



PORTATONE

PSR-350

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

92-BP (bottom)

FCC INFORMATION (U.S.A.)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance

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

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

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

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

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

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

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

(class B)

OBSERVERA!

Apparaten kopplas inte ur växelströmskällan (nätet) så länge som den är ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSSEL: Netspændingen til dette apparat er IKKE afbrudt, så længe netledningen sidder i en stikkontakt, som er tændt — også selvom der er slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytin ei irroita koko laitetta verkosta.

(standby)

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)

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-5C 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 and storing the floppy disks 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.

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

Congratulations on your purchase of the Yamaha PSR-350 PortaTone!

You now own a portable keyboard that combines advanced functions, great sound and exceptional ease-of-use in a highly compact package. Its outstanding features also make it a remarkably expressive and versatile instrument.

Read this Owner's Manual carefully while playing your new PSR-350 in order to take full advantage of its various features.

Main Features

The PSR-350 is a sophisticated yet easy-to-use keyboard with the following features and functions:



■ MUSIC DATABASE page 49

The PSR-350 has an advanced, easy-to-use Music Database feature that automatically selects the style, voice, and effect settings for playing in a specific type of music. This can be a big help if you know what genre of music you want to play, but you don't know what settings to make. Just select the genre, and the PSR-350 takes care of the rest!



■ Disk Drive page 69

The PSR-350 also features a convenient floppy disk drive letting you load and save your own original User Songs or load the Style Files. The PSR-350 is also compatible with a wide variety of disk formats, allowing you to play back song data on commercially available GM, DOC, and Clavinova Disklavier Piano Soft disks.

It also allows you to save and play back Standard MIDI File (SMF) format 0 data, making it possible to use song data with your favorite sequencer or sequencing software.



■ Powerful Speaker System

The built-in stereo amplifier/speaker system of the PSR-350 with a special Bass Boost feature — provides exceptionally powerful, high-quality sound, letting you hear the full dynamic range of the PSR-350's authentic voices.

Other powerful features include:

- The advanced **Yamaha Education Suite** — a special set of learning tools that make it easy and fun to master the keyboard. These tools include **Lesson**, which guides you through the parts of a song just as a teacher would, **Grade & Talking**, which evaluates your practice sessions and rates your performance, and **Dictionary**, which teaches you how to play chords.
- Instant **Portable Grand** function, for automatically configuring the PSR-350 for optimum piano play. Includes an authentic Stereo Sampled Piano voice and special piano-accompaniment Pianist styles.
- Exciting **DJ** feature, which puts a wealth of dance/DJ sounds and rhythms at your fingertips.
- **618** exceptionally **realistic and dynamic voices**, utilizing digital recordings of actual instruments.
- Special **Split voices**, with two different voices playable from separate sections of the keyboard.
- 10 different **Drum Kit voices**, with individual drum and percussion sounds on each key.
- High-quality **Reverb, DSP, and Harmony effects** for enhancing the sound of the voices — and your performance.
- **106 auto accompaniment styles**, each with Intro, Main A and B, and Ending sections. An Auto Fill function adds dynamic fills when switching sections.
- Powerful, easy-to-use **song recording** operations, for recording and playing back up to five of your original songs.
- **Registration Memory** presets for storing all of the PSR-350's panel settings to a single button for instant and automatic recall.
- **One Touch Setting** function for automatically calling up an appropriate voice to match the style or song you select.
- **Touch Response** and **Dynamic Filter** that give you extraordinarily expressive control over the voices. They automatically change both the volume and tone according to your playing strength — just like a real musical instrument!
- Full MIDI and **General MIDI (GM) compatibility**, letting you easily integrate the PSR-350 into a MIDI music system, and use the built-in GM voices with all GM software.

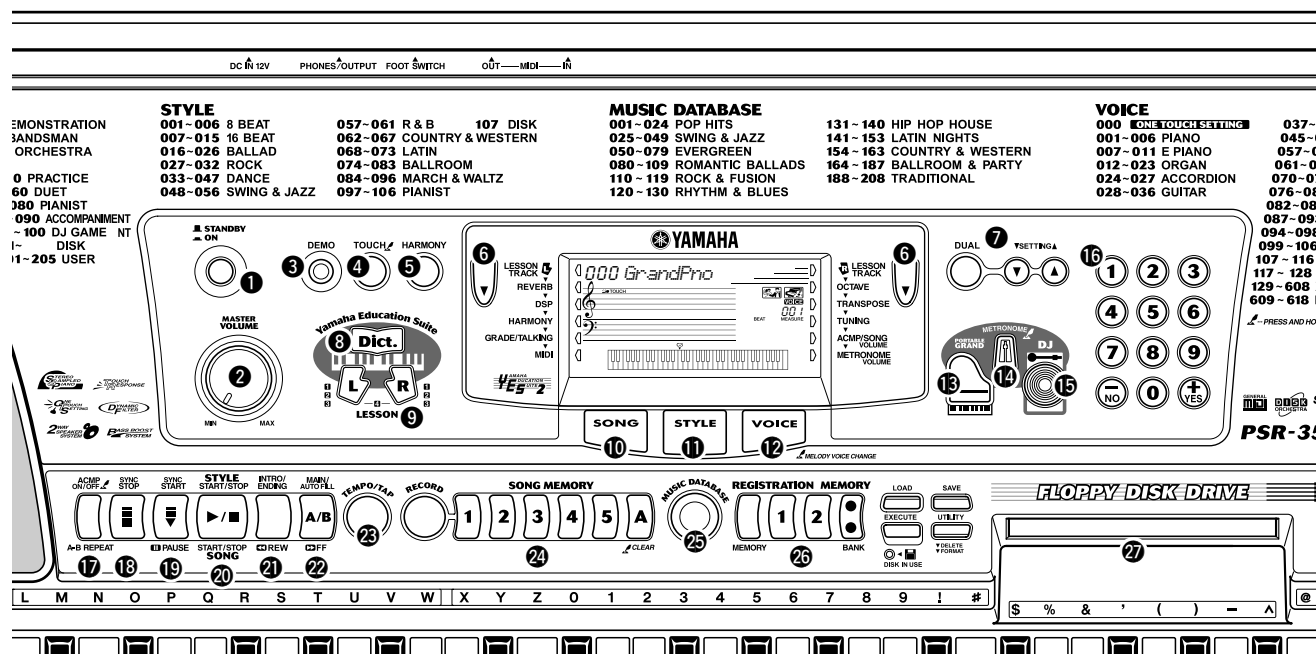
Contents

Panel Controls and Terminals	6	Selecting and Playing Songs	53
Setting Up	8	• Selecting and Playing a Song	53
• Power Requirements	8	• A-B Repeat	54
• Turning On the Power	8	• Melody Voice Change	55
• Accessory Jacks	9	• Changing the Tempo	56
		• Adjusting the Song Volume	57
		Song Recording	58
		• Recording a User Song	58
		• Song Clear	61
		• Track Clear	62
		Song Lesson	63
		• Using the Lesson Feature	63
		• Select the Lesson Track	65
		• Lesson 1 — Timing	65
		• Lesson 2 — Waiting	66
		• Lesson 3 — Minus One	66
		• Lesson 4 — Both Hands	67
		• Grade/Talking	68
		Disk Operations	69
		• Disk Song Playback	71
		• Save	72
		Saving files in SMF Format 0	74
		• Load	75
		• Utility — Delete	76
		• Utility — Formatting an Unformatted Disk	77
		• Utility — Formatting a Previously Formatted Disk	78
		MIDI Functions	79
		• What Is MIDI?	79
		• Connecting to a Personal Computer	81
		• Local Control	82
		• Using Initial Setup Send with a Sequencer	83
		• External Clock	84
		Troubleshooting	85
		Data Backup & Initialization	86
		Voice List	87
		Style List	94
		Music Database List	95
		Drum Kit List	96
		MIDI Implementation Chart	98
		Effect map	100
		Specifications	101
		Index	102
Panel Display Indications	18		
Portable Grand	20		
• Playing the Portable Grand	20		
• Using the Metronome	20		
DJ	22		
• Playing the DJ	22		
Playing Voices	23		
• Playing a Voice	23		
• Dual Voice	25		
• One Touch Setting	27		
• Transpose and Tuning	27		
• Touch and Touch Sensitivity	29		
Effects	30		
• Reverb	30		
• DSP	31		
• Harmony	32		
Auto Accompaniment	35		
• Selecting a Style	35		
• Playing the Accompaniment	36		
• Sync Stop	40		
• Changing the Tempo	41		
• Accompaniment Sections (Main A/B and Fill-ins)	41		
• Adjusting the Accompaniment Volume	42		
• Using Auto Accompaniment — Multi Fingering	43		
• Setting the Split Point	45		
• Dictionary	46		
Using the Music Database	49		
• Data stored by the Music Database	50		
Registration Memory	51		
• Registration Memory Presets	51		
• Recording a Registration Memory Preset	51		
• Recalling a Registration Memory Preset	52		



Panel Controls and Terminals

■ Front Panel



1 Power switch ([STANDBY/ON])

2 [MASTER VOLUME] dial

This determines the overall volume of the PSR-350.

3 [DEMO] button

This is used to play the Demo songs. (See page 12.)

4 [TOUCH] button

This turns the Touch function on and off. (See page 29.) Holding down this button allows you to adjust the Touch Sensitivity setting. (See page 29.)

5 [HARMONY] button

This turns the Harmony effect on and off. (See page 32.)

6 Overall (left, right) buttons

These two buttons on either side of the LCD let you call up various functions, settings, and operations of the PSR-350, including effects, transpose, tuning, and MIDI. (See page 18.)

7 [DUAL] and [SETTING ▲/▼] buttons

Use the [DUAL] button to turn the Dual voice on or off. Use the [SETTING ▲/▼] buttons to set the parameters related to the Main and Dual voices.

8 [Dict.] (DICTIONARY) button

This calls up the Dictionary function (page 46).

9 LESSON [L] (Left) and [R] (Right) buttons

These call up the Lesson exercises for the corresponding hand (left or right) for the selected song. (See page 64.)

10 [SONG] button

This is for enabling song selection. (See page 53.)

11 [STYLE] button

This is for enabling style selection. (See page 35.)

12 [VOICE] button

This is for enabling voice selection. (See page 23.) Holding down this button calls up the Melody Voice Change function. (See page 55.)

13 [PORTABLE GRAND] button

This instantly calls up the Grand Piano voice, plus a special piano song and style. (See page 10.)

14 [METRONOME] button

This turns the metronome on and off. (See page 20.)

15 [DJ] button

This instantly calls up a special DJ voice, song and style.

16 Numeric keypad, [+ / YES] and [- / NO] buttons

These are used for selecting songs, voices, and styles. (See pages 24.) They are also used for adjusting certain settings and answering certain display prompts.

17 [ACMP ON/OFF] / [A-B REPEAT] button

When the Style mode is selected, this turns the auto accompaniment on and off. (See page 36.) In the Song mode, this calls up the A-B Repeat function. (See page 54.)

18 [SYNC STOP] button

This turns the Sync Stop function on and off. (See page 40.)

19 [SYNC START] / [PAUSE] button

This turns the Sync Start function on and off. (See page 37.) In the Song mode, it is used to temporarily pause song playback. (See page 55.)

20 [START/STOP] button

When the Style mode is selected, this alternately starts and stops the auto accompaniment. (See page 36.) In the Song mode, this alternately starts and stops song playback. (See page 54.)

21 [INTRO/ENDING] / [REW] button

When the Style mode is selected, this is used to control the Intro and Ending functions. (See page 36.) When the Song mode is selected, this is used as a “rewind” control, or move the song playback point back toward the beginning.

22 [MAIN/AUTO FILL] / [FF] button

When the Style mode is selected, these are used to change auto accompaniment sections and control the Auto Fill function. (See page 41.) When the Song

mode is selected, this is used as a “fast forward” control, or move the song playback point toward the end.

23 [TEMPO/TAP] button

This button is used to call up the Tempo setting, letting you set the Tempo with the numeric keypad or [+]/[-] buttons. (See page 20.) It also allows you to tap out the tempo and automatically start a selected song or style at that tapped speed. (See page 37.)

24 [SONG MEMORY] buttons

These buttons ([RECORD], [1] - [5], [A]) are used for song recording, letting you record up to six different tracks of a song (including a special Chord track). (See page 59.) They are also used for clearing recorded data of all or specific tracks of a User song. (See pages 61, 62.)

25 MUSIC DATABASE button

This calls up the optimum panel settings for selected music genre. (See page 49.)

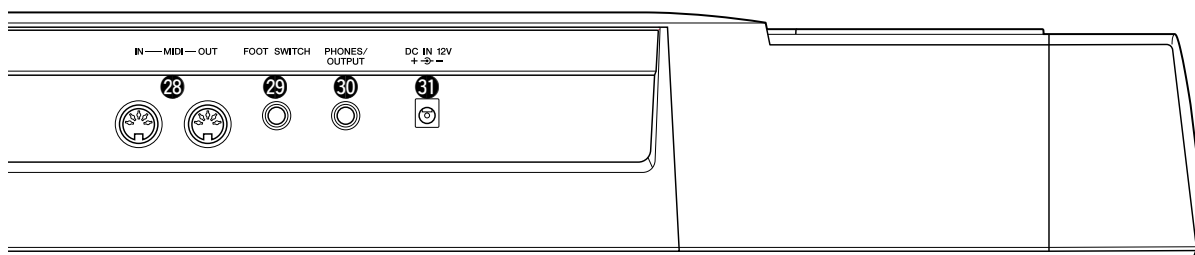
26 REGISTRATION MEMORY buttons

These are used for selecting and recording the Registration Memory presets. (See page 51.)

27 Disk Drive

This is for insertion of floppy disks, for loading and saving of data. (See page 69.)

■ Rear Panel



28 MIDI IN, OUT terminals

These are for connection to other MIDI instruments and devices. (See page 80.)

29 FOOTSWITCH jack

This is for connection to an optional FC4 or FC5 Footswitch for control over sustain, just like the damper pedal on a piano. (See page 9.)

30 PHONES/OUTPUT jack

This is for connection to a set of stereo headphones or to an external amplifier/speaker system. (See page 9.)

31 DC IN 12V jack

This is for connection to a PA-5C AC power adaptor. (See page 8.)



Setting Up

This section contains information about setting up your PSR-350 for playing. Make sure to read this section carefully before using the instrument.

Power Requirements

Although the PSR-350 will run either from an optional AC adaptor or batteries, Yamaha recommends use of an AC adaptor whenever possible. An AC adaptor is more environmentally friendly than batteries and does not deplete resources.

■ Using an AC Power Adaptor

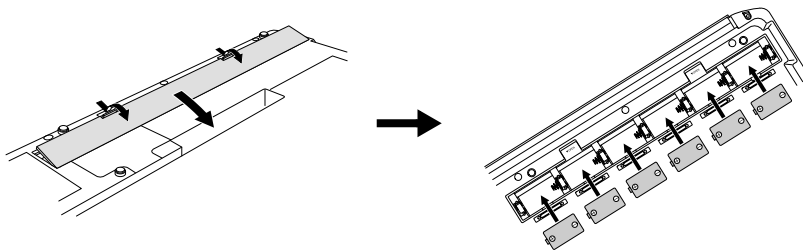
To connect your PSR-350 to a wall socket, you will need the optionally available Yamaha PA-5C Power Adaptor. Use of other AC adaptors could result in damage to the instrument, so be sure to ask for the right kind.

Make sure that the [STANDBY/ON] switch of the PSR-350 is set to STANDBY. Connect one end of the adaptor to the DC IN 12V jack on the rear panel of your PSR-350, and the other end to a suitable electrical outlet.

■ Using Batteries

● Inserting Batteries

Turn the instrument upside-down and remove the battery compartment lid. Insert six 1.5-volt “D” size, R20P (LR20) or equivalent batteries as shown in the illustration, making sure that the positive and negative terminals are properly aligned, and replace the lid.



● When the Batteries Run Down

When the batteries run low and the battery voltage drops below a certain level, the PSR-350 may not sound or function properly. As soon as this happens, replace them with a complete set of six new batteries.

⚠ CAUTION

- Never interrupt the power supply (e.g. remove the batteries or unplug the AC adaptor) during any PSR-350 record operation! Doing so can result in a loss of data.

⚠ WARNING

- Use ONLY a Yamaha PA-5C 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-350.
- Unplug the AC Power Adaptor when not using the PSR-350, or during electrical storms.

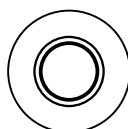
⚠ CAUTION

- Never mix old and new batteries or different types of batteries (e.g., alkaline and manganese).
- To prevent possible damage from battery leakage, remove the batteries from the instrument if it is not to be used for a long time.

Turning On the Power

With the AC power adaptor connected or with batteries installed, simply press the power switch until it locks in the ON position. When the instrument is not in use, be sure to turn the power off. (Press the switch again so that it pops up.)

■ STANDBY
▲ ON



⚠ CAUTION

- 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-350 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.

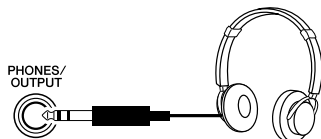
Accessory Jacks

■ Using Headphones

For private practicing and playing without disturbing others, connect a set of stereo headphones to the rear panel PHONES/OUTPUT jack. Sound from the built-in speaker system is automatically cut off when you insert a headphone plug into this jack.

■ Connecting a Keyboard Amplifier or Stereo System

Though the PSR-350 is equipped with a built-in speaker system, you can also play it through an external amplifier/speaker system. First, make sure the PSR-350 and any external devices are turned off, then connect one end of a stereo audio cable to the LINE IN or AUX IN jack(s) of the other device and the other end to the rear panel PHONES/OUTPUT jack on the PSR-350.

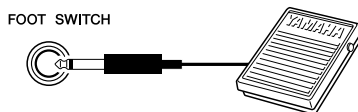


⚠ CAUTION

- To prevent damage to the speakers, set the volume of the external devices at the minimum setting before connecting them. Failure to observe these cautions may result in electric shock or equipment damage. Also, be sure to set the volumes of all devices at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

■ Using a Footswitch

This feature lets you use an optional footswitch (Yamaha FC4 or FC5) to sustain the sound of the voices. The footswitch functions the same way as a damper pedal on an acoustic piano — press and hold down the footswitch as you play the keyboard to sustain the sound.

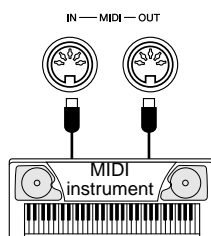


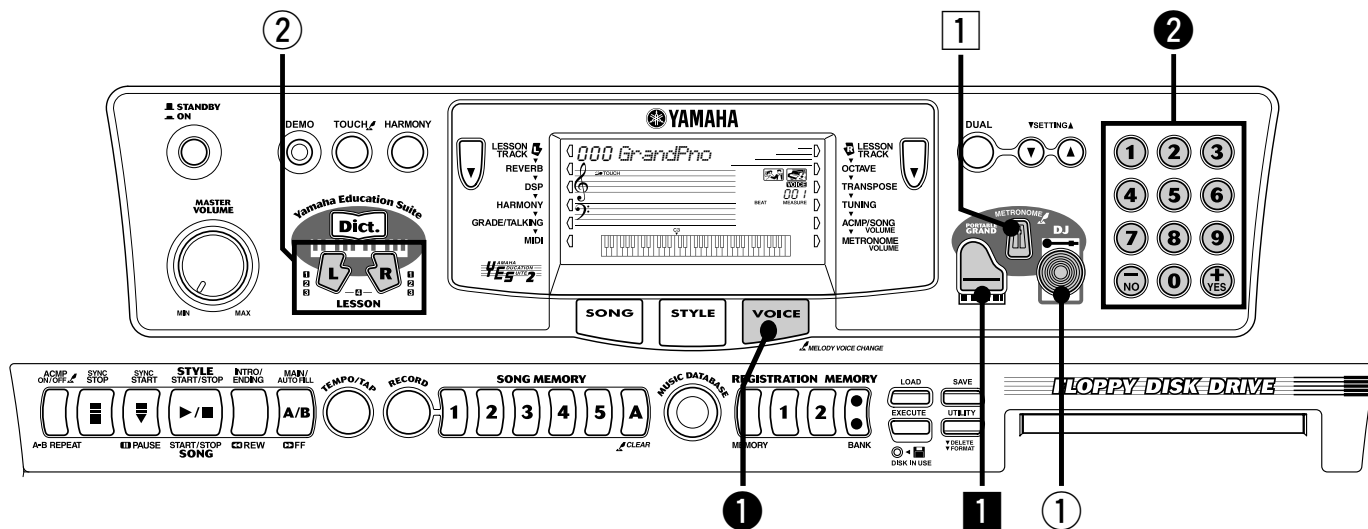
NOTE

- Make sure that the footswitch plug is properly connected to the FOOTSWITCH jack before turning on the power.
- Do not press the footswitch while turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.

■ Using the MIDI Terminals

The PSR-350 also features MIDI terminals, allowing you to interface the PSR-350 with other MIDI instruments and devices. (For more information, see page 80.)

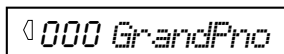




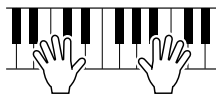
Playing the Piano

Simply by pressing the [PORTABLE GRAND] button, you can automatically reset the entire PSR-350 for piano play.

1 Press the [PORTABLE GRAND] button.



2 Play the keyboard.



Want to find out more? See page 20.

Playing

1 Press the [METRONOME] button.



Want to find out more? See page 20.

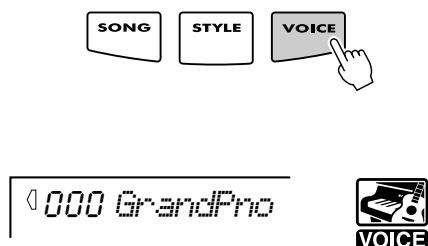
Panel Voice List

No.	Voice Name	No.	Voice Name	No.	Voice Name	No.	Voice Name	No.	Voice Name
PIANO									
001	Grand Piano	014	Click Organ	GUITAR				042	Synth Bass
002	Bright Piano	015	Bright Drawbar Organ	028	Classical Guitar	043	Hi-Q Bass	057	Choir
003	Honky-tonk Piano	016	Rock Organ	029	Folk Guitar	044	Dance Bass	058	Vocal Ensemble
004	MIDI Grand Piano	017	Purple Organ	030	12Strings Guitar	STRINGS			
005	CP 80	018	16'+2' Organ	031	Jazz Guitar	045	String Ensemble	059	Vox Humana
006	Harpsichord	019	16'+4' Organ	032	Octave Guitar	046	Chamber Strings	060	Air Choir
E.PIANO									
007	Funky Electric Piano	020	Theater Organ	033	Clean Guitar	047	Synth Strings	SAXOPHONE	
008	DX Modern Elec. Piano	021	Church Organ	034	Muted Guitar	048	Slow Strings	061	Soprano Sax
009	Hyper Tines	022	Chapel Organ	035	Overdriven Guitar	049	Tremolo Strings	062	Alto Sax
010	Venus Electric Piano	023	Reed Organ	036	Distortion Guitar	050	Pizzicato Strings	063	Tenor Sax
011	Clavi	ACCORDION				051	Orchestra Hit	064	Breathy Tenor
ORGAN									
012	Jazz Organ 1	024	Traditional Accordion	BASS				052	Violin
013	Jazz Organ 2	025	Musette Accordion	037	Acoustic Bass	053	Cello	054	Contrabass
		026	Bandoneon	038	Finger Bass	055	Banjo	056	Harp
		027	Harmonica	039	Pick Bass			065	Baritone Sax
				040	Fretless Bass			066	Oboe
				041	Slap Bass			067	English Horn
								068	Bassoon
								069	Clarinet

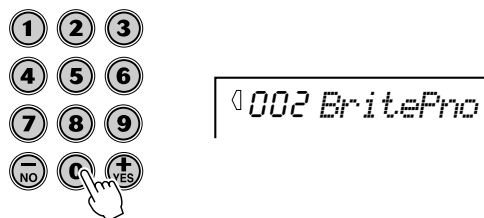
Selecting and Playing Other Voices

The PSR-350 has a huge total of 618 dynamic and realistic instrument voices. Let's try a few of them out now...

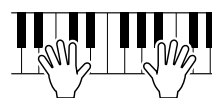
① Press the [VOICE] button.



② Select a voice.



③ Play the keyboard.



Want to find out more? See page 23.

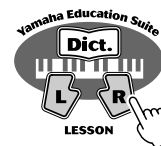
Playing with the DJ Feature

The exciting new DJ feature gives you a full variety of dance and DJ sounds — letting you create your own real-time mixes and groove along with various contemporary rhythms.

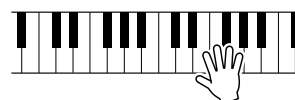
① Press the [DJ] button.



② Press the Lesson [L] or [R] button.

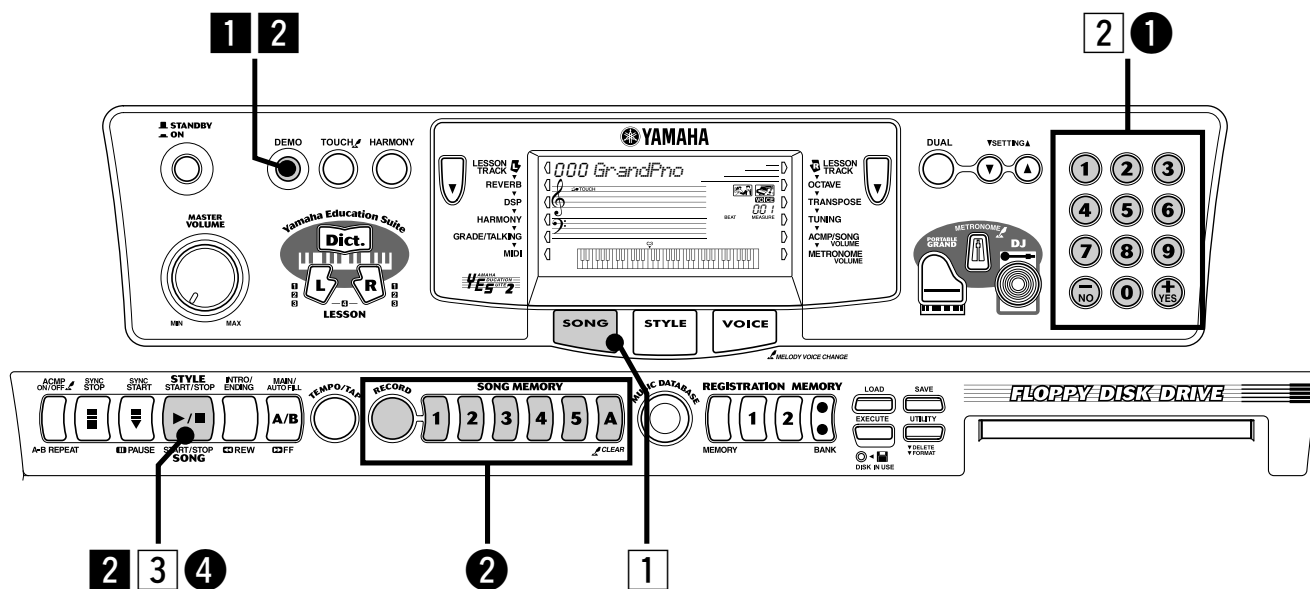


③ Play the DJ voice.



Want to find out more? See page 22.

No.	Voice Name	No.	Voice Name	No.	Voice Name	No.	Voice Name	No.	Voice Name
TRUMPET		083	Piccolo	097	Equinox	110	Grand Piano/Tenor Sax	121	Electronic Kit
070	Trumpet	084	Pan Flute	098	Dark Moon	111	Choir Oohs/Ocarina	122	Analog Kit
071	Muted Trumpet	085	Recorder	PERCUSSION		112	Vibraphone/Jazz Guitar	123	Dance Kit
072	Trombone	086	Ocarina	099	Vibraphone	113	Classical Guitar/Flute	124	Jazz Kit
073	Trombone Section	SYNTH LEAD		100	Marimba	114	French Horn/Trumpet	125	Brush Kit
074	French Horn	087	Square Lead	101	Xylophone	115	Church Organ/Choir Aahs	126	Symphony Kit
075	Tuba	088	Sawtooth Lead	102	Steel Drums	116	Grand Piano/Musette Accordion	127	SFX Kit 1
BRASS		089	Voice Lead	103	Celesta	DRUM KITS		128	SFX Kit 2
076	Brass Section	090	Star Dust	104	Tubular Bells	117	Standard Kit 1		
077	Big Band Brass	091	Brightness	105	Timpani	118	Standard Kit 2		
078	Mellow Horns	092	Analogon	106	Music Box	119	Room Kit		
079	Synth Brass	093	Fargo	SPLIT		120	Rock Kit		
080	Jump Brass	SYNTH PAD		107	Strings/Grand Piano				
081	Techno Brass	094	Fantasia	108	Grand Piano/Violin				
FLUTE		095	Bell Pad	109	DX Electric Piano/Harmonica				
082	Flute	096	Xenon Pad						



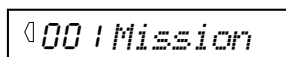
Playing the Songs

The PSR-350 is packed with a total of 100 songs, including three Demo songs, plus seventeen songs that have been specially created to showcase the rich and dynamic sounds of the instrument. There are also eighty additional songs, designed to be used with the educational Lesson feature.

Playing

Let's play the Demo songs now, Repeating with (001 - 003)

1 Start the Demo song.



You can also play back songs of other categories. Simply select the appropriate number of the desired song during playback.

2 Stop the Demo song.



or



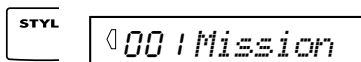
NOTE

- The PSR-350 also has a Demo Cancel function that allows you to disable Demo playback. To enable Demo Cancel, simultaneously hold down the [DEMO] button and turn on the power. To restore the Demo capabilities, simply turn the power off and on again.

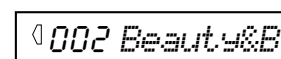
Playing

Naturally, you can also individually select and play back the PSR-350's songs (001 - 205).

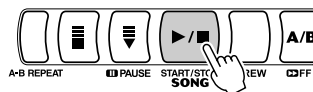
1 Press the [SONG] button.



2 Select a song.



3 Start (and stop) the song.

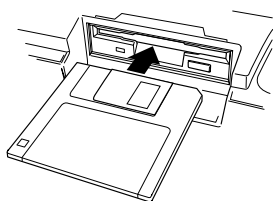


Want to find out more? See page 53.

Playing the Disk Song

This function lets you play songs contained on the included disk or on other song data disks.

1 Insert the disk.

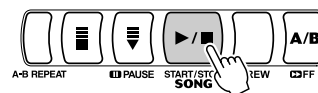


2 Select a desired User song for recording.



10 | Filename

3 To start or stop playing, press the [START/STOP] button.



Want to find out more? See page 71.

● Song List

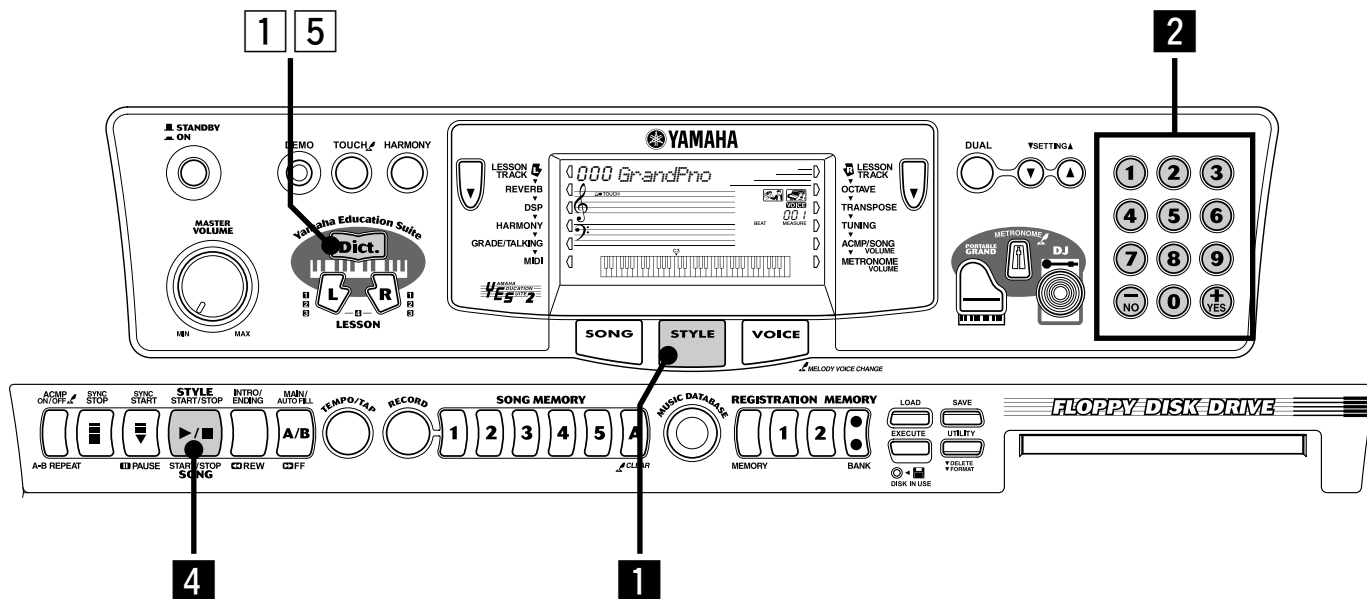
No.	Song Name
Demo	
001	Mission:Impossible
002	Beauty And The Beast
003	Linus And Lucy
Bandman	
004	Rock Chick
005	Love You
006	Electric Path
007	Twilight
008	Beach Party
009	Sometime
010	Slunky
Orchestra	
011	Frühlingsstimmen
012	Danse Des Mirlitons From "The Nutcracker"
013	"Orphée Aux Enfers" Overture
014	Slavonic Dances No.10
015	La Primavera (From Le Quattro Stagioni)
016	Méditation De Thais
017	Guillaume Tell
018	Valse Des Fleurs (From "The Nutcracker")
019	Frühlingslied
020	Ungarische Tänze Nr.5
Practice	
021	Little Brown Jug
022	Loch Lomond
023	Oh! Susanna
024	Song Of The Pearl Fisher

No.	Song Name
025	Wenn Ich Ein Vöglein War ?
026	Die Lorelei
027	Funiculi-Funicula
028	Greensleeves
029	Aura Lee
030	Londonderry Air
031	Ring De Banjo
032	Turkey In The Straw
033	Old Folks At Home
034	Silent Night
035	Jingle Bells
036	Muss I Denn
037	Jesu, Joy Of Man's Desiring
038	Gavotte
039	String Quartet No.17 2nd Mov. "Serenade"
040	Menuett
041	Canon
042	The Danube Waves
043	From "The Magic Flute"
044	Symphonie Nr.9
045	Piano Sonata Op.27-2 "Mondschein"
046	Liebesträume Nr.3
047	"The Surprise" Symphony
048	To A Wild Rose
049	Air de Toréador"Carmen"
050	O Mio Babbino Caro (From "Gianni Schicchi")
Duet	
051	Ten Little Indians
052	Mary Had A Little Lamb

No.	Song Name
053	O Du Lieber Augustin
054	Twinkle Twinkle Little Star
055	Pop Goes The Weasel
056	Im Mai
057	Close Your Hands, Open Your Hands
058	The Cuckoo
059	London Bridge
060	O Christmas Tree
Pianist	
061	Für Elise
062	Dolly's Dreaming And Awakening
063	La Violette
064	Menuett
065	Prelude (Wohltemperierte Klavier 1-1)
066	Marcia Alla Turca
067	Turkish March
068	Moments Musicaux Op.94-3
069	Valse Op.64-1 "Petit Chien"
070	Nocturne Op.9-2
071	Etude Op.10-3 "Chanson De L'adieu"
072	La Candeur
073	Arabesque
074	Pastorale
075	Petite Réunion
076	Innocence
077	Progrès
078	Tarentelle

No.	Song Name
079	La Chevaleresque
080	The Entertainer
Accomp	
081	Amazing Grace
082	My Bonnie
083	Beautiful Dreamer
084	Yankee Doodle
085	Grandfather's Clock
086	Battle Hymn Of The Republic
087	Aloha Oe
088	My Darling Clementine
089	Auld Lang Syne
090	American Patrol
DJ	
091	DJ Game
092	Ragga
093	Digital Rock
094	Hip House
095	All That
096	Pop Reggae
097	Acid House
098	SupaBad
099	Acid Techno
100	Flares

*For the songs #021- #090, refer to the included Song Book.

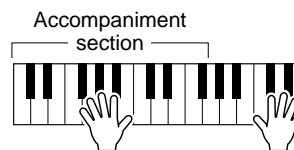


Music Database

Here's a convenient feature that lets you instantly reconfigure the PSR-350 for playing in different music styles. If you want to perform in a certain genre but don't know what settings to make, simply select the genre from the Music Database — and the PSR-350 makes all the right settings for you!

NOTE

- For more information on playing proper chords for the auto accompaniment, see "Using Auto Accompaniment — Multi Fingering" on page 43 and "Looking up Chords in the Dictionary" on the next page.



Left hand + Right hand

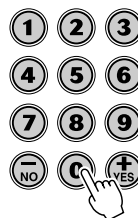
Auto accompaniment (for example, bass + guitar + drums)
Melody

1 Press the [MUSIC DATABASE] button.



2 Select a Music Database.

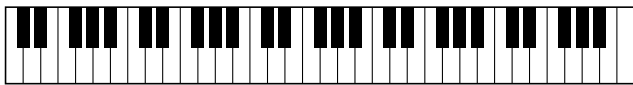
Refer to the Music Database List on page 95.



Looking up Chords in the Dictionary

The convenient Dictionary function teaches you how to play chords by showing you the individual notes. In the example below, we'll learn how to play a GM7 chord...

Keys for entering the chord type (C3 — B4) Keys for entering the chord root (C5 — B5)



Learning

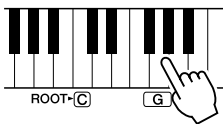
Example: **G M7**
Root note Chord type

- 1 Press the [Dict.] button.



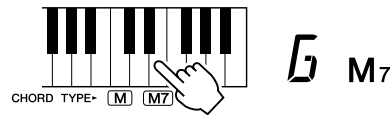
Dict.

- 2 Specify the root note of the chord (in this case, G).



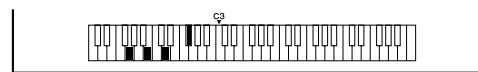
G

- 3 Specify the chord type of the chord (in this case, M7).

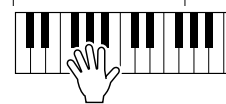


G M7

- 4 Play the notes of the chord as indicated in the keyboard diagram in the display. The chord name flashes when the chord is played properly.



Accompaniment section



G M7

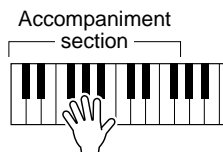
- 5 To leave the Dictionary function, press the [Dict.] button again



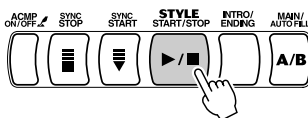
Want to find out more? See page 46.

- 3 Play a chord with your left hand.

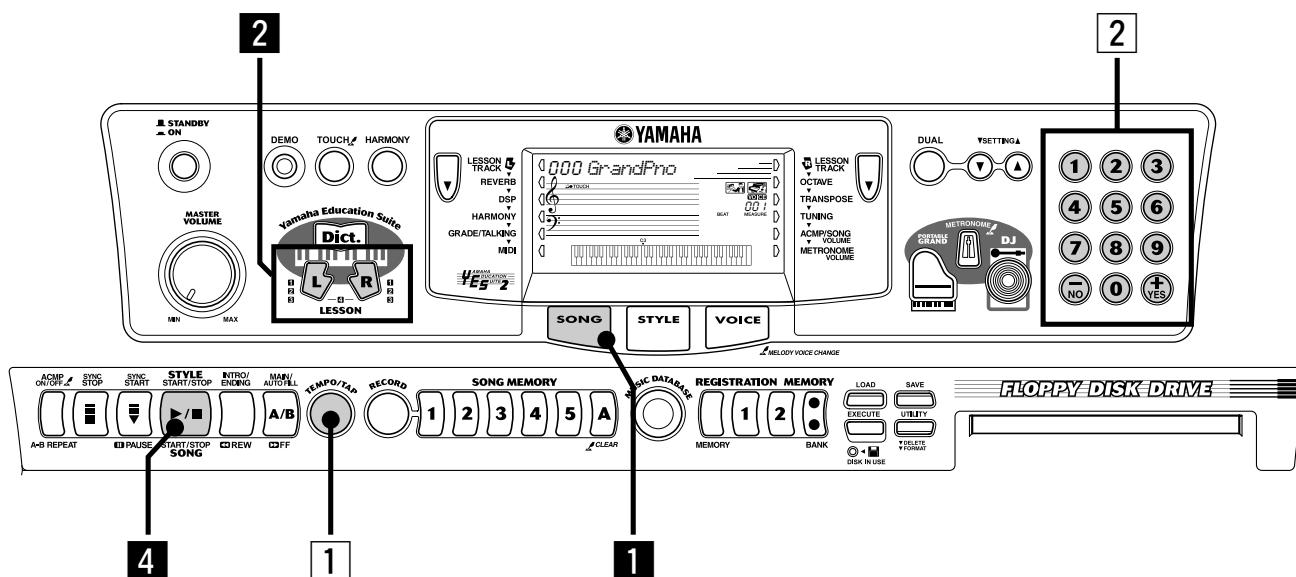
The auto accompaniment starts as soon as you play the keyboard. For more on chords, see "Looking up Chords in the Dictionary" above.



- 4 Stop the auto accompaniment.



Want to find out more? See page 49.



Using the Lesson Feature

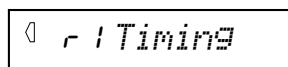
Songs 021 to 100 are specially designed for use with the educational Lesson feature. Lesson makes it fun and easy to master these songs. You can practice the left- and right-hand parts of each song individually: simply press the appropriate button, [L] (left) or [R] (right). The practice steps below apply to either hand.

- Lesson 1 — Timing** This lesson step lets you practice just the timing of the notes.
- Lesson 2 — Waiting** In this lesson step, the PSR-350 waits for you to play the correct notes before continuing playback of the song.
- Lesson 3 — Minus One** This lesson step plays back the song with one part muted — letting you play and master the missing part yourself.
- Lesson 4 — Both Hands** This lesson step is the same as “Minus One,” except in that both the left- and right-hand parts are muted — letting you play and master both hands.

1 Select one of the Lesson songs.
For instructions on selecting songs, see page 63.



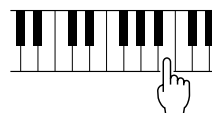
2 Select the part you wish to work on (left or right) and the Lesson step.
If you want to work on the right-hand part, press the [R] button; to work on the left, press the [L] button.



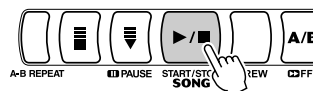
NOTE

- Each press of the corresponding button ([L] or [R]) alternately selects Lessons 1 - 3. Pressing both buttons simultaneously calls up Lesson 4, Both Hands.

3 Start the Lesson.



4 When you're finished, stop the Lesson.

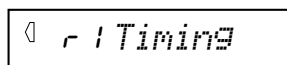
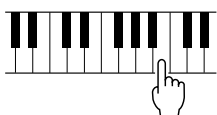


NOTE

- You can also exit from the Lesson by pressing one of the LESSON buttons ([L] or [R]) repeatedly until song name is shown in the display.

Lesson

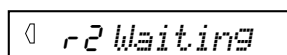
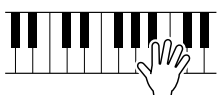
This step lets you work on the timing of the notes. In Lesson 1, the particular note you play on the keyboard is unimportant. The PSR-350 checks your timing and how rhythmically “tight” your playing is.



Want to find out more? See page 65.

Lesson

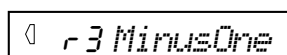
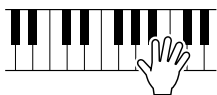
In Lesson 2, you practice playing the notes correctly as they appear in the display notation. The accompaniment pauses and waits for you to play the notes correctly before it continues.



Want to find out more? See page 66.

Lesson

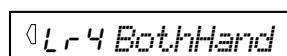
In Lesson 3, one of the parts is muted, and you practice the missing part in time with the rhythm.



Want to find out more? See page 66.

Lesson

Lesson 4 is just like Lesson 3, except that the parts for both hands are muted, letting you practice the missing parts in time with the rhythm.



Want to find out more? See page 67.

The PSR-350 has a built-in evaluation function that monitors your practicing and — like a real teacher — tells you how well you did each exercise. Four grades are assigned, depending on your performance: “OK,” “Good,” “Very Good,” and “Excellent.”

Want to find out more? See page 68.

This feature “talks” to you through the speakers, “announcing” the Grade comments as well as the titles of the Lesson steps.

Want to find out more? See page 68.

Naturally, you can change the tempo (speed) of the song to your liking, letting you slow down difficult passages and bring up the tempo gradually until you master them at normal speed.

- 1 Press the [TEMPO/TAP] button.



- 2 Use the numeric keypad to set the desired tempo.



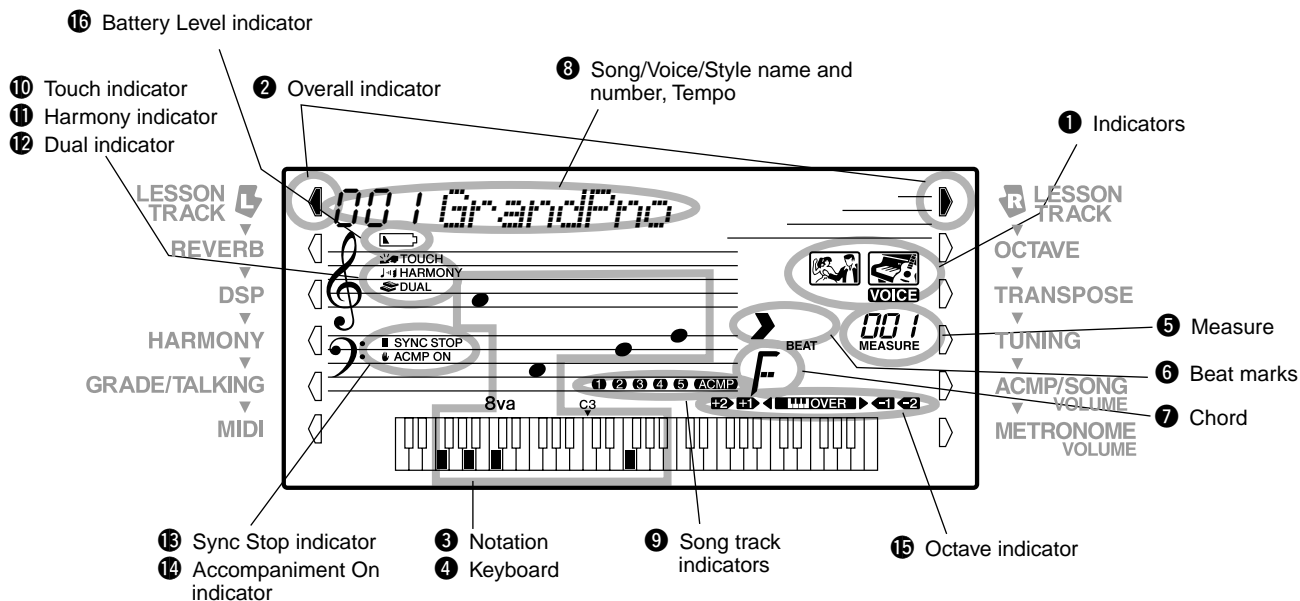
NOTE

- The PSR-350 also has a convenient Tap Tempo function that allows you to “tap” a new tempo in real time. (See page 37.)



Panel Display Indications

The PSR-350 features a large multi-function display that shows all important settings for the instrument. The section below briefly explains the various icons and indications in the display.



1 Indicators

These indicate the operating condition of the PSR-350 as shown below:

Using the numeric keypad selects **voice** numbers. Pressing the [START/STOP] button starts **song** playback.

Using the numeric keypad selects **voice** numbers. Pressing the [START/STOP] button starts **style** playback.

Using the numeric keypad selects **song** numbers. Pressing the [START/STOP] button starts **song** playback.

Using the numeric keypad selects **style** numbers. Pressing the [START/STOP] button starts **style** playback.

2 Overall indicator

The Overall buttons (on either side of the LCD) let you access the Function operations and settings of the PSR-350. The currently selected setting is indicated by a dark bar that appears next to its name (printed on the panel).

3 Notation / 4 Keyboard

These two portions of the display conveniently indicate notes. When a song is being played back, they show the melody or chord notes in succession. When you play the keyboard yourself, the display shows the notes you play.

NOTE

- For a few specific chords, not all notes may be shown in the notation section of the display. This is due to space limitations in the display.

5 Measure

These show the current measure during playback of a song or style.

6 Beat marks

These marks (one large, three small) flash in sequence and in time with the song or style. The large arrow indicates the first beat of the measure.

7 Chord

When a song (with chords) is being played back, this indicates the current chord root and type. It also indicates chords played in the ACMP section of the keyboard when the Style mode and auto accompaniment are on.

8 Song/Voice/Style name and number, Tempo

This portion of the display indicates the name and number of the currently selected song, voice, or style. It also displays the name and current value or setting of the Overall functions and the Function parameters, as well as other important operation messages. When the tempo setting is active, the value is shown.

9 Song track indicators

In song recording and playback, these indicate the status of the tracks. (See page 59.)

10 Touch indicator

This appears when the Touch function is turned on. (See page 29.)

11 Harmony indicator

This appears when the Harmony effect is turned on. (See page 32.)

12 Dual indicator

This appears when the Dual function is turned on. (See page 25.)

13 Sync Stop indicator

This appears when the Sync Stop function is turned on. (See page 40.)

14 Accompaniment On indicator

This appears when the auto accompaniment has been turned on. (See page 36.)

15 Octave indicator

When a disk song is playing and the note data exceeds the range limit of C1 - C6, an "OVER" indication flashes and ◀ or ▶ appears in the display.

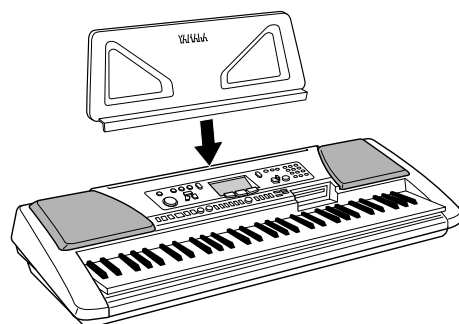
When a disk song is playing and the octave setting is raised or lowered, one of +2, +1, -1 and -2 indications appears in the display.

16 Battery Level indicator

This appears when the battery power is too low to ensure proper operation. (See page 8.)

Music Stand

Insert the bottom edge of the included music stand into the slot located at the top rear of the PSR-350 control panel.



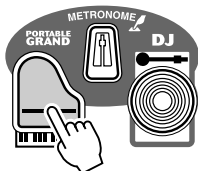


Portable Grand

This convenient function lets you instantly call up the Grand Piano voice.

Playing the Portable Grand

Press the [PORTABLE GRAND] button.



NOTE

- When the [PORTABLE GRAND] button is pressed, One Touch Setting (page 27) is automatically turned on.

Doing this automatically cancels any other mode or function, and resets the entire instrument for playing the special “Stereo Sampled Piano” Grand Piano voice. It automatically calls up song #061 (Für Elise) and style #097 (Stride).

The Portable Grand setting is designed also for playing with the special Pianist styles (#097 - #106). When auto accompaniment is turned on, these provide piano-only accompaniment in a variety of music styles.

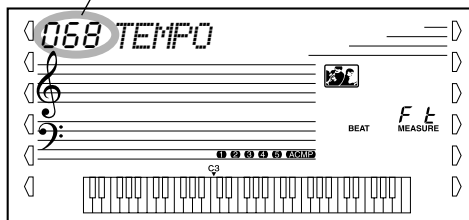
Using the Metronome

1 Call up the Tempo setting.

Press the [TEMPO/TAP] button.

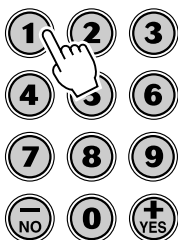


Current Tempo value



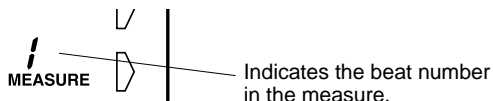
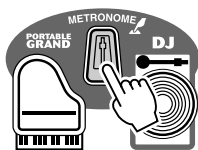
2 Change the value.

Use the numeric keypad to set the desired Tempo value, or use the [+]/[-] buttons to increase or decrease the value.



3 Turn on the Metronome.

Press the [METRONOME] button.



To turn the Metronome off, press the [METRONOME] button again.

Setting the Metronome Time Signature

The time signature of the Metronome can be set to various quarter-note based meters.



- The time signature changes automatically when a style or song is selected.

Hold down the [METRONOME] button (until “TIME SIG” appears in the display), then press the button on the numeric keypad that corresponds to the desired time signature (see chart at right).

Numeric keypad	Time signature
01	1/4 — Plays only “1” beats (all high clicks)
02	2/4
03	3/4
04	4/4
:	:
15	15/4
0	Plays no “1” beats (all low clicks)

Indicates current beat number

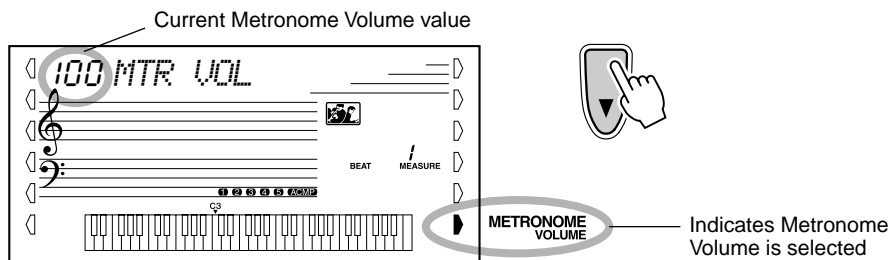


Adjusting the Metronome Volume

You can adjust the volume of the Metronome sound independently of the other PSR-350 sounds. The volume range is 000 - 127.

1 Call up the Metronome Volume setting.

Press the right Overall button until “MTR VOL” appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Metronome Volume value, or use the [+]/[-] buttons to increase or decrease the value.



Restoring the Default Metronome Volume Value

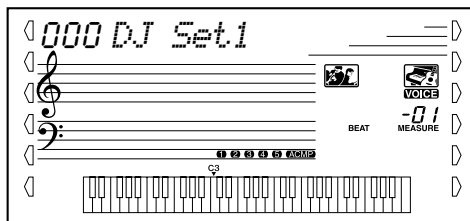
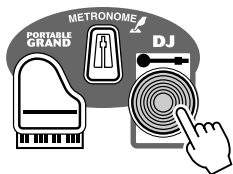
To restore the default Metronome Volume value (100), press both [+]/[-] buttons simultaneously (when Metronome Volume is selected in the Overall menu).



This exciting feature lets you instantly call up a dynamic DJ voice and style for playing contemporary dance music.

Playing the DJ

1 Press the [DJ] button.

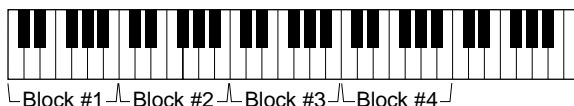


Doing this automatically resets the entire instrument for playing the specially programmed DJ song and voice.

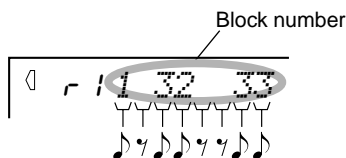
2 Turn on the Lesson feature, and select a Lesson step.

Lesson steps 1 - 3 can be used with DJ play. Press either the [L] or [R] button, repeatedly if necessary, until the desired Lesson step is called up.

The DJ voice is divided into “blocks” (as shown below). Each block has a different sound.

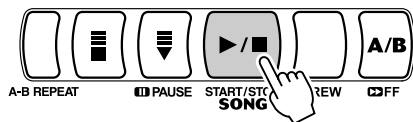


Once the song starts playing, play the appropriate block as indicated in the display. (When Grade/Talking is on, the blocks are also “announced” in Lesson 2.)



When the DJ “teacher” is playing, the block numbers appear in the display one after another according to the rhythm.

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



NOTE

• If two sixteenth notes are to be played, the appropriate block numbers appear successively at the same position. If the same block is to be played twice as sixteenth notes, an equal sign appears after the block number (as shown below).

3 → 1 Indicates that the third block and first block are to be played as successive sixteenth notes.

3 → = Indicates that the third block is to be played as two sixteenth notes.

NOTE

• Since there are no left or right parts in the DJ song, the [L] and [R] buttons can be used interchangeably. Also for the same reason, Lesson 3 and Lesson 4 are identical.

HINT

• Try playing one of the special DJ voices (#609 - #618) or the DJ GAME. (song #091 - #100)



Playing Voices

The PSR-350 features a total of 618 authentic voices — all of which have been created with Yamaha’s sophisticated AWM (Advanced Wave Memory) tone generation system. These include 480 Expanded voices, plus special Split voices, DJ voices and drum kits. The PSR-350 also has a Dual Voice function that lets you combine two different voices in a layer, and play the two together across the keyboard.

The voices are divided into various instrument categories, and the names are printed on the panel for convenience. For a complete list of available voices, see page 87.

Special **Split voices** (#107 - #116) feature two different voices that you can play from separate sections of the keyboard — for example, playing a bass voice with your left hand and a piano voice with your right.

A special set of **DJ voices** (#609 - #618) provides dynamic, exciting voices for playing many of today’s popular music styles.

The Voice mode also features special effect sections that let you enhance the sound of the voice. These include Reverb and Harmony, as well as a “DSP” section that provides miscellaneous effects, such as tremolo, echo, delay, equalization, and wah. (See page 30.)

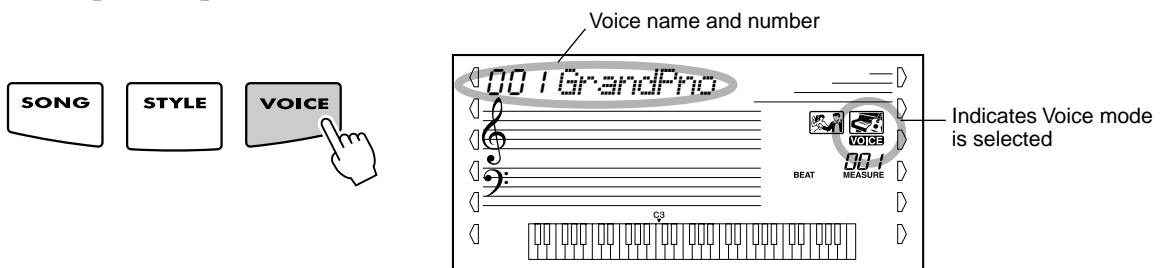
There’s also a Touch Sensitivity control (page 29), which determines how the voices respond to your playing technique.

The PSR-350 also includes special **Drum Kit voices** — #117 - #128 — that let you play various drum and percussion sounds from the keyboard. (Refer to the Drum Kit Voice chart on page 96.)

When a voice is selected, the most suitable DSP Type (page 33) and Harmony Type (page 34) for the voice are automatically called up.

Playing a Voice

1 Press the [VOICE] button.



2 Select the desired voice number.

Use the numeric keypad. The voices and their numbers are shown on the panel. A complete list of the available voices is given on page 87.

VOICE

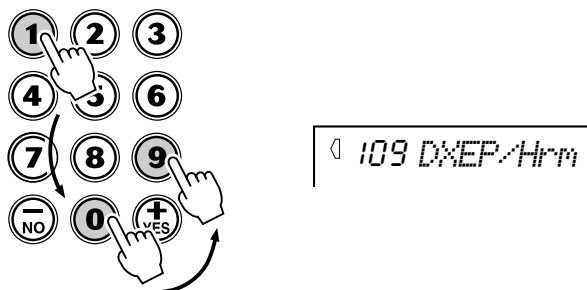
- | | |
|-----------------------------------|--------------------------|
| 000 ONETOUCHSETTING | 037~044 BASS |
| 001~006 PIANO | 045~056 STRINGS |
| 007~011 E PIANO | 057~060 CHOIR |
| 012~023 ORGAN | 061~069 SAXOPHONE |
| 024~027 ACCORDION | 070~075 TRUMPET |
| 028~036 GUITAR | 076~081 BRASS |

Playing Voices

There are two ways to select voices: 1) directly entering the voice number with the numeric keypad, or 2) using the [+]/[-] buttons to step up and down through the voice numbers.

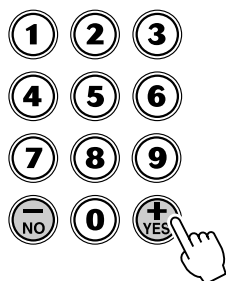
■ Using the numeric keypad

Enter the digits of the voice number as indicated on the panel. For example, to select voice #109, press “1” on the numeric keypad, then “0”, “9.” For voice numbers beginning with zeroes (such as #042 or #006), the initial zeroes may be omitted. In this case, there is a short pause before the indication appears.



■ Using the [+]/[-] buttons

Press the [+] button to select the next voice number, and press the [-] button to select the previous voice. Holding down either button continuously scrolls up or down through the numbers.

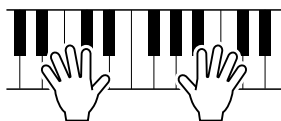


NOTE

- Each voice is automatically called up with the most suitable octave range setting. Thus, playing middle C with one voice may sound higher or lower than another voice at the same key.
- You can also turn on One Touch Setting by simultaneously pressing both the [+]/[-] buttons.

3 Play the selected voice.

Since either the Style or Song mode is active in the background (as indicated by the illustration in the display), you can also play styles or songs, respectively, in the Voice mode by simply pressing the [START/STOP] button. The last selected style or song will be played.



Drum Kit Voice Chart (voices 117 - 128)

When one of the 12 Drum Kit voices are selected you can play different drums and percussion instruments on the keyboard.

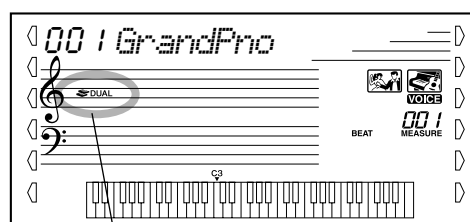
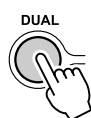
No.	Name	LCD
117	Standard Kit 1	Std.Kit1
118	Standard Kit 2	Std.Kit2
119	Room Kit	Room Kit
120	Rock Kit	Rock Kit
121	Electronic Kit	Elct.Kit
122	Analog Kit	AnlogKit
123	Dance Kit	DanceKit
124	Jazz Kit	Jazz Kit
125	Brush Kit	BrushKit
126	Symphony Kit	SymphKit
127	SFX Kit 1	SFX Kit1
128	SFX Kit 2	SFX Kit2

Dual Voice

The Dual Voice function lets you combine two different voices in a layer — one the Main voice, which is selected normally, and the other the Dual voice, which is selected here. You can also set various parameters independently for these voices, such as giving them separate volume, octave, Reverb and DSP settings. This lets you create an optimum mix for the voices, and enhance the way they blend together.

1 Turn the Dual voice on or off.

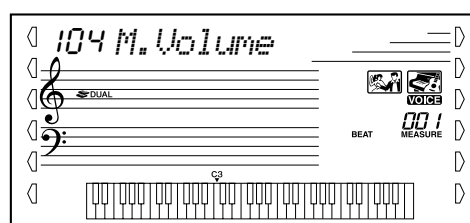
Press the [DUAL] button.



Indicates Dual is turned on

2 Select one of the parameters for the Main and Dual voices.

Press the [SETTING ▲] or [SETTING ▼] button, repeatedly if necessary, until the desired parameter's name appears in the display.



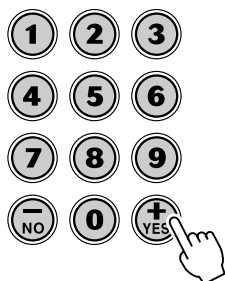
Playing Voices

3 Set the parameter's value.

Use the numeric keypad or the [+]/[-] buttons. (Refer to the parameter list below.)

NOTE

• The Dual Voice function is not available in the Lesson.



The parameters below provide all settings for both the Main Voice and Dual Voice — letting you change or enhance the sound of these voices independently.

- Main Volume
- Dual Volume
- Dual Voice
- Dual Octave
- Main Reverb Level
- Dual Reverb Level
- Main DSP Level
- Dual DSP Level

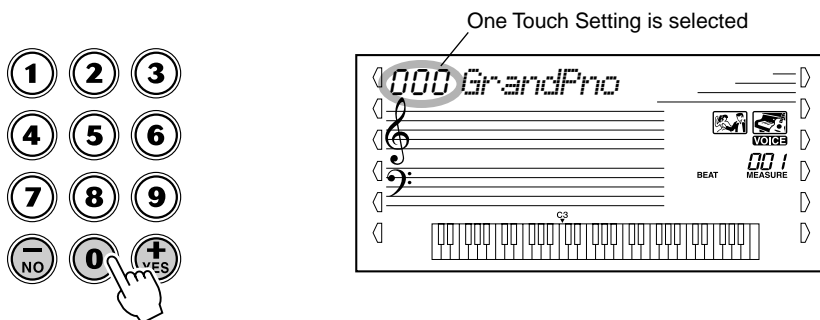
● Parameters

Parameter Name	Display Name	Range / Settings	
Main Voice Volume	M. Volume	0-127	This determines the volume of the Main voice, letting you create an optimum mix with the Dual voice.
Dual Voice Volume	D. Volume	0-127	This determines the volume of the Dual voice, letting you create an optimum mix with the Main voice.
Dual Voice Select	D. Voice name	1-618	This selects the Dual voice.
Dual Voice Octave	D. Octave	-2-2 (Octaves)	This determines the octave of the Dual voice.
Main Voice Reverb	M. RevLvl	0-127	This determines how much of the Main voice's signal is sent to the Reverb effect. Higher values result in a louder Reverb effect for the Main voice.
Dual Voice Reverb	D. RevLvl	0-127	This determines how much of the Dual voice's signal is sent to the Reverb effect. Higher values result in a louder Reverb effect for the Dual voice.
Main Voice DSP	M. DspLev	0-127	This determines how much of the Main voice's signal is sent to the DSP effect. Higher values result in a louder DSP effect for the Main voice.
Dual Voice DSP	D. DspLev	0-127	This determines how much of the Dual voice's signal is sent to the DSP effect. Higher values result in a louder DSP effect for the Dual voice.

One Touch Setting

This special “voice” is actually a convenient feature which automatically selects a suitable voice for you when you select a style. The voice is selected to best match the style or song you’ve called up.

1 Select voice #000 (One Touch Setting).



You can also turn on One Touch Setting by simultaneously pressing both the [+]/[-] buttons.

Transpose and Tuning

You can also adjust the tuning and change the transposition (key) of the entire PSR-350 sound with the Transpose and Tuning functions.

■ Transpose

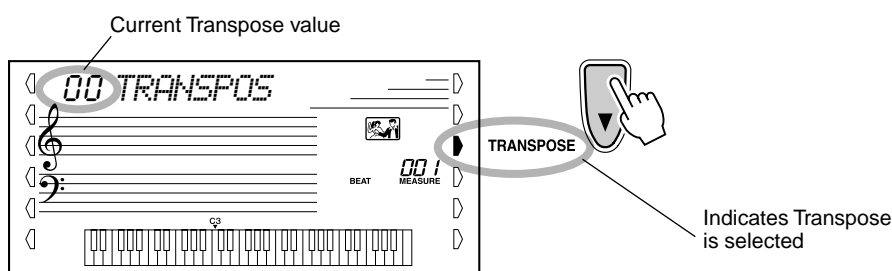
Transpose determines the key of both the main voice and the bass/chord accompaniment of the selected style. It also determines the pitch of the songs. This allows you to easily match the pitch of the PSR-350 to other instruments or singers, or play in a different key without changing your fingering. The Transpose settings can be adjusted over a range of ± 12 semitones (± 1 octave).

NOTE

- The Transpose function has no effect on the DJ voices (#609 - #618) or the Drum Kits voices (#117 - #128).

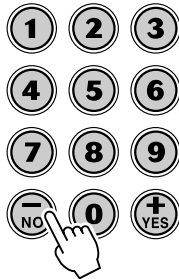
1 Select the Transpose function.

Press the right Overall button, repeatedly if necessary, until “TRANSPOS” appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Transpose value (-12 - +12). To transpose the pitch down, simultaneously press and hold the [-] button, and use the numeric keypad to type in the (negative) value. You can also use the [+] / [-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.



Restoring the Default Transpose Value

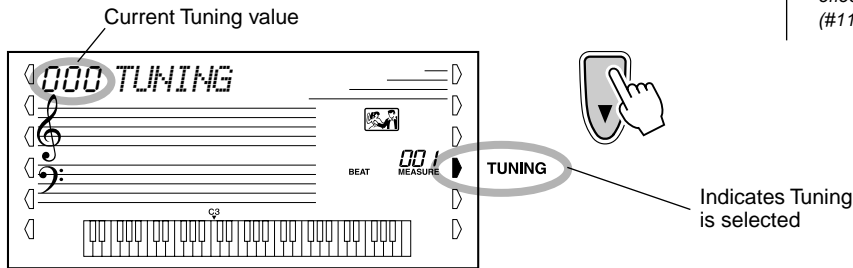
If you've changed the Transpose setting, you can instantly restore the default setting of "00" by pressing both [+] / [-] buttons simultaneously (when Transpose is selected).

■ Tuning

Tuning determines the fine pitch setting of both the main voice and the bass/chord accompaniment of the selected style. It also determines the pitch of the songs. This allows you to accurately match the tuning with that of other instruments. The Tuning settings can be adjusted over a range of ± 100 (approx. ± 1 semitone).

1 Select the Tuning function.

Press the right Overall button, repeatedly if necessary, until "TUNING" appears in the display.

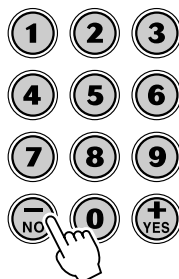


NOTE

The Tuning settings have no effect on the Drum Kit voices (#117 - #128).

2 Change the value.

Use the numeric keypad to set the desired Tuning value (-100 - +100). To tune the pitch down, simultaneously press and hold the [-] button, and use the numeric keypad to type in the (negative) value. You can also use the [+] / [-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.



Restoring the Default Tuning Value

If you've changed the Tuning setting, you can instantly restore the default setting of "00" by pressing both [+] / [-] buttons simultaneously (when Tuning is selected).

Touch and Touch Sensitivity

The Touch function gives you dynamic, expressive control over the voices, letting you determine how loud or soft the sound is by your playing strength.

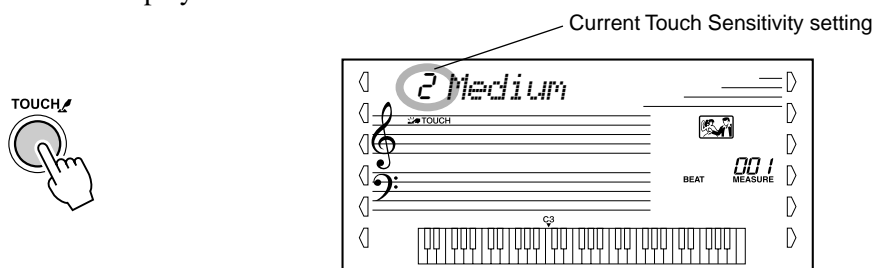
Turn the Touch function on or off as desired by pressing the [TOUCH] button.



Touch Sensitivity lets you set how the PSR-350 responds to your playing strength, allowing you to customize this expressive function to suit your own playing style.

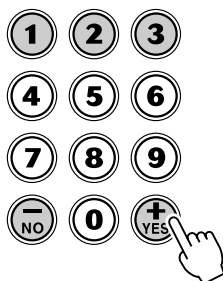
1 Select the Touch Sensitivity control.

Press and hold the [TOUCH] button until the Touch Sensitivity setting and name appears in the display.



2 Change the value.

Use the numeric keypad or [+]/[-] buttons to set the desired setting: 1, 2, or 3 (explained below).



● Settings:

1 (Soft)	This results in limited touch response, and produces a relatively narrow dynamic range, no matter how lightly or strongly you play the keys.
2 (Medium)	This lets you play over a normal dynamic range (soft to loud).
3 (Hard)	This is designed for playing very soft passages, giving you slightly more detailed control in the soft volume range.

When Touch is turned off, a constant volume (corresponding to a velocity value of 80) is produced.

Restoring the Default Touch Sensitivity Value

The default Touch Sensitivity is 2 (Medium). To restore the default value, press both [+]/[-] buttons simultaneously (when Touch Sensitivity is selected).

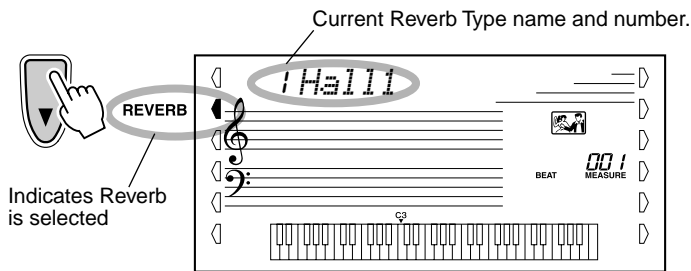


The PSR-350 is equipped with a wide variety of effects that can be used to enhance the sound of the voices. The PSR-350 has three separate effect systems — Reverb, DSP, and Harmony — and each has many different effect types to choose from.

Reverb

The Reverb effect reproduces the natural ambient “wash” of sound that occurs when a instrument is played in a room or concert hall. A total of eight different Reverb types simulating various different performance environments are available.

1 Select the Reverb function.

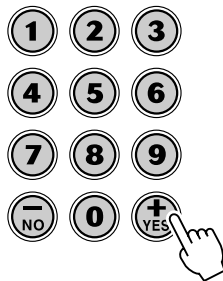


NOTE

- Twelve additional Reverb Types are available when controlling the PSR-350 from a MIDI device. (For details, See page 100.)

2 Set the Reverb Type, if desired.

Use the numeric keypad or [+]/[-] buttons to set the desired Reverb Type. (For a list of the available Reverb Types, see page 33.) To turn the Reverb effect off, select Reverb Type #9.



NOTE

- Each style of the PSR-350 has its own independent Reverb setting.
- You can also determine the Reverb level. (See page 25.)

Restoring the Default Reverb Type

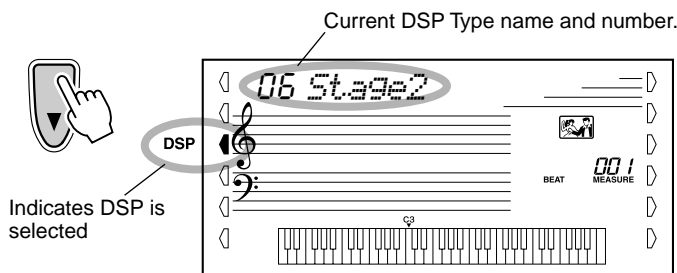
If you've changed the Reverb Type, you can instantly restore the default setting by pressing both [+]/[-] buttons simultaneously (when Reverb is selected).

DSP

The DSP effect section provides distortion and chorus effects, plus a wealth of other useful and dynamic effects for enhancing and changing the sound of the voices. Included among these miscellaneous effects are reverse gate reverb, phaser, rotary speaker, tremolo, echo, delay, distortion, equalization, and wah. A total of thirty-eight DSP types are available.

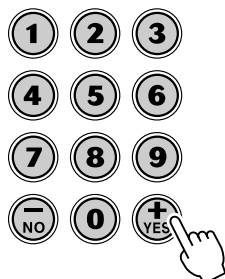
1 Select the DSP function.

Press the left Overall button, repeatedly if necessary, until the dark bar indication appears next to DSP.



2 Set the DSP Type, if desired.

Use the numeric keypad or [+]/[-] buttons to set the desired DSP Type. (For a list of the available DSP Types, see page 33.) To turn the DSP effect off, select DSP Type #39.



NOTE

- Each voice of the PSR-350 has its own independent DSP setting.
- Fifty-one additional DSP Types are available when controlling the PSR-350 from a MIDI device. (For details, see page 100.)
- You can also determine the DSP level. (See Page 25.)

Restoring the Default DSP Type

If you've changed the DSP Type, you can instantly restore the default setting by pressing both [+]/[-] buttons simultaneously (when DSP is selected).

Harmony

The Harmony section features a variety of performance effects that enhance the melodies you play when using the accompaniment styles of the PSR-350. A total of twenty-six Harmony types are available.

Tremolo, Trill and Echo effects can be used even if accompaniment is off. There are five different Harmony Types that automatically create harmony parts (for notes played in the upper section of the keyboard) to match the accompaniment chords.

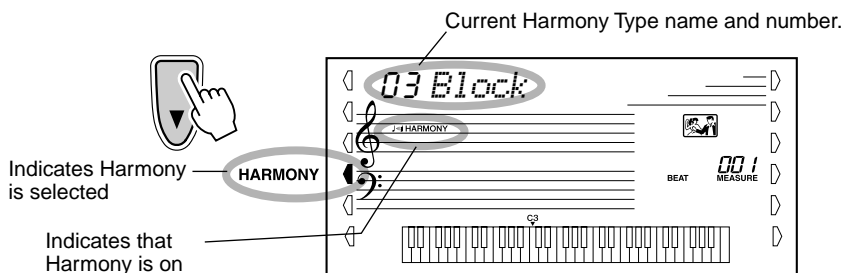
1 Turn on the Harmony effect.

Press the [HARMONY] button.



2 Select the Harmony function.

Press the left Overall button, repeatedly if necessary, until the dark bar indication appears next to HARMONY.



IMPORTANT

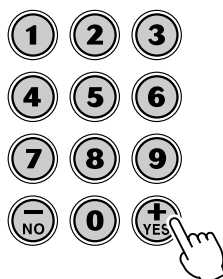
- For the first five Harmony Types (Duet, Trio, Block, Country, and Octave), chords must be played in the Accompaniment section of the keyboard.
- The speed of the Trill, Tremolo, and Echo effects depends on the Tempo setting (page 34).

NOTE

- Each voice of the PSR-350 has its own independent Harmony setting.

3 Set the Harmony Type, if desired.

Use the numeric keypad or [+]/[-] buttons to set the desired Harmony Type. (For a list of the available Harmony Types, see page 34.)



Restoring the Default Harmony Type

If you've changed the Harmony Type, you can instantly restore the default setting by pressing both [+]/[-] buttons simultaneously (when Harmony is selected).

■ Effect Types

● Reverb Types

No.	Reverb Type	Display Name	Description
1	Hall 1	Hall1	Concert hall reverb.
2	Hall 2	Hall1	
3	Room 1	Room1	Small room reverb.
4	Room 2	Room2	
5	Stage 1	Stage1	Reverb for solo instruments.
6	Stage 2	Stage2	
7	Plate 1	Plate1	Simulated steel plate reverb.
8	Plate 2	Plate2	
9	Off	Off	No effect.

● DSP Types

No.	DSP Type	Display Name	Description
1	Hall 1	Hall1	Concert hall reverb.
2	Hall 2	Hall2	
3	Room 1	Room1	Small room reverb.
4	Room 2	Room2	
5	Stage 1	Stage1	Reverb for solo instruments.
6	Stage 2	Stage2	
7	Plate 1	Plate1	Simulated steel plate reverb.
8	Plate 2	Plate2	
9	Early Reflection 1	ER1	Early reflections only.
10	Early Reflection 2	ER2	
11	Gate Reverb	Gate1	Gated reverb effect, in which the reverberation is quickly cut off for special effects.
12	Reverse Gate	Gate2	Similar to Gate Reverb, but with a reverse increase in reverb.
13	Chorus 1	Chorus1	Conventional chorus effect with rich, warm chorusing.
14	Chorus 2	Chorus2	
15	Flanger 1	Flanger1	Pronounced three-phase modulation with slight metallic sound.
16	Flanger 2	Flanger2	
17	Symphonic	Symphony	Exceptionally rich & deep chorusing.
18	Phaser	Phaser	Pronounced, metallic modulation with periodic phase change.
19	Rotary Speaker 1	Rotary1	Rotary speaker simulation.
20	Rotary Speaker 2	Rotary2	
21	Tremolo 1	Tremolo1	Rich Tremolo effect with both volume and pitch modulation.
22	Tremolo 2	Tremolo2	
23	Guitar Tremolo	Guitar Tremolo	Simulated electric guitar tremolo.
24	Auto Pan	AutoPan	Several panning effects that automatically shift the sound position (left, right, front, back).
25	Auto Wah	AutoWah	Repeating filter sweep "wah" effect.
26	Delay Left - Center - Right	DelayLCR	Three independent delays, for the left, right and center stereo positions.
27	Delay Left - Right	DelayLR	Initial delay for each stereo channel, and two separate feedback delays.
28	Echo	Echo	Stereo delay, with independent feedback level settings for each channel.
29	Cross Delay	CrossDly	Complex effect that sends the delayed repeats "bouncing" between the left and right channels.
30	Karaoke	Karaoke	Deep, pronounced echo effect.
31	Distortion Hard	D Hard	Hard-edged, warm distortion.
32	Distortion Soft	D Soft	Soft, warm distortion.
33	Overdrive	Overdrv	Natural distortion, like that of an overdriven amplifier.
34	Amp Simulation	AmpSimu	Characteristic sound of a guitar amplifier/speaker.
35	EQ Disco	EQ Disco	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
36	EQ Telephone	EQ Tel	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
37	3Band EQ	3BandEQ	Equalizer with three separate frequency bands.
38	2Band EQ	2BandEQ	Equalizer with two separate frequency bands.
39	No Effect	Off	No effect

● Harmony Types

No.	Harmony Type	Display Name		Description
1	Duet	Duet		Harmony types 1 - 5 are pitch-based and add one-, two- or three-note harmonies to the single-note melody played in the right hand. These types only sound when chords are played in the auto accompaniment section of the keyboard.
2	Trio	Trio		
3	Block	Block		
4	Country	Country		
5	Octave	Octave		
6	Trill 1/4 note	Tril1/4		<p>Types 6 - 26 are rhythm-based effects and add embellishments or delayed repeats in time with the auto accompaniment. These types sound whether the auto accompaniment is on or not; however, the actual speed of the effect depends on the Tempo setting (page 41). The individual note values in each type let you synchronize the effect precisely to the rhythm. Triplet settings are also available: 1/6 = quarter-note triplets, 1/12 = eighth-note triplets, 1/24 = sixteenth-note triplets.</p> <ul style="list-style-type: none"> • The Trill effect Types (6 - 12) create two-note trills (alternating notes) when two notes are held. • The Tremolo effect Types (13 - 19) repeat all held notes (up to four). • The Echo effect Types (20 - 26) create delayed repeats of each note played.
7	Trill 1/6 note	Tril1/6		
8	Trill 1/8 note	Tril1/8		
9	Trill 1/12 note	Tril1/12		
10	Trill 1/16 note	Tril1/16		
11	Trill 1/24 note	Tril1/24		
12	Trill 1/32 note	Tril1/32		
13	Tremolo 1/4 note	Trem1/4		
14	Tremolo 1/6 note	Trem1/6		
15	Tremolo 1/8 note	Trem1/8		
16	Tremolo 1/12 note	Trem1/12		
17	Tremolo 1/16 note	Trem1/16		
18	Tremolo 1/24 note	Trem1/24		
19	Tremolo 1/32 note	Trem1/32		
20	Echo 1/4 note	Echo1/4		
21	Echo 1/6 note	Echo1/6		
22	Echo 1/8 note	Echo1/8		
23	Echo 1/12 note	Echo1/12		
24	Echo 1/16 note	Echo1/16		
25	Echo 1/24 note	Echo1/24		
26	Echo 1/32 note	Echo1/32		



Auto Accompaniment

The PSR-350 provides dynamic rhythm/accompaniment patterns — as well as voice settings appropriate for each pattern — for various popular music styles.

A total of 106 different styles are available, in several different categories. Each style is made up of separate “sections” — Intro, Main A and B, and Ending — letting you call up different accompaniment sections as you perform.

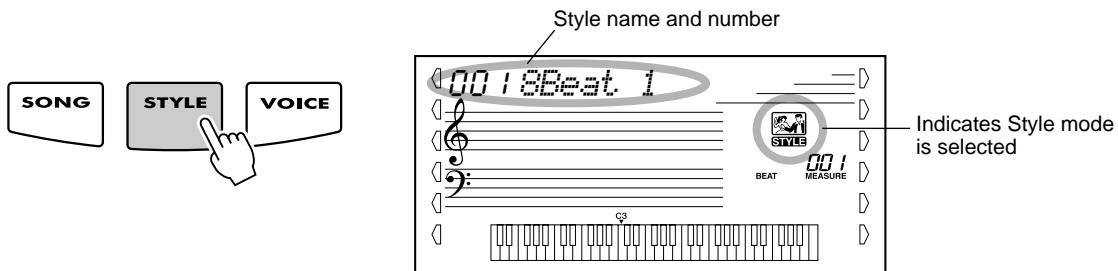
The auto accompaniment features that are built into the rhythms add the excitement of instrumental backing to your performance, letting you control the accompaniment by the chords you play. Auto accompaniment effectively splits the keyboard into two sections: The upper is used for playing a melody line, and the lower (set by default to keys F#2 and lower) is for the auto accompaniment function.

The PSR-350 also features the convenient Dictionary function (page 46). Dictionary provides you with a built-in “chord encyclopedia” that teaches you how to play any chord you specify by showing you the appropriate notes in the display.

The PSR-350 can also be used with the included disk or commercially available Style File data, allowing you to load additional styles (auto accompaniment patterns) to the instrument. Style File data is loaded individually as style number 107, and can be played just like the preset styles.

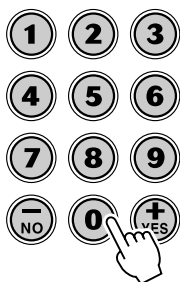
Selecting a Style

1 Press the [STYLE] button.



2 Select the desired style number.

Use the numeric keypad. The basic categories of styles and their numbers are shown at the left of the panel. A complete list of the available styles is given on page 94.



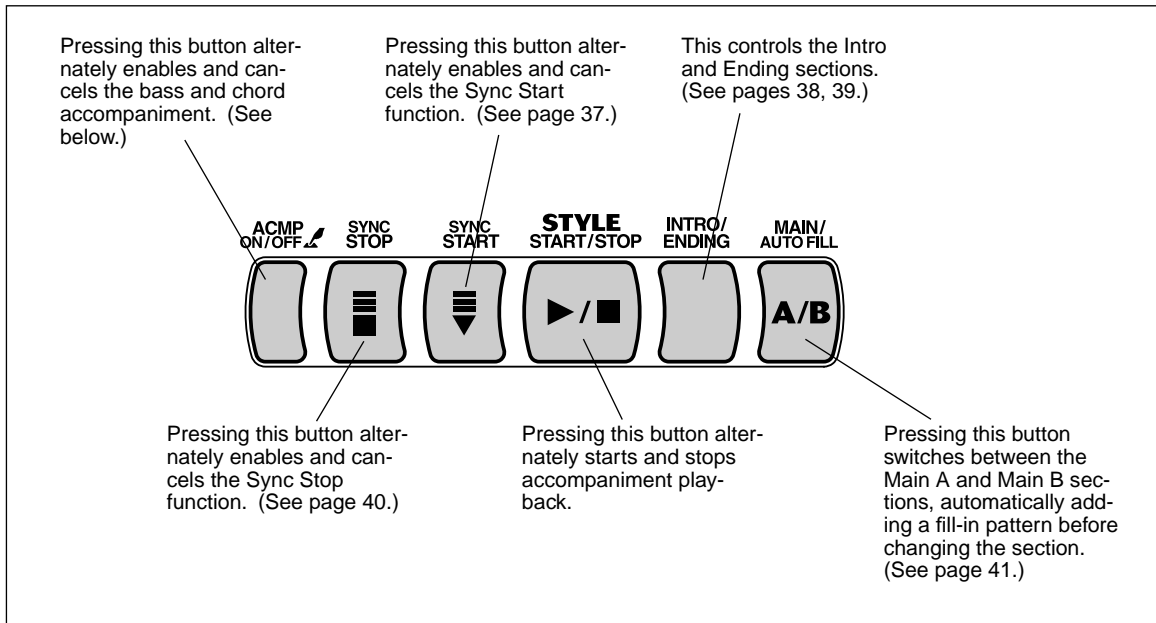
STYLE

001~006 8 BEAT	057~061 R & B	107 DISK
007~015 16 BEAT	062~067 COUNTRY & WESTERN	
016~026 BALLAD	068~073 LATIN	
027~032 ROCK	074~083 BALLROOM	
033~047 DANCE	084~096 MARCH & WALTZ	
048~056 SWING & JAZZ	097~106 PIANIST	

Style numbers can be selected in the same way as with the voices (see page 24). You can use the numeric keypad to directly enter the style number, or use the [+]/[-] buttons to step up and down through the styles.

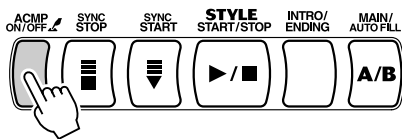
Playing the Accompaniment

The panel buttons below function as accompaniment controls.

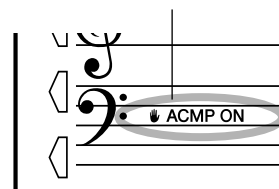


1 Turn on the auto accompaniment.

Press the [ACMP ON/OFF] button to turn on (enable) the auto accompaniment.



Indicates that auto accompaniment is on.

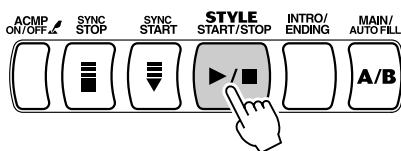


2 Start the accompaniment.

You can do this in one of the following ways:

■ Pressing the [START/STOP] button

The rhythm starts playing immediately without bass and chord accompaniment. The currently selected Main A or B section will play.



You can select the Main A or B section by pressing the appropriate button — [MAIN A/B] — before pressing the [START/STOP] button. (The display briefly shows the letter of the selected section: “MAIN A” or “MAIN B.”)



■ Using Tap Tempo to Start

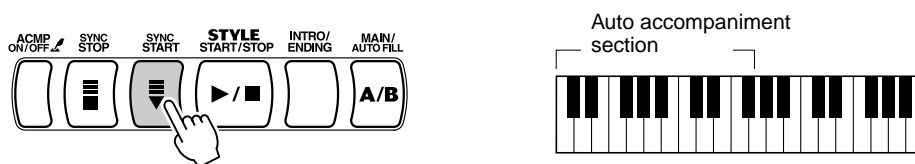
This useful feature lets you tap out the speed (tempo) of the auto accompaniment and automatically start the accompaniment at that tapped speed.



Simply tap the [TEMPO/TAP] button four times (or three times for a 3/4 time style), and the accompaniment starts automatically at the tempo you tapped. You can also change the tempo while the accompaniment is playing by tapping the [TEMPO/TAP] button twice at the desired tempo.

■ Using Sync Start

The PSR-350 also has a Sync Start function that allows you to start the rhythm/accompaniment by simply pressing a key on the keyboard. To use Sync Start, first press the [SYNC START] button (the beat marks all flash to indicate Sync Start stand-by), then press any key on the keyboard. (When auto accompaniment is on, play a key or chord in the auto accompaniment section of the keyboard.)



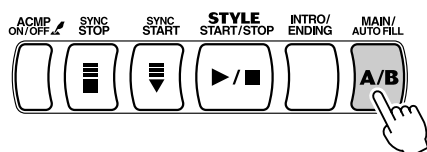
Auto Accompaniment

Starting with an Intro section

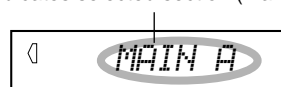
Each style has its own two- or four-measure Intro section. When used with the auto accompaniment, many of the Intro sections also include special chord changes and embellishments to enhance your performance.

To start with an Intro section:

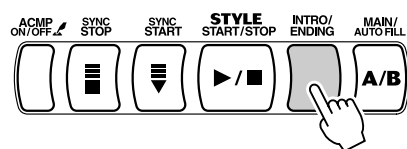
- 1) Press the [MAIN/AUTO FILL] button — to select which section (A or B) is to follow the Intro.



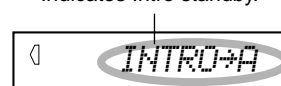
Indicates selected section (Main A or B).



- 2) Press the [INTRO/ENDING] button.



Indicates Intro standby.



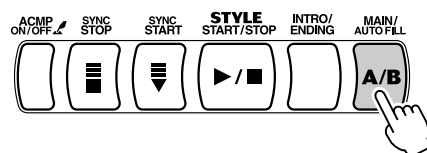
To actually start the Intro section and accompaniment, press the [START/STOP] button.

Using Sync Start with an Intro section

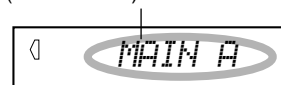
You can also use the Sync Start function with the special Intro section of the selected style.

To use Sync Start with an Intro section:

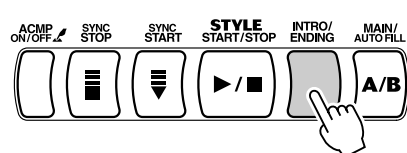
- 1) Press the [MAIN/AUTO FILL] button — to select which section (A or B) is to follow the Intro.



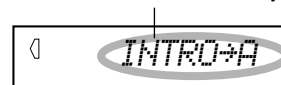
Indicates selected section (MAIN A or B).



- 2) Press the [INTRO/ENDING] button.



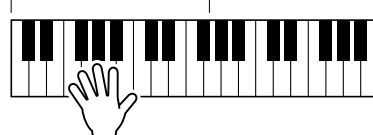
Indicates Intro standby.



- 3) Press the [SYNC START] button to enable Sync Start, and start the Intro section and accompaniment by playing any key on the keyboard. (When auto accompaniment is on, play a key or chord in the auto accompaniment section of the keyboard.)



Auto accompaniment section



3 Change chords using the auto accompaniment feature.

Try playing a few successive chords with your left hand, and notice how the bass and chord accompaniment change with each chord you play. (Refer to page 43 for more information on how to use auto accompaniment.)

HINT

- The [ACMP ON/OFF] button can also be used to turn off and on the bass/chord accompaniment while playing — allowing you to create dynamic rhythmic breaks in your performance.
- You can use the Sync Stop function to create a similar, yet even more dramatic break. With Sync Stop on (page 40), you can control breaks in the rhythm and accompaniment simply by releasing your fingers from the keys. As long as you play and hold a chord, the accompaniment continues. When you release it, the accompaniment stops. You can also use this feature to create exciting rhythmic stutter effects, chord hits, and accents by playing staccato chords.

NOTE

- Chords played in the auto accompaniment section of the keyboard are also detected and played when the accompaniment is stopped. In effect, this gives you a “split keyboard,” with bass and chords in the left hand and the normally selected voice in the right.

4 Stop the accompaniment.

You can do this in one of three ways:

■ Pressing the [START/STOP] button

The rhythm/accompaniment stops playing immediately.

■ Using an Ending section

Press the [INTRO/ENDING] button. The accompaniment stops after the Ending section is finished.

■ Pressing the [SYNC START] button

This immediately stops the accompaniment and automatically enables Sync Start, letting you re-start the accompaniment by simply playing a chord or key in the auto accompaniment section of the keyboard.

NOTE

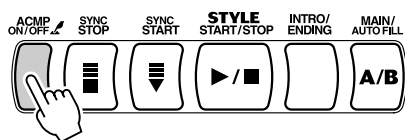
- To have the Ending section gradually slow down (*ritardando*) as it is playing, press the [INTRO/ENDING] button twice quickly.

Sync Stop

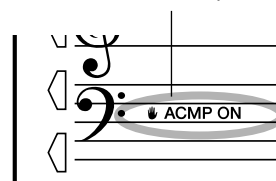
This convenient feature lets you stop (or pause) the auto accompaniment by releasing your fingers from the auto accompaniment section of the keyboard. Playing the chord again restarts the auto accompaniment. This is ideal for putting dynamic breaks in your performance — for example, stopping the rhythm and accompaniment briefly while you play a melodic break or solo with your right hand.

1 Press the [ACMP] button.

To turn accompaniment on.

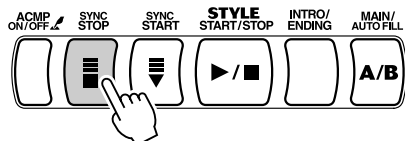


Indicates that auto accompaniment is on.

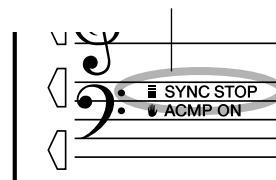


2 Press the [SYNC STOP] button.

Setting Sync Stop to on before starting the auto accompaniment automatically sets Sync Start to on as well, letting you immediately start the accompaniment by playing the keyboard.



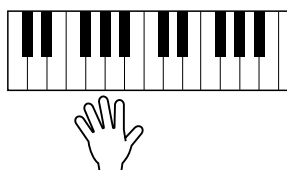
Indicates that Sync Stop is on.



3 Play a chord on the keyboard (in the auto accompaniment section of the keyboard).

The auto accompaniment starts as soon as you play a chord.

4 Stop the auto accompaniment by releasing the chord.



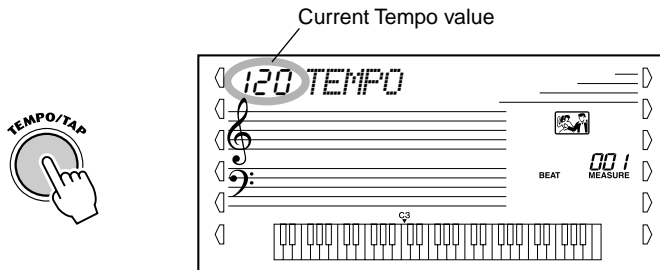
5 To start the auto accompaniment again, play a chord.

To turn Sync Stop off, press the [SYNC STOP] button again. To stop the auto accompaniment completely, press the [START/STOP] button.

Changing the Tempo

The tempo of style playback can be adjusted over a range of 32 - 280 bpm (beats per minute).

- 1 Call up the Tempo setting.**
Press the [TEMPO/TAP] button.

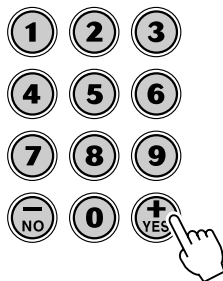


NOTE

- When accompaniment playback is stopped and a different style is selected, the tempo returns to the default setting of the new style. When switching styles during playback, the last tempo setting is maintained. (This allows you to keep the same tempo, even when changing styles.)

- 2 Change the value.**

Use the numeric keypad to set the desired Tempo value, or use the [+]/[-] buttons to increase or decrease the value.



Also, the tempo of a style returns to the default setting when selecting a different style. (The set tempo remains, however, when switching styles during playback.)

Restoring the Default Tempo Value

- Each song and style has been given a default or standard Tempo setting. If you've changed the Tempo, you can instantly restore the default setting by pressing both [+]/[-] buttons simultaneously (when Tempo is selected).

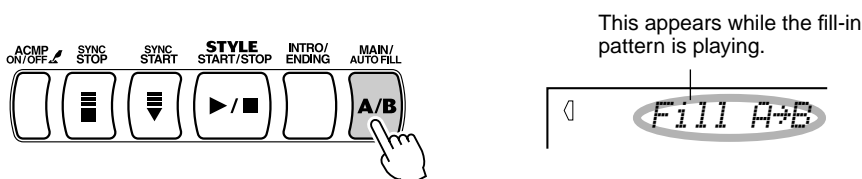
HINT

- You can also use the convenient Tap Tempo function to change the tempo by "tapping" a new one in real time. (See page 37.)

Accompaniment Sections (Main A/B and Fill-ins)

While the accompaniment is playing, you can add variation in the rhythm/accompaniment by pressing the [MAIN/AUTO FILL] button. This switches between the Main A and Main B sections, automatically playing a fill-in pattern to smoothly lead into the next section. For example, if the Main A section is currently playing, pressing this button automatically plays a fill-in pattern, followed by the Main B section. (See illustration on page 42.)

You can also select either the Main A or B section to start by pressing the [MAIN/AUTO FILL] button before starting the style.

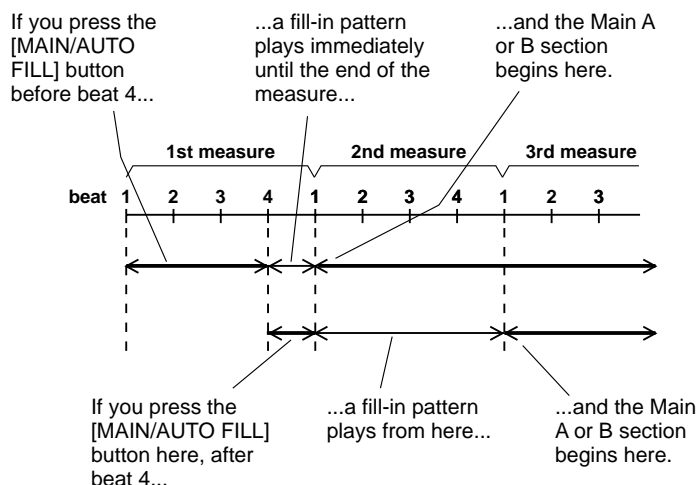


NOTE

- Rhythm sounds and fill-in sections are not available when one of the Pianist styles (#097 - #106) are selected.

Auto Accompaniment

About the Fill-in Patterns

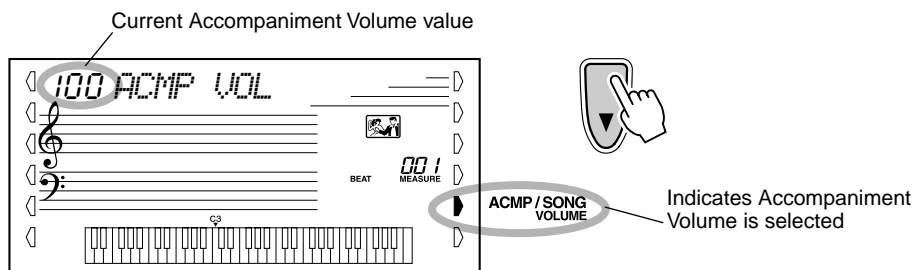


Adjusting the Accompaniment Volume

The playback volume of the accompaniment can be adjusted. This volume control affects only the accompaniment volume. The volume range is 000 - 127.

1 Select the Accompaniment Volume function.

Press the right Overall button, repeatedly if necessary, until “ACMP VOL” appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Accompaniment Volume value (000 - 127). You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.

NOTE

- Accompaniment Volume cannot be changed unless the Style mode is active.



Restoring the Default Accompaniment Volume Value

If you've changed the Accompaniment Volume setting, you can instantly restore the default setting of "100" by pressing both [+]/[-] buttons simultaneously (when Accompaniment Volume is selected).

Auto Accompaniment

Chord Name/[Abbreviation]	Normal Voicing	Chord (C)	Display
Major [M]	1 - 3 - 5	C	C
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 [(b5)]	1 - 3 - b5	C(b5)	Cb5
Major seventh flatted fifth [M7b5]	1 - 3 - b5 - 7	CM7b5	CM7b5
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 - b3 - 5	Cm	Cm
Minor add ninth [m(9)]	1 - 2 - b3 - 5	Cm(9)	Cm(9)
Minor sixth [m6]	1 - b3 - 5 - 6	Cm6	Cm6
Minor seventh [m7]	1 - b3 - (5) - b7	Cm7	Cm7
Minor seventh ninth [m7(9)]	1 - 2 - b3 - (5) - b7	Cm7(9)	Cm7(9)
Minor seventh add eleventh [m7(11)]	1 - (2) - b3 - 4 - 5 - (b7)	Cm7(11)	Cm7(11)
Minor major seventh [mM7]	1 - b3 - (5) - 7	CmM7	CmM7
Minor major seventh ninth [mM7(9)]	1 - 2 - b3 - (5) - 7	CmM7(9)	CmM7(9)
Minor seventh flatted fifth [m7b5]	1 - b3 - b5 - b7	Cm7b5	Cm7b5
Minor major seventh flatted fifth [mM7b5]	1 - b3 - b5 - 7	CmM7b5	CmM7b5
Diminished [dim]	1 - b3 - b5	Cdim	Cdim
Diminished seventh [dim7]	1 - b3 - b5 - 6	Cdim7	Cdim7
Seventh [7]	1 - 3 - (5) - b7 or 1 - (3) - 5 - b7	C7	C7
Seventh flatted ninth [7(b9)]	1 - b2 - 3 - (5) - b7	C7(b9)	C7(b9)
Seventh add flatted thirteenth [7(b13)]	1 - 3 - 5 - b6 - b7	C7(b13)	C7(b13)
Seventh ninth [7(9)]	1 - 2 - 3 - (5) - b7	C7(9)	C7(9)
Seventh add sharp eleventh [7(#11)]	1 - (2) - 3 - #4 - 5 - b7 or 1 - 2 - 3 - #4 - (5) - b7	C7(#11)	C7(#11)
Seventh add thirteenth [7(13)]	1 - 3 - (5) - 6 - b7	C7(13)	C7(13)
Seventh sharp ninth [7(#9)]	1 - #2 - 3 - (5) - b7	C7(#9)	C7(#9)
Seventh flatted fifth [7b5]	1 - 3 - b5 - b7	C7b5	C7b5
Seventh augmented [7aug]	1 - 3 - #5 - b7	C7aug	C7aug
Seventh suspended fourth [7sus4]	1 - 4 - (5) - b7	C7sus4	C7sus4
One plus two plus five [1+2+5]	1 - 2 - 5	C1+2+5	C

NOTE

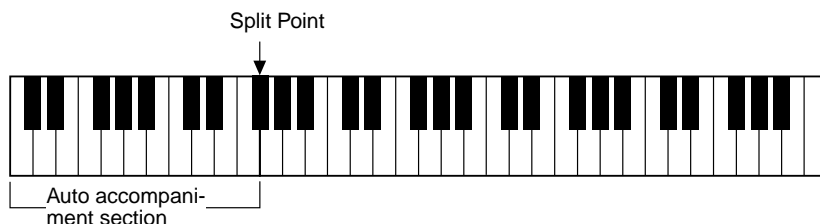
- Notes in parentheses can be omitted.
- Playing two same root keys in the adjacent octaves produces accompaniment based only on the root.
- A perfect fifth (1 + 5) produces accompaniment based only on the root and fifth which can be used with both major and minor chords.
- The chord fingerings listed are all in "root" position, but other inversions can be used — with the following exceptions:
 - m7, m7b5, 6, m6, sus4, aug, dim7, 7b5, 6(9), 1+2+5.
- Inversion of the 7sus4 and m7(11) chords are not recognized if the notes shown in parentheses are omitted.
- The auto accompaniment 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.

Setting the Split Point

The Split Point determines the highest key for the auto accompaniment section. The accompaniment can be played with the keys up to and including the Accompaniment Split Point key.

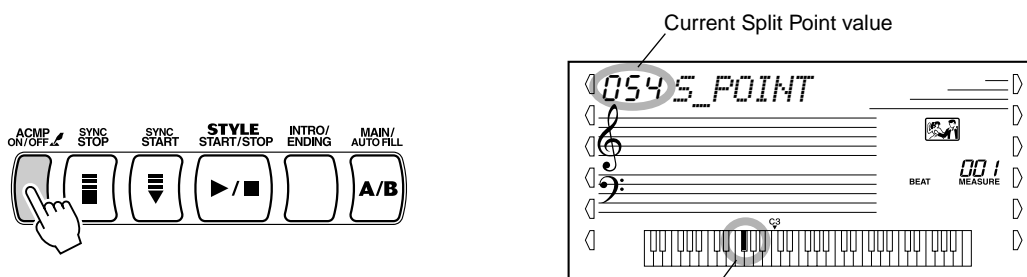
NOTE

- This setting also affects the split point for the special Split voices.



1 Select the Split Point control.

Press and hold the [ACMP ON/OFF] button until "S_POINT" appears in the display.



The current Split Point is also shown in the keyboard section of the display.

2 Change the value.

Use the numeric keypad or [+]/[-] buttons to set the desired value: 0 (C-2) - 127 (G8).



Restoring the Default Split Point Value

If you've changed the Split Point setting, you can instantly restore the default setting of "54" (F#2) by pressing both [+]/[-] buttons simultaneously (when Split Point is selected).

To leave the Split Point function, simply go on to another operation or function.

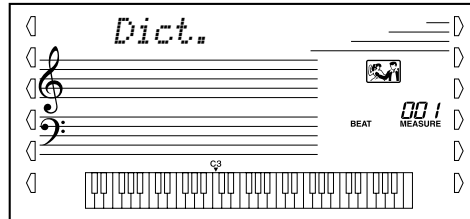
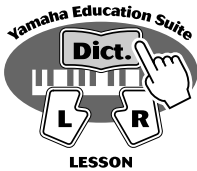
Dictionary

The Dictionary function is essentially a built-in “chord book” that shows you the individual notes of chords. It is ideal when you know the name of a certain chord and want to quickly learn how to play it.

IMPORTANT

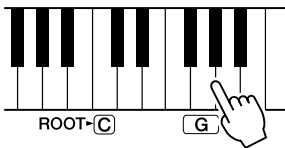
- Pressing the [Dict.] button automatically turns on the auto accompaniment.

1 Press the [Dict.] button.

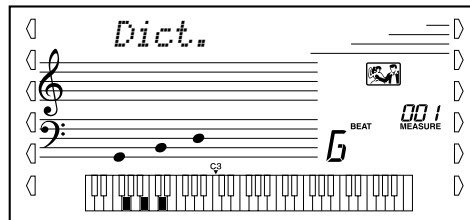


2 Specify the root of the chord.

Press the key on the keyboard that corresponds to the desired chord root (as printed on the panel).

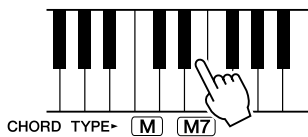


Pressing this key selects the root G.

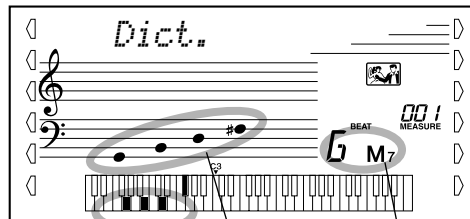


3 Specify the type of the chord (major, minor, seventh, etc.).

Press the key on the keyboard that corresponds to the desired chord type (as printed on the panel).



Pressing this key selects the major seventh chord type (M7).



NOTE

- For a few specific chords, not all notes may be shown in the notation section of the display. This is due to space limitations in the display.
- You can also show the inversion of chord when using [+]/[-] button.

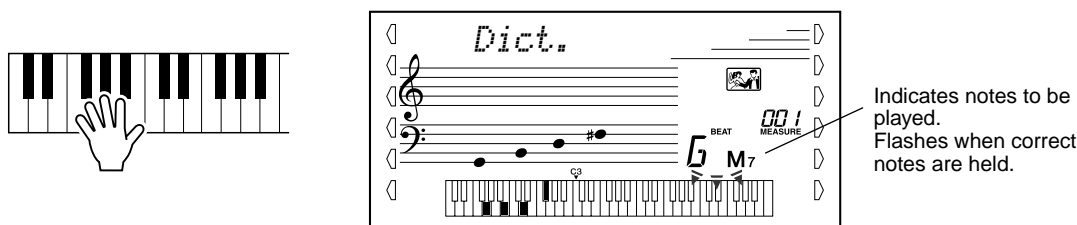
Individual notes of chord (keyboard)

Notation of chord

Chord name (root and type)

4 Play the chord.

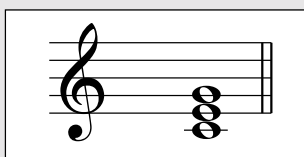
Play the chord (as indicated in the display) in the auto accompaniment section of the keyboard. The chord name flashes in the display (and a “congratulations” melody is played) when the correct notes are held down. (Inversions for many of the chords are also recognized.)



To leave the Dictionary function, press the [Dict.] button again.

..... What is a Chord?

The simple answer: Three or more notes played simultaneously is a chord. (Two notes played together is an “interval” — an interval being the distance between two different notes. This is also referred to as a “harmony.”) Depending on the intervals between the three or more notes, a chord can sound beautiful or muddy and dissonant.



The organization of notes in the example at left — a triad chord — produces a pleasant, harmonious sound. Triads are made up of three notes and are the most basic and common chords in most music.

In this triad, the lowest note is the “root.” The root is the most important note in the chord, because it anchors the sound harmonically by determining its “key” and forms the basis for how we hear the other notes of the chord.

The second note of this chord is four semitones higher than the first, and the third is three semitones higher than the second. Keeping our root note fixed and changing these notes by a semitone up or down (sharp or flat), we can create four different chords.

<p>Major chord (ex. C)</p>	<p>Minor chord (ex. Cm)</p>	<p>Augmented chord (ex. Caug)</p>	<p>Diminished chord (ex. Cdim)</p>
---------------------------------------	--	--	---

Keep in mind that we can also change the “voicing” of a chord — for example, change the order of the notes (called “inversions”), or play the same notes in different octaves — without changing the basic nature of the chord itself.

Inversion examples for the key of C



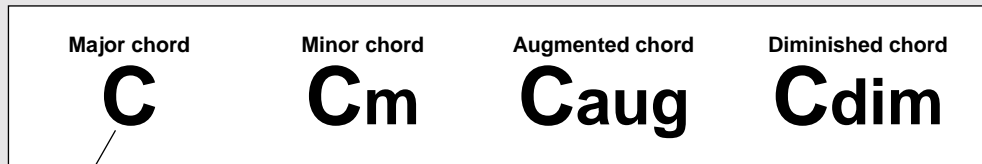
Auto Accompaniment

Beautiful sounding harmonies can be built in this manner. The use of intervals and chords is one of the most important elements in music. A wide variety of emotions and feelings can be created depending on the types of chords used and the order in which they are arranged.

••••• Writing Chord Names •••••

Knowing how to read and write chord names is an easy yet invaluable skill. Chords are often written in a kind of shorthand that makes them instantly recognizable (and gives you the freedom to play them with the voicing or inversion that you prefer). Once you understand the basic principles of harmony and chords, it's very simple to use this shorthand to write out the chords of a song.

First, write the root note of the chord in an uppercase letter. If you need to specify sharp or flat, indicate that to the right of the root. The chord type should be indicated to the right as well. Examples for the key of C are shown below.

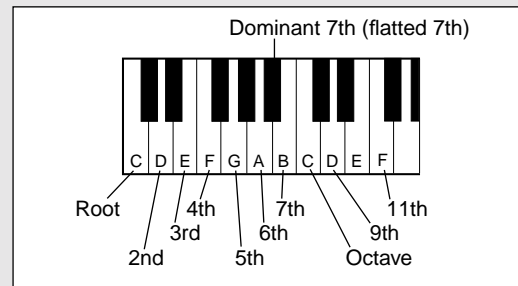


For simple major chords, the type is omitted.

One important point: Chords are made up of notes “stacked” on top of each other, and the stacked notes are indicated in the chord name of the chord type as a number — the number being the distance of the note from the root. (See the keyboard diagram below.) For example, the minor 6th chord includes the 6th note of the scale, the major 7th chord has the 7th note of the scale, etc.

The Intervals of the Scale

To better understand the intervals and the numbers used to represent them in the chord name, study this diagram of the C major scale:



Other Chords

Csus4

5th 4th

C7

Dominant 7th Major chord

Cm7

Dominant 7th Minor chord

CM7

7th Major chord

Cm7b5

Dominant 7th Diminished chord

Cm6

Minor chord 6th

C(9)

9th

Cdim7

Diminished 7th (double flatted 7th) Diminished chord

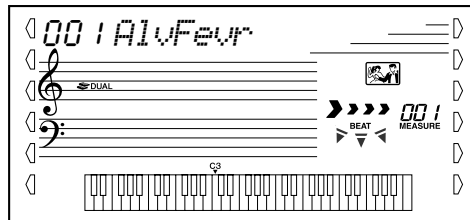
* Bbb = A



Using the Music Database

If you want to play in a certain genre of music but don't know which style and voice settings would be appropriate, simply select the desired genre from the Music Database. The PSR-350 automatically makes all appropriate panel settings to let you play in that music style!

- 1 Press the [MUSIC DATABASE] button.**
The MUSIC DATABASE menu appears in the display.

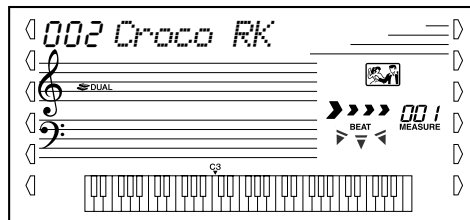
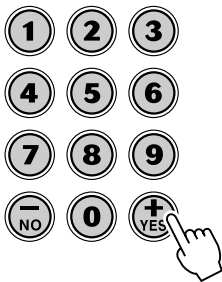


NOTE

- Press the [MUSIC DATABASE] button to switch into the Style mode, turn AUTO ACCOMPANIMENT on, and turn SYNCHRONIZED START on. See page 37 for details.

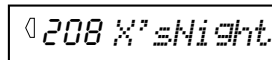
- 2 Select a "Music Database."**

Use the numeric keypad to set the desired Music Database, or use the [+]/[-] buttons to increase or decrease the value.



The PSR-350 has 208 panel setups in the Music Database and they are divided into eleven different categories.

In this example, we'll select #208 "Xmas Night" and play the song "Silent Night." (The sheet music is provided on the next page.)



- 3 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 "Multi Fingering" on page 43.

NOTE

- See pages 35 through 45 for details about the Auto Accompaniment.

Using the Music Database

♩ = 100 Silent Night

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

The accompaniment plays an ending phrase in ritardando.

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

You can also stop the accompaniment by using the [STOP] button.

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. Pressing the [MUSIC DATABASE] button and selecting a number 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

MAIN Voice, Octave, Volume, Reverb Depth, Chorus Depth, DSP Depth.....	page 25
Dual On/Off, Voice, Octave, Volume, Reverb Depth, Chorus Depth, DSP Depth	page 25
• Reverb Type	page 30
• DSP Type	page 31
• Harmony On/Off.....	page 32
• Harmony Type	page 34
• Transpose.....	page 27

■ AUTO ACCOMPANIMENT

• Synchro Start=ON*	page 37
• Style Number	page 35
• Accompaniment Split Point	page 45
• Main A/Main B.....	page 41
• Tempo	page 41
• Accompaniment Volume.....	page 42

* Set only when the accompaniment is not playing.



Registration Memory

Registration Memory is a flexible and convenient function that lets you instantly reconfigure virtually all settings of the PSR-350 with the touch of a single button. Simply save your favorite custom panel settings to one of the Registration Memory presets (up to sixteen are available) for future recall.

Registration Memory Presets

The PSR-350 has eight Registration Memory banks, each with two different presets (a total of sixteen) for your custom panel settings. Each of the sixteen Registration Memory can have different settings for the following parameters:

- Voice number
- Tempo
- Transpose
- Reverb Type
- DSP Type
- Harmony On/Off setting and Type
- Split Point
- Style number, and style-related settings: Accompaniment On/Off and Split Point

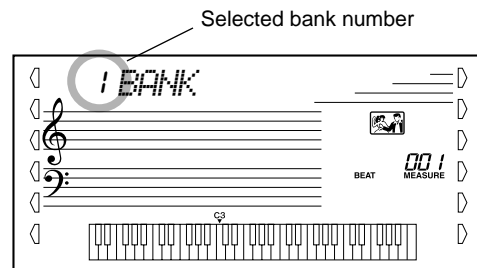
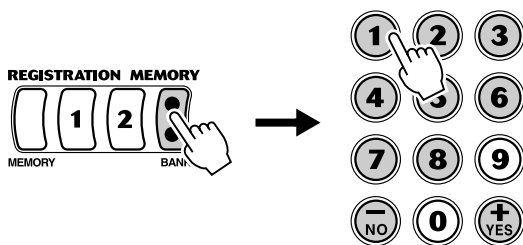
Recording a Registration Memory Preset

1 Make all desired settings for the PSR-350.

Virtually all of the PSR-350's settings can be saved to a Registration Memory button.

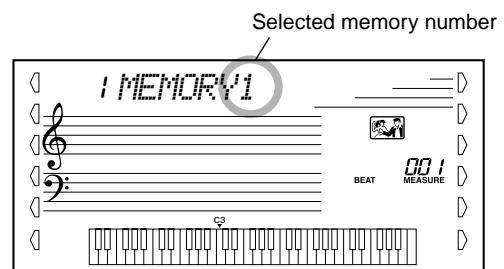
2 Select the desired bank.

Press the [BANK] button, then press the desired bank number (1 - 8).



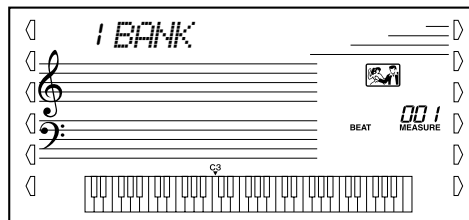
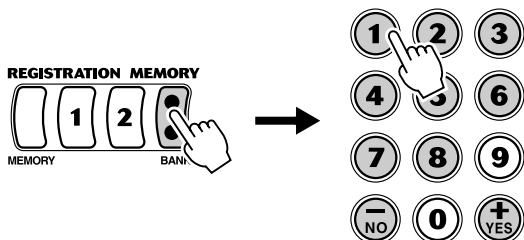
3 Record the settings to the desired preset, 1 or 2.

While holding down the [MEMORY] button, press the appropriate REGISTRATION MEMORY button, [1] or [2].

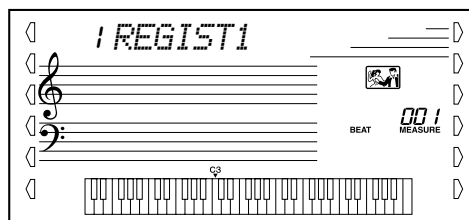


Recalling a Registration Memory Preset

1 Select the appropriate Registration Memory bank.



2 Press the desired Registration Memory preset button ([1] or [2]).





Selecting and Playing Songs

The PSR-350 features a total of 105 songs. These include 100 songs that showcase the rich and dynamic sounds of the instrument, and 80 of these songs can be used with the educational Lesson feature (page 63), a powerful tool that makes learning songs fun and easy. Three of the songs are special Demonstration songs that can be played automatically by pressing the [DEMO] button. Moreover, there are five special User songs to which you can record your own performance.

The User songs are “empty” and cannot be played until something has been recorded to them. (For instructions on recording your own songs, see page 58.)

You can also play back songs from floppy disks; for details, see page 69.

● Song Playback Display

Indicates the tracks currently playing back. (These can be alternately muted and sounded during playback by pressing the corresponding SONG MEMORY buttons.)

Current measure number
* The indication “F t” appears in the display when a song having a “free” tempo is selected. Certain songs have been composed or arranged in “free” tempo, meaning that the tempo and/or the time signature are not constant during the piece. As a result, when a “free” tempo song plays back, the measure, beat and timing indications are not shown in the display.

These display the notes and name of the current chord.

About the Beat Display
The arrow marks in the beat display flash in time with the rhythm of the song or style. The first arrow indicates the first beat of the measure, and the others flash in sequence.

Selecting and Playing a Song

1 Press the [SONG] button.

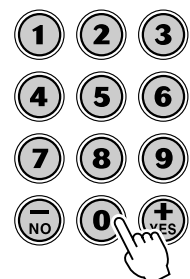
Song name and number

Indicates Song mode is selected

2 Select the desired song number.

Use the numeric keypad.

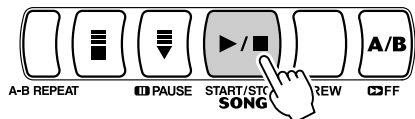
You can use the numeric keypad to directly enter the song number, or use the [+]/[-] buttons to step up and down through the songs.



Selecting and Playing Songs

3 Start the selected song.

Press the [START/STOP] button. As the song plays back, the measure number and chords are shown in the display.



NOTE

- You can play along with the song using the currently selected voice, or even select a different voice for playing along. Simply call up the Voice mode while the song is playing back and select the desired voice. (See page 23.)

4 Stop the song.

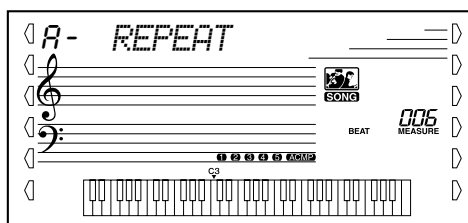
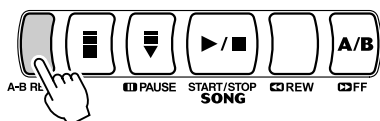
Press the [START/STOP] button. If playback was started by pressing the [START/STOP] button, the selected song stops automatically.

A-B Repeat

The convenient A-B Repeat function is an ideal aid for practicing and learning. It allows you to specify a phrase of a song (between point A and point B) and repeat it — while you play or practice along with it.

1 While playing a song, set point A (the start point).

During playback, press the [A-B REPEAT] button once, at the beginning point to be repeated.

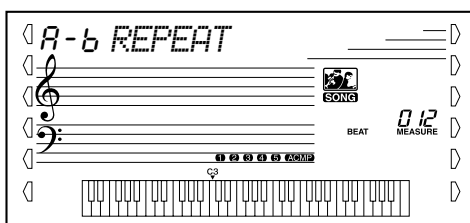
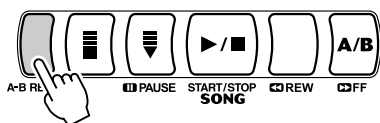


NOTE

- The A and B points can only be specified at the beginning of a measure (beat 1), and not at any point in the middle of a measure.
- To set the A point to the beginning of a song, press the [A-B REPEAT] button before starting playback.

2 Set point B (the end point).

As the song continues playing, press the [A-B REPEAT] button once again, at the ending point to be repeated. The selected phrase repeats indefinitely until stopped.

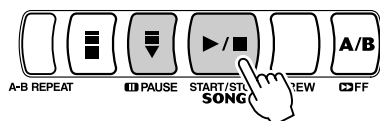


HINT

- If you're repeat practicing a particularly difficult section, try slowing down the Tempo to an appropriate speed to make it easier to play and master the part. You may also want to slow down the Tempo while setting the A and B points; this makes it easier to accurately set the points.
- You can also set the A-B Repeat function when the song is stopped. Simply use the [REW] and [FF] buttons to select the desired measures, pressing the [A-B REPEAT] button for each point, then start playback.

3 Pause or stop playback as needed.

Use the [PAUSE] button or [START/STOP] button. Stopping playback does not cancel the set A/B points or the A-B Repeat function.



4 Turn off the A-B Repeat function.

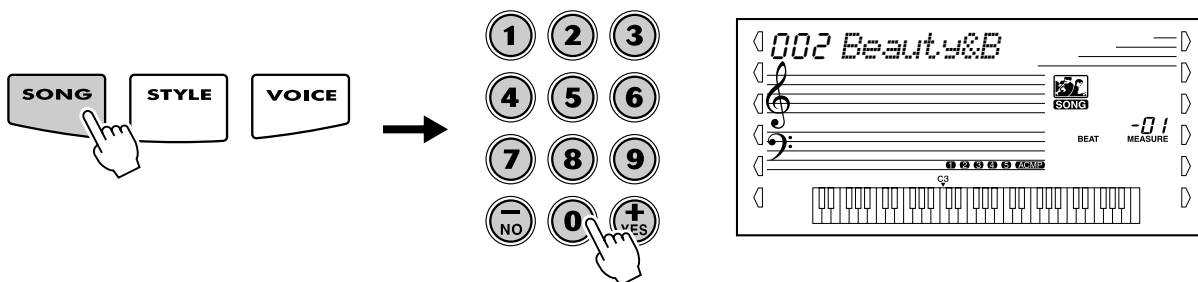
Press the [A-B REPEAT] button.

Melody Voice Change

The PSR-350 lets you play a melody on the keyboard along with each of the songs, either with the original melody voice or one of your own selection. The convenient Melody Voice Change feature takes this one step further — it lets you replace the original voice used for the melody of the song with the panel voice of your own selection. For example, if the current voice selected on the panel is piano but the song's melody is being played by a flute voice, using Melody Voice Change will change the flute melody voice to piano.

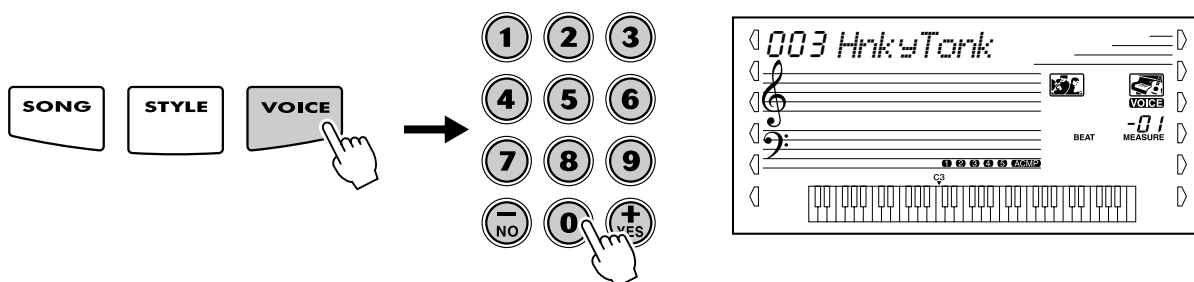
1 Select the desired song.

Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song.



2 Select the desired voice.

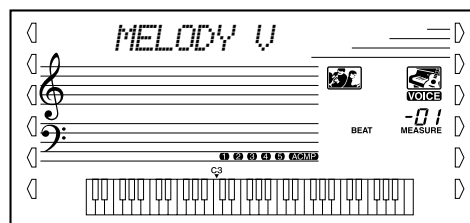
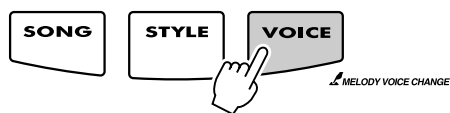
Press the [VOICE] button, then use the numeric keypad or [+]/[-] buttons to select the desired voice.



Selecting and Playing Songs

3 Press and hold down the [VOICE] button for at least one second.

“MELODY VOICE CHANGE” appears in the display, indicating that the selected panel voice has replaced the song’s original melody voice.

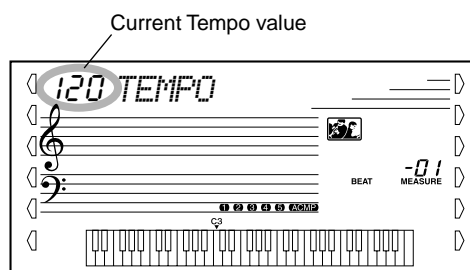


Changing the Tempo

The tempo of song playback can be adjusted over a range of 32 - 280 bpm (beats per minute).

1 Call up the Tempo setting.

Press the [TEMPO/TAP] button.



2 Change the value.

Use the numeric keypad to set the desired Tempo value, or use the [+]/[-] buttons to increase or decrease the value.



Restoring the Default Tempo Value

Each song has been given a default or standard Tempo setting. If you've changed the Tempo, you can instantly restore the default setting by pressing both [+]/[-] buttons simultaneously (when Tempo is selected).

Also, the tempo of a song returns to the default setting when selecting a different song. (The set tempo remains, however, when switching styles during playback.)

HINT

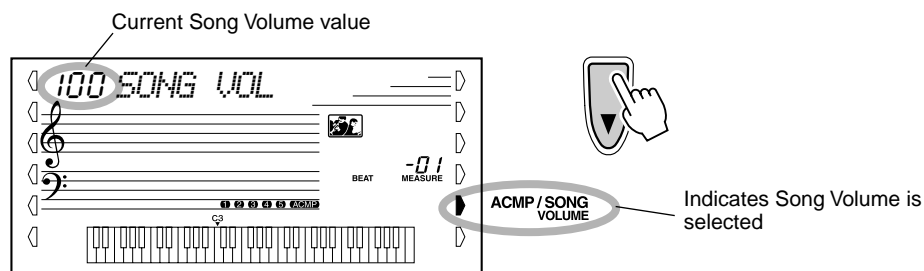
- You can also use the convenient Tap Tempo function to change the tempo by “tapping” a new one in real time. (See page 37.)

Adjusting the Song Volume

The playback volume of the song can be adjusted. This volume control affects only the song volume. The volume range is 000 - 127.

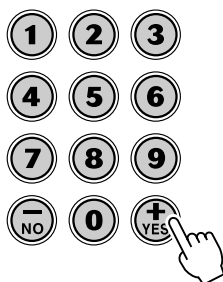
1 Select the Song Volume function.

Press the right Overall button, repeatedly if necessary, until “SONG VOL” appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Song Volume value (000 - 127). You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.



NOTE

- Song Volume cannot be changed unless the Song mode is active. (This function becomes Accompaniment Volume when the Style mode is active.)

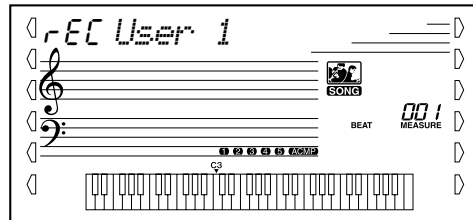
Restoring the Default Song Volume Value

If you've changed the Song Volume setting, you can instantly restore the default setting of "100" by pressing both [+]/[-] buttons simultaneously (when Song Volume is selected).



Song Recording

The PSR-350 features powerful and easy-to-use song recording features that let you record your keyboard performances — using up to six independent tracks (including one track for accompaniment) — for creating your own complete, fully orchestrated compositions. You can record and save up to five User songs.



NOTE

Song Memory Capacity

- Maximum number of notes : approximately 10,000 (when only "melody" tracks are recorded)
- Maximum number of chords : approximately 5,500 (when only the chord track is recorded)

Song recording on the PSR-350 is similar to using a tape recorder; whatever you play on the keyboard is recorded in real time as you play it. Also, when you record subsequent parts to other tracks, you can hear the previously recorded parts as you record new ones.

Recording a User Song

Data that can be recorded to the normal (melody) tracks:

- Note on/off
- Velocity
- Voice Number
- Reverb Type*
- Chorus Type*
- DSP Type*
- Sustain
- Tempo*, Time Signature* (if there is no such data in the Chord track)

Data that can be recorded to the Chord track:

- Style number*
- Chord changes and timing
- Changing sections (Intro, Main A/B, etc.)
- Accompaniment Volume*
- Tempo, Time Signature*

* These settings can only be recorded once at the beginning of a song; other settings can be changed in the middle of a song.

1 Make all desired PSR-350 settings.

Before you actually start recording, you'll need to make various settings for the song — such as selecting a style, setting the Tempo, and selecting a voice. (See pages 35, 41, and 23.)

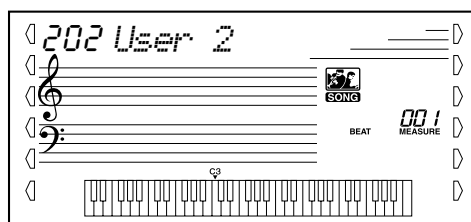
If desired, also make other settings. Refer to the list above for settings that can be recorded to a song.

Using the Metronome

You can use the Metronome instead of a style if desired. This allows you to keep your performance "in time," even when recording without rhythmic accompaniment. To do this, press the [METRONOME] button before recording in step #4 below. After the song is completely recorded, simply play back the song with the Metronome turned off. (See page 20.)

2 Select a User song number for recording.

Use the numeric keypad to select the desired song: 201 - 205. If no song is manually selected, the PSR-350 automatically selects the first available empty song number.

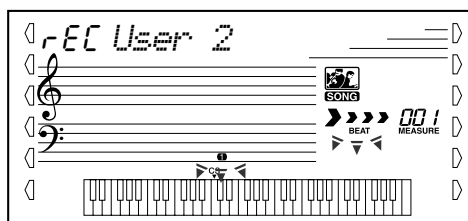


NOTE

- User song numbers can be selected in the same way as with the voices (see page 24). You can use the numeric keypad to directly enter the song number, use the [+]/[-] buttons to step up and down through the songs.

3 Select a track number for recording.

While holding down the [RECORD] button, press the appropriate SONG MEMORY button.



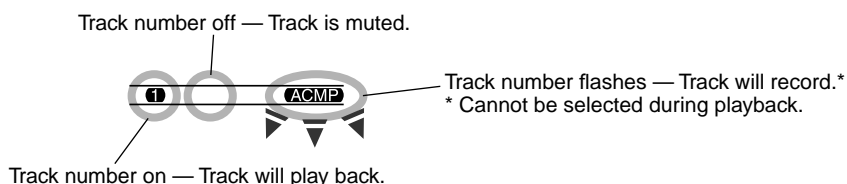
CAUTION

- Keep in mind that all recording operations "replace" the data. In other words, if you record to a track that already has recorded data, all previous data in the track will be erased and replaced by the newly recorded data.

● Muting Tracks During Playback

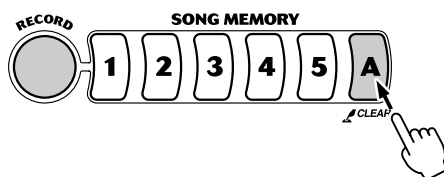
While recording is enabled, you can selectively mute different tracks. This is useful for when you want to clearly hear certain tracks, and not others, during recording. Muting can also be done "on the fly" during playback. To use muting, press the corresponding SONG MEMORY button, repeatedly if necessary, until the desired track number in the display is off.

Each press of a SONG MEMORY button (when playback is stopped) cycles through the following settings:



■ Recording to the Chord Track

A special Chord track is provided for recording accompaniment data. This is automatically recorded to the Chord track (track A). Selecting the Chord track automatically turns on the accompaniment.



NOTE

- If accompaniment has already been turned on before entering the Record mode, the Chord track is automatically selected.

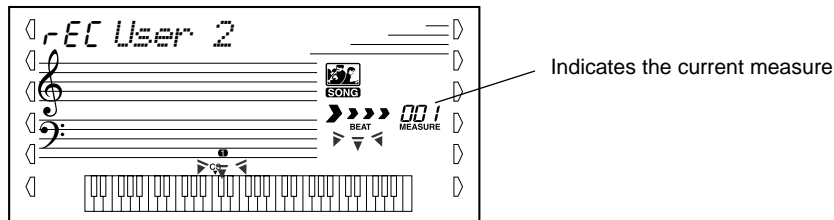
Song Recording

■ Recording to a Melody Track (1 - 5)

Five independent Melody tracks are provided for recording your keyboard performance. Normally, you'll want to record these after you've recorded the Chord track. You can also record the Chord track and one of the Melody tracks simultaneously.

4 Start recording.

When the beat marks and track number start flashing, you can start recording simply by playing the keyboard (or by pressing the [START/STOP] button).



If you want to rehearse your part before recording, press the [SYNC START] button to turn Sync Start off. After rehearsing, press [SYNC START] again to return to the above condition.

■ When recording the Chord track

With Sync Start on, play the first chord of the song in the auto accompaniment section of the keyboard. The accompaniment starts automatically and you can continue recording, playing other chords in time with the accompaniment.

5 Stop recording.

After you've finished playing the part, press the [START/STOP] or [RECORD] button.

6 Record to other tracks as desired.

To do this, simply repeat steps #3 - #5 above. Make sure that when you press the SONG MEMORY button corresponding to the desired track, the track number in the display flashes.

7 Listen to your new recording.

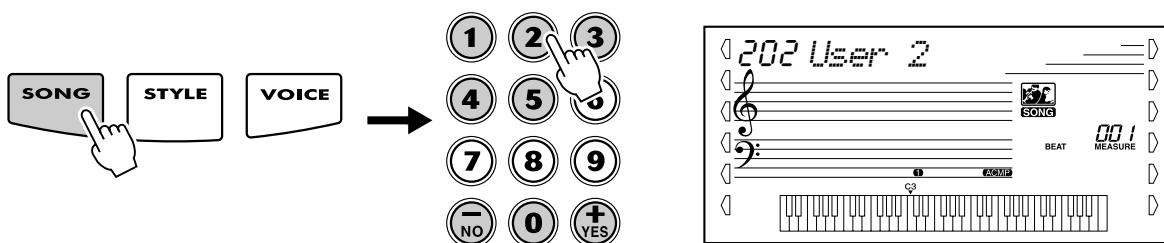
To play back the song from the beginning, simply press the [START/STOP] button again. Playback stops when the [START/STOP] button is pressed again.

Song Clear

The Song Clear operation completely erases all recorded data on all tracks of a selected User song. Use this operation only when you're sure you want to erase a song and record a new one. To erase an individual track of a song while leaving the other tracks intact, use the Track Clear operation (page 62).

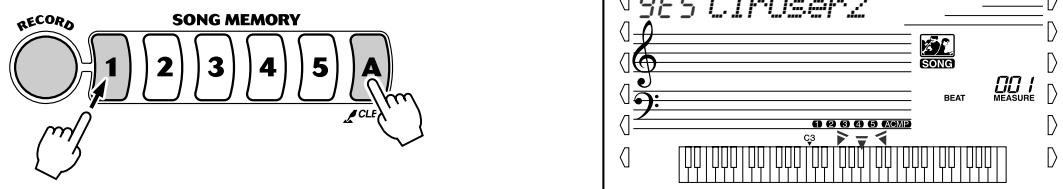
1 Select the desired song.

Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song (201 - 205).



2 While holding down the [A] button, press SONG MEMORY button [1].

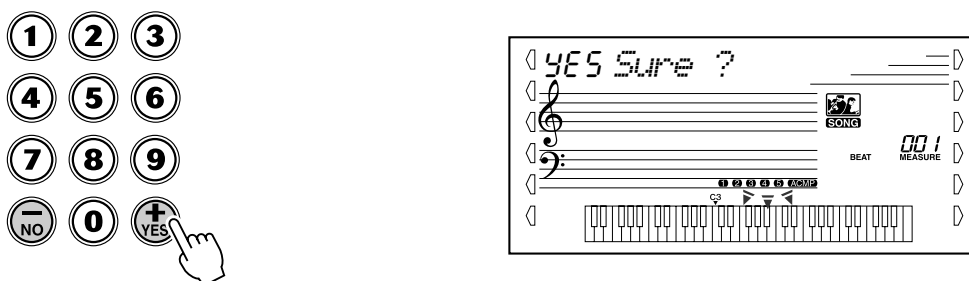
All track indications in the display flash, indicating that all tracks are to be erased.



3 Press the [+ / YES] button.

4 At the "Sure?" prompt, press the [+ / YES] button, or press the [- / NO] button to abort.

Pressing the [+ / YES] button executes the Song Clear operation.
Pressing the [- / NO] button aborts.

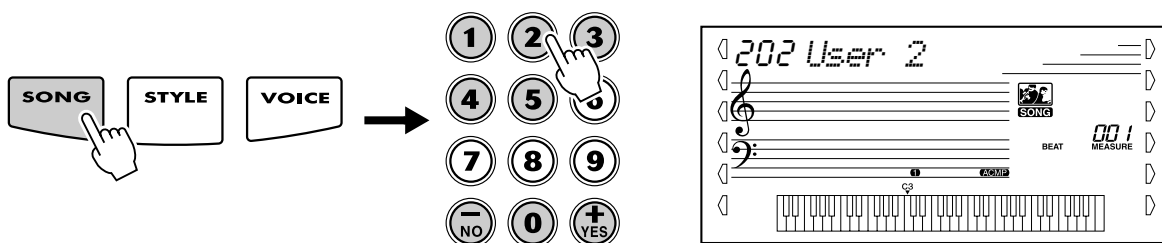


Track Clear

The Track Clear operation completely erases all recorded data on a selected track of a selected User song, leaving the other tracks intact. Use this operation only when you're sure you want to erase a track and record a new one. To erase the data of an entire song, use the Song Clear operation (page 61).

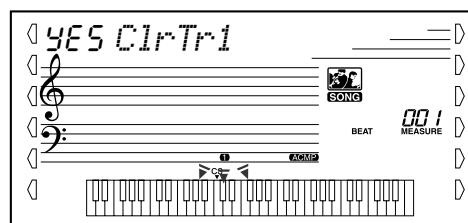
1 Select the desired song.

Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song (201 - 205).



2 Press and hold down the button corresponding to the track to be erased.

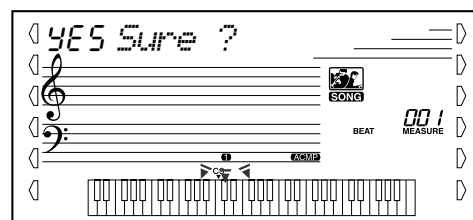
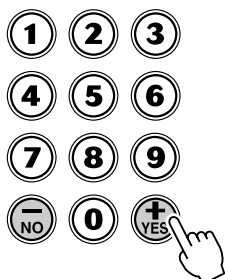
Press and hold down the appropriate SONG MEMORY button ([1] - [5], [A]) for at least one second.



3 Press the [+]/YES] button.

4 At the "Sure?" prompt, press the [+]/YES] button, or press the [-]/NO] button to abort.

Pressing the [+]/YES] button executes the Track Clear operation. Pressing the [-]/NO] button aborts.





Song Lesson

The Lesson feature provides an exceptionally fun and easy-to-use way to learn how to read music and play the keyboard. There are a total of 80 Lesson songs (Songs 021 to 100), specially designed for use with the educational features. Lesson lets you practice the left- and right-hand parts of each song independently, step by step, until you've mastered them and are ready to practice with both hands together. These practices are divided into four Lesson steps, as described below. Lessons 1 - 3 apply to each hand; press the appropriate button, [L] (left) or [R] (right) to select the desired part for practice.

Naturally, you can also use Song data you've loaded from disk with the Lesson features.

■ Lesson 1 — Timing

This lesson step lets you practice just the timing of the notes — any note can be used, as long as you play in rhythm.

■ Lesson 2 — Waiting

In this lesson step, the PSR-350 waits for you to play the correct notes before continuing playback of the song.

■ Lesson 3 — Minus One

This lesson step plays back the song with one part muted, letting you play and master the missing part yourself — in rhythm and at the proper tempo.

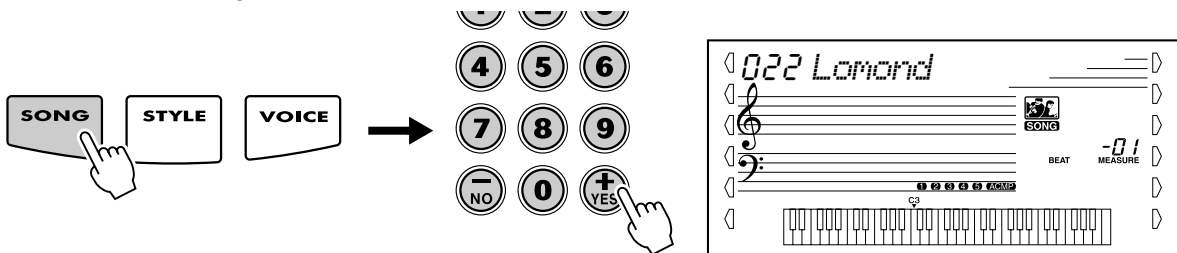
■ Lesson 4 — Both Hands

Lesson 4 is a “Minus One” practice essentially the same as Lesson 3, except that both the left- and right-hand parts are muted — letting you play and master both hands at the same time.

Using the Lesson Feature

1 Select one of the Lesson songs.

Press the [SONG] button, then use the numeric keypad or [+] / [-] buttons to select the desired song.

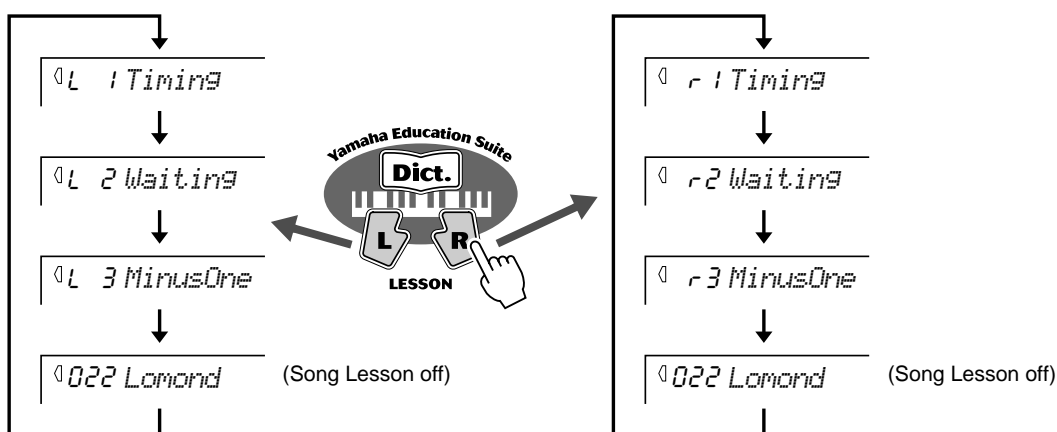


The Lesson songs are divided into several different categories or music genres, with 80 songs available.

- LESSON**
- 021~050 PRACTICE**
- 051~060 DUET**
- 061~080 PIANIST**
- 081~090 ACCOMPANIMENT**
- 091~100 DJ GAME**

2 Select the part you wish to work on (left or right) and the Lesson step.

If you want to work on the right-hand part, press the [R] button; to work on the left, press the [L] button. Pressing either button repeatedly cycles through the available Lesson steps in order: Lesson 1 → Lesson 2 → Lesson 3 → Off → Lesson 1, etc. The selected Lesson step is indicated in the display.



To select Lesson 4, press both [L] and [R] buttons simultaneously.



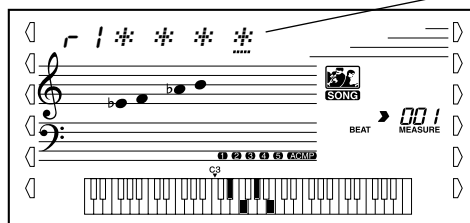
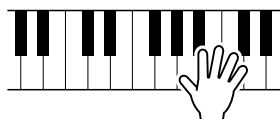
◁ L r 4 BothHand

NOTE

- When the Grade/Talking function (page 68) is on, the PSR-350 "announces" the current Lesson step.
- When a DJ song is selected, the left (L) and right (R) lessons are identical.

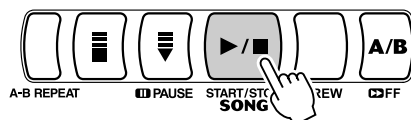
3 Start the Lesson.

The Lesson and song playback start automatically (following a lead-in count) as soon as the Lesson step is selected. When the Lesson is finished, your performance "grade" is shown in the display (if the Grade/Talking function is turned on; page 68). After a short pause, the Lesson begins again automatically.



Asterisks appear indicating the timing at which you should play the notes. The line of asterisks represents one full measure. Sixteenth notes are indicated by an alternating asterisk and sharp sign. (for songs having a "free" tempo, no such indications appear.)

4 Press the [START/STOP] button to stop the Lesson.



The PSR-350 exits from the Lesson feature automatically when the [START/STOP] button is pressed.

Select the Lesson Track

This function allows you to select the track number of a disk song (only SMF format 0). (Refer to the Disk Operations chapter on page 69.)

1 With Song playback stopped, press the Overall left or right button to select LESSON TRACK.

2 Set the Track number.

Use the numeric keypad number buttons [0]-[9], or the [+]/[-] buttons to select the Lesson Track number.

NOTE

- If necessary, the Octave setting can be changed for lesson track. (See page 72.)

Lesson 1 — Timing

This lesson step lets you practice just the timing of the notes — any note can be used, as long as you play in rhythm. Pick a note to play. For the left hand, use a note in the auto accompaniment section or play the appropriate left-hand note; for the right, play a note above F#2. Simply concentrate on playing each note in time with the rhythmic accompaniment.

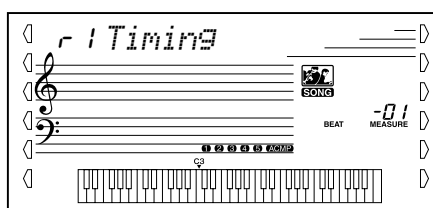
NOTE

- The melody note does not sound unless your playing is in time with the rhythm.

1 Select one of the Lesson songs.

2 Select Lesson 1.

Press the [L] or [R] button (repeatedly, if necessary) until Lesson 1 is indicated.

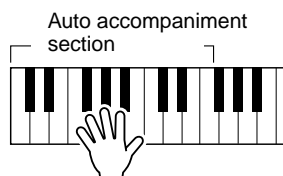


3 Play the appropriate melody or chord with the song.

After the lead-in, the song starts automatically, and the appropriate notes appear in the display. In Lesson 1, simply play one note repeatedly in time with the music.

Regarding chords and the use of the left hand, the PSR-350 actually has two different types of songs: 1) songs with normal left-hand chords, and 2) songs in which the left hand plays arpeggios or melodic figures in combination with the right.

In the case of the first type, play the chords with your left hand in the auto accompaniment section of the keyboard.



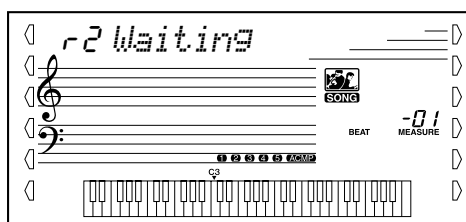
Lesson 2 — Waiting

In this lesson step, the PSR-350 waits for you to play the correct notes before continuing playback of the song. This lets you practice reading the music at your own pace. The notes to be played are shown in the display, one after another, as you play them correctly.

1 Select one of the Lesson songs.

2 Select Lesson 2.

Press the [L] or [R] button (repeatedly, if necessary) until Lesson 2 is indicated.



3 Play the appropriate melody or chord with the song.

After the lead-in, the song starts automatically, and the appropriate notes appear in the display. In Lesson 2, play the correct notes at your own pace, until you can master playing them in rhythm.

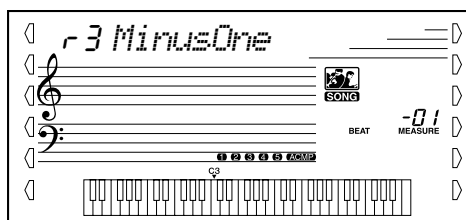
Lesson 3 — Minus One

This lesson step lets you practice one part of the song in rhythm at the proper tempo. The PSR-350 plays back the song accompaniment with one part muted (either the left part or the right)—letting you play and master the missing part yourself. The notes you are to play are shown continuously in the display as the song plays back.

1 Select one of the Lesson songs.

2 Select Lesson 3.

Press the [L] or [R] button (repeatedly, if necessary) until Lesson 3 is indicated.



3 Play the appropriate part with the song.

After the lead-in, the song starts automatically, and the appropriate notes appear in the display. In Lesson 3, listen carefully to the un-muted part, and play the muted part yourself.

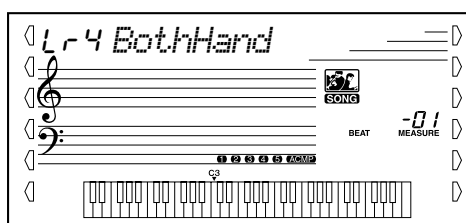
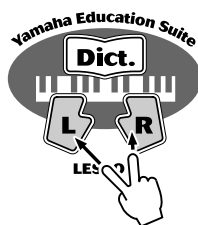
Lesson 4 — Both Hands

Lesson 4 is a “Minus One” practice essentially the same as Lesson 3, except that both the left- and right-hand parts are muted — letting you play and master both hands at the same time. Go on to this lesson step after you’ve mastered each hand’s part in the previous three lesson steps. Practice both hands in time with the rhythm along with the notation in the display.

1 Select one of the Lesson songs.

2 Select Lesson 4.

Press the [L] and [R] buttons simultaneously, so that Lesson 4 is indicated.



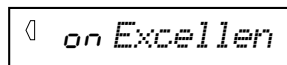
3 Play both the left- and right-hand parts with the song.

After the lead-in, the song starts automatically, and the appropriate notes appear in the display. In Lesson 4, both parts (left and right) are muted, letting you play the entire song by yourself.

Grade/Talking

The Lesson feature has a built-in evaluation function that monitors your practicing of the Lesson songs, and just like a real teacher, it tells you how well you did each exercise. Four grades are assigned, depending on your performance: “OK,” “Good,” “Very Good,” and “Excellent.”

The Grade/Talking feature is included in this function — “announcing” various comments through the speakers. These include the Grade comments as well as the titles of the Lesson steps and the names of certain functions.

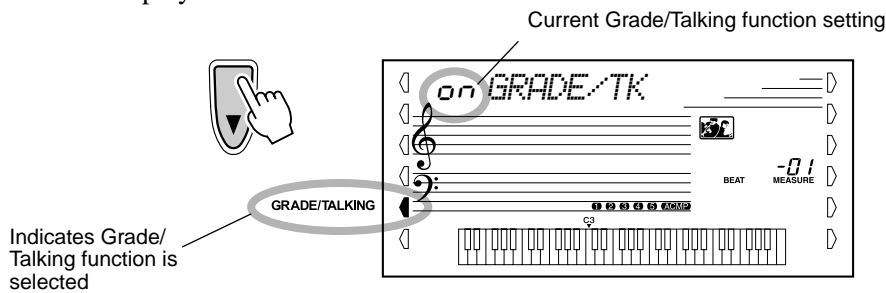


1 Select the Grade/Talking function.

Press the left Overall button, repeatedly if necessary, until “GRADE/TK” appears in the display.

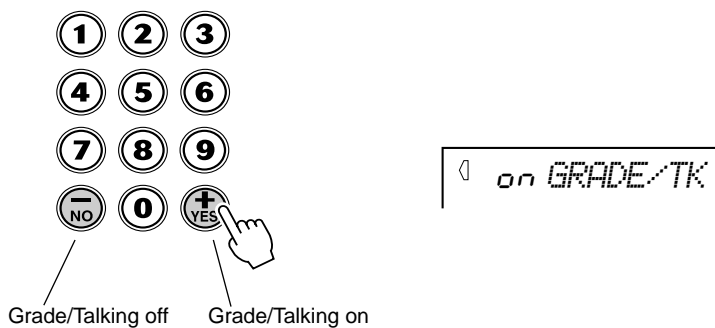
NOTE

- Grade/Talking is automatically set to on as the default setting.



2 Set Grade/Talking to on or off as desired.

Use the [+]/[-] buttons to set Grade/Talking to on or off.

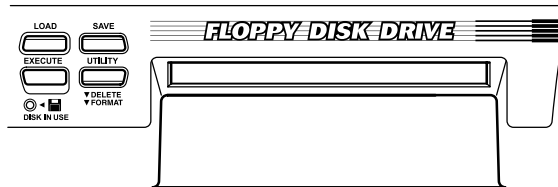




Disk Operations

The PSR-350 features a convenient floppy disk drive — built right into the instrument. Let you record and play back your own original User Songs, it allows you to save and load important PSR-350 data.

Moreover, since the PSR-350 is compatible with a wide variety of disk formats, you can play back song data on commercially available GM (General MIDI), DOC (Disk Orchestra Collection), and Clavinova Disklavier Piano Soft disks. It also allows you to save and play back Standard MIDI File (SMF) format 0 data.



The PSR-350 can also be used with the included disk or commercially available Style File data, allowing you to load additional styles (auto accompaniment patterns) to the instrument. Style File data is loaded individually as style number 107, and can be played just like the preset styles. Once loaded, the Style File data can then be saved in combination with User songs.

■ Data that Can be Saved or Loaded with the PSR-350

Data type	Extension	Save	Load
User Songs	.350	○	○
Style File	.STY	-	○

■ Using Commercially Available Music Data (sold separately)

The PSR-350 is compatible with music disks (floppy disks) that bear the following marks:



You can playback song files collected on these disks using the voices defined in the GM standard. (See page 71)
“GM System Level 1” is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of manufacturer. The GM mark is affixed to all software and hardware products that support GM System Level 1. The PSR-350 supports GM System Level 1.



You can playback song files collected on these disks using the voices defined in Yamaha’s DOC format. (See page 71)
The DOC voice allocation format provides data playback compatibility with a wide range of Yamaha instruments and MIDI devices, including the Clavinova series.



You can load and play with the style files collected on these disks. (See page 75)
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-350 uses the SFF data internally, reading from optional SFF style disks.

IMPORTANT

- While any of the disk-related displays are shown (called up by pressing the LOAD, SAVE, or UTILITY buttons), no panel operations can be executed (except for disk operations), and playing the keyboard does not produce any sound.

NOTE

- User Songs and Disk Style data (style number 107) are saved and loaded as a single file on the PSR-350.
- To ensure proper data storage, use only disks that have been formatted on the PSR-350 (page 77).
- The three letters following the file name (after the period) are referred to as a file “extension.” The extension indicates the type of file.

Using the Floppy Disk Drive (FDD) and Floppy Disk

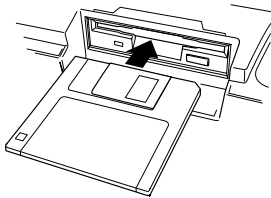
Be sure to handle floppy disks and treat the disk drive with care. Follow the important precautions below.

Compatible Disk Type

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

Inserting/Ejecting Floppy Disks

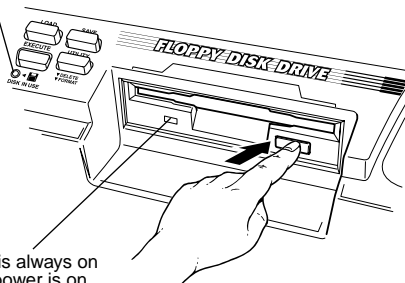
- To insert a floppy disk into the disk drive:
 - Hold the disk so that the label of the disk is facing upward and the sliding shutter is facing forward, towards the disk slot. Carefully insert the disk into the slot, slowly pushing it all the way in until it clicks into place and the eject button pops out.



- When the PSR-350 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.

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



This lamp is always on when the power is on, regardless of Disk operation.

- 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.

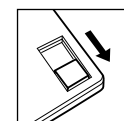
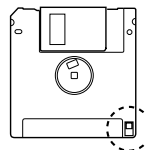
- Never attempt to remove the disk or turn the power off during recording, reading and playing back (when the DISK IN USE lamp is lit). Doing so can damage the disk and possibly the disk drive.
- Be sure to remove the floppy disk from the disk drive before turning off the power. A floppy disk left in 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

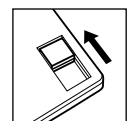
- Clean the read/write head regularly. This instrument employs a precision magnetic read/write head which, after an extended period of use, will pick up a layer of magnetic particles from the disks used that will eventually cause read and write errors.
- To maintain the disk drive in optimum working order Yamaha recommends that you use a commercially-available 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)



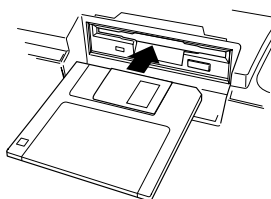
Write protect tab OFF (unlocked or write enabled)

Disk Song Playback

This function allows you to play back song data on commercially available GM (General MIDI), Yamaha DOC (Disk Orchestra Collection), or Clavinova Disklavier Piano Soft disks. It also allows you to play back Standard MIDI File (SMF) format 0 data.

1 Insert the disk into the disk drive.

Once the disk is inserted, the PSR-350 will automatically switch to the Song mode.

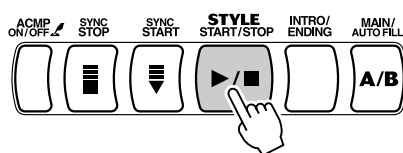


2 Select the desired song number.

Use the numeric keypad or the [+]/[-] buttons. The disk song numbers are from 101 to 199.

3 Start the selected song.

Press the [START/STOP] button.



NOTE

- 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-350, the measure 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.

Some of song files on the included sample disk are also free-tempo software.

4 If you want to change to another song, repeat step 2 above.

5 Stop the song.

Press the [START/STOP] button.

For details, see "Selecting and Playing a Song," page 53.

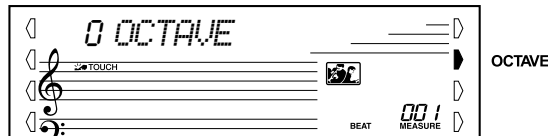
Change the Octave Setting for a Disk Song Track

When a disk song is playing and the note data exceeds the limit of C1 - C6, an "OVER" indication flashes and ◀ or ▶ appears in the display. If this happens, you can adjust the octave setting of the relevant track up or down to compensate.



1 Select the Octave function.

Press the right Overall button, until "OCTAVE" appears in the display



2 Change the Octave setting.

To set a positive octave value, press the number button, 0, 1, or 2.

To set a negative value, simultaneously hold down the [-] button and press the appropriate number button, 1 or 2.

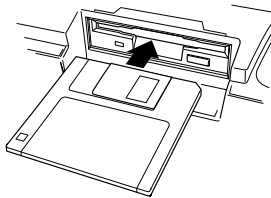
NOTE

- The Octave setting can only be changed when the Song is stopped.

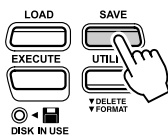
Save

You can save User songs (song #201 - #205) to floppy disks.

1 Insert a formatted floppy disk.



2 Press the [SAVE] button.

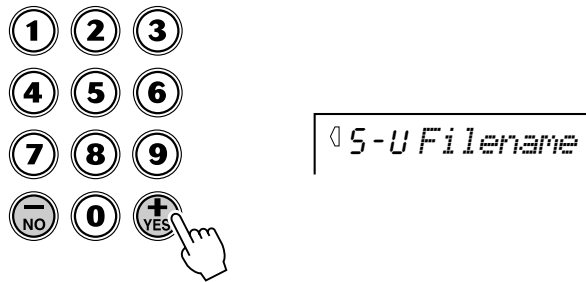


Indicates new file name

NOTE

- If the [SAVE] button is pressed when there is no floppy disk inserted into the disk drive, a "No Disk" message appears at the top of the display, and all disk operations will be disabled.
- When the floppy disk's write-protect tab is set to ON (page 70) or the disk is a purposely "copy-protected" disk, a "Protect" message appears, indicating that the Save function is not possible.

If you wish to overwrite the data already saved to an existing file, use the [+]/[-] buttons to select the file you want to overwrite.

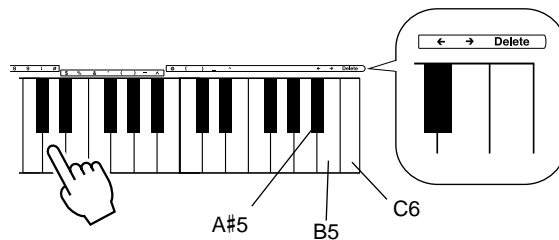


3 If necessary change the file name.

The PSR-350 automatically creates a file name (for example “UF_00nnn”) for the file you are about to save. If you want to enter a more descriptive name for easier file identification (and this is recommended), this can be done directly from the keyboard.

NOTE

- Even if you chose a file where data is already saved because you want to overwrite the data, renaming the file will cause the new data to be saved in a different file, and the old data won't be overwritten.

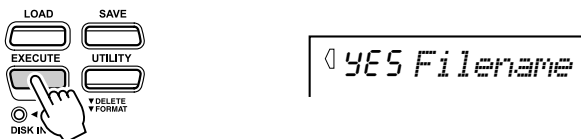


A file name can consist of up to 8 characters. Each key on the keyboard enters a different character, printed directly above the key (you cannot write over the file extension following the period at the end of the file name). The A#5 and B5 keys move the cursor backward and forward within the file name. Use these keys to place the cursor where you want to enter or change a character. The Delete key (C6) deletes the character at the cursor position.

4 Press the [EXECUTE] button.

NOTE

- If you have selected a file to which data has already been saved, “yES Over Wr?” will appear on the top line of the display.

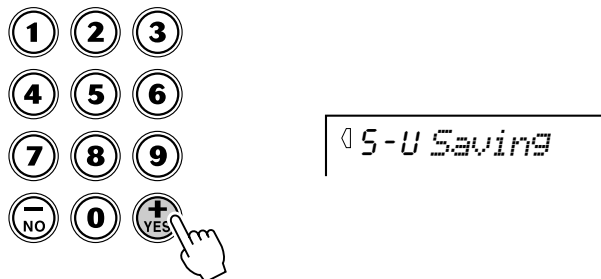


To exit from the Save screen, press the [UTILITY] button repeatedly.

5 Execute the Save operation.

Press the [+] button (“YES”), and the Save operation will start. Once started, the operation cannot be canceled.

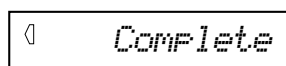
As the file is saving, “Saving” will appear on the top line of the display.



To avoid saving the file, press the [-] button (“NO”) instead of the [+] button (“YES”).

To exit from the Save screen, press the [UTILITY] button repeatedly.

When the operation is completed, the following display briefly appears.



NOTE

- If there isn't enough space on the disk, a "DiskFull" message appears, and you will not be able to save any data. You can delete unneeded files on the disk (page 76), or replace the disk with a new one and repeat the save operation.
- If a write error occurs during a save operation, an "Error" 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 retry the save operation.

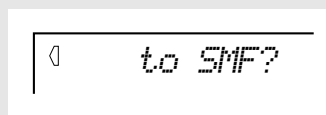
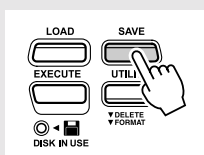
CAUTION

- While the file is being saved (the DISK IN USE lamp is lit), never eject the floppy disk or turn the power off.

Saving files in SMF Format 0

The PSR-350 can also save song data in SMF (Standard MIDI File) Format 0. To do this:

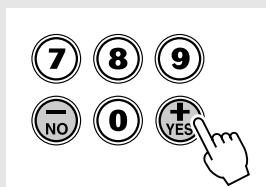
2-1 In step #2 of the above Save operation, after pressing the [SAVE] button, press the [SAVE] button again to call up the SMF Save mode.



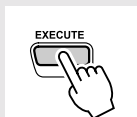
2-2 Press the [EXECUTE] button.



2-3 Select a song for saving, if necessary, using the [+]/[-] buttons.



2-4 Press the [EXECUTE] button.



Continue with step #3 of the Save operation above.

Load

Once you've saved your User data onto a floppy disk, you can reload that data back to the PSR-350. You can also load style data from the included disk or commercially available Yamaha Style File disks.

1 Insert the floppy disk into the disk drive.

2 Press the [LOAD] button.

Press the [LOAD] button again to exit from the LOAD screen.



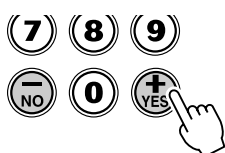
This case is user file. Style file indicates "L-S".

NOTE

- If the [LOAD] button is pressed when there is no floppy disk inserted into the disk drive, a "No disk" message appears at the top of the display, and all disk operations will be disabled.

3 Select the file to load.

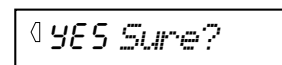
Use the [+]/[-] buttons.



NOTE

- If the disk contains no file, the display shows "No file" indicating that the Load function is not possible.

4 Press the [EXECUTE] button.



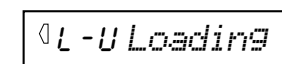
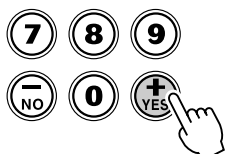
NOTE

- When data is loaded from a floppy disk to the PSR-350, the data already in the memory of the PSR-350 will be replaced by the data on the disk. Save important data into a disk file before doing the operation.

5 Execute the Load operation.

Press the [+] button ("YES"), and the Load operation will start. Once started, the operation cannot be canceled.

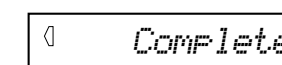
As the file is loading, "Loading" will appear on the top line of the display.



CAUTION

- While the file is loading (the DISK IN USE lamp is lit), never eject the floppy disk or turn the power off.

When the operation is completed, the following display briefly appears.



If you do not intend to load the file, press the [-] button ("NO") instead of the [+] button ("YES").

To exit from the LOAD screen, press the [LOAD] button.

Utility – Delete

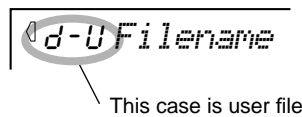
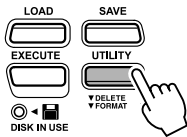
This function allows you to delete individual files of User data you've saved to floppy disk.

1 Insert the floppy disk into the disk drive.

2 Press the [UTILITY] button.

The filename will appear at the top of the display.

To exit from the UTILITY screen, press the [UTILITY] button twice.

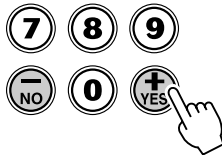


NOTE

- If the [UTILITY] button is pressed when there is no floppy disk inserted into the disk drive, a "No disk" message appears at the top of the display, and all disk operations will be disabled.
- When the floppy disk's write-protect tab is set to ON (see page 70) or the disk is a purposely "copy-protected" disk, a "Protect" message appears, indicating that the Utility function is not possible.
- SMF files are indicated by "d-s".

3 Select the file to be deleted.

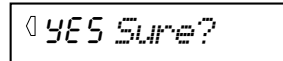
Use the [+]/[-] buttons.



IMPORTANT

- Only files that were created on the PSR-350 and were saved as files (User song, etc.) can be deleted. When there are no files on disk that the PSR-350 can delete, the FORMAT display appears instead of DELETE, when the [UTILITY] button is pressed.

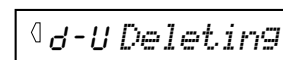
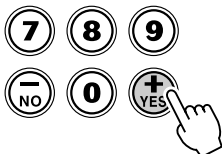
4 Press the [EXECUTE] button.



5 Execute the delete operation.

Press the [+] button ("YES"), and the Delete operation will start. Once started, the operation cannot be canceled.

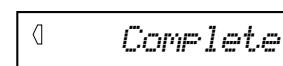
As the file is deleting, "Deleting" will appear on the top line of the display.



CAUTION

- While the file is being deleted (the DISK IN USE lamp is lit), never eject the floppy disk or turn the power off.

When the operation is completed, the following display briefly appears.



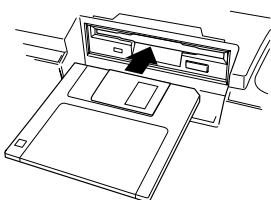
If you do not intend to delete the file, press the [-] button ("NO") instead of the [+] button ("YES").

To exit from the UTILITY screen, press the [UTILITY] button twice.

Utility – Formatting an Unformatted Disk

1 Insert the unformatted floppy disk into the disk drive.

A “Format?” message will appear at the top of the display.
Press the [UTILITY] button to exit from the FORMAT screen.



◁ CUE Format?

NOTE

- If you insert an unformatted disk with the write protect tab in the ON position into the drive, a “Protect” message appears. Eject the disk, move the protect tab to the OFF position, and reinsert it in the drive.

2 Press the [EXECUTE] button.



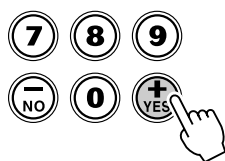
◁ YES Sure?

CAUTION

- If a disk that cannot be read by the PSR-350 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.

3 Execute the Format operation.

Press the [+] button (“YES”), and the Format operation will start. Once started, the operation cannot be canceled.
During formatting, “Formting” will appear at the top of the display.



◁ 072 Excuting

When the operation is completed, the following display briefly appears.

◁ Complete

If you do not intend to format the disk, press the [-] button (“NO”) instead of the [+] button (“YES”).

To exit from the UTILITY screen, press the [UTILITY] button.

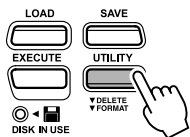
Utility – Formatting a Previously Formatted Disk

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.

1 Insert the floppy disk into the disk drive.

2 Press the [UTILITY] button.

This calls up the Delete operation (page 76). The filename will appear at the top of the display. When there are no files on disk that the PSR-350 can delete, the FORMAT display appears instead of DELETE, when the [UTILITY] button is pressed. In this situation, step #2 is unnecessary.

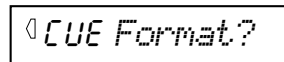
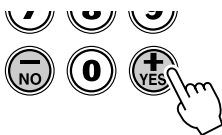


NOTE

- If the [UTILITY] button is pressed when there is no floppy disk inserted into the disk drive, a “No disk” message appears at the top of the display, and all disk operations will be disabled.

3 Press the [UTILITY] button again.

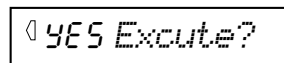
This calls up the Format operation. “Format?” will appear at the top of the display.



NOTE

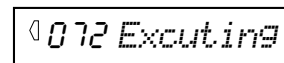
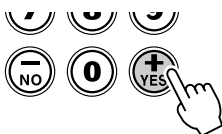
- When the floppy disk’s write-protect tab is set to ON (see page 70) or the disk is a purposely “copy-protected” disk, a “Protect” message appears, indicating that the Utility function is not possible.

4 Press the [EXECUTE] button.



5 Execute the Format operation.

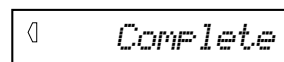
Press the [+] button (“YES”), and the Format operation will start. Once started, the operation cannot be canceled. During formatting, “Formting” will appear at the top of the display.



CAUTION

- While formatting is in progress (the DISK IN USE lamp is lit), never eject the disk or turn the power off.
- 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.

When the operation is completed, the following display briefly appears.



If you do not intend to format the disk, press the [-] button (“NO”) instead of the [+] button (“YES”). To exit from the operation, press the UTILITY button.



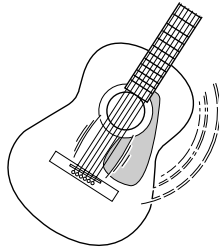
MIDI Functions

The PSR-350 is MIDI-compatible, featuring MIDI IN and MIDI OUT terminals and providing a variety of MIDI-related controls. 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-350.

What Is MIDI?

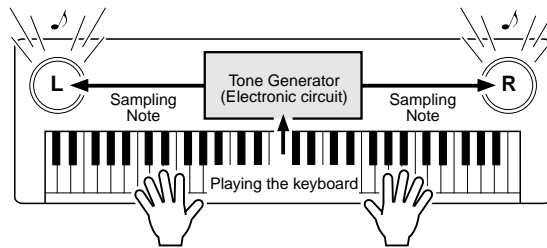
No doubt you have heard the terms “acoustic instrument” and “digital instrument.” In the world today, these are the two main categories of instruments. Let’s consider an acoustic piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike 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-350 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)	20 (strong)

GM System Level 1

“GM System Level 1” is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of manufacturer. The GM mark is affixed to all software and hardware products that support GM System Level 1. The PSR-350 supports GM System Level 1.



MIDI Functions

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-350 can control a MIDI device by transmitting note related data and various types of controller data. The PSR-350 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-350 can receive/transmit.

● Channel Messages

The PSR-350 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-350 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 struck.
Program Change	Voice number (along with corresponding bank select MSB/LSB settings, if necessary).
Control Change	Messages that are used to change some aspect of the sound (modulation, volume, pan, etc.).

● System Messages

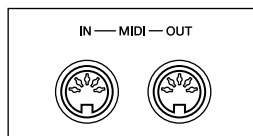
This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

Message Name	PSR-350 Operation/Panel Setting
Exclusive Message	Reverb/chorus/DSP settings, etc.
Realtime Messages	Start/stop operation

The messages transmitted/received by the PSR-350 are shown in the MIDI Implementation Chart on page 98.

MIDI Terminals

In order to exchange MIDI data between multiple devices, each device must be connected by a cable. The MIDI terminals of the PSR-350 are located on the rear panel.



MIDI IN	Receives MIDI data from another MIDI device.
MIDI OUT	Transmits the PSR-350's keyboard information as MIDI data to another MIDI device.

NOTE

- 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.

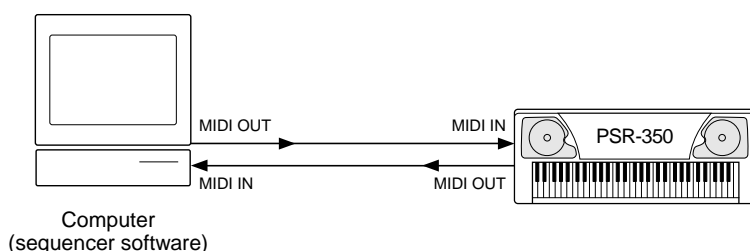
Connecting to a Personal Computer

By connecting your PSR-350's MIDI terminals to a personal computer, you can have access to a wide variety of music software.

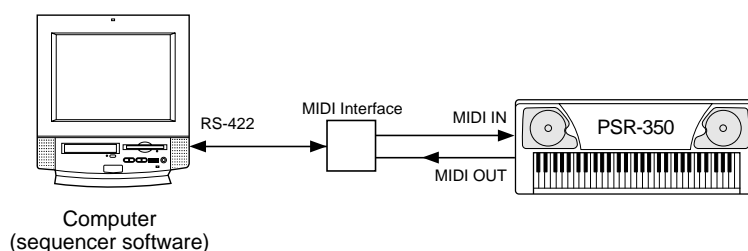
When using a MIDI interface device installed in the personal computer, connect the MIDI terminals of the personal computer and the PSR-350.

Use only special MIDI cables when connecting MIDI devices.

- **Connect the MIDI terminals of the PSR-350 to the MIDI terminals of the personal computer.**



- **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, as shown in the diagram below.**



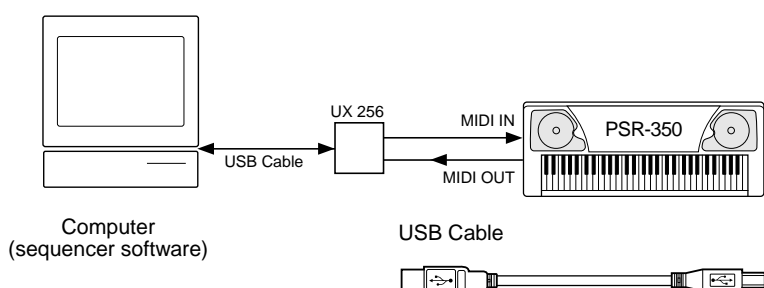
NOTE

• 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, refer to the owner's manual for the software you are using.

NOTE

Viewing the Notation for MIDI Channel 1
 • The PSR-350 has a special function that lets you view the notes of the MIDI data (channel 1 only) on the display.

- **When connecting to a computer with a USB interface, use the Yamaha UX256 USB/MIDI Interface. Connect the UX256 and the computer with a standard USB cable, then make the proper MIDI connections between the PSR-350 and the UX256.**

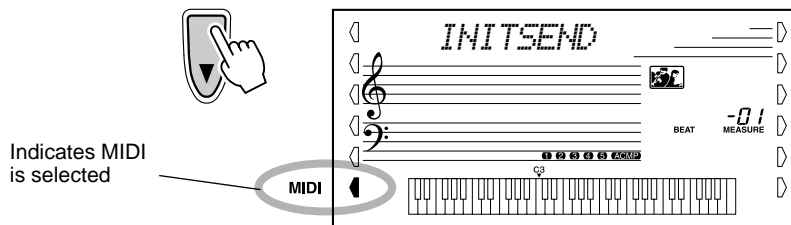


Local Control

This function lets you enable or disable keyboard control over the PSR-350's voices. This would come in handy, for example, when recording notes to MIDI sequencer. If you are using the sequencer to play back the voices of the PSR-350, you would want to set this to "off" — in order to avoid getting "double" notes, both from the keyboard and from the sequencer. Normally, when playing the PSR-350 by itself, this should be set to "on."

1 Select the MIDI operations.

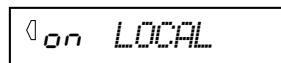
Press the left Overall button, repeatedly if necessary, until MIDI is selected.



2 Select the Local Control parameter.

Press "1" on the numeric keypad to select operation #1, Local Control.

If the LOCAL display appears instead of INITSEND in step #1 above, step #2 is unnecessary.



3 Press the [+]/[-] buttons.

Set Local Control to on or off, as desired.



Using Initial Setup Send with a Sequencer

The most common use for the Initial Setup Send function is in recording a song on a sequencer that is intended for playback with the PSR-350. Essentially, this takes a “snapshot” of the PSR-350 settings and sends that data to the sequencer. By recording this “snapshot” at the start of the song (before any actual performance data), you can instantly restore the necessary settings on the PSR-350. Provided there is a pause in the song, you could also do this in the middle of a song — for example, completely changing the PSR-350 settings for the next section of the song.

■ Sending Initial Setup Data •••••

1 First, set up the sequencer for recording.

The actual procedure may differ depending on your particular equipment and software.

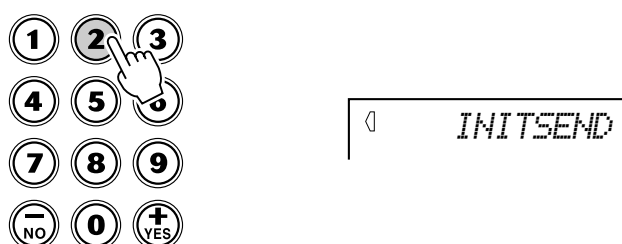
Ideally, you should leave two or more measures of silence (no performance data) before the song begins. The Initial Setup data should then be recorded to this space in the song.

2 Select the MIDI operations.

Press the left Overall button, repeatedly if necessary, until MIDI is selected.

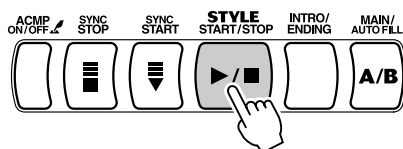
3 Select the Initial Setup Send operation.

Press “2” on the numeric keypad to select operation #2, Initial Setup Send. If the INITSEND display appears instead of LOCAL in step #2 above, step #3 is unnecessary.



4 Press the [START/STOP] button.

Start the Initial Setup Send operation.



5 Start recording on the sequencer, then send the Initial Setup data.

Start recording on the sequencer in the normal way, then — with as little delay as possible — press the [+] button to actually start transmitting the data.

An “End” message briefly appears in the display when the operation is complete.



6 Stop recording on the sequencer.

Stop recording on the sequencer in the normal way. Make sure that any subsequently recorded performance data is recorded at least one measure following the Initial Setup data.

NOTE

- When the Initial Setup Send operation is completed, the PSR-350 automatically returns to the previous panel condition.

External Clock

This determines whether the style and song playback functions are controlled by the PortaTone's internal clock (off) or by MIDI clock data from an external sequencer or computer (on).

This should be set to on when you want to have style or song playback follow the external device (such as a rhythm machine or a sequencer). The default setting is off.

1 Press the [TEMPO] button.

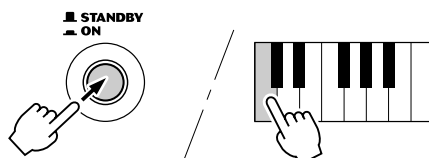
2 Set the instrument to External Clock.

Press and hold the [+] button until the value “280” is indicated, then press the [+] button once more to select “ECL” (External Clock) in the display.

To return to the Internal Clock setting, simply select a Tempo value from 32 to 280.

MIDI LSB receive cancel.

Set to receive or not receive the LSB data of BANK SELECT.
Press and hold the lowest key and turning on the power.



Turning on the power again normally, “MIDI LSB receive cancel” return to normal.



Troubleshooting

Problem	Possible Cause and Solution
When the PSR-350 is turned on or off, a popping sound is temporarily produced.	This is normal and indicates that the PSR-350 is receiving electrical power.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the PSR-350 may produce interference. To prevent this, turn off the mobile phone or use it further away from the PSR-350.
There is no sound even when the keyboard is played or when a song is being played back.	Check that nothing is connected to the PHONES/OUTPUT jack on the rear panel. When a set of headphones is plugged into this jack, no sound is output.
	Check the Local Control on/off. (See page 82.)
Playing keys in the right hand section of the keyboard does not produce any sound.	When using the Dictionary function (page 46), the keys in the right hand section are used only for entering the chord root and type.
The sound of the voices or rhythms seems unusual or strange.	The battery power is too low. Replace the batteries. (See page 8.)
The auto accompaniment doesn't turn on, even when pressing the [ACMP ON/OFF] button.	Make sure the Style mode is active before using the auto accompaniment. Press the [STYLE] button to enable style operations.
The accompaniment does not sound properly.	Make sure that the Accompaniment Volume (page 42) is set to an appropriate level. Make sure that the Split Point (page 45) is set to an appropriate value.
When playing back one of the Pianist styles (#086 - #100), the rhythm cannot be heard.	This is normal. The Pianist styles have no drums or bass — only piano accompaniment. The accompaniment of the style can only be heard when accompaniment is set to ON and keys are played in the auto accompaniment section of the keyboard.
Not all of the voices seem to sound, or the sound seems to be cut off.	The PSR-350 is polyphonic up to a maximum of 32 notes. If the Dual voice or Split voice is being used and a style or song is playing back at the same time, some notes/sounds may be omitted (or "stolen") from the accompaniment or song.
A strange "flanging" or "doubling" sound occurs when using the PSR-350 with a sequencer. (This may also sound like a "dual" layered sound of two voices, even when Dual is turned off.)	When using the accompaniment with a sequencer, set MIDI Echo (or the relevant control) to "off." (Refer to the owner's manual of your particular device and/or software for details.)
The footswitch (for sustain) seems to produce the opposite effect. For example, pressing the footswitch cuts off the sound and releasing it sustains the sounds.	The polarity of the footswitch is reversed. Make sure that the footswitch plug is properly connected to the SUSTAIN jack before turning on the power.
The sound of the voice changes from note to note.	The AWM tone generation method uses multiple recordings (samples) of an instrument across the range of the keyboard; thus, the actual sound of the voice may be slightly different from note to note.



Data Backup & Initialization

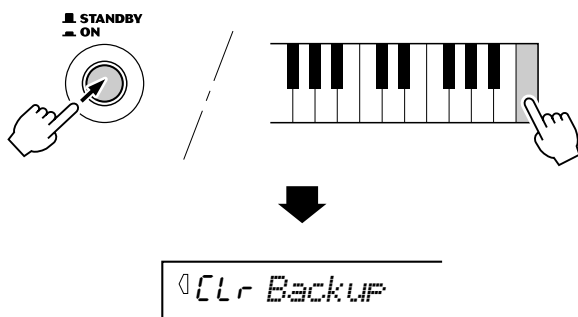
■ Data Backup

Except for the data listed below, all PSR-350 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 Song Data
- Song Volume
- Registration Memory Data
- Registration Memory Bank Number
- Metronome Volume
- Touch On/Off
- Tuning
- Grade/Talking On/Off

■ 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. “CLr Backup” will appear briefly on the display.



⚠ CAUTION

- All Registration Memory and User song 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-350 freezes or begins to act erratically for any reason.



Voice List

Maximum Polyphony

The PSR-350 has 32-note maximum polyphony. This means that it can play a maximum of up to 32 notes at once, regardless of what functions are used. Auto Accompaniment uses a number of the available notes, so when Auto Accompaniment is used the total number of available notes for playing on the keyboard is correspondingly reduced. The same applies to the Split Voice and Song functions.



- The Voice List includes MIDI program change numbers for each voice. Use these program change numbers when playing the PSR-350 via MIDI from an external device.
- Some voices may sound continuously or have a long decay after the notes have been released while the sustain pedal (foot-switch) is held.

Panel Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
PIANO				
001	000	112	000	Grand Piano
002	000	112	001	Bright Piano
003	000	112	003	Honky-tonk Piano
004	000	112	002	MIDI Grand Piano
005	000	113	002	CP 80
006	000	112	006	Harpsichord
E.PIANO				
007	000	112	004	Funky Electric Piano
008	000	112	005	DX Modern Elec. Piano
009	000	113	005	Hyper Tines
010	000	114	005	Venus Electric Piano
011	000	112	007	Clavi
ORGAN				
012	000	112	016	Jazz Organ 1
013	000	113	016	Jazz Organ 2
014	000	112	017	Click Organ
015	000	116	016	Bright Drawbar Organ
016	000	112	018	Rock Organ
017	000	114	018	Purple Organ
018	000	118	016	16'+2' Organ
019	000	119	016	16'+4' Organ
020	000	114	016	Theater Organ
021	000	112	019	Church Organ
022	000	113	019	Chapel Organ
023	000	112	020	Reed Organ
ACCORDION				
024	000	113	021	Traditional Accordion
025	000	112	021	Musette Accordion
026	000	113	023	Bandoneon
027	000	112	022	Harmonica
GUITAR				
028	000	112	024	Classical Guitar
029	000	112	025	Folk Guitar
030	000	113	025	12Strings Guitar
031	000	112	026	Jazz Guitar
032	000	113	026	Octave Guitar
033	000	112	027	Clean Guitar
034	000	112	028	Muted Guitar
035	000	112	029	Overdriven Guitar
036	000	112	030	Distortion Guitar
BASS				
037	000	112	032	Acoustic Bass
038	000	112	033	Finger Bass
039	000	112	034	Pick Bass

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
040	000	112	035	Fretless Bass
041	000	112	036	Slap Bass
042	000	112	038	Synth Bass
043	000	113	038	Hi-Q Bass
044	000	113	039	Dance Bass
STRINGS				
045	000	112	048	String Ensemble
046	000	112	049	Chamber Strings
047	000	112	050	Synth Strings
048	000	113	049	Slow Strings
049	000	112	044	Tremolo Strings
050	000	112	045	Pizzicato Strings
051	000	112	055	Orchestra Hit
052	000	112	040	Violin
053	000	112	042	Cello
054	000	112	043	Contrabass
055	000	112	105	Banjo
056	000	112	046	Harp
CHOIR				
057	000	112	052	Choir
058	000	113	052	Vocal Ensemble
059	000	112	053	Vox Humana
060	000	112	054	Air Choir
SAXOPHONE				
061	000	112	064	Soprano Sax
062	000	112	065	Alto Sax
063	000	112	066	Tenor Sax
064	000	114	066	Breathy Tenor
065	000	112	067	Baritone Sax
066	000	112	068	Oboe
067	000	112	069	English Horn
068	000	112	070	Bassoon
069	000	112	071	Clarinet
TRUMPET				
070	000	112	056	Trumpet
071	000	112	059	Muted Trumpet
072	000	112	057	Trombone
073	000	113	057	Trombone Section
074	000	112	060	French Horn
075	000	112	058	Tuba
BRASS				
076	000	112	061	Brass Section
077	000	113	061	Big Band Brass
078	000	119	061	Mellow Horns
079	000	112	062	Synth Brass
080	000	113	062	Jump Brass
081	000	114	062	Techno Brass

Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
FLUTE				
082	000	112	073	Flute
083	000	112	072	Piccolo
084	000	112	075	Pan Flute
085	000	112	074	Recorder
086	000	112	079	Ocarina
SYNTH LEAD				
087	000	112	080	Square Lead
088	000	112	081	Sawtooth Lead
089	000	112	085	Voice Lead
090	000	112	098	Star Dust
091	000	112	100	Brightness
092	000	115	081	Analogon
093	000	119	081	Fargo
SYNTH PAD				
094	000	112	088	Fantasia
095	000	113	100	Bell Pad
096	000	112	091	Xenon Pad
097	000	112	094	Equinox
098	000	113	089	Dark Moon
PERCUSSION				
099	000	112	011	Vibraphone
100	000	112	012	Marimba
101	000	112	013	Xylophone
102	000	112	114	Steel Drums
103	000	112	008	Celesta
104	000	112	014	Tubular Bells
105	000	112	047	Timpani
106	000	112	010	Music Box
SPLIT				
107	-	-	-	Strings/Grand Piano
108	-	-	-	Grand Piano/Violin
109	-	-	-	DX Electric Piano/Harmonica
110	-	-	-	Grand Piano/Tenor Sax
111	-	-	-	Choir Oohs/Ocarina
112	-	-	-	Vibraphone/Jazz Guitar
113	-	-	-	Classical Guitar/Flute
114	-	-	-	French Horn/Trumpet
115	-	-	-	Church Organ/Choir Aahs
116	-	-	-	Grand Piano/Musette Accordion
DRUM KITS				
117	127	000	000	Standard Kit 1
118	127	000	001	Standard Kit 2
119	127	000	008	Room Kit
120	127	000	016	Rock Kit
121	127	000	024	Electronic Kit
122	127	000	025	Analog Kit
123	127	000	027	Dance Kit
124	127	000	032	Jazz Kit
125	127	000	040	Brush Kit
126	127	000	048	Symphony Kit
127	126	000	000	SFX Kit 1
128	126	000	001	SFX Kit 2

● Expanded Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
PIANO				
129	000	000	000	Grand Piano
130	000	001	000	Grand Piano KSP
131	000	018	000	Mellow Grand Piano
132	000	040	000	Piano Strings
133	000	041	000	Dream
134	000	000	001	Bright Piano
135	000	001	001	Bright Piano KSP
136	000	000	002	Electric Grand Piano
137	000	001	002	Electric Grand Piano KSP
138	000	032	002	Detuned CP80
139	000	040	002	Layered CP 1
140	000	041	002	Layered CP 2
141	000	000	003	Honky-tonk Piano
142	000	001	003	Honky-tonk Piano KSP
143	000	000	004	Electric Piano 1
144	000	001	004	Electric Piano 1 KSP
145	000	018	004	Mellow Electric Piano 1
146	000	032	004	Chorus Electric Piano 1
147	000	040	004	Hard Electric Piano
148	000	045	004	Velocity Crossfade Electric Piano 1
149	000	064	004	60's Electric Piano 1
150	000	000	005	Electric Piano 2
151	000	001	005	Electric Piano 2 KSP
152	000	032	005	Chorus Electric Piano 2
153	000	033	005	DX Electric Piano Hard
154	000	034	005	DX Legend
155	000	040	005	DX Phase Electric Piano
156	000	041	005	DX + Analog Electric Piano
157	000	042	005	DX Koto Electric Piano
158	000	045	005	Velocity Crossfade Electric Piano 2
159	000	000	006	Harpsichord
160	000	001	006	Harpsichord KSP
161	000	025	006	Harpsichord 2
162	000	035	006	Harpsichord 3
163	000	000	007	Clavi
164	000	001	007	Clavi KSP
165	000	027	007	Clavi Wah
166	000	064	007	Pulse Clavi
167	000	065	007	Pierce Clavi
VIBRAPHONE etc.				
168	000	000	008	Celesta
169	000	000	009	Glockenspiel
170	000	000	010	Music Box
171	000	064	010	Orgel
172	000	000	011	Vibraphone
173	000	001	011	Vibraphone KSP
174	000	045	011	Hard Vibraphone
175	000	000	012	Marimba
176	000	001	012	Marimba KSP
177	000	064	012	Sine Marimba
178	000	097	012	Balimba
179	000	098	012	Log Drums
180	000	000	013	Xylophone
181	000	000	014	Tubular Bells
182	000	096	014	Church Bells

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
183	000	097	014	Carillon
184	000	000	015	Dulcimer
185	000	035	015	Dulcimer 2
186	000	096	015	Cimbalom
187	000	097	015	Santur
ORGAN				
188	000	000	016	Drawbar Organ
189	000	032	016	Detuned Drawbar Organ
190	000	033	016	60's Drawbar Organ 1
191	000	034	016	60's Drawbar Organ 2
192	000	035	016	70's Drawbar Organ 1
193	000	036	016	Drawbar Organ 2
194	000	037	016	60's Drawbar Organ 3
195	000	038	016	Even Bar
196	000	040	016	16+2"2/3
197	000	064	016	Organ Bass
198	000	065	016	70's Drawbar Organ 2
199	000	066	016	Cheezy Organ
200	000	067	016	Drawbar Organ 3
201	000	000	017	Percussive Organ
202	000	024	017	70's Percussive Organ
203	000	032	017	Detuned Percussive Organ
204	000	033	017	Light Organ
205	000	037	017	Percussive Organ 2
206	000	000	018	Rock Organ
207	000	064	018	Rotary Organ
208	000	065	018	Slow Rotary
209	000	066	018	Fast Rotary
210	000	000	019	Church Organ
211	000	032	019	Church Organ 3
212	000	035	019	Church Organ 2
213	000	040	019	Notre Dame
214	000	064	019	Organ Flute
215	000	065	019	Tremolo Organ Flute
216	000	000	020	Reed Organ
217	000	040	020	Puff Organ
218	000	000	021	Accordion
219	000	032	021	Accord It
220	000	000	022	Hamonica
221	000	032	022	Harmonica 2
222	000	000	023	Tango Accordion
223	000	064	023	Tango Accordion 2
GUITAR				
224	000	000	024	Nylon Guitar
225	000	016	024	Nylon Guitar 2
226	000	025	024	Nylon Guitar 3
227	000	043	024	Velocity Guitar Harmonics
228	000	096	024	Ukulele
229	000	000	025	Steel Guitar
230	000	016	025	Steel Guitar 2
231	000	035	025	12-string Guitar
232	000	040	025	Nylon & Steel Guitar
233	000	041	025	Steel Guitar with Body Sound
234	000	096	025	Mandolin
235	000	000	026	Jazz Guitar
236	000	018	026	Mellow Guitar
237	000	032	026	Jazz Amp
238	000	000	027	Clean Guitar
239	000	032	027	Chorus Guitar
240	000	000	028	Muted Guitar

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
241	000	040	028	Funk Guitar 1
242	000	041	028	Muted Steel Guitar
243	000	043	028	Funk Guitar 2
244	000	045	028	Jazz Man
245	000	000	029	Overdriven Guitar
246	000	043	029	Guitar Pinch
247	000	000	030	Distortion Guitar
248	000	040	030	Feedback Guitar
249	000	041	030	Feedback Guitar 2
250	000	000	031	Guitar Harmonics
251	000	065	031	Guitar Feedback
252	000	066	031	Guitar Harmonics 2
BASS				
253	000	000	032	Acoustic Bass
254	000	040	032	Jazz Rhythm
255	000	045	032	Velocity Crossfade Upright Bass
256	000	000	033	Finger Bass
257	000	018	033	Finger Dark
258	000	027	033	Flange Bass
259	000	040	033	Bass & Distorted Electric Guitar
260	000	043	033	Finger Slap Bass
261	000	045	033	Finger Bass 2
262	000	065	033	Modulated Bass
263	000	000	034	Pick Bass
264	000	028	034	Muted Pick Bass
265	000	000	035	Fretless Bass
266	000	032	035	Fretless Bass 2
267	000	033	035	Fretless Bass 3
268	000	034	035	Fretless Bass 4
269	000	096	035	Synth Fretless
270	000	097	035	Smooth Fretless
271	000	000	036	Slap Bass 1
272	000	027	036	Resonant Slap
273	000	032	036	Punch Thumb Bass
274	000	000	037	Slap Bass 2
275	000	043	037	Velocity Switch Slap
276	000	000	038	Synth Bass 1
277	000	018	038	Synth Bass 1 Dark
278	000	020	038	Fast Resonant Bass
279	000	024	038	Acid Bass
280	000	035	038	Clavi Bass
281	000	040	038	Techno Synth Bass
282	000	064	038	Orbiter
283	000	065	038	Square Bass
284	000	066	038	Rubber Bass
285	000	096	038	Hammer
286	000	000	039	Synth Bass 2
287	000	006	039	Mellow Synth Bass
288	000	012	039	Sequenced Bass
289	000	018	039	Click Synth Bass
290	000	019	039	Synth Bass 2 Dark
291	000	032	039	Smooth Synth Bass
292	000	040	039	Modular Synth Bass
293	000	041	039	DX Bass
294	000	064	039	X Wire Bass
VIOLIN etc.				
295	000	000	040	Violin
296	000	008	040	Slow Violin
297	000	000	041	Viola
298	000	000	042	Cello

Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
299	000	000	043	Contrabass
300	000	000	044	Tremolo Strings
301	000	008	044	Slow Tremolo Strings
302	000	040	044	Suspense Strings
303	000	000	045	Pizzicato Strings
304	000	000	046	Orchestral Harp
305	000	040	046	Yang Chin
306	000	000	047	Timpani
ENSEMBLE				
307	000	000	048	Strings 1
308	000	003	048	Stereo Strings
309	000	008	048	Slow Strings
310	000	024	048	Arco Strings
311	000	035	048	60's Strings
312	000	040	048	Orchestra
313	000	041	048	Orchestra 2
314	000	042	048	Tremolo Orchestra
315	000	045	048	Velocity Strings
316	000	000	049	Strings 2
317	000	003	049	Stereo Slow Strings
318	000	008	049	Legato Strings
319	000	040	049	Warm Strings
320	000	041	049	Kingdom
321	000	064	049	70's Strings
322	000	065	049	String Ensemble 3
323	000	000	050	Synth Strings 1
324	000	027	050	Resonant Strings
325	000	064	050	Synth Strings 4
326	000	065	050	Synth Strings 5
327	000	000	051	Synth Strings 2
328	000	000	052	Choir Aahs
329	000	003	052	Stereo Choir
330	000	016	052	Choir Aahs 2
331	000	032	052	Mellow Choir
332	000	040	052	Choir Strings
333	000	000	053	Voice Oohs
334	000	000	054	Synth Voice
335	000	040	054	Synth Voice 2
336	000	041	054	Choral
337	000	064	054	Analog Voice
338	000	000	055	Orchestra Hit
339	000	035	055	Orchestra Hit 2
340	000	064	055	Impact
TRUMPET etc.				
341	000	000	056	Trumpet
342	000	016	056	Trumpet 2
343	000	017	056	Bright Trumpet
344	000	032	056	Warm Trumpet
345	000	000	057	Trombone
346	000	018	057	Trombone 2
347	000	000	058	Tuba
348	000	016	058	Tuba 2
349	000	000	059	Muted Trumpet
350	000	000	060	French Horn
351	000	006	060	French Horn Solo
352	000	032	060	French Horn 2
353	000	037	060	Horn Orchestra
354	000	000	061	Brass Section
355	000	035	061	Trumpet & Trombone Section
356	000	040	061	Brass Section 2
357	000	041	061	High Brass

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
358	000	042	061	Mellow Brass
359	000	000	062	Synth Brass 1
360	000	012	062	Quack Brass
361	000	020	062	Resonant Synth Brass
362	000	024	062	Poly Brass
363	000	027	062	Synth Brass 3
364	000	032	062	Jump Brass
365	000	045	062	Analog Velocity Brass 1
366	000	064	062	Analog Brass 1
367	000	000	063	Synth Brass 2
368	000	018	063	Soft Brass
369	000	040	063	Synth Brass 4
370	000	041	063	Choir Brass
371	000	045	063	Analog Velocity Brass 2
372	000	064	063	Analog Brass 2
SAXOPHONE etc.				
373	000	000	064	Soprano Sax
374	000	000	065	Alto Sax
375	000	040	065	Sax Section
376	000	043	065	Hyper Alto Sax
377	000	000	066	Tenor Sax
378	000	040	066	Breathy Tenor Sax
379	000	041	066	Soft Tenor Sax
380	000	064	066	Tenor Sax 2
381	000	000	067	Baritone Sax
382	000	000	068	Oboe
383	000	000	069	English Horn
384	000	000	070	Bassoon
385	000	000	071	Clarinet
FLUTE etc.				
386	000	000	072	Piccolo
387	000	000	073	Flute
388	000	000	074	Recorder
389	000	000	075	Pan Flute
390	000	000	076	Blown Bottle
391	000	000	077	Shakuhachi
392	000	000	078	Whistle
393	000	000	079	Ocarina
SYNTH LEAD				
394	000	000	080	Square Lead
395	000	006	080	Square Lead 2
396	000	008	080	LM Square
397	000	018	080	Hollow
398	000	019	080	Shroud
399	000	064	080	Mellow
400	000	065	080	Solo Sine
401	000	066	080	Sine Lead
402	000	000	081	Sawtooth Lead
403	000	006	081	Sawtooth Lead 2
404	000	008	081	Thick Sawtooth
405	000	018	081	Dynamic Sawtooth
406	000	019	081	Digital Sawtooth
407	000	020	081	Big Lead
408	000	024	081	Heavy Synth
409	000	025	081	Waspy Synth
410	000	040	081	Pulse Sawtooth
411	000	041	081	Dr. Lead
412	000	045	081	Velocity Lead
413	000	096	081	Sequenced Analog
414	000	000	082	Calliope Lead
415	000	065	082	Pure Pad

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
416	000	000	083	Chiff Lead
417	000	064	083	Rubby
418	000	000	084	Charang Lead
419	000	064	084	Distorted Lead
420	000	065	084	Wire Lead
421	000	000	085	Voice Lead
422	000	024	085	Synth Aahs
423	000	064	085	Vox Lead
424	000	000	086	Fifths Lead
425	000	035	086	Big Five
426	000	000	087	Bass & Lead
427	000	016	087	Big & Low
428	000	064	087	Fat & Perky
429	000	065	087	Soft Whirl
SYNTH PAD				
430	000	000	088	New Age Pad
431	000	064	088	Fantasy
432	000	000	089	Warm Pad
433	000	016	089	Thick Pad
434	000	017	089	Soft Pad
435	000	018	089	Sine Pad
436	000	064	089	Horn Pad
437	000	065	089	Rotary Strings
438	000	000	090	Poly Synth Pad
439	000	064	090	Poly Pad 80
440	000	065	090	Click Pad
441	000	066	090	Analog Pad
442	000	067	090	Square Pad
443	000	000	091	Choir Pad
444	000	064	091	Heaven
445	000	066	091	Itopia
446	000	067	091	CC Pad
447	000	000	092	Bowed Pad
448	000	064	092	Glacier
449	000	065	092	Glass Pad
450	000	000	093	Metallic Pad
451	000	064	093	Tine Pad
452	000	065	093	Pan Pad
453	000	000	094	Halo Pad
454	000	000	095	Sweep Pad
455	000	020	095	Shwimmer
456	000	027	095	Converge
457	000	064	095	Polar Pad
458	000	066	095	Celestial
SYNTH EFFECT				
459	000	000	096	Rain
460	000	045	096	Clavi Pad
461	000	064	096	Harmo Rain
462	000	065	096	African Wind
463	000	066	096	Carib
464	000	000	097	Sound Track
465	000	027	097	Prologue
466	000	064	097	Ancestral
467	000	000	098	Crystal
468	000	012	098	Synth Drum Comp
469	000	014	098	Popcorn
470	000	018	098	Tiny Bells
471	000	035	098	Round Glockenspiel
472	000	040	098	Glockenspiel Chimes

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
473	000	041	098	Clear Bells
474	000	042	098	Chorus Bells
475	000	064	098	Synth Mallet
476	000	065	098	Soft Crystal
477	000	066	098	Loud Glockenspiel
478	000	067	098	Christmas Bells
479	000	068	098	Vibraphone Bells
480	000	069	098	Digital Bells
481	000	070	098	Air Bells
482	000	071	098	Bell Harp
483	000	072	098	Gamelimba
484	000	000	099	Atmosphere
485	000	018	099	Warm Atmosphere
486	000	019	099	Hollow Release
487	000	040	099	Nylon Electric Piano
488	000	064	099	Nylon Harp
489	000	065	099	Harp Vox
490	000	066	099	Atmosphere Pad
491	000	067	099	Planet
492	000	000	100	Brightness
493	000	064	100	Fantasy Bells
494	000	096	100	Smokey
495	000	000	101	Goblins
496	000	064	101	Goblins Synth
497	000	065	101	Creeper
498	000	066	101	Ring Pad
499	000	067	101	Ritual
500	000	068	101	To Heaven
501	000	070	101	Night
502	000	071	101	Glisten
503	000	096	101	Bell Choir
504	000	000	102	Echoes
505	000	008	102	Echoes 2
506	000	014	102	Echo Pan
507	000	064	102	Echo Bells
508	000	065	102	Big Pan
509	000	066	102	Synth Piano
510	000	067	102	Creation
511	000	068	102	Star Dust
512	000	069	102	Resonant & Panning
513	000	000	103	Sci-Fi
514	000	064	103	Starz
ETHNIC				
515	000	000	104	Sitar
516	000	032	104	Detuned Sitar
517	000	035	104	Sitar 2
518	000	096	104	Tambra
519	000	097	104	Tamboura
520	000	000	105	Banjo
521	000	028	105	Muted Banjo
522	000	096	105	Rabab
523	000	097	105	Gopichant
524	000	098	105	Oud
525	000	000	106	Shamisen
526	000	000	107	Koto
527	000	096	107	Taisho-kin
528	000	097	107	Kanoon
529	000	000	108	Kalimba
530	000	000	109	Bagpipe

Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
531	000	000	110	Fiddle
532	000	000	111	Shanai
533	000	064	111	Shanai 2
534	000	096	111	Pungi
535	000	097	111	Hichiriki
PERCUSSION				
536	000	000	112	Tinkle Bell
537	000	096	112	Bonang
538	000	097	112	Altair
539	000	098	112	Gamelan Gongs
540	000	099	112	Stereo Gamelan Gongs
541	000	100	112	Rama Cymbal
542	000	101	112	Asian Bells
543	000	000	113	Agogo
544	000	000	114	Steel Drums
545	000	097	114	Glass Percussion
546	000	098	114	Thai Bells
547	000	000	115	Woodblock
548	000	096	115	Castanets
549	000	000	116	Taiko Drum
550	000	096	116	Gran Cassa
551	000	000	117	Melodic Tom
552	000	064	117	Melodic Tom 2
553	000	065	117	Real Tom
554	000	066	117	Rock Tom
555	000	000	118	Synth Drum
556	000	064	118	Analog Tom
557	000	065	118	Electronic Percussion
558	000	000	119	Reverse Cymbal
SOUND EFFECT				
559	000	000	120	Fret Noise
560	000	000	121	Breath Noise
561	000	000	122	Seashore
562	000	000	123	Bird Tweet
563	000	000	124	Telephone Ring
564	000	000	125	Helicopter
565	000	000	126	Applause
566	000	000	127	Gunshot
SFX				
567	064	000	000	Cutting Noise
568	064	000	001	Cutting Noise 2
569	064	000	003	String Slap
570	064	000	016	Flute Key Click
571	064	000	032	Shower
572	064	000	033	Thunder
573	064	000	034	Wind
574	064	000	035	Stream
575	064	000	036	Bubble
576	064	000	037	Feed
577	064	000	048	Dog
578	064	000	049	Horse
579	064	000	050	Bird Tweet 2
580	064	000	054	Ghost
581	064	000	055	Maou
582	064	000	064	Phone Call
583	064	000	065	Door Squeak
584	064	000	066	Door Slam
585	064	000	067	Scratch Cut
586	064	000	068	Scratch Split

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
587	064	000	069	Wind Chime
588	064	000	070	Telephone Ring 2
589	064	000	080	Car Engine Ignition
590	064	000	081	Car Tires Squeal
591	064	000	082	Car Passing
592	064	000	083	Car Crash
593	064	000	084	Siren
594	064	000	085	Train
595	064	000	086	Jet Plane
596	064	000	087	Starship
597	064	000	088	Burst
598	064	000	089	Roller Coaster
599	064	000	090	Submarine
600	064	000	096	Laugh
601	064	000	097	Scream
602	064	000	098	Punch
603	064	000	099	Heartbeat
604	064	000	100	Footsteps
605	064	000	112	Machine Gun
606	064	000	113	Laser Gun
607	064	000	114	Explosion
608	064	000	115	Firework

● DJ Voice List

Voice #	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
DJ				
609	000	123	118	DJ Game Set1
610	000	123	119	DJ Game Set2
611	000	123	120	DJ Game Set3
612	000	123	121	DJ Game Set4
613	000	123	122	DJ Game Set5
614	000	123	123	DJ Game Set6
615	000	123	124	DJ Game Set7
616	000	123	125	DJ Game Set8
617	000	123	126	DJ Game Set9
618	000	123	127	DJ Game Set10

● DJ Voice List

Voice No.		609	610	611	612	613	614	615	616	617	618
MSB/LSB/PC		0/123/118	0/123/119	0/123/120	0/123/121	0/123/122	0/123/123	0/123/124	0/123/125	0/123/126	0/123/127
No.	Note	DJ Set1	DJ Set2	DJ Set3	DJ Set4	DJ Set5	DJ Set6	DJ Set7	DJ Set8	DJ Set9	DJ Set10
036	C 1										
037	C# 1										
038	D 1										
039	D# 1										
040	E 1										
041	F 1	Drum Loop	Yo-Kurt	Kick	SawLead G2	Kick	Piano F	Signal	Organ E4	Guitar E2	Scratch (L)
042	F# 1										
043	G 1										
044	G# 1										
045	A 1										
046	A# 1										
047	B 1										
048	C 2										
049	C# 2										
050	D 2										
051	D# 2										
052	E 2										
053	F 2	Scratch	Come On 1	Snare	SawLead A2	Clap	Piano G	Omen-FX	Organ F4	Guitar G2	Scratch (H)
054	F# 2										
055	G 2										
056	G# 2										
057	A 2										
058	A# 2										
059	B 2										
060	C 3	Uhh+Hit									
061	C# 3	One									
062	D 3	One More Time									
063	D# 3	Two									
064	E 3	Ohh 2									
065	F 3	Ohh 1									
066	F# 3	Three	Clap	Hi-hat	SawLead C3	Ohh 2	Och. Hit	FMTB2	Organ G4	Guitar A2	Yo-Kurt
067	G 3	Yo-Kurt									
068	G# 3	Four									
069	A 3	Hiuhu									
070	A# 3	Ok									
071	B 3	Huea									
072	C 4	Turntable									
073	C# 4	Off									
074	D 4	Signal									
075	D# 4	Lesson									
076	E 4	Reverse									
077	F 4	Omen-FX	Scratch (L)	hat open	SawLead D3	Huea	Clap	FMTB1	Organ C5	Guitar C3	GetUp!
078	F# 4	Dj!									
079	G 4	FMTB2									
080	G# 4	Pinpon									
081	A 4	BLJ Trill									
082	A# 4	Good									
083	B 4	FMTB1									
084	C 5	Yeah...									
085	C# 5	Very Good									
086	D 5	Uhh									
087	D# 5	Excellent									
088	E 5	Go!!									
089	F 5	GetUp!									
090	F# 5	Dictionary									
091	G 5	Come On 2									
092	G# 5	Hand Clap									
093	A 5	Come On 1									
094	A# 5	Bell Tree									
095	B 5	Scratch (L)									
096	C 6	Scratch (H)									
097	C# 6										
098	D 6										
099	D# 6										
100	E 6										
101	F 6										
102	F# 6										
103	G 6										
104	G# 6										
105	A 6										
106	A# 6										
107	B 6		BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill	BLJ Trill
108	C 7		Go!!	Go!!	Go!!	Go!!	Go!!	Go!!	Go!!	Go!!	Go!!



Style List

Serial No.	Style Name
8BEAT	
001	8Beat 1
002	8Beat 2
003	8Beat Adria
004	8Beat Pop 1
005	British Pop
006	8Beat Soft
16BEAT	
007	16Beat 1
008	16Beat 2
009	16Beat 3
010	Soft Fusion
011	Hip Hop Pop
012	Cool Dance
013	16Beat Funk
014	Funky Pop
015	16Beat 4
BALLAD	
016	Piano Ballad
017	U.S. Ballad
018	Slow Rock
019	Modern 6/8
020	Guitar Ballad
021	Organ Ballad
022	Epic Ballad
023	16Beat Ballad
024	Rock Ballad
025	Slow Ballad
026	Pop Ballad
ROCK	
027	Rock 1
028	Hard Rock
029	Rock & Roll
030	Twist
031	4/4 Blues
032	6/8 Rock
DANCE	
033	Clubdance
034	Techno
035	Trance
036	Eurobeat
037	70's Disco
038	90's Disco
039	Acid Techno
040	Acid House
041	All That
042	Ragga
043	Digital Rock
044	Supabad
045	Flares
046	Hip House
047	Pop Reggae
SWING & JAZZ	
048	Swing
049	Big Band 1
050	Big Band Ballad
051	Jazz Ballad
052	Jazz Trio
053	Boogie

Serial No.	Style Name
054	Bebop
055	Big Band 2
056	Dixieland
RHYTHM & BLUES	
057	Gospel Shuffle
058	R & B
059	Motown
060	Soul Shuffle
061	6/8 Blues
COUNTRY	
062	Country Rock
063	Country 8Beat
064	Country Pop
065	Country Swing
066	Bluegrass
067	Country Ballad
LATIN	
068	Samba Rio
069	Bossa Nova
070	Espanole
071	Swing Reggae
072	Salsa
073	Mambo
BALLROOM	
074	Slow Fox
075	Quickstep
076	Tango
077	Cha Cha Cha
078	Samba
079	Rhumba
080	Pasodoble
081	Jive
082	Beguine
083	Foxtrot
MARCH & WALTZ	
084	U.S. March
085	German March
086	6/8 March
087	Polka Pop
088	PolkaOberkrainer
089	Jazz Waltz
090	Country Waltz
091	Vienna Waltz
092	Slow Waltz
093	Orch. Waltz
094	WaltzOberkrainer
095	Musette
096	Guitar Waltz
PIANIST	
097	Stride
098	Boogie
099	Swing
100	Pianoman
101	Ballad
102	Ragtime
103	March
104	6/8 March
105	Waltz
106	Jazz Waltz



Music Database List

MDB No.	MDB Name
POP HITS	
001	AlvFever
002	Croco Rk
003	Dsurvive
004	EasySday
005	GoMyWay
006	HurryLuv
007	I'm Torn
008	Imagine
009	JustCall
010	JustWay
011	HowDeep!
012	MscThnks
013	NikitTrp
014	PdiseDay
015	ProudGtr
016	SailingSx
017	Sept.Pop
018	SultanSw
019	SweetLrd
020	TitanicH
021	WatchGrl
022	WaterSfl
023	WhiterSh
024	YestDGtr
SWING & JAZZ	
025	DayOfSax
026	HoneyTst
027	LostHrt
028	MistyGrg
029	HighMoon
030	MoonLit
031	New York
032	PanthrSw
033	PatrolBr
034	PatrolSx
035	PetiteCl
036	RagtimeB
037	RedRose
038	SaintMch
039	SatinWd
040	SaxMood
041	ShearJz
042	Showbiz
043	SplinkyTb
044	SunnySde
045	TwoFoot5
046	BluesyWz
047	WhatsNew
048	DixieCat
049	WondrLnd
EVERGREEN	
050	BlackFst
051	CaliBlue
052	CiaoCpri
053	CloseOnU
054	DAmorStr
055	DoUWish?
056	DolanesS
057	EIcondor
058	Enrttain
059	EpicSong
060	Stranger
061	SingRain
062	LuvStory
063	LuckySax
064	MillionS
065	MyPrince
066	OSoleMio
067	PalomaGt
068	PuppetBr
069	Raindrop
070	RedMouln

MDB No.	MDB Name
071	R'ticGtr
072	Schiwago
073	ShadowGt
074	SmallWld
075	SnowWhite
076	SpnishEy
077	TieRibbn
078	TimeGoes
079	WondrWld
ROMANTIC BALLADS	
080	AdelineB
081	ArgenCry
082	BlueAcor
083	BdyBeaut
084	CatMemry
085	CavaSolo
086	DpBallad
087	ElvisBld
088	Fly Away
089	GoodFeel
090	GreenSlv
091	GtCncert
092	Gtr Date
093	HrdToSay
094	LonlyPip
095	MoonSax
096	MBoxDnce
097	Norw.Flt
098	OverRain
099	Red Lady
100	ReleseMe
101	SavingLv
102	SierraMd
103	SilentSd
104	SilverMn
105	SmokyEye
106	Shore Cl
107	SweetOrh
108	Unplugd
109	WhisprSx
ROCK & FUSION	
110	DavAgain
111	FunkyPce
112	JumpRock
113	OyComCha
114	RedRiver
115	SatsfyGt
116	Sheriff
117	SmokyWz
118	TwistAgn
119	VenusPop
RHYTHM & BLUES	
120	Amazing
121	BabyBaby
122	BoogiePf
123	Clock Rk
124	Aligator
125	HappyDay
126	JohnnyB
127	60sOrgan
128	MercyBrs
129	RisingSn
130	SuperGrv
HIP HOP HOUSE	
131	BoyGroup
132	FunkyCty
133	FunkyDsc
134	Grounded
135	MiamiTrn
136	Nine PM
137	2 of US
138	Rap Talk
139	SoftKill

MDB No.	MDB Name
140	TechDoll
LATIN NIGHTS	
141	BambaBrs
142	BambaFlt
143	BeHappy!
144	DayNight
145	Ipanema
146	LatLola
147	MarinaTb
148	MuchoTrb
149	SmoothLt
150	SunOfLif
151	Sunshine
152	Tico Org
153	TrbWave
COUNTRY & WESTERN	
154	AlabamBj
155	BlownWnd
156	Bonanza
157	GreenGrs
158	Jambala
159	LondonSt
160	LucyStr
161	Think2s
162	TopWorld
163	CntryRds
BALLROOM & PARTY	
164	AlhHwaih
165	Babylon
166	Barbados
167	BrazilBr
168	MantoStr
169	CherryBr
170	CherryOr
171	ChickSyn
172	Cmparsta
173	DanubeWv
174	FestaMex
175	HandsPty
176	ModrnTik
177	NxtAlice
178	PalomaFl
179	PubPiano
180	SandmnFx
181	SundyNvr
182	TeaTime
183	LuvTheme
184	TijuanBr
185	TulipWtz
186	Why MCA?
187	YesSirQk
TRADITIONAL	
188	AlpenTri
189	Balalaik
190	Ceilidh
191	CielPari
192	ClariFun
193	Comrades
194	HappyPlk
195	Herzlin
196	JinglBel
197	Kufstein
198	La Danza
199	MexiHat
200	MickyFlt
201	NavyAway
202	RIBarrel
203	SnowWtz
204	StarMrch
205	HornPipe
206	WA Post
207	WdCuttrs
208	XmasNght



Drum Kit List

- “<—” indicates that the drum sound is the same as “Standard Kit 1”.
- Each percussion voice uses one note.
- The MIDI Note # and Note are actually one octave lower than listed. For example, in “119: Standard Kit 1”, the “Seq Click H” (Note# 36/Note C1) corresponds to (Note# 24/Note C0).
- Key Off: Keys marked “O” stop sounding the instant they are released.
- Voices with the same Alternate Note Number (*1 ... 4) cannot be played simultaneously. (They are designed to be played alternately with each other.)

Voice No.		117		118		119		120		121		121	
MSB/LSB/PC		127/000/000		127/000/001		127/000/008		127/000/016		127/000/024		127/000/025	
Keyboard	MIDI	Standard Kit 1		Standard Kit 2		Room Kit		Rock Kit		Electronic Kit		Analog Kit	
25	C# 0	13	C# -1	Surdo Mute	<—	<—	<—	<—	<—	<—	<—	<—	<—
26	D 0	14	D -1	Surdo Open	<—	<—	<—	<—	<—	<—	<—	<—	<—
27	D# 0	15	D# -1	Hi Q	<—	<—	<—	<—	<—	<—	<—	<—	<—
28	E 0	16	E -1	Whip Slap	<—	<—	<—	<—	<—	<—	<—	<—	<—
29	F 0	17	F -1	Scratch Push	<—	<—	<—	<—	<—	<—	<—	<—	<—
30	F# 0	18	F# -1	Scratch Pull	<—	<—	<—	<—	<—	<—	<—	<—	<—
31	G 0	19	G -1	Finger Snap	<—	<—	<—	<—	<—	<—	<—	<—	<—
32	G# 0	20	G# -1	Click Noise	<—	<—	<—	<—	<—	<—	<—	<—	<—
33	A 0	21	A -1	Metronome Click	<—	<—	<—	<—	<—	<—	<—	<—	<—
34	A# 0	22	A# -1	Metronome Bell	<—	<—	<—	<—	<—	<—	<—	<—	<—
35	B 0	23	B -1	Seq Click L	<—	<—	<—	<—	<—	<—	<—	<—	<—
36	C 1	24	C 0	Seq Click H	<—	<—	<—	<—	<—	<—	<—	<—	<—
C1	C#1	25	C# 0	Brush Tap	<—	<—	<—	<—	<—	<—	<—	<—	<—
D1	D#1	26	D 0	Brush Swirl	<—	<—	<—	<—	<—	<—	<—	<—	<—
E1	E#1	27	D# 0	Brush Slap	<—	<—	<—	<—	<—	<—	<—	<—	<—
F1	F#1	28	E 0	Brush Tap Swirl	<—	<—	<—	<—	<—	Reverse Cymbal	<—	Reverse Cymbal	<—
G1	G#1	29	F 0	Snare Roll	<—	<—	<—	<—	<—	<—	<—	<—	<—
A1	A#1	30	F# 0	Castanet	<—	<—	<—	<—	<—	Hi Q 2	<—	Hi Q 2	<—
B1	B#1	31	G 0	Snare H Soft	Snare H Soft 2	<—	<—	SD Rock H	<—	Snare L	<—	SD Rock H	<—
C2	C#2	32	G# 0	Sticks	<—	<—	<—	<—	<—	<—	<—	<—	<—
D2	D#2	33	A 0	Bass Drum Soft	<—	<—	<—	<—	<—	Bass Drum H	<—	Bass Drum H	<—
E2	E#2	34	A# 0	Open Rim Shot	Open Rim Shot 2	<—	<—	<—	<—	<—	<—	<—	<—
F2	F#2	35	B 0	Bass Drum Hard	<—	<—	<—	Bass Drum H	<—	BD Rock	<—	BD Analog L	<—
G2	G#2	36	C 1	Bass Drum	Bass Drum 2	<—	<—	BD Rock	<—	BD Gate	<—	BD Analog H	<—
A2	A#2	37	C# 1	Side Stick	<—	<—	<—	<—	<—	<—	<—	Analog Side Stick	<—
B2	B#2	38	D 1	Snare M	Snare M 2	SD Room L	<—	SD Rock L	<—	SD Rock L	<—	Analog Snare 1	<—
C3	C#3	39	D# 1	Hand Clap	<—	<—	<—	<—	<—	<—	<—	<—	<—
D3	D#3	40	E 1	Snare H Hard	Snare H Hard 2	SD Room H	<—	SD Rock Rim	<—	SD Rock H	<—	Analog Snare 2	<—
E3	E#3	41	F 1	Floor Tom L	<—	Room Tom 1	<—	Rock Tom 1	<—	E Tom 1	<—	Analog Tom 1	<—
F3	F#3	42	F# 1	Hi-Hat Closed	<—	<—	<—	<—	<—	<—	<—	Analog HH Closed 1	<—
G3	G#3	43	G 1	Floor Tom H	<—	Room Tom 2	<—	Rock Tom 2	<—	E Tom 2	<—	Analog Tom 2	<—
A3	A#3	44	G# 1	Hi-Hat Pedal	<—	<—	<—	<—	<—	<—	<—	Analog HH Closed 2	<—
B3	B#3	45	A 1	Low Tom	<—	Room Tom 3	<—	Rock Tom 3	<—	E Tom 3	<—	Analog Tom 3	<—
C4	C#4	46	A# 1	Hi-Hat Open	<—	<—	<—	<—	<—	<—	<—	Analog HH Open	<—
D4	D#4	47	B 1	Mid Tom L	<—	Room Tom 4	<—	Rock Tom 4	<—	E Tom 4	<—	Analog Tom 4	<—
E4	E#4	48	C 2	Mid Tom H	<—	Room Tom 5	<—	Rock Tom 5	<—	E Tom 5	<—	Analog Tom 5	<—
F4	F#4	49	C# 2	Crash Cymbal 1	<—	<—	<—	<—	<—	<—	<—	Analog Cymbal	<—
G4	G#4	50	D 2	High Tom	<—	Room Tom 6	<—	Rock Tom 6	<—	E Tom 6	<—	Analog Tom 6	<—
A4	A#4	51	D# 2	Ride Cymbal 1	<—	<—	<—	<—	<—	<—	<—	<—	<—
B4	B#4	52	E 2	Chinese Cymbal	<—	<—	<—	<—	<—	<—	<—	<—	<—
C5	C#5	53	F 2	Ride Cymbal Cup	<—	<—	<—	<—	<—	<—	<—	<—	<—
D5	D#5	54	F# 2	Tambourine	<—	<—	<—	<—	<—	<—	<—	<—	<—
E5	E#5	55	G 2	Splash Cymbal	<—	<—	<—	<—	<—	<—	<—	<—	<—
F5	F#5	56	G# 2	Cowbell	<—	<—	<—	<—	<—	<—	<—	<—	<—
G5	G#5	57	A 2	Crash Cymbal 2	<—	<—	<—	<—	<—	<—	<—	<—	<—
A5	A#5	58	A# 2	Vibraslap	<—	<—	<—	<—	<—	<—	<—	<—	<—
B5	B#5	59	B 2	Ride Cymbal 2	<—	<—	<—	<—	<—	<—	<—	<—	<—
C6	C#6	60	C 3	Bongo H	<—	<—	<—	<—	<—	<—	<—	<—	<—
D6	D#6	61	C# 3	Bongo L	<—	<—	<—	<—	<—	<—	<—	<—	<—
E6	E#6	62	D 3	Conga H Mute	<—	<—	<—	<—	<—	<—	<—	<—	<—
F6	F#6	63	D# 3	Conga H Open	<—	<—	<—	<—	<—	<—	<—	Analog Conga H	<—
G6	G#6	64	E 3	Conga L	<—	<—	<—	<—	<—	<—	<—	Analog Conga M	<—
A6	A#6	65	F 3	Timbale H	<—	<—	<—	<—	<—	<—	<—	Analog Conga L	<—
B6	B#6	66	F# 3	Timbale L	<—	<—	<—	<—	<—	<—	<—	<—	<—
C7	C#7	67	G 3	Agogo H	<—	<—	<—	<—	<—	<—	<—	<—	<—
D7	D#7	68	G# 3	Agogo L	<—	<—	<—	<—	<—	<—	<—	<—	<—
E7	E#7	69	A 3	Cabasa	<—	<—	<—	<—	<—	<—	<—	<—	<—
F7	F#7	70	A# 3	Maracas	<—	<—	<—	<—	<—	<—	<—	<—	Analog Maracas
G7	G#7	71	B 3	Samba Whistle H	<—	<—	<—	<—	<—	<—	<—	<—	<—
A7	A#7	72	C 4	Samba Whistle L	<—	<—	<—	<—	<—	<—	<—	<—	<—
B7	B#7	73	C# 4	Guiro Short	<—	<—	<—	<—	<—	<—	<—	<—	<—
C8	C#8	74	D 4	Guiro Long	<—	<—	<—	<—	<—	<—	<—	<—	<—
D8	D#8	75	D# 4	Claves	<—	<—	<—	<—	<—	<—	<—	<—	Analog Claves
E8	E#8	76	E 4	Wood Block H	<—	<—	<—	<—	<—	<—	<—	<—	<—
F8	F#8	77	F 4	Wood Block L	<—	<—	<—	<—	<—	<—	<—	<—	<—
G8	G#8	78	F# 4	Cuica Mute	<—	<—	<—	<—	<—	Scratch Push	<—	Scratch Push	<—
A8	A#8	79	G 4	Cuica Open	<—	<—	<—	<—	<—	Scratch Pull	<—	Scratch Pull	<—
B8	B#8	80	G# 4	Triangle Mute	<—	<—	<—	<—	<—	<—	<—	<—	<—
C9	C#9	81	A 4	Triangle Open	<—	<—	<—	<—	<—	<—	<—	<—	<—
D9	D#9	82	A# 4	Shaker	<—	<—	<—	<—	<—	<—	<—	<—	<—
E9	E#9	83	B 4	Jingle Bell	<—	<—	<—	<—	<—	<—	<—	<—	<—
F9	F#9	84	C 5	Bell Tree	<—	<—	<—	<—	<—	<—	<—	<—	<—
G9	G#9	85	C# 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
A9	A#9	86	D 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
B9	B#9	87	D# 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
C10	C#10	88	E 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
D10	D#10	89	F 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
E10	E#10	90	F# 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
F10	F#10	91	G 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
G10	G#10	92	G# 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
A10	A#10	93	A 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
B10	B#10	94	A# 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
C11	C#11	95	B 5		<—	<—	<—	<—	<—	<—	<—	<—	<—
D11	D#11	96	C 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
E11	E#11	97	C# 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
F11	F#11	98	D 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
G11	G#11	99	D# 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
A11	A#11	100	E 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
B11	B#11	101	F 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
C12	C#12	102	F# 6		<—	<—	<—	<—	<—	<—	<—	<—	<—
D12	D#12	103	G 6		<—	<—	<—	<—	<—	<—	<—	<—	<—

Drum Kit List

Voice No.		117		123		124		125		126		127		128		
MSB/LSB/PC		127/000/000		127/000/27		127/000/32		127/000/40		127/000/48		126/000/000		126/000/001		
Keyboard	MIDI	Standard Kit 1		Dance Kit		Jazz Kit		Brush Kit		Symphonic Kit		SFX Kit 1		SFX Kit 2		
	25	C#	0	13	C#	-1	Surdo Mute	<--	<--	<--	<--					
	26	D	0	14	D	-1	Surdo Open	<--	<--	<--	<--					
	27	D#	0	15	D#	-1	Hi Q	<--	<--	<--	<--					
	28	E	0	16	E	-1	Whip Slap	<--	<--	<--	<--					
	29	F	0	17	F	-1	Scratch Push	<--	<--	<--	<--					
	30	F#	0	18	F#	-1	Scratch Pull	<--	<--	<--	<--					
	31	G	0	19	G	-1	Finger Snap	<--	<--	<--	<--					
	32	G#	0	20	G#	-1	Click Noise	<--	<--	<--	<--					
	33	A	0	21	A	-1	Metronome Click	<--	<--	<--	<--					
	34	A#	0	22	A#	-1	Metronome Bell	<--	<--	<--	<--					
	35	B	0	23	B	-1	Seq Click L	<--	<--	<--	<--					
	36	C	1	24	C	0	Seq Click H	<--	<--	<--	<--					
C1	37	C#	1	25	C#	0	Brush Tap	<--	<--	<--	<--					
D1	38	D	1	26	D	0	Brush Swirl	<--	<--	<--	<--					
E1	39	D#	1	27	D#	0	Brush Slap	<--	<--	<--	<--					
F1	40	E	1	28	E	0	Brush Tap Swirl	<--	<--	<--	<--					
G1	41	F	1	29	F	0	Snare Roll	<--	<--	<--	<--					
A1	42	F#	1	30	F#	0	Castanet	<--	<--	<--	<--					
B1	43	G	1	31	G	0	Snare H Soft	AnSD Snappy	SD Jazz H Light	Brush Slap L	<--					
C2	44	G#	1	32	G#	0	Sticks	<--	<--	<--	<--					
D2	45	A	1	33	A	0	Bass Drum Soft	AnBD Dance-1	<--	<--	Bass Drum L					
E2	46	A#	1	34	A#	0	Open Rim Shot	AnSD OpenRim	<--	<--	<--					
F2	47	B	1	35	B	0	Bass Drum Hard	AnBD Dance-2	<--	<--	Gran Cassa					
G2	48	C	2	36	C	1	Bass Drum	AnBD Dance-3	BD Jazz	BD Jazz	Gran Cassa Mute	Cutting Noise	Phone Call			
A2	49	C#	2	37	C#	1	Side Stick	Analog Side Stick	<--	<--	<--	Cutting Noise 2	door 1			
B2	50	D	2	38	D	1	Snare M	AnSD Q	SD Jazz L	Brush Slap	Marching Sn M		door 2			
C3	51	D#	2	39	D#	1	Hand Clap	<--	<--	<--	<--	String Slap	Scratch Cut			
D3	52	E	2	40	E	1	Snare H Hard	AnSD Ana+Acoustic	SD Jazz M	Brush Tap	Marching Sn H		Scratch			
E3	53	F	2	41	F	1	Floor Tom L	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1		Wind Chime			
F3	54	F#	2	42	F#	1	Hi-Hat Closed	Analog HH Closed 3	<--	<--	<--		Telephone Ring 2			
G3	55	G	2	43	G	1	Floor Tom H	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2					
A3	56	G#	2	44	G#	1	Hi-Hat Pedal	Analog HH Closed 4	<--	<--	<--					
B3	57	A	2	45	A	1	Low Tom	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3					
C4	58	A#	2	46	A#	1	Hi-Hat Open	Analog HH Open 2	<--	<--	<--					
D4	59	B	2	47	B	1	Mid Tom L	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4					
E4	60	C	3	48	C	2	Mid Tom H	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5					
F4	61	C#	3	49	C#	2	Crash Cymbal 1	Analog Cymbal	<--	<--	Hand Cym. L					
G4	62	D	3	50	D	2	High Tom	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6					
A4	63	D#	3	51	D#	2	Ride Cymbal 1	<--	<--	<--	Hand Cym.Short L					
B4	64	E	3	52	E	2	Chinese Cymbal	<--	<--	<--	<--	Flute Key Click	Car Engine Ignition			
C5	65	F	3	53	F	2	Ride Cymbal Cup	<--	<--	<--	<--		Car Tires Squeal			
D5	66	F#	3	54	F#	2	Tambourine	<--	<--	<--	<--		Car Passing			
E5	67	G	3	55	G	2	Splash Cymbal	<--	<--	<--	<--		Car Crash			
F5	68	G#	3	56	G#	2	Cowbell	Analog Cowbell	<--	<--	<--		Siren			
G5	69	A	3	57	A	2	Crash Cymbal 2	<--	<--	<--	Hand Cym. H		Train			
A5	70	A#	3	58	A#	2	Vibraslap	<--	<--	<--	<--		Jet Plane			
B5	71	B	3	59	B	2	Ride Cymbal 2	<--	<--	<--	Hand Cym.Short H		Starship			
C6	72	C	4	60	C	3	Bongo H	<--	<--	<--	<--		Burst			
D6	73	C#	4	61	C#	3	Bongo L	<--	<--	<--	<--		Roller Coaster			
E6	74	D	4	62	D	3	Conga H Mute	Analog Conga H	<--	<--	<--		Submarine			
F6	75	D#	4	63	D#	3	Conga H Open	Analog Conga M	<--	<--	<--					
G6	76	E	4	64	E	3	Conga L	Analog Conga L	<--	<--	<--					
A6	77	F	4	65	F	3	Timbale H	<--	<--	<--	<--					
B6	78	F#	4	66	F#	3	Timbale L	<--	<--	<--	<--					
C7	79	G	4	67	G	3	Agogo H	<--	<--	<--	<--					
D7	80	G#	4	68	G#	3	Agogo L	<--	<--	<--	<--					
E7	81	A	4	69	A	3	Cabasa	<--	<--	<--	<--	Shower	Laugh			
F7	82	A#	4	70	A#	3	Maracas	Analog Maracas	<--	<--	<--	Thunder	Scream			
G7	83	B	4	71	B	3	Samba Whistle H	<--	<--	<--	<--	Wind	Punch			
A7	84	C	5	72	C	4	Samba Whistle L	<--	<--	<--	<--	Stream	Heartbeat			
B7	85	C#	5	73	C#	4	Guiro Short	<--	<--	<--	<--	Bubble	FootSteps			
C8	86	D	5	74	D	4	Guiro Long	<--	<--	<--	<--	Feed				
D8	87	D#	5	75	D#	4	Claves	Analog Claves	<--	<--	<--	<--				
E8	88	E	5	76	E	4	Wood Block H	<--	<--	<--	<--					
F8	89	F	5	77	F	4	Wood Block L	<--	<--	<--	<--					
G8	90	F#	5	78	F#	4	Cuica Mute	Scratch Push	<--	<--	<--					
A8	91	G	5	79	G	4	Cuica Open	Scratch Pull	<--	<--	<--					
B8	92	G#	5	80	G#	4	Triangle Mute	<--	<--	<--	<--					
C9	93	A	5	81	A	4	Triangle Open	<--	<--	<--	<--					
D9	94	A#	5	82	A#	4	Shaker	<--	<--	<--	<--					
E9	95	B	5	83	B	4	Jingle Bell	<--	<--	<--	<--					
F9	96	C	6	84	C	5	Bell Tree	<--	<--	<--	<--	Dog	Machine Gun			
G9	97	C#	6	85	C#	5						Horse	Laser Gun			
A9	98	D	6	86	D	5						Bird Tweet 2	Explosion			
B9	99	D#	6	87	D#	5							Firework			
C10	100	E	6	88	E	5										
D10	101	F	6	89	F	5										
E10	102	F#	6	90	F#	5						Ghost				
F10	103	G	6	91	G	5						Maou				



MIDI Implementation Chart

YAMAHA [Portable Keyboard]
Model PSR-350 MIDI Implementation Chart

Date:26-JAN-2001
Version : 1.0

Function...	Transmitted	Recognized	Remarks
Basic Default	1 - 16	1 - 16	*1
Channel Changed	1 - 16	1 - 16	*1
Mode Default	3	3	
Messages	x	x	
Altered	*****	x	
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON	o 9nH,v=1-127	o 9nH,v=1-127	
Note OFF	o 9nH,v=0	o 9nH,v=0 or 8nH	
After Key's	x	x	
Touch Ch's	x	x	
Pitch Bend	x	o	
Control Change	0,32 o 1 x *2 6,38 x *2 7 o 10 x 11 x *2 64 o 71 x *2 72 x *2 73 x *2 74 x *2 84 x *2 91,93,94 x 96,97 x 100,101 x *2	o o o o o o o o o o o o o o o o o o o o	Bank Select Modulation wheel Data Entry Part Volume Pan Expression Sustain Harmonic Content Release Time Attack Time Brightness Portamento Cntrl Effect Depth RPN Inc,Dec RPN LSB,MSB
Prog Change : True #	o 0 - 127 *****	o 0 - 127	
System Exclusive	o *3	o *3	
: Song Pos.	x	x	
: Song Sel.	x	x	
: Tune	x	x	
System : Clock	o	o	
Real Time: Commands	o *4	o *4	
Aux :All Sound OFF	x	o(120,126,127)	
:Reset All Cntrls	x	o(121)	
:Local ON/OFF	x	o(122)	*5
:All Notes OFF	x	o(123-125)	
Mes- :Active Sense	o	o	
sages:Reset	x	x	

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON , MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No

NOTE:

- *1 By default (factory settings) the PSR-350 ordinarily functions as a 16-channel multi-timbral tone generator, and incoming data does not affect the panel voices or panel settings. However, the MIDI messages listed below do affect the panel voices, auto accompaniment, and songs.
- MIDI Master Tuning
 - System exclusive messages for changing the Reverb Type, Chorus Type, and DSP Type.
- *2 Messages for these control change numbers cannot be transmitted from the PSR-350 itself. However, they may be transmitted when playing the accompaniment, song or using the Harmony effect.
- *3 Exclusive
- <GM System ON> F0H, 7EH, 7FH, 09H, 01H, F7H
- This message automatically restores all default settings for the instrument, with the exception of MIDI Master Tuning.
- <MIDI Master Volume> F0H, 7FH, 7FH, 04H, 01H, II, mm, F7H
- This message allows the volume of all channels to be changed simultaneously (Universal System Exclusive).
 - The values of "mm" is used for MIDI Master Tuning. (Values for "II" are ignored.)
- <MIDI Master Tuning> F0H, 43H, 1nH, 27H, 30H, 00H, 00H, mm, II, cc, F7H
- This message simultaneously changes the tuning value of all channels.
 - The values of "mm" and "II" are used for MIDI Master Tuning.
 - The default value of "mm" and "II" are 08H and 00H, respectively. Any values can be used for "n" and "cc."
- <Reverb Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 00H, mmH, IIH, F7H
- mm : Reverb Type MSB
 - II : Reverb Type LSB
- Refer to the Effect Map (page 100) for details.
- <Chorus Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 20H, mmH, IIH, F7H
- mm : Chorus Type MSB
 - II : Chorus Type LSB
- Refer to the Effect Map (page 100) for details.
- <DSP Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 40H, mmH, IIH, F7H
- mm : DSP Type MSB
 - II : DSP Type LSB
- Refer to the Effect Map (page 100) for details.
- <DRY Level> F0H, 43H, 1nH, 4CH, 08H, 0mH, 11H, IIH, F7H
- II : Dry Level
 - 0m : Channel Number
- *4 When the accompaniment is started, an FAH message is transmitted. When accompaniment is stopped, an FCH message is transmitted. When the clock is set to External, both FAH (accompaniment start) and FCH (accompaniment stop) are recognized.
- *5 Local ON/OFF
- <Local ON> Bn, 7A, 7F
- <Local OFF> Bn, 7A, 00
- Value for "n" is ignored.

MIDI Implementation Chart

■ Effect map

- * If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.
- * The numbers in parentheses in front of the Effect Type names correspond to the number indicated in the display..
- * By using an external sequencer, which is capable of editing and transmitting the system exclusive messages and parameter changes, you can select the Reverb, Chorus and DSP effect types which are not accessible from the PSR-350 panel itself. When one of the effects is selected by the external sequencer, " - " will be shown on the display.

● REVERB

TYPE MSB	TYPE LSB								
	00	01	02	08	16	17	18	19	20
000	No Effect								
001	(1)Hall1					(2)Hall2			
002	Room					(3)Room1		(4)Room2	
003	Stage				(5)Stage1	(6)Stage2			
004	Plate				(7)Plate1	(8)Plate2			
005...127	No Effect								

● CHORUS

TYPE MSB	TYPE LSB								
	00	01	02	08	16	17	18	19	20
000...064	No Effect								
065	Chorus		Chorus2						
066	Celeste					Chorus1			
067	Flanger			Flanger1		Flanger2			
068...127	No Effect								

● DSP

TYPE MSB	TYPE LSB								
	00	01	02	08	16	17	18	19	20
000	No Effect								
001	(1)Hall1					(2)Hall2			
002	Room					(3)Room1		(4)Room2	
003	Stage				(5)Stage1	(6)Stage2			
004	Plate				(7)Plate1	(8)Plate2			
005	Delay L,C,R				(26)Delay L,C,R				
006	(27)Delay L,R								
007	(28)Echo								
008	(29)Cross Delay								
009	(9)Early Reflection1	(10)Early Reflection2							
010	(11)Gate Reverb								
011	(12)Reverse Gate								
012...019	No Effect								
020	(30)Karaoke								
021...064	No Effect								
065	Chorus		(14)Chorus2						
066	Celeste					(13)Chorus1			
067	Flanger			(15)Flanger1		(16)Flanger2			
068	Symphonic				(17)Symphonic				
069	Rotary Speaker				(19)Rotary Speaker1				
070	Tremolo				(21)Tremolo1				
071	Auto Pan				(24)Auto Pan		(20)Rotary Speaker2	(22)Tremolo2	(23)Guitar Tremolo
072	(18)Phaser								
073	Distortion								
074	(33)Overdrive								
075	(34)Amp Simulation				(31)Distortion Hard	(32)Distortion Soft			
076	(36)3Band EQ					(35)EQ Telephone			
077	(37)2Band EQ								
078	Auto Wah				(25)Auto Wah				
079...127	No Effect								



Specifications

Keyboards

- 61 standard-size keys (C1 - C6), with Touch Response and Dynamic Filter.

Display

- Large multi-function LCD display (backlit)

Setup

- STANDBY/ON
- MASTER VOLUME : MIN - MAX

Panel Controls

- OVERALL (L, R), SONG, VOICE, STYLE, PORTABLE GRAND, DJ, METRONOME, [0]-[9], [+](YES), [-](NO), DEMO, TOUCH, HARMONY, Dict., L, R, TEMPO/TAP

Voice

- 116 panel voices + 12 drum kits + XG expanded voices + 10 DJ voices
- Polyphony : 32

Auto Accompaniment

- 106 styles + Disk
- Accompaniment Control : ACMP ON/OFF, SYNC STOP, SYNC START, START/STOP, INTRO/ENDING, MAIN A/B(AUTO FILL)
- Fingering : Multi fingering
- Accompaniment Volume

Music Database

- 208

Yamaha Educational Suite

- Dictionary
- Lesson 1-4

One Touch Setting

- Voice (for each style or song)

Overall controls

- Lesson R, L
- Octave
- Transpose
- Tuning
- Accompaniment/Song Volume
- Metronome Volume
- Reverb
- DSP
- Harmony
- Grade/Talking
- MIDI

Effects

- Reverb : 8 types
- DSP : 38 types
- Harmony : 26 types

Song

- 100 Songs + 5 User Songs
- Song Clear, Track Clear

Recording

- Song
User Song : 5 Songs
Recording Tracks : 1, 2, 3, 4, 5, CHORD

Disk

- Song Playback
- Save
- Load
- Delete
- Format

MIDI

- Initial Send
- Local on/off

Auxiliary jacks

- PHONES/OUTPUT, DC IN 12V, MIDI IN/OUT, SUSTAIN

Amplifier

- 3.0W + 3.0W

Speakers

- 12cm x 2 + 3cm x 2

Power Consumption

- 22 W (when using PA-5C power adaptor)

Power Supply

- Adaptor : Yamaha PA-5C AC power adaptor
- 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 6-2/3")

Weight

- 8.5 kg (18 lbs., 12 oz.)

Supplied Accessories

- Music Stand
- Data Disk
- Owner's Manual
- Song Book

Optional Accessories

- Headphones : HPE-150
 - AC power adaptor : PA-5C
 - Footswitch : FC4, FC5
 - Keyboard stand : L-6
-

* 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.



Misc.

+/- buttons24

A

AC Power adaptor8
accessory jacks9
accompaniment sections41
Accompaniment Split Point45
Accompaniment Volume42
accompaniment, playing36
Auto Accompaniment35

B

Bank51
Batteries8
Beat display53
beat marks53

C

Chord Names48
Chord Track59
Chord Type48
Chords, About47
Chords, Fingered43
Chords, Single Finger43
Clearing, Song61

D

DEMO button12
Demo songs12
Dictionary46
DISK ORCHESTRA69
DJ22
Drum Kit Voice Chart96
DSP31
DSP types33
Dual Voice DSP25
Dual Voice Octave25
Dual Voice Reverb25
Dual Voice Select25
Dual Voice Volume25

E

Effects30
Ending36
External Clock84

F

Fill-in41
Fingered chords43
Footswitch9

G

GM System Level 179
Grade/Talking68

H

Harmony32
HARMONY button32
Harmony types34
Headphones9

I

Indicator18
Initial Setup Send83
Initialization86
Intro38

L

Lesson63

M

Main A/B41
Main Voice DSP25
Main Voice Reverb25
Main Voice Volume25
MDB (music database)49
Metronome20
MIDI79
MIDI channels80
MIDI Implementation Chart98
MIDI LSB Receive cancel84
MIDI terminals80
Multi Fingering43
MUSIC DATABASE49
Music Stand19

N

numeric keypad24

O

Octave72
One Touch Setting27
Overall buttons18

P

PHONES/OUTPUT jack7
Portable Grand20

Q

Quick Guide10

R

RECORD button58
recording, song58
Registration Memory51
Reverb30
Reverb types33
Root47

S

sections (accompaniment)41
Single Finger chords43

Song Clear61
SONG MEMORY59
song recording58
Song Volume57
songs, recording58
songs, selecting and playing53
Specifications101
Split Point45
STYLE FILE69
styles, selecting35
SUSUTAIN9
Sync Start37
Sync Stop40

T

Tap37
Tempo (song)56
Tempo (style)41
Time Signature21
TOUCH button29
Touch Sensitivity29
track (song)59
tracks, muting59
Transpose27
Troubleshooting85
Tuning27

U

User songs58

V

Voice List87
voices, Drum Kit96
voices, selecting and playing23
voices, XG88

X

XG voices88

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 _____
(Retailer)

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

U.S.A.

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

FRANCE

**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

NORWAY

Norsk filial av Yamaha Scandinavia AB
Grini Næringspark 1
N-1345 Østerås, Norway
Tel: 67 16 77 70

ICELAND

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. Nusantara**
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
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HEAD OFFICE Yamaha Corporation, Pro Audio & Digital Musical Instrument Division
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-3273



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/>

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