YAMAHA PORTATONE PSR-550

Owner's Manual



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.

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.

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, do not mix batteries with new, or with batteries of a different type. 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

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions in a safe place for future reference.



WARNING

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

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the AC adaptor cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch,
- disconnect the adaptor plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Use the specified adaptor (PA-6 or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Before cleaning the instrument, always remove the electric plug from the outlet.
 Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.



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:

- Do not place the AC adaptor cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- Do not connect the instrument to an electrical outlet using a multiple-connector.
 Doing so can result in lower sound quality, or possibly cause overheating in the outlet
- Unplug the AC power adaptor when not using the instrument, or during electrical storms
- Always make sure all batteries are inserted in conformity with the +/- polarity markings. Failure to do so might result in overheating, fire, or battery fluid leakage
- Always replace all batteries at the same time. Do not use new batteries together
 with old ones. Also, do not mix battery types, such as alkaline batteries with
 manganese batteries, or batteries from different makers, or different types of
 batteries from the same maker, since this can cause overheating, fire, or battery
 fluid leakage.
- Do not dispose of batteries in fire.
- Do not attempt to recharge batteries that are not intended to be charged.
- When the batteries run out, or if the instrument is not to be used for a long time, remove the batteries from the instrument to prevent possible leakage of the battery fluid.
- · Keep batteries away from children.
- If the batteries do leak, avoid contact with the leaked fluid. If the battery fluid should come in contact with your eyes, mouth, or skin, wash immediately with water and consult a doctor. Battery fluid is corrosive and may possibly cause loss of sight or chemical burns.
- 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. Also, 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.
- 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 or damage to the internal
 components.

- Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected adaptor and other cables.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- 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.
- Use only the stand specified for the instrument. When attaching the stand or rack, use the provided screws only. Failure to do so could cause damage to the internal components or result in the instrument falling over.
- Do not operate the instrument 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.

■DATA BACK-UP AND STORAGE

Yamaha recommends that you regularly save data using a floppy disk in a safe, cool, dry place. YAMAHA CANNOT BE HELD RESPONSIBLE FOR THE ACCIDENTAL LOSS OF IMPORTANT MUSIC DATA! Regarding the data you have created, as long as fresh batteries are inserted in (or an AC power adaptor is connected to) the instrument, the data will be retained, even when the power is turned off. It will also be retained long enough to exchange an old set of batteries for a new set. If you have important data in the instrument which you don't want to lose, please take care to keep fresh batteries inserted in (or keep an AC power adaptor connected to) the instrument, and to regularly save data.

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.

Make sure to discard used batteries according to local regulations.

(4)-7

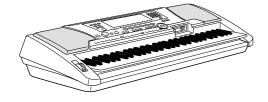
Congratulations!

You are the proud owner of a fine electronic keyboard. The Yamaha PSR-550 PortaTone combines the most advanced tone generation technology with state-of-the-art digital electronics and features to give you stunning sound quality with maximum musical enjoyment. A large graphic display and easy-to-use interface also greatly enhance the operability of this advanced instrument. In order to make the most of your PortaTone's features and extensive performance potential, we urge you to read the manual thoroughly while trying out the various features described. Keep the manual in a safe place for later reference.

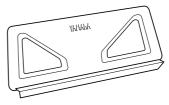
Packing List

Please check that these items have been packed with your PSR-550.

• PSR-550



• Music Stand (page 9)



• PSR-550 Data Disk



(Refer to "Included Data Disk" on page 59, and "MIDI and TO HOST Terminals" on page 107.) • Owner's Manual

How to use the manual

Setting Up

page 12

Before going on to any other part of the manual, we strongly suggest you read this section first. It shows you how to get started playing and using your new PSR-550.

Important Features

page 8

Once you've set up the PSR-550, you should read through this section — and explore the relevant page references — to familiarize yourself with the enormous variety of features and functions of the PSR-550.

Basic Operation

page 17

This section introduces you to the basic operating conventions of the PSR-550, such as editing values and changing settings, and shows you how to use the convenient Help and Direct Access functions.

Contents

page 6

All topics, features, functions and operations are listed here in the order they appear in the manual, for easy reference.

Panel Controls

page 10

Use this section to find out about all of the buttons and controls of the PSR-550.

Panel Display Indications

page 16

This section explains the display indications of the PSR-550 and how to read them for optimum operation.

Function Tree

page 22

This lists all functions of the PSR-550 according to their hierarchical structure, letting you easily see the relationship of the various functions and quickly locate desired information.

Appendix

page 123

This contains various important lists such as the Voice list, Preset Style list, Effect list, MIDI data format and MIDI implementation chart.

Troubleshooting

page 135

If the PSR-550 does not function as expected or you have some problem with the sound or operation, consult this section before calling your Yamaha dealer or service center. Most common problems and their solutions are covered here in a very simple and easy-to-understand way.

Index

page 153

This section alphabetically lists virtually all topics, features, functions and operations with their respective page numbers, letting you quickly and easily find the information you need.

The illustrations and LCD screens as shown in this owner's manual are for instructional purposes only, and may be different from your instrument.

Contents

Packing List 4	Playing Voices	26
	Selecting a Voice	26
	Playing Two Voices (R1, R2) Simultaneously	
How to use the manual 5	Playing Different Voices with	21
	• •	20
	the Left (L) and Right (R1, R2) Hands	
Important Features 8	Functions of the Keyboard	
important routur oo	Transpose	
Panel logos9	Pitch Bend Wheel	
Music stand 10	Sustain	
	Keyboard Percussion	31
Panel Controls and Terminals 10	Auto Accompaniment	32
FOOTSWITCH jack 10		
PHONES/OUTPUT jack 10	Using Auto Accompaniment (rhythm track only)	
Top Panel Controls	Using Auto Accompaniment (all tracks)	
Rear Panel Controls	Accompaniment Sections	34
real raner controls	Tempo/Tap	36
	Accompaniment Track Muting	37
Setting Up 12	Accompaniment Volume Control	37
	Chord Fingerings	
Power supply connections 12	Accompaniment Split Point	
	Synchro Stop	
Demo Song Playback 13	One Touch Setting	
Demo Song Playback 13	Cho rough County	
	The Multi Pads	43
Using the Music Database 14	District March	40
	Playing the Multi Pads	
	Chord Match	
Panel Display Indications 16	Selecting a Multi Pad Bank	
	Turning Chord Match On/Off	
	Multi Pad Bank List	45
Basic Operation 17	Digital Effects	46
Calling up the Operation Displays 17	Digital Ellocto	70
How to Read the Menu/Message Display and	Reverb	46
"Easy Navigator"18	Chorus	48
Menu Selection 19	DSP	49
Changing (Editing) Values	System Effects and Insertion Effects	
Naming 21	Harmony/Echo	
Direct Access	,,	
	Registration Memory	54
Function Tree 22	Pegistering the Panel Cottings	55
	Registering the Panel Settings	
	Recalling the Registered Panel Settings	
Direct Access Chart 24	Selecting a Registration Bank	
	Naming the Registration Banks	56
Mode 25	Disk Operations	57
		J.
Style Mode	Using the Floppy Disk Drive (FDD) and	
Song Mode 25	Floppy Disks	
Record Mode	Included Data Disk	
Disk Mode25	Format	60
	Save	60
	Load	62
	Song Copy	64
	Delete	67

Contents

Disk Song Play	vback 68
Song Play	pack
,	Muting 70
	ne Control 70
Playing fro	m a Specified Measure 71
Repeat Pla	y (A-B Repeat) 72
Song Trans	spose
Part Settings	74
Voice Char	nge
	76
Song Recordin	78
Quick Reco	ording 80
	Recording 82
	ng — Punch In/Out and Start Measure . 84
	86
Editing Set	up Data 88
-	eer Songs
Clearing U	ser Song Data 91
Multi Pad Reco	ording 92
Multi Pad F	Recording
Chord Mate	ch94
Naming Us	er Pads94
Clearing U	ser Pad Data95
Style Recordin	ng 96
Style Reco	rding — Rhythm Track
Style Reco	- ·
Bass/P	hrase/Pad/Chord Tracks100
Quantize	102
	er Styles 104
Clearing U	ser Style Data 104
MIDI Functions	106
What's MIF	01? 106
	Can Do With MIDI
	Compatibility 109
	to a Personal Computer 110
7	late 112
	mit Setting114
	ive Setting 115
Local Cont	rol116
	116
Initial Data	Send 117

Other Functions (Utility)	118
Metronome	118
Upper Octave	119
Master Tuning	119
Scale Tuning	
Split Point	120
Touch Sensitivity	120
Voice Set	120
Footswitch	121
Pitch Bend Range	122
Assignable	
Backlight	

pendix 1	23
Voice List	123
Panel Voice List	123
XG Voice List	125
Drum Kit List	128
Style List	130
Music Database List	131
About the Digital Effects (Reverb/Chorus/DSP)	132
Reverb Type List	133
	133
	133
	134
	135
· ·	136
•	137
	139
	151
•	153
Specifications	156

Important Features

Since the PSR-550 has such a wealth of advanced features and functions, you may be at a loss as to how to explore its capabilities and how to best use them for your music. You needn't worry. The PSR-550 is very easy to play and use, and each function — no matter how advanced — can be mastered easily.

That's what this section is designed for. It will help you master the PSR-550. It introduces you to the important features of the PSR-550 with short explanations and page references. Read through the features you're interested in, then turn to the relevant pages in the manual for instructions and other details.

Basic operations

- The PSR-550 is packed with sophisticated feature and functions, yet it's also exceptionally easy to use. Using the panel controls is quick, easy and intuitive thanks to the Easy navigator feature, which indicates the buttons you should press, and the special backlit LCD, which changes color according to the selected mode. (→ Pages 16, 18)
- A convenient Direct Access function lets you instantly call up the specific menu or display you need. (→ Page 21)

Listening to the PSR-550

- The PSR-550 features a wide variety of songs in various musical genres. (→ Page 15)
- In addition, 10 songs are provided in the included disk. (→ Page 59)
- The powerful auto accompaniment function gives you a total of 112 styles (rhythm and accompaniment patterns), providing professional sounding backing parts for your performance.
 (→ Page 112)
- Special Multi Pads let you instantly and easily play short rhythmic and melodic sequences for adding impact and variety to your performance. (→ Page 43)

Playing the PSR-550

- The PSR-550 keyboard has 61 keys with full touch-response capability that lets you play with extraordinary expressiveness and dynamic control. (→ Page 26)
- The PSR-550 lets you perform with a huge variety of musical instrument voices. (→ Page 26)
 There are two different types of voices: panel voices (the original PSR-550voices) and XG voices.
 - * The PSR-550 features 219 panel voices, 14 drum kits and 480 XG voices
- With the R1, R2 and L voices, you can play two different voices in a layer, and even play two different voices with your right and left hands. (→ Pages 27, 28)

Auto accompaniment (styles)

- The auto accompaniment feature puts a full backing band at your fingertips, with a total of 112 styles (rhythm and accompaniment patterns). (→ Page 32)
- The One Touch Setting feature lets you instantly call up the appropriate voice, effect and other settings for the selected accompaniment style — with the touch of a single button. (→ Page 42)
- You can also create your original accompaniment styles by recording them directly from the keyboard. (→ Page 96)

Music Database

The PSR-550's built-in Music Database gives you a
convenient way to automatically select the style, voice,
and effect settings that best suit a particular type of music.
If you don't know which style or voice would be appropriate, the Music Database can help you out. (→ Page 14)

Multi Pads

- By simply pressing one of the Multi Pads, you can play short rhythmic or melodic phrases. (→ Page 43)
- You can also create your original Multi Pad phrases by recording them directly from the keyboard. (→ Page 92)

Registration Memory

 The convenient Registration Memory feature lets you save virtually all panel settings to one of 128 Registration Memory settings, and then instantly recall all your custom panel settings by pressing a single button. (→ Page 54)

Song Recording

- Use the powerful song recording features create your own complete, fully orchestrated compositions and save them floppy disk as a User song. Each User song lets you record up to sixteen independent tracks. (→ Page 78)
 - * To quickly and easily mold your musical ideas into complete songs, use the Quick Recording method. (→ Page 80)
 - * To build up a song part-by-part and track-by-track, use the Multi Track Recording method. (→ Page 82)
 - * You can also "fine tune" the recorded song data with the PSR-550's comprehensive song editing functions. (→ Pages 84-91)

Digital Effects

- A comprehensive set of professional-sounding digital effects are built into the PSR-550, letting you enhance the sound of your performance in a wide variety of ways. These include Reverb, Chorus, DSP and Harmony/Echo. (→ Page 46)
 - Reverb recreates the rich spacial ambiance of various performance environments, such as a concert hall or a night club. (→ Page 46)
 - * Chorus enriches the voices by making them sound warmer and thicker — as if several instruments were playing together at the same time. (→ Page 48)
 - * The DSP effects let you process the sound in special, unusual ways — such as applying distortion or tremolo to a specific part. (→ Page 49)
 - * Harmony/Echo lets you enhance your right-hand melodies with a variety of harmony and echo effects.
 (→ Page 50)

Disk Drive

The PSR-550 also features a built-in disk drive that lets you save all your important original data (such as User songs, User styles, User Multi Pads, Registration Memory, etc.) to floppy disk for future recall. (→ Page 57)

MIDI

- MIDI (Musical Instrument Digital Interface) is a worldwide standard interface that allows various electronic music instruments, computers and other devices to communicate with each other. The MIDI features let you seamlessly integrate the PSR-550 into a variety of systems and applications:
 - * Play other instruments from the PSR-550. (→ Page 108)
 - Play the sounds of the PSR-550 (including the auto accompaniment) from a connected keyboard. (→ Page 108)
 - Connect the PSR-550 directly to a computer, for advanced recording, editing and playing back of song data. (→ Page 110)
 - Use pre-programmed templates to instantly configure the PSR-550 for your specific MIDI system/application.
 (→ Page 112)

Panel logos

The logos printed on the PSR-550 panel indicate standards/formats it supports and special features it includes.



GM System Level 1

"GM System Level 1" is an addition to the MIDI standard which guarantees that any data conforming to the standard will play accurately on any GM-compatible tone generator or synthesizer from any manufacturer.



XG is a new Yamaha MIDI specification which significantly expands and improves on the GM System Level 1 standard with greater voice handling capacity, expressive control and effect capability while retaining full compatibility with GM. By using the PSR-550's XG voices, it is possible to record XG-compatible song files.

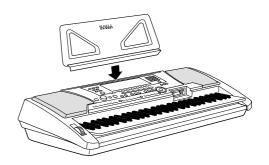


The DOC voice allocation format provides data playback compatibility with a wide range of Yamaha instruments and MIDI devices, including the Clavinova series.

Style File Format

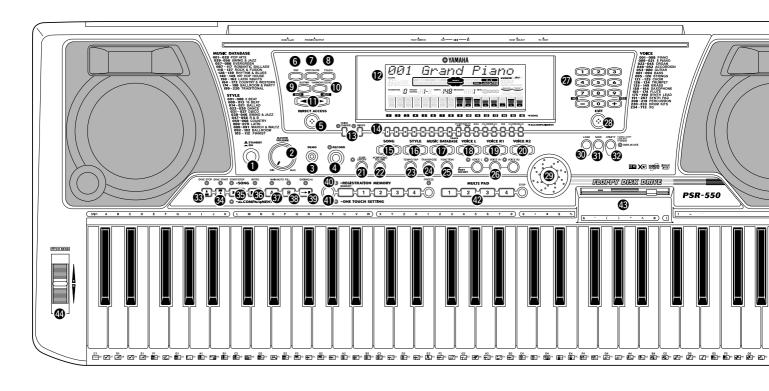
The Style File Format — SFF — is Yamaha's original style file format which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types. The PSR-550 uses the SFF internally, reads optional SFF style disks, and creates SFF styles using the Style Recording feature.

Music stand



The PSR-550 is supplied with a music stand that can be attached to the instrument by inserting it into the slot at the rear of the control panel.

Panel Controls and Terminals



■ FOOTSWITCH jack

The sustain function lets you produce a natural sustain as you play by pressing a footswitch. Plug an optional Yamaha FC4 or FC5 footswitch into this jack and use it to switch sustain on and off. The footswitch connected to this jack can also be set to replicate the functions of some panel buttons, doing things like starting and stopping accompaniment (page 121).



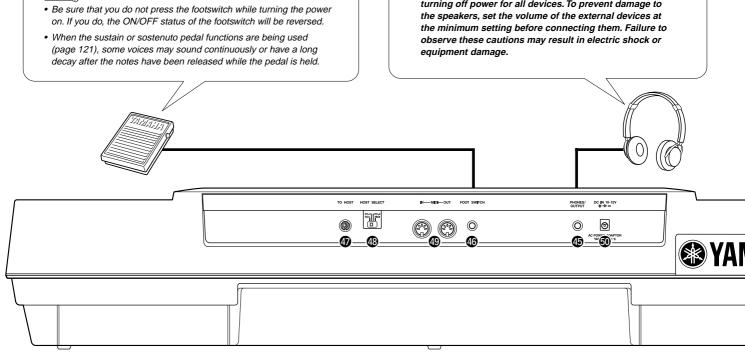
■ PHONES/OUTPUT jack

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of head phones is plugged into the PHONES/OUTPUT jack. Do not listen with the headphones at high volume

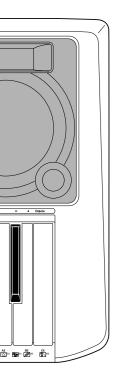
for long periods of time. Doing so may cause hearing loss.

A CAUTION

· Connect the PSR-550 to external equipment only after turning off power for all devices. To prevent damage to the speakers, set the volume of the external devices at observe these cautions may result in electric shock or equipment damage.



Panel Controls and Terminals



Top Panel Controls	
STANDBY/ON switch	13
2 MASTER VOLUME control	13
3 DEMO button13	3, 17
4 RECORD button 17, 25, 78, 92	2, 96
5 DIRECT ACCESS button2	1, 24
6 DSP button	49
7 FAST/SLOW button	49
0 =0.000	
3 TOUCH button	
9 SUSTAIN button	
HARMONY/ECHO button	50
BACK button, NEXT button	17
A LOD district	40
LCD display	
VOICE CHANGE button	
MIXER button	
TRACK 1 - 16 buttons	
6 SONG button17, 25	
6 STYLE button 17, 25	5, 32
MUSIC DATABASE button14	4, 17
17 VOICE L button	7, 28
17 VOICE R1 button17	7, 26
20 VOICE R2 button17	7, 27
② ACMP ON/OFF button25	5, 33
2 ACMP/SONG VOLUME button 17, 37	7, 70

TEMPO/TAP button	17, 36
2 TRANSPOSE button	17, 30
FUNCTION button	. 17, 118
PART ON/OFF	
VOICE L button	28
VOICE R1 button	26
VOICE R2 button	27
Number buttons	
[1]-[0], [-/NO], [+/YES]	
EXIT button	17
② Data dial	20
3 DISK LOAD button	17, 62
3 DISK SAVE button	17, 60
3 DISK UTILITY button17	7, 64, 67
SYNC STOP button	41
SYNC START button	33
START/STOP button	32, 69
3 INTRO button	34
MAIN/AUTO FILL A button	34
3 MAIN/AUTO FILL B button	34
39 ENDING/rit. button	34
4 REGISTRATION MEMORY buttons	54
4 ONE TOUCH SETTING buttons	42
MULTI PAD buttons	43
43 Disk Drive	58
M DITCH REND wheel	20

	Rear Panel Controls	
4 5	PHONES/OUTPUT jack	10
4 5	FOOTSWITCH jack	10
1	TO HOST connector	107
4 3	HOST SELECT switch	110
49	MIDI IN/OUT connectors	107
1	DC IN 10-12V jack	12



Setting Up

This section contains information about setting up your PSR-550 and preparing to play. Be sure to go through this section carefully before turning the power on.

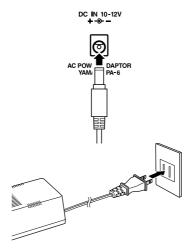
Power supply connections

Although the PSR-550 will run either from an optional AC adaptor or batteries, Yamaha recommends use of the more environmentally safe AC adaptor. Follow the instructions below according to the power source you intend to use.

Using An Optional AC Power Adaptor

- **1** Make sure that the STANDBY/ON switch of the PSR-550 is set to STANDBY.
- **2** Connect the AC adaptor (PA-6 or other adaptor specifically recommended by Yamaha) to the power supply jack.
- **3** Plug the AC adaptor into an AC outlet.

When turning the power OFF, simply reverse the procedure.



A CAUTION

 Never interrupt the power supply (e.g. remove the batteries or unplug the AC adaptor) during any PSR-550 record operation! Doing so can result in a loss of data.

riangle warning

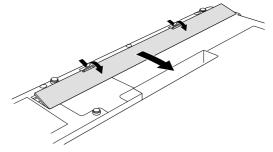
- Use ONLY a Yamaha PA-6 AC Power Adaptor (or other adaptor specifically recommended by Yamaha) to power your instrument from the AC mains. The use of other adaptors may result in irreparable damage to both the adaptor and the PSR-550.
- Unplug the AC Power Adaptor when not using the PSR-550, or during electrical storms.

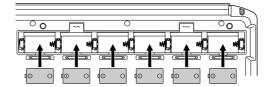
■ Using Batteries

For battery operation the PSR-550 requires six 1.5V "D" size, R20P (LR20) or equivalent batteries. When the batteries need to be replaced, "Battery Low" may appear on top of the display, the volume may be reduced, the sound may be distorted, and other problems may occur. When this happens, turn the power off and replace the batteries.

Replace the batteries as follows:

- **1** Open the battery compartment cover located on the instrument's bottom panel.
- 2 Insert the six new batteries, being careful to follow the polarity markings on the inside of the compartment.
- **3** Replace the compartment cover, making sure that it locks firmly in place.





A CAUTION

- When the batteries run down, replace them with a complete set of six new batteries. NEVER mix old and new batteries.
- Do not use different kinds of batteries (e.g. alkaline and manganese) at the same time.
- If the instrument is not to be in use for a long time, remove the batteries from it, in order to prevent possible fluid leakage from the battery.
- Plugging or unplugging the AC power adaptor while the batteries are installed will reset the PSR-550 to the defaults.

Important Notes on Battery Use

- Since the PSR-550 consumes a considerable amount of power, Yamaha recommends the use of an AC power adaptor rather than batteries. The batteries should be considered an auxiliary power source for data backup.
- The floppy disk drive, in particular, uses a large amount of power, so it is important to always use an AC power adaptor when performing disk-intensive operations such as song recording/playback or data
- load/save. If you attempt to use battery power for these operations and the batteries do fail, you will lose not only the data you're recording or saving, but also other data in internal memory including user styles, user pads, registration memory, etc.
- Taking the above precautions into consideration, always use an AC power adaptor when using the PSR-550 for an important performance or when creating important data.

Demo Song Playback

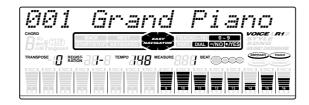
Once you've set up your PSR-550, try listening to the pre-programmed demonstration songs. A total of 9 demo songs are provided. As the song plays back, the backlit LCD of the PSR-550 changes color.



Turn the power ON by pressing the [STANDBY/ON] switch.

Press the [STANDBY/ON] switch again to turn the power OFF.







• Even when the switch is in the "STANDBY" position, electricity is still flowing to the instrument at the minimum level. When you are not using the PSR-550 for a long time, make sure you unplug the AC power adaptor from the wall AC outlet, and/or remove the batteries from the instrument.



Press the [DEMO] button to start demo playback.



1 Sweet Tenor



 The LCD changes color during Demo song playback only if the Backlight mode is set to "Auto" (page 122).



Set a volume level with the [MASTER VOLUME] control.



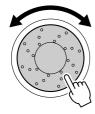


 If you play the PSR-550 with the volume at its maximum level when the batteries are used, the life of the batteries will be shorter.



Skip to the beginning of a different demo song.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].





2 SweetTrumpet



Press the [DEMO] button again to stop the demo song.

Using the Music Database

If you want to play in a certain genre of music but don't know which style (page 32) and voice (page 26) settings would be appropriate, simply select the desired genre from the Music Database. The PSR-550 automatically makes all appropriate panel settings to let you play in that music style!

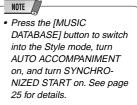


Press the [MUSIC DATABASE] button.

The MUSIC DATABASE menu appears in the display.









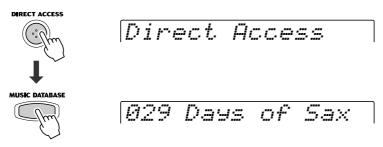
Select a "Music Database."

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].



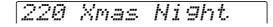
The PSR-550 has 220 panel setups in the Music Database and they are divided into eleven different categories. You can select different Music Database categories in succession by using the Direct Access function.

To select the first Music Database of the next available category, first press the [DIRECT ACCESS] button, then press the [MUSIC DATABASE] button.



See page 21 for details about the Direct Access function.

In this example, we'll select #220 "Xmas Night" and play the song "Silent Night." (The sheet music is provided on the next page.)

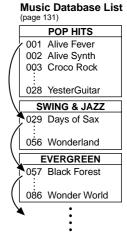




Play the chords with your left hand and the melody lines with your right hand along with the music.

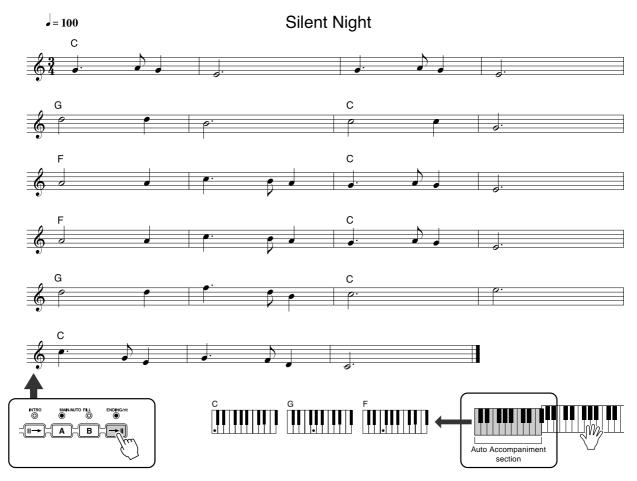
As soon as you play a chord with your left hand, the auto accompaniment starts.

For information on how to enter chords, see "Chord Fingerings" on page 38.





 See pages 32 through 41 for details about the Auto Accompaniment.





When you reach the point in the music indicated by the arrow above, press the [ENDING] button.

When the ending is finished, the auto accompaniment automatically stops.

Data stored by the Music Database

Each of the Music Database settings has been specially programmed to match the selected style and each features the best suited voice (or combination of voices), style, and other settings for that style. Pressing the [MUSIC DATABASE] button and selecting a style lets you instantly reconfigure all relevant settings, conveniently allowing you to start playing in the desired genre with all the appropriate sounds — without having to make each setting one by one. For each parameter, refer to the following pages.

■ VOICE PARAMETERS

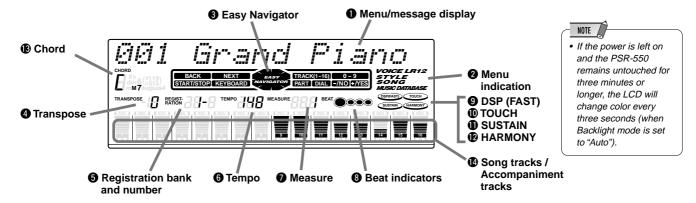
 Part on/off (Voice R1/R2/L) Voice change setting (Voice R1/R2/L) Mixer setting (Voice R1/R2/L) DSP on/off, FIRST/SLOW on/off, DSP Type and Return Level HARMONY/ECHO on/off, type, volume, part Pitch Bend Range Upper Octave setting 	page 75 page 76 page 49 page 50 page 122
 AUTO ACCOMPANIMENT PARAMETERS Auto accompaniment (ACMP) on/off Synchro Start = ON* 	page 33
Style Number Main A/B section	page 32
• Tempo	page 36
Accompaniment Volume Track on/off	page 37
Voice Change setting Mixer setting	page 75
Multi Pad Bank number	page 43
Reverb setting Chorus setting	page 46 page 48

^{*} Set only when the accompaniment is not playing.

Panel Display Indications

The PSR-550 features a large multi-function display that shows all important settings for the instrument. This backlit LCD also changes color depending on the selected mode, making operation even easier and more intuitive. For details about the LCD's Backlight mode, see page 122.

The section below briefly explains the various icons and indications in the display.



Menu/message display

This shows the menu for each function of the PSR-550. It also displays the relevant messages for the current operation.

See the "Basic Operation" section (page 17) for details on the menu/message display.

2 Menu indication

This indicates the items shown in the menu display, and the button to be pressed. Refer to "Basic Operation" (page 17) for details.

Seasy Navigator

This indicates the buttons to be pressed. Refer to "Basic Operation" (page 18) for details.

Transpose

Shows the current transpose value (page 30).

5 Registration bank-number

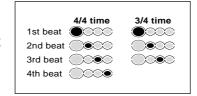
Shows the current selected registartion memory bank and number (page 56).

6 Tempo

Shows the current tempo of accompaniment/song playback (page 36).

Measure

Indicates the current measure number during song recording and playback.



8 Beat indicators

Flashes at the current tempo and indicates the current beat during accompaniment and song playback.

9 DSP (FAST)

"DSP" appears when the DSP effect is turned on (page 49).

"FAST" appears when the DSP FAST/SLOW effect is turned on (page 49).

1 TOUCH

Appears when the touch sensitivity is turned on (page 120).

1 SUSTAIN

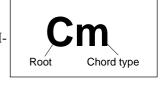
Appears when the sustain is turned on (page 30).

12 HARMONY

Appears when the HARMONY effect is turned on (page 50).

(B) Chord

Displays the current chord name during AUTO ACCOM-PANIMENT playback or SONG recording/playback (page 33).



Song tracks / Accompaniment tracks

• In the Song mode (page 25) and the Demo Song mode (page 15):

The icons of all tracks indicate the on/off status and volume/velocity settimgs.

• In the Style mode (page 25):

The icons of tracks 9 - 16 indicate the on/off status and volume/velocity settings for each of the eight accompaniment tracks.

• In the Record mode (page 25):

The icons of all tracks indicate the on/off status and volume/velocity settimgs. The "REC" marks indicate the recording status.

Basic Operation

This section introduces you to the basic operations common to the various functions of the PSR-550. In particular, you'll learn how to use the menu/message display at the center of the front panel.

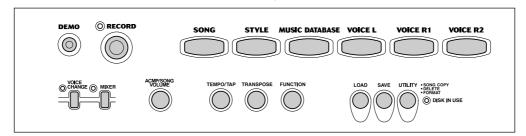
Calling up the Operation Displays	page 17
• How to read the Menu/message display and the "Easy Navigator"	page 18
Menu Selection	page 19
Changing (Editing) Values	page 20
• Naming	
Direct Access	page 21

Calling up the Operation Displays

Press the buttons listed below in order to call up the appropriate displays for the various functions of the PSR-550.

DEMO button	page 13
RECORD button	. pages 25, 78, 92, 96
SONG button	page 25
STYLE button	pages 25, 32
 MUSIC DATABASE button 	page 14
VOICE L button	page 28
VOICE R1 button	page 26
VOICE R2 button	page 27
VOICE CHANGE button	page 75

MIVED button	page 76
MIXER button	
 ACMP/SONG VOL button 	pages 37, 70
TEMPO/TAP button	page 36
TRANSPOSE button	
• FUNCTION button	
DISK LOAD button	
DISK SAVE button	
DISK UTILITY button	
	. •



Pressing one of these buttons instantly calls up the relevant display for the selected function

See the function tree chart for details (page 22).

If you've selected several different functions' displays in succession, you can "retrace your steps" and revisit each display by using the **[BACK]** and **[NEXT]** buttons at the left side of the display. Of course you can also directly select the desired displays by pressing the appropriate buttons (as listed above).



How to leave the current display

As shown in the function tree chart (page 22), there is a wide variety of functions on the PSR-550, each with its own corresponding display. In order to leave the display of each function press the **[EXIT]** button.



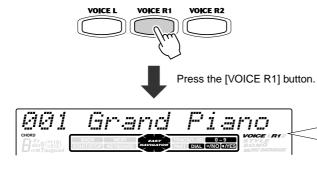
Since the PSR-550 has so many different displays, you may occasionally find yourself confused as to which operation's display is currently shown. If this happens, you can return to "home base" by pressing the **[EXIT]** button several times. This returns the PSR-550 to the default display — the same display that appears when the power is turned on.

How to Read the Menu/Message Display and "Easy Navigator"

Depending on the selected function or operation, the PSR-550 shows a variety of displays and indications. Included in these are "Easy Navigator" messages that guide you through the various operations.

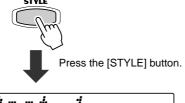
Let's take a look at some examples:

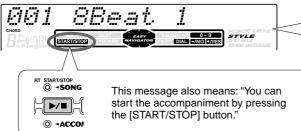
Voice



This message means: "The current voice for voice R1 (Grand Piano) is shown at top. You can change this voice by using the data dial, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0]."

Style



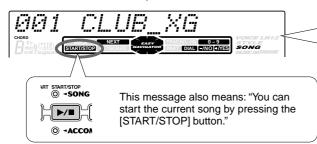


This message means: "The current style (8Beat 1) is shown at top. You can change this style by using the data dial, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0]."

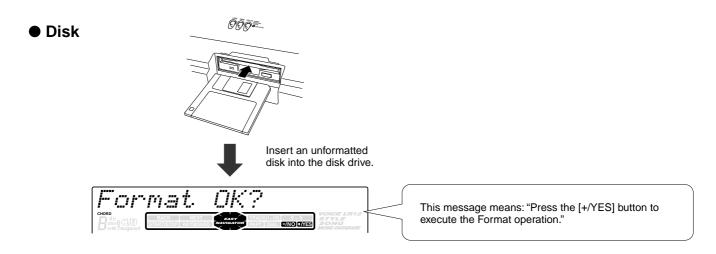
Song



Insert the included data disk into the disk drive.



This message means: "The current song (CLUB_XG) is shown at top. You can change this song by using the data dial, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0]."



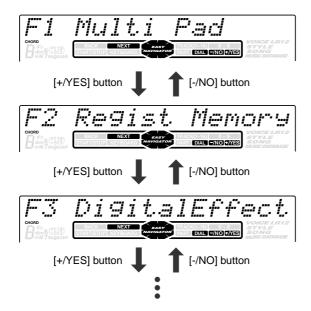
Menu Selection

For certain operations on the PSR-550 (such as selecting voices, demo songs and styles), you'll need to select different menus in the display.

For example, the display below (for selecting the function) appears when you press the **[FUNCTION]** button.



In this case you can select the function by turning the **data dial**, or move the cursor by pressing the [+/YES]/[-/NO] buttons.



The display below (for selecting voices) appears when you press the **[VOICE R1]** button.

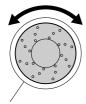
CHORD

CH

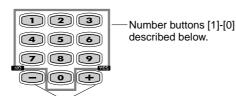
In this case you can also select the voice by using the **data dial** or the [+/YES]/[-/NO] buttons as above; you can also input the voice number directly by using the number buttons [1]-[0] (see the next page).

Changing (Editing) Values

This section shows you how to set numeric values on the PSR-550, such as voice number, song/style number and various parameters. Input the values by using the number buttons [1]-[0] or the [+/YES]/[-/NO] buttons.



Rotating the data dial to the right (clockwise) increases the value, while rotating it to the left (counter-clockwise) decreases it.



Pressing the [+/YES] button increases the displayed value by 1. Pressing the [-/NO] button decreases the displayed value by 1. Pressing and holding either button causes a continuous increase and decrease. For items that have initial default values, pressing the [+/YES] and the [-/NO] buttons together at the same time will return the setting to the initial value.

Numeric entry

The explanations here apply only to numbers that have a maximum of three digits, such as those for voices and styles.

• Entering one- or two-digit numbers

One- or two-digit voice numbers can be entered with leading zeroes: e.g. "12" can be entered as "012" by pressing the [0], [1] and [2] buttons in sequence.



NOTE

• One- or two-digit numbers can also be entered without leading zeroes.
To select number "12", for example, simply press the [1] button and then the [2] button. The bars below the number on the display will flash for a few seconds, and then disappear when the selected number has been recognized by the PSR-550.

• Entering three-digit numbers

The number buttons can be used to directly enter the number of the desired voice, thereby immediately selecting that voice without having to step through a number of other voices. To select number 106, for example, press the [1], [0] and [6] number buttons in sequence.

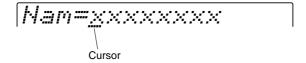


Naming

The allows you to create your own original data such as songs, styles and registration memory settings. You can also freely name the data as desired. The following data types can be named.

Disk files (User songs, etc)
User Styles
User Pad banks
Registration Memory banks
page 56
page 61, 65, 66, 90
page 104
page 94
Registration Memory banks

The example display below appears when naming a song on a floppy disk (page 90).



To enter an original name, use the keyboard.



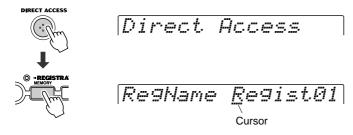
Entering a character	Each key on the keyboard enters a different character, as marked directly above the key.
Moving the cursor	The A#5 and B5 keys move the cursor backward and forward within the file name.
Entering a lower-case character	The C1 key functions as a shift key that shifts between lower- and upper-case characters: hold the Shift key while pressing a character key to enter the lower-case character.
Delete	The Delete key (C6) deletes the character at the cursor position.



 Lowercase letters cannot be used for disk file names.

Direct Access

By using the [DIRECT ACCESS] button, you can instantly call up the desired display. For example, pressing the [DIRECT ACCESS] button and press the [REGISTRARTION MEMORY] button automatically selects the display for inputting the Registration Memory bank name.



See page 24 for the Direct Access Chart.

Function Tree

Button	Menu/message display	Function		See pa
DEMO	— Sweet Tenor	Demo song selection		13
VOICE R1	— 001 Grand Piano	Voice R1 selection		26
VOICE R2	— 001 Grand Piano	Voice R2 selection		27
VOICE L	— 001 Grand Piano	Voice L selection		28
STYLE	— 001 8Beat 1	Accompaniment Style selection	1 dinect 1 1	32
SONG		Song selection		
		Song menu selection		
	PlayMode	Song play method selection	💯 🗸	69
		Song Measure from which to start playback		
		Song repeat setting		
		Song transpose setting		
SIC DATABASE	— 001 Alive Fever		ADESS 7 4	14
ICE CHANGE	— R1=001 Grand Pno	Voice selection of R1/R2/L/Style track/Song track		75
MIXER	— Volume R1	Volume adjustment of Voice R1/R2/L	95 5.6.7.	76
	Volume Ph1	Volume adjustment of the accompaniment track	DIRECT 1	76
		Volume adjustment of the song track		
		Octave setting of voice R1/R2/L		
		Octave setting of voice K7/K2/E		
		Pan setting of voice R1/R2/L		
	Pan RNM	Pan setting of accompaniment track	ACCESS 2	/ 1
	Pan_101	Pan setting of song track	AGESS 2	/ /
	RevDepth R1	Reverb depth setting of voice R1/R2/L	7 27 27	77
		Reverb depth setting of accompaniment track		
	RevDepth T01	Reverb depth setting of song track	991/27	77
	ChoDepth R1	Chorus depth setting of voice R1/R2/L	30	77
	ChoDepth RhM	Chorus depth setting of accompaniment track	30	7
		Chorus depth setting of song track		
		DSP depth setting of voice R1/R2/L		
		DSP depth setting of accompaniment track		
		DSP depth setting of song track		
MP/SONG VOL	Acmp Volume	Accompaniment Volume setting		3.
III 700110 VOL		Song Volume setting		
RANSPOSE	— Transpose	Transpose setting		30
EMPO/TAP	— Tempo	Tempo setting		36
DISK LOAD	— Ld	Loading data from a disk		62
DISK SAVE	Sv	Saving data to a disk		60
DISK UTILTY	— Menu			
		Copying a song in a disk		
		Deleting a file in a disk		
		Formatting a disk		

- The piece icon in the chart indicates that the relevant function or parameter can be called up via the Direct Access function, and the numbers beside the icon correspond to the ones in the Direct Access Chart on page 24. All functions indicated with this mark (other than Style selection, Music Database selection, and Disk Format) can be user-assigned to the [+/YES] button, [-/NO] button and the number buttons [1]-[0] allowing you to instantly select the desired function/parameter.
- When you call up the Mixer screens (other than Volume and Octave) via the Direct Access, the previously edited part (page 74) will be displayed.
- Concerning \$\square\$ 1 and \$\square\$ 4, the screens that are called up actually are different from the ones described at the left. See the Direct Access Chart on page 24.

tton	Menu/message display	Function		See pag
TION	─┬─ F1 Multi Pad			
		Multi pad bank selection	12 Jane 1	44
		Chord match on/off setting		
	F2 Regist Memory	Registration Memory bank selection	,pps:514 1.4	56
	RegName	Registration Memory bank selection	01RECT 7 14	56 56
	— Regivanie	Naming Registration Memory Dank		30
	— F3 DigitalEffect			
	— Reverb		4	
		Reverb type selection		
		Reverb return level setting		47
	ChoType	Chorus type selction	ninectally 20	/Ω
	ChoRetnI evel	Chorus return level setting	温野 29	48
	— Dsp	3 3		
		DSP type selection		49
	DspRetnLevel	DSP return level setting	32	49
	└─ Harmony		4	
	— HТур	Harmony/Echo type selection	17,34	50
	Harmony Vol	Harmony /Echo volume setting	455527 24	52
	☐ HarmPart	Harmony part setting	35	53
	F4 Midi			
		MIDI template vselection		112
		Loading the selected MIDI template setting		
		MIDI transmit channel setting		
		MIDI receive channel setting		
		Local control on/off setting		
		External /Internal clock selection		
	└─ Init Send	Initial data send	DIRECT ACCESS 4	117
	EC 11696 .			
	F5 Utility	Material and a felt and a	DIRECTAL	440
		Metronome on/off setting		
		Opper octave setting		
		Scale tuning setting		
		Scale tuning template selection		
		Individual note tuning		
		Split point setting		
	— Fingerng	Fingering selection	20	38
	— TouchSns	Touch sensitivity setting	🅦 🗘 21	120
		Voice set on/off setting		
		Selecting footswitch function		
		Pitch bend range setting		
	— Assignoi	Direct Access setting LCD's backlight color setting	DIRECTAL CO	122
	— васкыў	LCD's backlight color setting	AUGUST (7 23	122
	, Song			
		User Song Quick recording		80
		Punch in/out setting		
	RecStart Mes	Measure from which to start playback		84
	i i	Quantize		98
		Setup data editing		
		Naming User Songs		
		Clearing user song data		
	– Style			
		User Style recording		96
	└─ Edit			
		Quantize		
		Namimg User Styles		
	└─ Clear	Clearing user style data		104
	MultiPad			
	i	User Pad recording		92
	Edit	Osor I ad recording		52
	T. Control of the Con	Chord match on/off setting		94
		Naming user pads		
		Clearing user pad data		

ACCESS Direct Access Chart

	Function Tree number/function	Operation: + button listed below
1	Next style category selection	[STYLE]
2	Song repeat setting	[SONG]*
3	Song transpose setting	[TRANSPOSE]*
4	Next Music database category selection	[MUSIC DATABASE]
5	Volume adjustment of Voice R1	[VOICE R1]
6	Volume adjustment of Voice R2	[VOICE R2]
7	Volume adjustment of Voice L	[VOICE L]
8	Octave setting of Voice R1	PART ON/OFF [VOICE R1]
9	Octave setting of Voice R2	PART ON/OFF [VOICE R2]
10	Octave setting of Voice L	PART ON/OFF [VOICE L]
11	Formatting a disk	[UTILITY]
12	Multi pad bank selection	MULTI PAD [STOP]
13	Chord match on/off setting	MULTI PAD [1]~[4]
14	Registration Memory bank selecton	REGISTRATION MEMORY [1]~[4]
15	Naming Registration Memory bank	REGISTRATION MEMORY [MEMORY]
16	DSP type selection	[DSP] or [FAST/TAP]
17	Harmony/Echo type selection	[HARMONY]
18	Metoronome on/off setting	[TEMPO/TAP]
19	Split point settiong	[SONG/ACMP VOLUME]
20	Fingering selection	[ACMP ON/OFF]
21	Touch sensitivity setting	[TOUCH]
22	Voice set on/off setting	[FUNCTION]
23	LCD's backlight color setting	[DEMO]
24	Harmony/Echo volume setting	Number button [0]
25	Reverb type selection	Number button [1]
26	Reverb return level setting	Number button [2]
27	Reverb depth setting	Number button [3]
28	Chorus type selection	Number button [4]
29	Chorus return level setting	Number button [5]
30	Chorus depth setting	Number button [6]
31	DSP type selection	Number button [7]
32	DSP return level setting	Number button [8]
33	DSP depth setting	Number button [9]
34	Harmony/Echo type selection	Number button [-/NO]
35	Harmony part setting	Number button [+/YES]

^{*} Available only in the Song mode.

Various functions other than ones listed above can be accessed by assigning them to the [+/YES] button, [-/NO] button and the number buttons [1]-[0].

The functions listed above are default settings.

See the Function Tree on pages 22 and 23 for the available functions.

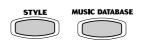
See page 122 about how to assign the available functions.

Mode

methods of operation). Each of these condition is called a mode. This section explains the main modes of the instrument.

Depending on the panel operation used, the PSR-550 has several fundamentally different conditions (or

Style Mode page 32



Select this mode by pressing the [STYLE] button or the [MUSIC DATABASE] button. (This is the default mode when the power is turned on.)

The Style mode is used for playing the full keyboard normally, and when using the auto accompaniment.

Styles are the rhythm/accompaniment pattterns which are played by the auto accompaniment feature.

In the Style mode, the backlight color is set to blue as the factory default.

START/STOP IN ▶/■ | | | | **⊲ACCOM**

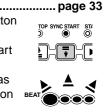
 Auto accompaniment (ACMP) on/offpage 33

The [ACMP ON/OFF] button switches on and off. When auto accompaniment is on, the left side of the keyboard is used for playing/ indicating chords.



 Synchronized Start standby (SYNC START) on/off page 33

The [SYNC START] button switches on and off. When Synchronized Start standby is on, the auto accompaniment starts as soon as you play a key on the keyboard.



page 68

Song Mode





¬ACCOMI

Select this mode by pressing the [SONG] button or inserting the disk that contains song data into the disk drive.

The Song mode is used for playing the full keyboard normally, and for playing back the

In the Song mode, the backlight color is set to purple as the factory default.

Record Mode



Select this mode by pressing the [RECORD] button.

In the Record mode you can record your own original performances and songs, create original styles and Multi Pad phrases.

In the Record mode, the backlight color is set to red as the factory default.

- Song record modepage 78
 - Rehearsal mode (Sync Start off)
 - · Record (Synchronized Start) standby
 - Recording
- Style record modepage 96
 - Rehearsal mode (Sync Start off)
 - Record (Synchronized Start) standby
 - Recording

- Pad record modepage 92
 - Rehearsal mode (Sync Start off)
 - Record (Synchronized Start) standby
 - Recording

When Record (Synchronized Start) standby is on, the recording starts as soon as you play a key on the keyboard.

Disk Mode

page 57



Select this mode by pressing the [LOAD] button, [SAVE] button or the [UTILITY] button.

In the Disk mode you can save and load important data.

In the Disk mode, no panel operations can be executed (except for disk operations). In the Disk mode, the backlight color is set to blue as the factory default.

Playing Voices

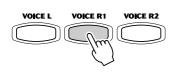
The PSR-550 has a huge selection of various musical instrument voices which you can play. Try out the different voices referring to the voice list at the end of this manual (page 123).

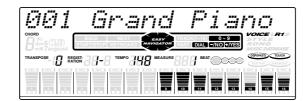
Select and play the voices of different musical instruments • Selecting a Voice	page 26
Keyboard Percussion	
Assign three different voices to the keyboard and play them	1
 Playing Two Voices (R1, R2) Simultaneously 	page 27
 Playing Different Voices with the Left (L) and Right (R1, R2)) Hands page 28
Functions of the Keyboard	
Other voice-related functions	
Pitch Bend Wheel	page 30
• Transpose	page 30
• Sustain	page 30
Touch Sensitivity	

Selecting a Voice



Press the [VOICE R1] button.







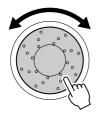
• The voice selected here is called voice R1 (RIGHT 1). See page 29 for more information on voice R1.



Select a voice.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Refer to the Voice List (page 123).





002 Bright Piano



Play the keyboard and adjust the volume.

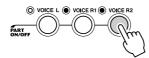




Playing Two Voices (R1, R2) Simultaneously



Press the [PART ON/OFF VOICE R2] button.





Play the voices.

Two different voices are sounded simultaneously in a layer.



Voice R1 (RIGHT 1) is the first voice of the layer and is meant to be played with the right hand. The second voice is called voice R2 (RIGHT 2) and is also played with the right hand.

Selecting a voice for VOICE R2



Press the [VOICE R2] button.



098 Slow Strings



Select a voice.

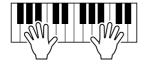
Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Refer to the Voice List (page 123).

The voices available for selection here (VOICE R2) are the same as those available for VOICE R1 (selected on page 26).



Play the voice.



Playing Different Voices with the Left (L) and Right (R1, R2) Hands



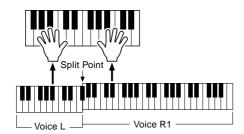
Press the [PART ON/OFF VOICE L] button.





Play the voices.

The notes you play with your right and left hands sound two different voices.



NOTE

 The point on the keyboard that separates voice L and voice R1 is called the "split point" (page 29).

Voice R1 (RIGHT 1) is meant to be played with the right hand. Voice L (LEFT) is played with the left hand.

Selecting a voice for VOICE L



Press the [VOICE L] button.



195 String Ensbl



Select a voice.

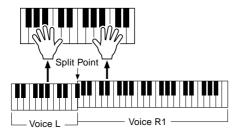
Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Refer to the Voice List (page 123).

The voices available for selection here (VOICE L) are the same as those available for VOICE R1 (selected on page 26).



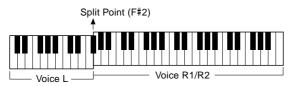
Play the voices.



Split Point

The point on the keyboard that separates voice L and voice R1/R2 is called the "split point".

The split point is set to F#2 at the factory setting, however you can set this to any key you wish. Refer to page 120 for instructions on setting the split point.



Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1, and the highest (farthest right) key to C6. (See below for details.)

Functions of the Keyboard

As explained above, the keyboard of the PSR-550 can sound three different voices. Here's a short summary of the various ways of playing voices.

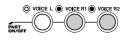
Playing a Single Voice





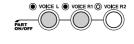
Playing Two Voices



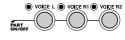


 Playing Separate Voices with the Right and Left Hands









In addition, the keyboard of the PSR-550 has other important functions besides playing voices (as shown below).

Auto Accompaniment Section

When the auto accompaniment is set to on (page 33), the key range of voice L becomes the range for playing/indicating chords.

Split Point

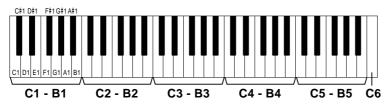




Naming

The keyboard can also be used to name song files on a floppy disk, User Styles, User Pad banks and Registration Memory banks (page 21).

Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1, and the highest (farthest right) key to C6.



Transpose

This function allows the overall pitch of the PSR-550 to be transposed up or down by a maximum of one octave in semitone increments. The transpose range is from -12 to +12.

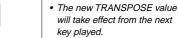


Press the [TRANSPOSE] button.



Transecs.





value to "0".

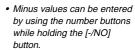
(page 31).

NOTE

The Transpose function

cannot be applied when a drum kit is the selected voice

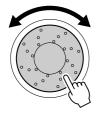
 Press the [+/YES] and [-/NO] buttons simultaneously to instantly reset the transpose





Set the transposition.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].





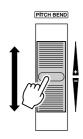
Transfose





Pitch Bend Wheel

Use the PSR-550 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 wheel is self-centering and will automatically return to nornal pitch when released.





NOTE

 The maximum pitch bend range can be set via the Pitch Bend Range function in the Utility function group (page 122).

Sustain

When the Sustain features is ON, all notes played on the keyboard have a longer sustain. Press the [SUSTAIN] button to turn the SUSTAIN effect ON or OFF.



Keyboard Percussion



Press the [VOICE R1] button.



Select "StandardKit1".

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

220 StandardKitl



Play the voice.

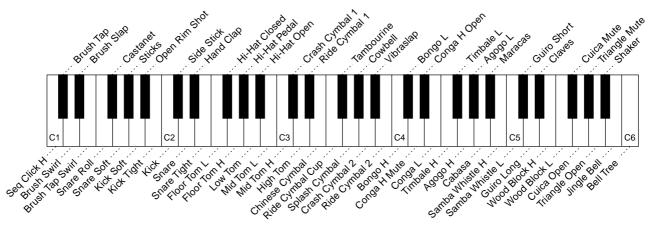
Refer to the illustration below and the drum kit list at the end of the manual (page 128).

The drum and percussion instrument sounds for the standard kit (Std.Kit1) are indicated by symbols printed below the keys.

NOTE

- The Transpose function cannot be applied when a drum kit is the selected voice (page 30).
- Each key has a note name; for example, the lowest (farthest left) key on the keyboard corresponds to C1, and the highest (farthest right) key to C6. (See page 29 for details.)

[Standard Kit 1]



Auto Accompaniment

The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand as you perform, and the selected accompaniment style matching your music will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of an entire band or orchestra.

The PSR-550 features a total of 112 styles or accompaniment patterns (style numbers 1 - 112) in a variety of different musical genres. Try selecting some of the different styles (page 130) and play with the auto accompaniment.

Two ways to playback the auto accompaniment Using Auto Accompaniment (rhythm track only) Using Auto Accompaniment (all tracks)	
Additional functions for getting the most out of the auto accordance Accompaniment Sections Tempo / Tap Accompaniment Track Muting Accompaniment Volume Control	page 34 page 36 page 37
Auto accompaniment functions related to your left hand chorn Chord Fingerings • Accompaniment Split Point	page 38 page 40
Automatic one-touch selection of a variety of specially progresettings to match the auto accompaniment style • One Touch Setting	•

Using Auto Accompaniment (rhythm track only)



Press the [STYLE] button.



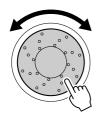


2

Select a style.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Refer to the Style List (page 130).







NOTE
 You can select successive

Style categories by using the Direct Access function. The method is the same as for selecting Music Database categories. Refer to step #2 in "Using the Music Database" on page 14. Also refer to the Style categories printed on the panel.

3

Press the [START/STOP] button to start the rhythm tracks of the auto accompaniment, minus the bass and chord tracks.





Press the [START/STOP] button again to stop the accompaniment.

Using Auto Accompaniment (all tracks)

1

Press the [STYLE] button.

2

Select a style.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

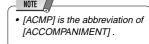
Refer to the Style List (page 130).

3

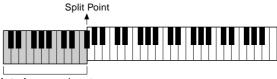
Turn AUTO ACCOMPANIMENT on.

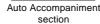
Press the [ACMP ON/OFF] so that its indicator lights.

The specified left-hand section of the keyboard becomes the "Auto Accompaniment" section, and chords played in this section are automatically detected and used as a basis for fully automatic accompaniment with the selected style.











Turn SYNCHRONIZED START on.

Press the [SYNC START] button so that its indicator lights.

The beat lamp also flashes in time with the tempo. This condition is called synchronized start standby. Refer to page 25 for details.



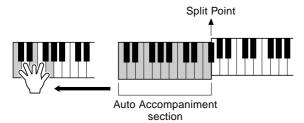
 [SYNC START] is the abbreviation of [SYNCHRO-NIZED START].





As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).

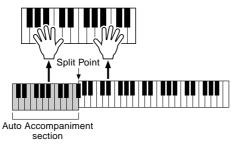




6 Try playir

Try playing other chords with your left hand.

For information on how to enter chords, see "Chord Fingerings" on page 38.

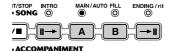




Press the [START/STOP] button again to stop the accompaniment.

Accompaniment Sections

There are various types of Auto Accompaniment sections that allow you to vary the arrangement of the accompaniment to match the song you are playing. They are: Intro, Main A and B, Fill-in and Ending. By switching among them as you play, you can easily produce the dynamic elements of a professional-sounding arrangement in your performance.



INTRO Section

This is used for the beginning of the song. When the intro finishes playing, accompaniment shifts to the main section.

The length of the intro (in measures) differs depending on the selected style.

MAIN Section

This is used for playing the main part of the song. It plays an accompaniment pattern of several measures (2 - 4 measures), and repeats indefinitely until another section's button is pressed. There are two variations on the basic pattern, A - B, and the auto accompaniment changes harmonically based on the chords you play with your left hand.

FILL-IN Section

The fill-in sections let you add dynamic variations and breaks in the rhythm of the accompaniment, to make your performance sound even more professional. Simply press one of the MAIN/AUTO FILL (A, B) buttons as you play, and the selected fill-in section plays automatically (AUTO FILL), spicing up the auto accompaniment. When the fill-in is finished, it leads smoothly into the selected main section (A, B).

ENDING Section

This is used for the ending of the song. When the ending is finished, the auto accompaniment stops automatically. The length of the ending (in measures) differs depending on the selected style.



Press the [STYLE] button.



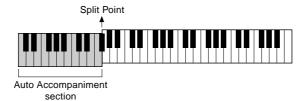
Select a style (page 32).

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].



Turn AUTO ACCOMPANIMENT on (page 33).





• [ACMP] is the abbreviation of [ACCOMPANIMENT] and [SYNC START] is that of [SYNCHRONIZED START].



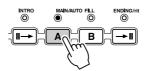
Turn SYNCHRONIZED START on (page 33).





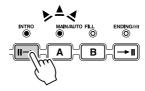
5

Press the [MAIN A] button.



6

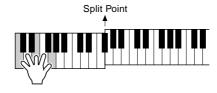
Press the [INTRO] button.





As soon as you play a chord with your left hand, the auto accompaniment starts.

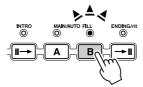
For this example, play a C major chord (as shown below). For information on how to enter chords, see "Chord Fingerings" on page 38.



When the playback of the intro is finished, it automatically leads into main A section.



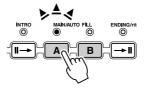
Press the [MAIN B] button.



A fill-in plays, automatically followed by the main B section.



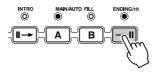
Press the MAIN buttons as desired during your performance.



The main section corresponding to the pressed button plays following an automatic fill-in.



Press the [ENDING] button.



This switches to the ending section. When the ending is finished, the auto accompaniment automatically stops.

You can have the ending gradually slow down (ritardando) by pressing the **[ENDING]** button again while the ending is playing back.

NOTE

- The indicator of the destination section (MAIN A or B) will flash while the corresponding fill-in is playing. During this time you can change the destination section by pressing the appropriate MAIN/AUTO FILL [A] or [B] button.
- You can use the intro section even in the middle of the song by pressing the [INTRO] button during the song.
- If the MAIN/AUTO FILL A/B button is pressed after the final half beat (eighth note) of the measure, fill-in will begin from the next measure.



- If you press the INTRO button while the ending is playing, the intro section will begin playing after the ending is finished.
- If you press a MAIN/AUTO FILL button while the ending is playing, the fill-in accompaniment will immediately start playing, continuing with the main section.
- If you press the [SYNC START] button while the accompaniment is playing, the accompaniment will stop and the PSR-550 will enter Synchronized Start standby status.
- You can begin the accompaniment by using the ending instead of the intro section.

Tempo/Tap

Each style of the PSR-550 has been programmed with a default or standard tempo; however, this can be changed by using the **[TEMPO/TAP]** button.

You can change the tempo to any value between 32 and 280 beats per minute.

The following steps can be used even during playback.



Press the [TEMPO/TAP] button.



Tenec

=148

NOTE

2

Change the tempo.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

 When you select a different style while the accompaniment is not playing, the "default" tempo for that style is also selected. If the accompaniment is playing, the same tempo is maintained even if you select a different style.





Tene

==124



To restore the default tempo setting, press the [+/YES]/[-/NO] buttons simultaneously.



Tene

=145

Using the Tap function

The auto accompaniment can be started at any tempo you desire by "tapping" out the tempo with the **[TEMPO/TAP]** button.



Press the [STYLE] button.

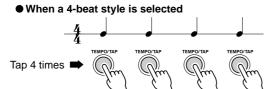


Select a style (page 32).

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].



Press the [TEMPO/TAP] button four times successively (in a consistent rhythm).



* When a 3-beat style is selected, tap 3 times.

The auto accompaniment starts automatically at the tempo you tapped the button.

• The Te

 The Tempo can also be changed during playback by tapping the TEMPO/TAP button twice at the desired tempo.

Accompaniment Track Muting

The PSR-550 has eight accompaniment tracks — RHYTHM SUB, RHYTHM MAIN, BASS, CHORD 1, CHORD 2, PAD, PHRASE 1 and PHRASE 2 — that you can control to modify the "orchestration" and therefore the overall sound of the accompaniment. When a style is selected, the icons corresponding to the tracks which contain data for any section of that style will light.

Individual accompaniment tracks can be turned OFF (muted) or ON by pressing the TRACK buttons (9 - 16) corresponding to the target tracks. The [M] icon will appear when a track is muted. By turning the tracks OFF and ON in different combinations, you can create various arrangements from a single accompaniment style.

Track contents

• RHYTHM SUB, RHYTHM MAIN

These are the main rhythm tracks. The RHYTHM tracks produce the drum and percussion sounds.

BASS

The BASS track always plays a bass line, but the voice will change to fit the selected style ... acoustic bass, synth bass, tuba, etc.

CHORD 1, CHORD 2

These tracks provide the rhythmic chordal accompaniment required by each style. You'll find guitar, piano and other chordal instruments here.



This track plays long chords where necessary, using sustained instruments such as strings, organ, choir.

PHRASE 1, PHRASE 2

This is where the musical embellishments reside.

The PHRASE tracks are used for punchy brass stabs, arpeggiated chords and other extras that make the accompaniment more interesting.



This separate volume control for the auto accompaniment lets you set the optimum level balance between the accompaniment and your right hand performance.

The accompaniment volume range is from "0" (no sound) to "127" (maximum volume).



Start the accompaniment (page 33).



Press the [ACMP/SONG VOLUME] button.



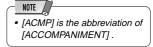




Adjust the Accompaniment Volume.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Adjust the level as you play the keyboard with your right hand, listening to the overall balance between the accompaniment and the keyboard-played voice.





Stop the accompaniment (page 33).



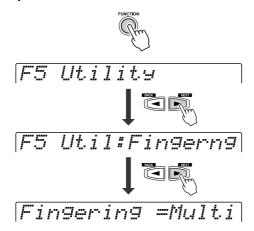


Chord Fingerings

The way in which chords are played or indicated with your left hand (in the auto accompaniment section of the keyboard) is referred to as "fingering". There are 5 types of fingerings as described below.



Multi Finger	page 40
Single Finger	
• Fingered 1	
• Fingered 2	
• Full Keyboard	



- 1 Press the [FUNCTION] button.
- 2 Select "Utility" by using the data dial, the [+/YES] button or the [-/NO] button.
- 3 Press the [NEXT] button.
- **4** Select "Fingerng" by using the data dial, the [+/ YES] button or the [-/NO] button.
- **5** Press the [NEXT] button.
- 6 Select the way in which chords are played or indicated (Fingering) by using the data dial, the [+/ YES] button or the [-/NO] button.

The operations for each function corresponding to step #6 are covered in the following explanations.

The Single Finger mode

Fingering =Singl

Single-finger accompaniment makes it simple to produce beautifully orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys on the Auto accompaniment section of the keyboard. The following abbreviated chord fingerings are used:



- For a major chord, press the root key only.
- For a seventh chord, simultaneously press the root key and a white key to its left.



 For a minor chord, simultaneously press the root key and a black key to its left.



 For a minor-seventh chord, simultaneously press the root key and both a white and black key to its left.

The Fingered 1 mode

Fingering =F1

The Fingered 1 mode lets you finger your own chords on the Auto accompaniment section of the keyboard (i.e. all keys to the left of and including the split-point key — normally F#2) while the PSR-550 supplies appropriately orchestrated rhythm, bass and chord accompaniment in the selected style.

The Fingered 1 mode recognizes the following chords:

• Example for "C" chords

С	C (a)	C ₆	C ₆ (9)	CM ₇	CM ₇ (9)	CM ₇ (#11)	C(♭5)	CM7 ^{♭5}
		• • •		• • •				
Csus ₄	Caug	CM ₇ aug	Cm	Cm ⁽⁹⁾	Cm ₆	Cm ₇	Cm ₇ (9)	Cm ₇ (11)
		• 9				• 9		
CmM ₇	CmM ₇ (9)	Cm ₇ ♭5	CmM ₇ ♭5	Cdim	Cdim ₇	C ₇	C ₇ (♭9)	C ₇ (♭13)
CmM ₇	CmM ₇ (9)	Cm ₇ ♭5	CmM ₇ ♭5	Cdim	Cdim ₇	C ₇	C ₇ (\(\rightarrow 9\)	C ₇ (\(\bar{1}\)3)
				Cdim C ₇ C ₇				

Chord Name/[Abbreviation]	Normal Voicing	Chord (C)	Display
Major [M]	1 - 3 - 5	С	С
Add ninth [(9)]	1 - 2 - 3 - 5	C(9)	C(9)
Sixth [6]	1 - (3) - 5 - 6	C6	C6
Sixth ninth [6(9)]	1 - 2 - 3 - (5) - 6	C6(9)	C6(9)
Major seventh [M7]	1 - 3 - (5) - 7 or 1 - (3) - 5 - 7	CM7	CM7
Major seventh ninth [M7(9)]	1 - 2 - 3 - (5) - 7	CM7(9)	CM7(9)
Major seventh add sharp eleventh [M7(#11)]	1 - (2) - 3 - #4 - 5 - 7 or 1 - 2 - 3 - #4 - (5) - 7	CM7(#11)	CM7(#11)
Flatted fifth [(\bdack5)]	1 - 3 - ♭5	C(♭5)	C(♭5)
Major seventh flatted fifth [M7♭5]	1 - 3 - 15 - 7	CM7♭5	CM7♭5
Suspended fourth [sus4]	1 - 4 - 5	Csus4	Csus4
Augmented [aug]	1 - 3 - #5	Caug	Caug
Major seventh augmented [M7aug]	1 - (3) - #5 - 7	CM7aug	CM7aug
Minor [m]	1 - 1-3 - 5	Cm	Cm
Minor add ninth [m(9)]	1 - 2 - 13 - 5	Cm(9)	Cm(9)
Minor sixth [m6]	1 - 1-3 - 5 - 6	Cm6	Cm6
Minor seventh [m7]	1 - 1-3 - (5) - 17	Cm7	Cm7
Minor seventh ninth [m7(9)]	1 - 2 - 13 - (5) - 17	Cm7(9)	Cm7(9)
Minor seventh add eleventh [m7(11)]	1 - (2) - 13 - 4 - 5 - (17)	Cm7(11)	Cm7(11)
Minor major seventh [mM7]	1 - 1-3 - (5) - 7	CmM7	CmM7
Minor major seventh ninth [mM7(9)]	1 - 2 - 13 - (5) - 7	CmM7(9)	CmM7(9)
Minor seventh flatted fifth [m7♭5]	1 - 1-3 - 15 - 17	Cm7♭5	Cm7♭5
Minor major seventh flatted fifth [mM7♭5]	1 - 1-3 - 15 - 7	CmM7♭5	CmM7♭5
Diminished [dim]	1 - 1-3 - 1-5	Cdim	Cdim
Diminished seventh [dim7]	1 - 1-3 - 15 - 6	Cdim7	Cdim7
Seventh [7]	1 - 3 - (5) - ♭7 or 1 - (3) - 5 - ♭7	C7	C7
Seventh flatted ninth [7(♭9)]	1 - 1 - 2 - 3 - (5) - 7	C7(♭9)	C7(♭9)
Seventh add flatted thirteenth [7(\bar{13})]	1 - 3 - 5 - 16 - 17	C7(♭13)	C7(♭13)
Seventh ninth [7(9)]	1 - 2 - 3 - (5) - 1-7	C7(9)	C7(9)
Seventh add sharp eleventh [7(#11)]	1 - (2) - 3 - #4 - 5 - ♭7 or 1 - 2 - 3 - #4 - (5) - ♭7	C7(#11)	C7(#11)
Seventh add thirteenth [7(13)]	1 - 3 - (5) - 6 - 17	C7(13)	C7(13)
Seventh sharp ninth [7(#9)]	1 - #2 - 3 - (5) - ♭7	C7(#9)	C7(#9)
Seventh flatted fifth [7\b5]	1 - 3 - 15 - 17	C7♭5	C7♭5
Seventh augmented [7aug]	1 - 3 - #5 - ♭7	C7aug	C7aug
Seventh suspended fourth [7sus4]	1 - 4 - (5) - 1-7	C7sus4	C7sus4
One plus two plus five [1+2+5]	1 - 2 - 5	C1+2+5	С

NOTE

- Notes in parentheses can be omitted.
- If you play any three adjacent keys (including black keys), the chord sound will be cancelled and only the rhythm instruments will continue playing (CHORD CANCEL function).
- Playing a single key or two same root keys in the adjacent octaves produces accompaniment based only on the root.
- A perfect fifth (1 + 5) produces accompaniment based only on the root and fifth which can be used with both major and minor chords.
- The chord fingerings listed are all in "root" position, but other inversions can be used — with the following exceptions:

 The chord fingering listed are all in "root" position, but
 - m7, m7\(\bar{b}\) 5, 6, m6, sus4, aug, dim7, 7\(\bar{b}\) 5, 6(9), m7(11), 1+2+5.
- Inversion of the 7sus4 chord are not recognized if the 5th is omitted.
- The AUTO ACCOMPANI-MENT will sometimes not change when related chords are played in sequence (e.g. some minor chords followed by the minor seventh).
- Two-note fingerings will produce a chord based on the previously played chord.

Auto Accompaniment

The Fingered 2 mode

Fingering =F2

This is essentially the same as the Fingered 1 mode, described above, except that the Fingered 2 mode additionally allows you to specify the lowest note of each chord — simply, the lowest note played in the Auto accompaniment section of the keyboard is used as the accompaniment bass note. This means you can specify "on-bass" chords in which the main bass note for the chord is not the root of the chord. For a C major chord, for example, you could use E (the third) or G (the fifth) as the bass note rather than C.







The Full Keyboard mode

Fingering =Full

When the Full Keyboard Mode is selected, the PSR-550 will automatically create appropriate accompaniment while you play just about anything using both hands, anywhere on the keyboard. You do not have to worry about specifying the accompaniment chords. The name of the detected chord will appear in the display.

NOTE

 When the Full Keyboard mode is selected, the split point setting (see below) for the auto accompaniment will be ignored.

The Multi Finger mode

Fingering =Multi

This is the default accompaniment mode. The Multi Finger mode automatically detects Single Finger or Fingered 1 chord fingerings, so you can use either type of fingering without having to switch fingering modes.

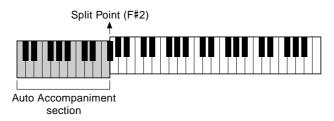
NOTE

 If you want to play minor, seventh or minor seventh chords using the Single Finger operation in the Multi Finger Mode, always press the closest white/black key(s) to the root of the chord.

Accompaniment Split Point

The point on the keyboard that separates the auto accompaniment section and the right-hand section of the keyboard is called the "split point".

The initial setting (factory setting) of the split point is "F#2"; however, this can be set to any key you wish. Refer to page 118 for instructions on how to set the split point.



Synchro Stop

When the Synchro Stop function is engaged, accompaniment playback will stop completely when all keys in the auto-accompaniment section of the keyboard are released. Accompaniment playback will start again as soon as a chord is played. The BEAT indicators in the display will flash while the accompaniment is stopped.



Press the [STYLE] button.



Turn AUTO ACCOMPANIMENT on (page 33).



Turn SYNCHRONIZED START on (page 33).



Turn SYNCHRONIZED STOP on.

Press the [SYNC STOP] button.

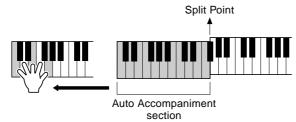






As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).





The auto accompaniment stops when you release your left hand from the keys.





Playing a chord with your left hand automatically restarts the auto accompaniment.

To stop the auto accompaniment, simply release your left hand from the keyboard.



Turn SYNCHRONIZED STOP off.

Press the [SYNC STOP] button.



When Synchronized Stop is off, the auto accompaniment does not stop when you release your left hand from the keys.



Stop the accompaniment (page 33).



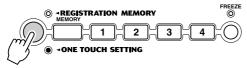
- Synchro Stop cannot be set to on when the fingering mode is set to Full Keyboard or the auto accompaniment on the panel is set to off. Also, Synchro Stop automatically turns off when Full Keyboard is selected for the fingering mode or when the auto accompaniment on the panel is turned off.
- [SYNC STOP] is the abbreviation of [SYNCHRO STOP].

One Touch Setting

One Touch Setting is a powerful and convenient function that lets you instantly reconfigure virtually all auto-accompaniment-related panel settings with the touch of a single button.



Press the round One Touch Setting button to call up the One Touch Setting function.





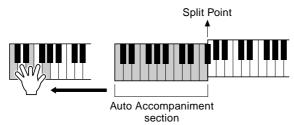
Press one of the [ONE TOUCH SETTING] buttons [1]-[4].

Steps #3 - #4 of "Using Auto Accompaniment (all tracks)" (page 33) can be set with just a single press of a **[ONE TOUCH SETTING]** button. In addition, various panel settings (such as voices, effects, etc.) that match the selected style can be instantly recalled with just a single button press (see below).



As soon as you play a chord with your left hand, the auto accompaniment starts.

For this example, play a C major chord (as shown below).





Stop the accompaniment.

One Touch Setting parameter list

The PSR-550 features four different One Touch Settings for each of the 112 auto accompaniment styles built into the instrument. Each has been specially programmed to match the selected style; each has the best suited voice (or combination of voices), digital effects and other settings for that style. Simply pressing one of the [ONE TOUCH SETTING] buttons lets you instantly reconfigure all relevant settings, conveniently allowing you to start playing in a desired style with all the appropriate sounds — without having to make each setting one by one.

Part on/off (VOICE R1, R2) Voice Change setting (VOICE R1, R2) Mixer setting (VOICE R1, R2) Auto accompaniment = ON Synchro Start = ON* HARMONY/ECHO on/off, type, volume, part DSP on/off, type, return level and FAST/SLOW Multi Pad bank number	page 75 page 76 page 33 page 33 page 50 page 49
Multi Pad bank number Upper Octave setting	. •

^{*} Set only when the accompaniment is not playing.

NOTE

- You can also try changing the established One Touch Setting data, making your own original settings. To be able to recall your original settings anytime, save them using the Registration Memory function (page 54).
- When a User style (number 113-115) is selected, the One Touch Setting cannot be used.

The Multi Pads

The PSR-550 Multi Pads can be used to play a number of short pre-recorded rhythmic and melodic sequences that can be used to add impact and variety to your keyboard performances. You can also record your own Multi Pad phrases as described in "Multi Pad Recording" on page 92.

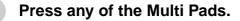
Some pad phrases simply play back as programmed, while others are "chord match" types which, if the Chord Match function is turned on, are automatically transposed to match chords played using the PSR-550 auto accompaniment feature.

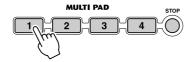
- BANK 01

 MULTI PAD

 1 2 3 4

Playing the Multi Pads





The corresponding phrase (in this case, for Pad 1) starts playing back in its entirety as soon as the pad is pressed. To stop playback in the middle of the phrase, press the **[STOP]** button.



- Simply tap any of the Multi Pads at any time to play back the corresponding phrase at the currently set tempo.
- You can even play two, three or four Multi Pads at the same time.
- Pressing the pad during its playback will stop playing and begin playing from the top again.

Chord Match



Press the [STYLE] button.

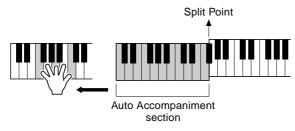


Turn AUTO ACCOMPANIMENT on (page 33).



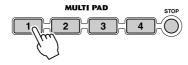
Play a chord with your left hand.

For this example, play an F major chord (as shown below).





Press any of the Multi Pads.



In this example, the phrase for Pad 1 will be transposed into F major before playing back. Try playing other chords and pressing the pads.



The chord match on/off status depends on the selected Multi Pad. Refer to the Multi Pad Bank list (page 45).

The chord match on/off
status depends on the status of the

Selecting a Multi Pad Bank

1

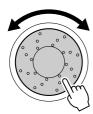
Press the [FUNCTION] button.



2

Select "Multi Pad."

Use the data dial, the [+/YES] button or the [-/NO] button.





F1 Multi Pad

3

Press the [NEXT] button to display the MULTI PAD BANK screen.



| FBnk=01 Fanfare



Select a Bank.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Turning Chord Match On/Off



Use the same operation as in "Selecting a Multi Pad Bank" above.



Press the [NEXT] button again.



CdMatch Pad1=On



Select the desired PAD.

Use the [NEXT]/[BACK] button.



CdMatch Pad2=On



- The chord match function has no effect with pads that contain percussion phrases.
- The chord match on/off setting is restored to its original status whenever a preset Multi Pad Bank is selected.
- When the chord match on/off status of a user Multi Pad Bank (see above) is changed, the new status is recorded with the Multi Pad data.



Turn the CHORD MATCH function on or off.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Multi Pad Bank List

No.	Bank name		Chor	d Match			Re	epeat	
		Pad1	Pad2	Pad3	Pad4	Pad1	Pad2	Pad3	Pad4
1	Fanfare	0	0	0	_	_	_	_	_
2	Crystal	0	0	0	0	_	_	_	_
3	Gothic_V	0	0	0	0	_	_	_	_
4	TechSyn1	0	0	0	0	0	0	0	0
5	TechSyn2	0	0	0	0	0	0	0	0
6	TechSyn3	0	0	_	_	0	0	0	0
7	TechSyn4	0	0	_	_	0	0	0	0
8	PianoSeq	0	0	0	0	_	_	_	_
9	OrcheHit	0	0	0	0	_	_	_	_
10	Traffic	_	_	_	_	_	_	_	_
11	Chirp	_	_	_	_	_	_	_	_
12	HorrorSE	-	-	_	-	-	_	_	_
13	Noises	_	_	_	-	_	_	_	_
14	WaterSE	-	-	-	-	-	-	-	-
15	AnalgKit	_	-	-	-	_	-	-	-
16	TechKit	-	-	-	-	-	-	-	-
17	RockKit	-	-	-	-	-	-	-	-
18	TomFlam	_	-	-	-	_	-	-	-
19	LatPerc1	-	-	-	-	-	-	-	-
20	LatPerc2	_	-	-	-	_	-	-	-
21	Timbales	-	-	-	-	-	-	-	-
22	ArabKit1	_	-	-	-	_	-	-	-
23	ArabKit2	_	-	-	-	_	-	-	-
24	Brassy1	0	0	0	0	_	_	_	-
25	Brassy2	0	0	0	0	_	_	_	_
26	Swingy	0	0	0	0	_	_	_	_
27	SynBrass	0	0	0	0	_	_	_	_
28	GtrPlay1	0	0	0	0	0	0	0	0
29	GtrPlay2	0	0	0	0	0	0	0	0
30	GtrPlay3	0	0	0	0	0	0	0	0
31	GtrPlay4	0	0	0	0	0	0	0	0
32	PianoMan	0	0	0	0	0	0	0	_
33	SalsaPno	0	0	0	0	0	0	0	0
34	SambaShw	_	_	_	_	0	0	0	0
35	Accrdion	0	0	0	0	-	-	_	_
36	Arpeggio	0	0	0	0	-	_		
37	Classic	0	0	0	0	-	_	_	_
38	Twinkle	0	0	0	0	-		-	-
39	Xmas1	0	0	0		-			0
40	Xmas2	_	0	0	_	_	-	_	_

O : available



There are two types of Multi Pad data: some of the data will be played back once and stop when it reaches to the end. Others will be played back repeatedly until you press the [STOP] button.

Digital Effects

With the digital effects built into the PSR-550 you can add ambiance 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 or adding harmony notes for a full, rich sound.

Reverb page 46

You can create a reverb effect that makes you sound like you are playing in

You can create a reverb effect that makes you sound like you are playing in places like a concert hall, or live in a club.

Reverb is always set to on for the PSR-550. A total of 24 different reverb types are available.

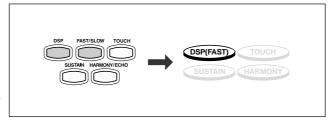
● Choruspage 48

You can add a chorus effect that makes your playing sound as though multiple parts were being played together at the same time.

Chorus is always set to on for the PSR-550. A total of 16 different chorus types are available.

In addition to the Reverb and Chorus types, the PSR-550 has special DSP effects, that include additional effects usually used for a specific part, such as distortion and tremolo.

A total of 74 DSP types are available. The PSR-550 features one DSP system, which can be turned on or off by a panel button (page 49). The [FAST/SLOW]



NOTE

 For details about using Digital Effects (Reverb,

Chorus, DSP) (page 132).

button can switch between variations of the DSP effect. For example, this lets you change the rotating speed (fast/slow) of the rotary speaker effect.

● Harmony/Echopage 50

You can add a variety of harmony notes to your playing in the right-hand section (page 29), as well as adding tremolo or other effects.



Reverb

Selecting a reverb type



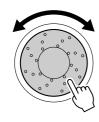
Press the [FUNCTION] button.





Select "Digital Effect".

Use the data dial, the [+/YES] button or the [-/NO] button.





F3 DigitalEffect

3

Press the [NEXT] button to display the Digital Effect screen.

4

Select "Reverb".

Use the data dial, the [+/YES] button or the [-/NO] button.

D.Effect#Reverb

5

Press the [NEXT] button.



RevType=Halll



Select a reverb type.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Refer to the Reverb Type List (page 133).



 When you select a different style, the appropriate reverb type will be selected accordingly.



Play the keyboard.

Try out some of the other reverb types as well.



Adjust the depth of the reverb.

The two parameters below affect the depth of the reverb.



Press the [NEXT] button.



RevRetnLevel= 64



Adjust the reverb return level.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [11-[0].

The range is from 0 to 127. The higher the value, the greater the return level.

Chorus

Selecting a Chorus Type

1-3 Use the same operation as in "Reverb" (page 46).

Select "Chorus".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

D. Effect # Chorus

Press the [NEXT] button.



ChoType=Chorus2



Select a chorus type.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Refer to the Chorus Type List (page 133).

NOTE

 When you select a different style, the appropriate chorus type will be selected accordingly.



Play the keyboard.

Try out some of the other chorus types as well.



Adjust the depth of the chorus.

The two parameters below affect the depth of the chorus effect.

- Chorus Depth (send level) page 74 Sets the chorus depth for the specified voice or track, and thus the amount of chorus effect applied to that voice or track.
- Sets the amount of chorus effect returned from the chorus effect stage, thus making it possible to adjust the degree of chorus effect applied to the overall sound.



Press the [NEXT] button.



ChoRetnLevel= 64



Adjust the chorus return level.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The range is from 0 to 127. The higher the value, the greater the return level.

Applying the DSP effect



Press the [DSP] button.

The DSP icon will light up and the DSP effect will be turned on.

The effect will be applied when

you play the R1, R2 and L voices from the keyboard.

In addition, when the [FAST/SLOW] button is pressed, the FAST icon lights up indicating that the variation of the DSP effect is selected. When the DSP effect type is Rotary Speaker or Tremolo, the speed of the modulation becomes fast.



DSP(FAST)

 When the Voice Set function is ON (page 120), the DSP effect and FAST/SLOW settings may change according to the selected R1 panel voice.

Selecting a DSP Type





f 3 Use the same operation as in "Reverb" (page 46).



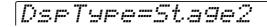
Select "Dsp".

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button.







Select a DSP type.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Refer to the DSP Type List (page 133).



Play the keyboard.

Try out some of the other DSP types as well.



· When the selected DSP type is an Insertion Effect (pages 49, 133), the DSP effect applies only to the Voice R1.

Adjust the depth of the DSP.

The two parameters below affect the depth of the DSP effect.

- DSP Depth (Send level)......page 74 Sets the DSP depth for the specified voice or track, and thus the amount of DSP effect applied to that voice or track.
- DSP Return Level see below Sets the amount of DSP effect returned from the DSP effect stage, thus making it possible to adjust the degree of DSP effect applied to the overall sound.



• If DSP Insertion Effect is selected (page 50), you won't be able to set the DSP Return Level.



Press the [NEXT] button.





Adjust the DSP return level.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The range is from 0 to 127. The higher the value, the greater the return level.

System Effects and Insertion Effects

The reverb, chorus and DSP effects are divided into two different types or methods or operation.

There are two types of digital effects: system effects and insertion effects.

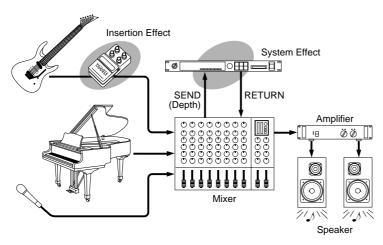
System Effects

Applies the effect to all of the parts input to the mixer. You can set the amount of effect applied with the depth and return level parameters. Reverb and chorus are both system effects.

Insertion Effects

Applies the effect to only one designated part before inputting the signal to the mixer. You can effectively use the digital effects by applying the desired effect to the specific part. With the insertion effects, only the DSP depth can be set.

The illustration below with the various audio components (instruments, effect devices and a mixer) represents the inner workings of the DSP effects of the PSR-550.



- Reverb All types function as system effects.
- Chorus All types function as system effects.
- DSP Depending on the selected type, this functions either as a system effect or an insertion effect.

Refer to "About Digital Effects" (page 132) and the Type List.

Harmony/Echo

Selecting a Harmony/Echo type



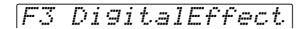
Press the [FUNCTION] button.





Select "DigitalEffect".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





Press the [NEXT] button to display the Digital Effect screen.

4

Select "Harmony".

Use the data dial, the [+/YES] button or the [-/NO] button.

D.Effect:Harmony

5

Press the [NEXT] button.



HTyp=Duet

6

Select a Harmony/Echo type.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Refer to the Harmony/Echo Type List (page 134).

NOTE

 When the Voice Set function is ON (page 120), the Harmony/Echo type may change according to the selected R1 panel voice.

Applying the Harmony/Echo effect



Press the [STYLE] button.

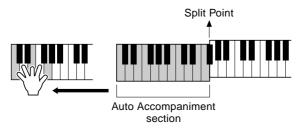


Turn AUTO ACCOMPANIMENT on (page 33).

3

Play a chord with your left hand.

For this example, play a C major chord.





4

Press the [HARMONY/ECHO] button.





Play some notes in the right-hand range of the keyboard.



● When a Harmony type (Duet through Strum) is selected

This type automatically add one or more harmony notes to a single-note melody played in the right hand.

● When an Echo type is selected

An echo effect is applied to the note played on the keyboard at the currently set tempo

Steps #1 - #3 above are unnecessary for this type.

When a Tremolo type is selected

A tremolo effect is applied to the note played on the keyboard at the currently set tempo.

Steps #1 - #3 above are unnecessary for this type.

When a Trill type is selected

Two notes held on the keyboard are played alternately at the currently set tempo. Steps #1 - #3 above are unnecessary for this type.

NOTE

 Harmony/Echo cannot be turned on when the Full Keyboard (page 40) is selected. Harmony/Echo will be automatically turned off if the Full Keyboard fingering mode is selected while the Harmony/Echo effect is on.

Digital Effects

Adjusting the Harmony/Echo volume

The volume of the Harmony/Echo sound in relation to the keyboard sound can be adjusted as follows:



Use the same operation as in "Selecting a Harmony/Echo Type" (page 50).

D.Effect:Harmony



Press the [NEXT] button to display the Type Selection screen.



Press the [NEXT] button to display the Harmony/Echo Volume screen.



| Harmony Vol =120



Adjust the Harmony/Echo volume.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The volume range is from 0 (no sound) to 127 (maximum volume).

Harmony Vol =113



- When the Voice Set function is on (page 120), the Harmony/Echo Volume may change according to the selected R1 panel voice.
- Changing the volume of the harmony sound may not produce audible effect for some R1 voices (ex. organ sounds) when you select Harmony types "Duet" through "Strum".

Changing the Part for the Harmony/Echo effect

This allows you to select the part which is used for the Harmony/Echo effect.



- Use the same operation as in "Selecting a Harmony/Echo Type" (page 50).

D.Effect:Harmony



Press the [NEXT] button to display the Type Selection screen.



Press the [NEXT] button to display the Harmony Volume screen.



Press the [NEXT] button to display the Harmony Part setting screen.



HarmoPart=Auto



Set the part.

Use the data dial, the [+/YES] button or the [-/NO] button.

- Auto Harmony/Echo notes are automatically assigned to the R1 and R2 parts, in that order or priority.
- Right1 Harmony/Echo is only applied to the Voice R1.
 If Voice R1 is off, there will be no Harmony/Echo effect.
- Right2 Harmony/Echo is only applied to the Voice R2.
 If Voice R2 is off, there will be no Harmony/Echo effect.

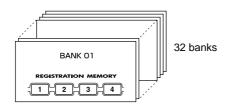
NOTE

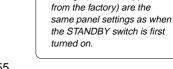
 When the Voice Set function is on (page 120), the Harmony/Echo part setting may change according to the selected R1 panel voice.

Registration Memory

Since the PSR-550 is such a sophisticated instrument with such a variety of controls and functions — voice, style, auto accompaniment and effect settings, just to name a few — the Registration Memory feature is one of the most convenient and powerful of the instrument. It allows you save virtually all panel settings to a Registration Memory setting, and then instantly recall your custom panel settings by pressing a single button.

Registration Memory provides up to 128 complete control-panel setups (32 banks, 4 setups each) that can be recalled instally during your performance.





NOTE

The PSR-550's initial

Registration Memory [1]–[4] settings (when it shipped

Data stored by the Registration Memory

■ VOICE PARAMETERS

• Part on/off (VOICE R1, R2, L)	page 29
Voice Change setting (VOICE R1, R2, L)	
Mixer setting (VOICE R1, R2, L)	
Touch Sensitivity	
• DSP on/off, FAŚT/SLOW on/off, DSP Type and Return Level	
HARMONY/ECHO on/off, type, volume, part	
• TOUCH on/off	
SUSTAIN on/off	
Pitch Bend Range	
Scale Tuning	
Footswitch function	
• Transpose	
Upper Octave setting	
Direct Access setting	
Backlight color setting	
- Daokiight Color Setting	paye 122

NOTE

Material recorded data is retained in memory even when the STANDBY switch is turned off if batteries are installed or an AC adaptor is connected (page 136). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 60).

■ ACCOMPANIMENT PARAMETERS

Auto Accompaniment on/off	page 33
• Style number	
Main A/B section	
• Tempo	
• Fingering mode	
Split Point	
Accompaniment Volume	page 37
Track on/off setting	page 37
Voice Change setting	page 75
Mixer setting	page 75
Multi Pad Bank number, Chord Match on/off	page 43
Reverb setting	page 46
Chorus setting	page 48

Registration Memory data can be saved to and loaded from floppy disk as needed (page 57).

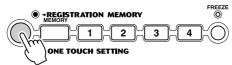
Registering the Panel Settings



Set up the panel controls as required.



Press the round Registration Memory button to call up the Registration Memory function.

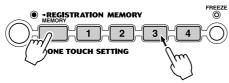




- Any data that was previously recorded in the Registration Memory location you selected will be erased and replaced by the new settings.
- The Registration Memory contents will be retained even after turning the power off. See page 136 for details.



While holding the [MEMORY] button, press one of the REGISTRATION MEMORY buttons: [1] through [4].



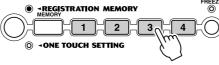
A "Regist Memorized" message briefly appears in the display, indicating that the panel settings have been memorized.

In this example, the panel settings are memorized to button number 3.

Recalling the Registered Panel Settings



Press one of the REGISTRATION MEMORY buttons: [1] through [4].



In this example, the panel settings memorized to button number 3 are recalled.

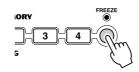
The Accompaniment Freeze function

When the FREEZE function is engaged, selecting a different Registration Memory setup will not change any of the accompaniment (all other parameters will change as programmed). This allows you to use the auto accompaniment and select different Registration Memory setups, without suddenly disturbing the flow of the accompaniment.



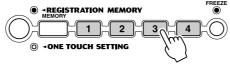
Press the [FREEZE] button.

The [FREEZE] lamp lights.





Press one of the REGISTRATION MEMORY buttons: [1] through [4].



In this example, only the voice parameter settings memorized to button number 3 are recalled.



- Registration data cannot be recalled when the One Touch Setting function is on.
- Some parameters cannot be recalled depending on the selected mode. For example, you cannot recall the Voice R2/L voices in the Style Record mode and Pad Record mode even if you press the Registration Memory buttons, since only the Voice R1 voice is used in those modes.



- For details about Accompaniment parameters (page 54).
- The Freeze function will automatically be turned on when one of the following modes, Song, Style Record or Pad Record is engaged.

Selecting a Registration Bank

1

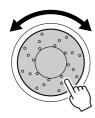
Press the [FUNCTION] button.



2

Select "Regist Memory".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





F2 Regist Memory

Press the [NEXT] button to display the Registration Memory Bank screen.



RBnk=01 Regist01

4

Select a bank.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Naming the Registration Banks



Use the same operation as in "Selecting a Registration Bank" (see above).



RBnk=01 Regist01

4

Press the [NEXT] button to display the Name screen.



5

Enter the desired name for the bank.

Use the keyboard to enter the name (page 21). Up to eight letters or characters can be used.

Disk Operations

Built into the PSR-550 is a disk drive. Simply insert a floppy disk and you've got access to a wide variety of convenient functions, such as recording and playback of User songs (page 78), as well as saving and loading of User styles (page 96), User pads (page 92) and Registration Memory data (page 54).

You can save any number of User styles, pads and registration data to floppy disks, create your own song libraries or find many other ways to make playing and using the PSR-550 more efficient.

 The PSR-550 is capable of playing back songs contained on the included data disk, as well as commercially available song data in the following formats, indicated by the corresponding logos (page 9):

MID!

You can play back song files collected on these disks using the voices defined in the GM standard.



You can play back songs using the XG format, an extension of the GM standardthat allows for much higher sound quality.



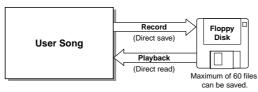
You can play back song files collected on these disks using the voices defined in Yamaha's DOC format.

 The PSR-550 is compatible with style data contained on the included data disk, as well as commercially available disk styles in the following format, indicated by the corresponding logo (page 9):

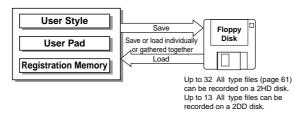
STYLE |

You can load and play with the style files collected on these disks.

 You can record your own performances to User songs and play them back (page 78).



The PSR-550 features special User style, User pad and Registration Memory functions. The data recorded with these functions can also be saved to disk individually or in any combination. Likewise, data (files) saved to disks can be loaded individually or in any combination to the PSR-550.



User data compatible with the PSR-550 is indicated in the chart below.

Data that can be Saved or Loaded with the PSR-550

Data Type	Extension	Save	Load
User song			
(Standard MIDI format0)	.MID	_	_
User style			
(Style file format)	.USR	0	0
User pad	.USR	0	0
Registration Memory	.USR	0	0

Other disk functions include:

• Format	page 60
• Song Copy	page 64
Delete	



 Refer to page 9 for more details on the logos.

NOTE

 It may not be possible to record the full 60 files to a disk, depending on the length of the recorded files.



The maximum number of files may vary according to the type and volume of the saved files (page 61).



- When saving data, use a floppy disk formatted on the PSR-550
- The three letters following the file name (after the period) are referred to as a file "extension". The extension indicates the type of file.
- Since the user songs are directly recorded to the disk as you play during recording and read from the disk during playback, the Save/Load functions are not available. The Copy and Delete File operations related to the user songs can be executed.

Using the Floppy Disk Drive (FDD) and Floppy Disks

Be sure to handle floppy disks and treat the disk drive with care. Follow the important precautions below.

■ Compatible Disk Type

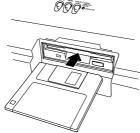
3.5" 2DD and 2HD type floppy disks can be used.

■ Inserting/Ejecting Floppy Disks

- To insert a floppy disk into the disk drive:
 - Hold the disk so that the label of the disk is facing upward and the sliding shutter is facing forward, towards the disk slot.

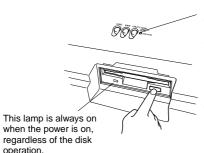
 Carefully insert the disk into the slot, slowly

towards the disk slot.
Carefully insert the disk into the slot, slowly pushing it all the way in until it clicks into place and the eject button pops out.





- When the PSR-550 is turned on, the LED below the floppy disk slot will be lit indicating that the Disk Drive is ready to use.
- To eject a floppy disk:
 - Before ejecting the disk, be sure to confirm that the FDD is stopped (check if the DISK IN USE lamp is off). Press the eject button slowly as far as it will go; the disk will automatically pop out. When the disk is fully ejected, carefully remove it by hand.



DISK IN USE

This lamp lights during disk read/ write operations, such as when a disk has been inserted, during recording, playback, formatting, etc.

- If the eject button is pressed too quickly, or if it is not pressed in as far as it will go, the disk may not eject properly. The eject button may become stuck in a half-pressed position with the disk extending from the drive slot by only a few millimeters. If this happens, do not attempt to pull out the partially ejected disk, since using force in this situation can damage the disk drive mechanism or the floppy disk. To remove a partially ejected disk, try pressing the eject button once again or push the disk back into the slot and then repeat the eject procedure.
- Never attempt to remove the disk or turn the power off during recording, reading and playing back. Doing so can damage the disk and possibly the disk drive.
- Be sure to remove the floppy disk from the disk drive before turning off the power. A floppy disk left in the drive for extended periods can easily pick up dust and dirt that can cause data read and write errors.

■ Cleaning the Disk Drive Read/Write Head

- Clean the read/write head regularly. This instrument employs a precision magnetic read/write head which, after an extended period of use, will pick up a layer of magnetic particles from the disks used that will eventually cause read and write errors.
- To maintain the disk drive in optimum working order Yamaha recommends that you use a commerciallyavailable dry-type head cleaning disk to clean the head about once a month. Ask your Yamaha dealer about the availability of proper head-cleaning disks.
- Never insert anything but floppy disks into the disk drive. Other objects may cause damage to the disk drive or floppy disks.

■ About the Floppy Disks

- To handle floppy disks with care:
 - Do not place heavy objects on a disk or bend or apply pressure to the disk in any way. Always keep floppy disks in their protective cases when they are not in use.
 - Do not expose the disk to direct sunlight, extremely high or low temperatures, or excessive humidity, dust or liquids.
 - Do not open the sliding shutter and touch the exposed surface of the floppy disk inside.
 - Do not expose the disk to magnetic fields, such as those produced by televisions, speakers, motors, etc., since magnetic fields can partially or completely erase data on the disk, rendering it unreadable.
 - Never use a floppy disk with a deformed shutter or housing.
 - Do not attach anything other than the provided labels to a floppy disk. Also make sure that labels are attached in the proper location.
- To protect your data (write-protect tab):
 - To prevent accidental erasure of important data, slide the disk's write-protect tab to the "protect" position (tab open).





Write protect tab ON (locked or write protected)



Write protect tab OFF (unlocked or write enabled)

- Data backup
 - For maximum data security Yamaha recommends that you keep two copies of important data on separate floppy disks. This gives you a backup if one disk is lost or damaged.

Included Data Disk

Disk song playback



Insert the included data disk into the disk drive.





If a disk has already been inserted into the drive, press the [SONG] button to call up the Song display.



Select the desired song.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

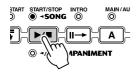




002 TECHNO



Press the [START/STOP] button to start the song.







Press the [START/STOP] button again to stop the song.

For details, see "Song Playback" (page 68).

Format

Setting up commercially available floppy disks for use with PSR-550 is called formatting.

This function is useful for quickly deleting unnecessary files from an already formatted disk. Be careful when using this operation, since it automatically deletes all data on the disk.



 After formatting, the capacity of a 2HD disk is 1 MB and that of a 2DD disk is 720 KB.



Insert the floppy disk into the disk drive.

When a (new) blank disk or an incompatible disk is inserted "Unformatted Disk" will be displayed on the screen. In this case, press the **[EXIT]** button to show "Format OK?" and then simply follow the procedure 5 below.



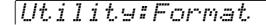
Press the [UTILITY] button.





Select "Format".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





Press the [NEXT] button to display the FORMAT operation screen.

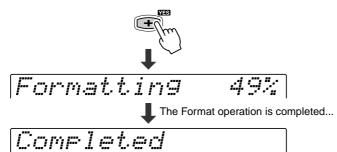


Format OK?



Execute the Format operation.

Press the [+/YES] button to execute the Format operation. Press the [-/NO] button to abort the Format operation.



NOTE

 When the floppy disk's writeprotect tab is set to ON (page 58) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Format function is not possible.

A CAUTION

- If data is already saved on the disk, be careful not to format it. If you format the disk, all the previously recorded data will be deleted.
- While formatting is in progress, never eject the disk or turn off the power to the PSR-550.
- If a disk that cannot be read by the PSR-550 is inserted into the disk drive, it will be treated the same as an unformatted floppy disk. Take care not to erase important data by accidentally formatting a disk.

Save

You can save PSR-550 User styles, User pad (banks 37-40) and Registration Memory data (banks 01-16) to floppy disks.



Insert the floppy disk into the disk drive.



Press the [SAVE] button.



Sv Type#All



 When the floppy disk's writeprotect tab is set to ON (page 58) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Save function is not possible.

Disk Operations

3

Select the file type.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Refer to the file type list below:

Save all User Style (113-115), User Pad (bank 41-44), Registra-
tion Memory (bank 01-32) and all setup data into one single file.
Save all User Style (113-115) and Registration Memory (bank 01-
32) data gathered together into one single file.
Save all User Style (113-115) data gathered together into one
single file.
Save all User Pad (bank 41-44) data gathered together into one
single file.
Save all Registration Memory (bank 01-32) data gathered
together into one single file.



 Although all User Style, User Pad and Registration Memory data can be saved together into one single file, the data can be recalled individually when loaded back into the PSR-550.



Press the [NEXT] button to display the FILE SELECT screen.

Select the destination file.

Use the **data dial**, the [+/YES] button or the [-/NO] button. Select NEW when creating a new file.







 If you've selected a file that already contains data and you rename the file with the intent of overwriting the data, renaming the file will simply copy that data to the new file name and leave the original data and file name intact.



Press the [NEXT] button to display the Name screen.

Enter the file name directly from the keyboard (page 21).

Sv Name=UF_00002



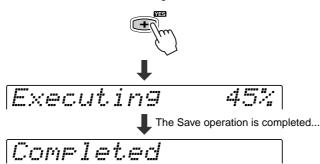
Press the [NEXT] button to display the Save operation screen.

save ok?



Execute the Save operation.

Press the [+/YES] button to execute the Save operation. Press the [-/NO] button to abort the Save operation.



A CAUTION

 While data is being saved, never eject the floppy disk or turn off power to the PSR-550.

NOTE

- If there isn't enough space on the disk, an alert message appears and you will not be able to save any data. You can delete unneeded files on the disk (page 67), or replace the disk with a new one and repeat the Save operation.
- If a write error occurs during a save operation, an alert message appears. If the error reoccurs after repeating the Save operation, there could be something wrong with the disk. Insert a different disk in the drive and repeat the Save operation.

Load

After saving User style (107-109), User pad (banks 37-40) and Registration Memory (bank 01-32) data to a floppy disk, you can reload them into the PSR-550.



Insert the floppy disk into the disk drive.





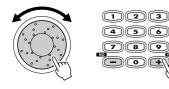
Press the [LOAD] button.





Select the file to be loaded.

Use the data dial, the [+/YES] button or the [-/NO] button.









Press the [NEXT] button to display the Data Type Selection screen.

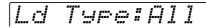


Select the file type (data type) to be loaded.

Use the data dial, the [+/YES] button or the [-/NO] button.







File types that can be loaded				
All	To Step 10			
Sty + Reg	To Step 10			
Style	To Step 6			
Multi Pad	To Step 6			
Regist	To Step 6			

Please follow the steps as indicated in the chart above, since the actual operation differs depending on the selected file type.

6

Press the [NEXT] button.

[Src=User8BeatPop]

7

Select the data to be loaded.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

8

Press the [NEXT] button to display the destination selection

9

Select the destination.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Dst=UserStyle1

10

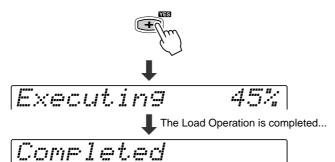
Press the [NEXT] button to display the Load operation screen.

Load OK?

11

Execute the Load operation.

Press the [+/YES] button to execute the Load operation. Press the [-/NO] button to abort the Load operation.





- When data is loaded from a floppy disk to the PSR-550, the data already in the memory of the instrument will be replaced by the data on the disk. Save important data into a disk file before doing the Load operation.
- While data is loading, never eject the floppy disk or turn the power off.

NOTE

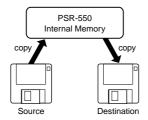
 An alert message may appear on the display, if a problem occurs that prevents the data from being loaded. (For example, the capacity of the PSR-550 [RAM] may be exceeded, something may be wrong with the floppy disk, or the data from the disk may be corrupted, etc.)

Song Copy

This operation allows you to make backup copies of your important Song data. Primarily, this will come in handy when you are recording and editing song data. For example, if you are quantizing the track of a song (page 86) — which makes permanent changes to the track — making a backup copy of the song allows you to restore the original song data in case you're not satisfied with the results of the quantization. Having a dedicated backup disk for every song you work on is a good idea. In this way, you can save a new copy of the song each time you make an important edit to it.

Copying song data from one floppy disk to another

Prepare a backup disk by formatting it. One file can be copied at a time. As shown in the illustration below, first copy the desired file on the disk to internal memory, then copy it to the destination disk.



NOTE

 When the destination disk's write-protect tab is set to ON (page 58) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Song Copy function is not possible.

If the quantity of data is large, it may be necessary for the data to be copied in parts.



Insert the disk to be copied (source disk) into the disk drive.



Press the [UTILITY] button.



3 Select "SongCopy".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

4

Press the [NEXT] button to display the Copy Type selection screen.

5 Select "OtherFD".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Song selection screen.



Select the source song file.

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the Name screen.

- 9
 - Enter the destination song name directly from the keyboard (page 21).
- Press the [NEXT] button to display the Copy operation screen.

11

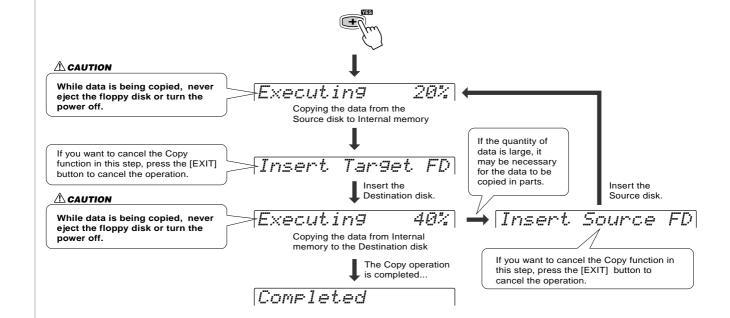
63

Execute the Copy operation.

Press the [+/YES] button to execute the Copy operation. Press the [-/NO] button to abort the Copy operation.

NOTE

 If you insert a wrong disk, different from the source or destination disk, during the Copy operation, an alert message (page 137) will appear on the display.



Copying data to another location on the same disk

1 - 4 Use the same operation as in "Copying data from one floppy disk to another" (page 64).

Select "Same FD".

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Song selection screen.

Select the song source file.

Use the data dial, the [+/YES] button or the [-/NO] button.

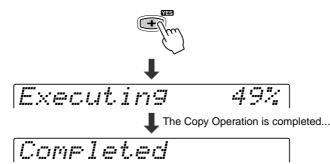
8 Press the [NEXT] button to display the Name screen.

9 Enter the destination file name directly from the keyboard (page 21).

Press the [NEXT] button to display the Copy operation screen.

11 Execute the Copy operation.

Press the [+/YES] button to execute the Copy operation. Press the [-/NO] button to abort the Copy operation.



A CAUTION

 While data is being copied, never eject the floppy disk or turn the power off.

Delete

You can delete individual files (User songs, User styles, User pads or Registration Memory) from the floppy disk.

1

Insert the floppy disk into the disk drive.

2

Press the [UTILITY] button.

3

Select "Delete".

Use the data dial, the [+/YES] button or the [-/NO] button.

Utility"Delete



 When the floppy disk's writeprotect tab is set to ON (page 58) or the disk is a purposely "copy-protected" disk, an alert message appears indicating that the Delete function is not possible.



Press the [NEXT] button to display the Delete screen.



Select the file to be deleted.

Use the data dial, the [+/YES] button or the [-/NO] button.

.USR



Press the [NEXT] button to display the Delete operation screen.

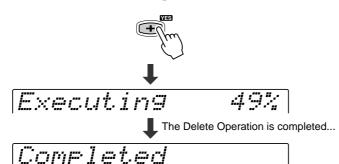


Delete OK?



Execute the Delete operation.

Press the [+/YES] button to execute the Delete operation. Press the [-/NO] button to abort the Delete operation.



\triangle CAUTION

 While the file is being deleted, never eject the floppy disk or turn the power off.

Disk Song Playback

You can playback a huge variety of songs on the PSR-550, including the preset demo songs, the songs on the included data disk, the User songs that you record to a floppy disk and songs on commercially available XG/GM song collection disks. Except for the preset demo songs, a floppy disk must be inserted in the disk drive to playback a song.

 The following disks are compatible for playback on the PSR-550 (including the data disk). Refer to page 9 for more details on the logos.



You can play back song files collected on these disks using the voices defined in the GM standard.



You can play back songs using the XG format, an extension of the GM standardthat allows for much higher sound quality.



You can play back song files collected on these disks using the voices defined in Yamaha's DOC format.

- Disk songs can be played back in five different ways:page 69
 - SINGLE
 - SINGLE REPEAT
 - ALL
 - ALL REPEAT
 - RANDOM
- Additional song playback functions:

Song Track Muting	nage 70
Tempo/Tap	
Song Volume Control	
Song Transpose	
Playing from a Specified Measure	
Repeat Play	page 72

IMPORTANT

 Make sure to read the section "Using the Floppy Disk Drive (FDD) and Floppy Disks" on page 58.



• The tempo setting of some commercially available disk songs is fixed. These songs are called "free-tempo software". When playing back free-tempo song data on the PSR-550, the Tempo display shows "- - -" and the beat display does not flash. Also, the measure number in the display does not match the actual measure number of playback, and only gives you an indication of how much of the song has played back.

Song Playback



Insert the disk that contains song data into the disk drive.

PSR-550 will automatically switch into Song mode.







- If a disk has already been inserted into the drive, press the [SONG] button to call up the Song display.
- Inserting a disk that does not contain song data will not automatically call up the Song display.



Select the desired song.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].





002 TECHNO



Press the [NEXT] button to display the Song Menu screen.





Select "PlayMode".

Use the data dial, the [+/YES] button or the [-/NO] button.





[SngMenu: PlayMode]



Press the [NEXT] button to display the Song Play Mode screen.



FlayNd=Single



Select the desired Play mode.

Use the **data dial**, the [+/YES] button or the [-/NO] button.



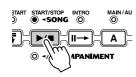


FlayNd=SglRereat.

- Single Play through the selected song, then stop.
- SglRepeat (Single Repeat) .. Play through the selected song repeatedly.
- All Repeat Continue playback through all the songs on the floppy disk repeatedly.
- Random Continue playback through all the songs at random.



Press the [START/STOP] button to start the song.







Press the [START/STOP] button again to stop the song.

Song Track Muting

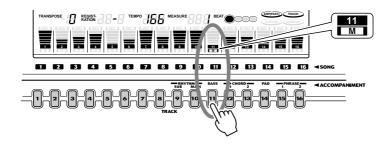


Press the [START/STOP] button to start the song.



Press one of the TRACK buttons below the display.

The [M] icon will appear and the selected track will be muted.



Pressing the same track button again enables output of the playback sound.

3

Press the [START/STOP] button again to stop the song.

Song Volume Control



Press the [START/STOP] to start the song.



Press the [ACMP/SONG VOLUME] button.







 The volume of the keyboardplayed voice(s) is not affected by this operation.

3 Adjust the Song Volume.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The range is from 0 to 127.









Press the [START/STOP] button again to stop the song.

Playing from a Specified Measure



Press the [SONG] button.



Press the [NEXT] button to display the Song Menu screen.



Select "Measure".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





SngMenu: Measure



Press the [NEXT] button to display the Song Start Measure screen.



StartMeasure= 1



Specify the measure from which to begin playback.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].







Press the [START/STOP] to start the song from the specified measure.





Press the [START/STOP] button again to stop the song.

Repeat Play (A-B Repeat)

1

Press the [SONG] button.

2

Press the [NEXT] button to display the Song Menu screen.

3

Select "AbRepeat".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





Sn9Menu: AbRereat



Press the [NEXT] to display the Repeat screen.





Press the [START/STOP] button to start the song.



Press the [MAIN A] button or the [+/YES] button at the starting point (A) to be repeated.





 If only the "A" repeat point is specified, repeat playback will occur between the "A" point and the end of the song.



Press the [MAIN B] button or the [+/YES] button at the ending point (B) to be repeated.



$$\overline{H-B}$$
 Rereat $=\overline{H-B}$

Repeat playback is now set, and the selected section automatically repeats indefinitely (until disabled or stopped in the steps below).



To cancel the repeat function and continue song playback, press the [MAIN A] button again, or press the [-/NO] button.



Press the [START/STOP] button to stop the song.



 Repeat playback will be cancelled if a different song is selected.

Song Transpose



Press the [SONG] button.



Press the [NEXT] button to display the Song Menu screen.



Select "S.Trans".

Use the data dial, the [+/YES] button or the [-/NO] button.





[SngMenu#5.Trans



- This operation does not affect the pitch of the keyboard-played voice(s)
- Changes made to the transpose setting (on page 30) affect the entire sound of the PSR-550, including the song transpose setting.
- Enabling the record mode to record a User song automatically resets the song transpose setting to "0".



Press the [NEXT] button to display the Song Transpose screen.



|SongTransPos= 0



Set the Transpose value.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The transpose range is from -12 to +12. Each step corresponds to one semitone, allowing a maximum upward or downward transposition of one octave. A setting of "0" produces normal pitch.





SongTranspos= 4



 Minus values can be entered by using the number buttons while holding the [-] button.



Press the [START/STOP] to start the song.



Press the [START/STOP] button again to stop the song.



• Steps #1 through #5 can be executed during playback.

Part Settings

In addition to the keyboard-played voices, the PSR-550 features many different instrumental "parts," included with the auto accompaniment, and song playback.

Style mode

• otyte meac		
	Part	
Keyboard	VOICE R1	
	VOICE R2	
	VOICE L	
Auto Accompaniment	RHYTHM SUB	
	RHYTHM MAIN	
	BASS	
	CHORD1	
	CHORD2	
	PAD	
	PHRASE1	
	PHRASE2	

Song mode

	Part
Keyboard	VOICE R1
	VOICE R2
	VOICE L
Song	TRACK1
	TRACK2
	TRACK3
	TRACK4
	:
	TRACK15
	TRACK16

Use the following functions to change the settings for each part:

This lets you change the following settings for each part:

Volume

Determines the volume of the specified voice or track.

Octave

Shifts the pitch of the specified voice or track up or down by one or two octaves. A setting of "0" produces normal pitch.

Pan

Positions the sound of the specified voice or track from left to right in the stereo sound field. "-7" is full left, "7" is full right, "0" is center, and all other settings are corresponding positions in between.

- Reverb depth
 - Sets the reverb depth for the specified voice or track, and thus the amount of reverb effect applied to that voice or track.
- Chorus depth
 - Sets the chorus depth for the specified voice or track, and thus the amount of chorus effect applied to that voice or track.
- DSP depth

Sets the DSP depth for the specified voice or track, and thus the amount of DSP effect applied to that voice or track.

The parameters which can be set for each part are shown in the chart below.

Parameters

Parameter	Voice R1, R2, L	Style	Song	Range	Function
Voice number	0	0	0	Refer to the Voice List (page 123)	Voice Change
Volume	0	0	0	0 – 127	Mixer
Octave	0	-	0	-2 – 2	Mixer
Pan	0	0	0	-64 – 63	Mixer
Reverb depth	0	0	0	0 – 127	Mixer
Chorus depth	0	0	0	0 – 127	Mixer
DSP depth	0	0	0	0 – 127	Mixer

O : available



Voice R1, R2, L

- When one of the DSP types belonging to the Insertion Effect (page 50) is selected, the effect will be exclusively applied to the Voice R1 and not to the Voice R2/L. Therefore the DSP depth for the Voice R2/ L cannot be changed. Also, the DSP depth for the Voice R1 cannot be altered depending on the selected Insertion Effect type.
- Save any part settings you want to keep to the PSR-550 Registration Memory (page 54). The voice part settings are temporary and will be lost if the power is turned off, a different R1 panel voice is selected while the Voice Set function (page 120) is on, or a Registration Memory is recalled.

Song

- Make sure to first select the appropriate song for which you wish to set the part before calling up the relevant display.
- Any part settings made for the song will be lost if you turn off the power, select another song, or select the Style mode (after finishing the part settings). To prevent this, make sure to select the Recording mode and save the song data to disk (page 78).

Auto Accompaniment

- Only drum kit voices (page 31) can be selected for the RHYTHM MAIN track.
- When using auto accompaniment part settings for the RHYTHM SUB track, any of the voices can be selected but no chord changes will occur when using Auto Accompaniment.
- Make sure to first select the appropriate style for which you wish to set the part before calling up the relevant display.
- Auto accompaniment part settings can even be set while an accompaniment is playing.
- Auto accompaniment part settings affects all sections of the selected style.
- Save any part settings you want to keep to the PSR-550 Registration Memory (page 54). The Auto accompaniment part setting are temporary and will be lost if the power is turned off, a different style is selected while the Voice Set function (page 120) is on, or a Registration Memory is recalled.

Voice Change

In addition to being able to change the voices played from the keyboard (R1, R2, L), you can also change the voices for each track of the auto accompaniment and songs.



Press the [VOICE CHANGE] button.

The [VOICE CHANGE] lamp lights.





Select the part for which you want to change voices.

Parts can be selected from the following buttons (depending on the selected mode: Style or Song):

- Voice PART ON/OFF [VOICE R1], [VOICE R2], [VOICE L] buttons
- Accompaniment track [TRACK9]-[TRACK16] buttons (Style mode)
 Song track [TRACK1]-[TRACK16] button (Song mode)



Select a voice.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

Refer to the Voice List (page 123).





Repeat steps #2 and #3 as often as needed for other parts/ tracks.



Press the [EXIT] button to exit from the Voice Change screen.

Mixer



Press the [MIXER] button so that its indicator lights.





Select the part for which you want to adjust the volume setting or parameters.

Parts can be selected from the following buttons (depending on the selected mode: Style or Song):

- Accompaniment track [TRACK9] [TRACK16] buttons (Style mode)
- Song track [TRACK1] [TRACK16] button (Song mode)

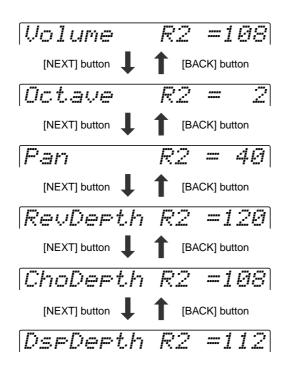
• Style mode

Song mode

PART ON/OFF [VOICE R1] Voice R1	PART ON/OFF [VOICE R1] Voice R1
Volume R1 = 120	Volume R1 =120
PART ON/OFF [VOICE R2] Voice R2	PART ON/OFF [VOICE R2] Voice R2
Volume R2 =120	Volume R2 =120
PART ON/OFF [VOICE L] Voice L	PART ON/OFF [VOICE L] Voice L
Volume L =120	Volume L = 120
[TRACK 9] Rhythm sub	[TRACK 1] Song track 1
Volume RhS=120	
[TRACK 10] Rhythm main	[TRACK 2] Song track 2
Volume RhM=120	Volume T02=120
[TRACK 11] Bass	
Volume Bas=120	•
[TRACK 12] Chord 1	•
Volume Cd1=120	•
[TRACK 13] Chord 2	•
Volume Cd2=120	•
[TRACK 14] Pad	•
Volume Pad=120	•
[TRACK 15] Phrase 1	•
Volume Ph1=120	•
[TRACK 16] Phrase 2	[TRACK 16] Song track 16
<i>Volume Ph2=120</i>	<i>Volume T16=120</i>



Select the desired parameter by pressing the [NEXT]/[BACK] button.



part

NOTE

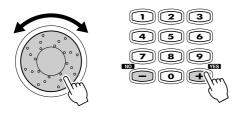
- The Octave parameter of the style tracks cannot be adited.
- Minus settings for the Octave and Pan parameters can be directly entered by pressing the appropriate number button while holding the [-/NO] button.

The order of Steps 2 and 3 here can be reversed; you can also select the part after selecting the parameter. (In step #2 above, the Volume parameter is shown as an example; however, any of the other parameters shown in step #3 can be selected.)



Adjust the volume or parameters.

Use the data dial, the [+/YES] button or the [-/NO] button.





Repeat steps 2 to 4, as necessary.



Press the [EXIT] button to exit from the Mixer.

Song Recording

With the powerful and easy-to-use song recording features, you can record your own keyboard performances to a floppy disk as a User song, and create your own complete, fully orchestrated compositions.

NOTE

 User Songs are recorded on floppy disks. They cannot be recorded unless a floppy disk is inserted into the disk drive.

Each User song lets you record up to sixteen independent tracks. These include not only the voices for the keyboard performance (R1, R2, L), but also the auto accompaniment parts.

The PSR-550 provides two different ways to record: Quick Recording and Multi Track Recording. In addition, comprehensive editing functions let you "fine tune" the recorded song data.

 Quick Recording	page 80
Multi Track Recording With this method, you can record up to sixteen tracks independently, and even rerecord parts that have been previously recorded.	page 82
Punch In/Out This function allows you to selectively re-record a portion of a song track (the measures between the specified punch-in and punch-out points.	page 84
Start Measure This determines the measure at which recording starts. Set this when you desire to start the recording in the middle of the song when re-recording. Keep in mind that all previously recorded data from the starting measure is replaced.	. page 84
Editing The four editing features below allow you to edit already recorded song data.	page 86
Quantize This function aligns the timing of the recorded note data to a specified value. Editing Setup Data	-
This function allows you to change a variety of non-note settings. Naming User Songs	-
This function assigns a twelve-letter name to a recorded song. • Clearing User Song Data This function lets you delete song data, either a specified part or the entire song.	page 91

After finishing your recording of a User song, you can play it back in the same way as one of the disk songs.

■ Data that can be recorded to User songs

The maximum amount of song memory is 65,000 notes for 2DD disks and 130,000 notes for 2HD disks.



 Songs recorded by the PSR-550 are saved as SMF (format 0) files. See page 109 for information on the SMF (format 0) format.



- Being able to record note on/ off and velocity means being able to record forte or piano, crescendo or diminuendo, and other subtle elements of expression from the keyboard as you play them.
- Note ON (key press), note OFF (key release), and velocity (strength of key press) are MIDI data events (playing information) (page 107).

■ User Song Tracks

The tracks which can be recorded to the User songs are organized as shown in the chart below.

Other Parts that can be set	Default Part
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	VOICE R2
VOICE R1, R2, L, Accompaniment Style track	VOICE L
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	VOICE R1
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style RHYTHM SUB
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style RHYTHM MAIN
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style BASS
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style CHORD1
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style CHORD2
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style PAD
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style PHRASE1
VOICE R1, R2, L, Accompaniment Style track	Accompaniment Style PHRASE2
	VOICE R1, R2, L, Accompaniment Style track

The PSR-550 provides two different ways to record: Quick Recording and Multi Track Recording.

About Multi Track Recording

In Multi Track Recording, you determine the track assignments (as shown above) before recording. Several tracks can be recorded simultaneously. In addition to being able to record to empty tracks, you can also re-record tracks that already contain recorded data.

About Quick Recording

In Quick Recording, you can quickly record without having to worry about the track assignments above. Quick Recording automatically makes track assignments according to the simple rules below.

- When Record method is set to "Melody"
 Your keyboard performances (VOICE R1, R2, L) are recorded to tracks
 1 3.
- When Record method is set to "Acmp"
 The auto accompaniment parts are recorded to tracks 9 16.
- When Record method is set to "Melody + Acmp"
 Your keyboard performances (VOICE R1 and R2) are recorded to tracks
 1 2, and the auto accompaniment parts are recorded to tracks 9 -16.

The Quick Recording method is different from the Multi Track Recording method; however, for both of them, the recorded data is recorded on tracks 1–16. If you wish to re-record a User song that was originally recorded by the Quick Recording method, use Multi Track Recording.



The following notes and cautions are important points for you to keep in mind as you record.

- Using the Metronome function (page 118) can make your recording sessions much more efficient.
- Using Registration Memory (page 54) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press.
 When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).
- When the record mode is engaged, the Synchro Stop function will be turned off (it cannot be turned on while the record mode is engaged).
- Whenever you record, any previously recorded material in the same track will be erased.
- · Song files on commercially available disks which are not write-protected can be selected and recorded to (edited) on the PSR-550. If the song data is of a different format from that of the PSR-550 User songs, the display prompts you to convert the song data. By pressing the [+/YES] button, you can convert the song data to the PSR-550 format (compatible with the PSR-550). Once the conversion operation is finished, the PSR-550 returns to record standby, allowing you to record.
- If the disk memory becomes full while recording, an alert message will appear on the display and recording will stop.
- Be careful to avoid turning off the power or unplugging the AC adaptor from the outlet during recording, since this will result in the loss of recorded data.

Quick Recording



Insert the floppy disk into the disk drive.



2

Press the [RECORD] button to engage the Record mode.



3

Select "Song".

Use the **data dial**, the [+/YES] button or the [-/NO] button.





Rechenu Song

4

Press the [NEXT] button.



1991 New Song

5

Press the [NEXT] button again to display the RecMode screen.



Select "QuickRec".

Use the data dial, the [+/YES] button or the [-/NO] button.





Son9Rec#QuickRec

7

Press the [NEXT] button.



Rec Tr =Melody



Select a Record method.

Use the data dial, the [+/YES] button or the [-/NO] button.

- Melody This records your keyboard performance (Voices R1/R2/L) without the auto accompaniment.
- Acmp This records only the auto accompaniment. When this is selected, the auto accompaniment is automatically set to on.
- Mel + Acmp This records your keyboard performance (Voices R1/R2)
 along with the auto accompaniment. When this is selected,
 auto accompaniment is automatically set to on.

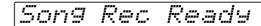


Press the [NEXT] button to display the Record ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.







NOTE

recording.

Auto accompaniment cannot

be turned on or off during

Start recording.

- If you've selected [Melody] or [Mel + Acmp] in step #8 above, recording starts as soon as you play a key.
- If you've selected [Acmp] in step #8 above, the auto accompaniment and recording start simultaneously as soon as a chord is played in the auto accompaniment section of the keyboard (the left side of the split point).
- Recording can also be started by pressing the [START/STOP] button.

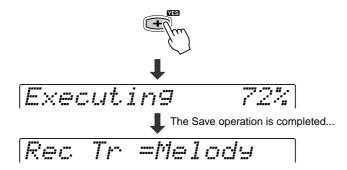
Song Recording

Stop recording.

- If you've selected [Melody] in step #8 above, press the [START/STOP]
- If you've selected [Acmp] or [Mel + Acmp] in step #8 above, press the [START/STOP] button or the [ENDING] button. If you press the [END-**ING**] button while recording the auto accompaniment track, recording will stop automatically after the ending section has finished.

Select whether to save the newly recorded data to disk or

- To cancel the save operation (for example, when you wish to redo the recording), press the [-/NO] button and re-record starting with step #8 above, after the display returns to the Track selection screen.
- To save the data to disk, press the [+/YES] button.



Press the [RECORD] button to exit from the Record mode.



riangle Caution

· While the file is being saved, never eject the floppy disk or turn the power off.

Multi Track Recording

1-3 Use the same operation as in "Quick Recording" (page 80).

Press the [NEXT] button to display the Song selection screen.

1991 New Song

Press the [NEXT] button again to display the RecMode screen.

Select "MultiRec".

Use the data dial, the [+/YES] button or the [-/NO] button.

SongRec:MultiRec

Press the [NEXT] button three times to display the PART setting screen.

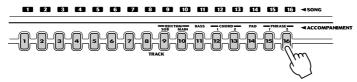
RecPart T01 =R1

 For information on the punch in and start measure functions (page 84).

8 Select the desired track and part for recording.

1) Select a track.

Press one of the [TRACK1]-[TRACK16] buttons.

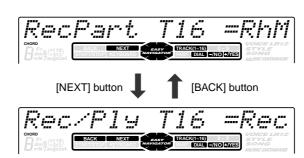


2) Select a part.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

3) Set the desired track to "Rec".

Press the [NEXT] button and use the **data dial**, the [+/YES] button or the [-/NO] button.



NOTE

- For information on track assignments (page 79).
- To record auto accompaniment data, set the [ACMP] button to ON.
- The same part cannot be set to more than one track for recording.

• Make all necessary settings to each track by repeating steps 1) through 3) above.



Press the [NEXT] button to display the Rehearsal screen.

Voices and styles can be set from this display. After completing the desired settings, press the **[EXIT]** button to return to this display.

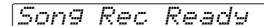
10

Press the [NEXT] button to display the Record Ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.







11

Start recording.

- Recording starts as soon as you play a key on the keyboard.
- If you enabled the auto accompaniment track for recording (in steps #8 above), recording starts as soon as you play a chord in the auto accompaniment section of the keyboard (the left side of the split point).
- Recording can also be started by pressing the [START/STOP] button.



 Auto accompaniment cannot be turned on or off during recording.

12

Y Stop recording.

- If you did not enable the auto accompaniment track for recording (in steps #8 above), press the [START/STOP] button.
- If you enabled the auto accompaniment track for recording (in steps #8 above), press the [START/STOP] button or the [ENDING] button. If you press the [ENDING] button while recording the auto accompaniment track, recording will stop automatically after the ending section has finished.

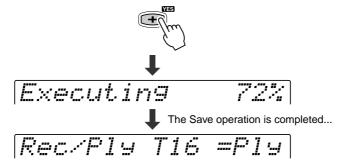
13

Save the recorded data to the disk.

- To cancel the save operation (for example, when you wish to redo the recording), press the [-/NO] button and re-record starting with step #8 above, after the display returns to the Track setting screen.
- To save the data to disk, press the [+/YES] button.



 While the file is being saved, never eject the floppy disk or turn the power off.





Press the [RECORD] button to exit from the Record mode.

Re-recording — **Punch In/Out and Start Measure**

This section shows you how to re-record a specific section of a already-recorded song. In the eight-measure example below, the third measures through the fifth measure are re-recorded.

Before re-recording



● After re-recording

1

Insert the floppy disk into the disk drive.

2

Press the [RECORD] button to engage the Record mode.



3

Select "Song".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

4

Press the [NEXT] button to display the Song selection screen.

5

Select the Song you want to re-record.

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button again to display the RecMode screen.



Select "MultiRec".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Punch In/Out screen.

Select "On".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Punch In measure

Set the punch-in measure.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

$$Funch In = 3$$

Press the [NEXT] button to display the Punch Out measure

3 Set the punch-out measure.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].



 The punch-out measure number cannot be set lower than the punch-in measure

Funch Out

Press the [NEXT] button to display the START MEASURE screen.

Set the start measure (the measure at which playback starts).

Use the data dial, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].





- Punch In/Out recording cannot be used with the auto accompaniment tracks.
- During recording you can use the TRACK buttons to turn playback of previouslyrecorded tracks on or off as required.
- 16 Press the [NEXT] button to display the PART screen.

Record using the same operation as described in "Multi Track Recording" on page 82, starting with step #7.

Quantize

Quantize lets you "clean up" or "tighten" the timing of a previously recorded track. For example, the following musical passage has been written with exact quarter-note and eighth-note values.



Even though you think you may have recorded the passage accurately, your actual performance may be slightly ahead of or behind the beat (or both!). Quantize allows you to align all the notes in a track so that the timing is absolutely accurate to the specified note value.



- 4 Use the same operation as in "Re-recording" (page 84).



Select the Song file to be quantized.

Use the data dial, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button again to display the RecMode screen.



Select "Edit".

Use the data dial, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the Edit Menu screen.



Select "Quantize".

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the Track selection screen.



Select the track to be quantized.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

12 Press the [NEXT] button.

QuantizSize=1/4

13 Select the Quantize size (resolution).

Use the ${\bf data\ dial},$ the [+/YES] button or the [-/NO] button.

Set the Quantize resolution to correspond to the smallest notes in the track you are working with. For example, if the data was recorded with both quarter notes and eighth notes, use 1/8 for the quantize resolution. If the quantize function is applied in this case with the resolution set to 1/4, the eighth notes would be moved on top of the quarter notes.

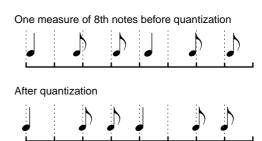
Quantize size			
Note			
Quarter note			
Quarter note triplet			
Eighth note			
Eighth note triplet			
Sixteenth note			

Sixteenth note triplet

Thirty-second note

1/24

1/32



Press the [NEXT] button to display the Quantize operation screen.

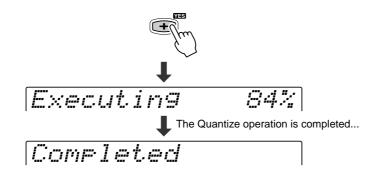
Quantize OK?

NOTE

You cannot restore the original data once you've executed the Quantize operation. If space exists on the disk, save the original song data (as a backup), then use Quantize. If you don't like the results, you can reload the backup song data.

Press the [+/YES] button to execute the Quantize operation.

To abort the Quantize operation, press the [-/NO] button.



16 Press the [RECORD] button to exit from the Record mode.

A CAUTION

 While the Quantize operation is being executed, never eject the floppy disk or turn the power off.

Editing Setup Data

This function lets you make changes to various setup data (voice-related parameters) for each track of a recorded song. The following parameters can be edited:

● Voice ● Volume ● Octave	
● Pan	pitch. Positions the sound of the specified track from left to right in the stereo sound field. A setting of "-7" is full left, "7" is full right, "0" is center, and all other settings
Reverb depth	are corresponding positions in between. Sets the reverb depth for the specified track, and thus the amount of reverb effect applied to that voice or track.
Chorus depth	. Sets the chorus depth for the specified track, and thus the amount of chorus effect applied to that voice or track.
DSP depth	

Only one of the Setup parameters can be recorded to each track, and any parameter changes made in the middle of the song will be cancelled. However, in the case of Volume data, any Volume changes in the middle of the song are applied as an offset to the initial Setup Data setting.



 $oldsymbol{1}$ - $oldsymbol{4}$ Use the same operation as in "Re-recording" (page 84).

Select the file (song) for which you wish to change the setup

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button again to display the RecMode screen.



Use the data dial, the [+/YES] button or the [-/NO] button .

Press the [NEXT] button to display the Edit Menu screen.

Select "Setup Dt".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

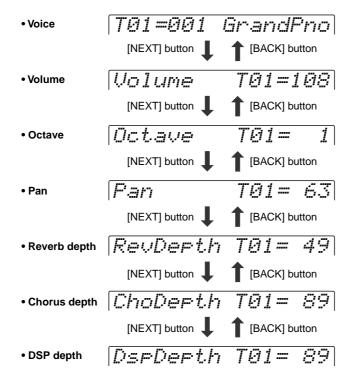
Press the [NEXT] button to display the setup data screen.

11

Edit the setup data.

Press the **[NEXT]** and **[BACK]** buttons to switch among the displays (as shown below).

- Select a track by pressing one of the [TRACK1]-[TRACK16] buttons.
- Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0] to change the desired values in each display.





 Minus settings for the Octave and Pan parameters can be directly entered by pressing the appropriate number button while holding the [-/NO] button.

Press the [NEXT] button to display the setup data saving screen.

Setur Data OK?

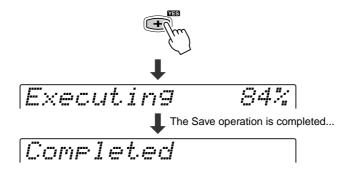
13

Save the changed data to the floppy disk.

- To cancel the save operation (if you wish to redo any edits), press the [-/NO] button and continue editing.
- To save the data to disk, press the [+/YES] button.



 While the file is being saved, never eject the floppy disk or turn the power off.





Press the [RECORD] button to exit from the Record mode.

Naming User Songs

Use the same operation as in "Re-recording" (page 84).

Select the file (song) for which you wish to change the name.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button again to display the RecMode screen.



Select "Edit".

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Edit Menu screen.

Select "Name".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the NAME screen.

Enter the desired name for the file (song).

Use the keyboard to enter the name (page 21).

Up to 12 letters or characters can be used. (The three-letter extension cannot be changed.)

Press the [RECORD] button to exit from the Record mode.

Clearing User Song Data

1 - 4 Use the same operation as in "Re-recording" (page 84).

Select the song file to be cleared.

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button again to display the RecMode screen.

Select "Edit".

Use the data dial, the [+/YES] button or the [-/NO] button.

Describe INEXT: button to display the Edit Many concern

Press the [NEXT] button to display the Edit Menu screen.

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Sn9Edit#Clear

10 Press the [NEXT] button.

Select "Clear".

Clear Track =T13

Select the track to be cleared.

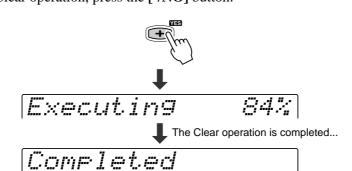
Use the data dial, the [+/YES] button or the [-/NO] button.

To clear the data of an entire song, select "ALL".

Press the [NEXT] button.

Clear Track OK?

Press the [+/YES] button to execute the Clear operation.
To abort the Clear operation, press the [-/NO] button.



Press the [RECORD] button to exit from the Record mode.

⚠ CAUTION

 While the track is being cleared, never eject the floppy disk or turn the power off.

Multi Pad Recording

In addition to the preset Multi Pad sets, the PSR-550 has 16 user-recordable sets that you can use to store your own creations. These original User Multi Pads can be played and used in the same way as the presets. User Multi Pad data can also be saved to and loaded from floppy disk.

Your keyboard performance (using voice R1) is recorded to the User pad. Chord Match data (page 43) can also be recorded.

Multi Pad Recording	page 92
Chord Match	
Naming User Pads	page 94
Clearing User Pad Data	

■ Data that can be recorded to User pads

- Note on/off (key press and release)
- · Velocity (strength of key press)
- Pitch bend, pitch bend range
- SUSTAIN button on/off
- Footswitch on/off (sustain, sostenuto, soft)
- Voice Change settings
- Mixer settings

Up to approximately 2,000 notes for all pads can be recorded to the PSR-550 Multi Pads.

NOTE

 User Pad data is recorded by playing voice R1 from the keyboard. Voice R2, voice L and the auto accompaniment cannot be used.

NOTE

 Material recorded data is retained in memory even when the STANDBY switch is turned off if batteries are installed or an AC adaptor is connected (page 136). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 60).

Multi Pad Recording



Press the [RECORD] button to engage the Record mode.



2

Select "MultiPad".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

RecMenu: MultiPad

3

Press the [NEXT] button.



Select a Multi Pad Bank to record.

Use the **data dial**, the [+/YES] button or the [-/NO] button.



The following notes and cautions are important points for you to keep in mind as you record your Multi Pad data.

- Using the Metronome function (page 118) can make your recording sessions much more efficient.
- Using Registration Memory (page 54) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press.

 When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).
- Whenever you record, any previously recorded material in the same track will be erased.
- If the memory becomes full while recording, an alert message will appear on the display and recording will stop.
- Be careful to avoid turning off the power or unplugging the AC adaptor from the outlet during recording, since this will result in the loss of recorded data.

Press the [NEXT] button to display the RecMode screen.



Select "Record".

Use the data dial, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the pad number selection screen.



Select a Pad number to record.

Use the data dial, the [+/YES] button, the [-/NO] button, or the MULTI PAD buttons [1]-[4].



Press the [NEXT] button to display the Rehearsal screen.

Voices can be set from this display. After completing the desired settings, press the [EXIT] button to return to this display.

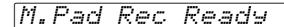


Press the [NEXT] button to display the Record ready screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.







Start recording.

- Recording starts as soon as you play a key on the keyboard.
- Recording can also be started by pressing the [START/STOP] button.

If you are recording a Chord match phrase, use only the CM7 scale tones (i.e. C, D, E, G, A and B).



C = chord tone C, S = scale tones

Press the [START/STOP] button to stop recording.

 $m{1}$ Press the [RECORD] button to exit from the Record mode.

Multi Pad Recording

Chord Match

1-5

Use the same operation as in "Multi Pad Recording" (page 92).

6

Select "Edit".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

7

Press the [NEXT] button to display the Edit menu screen.

8

Select "ChdMatch".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

9

Press the [NEXT] button to display the Chord Match screen.

10

Turn the Chord Match function on or off.

- Use the data dial, the [+/YES] button or the [-/NO] button.
- To select the desired pad for setting, press the [NEXT] button.

11

Press the [RECORD] button to exit from the Record mode.

Naming User Pads



Use the same operation as in "Chord Match" above.

8

Select "Name".

Use the data dial, the [+/YES] button or the [-/NO] button.

9

Press the [NEXT] button to display the Name screen.

Enter the desired name for the bank.

Use the keyboard to enter the name (page 21). Up to eight letters or characters can be used.

Press the [RECORD] button to exit from the Record mode.

Clearing User Pad Data



Use the same operation as in "Chord Match" (page 94).

Select "Clear".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Padedit.#Clear

Press the [NEXT] button.

Clr Fad=Fad1

Select the Pad number to be cleared.

Use the **data dial**, the [+/YES] button or the [-/NO] button. To clear the data from all four pads, select "All".

Press the [NEXT] button.

Clear Pad OK?

Execute the Clear operation.

Press the [+/YES] button to execute the Clear operation.

To abort the Clear operation, press the [-/NO] button.



The Clear operation is completed...

Press the [RECORD] button to exit from the Record mode.

Style Recording

The PSR-550 lets you record up to three original User styles which can be used for auto accompaniment in the same way as the preset styles. User Style data can also be saved to and loaded from floppy disk (page 57).

You can create a User style by using the internal style data as a starting point. Select a preset style that is closest to the type of style you want to create, and record the auto accompaniment patterns to each section.

Clearing User Style Data page 104

■ User Style Tracks

The tracks which can be recorded to the User styles are organized as shown in the chart below.

This function is for clearing (deleting) or part of the recorded style.

Section	Track			
INTRO	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
MAIN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN A	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
FILL IN B	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD
ENDING	RHYTHM SUB	CHORD1	PHRASE1	BASS
	RHYTHM MAIN	CHORD2	PHRASE2	PAD

NOTE

 Material recorded data is retained in memory even when the STANDBY switch is turned off if batteries are installed or an AC adaptor is connected (page 136). It is nevertheless a good idea to save important data to floppy disk so that you can keep them indefinitely and build up your own data library (page 60).

On the PSR-550, you can record up to a total of 48 tracks (6 sections x 8 tracks).

■ Data that can be recorded to User styles

• Note on/off (key press and release) • Velocity (strength of key press)	
• Pitch bend, pitch bend range	
• Voice number (drum kit number)*	
Mixer settings*	
• Tempo	
Reverb type and settings	
Chorus type and settings	page 48

Up to approximately 1,950 notes for a section (a total of about 7,150 notes) can be recorded to the PSR-550 style tracks.

Only one event of the item marked with * can be recorded for each track of the sections.



 User Style data is recorded by playing voice R1 from the keyboard. Voice R2, voice L and the auto accompaniment cannot be used.

■ About Recording User Styles

In recording a User song, the PSR-550 records your keyboard performance as MIDI data. Recording of User styles, however, is done in a different way. Here are some of the aspects in which style recording differs from song recording:

Loop Recording

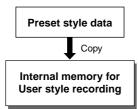
Auto accompaniment repeats the accompaniment patterns of several measures in a "loop," and style recording is also done using loops. For example, if you start recording with a two-measure main section, the two measures are repeatedly recorded. Notes that you record will play back from the next repetition (loop), letting you record while hearing previously recorded material.

Overdub Recording

This method records new material to a track already containing recorded data, without deleting the original data. In style recording, the recorded data is not deleted, except when using functions such as Clear (page 104) and Drum Cancel (page 99).

For example, if you start recording with a two-measure main section, the two measures are repeated many times. Notes that you record will play back from the next repetition, letting you overdub new material to the loop while hearing previously recorded material.

Using Preset Styles



As shown in the chart at left, when you select the internal preset style that is the closest to the type of style you wish to create, the preset style data will be copied to a special memory location for recording.

You create (record) your new, original style by adding or deleting data from the memory location.

All tracks (with the exception of the rhythm track) must be cleared before recording (page 104).



The following notes and cautions are important points for you to keep in mind as you record your User styles.

- Make sure to clear at least one of the three User styles before recording a new User style. Recording a new User style cannot be started when all three User styles have recorded data.
- Be careful to avoid turning off the power or unplugging the AC adaptor from the outlet during recording, since this will result in the loss of recorded data.
- Using Registration Memory (page 54) can make your recording sessions much more efficient, since various settings (such as voices, etc.) can be recalled by a single button press.
 When the record mode is engaged, the Registration Memory Freeze function will be turned on (it cannot be turned off while the record mode is engaged).
- Using the Metronome function (page 118) can make your recording sessions much more efficient.

- In the Record Ready mode, you can exchange or edit the voice data in the recorded tracks using Mixer on page 76.
- If the memory becomes full while recording, an alert message will appear on the display and recording will stop.
- Since recording is done in measure units, you should first select a style that has the same number of measures as the section you intend to record..
- If none of the preset styles is appropriate, select one that has the same time signature and number of measures as the one you want to create, then use the Clear function (page 104) to clear all preset data before entering your own.

Style Recording — Rhythm Track

With this operation you can create your own original rhythm patterns by editing existing rhythm track (percussion) data from a preset style.



Press the [RECORD] button to engage the Record mode.



2

Select "Style".

Use the data dial, the [+/YES] button or the [-/NO] button.

3

Press the [NEXT] button.

4

Select a style to begin with.

Use the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

5

Press the [NEXT] button again to display the RecMode screen.

6

Select "Record".

Use the **data dial**, the [+/YES] button or the [-/NO] button.

7

Press the [NEXT] button to display the Section selection screen.

8

Select the section to be recorded.

9

Press the [NEXT] button to display the Track selection screen.



• Multiple sections cannot be recorded at the same time.

10

Select a Rhythm track to be recorded.

Select "RHYTHM MAIN" or "RHYTHM SUB" with the **data dial**, the [+/**YES**] button or the [-/**NO**] button.



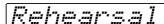
 Only one track can be recorded at a time.

11

Press the [NEXT] button to display the Reharsal screen.

The beat indicator dots will flash at the currently set tempo, indicating that the record ready (Synchro Start) mode is engaged.

Record Track=RhM



12

Select one of the Drum Kits.

Select the desired kit by pressing the [VOICE R1] button (page 26).



To return to the original display, press the **[EXIT]** button (page 17).

13

Start recording.

You can start recording with one of the following ways:

- Press the [START/STOP] button. The following will start to play back: the style selected in step #4, the section selected in step #8 and the rhythm track selected in step #10.
- Press the [SYNC START] button to enable synchronized standby (page 25), then play a key on the keyboard. Playback starts as described in the first method above.

Style Recording

Since the rhythm pattern plays back repeatedly, you can record by overdubbing — listening to the pattern and playing the desired keys. Look at the icons printed under the keys indicating the percussion sounds that are assigned to each key.

You can also delete certain percussion sounds in the following way:

1) Press the [NEXT] button.

Drum Cancel

- 2) Press the key on the keyboard corresponding to the instrument you want to cancel.
- 3) To return to the original display, press the [BACK] button.

14

Press the [START/STOP] button to stop recording.

Press the [RECORD] button to exit from the Record mode.

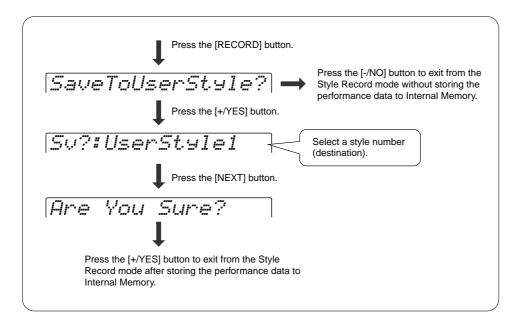
You should save the recorded data before leaving the recording mode. (Refer to page 100 for details.)



 For recording the RHYTHM tracks, the instrument symbols printed on the front edge of the panel show you the instrument assignments to each key. See "Keyboard Percussion" on page 31 for playing each drum/ percussion sound.

Exiting from the Style Record mode

To leave the style recording mode, follow the instructions in the chart below.



NOTE

 After exiting from the Style Recording mode, the section automatically switches to Main B. If you record a section other than Main B, select the section again and play the accompaniment.

Style Recording — Bass/Phrase/Pad/Chord Tracks

This section explains how to record all tracks (other than the rhythm), using the preset styles.

Unlike recording the rhythm track, in this method you have to clear the track data of the original style before recording.



Use the same operation as in "Style Recording — Rhythm Track" (page 98).

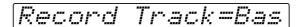


Select a Track to be recorded.

Use the **data dial**, the [+/**YES**] button or the [-/**NO**] button. Select from the following: "BASS," "CHORD1," "CHORD2," "PAD," "PHRASE1," and "PHRASE2".



 Only one track can be recorded at a time.



11

Press the [NEXT] button to display the Record Ready screen.

Song Rec Ready

A CAUTION

 Be aware that this process automatically clears the data in the track selected in step #10.

12 Select a voice for the track to be recorded.

Select the desired voice by pressing the [VOICE R1] button (page 26).



To return to the previous display, press the **[EXIT]** button.

1 Start recording.

You can start recording with one of the following ways:

- Press the [START/STOP] button.
- Press the [SYNC START] button to enable synchronized standby (page 25), then play a key on the keyboard.

Style Recording

The recording repeats indefinitely (until stopped) in a loop.

Notes that you record will play back from the next repetition, letting you record while hearing previously recorded material.

Observe the following rules when recording the MAIN and FILL sections:

- Use only the CM7 scale tones when recording the BASS and PHRASE tracks (i.e. C, D, E, G, A and B).
- Use only the chord tones when recording the CHORD and PAD tracks (i.e. C, E, G and B).



C = chord tone C, S = scale tones

Any appropriate chord or chord progression can be used for the INTRO and ENDING sections.

14 Press the [START/STOP] button to stop recording.

15 Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 100.

Quantize

Quantize lets you "clean up" or "tighten" the timing of a previously recorded track. For example, the following musical passage has been written with exact quarter-note and eighth-note values.



Even though you think you may have recorded the passage accurately, your actual performance may be slightly ahead of or behind the beat (or both!). Quantize allows you to align all the notes in a track so that the timing is absolutely accurate to the specified note value.



Select "Edit".

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Edit Menu screen.

Select "Quantize".

Use the data dial, the [+/YES] button or the [-/NO] button.

9 Press the [NEXT] button to display the Section selection screen.

Select the section to be quantized.

Use the $data\ dial$, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Track selection screen.

12 Select the track to be quantized.

Use the $data\ dial$, the [+/YES] button or the [-/NO] button.

[QuantizTrack=Pad]

13 Press the [NEXT] button.

QuantizSize =1/4

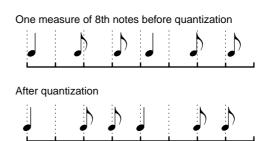
4 Select the Quantize size (resolution).

Use the **data dial**, the [-/NO] button or the [+/YES] button.

Set the Quantize resolution to correspond to the smallest notes in the track you are working with. For example, if the data was recorded with quarter notes and eighth notes, use 1/8 for the quantize resolution. If the quantize function is applied in this case with the resolution set to 1/4, the eighth notes would be moved on top of the quarter notes.

	_		_	_
•	Λ.	n	4i70	size
•	W.L	ıaı	ルレスセ	3126

Size	Note
1/4	Quarter note
1/6	Quarter note triplet
1/8	Eighth note
1/12	Eighth note triplet
1/16	Sixteenth note
1/24	Sixteenth note triplet
1/32	Thirty-second note



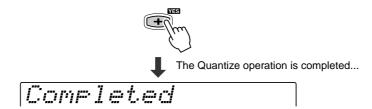
Press the [NEXT] button to display the QUANTIZE operation

Quantize OK?

• You can audition the quantized pattern in this step, allowing you to hear the results of the operation before actually changing the data. To audition the pattern, press the [START/STOP] button.

Press the [+/YES] button to execute the Quantize operation.

To abort the Quantize operation, press the [-/NO] button.



Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 100.

Style Recording

Naming User Styles

1-7 Use the same operation as in "Quantize" (page 102).

Select "Name".

Use the data dial, the [+/YES] button or the [-/NO] button.

9 Press the [NEXT] button to display the Name screen.

Use the keyboard to enter the name (page 21).
Up to 12 letters or characters can be used.

Press the [RECORD] button to exit from the Record mode.

For information on leaving the recording mode, see page 100.

Clearing User Style Data

1-7 Use the same operation as in "Quantize" (page 102).

8 Select "Clear".

Use the data dial, the [+/YES] button or the [-/NO] button.

Press the [NEXT] button to display the Section selection screen.

Select a Section to be cleared.

Use the ${\bf data\ dial}$, the [+/YES] button or the [-/NO] button.

When "All Sect" is selected as the section to be cleared, all style data (which includes all sections and all tracks) will be deleted. In this case, go to step #13, skipping over steps #11 and #12.

11 Press the [NEXT] button to display the Track selection screen.

Select a Track to be cleared.

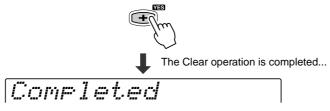
Use the **data dial**, the [+/YES] button or the [-/NO] button.

13 Press the [NEXT] button to display the Clear screen.

Clear OK?

14 Press the [+/YES] button to execute the Clear operation.

To abort the Clear operation, press the [-/NO] button.



Press the [RECORD] button to exit from the Record mode.

If you've selected a certain section (other than "ALL sect"), see the explanation on leaving the recording mode on page 100.

MIDI Functions

In the rear panel of your PSR-550, there are MIDI terminals (MIDI IN, MIDI OUT), a TO HOST terminal, and a HOST SELECT switch. By using the MIDI functions you can expand your musical possibilities. This section explains what MIDI is, and what it can do, as well as how you can use MIDI on your PSR-550.

 If you don't know what MIDI is, make sure to read these sections: What's MIDI? 	page 106
What You Can Do With MIDI MIDI Data Compatibility	page 108
 If you want to use your PSR-550 with a computer, read this section: Connecting to a Personal Computer 	page 110
● The PSR-550 lets you make the following MIDI-related settings:	
MIDI Template MIDI Transmit Setting	
MIDI Receive Setting	
Local Control	
• Clock	page 116
Initial Data Send	page 117

What's MIDI?

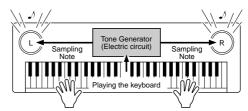
No doubt you have heard the terms "acoustic instrument" and "digital instrument." In the world today, these are the two main categories of instruments. Let's consider an acoustic piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike a key, and a hammer inside hits some strings and plays a note. With the guitar, you directly pluck a string and the note sounds. But how does a digital instrument go about playing a note?

Acoustic guitar note production



Pluck a string and the body resonates the sound.

Digital instrument note production



Based on playing information from the keyboard, a sampling note stored in the tone generator is played through the speakers.

As shown in the illustration above, in an electronic instrument the sampling note (previously recorded note) stored in the tone generator section (electronic circuit) is played based on information received from the keyboard. So then what is the information from the keyboard that becomes the basis for note production?

For example, let's say you play a "C" quarter note using the grand piano sound on the PSR-550 keyboard. Unlike an acoustic instrument that puts out a resonated note, the electronic instrument puts out information from the keyboard such as "with what voice," "with which key," "about how strong," "when was it pressed," and "when was it released." Then each piece of information is changed into a number value and sent to the tone generator. Using these numbers as a basis, the tone generator plays the stored sampling note.

Example of Keyboard Information

· · · · · · · · · · · · · · · · · · ·	
Voice number (with what voice)	01 (grand piano)
Note number (with which key)	60 (C3)
Note on (when was it pressed) and note off (when was it released)	Timing expressed numerically (quarter note)
Velocity (about how strong)	120 (strong)

MIDI is an acronym that stands for Musical Instrument Digital Interface, which allows electronic musical instruments to communicate with each other, by sending and receiving compatible Note, Control Change, Program Change and various other types of MIDI data, or messages.

The PSR-550 can control a MIDI device by transmitting note related data and various types of controller data. The PSR-550 can be controlled by the incoming MIDI messages which automatically determine tone generator mode, select MIDI channels, voices and effects, change parameter values and of course play the voices specified for the various parts.

MIDI messages can be divided into two groups: Channel messages and System messages. Below is an explanation of the various types of MIDI messages which the PSR-550 can receive/transmit.

Channel Messages

The PSR-550 is an electronic instrument that can handle 16 channels. This is usually expressed as "it can play 16 instruments at the same time." Channel messages transmit information such as Note ON/OFF, Program Change, for each of the 16 channels.

Message Name	PSR-550 Operation/Panel Setting
Note ON/OFF	Messages which are generated when the keyboard is played. Each message includes a specific note number which corresponds to the key which is pressed, plus a velocity value based on how hard the key is stuck.
Program Change	Voice setting (control change bank select MSB/LSB setting)
Control Change	Mixer (volume, pan pot, etc.)

System Messages

This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

Message Name	PSR-550 Operation/Panel Setting	
Exclusive Message	Reverb/chorus/DSP settings, etc.	
Realtime Messages	Clock setting	
	Start/stop operation	

The messages transmitted/received by the PSR-550 are shown in the MIDI Data Format and MIDI Implementation Chart on pages 139 and 151.

NOTE

 The performance data of all songs, styles and Multi Pads is MIDI data.

MIDI and TO HOST terminals

In order to exchange MIDI data between multiple devices, each device must be connected by a cable.

There are two ways to connect: from the MIDI terminals of the PSR-550 to the MIDI terminals of an external device using a MIDI cable, or from the TO HOST port of the PSR-550 to the serial port of a personal computer using a special cable.

If you connect from the PSR-550 TO HOST terminal to a personal computer, the PSR-550 will be used as a MIDI interface device, meaning that a specialized MIDI interface device is not necessary.

In the rear panel of the PSR-550, there are two kinds of terminals, the MIDI terminals and the TO HOST terminal.









- MIDI IN Receives MIDI data from another MIDI device.
- MIDI OUT Transmits the PSR-550's keyboard information as MIDI data to another MIDI device.
- TO HOST Transmits and receives MIDI data to and from a personal computer.

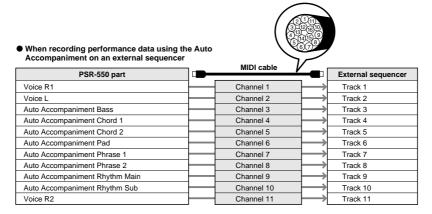


- When using the TO HOST terminal to connect to a personal computer using Windows, a Yamaha MIDI driver must be installed in the personal computer. The included disk contains the Yamaha MIDI driver.
- Special MIDI cables (sold separately) must be used for connecting to MIDI devices.
 They can be bought at music stores, etc.
- Never use MIDI cables longer than about 15 meters. Cables longer than this can pick up noise which can cause data errors.

The PSR-550 is an electronic musical instrument which is capable of transmitting and receiving over sixteen channels. Imagine that there are sixteen separate pipes in the connected MIDI cable. When transmitting MIDI data from the PSR-550 to an external device, MIDI data is sent through the assigned pipe (or MIDI channel) and transmitted to the external device.

For example, several tracks can be transmitted simultaneously, including the auto accompaniment data (as shown

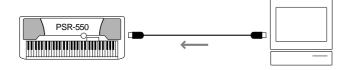
below).



As you can see, it is essential to determine which data is to be sent over which MIDI channel when transmitting MIDI data (page 114).

What You Can Do With MIDI

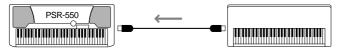
• Use the PSR-550 as a multi tone generator (playing 16 channels at one time).



When using a personal computer, special software (sequencer software) is needed.

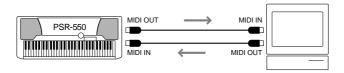
Receive mode for all channels set to "XG/GM." MIDI receive settings (page 115).

 Play music from another keyboard (no tone generator) using the PSR-550 XG tone generator.



MIDI receive settings (page 115).

• Record performance data (1-16 channels) using the PSR-550 Auto Accompaniment on a external sequencer (such as a personal computer). After recording, edit the data with the sequencer, then play it again on the PSR-550 (playback).



MIDI transmit settings (page 114). Initial Data send (page 117).

MIDI Data Compatibility

This section covers basic information on data compatibility: whether or not other MIDI devices can playback the data recorded by PSR-550, and whether or not the PSR-550 can playback commercially available song data or song data created for other instruments or on a computer.

Depending on the MIDI device or data characteristics, you may be able to play back the data without any problem, or you may have to perform some special operations before the data can be played back. If you run into problems playing back data, please refer to the information below.

Sequence format

The system which records song data is called "sequence format."

Playback is only possible when the sequence format of the disk matches that of the MIDI device.

● SMF (Standard MIDI File)

This is the most common sequence format.

Standard MIDI Files are generally available as one of two types: Format 0 or Format 1. Many MIDI devices are compatible with Format 0, and most commercially available software is recorded as Format 0.

- The PSR-550 is compatible with both Format 0 and Format 1.
- Song data recorded on the PSR-550 is automatically recorded as SMF Format 0.

ESEQ

This sequence format is compatible with many of Yamaha's MIDI devices, including the Clavinova series instruments. This is a common format used with various Yamaha software.

• The PSR-550 is compatible with ESEQ.

Style File

The Style File Format — SFF — is Yamaha's original style file format which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types.

 The PSR-550 uses the SFF internally, reads optional SFF style disks, and creates SFF styles using the Style recording feature.

Voice allocation format

With MIDI, voices are assigned to specific numbers, called "program numbers." The numbering standard (order of voice allocation) is referred to as the "voice allocation format."

Voices may not play back as expected unless the voice allocation format of the song data matches that of the compatible MIDI device used for playback.

GM System Level 1

This is one of the most common voice allocation formats.

Many MIDI devices are compatible with GM System Level 1, as is most commercially available software.

• The PSR-550 is compatible with GM System Level 1.

XG

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.

• The PSR-550 is compatible with XG.

DOC

This voice allocation format is compaible with many of Yamaha's MIDI devices, including the Clavinova series instruments.

This is also a common format used with various Yamaha software.

• The PSR-550 is compatible with DOC.

NOTE

 Even if the devices and data used satisfy all the conditions above, the data may still not be completely compatible, depending on the specifications of the devices and particular data recording methods.

Connecting to a Personal Computer

Connect your PSR-550 to a computer and take advantage of the wide range of powerful and versatile software for creating and editing music. The PSR-550 can be connected in two ways:

- Using the MIDI terminals
- Using the TO HOST terminal

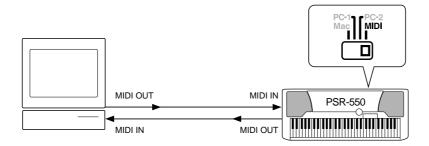


Connect using the PSR-550 MIDI terminals

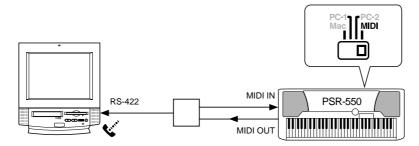
Using a MIDI interface device installed in the personal computer, connect the MIDI terminals of the personal computer and the PSR-550.

For the connection cable, use a special MIDI cable.

• When the computer has a MIDI interface installed, connect the MIDI OUT terminal of the personal computer to the MIDI IN terminal of the PSR-550. Set the HOST SELECT switch to "MIDI."



• When using a MIDI interface with a Macintosh series computer, connect the RS-422 terminal of the computer (modem or printer terminal) to the MIDI interface, then connect the MIDI OUT terminal on the MIDI interface to the MIDI IN terminal of the PSR-550, as shown in the diagram below. Set the HOST SE-LECT switch on the PSR-550 to "MIDI."



- When the HOST SELECT switch is set in the "MIDI" position, input and output in the TO HOST switch is ignored.
- When using a Macintosh series computer, set the MIDI interface clock setting in the application software to match the setting of the MIDI interface you are using. For details, carefully read the owner's manual for the software you are using.

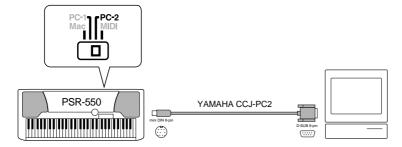
Connect using the TO HOST terminal

Connect the serial port of the personal computer (RS-232C terminal or RS-422 terminal) to the TO HOST terminal of the PSR-550.

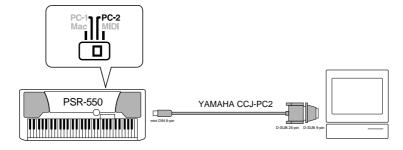
For the connection cable, use the cable below (sold separately) that matches the personal computer type.

IBM-PC/AT Series

Connect the RS-232C terminal on the computer to the TO HOST terminal on the PSR-550 using a serial cable (D-SUB 9P \rightarrow MINI DIN 8P cross cable). Set the PSR-550 HOST SELECT switch in the "PC-2" position.

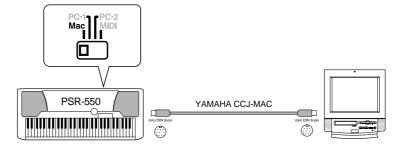


When using a D-SUB 25P \rightarrow MINI DIN 8P cross cable, connect using a D-SUB 9P plug adaptor on the computer side of the cable.



Macintosh Series

Connect the RS-422 terminal (modem or printer terminal) on the computer to the TO HOST terminal on the PSR-550 using a serial cable (system peripheral cable, 8 bit). Set the PSR-550 HOST SELECT switch in the "Mac" position.



Set the MIDI interface clock in the sequencer software you are using to 1 MHz. For details, carefully read the owner's manual for the software you are using.

For details about the necessary MIDI settings for computer and sequence software you are using, refer to the relevant owner's manuals.

- Macintosh is a registered trademark of Apple Computer, Inc.
- IBM PC/AT is a trademark of International Business Machines Corp.
- Other company names and product names, etc. in this manual are registered trademarks or trademarks of those companies.

MIDI Template

The PSR-550 is capable of transmitting and receiving MIDI data over sixteen independent channels. For proper MIDI operation, it is necessary to determine which data is set to which channel.

The MIDI Template function allows you to instantly configure all appropriate transmit/receive settings with a single button press.



Press the [FUNCTION] button.





Select "Midi."

Use the data dial, the [+/YES] button or the [-/NO] button.



F4 Midi



Press the [NEXT] button to display the MIDI screen.





Select "Template."

Use the **data dial**, the [+/YES] button or the [-/NO] button.





Midi#Template



Press the [NEXT] button to display the MIDI Template screen.



Temp=XG Module



Select a MIDI Template.

Use the **data dial**, the [+/YES] button or the [-/NO] button. For details, refer to the MIDI Template List (page 113).





Temp=Acmp Out



Press the [NEXT] button.

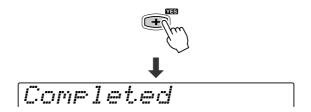


MidiTemplatLoad?



Load the selected MIDI Template.

Press the [+/YES] button to actually load the selected MIDI template settings. To abort the operation, press the [-/NO] button.



Keyboard Out	The transmit channels are set as follows: ch. 1: Right1, ch. 2: Right2, ch. 3: Left, chs. 4-16: Off
	When outputting the performance data (note on/off messages). Used to play the PSR-550 note on/off data with an external tone generator and to record the PSR-550 note on/off data to an external sequencer.
Acmp Out	The transmit channels 9-16 are set with the Accompaniment tracks.
	chs. 1-8: Off, chs. 9-10: Rhythms, ch. 11: Bass, chs. 12-13: Chords, ch. 14: Pad, chs. 15-16: Phrases When outputting the style data. Used to play the PSR-550 auto accompaniment data with an external tone generator and to record the PSR-550 auto accompaniment data to an external sequencer.
Song Out	All transmit channels are set with the Song tracks 1-16. When outputting the song data. Used to play the PSR-550 song data with an external tone generator and to record your entire performance on the PSR-550 to an external sequencer.
Master Keyboard	When using the PSR-550 as a master keyboard; in other words, using it strictly as a controller for outputting MIDI data, without using the internal sounds.
XG Module	All receive channels are set to "XG/GM." When using the PSR-550 as a multi-timbral XG tone generator.
Accordion	The receive channels are set as follows: ch. 1: Remote, ch. 2: Chord, ch. 3: Bass, chs. 4-16: Off When playing the PSR-550 by an external MIDI Accordion. The connected MIDI accordion can play the PSR-550 and detect chords and basses in the auto accompaniment section.
Midi Pedal	All receive channels are set to "Root." When playing the PSR-550 using a connected (optional) MIDI pedal. The connected MIDI pedal detects chords and basses in the auto accompaniment section, allowing you to play on-bass chords.

MIDI Transmit Setting

The PSR-550 can simultaneously transmit data on all 16 MIDI channels. The Transmit Channel and Transmit Track functions determine what PSR-550 data is transmitted via which MIDI channels.



Press the [FUNCTION] button.



Select "Midi."

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the MIDI screen.



Select "Transmit Ch."

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the MIDI Transmit Ch



Set a MIDI Transmit Channel and Transmit Track.

• Press one of the [TRACK1]-[TRACK16] buttons to select a MIDI channel.

• Select a track with the **data dial**, the [+/YES] button or the [-/NO] button.

Off	Nothing is transmitted.
R1	Right-hand keyboard playing* (VOICE R1)**
R2	Right-hand keyboard playing* (VOICE R2)**
L	Left-hand keyboard playing* (VOICE L)**
Upper	Right-hand keyboard playing*
	(Outputs MIDI note data normally as explained on page 29.)
Lower	Left-hand keyboard playing* with Auto Accompaniment ON
	(Outputs MIDI note data normally as explained on page 29.)
RhM	Auto Accompaniment RHYTHM MAIN track
RhS	Auto Accompaniment RHYTHM SUB track
Bas	Auto Accompaniment BASS track
Cd1	Auto Accompaniment CHORD1 track
Cd2	Auto Accompaniment CHORD2 track
Pad	Auto Accompaniment PAD track
Ph1	Auto Accompaniment PHRASE1 track
Ph2	Auto Accompaniment PHRASE2 track
T01-16	Song track 1-16
	<u> </u>

^{* &}quot;Right-hand keyboard playing" and "Left-hand keyboard playing" indicate the performance played on the right side and left side of the keyboard from the split point, respectively.

NOTE

- When a track is assigned to more than one MIDI channel, the data from that track is transmitted via the lowestnumbered channel.
- MIDI transmit track settings will be retained even after turning the power off. See page 136 for details.
- The initial default channel/ track settings are:
 - Ch. 1 = R1
 - Ch. 2 = R2
 - Ch. 3 = L
 - Ch. 4 = Off
 - Ch. 5 = Off
 - Ch. 6 = Off • Ch. 7 = Off
 - Ch. 8 = Off
 - Ch. 9 = RhS
 - Ch. 10 = RhM • Ch. 11 = Bas
 - Ch. 12 = Cd1
 - Ch. 13 = Cd2 • Ch. 14 = Pad
 - Ch. 15 = Ph1
 - Ch. 16 = Ph2
- To avoid MIDI loops which can cause operational errors, check the PSR-550 Local Control setting (page 116), and the MIDI THRU settings of any external MIDI devices.

^{**} Outputs MIDI note data according to the respective octave settings for the voices R1, R2 and L.

MIDI Receive Setting

The PSR-550 can simultaneously receive data on all 16 MIDI channels, allowing it to function as a 16-channel multi-timbral tone generator. The Receive Channel and Receive Mode functions determine how each channel will respond to received MIDI data.



Press the [FUNCTION] button.



Select "Midi."

Use the data dial, the [+/YES] button or the [-/NO] button.

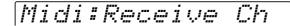


Press the [NEXT] button to display the MIDI screen.



Select "Receive Ch."

Use the **data dial**, the [+/YES] button or the [-/NO] button.



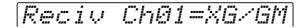


Press the [NEXT] button to display the MIDI Receive Ch screen.



Set a MIDI Receive Channel and Receive mode.

• Press one of the [TRACK1]-[TRACK16] buttons to select a MIDI channel.



● Select a receive mode with the **data dial**, the [+/YES] button or the [-/NO] button.

Off	No MIDI data is received on channels set to "Off".
XG/GM	Received MIDI data is sent directly to the PSR-550 tone generator. If all channels are set to "XG/GM", the PSR-550 functions as a 16-channel multi-timbral tone generator.
Keybd	Received MIDI data is handled in the same way as data generated by the PSR-550's own keyboard. In other words, a remote keyboard could be used to control the PSR-740/640 AUTO ACCOMPANIMENT functions, etc.
Chord	The note on/off messages received at the channel(s) set to "Chord" are recognized as the fingerings in the accompaniment section. The chords to be detected depend on the fingering mode on the PSR-550. The chords will be detected regardless of the accompaniment on/off and split point settings on the PSR-550 panel.
Root	The note on/off messages received at the channel(s) set to "Root" are recognized as the bass notes in the accompaniment section. The bass notes will be detected regardless of the accompaniment on/off and split point settings on the PSR-550 panel.



- The initial default setting (factory setting) for all channels is "XG/GM."
- MIDI receive mode settings will be retained even after turning the power off. See page 136 for details.

Local Control

"Local Control" refers to the fact that, normally, the PSR-550 keyboard controls the internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control on" since the internal tone generator is controlled locally by its own keyboard. Local control can be turned off, however, so that the keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator can respond to MIDI information received on channels set to the "XG/GM" mode via the MIDI IN connector. This means that while an external MIDI sequencer, for example, plays the PSR-550 internal voices, an external tone generator can be played from the PSR-550 keyboard.



 The default Local Control setting (factory setting) is "On".



Press the [FUNCTION] button.



Select "Midi".

Use the data dial, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the MIDI screen.



Select "LocalContrl."

Use the data dial, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the Local Control screen.



Turn the Local Control on or off.

Use the **data dial**, the [+/YES] button or the [-NO] button.

Clock

Reception of an external MIDI clock signal can be enabled or disabled as required. When disabled ("Int"), all of the time-based functions (Auto Accompaniment, SONG recording and playback, etc.) are controlled by its own internal clock. When MIDI clock reception is enabled ("Ext"), however, all timing is controlled by an external MIDI clock signal received via the MIDI IN terminal (in this case the PSR-550 TEMPO setting has no effect). The default setting is "Int".



Press the [FUNCTION] button.



Select "Midi."

Use the **data dial**, the [+/YES] button or the [-/NO] button.

3

Press the [NEXT] button to display the MIDI screen.



Select "Clock."

Use the data dial, the [+/YES] button or the [-/NO] button.

Midi#Clock



Press the [NEXT] button to display the Clock screen.



Set the Clock to "Int" or "Ext."

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Midi Clock =Int

NOTE

- The default Clock setting (factory setting) is "Int."
- When the Clock setting is "Ext," auto accompaniment playback cannot be started via the panel [START/STOP] button. Also, Multi Pad playback cannot be initiated by pressing the any of the Multi Pads.
- When the Clock setting is "Ext", "EC" will appear on the TEMPO display, and tempo cannot be changed with the panel button.

Initial Data Send

Transmits all current panel settings to a second PSR-550 or a MIDI data storage device.

If you want to have the song play back with the panel settings used for recording, execute the Initial Data Send function before recording the performance on the PSR-550 to an external sequencer.



Press the [FUNCTION] button.



Select "Midi."

Use the **data dial**, the [+/YES] button or the [-/NO] button.



Press the [NEXT] button to display the MIDI screen.



Select "Init Send."

Use the **data dial**, the [+/YES] button or the [-/NO] button.

Midi#Init Send



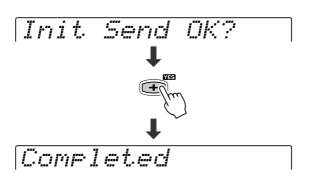
Press the [NEXT] button to display the Init Send screen.



Execute the Init Send operation.

Press the [+/YES] button to execute the Init Send operation.

To abort the operation, press the [-/NO] button.

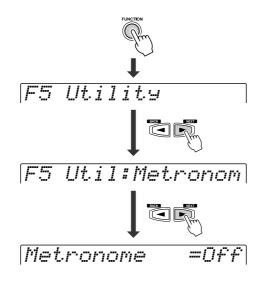


Other Functions (Utility)

This section of the manual covers some important functions of the PSR-550 that have not been explained in previous sections. These are all combined in the Utility menu of the "Function" section.

Metronome	."Metronom"	page 118
Upper Octave	."UpperOct"	page 119
Master Tuning	."Tuning"	page 119
Scale Tuning	."SC.Tune"	page 119
Split Point	"SFlit"	page 120
Fingering	."Fin9ern9"	page 38
Touch Sensitivity	."TouchSns"	page 120
Voice Set	."VoiceSet"	page 120
Footswitch	."Pedal"	page 121
Pitch Bend Range	."PitchBnd"	page 122
Assignable	."Assi9nbl"	page 122
	."BackLi9t"	

Each of the above functions can be set as described below.



1 Press the [FUNCTION] button.

- Select "Utility." Use the data dial, the [+/YES] button or the [-/NO] button.
- **3** Press the [NEXT] button.
- 4 Select a function.
 Use the data dial, the [+/YES] button or the [-/NO] button.
 Refer to the list above for available Utility menu items.
- **5** Press the [NEXT] button.
- 6 Set the value.
 Use the data dial, the [+/YES] button or the [-/NO] button.

The operations for each function corresponding to step #6 are covered in the following explanations.

Metronome

When this is set to "ON," the metronome sounds at the set tempo for the following conditions.

- Accompaniment playback
- Song playback
- Synchronized start standby
- Record standby
- Recording

Metronome = Un

• Turn Metronome ON or OFF with the **data dial**, the [+/YES] button or the [-/NO] button.



 The Metronome cannot be turned on when free-tempo song data is selected in the Song mode.

The tempo setting of some commercially available songs is fixed. These songs are called "free-tempo" software. When playing back free-tempo song data on the PSR-550, the Tempo display shows "- - -" and the beat display does not flash. Also, the measure number in the display does not match the actual measure number of playback, and only gives you an indication of how much of the song has played back.

Upper Octave

This determines the Octave setting for the right-hand range of the keyboard, letting you have independent ranges for the right and left hands. The range is from -1 to 1.

$$Urrer Octave = 1$$

• Use the data dial, the [+/YES] button or the [-/NO] button to set the Octave.

Master Tuning

The Master Tuning function sets the overall pitch of the PSR-550. The range is from 414.6 Hz to 466.8 Hz.

• Set the value with the data dial, the [+/YES] button or the [-/NO] button.

Scale Tuning

Scale tuning allows each individual note of the octave to be tuned over range from -64 to +63 cents in 1-cent increments (1 cent = 1/100th of a semitone). This makes it possible to produce subtle tuning variations, or tune the instrument to totally different scales (e.g. classic or Arabic scales).

The PSR-550 also provides nine different scale settings (shown below) that let you instantly reconfigure the tuning of the instrument for playing in special scales. You can tune the instrument in two ways: select the desired scale setting template, or tune each key individually using Note Edit.

Template	С	C#	D	E♭	E	F	F#	G	A۶	Α	В♭	В
Bayat-G	0	0	0	0	-50	0	0	0	0	-50	0	0
Bayat-A	0	0	0	0	0	0	-50	0	0	0	0	-50
Bayat-E	0	-50	0	0	0	0	-50	0	0	0	0	0
Bayat-C	0	0	-50	0	0	0	0	0	0	-50	0	0
Rast-G	0	0	0	0	0	0	-50	0	0	0	0	-50
Rast-A	0	-50	0	0	0	0	0	0	-50	0	0	0
Rast-E	0	0	0	-50	0	0	0	0	-50	0	0	0
Rast-C	0	0	0	0	-50	0	0	0	0	0	0	-50
Equal	0	0	0	0	0	0	0	0	0	0	0	0

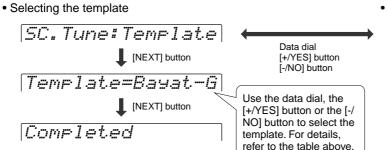
NOTE

- The scale tuning settings are common to each octave on the keyboard.
- Minus values can be entered by using the number buttons while holding the [-/NO] button.

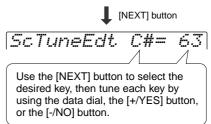


 The normal tuning of ±0 cents can be recalled by setting "Equal".

Use the same operation as in steps 1-5 on page 118 and:



Individual note tuning



SC.Tune:NoteEdit

Other Functions (Utility)

Split Point

The point on the keyboard that separates the auto accompaniment section and the right-hand section of the keyboard is called the "split point."

- The default setting (factory setting) is "F#2."
- When the auto accompaniment is on, keys played to the left of the split point are used for controlling the auto accompaniment (page 33).
- When the auto accompaniment is off, keys played to the left of the split point are used for playing voice L (page 28).

• Set the value with the data dial, the [+/YES] button or the [-/NO] button.

Touch Sensitivity

The keyboard of the PSR-550 is equipped with a touch response feature that lets you dynamically and expressively control the level of the voices with your playing strength — just as on an acoustic instrument. The Touch Sensitivity parameter gives you detailed control over the touch response feature by letting you set the degree of touch response.

• Set the value with the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

The range is from 0 to 127. The greater the value, the more sensitive the keyboard is to your playing strength, and the more dynamic range that can be brought out of the voices.

A setting of "0" results in a fixed touch response, or no level change no matter how hard or how soft you play the keys. (This setting is good for instrument sounds such as organ or harpsichord, which normally do not have touch response.) You can also achieve the same effect by turning touch response off with the [TOUCH] button on the panel (the indicator turns off).





Voice Set

The Voice Set feature brings out the best in each individual voice by automatically setting a range of important voice-related parameters whenever an R1 panel voice is selected. The parameters that may be set by the Voice Set feature are listed below. This function lets you turn Voice Set on or off, as required.

● Voice Set Parameter List

- Voice R1 (Volume, octave, pan, reverb depth, chorus depth, DSP depth)
- Voice R2 (Voice number, volume, octave, pan, reverb depth, chorus depth, DSP depth)
- · Harmony Type, Volume, Part setting
- DSP on/off, type, return level and FAST/SLOW

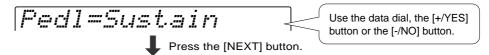
• Turn Voice Set On or Off by using the **data dial**, the [+/**YES**] button or the [-/**NO**] button.

Footswitch

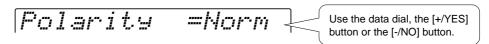
Various functions can be assigned to the footswitch connected to the FOOTSWITCH jack. The polarity of the footswitch can also be changed.



• Select the Functions to be controlled by the footswitch.



• Set the polarity of the footswitch NORMAL or REVERSE.



Functions controlled by the footswitch

Sustain When you press the footswitch, sustain is applied to the keyboard notes.

For "Sustain," if you press and hold the footswitch here, all the notes shown will be sustained.

Sostenuto When you press the footswitch, the sostenuto effect is applied to the keyboard notes.



For "Sostenuto," if you press and hold the footswitch here, only the first note will be sustained (the note that you played and held when pressing the footswitch).

Soft	When you press the footswitch, the soft effect is applied to the keyboard notes.
Regist +	Pressing the footswitch advances through the Registration Memory numbers. For example, if you step on the footswitch with bank 1-3 recalled, 1-4 will be recalled, then next 2-1 will be recalled.
Start/Stop	Pressing the footswitch has the same effect as pressing the START/STOP button on the panel.
Synchro Stop	Pressing the footswitch has the same effect as pressing the SYNC STOP button on the panel.
Bass Hold	The bass root note will be held as long as you press the footswitch.
Break	When you press the footswitch, accompaniment will stop. Releasing the switch with the foot will cause it to play again from the next measure.
Tap Tempo	Pressing the footswitch has the same effect as pressing the TAP TEMPO button on the panel.

Polarity

This parameter lets you configure the footswitch response of the PSR-550 to match that of the particular footswitch you are using. If the footswitch works in the opposite way (i.e., pressing the footswitch has no effect, but releasing it does), try changing this setting. The default setting is "Norm."

NOTE

When the footswitch changes the Registration Memory number (Regist +), the footswitch function set in the selected Registration Memory is overridden or ignored. For example, even if footswitch is set to control Sustain in the selected Registration Memory, if set to "Regist +" here, the footswitch will NOT control Sustain.

Pitch Bend Range

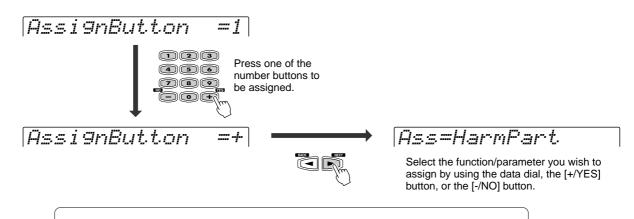
This determines the maximum pitch bend range for the **PITCH BEND** wheel.

The range is from "0" to "12". Each increment corresponds to one semitone.

• Set the Pitch Bend Range with the **data dial**, the [+/YES] button, the [-/NO] button or the number buttons [1]-[0].

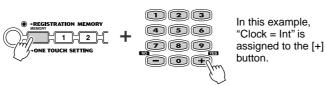
Assignable

Functions to be called up via the Direct Access can be assigned to the [+/YES] button, [-/NO] button and the number buttons [1]-[0]. See the function tree chart for details (page 22-23).





 $2\,$ While holding the [MEMORY] button, press one of the number buttons.



Backlight

You can set the Backlight color of the display.

Use the data dial, the [+/YES] button or the [-/NO] button to set the Backlight color.

- Blue, Red, Purple The backlight color is not changed regardless of the mode.
- Off The backlight color is turned off.

PSR-550 Voices

The PSR-550 actually includes two voice sets: the "panel" voices and percussion kits, and the XG voices. The panel voices include 219 "pitched" voices and 14 drum kits, while the XG voice set includes 480 voices.

The panel voices are specially recorded and programmed voices exclusive to the PSR-550 and other PortaTone instruments. The XG voices conform to Yamaha's XG format; they also conform to the GM (General MIDI) standard. This allows you to accurately play back any GM- or XG-compatible song data directly on the PSR-550 itself, without having to change voices or make special settings. It also allows you to record songs for other GM- or XG-compatible instruments, and have them play back on those instruments as intended.

Voices			
	Panel Voices	Drum Kits	XG Voices
		(Panel Voices)	
PSR-550	001-219	220-233	234-713

Maximum Polyphony

The PSR-550 has 32-note maximum polyphony. Auto Accompaniment uses a number of the available notes, so when Auto Accompaniment is used the total number of notes that can be played on the keyboard is correspondingly reduced. The same applies to the Voice R2, Voice L, Multi Pad, and Song functions. When the maximum polyphony is exceeded, notes are played using last-note priority.

NOTE

- The Voice List includes MIDI program change numbers for each voice. Use these program change numbers when playing the PSR-550 via MIDI from an external device.
- When the sustain or sostenuto pedal functions are being used (page 121), some voices may sound continuously or have a long decay after the notes have been released while the pedal is held.

Panel Voice List

	Ban	k Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
			Piano		
1	0	112	1	Grand Piano	2
2	0	112	2	Bright Piano	2
3	0	112	4 Honky Tonk		2
4	0	114	3	Rock Piano	2
5	0	112	3	Midi Grand	2
6	0	113	3	CP 80	2
7	0	112	7	Harpsichord	1
8	0	113	7	Grand Harpsi	2
			E.Piano		
9	0	114	5	Galaxy EP	2
10	0	115	5	Polaris EP	2
11	0	118	5	Suitcase EP	2
12	0	117	6	Super DX EP	2
13	0	112	6	DX Modern EP	2
14	0	112	5	Funk EP	1
15	0	115	6	Modern EP	2
16	0	113	6	Hyper Tines	2
17	0	116	6	New Tines	2
18	0	114	6	Venus EP	2
19	0	113	5	Tremolo EP	2
20	0	112	8	Clavi	1
21	0	113	8	Wah Clavi	1
			Organ		·
22	0	112	17	Jazz Organ1	2
23	0	113	17	Jazz Organ2	2
24	0	120	17	GlassJazzOrg	2
25	0	112	18	Click Organ	2
26	0	113	18	Dance Organ	2
27	0	115	17	DrawbarOrgan	2
28	0	115	18	Mellow Draw	2
29	0	116	17	Bright Draw	2
30	0	112	19	Rock Organ 1	2
31	0	113	19	Rock Organ 2	2
32	0	114	19	Purple Organ	2
33	0	116	18	60's Organ	2
34	0	117	18	Blues Organ	2
35	0	117	17	16+1 Organ	2
36	0	118	17	16+2 Organ	2
37	0	119	17		
38	0	118	18	Elec.Organ	2
39	0	114	17	TheaterOrg1	2
40	0	114	18	TheaterOrg2	2
41	0	112	20	Pipe Organ	2

	Ban	k Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
42	0	113	20	ChapelOrgan1	2
43	0	114	20	ChapelOrgan2	2
44	0	115	20	ChapelOrgan3	2
45	0	112	21	Reed Organ	1
			Accordic	on	
46	0	113	22	Trad.Accrd	2
47	0	112	22	MusetteAccrd	2
48	0	112	24	Tango Accrd	1
49	0	113	24	Bandoneon	2
50	0	114	22	Soft Accrd	2
51	0	115	22	Accordion	1
52	0	112	23	Harmonica	1
			Guitar		1
53	0	113	25	Spanish Gtr	1
54	0	112	25	Classic Gtr	2
55	0	112	26	Folk Guitar	1
56	0	116	26	FolkGw/pick1	2
57	0	117	26	FolkGw/pick2	2
58	0	118	26	FolkGw/pick3	2
59	0	113	26	12Str Guitar	2
60	0	114	25	Smooth Nylon	2
61	0	115	26	Campfire	2
62	0	112	27	Jazz Guitar	2
63	0	113	27	Octave Gtr	2
64	0	114	27	Hawaiian Gtr	2
65	0	123	28	VintageOpen	1
66	0	123	28	VintageOpen	2
67	0	118	28	Solid Guitar	2
68	0	116	28	Bright Clean	1
69	0	112	28	Clean Guitar	2
70		112		Elec12StrGtr	2
70	0	113	28 28	Tremolo Gtr	2
		113	-		1
72	0		29	Cool! E.Gtr	1
73	0	115	29	VintageMute	
74	0	113	29	Funk Guitar	1
75	0	112	29	Muted Guitar	1
76	0	113	30	Feedback Gtr	2
77	0	112	30	Overdriven	2
78	0	112	31	Distortion	2
79	0	115	28	Pedal Steel	2
80	0	114	26	Mandolin	2
			Bass		
81	0	112	34	Finger Bass	1
82	0	112	33	AcousticBass	2

	Ban	Bank Select			Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
83	0	114	33	Bass&Cymbal	2
84	0	112	35	Pick Bass	1
85	0	112	36	FretlessBass	2
86	0	113	36	Jaco Bass	2
87	0	112	37	Slap Bass	1
88 89	0	112 113	38 37	Funk Bass Fusion Bass	1
90	0	112	39	Synth Bass	1
91	0	112	40	Analog Bass	2
92	0	113	40	Dance Bass	2
93	0	113	39	Hi-Q Bass	2
94	0	114	39	Rave Bass	2
,			Strings		
95	0	112	49	String Ensbl	2
96	0	113	49	Orch.Strings	2
97	0	114	49	SymphonicStr	2
98	0	113	50	Slow Strings	2
99	0	114	50	Str.Quartet	2
100	0	115	49	Concerto Str	2
101	0	115	50	Marcato Strs	2
102	0	112	50	Chamber Strs	2
103	0	112	45	Tremolo Strs	2
104	0	112	46	Pizz.Strings	2
105	0	112	51	Syn Strings	2
106	0	112	52	Analog Strs	2
107	0	113	51	Tech Strings	2
108	0	112	56	OrchestraHit	2
109	0	112	41	Solo Violin	2
110 111	0	113 112	41 111	Soft Violin Fiddle	1
112	0	112	42	Viola	2
113	0	112	43	Cello	1
114	0	112	44	Contrabass	1
115	0	112	47	Harp	2
116	0	113	47	Hackbrett	2
117	0	112	107	Shamisen	1
118	0	112	108	Koto	1
119	0	112	105	Sitar	2
120	0	112	106	Banjo	1
			Choir		
121	0	112	53	Choir	2
122	0	112	55	Air Choir	2
123	0	113	54	Gothic Vox	2
124	0	113	53	Vocal Ensbl	2
125	0	112	54 -	Vox Humana	2
400		44-	Trumpe		
126	0	115	57	SweetTrumpet	1
127	0	112	57	Solo Trumpet	1
128	0	114	57 57	Soft Trumpet Flugel Horn	1
129 130	0	113 112	57 60	MutedTrumpet	1
130	0	112	58	Trombone	1
132	0	114	58	Mel.Trombone	2
133	0	112	61	French Horn	1
134	0	112	59	Tuba	2
			Brass		
135	0	113	62	BigBandBrass	2
136	0	112	62	BrassSection	2
137	0	116	62	Mellow Brass	2
138	0	117	62	Small Brass	2
139	0	118	62	Pop Brass	2
140	0	119	62	Mellow Horns	2
141	0	113	60	Ballroom Brs	2
142	0	114	62	Full Horns	2

Voice	Ban	k Select	MIDI		Number
Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
143	0	115	62	High Brass	2
144	0	120	62	Bright Brass	2
145	0	113	58	Trb.Section	2
146	0	112	63	Synth Brass	2
147	0	112	64	Analog Brass	2
148 149	0	113 114	63 63	Jump Brass Techno Brass	2 2
149	0	114	Saxopho		2
150	0	117	67	Sweet Tenor	2
151	0	114	67	BreathyTenor	2
152	0	113	66	Breathy Alto	2
153	0	112	65	Soprano Sax	2
154	0	112	66	Alto Sax	1
155	0	112	67	Tenor Sax	1
156	0	112	68	Baritone Sax	1
157	0	116	67	Sax Section	2
158	0	115	67	Sax Combo	2
159	0	112	72	Clarinet	2
160	0	113	72	Mel.Clarinet	2
161	0	113	67	Woodwind Ens	2
162	0	112	69	Oboe	1
163 164	0	112 112	70 71	English Horn Bassoon	1 1
104		112	Flute	Dassoon	!
165	0	114	74	Sweet Flute	1
166	0	112	74	Flute	2
167	0	113	74	Pan Flute	2
168	0	112	73	Piccolo	1
169	0	112	76	Ethnic Flute	2
170	0	112	78	Shakuhachi	1
171	0	112	79	Whistle	1
172	0	112	75	Recorder	1
173	0	112	80	Ocarina	1
174	0	112	110	Bagpipe	2
175		116	Synth Le		
175 176	0	116 112	82 81	Fire Wire Square Lead	2 2
176	0	112	82	SawtoothLead	2
178	0	113	82	Big Lead	2
179	0	112	99	Stardust	2
180	0	114	82	Blaster	2
181	0	115	82	Analogon	2
182	0	113	99	Sun Bell	2
183	0	112	84	Aero Lead	2
184	0	114	81	Mini Lead	2
185	0	115	81	Vinylead	1
186	0	117	82	Warp	2
187	0	116	81	Hi Bias	2
188	0	118	81	Tiny Lead	2
189	0	118	82	Sub Aqua	2
190	0	119	82	Fargo	2
101		113	Synth Pa		2
191 192	0	115	89	Insomnia Golden Age	2
193	0	113	100	Cyber Pad	2
194	0	112	96	Wave 2001	2
195	0	112	95	Equinox	2
196	0	114	89	Stargate	2
197	0	112	93	DX Pad	2
198	0	112	89	Fantasia	2
199	0	112	92	Xenon Pad	2
200	0	112	90	Area 51	2
201	0	112	100	AtmospherPad	2
202	0	113	90	Dark Moon	2

	Banl	k Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
203	0	115	95	Ionosphere	2
204	0	113	89	Symbiont	2
205	0	114	95	Solaris	2
206	0	117	89	Millenium	2
207	0	113	96	Transform	2
			Percussion	on	
208	0	113	12	Jazz Vibes	2
209	0	112	12	Vibraphone	2
210	0	112	13	Marimba	2
211	0	112	14	Xylophone	1
212	0	112	115	Steel Drums	1
213	0	112	9	Celesta	2
214	0	112	10	Glockenspiel	1
215	0	112	11	Music Box	2
216	0	112	15	Tubular Bell	2
217	0	112	109	Kalimba	1
218	0	112	48	Timpani	1
219	0	112	16	Dulcimer	2

	Banl	k Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
			Drum Kit	s	
220	127	0	1	StandardKit1	-
221	127	0	2	StandardKit2	-
222	127	0	9	Room Kit	-
223	127	0	17	Rock Kit	-
224	127	0	25	Electro Kit	-
225	127	0	26	Analog Kit	-
226	127	0	28	Dance Kit	-
227	127	0	33	Jazz Kit	-
228	127	0	41	Brush Kit	-
229	127	0	49	Symphony Kit	-
230	127	0	81	Style Kit	-
231	126	0	36	ArabicKit	
232	126	0	1	SFX Kit 1	-
233	126	0	2	SFX Kit 2	-

XG Voice List

	Bank	Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
234	0	0	1	Grand Piano	1
235	0	1	1	GrndPianoKSP	1
236	0	18	1	MellowGrPno	1
237	0	40	1	PianoStrings	2
238	0	41	1	Dream	2
239	0	0	2	Bright Piano	1
240	0	1	2	BritePnoKSP	1
241	0	0	3	ElecGrandPno	2
242	0	1	3	ElecGrPnoKSP	2
243	0	32	3	Detuned CP80	2
244	0	40	3	Layered CP 1	2
245	0	41	3	Layered CP 2	2
246	0	0	4	Honkytonk	2
247	0	1	4	HonkytonkKSP	2
248	0	0	5	El.Piano 1	2
249	0	1	5	El.Piano1KSP	1
250	0	18	5	Mellow EP 1	2
251	0	32	5	Chorus EP 1	2
252	0	40	5	HardEl.Piano	2
253	0	45	5	VXfade El.P1	2
254	0	64	5	60sEl.Piano1	1
255	0	0	6	El.Piano 2	2
256	0	1	6	El.Piano2KSP	1
257	0	32	6	Chorus EP 2	2
258	0	33	6	DX EP Hard	2
259	0	34	6	DX Legend	2
260	0	40	6	DX Phase EP	2
261	0	41	6	DX+AnalogEP	2
262	0	42	6	DX Koto EP	2
263	0	45	6	VXfade El.P1	2
264	0	0	7	Harpsichord	1
265	0	1	7	Harpsi.KSP	1
266	0	25	7	Harpsichord2	2
267	0	35	7	Harpsichord3	2
268	0	0	8	Clavi.	1
269	0	1	8	Clavi.KSP	1
270	0	27	8	Clavi.Wah	2
271	0	64	8	Pulse Clavi.	1

	Bank	Select	MIDI		Nombre
Voice Number	MSB	LSB	Program Change Number	Voice Name	Number of Notes Used
272	0	65	8	PierceClavi.	2
273	0	0	9	Celesta	1
274	0	0	10	Glockenspiel	1
275	0	0	11	Music Box	2
276	0	64	11	Orgel	2
277	0	0	12	Vibraphone	1
278	0	1	12	Vibes KSP	1
279	0	45	12	Hard Vibes	2
280	0	0	13	Marimba	1
281	0	1	13	Marimba KSP	1
282	0	64	13	Sine Marimba	2
283	0	97	13	Balimba	2
284	0	98	13	Log Drums	2
285	0	0	14	Xylophone	1
286	0	0	15	TubularBells	1
287	0	96	15	Church Bells	2
288	0	97	15	Carillon	2
289	0	0	16	Dulcimer	1
290	0	35	16	Dulcimer 2	2
291	0	96	16	Cimbalom	2
292	0	97	16	Santur	2
293	0	0	17	DrawbarOrgan	1
294	0	32	17	DetDrawOrgan	2
295	0	33	17	60sDrawOrg1	2
296	0	34	17	60sDrawOrg2	2
297	0	35	17	70sDrawOrg1	2
298	0	36	17	DrawbarOrg2	2
299	0	37	17	60sDrawOrg3	2
300	0	38	17	Even Bar Org	2
301	0	40	17	16+2'2/3 Org	2
302	0	64	17	Organ Bass	1
303	0	65	17	70sDrawOrg2	2
304	0	66	17	Cheezy Organ	2
305	0	67	17	DrawbarOrg3	2
306	0	0	18	Perc.Organ	1
307	0	24	18	70sPercOrg1	2
308	0	32	18	DetPercOrgan	2
309	0	33	18	Light Organ	2

	Bank	Select	MIDI		
Voice Number	MSB	LSB	Program Change Number	Voice Name	Number of Notes Used
310	0	37	18	Perc.Organ2	2
311	0	0	19	Rock Organ	1
312	0	64	19	Rotary Organ	2
313	0	65	19	Slow Rotary	2
314	0	66	19	Fast Rotary	2
315	0	0	20	Church Organ	2
316	0	32	20	ChurchOrgan3	2
317	0	35	20	ChurchOrgan2	2
318	0	40	20	Notre Dame	2
319	0	64	20	Organ Flute	2
320	0	65	20	Trem.OrganFl	2
321	0	0	21	Reed Organ	1
322	0	40	21	Puff Organ	2
323	0	0	22	Accordion	1
324	0	32	22	Accord It	2
325	0	0	23	Harmonica	1
326	0	32	23	Harmonica 2	2
327	0	0	24	Tango Accord	1
328	0	64	24	TangoAccord2	2
329	0	0	25	Nylon Guitar	1
330	0	16	25	NylonGuitar2	1
331	0	25	25	NylonGuitar3	2
332	0	43	25	VelGtrHarmo	1
333	0	96	25	Ukulele	1
334	0	0	26	Steel Guitar	1
335	0	16	26	SteelGuitar2	1
336	0	35	26	12Str Guitar	2
337	0	40	26	Nylon&Steel	2
338	0	41	26	Steel&Body	2
339	0	96	26	Mandolin	2
340	0	0	27	Jazz Guitar	1
341	0	18	27	MellowGuitar	1
342	0	32	27	Jazz Amp	2
343	0	0	28	Clean Guitar	1
344	0	32	28	ChorusGuitar	2
345	0	0	29	Muted Guitar	1
346	0	40	29	FunkGuitar1	2
347	0	41	29	MuteSteelGtr	2

Voice List

	Bank	Select	MIDI		Number
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Notes Used
348	0	43	29	FunkGuitar2	1
349	0	45	29	Jazz Man	2
350 351	0	43	30	Overdriven Guitar Pinch	1
352	0	0	31	Distortion	1
353	0	40	31	FeedbackGtr	2
354	0	41	31	FeedbackGtr2	2
355	0	0	32	GtrHarmonics	1
356	0	65	32	GtrFeedback	1
357	0	66	32	GtrHarmonic2	1
358	0	0	33	AcousticBass	1
359	0	40	33	Jazz Rhythm	2
360	0	45	33	VXUprghtBass	2
361	0	0	34	Finger Bass	1
362	0	18	34	Finger Dark	2
363	0	27	34	Flange Bass	2
364	0	40	34	Bass&DistEG	2
365	0	43	34	Finger Slap	1
366	0	45	34	FingerBass2	2
367	0	65	34	Mod.Bass	2
368	0	0	35	Pick Bass	1
369	0	28	35	MutePickBass	1
370	0	0	36	FretlessBass	1
371	0	32	36	Fretless 2	2
372	0	33	36	Fretless 3	2
373	0	34	36	Fretless 4	2
374	0	96	36	Syn.Fretless	2
375	0	97	36	SmthFretless	2
376	0	0	37	Slap Bass 1	1
377	0	27	37	ResonantSlap	1
378	0	32	37	Punch Thumb	2
379	0	0	38	Slap Bass 2	1
380	0	43	38	Velo.Sw.Slap	1
381	0	0	39	Synth Bass 1	1
382	0	18	39	SynBass1Dark	1
383	0	20	39	FastResoBass	1
384	0	24	39	Acid Bass	1
385	0	35	39	Clavi Bass	2
386 387	0	40	39	Techno Bass Orbiter	2
388	0	64 65	39 39	Square Bass	1
389	0	66	39	Rubber Bass	2
390	0	96	39	Hammer	2
391	_	0	40		2
392	0	6	40	Synth Bass 2 MellowSyBass	1
393	0	12	40	SequenceBass	2
394	0	18	40	ClickSynBass	2
395	0	19	40	SynBass2Dark	1
396	0	32	40	SmoothSyBass	2
397	0	40	40	ModulrSyBass	2
398	0	41	40	DX Bass	2
399	0	64	40	X Wire Bass	2
400	0	0	41	Violin	1
401	0	8	41	SlwAtkViolin	1
402	0	0	42	Viola	1
403	0	0	43	Cello	1
404	0	0	44	Contrabass	1
405	0	0	45	Trem.Strings	1
406	0	8	45	SlwAtTremStr	1
407	0	40	45	SuspenseStr	2
1	- 0				
408	0	0	46	PizzicatoStr	1
409		0	47	Orch.Harp	1
-	0				

Voice	Bank	Select	MIDI Program		Number
Number	MSB	LSB	Change Number	Voice Name	of Notes Used
412	0	0	49	Strings 1	1
413	0	3	49	StereoStrngs	2
414	0	8	49	SlwAtkStrngs	1
415	0	24	49	Arco Strings	2
416	0	35	49	60's Strings	2
417	0	40	49	Orchestra	2
418	0	41	49	Orchestra 2	2
419	0	42	49	TremOrchstra	2
420	0	45	49	Velo.Strings	2
421	0	0	50	Strings 2	1
422	0	3	50	S.SlowStrngs	2
423	0	8	50	LegatoStrngs	2
424	0	40	50	Warm Strings	2
425	0	41	50	Kingdom	2
426	0	64	50	70's Strings	1
427	0	65	50	Strings 3	1
428 429	0	0	51	SynStrings1	2
429	0	27 64	51	Reso Strings	2
430	0	65	51 51	SynStrings4 SynStrings5	2
431	0	0	52	, ,	2
432	0	0	53	SynStrings2 Choir Aahs	1
434	0	3	53	Stereo Choir	2
435	0	16	53	Choir Aahs 2	2
436	0	32	53	Mellow Choir	2
437	0	40	53	ChoirStrings	2
438	0	0	54	Voice Oohs	1
439	0	0	55	Synth Voice	1
440	0	40	55	SynthVoice2	2
441	0	41	55	Choral	2
442	0	64	55	Analog Voice	1
443	0	0	56	OrchestraHit	2
444	0	35	56	OrchestrHit2	2
445	0	64	56	Impact	2
446	0	0	57	Trumpet	1
447	0	16	57	Trumpet 2	1
448	0	17	57	BriteTrumpet	2
449	0	32	57	Warm Trumpet	2
450	0	0	58	Trombone	1
451	0	18	58	Trombone 2	2
452	0	0	59	Tuba	1
453	0	16	59	Tuba 2	1
454	0	0	60	MutedTrumpet	1
455	0	0	61	French Horn	1
456	0	6	61	Fr.Horn Solo	1
457	0	32	61	FrenchHorn2	2
458	0	37	61	HornOrchestr	2
459	0	0	62	BrassSection	1
460	0	35	62	Tp&TbSection	2
461	0	40	62	BrassSect2	2
462	0	41	62	High Brass	2
463	0	42	62	Mellow Brass	2
464	0	0	63	SynthBrass1	2
465	0	12	63	Quack Brass	2
466	0	20	63	ResoSynBrass	2
467	0	24	63	Poly Brass	2
468	0	27	63	SynthBrass3	2
469	0	32	63	Jump Brass	2
470	0	45	63	AnaVelBrass1	2
471	0	64	63	AnalogBrass1	2
472	0	0	64	SynthBrass2	1
473	0	18	64	Soft Brass	2
474	0	40	64	SynthBrass4	2

	Bank	Select	MIDI		I
Voice Number	MSB	LSB	Program Change Number	Voice Name	Number of Notes Used
476	0	45	64	AnaVelBrass2	2
477	0	64	64	AnalogBrass2	2
478	0	0	65	Soprano Sax	1
479	0	0	66	Alto Sax	1
480 481	0	40	66 66	Sax Section HyperAltoSax	1
482	0	0	67	Tenor Sax	1
483	0	40	67	BreathyTenor	2
484	0	41	67	SoftTenorSax	2
485	0	64	67	Tenor Sax2	1
486	0	0	68	Baritone Sax	1
487	0	0	69	Oboe	1
488	0	0	70	English Horn	1
489	0	0	71	Bassoon	1
490	0	0	72	Clarinet	1
491	0	0	73	Piccolo	1
492	0	0	74	Flute	1
493 494	0	0	75 76	Recorder Pan Flute	1
494	0	0	77	Blown Bottle	2
496	0	0	78	Shakuhachi	1
497	0	0	79	Whistle	1
498	0	0	80	Ocarina	1
499	0	0	81	Square Lead	2
500	0	6	81	SquareLead2	1
501	0	8	81	LM Square	2
502	0	18	81	Hollow	1
503	0	19	81	Shroud	2
504	0	64	81	Mellow	2
505	0	65	81	Solo Sine	2
506	0	66	81	Sine Lead	1
507 508	0	6	82 82	SawtoothLead SawtoothLd2	1
509	0	8	82	Thick Saw	2
510	0	18	82	Dynamic Saw	1
511	0	19	82	Digital Saw	2
512	0	20	82	Big Lead	2
513	0	24	82	Heavy Synth	2
514	0	25	82	Waspy Synth	2
515	0	40	82	Pulse Saw	2
516	0	41	82	Dr. Lead	2
517	0	45	82	VelocityLead	2
518	0	96	82	Seq.Analog	2
519	0	0	83	CalliopeLead	2
520	0	65	83	Pure Pad Chiff Lead	2
521 522	0	0 64	84 84	Rubby	2
523	0	0	85	Charang Lead	2
524	0	64	85	DistortedLd	2
525	0	65	85	Wire Lead	2
526	0	0	86	Voice Lead	2
527	0	24	86	Synth Aahs	2
528	0	64	86	Vox Lead	2
529	0	0	87	Fifths Lead	2
530	0	35	87	Big Five	2
531	0	0	88	Bass & Lead	2
532	0	16	88	Big & Low	2
533	0	64	88	Fat & Perky	2
534	0	65	88	Soft Whirl	2
535	0	64	89 89	New Age Pad Fantasy	2
536 537	0	64 0	90	Warm Pad	2
538	0	16	90	Thick Pad	2
539	0	17	90	Soft Pad	2

	Bank	Select	MIDI		
Voice Number	MSB	LSB	Program Change Number	Voice Name	Number of Notes Used
540	0	18	90	Sine Pad	2
541	0	64	90	Horn Pad	2
542	0	65	90	RotaryStrngs	2
543	0	0	91	PolySynthPad	2
544	0	64	91	Poly Pad 80	2
545	0	65	91	Click Pad	2
546	0	66	91	Analog Pad	2
547	0	67	91	Square Pad	2
548	0	0	92	Choir Pad	2
549	0	64	92	Heaven	2
550	0	66	92	Itopia	2
551	0	67	92	CC Pad	2
552	0	0	93	Bowed Pad	2
553	0	64	93	Glacier	2
554	0	65	93	Glass Pad	2
555	0	0	94	Metallic Pad	2
556	0	64	94	Tine Pad	2
557	0	65	94	Pan Pad	2
558	0	0	95	Halo Pad	2
559	0	0	96	Sweep Pad	2
560	0	20	96	Shwimmer	2
561	0	27	96	Converge	2
562	0	64	96	Polar Pad	2
563	0	66	96	Celestial	2
564	0	0	97	Rain	2
565	0	45	97	Clavi Pad	2
566	0	64	97	Harmo Rain	2
567	0	65	97	African Wind	2
568	0	66	97	Carib	2
569	0	0	98	Sound Track	2
570	0	27	98	Prologue	2
571	0	64	98	Ancestral	2
572	0	0	99	Crystal	2
573	0	12	99	SynthDr.Comp	2
574	0	14	99	Popcorn	2
575	0	18	99	Tiny Bells	2
576	0	35	99	RoundGlocken	2
577	0	40	99	GlockenChime	2
578	0	41	99	Clear Bells	2
579	0	42	99	Chorus Bells	2
580	0	64	99	Synth Mallet	1
581	0	65	99	Soft Crystal	2
582 583	0	66	99	Loud Glocken	2
	0	67	99	ChristmasBel	_
584	0	68	99	Vibe Bells	2
585	0	69	99	DigitalBells	2
586	0	70	99	Air Bells	2
587	0	71	99	Bell Harp	2
588	0	72	99	Gamelimba	2
589	0	10	100	Atmosphere	
590	0	18	100	Warm Atmos.	2
591	0	19 40	100	HollwRelease	2
592		_		Nylon Harn	2
593 594	0	64	100	Nylon Harp Harp Vox	_
595	0	65	100	Atmos.Pad	2
595		66			_
	0	67	100	Planet	2
597 598	0	64	101	Brightness FantasyBells	2
		_	101	FantasyBells	2
599	0	96	-	Smokey	2
600	0	64	102 102	Goblins GoblinsSynth	2
601		1 14	102	CODIIIOOVIIII	1 Z
601 602	0	65	102	Creeper	2

	Bank	Select	MIDI		Numbe
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Note Used
604	0	67	102	Ritual	2
605	0	68	102	To Heaven	2
606	0	70	102	Night	2
607	0	71	102	Glisten	2
608	0	96	102	Bell Choir	2
609	0	0	103	Echoes	2
610	0	8	103	Echoes2	2
611	0	14	103	Echo Pan	2
612	0	64	103	Echo Bells	2
613	0	65	103	Big Pan	2
614	0	66	103	Synth Piano	2
615	0	67	103	Creation	2
616	0	68	103	Star Dust	2
617	0	69	103	Reso&Panning	2
618	0	0	104	Sci-Fi	2
619	0	64	104	Starz	2
620	0	0	105	Sitar	1
621	0	32	105	DetunedSitar	2
622	0	35	105	Sitar 2	2
623	0	96	105	Tambra	2
624	0	97	105	Tamboura	2
625	0	0	106	Banjo	1
626	0	28	106	Muted Banjo	1
627	0	96	106	Rabab	2
628	0	97	106	Gopichant	2
629	0	98	106	Oud	2
630	0	0	107	Shamisen	1
631	0	0	108	Koto	1
632	0	96	108	Taisho-kin	2
633	0	97	108	Kanoon	2
634	0	0	109	Kalimba	1
635	0	0	110	Bagpipe	2
636	0	0	111	Fiddle	1
637	0	0	112	Shanai	1
638	0	64	112	Shanai2	1
639	0	96	112	Pungi	2
640 641	0	97	112	Hichiriki Tinkle Bell	2
	0	0	113		_
642	0	96	113	Bonang	2
643	0	97	113	Altair	2
644	0	98	113	GamelanGongs	2
645	0	99	113	StereoGamlan	2
646	0	100	113	Rama Cymbal	2
647	0	101	113	Asian Bells	2
648	0	0	114	Agogo	1
649	0	0	115	Steel Drums	1
650	0	97	115	Glass Perc.	2
651	0	98	115	Thai Bells	2
652	0	0	116	Woodblock	1
653	0	96	116	Castanets	_
654	0	0	117	Taiko Drum	1
655	0	96	117	Gran Cassa	1
656	0	0	118	Melodic Tom	1
657	0	64	118	MelodicTom2	1
658	0	65	118	Real Tom	2
659	0	66	118	Rock Tom	2
660	0	0	119	Synth Drum	1
661	0	64	119	Analog Tom	1
662	0	65	119	ElectroPerc.	2
663	0	0	120	Rev.Cymbal	1
664	0	0	121	GtrFretNoise	1
665	0	0	122	Breath Noise	1
666	0	0	123	Seashore	2
667	0	0	124	Bird Tweet	2

	Bank	Select	MIDI		Numbe
Voice Number	MSB	LSB	Program Change Number	Voice Name	of Note: Used
668	0	0	125	TelephonRing	1
669	0	0	126	Helicopter	1
670	0	0	127	Applause	1
671	0	0	128	Gunshot	1
672	64	0	1	CuttingNoise	1
673	64	0	2	CuttingNoiz2	2
674	64	0	4	String Slap	1
675	64	0	17	Fl.Key Click	1
676	64	0	33	Shower	1
677	64	0	34	Thunder	1
678	64	0	35	Wind	1
679	64	0	36	Stream	2
680	64	0	37	Bubble	2
681	64	0	38	Feed	2
682	64	0	49	Dog	1
683	64	0	50	Horse	1
684	64	0	51	Bird Tweet 2	1
685	64	0	55	Ghost	2
686	64	0	56	Maou	2
687	64	0	65	Phone Call	1
688	64	0	66		1
	_	0		Door Squeak	1
689	64	-	67	Door Slam	
690	64	0	68	Scratch Cut	1
691	64	0	69	ScratchSplit	1
692	64	0	70	Wind Chime	1
693	64	0	71	TelphonRing2	1
694	64	0	81	CarEngineIgn	1
695	64	0	82	CarTiresSqel	1
696	64	0	83	Car Passing	1
697	64	0	84	Car Crash	1
698	64	0	85	Siren	2
699	64	0	86	Train	1
700	64	0	87	Jet Plane	2
701	64	0	88	Starship	2
702	64	0	89	Burst	2
703	64	0	90	RollrCoaster	2
704	64	0	91	Submarine	1
705	64	0	97	Laugh	1
706	64	0	98	Scream	1
707	64	0	99	Punch	1
708	64	0	100	Heartbeat	1
709	64	0	101	FootSteps	1
710	64	0	113	Machine Gun	1
711	64	0	114	Laser Gun	2
712	64	0	115	Explosion	2
713	64	0	116	Firework	2

Drum Kit List

- "<—" indicates that the drum kit is the same as "Standard Kit1".
 Each percussion voice uses one note, whereas one marked (______) = uses two notes.
 The note numbers and note names printed on the keyboard are one octave higher than the MIDI note numbers and note names shown in the list. For example, the note number and note name, #36 and C1, on the keyboard correspond to the MIDI note number and note name, #24 and C0, shown in the list.

		MSB	127	127	127	127	127	127	127
		LSB	0	0	0	0	0	0	0
		Number	1	2	9	17	25	26	28
	Note #	Note	Standard Kit 1	Standard Kit 2	Room Kit	Rock Kit	Electro Kit	Analog Kit	Dance Kit
	13 14	C#-1 D-1	Surdo Mute	<	<	<	<	<	
	15	D#-1	Surdo Open Hi Q	<	<	<	<	<	<
	16	E-1	Whip Slap	<	<	<		<	
	17	F-1	Scratch H	<		<	<	<	<
	18	F#-1	Scratch L	\	<	<		<	<
	19	G-1		\		<		<	
	20	G#-1	Finger Snap Click Noise	\	<	<	<	<	<
	21	A-1	Metronome Click	\	<	<		<	
	22	A#-1	Metronome Bell		<	<	<	<	
	23	B-1	Seq Click L		<	<		<	
	24	C0	Seq Click H		<	<	<	<	<
C1 C#1	25	C#0	Brush Tap		<	<	<	<	<
D1	26	D0	Brush Swirl	<	<	<		<	<
D#1	27	D#0	Brush Slap		<	<		<	<
E1	28	E0	Brush Tap Swirl		<	<	Reverse Cymbal	Reverse Cymbal	Reverse Cymbal
	29	F0	Snare Roll		<	<	<	<	<
F1 F#1	30	F#0	Castanet	<	<	<	Hi Q 2	Hi Q 2	Hi Q 2
G1	31	G0	Snare Soft	Snare Soft 2	<	Snare Noisy	Snare Snappy Electro	Snare Noisy 4	Snare Techno
G#1	32	G#0	Sticks	<	<	<	<	<	<
A1	33	A0	Kick Soft		<	<	Kick 3	Kick 3	Kick Techno Q
A#1	34	A#0	Open Rim Shot	Open Rim Shot H Short	<	<	<	<	Rim Gate
B1	35	B0	Kick Tight	<	<	Kick 2	Kick Gate	Kick Analog Short	Kick Techno L
	36	C1	Kick	Kick Short	<	Kick Gate	Kick Gate Heavy	Kick Analog	Kick Techno 2
C2 C#2	37	C#1	Side Stick	Side Stick Light	<	<	<	Side Stick Analog	Side Stick Analog
D2	38	D1	Snare	Snare Short	Snare Snappy	Snare Rock	Snare Noisy 2	Snare Analog	Snare Clap
D#2	39	D#1	Hand Clap	<	<	<	<	<	<
E2	40	E1	Snare Tight	Snare Tight H	Snare Tight Snappy	Snare Rock Tight	Snare Noisy 3	Snare Analog 2	Snare Dry
F0	41	F1	Floor Tom L	<	Tom Room 1	Tom Rock 1	Tom Electro 1	Tom Analog 1	Tom Analog 1
F2 F#2	42	F#1	Hi-Hat Closed	<	<	<	<	Hi-Hat Closed Analog	Hi-Hat Closed 3
G2	43	G1	Floor Tom H		Tom Room 2	Tom Rock 2	Tom Electro 2	Tom Analog 2	Tom Analog 2
G#2	44	G#1	Hi-Hat Pedal	<	<	<	<	Hi-Hat Closed Analog 2	Hi-Hat Closed Analog
A2	45	A1	Low Tom		Tom Room 3	Tom Rock 3	Tom Electro 3	Tom Analog 3	Tom Analog 3
Δ#2	46	A#1	Hi-Hat Open	<	<	<	<	Hi-Hat Open Analog	Hi-Hat Open 3
B2	47	B1	Mid Tom L	<	Tom Room 4	Tom Rock 4	Tom Electro 4	Tom Analog 4	Tom Analog 4
00	48	C2	Mid Tom H	<	Tom Room 5	Tom Rock 5	Tom Electro 5	Tom Analog 5	Tom Analog 5
C3 C#3	49	C#2	Crash Cymbal 1	<	<	<	<	Crash Analog	Crash Analog
D3	50	D2	High Tom	<	Tom Room 6	Tom Rock 6	Tom Electro 6	Tom Analog 6	Tom Analog 6
D#2	51	D#2	Ride Cymbal 1	<	<	<	<	<	<
E3	52	E2	Chinese Cymbal	<	<	<	<	<	<
F3	53	F2	Ride Cymbal Cup		<	<	<	<	<
F#3	54	F#2	Tambourine	<	<	<	<	<	<
G3	55	G2	Splash Cymbal	<	<	<	<	<	<
G#3	56	G#2	Cowbell	<	<	<	<	Cowbell Analog	Cowbell Analog
A3	57	A2	Crash Cymbal 2	<	<	<	<	<	<
Δ#3	58	A#2	Vibraslap	<	<	<	<	<	<
В3	59	B2	Ride Cymbal 2	<	<	<	<	<	<
C4	60	C3	Bongo H		<	<	<	<	<
C#4	61	C#3	Bongo L	<	<	<	<	<	<
D4	62	D3	Conga H Mute		<	<	<	Conga Analog H	Conga Analog H
D#4	63	D#3	Conga H Open	<	<	<	<	Conga Analog M	Conga Analog M
E4	64	E3	Conga L	<u></u>	<	<		Conga Analog L	Conga Analog L
F4	65	F3	Timbale H		<	<		<	<
F#4	66	F#3	Timbale L	<	<	<	<	<	<
G4	67	G3	Agogo H	<	<	<	<	<	<
G#4	68	G#3	Agogo L	<	<	<	<	<	<
A4	69	A3	Cabasa		<	<	<	<	<
Δ#1	70	A#3	Maracas		<	<	<	Maracas 2	Maracas 2
B4	71	B3	Samba Whistle H		<	<	<	<	<
C5	72	C4	Samba Whistle L	<	<	<	<	<	<
C#5	73	C#4	Guiro Short	Ų	<	<	<	<	<
D	74	D4	Guiro Long	<	<	<	<	<	<
D#5	75	D#4	Claves		<	<	<	Claves 2	Claves 2
D5 D#5	76	E4	Wood Block H	-	<	<	<	<	<
E5	77	F4	Wood Block L	<	<	<	<	<	<
F#5	78	F#4	Cuica Mute		<	<	Scratch H 2	Scratch H 2	Scratch H 2
G5	79	G4	Cuica Open		<	<	Scratch L 2	Scratch L 2	Scratch L 2
G#5	80	G#4	Triangle Mute	<	<	<	<	<	<
A5	81	A4	Triangle Open	<	<	<	<	<	<
A#5	82	A#4	Shaker		<	<	<	<	<
B5	83	B4	Jingle Bells		<	<		<	
C6	84	C5	Bell Tree	<	<	<	<	<	<
	85	C#5							
	86	D5							
	87	D#5							
	88	E5							
	89	F5							
	90	F#5							
	91	G5							

		Number	33	41	49	81	36	1	2
	Note #	Note	Jazz Kit	Brush Kit	Symphony Kit	Style Kit	Arabic Kit	SFX Kit 1	SFX Kit 2
	13	C#-1	<	<	<	<			
	14	D-1	<	<	<	<			
	15	D#-1	<	<	<	<			
	16	E-1	<	<	<	<			
									
	17	F-1	<	<	<	<			
	18	F#-1	<	<	<	<			
	19	G-1	<	<	<	<			
	20	G#-1	<	<	<	<			
	21	A-1	<	<	<	<			
	22	A#-1	<	<	<	<			
	23	B-1	<	<	<i>-</i>	<			
	24	C0			-		Nakarazan Dom		
C1			<	<	<				
C#1	25	C#0	<	<	<	Brush Tap Style	Cabasa		
D1	26	D0	<	<	<	Brush Swirl Style	Nakarazan Edge		
D#1	27	D#0	<	<	<	Brush Slap Style	Hager Dom		
E1	28	E0	<u> </u>						
				<		Brush Tap Swirl Style	Hager Edge		
F1	29	F0	<	<	<	<	Bongo H		
F#1	30	F#0	<	<	<	<	Bongo L		
G1	31	G0	Snare Jazz H	Brush Slap 2		Snare Soft Style	Conga H Mute		
					<				
G#1	32	G#0	<	<	<	<	Conga H Open		
A1	33	A0	<	<	Kick Soft 2	Kick Soft Style	Conga L		
A#1	34	A#0	<	Open Rim Shot Light	<	Open Rim Shot Style	Zagrouda H		
B1	35	B0		- pon rum onot Eight					t e
			<	<u> </u>	Gran Cassa	Kick Tight Style	Zagrouda L	0.111	Di
C2	36	C1	Kick Jazz	Kick Jazz	Gran Cassa Mute	Kick Style	Kick Soft	Cutting Noise	Phone Call
C#2	37	C#1	Side Stick Light	Side Stick Light	<	Side Stick Style	Side Stick	Cutting Noise 2	Door Squeak
D2	38	D1	Snare Jazz L	Brush Slap 3	Band Snare	Snare Style	Snare Soft		Door Slam
								Otring Oler	
E2 D#2	39	D#1	<	<	<	<	Arabic Hand Clap	String Slap	Scratch Cut
C Z	40	E1	Snare Jazz M	Brush Tap 2	Band Snare 2	Snare Tight Style	Snare	<u> </u>	Scratch H 3
E2	41	F1	<	Tom Brush 1	<	Floor Tom L Style	Floor Tom L		Wind Chime
F2 F#2	42	F#1	<	<	<		Hi-Hat Closed		Telephone Ring 2
						Hi-Hat Closed Style		-	relephone King 2
G2	43	G1	<	Tom Brush 2	<	Floor Tom H Style	Floor Tom H		
G#2	44	G#1	<	<	<	Hi-Hat Pedal Style	Hi-Hat Pedal		
A2	45	A1	<	Tom Brush 3	<	Low Tom Style	Low Tom		
									-
B2 A#2	46	A#1	<	<	<	Hi-Hat Open Style	Hi-Hat Open		
DZ	47	B1	<	Tom Brush 4	<	Mid Tom L Style	Mid Tom L		
Ca	48	C2	<	Tom Brush 5	<	Mid Tom H Style	Mid Tom H		
C3 C#3	49	C#2	<	<	Hand Cymbal		Crash Cymbal 1		
						Crash Cymbal 1 Style			
D3	50	D2	<	Tom Brush 6	<	High Tom Style	High Tom		
D#3	51	D#2	<	<	Hand Cymbal Short	Ride Cymbal 1 Style	Ride Cymbal 1		
E3	52	E2	<	<	<	Chinese Cymbal Style	Crash Cymbal 2	Flute Key Click	Car Engine Ignition
								Tiute Ney Ollon	
F3	53	F2	<	<	<	Ride Cymbal Cup Style	Duhulla Dom		Car Tires Squeal
F#3	54	F#2	<	<	<	<	Tambourine		Car Passing
G3	55	G2	<	<	<	Splash Cymbal Style	Duhulla Tak		Car Crash
G#3	56	G#2	<	<	<		Cowbell		Siren
		G#Z			<u> </u>	<			
A3	57	A2	<	<	Hand Cymbal 2	Crash Cymbal 2 Style	Duhulla Sak		Train
A#3	58	A#2	<	<	<	<	Claves		Jet Plane
В3	59	B2	<	<	Hand Cymbal 2 Short	Ride Cymbal 2 Style	Doff Dom		Starship
	60	C3	-						
C4		US	<	<	<	<	Katem Dom		Burst
C#4	61	C#3	<	<	<	<	Katem Tak		Roller Coaster
D4	62	D3	<	<	<	<	Katem Sak		Submarine
D#4	63	D#3	<	<	<	<	Katem Tak		
E4	64				<				
		E3	<	<		<	Doff Tak		
F4	65	F3	<	<	<	<	Tabla Dom		
F#4	66	F#3	<	<	<	<	Tabla Tak1		
G4	67	G3	<	<	<		Tabla Tik		
								Chause	Lough
G#4	68	G#3	<	<	<	<	Tabla Tak2	Shower	Laugh
A4	69	A3	<	<	<	<	Tabla Sak	Thunder	Scream
A#4	70	A#3	<	<	<	<	Tabla Roll of Edge	Wind	Punch
B4	71	В3	<	<	<	<	Tabla Flam	Stream	Heart Beat
	72								
C5		C4	<	<	<	<	Sagat 1	Bubble	Foot Steps
C#5	73	C#4	<	<	<	<	Tabel Dom	Feed	
D5	74	D4	<	<	<	<	Sagat 3		
D#E	75	D#4	<	<	<	<	Tabel Tak		
E5									+
	76	E4	<	<	<	<	Sagat 2	-	
F5	77	F4	<	<	<	<	Rik Dom		
F#5	78	F#4	<	<	<	<	Rik Tak 2		
G5	79	G4	<	<	<	<	Rik Finger 1		
G#5	80	G#4	<	<	<	<	Rik Tak 1		
A5	81	A4	<	<	<	<	Rik Finger 2		
۸#۶	82	A#4	<	<	<	<	Rik Brass Tremolo	1	
B5	83	B4	<	<	<		Rik Sak		
								D	Mash' · · · · · · ·
C6	84	C5	<	<	<	<	Rik Tik	Dog	Machine Gun
	85	C#5						Horse	Laser Gun
	86	D5						Bird Tweet 2	Explosion
								2114 1WOOL 2	
	87	D#5							Firework
		E5					<u> </u>	<u> </u>	<u> </u>
	88								
									1
	89	F5						Ghost	
								Ghost Maou	

Bank MSB Bank LSB

Style List

Style	Style Name	
Number	8 Beat	_
1	8 Beat 1	
2	8 Beat 2	_
3	8 Beat 3	
4	8 Beat Adria	_
5	8 Beat Party	
6	8 Beat Rock	_
7	Root Rock	
8	Hard Rock	_
,	16 Beat	
9	16 Beat Pop	
10	Guitar Pop	
11	Kool Shuffle	
12	Pop Shuffle	
13	Jazz Rock	
	Ballad	
14	16 Beat Ballad	
15	Slow & Easy	
16	Love Song	
17	Organ Ballad	
18	Analog Ballad	
19	6/8 Slow Rock	
20	Modern 6/8	
21	Acoustic Ballad	
	Dance	
22	House	
23	Eurobeat	
24	Euro House	
25	Trance	
26	Clubdance	
27	Techno	
28	Hip Hop	
29	Trip Hop	
30	Groundbeat Disco	
31	Saturday Night	
32	70's Disco	_
33	Disco Chocolate	_
34	Disco Hands	_
35	Disco Funk	_
36	Disco Fox	_
37	Disco Party	_
<u> </u>	Swing & Jazz	
38	Big Band 1	_
39	Big Band 2	_
40	Big Band 3	
41	Swing	
42	Swingfox	_
43	Shuffle	_
44	Acoustic Jazz	
45	Jazz Ballad	
46	Dixieland	
	R & B	
47	Soul Shuffle	
48	Cat Groove	
49	Gospel Brothers	
50	Gospel Sisters	
51	Boogie Woogie	
52	Croco Twist	
53	Rock & Roll	
54	60's Rock & Roll	
55	Soul	
56	Rock Shuffle	
57	Motown Soul	
58	6/8 Blues	

Style	Chule Name	
Number	Style Name	
	Country	
59	Country Rock	
60	Country 2/4	
61	Country 8 Beat	
62	Country Pop	
63	Country Swing	
64	Country Shuffle	
65	Country Ballad	
66	Country Waltz	
67	Bluegrass	
68	Hoedown	
	Latin	
69	Latin Pop	
70	Samba City	
71	Bossa Nova	
72	Guitar Bossa	
73	Mambo	
74	Salsa	
75	Beguine	
76	Gypsy Rumba	
77	Pop Rumba	
78	Happy Reggae	
79	Disco Latin	
	March & Waltz	
80	US March	
81	German March	
82	6/8 March	
83	Polka Oberkrainer	
84	Waltz Oberkrainer	
85	Polka Pop	
86	Tarantella	
87	Reel	
88	Musette	
89	Jazz Waltz	
90	Christmas 3/4	
91	Slow Waltz	
Ballroom		
92	Vienna Waltz	
93	English Waltz	
94	Slowfox	
95	Quickstep	
96	Foxtrot	
97	Tango	
98	Samba	
99	Rumba	
100	Cha Cha Cha	
101	Pasodoble	
102	Jive	
	Pianist	
103	P_Swing	
104	P_Stride	
105	P_Boogie	
106	P_Ballad	
107	P_Pianoman	
108	P_March	
109	P_6/8 March	
110	P_Ragtime	
111	P_Jazz Waltz	
112	P_Waltz	

Music Database List

MDB	
MDB Number	Song Name
	POP HITS
2	Alive Fever Alive Synth
3	Croco Rock
4	D.Survival
5	EasySunday1
6	EasySunday2
7 8	GoingMyWay 1 GoingMyWay 2
9	Hurry Luv
10	I'm Torn
11	Imagination
12	Just Called
13 14	Just the way Love is Deep
15	Music Thanks
16	Nikita Trp.
17	Paradise Day
18	Proud Guitar
19	Sailing Sax SeptemberPop
21	Sultan Swing
22	Sweet Lord
23	TitanicHeart
24	WatchGirls1
25 26	WatchGirls2 WaterlooShfl
27	Whiter Shade
28	YesterGuitar
'	SWING & JAZZ
29	Days of Sax
30	Honey Taste Lost Heart
32	MistyGeorgia
33	Moon Jazz
34	Moonlight 1
35	Moonlight 2
36	New York 1 New York 2
37	New York 2 New York 3
39	PantherSwing
40	Patrol Brass
41	Patrol Sax
42	PetiteClari.
43	Ragtime Band RedRoseSwing
45	Saints March
46	Satin Woodw.
47	Sax The Mood
48	Shear Jazz
49 50	Show Bizz Splanky Trb.
51	Sunny Side
52	Two Foot 5
53	WaltzingBlue
54	What is new?
55 56	WildCatDixie Wonderland
30	EVERGREEN
57	Black Forest
58	California
59	Ciao Capri
60	Close on You D'Amour Str.
62	Do you wish?
63	Dolanes Song
64	El Condor
65	Entertainer
66	EpicSymphony
67 68	In the Night In the Rain
69	Love Stories
70	Lucky Sax
71	MillionStars
72	My Prince
73 74	O Sole Mio PalomaGuitar
14	i alvillaGuitai

MDB	Song Name		
Number 75	Puppet Brass		
76	Raindrops		
77	Red Moulin		
78	Romantic Gtr		
79 80	SchiwagoMood Shadow Gtr.		
81	Small Planet		
82	Snow White		
83	Spanish Eyes		
84	Tie a Ribbon		
85 86	Time goes by Wonder World		
- 00	ROMANTIC BALLADS		
87	Adeline B.		
88	ArgentinaCry BlueAcordion		
90	Body Beauty		
91	Cat Memory		
92	CavatinaSolo		
93	Deep Ballad		
94 95	Elvis Ballad Fly Away		
96	GoodFeelings		
97	GreenSleeves		
98	Gtr.Concerto		
99	Guitar Date Hard to Say1		
101	Hard to Say1		
102	Lonely Piper		
103	Moon Tenor		
104 105	MusicboxDnce NorwegianFlt		
106	RainbowAbove		
107	Red Lady		
108	Release me		
109 110	SavingMyLove SierraMusett		
111	Silent Sound		
112	Silvery Moon		
113 114	Smokey Eyes StrangeShore		
115	Sweet Orch		
116	Unplugged		
117	Whisper Sax		
118	ROCK & FUSION 118 Dave again		
119	Funky Pieces		
120	Jump Rock		
121 122	Oye Como Cha RiverRedRock		
122	SatisfiedGtr		
124	Sheriff Shot		
125	Smokey Water		
126 127	Twist again		
127	Venus Pop RHYTHM & BLUES		
128	Amazing		
129	Baby Baby		
130	BoogieManiac		
131 132	Clock Rock Gator Boogie		
133	Happy Day!		
134	Johnny Good		
135	Melon Cat		
136 137	Mercy Bros. Rising Sun		
138	Supergroove1		
139	Supergroove2		
140	HIP HOP HOUSE		
140	Boy Group Funky City		
142	Funky Disco		
143	Grounded		
144	Miami Trance		
145 146	Nine PM Only TwoOfUs		
147	Pan Talk		

147

Rap Talk

MDB	Song Name
Number 148	Soft Kill
149	Techno Dolls
110	LATIN NIGHTS
150	Bamba Brass
151	Bamba Flute
152	Be Happy!
153 154	Day & Night Ipanema 1
155	Ipanema 2
156	Latin Lola
157	MarinaMusett
158	Mucho Tromb.
159	Smooth Latin Sun of Life
160 161	Sunshine
162	Tico Organ
163	TromboneWave
	COUNTRY & WESTERN
164	AlabamaBanjo
165 166	Blowing Wind Bonanza
167	Green Grass
168	JambalayaFlt
169	LondonStreet
170	Lucille Str.
171 172	Think Twice Top World
172	WestVirginia
	BALLROOM & PARTY
174	Aloha Hawaii
175	BabylonDisco
176	Barbados!
177 178	Brazil Brass Charming 3/4
179	Cherry Brass
180	Cherry Organ
181	ChickenSynth
182	Cumparsita
183 184	Danube Waves FiestaMexico
185	HandsUpParty
186	Modern Talk
187	Next Alice
188 189	Paloma Flute Pub Piano
190	Sandman Fox
191	Sunday Never
192	Tea Time Cha
193	ThemeOfLove
194 195	Tijuana 1 Tijuana 2
195	Tulip'sWaltz
197	Why MCA?
198	"YesSir,Quick"
400	TRADITIONAL
199	Alpen Trio Balalaikas
200	Ceilidh Band
202	Ciel deParis
203	Clarinet Fun
204	Comrades
205	Happy Polka
206 207	Herzilein Jingle Bells
208	KufsteinSong
209	La Danza
210	MexiHatDance
211	Mickey Flute
212 213	Navy Anchors Rolla Barrel
213	Snow Waltz
215	Star March 1
216	Star March 2
217	The Hornpipe
218 219	Washington Wood Cutters
219	Xmas Night
	٠٠٠- نون

About the Digital Effects (Reverb/Chorus/DSP)

Reverb (System effect)

Reverb effect type/depth can be set by panel operation.

When you select a different style, the appropriate reverb type will be selected accordingly.

Chorus (System effect)

Chorus effect type/depth can be set by panel operation.

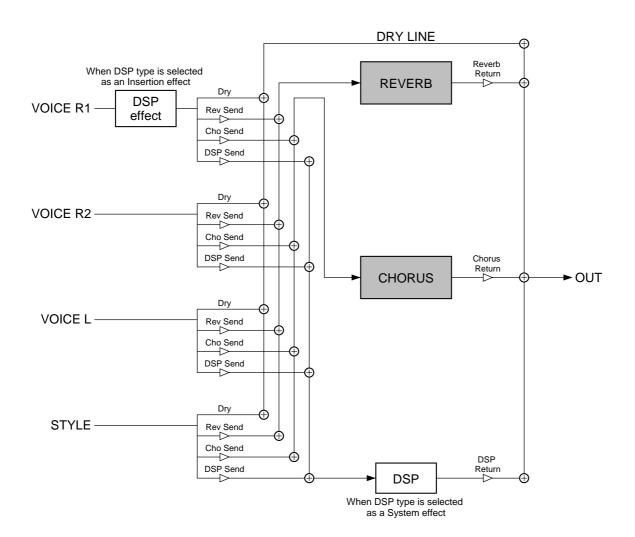
When you select a different style, the appropriate chorus type will be selected accordingly.

DSP (System/Insertion effect)

DSP effect on/off status, type and depth can be set by panel operation. DSP effect will function as either System or Insertion effect. Whether DSP effect is System or Insertion depends on the selected type. DSP effect configuration will differ between System and Insertion effects as follows:



 Although not all the effect settings cannot be made by operating the PSR-550 panel manually, some of them may be accessible through MIDI. Refer to the MIDI data format for details.



About the Digital Effects (Reverb/Chorus/DSP)

■ Reverb Type List

Reverb Type	System/Insertion	Description
Hall1-5	System	Concert hall reverb.
Room1-7	System	Small room reverb.
Stage1-4	System	Reverb for solo instruments.
Plate1-3	System	Simulated steel plate reverb.
White Room	System	A unique short reverb with a bit of initial delay.
Tunnel	System	Simulation of a tunnel space expanding to left and right.
Canyon	System	A hypothetical acoustic space which extends without limit.
Basement	System	A bit of initial delay followed by reverb with a unique resonance.
No Effect	_	No effect.

● Chorus Type List

Chorus Type	System/Insertion	Description
Chorus1-8	System	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	System	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	System	Pronounced three-phase modulation with slight metallic sound.
No Effect	_	No effect.

■ DSP Type List

DSPType	System/Insertion	Description
Hall1-5	System	Concert hall reverb.
Room1-7	System	Small room reverb.
Stage1-4	System	Reverb for solo instruments.
Plate1-3	System	Simulated steel plate reverb.
Delay Left - Center - Right1, 2	System	Three independent delays, for the left, right and center stereo positions.
Delay Left - Right	System	Initial delay for each stereo channel, and two separate feedback delays.
Echo	System	Stereo delay, with independent feedback level settings for each channel.
Cross Delay	System	Complex effect that sends the delayed repeats "bouncing" between the left and right channels.
ER1, 2	System	This effect isolates only the early reflection components of the reverb.
Gate Reverb	System	Gated reverb effect, in which the reverberation is quickly cut off for special effects.
Reverse Gate	System	Similar to Gate Reverb, but with a reverse increase in reverb.
Karaoke1-3	System	A delay with feedback of the same types as used for karaoke reverb.
Chorus1-8	System	Conventional chorus program with rich, warm chorusing.
Celeste1, 2	System	A 3-phase LFO adds modulation and spaciousness to the sound.
Flanger1-5	System	Pronounced three-phase modulation with slight metallic sound.
Symphonic1, 2	System	A multi-phase version of Celeste.
Rotary Speaker 1-6	Insertion	Rotary speaker simulation.
Tremolo1-3	Insertion	Rich Tremolo effect with both volume and pitch modulation.
Guitar Tremolo	Insertion	Simulated electric guitar tremolo.
Auto Pan1, 2	Insertion	Several panning effects that automatically shift the sound position (left, right, front, back).
Phaser 1, 2	System	Pronounced, metallic modulation with periodic phase change.
Distortion Hard	Insertion	Hard-edge distortion.
Distortion Soft	Insertion	Soft, warm distortion.
Distortion Heavy	Insertion	Heavy distortion.
Overdrive	Insertion	Adds mild distortion to the sound.
Amp Simulator	Insertion	A simulation of a guitar amp.
EQ Disco	Insertion	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
EQ Telephone	Insertion	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
3Band EQ (MONO)	Insertion	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
2Band EQ (STEREO)) Insertion	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
Auto Wah1, 2	Insertion	Cyclically modulates the center frequency of a wah filter.
No Effect	_	No effect.
Through	_	Bypass without applying an effect.

Harmony/Echo Type List

Category	Туре	Description
Harmony	Duet	An extra note is added to the note played on the keyboard to produce duet type harmony.
	1+5	A parallel voice is produced a fifth above the note played on the keyboard.
	Country	One note is added above the note played on the keyboard for a country-style harmony feel.
	Trio	Two notes are added below the note played on the keyboard for three-part harmony.
	Block	Three or four notes are added to the note played on the keyboard to produce four or five- note chords.
	4Way Close1	Three harmony notes are generated to produce a four-note chord.
	4Way Close2	Similar to the preceding type, but depending on the chords played this type will sometimes produce a more colorful sound.
	4Way Open	Four-note chords with open voice (large intervals between the notes). The result is a very "open" sound. Since the harmony notes can be as much as two octaves below the note played on the keyboard, avoid playing in the lower registers.
	Octave	One note is added an octave below the note played on the keyboard.
	Strum	The notes and assignments are the same as in the Block type, but the notes are arpeggiated.
Echo	Echo 1/4	An echo effect is applied to the note played on the keyboard at the currently set tempo.
	Echo 1/6	
	Echo 1/8	
	Echo 1/12	
Tremolo	Tremolo 1/8	A tremolo effect is applied to the note played on the keyboard at the currently set tempo.
	Tremolo 1/12	
	Tremolo 1/16	
	Tremolo 1/32	
Trill	Trill 1/12	Two notes played on the keyboard are played alternately at the currently set tempo.
	Trill 1/16	
	Trill 1/24	
	Trill 1/32	

Troubleshooting

PROBLEM	POSSIBLE CAUSE/SOLUTION
 The speakers produce a "pop" sound whenever the power is turned ON or OFF. 	This is normal and is no cause for alarm.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the PortaTone may produce interference To prevent this, turn off the mobile phone or use it further away from the PortaTone.
 The volume is reduced or the sound is distorted. The sound quality has gotten progressively worse. The registration memory doesn't work properly. Recorded song data will not play back properly. The display goes blank and all panel controls are reset. 	The batteries probably need to be replaced. Either replace all six batteries, or use an AC power adaptor.
No sound results when the keyboard is played.	 The R1/R2/L voice volume (Mixer) settings could be set too low. Make sure the voice volumes are set at appropriate levels (page 76). The Local Control function could be turned off. Make sure Local Control is turned on (page 116). Check whether the naming function of Registration Memory or song recording (page 21) is called up in the display or not. If the naming function is active, the PSR-550 does not produce any sound, even when the keys are played.
 Not all simultaneously-played notes sound. Auto Accompaniment seems to "skip" when the keyboard is played. 	You are probably exceeding the maximum polyphony of the PSR-550. The PSR-550 can play up to 32 notes at the same time — including voice R2, voice L, auto accompaniment, song, and multi pad notes. Notes exceeding this limit will not sound.
 Nothing happens or nothing seems to function, even when pressing a panel button. For example, pressing the DEMO button does not start the Demo song, or playing the keyboard does not produce any sound. 	Make sure that Disk mode is engaged. In the Disk mode, no panel operations can be executed (except for disk operations) and playing the keyboard does not produce any sound. Exit from the display by pressing the [EXIT] button.
 The accompaniment or song does not play back even when pressing the [START/STOP] button. The Multi Pads do not play back, even when one of the MULTI PAD buttons is pressed. 	The MIDI Clock may be set to "Ext". Make sure it is set to "Int" (page 116).
 The auto accompaniment does not start, even when the Synchro Start is in the standby condition and a key is pressed. 	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Synchro Start, make sure to play a key in the left-hand (accompaniment) range of the keyboard.
 The following buttons related to the auto accompaniment do not function. [SYNC START] button [SYNC STOP] button [ACMP ON/OFF] button REGISTRATION MEMORY [FREEZE] button 	Check whether the Song mode (page 25) is selected or not. When the Song mode is active, none of the auto accompaniment functions can be used.
Certain notes sound at the wrong pitch.	Make sure that the scale tuning value for those notes is set to "0." If not, select the template "Equal" to recall the normal tuning of ± 0 cents (page 119).
 Auto accompaniment chords are recognized regardless of the split point or where chords are played on the keyboard. 	Check whether the fingering mode is set to "Full" or not. If the Full fingering mode is selected, chords are recognized over the entire range of the keyboard, irrespective of the split point setting.
The Harmony function does not operate.	 Harmony cannot be turned on when the Full Keyboard fingering mode is selected or if a percussion kit voice is selected. Select an appropriate fingering mode or voice. Harmony cannot be turned on when a drum kit is selected for the voice R1.
 MIDI data is not transmitted or received, even when MIDI cables are connected properly. 	The MIDI terminals can only be used when the HOST SELECT switch is set to "MIDI." All other settings ("Mac," "PC-1," and "PC-2") are for direct transmission/reception with a computer.

Data Backup & Initialization

■ Data Backup

Except for the data listed below, all PSR-550 panel settings are reset to their initial settings whenever the power is turned on. The data listed below are backed up - i.e. retained in memory - as long as an AC adaptor is connected or a set of batteries is installed.

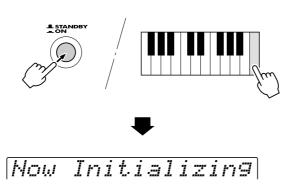
User Style data	page 96
• User Pad data	page 92
Registration Memory data	page 54
 Registration Memory Bank Number 	page 56
 Registration Memory/One Touch Setting status 	page 55
• Freeze on/off	page 55
MIDI Transmit settings	page 114
 MIDI Receive settings 	page 115
 Voice Set on/off 	page 120
Voice L (Voice Change, Mixer)	page 74
Fingering mode	page 38
Split Point	page 120
Sustain on/off	page 30
 Upper Octave setting 	page 119
Pitch Bend Range	page 122
Scale Tuning	page 119
Transpose	page 30
 Footswitch Function, Polarity 	page 121
 Touch on/off, Sensitivity 	page 120
Multi Pad setting	page 43
Master Tuning	page 119
Metronome on/off	page 118

Even though these settings are retained in memory, you should save them — and all your important data — to floppy disk for permanent, safe storage. To save all of the data types listed above to floppy disk, use the Save operation (page 60) and select "All" as the file type.

All data listed above will be lost if the power is interrupted — in other words, if the power is turned off, the AC adaptor is disconnected and the batteries are removed. When this happens, the next time you turn on the PSR-550, a "Clear Backup" message appears in the display, the Data Initialization operation (below) is automatically executed, and the PSR-550 is set to the Style mode (page 25).

■ Data Initialization

All data can be initialized and restored to the factory preset condition by turning on the power while holding the highest (rightmost) white key on the keyboard. "Now Initializing" will appear briefly on the display.



A CAUTION

- All registration and User Style/Pad memory data, plus the other settings listed above, will be erased and/or changed when the data initialization procedure is carried out.
- Carrying out the data initialization procedure will usually restore normal operation if the PSR-550 freezes or begins to act erratically for any reason.

Alert Message List

No File	The disk contains no file to be loaded, copied, or be deleted. Insert the disk that contains files to be loaded, copied, or deleted.
Unformatted Disk	An unformatted disk is inserted.
Disk Error	An error occurred during execution of a disk operation. Try changing the disk. This message also may appear when executing the Load operation if the internal memory becomes full.
Write-protected	The floppy disk's write-protect tab is set to ON. Remove the disk, set write-protect to off, reinsert the disk and attempt the operation again.
File Protected	The file is a purposely "copy-protected" disk. The Copy function is not possible.
No Disk	There is no floppy disk inserted into the disk drive. Insert a disk.
Insert Song Disk	This message appears when you press the [SONG] button without a disk in the disk drive.
Disk Removed	An error occured because the disk was removed during a disk operation. Never remove a disk during a disk operation since this could damage both the disk and the drive.
Disk Full	The disk's memory capacity is full and no additional data can be recorded. Delete one or more unneeded songs (using Delete), and attempt the operation again.
Wrong Disk	When using the Copy operation, the inserted disk is different from the source or destination disk. Remove the disk and reinsert the proper Disk.
Same Name	More than one file has the same name on the disk. Change the name.
Maximum 60 Son9s	Maximum of 60 songs can be recorded. Delete one or more unneeded songs (using Delete), and attempt the song recording again.
Memory Full	If the internal memory becomes full during Style/Pad recording, this message will appear on the display and recording will stop.

Alert Message List

Memory Over	This message appears when executing the Quantize or Recording operations (in the Style Recording mode) when the internal memory is full.
Data Not Found	This message appears when you attempt to edit, quantize or clear the track which contains no data in the Record mode.
User Style Full	This message indicates that recording a new User style cannot be started when all three User styles have recorded data. Make sure to clear at least one of the three User styles before recording a new User style.
Preset Data	This message appears when you attempt to edit, or quantize the track (other than RHYTHM) which contains preset data in the Style Record mode.
Cannot Operate	This function cannot be used during Song/Style/Pad recording.

operations.

CannotTurnHar.On

Cannot Set MIDI

Harmony cannot be turned on during Style/Pad recording.

The MIDI function cannot be set during recording, playback, and disk

CannotTurnDSP On

DSP cannot be turned on during Style/Pad recording.

CannotEnterFunc.

This message appears to indicate you cannot enter the function when you select a Multi Pad function in the Multi Pad Recording mode.

Clear Backur

- This message may appear when the PSR-550 is turned on, and indicates that user data temporarily stored in the internal memory has been lost (page 136). When this happens, the Data Initialization operation (page 136) is automatically executed, and the PSR-550 is set to the Style mode (page 25).
- If this message appears even when the AC adaptor is connected or the battery power is adequate, the backup data (page 136) is faulty. Use the Data Initialization function (page 136).

Now Initializing

All data can be initialized and restore to the factory preset condition by turning the STANDBY switch ON while holding the highest (rightmost) white key on the keyboard.

Battery Low

When the batteries run down this message appears every few seconds. Exchange all the batteries with the new ones according to the instructions on page 12.

MIDI Data Format

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers

Hexadecimal numbers may include the letter "H" as a suffix. Also, "n" can freely be defined as any whole number.

To enter data/values, refer to the table below.

Decimal	Hexadecimal	Binary	Decimal	Hexadecimal	Binary
0	0.0	0000 0000	64	40	0100 0000
1	01	0000 0001	65	41	0100 0001
2	02	0000 0010	66	42	0100 0010
3	03	0000 0011	67	43	0100 0011
4	04	0000 0100	68	44	0100 0100
5	05	0000 0101	69	45	0100 0101
6	06	0000 0110	70	46	0100 0110
7	07	0000 0111	71	47	0100 0111
8	08	0000 1000	72	48	0100 1000
9	09	0000 1001	73	49	0100 1001
10	0A	0000 1010	74	4A	0100 1010
11	0B	0000 1011	75	4B	0100 1011
12	0C	0000 1100	76	4C	0100 1100
13	0D	0000 1101	77	4D	0100 1101
14	0E	0000 1110	78	4E	0100 1110
15	0F	0000 1111	79	4F	0100 1111
16	10	0000 1111	80	50	0100 1111
17	11	0001 0001	81	51	0101 0001
18	12	0001 0001	82	52	0101 0001
19	13	0001 0010	83	53	0101 0010
20	14	0001 0011	84	54	0101 0011
21	15	0001 0100	85	55	0101 0100
22	16	0001 0101	86	56	0101 0101
23	17 18	0001 0111 0001 1000	87	57 58	0101 0111 0101 1000
25	19	0001 1000	89	59	0101 1000
26	1A	0001 1010	90	5A	0101 1010
27	1B	0001 1011	91	5B	0101 1011
28	1C	0001 1100	92	5C	0101 1100
29	1D	0001 1101	93	5D	0101 1101
30	1E	0001 1110	94	5E	0101 1110
31	1F	0001 1111	95	5F	0101 1111
32	20	0010 0000	96	60	0110 0000
33	21	0010 0001	97	61	0110 0001
34	22	0010 0010	98	62	0110 0010
35	23	0010 0011	99	63	0110 0011
36	24	0010 0100	100	64	0110 0100
37	25	0010 0101	101	65	0110 0101
38	26	0010 0110	102	66	0110 0110
39	27	0010 0111	103	67	0110 0111
40	28	0010 1000	104	68	0110 1000
41	29	0010 1001	105	69	0110 1001
42	2A	0010 1010	106	6A	0110 1010
43	2B	0010 1011	107	6B	0110 1011
44	2C	0010 1100	108	6C	0110 1100
45	2D	0010 1101	109	6D	0110 1101
46	2E	0010 1110	110	6E	0110 1110
47	2F	0010 1111	111	6F	0110 1111
48	30	0011 0000	112	70	0111 0000
49	31	0011 0001	113	71	0111 0001
50	32	0011 0010	114	72	0111 0010
51	33	0011 0011	115	73	0111 0011
52	34	0011 0100	116	74	0111 0100
53	35	0011 0101	117	75	0111 0101
54	36	0011 0110	118	76	0111 0110
55	37	0011 0111	119	77	0111 0111
56	38	0011 1000	120	78	0111 1000
57	39	0011 1001	121	79	0111 1001
58	3A	0011 1010	122	7A	0111 1010
59	3B	0011 1011	123	7B	0111 1011
60	3C	0011 1100	124	7C	0111 1100
61	3D	0011 1101	125	7D	0111 1101
62	3E	0011 1110	126	7E	0111 1110
				7F	0111 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) displays the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 displays the Control Change Message for each channel (1-16).
- 192-207/CnH/1100 0000-1100 1111 displays the Program Change Message for each channel (1-16). 240/FOH/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- · ccH/0cccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

(1) TRANSMIT FLOW

MIDI ←	NOTE ON/OFF	9nH
001	CONTROL CHANGE	BnH
	BANK SELECT MSB	BnH.00H
	BANK SELECT LSB	BnH,20H
	DATA ENTRY MSB	BnH,06H
	DATA ENTRY LSB	BnH.26H
	MAIN VOLUME	BnH.07H
	PANPOT	BnH.0AH
	SUSTAIN	BnH,40H
	SOSTENUTE	BnH,42H
	SOFT PEDAL	BnH.43H
	RELEASE TIME	BnH,48H
	REVERB SEND LEVEL	BnH,5BH
	CHORUS SEND LEVEL	
		BnH,5DH
	VARIATION SEND LEVEL	BnH,5EH
	RPN LSB	BnH,64H
	RPN MSB	BnH,65H
	PITCH BEND SENS.	BnH,65H,00H,64H,00H,06H,mmH
	PROGRAM CHANGE	CnH
	└─PITCH BEND	EnH
<u> </u>	SYSTEM EXCLUSIVE MESSAGE	
	<yamaha format="" midi=""></yamaha>	
	<universal></universal>	
	-UNIVERSAL NON-REALTIME	F0H 7EHF7H
	<xg standard=""></xg>	
	-XG PARAMETER CHANGE	F0H 43H 1nH 4CH aaH aaH aaH ddH
	—XG BULK DUMP	ddH F7H F0H 43H 0nH 4CH bbH bbH aaH aaH aaH ddHddH ccH F7H
	SPECIAL OPERATORS	
	——SYSTEM REALTIME MESSAGE	
	MIDI CLOCK	F8H
	START	FAH
	STOP	FCH
	ACTIVE SENSING	FEH

(2) R

	SPECIAL OPERATORS				
	SYSTEM REALTIME MESSAGE				
	MIDI CLOCK	F8H			
	START	FAH			
	STOP	FCH			
	ACTIVE SENSING	FEH			
(2) RE	CEIVE FLOW				
(=) 112	021,2120,,				
MIDI —	→ NOTE OFF	8nH			
IN					
	-NOTE ON/OFF	9nH			
	-CONTROL CHANGE				
	BANK SELECT MSB	BnH,00H			
	BANK SELECT LSB	BnH,20H			
	MODULATION	BnH,01H			
	PORTAMENTO TIME	BnH,05H			
	DATA ENTRY MSB	BnH,06H			
	DATA ENTRY LSB	BnH,26H			
	MAIN VOLUME	BnH,07H			
	PANPOT	BnH,0AH			
	EXPRESSION	BnH,0BH			
	SUSTAIN	BnH,40H			
	PORTAMENTO	BnH,41H			
	SOSTENUTO	BnH,42H			
	SOFT PEDAL	BnH,43H			
	HARMONIC CONTENT	BnH,47H			
	RELEASE TIME	BnH,48H			
	ATTACK TIME	BnH,49H			
	BRIGHTNESS	BnH,4AH			
	PORTAMENTO CONTROL	BnH,54H			
	REVERB SEND LEVEL	BnH,5BH			
	CHORUS SEND LEVEL	BnH,5DH			
	VARIATION SEND LEVEL	BnH,5EH			
	DATA INCREMENT	BnH,60H			
	DATA DECREMENT	BnH,61H			
	NRPN LSB	BnH,62H			
	NRPN MSB	BnH,63H			
	VIBRATO RATE	BnH,63H,01H,62H,08H,06H,mmH			
	VIBRATO DEPTH	BnH,63H,01H,62H,09H,06H,mmH			
	VIBRATO DELAY	BnH,63H,01H,62H,0AH,06H,mmH			
		BnH,63H,01H,62H,20H,06H,mmH			
	FILTER RESONANCE	BnH,63H,01H,62H,21H,06H,mmH			
	AEG DECAY TIME	BnH,63H,01H,62H,63H,06H,mmH			
	AEG DECAY TIME AEG RELEASE	BnH,63H,01H,62H,64H,06H,mmH			
	AEG KELEASE	BnH,63H,01H,62H,66H,06H,mmH			
	DRUM INST				
	CUTOFF FREQ.	BnH,63H,14H,62H,rrH,06H,mmH			
		BnH,63H,15H,62H,rrH,06H,mmH			
	AEG ATTACK RATE	BnH,63H,16H,62H,rrH,06H,mmH			
	AEG DECAY RATE	BnH 63H 17H 62H rrH 06H mmH			

AEG DECAY RATE BnH,63H,17H,62H,rrH,06H,mmH

BnH,63H,18H,62H,rrH,06H,mmH

PITCH COARSE

PITCH FINE LEVEL PANPOT REVERB SEND CHORUS SEND VARIATION SEND	BnH,63H,19H,62H,rrH,06H,mmH BnH,63H,1AH,62H,rrH,06H,mmH BnH,63H,1CH,62H,rrH,06H,mmH BnH,63H,1DH,62H,rrH,06H,mmH BnH,63H,1EH,62H,rrH,06H,mmH BnH,63H,1FH,62H,rrH,06H,mmH
RPN LSB RPN MSB PITCH BEND SENS. FINE TUNING	BnH,64H BnH,65H BnH,65H,00H,64H,00H,06H,mmH BnH,65H,00H,64H,01H,06H,mmH, 26H,IIH
COARSE TUNING NULL ALL SOUND OFF RESET ALL CONTROLLERS ALL NOTES OFF OMNI OFF OMNI ON MONO POLY	BnH,65H,00H,64H,02H,06H,mmH BnH,65H,7FH,64H,7FH BnH,78H,00H
-PROGRAM CHANGE	CnH
-CHANNEL AFTER TOUCH	DnH
PITCH BEND CHANGE	EnH
SYSTEM EXCLUSIVE MESSAGE <yamaha format="" midi=""> <universal></universal></yamaha>	
-UNIVERSAL REALTIME -UNIVERSAL NON-REALTIME <xg standard=""></xg>	F0H 7FHF7H F0H 7EHF7H
-XG PARAMETER CHANGE	F0H 43H 1nH 4CH aaH aaH aaH ddH ddH F7H
-XG BULK DUMP	FOH 43H OnH 4CH bbH bbH aaH aaH aaH ddHddH ccH F7H
PARAMETER REQUEST DUMP REQUEST SPECIAL OPERATORS Others	aari durdur eer F/h F0H 43H 3nH 4CH aaH aaH aaH aaH F7H F0H 43H 2nH 4CH aaH aaH aaH F7H
SYSTEM REALTIME MESSAGE MIDI CLOCK START STOP ACTIVE SENSING	F8H FAH FCH FEH

(3) TRANSMIT/RECEIVE DATA

(3-1) CHANNEL VOICE MESSAGES

(3-1-1) NOTE OFF	(Receive only	y)

(3-1-1) NOTE OFF (Red	ceive only)	
STATUS	1000nnnn(8nH)	n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk	k = 0 (C-2) - 127 (G8)
VELOCITY	0vvvvvv	v: ignored
(3-1-2) NOTE ON/OFF		-

STATUS NOTE NUMBER	1001nnnn(9nH) 0kkkkkk	n = 0 - 15 VOICE CHANNEL NUMBER k = 0 (C-2) - 127 (G8)
VELOCITY	Ovvvvvv	k = 0 (C-2) - 127 (G8) (v\neq 0) NOTE ON
	00000000	(v=0) NOTE OFF

(3-1-3) PROGRAM CHANGE

STATUS	1100nnnn(CnH)	n = 0 - 15 VOICE CHANNEL NUMBER
PROGRAM NUMBER	Оррррррр	p = 0 - 127

* PROGRAM NUMBER: XG DRUM VOICE number correspondence

P = 0	Standard Kit
P = 1	Standard2 Kit
P = 8	Room Kit
P = 16	Rock Kit
P = 24	Eletrnic Kit
P = 25	Analog Kit
P = 27	Dance Kit
P = 32	Jazz Kit
P = 40	Brush Kit
P = 48	Symphonic Kit

$*\,PROGRAM\,NUMBER:\,XG\,SFX\,KIT\,number\,correspondence$

IKOGKAM	LINOIN	DL
P = 0	SFX1	Kit
P - 1	SEX2	Kit

When DRUM VOICE is selected and program change data for a different DRUM VOICE is received, the currently selected DRUM VOICE will be replaced with the new DRUM VOICE.

(3-1-4) CHAN STATUS VALUE	NEL AFTI	ER TOUCH (Receit 1101nnnn(DnH) 0vvvvvvv		
(3-1-5) PITCH STATUS LSB MSB	I BEND C	HANGE 1110nnnn(EnH) 0vvvvvvv 0vvvvvvv	n = 0 - 15 VOICE CHANNEL NUMBER PITCH BEND CHANGE LSB PITCH BEND CHANGE MSB	
(3-1-6) CONT STATUS CONTROL I CONTROL V	NUMBER	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER	
		OL NUMBER. ELECT MSB	; v = 0:XG NORMAL, 64:SFX NORMAL, 126:XG SFX KIT, 127:XG DRUM	
c = 32 c = 6 c = 38 c = 7 c = 10	DATA EN DATA EN MAIN VO PANPOT		; v = 0 - 127 ; v = 0 - 127	
c = 64 c = 66 c = 67 c = 72 c = 91 c = 93		UTO DAL	; v = 0-63:OFF , 64-127:ON ; v = 0-63:OFF , 64-127:ON ; v = 0-63:OFF , 64-127:ON ; v = 0:-64-64:0-127:+63 ; v = 0 - 127 ; v = 0 - 127	
c = 94		ON SEND LEVEL		
c = 101	RPN MSI	В	Refer to "(3-3)REGISTERED PARAMETER NUMBER"	
		L NUMBER. ELECT MSB	; v = 0:XG NORMAL, 64:SFX NORMAL, 126:XG SFX KIT,	
c = 32 c = 1 c = 5 c = 6 c = 38 c = 7 c = 10	MODULA PORTAM DATA EN	IENTO TIME ITRY MSB ITRY LSB DLUME	; v = 0 - 127	*2 *1 *1
c = 11 c = 64 c = 65 c = 66 c = 67 c = 71		N IENTO UTO DAL NIC CONTENT	; v = 0 - 127 ; v = 0-63:OFF, 64-127:ON ; v = 0-63:OFF, 64-127:ON ; v = 0-63:OFF, 64-127:ON ; v = 0-63:OFF, 64-127:ON ; v = 0:-64 - 64:O - 127:+63	*2 *2 *2 *2
c = 72 c = 73 c = 74 c = 84 c = 91		TIME	; v = 0:-64 - 64:0 - 127:+63 ; v = 0:-64 - 64:0 - 127:+63	*2
c = 93 $c = 94$ $c = 96$	CHORUS VARIATI	S SEND LEVEL ON SEND LEVEL CREMENT	; v = 0 - 127 ; v = 0 - 127 ; v = 0 - 127 (When only Connection=1[System ; v = 0 - 127	n]) *1
c = 96 c = 97 c = 98		ECREMENT		*1
c = 99 c = 100	NRPN M RPN LSE		Refer to "(3-4)NON-REGISTERED PARAMETER NUMBER" Refer to "(3-3)REGISTERED	
c = 101	RPN MSI	В	PARAMETER NUMBER" Refer to "(3-3)REGISTERED PARAMETER NUMBER"	

- *1 Only when setting the appointed parameter with RPN. *2 Does not effect Rhythm Voice.
- Until a PROGRAM CHANGE message is received, the BANK SELECT operation will be suspended.
 When a Voice, including VOICE BANK, is changed, set the BANK SELECT and

PARAMETER NUMBER"

Program Change Message, and transmit in the following order, BANK SELECT MSB, LSB, PROGRAM CHANGE.

- MODULATION controls the Vibrato Depth.
- PORTAMENTO TIME controls the Pitch Change Speed when the Portamento Switch = ON. 0 being the shortest time, and 127 being the longest.
- PANPOT changes the value for the melody voice and rhythm voice in relation to the preset value.
- Portamento time is fixed to 0 when the PORTAMENTO CONTROL is used.
- HARMONIC CONTENT applies adjustment to the resonance value that is set by the

This parameter specifies relative change with the value of 64 producing 0 adjustment. As values get higher the sound becomes increasingly eccentric.

Note that for some voices the effective parameter range is narrower than the legal parameter range.

- RELEASE TIME applies adjustment to the envelope release time set by the voice.
 This parameter specifies relative change with the value of 64 producing 0 adjustment.
- ATTACK TIME applies adjustment to the envelope attack time set by the voice.
 This parameter specifies relative change with the value of 64 producing 0 adjustment.
- BRIGHTNESS applies adjustment to the cut-off frequency set by the voice.
 This parameter specifies relative change with the value of 64 producing 0 adjustment.
 Lower voices produce a softer sound.

For some voices the effective parameter range is narrower than the legal parameter range.

(3-2) CHANNEL MODE MESSAGES

STATUS 101 Innnn(BnH) n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER 0cccccc c = CONTROL NUMBER
CONTROL VALUE 0vvvvvv v = DATA VALUE

(3-2-1) ALL SOUND OFF (Receive only)

(CONTROL NUMBER = 78H , DATA VALUE = 0)

Switches off all sound from the channel.

Does not reset Note On and Hold On conditions established by Channel Messages

(3-2-2) RESET ALL CONTROLLERS (Receive only)

(CONTROL NUMBER = 79H, DATA VALUE = 0)

Resets controllers as follows

 PITCH BEND CHANGE
 0 (Center)

 AFTER TOUCH
 0 (min.)

 MODULATION
 0 (min.)

 EXPRESSION
 127 (max.)

 SUSTAIN
 0 (off)

 SOSTENUTO
 0 (off)

 SOFT PEDAL
 0 (off)

NRPN Sets number to null. (Internal data remains unchanged)
RPN Sets number to null. (Internal data remains unchanged)

PORTAMENT CONTROL Resets portamento source note number

PORTAMENTO

0 (off)

(3-2-3) ALL NOTES OFF (Receive only)

(CONTROL NUMBER = 7BH , DATA VALUE = 0)

Switches off all of the channel's "on" notes.

However, any notes being held by SUSTAIN or SOSTENUTO continue to sound until SUSTAIN/SOSTENUTO goes off.

(3-2-4) OMNI OFF (Receive only)

(CONTROL NUMBER = 7CH , DATA VALUE = 0)

Same processing as for All Notes Off.

(3-2-5) OMNI ON (Receive only)

(CONTROL NUMBER = 7DH , DATA VALUE = 0)

Same processing as for All Notes Off. Omni On is not executed.

(3-2-6) MONO (Receive only) (CONTROL NUMBER = 7EH , DATA VALUE = 0) Same processing as for All Notes Off.

If the 3rd byte is in a range of 0-16 the corresponding channel will be changed to Mode 4 (m=1).

(3-2-7) POLY (Receive only) (CONTROL NUMBER = 7FH, DATA VALUE = 0) Same processing as for All Sounds Off and the corresponding channel will be changed to Mode 3.

(3-3) REGISTERED PARAMETER NUMBER (RPN)

n = 0 - 15 VOICE CHANNEL NUMBER STATUS 1011nnnn(BnH) RPN LSB 01100100(64H) RPN LSB NUMBER p = RPN LSB(refer to the list below) Oppppppp 01100101(65H) RPN MSB RPN MSB q = RPN MSB(refer to the list below) 0aaaaaaa DATA ENTRY MSB 00000110(06H) m = Data Value DATA VALUE 0mmmmmmm DATA ENTRY LSB 00100110(26H) DATA VALUE 1 = Data Value

First appoints the parameter for RPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

RPN	D.ENTRY		
MSB	LSB MSB LSB	PARAMETER NAME	DATA RANGE
00H	00H mmH —	PITCH BEND SENSITIVITY	00H - 18H(0 - 24 semitones)
01H	00H mmH llH	FINE TUNE	$\{mmH,llH\} =$
			{00H,00H}-{40H,00H}-{7FH,7FH}
			(-8192*100/8192) - 0 - (+8192*100/8192)
02H	00H mmH —	COARSE TUNE	28H - 40H - 58H (-24 - 0 - +24 semitones)
7FH	7FH — —	NULL	Clears the current RPN number setting.
			Does not change the internal parameter settings.

(3-4) NON-REGISTERED PARAMETER NUMBER (NRPN) (Receive only)

STATUS 1011nnnn(BnH) n = 0 - 15 VOICE CHANNEL NUMBER

```
        NRPN LSB
        01100010(62H)

        NRPN LSB NUMBER
        0ppppppp

        NRPN MSB
        01100011(63H)

        NRPN MSB NUMBER
        0qqqqqq

        DATA ENTRY MSB
        00000110(06H)

        DATA VALUE
        0mmmmmm

        m = Data Value
```

First appoints the parameter for NRPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

NRPN D.ENTRY		
MSB LSB MSB LSB	PARAMETER NAME	DATA RANGE
01H 08H mmH	VIBRATO RATE	00H - 40H - 7FH (-64 - 0 - +63)
01H 09H mmH -	VIBRATO DEPTH	00H - 40H - 7FH (-64 - 0 - +63)
01H 0AH mmH -	VIBRATO DELAY	00H - 40H - 7FH (-64 - 0 - +63)
01H 20H mmH -	FILTER CUTOFF FREQUENCY	00H - 40H - 7FH (-64 - 0 - +63)
01H 21H mmH -	FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
01H 63H mmH -	EG ATTACK TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H 64H mmH -	EG DECAY TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H 66H mmH -	EG RELEASE	00H - 40H - 7FH (-64 - 0 - +63)
14H rrH mmH —	DRUM FILTER CUTOFF FREQ.	00H - 40H - 7FH (-64 - 0 - +63)
15H rrH mmH —	DRUM FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
16H rrH mmH —	DRUM AEG ATTACK RATE	00H - 40H - 7FH (-64 - 0 - +63)
17H rrH mmH —	DRUM AEG DECAY RATE	00H - 40H - 7FH (-64 - 0 - +63)
18H rrH mmH —	DRUM PITCH COARSE	00H - 40H - 7FH (-64 - 0 - +63)
19H rrH mmH —	DRUM PITCH FINE	00H - 40H - 7FH (-64 - 0 - +63)
1AH rrH mmH —	DRUM LEVEL	00H - 7FH (0 - max.)
1CH rrH mmH —	DRUM PANPOT	00H, 01H - 40H - 7FH
		(random,left - center - right)
1DH rrH mmH —	DRUM REVERB SEND LEVEL	00H - 7FH (0 - max.)
1EH rrH mmH —	DRUM CHORUS SEND LEVEL	00H - 7FH (0 - max.)
1FH rrH mmH —	DRUM VARIATION SEND LEVEL	00H - 7FH (0 - max.)

rrH: drum instrument note number

(3-5) SYSTEM REALTIME MESSAGES

(3-5-1) MIDI CLOCK

STATUS 11111000 (F8H) **Transmission:** 96 clocks per measure are transmitted.

Reception: If the instrument's clock is set to external, after FAH is received from the external device the instrument's clock will sync with the 96 beats per measure received from the external device.

Decides whether the internal clock, or Timing Clocks received via the MIDI IN will be used.

(3-5-2) START

STATUS 11111010 (FAH)

Transmission: Transmitted when instrument's Rhythm or Song playback is started. **Reception:** Depending upon the condition, Rhythm, Song Playback, or Song Rec will start

(3-5-3) STOP

STATUS 11111100 (FCH)

Transmission: Transmitted when instrument's Rhythm or Song playback is stopped. **Reception:** Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

(3-5-4) ACTIVE SENSING

STATUS 11111110 (FEH)

Transmission: Transmitted approximately once every 200msec.

Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

(3-6) SYSTEM EXCLUSIVE MESSAGE

(3-6-1) YAMAHA MIDI FORMAT

(3-6-1-1) SECTION CONTROL

binary	hexadecimal		
11110000	F0	Exclusive statu	us
01000011	43	YAMAHA ID	
01111110	7E	Style	
00000000	00	•	
Osssssss	SS	Switch No.	
		00H	: INTRO A
		01H - 07H	: INTRO B
		08H	: MAIN A
		09H - 0FH	: MAIN B
		10H	: FILL IN A
		11H - 1FH	: FILL IN B
		20H	: ENDING A
		21H - 27H	: ENDING B
0ddddddd	DD	Switch On/Off	f: 00H(Off),7FH(On)
11110111	F7	End of Exclusi	ive

When an ON code is received, the appointed section will be changed.

MIDI Data Format

(3-6-1-2) TEMPO CONTROL

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	01	
Otttttt	TT	Tempo4
Otttttt	TT	Tempo3
Otttttt	TT	Tempo2
Otttttt	TT	Tempo1
11110111	F7	End of Exclusive

The internal clock will be set to the received Tempo value.

Tempo Meta Event is a large data block (24-bit), it is divided into 4 groups with 7-bits going into each of the Tempos 1-4 (4 receives the remaining 3 bits).

(3-6-2) UNIVERSAL SYSTEM EXCLUSIVE

(3-6-2-1) UNIVERSAL REALTIME MESSAGE

(3-6-2-1-1) MIDI MASTER VOLUME (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01111111	7F	Universal Realtime
01111111	7F	ID of target Device
00000100	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
Ottttttt	TT	Volume MSB
11110111	F7	End of Exclusive
or		
11110000	F0	Exclusive status
01111111	7F	Universal Realtime
0xxxnnnn	XN	When N is received N=0-F, whichever is received.
		When N is transmitted N always=0.
		X = don't care
00000100	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
Ottttttt	TT	Volume MSB
11110111	F7	End of Exclusive

The volume for all channels will be changed simultaneously.

The TT value is used as the MIDI Master Volume value. (the ss value is ignored.)

(3-6-2-2) UNIVERSAL NON REALTIME MESSAGE

(3-6-2-2-1) GENERAL MIDI SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
01111111	7F	ID of target Device
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive
or		
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
0xxxnnnn	XN	When N is received N=0-F, whichever is received.
		When N is transmitted N always=0.
		X = don't care
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive

Depending upon the received ON message, the System Mode will be changed to XG.

Except MIDI Master Tuning, all control data be reset to default values. This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

The bank select message for the channel 10 and the NRPN message are not received in the GM mode

(3-6-3) XG STANDARD

(3-6-3-1) XG PARAMETER CHANGE

(3-6-3-1-1) XG SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
00000000	00	Address High
00000000	00	Address Mid
01111110	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

Depending upon the received ON message, the SYSTEM MODE will be changed to XG.Controllers will be reset, all values of Multi Part and Effect, and All System values denoted by "XG" data within All System will be reset to default values in the table. This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(3-6-3-1-2) XG PARMETER CHANGE

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
0ddddddd	DD	Data
11110111	F7	End of Exclusive

For parameters with data size of 2 or 4, transmit the appropriate number of data bytes. For more information on Address and Parameters, refer to < Table 1-2>-< Table 1-5>.

The data types listed below are transmitted and received.

System Data Multi Effect1 Data Multi Part Data Drums Setup Data

(3-6-3-2) XG BULK DUMP

binary	hexadecimal	
01110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0N	Device Number
01001100	4C	Model ID
0bbbbbbb	BB	ByteCount MSB
0bbbbbbb	BB	ByteCount LSB
Oaaaaaaa	AA	Address High
Oaaaaaaa	AA	Address Mid
Oaaaaaaa	AA	Address Low
0ddddddd	DD	Data
Осссссс	CC	Check sum
11110111	F7	End of Exclusive

For more information on Address and Byte Count, refer to < Table 1-2 > - < Table 1-5 > The Check Sum value is set such that the sum of Byte Count, Address, Data, and Check Sum has value zero in its seven least significant bits.

If the top of the block is appointed to the Address the XG Bulk Dump, Bulk Request will be received.

The Block is a unit that consists of the data, arranged in the list, as the Total Size.

The data types listed below are transmitted and received. (These are transmitted only after a Bulk Dump request is received.)

System Data

System Information (Transmit ONLY)

Multi Effect1 Data Multi Part Data Drums Setup Data

(3-6-3-3) XG PARAMETER REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > - < Table 1-5 >.

The data types listed below are received.

System Data

Multi Effect1 Data Multi Part Data Drums Setup Data

(3-6-3-4) XG DUMP REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01001100	4C	Model ID
00aaaaaaa	AA	Address High
00aaaaaaa	AA	Address Mid
00aaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > - < Table 1-5 >.

The data types listed below are received.

System Data System Information Multi Effect1 Data Multi Part Data Drums Setup Data

(3-6-4) CLAVINOVA MIDI COMPLIANCE

(3-6-4-1) DOC MULTI TIMBRE ON / OFF (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova commmon II

N: 3(DOC Multi Timbre Off),4(DOC Multi Timbre On) 0001000n 11110111 F7 End of Exclusive

(3-6-4-2) MIDI FA CANCEL(Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
01100001	61	MIDI FA Cancel
11110111	F7	End of Exclusive

If this message is received, even if FAH is received the accompaniment/song will not start.

(3-6-5) SPECIAL OPERATORS

(3-6-5-1) VOLUME ,EXPRESSION AND PAN REALTIME CONTROL OFF

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel

01000101	45	Volume and Expression Realtime Control Off
0vvvvvvv	VV	Value VV: Off=7FH, on=OOH
11110111	F7	End of Exclusive

When "On" is received, subsequent volume, expression, and PAN changes are only valid after the reception of the next key on. Normal operation resumes when "Off" is received.

(3-6-6) Others

(3-6-6-1) MIDI MASTER TUNING(Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	When N is received N=0-F, whichever is received.
		When N is transmitted N always=0.
00100111	27	Model ID
00110000	30	Sub ID
00000000	00	
00000000	00	
0mmmmmmm	MM	Master Tune MSB
01111111	LL	Master Tune LSB
Осссссс	CC	don't care
11110111	F7	End of Exclusive

Changes tuning of all channels.
MM, LL values are used to define the MIDI Master Tuning value.

T = M-128

T: Tuning value (-99cent - +99cent)

M: A single byte value (28-228) consists of bytes 0-3 of MM = MSB, bytes 0-3 of LL = LSB.

In this setting, GM System ON, XG System ON will not be reset.

< Table 1-1> Parmeter Basic Address

			Change					
	Add	ress						
	(H)	(M)	(L)	Description				
SYSTEM	00	00	00	System				
	00	00	7D	Drum Setup Reset				
	00	00	7E	XG System On				
	00	00	7F	All Parameter Reset				
INFORMATION	01	00	00	System Information				
EFFECT 1	02	01	00	Effect1(Reverb,Chorus,Va	riatio	n)		
MULTI PART	08	00	00	Multi Part 1				
	08	0F	00	Multi Part 16				
DRUM	30	0D	00	Drum Setup 1	Add	ress		Parameter
	31	0D	00	Drum Setup 2	:			:
					3n	0D	0	note number 13
					3n	0E	0	note number 14
					3n	: 5B	0	: note number 91

< Table 1-2 > MIDI Parameter Change table (SYSTEM)

Address (H)		Size (H)	Data (H)	Prameter Name	Description	Default Value (H)
00 00	00 01 02 03	4	0000 07FF	Master Tune	-102.4+102.3[cent] 1st bit3-0 → bit15-12 2nd bit3-0 → bit11-8 3rd bit3-0 → bit7-4 4th bit3-0 → bit3-0	00 04 00 00 (400)
	04 05	1	007F	Master Volume Not Used	0127	7F
TOTAL	06 7D 7E 7F	1	2858 0n 00 00	Transpose Drum Setup Reset XG System On All Parameter Reset	-24+24[semitones] 0n=Drum Setup Number 00=XG Sytem on 00=on (receive only)	40

< Table 1-3 > MIDI Parameter table (System information)

Address (H)		Size (H)	Data (H)	Prameter Name	Description
01 00	00	E	207F	Model Name	32127(ASCII)
	:				
	0D				
	0E	1	00		
	0F	1	00		
TOTAL	SIZE 10				

(Transmitted by Dump Request. Not received. Bulk Dump Only)

 $< Table \ 1-4 > MIDI \ Parameter \ Change \ table \ (EFFECT)$

< Table	1-4 /	MIDIFA	i ameter C	mange table (EFFECT)		
Address		Size	Data	Prameter Name	Description	Default Value
(H)	00	(H)	(H)	D IT MCD	De de Femilia	(H)
02 01	00	2	007F 007F	Reverb Type MSB	Refer to the Ef. Type List 00 : basic type	01(=HALL1) 00
	02	1	007F	Reverb Type LSB Reverb Parameter 1	Refer to the Ef. Parameter List	Depend on Reverb type
	03	1	007F	Reverb Parameter 2	Refer to the Ef. Parameter List	Depend on Reverb type
	04	1	007F	Reverb Parameter 3	Refer to the Ef. Parameter List	Depend on Reverb type
	05	1	007F	Reverb Parameter 4	Refer to the Ef. Parameter List	Depend on Reverb type
	06	1	007F	Reverb Parameter 5	Refer to the Ef. Parameter List	Depend on Reverb type
	07	1	007F	Reverb Parameter 6	Refer to the Ef. Parameter List	Depend on Reverb type
	08 09	1 1	007F 007F	Reverb Parameter 7 Reverb Parameter 8	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Reverb type Depend on Reverb type
	0A	1	007F	Reverb Parameter 9	Refer to the Ef. Parameter List	Depend on Reverb type
	0B	1	007F	Reverb Parameter 10	Refer to the Ef. Parameter List	Depend on Reverb type
	0C	1	007F	Reverb Return	-∞0+6dB(064127)	40
	0D	1	017F	Reverb Pan	L63CR63(164127)	40
TOTAL S	SIZE 0E					
02 01	10	1	007F	Reverb Parameter 11	Refer to the Ef. Parameter List	Depend on Reverb type
	11	1	007F	Reverb Parameter 12	Refer to the Ef. Parameter List	Depend on Reverb type
	12	1	007F	Reverb Parameter 13	Refer to the Ef. Parameter List	Depend on Reverb type
	13	1	007F	Reverb Parameter 14	Refer to the Ef. Parameter List	Depend on Reverb type
	14	1	007F	Reverb Parameter 15	Refer to the Ef. Parameter List	Depend on Reverb type
TOTAL S	15 SIZE 6	1	007F	Reverb Parameter 16	Refer to the Ef. Parameter List	Depend on Reverb type
TOME	JILL O					
02 01	20	2	007F	Chorus Type MSB	Refer to the Ef. Type List	41(=Chorus1)
			007F	Chorus Type LSB	00 : basic type	00
	22	1	007F	Chorus Parameter 1	Refer to the Ef. Parameter List	Depend on Chorus Type
	23 24	1	007F	Chorus Parameter 2	Refer to the Ef. Parameter List	Depend on Chorus Type
	24 25	1 1	007F 007F	Chorus Parameter 3 Chorus Parameter 4	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Chorus Type Depend on Chorus Type
	26	1	007F	Chorus Parameter 5	Refer to the Ef. Parameter List	Depend on Chorus Type
	27	1	007F	Chorus Parameter 6	Refer to the Ef. Parameter List	Depend on Chorus Type
	28	1	007F	Chorus Parameter 7	Refer to the Ef. Parameter List	Depend on Chorus Type
	29	1	007F	Chorus Parameter 8	Refer to the Ef. Parameter List	Depend on Chorus Type
	2A	1	007F	Chorus Parameter 9	Refer to the Ef. Parameter List	Depend on Chorus Type
	2B 2C	1 1	007F 007F	Chorus Parameter 10 Chorus Return	Refer to the Ef. Parameter List $-\infty0+6$ dB (064127)	Depend on Chorus Type 40
	2D	1	017F	Chorus Pan	L63CR63(164127)	40
	2E	1	007F	Send Chorus To Reverb	-∞0+6dB(064127)	00
TOTAL S	SIZE 0F					
2 01	20		00.75	Ch D 11	Defends the Ef Demonstra List	D d Ch T
02 01	30 31	1 1	007F 007F	Chorus Parameter 11 Chorus Parameter 12	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Chorus Type Depend on Chorus Type
	32	1	007F	Chorus Parameter 13	Refer to the Ef. Parameter List	Depend on Chorus Type
	33	1	007F	Chorus Parameter 14	Refer to the Ef. Parameter List	Depend on Chorus Type
	34	1	007F	Chorus Parameter 15	Refer to the Ef. Parameter List	Depend on Chorus Type
TOTAL S	35 SIZE 6	1	007F	Chorus Parameter 16	Refer to the Ef. Parameter List	Depend on Chorus Type
OIALL	JIZE 0					
02 01	40	2	007F	Variation Type MSB	Refer to the Ef. Type List	05(=DELAY L,C,R)
		_	007F	Variation Type LSB	00 : basic type	00
	42	2	007F	Vari. Param. 1 MSB Vari. Param. 1 LSB	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Vari. Type
	44	2	007F 007F	Vari. Param. 2 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type Depend on Vari. Type
		-	007F	Vari. Param. 2 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	46	2	007F	Vari. Param. 3 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
			007F	Vari. Param. 3 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	48	2	007F	Vari. Param. 4 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	4.4	2	007F	Vari. Param. 4 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	4A	2	007F 007F	Vari. Param. 5 MSB Vari. Param. 5 LSB	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Vari. Type Depend on Vari. Type
	4C	2	007F	Vari. Param. 6 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
			007F	Vari. Param. 6 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	4E	2	007F	Vari. Param. 7 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
			007F	Vari. Param. 7 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	50	2	007F	Vari. Param. 8 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	52	2	007F 007F	Vari. Param. 8 LSB Vari. Param. 9 MSB	Refer to the Ef. Parameter List Refer to the Ef. Parameter List	Depend on Vari. Type Depend on Vari. Type
	32	2	007F	Vari. Param. 9 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type Depend on Vari. Type
	54	2	007F	Vari. Param. 10 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
			007F	Vari. Param. 10 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
	56	1	007F	Variation Return	-∞0+6dB(064127)	40
	57	1	017F	Variation Pan	L63CR63(164127)	40
	58	1	007F	Send Vari. To Reverb	-∞0+6dB(096127)	00
	59 5A	1 1	007F 0001	Send Vari. To Chorus Variation Connection	-∞0+6dB(096127) 0:insertion,1:system	00 00
	5B	1	007F	Variation Part	part116(015),off(1663,65127),AD1(64)	
	5C	1	007F	MW Vari. Ctrl Depth	-63+63	40
	5D	1	007F	PB Vari. Ctrl Depth	-63+63	40
	5E	1	007F	CAT Vari. Ctrl Depth	-63+63	40
	5F	1		Not Used		
COTAL	60 SIZE 21	1		Not Used		
OTAL S	oize 21					
2 01	70	1	007F	Variation Parameter 11	option Parameter	Depend on Variation Type
	71	1	007F	Variation Parameter 12	option Parameter	Depend on Variation Type
	72	1	007F	Variation Parameter 13	option Parameter	Depend on Variation Type
	73	1	007F	Variation Parameter 14	option Parameter	Depend on Variation Type
	74 75	1 1	007F 007F	Variation Parameter 15 Variation Parameter 16	option Parameter option Parameter	Depend on Variation Type Depend on Variation Type
TOTAL S			00/1	variation i arameter 10	option i municioi	Depond on variation Type
	-					

< Table 1-5 > MIDI Parameter Change table (MULTI PART)

		~.	_		- · · ·	
Address		Size	Data	Prameter Name	Description	Default Value
(H) 08 nn	00	(H) 1	(H) 0020	Element Reserve	032	(H) 0(Port10) 2(Othors)
08 nn nn	01	1	0026 007F	Bank Select MSB	0127	0(Part10),2(Others)
nn	02	1	007F	Bank Select LSB	0127	7F(Part10),00(Others) 00
nn	03	1	007F	Program Number	1128	00
nn	04	1	000F,	Rcv Channel	015;116,127;off	Part No.
1111	0-1		7F	rev chamer	013,110,127,011	Turt 110.
nn	05	1	0001	Mono/Poly Mode	0:mono,1:poly	01
nn	06	1	0003	Same Note Number	0:single	01
				Key On Assign	1:multi	
				.,	2:inst (for DRUM)	
nn	07	1	0002	Part Mode	0:normal	00 (other than Part10)
					1:drum (ROM)	01 (Part10)
					2-3:drum (RAM)	
nn	08	1	2858	Note Shift	-24+24[semitones]	40
nn	09	2	00FF	Detune	-12.8+12.7[Hz]	08 00
nn	0A				1st bit30 \rightarrow bit74	-80
	0.70				2nd bit30 \rightarrow bit30	
nn	0B	1	007F	Volume	0127	64
nn	OC	1	007F	Velocity Sense Depth	0127	40
nn	0D	1	007F	Velocity Sense Offset	0127	40 40
nn	0E	1	007F	Pan	0:random L63CR63(164127)	40
					L03CR03(104127)	
nn	0F	1	007F	Note Limit Low	C-2G8	00
nn	10	1	007F	Note Limit High	C-2G8	7F
nn	11	1	007F	Dry Level	0127	7F
nn	12	1	007F	Chorus Send	0127	00
nn	13	1	007F	Reverb Send	0127	28
nn	14	1	007F	Variation Send	0127	00
	15	1	007F	Vibrato Pate	-64+63	40
nn nn	15 16	1	007F 007F	Vibrato Rate Vibrato Depth	-64+63 -64+63	40
nn	17	1	007F	Vibrato Depth Vibrato Delay	-64+63	40
nn	18	1	007F	Filter Cutoff Freq.	-64+63	40
nn	19	1	007F	Filter Resonance	-64+63	40
nn	1A	1	007F	EG Attack Time	-64+63	40
nn	1B	1	007F	EG Decay Time	-64+63	40
nn	1C	1	007F	EG Release Time	-64+63	40
nn	1D	1	2858	MW Pitch Control	-24+24[semitones]	40
nn	1E	1	007F	MW Filter Control	-9600+9450[cent]	40
nn	1F	1	007F	MW Amp. Control	-100+100[%]	40
nn	20	1	007F	MW LFO PMod Depth	0127	0A
nn	21 22	1	007F	MW LFO AMod Depth	0127	00 00
nn	22	1	007F	MW LFO AMod Depth	0127	00
nn	23	1	2858	Bend Pitch Control	-24+24[semitones]	42
nn	24	1	007F	Bend Filter Control	-9600+9450[cent]	40
nn	25	1	007F	Bend Amp. Control	-100+100[%]	40
nn	26	1	007F	Bend LFO PMod Depth	0127	00
nn	27	1	007F	Bend LFO FMod Depth	0127	00
nn	28	1	007F	Bend LFO AMod Depth	0127	00
TOTAL S	SIZE 29					
nn	30			Not Used		
1111	:			:		
nn	40			Not Used		
nn	41	1	007F	Scale Tuning C	-64+63[cent]	40
nn	42	1	007F	Scale Tuning C#	-64+63[cent]	40
nn	43	1	007F	Scale Tuning D	-64+63[cent]	40
nn	44	1	007F	Scale Tuning D# Scale Tuning E	-64+63[cent]	40
nn nn	45 46	1	007F 007F	Scale Tuning E Scale Tuning F	-64+63[cent] -64+63[cent]	40 40
nn	47	1	007F	Scale Tuning F#	-64+63[cent]	40
nn	48	1	007F	Scale Tuning G	-64+63[cent]	40
nn	49	1	007F	Scale Tuning G#	-64+63[cent]	40
nn	4A	1	007F	Scale Tuning A	-64+63[cent]	40
nn	4B	1	007F	Scale Tuning A#	-64+63[cent]	40
nn	4C	1	007F	Scale Tuning B	-64+63[cent]	40
	415		20.50	CATERIALC	24 - 245 - 3	40
nn	4D	1	2858	CAT Pitch Control	-24+24[semitones]	40
nn	4E	1	007F	CAT Filter Control	-9600+9450[cent]	40
nn	4F 50	1	007F	CAT I FO PMod Depth	-100+100[%] 0127	40 00
nn nn	51	1	007F 007F	CAT LFO PMod Depth CAT LFO FMod Depth	0127	00
nn nn	52	1	007F 007F	CAT LFO FMod Depth	0127	00
1111		-		•		
nn	53			Not Used		
	:			; 		
	66			Not Used		
nn	67	1	0001	Portamento Switch	off/on	00
nn	68	1	0001 007F	Portamento Time	0127	00
1111	-	•	JU1	- Jamie IIII		
nn	69			Not Used		
	:			: N II I		
TOTAL	6E			Not Used		
TOTAL S	SIZE 3F					

nn = PartNumber

If there is a Drum Voice assigned to the Part, the following parameters are ineffective.

• Bank Select LSB

• Pitch EG

• Portamento

• Soft Pedal

• Mono/Poly

• Scale Tuning

MIDI Data Format

< Table 1-6 > MIDI Parameter Change table (DRUM SETUP)

Address	Size	Data	Prameter Name	Description	Default Value
(H)	(H)	(H)		(H)	(H)
3n rr 00	1	007F	Pitch Coarse	-64+63	40
3n rr 01	1	007F	Pitch Fine	-64+63[cent]	40
3n rr 02	1	007F	Level	0127	Depend on the Note
3n rr 03	1	007F	Alternate Group	0:off,1127	Depend on the Note
3n rr 04	1	007F	Pan	0:random	Depend on the Note
				L63CR63(164127)	•
3n rr 05	1	007F	Reverb Send Level	0127	Depend on the Note
3n rr 06	1	007F	Chorus Send Level	0127	Depend on the Note
3n rr 07	1	007F	Variation Send Level	0127	7F
3n rr 08	1	0001	Key Assign	0:single,1:multi	00
3n rr 09	1	0001	Rcv Note Off	off/on	Depend on the Note
3n rr 0A	1	0001	Rcv Note On	off/on	01
3n rr OB	1	007F	Filter Cutoff Freq.	-6463	40
3n rr 0C	1	007F	Filter Resonance	-6463	40
3n rr 0D	1	007F	EG Attack Rate	-6463	40
3n rr 0E	1	007F	EG Decay1 Rate	-6463	40
3n rr 0F	1	007F	EG Decay2 Rate	-6463	40
TOTAL SIZE 1	0		•		

n:Drum Setup Number(0 - 1) rr:note number(0DH - 5BH)

If XG SYSTEM ON and/or GM On message is received, all Drum Setup Parameter will be reset to default values. According to the Drum Setup Reset message, individual Drum Setup Parameters can be reset to default values.

< Table 1-7 > Effect Type List

XG ESSENTIAL EFFECT
Same as LSB=0
XG OPTION EFFECT
Expanded type for PSR-550
* If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.
* Panel Effects are based on the "[Number] Effect Name".

REVERB TYPE

KEVEKD												
TYPE	MSB	TYPE LSB										
DEC	HEX	00	01	02	0307	08	0915	16	17	18	19	20
000	00	NO EFFECT										
001	01	[1]HALL1	[5]HALL2					[2]HALL2	[3]HALL3	[4]HALL4		
002	02	[10]ROOM1	[11]ROOM2	[12]ROOM3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	03	[15]STAGE1	[16]STAGE2					[13]STAGE1	[14]STAGE2			
004	04	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	05	NO EFFECT										
:	:	:										
015	0F	NO EFFECT										
016	10	[20]WHITE ROOM										
017	11	[21]TUNNEL										
018	12	[22]CANYON										
019	13	[23]BASEMENT										
020	14	NO EFFECT										
:	:	:										
127	7F	NO EFFECT										

CHORUS TYPE

TYPE	MSB	TYPE LSB										
DEC	HEX	00	01	02	0307	08	0915	16	17	18	19	20
000	00	NO EFFECT										
001	01	NO EFFECT										
:	:	:										
064	40	NO EFFECT										
065	41	[6]CHORUS1	[7]CHORUS2	[5]CHORUS5		[8]CHORUS4						
066	42	[9]CELESTE1	[4]CHORUS4	[10]CELESTE3		[2]CHORUS2		[3]CHORUS3	[1]CHORUS1			
067	43	[15]FLANGER 1	[14]FLANGER 4			[11]FLANGER1		[12]FLANGER2	[13]FLANGER3			
068	44	NO EFFECT										
:	:	:										
127	7F	NO EFFECT										

VARIATION TYPE(0-63)

TYPE	MSB	TYPE LSB										
DEC	HEX	00	01	02	0307	08	0915	16	17	18	19	20
000	00	NO EFFECT										
001	01	[1]HALL1	[5]HALL2					[2]HALL2	[3]HALL3	[4]HALL4		
002	02	[10]ROOM1	[11]ROOM2	[12]ROOM3				[6]ROOM1	[7]ROOM2	[8]ROOM3	[9]ROOM4	
003	03	[15]STAGE1	[16]STAGE2					[13]STAGE1	[14]STAGE2			
004	04	[19]PLATE						[17]PLATE1	[18]PLATE2			
005	05	[21]DELAY L,C,R						[20]Delay LCR				
006	06	[22]DELAY L,R										
007	07	[23]ECHO										
008	08	[24]CROSS DELAY										
009	09	[25]ER1	[26]ER2									
010	0A	[27]GATE REVERB										
011	0B	[28]REVERS GATE										
012	0C	NO EFFECT or THRU*										
:	:	:										
019	13	NO EFFECT or THRU*										
020	14	[29]KARAOKE 1	[30]KARAOKE 2	[31]KARAOKE 3								
021	15	NO EFFECT or THRU*										
:		:										
063	3F	NO EFFECT or THRU*										

^{*} No effect when Effect Connection = System. Through when Effect Connection = Insertion.

VARIATION TYPE (64-127)

VARIATIO	NITPE (C	94-127)										
TYPE	MSB	TYPE LSB										
DEC	HEX	00	01	02	0307	08	0915	16	17	18	19	20
064	40	THRU										
065	41	[37]CHORUS1	[38]CHORUS2	[36]CHORUS5		[39]CHORUS4						
066	42	[40]CELESTE1	[35]CHORUS4	[41]CELESTE3		[33]CHORUS2		[34]CHORUS3	[32]CHORUS1	[53]Rotary Sp5		
067	43	[46]FLANGER 1	[45]FLANGER 4			[42]FLANGER1		[43]FLANGER2	[44]FLANGER3			
068	44	[48]SYMPHONIC						[47]Symphonic				
069	45	[54]ROTARY SP.						[49]Rotary Sp1				
070	46	[57]TREMOLO						[55]Tremolo1	[52]Rotary Sp4			
071	47	[60]AUTO PAN						[36]AutoPan	[50]Rotary Sp2	[51]Rotary Sp3	[56]Tremolo2	[58]Gtr Tremolo
072	48	[61]PHASER				[62]PHASER 2						
073	49	[65]DISTORTION										
074	4A	[66]OVER DRIVE										
075	4B	[67]AMP SIM.						[63]DIST.HARD	[64]DIST.SOFT			
076	4C	[70]3BAND EQ						[68]EQ DISCO	[69]EQ TEL			
077	4D	[71]2BAND EQ										
078	4E	[73]AUTO WAH						[72]Auto Wah				
079	4F	THRU										
:	:											
127	7E	THDII										

< Table 1-8 > Effect Parameter List

HALL1,HALL2, ROOM1,ROOM2,ROOM3, STAGE1,STAGE2, PLATE (reverb, variation block)

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4	
2	Diffusion	0-10	0-10		
3	Initial Delay	0.1mS-99.3mS	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k-Thru	34-60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11	Rev Delay	0.1mS-99.3mS	0-63	table#5	
12	Density	0-4	0-3		
13	Er/Rev Balance	E63>R - E=R - E <r63< td=""><td>1-127</td><td></td><td></td></r63<>	1-127		
14					
15	Feedback Level	-63-+63	1-127		
16					

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4	
2	Diffusion	0-10	0-10		
3	Initial Delay	0.1mS-99.3mS	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k-Thru	34-60	table#3	
6	Width	0.5-10.2m	0-37	table#8	
7	Heigt	0.5-20.2m	0-73	table#8	
8	Depth	0.5-30.2m	0-104	table#8	
9	Wall Vary	0-30	0-30		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11	Rev Delay	0.1mS-99.3mS	0-63	table#5	
12	Density	0-4	0-3		
13	Er/Rev Balance	E63>R - E=R - E <r63< td=""><td>1-127</td><td></td><td></td></r63<>	1-127		
14					
15	Feedback Level	-63-+63	1-127		
16					

DELAY L,C,R (variation block)

	No.	Parameter	Display	Value	See Table	Control
Γ	1	Lch Delay	0.1-715.0ms	1-7150		
	2	Rch Delay	0.1-715.0ms	1-7150		
	3	Cch Delay	0.1-715.0ms	1-7150		
	4	Feedback Delay	0.1-715.0ms	1-7150		
	5	Feedback Level	-63-+63	1-127		
	6	Cch Level	0-127	0-127		
	7	High Damp	0.1-1.0	1-10		
	8					
	9					
	10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
	11					
	12					
	13	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
	14	EQ Low Gain	-12-+12dB	52-76	table#3	
	15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
	16	EQ High Gain	-12-+12dB	52-76	table#3	

DELAY L,R (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1-715.0ms	1-7150		
2	Rch Delay	0.1-715.0ms	1-7150		
3	Feedback Delay 1	0.1-715.0ms	1-7150		
4	Feedback Delay 2	0.1-715.0ms	1-7150		
5	Feedback Level	-63-+63	1-127		
6	High Damp	0.1-1.0	1-10		
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
14	EQ Low Gain	-12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	-12-+12dB	52-76		

ECHO (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay1	0.1-355.0ms	1-3550		
2	Lch Feedback Level	-63-+63	1-127		
3	Rch Delay1	0.1-355.0ms	1-3550		
4	Rch Feedback Level	-63-+63	1-127		
5	High Damp	0.1-1.0	1-10		
6	Lch Delay2	0.1-355.0ms	1-3550		
7	Rch Delay2	0.1-355.0ms	1-3550		
8	Delay2 Level	0-127	0-127		
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
14	EQ Low Gain	-12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	-12-+12dB	52-76		

CROSS DELAY (variation block)

011000	DELAT (Variation block)				
No.	Parameter	Display	Value	See Table	Control
1	L->R Delay	0.1-355.0ms	1-3550		
2	R->L Delay	0.1-355.0ms	1-3550		
3	Feedback Level	-63-+63	1-127		
4	Input Select	L,R,L&R	0-2		
5	High Damp	0.1-1.0	1-10		
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>• </td></w63<>	1-127		•
11					
12					
13	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
14	EQ Low Gain	-12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	-12-+12dB	52-76		

EARLY REF1,EARLY REF2(variation block)

No.	Parameter	Display	Value	See Table	Control
1	Туре	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5		
2	Room Size	0.1-7.0	0-44	table#6	
3	Diffusion	0-10	0-10		
4	Initial Delay	0.1mS-99.3mS	0-63	table#5	
5	Feedback Level	-63-+63	1-127		
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k-Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>• </td></w63<>	1-127		•
11	Liveness	0-10	0-10		
12	Density	0-3	0-3		
13	High Damp	0.1-1.0	1-10		
14					
15					
16					

GATE REVERB, REVERSE GATE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Туре	TypeA,TypeB	0-1		
2	Room Size	0.1-20.0	0-127	table#6	
3	Diffusion	0-10	0-10		
4	Initial Delay	0.1mS-200.0mS	0-127	table#5	
5	Feedback Level	-63-+63	1-127		
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k-Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11	Liveness	0-10	0-10		
12	Density	0-3	0-3		
13	High Damp	0.1-1.0	1-10		
14	1				
15					
16					

KARAOKE1,2,3 (variation block)

KAKAUI	KE1,2,3 (variation bloc	:к)			
No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1mS-400.0mS	0-127	table#7	
2	Feedback Level	-63-+63	1-127		
3	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
4	LPF Cutoff	1.0k-Thru	34-60	table#3	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13					
14					
15			1		1
16			1		1

CHORUS1,2,3,4, CELESTE1,2,3,4 (chorus, variation block)

SHORU	31,2,3,4, CLLL31L1,2,3	,4 (chorus, variation block)			
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Feedback Level	-63-+63	1-127		
4	Delay Offset	0.0mS-50mS	0-127	table#2	
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					

MIDI Data Format

FLANGER1,2,3 (chorus, variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Feedback Level	-63-+63	1-127		
4	Delay Offset	0.0mS-50mS	0-127	table#2	
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13					
14	LFO Phase Difference	-180-+180deg (resolution=3deg.)	4-124		
15	Li O i liase Dilleterice	-100-1100deg (resolution=3deg.)	7-124		
16					

SYMPHONIC (chorus, variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Delay Offset	0.0mS-50mS	0-127	table#2	
4					
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11					
12					
13					
14					
15					
16					

ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	•
2	LFO Depth	0-127	0-127		
3					
4					
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td></td></w63<>	1-127		
11					
12					
13					
14					
15					
16					

TREMOLO (variation block)

KLINIO	LO (variation block)				
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	•
2	AM Depth	0-127	0-127		
3	PM Depth	0-127	0-127		
4					
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10					
11					
12					
13					
14	LFO Phase Difference	-180-+180deg (resolution=3deg.)	4-124		
15	Input Mode	mono/stereo	0-1		
16	l .				

AUTO PAN (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	•
2	L/R Depth	0-127	0-127		
3	F/R Depth	0-127	0-127		
4	PAN Direction	L<->R,L->R,L<-R,Lturn,Rturn,L/R	0-5		
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10					
11					
12					
13					
14					
15					
16					

PHASER 1 (chorus, variation block)

FIIAGEN	i (chorus, variation block)			
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Phase Shift Offset	0-127	0-127		
4	Feedback Level	-63-+63	1-127		
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11	Stage	4,5,6 (chorus block)	4-6		
		6-10 (variation block)	6-10		
12					
13					
14					
15					
16					

PHASER 2 (variation block)

	Z (Variation block)				
No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Phase Shift Offset	0-127	0-127		
4	Feedback Level	-63-+63	1-127		
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td>•</td></w63<>	1-127		•
11	Stage	3,4,5	3-5		
12					
13	LFO Phase Difference	-180deg-+180deg (resolution=3deg.)	4-124		
14					
15					
16					

DISTOR	HON, OVERDRIVE (vari	ation block)			
No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		•
2	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
3	EQ Low Gain	-12-+12dB	52-76		
4	LPF Cutoff	1.0k-Thru	34-60	table#3	
5	Output Level	0-127	0-127		
6					
7	EQ Mid Frequency	500Hz-10.0kHz	28-54	table#3	
8	EQ Mid Gain	-12-+12dB	52-76		
9	EQ Mid Width	1.0-12.0	10-120		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td></td></w63<>	1-127		
11	Edge (Clip Curve)	0-127	0-127	mild-sharp	
12					
13					
14					
15					
16					

AMP SIMULATOR (variation block)

AIVIP SIIV	IULATUR (variation block)				
No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		•
2	AMP Type	Off,Stack,Combo,Tube	0-3		
3	LPF Cutoff	1.0k-Thru	34-60	table#3	
4	Output Level	0-127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td></td></w63<>	1-127		
11	Edge(Clip Curve)	0-127	0-127	mild-sharp	
12					
13					
14					
15					
16					

3BAND EQ(MONO) (variation block)

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Gain	-12-+12dB	52-76		
2	EQ Mid Frequency	500Hz-10.0kHz	28-54	table#3	
3	EQ Mid Gain	-12-+12dB	52-76		
4	EQ Mid Width	1.0-12.0	10-120		
5	EQ High Gain	-12-+12dB	52-76		
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
8					
9					
10					
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					1

2BAND EQ(STEREO) (variation block)

	- w(OTERLO) (variation bio	- '			
No.	Parameter	Display	Value	See Table	Control
1	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
2	EQ Low Gain	-12-+12dB	52-76		
3	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
4	EQ High Gain	-12-+12dB	52-76		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

AUTO WAH (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Cutoff Frequency Offset	0-127	0-127		•
4	Resonance	1.0-12.0	10-120		
5					
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ Low Gain	-12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	-12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D <w63< td=""><td>1-127</td><td></td><td></td></w63<>	1-127		
11					
12					
13					
14					
15					
16					

NO EFFECT (reverb, chorus, variation block), THRU (variation block)

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MIDI Data Format

< Table 1-9 > Effect Data Value Assign Table

LFO Frequency											
Data	Value	Data	Value	Data	Value	Data	Value				
0	0.00	32	1.35	64	2.69	96	8.41				
1	0.04	33	1.39	65	2.78	97	8.75				
2	0.08	34	1.43	66	2.86	98	9.08				
3	0.13	35	1.47	67	2.94	99	9.42				
4	0.17	36	1.51	68	3.03	100	9.76				
5	0.21	37	1.56	69	3.11	101	10.1				
6	0.25	38	1.60	70	3.20	102	10.8				
7	0.29	39	1.64	71	3.28	103	11.4				
8	0.34	40	1.68	72	3.37	104	12.1				
9	0.38	41	1.72	73	3.45	105	12.8				
10	0.42	42	1.77	74	3.53	106	13.5				
11	0.46	43	1.81	75	3.62	107	14.1				
12	0.51	44	1.85	76	3.70	108	14.8				
13	0.55	45	1.89	77	3.87	109	15.5				
14	0.59	46	1.94	78	4.04	110	16.2				
15	0.63	47	1.98	79	4.21	111	16.8				
16	0.67	48	2.02	80	4.37	112	17.5				
17	0.72	49	2.06	81	4.54	113	18.2				
18	0.76	50	2.10	82	4.71	114	19.5				
19	0.80	51	2.15	83	4.88	115	20.9				
20	0.84	52	2.19	84	5.05	116	22.2				
21	0.88	53	2.23	85	5.22	117	23.6				
22	0.93	54	2.27	86	5.38	118	24.9				
23	0.97	55	2.31	87	5.55	119	26.2				
24	1.01	56	2.36	88	5.72	120	27.6				
25	1.05	57	2.40	89	6.06	121	28.9				
26	1.09	58	2.44	90	6.39	122	30.3				
27	1.14	59	2.48	91	6.73	123	31.6				
28	1.18	60	2.52	92	7.07	124	33.0				
29	1.22	61	2.57	93	7.40	125	34.3				
30	1.26	62	2.61	94	7.74	126	37.0				
31	1.30	63	2.65	95	8.08	127	39.7				

Table#2

Modul	Modulation Delay Offset											
Data	Value	Data	Value	Data	Value	Data	Value					
0	0.0	32	3.2	64	6.4	96	9.6					
1	0.1	33	3.3	65	6.5	97	9.7					
2	0.2	34	3.4	66	6.6	98	9.8					
3	0.3	35	3.5	67	6.7	99	9.9					
4	0.4	36	3.6	68	6.8	100	10.0					
5	0.5	37	3.7	69	6.9	101	11.1					
6	0.6	38	3.8	70	7.0	102	12.2					
7	0.7	39	3.9	71	7.1	103	13.3					
8	0.8	40	4.0	72	7.2	104	14.4					
9	0.9	41	4.1	73	7.3	105	15.5					
10	1.0	42	4.2	74	7.4	106	17.1					
11	1.1	43	4.3	75	7.5	107	18.6					
12	1.2	44	4.4	76	7.6	108	20.2					
13	1.3	45	4.5	77	7.7	109	21.8					
14	1.4	46	4.6	78	7.8	110	23.3					
15	1.5	47	4.7	79	7.9	111	24.9					
16	1.6	48	4.8	80	8.0	112	26.5					
17	1.7	49	4.9	81	8.1	113	28.0					
18	1.8	50	5.0	82	8.2	114	29.6					
19	1.9	51	5.1	83	8.3	115	31.2					
20	2.0	52	5.2	84	8.4	116	32.8					
21	2.1	53	5.3	85	8.5	117	34.3					
22	2.2	54	5.4	86	8.6	118	35.9					
23	2.3	55	5.5	87	8.7	119	37.5					
24	2.4	56	5.6	88	8.8	120	39.0					
25	2.5	57	5.7	89	8.9	121	40.6					
26	2.6	58	5.8	90	9.0	122	42.2					
27	2.7	59	5.9	91	9.1	123	43.7					
28	2.8	60	6.0	92	9.2	124	45.3					
29	2.9	61	6.1	93	9.3	125	46.9					
30	3.0	62	6.2	94	9.4	126	48.4					
31	3.1	63	6.3	95	9.5	127	50.0					

Table#3

EQ Frequency									
Data	Value	Data	Value						
0	THRU(0)	32	800						
1	22	33	900						
2	25	34	1.0k						
3	28	35	1.1k						
4	32	36	1.2k						
5	36	37	1.4k						
6	40	38	1.6k						
7	45	39	1.8k						
8	50	40	2.0k						
9	56	41	2.2k						
10	63	42	2.5k						
11	70	43	2.8k						
12	80	44	3.2k						
13	90	45	3.6k						
14	100	46	4.0k						
15	110	47	4.5k						
16	125	48	5.0k						
17	140	49	5.6k						
18	160	50	6.3k						
19	180	51	7.0k						
20	200	52	8.0k						
21	225	53	9.0k						
22	250	54	10.0k						
23	280	55	11.0k						
24	315	56	12.0k						
25	355	57	14.0k						
26	400	58	16.0k						
27	450	59	18.0k						
28	500	60	THRU(20.0k)						
29	560								
30	630								
31	700								

Table#4 Reverb time

0 0.3 32 3.5 64 17.0 1 0.4 33 3.6 65 18.0 2 0.5 34 3.7 66 19.0 3 0.6 35 34 3.7 66 19.0 6 0.9 38 4.1 7 10.0 93 34.2 8 1.1 40 4.3 9 12.2 41 4.4 4.5 11 1.4 43 4.6 12.1 1.4 43 4.6 12.1 1.5 44 4.7 13 1.6 45 4.8 14 1.7 4.6 4.9 15 18.8 4.7 15 18 4.7 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 15 18 4.7 18 4.7 15 18 4.7 18 4.7 18 4.7 18 4.7 18 4.7 18 4.7 18 4.7 18 4.7	Reverb time									
1		Value		Value	_	Value				
2 0.5 34 3.7 66 19.0 3 0.6 35 38 67 20.0 4 0.7 36 3.9 68 25.0 5 0.8 37 4.0 69 30.0 6 0.9 38 4.1 7 1.0 39 4.2 8 1.1 40 4.3 9 1.2 41 4.4 10 1.3 42 4.5 11 1.4 43 4.6 11 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0										
3 0.6 35 3.8 67 20.0 4 0.7 36 3.9 68 25.0 5 0.8 37 4.0 69 30.0 6 0.9 38 4.1 7 1.0 39 4.2 8 1.1 40 4.3 9 1.2 41 4.4 10 1.3 4.2 4.5 11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 3.6 2 15.0		_								
4	2	0.5	34	3.7	66	19.0				
6 0.8 37 4.0 69 30.0 6 0.9 38 4.1 7 1.0 39 4.2 8 1.1 40 4.3 9 1.2 41 4.4 10 1.3 4.2 4.5 11 1.4 4.5 4.5 11 1.4 4.5 4.5 1.1 4.5 4.8 4.7 13 1.6 45 4.8 4.9 4.5 4.8 4.9 4.5 1.8 4.7 5.0 6.0 18 2.9 5.5 1.7 2.0 4.9 6.0 18 2.1 5.0 6.0 18 2.1 5.0 6.0 18 2.1 5.0 6.0 18 2.1 5.0 5.5 2.1 2.2 5.5 5.5 2.2 2.5 5.5 2.3 2.2 5.5 7.5 2.2 2.5 5.5 9.5 2.2 2.5 5.5 9.5 2.2 2.5 5.5 9.5	3	0.6	35	3.8	67	20.0				
6 0.9 38 4.1 7 1.0 39 4.2 8 1.1 40 4.3 9 1.2 41 4.4 10 1.3 42 4.5 11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 56 15.0	4	0.7	36	3.9	68	25.0				
7 1.0 39 4.2 8 1.1 40 4.3 9 12 41 4.4 10 1.3 42 4.5 11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	5	0.8	37	4.0	69	30.0				
8 1.1 40 4.3 9 1.2 41 4.4 10 1.3 42 4.5 11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0		0.9	38							
9 1.2 41 4.4 10 1.3 42 4.5 11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	7	1.0	39	4.2						
10	8	1.1	40	4.3						
11 1.4 43 4.6 12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	9	1.2	41	4.4						
12 1.5 44 4.7 13 1.6 45 4.8 14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	10	1.3	42	4.5						
13 1.6 45 4.8 4.8 4.1 1.7 46 4.9 4.9 4.1 4.9 4.9 4.9 4.9 4.0 4.9 4.0 4	11	1.4	43	4.6						
14 1.7 46 4.9 15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 5.1 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	12	1.5	44	4.7						
15 1.8 47 5.0 16 1.9 48 5.5 17 2.0 49 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	13	1.6	45	4.8						
16 1.9 48 5.5 17 2.0 48 6.0 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	14	1.7	46	4.9						
17 20 49 60 18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	15	1.8	47	5.0						
18 2.1 50 6.5 19 2.2 51 7.0 20 2.3 52 7.5 21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 362 15.0	16	1.9	48	5.5						
19	17	2.0	49	6.0						
20	18	2.1	50	6.5						
21 2.4 53 8.0 22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	19	2.2	51	7.0						
22 2.5 54 8.5 23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	20	2.3	52	7.5						
23 2.6 55 9.0 24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	21	2.4	53	8.0						
24 2.7 56 9.5 25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	22	2.5	54	8.5						
25 2.8 57 10.0 26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	23	2.6	55	9.0						
26 2.9 58 11.0 27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	24	2.7	56	9.5						
27 3.0 59 12.0 28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	25	2.8	57	10.0						
28 3.1 60 13.0 29 3.2 61 14.0 30 3.3 62 15.0	26	2.9	58	11.0						
29 3.2 61 14.0 30 3.3 62 15.0	27	3.0	59	12.0						
30 3.3 62 15.0	28	3.1	60	13.0						
	29	3.2	61	14.0						
31 34 63 160	30	3.3	62	15.0						
31 3.7 00 10.0	31	3.4	63	16.0						

Table#5

Delay Time(200.0ms)										
Data	Value	Data	Value	Data	Value	Data	Value			
0	0.1	32	50.5	64	100.8	96	151.2			
1	1.7	33	52.0	65	102.4	97	152.8			
2	3.2	34	53.6	66	104.0	98	154.4			
3	4.8	35	55.2	67	105.6	99	155.9			
4	6.4	36	56.8	68	107.1	100	157.5			
5	8.0	37	58.3	69	108.7	101	159.1			
6	9.5	38	59.9	70	110.3	102	160.6			
7	11.1	39	61.5	71	111.9	103	162.2			
8	12.7	40	63.1	72	113.4	104	163.8			
9	14.3	41	64.6	73	115.0	105	165.4			
10	15.8	42	66.2	74	116.6	106	166.9			
11	17.4	43	67.8	75	118.2	107	168.5			
12	19.0	44	69.4	76	119.7	108	170.1			
13	20.6	45	70.9	77	121.3	109	171.7			
14	22.1	46	72.5	78	122.9	110	173.2			
15	23.7	47	74.1	79	124.4	111	174.8			
16	25.3	48	75.7	80	126.0	112	176.4			
17	26.9	49	77.2	81	127.6	113	178.0			
18	28.4	50	78.8	82	129.2	114	179.5			
19	30.0	51	80.4	83	130.7	115	181.1			
20	31.6	52	81.9	84	132.3	116	182.7			
21	33.2	53	83.5	85	133.9	117	184.3			
22	34.7	54	85.1	86	135.5	118	185.8			
23	36.3	55	86.7	87	137.0	119	187.4			
24	37.9	56	88.2	88	138.6	120	189.0			
25	39.5	57	89.8	89	140.2	121	190.6			
26	41.0	58	91.4	90	141.8	122	192.1			
27	42.6	59	93.0	91	143.3	123	193.7			
28	44.2	60	94.5	92	144.9	124	195.3			
29	45.7	61	96.1	93	146.5	125	196.9			
30	47.3	62	97.7	94	148.1	126	198.4			
31	48.9	63	99.3	95	149.6	127	200.0			

Table#6

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	5.1	64	10.1	96	15.1
1	0.3	33	5.3	65	10.3	97	15.3
2	0.4	34	5.4	66	10.4	98	15.5
3	0.6	35	5.6	67	10.6	99	15.6
4	0.7	36	5.7	68	10.8	100	15.8
5	0.9	37	5.9	69	10.9	101	15.9
6	1.0	38	6.1	70	11.1	102	16.1
7	1.2	39	6.2	71	11.2	103	16.2
8	1.4	40	6.4	72	11.4	104	16.4
9	1.5	41	6.5	73	11.5	105	16.6
10	1.7	42	6.7	74	11.7	106	16.7
11	1.8	43	6.8	75	11.9	107	16.9
12	2.0	44	7.0	76	12.0	108	17.0
13	2.1	45	7.2	77	12.2	109	17.2
14	2.3	46	7.3	78	12.3	110	17.3
15	2.5	47	7.5	79	12.5	111	17.5
16	2.6	48	7.6	80	12.6	112	17.6
17	2.8	49	7.8	81	12.8	113	17.8
18	2.9	50	7.9	82	12.9	114	18.0
19	3.1	51	8.1	83	13.1	115	18.1
20	3.2	52	8.2	84	13.3	116	18.3
21	3.4	53	8.4	85	13.4	117	18.4
22	3.5	54	8.6	86	13.6	118	18.6
23	3.7	55	8.7	87	13.7	119	18.7
24	3.9	56	8.9	88	13.9	120	18.9
25	4.0	57	9.0	89	14.0	121	19.1
26	4.2	58	9.2	90	14.2	122	19.2
27	4.3	59	9.3	91	14.4	123	19.4
28	4.5	60	9.5	92	14.5	124	19.5
29	4.6	61	9.7	93	14.7	125	19.7
30	4.8	62	9.8	94	14.8	126	19.8
31	5.0	63	10.0	95	15.0	127	20.0

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	100.9	64	201.6	96	302.4
1	3.2	33	104.0	65	204.8	97	305.
2	6.4	34	107.2	66	207.9	98	308.
3	9.5	35	110.3	67	211.1	99	311.
4	12.7	36	113.5	68	214.2	100	315.
5	15.8	37	116.6	69	217.4	101	318.
6	19.0	38	119.8	70	220.5	102	321.
7	22.1	39	122.9	71	223.7	103	324.
8	25.3	40	126.1	72	226.8	104	327.
9	28.4	41	129.2	73	230.0	105	330.
10	31.6	42	132.4	74	233.1	106	333.
11	34.7	43	135.5	75	236.3	107	337.
12	37.9	44	138.6	76	239.4	108	340.
13	41.0	45	141.8	77	242.6	109	343.
14	44.2	46	144.9	78	245.7	110	346.
15	47.3	47	148.1	79	248.9	111	349.
16	50.5	48	151.2	80	252.0	112	352.
17	53.6	49	154.4	81	255.2	113	355.
18	56.8	50	157.5	82	258.3	114	359.
19	59.9	51	160.7	83	261.5	115	362.:
20	63.1	52	163.8	84	264.6	116	365.
21	66.2	53	167.0	85	267.7	117	368.
22	69.4	54	170.1	86	270.9	118	371.
23	72.5	55	173.3	87	274.0	119	374.
24	75.7	56	176.4	88	277.2	120	378.
25	78.8	57	179.6	89	280.3	121	381.
26	82.0	58	182.7	90	283.5	122	384.
27	85.1	59	185.9	91	286.6	123	387.
28	88.3	60	189.0	92	289.8	124	390.
29	91.4	61	192.2	93	292.9	125	393.
30	94.6	62	195.3	94	296.1	126	396.
31	97.7	63	198.5	95	299.2	127	400.

Table#8 Reverb Width;Depth;Height							
Data	Value	Data	Value	Data	Value	Data	Value
0	0.5	32	8.8	64	17.6	96	27.5
1	0.8	33	9.1	65	17.9	97	27.8
2	1.0	34	9.4	66	18.2	98	28.1
3	1.3	35	9.6	67	18.5	99	28.5
4	1.5	36	9.9	68	18.8	100	28.8
5	1.8	37	10.2	69	19.1	101	29.2
6	2.0	38	10.4	70	19.4	102	29.5
7	2.3	39	10.7	71	19.7	103	29.9
8	2.6	40	11.0	72	20.0	104	30.2
9	2.8	41	11.2	73	20.2		
10	3.1	42	11.5	74	20.5		
11	3.3	43	11.8	75	20.8		
12	3.6	44	12.1	76	21.1		
13	3.9	45	12.3	77	21.4		
14	4.1	46	12.6	78	21.7		
15	4.4	47	12.9	79	22.0		
16	4.6	48	13.1	80	22.4		
17	4.9	49	13.4	81	22.7		
18	5.2	50	13.7	82	23.0		
19	5.4	51	14.0	83	23.3		
20	5.7	52	14.2	84	23.6		
21	5.9	53	14.5	85	23.9		
22	6.2	54	14.8	86	24.2		
23	6.5	55	15.1	87	24.5		
24	6.7	56	15.4	88	24.9		
25	7.0	57	15.6	89	25.2		
26	7.2	58	15.9	90	25.5		
27	7.5	59	16.2	91	25.8		
28	7.8	60	16.5	92	26.1		
29	8.0	61	16.8	93	26.5		
30	8.3	62	17.1	94	26.8		
31	8.6	63	17.3	95	27.1		

MIDI Implementation Chart

[Portable Keyboard] Date : 30-NOV-2000 Model : PSR-550 MIDI Implementation Chart Version : 1.0

Function.		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 - 16	1 - 16	
Mode	Default Messages Altered	3 X ********	3 x x	
Note Number	: True voice	0 - 127	0 - 127 0 - 127	
Velocity	Note ON Note OFF	o 9nH,v=1-127 x 9nH,v=0	o 9nH,v=1-127 x	
After Touch	Key's Ch's	x x	x o	
Pitch Ben	d	0	0	
Control Change Prog Change	0,32 1,5,11 7,10 6,38 64,66-67 65 72 71,73-74 84 91,93-94 96-97 98-99 100-101	O	0 0 0 0 0 0 0 0 0 0 0 0 0	Bank Select Data Entry Portamento Sound Controller Sound Controller Portament Cntrl Effect SendLevel Data Inc,Dec NRPN LSB,MSB RPN LSB,MSB
System E	xclusive	0	0	
Common	: Song Pos. : Song Sel. : Tune	x x x	x x x	
System Real Time	: Clock e : Commands	0	0	
Aux Mes- sages	: All Sound Off : Reset All Cntrls : Local ON/OFF : All Notes OFF : Active Senseo : Reset	X X X X O	o o x o (123-127)	

 Mode 1 : OMNI ON, POLY
 Mode 2 : OMNI ON, MONO
 o : Yes

 Mode 3 : OMNI OFF, POLY
 Mode 4 : OMNI OFF, MONO
 x : No

MIDI Implementation Chart

- The tracks for each channel can be selected on the panel. See page 114 for more information.
- Incoming MIDI messages control the PSR-550 as 16 channel multi timbral tone generator when initially shipped (factory set). The MIDI messages don't affect the panel controls including the Panel Voice selection since they are directly sent to the tone generator of the PSR-550.

However, the following MIDI messages affects the panel controls such as Panel Voice, Style, Multi Pad and Song settings:

- MIDI MASTER TUNE, MASTER TUNE (XG System Parameter)
- TRANSPOSE (XG System Parameter).
- System Exclusive Messages related to the REVERB, CHO-RUS and DSP EFFECT settings.

Also, the MIDI messages affect the panel settings when one of the following MIDI reception modes is selected.

These modes can be selected on the panel (see page 115).

Keyboard: The Note On/Off messages received at the designated Keyboard (receive) channel are processed the same as the notes normally played on the keyboard. In this mode, only the following channel messages will be recognized:

- Note On/Off
- Control Changes

Bank Select (R1 voice only)

Modulation

Volume(R1 voice only)

Data entry

Pan (R1 voice only)

Expression

Sustain

Sostenuto

Soft Pedal

Harmonic Content

Release time

Brightness

Reverb send level (R1 voice only)

Chorus send level (R1 voice only)

Variation send level (R1 voice only)

RPN(Pich bend sensitivity)

All Notes Off

- Program Change (R1 voice only)
- Pitch Bend

Root:

The note on/off messages received at the channel(s) set to "Root" are recognized as the bass notes in the accompaniment section.

The bass notes will be detected regardless of the

accompaniment on/off the PSR-550.

However, the following MIDI messages affects and

split point settings on the PSR-550 panel.

Chord:

The note on/off messages received at the channel(s) set to "Chord" are recognized as the fingerings in the

accompaniment section.

The chords to be detected depend on the fingering

mode on the PSR-550.

The chords will be detected regardless of the accompaniment on/off and split point settings on the

PSR-550 panel.

Off:

The MIDI channel messages will not be received at

the designated channel.

Index

AC adaptor 12 Easy Navigator Accompaniment 32 Echo Accompaniment style 32 Edit 86, 88, 9 Accompaniment track 37 Ending EsEQ ACMP 33 EXIT External Auto Accompaniment 32 Auto Accompaniment on/off 25, 33 F	51, 134 91, 94, 102 34 109 17 116 16, 46, 49 38, 39 38, 40 38
Accompaniment 32 Echo Accompaniment style 32 Edit 86, 88, 9 Accompaniment track 37 Ending EsEQ Accompaniment volume 37 ESEQ EXIT Accompaniment 122 External Auto Accompaniment 32	51, 134 91, 94, 102 34 109 17 116 16, 46, 49 38, 39 38, 40 38
Accompaniment style 32 Edit 86, 88, 9 Accompaniment track 37 Ending Ending Accompaniment volume 37 ESEQ EXIT Accompaniment 122 External Auto Accompaniment 32 External	01, 94, 102
Accompaniment track 37 Ending ESEQ ESEQ EXIT Acsignable 122 External Auto Accompaniment 32	34 109 17 116 38, 39 38, 40 38, 40
Accompaniment volume 37 ESEQ EXIT External Auto Accompaniment 32	
ACMP	17 116 38, 39 38, 40 17, 38
Assignable	
Auto Accompaniment	16, 46, 49 38, 39 38, 40 17, 38
· · · · · · · · · · · · · · · · · · ·	38, 39 38, 40 17, 38
	38, 39 38, 40 17, 38
	38, 39 38, 40 17, 38
A . F.11	38, 40 17, 38
1 ingeleut	17, 38
Fingered2	
Fingering	5 Q
BACK	
Backlight	*
Backup	
Bank	
BASS	
Bass Hold Function 17	, ,
Batteries12 Function tree	22
Beat indicator	
Break	
GM (General MIDI)	9, 68, 109
Chord	
Chord Fingerings	
Chord Match	
CHORD1	
CHORD2	
Chorus	110, 111
Clear	
Clock	
Control Change	59
Copy64 Initial send	117
Initialization	136
Insertion effect	50, 132
Data dial	116
DC IN 10-12V jack	
Default20	
Delete21, 67	
Demo song	20
Digital effect	
Direct Access	31
DISK IN USE58	
Disk drive	
Disk mode	
Display 16 Load	
DOC	
Drum Cancel 99 Loop recording	
Drum Kit	112
Drum Kit List	
DSP	

Index

M	R
Main34	Receive
Master Tuning119	Record
Master Volume15	Record mode25
Maximum Polyphony123	Regist +
Measure16, 71, 84	Regist
Menu16, 17	Registration Memory54
Metronome118	Rehearsal mode25
MIDI106	Repeat45, 69, 72
MIDI Data Format139	Return Level47, 48, 49
MIDI Implementation Chart151	Reverb46
MIDI terminals107	RHYTHM MAIN37, 96
Mixer17, 74, 76	RHYTHM SUB37, 96
Mode25	Right29
Multi Finger	Ritardando35
Multi Pad43, 92	Root
Multi Track Recording78, 79, 82	
Music Database14	8
Music Database List131	Save60
Music stand9	Scale Tuning
	Section34
N	Send Level47, 48, 49
Name21, 56, 65, 90, 94, 104	Setting up12
NEXT17	Shift21
Note on/off106	Single Finger38
Number buttons20	SLOW16, 46, 49
	Soft121
0	Song Copy64
Octave	Song Menu72
One Touch Setting42	Song mode25
Overddub97	Song Play mode69
	Song volume70
P	Sostenuto
Packing List4	Specification
Pan	Split Point29, 40, 120
Panel voice	Standard MIDI
PART ON/OFF	STANDBY switch15
Pitch Bend	Start Measure71
Pitch Bend Range	START/STOP25, 32, 69, 81, 83, 93, 99
Polarity	Style
Program Change	Style File
Punch In/Out84	Style List
	Style mode25
ſ	Sustain
Nuantiza 96 100	SYNC START25, 33
Quantize 86, 102 Quick Recording 78, 79, 80	SYNC STOP41
Quick Recording	Synchro Start
	Synchro Stop41, 121
	Synchronized Start standby25
	System affect 50, 132

Specifications

Keyboards

 61 standard-size keys (C1 — C6) with touch response.

Display

· Large multi-function LCD display

Setup

STANDBY/ON

• Master Volume : MIN - MAX

Demo

• 9 Songs

Realtime Controls

· Pitch Bend wheel

Control & Number Buttons

- SONG
- STYLE
- MUSIC DATABASE
- VOICE L
- VOICE R1
- VOICE R2
- VOICE CHANGE
- MIXER
- NEXT/BACK
- DIRECT ACCESS
- EXIT
- Data dial, [1] [0], [+/YES], [-/NO]

Overall Controls

- Tempo: 32 280
- Transpose

Voice

- 219 Panel Voices +14 Drum Kits + 480 XG Voices
- Polyphony: 32
- Voice Set
- R1/R2/L Voices
- Part on/off (R1/R2/L)
- Voice Change : Voice number
- Mixer: Volume, Octave, Pan, Reverb Depth, Chorus Depth, DSP Depth

Auto Accompaniment

- 112 Styles
- Accompaniment Track: RHYTHM SUB/ MAIN, BASS, CHORD 1/2, PAD, PHRASE1/2
- Accompaniment Track Settings : ON/OFF
- Accompaniment Control : ACMP ON/OFF, SYNC START, SYNC STOP, START/ STOP, INTRO, MAIN A/B (AUTO FILL), ENDING/rit
- · Beat Indicator
- Accompaniment Volume
- Voice Change : Voice number
- Mixer: Volume, Pan, Reverb depth, Chorus depth, DSP depth
- One Touch Setting
- Fingering Mode: Multi Finger/Single Finger/Fingered 1/Fingered 2/Full Keyboard

Music Database

• 220

Multi Pads

- 40 Multi Pad Banks
- 4 Pads + STOP
- Chord Match
- Naming

Digital Effects

- Reverb : 24 typesChorus : 16 types
- DSP (system/insertion): 74 types
- Harmony/Echo : 22 types

Registration Memory

- 32 Registration Banks: 1 4
- Naming
- Accompaniment Freeze

Disk Operations

- Song playback/recording
- · Load (Style/Multi Pad/Registration Memory)
- Save (Style/Multi Pad/Registration Memory)
- . Utility: Format, Song Copy, Delete File

Song

- Song Volume
- Song Track Settings : ON/OFF
- Repeat Play
- Song Transpose

Song Recording

- Quick Record, Multi Record
- Recording Tracks: 1 16
- Punch In/Punch Out
- Quantize
- Naming
- Clear
- Setup Data : Volume, Octave, Pan, Reverb depth, Chorus depth, DSP depth

Multi Pad Recording

- User Pad Bank: 4 (41 44)
- Naming
- Clear
- Chord Match

Style Recording

- User Styles: 3 (113 115)
- Recording Tracks : 6 Sections x 8 tracks
- Drum Cancel
- Quantize
- Naming
- Clear

MIDI

- Transmit settings
- Receive settings
- Local Control
- Clock
- Initial Data Send
- MIDI template

Other functions

- Metronome
- Upper OctaveMaster Tuning
- Scale Tuning
- Scale luningSplit Point
- Touch Sensitivity
- Voice Set
- Footswitch function
- Pitch Bend Range

Auxiliary Jacks

 DC IN 10-12V, PHONES/OUTPUT, SUSTAIN, MIDI IN/OUT, TO HOST

Amplifiers

- 6W + 6W (when using PA-6 power adaptor)
- 4.5W + 4.5W (when using batteries)

Speakers

• 12 cm (4-3/4") x 2, 3 cm (1-3/16") x 2

Power Consumption

• 22W (when using PA-6 power adaptor)

Power Supply

- Adaptor : Yamaha PA-6 AC power adaptor Rated Voltage DC 10-12V Rated Current 2A
- Batteries : Six "D" size, R20P (LR20) or equivalent batteries

Dimensions (W x D x H)

• 952 x 387 x 169 (mm) (37-1/2" x 15-1/4" x 6-5/8")

Weight

• 8.7 Kg (19.2 lbs.) excluding batteries

Supplied Accessories

- Data Disk
- Music StandOwner's Manual
- **Optional Accessories**

· Keyboard Stand

Headphones : HPE-150
AC Power Adaptor : PA-6
Foot Switch : FC4, FC5

: L-6. L-7

^{*} Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

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.

(class B)

Entsorgung leerer Batterien (nur innerhalb Deutschlands)

Leisten Sie einen Beitrag zum Umweltschutz. Verbrauchte Batterien oder Akkumulatoren dürfen nicht in den Hausmüll. Sie können bei einer Sammelstelle für Altbatterien bzw. Sondermüll abgegeben werden. Informieren Sie sich bei Ihrer Kommune.

(battery)

OBSERVERA!

Apparaten kopplas inte ur växelströmskällan (nätet) sá länge som den ar ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspæendingen til dette apparat er IKKE afbrudt, sálæenge netledningen siddr i en stikkontakt, som er t endt — også selvom der or slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.

(standby)

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

Limited Warranty

90 DAYS LABOR 1 YEAR PARTS

Yamaha Corporation of America, hereafter referred to as Yamaha, warrants to the original consumer of a product included in the categories listed below, that the product will be free of defects in materials and/or workmanship for the periods indicated. This warranty is applicable to all models included in the following series of products:

PSR SERIES OF PORTATONE ELECTRONIC KEYBOARDS

If during the first 90 days that immediately follows the purchase date, your new Yamaha product covered by this warranty is found to have a defect in material and/or workmanship, Yamaha and/or its authorized representative will repair such defect without charge for parts or labor.

If parts should be required after this 90 day period but within the one year period that immediately follows the purchase date, Yamaha will, subject to the terms of this warranty, supply these parts without charge. However, charges for labor, and/or any miscellaneous expenses incurred are the consumers responsibility. Yamaha reserves the right to utilize reconditioned parts in repairing these products and/or to use reconditioned units as warranty replacements.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY WHICH YAMAHA MAKES IN CONNECTION WITH THESE PRODUCTS. ANY IMPLIED WARRANTY APPLICABLE TO THE PRODUCT, INCLUDING THE WARRANTY OF MERCHANT ABILITY IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY. YAMAHA EXCLUDES AND SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations that relate to implied warranties and/or the exclusion of incidental or consequential damages. Therefore, these limitations and exclusions may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

CONSUMERS RESPONSIBILITIES

If warranty service should be required, it is necessary that the consumer assume certain responsibilities:

- 1. Contact the Customer Service Department of the retailer selling the product, or any retail outlet authorized by Yamaha to sell the product for assistance. You may also contact Yamaha directly at the address provided below.
- 2. Deliver the unit to be serviced under warranty to: the retailer selling the product, an authorized service center, or to Yamaha with an explanation of the problem. Please be prepared to provide proof purchase date (sales receipt, credit card copy, etc.) when requesting service and/or parts under warranty.
- 3. Shipping and/or insurance costs are the consumers responsibility.* Units shipped for service should be packed securely.

*Repaired units will be returned PREPAID if warranty service is required within the first 90 days.

IMPORTANT: Do NOT ship anything to ANY location without prior authorization. A Return Authorization (RA) will be issued that has a tracking number assigned that will expedite the servicing of your unit and provide a tracking system if needed.

4. Your owners manual contains important safety and operating instructions. It is your responsibility to be aware of the contents of this manual and to follow all safety precautions.

EXCLUSIONS

This warranty does not apply to units whose trade name, trademark, and/or ID numbers have been altered, defaced, exchanged removed, or to failures and/or damages that may occur as a result of:

- 1. Neglect, abuse, abnormal strain, modification or exposure to extremes in temperature or humidity.
- 2. Improper repair or maintenance by any person who is not a service representative of a retail outlet authorized by Yamaha to sell the product, an authorized service center, or an authorized service representative of Yamaha.
- 3. This warranty is applicable only to units sold by retailers authorized by Yamaha to sell these products in the U.S.A., the District of Columbia, and Puerto Rico. This warranty is not applicable in other possessions or territories of the U.S.A. or in any other country.

Please record the model and serial number of the product you have purchased in the spaces provided below.

Model	Serial #	Sales Slip #
Purchased from		Date

YAMAHA CORPORATION OF AMERICA

Electronic Service Division 6600 Orangethorpe Avenue Buena Park, CA 90620

KEEP THIS DOCUMENT FOR YOUR RECORDS. DO NOT MAIL!

For details of products, please contact your nearest Yamaha 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, Scarborough, Ontario, M1S 3R1, Canada Tel: 416-298-1311

Yamaha Corporation of America

6600 Orangethorpe Ave., Buena Park, Calif. 90620, U.S.A.

Tel: 714-522-9011

CENTRAL & SOUTH AMERICA

MEXICO

Yamaha de Mexico S.A. De C.V., Departamento de ventas

Javier Rojo Gomez No.1149, Col. Gpe Del Moral, Deleg. Iztapalapa, 09300 Mexico, D.F. Tel: 686-00-33

BRAZIL

Yamaha Musical do Brasil LTDA.

Av. Rebouças 2636, São Paulo, Brasil Tel: 011-853-1377

ARGENTINA

Yamaha Music Argentina S.A.

Viamonte 1145 Piso2-B 1053, Buenos Aires, Argentina Tel: 1-4371-7021

PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ **CARIBBEAN COUNTRIES**

Yamaha de Panama S.A.

Torre Banco General, Piso 7, Urbanización Marbella, Calle 47 y Aquilino de la Guardia, Ciudad de Panamá, Panamá

Tel: 507-269-5311

EUROPE

THE UNITED KINGDOM

Yamaha-Kemble Music (U.K.) Ltd.

Sherbourne Drive, Tilbrook, Milton Keynes, MK7 8BL, England Tel: 01908-366700

IRELAND

Danfay Ltd.

61D, Sallynoggin Road, Dun Laoghaire, Co. Dublin Tel: 01-2859177

GERMANY/SWITZERLAND

Yamaha Europa GmbH.

Siemensstraße 22-34, 25462 Rellingen, F.R. of Germany Tel: 04101-3030

AUSTRIA

Yamaha Music Austria

Schleiergasse 20, A-1100 Wien Austria Tel: 01-60203900

THE NETHERLANDS

Yamaha Music Nederland

Kanaalweg 18G, 3526KL, Utrecht, The Netherlands Tel: 030-2828411

BELGIUM

Yamaha Music Belgium

Keiberg Imperiastraat 8, 1930 Zaventem, Belgium Tel: 02-7258220

Yamaha Musique France,

Division Claviers

BP 70-77312 Marne-la-Vallée Cedex 2, France Tel: 01-64-61-4000

ITALY

Yamaha Musica Italia S.P.A., Home Keyboard Division

Viale Italia 88, 20020 Lainate (Milano), Italy Tel: 02-935-771

SPAIN/PORTUGAL

Yamaha-Hazen Electronica Musical, S.A.

Ctra. de la Coruna km. 17, 200, 28230 Las Rozas (Madrid) Spain Tel: 91-201-0700

GREECE

Philippe Nakas S.A.

Navarinou Street 13, P.Code 10680, Athens, Greece Tel: 01-364-7111

SWEDEN

Yamaha Scandinavia AB

J. A. Wettergrens Gata 1 Box 30053 S-400 43 Göteborg, Sweden Tel: 031 89 34 00

DENMARK

YS Copenhagen Liaison Office

Generatorvej 8B

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

Norsk filial av Yamaha Scandinavia AB

Grini Næringspark 1 N-1345 Østerås, Norway Tel: 67 16 77 70

Skifan HF

Skeifan 17 P.O. Box 8120 IS-128 Reykjavik, Iceland Tel: 525 5000

OTHER EUROPEAN COUNTRIES

Yamaha Europa GmbH.

Siemensstraße 22-34, 25462 Rellingen, F.R. of Germany Tel: 04101-3030

AFRICA

Yamaha Corporation,

Asia-Pacific Music Marketing Group

Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650 Tel: 053-460-2312

MIDDLE EAST

TURKEY/CYPRUS

Yamaha Europa GmbH.

Siemensstraße 22-34, 25462 Rellingen, F.R. of Germany Tel: 04101-3030

OTHER COUNTRIES

Yamaha Music Gulf FZE

LB21-128 Jebel Ali Freezone P.O.Box 17328, Dubai, U.A.E. Tel: 971-4-881-5868

ASIA

HONG KONG

Tom Lee Music Co., Ltd.

11/F., Silvercord Tower 1, 30 Canton Road, Tsimshatsui, Kowloon, Hong Kong Tel: 2737-7688

INDONESIA

PT. Yamaha Music Indonesia (Distributor) PT. Nusantik

Gedung Yamaha Music Center, Jalan Jend, Gatot Subroto Kav. 4, Jakarta 12930, Indonesia Tel: 21-520-2577

KOREA

Cosmos Corporation

1461-9, Seocho Dong, Seocho Gu, Seoul, Korea Tel: 02-3486-0011

MALAYSIA

Yamaha Music Malaysia, Sdn., Bhd.

Lot 8, Jalan Perbandaran, 47301 Kelana Jaya, Petaling Jaya, Selangor, Malaysia Tel: 3-703-0900

PHILIPPINES

Yupangco Music Corporation

339 Gil J. Puyat Avenue, P.O. Box 885 MCPO, Makati, Metro Manila, Philippines Tel: 819-7551

SINGAPORE

Yamaha Music Asia Pte., Ltd.

11 Ubi Road #06-00, Meiban Industrial Building, Singapore Tel: 65-747-4374

TAIWAN

Yamaha KHS Music Co., Ltd.

10F, 150, Tun-Hwa Northroad, Taipei, Taiwan. R.O.C. Tel: 02-2713-8999

THAILAND

Siam Music Yamaha Co., Ltd.

121/60-61 RS Tower 17th Floor, Ratchadaphisek RD., Dindaeng, Bangkok 10320, Thailand Tel: 02-641-2951

THE PEOPLE'S REPUBLIC OF CHINA AND OTHER ASIAN COUNTRIES

Yamaha Corporation,

Asia-Pacific Music Marketing Group

Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650 Tel: 053-460-2317

OCEANIA

AUSTRALIA

Yamaha Music Australia Pty. Ltd.

Level 1, 99 Queensbridge Street, Southbank, Victoria 3006, Australia Tel: 3-9693-5111

NEW ZEALAND

Music Houses of N.Z. Ltd.

146/148 Captain Springs Road, Te Papapa, Auckland, New Zealand Tel: 9-634-0099

COUNTRIES AND TRUST TERRITORIES IN PACIFIC OCEAN

Yamaha Corporation,

Asia-Pacific Music Marketing Group

Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650 Tel: 053-460-2312



Yamaha PK CLUB (Portable Keyboard Home Page, English only)
http://www.yamaha.co.jp/english/product/pk

Yamaha Manual Library (English versions only) http://www2.yamaha.co.jp/manual/english/

M.D.G., Pro Audio & Digital Musical Instrument Division, Yamaha Corporation © 2001 Yamaha Corporation