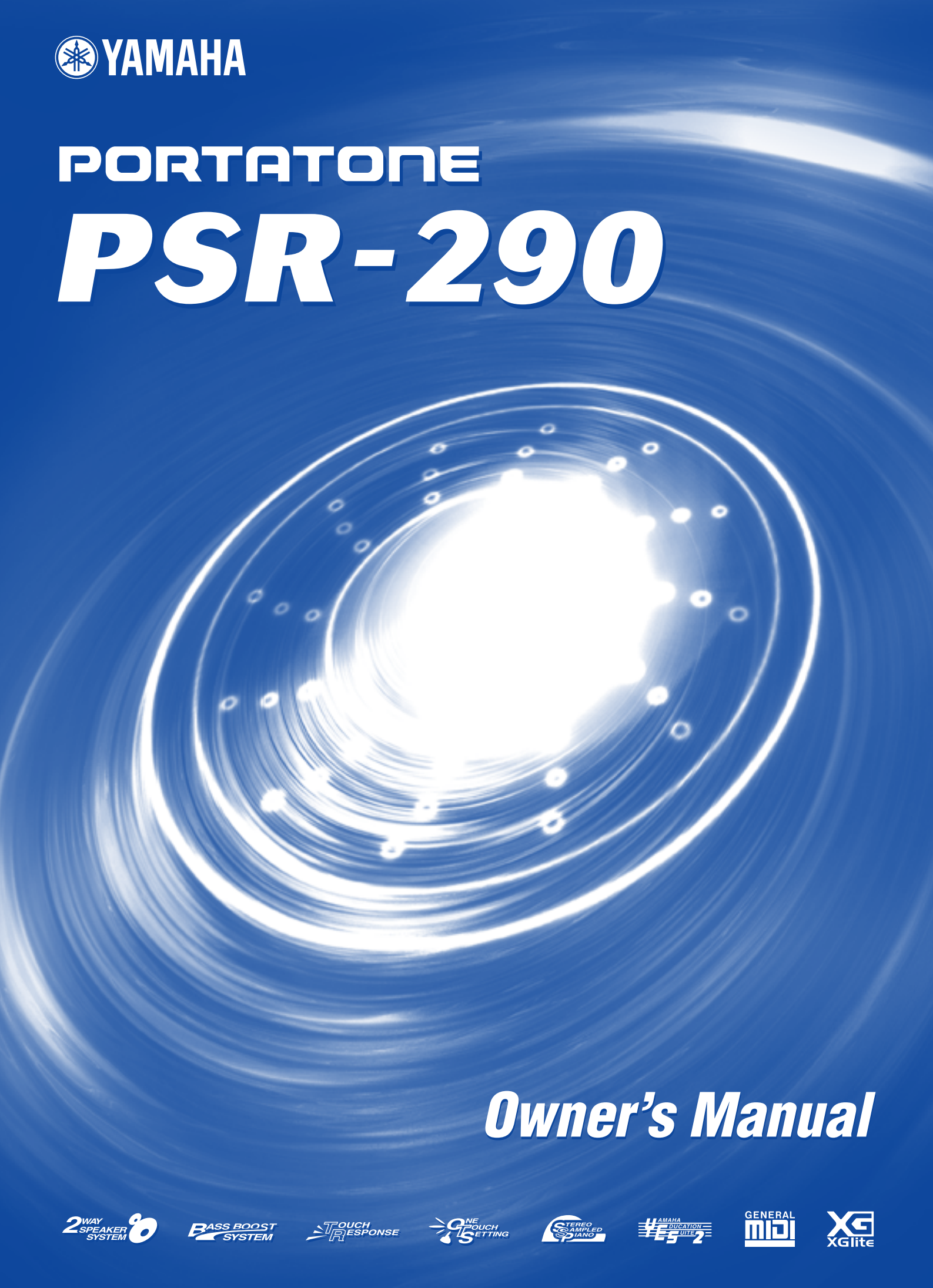
YAMAHA

PORTATONE

PSR-290



Owner's Manual

2WAY SPEAKER SYSTEM
BASS BOOST SYSTEM
TOUCH RESPONSE
ONE TOUCH SETTING
STEREO SAMPLED PIANO
YAMAHA EDUCATION SUITE 2
GENERAL MIDI
XG XGlite

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

92-BP (bottom)

PLEASE KEEP THIS MANUAL

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 ar ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspændingen til dette apparat er IKKE afbrudt, sålænge netledningen siddr i en stikkontakt, som er t endt — også selvom der or slukket på apparatets afbryder.

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

(standby)

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 this manual 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:

Power supply/AC power adaptor

- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use the specified adaptor (PA-3C or PA-3B or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Do not 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.

Do not open

- 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.

Water warning

- 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.
- Never insert or remove an electric plug with wet hands.

Fire warning

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

If you notice any abnormality

- 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.

⚠ *CAUTION*

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

Power supply/AC power adaptor

- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- Unplug the AC power adaptor when not using the instrument, or during electrical storms.
- 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.

Battery

- 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.

Location

- 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 in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise.

- 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.
- 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.

Connections

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. 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.

Maintenance

- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Handling caution

- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- 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.
- 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.

Saving data

Saving and backing up your data

- Saved data may be lost due to malfunction or incorrect operation. Save important data to external media such as the Yamaha MDF3 MIDI data filer.

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.

When using a power adaptor, even when the power switch is in the "STANDBY" position, electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the AC power adaptor from the wall AC outlet.

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.

● Regarding the song (or composition) "Just The Way You Are" included in this keyboard

Composition Title : Just The Way You Are
Composer's Name : Billy Joel
Copyright Owner's Name : EMI MUSIC PUBLISHING LTD
CAUTION : All Rights Reserved, Unauthorised copying, public performance and broadcasting are strictly prohibited.

● COPYRIGHT NOTICE

This product incorporates and bundles computer programs and contents in which Yamaha owns copyrights or with respect to which it has license to use others' copyrights. Such copyrighted materials include, without limitation, all computer software, styles files, MIDI files, WAVE data and sound recordings. Any unauthorized use of such programs and contents outside of personal use is not permitted under relevant laws. Any violation of copyright has legal consequences. DON'T MAKE, DISTRIBUTE OR USE ILLEGAL COPIES.

● Trademarks

• Apple and Macintosh are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.
• Windows is the registered trademark of Microsoft® Corporation.

All other trademarks are the property of their respective holders.

Congratulations on your purchase of the Yamaha PSR-290 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-290 in order to take full advantage of its various features.

Main Features

The PSR-290 is a sophisticated yet easy-to-use keyboard with the following features and functions:

■ Stereo Sampled Piano ..... page 20

The PSR-290 has a special Portable Grand Piano Voice — created by state-of-the-art stereo sampling technology and using Yamaha's sophiscated AWM (Advanced Wave memory) tone generation system.

■ Touch Response ..... page 30

The exceptionally natural Touch Response feature, with a convenient front panel on/off switch, gives you maximum expressive level control over the voices. It also works in conjunction with the Dynamic Filter, which dynamically adjusts the timbre or tone of a voice according to your playing strength — just a like a real musical instrument!

■ Yamaha Education Suite ..... pages 43, 45, 61

The PSR-290 features the new Yamaha Education Suite — a set of learning tools that utilize the latest technology to make studying and practicing music more fun and fulfilling than ever before!

■ One Touch Setting ..... page 28

The One Touch Setting feature lets you automatically call up an appropriate voice for playing with the selected style. Each style has memory space for two One Touch Settings, and you can change them to your own desired voice setting — letting you save your custom panel settings for instant recall.

■ Powerful Speaker System

The built-in stereo amplifier/speaker system of the PSR-290 — with a special Bass Boost feature — provides exceptionally powerful, high-quality sound, letting you hear the full dynamic range of the PSR-290's authentic voices.

■ Music Database ..... page 48

The PSR-290 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-290 takes care of the rest!

■ GM System Level 1

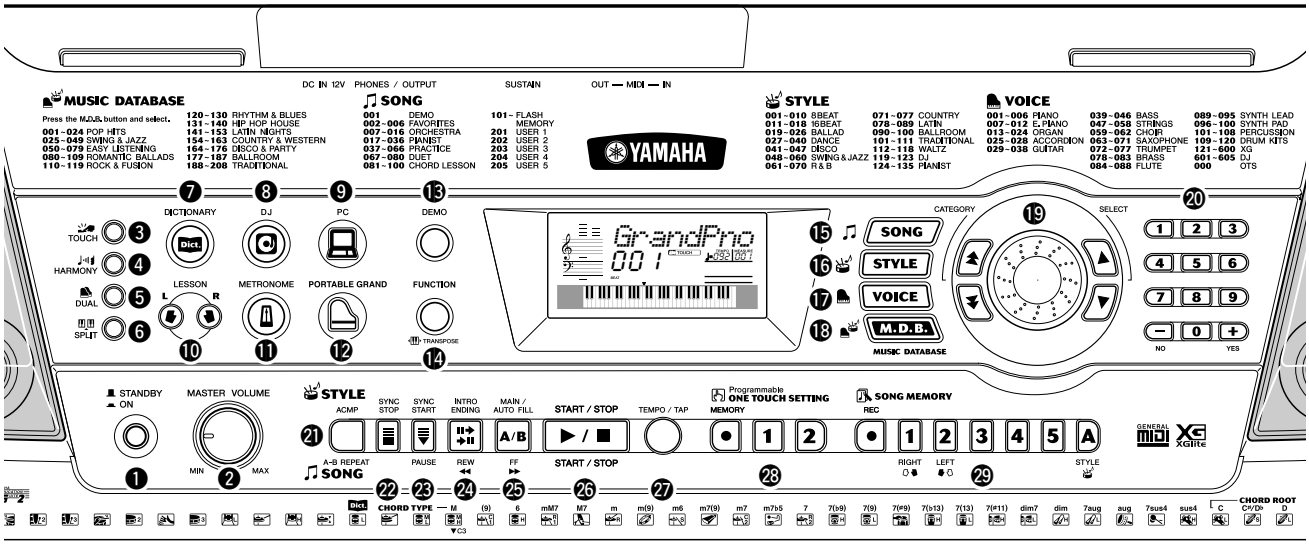
"GM System Level 1" is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of manufacturer. The GM mark is affixed to all software and hardware products that support GM System Level.

■ XGlite

As its name implies, "XGlite" is a simplified version of Yamaha's high-quality XG tone generation format. Naturally, you can play back any XG song data using an XGlite tone generator. However, keep in mind that some songs may play back differently compared to the original data, due to the reduced set of control parameters and effects.

Contents

■ Front Panel



❶ Power switch ([STANDBY/ON])

❷ [MASTER VOLUME] dial

This determines the overall volume of the PSR-290.

❸ [TOUCH] button

This turns the Touch function on and off. (See page 30.)

❹ [HARMONY] button

This turns the Harmony effect on and off. (See page 31.)

❺ [DUAL] button

This turns the Dual voice on or off. (See page 26.)

❻ [SPLIT] button

This turns the Split voice on and off. (See page 27.)

❼ [DICTIONARY] button

This calls up the Dictionary function (page 45).

❽ [DJ] button

This instantly calls up a special DJ voice and style.

❾ [PC] Button

This exceptionally convenient control lets you store and instantly call up the specified MIDI settings for optimum use with a connected computer or other MIDI device. (See page 73.)

❿ 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 62.)

⓫ [METRONOME] button

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

⓬ [PORTABLE GRAND] button

This instantly calls up the Grand Piano voice. (See page 12.)

⓭ [DEMO] button

This is used to play the Demo song. (See page 14.)

⓮ [FUNCTION] Button

This calls up the Function mode and stores the specified panel setting to the flash memory (see pages 74, 78).

⓯ [SONG] button

This is for enabling song selection. (See page 51.)

⓰ [STYLE] button

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

⓱ [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.)

⓲ [M.D.B.] (MUSIC DATABASE) button

This calls up the optimum panel settings for selected music genre. (See page 48.)

⓳ Dial, CATEGORY [▲]/[▼] buttons, SELECT [▲]/[▼] buttons

This dial is used to select the number of the desired song, voice, style or M.D.B.. (See page 24.) This also used to set the Tempo and Function value. The CATEGORY [▲]/[▼] buttons are used to select

the category of songs, voices, styles, M.D.B. or Functions. Pressing the buttons steps through the various categories.
The SELECT [▲]/[▼] buttons are used to decrease or increase the number of the desired song, voice, style, M.D.B., or specific Function, as well as to adjust certain settings.

⑳ 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.

㉑ [ACMP] / [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.)

㉒ [SYNC STOP] button
This turns the Sync Stop function on and off. (See page 40.)

㉓ [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 53.)

㉔ [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.

㉕ [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 42.) When the Song mode is selected, this is used as a "fast forward" control, or move the song playback point toward the end.

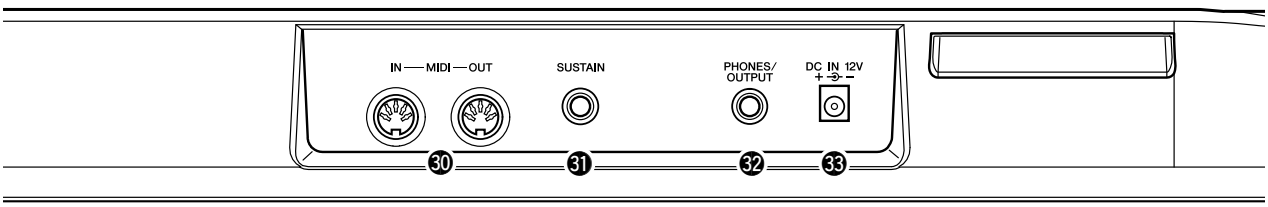
㉖ [START/STOP] button
When the Style mode is selected, this alternately starts and stops the style. (See page 36.) In the Song mode, this alternately starts and stops song playback. (See page 54.)

㉗ [TEMPO/TAP] button
This button is used to call up the Tempo setting, letting you set the Tempo with the dial, 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.)

㉘ ONE TOUCH SETTING buttons
These buttons ([MEMORY], [1], [2]) are used to select the One Touch Setting registrations. (See page 28.)

㉙ SONG MEMORY buttons
These buttons ([REC], [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 57.)

■ Rear Panel



㉚ MIDI IN, OUT terminals
These are for connection to other MIDI instruments and devices. (See page 67.)

㉛ SUSTAIN 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 11.)

㉜ PHONES/OUTPUT jack
This is for connection to a set of stereo headphones or to an external amplifier/speaker system. (See page 11.)

㉝ DC IN 12V jack
This is for connection to a PA-3C or PA-3B AC power adaptor. (See page 10.)

This section contains information about setting up your PSR-290 for playing. Make sure to read this section carefully before using the instrument.

Power Requirements

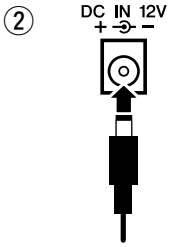
Although the PSR-290 will run either from an optional AC adaptor or batteries, Yamaha recommends use of an AC adaptor whenever possible. An AC adaptor is more environmentally friendly than batteries and does not deplete resources.

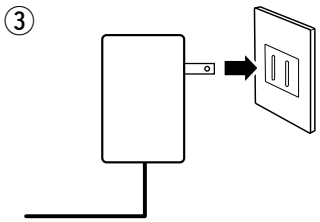
⚠ CAUTION

- *Never interrupt the power supply (e.g. remove the batteries or unplug the AC adaptor) during any PSR-290 record operation! Doing so can result in a loss of data.*
- *Never attempt to turn the power off when a "WRITING!" message is shown in the display. Doing so can damage the internal flash memory and result in loss of data.*

■ Using an AC Power Adaptor

① Make sure that the [STANDBY/ON] switch of the PSR-290 is set to STANDBY.
② Connect the AC adaptor (PA-3C, PA-3B, or other adaptor specifically recommended by Yamaha) to the power supply jack.
③ Plug the AC adaptor into an AC outlet.





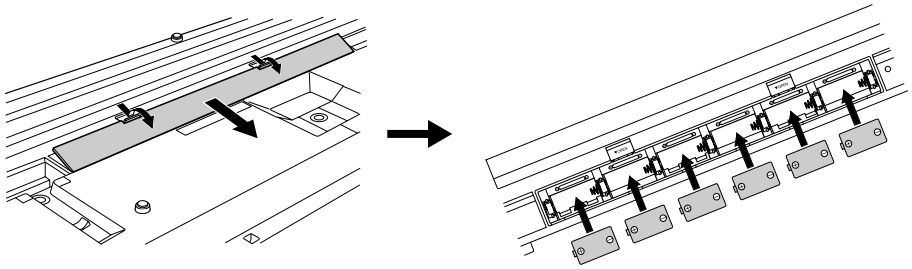
⚠ WARNING

- *Use ONLY a Yamaha PA-3C or PA-3B 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-290.*
- *Unplug the AC Power Adaptor when not using the PSR-290, or during electrical storms.*

■ Using Batteries

For battery operation the PSR-290 requires six 1.5V "D" size, R20P (LR20) or equivalent batteries. (Alkaline batteries are recommended.) When the batteries need to be replaced, the volume may be reduced, the sound may be distorted, and other problems may occur. When this happens, turn the power off and replace the batteries, as described below

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

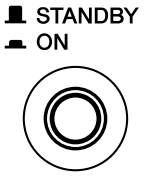


⚠ CAUTION

- *When the batteries run down, replace them with a complete set of six new batteries. NEVER mix old and new batteries.*
- *Do not use different kinds of batteries (e.g. alkaline and manganese) at the same time.*
- *If the instrument is not to be in use for a long time, remove the batteries from it, in order to prevent possible fluid leakage from the battery.*

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.)



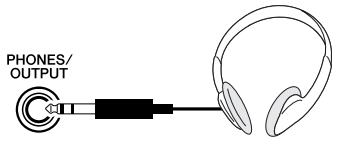
⚠ CAUTION

- ***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-290 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.***
- ***Never attempt to turn the power off when a "WRITING!" message is shown in the display. Doing so can damage the internal flash memory and result in loss of data.***

Accessory Jacks

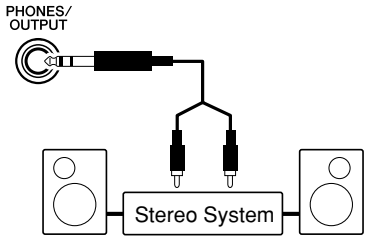
■ Using Headphones

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-290 is equipped with a built-in speaker system, you can also play it through an external amplifier/speaker system. First, make sure the PSR-290 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-290.

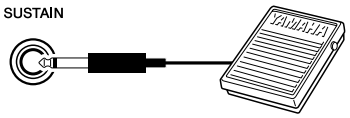


⚠ CAUTION

- ***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.

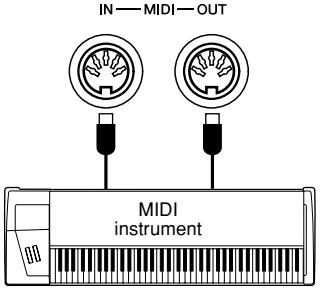


NOTE

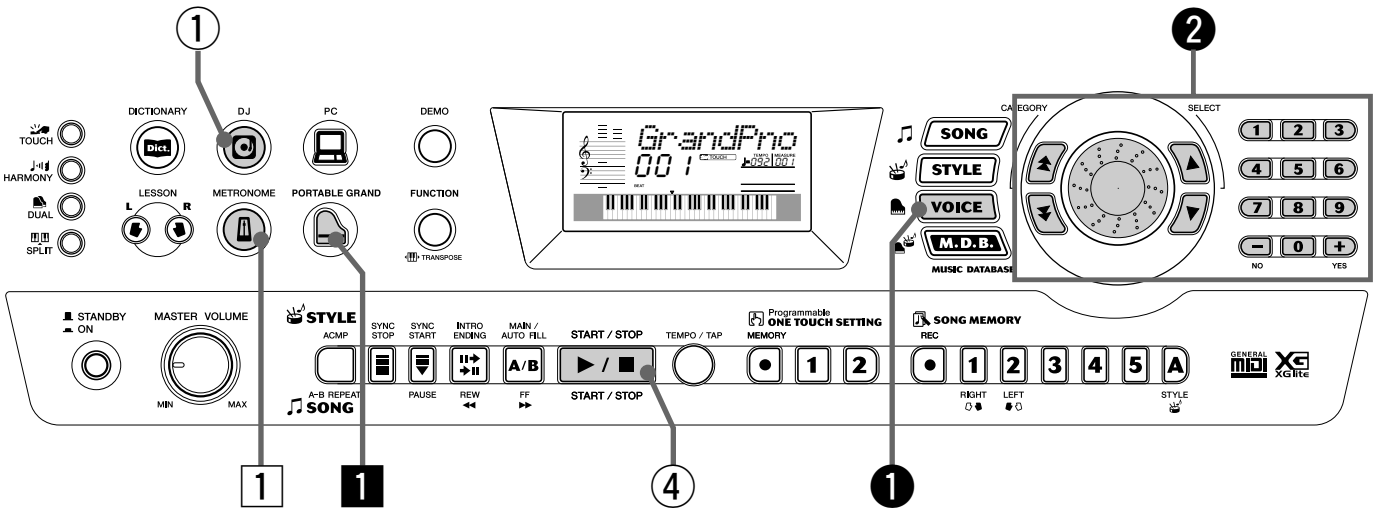
- *Make sure that the footswitch plug is properly connected to the SUSTAIN jack before turning on the power.*
- *Do not press the footswitch while turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.*

■ Using the MIDI Terminals

The PSR-290 also features MIDI terminals, allowing you to interface the PSR-290 with other MIDI instruments and devices. (For more information, see page 67.)



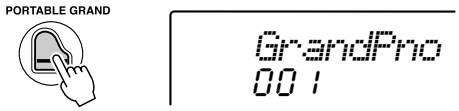
Step 1 Voices



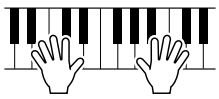
Playing the Piano

Simply by pressing the [PORTABLE GRAND] button, you can automatically select the Grand Piano voice.

1 Press the [PORTABLE GRAND] button.



2 Play the keyboard.



Want to find out more? See page 20.

Playing along with the Metronome

1 Press the [METRONOME] button.

Want to find out more? See page 20.

● Panel Voice List

* This list includes only a portion of the total available voices.

No.	Voice Name
	PIANO
001	Grand Piano
002	Bright Piano
003	Honky-tonk Piano
004	MIDI Grand Piano
005	CP 80
006	Harpsichord
	E.PIANO
007	Galaxy EP
008	Funky Electric Piano
009	DX Modern Elec. Piano
010	Hyper Tines
011	Venus Electric Piano
012	Clavi

No.	Voice Name
	ORGAN
013	Jazz Organ 1
014	Jazz Organ 2
015	Click Organ
016	Bright Organ
017	Rock Organ
018	Purple Organ
019	16'+2' Organ
020	16'+4' Organ
021	Theater Organ
022	Church Organ
023	Chapel Organ
024	Reed Organ

No.	Voice Name
	ACCORDION
025	Traditional Accordion
026	Musette Accordion
027	Bandoneon
028	Harmonica
	GUITAR
029	Classical Guitar
030	Folk Guitar
031	12Strings Guitar
032	Jazz Guitar
033	Octave Guitar
034	Clean Guitar
035	60's Clean Guitar
036	Muted Guitar
037	Overdriven Guitar

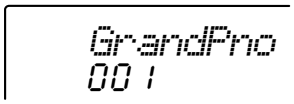
No.	Voice Name
038	Distortion Guitar
	BASS
039	Acoustic Bass
040	Finger Bass
041	Pick Bass
042	Fretless Bass
043	Slap Bass
044	Synth Bass
045	Hi-Q Bass
046	Dance Bass
	STRINGS
047	String Ensemble
048	Chamber Strings
049	Synth Strings
050	Slow Strings

No.	Voice Name
051	Tremolo Strings
052	Pizzicato Strings
053	Orchestra Hit
054	Violin
055	Cello
056	Contrabass
057	Banjo
058	Harp
	CHOIR
059	Choir
060	Vocal Ensemble
061	Vox Humana
062	Air Choir

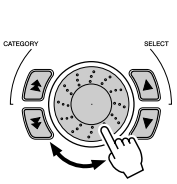
Selecting and Playing Other Voices

The PSR-290 has a huge total of 605 dynamic and realistic instrument voices. Let's try a few of them out now...

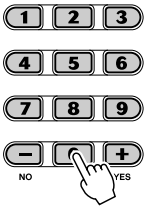
❶ Press the [VOICE] button.

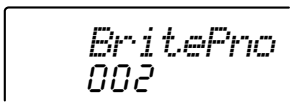


❷ Select a voice.



or

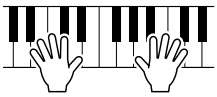




NOTE

- *You can also select the appropriate category by using the [▲]/[▼] buttons.*

❸ Play the keyboard.



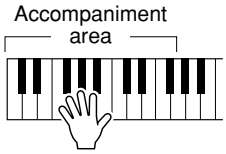
Want to find out more? See page 23.

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.

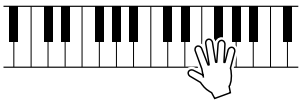
① Press the [DJ] button.

② Play the DJ style.

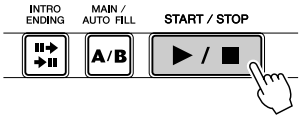


The DJ starts as soon as you play keys in the accompaniment area of the keyboard.

③ Play the DJ voices.



④ Stop the DJ style.



Want to find out more? See page 22.

No.	Voice Name
	SAXOPHONE
063	Soprano Sax
064	Alto Sax
065	Tenor Sax
066	Breathy Tenor
067	Baritone Sax
068	Oboe
069	English Horn
070	Bassoon
071	Clarinet
	TRUMPET
072	Trumpet
073	Muted Trumpet
074	Trombone

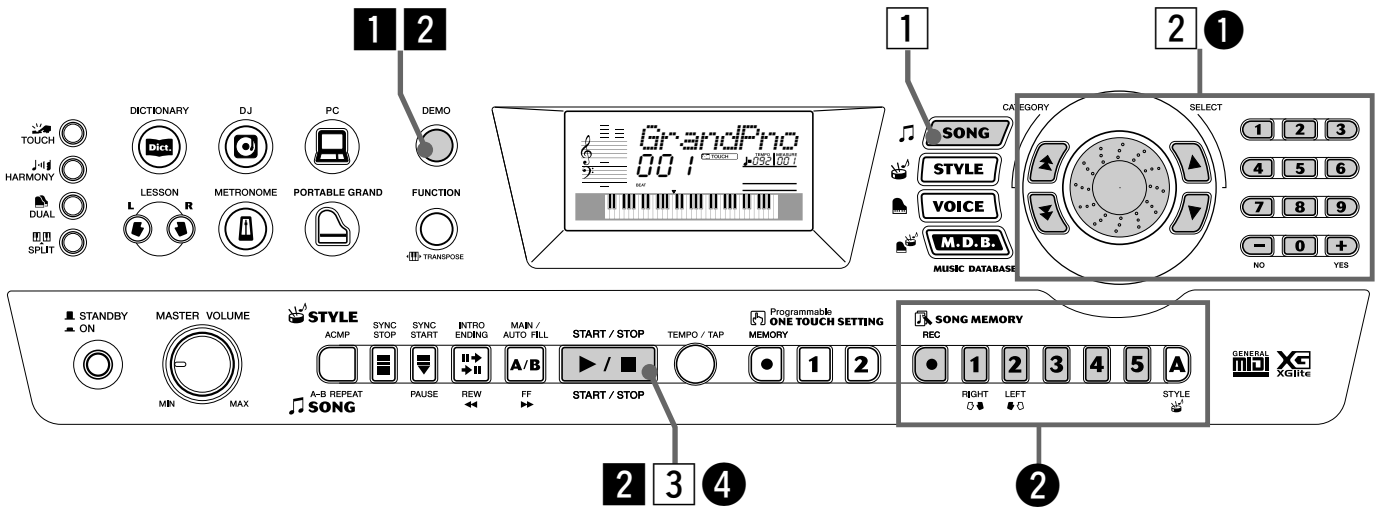
No.	Voice Name
075	Trombone Section
076	French Horn
077	Tuba
	BRASS
078	Brass Section
079	Big Band Brass
080	Mellow Horns
081	Synth Brass
082	Jump Brass
083	Techno Brass
	FLUTE
084	Flute
085	Piccolo
086	Pan Flute

No.	Voice Name
087	Recorder
088	Ocarina
	SYNTH LEAD
089	Square Lead
090	Sawtooth Lead
091	Voice Lead
092	Star Dust
093	Brightness
094	Analogon
095	Fargo
	SYNTH PAD
096	Fantasia
097	Bell Pad
098	Xenon Pad

No.	Voice Name
099	Equinox
100	Dark Moon
	PERCUSSION
101	Vibraphone
102	Marimba
103	Xylophone
104	Steel Drums
105	Celesta
106	Tubular Bells
107	Timpani
108	Music Box
	DRUM KITS
109	Standard Kit 1
110	Standard Kit 2

No.	Voice Name
111	Room Kit
112	Rock Kit
113	Electronic Kit
114	Analog Kit
115	Dance Kit
116	Jazz Kit
117	Brush Kit
118	Symphony Kit
119	SFX Kit 1
120	SFX Kit 2

Step 2 Songs



Playing the Songs

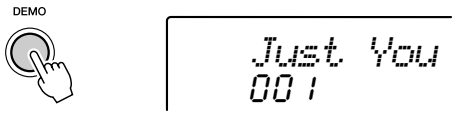
The PSR-290 is packed with a total of 100 songs, including one Demo song — which has been specially created to showcase the rich and dynamic sounds of the instrument. There are also 99 additional songs, designed to be used with the educational Lesson feature.

You can also play songs loaded to the PSR via MIDI. The songs can be stored to song numbers 101-199. (See page 71.)

Playing the Demo song

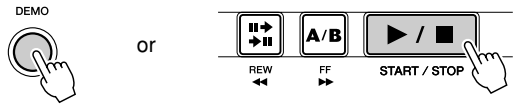
Let's play the Demo song now, Repeating with #001.

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.



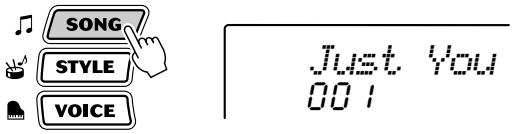
NOTE

- *The PSR-290 also has a Demo and DJ Cancel function that allows you to disable Demo song and DJ function. Set Demo and DJ Cancel in the Function mode (page 76).*

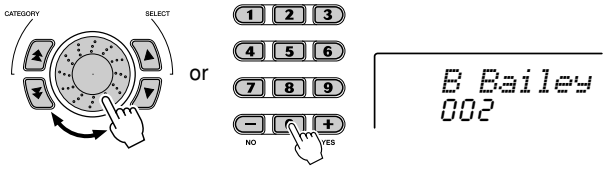
Playing a single song

Naturally, you can also individually select and play back the PSR-290's songs (001 - 205).

1 Press the [SONG] button.



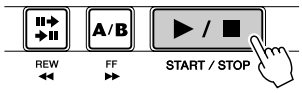
2 Select a song.



NOTE

- *You can also select the appropriate category by using the [▲]/[▼] buttons.*

3 Start (and stop) the song.

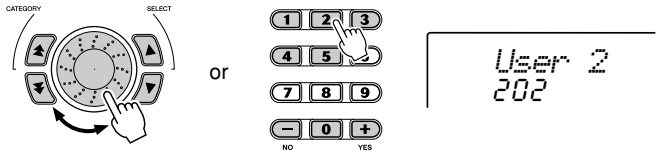


Want to find out more? See page 51.

Recording Your Own Song

Much like a multi-track tape recorder, the PSR-290 lets you play and record the individual parts of your own song in real time.

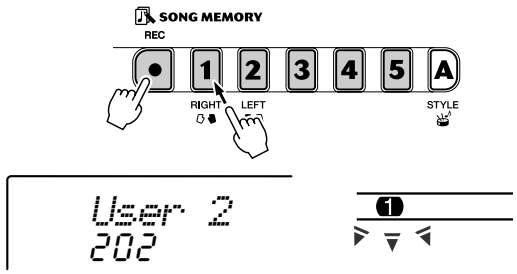
❶ Select the desired User song (201 - 205) for recording.



NOTE

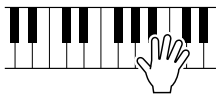
- *You can also select the appropriate category by using the [▲]/[▼] buttons.*

❷ Simultaneously hold down the [REC] button and press the desired track number button ([1] - [5]).

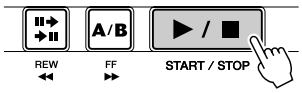


❸ Start recording by playing a melody on the keyboard.

The PSR-290 starts recording as soon as you play the first note on the keyboard.



❹ To stop recording, press the [START/STOP] button.



Want to find out more? See page 56.

● Song List

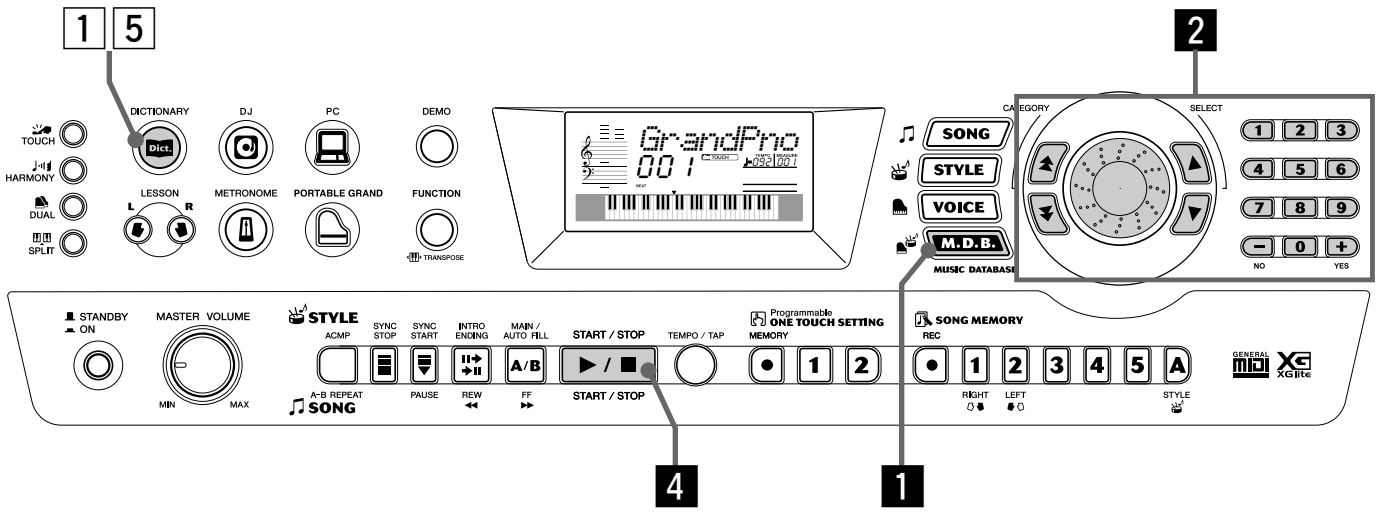
No.	Song Name
	Demo
001	Just The Way You Are
	Favorites
002	Bill Bailey (Won't You Please Come Home)
003	When Irish Eyes Are Smiling
004	Down By The Riverside
005	America The Beautiful
006	When The Saints Go Marchin' In
	Orchestra
007	Frühlingsstimmen
008	Danse Des Mirlitons From "The Nutcracker"
009	"Orphée Aux Enfers" Ouverture
010	Slavonic Dances No.10
011	La Primavera (From Le Quattro Stagioni)
012	Méditation De Thais
013	Guillaume Tell
014	Camptown Races
015	Frühlingslied
016	Ungarische Tänze Nr.5
	Pianist
017	Dolly's Dreaming And Awakening
018	La Candeur
019	Arabesque
020	Pastorale
021	Petite Réunion
022	Innocence

No.	Song Name
023	Progrès
024	Tarentelle
025	La Chevaleresque
026	Etude Op.10-3 "Chanson De L'adieu"
027	Marcia Alla Turca
028	Turkish March
029	Valse Op.64-1 "Peiti Chien"
030	Menuett
031	Nocturne Op.9-2
032	Moments Musicaux Op.94-3
033	The Entertainer
034	Prelude (Wohltemperierte Klavier 1-1)
035	La Viollette
036	Für Elise
	Practice
037	Little Brown Jug
038	Loch Lomond
039	Oh! Susanna
040	Greensleeves
041	Aura Lee
042	Londonderry Air
043	Ring De Banjo
044	Wenn Ich Ein Vöglein Wär ?
045	Die Lorelei
046	Funiculi-Funicula
047	Turkey In The Straw
048	Old Folks At Home
049	Silent Night
050	Jingle Bells

No.	Song Name
051	Muss I Denn
052	Liebesträume Nr.3
053	Jesu, Joy Of Man's Desiring
054	Symphonie Nr.9
055	Song Of The Pearl Fisher
056	Gavotte
057	String Quartet No.17 2nd Mov. "Serenade"
058	Menuett
059	Canon
060	The Danube Waves
061	From "The Magic Flute"
062	Piano Sonate Op.27-2 "Mondschein"
063	"The Surprise" Symphony
064	To A Wild Rose
065	Air de Toréador "Carmen"
066	O Mio Babbino Caro (From "Gianni Schicchi")
	Duet
067	Row Row Row Your Boat
068	On Top Of Old Smoky
069	We Wish You A Merry Christmas
070	Scarborough Fair
071	Im Mai
072	O Christmas Tree
073	Mary Had A Little Lamb
074	Ten Little Indians
075	Pop Goes The Weasel
076	Twinkle Twinkle Little Star

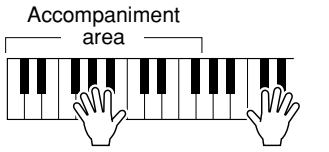
No.	Song Name
077	Close Your Hands, Open Your Hands
078	The Cuckoo
079	O Du Lieber Augustin
080	London Bridge
	Chord Lesson
081	Twinkle Twinkle Little Star
082	Close Your Hands, Open Your Hands
083	The Cuckoo
084	O Du Lieber Augustin
085	London Bridge
086	American Patrol
087	Beautiful Dreamer
088	Battle Hymn Of The Republic
089	Home Sweet Home
090	Valse Des Fleurs (From "The Nutcracker")
091	Aloha Oe
092	I've Been Working On The Railroad
093	My Darling Clementine
094	Auld Lang Syne
095	Grandfather's Clock
096	Amazing Grace
097	My Bonnie
098	Yankee Doodle
099	Joy To The World
100	Ave Maria

Step 3 Music Database



Music Database

Here's a convenient feature that lets you instantly reconfigure the PSR-290 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-290 makes all the right settings for you!



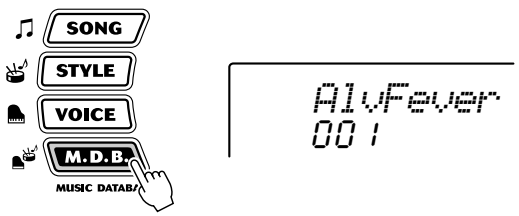
Auto accompaniment (for example, bass + guitar + drums)

Melody

NOTE

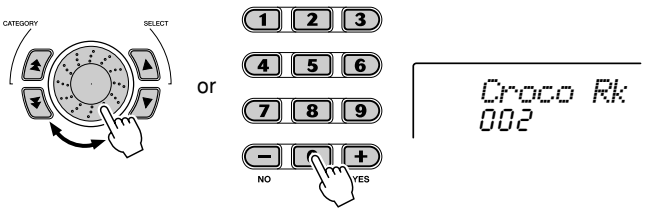
• For more infomation on playing proper chords for the auto accompaniment, see "Using Auto Accompaniment — Multi Fingering" on page 43 and "Looking up Chords in the Dictionary" on the next page.

1 Press the [M.D.B.] (MUSIC DATABASE) button.



2 Select a Music Database.

Refer to the Music Database List on page 87.

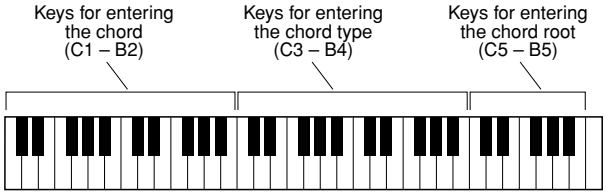


NOTE

• You can also select the appropriate category by using the [▲]/[▼] buttons.

Looking up Chords in the Dictionary

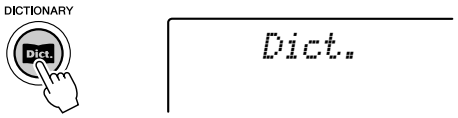
The convenient Dictionary function teaches you how to play chords by showing you the individual notes. In the example below, we'll learn how to play a GM7 chord...



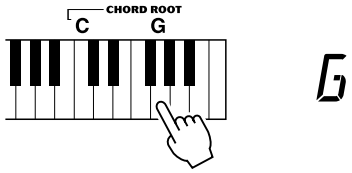
Learning how to play a specific chord

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

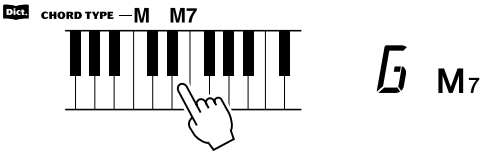
1 Press the [DICTIONARY] button.



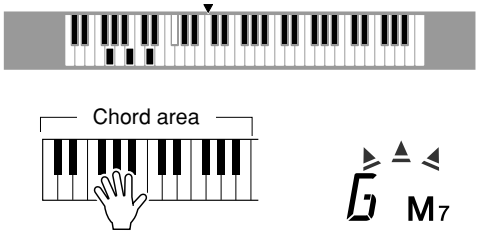
2 Specify the root note of the chord (in this case, G).



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



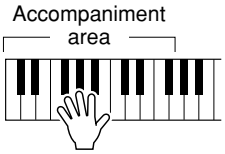
4 Play the notes of the chord as indicated in the keyboard diagram in the display. The chord name flashes when the chord is played properly.



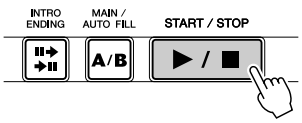
5 To leave the Dictionary function, press the [DICTIONARY] button again

Want to find out more? See page 45.

3 Play a chord with your left hand.
The style starts as soon as you play the keyboard, letting you play the melody along with accompaniment. For more on chords, see "Looking up Chords in the Dictionary" above.



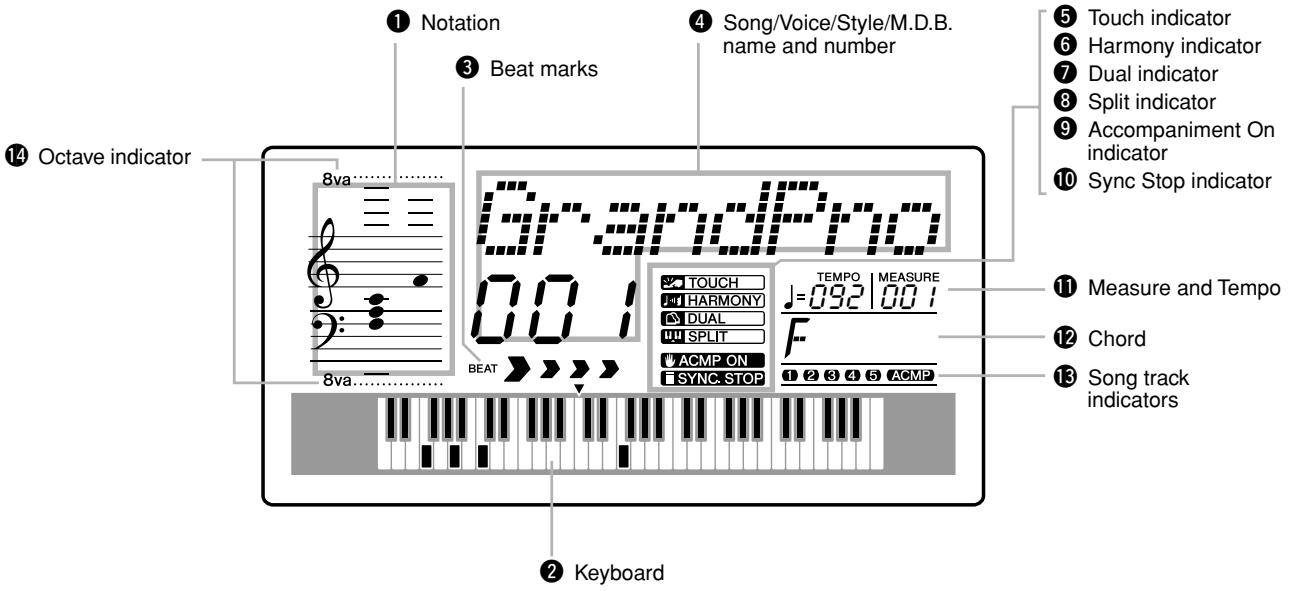
4 Stop the style.



Want to find out more? See page 48.

Panel Display Indications

The PSR-290 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.



❶ Notation / ❷ 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.

❸ 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.

❹ Song/Voice/Style/M.D.B. name and number

This portion of the display indicates the name and number of the currently selected song, voice, style or M.D.B. It also displays the category name when using the category button, or the name and current setting/value of other functions, as well as other important operation messages.

❺ Touch indicator

This appears when the Touch function is turned on. (See page 30.)

❻ Harmony indicator

This appears when the Harmony effect is turned on. (See page 31.)

❼ Dual indicator

This appears when the Dual function is turned on. (See page 26.)

❽ Split indicator

This appears when the Split function is turned on. (See page 27.)

❾ Accompaniment On indicator

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

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

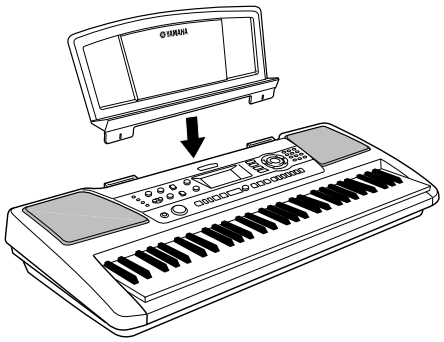
⓫ Measure and Tempo
These show the current measure during playback of a song or style, and the currently set Tempo value for the song or style.

⓬ 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 area of the keyboard when the Style mode and auto accompaniment are on.

⓭ Song track indicators
In song recording and playback, these indicate the status of the tracks. (See page 57.)

⓮ Octave indicator
When note data exceeds the range limit of note display, the "8va" indication appears in the display.

Music Stand
Insert the bottom edge of the included music stand into the slot located at the top rear of the PSR-290 control panel.

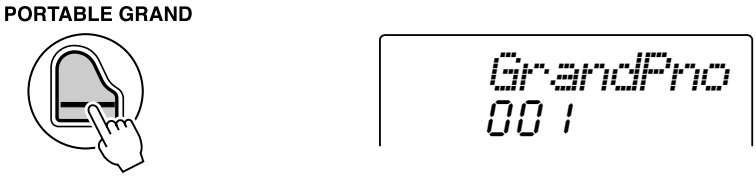


Portable Grand

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

Playing the Portable Grand

Press the [PORTABLE GRAND] button.

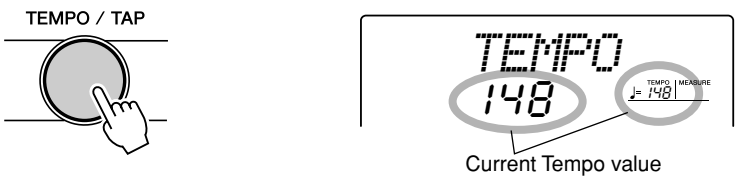


Doing this automatically selects the special "Stereo Sampled Piano" Grand Piano voice.

Using the Metronome

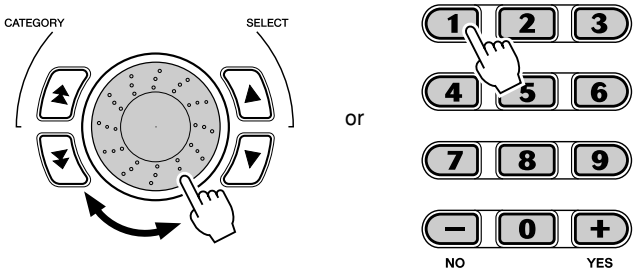
1 Call up the Tempo setting.

Press the [TEMPO/TAP] button.



2 Change the value.

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



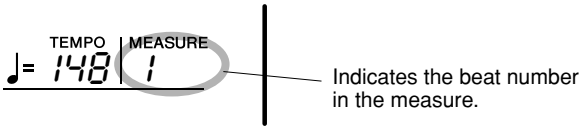
Restoring the Default Tempo Value

Each song 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).

You can also restore the default Tempo easily by simultaneously holding the [TEMPO/TAP] button and moving the dial.

3 Turn on the Metronome.

Press the [METRONOME] button.



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

Setting the Metronome Time Signature

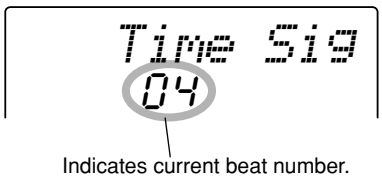
The time signature of the Metronome can be set to various quarter-note based meters.

The Time Signature can be set in the Function mode (page 76).

NOTE

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

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)



Adjusting the Metronome Volume

You can adjust the volume of the Metronome sound in the *Function mode (page 76)*. The volume range is 000 - 127.

DJ

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.

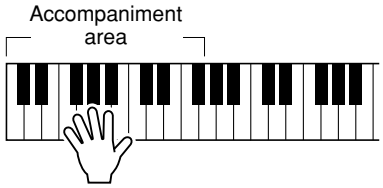
Doing this automatically resets the entire instrument for playing the specially programmed DJ voice.

NOTE

- *The PSR-290 has a Demo song and DJ Cancel function that allows you to disable Demo song and DJ function. Set Demo and DJ Cancel in the Function mode (page 76).*

2 Play the DJ style.

Play keys in the accompaniment area of the keyboard.

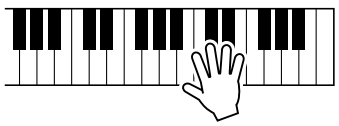


NOTE

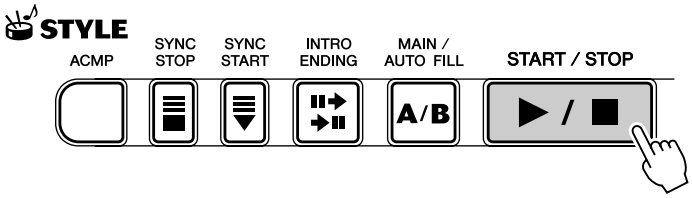
- *When the DJ style is selected, the accompaniment is triggered by only the root of the chord, letting you play with one finger.*

3 Play the DJ voices.

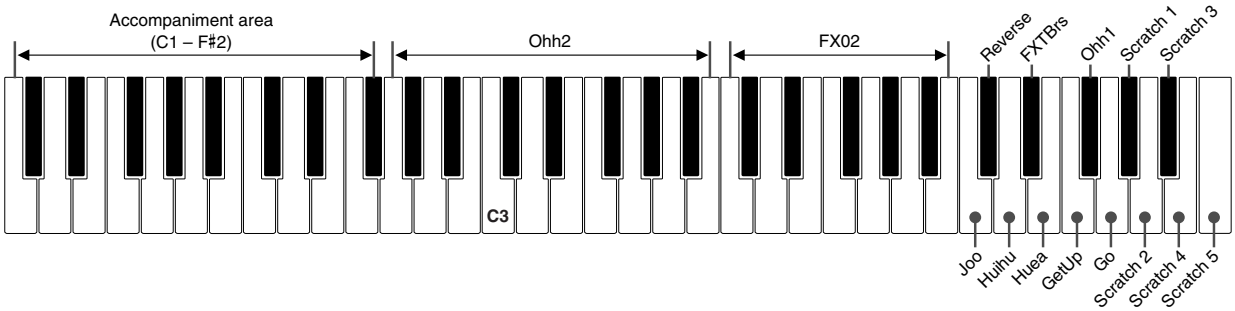
Play the upper area of the keyboard.



4 Stop the DJ style.



● **For example, when 601 "DJ Set 1" is selected:**

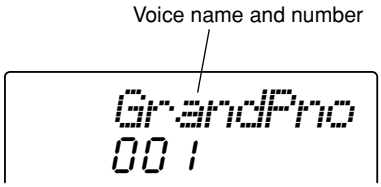


Playing Voices

The PSR-290 features a total of 605 authentic voices — all of which have been created with Yamaha's sophisticated AWM (Advanced Wave Memory) tone generation system. These include 480 XG voices and drum kits.
The PSR-290 also has a Dual Voice or Split Voice function that lets you combine two different voices in a layer, or play from separate areas of the keyboard, play the two together across the keyboard.

Playing a Voice

1 Press the [VOICE] button.



2 Select the desired voice number.

The categories of each voice and their numbers are shown on the panel. A complete voice list of the available voices is given on page 79.

VOICE

001~006 PIANO	**039~046** BASS	**089~095** SYNTH LEAD
007~012 E. PIANO	**047~058** STRINGS	**096~100** SYNTH PAD
013~024 ORGAN	**059~062** CHOIR	**101~108** PERCUSSION
025~028 ACCORDION	**063~071** SAXOPHONE	**109~120** DRUM KITS
029~038 GUITAR	**072~077** TRUMPET	**121~600** XG
	078~083 BRASS	**601~605** DJ
	084~088 FLUTE	**000** OTS

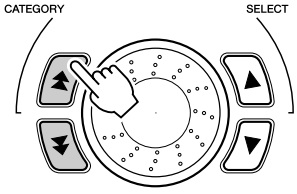
NOTE

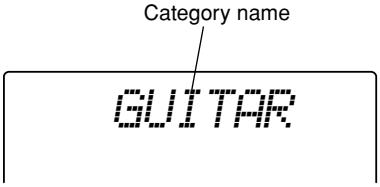
• Selecting the #000 OTS voice calls up a convenient feature — automatically selecting an appropriate voice to best match the current style or song.

■ Use the CATEGORY [▲▲]/[▼▼] buttons, dial or the SELECT [▲]/[▼] buttons.

● Select the voice CATEGORY

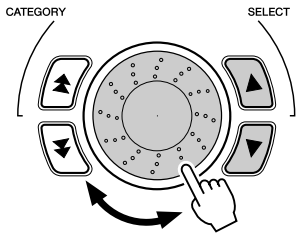
Using the CATEGORY [▲▲]/[▼▼] button jumps through the voice numbers according to their category divisions.

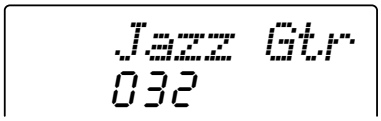




● Select the voice number

Select a voice by using the dial or the SELECT [▲]/[▼] buttons.



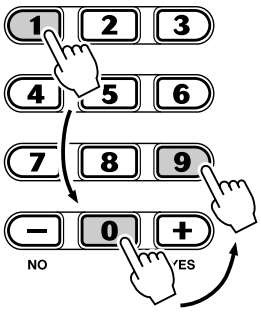


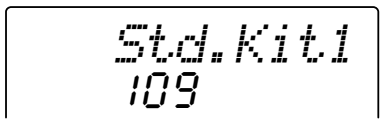
■ Use the numeric keypad.

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

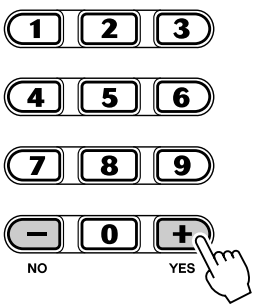
Enter the digits of the voice number as listed on page 79. For example, to select voice #109, press "1" on the numeric keypad, then "0", "9." For voice numbers beginning with zeroes (such as #042 or #006), the initial zeroes may be omitted. In this case, there is a short pause before the indication appears.





● 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.

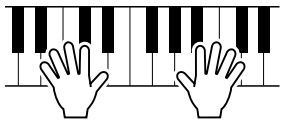


NOTE

- *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.*

3 Play the selected voice.

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



The following parameteres can be set in the Function mode (page 75).

CATEGORY	SELECT
Main Voice	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level

Drum Kit Voice List (voices 109-120)

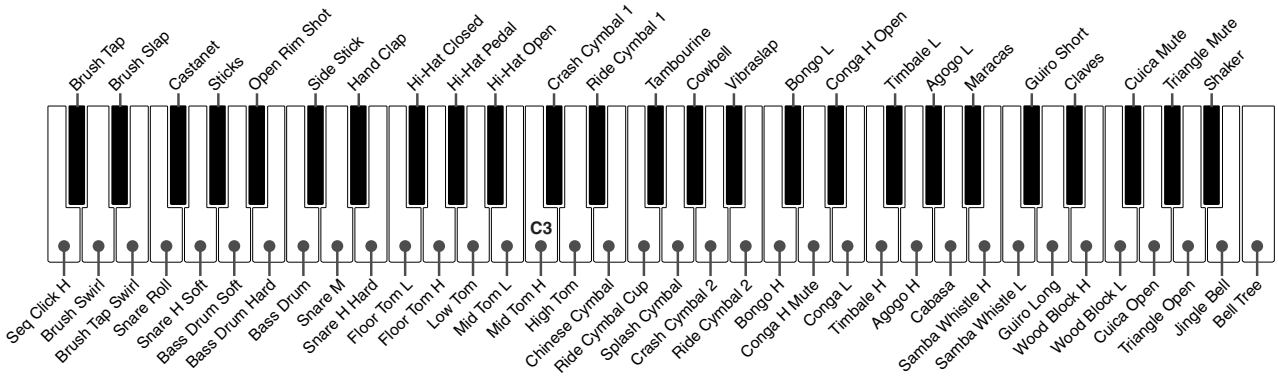
When one of the 12 Drum Kit voices is selected, you can play different drum and percussion instrument sounds from the keyboard.

NOTE

• *For more details, see page 88.*

No.	Name	LCD
109	Standard Kit 1	Std.Kit1
110	Standard Kit 2	Std.Kit2
111	Room Kit	Room Kit
112	Rock Kit	Rock Kit
113	Electronic Kit	Elct.Kit
114	Analog Kit	AnlogKit
115	Dance Kit	DanceKit
116	Jazz Kit	Jazz Kit
117	Brush Kit	BrushKit
118	Symphony Kit	SymphKit
119	SFX Kit 1	SFX Kit1
120	SFX Kit 2	SFX Kit2

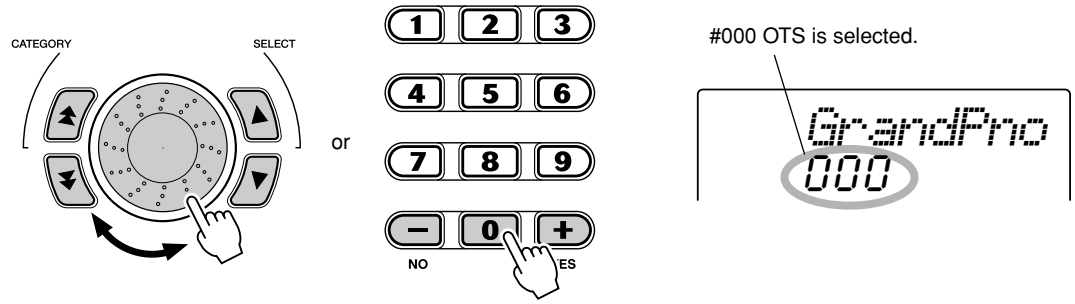
● **For example, when 109 "Standard Kit 1" is selected:**



#000 OTS

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.

Select voice #000 (OTS).



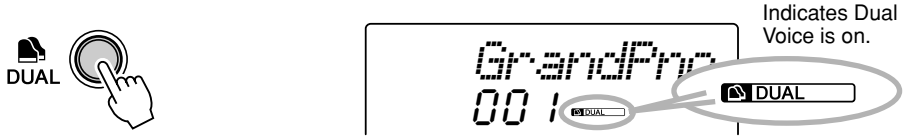
Dual Voice

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 in the *Function mode (page 75)*. You can also set various parameters independently for these voices, such as giving them separate volume, octave, Pan, Reverb, Chorus, and DSP settings. This lets you create an optimum mix for the voices, and enhance the way they blend together.

The following parameters can be set in the Function mode (page 75).

CATEGORY	SELECT
Dual Voice	Voice
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level

To turn the Dual Voice on or off, press the [DUAL] button.



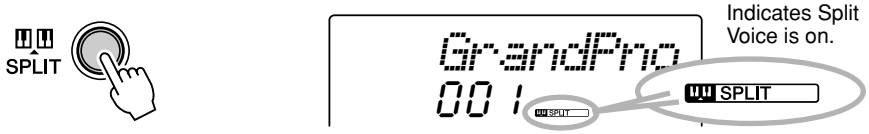
Split Voice

The Split Voice function lets you assign two different Voices to opposite areas of the keyboard, and play one Voice with your left hand while your right plays another.
For example, you could play bass with the left hand and play piano with the right. The right-hand (or upper) Voice is selected in the Main Voice mode (page 23), and the left-hand (or lower) Voice is selected in the *Function mode (page 75)*, along with the other Split Voice parameters shown below.

The following parameters can be set in the Function mode (page 75).

CATEGORY	SELECT
Split Voice	Voice
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level

To turn the Split Voice on or off, press the [SPLIT] button.

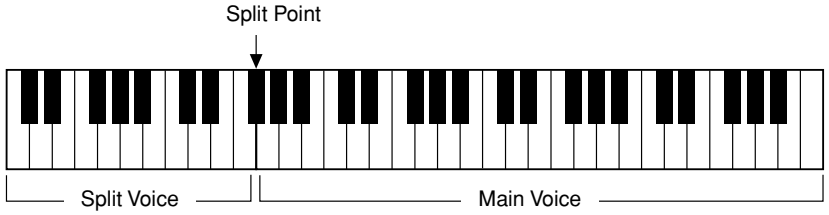


Setting the Split Point

The Split Point determines the highest key for the split voice and sets the split point.

NOTE

- *This setting also affects the split point for the accompaniment area.*



Split Point can be set in the Function mode (page 75).

One Touch Setting

This convenient feature automatically selects the voice to best match the selected style — simply by pressing one of the two One Touch Setting buttons. Two types of One Touch Settings are available.
For each style, you can create and store your own custom One Touch Settings.

NOTE
- *One Touch Setting does not function in the Song mode.*

● One Touch Setting Parameters

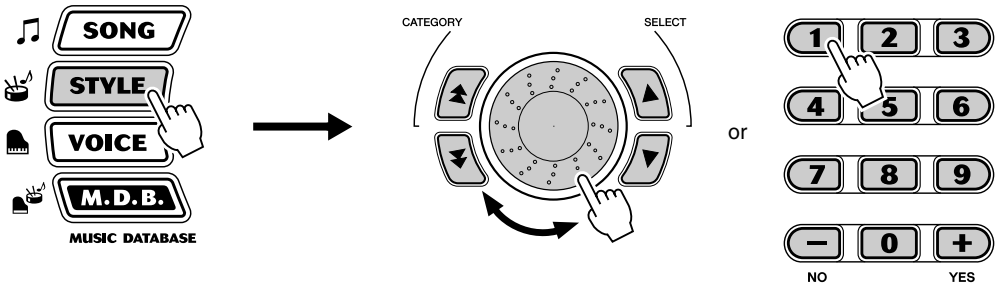
Main Voice	Voice Number
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level
Dual Voice	ON/Off
	Voice Number
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level

Effect	DSP Type
Harmony	On/Off
	Harmony Type
	Harmony Volume

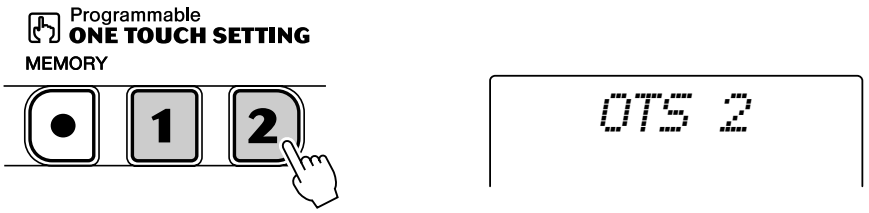
* Accompaniment is automatically set to on.
Synchro Start is automatically set to on (when style is stopped).

■ Calling up a One Touch Setting. •

1 **Select the style.**



2 **Press the ONE TOUCH SETTING button [1] or [2].**



■ Creating and Storing a One Touch Setting.

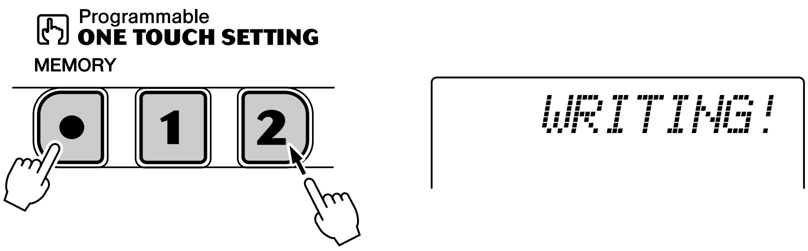
You can also create and store your own custom One Touch Settings for each of the styles.

1 **Select the desired style.**

2 **Make the desired settings.**

Change the voice and make any other settings you want to use with the selected style and the One Touch Setting buttons.

3 **Press and hold the [MEMORY] button then press the appropriate button — ONE TOUCH SETTING button [1] or [2].**



Restoring the Default One Touch Setting data

Each One Touch Setting can be restored to its default. To do this, simply press and hold the appropriate One Touch Setting button, [1] or [2]. To restore both buttons to their defaults, simultaneously press and hold both the [1] and [2] buttons.

Transpose and Tuning

You can also adjust the tuning and change the transposition (key) of the entire PSR-290 sound with the Transpose and Tuning functions.

■ Transpose

Transpose determines the key of both the main voice and the bass/chord accompaniment. It also determines the pitch of the songs. This allows you to easily match the pitch of the PSR-290 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).

Transpose can be set in the Function mode (page 75).

NOTE

- *The Transpose function has no effect on the Drum Kits voices (#109 - #120) and DJ voices (#601 - #605).*

■ Tuning

Tuning determines the fine pitch setting of both the main voice and the bass/chord accompaniment. 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).

Tuning can be set in the Function mode (page 75).

NOTE

- *The Tuning settings have no effect on the Drum Kit voices (#109 - #120).*

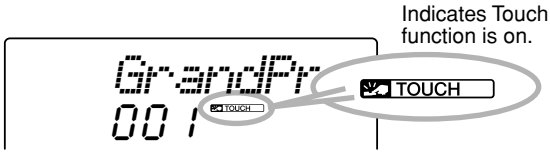
Touch and Touch Sensitivity

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.

NOTE

- *To save the Touch on/off status and the Function parameters to internal memory (flash memory), press and hold the [FUNCTION] button. (See page 78.)*



Touch Sensitivity lets you set how the PSR-290 responds to your playing strength, allowing you to customize the keyboard to suit your own playing style.
The default Touch Sensitivity is 2 (Medium).

Sensitivity can be set in the Function mode (page 75).

● **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.

Effects

The PSR-290 is equipped with a wide variety of effects that can be used to enhance the sound of the voices. The PSR-290 has four separate effect systems — Harmony, Reverb, Chorus and DSP — and each has many different effect types to choose from.

Harmony

The Harmony section features a variety of performance effects that enhance the melodies you play when using the accompaniment styles of the PSR-290. A total of twenty-six Harmony types are available. (See page 33.)

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.

IMPORTANT

- *For the first five Harmony Types (Duet, Trio, Block, Country, and Octave), chords must be played in the Accompaniment area of the keyboard. The Harmony voice(s) change in pitch to best match the chords you play.*
- *The speed of the Trill, Tremolo, and Echo effects depends on the Tempo setting (page 33).*

Turn on/off the Harmony effect.

Press the [HARMONY] button.

NOTE

- *Each voice of the PSR-290 has its own independent Harmony setting.*

Harmony type and Harmony Volume (when Harmony Type 1 - 5 is selected) can be set in the Function mode (page 76).

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. (See page 33.)

NOTE

- *Twelve additional Reverb Types are available when controlling the PSR-290 from a MIDI device. (For details, See page 92.)*
- *Each style of the PSR-290 has its own independent Reverb setting.*

The following parameters can be set in the Function mode (pages 75, 76).

CATEGORY	SELECT
Effect	Reverb Type
Main Voice	Reverb Send Level
Dual Voice	Reverb Send Level
Split Voice	Reverb Send Level

Chorus

The Chorus effect lets you enhance the sound of the voices with the use of pitch modulation. Two basic types are provided: Chorus and Flanger. Chorus produces a thicker, warmer, and more animated sound, whereas Flanger creates a swirling, metallic effect. A total of four Chorus types are available. (See page 34.)

The following parameters can be set in the Function mode (pages 75, 76).

CATEGORY	SELECT
Effect	Chorus Type
Main Voice	Chorus Send Level
Dual Voice	Chorus Send Level
Split Voice	Chorus Send Level

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. (See page 34.)

NOTE

- *Each voice of the PSR-290 has its own independent DSP setting.*
- *Fifty-one additional DSP Types are available when controlling the PSR-290 from a MIDI device. (For details, see page 92.)*

The following parameters can be set in the Function mode (pages 75, 76).

CATEGORY	SELECT
Effect	DSP Type
Main Voice	DSP Send Level
Dual Voice	DSP Send Level
Split Voice	DSP Send Level

■ Effect Types

● 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 area of the keyboard.
2	Trio	Trio		
3	Block	Block		
4	Country	Country		
5	Octave	Octave		
6	Trill 1/4 note	Tril1/4		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. • 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		

● 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.

Effects

● Chorus Types

No.	Chorus Type	Display Name	Description
1	Chorus 1	Chorus1	Conventional chorus program with rich, warm chorusing.
2	Chorus 2	Chorus2	
3	Flanger 1	Flanger1	Pronounced three-phase modulation with a slight metallic sound.
4	Flanger 2	Flanger2	
5	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

Selecting and Playing Styles

The PSR-290 provides dynamic rhythm/accompaniment patterns (styles) — as well as voice settings appropriate for each style — for various popular musical categories.

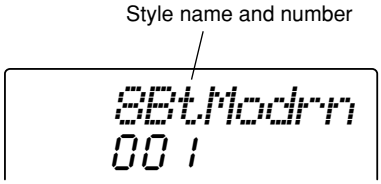
A total of 135 different styles are available, in several different categories. Each style is made up of separate "sections" — Intro, Main A and B, and Ending — letting you call up different accompaniment sections as you perform.

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 areas: 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-290 also features the convenient Dictionary function (page 45). 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.

Selecting a Style

1 Press the [STYLE] button.



2 Select the desired style number.

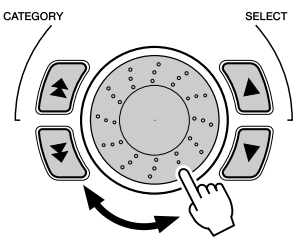
The categories of each styles and their numbers are shown on the panel. A complete style list of the available styles is given on page 86.

STYLE

001~010	8BEAT	**071~077**	COUNTRY
011~018	16BEAT	**078~089**	LATIN
019~026	BALLAD	**090~100**	BALLROOM
027~040	DANCE	**101~111**	TRADITIONAL
041~047	DISCO	**112~118**	WALTZ
048~060	SWING & JAZZ	**119~123**	DJ
061~070	R & B	**124~135**	PIANIST

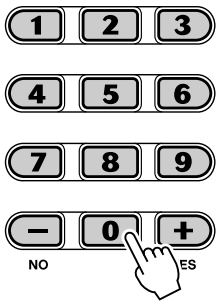
■ Use the dial. You can also use the CATEGORY and/or SELECT buttons.

Turn the dial and select the desired style. Select the appropriate category by using the CATEGORY [▲▲]/[▼▼] buttons. When you come close to the desired number, use the SELECT [▲]/[▼] buttons to step down and up through the style numbers.



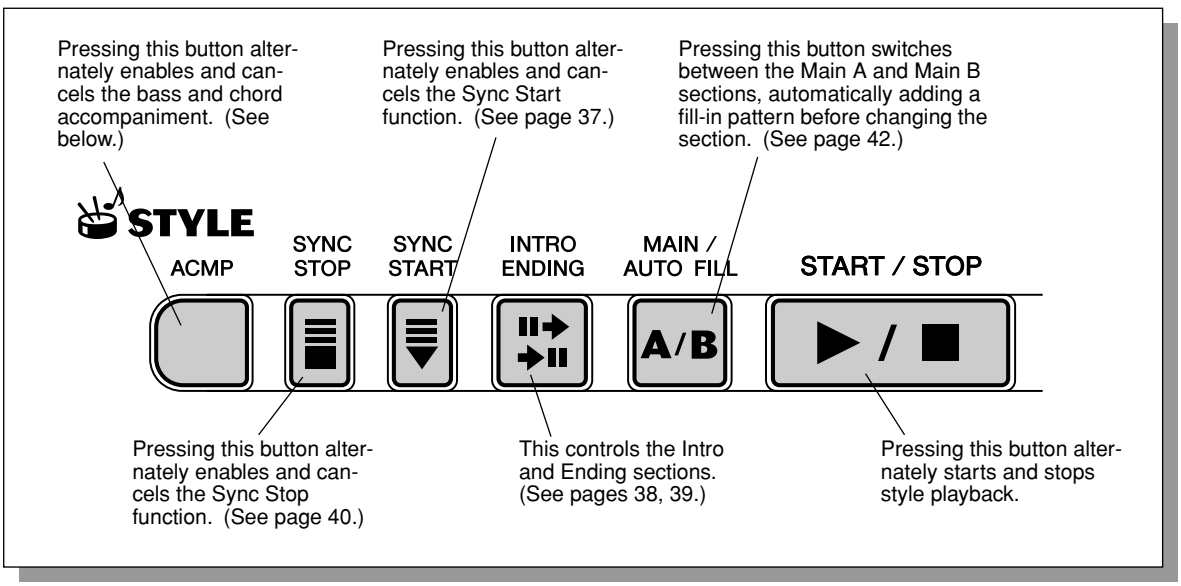
■ Use the numeric keypad.

Style numbers can be selected in the same way as with the voices (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.



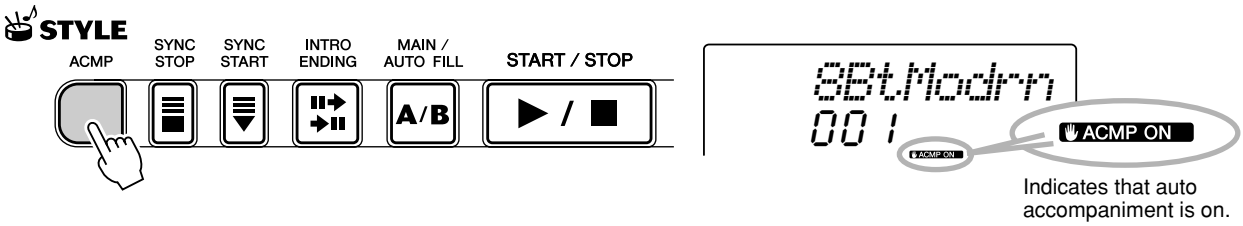
Playing the Styles

The panel buttons below function as style controls.



1 Turn on the auto accompaniment.

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

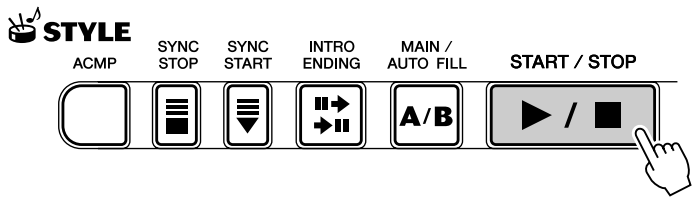


2 Start the style.

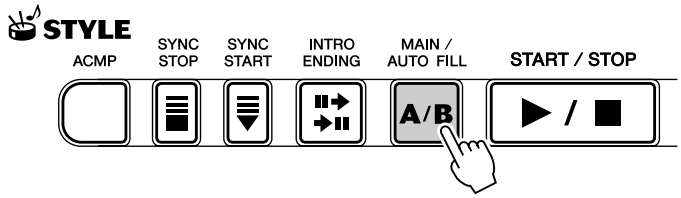
You can do this in one of the following ways:

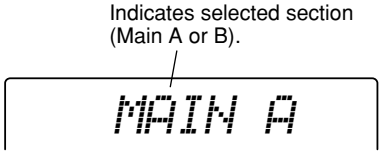
■ Pressing the [START/STOP] button

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



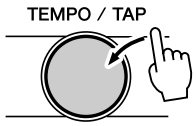
You can select the Main A or B section by pressing the appropriate button — [MAIN A/B] — before pressing the [START/STOP] button. (The display briefly shows the letter of the selected section: "MAIN A" or "MAIN B.")





■ Using Tap Tempo to Start

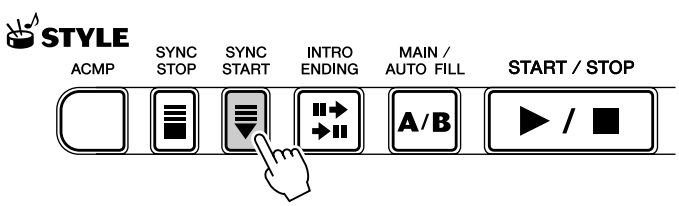
This useful feature lets you tap out the speed (tempo) of the style and automatically start the style at that tapped speed.

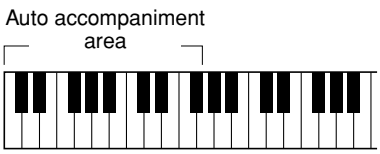


Simply tap the [TEMPO/TAP] button four times (or three times for a 3/4 time style), and the style starts automatically at the tempo you tapped. You can also change the tempo while the style is playing by tapping the [TEMPO/TAP] button twice at the desired tempo.

■ Using Sync Start

The PSR-290 also has a Sync Start function that allows you to start the style 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 standby), then press any key on the keyboard. (When auto accompaniment is on, play a key or chord in the auto accompaniment area of the keyboard.)



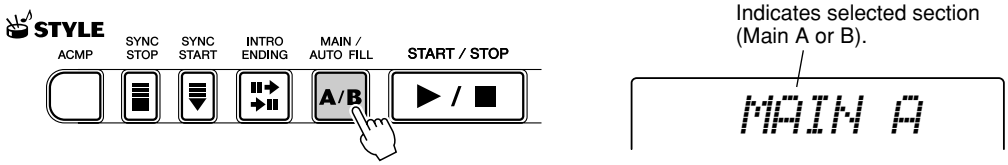


Starting with an Intro section

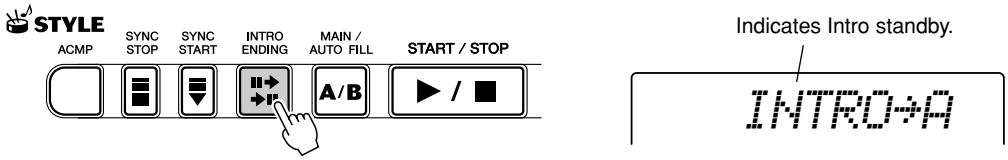
Each style has its own two- or four-measure Intro section. When used with the auto accompaniment, many of the Intro sections also include special chord changes and embellishments to enhance your performance.

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.



2) Press the [INTRO ENDING] button.



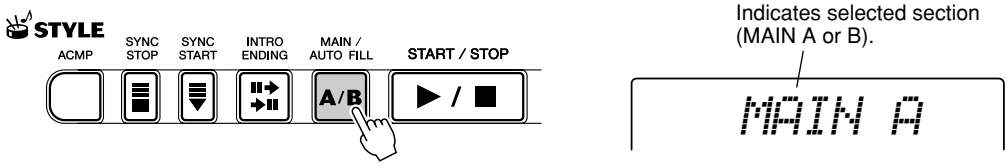
To actually start the Intro section, press the [START/STOP] button.

Using Sync Start with an Intro section

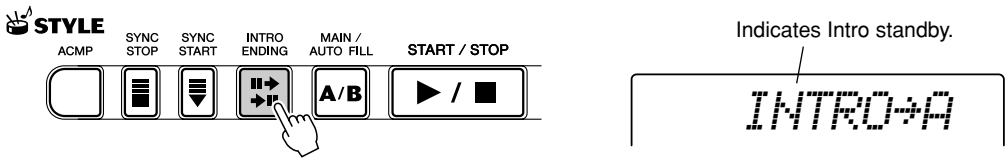
You can also use the Sync Start function with the special Intro section of the selected style.

To use Sync Start with an Intro section:

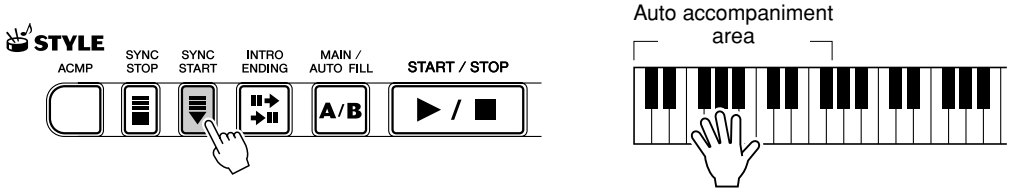
1) Press the [MAIN/AUTO FILL] button — to select which section (A or B) is to follow the Intro.



2) Press the [INTRO ENDING] button.



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 area of the keyboard.)



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] 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.*

NOTE

- *Chords played in the auto accompaniment area of the keyboard are also detected and played when the style 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 style.

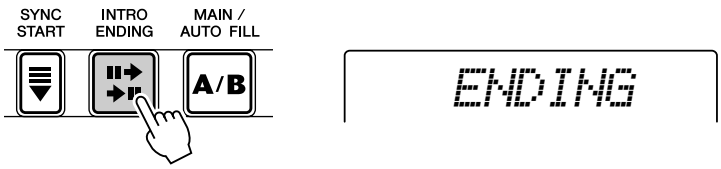
You can do this in one of three ways:

■ Pressing the [START/STOP] button

The style stops playing immediately.

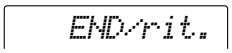
■ Using an Ending section

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



NOTE

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



■ Pressing the [SYNC START] button

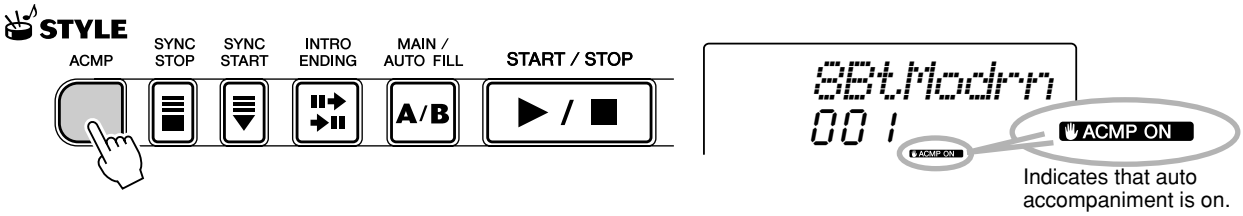
This immediately stops the style and automatically enables Sync Start, letting you restart the style by simply playing a chord or key in the auto accompaniment area of the keyboard.

Sync Stop

This convenient feature lets you stop (or pause) the style by releasing your fingers from the auto accompaniment area of the keyboard. Playing the chord again restarts the style. 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.

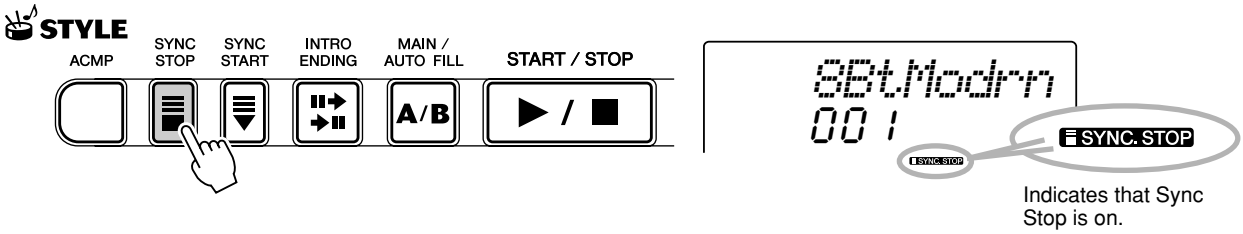
1 Press the [ACMP] button.

To turn accompaniment on.



2 Press the [SYNC STOP] button.

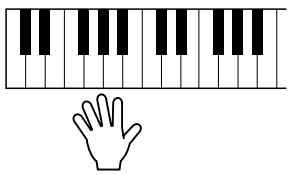
Setting Sync Stop to on before starting the style automatically sets Sync Start to on as well.



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

The style starts as soon as you play a chord.

4 Stop the style by releasing the chord.



5 To start the style again, play a chord.

6 To turn Sync Stop off, press the [SYNC STOP] button again.

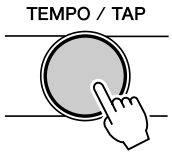
To stop the style completely, press the [START/STOP] button.

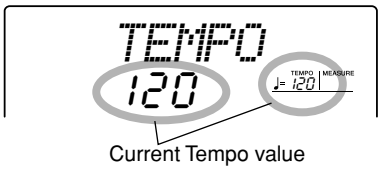
Changing the Tempo

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

1 Call up the Tempo setting.

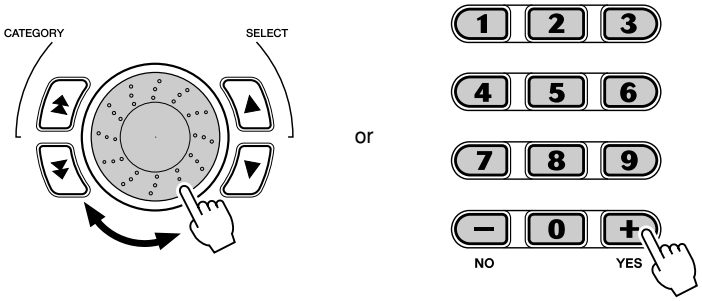
Press the [TEMPO/TAP] button.





2 Change the value.

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



NOTE

- *When style 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.)*

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).

You can also restore the default Tempo easily by simultaneously holding the [TEMPO/TAP] button and moving the dial.

HINT

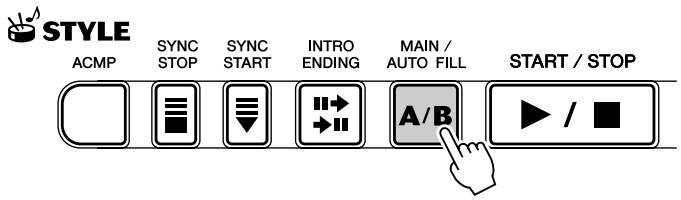
- *You can also use the convenient Tap Tempo function to change the tempo by "tapping" a new one in real time. (See page 37.)*

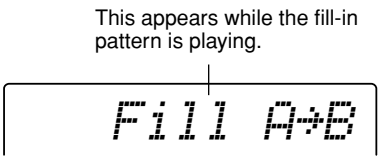
Accompaniment Sections (Main A/B and Fill-ins)

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

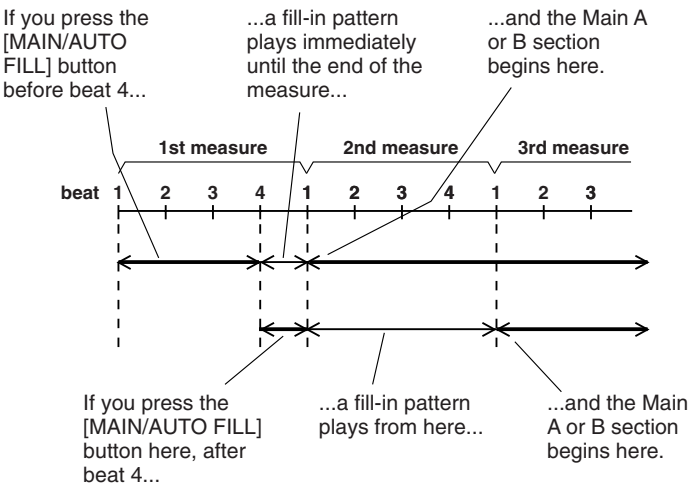
NOTE

- *Rhythm sounds and fill-in sections are not available when one of the Pianist styles (#124 - #135) are selected.*





About the Fill-in Patterns



Adjusting the Style Volume

The playback volume of the style can be adjusted in the *Function mode (page 76)*. This volume control affects only the Style volume. The volume range is 000 - 127.

NOTE

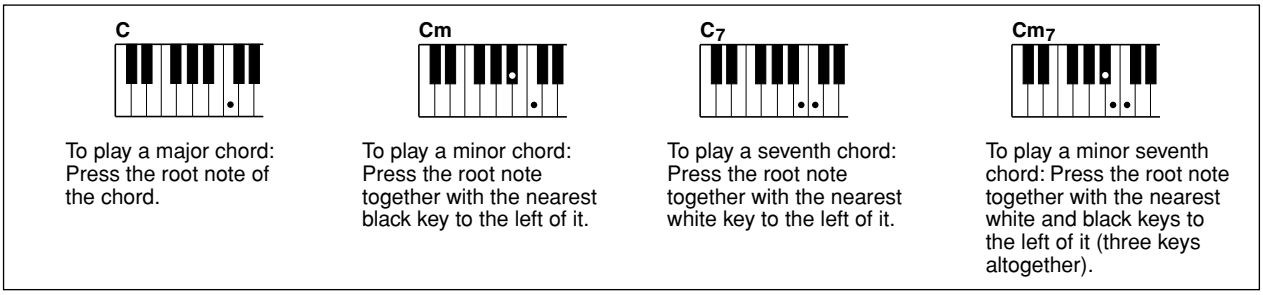
- *Style Volume cannot be changed unless the Style mode is active.*

Using Auto Accompaniment — Multi Fingering

When it is set to on (page 36), the auto accompaniment function automatically generates bass and chord accompaniment for you to play along with, by using Multi Fingering operation. You can change the chords of the accompaniment by playing keys in the auto accompaniment area of the keyboard using either the "Single Finger" or "Fingered" method. With Single Finger you can simply play a one-, two- or three-finger chord indication (see Single Finger Chords below). The Fingered technique is that of conventionally playing all the notes of the chord. Whichever method you use, the PSR-290 "understands" what chord you indicate and then automatically generates the accompaniment.

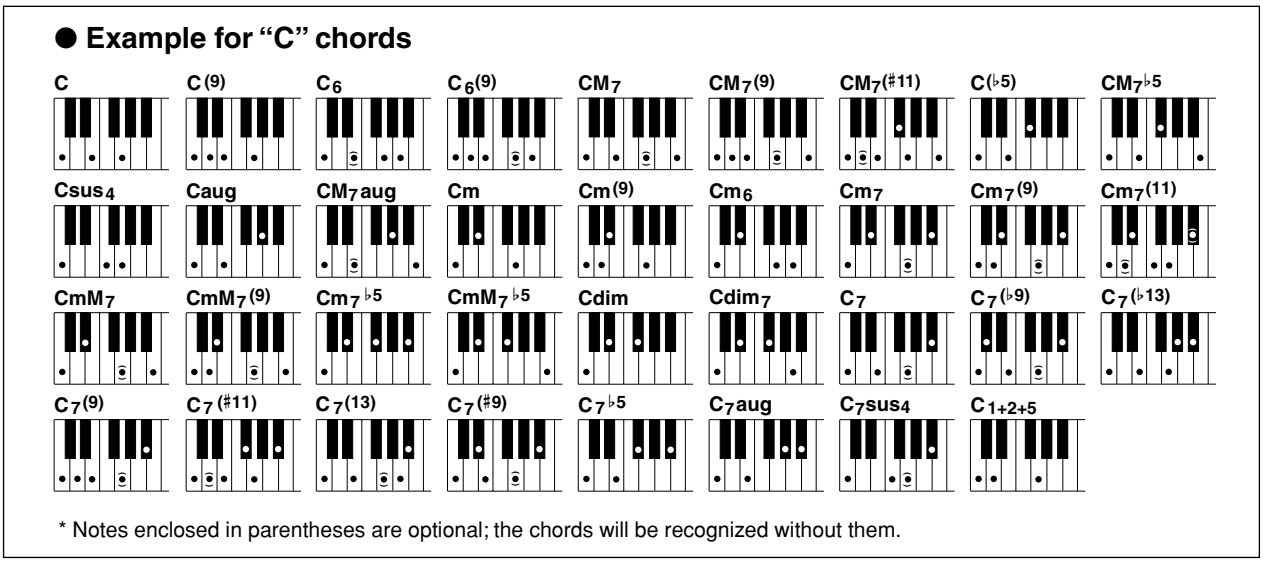
■ Single Finger Chords

Chords that can be produced in Single Finger operation are major, minor, seventh and minor seventh. The illustration shows how to produce the four chord types. (The key of C is used here as an example; other keys follow the same rules. For example, B♭7 is played as B♭ and A.)



■ Fingered Chords

Using the key of C as an example, the chart below shows the types of chords that can be recognized in the Fingered mode.



* Notes enclosed in parentheses are optional; the chords will be recognized without them.

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 [(♭5)]	1 - 3 - ♭5	C(♭5)	C♭5
Major seventh flatted fifth [M7♭5]	1 - 3 - ♭5 - 7	CM7♭5	CM7♭5
Suspended fourth [sus4]	1 - 4 - 5	Csus4	Csus4
Augmented [aug]	1 - 3 - ♯5	Caug	Caug
Major seventh augmented [M7aug]	1 - (3) - ♯5 - 7	CM7aug	CM7aug
Minor [m]	1 - ♭3 - 5	Cm	Cm
Minor add ninth [m(9)]	1 - 2 - ♭3 - 5	Cm(9)	Cm(9)
Minor sixth [m6]	1 - ♭3 - 5 - 6	Cm6	Cm6
Minor seventh [m7]	1 - ♭3 - (5) - ♭7	Cm7	Cm7
Minor seventh ninth [m7(9)]	1 - 2 - ♭3 - (5) - ♭7	Cm7(9)	Cm7(9)
Minor seventh add eleventh [m7(11)]	1 - (2) - ♭3 - 4 - 5 - (♭7)	Cm7(11)	Cm7(11)
Minor major seventh [mM7]	1 - ♭3 - (5) - 7	CmM7	CmM7
Minor major seventh ninth [mM7(9)]	1 - 2 - ♭3 - (5) - 7	CmM7(9)	CmM7(9)
Minor seventh flatted fifth [m7♭5]	1 - ♭3 - ♭5 - ♭7	Cm7♭5	Cm7♭5
Minor major seventh flatted fifth [mM7♭5]	1 - ♭3 - ♭5 - 7	CmM7♭5	CmM7♭5
Diminished [dim]	1 - ♭3 - ♭5	Cdim	Cdim
Diminished seventh [dim7]	1 - ♭3 - ♭5 - 6	Cdim7	Cdim7
Seventh [7]	1 - 3 - (5) - ♭7 or 1 - (3) - 5 - ♭7	C7	C7
Seventh flatted ninth [7(♭9)]	1 - ♭2 - 3 - (5) - ♭7	C7(♭9)	C7(♭9)
Seventh add flatted thirteenth [7(♭13)]	1 - 3 - 5 - ♭6 - ♭7	C7(♭13)	C7(♭13)
Seventh ninth [7(9)]	1 - 2 - 3 - (5) - ♭7	C7(9)	C7(9)
Seventh add sharp eleventh [7(♯11)]	1 - (2) - 3 - ♯4 - 5 - ♭7 or 1 - 2 - 3 - ♯4 - (5) - ♭7	C7(♯11)	C7(♯11)
Seventh add thirteenth [7(13)]	1 - 3 - (5) - 6 - ♭7	C7(13)	C7(13)
Seventh sharp ninth [7(♯9)]	1 - ♯2 - 3 - (5) - ♭7	C7(♯9)	C7(♯9)
Seventh flatted fifth [7♭5]	1 - 3 - ♭5 - ♭7	C7♭5	C7♭5
Seventh augmented [7aug]	1 - 3 - ♯5 - ♭7	C7aug	C7aug
Seventh suspended fourth [7sus4]	1 - 4 - (5) - ♭7	C7sus4	C7sus4
One plus two plus five [1+2+5]	1 - 2 - 5	C1+2+5	C

NOTE

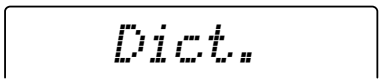
- *Notes in parentheses can be omitted.*
- *Playing two same root keys in the adjacent octaves produces accompaniment based only on the root.*
- *A perfect fifth (1 + 5) produces accompaniment based only on the root and fifth which can be used with both major and minor chords.*
- *The chord fingerings listed are all in "root" position, but other inversions can be used — with the following exceptions:*

  m7, m7♭5, 6, m6, sus4, aug, dim7, 7♭5, 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.*

Dictionary

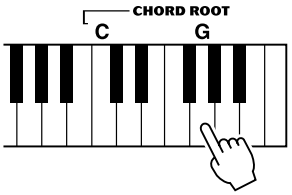
The Dictionary function is essentially a built-in "chord book" that shows you the individual notes of chords. It is ideal when you know the name of a certain chord and want to quickly learn how to play it.

1 Press the [DICTIONARY] button.

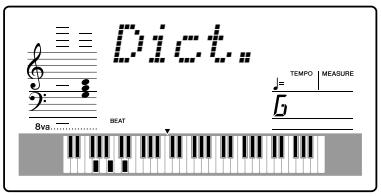


2 Specify the root of the chord.

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.

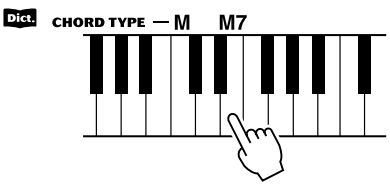


3 Specify the type of the chord (major, minor, seventh, etc.).

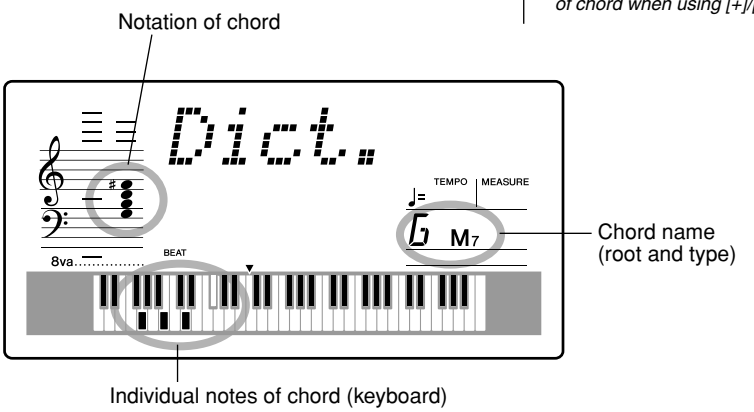
Press the key on the keyboard that corresponds to the desired chord type (as printed on the panel).

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.*

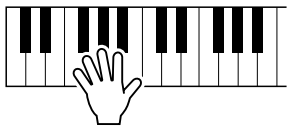


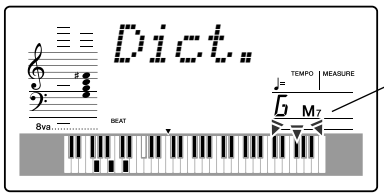
Pressing this key selects the major seventh chord type (M7).



4 Play the chord.

Play the chord (as indicated in the display) in the chord area of the keyboard.
The chord name flashes in the display when the correct notes are held down.
(Inversions for many of the chords are also recognized.)



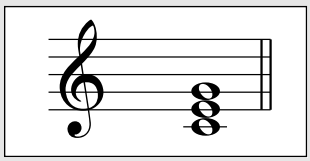


Indicates notes to be played.
Flashes when correct notes are held.

To leave the Dictionary function, press the [DICTIONARY] 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.

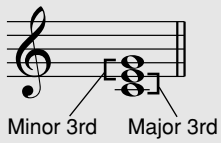


The organization of notes in the example at left — a triad chord — produces a pleasant, harmonious sound. Triads are made up of three notes and are the most basic and common chords in most music.

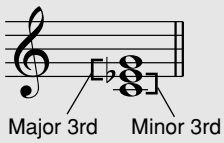
In this triad, the lowest note is the "root." The root is the most important note in the chord, because it anchors the sound harmonically by determining its "key" and forms the basis for how we hear the other notes of the chord.

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.

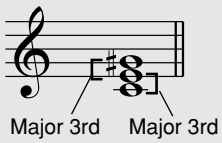
Major chord (ex. C)



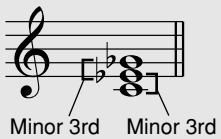
Minor chord (ex. Cm)



Augmented chord (ex. Caug)

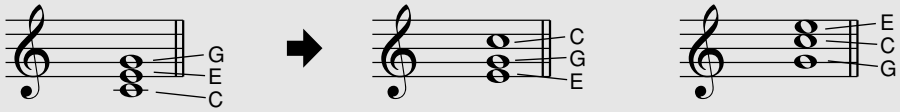


Diminished chord (ex. Cdim)



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

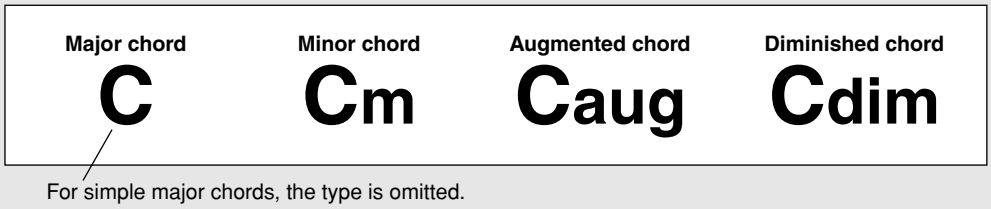


Beautiful sounding harmonies can be built in this manner. The use of intervals and chords is one of the most important elements in music. A wide variety of emotions and feelings can be created depending on the types of chords used and the order in which they are arranged.

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.

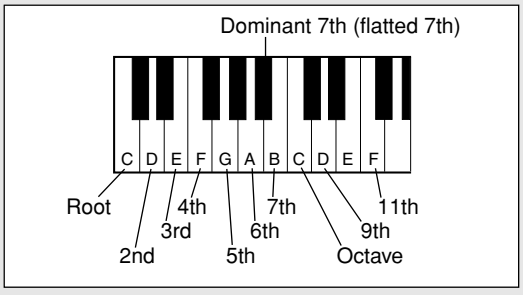
First, write the root note of the chord in an uppercase letter. If you need to specify sharp or flat, indicate that to the right of the root. The chord type should be indicated to the right as well. Examples for the key of C are shown below.



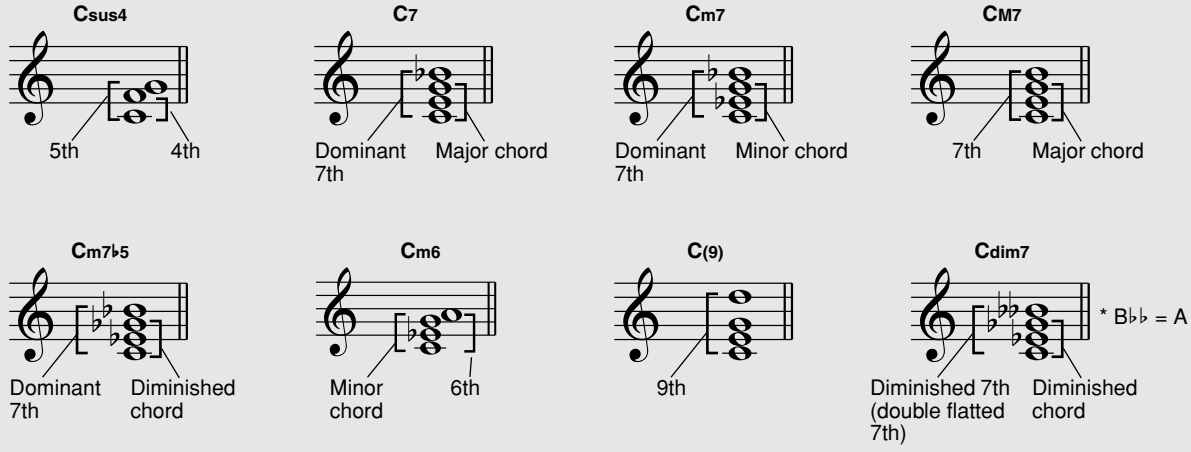
One important point: Chords are made up of notes "stacked" on top of each other, and the stacked notes are indicated in the chord name of the chord type as a number — the number being the distance of the note from the root. (See the keyboard diagram below.) For example, the minor 6th chord includes the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

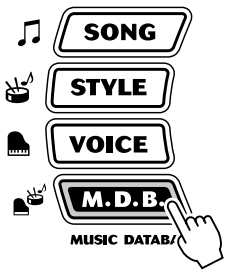


Using the Music Database

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-290 automatically makes all appropriate panel settings to let you play in that music style!

1 Press the [M.D.B.] (MUSIC DATABASE) button.

The MUSIC DATABASE menu appears in the display.



NOTE

• Press the [M.D.B.] (MUSIC DATABASE) button to automatically set the Style mode, turn AUTO ACCOMPANIMENT on, and turn SYNCHRONIZED START on. See page 37 for details.

2 Select a Music Database.

The categories of each Music Database and their numbers are shown on the panel. A complete list of the available styles in the Music Database is given on page 87.

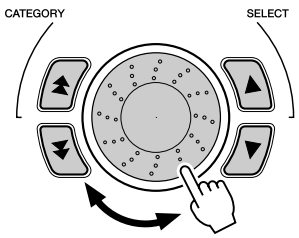
MUSIC DATABASE

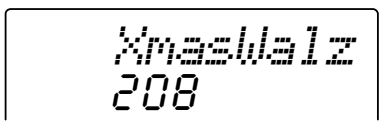
Press the M.D.B. button and select.

001~024 POP HITS	**120~130** RHYTHM & BLUES
025~049 SWING & JAZZ	**131~140** HIP HOP HOUSE
050~079 EASY LISTENING	**141~153** LATIN NIGHTS
080~109 ROMANTIC BALLADS	**154~163** COUNTRY & WESTERN
110~119 ROCK & FUSION	**164~176** DISCO & PARTY
	177~187 BALLROOM
	188~208 TRADITIONAL

■ Use the dial. You can also use the CATEGORY and/or SELECT buttons.

Turn the dial and select the Music Database. Select the appropriate category by using the CATEGORY [▲▲]/[▼▼] buttons. When you come close to the desired number, use the SELECT [▲]/[▼] buttons to step down and up through the Music Database numbers.

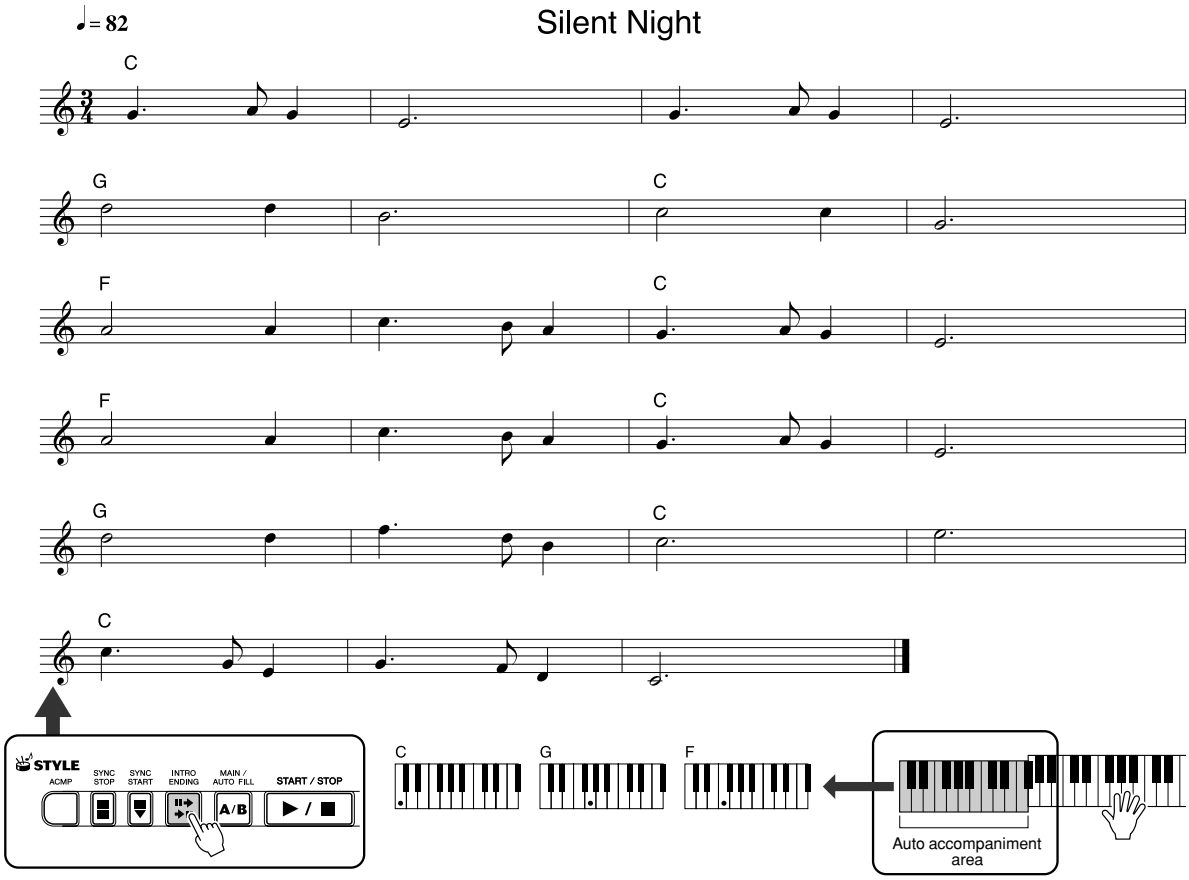




■ Use the numeric keypad.

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

In this example, we will select #208 “Xmas Walz” and play the Song “Silent Night”.



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

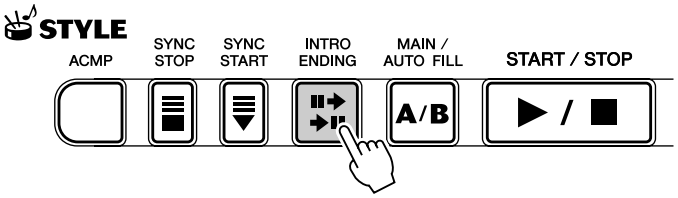
As soon as you play a chord with your left hand, the style starts.
For information on how to enter chords, see “Multi Fingering” on page 43.

NOTE

- *See pages 35 through 44 for details about the Style.*

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

The style plays an ending phrase in ritardando.
When the ending is finished, the style automatically stops.
You can also stop the style 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 musical style and each features the best suited voice (or combination of voices), style and other settings. Pressing the [M.D.B.] (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.

● M.D.B. Parameters

Style	Style Number
	Accompaniment Split Point
	MainA/MainB
	Style Volume
Main Voice	Voice Number
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level
Dual Voice	ON/Off
	Voice Number
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level

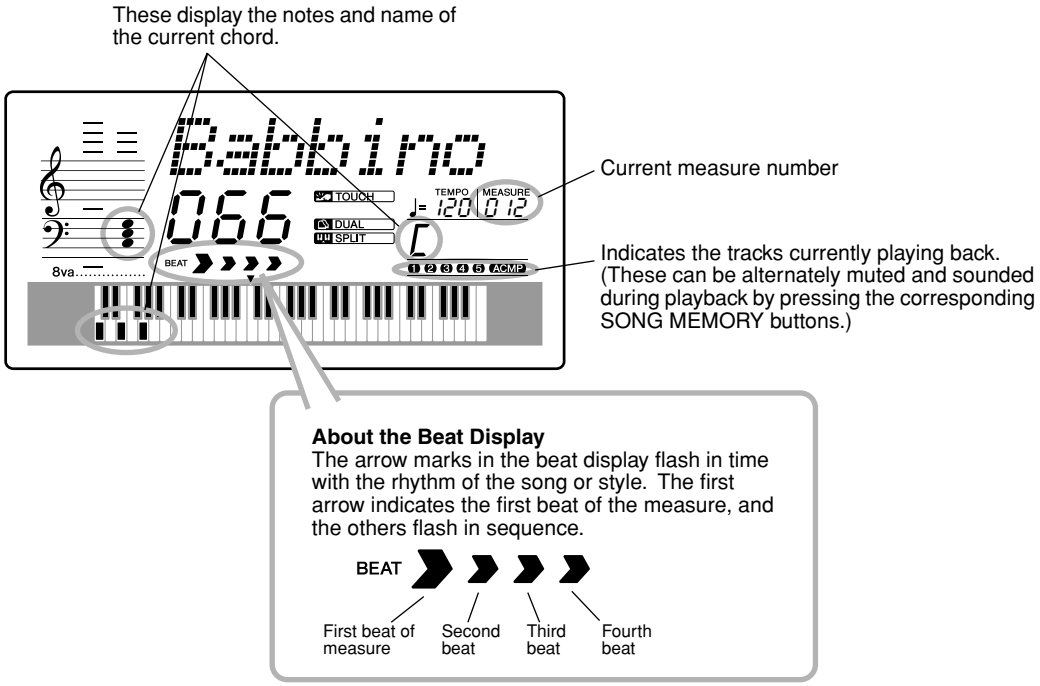
Split Voice	ON/Off
	Voice Number
	Volume
	Octave
	Pan
	Reverb Send Level
	Chorus Send Level
	DSP Send Level
	Split Point
Effect	Reverb Type
	Chorus Type
	DSP Type
Harmony	On/Off
	Harmony Type
	Harmony Volume
Transpose	Transpose
Tempo	Tempo

* Accompaniment is automatically set to on.
  Synchro Start is automatically set to on (when style is stopped).

Selecting and Playing Songs

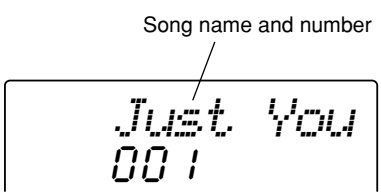
The PSR-290 features a total of 105 songs. These include 100 songs that showcase the rich and dynamic sounds of the instrument, and 99 of these songs can be used with the educational Lesson feature (page 61), a powerful tool that makes learning songs fun and easy.
A special Demo song has also been included, and 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 56.)
You can also transfer song data from your computer to the PSR-290 for playback. For details, see page 71.

● **Song Playback Display**



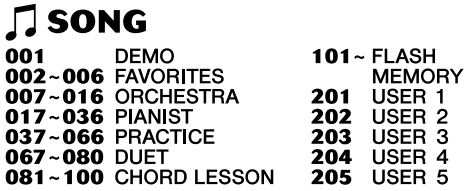
Selecting a Song

1 **Press the [SONG] button.**



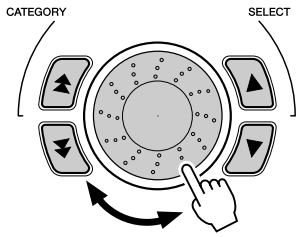
2 Select the desired song number.

The categories of each song and their numbers are shown on the panel. A complete list of the available songs is given on page 15.



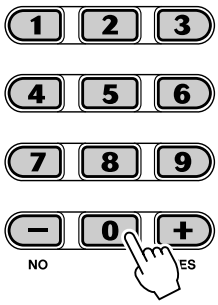
■ Use the dial. You can also use the CATEGORY and/or SELECT buttons.

Turn the dial and select the desired song. Select the appropriate category by using the CATEGORY [▲▲]/[▼▼] buttons. When you come close to the desired number, use the SELECT [▲]/[▼] buttons to step down and up through the song numbers.



■ Use the numeric keypad.

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



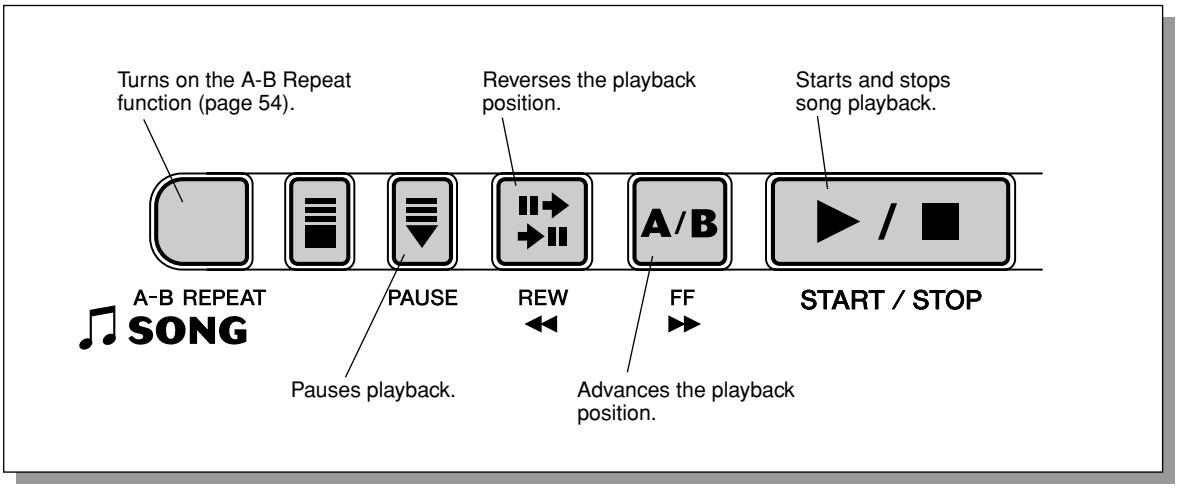
Listening to the Flash Memory Song

The PSR-290 can play a song loaded into its internal flash memory. To do this, you'll need to connect the PSR-290 to a personal computer, and use the "Song Filer" software to transmit the song from the computer.
For more information on Flash songs and Song Filer, refer to page 71.

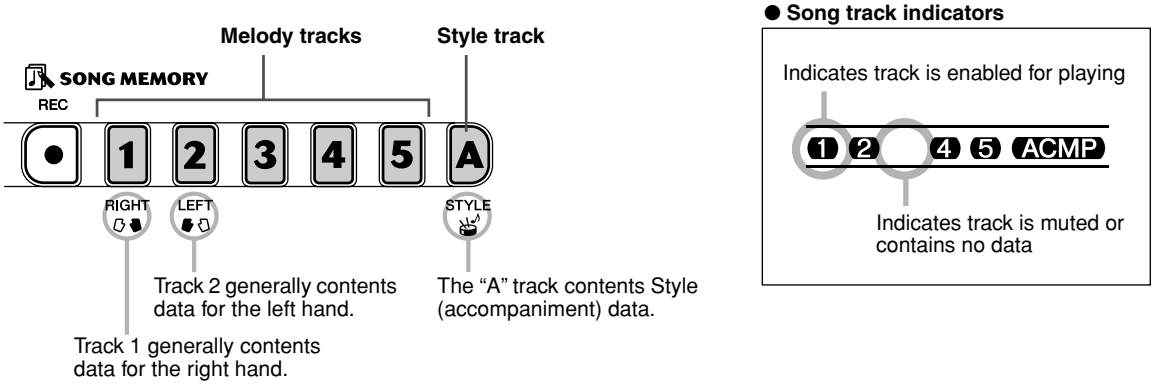
Select the song number 101-199 using the dial or numeric keypad in the same way as preset songs.

Playing the Songs

The Panel buttons below function as Song controls.

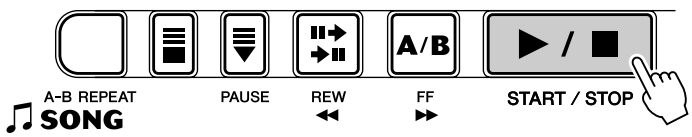


About the Song Tracks



1 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.)

2 Stop the song.

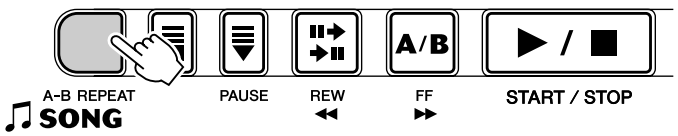
Press the [START/STOP] button. If playback was started by pressing the [START/STOP] button, the selected song stops automatically.

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.

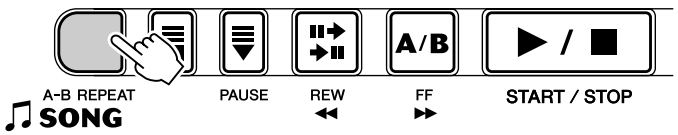


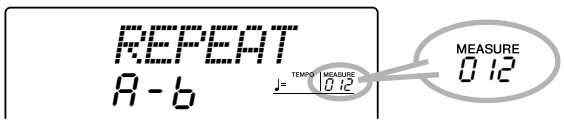
NOTE

- *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.



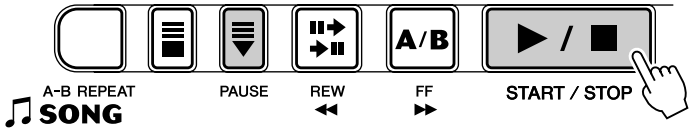


HINT

- *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-290 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 dial , numeric keypad or [+]/[-] buttons to select the desired song. (See page 51.)

2 Select the desired voice.

Press the [VOICE] button, then use the dial , numeric keypad or [+]/[-] buttons to select the desired voice. (See page 23.)

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.

Adjusting the Song Volume

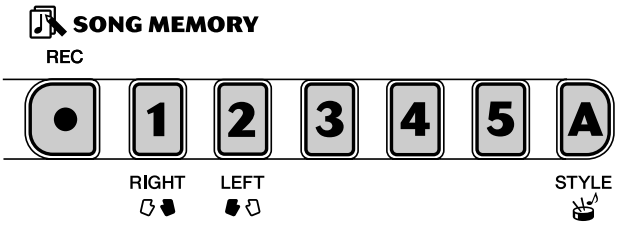
The playback volume of the song can be adjusted in the *Function mode (page 76)*. This volume control affects only the Song volume. The volume range is 000 - 127.

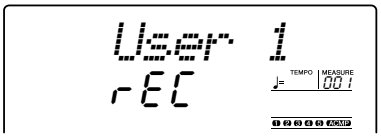
NOTE

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

Song Recording

The PSR-290 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.





Song recording on the PSR-290 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.

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)*

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.)*
- *Style 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-290 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.

NOTE

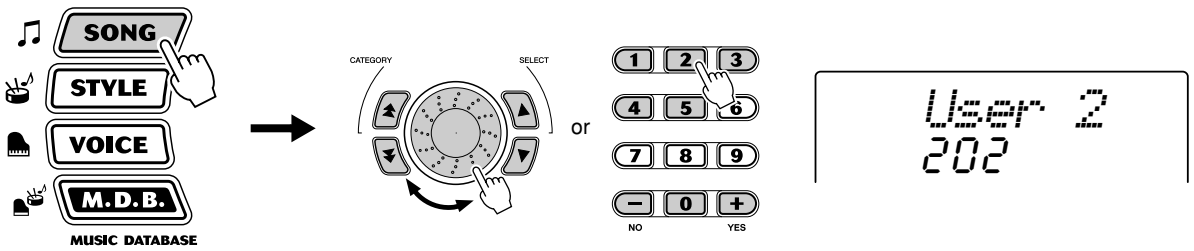
- *When using a Split Voice for recording, the voice assigned to the left of the split point cannot be recorded.*

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 style. 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.)

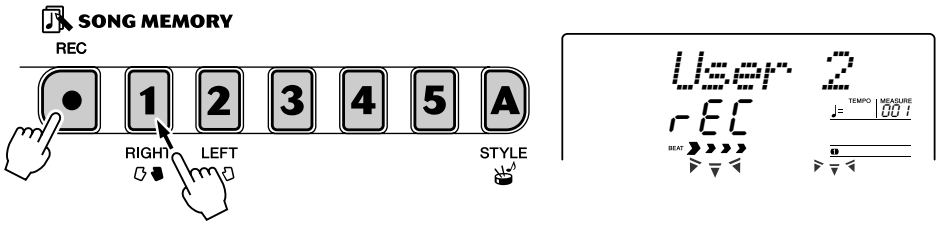
2 Select a User song number for recording.

Use the dial or numeric keypad to select the desired song: 201 - 205. If no song is manually selected, the PSR-290 automatically selects the first available empty song number.



3 Select a track number for recording.

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



⚠ CAUTION

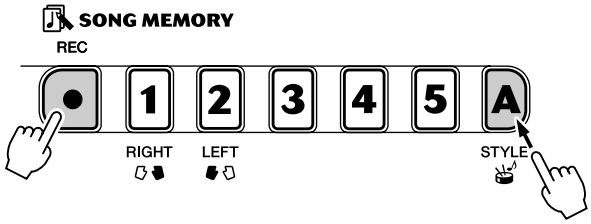
- ***Keep in mind that all recording operations "replace" the data. In other words, if you record to a track that already has recorded data, all previous data in the track will be erased and replaced by the newly recorded data.***

■ 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.*



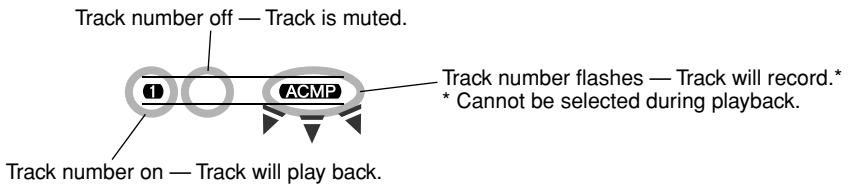
■ Recording to a Melody Track (1 - 5)

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.

Muting Tracks During Playback

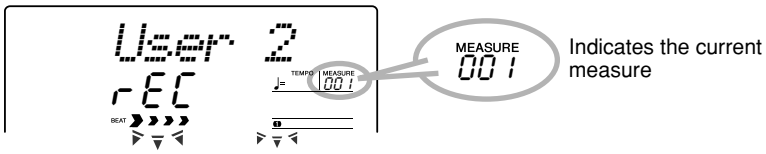
While recording is enabled, you can selectively mute different tracks. This is useful for when you want to clearly hear certain tracks, and not others, during recording. Muting can also be done "on the fly" during playback. To use muting, press the corresponding SONG MEMORY button, repeatedly if necessary,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



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 area 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 [REC] 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.

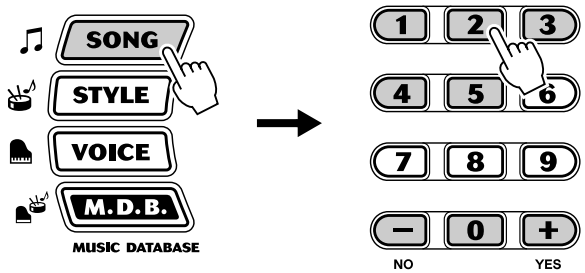
To play back the song from the beginning, simply press the [START/STOP] button again. Playback stops when the [START/STOP] button is pressed again.

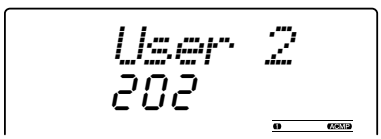
Song Clear

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 60).

1 Select the desired song.

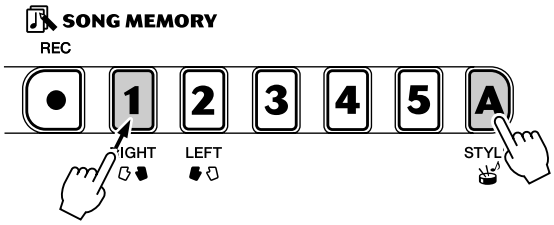
Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song (201 - 205).

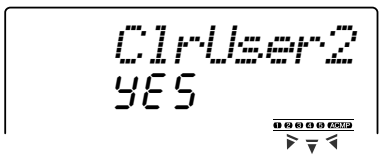




2 While holding down the [A] button, press SONG MEMORY button [1].

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

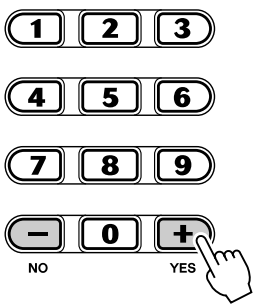




3 Press the [+/YES] button.

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.

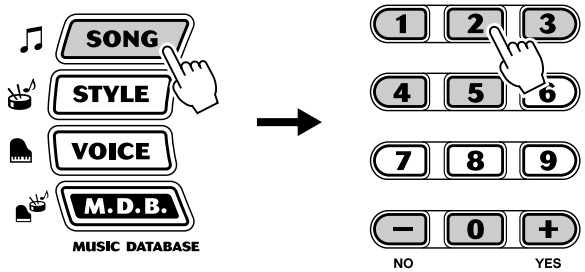


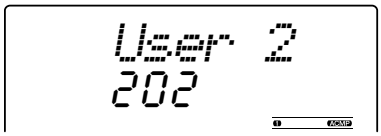
Track Clear

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 59).

1 Select the desired song.

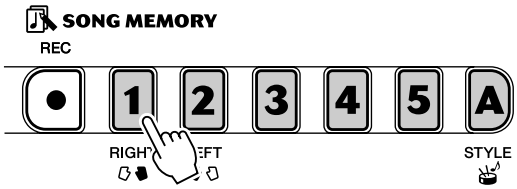
Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song (201 - 205).





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

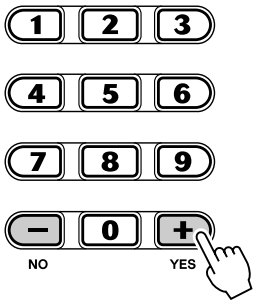
Press and hold down the appropriate SONG MEMORY button ([1] - [5], [A]) for at least one one second.



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. 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 computer 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-290 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.

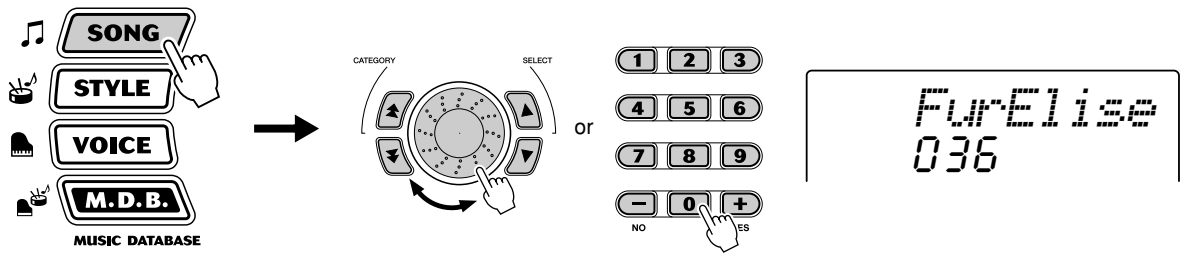
■ Lesson 4 — Both Hands

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.

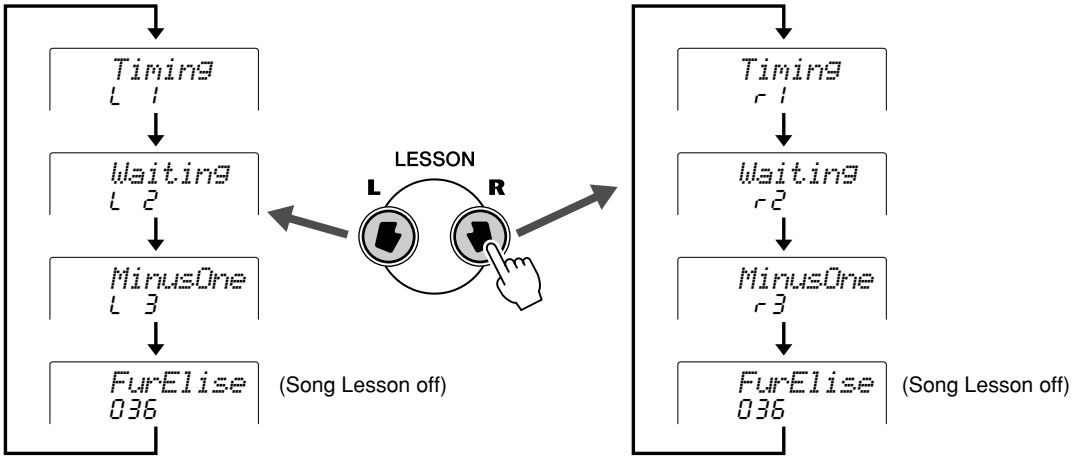
Press the [SONG] button, then use the dial or numeric keypad or [+]/[-] buttons to select the desired song.



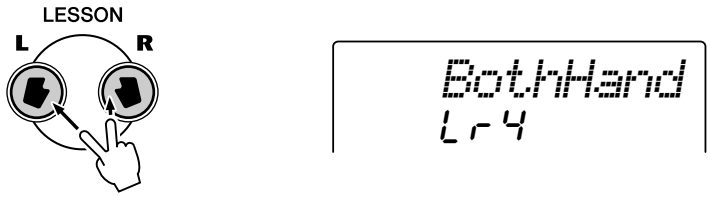
The songs are divided into several different categories or music genres.

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.

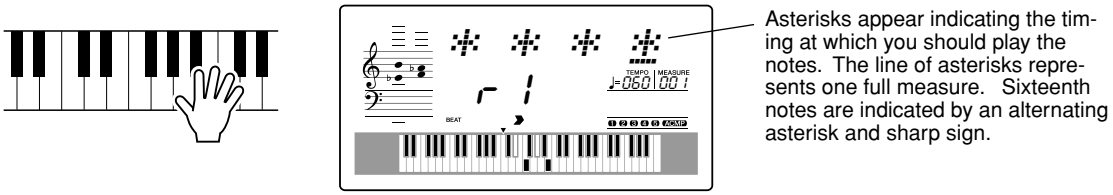


To select Lesson 4, press both [L] and [R] buttons simultaneously.



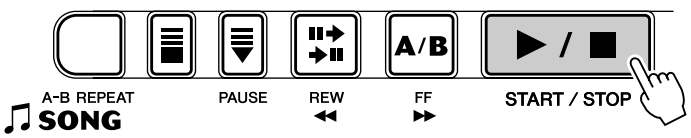
3 Start the Lesson.

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 function is turned on; page 65). 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.

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



The PSR-290 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 loaded song from computer (only SMF format 0).

The track number of the song can be specified in the Function mode (page 76).

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 area 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.

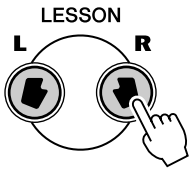
NOTE

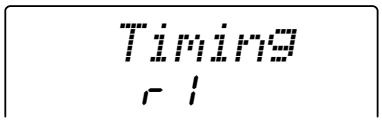
- *The melody note does not sound unless your playing is in time with the rhythm.*

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.



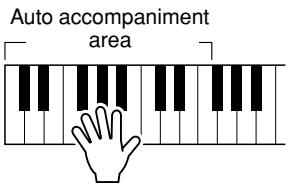


3 Play the appropriate melody or chord with the song.

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-290 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 area of the keyboard.



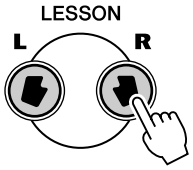
Lesson 2 — Waiting

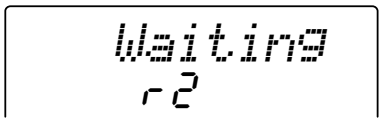
In this lesson step, the PSR-290 waits for you to play the correct notes before continuing playback of the song. This lets you practice reading the music at your own pace. The notes to be played are shown in the display, one after another, as you play them correctly.

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.

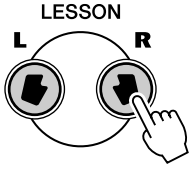
Lesson 3 — Minus One

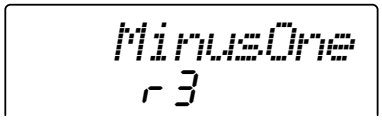
This lesson step lets you practice one part of the song in rhythm at the proper tempo. The PSR-290 plays back the song accompaniment with one part muted (either the left part or the right)— letting you play and master the missing part yourself. The notes you are to play are shown continuously in the 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.

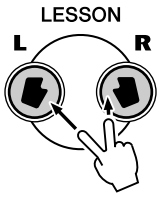
Lesson 4 — Both Hands

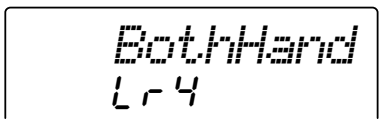
Lesson 4 is a "Minus One" practice essentially the same as Lesson 3, except that both the left- and right-hand parts are muted — letting you play and master both hands at the same time. Go on to this lesson step after you've mastered each hand's part in the previous three lesson steps. Practice both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

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."

NOTE

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

The evaluation function can be set to on/off in the Function mode (page 76).

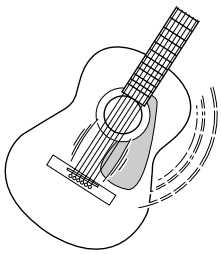
MIDI Functions

The PSR-290 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-290.

What Is MIDI?

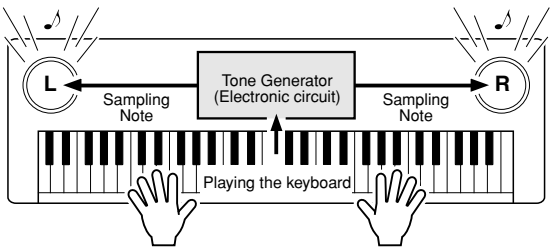
No doubt you have heard the terms "acoustic instrument" and "digital instrument." In the world today, these are the two main categories of instruments. Let's consider an acoustic piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike 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-290 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-290 supports GM System Level 1.

GENERAL MIDI

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-290 can control a MIDI device by transmitting note related data and various types of controller data. The PSR-290 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-290 can receive/transmit.

● Channel Messages

The PSR-290 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-290 Operation/Panel Setting
Note ON/OFF	Messages which are generated when the keyboard is played. Each message includes a specific note number which corresponds to the key which is pressed, plus a velocity value based on how hard the key is stuck.
Program Change	Voice 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

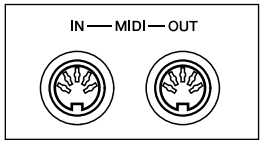
This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

Message Name	PSR-290 Operation/Panel Setting
Exclusive Message	Reverb/chorus/DSP settings, etc.
Realtime Messages	Start/stop operation

The messages transmitted/received by the PSR-290 are shown in the MIDI Implementation Chart on page 90.

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-290 are located on the rear panel.



MIDI IN	Receives MIDI data from another MIDI device.
MIDI OUT	Transmits the PSR-290's keyboard information as MIDI data to another MIDI device.

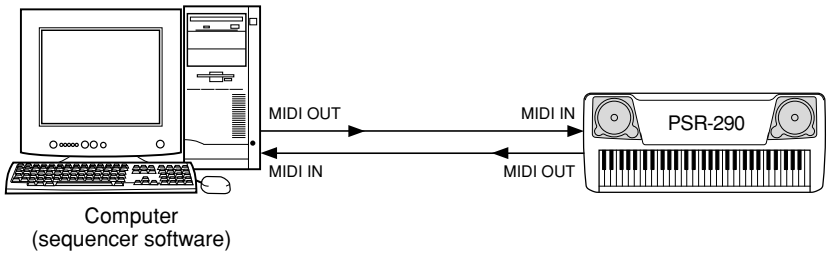
NOTE

- *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.*

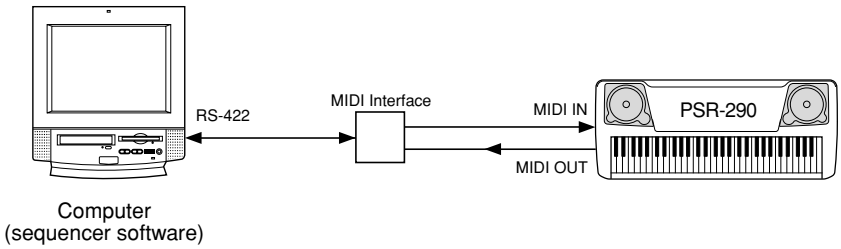
Connecting to a Personal Computer

By connecting your PSR-290'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-290.



● 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

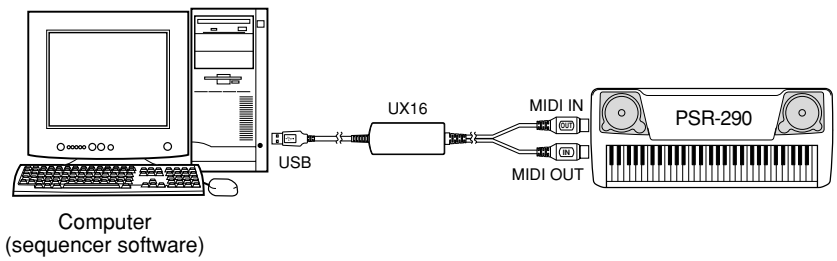
• When using a Macintosh series computer, set the MIDI interface clock setting in the application software to match the setting of the MIDI interface you are using. For details, refer to the owner's manual for the software you are using.

NOTE

Viewing the Notation for MIDI Channel 1

• The PSR-290 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 UX16 USB/MIDI Interface. Connect the UX16 and the computer with a standard USB cable, then make the proper MIDI connections between the PSR-290 and the UX16.



Local Control

This function lets you enable or disable keyboard control over the PSR-290's voices in the *Function mode (page 76)*. 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-290, 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-290 by itself, this should be set to "on."

⚠ CAUTION

- ***No sound is output from the PSR-290 when Local ON/OFF is set to OFF.***

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-290. Essentially, this takes a "snapshot" of the PSR-290 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-290 in the *Function mode (page 76)*. 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-290 settings for the next section of the song.

NOTE

- *When the Initial Setup Send operation is completed, the PSR-290 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.

These settings can be made in the Function mode (page 76).

⚠ CAUTION

- ***If External Clock is set to ON, style or song playback will not start unless external clock are received.***

Bulk Data Send

This lets you save important PortaTone data and settings to another device (such as a sequencer, computer, or MIDI data filer).

These settings can be made in the Function mode (page 76).

● Bulk Data Receive

Send the Bulk Data from computer or sequencer to the PSR-290.

⚠ CAUTION

- ***Keep in mind that all recorded Song data and One Touch Setting data operations replace the data.***

Keyboard Out

This determines whether Keyboard performance data of the Portatone is transmitted via MIDI OUT or not.

These settings can be made in the Function mode (page 76).

Style Out

This determines whether style data is transmitted via MIDI OUT or not.

These settings can be made in the Function mode (page 76).

Song Out

This determines whether Song data is transmitted via MIDI OUT or not.

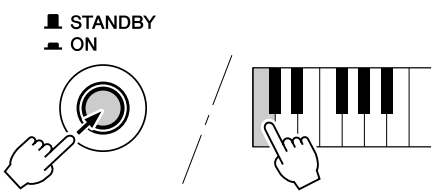
These settings can be made in the Function mode (page 76).

NOTE

- *For the Song #001, data is not transmitted.*

MIDI LSB Receive Cancel

Determines whether the LSB data of Bank Select is received or not. Press and hold the lowest key and turn on the power to change the setting (LSB is ignored).



To restore MIDI LSB Receive Cancel to normal (LSB is recognized), turn on the power again normally.

Loading a Song into PSR-290's Flash Memory

The PSR-290's internal flash memory enables you to save song data transmitted from a connected personal computer. You can play or practice Flash songs (saved in flash memory) in the same way as preset songs.
To transmit song data from a personal computer to the PSR-290, you first need to install the "Song Filer" application to your computer.

Song data that can be saved in flash memory:

- *The number of songs: max. 99 songs (Song #101–#199)*
- *Available memory: 352 KB*
- *Data format: SMF format 0*

■ Installing Song Filer

You can download the "Song Filer" application from the following Yamaha PK CLUB website. Make sure that your computer has an Internet connection.

Yamaha PK CLUB (Portable Keyboard Home Page)
http://www.yamahaPKclub.com/

NOTE

- *Visit the Yamaha PK CLUB website for more information on the latest version of Song Filer (version 2.0.0 or higher) and how to install it.*

System requirements for Song Filer:

[Windows]

OS:	*Windows 95/98/Me/2000*
CPU:	*Pentium/100MHz or faster*
Available Memory:	*8MB or more*
Free space in Hard Disk:	*2MB or more*
Display:	*800 x 600, 256 colors or more*

[Macintosh]

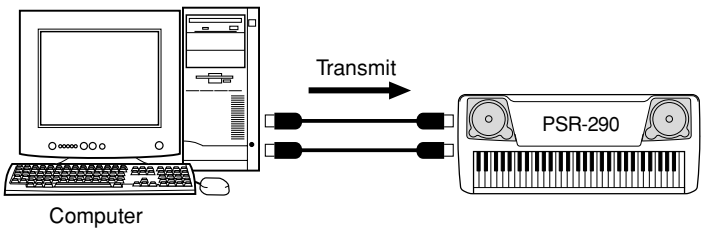
OS:	*Mac OS 7.5 or upper*
CPU:	*Power PC or upper*
Available Memory:	*8MB or more*
Free space in Hard Disk:	*2MB or more*
Display:	*800 x 600, 256 colors or more*

■ Song Filer

After you install Song Filer and connect the PSR-290 to the computer, you can use the two functions described below.

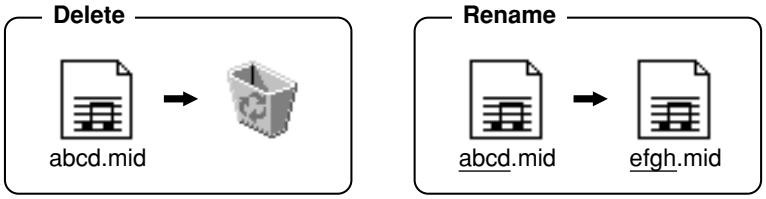
● Transmit Files

You can transmit song files from your computer to your PSR-290's Flash Memory.



● Manage Files on Flash Memory

You can delete and rename files in your PSR-290's Flash Memory from your computer.



NOTE

- *Refer to page 68 for information on connecting the PSR-290 to a computer.*
- *You cannot use the Song Filer's "Receive Files" function with the PSR-290.*
- *For more information on using Song Filer, refer to the PDF manual included in the Song Filer application.*

⚠ CAUTION

- ***Never attempt to turn the power off while transmitting song data. Doing so will not only result in failure to save the data, but also make the internal flash memory unstable. It may also clear all the data residing in the flash memory when turning the power on and off.***
- ***Saved data in the instrument may be lost due to malfunction or incorrect operation. Retain important data to your computer or floppy disk.***

Selecting a right & left hand guide track

You can select a track in the *Function mode (page 76)* to guide your right and left hand fingering during the Lesson (page 63).
This function is available only when you select a flash memory song (SMF format 0).

PC Mode

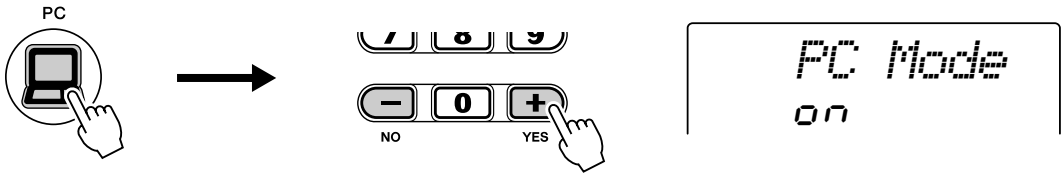
The PC Mode lets you instantly reconfigure the MIDI control settings for use with a computer or MIDI device.

● **Default settings**

	PC mode is on	PC mode is off
LOCAL ON/OFF	ON	
EXTERNAL CLOCK	OFF	
KEYBOARD OUT	ON	
STYLE OUT	OFF	ON
SONG OUT	OFF	

■ To turn the PC mode on or off:

Press the [PC] button and then press the appropriate [+]/[-] button. This switches between the PC Mode on/off settings.



■ To store the PC mode parameters:

1 Change the PC mode parameters.

Change the desired MIDI parameters in the Function mode.
The following PC Mode parameters can be stored to memory.

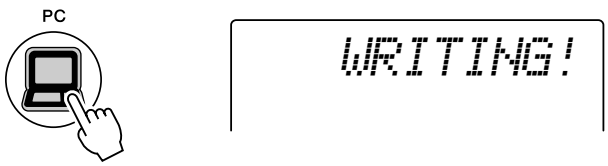
LOCAL ON/OFF
EXTERNAL
KEYBOARD
STYLE OUT
SONG OUT

⚠ CAUTION

- ***No sound is output from the PSR-290 when Local ON/OFF is set to OFF.***
- ***If External Clock is set to ON, style or song playback will not start unless external clock are received.***

2 Store the parameters to the PC memory.

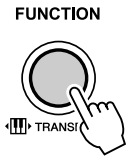
Press and hold the [PC] button until "WRITING!" appears in the LCD.



The PSR-290 has a variety of settings in the Function parameters. These give you detailed control over many of the PSR-290's features.

Using the Function parameters

1 Press the Function button.

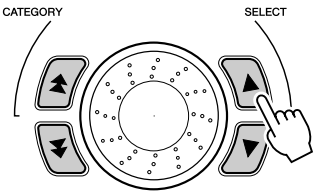


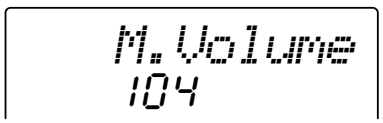
NOTE

- *To save the Function parameters and the Touch on/off status to internal memory (flash memory), press and hold the [FUNCTION] button. (See page 78.)*

2 Select a Function name.

Use the SELECT [▲]/[▼] buttons to select a Function name.



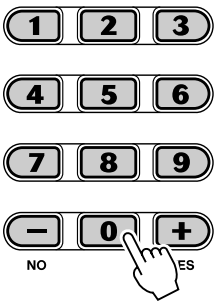


NOTE

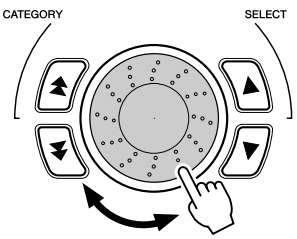
- *Use the CATEGORY [▲▲]/[▼▼] buttons when selecting the category steps.*

3 Input the appropriate value or use the [+]/[-] buttons to set the selected Function.

You can also use the dial.



or



● Function parameters

CATEGORY	SELECT	Display	Range/ Settings	Description	
Overall	Transpose	Transpos	-12–12	This determines the transposition of the entire PSR-290 sound.	*
	Tuning	Tuning	-100–100	This determines the pitch of the entire PSR-290 sound .	*
	Split Point	SplitPnt	000–127	This determines the highest key for the Split voice and sets the Split "point" — in other words, the key that separates the Split (lower) and Main (upper) voices. (The Split voice sounds up to and including the Split Point key.) The default Split Point is 054 (F♯2). The Split Point setting and Accompaniment Split Point setting are automatically set to the same value.	*
	Touch Sensitivity	TouchSns	1–3	A setting of "1" results in limited touch response; this setting produces a relatively narrow dynamic range, no matter how lightly or strongly you play the keys. "2" lets you play over a normal dynamic range (soft to loud), while "3" is designed for playing very soft passages, giving you slightly more detailed control in the soft volume range. When Touch is turned off (page 30), a constant velocity value of 80 is produced (total velocity range = 0–127).	*
Main Voice	Volume	M.Volume	0–127	This determines the volume of the Main voice, letting you create an optimum mix with the Dual or Split voice.	*
	Octave	M.Octave	-2–2 (octave)	This determines the octave range for the Main voice. Use this to set the most suitable range for the Main voice.	*
	Pan	M.Pan	0 (full left)–64 (center) –127 (full right)	This determines the pan position of the Main voice in the stereo image.	*
	Reverb Send Level	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.	*
	Chorus Send Level	M.ChoLvl	0–127	This determines how much of the Main voice's signal is sent to the Chorus effect. Higher values result in a louder Chorus effect.	*
	DSP Send Level	M.DspLvl	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.	*
Dual Voice	Voice	D.Voice	1–605	This select the 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.	*
	Octave	D.Octave	-2–2 (octave)	This determines the octave range for the Dual voice. Use this to create an octave layer with the Main voice.	*
	Pan	D.Pan	0 (full left)–64 (center) –127 (full right)	This determines the pan position of the Dual voice in the stereo image. For a spacious sounding effect, set this value at or near 0, and set the Main Voice Pan at the opposite positive value.	*
	Reverb Send Level	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.	*
	Chorus Send Level	D.ChoLvl	0–127	This determines how much of the Dual voice's signal is sent to the Chorus effect. Higher values result in a louder Chorus effect for the Dual voice.	*
	DSP Send Level	D.DspLvl	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.	*
Split Voice	Voice	S.Voice	1–605	This select the split voice.	
	Volume	S.Volume	0–127	This determines the volume of the Split voice, letting you create an optimum mix with the Main voice.	*
	Octave	S.Octave	-2–2 (octave)	This determines the octave range for the Split voice. Use this to set the most suitable range for the Split (lower) voice.	*
	Pan	S.Pan	0 (full left)–64 (center) –127 (full right)	This determines the pan position of the Split voice in the stereo image. For a spacious sounding effect, set this value at or near 0, and set the Main Voice Pan at the opposite positive value.	*
	Reverb Send Level	S.RevLvl	0–127	This determines how much of the Split voice's signal is sent to the Reverb effect. Higher values result in a louder Reverb effect for the Split voice.	*
	Chorus Send Level	S.ChoLvl	0–127	This determines how much of the Split voice's signal is sent to the Chorus effect. Higher values result in a louder Chorus effect for the Split voice.	*
	DSP Send Level	S.DspLvl	0–127	This determines how much of the Split voice's signal is sent to the DSP effect. Higher values result in a louder DSP effect for the Split voice.	*

* The "*" mark indicates that the setting can be restored to default value by pressing both [+]/[-] buttons simultaneously.

CATEGORY	SELECT	Display	Range/ Settings	Description	
Effect	Reverb Type	Reverb	1–9	This determines the Reverb type, including “off.” (See the list on page 33).	*
	Chorus Type	Chorus	1–5	This determines the Chorus type, including “off.” (See the list on page 34).	*
	DSP Type	DSP	1–39	This determines the DSP type, including “off.” (See the list on page 34).	*
Harmony	Harmony Type	HarmType	1–26	This determines the Harmony type. (See the list on page 33).	*
	Harmony Volume	HarmVol	0–127	This determines the level of the Harmony effect when Harmony type 1-5 is selected, letting you create the optimum mix with the original melody note.	*
MIDI	Local On/ Off	Local	On/Off	This determines the Local on or off. Press the [+]/[-] buttons to set Local Control to on or off.	
	External Clock	ExtClock	On/Off	This determines the External clock or Internal clock. Press the [+]/[-] buttons to set External clock or Internal clock.	
	Bulk Data Send	BulkSend	YES/NO	This lets you save important PortaTone data and settings to another device (such as a sequencer, computer, or MIDI data filer). Use the [YES/+] button to transmit the data. Use the [NO/-] button to stop the transmission.	
	Initial Setup Send	InitSend	YES/NO	This lets you save PortaTone initial data to another device (such as a sequencer, computer, or MIDI data filer). Use the [YES/+] button to transmit the data. Use the [NO/-] button to stop the transmission.	
	Keyboard Out	KbdOut	On/Off	This determines whether Keyboard performance data of the Portatone is transmitted or not. Use the [+]/[-] buttons to change the setting.	
	Style Out	StyleOut	On/Off	This determines whether style data is transmitted via MIDI OUT or not. Press the [+]/[-] buttons to set the Style Out to on or off.	
	Song Out	SongOut	On/Off	This determines whether Song data is transmitted via MIDI OUT or not. Press the [+]/[-] buttons to set Song Out to on or off. (For song #001, data is not transmitted.)	
Volume	Style	StyleVol	0–127	This determines the volume of the style, letting you create an optimum mix with your performance.	*
	Song	Song Vol	0–127	This determines the volume of the Song.	*
Metronome	Volume	Mtr Vol	0–127	This determines the volume of the Metronome.	*
	Time Signature	Time Sig	0–15	This determines the time signature of the Metronome.	*
Lesson	Lesson Track (R)	R-Part	1–16	This determines the track number for your right hand lesson. This setting is effective only loaded song.	*
	Lesson Track (L)	L-Part	1–16	This determines the track number for your left hand lesson. This setting is effective only loaded song.	*
Utility	Grade On/ Off	Grade	On/Off	This determines whether Grade function is on or off. Press the [+]/[-] buttons to set Grade to on or off.	
	Demo and DJ Cancel	D-Cancel	On/Off	This determines the Demo and DJ cancel is enabled or not. Press the [+]/[-] buttons to set Demo and DJ Cancel to on or off.	

* The “*” mark indicates that the setting can be restored to default value by pressing both [+]/[-] buttons simultaneously.

Problem	Possible Cause and Solution
When the PSR-290 is turned on or off, a popping sound is temporarily produced.	This is normal and indicates that the PSR-290 is receiving electrical power.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the PSR-290 may produce interference. To prevent this, turn off the mobile phone or use it further away from the PSR-290.
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 69.)
Playing keys in the right hand area of the keyboard does not produce any sound.	When using the Dictionary function (page 45), the keys in the right hand area 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 10.)
The auto accompaniment doesn't turn on, even when pressing the [ACMP] button.	Make sure the Style mode is active before using the auto accompaniment. Press the [STYLE] button to enable style operations.
The style or song does not play back even when pressing the [START/STOP] button.	Check the External Clock on/off. (See page 69.)
The style does not sound properly.	Make sure that the Style Volume (page 42) is set to an appropriate level. Make sure that the Split Point (page 27) is set to an appropriate value.
When playing back one of the Pianist styles (#124 - #135), 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 area of the keyboard.
Not all of the voices seem to sound, or the sound seems to be cut off.	The PSR-290 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-290 with a sequencer. (This may also sound like a "dual" layered sound of two voices, even when Dual is turned off.)	When using the style 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.

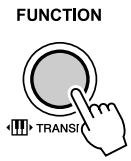
■ Data Backup

The following data can be stored to internal flash memory as data backup.

Group	Parameter
SONG	User Song Data
ONE TOUCH SETTING	See page 28.
PC	PC Memory
FUNCTION	Tuning Split Point Touch Sensitivity Style Volume Song Volume Metronome Volume Grade On/Off Demo & DJ Cancel
Touch	Touch On/Off

● About the Internal Flash Memory

The Song, One Touch Setting and PC parameters are automatically stored when each saving operation is done.
Function and touch On/Off are stored when Pressing and Holding the Function button.



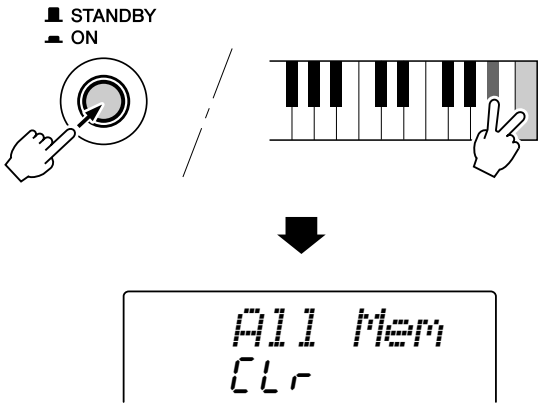
⚠ CAUTION

- ***Never attempt to turn the power off when a "WRITING!" message is shown in the display. Doing so can damage the internal flash memory and result in loss of data.***

■ Data Initialization

● All 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 and highest (rightmost) black key on the keyboard. "All Mem CLr" will appear briefly on the display.



⚠ CAUTION

- ***All data listed above, plus loaded song data, will be erased and/or changed when the All Data Initialization procedure is carried out.***
- ***Carrying out the data initialization procedure will usually restore normal operation if the PSR-290 freezes or begins to act erratically for any reason.***

● Loaded Song Initializaion

You can erase only the loaded song data by turning on the power while holding the highest (rightmost) black key on the keyboard.

Voice List

■ Maximum Polyphony

The PSR-290 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.

NOTE

- *The Voice List includes MIDI program change numbers for each voice. Use these program change numbers when playing the PSR-290 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 (footswitch) is held.*

● Panel Voice List

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
PIANO				
001	0	112	0	Grand Piano
002	0	112	1	Bright Piano
003	0	112	3	Honky-tonk Piano
004	0	112	2	MIDI Grand Piano
005	0	113	2	CP 80
006	0	112	6	Harpsichord
E.PIANO				
007	0	114	4	Galaxy EP
008	0	112	4	Funky Electric Piano
009	0	112	5	DX Modern Elec. Piano
010	0	113	5	Hyper Tines
011	0	114	5	Venus Electric Piano
012	0	112	7	Clavi
ORGAN				
013	0	112	16	Jazz Organ 1
014	0	113	16	Jazz Organ 2
015	0	112	17	Click Organ
016	0	116	16	Bright Organ
017	0	112	18	Rock Organ
018	0	114	18	Purple Organ
019	0	118	16	16'+2' Organ
020	0	119	16	16'+4' Organ
021	0	114	16	Theater Organ
022	0	112	19	Church Organ
023	0	113	19	Chapel Organ
024	0	112	20	Reed Organ
ACCORDION				
025	0	113	21	Traditional Accordion
026	0	112	21	Musette Accordion
027	0	113	23	Bandoneon
028	0	112	22	Harmonica
GUITAR				
029	0	112	24	Classical Guitar
030	0	112	25	Folk Guitar
031	0	113	25	12Strings Guitar
032	0	112	26	Jazz Guitar
033	0	113	26	Octave Guitar
034	0	112	27	Clean Guitar
035	0	117	27	60's Clean Guitar
036	0	112	28	Muted Guitar
037	0	112	29	Overdriven Guitar
038	0	112	30	Distortion Guitar
BASS				
039	0	112	32	Acoustic Bass
040	0	112	33	Finger Bass

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
041	0	112	34	Pick Bass
042	0	112	35	Fretless Bass
043	0	112	36	Slap Bass
044	0	112	38	Synth Bass
045	0	113	38	Hi-Q Bass
046	0	113	39	Dance Bass
STRINGS				
047	0	112	48	String Ensemble
048	0	112	49	Chamber Strings
049	0	112	50	Synth Strings
050	0	113	49	Slow Strings
051	0	112	44	Tremolo Strings
052	0	112	45	Pizzicato Strings
053	0	112	55	Orchestra Hit
054	0	112	40	Violin
055	0	112	42	Cello
056	0	112	43	Contrabass
057	0	112	105	Banjo
058	0	112	46	Harp
CHOIR				
059	0	112	52	Choir
060	0	113	52	Vocal Ensemble
061	0	112	53	Vox Humana
062	0	112	54	Air Choir
SAXOPHONE				
063	0	112	64	Soprano Sax
064	0	112	65	Alto Sax
065	0	112	66	Tenor Sax
066	0	114	66	Breathy Tenor
067	0	112	67	Baritone Sax
068	0	112	68	Oboe
069	0	112	69	English Horn
070	0	112	70	Bassoon
071	0	112	71	Clarinet
TRUMPET				
072	0	112	56	Trumpet
073	0	112	59	Muted Trumpet
074	0	112	57	Trombone
075	0	113	57	Trombone Section
076	0	112	60	French Horn
077	0	112	58	Tuba
BRASS				
078	0	112	61	Brass Section
079	0	113	61	Big Band Brass
080	0	119	61	Mellow Horns

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
081	0	112	62	Synth Brass
082	0	113	62	Jump Brass
083	0	114	62	Techno Brass
FLUTE				
084	0	112	73	Flute
085	0	112	72	Piccolo
086	0	112	75	Pan Flute
087	0	112	74	Recorder
088	0	112	79	Ocarina
SYNTH LEAD				
089	0	112	80	Square Lead
090	0	112	81	Sawtooth Lead
091	0	112	85	Voice Lead
092	0	112	98	Star Dust
093	0	112	100	Brightness
094	0	115	81	Analogon
095	0	119	81	Fargo
SYNTH PAD				
096	0	112	88	Fantasia
097	0	113	100	Bell Pad
098	0	112	91	Xenon Pad
099	0	112	94	Equinox
100	0	113	89	Dark Moon
PERCUSSION				
101	0	112	11	Vibraphone
102	0	112	12	Marimba
103	0	112	13	Xylophone
104	0	112	114	Steel Drums
105	0	112	8	Celesta
106	0	112	14	Tubular Bells
107	0	112	47	Timpani
108	0	112	10	Music Box
DRUM KITS				
109	127	0	0	Standard Kit 1
110	127	0	1	Standard Kit 2
111	127	0	8	Room Kit
112	127	0	16	Rock Kit
113	127	0	24	Electronic Kit
114	127	0	25	Analog Kit
115	127	0	27	Dance Kit
116	127	0	32	Jazz Kit
117	127	0	40	Brush Kit
118	127	0	48	Symphony Kit
119	126	0	0	SFX Kit 1
120	126	0	1	SFX Kit 2

● XG Voice List

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
PIANO				
121	0	0	0	Grand Piano
122	0	1	0	Grand Piano KSP
123	0	18	0	Mellow Grand Piano
124	0	40	0	Piano Strings
125	0	41	0	Dream
126	0	0	1	Bright Piano
127	0	1	1	Bright Piano KSP
128	0	0	2	Electric Grand Piano
129	0	1	2	Electric Grand Piano KSP
130	0	32	2	Detuned CP80
131	0	40	2	Layered CP 1
132	0	41	2	Layered CP 2
133	0	0	3	Honky-tonk Piano
134	0	1	3	Honky-tonk Piano KSP
135	0	0	4	Electric Piano 1
136	0	1	4	Electric Piano 1 KSP
137	0	18	4	Mellow Electric Piano 1
138	0	32	4	Chorus Electric Piano 1
139	0	40	4	Hard Electric Piano
140	0	45	4	Velocity Crossfade Electric Piano 1
141	0	64	4	60's Electric Piano 1
142	0	0	5	Electric Piano 2
143	0	1	5	Electric Piano 2 KSP
144	0	32	5	Chorus Electric Piano 2
145	0	33	5	DX Electric Piano Hard
146	0	34	5	DX Legend
147	0	40	5	DX Phase Electric Piano
148	0	41	5	DX + Analog Electric Piano
149	0	42	5	DX Koto Electric Piano
150	0	45	5	Velocity Crossfade Electric Piano 2
151	0	0	6	Harpsichord
152	0	1	6	Harpsichord KSP
153	0	25	6	Harpsichord 2
154	0	35	6	Harpsichord 3
155	0	0	7	Clavi
156	0	1	7	Clavi KSP
157	0	27	7	Clavi Wah
158	0	64	7	Pulse Clavi
159	0	65	7	Pierce Clavi
CHROMATIC				
160	0	0	8	Celesta
161	0	0	9	Glockenspiel
162	0	0	10	Music Box
163	0	64	10	Orgel
164	0	0	11	Vibraphone
165	0	1	11	Vibraphone KSP
166	0	45	11	Hard Vibraphone
167	0	0	12	Marimba
168	0	1	12	Marimba KSP
169	0	64	12	Sine Marimba
170	0	97	12	Balimba
171	0	98	12	Log Drums
172	0	0	13	Xylophone
173	0	0	14	Tubular Bells
174	0	96	14	Church Bells
175	0	97	14	Carillon
176	0	0	15	Dulcimer
177	0	35	15	Dulcimer 2
178	0	96	15	Cimbalom
179	0	97	15	Santur
ORGAN				
180	0	0	16	DrawOrg
181	0	32	16	DetDrawOrg
182	0	33	16	60sDrawOrg1
183	0	34	16	60sDrawOrg2
184	0	35	16	70sDrawOrg1

Voice No.	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
185	0	36	16	DrawOrg2
186	0	37	16	60sDrawOrg3
187	0	38	16	Even Bar
188	0	40	16	16+2"2/3
189	0	64	16	Organ Bass
190	0	65	16	70sDrawOrg2
191	0	66	16	Cheezy Organ
192	0	67	16	DrawOrg3
193	0	0	17	Percussive Organ
194	0	24	17	70's Percussive Organ
195	0	32	17	Detuned Percussive Organ
196	0	33	17	Light Organ
197	0	37	17	Percussive Organ 2
198	0	0	18	Rock Organ
199	0	64	18	Rotary Organ
200	0	65	18	Slow Rotary
201	0	66	18	Fast Rotary
202	0	0	19	Church Organ
203	0	32	19	Church Organ 3
204	0	35	19	Church Organ 2
205	0	40	19	Notre Dame
206	0	64	19	Organ Flute
207	0	65	19	Tremolo Organ Flute
208	0	0	20	Reed Organ
209	0	40	20	Puff Organ
210	0	0	21	Accordion
211	0	32	21	Accord It
212	0	0	22	Hamonica
213	0	32	22	Harmonica 2
214	0	0	23	Tango Accordion
215	0	64	23	Tango Accordion 2
GUITAR				
216	0	0	24	Nylon Guitar
217	0	16	24	Nylon Guitar 2
218	0	25	24	Nylon Guitar 3
219	0	43	24	Velocity Guitar Harmonics
220	0	96	24	Ukulele
221	0	0	25	Steel Guitar
222	0	16	25	Steel Guitar 2
223	0	35	25	12-string Guitar
224	0	40	25	Nylon & Steel Guitar
225	0	41	25	Steel Guitar with Body Sound
226	0	96	25	Mandolin
227	0	0	26	Jazz Guitar
228	0	18	26	Mellow Guitar
229	0	32	26	Jazz Amp
230	0	0	27	Clean Guitar
231	0	32	27	Chorus Guitar
232	0	0	28	Muted Guitar
233	0	40	28	Funk Guitar 1
234	0	41	28	Muted Steel Guitar
235	0	43	28	Funk Guitar 2
236	0	45	28	Jazz Man
237	0	0	29	Overdriven Guitar
238	0	43	29	Guitar Pinch
239	0	0	30	Distortion Guitar
240	0	40	30	Feedback Guitar
241	0	41	30	Feedback Guitar 2
242	0	0	31	Guitar Harmonics
243	0	65	31	Guitar Feedback
244	0	66	31	Guitar Harmonics 2
BASS				
245	0	0	32	Acoustic Bass
246	0	40	32	Jazz Rhythm
247	0	45	32	Velocity Crossfade Upright Bass
248	0	0	33	Finger Bass
249	0	18	33	Finger Dark
250	0	27	33	Flange Bass
251	0	40	33	Bass & Distorted Electric Guitar
252	0	43	33	Finger Slap Bass
253	0	45	33	Finger Bass 2
254	0	65	33	Modulated Bass
255	0	0	34	Pick Bass
256	0	28	34	Muted Pick Bass
257	0	0	35	Fretless Bass
258	0	32	35	Fretless Bass 2
259	0	33	35	Fretless Bass 3
260	0	34	35	Fretless Bass 4
261	0	96	35	Synth Fretless
262	0	97	35	Smooth Fretless
263	0	0	36	Slap Bass 1
264	0	27	36	Resonant Slap
265	0	32	36	Punch Thumb Bass
266	0	0	37	Slap Bass 2
267	0	43	37	Velocity Switch Slap
268	0	0	38	Synth Bass 1
269	0	18	38	Synth Bass 1 Dark
270	0	20	38	Fast Resonant Bass
271	0	24	38	Acid Bass
272	0	35	38	Clavi Bass
273	0	40	38	Techno Synth Bass
274	0	64	38	Orbiter
275	0	65	38	Square Bass
276	0	66	38	Rubber Bass
277	0	96	38	Hammer
278	0	0	39	Synth Bass 2
279	0	6	39	Mellow Synth Bass
280	0	12	39	Sequenced Bass
281	0	18	39	Click Synth Bass
282	0	19	39	Synth Bass 2 Dark
283	0	32	39	Smooth Synth Bass
284	0	40	39	Modular Synth Bass
285	0	41	39	DX Bass
286	0	64	39	X Wire Bass
STRING				
287	0	0	40	Violin
288	0	8	40	Slow Violin
289	0	0	41	Viola
290	0	0	42	Cello
291	0	0	43	Contrabass
292	0	0	44	Tremolo Strings
293	0	8	44	Slow Tremolo Strings
294	0	40	44	Suspense Strings
295	0	0	45	Pizzicato Strings
296	0	0	46	Orchestral Harp
297	0	40	46	Yang Chin
298	0	0	47	Timpani

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
ENSEMBLE				
299	0	0	48	Strings 1
300	0	3	48	Stereo Strings
301	0	8	48	Slow Strings
302	0	24	48	Arco Strings
303	0	35	48	60's Strings
304	0	40	48	Orchestra
305	0	41	48	Orchestra 2
306	0	42	48	Tremolo Orchestra
307	0	45	48	Velocity Strings
308	0	0	49	Strings 2
309	0	3	49	Stereo Slow Strings
310	0	8	49	Legato Strings
311	0	40	49	Warm Strings
312	0	41	49	Kingdom
313	0	64	49	70's Strings
314	0	65	49	String Ensemble 3
315	0	0	50	Synth Strings 1
316	0	27	50	Resonant Strings
317	0	64	50	Synth Strings 4
318	0	65	50	Synth Strings 5
319	0	0	51	Synth Strings 2
320	0	0	52	Choir Aahs
321	0	3	52	Stereo Choir
322	0	16	52	Choir Aahs 2
323	0	32	52	Mellow Choir
324	0	40	52	Choir Strings
325	0	0	53	Voice Oohs
326	0	0	54	Synth Voice
327	0	40	54	Synth Voice 2
328	0	41	54	Choral
329	0	64	54	Analog Voice
330	0	0	55	Orchestra Hit
331	0	35	55	Orchestra Hit 2
332	0	64	55	Impact
BRASS				
333	0	0	56	Trumpet
334	0	16	56	Trumpet 2
335	0	17	56	Bright Trumpet
336	0	32	56	Warm Trumpet
337	0	0	57	Trombone
338	0	18	57	Trombone 2
339	0	0	58	Tuba
340	0	16	58	Tuba 2
341	0	0	59	Muted Trumpet
342	0	0	60	French Horn
343	0	6	60	French Horn Solo
344	0	32	60	French Horn 2
345	0	37	60	Horn Orchestra
346	0	0	61	Brass Section
347	0	35	61	Trumpet & Trombone Section
348	0	40	61	Brass Section 2
349	0	41	61	High Brass
350	0	42	61	Mellow Brass
351	0	0	62	Synth Brass 1
352	0	12	62	Quack Brass
353	0	20	62	Resonant Synth Brass
354	0	24	62	Poly Brass
355	0	27	62	Synth Brass 3
356	0	32	62	Jump Brass
357	0	45	62	Analog Velocity Brass 1
358	0	64	62	Analog Brass 1
359	0	0	63	Synth Brass 2
360	0	18	63	Soft Brass
361	0	40	63	Synth Brass 4
362	0	41	63	Choir Brass
363	0	45	63	Analog Velocity Brass 2
364	0	64	63	Analog Brass 2
REED				
365	0	0	64	Soprano Sax
366	0	0	65	Alto Sax
367	0	40	65	Sax Section
368	0	43	65	Hyper Alto Sax
369	0	0	66	Tenor Sax
370	0	40	66	Breathy Tenor Sax
371	0	41	66	Soft Tenor Sax
372	0	64	66	Tenor Sax 2
373	0	0	67	Baritone Sax
374	0	0	68	Oboe
375	0	0	69	English Horn
376	0	0	70	Bassoon
377	0	0	71	Clarinet
PIPE				
378	0	0	72	Piccolo
379	0	0	73	Flute
380	0	0	74	Recorder
381	0	0	75	Pan Flute
382	0	0	76	Blown Bottle
383	0	0	77	Shakuhachi
384	0	0	78	Whistle
385	0	0	79	Ocarina
SYNTH LEAD				
386	0	0	80	Square Lead
387	0	6	80	Square Lead 2
388	0	8	80	LM Square
389	0	18	80	Hollow
390	0	19	80	Shroud
391	0	64	80	Mellow
392	0	65	80	Solo Sine
393	0	66	80	Sine Lead
394	0	0	81	Sawtooth Lead
395	0	6	81	Sawtooth Lead 2
396	0	8	81	Thick Sawtooth
397	0	18	81	Dynamic Sawtooth
398	0	19	81	Digital Sawtooth
399	0	20	81	Big Lead
400	0	24	81	Heavy Synth
401	0	25	81	Waspy Synth
402	0	40	81	Pulse Sawtooth
403	0	41	81	Dr. Lead
404	0	45	81	Velocity Lead
405	0	96	81	Sequenced Analog
406	0	0	82	Calliope Lead
407	0	65	82	Pure Pad
408	0	0	83	Chiff Lead
409	0	64	83	Rubby
410	0	0	84	Charang Lead
411	0	64	84	Distorted Lead
412	0	65	84	Wire Lead

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
413	0	0	85	Voice Lead
414	0	24	85	Synth Aahs
415	0	64	85	Vox Lead
416	0	0	86	Fifths Lead
417	0	35	86	Big Five
418	0	0	87	Bass & Lead
419	0	16	87	Big & Low
420	0	64	87	Fat & Perky
421	0	65	87	Soft Whirl
SYNTH PAD				
422	0	0	88	New Age Pad
423	0	64	88	Fantasy
424	0	0	89	Warm Pad
425	0	16	89	Thick Pad
426	0	17	89	Soft Pad
427	0	18	89	Sine Pad
428	0	64	89	Horn Pad
429	0	65	89	Rotary Strings
430	0	0	90	Poly Synth Pad
431	0	64	90	Poly Pad 80
432	0	65	90	Click Pad
433	0	66	90	Analog Pad
434	0	67	90	Square Pad
435	0	0	91	Choir Pad
436	0	64	91	Heaven
437	0	66	91	Itopia
438	0	67	91	CC Pad
439	0	0	92	Bowed Pad
440	0	64	92	Glacier
441	0	65	92	Glass Pad
442	0	0	93	Metallic Pad
443	0	64	93	Tine Pad
444	0	65	93	Pan Pad
445	0	0	94	Halo Pad
446	0	0	95	Sweep Pad
447	0	20	95	Shwimmer
448	0	27	95	Converge
449	0	64	95	Polar Pad
450	0	66	95	Celestial
SYNTH EFFECTS				
451	0	0	96	Rain
452	0	45	96	Clavi Pad
453	0	64	96	Harmo Rain
454	0	65	96	African Wind
455	0	66	96	Carib
456	0	0	97	Sound Track
457	0	27	97	Prologue
458	0	64	97	Ancestral
459	0	0	98	Crystal
460	0	12	98	Synth Drum Comp
461	0	14	98	Popcorn
462	0	18	98	Tiny Bells
463	0	35	98	Round Glockenspiel
464	0	40	98	Glockenspiel Chimes
465	0	41	98	Clear Bells
466	0	42	98	Chorus Bells
467	0	64	98	Synth Mallet
468	0	65	98	Soft Crystal
469	0	66	98	Loud Glockenspiel
470	0	67	98	Christmas Bells

Voice No.	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
471	0	68	98	Vibraphone Bells
472	0	69	98	Digital Bells
473	0	70	98	Air Bells
474	0	71	98	Bell Harp
475	0	72	98	Gamelimba
476	0	0	99	Atmosphere
477	0	18	99	Warm Atmosphere
478	0	19	99	Hollow Release
479	0	40	99	Nylon Electric Piano
480	0	64	99	Nylon Harp
481	0	65	99	Harp Vox
482	0	66	99	Atmosphere Pad
483	0	67	99	Planet
484	0	0	100	Brightness
485	0	64	100	Fantasy Bells
486	0	96	100	Smokey
487	0	0	101	Goblins
488	0	64	101	Goblins Synth
489	0	65	101	Creeper
490	0	66	101	Ring Pad
491	0	67	101	Ritual
492	0	68	101	To Heaven
493	0	70	101	Night
494	0	71	101	Glisten
495	0	96	101	Bell Choir
496	0	0	102	Echoes
497	0	8	102	Echoes 2
498	0	14	102	Echo Pan
499	0	64	102	Echo Bells
500	0	65	102	Big Pan
501	0	66	102	Synth Piano
502	0	67	102	Creation
503	0	68	102	Star Dust
504	0	69	102	Resonant & Panning
505	0	0	103	Sci-Fi
506	0	64	103	Starz
WORLD				
507	0	0	104	Sitar
508	0	32	104	Detuned Sitar
509	0	35	104	Sitar 2
510	0	96	104	Tambra
511	0	97	104	Tamboura
512	0	0	105	Banjo
513	0	28	105	Muted Banjo
514	0	96	105	Rabab
515	0	97	105	Gopichant
516	0	98	105	Oud
517	0	0	106	Shamisen
518	0	0	107	Koto
519	0	96	107	Taisho-kin
520	0	97	107	Kanoon
521	0	0	108	Kalimba
522	0	0	109	Bagpipe
523	0	0	110	Fiddle
524	0	0	111	Shanai
525	0	64	111	Shanai 2
526	0	96	111	Pungi
527	0	97	111	Hichiriki
PERCUSSIVE				
528	0	0	112	Tinkle Bell

Voice No.	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
529	0	96	112	Bonang
530	0	97	112	Altair
531	0	98	112	Gamelan Gongs
532	0	99	112	Stereo Gamelan Gongs
533	0	100	112	Rama Cymbal
534	0	101	112	Asian Bells
535	0	0	113	Agogo
536	0	0	114	Steel Drums
537	0	97	114	Glass Percussion
538	0	98	114	Thai Bells
539	0	0	115	Woodblock
540	0	96	115	Castanets
541	0	0	116	Taiko Drum
542	0	96	116	Gran Cassa
543	0	0	117	Melodic Tom
544	0	64	117	Melodic Tom 2
545	0	65	117	Real Tom
546	0	66	117	Rock Tom
547	0	0	118	Synth Drum
548	0	64	118	Analog Tom
549	0	65	118	Electronic Percussion
550	0	0	119	Reverse Cymbal
SOUND EFFECTS				
551	0	0	120	Fret Noise
552	0	0	121	Breath Noise
553	0	0	122	Seashore
554	0	0	123	Bird Tweet
555	0	0	124	Telephone Ring
556	0	0	125	Helicopter
557	0	0	126	Applause
558	0	0	127	Gunshot
559	64	0	0	Cutting Noise
560	64	0	1	Cutting Noise 2
561	64	0	3	String Slap
562	64	0	16	Flute Key Click
563	64	0	32	Shower
564	64	0	33	Thunder
565	64	0	34	Wind
566	64	0	35	Stream
567	64	0	36	Bubble
568	64	0	37	Feed
569	64	0	48	Dog
570	64	0	49	Horse
571	64	0	50	Bird Tweet 2
572	64	0	54	Ghost
573	64	0	55	Maou
574	64	0	64	Phone Call
575	64	0	65	Door Squeak
576	64	0	66	Door Slam
577	64	0	67	Scratch Cut
578	64	0	68	Scratch Split
579	64	0	69	Wind Chime
580	64	0	70	Telephone Ring 2
581	64	0	80	Car Engine Ignition
582	64	0	81	Car Tires Squeal
583	64	0	82	Car Passing
584	64	0	83	Car Crash
585	64	0	84	Siren
586	64	0	85	Train
587	64	0	86	Jet Plane
588	64	0	87	Starship
589	64	0	88	Burst
590	64	0	89	Roller Coaster
591	64	0	90	Submarine
592	64	0	96	Laugh
593	64	0	97	Scream
594	64	0	98	Punch
595	64	0	99	Heartbeat
596	64	0	100	Footsteps
597	64	0	112	Machine Gun
598	64	0	113	Laser Gun
599	64	0	114	Explosion
600	64	0	115	Firework

● DJ Voice List

Voice No.	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
DJ				
601	0	123	118	DJ Set 1
602	0	123	119	DJ Set 2
603	0	123	120	DJ Set 3
604	0	123	121	DJ Set 4
605	0	123	122	DJ Set 5

● DJ Voice List

Voice No.		601	602	603	604	605
MSB/LSB/PC		000/123/118	000/123/119	000/123/120	000/123/121	000/123/122
No.	Note	DJ Set 1	DJ Set 2	DJ Set 3	DJ Set 4	DJ Set 5
036	C 1	BD Analog H	Bass Drum Soft	BD Analog H	BD Analog H	BD Analog H
037	C♯ 1	Analog Side Stick	Side Stick	Analog Side Stick	Analog Side Stick	Analog Side Stick
038	D 1	Analog Snare 1	Snare M	Analog Snare 1	Analog Snare 1	Analog Snare 1
039	D♯ 1	Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap
040	E 1	Analog Snare 2	Snare H Hard	Analog Snare 2	Analog Snare 2	Analog Snare 2
041	F 1	Analog Tom 1	Floor Tom L	Analog Tom 1	Analog Tom 1	Analog Tom 1
042	F♯ 1	Analog HH Closed 1	Hi-Hat Closed	Analog HH Closed 1	Analog HH Closed 1	Analog HH Closed 1
043	G 1	Analog Tom 2	Floor Tom H	Analog Tom 2	Analog Tom 2	Analog Tom 2
044	G♯ 1	Analog HH Closed 2	Hi-Hat Pedal	Analog HH Closed 2	Analog HH Closed 2	Analog HH Closed 2
045	A 1	Analog Tom 3	Low Tom	Analog Tom 3	Analog Tom 3	Analog Tom 3
046	A♯ 1	Analog HH Open	Hi-Hat Open	Analog HH Open	Analog HH Open	Analog HH Open
047	B 1	Analog Tom 4	Mid Tom L	Analog Tom 4	Analog Tom 4	Analog Tom 4
048	C 2	Analog Tom 5	Mid Tom H	Analog Tom 5	Analog Tom 5	Analog Tom 5
049	C♯ 2	Analog Cymbal	Crash Cymbal 1	Analog Cymbal	Analog Cymbal	Analog Cymbal
050	D 2	Analog Tom 6	High Tom	Analog Tom 6	Analog Tom 6	Analog Tom 6
051	D♯ 2	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1
052	E 2	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal
053	F 2	Ride Cymbal Cup	Ride Cymbal Cup	Ride Cymbal Cup	Ride Cymbal Cup	Ride Cymbal Cup
054	F♯ 2	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
055	G 2	Ohh2	FX01	ORCH	signal	Go
056	G♯ 2					
057	A 2					
058	A♯ 2					
059	B 2					
060	C 3					
061	C♯ 3					
062	D 3					
063	D♯ 3					
064	E 3					
065	F 3					
066	F♯ 3					
067	G 3					
068	G♯ 3					
069	A 3					
070	A♯ 3					
071	B 3					
072	C 4	FX02	Onemoretime	Onemoretime	Uhh-Hit	Huea
073	C♯ 4					
074	D 4					
075	D♯ 4					
076	E 4					
077	F 4					
078	F♯ 4					
079	G 4					
080	G♯ 4					
081	A 4					
082	A♯ 4					
083	B 4					
084	C 5	Joo	Go	GetUp	Huihu	GetUp
085	C♯ 5	Reverse	Ohh2	signal	Joo	Reverse
086	D 5	Huihu	Heau	Joo	ComeOn	Joo
087	D♯ 5	FXTBrs	FX02	FXTBrs	Onemoretime	FX01
088	E 5	Huea	Huihu	Go	Go	Ohh1
089	F 5	GetUp	GetUp	Huihu	GetUp	Ohh2
090	F♯ 5	Ohh1	Reverse	FX01	Huea	Onemoretime
091	G 5	Go	signal	ComeOn	Ohh2	ComeOn
092	G♯ 5	Scratch 1	Scratch 1	Scratch 1	Scratch 1	Scratch 1
093	A 5	Scratch 2	Scratch 2	Scratch 2	Scratch 2	Scratch 2
094	A♯ 5	Scratch 3	Scratch 3	Scratch 3	Scratch 3	Scratch 3
095	B 5	Scratch 4	Scratch 4	Scratch 4	Scratch 4	Scratch 4
096	C 6	Scratch 5	Scratch 5	Scratch 5	Scratch 5	Scratch 5

Style List

Style No.	Style Name
8Beat	
001	8BeatModern
002	60'sGtrPop
003	8BeatAdria
004	60's8Beat
005	8Beat
006	OffBeat
007	60'sRock
008	HardRock
009	RockShuffle
010	8BeatRock
16Beat	
011	16Beat
012	PopShuffle1
013	PopShuffle2
014	GuitarPop
015	16BtUptempo
016	KoolShuffle
017	JazzRock
018	HipHopLight
Ballad	
019	PianoBallad
020	LoveSong
021	6/8ModernEP
022	6/8SlowRock
023	OrganBallad
024	PopBallad
025	16BeatBallad1
026	16BeatBallad2
Dance	
027	EuroTrance
028	Ibiza
029	HouseMusik
030	SwingHouse
031	TechnoPolis
032	Clubdance
033	ClubLatin
034	Garage1
035	Garage2
036	TechnoParty
037	UKPop
038	HipHopGroove
039	HipShuffle
040	HipHopPop
Disco	
041	70'sDisco1
042	70'sDisco2
043	LatinDisco
044	DiscoPhilly
045	SaturdayNight
046	DiscoChocolate
047	DiscoHands

Style No.	Style Name
Swing&Jazz	
048	BigBandFast
049	BigBandMid
050	BigBandBallad
051	BigBandShfl
052	JazzClub
053	Swing1
054	Swing2
055	Five/Four
056	JazzBallad
057	Dixieland
058	Ragtime
059	AfroCuban
060	Charleston
R&B	
061	Soul
062	DetroitPop1
063	60'sRock&Roll
064	6/8Soul
065	CrocoTwist
066	Rock&Roll
067	DetroitPop2
068	BoogieWoogie
069	ComboBoogie
070	6/8Blues
Country	
071	Country8Beat
072	CountryPop
073	CountrySwing
074	Country2/4
075	CowboyBoogie
076	CountryShuffle
077	Bluegrass
Latin	
078	BrazilianSamba
079	BossaNova
080	PopBossa
081	Tijuana
082	DiscoLatin
083	Mambo
084	Salsa
085	Beguine
086	GypsyRumba
087	RmbFlamenca
088	RumbaIsland
089	Reggae
Ballroom	
090	ViennneseWaltz
091	EnglishWaltz
092	Slowfox
093	Foxtrot
094	Quickstep

Style No.	Style Name
095	Tango
096	Pasodoble
097	Samba
098	ChaChaCha
099	Rumba
100	Jive
Traditional	
101	USMarch
102	6/8March
103	GermanMarch
104	PolkaPop
105	OberPolka
106	Tarantella
107	Showtune
108	ChristmasSwing
109	ChristmasWaltz
110	ScottishReel
111	Hawaiian
Waltz	
112	GuitarSerenade
113	SwingWaltz
114	JazzWaltz1
115	JazzWaltz2
116	CountryWaltz
117	OberWalzer
118	Musette
DJ	
119	DJ-HipHop
120	DJ-DanceSwing
121	DJ-House
122	DJ-GarageHouse
123	DJ-PopR&B
Pianist	
124	Stride
125	PianoSwing
126	PianoRag
127	Arpeggio
128	Musical
129	Habanera
130	SlowRock
131	8BeatPianoBallad
132	PianoMarch
133	6/8PianoMarch
134	PianoWaltz
135	PianoBeguine

Music Database List

M.D.B. No.	M.D.B. Name
	POP HITS
001	AlvFever
002	Croco Rk
003	DayPdise
004	EasySday
005	GoMyWay
006	HowDeep!
007	HurryLuv
008	I'm Torn
009	Imagine
010	ISurvive
011	JustCall
012	JustWay
013	NikitTrp
014	ProudGtr
015	SailngSx
016	Sept.Pop
017	SultanSw
018	SweetLrd
019	ThnkMsic
020	TitanicH
021	WatchGrl
022	WhatALoo
023	WhitePle
024	YestDGtr
	SWING & JAZZ
025	Alex Rag
026	Blue Set
027	DayOfW&R
028	HighMoon
029	MistySax
030	MoonLit
031	New York
032	PanthrSw
033	PatrolBr
034	PatrolSx
035	PetiteCl
036	RedRoses
037	SaintMch
038	SatinWd
039	SaxMood
040	SF Heart
041	ShearJz
042	Showbiz
043	SplnkyTb
044	SunnySde
045	TstHoney
046	TwoFoot5
047	WhatsNew
048	Wild Cat
049	WondrLnd
	EASY LISTENING
050	BlackFst
051	CaliBlue
052	CiaoCpri
053	Close2U
054	DAmorStr
055	DolanesM
056	ElCondor
057	Entrtain
058	Frippers
059	LuckySax
060	LuvStory
061	MyPrince
062	OSoleMio
063	PalomaGt
064	PuppetBr
065	Raindrop
066	RedMouln
067	R'ticGtr
068	Schiwago
069	ShadowGt
070	SingRain

M.D.B. No.	M.D.B. Name
071	SmallWld
072	SpkSoft
073	SpnishEy
074	StrangeN
075	TieRibbn
076	TimeGoes
077	WhteXmas
078	WishStar
079	WondrWld
	ROMANTIC BALLADS
080	AdelineB
081	ArgenCry
082	BeautBdy
083	Bl Bayou
084	CatMemry
085	CavaSolo
086	E Weiss
087	ElvGhett
088	Feeling
089	Fly Away
090	Fnl Date
091	GreenSlv
092	GtCncert
093	HrdToSay
094	LonlyPan
095	MBoxDnce
096	Mn Rivr
097	Norw.Flt
098	OnMyMnd
099	OverRbow
100	Red Lady
101	ReleseMe
102	SavingLv
103	Shore Cl
104	SierraMd
105	SilverMn
106	SmokyEye
107	SndOfSil
108	TblWater
109	WhisprSx
	ROCK & FUSION
110	DavAgain
111	JumpRock
112	OyComCha
113	PickUpPc
114	RdRiverR
115	SatsfyGt
116	Sheriff
117	SmokeWtr
118	TwistAgn
119	VenusPop
	RHYTHM & BLUES
120	AmazingG
121	BoogiePf
122	Clock Rk
123	CU later
124	HappyDay
125	JohnnyB
126	MercyBrs
127	RisingSn
128	S Preems
129	SuperStv
130	Yeh Orgn
	HIP HOP HOUSE
131	2 of US
132	B Leave
133	Back St
134	FunkyTwn
135	KillSoft
136	MiamiTrn
137	Nine PM
138	SharpRap
139	SingBack
140	StrandD

M.D.B. No.	M.D.B. Name
	LATIN NIGHTS
141	BambaBrs
142	BambaFlt
143	BeHappy!
144	CopaLola
145	DayNight
146	Ipanema
147	MarinaAc
148	MuchoTrb
149	SmoothLt
150	SunOfLif
151	Sunshine
152	Tico Org
153	TrbWave
	COUNTRY & WESTERN
154	BlownWnd
155	Bonanza
156	BoxerGtr
157	CntryRds
158	GreenGrs
159	Jambala
160	LondonSt
161	LooseEL
162	TopWorld
163	YlwRose
	DISCO & PARTY
164	AlhHwaii
165	Babylon
166	Barbados
167	BirdySyn
168	FestaMex
169	HandsPty
170	LuvTheme
171	ModrnTlk
172	NxtAlice
173	PalomaFl
174	PubPiano
175	Tijuana
176	Why MCA?
	BALLROOM
177	BrazilBr
178	CherryBr
179	CherryOr
180	DanubeWv
181	MantoStr
182	SandmnFx
183	SundyNvr
184	TangoPiz
185	Tea4Two
186	TulipWtz
187	YesSirQk
	TRADITIONAL
188	AlpenTri
189	Balalaik
190	Ceilidh
191	CielPari
192	Cl Polka
193	Comrades
194	Funiculi
195	HappyPlk
196	Herzlin
197	HornPipe
198	JinglBel
199	Kufstein
200	MexiHat
201	MickyFlt
202	NavyAway
203	RlBarrel
204	SnowWtz
205	StarMrch
206	WashPost
207	WdCuttrs
208	XmasWalz

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 keyboard Note # and Note. For example, in "109: 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.							109	110	111	112	113	114
MSB/LSB/PC							127/000/000	127/000/001	127/000/008	127/000/016	127/000/024	127/000/025
Keyboard		MIDI		Key Off	Alternate assign		Standard Kit 1	Standard Kit 2	Room Kit	Rock Kit	Electronic Kit	Analog Kit
Note#	Note	Note#	Note									
25	C# 0	13	C# -1		3		Surdo Mute					
26	D 0	14	D -1		3		Surdo Open					
27	D# 0	15	D# -1				Hi Q					
28	E 0	16	E -1				Whip Slap					
29	F 0	17	F -1		4		Scratch Push					
30	F# 0	18	F# -1		4		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					
37	C# 1	25	C# 0				Brush Tap					
38	D 1	26	D 0	O			Brush Swirl					
39	D# 1	27	D# 0				Brush Slap					
40	E 1	28	E 0	O			Brush Tap Swirl				Reverse Cymbal	Reverse Cymbal
41	F 1	29	F 0	O			Snare Roll					
42	F# 1	30	F# 0				Castanet				Hi Q 2	Hi Q 2
43	G 1	31	G 0				Snare H Soft	Snare H Soft 2		SD Rock H	Snare L	SD Rock H
44	G# 1	32	G# 0				Sticks					
45	A 1	33	A 0				Bass Drum Soft				Bass Drum H	Bass Drum H
46	A# 1	34	A# 0				Open Rim Shot	Open Rim Shot 2				
47	B 1	35	B 0				Bass Drum Hard			Bass Drum H	BD Rock	BD Analog L
48	C 2	36	C 1				Bass Drum	Bass Drum 2		BD Rock	BD Gate	BD Analog H
49	C# 2	37	C# 1				Side Stick					Analog Side Stick
50	D 2	38	D 1				Snare M	Snare M 2	SD Room L	SD Rock L	SD Rock L	Analog Snare 1
51	D# 2	39	D# 1				Hand Clap					
52	E 2	40	E 1				Snare H Hard	Snare H Hard 2	SD Room H	SD Rock Rim	SD Rock H	Analog Snare 2
53	F 2	41	F 1				Floor Tom L		Room Tom 1	Rock Tom 1	E Tom 1	Analog Tom 1
54	F# 2	42	F# 1		1		Hi-Hat Closed					Analog HH Closed 1
55	G 2	43	G 1				Floor Tom H		Room Tom 2	Rock Tom 2	E Tom 2	Analog Tom 2
56	G# 2	44	G# 1		1		Hi-Hat Pedal					Analog HH Closed 2
57	A 2	45	A 1				Low Tom		Room Tom 3	Rock Tom 3	E Tom 3	Analog Tom 3
58	A# 2	46	A# 1		1		Hi-Hat Open					Analog HH Open
59	B 2	47	B 1				Mid Tom L		Room Tom 4	Rock Tom 4	E Tom 4	Analog Tom 4
60	C 3	48	C 2				Mid Tom H		Room Tom 5	Rock Tom 5	E Tom 5	Analog Tom 5
61	C# 3	49	C# 2				Crash Cymbal 1					Analog Cymbal
62	D 3	50	D 2				High Tom		Room Tom 6	Rock Tom 6	E Tom 6	Analog Tom 6
63	D# 3	51	D# 2				Ride Cymbal 1					
64	E 3	52	E 2				Chinese Cymbal					
65	F 3	53	F 2				Ride Cymbal Cup					
66	F# 3	54	F# 2				Tambourine					
67	G 3	55	G 2				Splash Cymbal					
68	G# 3	56	G# 2				Cowbell					Analog Cowbell
69	A 3	57	A 2				Crash Cymbal 2					
70	A# 3	58	A# 2				Vibraslap					
71	B 3	59	B 2				Ride Cymbal 2					
72	C 4	60	C 3				Bongo H					
73	C# 4	61	C# 3				Bongo L					
74	D 4	62	D 3				Conga H Mute					Analog Conga H
75	D# 4	63	D# 3				Conga H Open					Analog Conga M
76	E 4	64	E 3				Conga L					Analog Conga L
77	F 4	65	F 3				Timbale H					
78	F# 4	66	F# 3				Timbale L					
79	G 4	67	G 3				Agogo H					
80	G# 4	68	G# 3				Agogo L					
81	A 4	69	A 3				Cabasa					
82	A# 4	70	A# 3				Maracas					Analog Maracas
83	B 4	71	B 3	O			Samba Whistle H					
84	C 5	72	C 4	O			Samba Whistle L					
85	C# 5	73	C# 4				Guiro Short					
86	D 5	74	D 4	O			Guiro Long					
87	D# 5	75	D# 4				Claves					Analog Claves
88	E 5	76	E 4				Wood Block H					
89	F 5	77	F 4				Wood Block L					
90	F# 5	78	F# 4				Cuica Mute				Scratch Push	Scratch Push
91	G 5	79	G 4				Cuica Open				Scratch Pull	Scratch Pull
92	G# 5	80	G# 4		2		Triangle Mute					
93	A 5	81	A 4		2		Triangle Open					
94	A# 5	82	A# 4				Shaker					
95	B 5	83	B 4				Jingle Bell					
96	C 6	84	C 5				Bell Tree					
97	C# 6	85	C# 5									
98	D 6	86	D 5									
99	D# 6	87	D# 5									
100	E 6	88	E 5									
101	F 6	89	F 5									
102	F# 6	90	F# 5									
103	G 6	91	G 5									

C1 C#1 D1 D#1 E1 F1 F#1 G1 G#1 A1 A#1 B1 C2 C#2 D2 D#2 E2 F2 F#2 G2 G#2 A2 A#2 B2 C3 C#3 D3 D#3 E3 F3 F#3 G3 G#3 A3 A#3 B3 C4 C#4 D4 D#4 E4 F4 F#4 G4 G#4 A4 A#4 B4 C5 C#5 D5 D#5 E5 F5 F#5 G5 G#5 A5 A#5 B5 C6

Voice No.							109	115	116	117	118	119	120
MSB/LSB/PC							127/000/000	127/000/027	127/000/032	127/000/040	127/000/048	126/000/000	126/000/001
Keyboard		MIDI		Key Off	Alternate assign		Standard Kit 1	Dance Kit	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit 1	SFX Kit 2
Note#	Note	Note#	Note										
25	C# 0	13	C# -1		3		Surdo Mute						
26	D 0	14	D -1		3		Surdo Open						
27	D# 0	15	D# -1				Hi Q						
28	E 0	16	E -1				Whip Slap						
29	F 0	17	F -1		4		Scratch Push						
30	F# 0	18	F# -1		4		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						
37	C# 1	25	C# 0				Brush Tap						
38	D 1	26	D 0	O			Brush Swirl						
39	D# 1	27	D# 0				Brush Slap						
40	E 1	28	E 0	O			Brush Tap Swirl	Reverse Cymbal					
41	F 1	29	F 0	O			Snare Roll						
42	F# 1	30	F# 0				Castanet	Hi Q 2					
43	G 1	31	G 0				Snare H Soft	AnSD Snappy	SD Jazz H Light	Brush Slap L			
44	G# 1	32	G# 0				Sticks						
45	A 1	33	A 0				Bass Drum Soft	AnBD Dance-1			Bass Drum L		
46	A# 1	34	A# 0				Open Rim Shot	AnSD OpenRim					
47	B 1	35	B 0				Bass Drum Hard	AnBD Dance-2			Gran Cassa		
48	C 2	36	C 1				Bass Drum	AnBD Dance-3	BD Jazz	BD Jazz	Gran Cassa Mute	Cutting Noise	Phone Call
49	C# 2	37	C# 1				Side Stick	Analog Side Stick				Cutting Noise 2	Door Squeak
50	D 2	38	D 1				Snare M	AnSD Q	SD Jazz L	Brush Slap	Marching Sn M		Door Slam
51	D# 2	39	D# 1				Hand Clap					String Slap	Scratch Cut
52	E 2	40	E 1				Snare H Hard	AnSD Ana+Acoustic	SD Jazz M	Brush Tap	Marching Sn H		Scratch
53	F 2	41	F 1				Floor Tom L	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1		Wind Chime
54	F# 2	42	F# 1		1		Hi-Hat Closed	Analog HH Closed 3					Telephone Ring 2
55	G 2	43	G 1				Floor Tom H	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2		
56	G# 2	44	G# 1		1		Hi-Hat Pedal	Analog HH Closed 4					
57	A 2	45	A 1				Low Tom	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3		
58	A# 2	46	A# 1		1		Hi-Hat Open	Analog HH Open 2					
59	B 2	47	B 1				Mid Tom L	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4		
60	C 3	48	C 2				Mid Tom H	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5		
61	C# 3	49	C# 2				Crash Cymbal 1	Analog Cymbal			Hand Cym. L		
62	D 3	50	D 2				High Tom	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6		
63	D# 3	51	D# 2				Ride Cymbal 1				Hand Cym.Short L		
64	E 3	52	E 2				Chinese Cymbal					Flute Key Click	Car Engine Ignition
65	F 3	53	F 2				Ride Cymbal Cup						Car Tires Squeal
66	F# 3	54	F# 2				Tambourine						Car Passing
67	G 3	55	G 2				Splash Cymbal						Car Crash
68	G# 3	56	G# 2				Cowbell	Analog Cowbell					Siren
69	A 3	57	A 2				Crash Cymbal 2				Hand Cym. H		Train
70	A# 3	58	A# 2				Vibraslap						Jet Plane
71	B 3	59	B 2				Ride Cymbal 2				Hand Cym.Short H		Starship
72	C 4	60	C 3				Bongo H						Burst
73	C# 4	61	C# 3				Bongo L						Roller Coaster
74	D 4	62	D 3				Conga H Mute	Analog Conga H					Submarine
75	D# 4	63	D# 3				Conga H Open	Analog Conga M					
76	E 4	64	E 3				Conga L	Analog Conga L					
77	F 4	65	F 3				Timbale H						
78	F# 4	66	F# 3				Timbale L						
79	G 4	67	G 3				Agogo H						
80	G# 4	68	G# 3				Agogo L					Shower	Laugh
81	A 4	69	A 3				Cabasa					Thunder	Scream
82	A# 4	70	A# 3				Maracas	Analog Maracas				Wind	Punch
83	B 4	71	B 3	O			Samba Whistle H					Stream	Heartbeat
84	C 5	72	C 4	O			Samba Whistle L					Bubble	FootSteps
85	C# 5	73	C# 4				Guiro Short					Feed	
86	D 5	74	D 4	O			Guiro Long						
87	D# 5	75	D# 4				Claves	Analog Claves					
88	E 5	76	E 4				Wood Block H						
89	F 5	77	F 4				Wood Block L						
90	F# 5	78	F# 4				Cuica Mute	Scratch Push					
91	G 5	79	G 4				Cuica Open	Scratch Pull					
92	G# 5	80	G# 4		2		Triangle Mute						
93	A 5	81	A 4		2		Triangle Open						
94	A# 5	82	A# 4				Shaker						
95	B 5	83	B 4				Jingle Bell						
96	C 6	84	C 5				Bell Tree					Dog	Machine Gun
97	C# 6	85	C# 5									Horse	Laser Gun
98	D 6	86	D 5									Bird Tweet 2	Explosion
99	D# 6	87	D# 5										Firework
100	E 6	88	E 5										
101	F 6	89	F 5										
102	F# 6	90	F# 5									Ghost	
103	G 6	91	G 5									Maou	

C1 C#1 D1 D#1 E1 F1 F#1 G1 G#1 A1 A#1 B1 C2 C#2 D2 D#2 E2 F2 F#2 G2 G#2 A2 A#2 B2 C3 C#3 D3 D#3 E3 F3 F#3 G3 G#3 A3 A#3 B3 C4 C#4 D4 D#4 E4 F4 F#4 G4 G#4 A4 A#4 B4 C5 C#5 D5 D#5 E5 F5 F#5 G5 G#5 A5 A#5 B5 C6

MIDI Implementation Chart

YAMAHA [Portable Keyboard] Date:25-Jan-2002
Model PSR-290 MIDI Implementation Chart Version : 1.0

Function...		Transmitted	Recognized	Remarks
Basic	Default	1 - 16	1 - 16 *1	
Channel	Changed	x	x	
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	o	Bank Select
	1	x *2	o	Modulation wheel
	6	x	o	Data Entry(MSB)
	38	x	o	Data Entry(LSB)
	7	o	o	Part Volume
	10	o	o	Pan
	11	x *2	o	Expression
	64	o	o	Sustain
	71	x *2	o	Harmonic Content
	72	x *2	o	Release Time
	73	x *2	o	Attack Time
	74	x *2	o	Brightness
	84	x *2	o	Portamento Cntrl
	91,93,94	o	o	Effect Depth
	96,97	x	o	RPN Inc,Dec
	100,101	x *2	o	RPN LSB,MSB
Prog Change	: True #	o 0 - 127 **********	o 0 - 127	
System Exclusive		o *3	o *3	
Common	: 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	o	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-290 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-290 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, ll, 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 "ll" are ignored.)*

<MIDI Master Tuning> F0H, 43H, 1nH, 27H, 30H, 00H, 00H, mm, ll, cc, F7H
- *This message simultaneously changes the tuning value of all channels.*
- *The values of "mm" and "ll" are used for MIDI Master Tuning.*
- *The default value of "mm" and "ll" are 08H and 00H, respectively. Any values can be used for "n" and "cc."*

<Reverb Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 00H, mmH, llH, F7H
- *mm : Reverb Type MSB*
- *ll : Reverb Type LSB*

Refer to the Effect Map (page 92) for details.

<Chorus Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 20H, mmH, llH, F7H
- *mm : Chorus Type MSB*
- *ll : Chorus Type LSB*

Refer to the Effect Map (page 92) for details.

<DSP Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 40H, mmH, llH, F7H
- *mm : DSP Type MSB*
- *ll : DSP Type LSB*

Refer to the Effect Map (page 92) for details.

<DRY Level> F0H, 43H, 1nH, 4CH, 08H, 0mH, 11H, llH, F7H
- *ll : Dry Level*
- *0m : Channel Number*

<XG Parametter Change> F0H, 43H, 1nH, 4CH, hh, mm, ll, dd, F7H
- *hh mm ll : address*
- *dd : data*

<XG Bulk Dump> F0H, 43H, 0nH, 4CH, aa, bb, hh, mm, ll, dd, cc, F7H
- *0n : Device Number n=0 (send), 0 - f (receive)*
- *aa bb : Byte Count (aa << 7) + bb*
- *hh mm ll : address*
- *dd : data*

<Sequence Recording Bulk Dump>
F0H, 43H, 73H, 7FH, mID, 06H, 0AH, aa, bb, cc, dd, hh, mm, ll, bulk data, sum, F7H
- *mID : model ID PSR-290=2BH*
- *06H : Bulk ID*
- *0AH : Bulk No.*
- *aa : Byte Count MSB*
- *bb : Byte Count LSB*
- *cc : amount of valid MSB data*
- *dd : amount of valid LSB data*
- *hh mm ll : address*
- *bulk data : Sequence data (1byte, 2byte...7byte, MSB data)*
- *sum : Check Sum = 0-sum (bulk data)*

<One Touch Setting Bulk Dump>
F0H, 43H, 73H, 7FH, mID, 06H, 09H, aa, bb, cc, dd, hh, mm, ll, bulk data, sum, F7H
- *mID : model ID PSR-290=2BH*
- *06H : Bulk ID*
- *09H : Bulk No.*
- *aa : Byte Count MSB*
- *bb : Byte Count LSB*
- *cc : amount of valid MSB data*
- *dd : amount of valid LSB data*
- *hh mm ll : address*
- *bulk data : Sequence data (low 4bit, high 4 bit...low 4bit, high 4 bit)*
- *sum : Check Sum = 0-sum (bulk data)*

**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.

■ 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-290 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.

Display
- Large multi-function LCD display (backlit)

Setup
- STANDBY/ON
- MASTER VOLUME : MIN - MAX

Panel Controls
- SONG, VOICE, STYLE, M.D.B., DICTIONARY, DJ, PC, LESSON L, R, METRONOME, PORTABLE GRAND, DEMO, FUNCTION(TRANSPOSE), TOUCH, HARMONY, DUAL, SPLIT, TEMPO/TAP, ONE TOUCH SETTING, [0]-[9], [+](YES), [-](NO), CATEGORY, SELECT, Dial

Voice
- 108 panel voices + 12 drum kits + 480 XG voices + 5 DJ voices
- Polyphony : 32
- DUAL
- SPLIT

Style
- 135 styles
- Style Control : ACMP ON/OFF, SYNC STOP, SYNC START, START/STOP, INTRO ENDING, MAIN/AUTO FILL
- Fingering : Multi fingering
- Style Volume

Music Database
- 208

Yamaha Educational Suite
- Dictionary
- Lesson 1-4

One Touch Setting
- Preset A and B (for each style)
- Memory

Function
- Transpose, Tuning, Split Point, Touch Sensitivity, Main Voice – Volume; Octave; Pan; Reverb Send Level; Chorus Send Level; DSP Send Level, Dual Voice – Voice; Volume; Octave; Pan; Reverb Send Level; Chorus Send Level; DSP Send Level, Split Voice – Voice; Volume; Octave; Pan; Reverb Send Level; Chorus Send Level; DSP Send Level, Reverb Type, Chorus Type, DSP Type, Harmony Type, Harmony Volume, Local On/Off, External Clock, Bulk Data Send, Initial Setup Send, Keyboard Out, Style Out, Song Out, Style Volume, Song Volume, Metronome Volume, Time Signature, Lesson Track (R), Lesson Track (L), Grade On/Off, Demo and DJ Cancel

Effects
- Reverb : 8 types
- Chorus : 4 types
- DSP : 38 types
- Harmony : 26 types

Song
- 100 Songs + 5 User Songs + Flash Memory
- Song Clear, Track Clear
- Song Volume

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

MIDI
- Local On/Off
- Initial Setup Send
- External Clock
- Bulk Data Send
- Keyboard Out
- Style Out
- Song Out

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 (when using PA-3C power adaptor)
- UL/CSA :14W
- CE :15W

Power Supply
- Adaptor : Yamaha PA-3C AC power adaptor
- Batteries : Six “D” size, R20P (LR20) or equivalent batteries

Dimensions (W x D x H)
- 952 x 389 x 140 mm (37-1/2" x 15-1/3" x 5-1/2")

Weight
- 6.8 kg (15 lbs.)

Supplied Accessories
- Music Stand
- Owner’s Manual
- Song Book

Optional Accessories
- Headphones : HPE-150
- AC power adaptor : PA-3B/3C
- Footswitch : FC4, FC5
- Keyboard stand : L-2C

* 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.

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Panel controls and terminals

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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.

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