

PORTFIONE

EZ-150



Owner's Manual













SPECIAL MESSAGE SECTION

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

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

SPECIFICATIONS SUBJECT TO CHANGE:

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

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

NOTICE:

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

ENVIRONMENTAL ISSUES:

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

Battery Notice:

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

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

When installing batteries, do not mix batteries with new, or with batteries of a different type. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

Warning:

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

Disposal Notice:

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

NAME PLATE LOCATION:

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

Model

Serial No.

Purchase Date

PLEASE KEEP THIS MANUAL

92-BP (bottom)

FCC INFORMATION (U.S.A.) 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT! with FCC regulations does not get a second of the second

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

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

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

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

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

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

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

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

(class B)

OBSERVERA!

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

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

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

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)

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

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.

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 LED display as shown in this owner's manual are for instructional purposes only, and may be different from the ones on your instrument.

Trademarks

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- 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 EZ-150 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 EZ-150 in order to take full advantage of its various features.

Main Features

The EZ-150 is a sophisticated yet easy-to-use keyboard with the following features and functions:



■ Yamaha Education Suite

The EZ-150 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!

The Yamaha Education Suite includes:

● Lessonpage 36

The convenient and easy-to-use Lesson feature, guides you through the parts of a song — just like a patient teacher! Select from any one of 100 songs on the EZ-150, and learn the left- and right-hand parts independently at first, then together. Lesson features four easy steps that help you master each song: Timing, Waiting, Minus One, and Both Hands.

• Grade & Talkingpages 41, 42

The EZ-150 also has the Grade and Talking features. Grade is a virtual "teacher," evaluating your practice sessions and rating your performance. The convenient Talking function "announces" each Lesson step and your "grades," among other things.

● Lightingpage 42

When you are using the Lesson feature or the Dictionary, the key indicators tell you which keys to play. Also, during song playback, they show the keys that are playing.

◆ Dictionary page 43

Dictionary is a built-in "chord encyclopedia" that teaches you how to play specific chords by showing lighting keyboards — perfect for when you know the name of a chord and want to quickly learn how to play it!



■ Portable Grandpage 22

The EZ-150 also has a **Portable Grand** function for realistic piano performance. Pressing the [PORTA-BLE GRAND] button instantly calls up the stunningly authentic "Stereo Sampled Piano" voice and configures the entire EZ-150 for optimum piano play. Special Pianist styles — with piano-only accompaniment — are also provided.



■ DJ page 24

The DJ feature is an exciting new addition to the EZ-150, that puts a wealth of contemporary sounds and rhythms at your fingertips. Pressing the [DJ] button instantly calls up one of the special DJ songs ("DJ GAME") and a DJ style, and provides the appropriate voice and sound effects to match.

Other powerful features include:

- Exceptionally realistic and dynamic sounds with 100 voices, utilizing digital recordings of actual instruments.
- 100 dynamic auto accompaniment Styles, each with different Intro, Main A and B, and Ending sections. All styles (except for the Piano styles) also have their own two Fill-in patterns.
- 100 songs, for your listening enjoyment or for use with the sophisticated learning tools of the Yamaha Education Suite.
- Convenient control over accompaniment Styles including Tempo, Tap Tempo and independent Accompaniment Volume.
- Four Multi Pads, for instantly adding special instrumental breaks, fills, and phrases to your performance.
- One Touch Setting (OTS), for automatically calling up an appropriate voice for playing with the selected Style and Song.
- MIDI terminals for interfacing with other MIDI devices.
- $\bullet \quad Built-in, high-quality\ stereo\ amplifier/speaker\ system.$

COPYRIGHT NOTICE

① Six of the demo-songs (or compositions) included in this keyboard are as follows:

A Hard Day's Night

- Words and Music by John Lennon and Paul McCartney
- Copyright © 1964 Sony/ATV Songs LLC
- Copyright Renewed
- All Rights Administered by Sony/ATV Music Publishing, 8 Music Square West, Nashville, TN37203
- International Copyright Secured All Rights Reserved

Can't Help Falling In Love

- Words and Music by George David Weiss, Hugo Peretti and Luigi Creatore
- Copyright © 1961 by Gladys Music, Inc.
- Copyright Renewed and Assigned to Gladys Music
- All Rights Administered by Cherry Lane Music Publishing Company, Inc. and Chrysalis Music
- International Copyright Secured All Rights Reserved

Stella By Starlight

- from the Paramount Picture THE UNINVITED
- Words by Ned Washington
- Music by Victor Young
- Copyright© 1946 (Renewed 1973, 1974) by Famous Music Corporation
- International Copyright Secured All Rights Reserved

Hey Jude

- Words and Music by John Lennon and Paul McCartney
- Copyright © 1968 Sony/ATV Songs LLC
- Copyright Renewed
- All Rights Administered by Sony/ATV Music Publishing, 8 Music Square West, Nashville, TN37203
- International Copyright Secured All Rights Reserved

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- Lyrics by Oscar Hammerstein II
- Music by Richard Rodgers
- Copyright © 1959 by Richard Rodgers and Oscar Hammerstein II
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Linus And Lucy

- By Vince Guaraldi
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② Four of the demo-songs (or compositions) included in this keyboard are as follows:

Composition Title : An Englishman In New York

Composer's Name : Sumner 0590545 Copyright Owner's Name : G M SUMNER LTD

Composition Title : Against All Odds Composer's Name : Collins 0007403

Copyright Owner's Name: EMI MUSIC PUBLISHING LTD / HIT

& RUN MUSIC LTD

Composition Title : Just The Way You Are Composer's Name : Joel 0273671

Copyright Owner's Name: EMI MUSIC PUBLISHING LTD

Composition Title : Look Of Love

Composer's Name : Bacharach/David 0093316 Copyright Owner's Name : Screen Gems - EMI Music Ltd

CAUTION: All Rights Reserved, Unauthorized copying, public performance and broadcasting are strictly prohibited regarding the above ten demo-songs.

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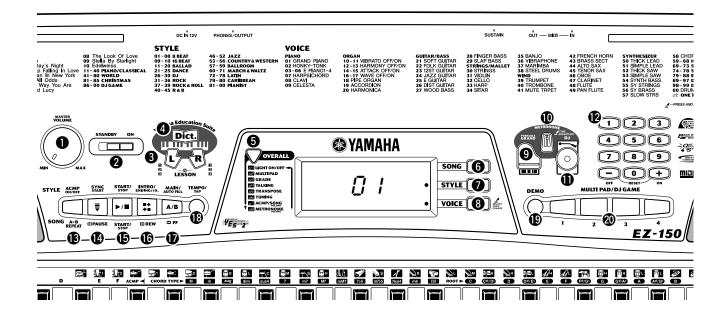
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B

Panel Controls and Terminals

■ Front Panel



1 [MASTER VOLUME] dial

This determines the overall volume of the EZ-150.

Power switch ([STANDBY/ON])

3 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 37.)

4 [Dict.] (DICTIONARY) button

This calls up the Dictionary function (See page 43).

6 [OVERALL] button

This is for selecting the various "overall" functions. (See page 20.)

6 [SONG] button

This is for enabling song selection. (See page 31.)

[STYLE] button

This is for enabling style selection. (See page 44.)

[VOICE] button

This is for enabling voice selection. (See page 25.) Holding down this button calls up the Melody Voice Change function. (See page 32.)

9 [PORTABLE GRAND] button

This instantly calls up the Grand Piano voice, plus a special piano song and style. (See page 22.)

(I) [METRONOME] button

This turns the metronome on and off. (See page 22.)

(DJ) button

This instantly calls up a special DJ voice, song and style. (See page 24.)

Numeric keypad, [+/ON] and [-/OFF] buttons

These are used for selecting songs, voices, and styles. (See page 26.) They are also used for entering values and adjusting or making certain settings.

([A-B REPEAT]) button

When the Style mode is selected, this turns the auto accompaniment on and off. (See page 45.) When the Song mode is selected, this controls the A-B Repeat function. (See page 35.)

[SYNC START] ([PAUSE]) button

When the Style mode is selected, this turns the Sync Start function on and off. (See page 46.) When the Song mode is selected, this alternately pauses and starts song playback. (See page 34.)

(START/STOP button

When the Style mode is selected, this alternately starts and stops the style. (See page 45.) When the Song mode is selected, this alternately starts and stops song playback. (See page 34.)

⑥ [INTRO/ENDING/rit.] ([☑REW]) button

When the Style mode is selected, this is used to control the Intro and Ending functions. (See page 47.) When the Song mode is selected, this is used to rewind during song playback. When song playback is stopped, it is used to reverse to specific measure numbers in the song. (See page 34.)

(MAIN/AUTO FILL) (DFF)) button

When the Style mode is selected, this is used to change auto accompaniment sections and control the Auto Fill function. (See page 48.) When the Song mode is selected, this is used to fast forward during song playback. When song playback is stopped, it is used to advance to specific measure numbers in the song. (See page 34.)

(B) [TEMPO/TAP] button

This button allows you to tap out the tempo and automatically start a selected song or style at that tapped speed. (See page 46.) It also is used to call up the Tempo setting, letting you set the Tempo with the numeric keypad or [+]/[-] buttons. (See page 33.)

(P [DEMO] button

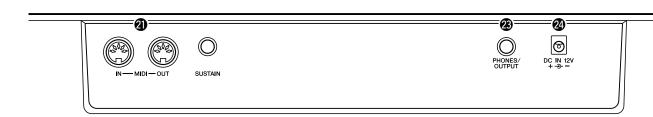
This is used to play the Demo songs. (See page 14.)

(MULTI PAD/DJ GAME) buttons

These are used to automatically play pre-programmed musical phrases. (See page 53.)

These are also used to play the DJ GAME. (See page 24.)

■ Rear Panel



MIDI IN, OUT terminals

These are for connection to other MIDI instruments and devices. (See pages 11, 54.)

2 SUSTAIN jack

This is for connection to an optional FC4 or FC5 Footswitch. (See page 11.)

PHONES/OUTPUT jack

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

2 DC IN 12V jack

This is for connection to a PA-3C or PA-3B AC power adaptor. (See page 10.)

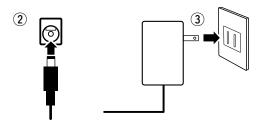
Setting Up

This section contains information about setting up your EZ-150 for playing. Make sure to read this section carefully before using the instrument.

Power Requirements

Although the EZ-150 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.

- ① Make sure that the [STANDBY/ON] switch of the EZ-150 is set to STANDBY.
- 2 Connect the AC adaptor (PA-3C, PA-3B, or other adaptor specifically recommended by Yamaha) to the DC IN 12V jack.
- 3 Plug the AC adaptor into an AC outlet.



⚠ WARNING

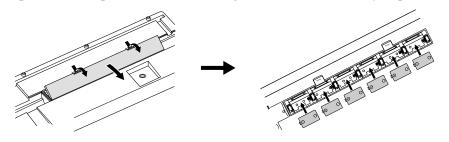
- Use ONLY a Yamaha PA-3C or PA-3B AC Power Adaptor (or other adaptor specifically recommended by Yamaha) to power your instrument from the AC mains. The use of other adaptors may result in irreparable damage to both the adaptor and the EZ-150.
- Unplug the AC Power Adaptor when not using the EZ-150, or during electrical storms.

■ Using Batteries

Inserting Batteries

For battery operation the EZ-150 requires six 1.5V "D" size, R20P (LR20) or equivalent batteries. 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 in the compartment cover.
- (3) Replace the compartment cover, making sure that it locks firmly in place.

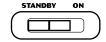


ACAUTION

- 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.
- The effective life of rechargeable batteries may shorter than that of conventional batteries.

Turning On the Power

With the AC power adaptor connected or with batteries installed, simply move the STANDBY switch until it is set to the ON position. When the instrument is not in use, be sure to turn the power off.



riangle 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 EZ-150 for a long time, make sure you unplug the AC power adaptor from the wall AC outlet, and/or remove the batteries from the instrument.

Accessory Jacks

■ Using Headphones • • • •

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

■ Connecting a Keyboard Amplifier or Stereo System ••••••

Though the EZ-150 is equipped with a built-in speaker system, you can also play it through an external amplifier/speaker system. First, make sure the EZ-150 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 EZ-150.

■ Using a Sustain Footswitch •••••••••

This feature lets you use an optional footswitch (Yamaha FC4 or FC5) to sustain the sound of the keyboard voice. This is used in 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.



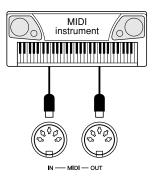
The EZ-150 also features MIDI terminals, allowing you to interface the EZ-150 with other MIDI instruments and devices. (For more information, see page 54.)

A 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.

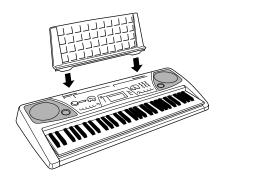


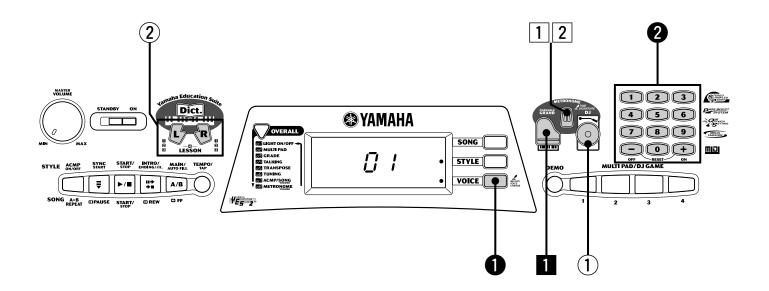
- Make sure that the footswitch plug is properly connected to the SUSTAIN jack before turning on the power.
- Do not press the footswitch while turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.



Music Rest

Insert the bottom edge of the included music rest into the slot located at the top rear of the EZ-150 control panel.





Playing the Piano

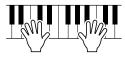
Simply by pressing the [PORTABLE GRAND] button, you can automatically reset the entire EZ-150 for piano play.

1 Press the [PORTABLE GRAND] button.



[] / . voice

2 Play the keyboard.



Want to find out more? See page 22.

Playing along with the Metronome

1 Press the [METRONOME] button.



2 Stop the Metronome.



Want to find out more? See page 22.

Panel Voice List

No.	Voice Name		
	PIANO		
01	GRAND PIANO		
02	HONKY-TONK PIANO		
03	ELECTRIC PIANO 1		
04	ELECTRIC PIANO 2		
05	ELECTRIC PIANO 3		
06	ELECTRIC PIANO 4		
07	HARPSICHORD		
08	CLAVI		
09	CELESTA		
ORGAN			
10	VIBRATO OFF		
11	VIBRATO ON		
12	HARMONY OFF		

No.	Voice Name	
13	HARMONY ON	
14	ATTACK OFF	
15	ATTACK ON	
16	WAVE OFF	
17	WAVE ON	
18	PIPE OGAN	
19	ACCORDION	
20	HARMONICA	
GUITAR/BASS		
21	SOFT GUITAR	
22	FOLK GUITAR	
23	12STRINGS	
23	GUITAR	
24	JAZZ GUITAR	
25	ELECTRIC GUITAR	

No.	Voice Name
26	DISTORTION
20	GUITAR
27	WOOD BASS
28	FINGER BASS
29	SLAP BASS
S	TRINGS/MALLET
30	STRINGS
31	VIOLIN
32	CELLO
33	HARP
34	SITAR
35	BANJO
36	VIBRAPHONE
37	MARIMBA
38	STEEL DRUMS

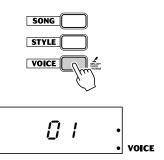
No.	Voice Name		
	WIND		
39	TRUMPET		
40	TROMBONE		
41	MUTE TRUMPET		
42	FRENCH HORN		
43	BRASS SECTION		
44	ALTO SAX		
45	TENOR SAX		
46	OBOE		
47	CLARINET		
48	FLUTE		
49	PAN FLUTE		
SYNTHESIZER			
50	THICK LEAD		
51	SIMPLE LEAD		

No.	Voice Name
52	THICK SAWTOOTH
	SIMPLE
53	SAWTOOTH
54	SYNTH BASS
55	SYNTH STRINGS
56	SYNTH BRASS
57	SLOW STRINGS
58	CHORUS
	HARMONY
59	PIANO TRIO
60	PIANO COUNTRY
61	ELECTRIC PIANO
01	TRIO
62	HARPSICHORD
	TRIO

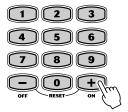
Selecting and Playing Other Voices

The EZ-150 has a total of 100 dynamic and realistic instrument voices. Let's try a few of them out now...

1 Press the [VOICE] button.

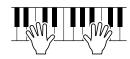


2 Select a voice.



[] [] · voice

3 Play the keyboard.



Want to find out more? See page 25.

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.



98

VOICE

2 Press the Lesson [L] or [R] button.



3 Play the DJ GAME voice.



Want to find out more? See page 24.

65 TRUMPET DUET 66 HORN DUET 67 CLARINET TRIO 68 FLUTE DUET SPLIT 69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO				
65 TRUMPET DUET 66 HORN DUET 67 CLARINET TRIO 68 FLUTE DUET SPLIT 69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO	63			
66 HORN DUET 67 CLARINET TRIO 68 FLUTE DUET SPLIT 69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO	64	VIBRAPHONE DUET		
67 CLARINET TRIO 68 FLUTE DUET	65	TRUMPET DUET		
68 FLUTE DUET SPLIT 69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO	66	HORN DUET		
SPLIT 69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO	67	CLARINET TRIO		
69 WOOD BASS / PIANO 70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO	68	FLUTE DUET		
70 STRINGS / PIANO 71 FINGER BASS / ELECTRIC PIANO		SPLIT		
71 FINGER BASS / ELECTRIC PIANO	69			
71 ELECTRIC PIANO	70	STRINGS / PIANO		
72 HARP / VIOLIN	71			
72 13 11 7 1102111	72	HARP / VIOLIN		

Voice Name

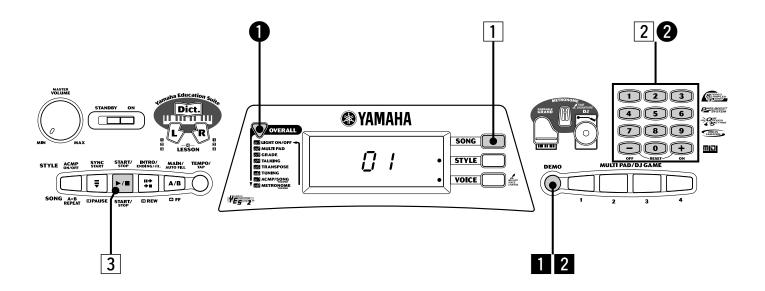
No.

Voice Name		
FRENCH HORN /		
TRUMPET		
SUSTAIN		
SUSTAIN PIANO		
SUSTAINELECTRIC		
PIANO 1		
SUSTAINELECTRIC		
PIANO 2		
SUS VIBRAPHONE		
SUSTAIN STRINGS		
ECHO		
ECHO PIANO		
ECHO ELECTRIC		
PIANO		

No.	Voice Name		
81	ECHO		
01	HARPSICHORD		
82	ECHO CELESTA		
83	ECHO FOLK		
63	GUITAR		
84	ECHO BANJO		
85	ECHO VIBRA-		
65	PHONE		
86	ECHO MARIMBA		
87	ECHO STEEL		
07	DRUMS		
88	ECHO DRUM KIT		
	DUAL		
89	PIANO CONCERTO		

No.	Voice Name		
90	ELECTRIC PIANO		
90	CONCERTO		
91	FAIRY LAND		
92	MOOD GUITAR		
93	RICH GUITAR		
94	HOT ORGAN		
95	EXCEL VIOLIN		
96	CRYSTAL		
97	STAR SHIP		
DJ Voice			
98	DJ VOICE 1		
99	DJ VOICE 2		
DRUMS			
00	DRUM KIT		





Playing the Songs

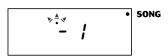
The EZ-150 is packed with 100 songs, including 10 special Demo songs.

Playing the Demo songs

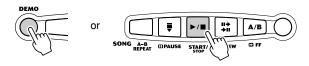
Demo songs (01 - 10) showcase the sophisticated features and stunning sound of the EZ-150. Let's play the Demo songs now, starting with 01...

Press the [DEMO] button.





2 Stop the Demo song.



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

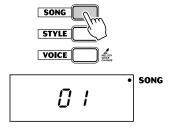


Demo Cancel function that allows you to disable the Demo feature. To
use this, simultaneously hold down the [DEMO] button and turn the
power on ([STANDBY/ON] button). While the power is on in this condition, pressing the [DEMO] button has no effect. To turn Demo Cancel
off, simply turn the power off and back on again normally.

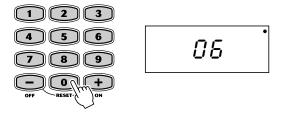
Playing a single song

Naturally, you can also individually select and play back any of the EZ-150 songs (00 - 99).

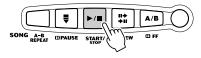
1 Press the [SONG] button.



2 Select a song.



3 Start (and stop) the song.



Want to find out more? See page 31.

Changing the volume of the song

This lets you adjust the volume balance between the song and your keyboard performance.

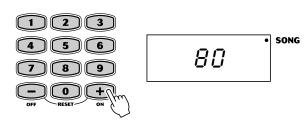
• Press the [OVERALL] button, until "o ?" is indicated in the display.





② Use the [+]/[-] buttons to adjust the song volume.

You can also use the numeric keypad to directly enter the value.



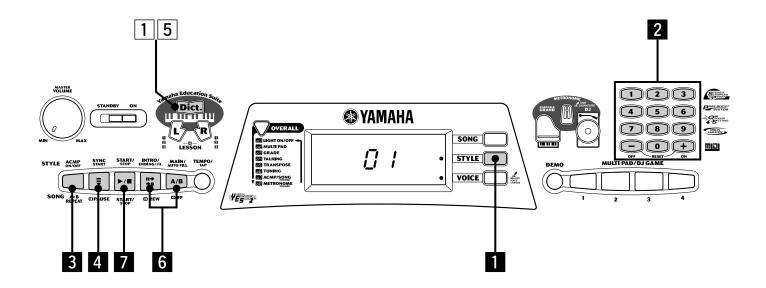
Want to find out more? See page 34.

Song List

• Song List			
No.	Song Name (Composer)	No.	Song Name (Composer)
	FAVORITES	49	Aura Lee (G. Poulton)
1	Hey Jude	50	My Old Kentucky Home
2	A Hard Day's Night	51	(S.C. Foster) Aloha Oe*
3	Can't Help Falling In Love	52	Die Lorelei (F. Silcher)
4	Englishman In New York	53	Londonderry Air*
5	Against All Odds	54	Auld Lang Syne*
6 7	Just The Way You Are Linus And Lucy		Carry Me Back To Old
8	The Look Of Love	55	Virginny*
9	Stella By Starlight	50	The Yellow Rose Of Texas
10	Edelweiss	56	(C.H. Brown)
10	PIANO/CLASSICAL	57	Long, Long Ago
11	Für Elise (L.v. Beethoven)		(T.H. Bayly)
12	Menuett (J.S. Bach)	58	London Bridge*
	Turkish March	59	Old Folks At Home
13	(W.A. Mozart)	60	(S.C. Foster) O Du Lieber Augustin*
14	Marcia Alla Turca	61	My Darling Clementine*
14	(L.v. Beethoven)	62	Hamabe No Uta (T. Narita)
15	Valse op.64-1 "Petit chien"	63	Furusato (T. Okano)
	(F. Chopin)	64	Oh! Susanna (S.C. Foster)
16	Etude op.10-3 "Chanson	04	Jeanie With The Light
	De L'adieu" (F. Chopin)	65	Brown Hair (S.C. Foster)
17	Jesu, Joy Of Man's Desiring (J.S. Bach)		I've Been Working On The
	Symphonie Nr.9	66	Railroad*
18	(L.v. Beethoven)	67	Loch Lomond*
19	Gavotte (F.J. Gossec)	68	My Bonnie*
	Fröhlicher Landmann	69	Yankee Doodle*
20	(R. Schumann)	70	Turkey In The Straw*
21	Polonaise (J.S. Bach)	71	Annie Laurie (L. Scott)
22	Canon (J. Pachelbel)	<u> </u>	Close Your Hands,Open
23	Heidenröslein (F. Schubert)	72	Your Hands
24	Träumerei (R. Schumann)		(J.J. Rousseau)
	From The New World	73	Muss I Denn (F. Silcher)
25	(A. Dvorák)	74	The Cuckoo *
-00	Frühlingslied	75	Battle Hymn Of The
26	(F. Mendelssohn)	75	Republic*
27	Menuett (J. Krieger)	76	Camptown Races
28	Liebesträume Nr.3		(S.C. Foster)
	(F. Liszt)	77	Romance De L'amour*
29	Blumenlied (G. Lange)	78	American Patrol
	Valse Des Fleurs	79	(F.W. Meacham)
30	(From "The Nutcracker")	80	Little Brown Jug* The Entertainer (S. Joplin)
	(P.I. Tchaikovsky) Air On The G String	80	CHRISTMAS
31	(J.S. Bach)	81	Jingle Bells (J.S. Pierpont)
32	Die Forelle (F. Schubert)	82	Silent Night (F. Gruber)
	Marche (From "The Nut-	02	· · · · · · · · · · · · · · · · · ·
33	cracker") (P.I. Tchaikovsky)	83	Joy To The World (G.F. Händel)
34	Humoreske (A. Dvorák)	84	O Christmas Tree*
35	Pizzicato Polka (J. Strauss)	85	Deck The Halls*
36	Ave Maria (F. Schubert)		DJ GAME
37	Ave Maria (C. Gounod)	86	Euro Techno (YAMAHA)
38	Wiegenlied (B. Flies)	87	Flares (YAMAHA)
39	Wiegenlied (F. Schubert)	88	Grind (YAMAHA)
40	Wiegenlied (J. Brahms)	89	Acid House (YAMAHA)
	WORLD	90	Pop Reggae (YAMAHA)
41	Twinkle Twinkle Little Star*	91	Ragga (YAMAHA)
	Grandfather's Clock	92	Digital Rock (YAMAHA)
42	(H.C. Work)	93	Ambient (YAMAHA)
40	Beautiful Dreamer	94	Acid Techno (YAMAHA)
43	(S.C. Foster)	95	Drums & Bass (YAMAHA)
44	Greensleeves*	96	Hard Step 8th (YAMAHA)
45	Believe Me, If All Those En-	97	Hype (YAMAHA)
	dearing Young Charms*	98	Beatbox (YAMAHA)
46	Im Mai*	99	Funked Up (YAMAHA)
47	Home Sweet Home	00	All That (YAMAHA)
	(H. Bishop)		(17447414)
48	Amazing Grace*		
For the	e songs #11 - #85, refer to the	include	ed Song Book.

^{*} indicates that is traditional song.



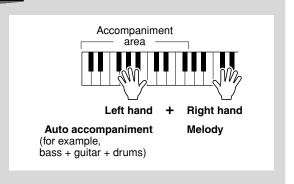


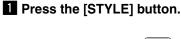
Using the Style

The powerful yet easy-to-use Style features give you professional instrumental backing for your performances. Simply play chords with your left hand — and the EZ-150 automatically produces appropriate bass, chord and rhythm backing. Use your right hand to play melodies, and you'll sound like an entire band!

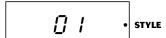


• For more infomation on playing proper chords for the auto accompaniment, see "Using Auto Accompaniment — Multi Fingering" on page 50 and "Looking up Chords in the Dictionary" on page 43.

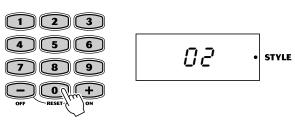




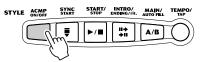




2 Select a style.

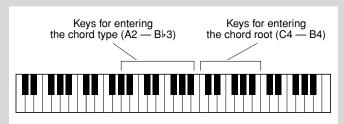


3 Turn the auto accompaniment on.



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...



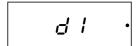
Learning how to play a specific chord

Example:

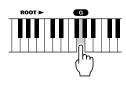
G M7
Root note Chord type

1 Press the [Dict.] button.

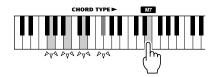




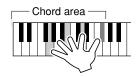
2 Specify the root note of the chord (in this case, G).



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



4 Play the notes of the chord according to the Light Guide. The "Congratulation" melody plays when the chord is played properly.



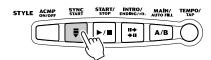
The keys light to show you how to play the chord. You can also play chord inversions, as described in the note on page 50 (Fingered Chords).

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



Want to find out more? See page 43.

4 Turn the Sync Start function on.



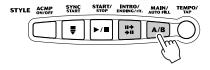
5 Play a chord with your left hand.

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

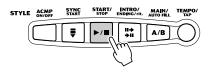


6 Select a section.

The auto accompaniment has four sections: Intro, Main A/B, and Ending.

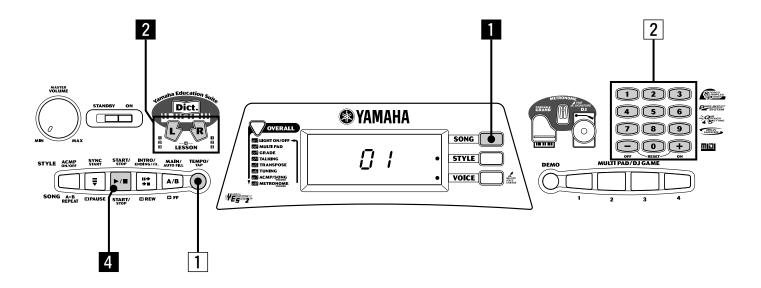


7 Stop the style.



Want to find out more? See page 45.





Using the Lesson Feature

All of the EZ-150 songs can be used with the educational Lesson feature. Lesson makes it fun and easy to master these songs. You can practice the left- and right-hand parts of each song individually: simply press the appropriate button, [L] (left) or [R] (right). The practice steps below apply to either hand. Try playing with the Lesson feature, following the Light Guides.

Lesson 1 — Timing........This lesson step lets you practice just the timing of the notes.

Lesson 2 — Waiting In this lesson step, the EZ-150 waits for you to play the correct notes before continuing playback of the song.

Lesson 3 — **Minus One**. This lesson step plays back the song with one part muted — letting you play and master the missing part yourself.

Lesson 4 — Both Hands.... This lesson step is the same as "Minus One," except in that both the left- and right-hand parts are muted — letting you play and master both hands.

1 Select one of the Lesson songs.

For instructions on selecting songs, see page 31.



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

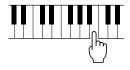
If you want to work on the right-hand part, press the [R] button; to work on the left, press the [L] button.



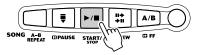
NOTE

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

3 Start the Lesson.



4 When you're finished, stop the Lesson.



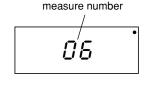


 You can also exit from the Lesson by pressing one of the LESSON buttons ([L] or [R]) repeatedly until "Lesson off" is announced.

Lesson 1 — Timing

This step lets you work on the timing of the notes. In Lesson 1, the particular note you play on the keyboard is unimportant. The EZ-150 checks your timing and how rhythmically "tight" your playing is.

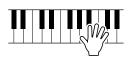




Want to find out more? See page 38.

Lesson 2 — Waiting

In Lesson 2, you practice playing the notes correctly as they are indicated with the Light Guides. The accompaniment pauses and waits for you to play the notes correctly before it continues.

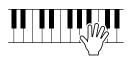




Want to find out more? See page 39.

Lesson 3 — Minus One

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





Want to find out more? See page 39.

Lesson 4 — Both Hands

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





Want to find out more? See page 40.

Grade

The EZ-150 has a built-in evaluation function that monitors your practicing and — like a real teacher — tells you how well you did each exercise. Four grades are assigned, depending on your performance: "OK," "Good," "Very Good," and "Excellent."

Want to find out more? See page 41.

Talking

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

Want to find out more? See page 42.

Light Guide

This convenient feature of the instrument lights the keys in succession, showing you what keys you should play when learning a song.

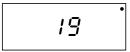
Want to find out more? See page 42.

Changing the Tempo

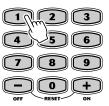
Naturally, you can change the tempo (speed) of the song to your liking, letting you slow down difficult passages and bring up the tempo gradually until you master them at normal speed.

1 Press the [TEMPO/TAP] button.





2 Use the numeric keypad to set the desired tempo.





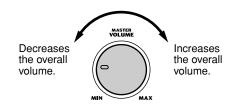
 The EZ-150 also has a convenient Tap Tempo function that allows you to "tap" a new tempo in real time. (See page 46.)



Basic operation and LED Display



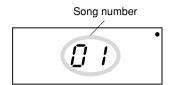
Turn the [MASTER VOLUME] dial.

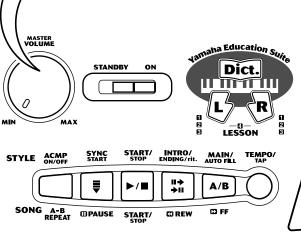


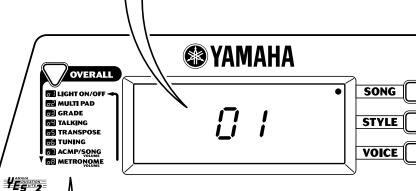
Song/Style/Voice/Function Number or Value indication

Currently selected number (Song, Style or Voice) appear here.

For example, when song is selected:

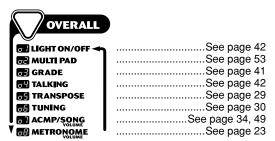






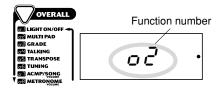
Function settings and indications

This button lets you call up the various function settings.



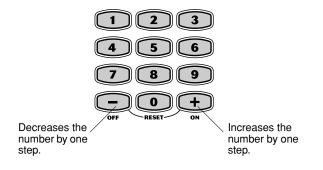
Note that the function number in the LED indicates the selected function (LIGHT ON/OFF, MULTI PAD, etc.) when you select each function.

For example, when o∂ MULTI PAD is selected:



Setting values

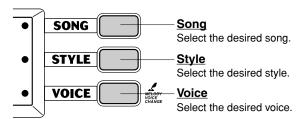
• Use the numeric [0]-[9] buttons or [+]/[-] buttons.



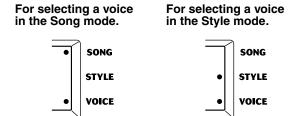
To continuously change the number up or down, press and hold the appropriate [+]/[-] button. To input a negative value, simultaneously hold the [-] button and enter the number.

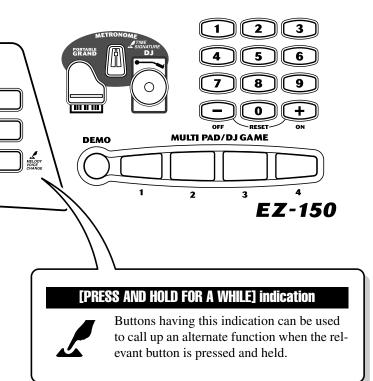
Entering one of the modes (Song, Style or Voice)

 Pressing one of the buttons below calls up the appropriate mode — Song, Style or Voice, and the dot in the display indicates the currently selected mode.



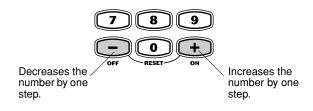
 The following indications appear when you press the [VOICE] button in the Song or Style mode.





Entering numbers

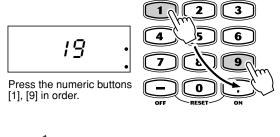
• Use the [+]/[-] buttons when you want to change the number in single steps.



To continuously change the number up or down, press and hold the appropriate [+]/[-] button.

• To directly enter the desired number, use numeric buttons [0]-[9].

Ex. Voice number 19: ACCORDION





• If the first digit is "0," (ex., 07), pressing the [0] button is unnecessary.



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

Playing the Portable Grand

Press the piano-shaped [PORTABLE GRAND] button.

Doing this automatically cancels any other mode or function, and resets the entire instrument for playing the special "Stereo Sampled Piano" Grand Piano voice. It automatically selects the Song mode, calling up song #11, "Für Elise" — which can be played instantly by pressing the [START/STOP] button.



The Portable grand setting is designed also for playing with the special Pianist styles (#81 - #00). When auto accompaniment is turned on, these provide piano-only accompaniment in a variety of music styles.



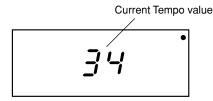
When the [PORTABLE GRAND] button is pressed, One Touch Setting (page 28) is automatically turned on, and special Multi Pad sounds for piano are automatically called up as well. (For more on Multi Pads, see page 53.)

Using the Metronome

Call up the Tempo setting.

Press the [TEMPO/TAP] button.





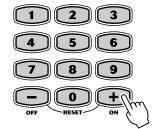
The tempo value can be adjusted over a range of 10 - 60 (40 - 240 bpm). The relative tempo value is indicated in the display. (For actual tempo values, see chart below.)

Indication	Actual value in bpm (beats per minute)
10	40
11	44
:	:
20	80

Indication	Actual value in bpm (beats per minute)
30	120
40	160
50	200
60	240

2 Change the value.

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



38

3 Turn on the Metronome.

Press the [METRONOME] button.



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

Setting the Metronome Time Signature

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



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

Hold down the [METRONOME] button, then press the button on the numeric keypad or [+]/[-] buttons that corresponds to the desired time signature (see chart at right).

Number. button	Time signature
1	1/4 — Plays only "1" beats (all high clicks)
2	2/4
3	3/4
4	4/4
5	5/4
6	6/4
7	7/4
8	8/4
9	9/4
0	Plays no "1" beats (all low clicks)

닉

Adjusting the Metronome Volume

You can adjust the volume of the Metronome sound independently of the other EZ-150 sounds. The volume range is 00 - 99.

1 Select the Metronome Volume function in the Overall menu.

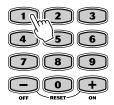
Press the [OVERALL] button, repeatedly if necessary, until " $\sigma \theta$ " appears in the display.





2 Change the value.

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



Resetting the Metronome Volume Value

To restore the default Metronome Volume value of "80," press both [+]/[-] buttons simultaneously (when Metronome Volume is selected).

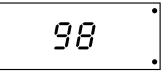


This exciting feature lets you instantly call up a dynamic DJ voice, style and DJ GAME for playing contemporary dance music.

Playing the DJ

Press the [DJ] button.





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

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

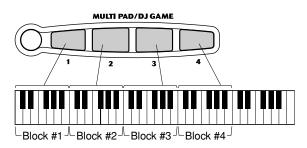
Lesson steps 1 - 3 can be used with DJ play. Press either the [L] or [R] button, repeatedly if necessary, until the desired Lesson step is called up.

You can play with the DJ feauture by using the Multi pads or the keyboard. In the case of the keyboard, the DJ voice is divided into "blocks" (as shown below). Each block has a different sound.



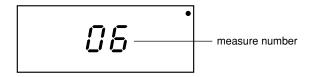
 Since there are no left or right parts in the DJ song, the [L] and [R] buttons can be used interchangeably. Also for the same reason, Lesson 3 and Lesson 4 are identical.



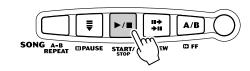


For Lesson 1, any note on the keyboard can be played. For the other Lesson steps, play the appropriate octave block.

Once the song starts playing and the DJ "teacher" says "Go," play the appropriate block as indicated by the lights on the keyboard. (When Talking is on, the blocks are also "announced" in Lesson 2.)



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





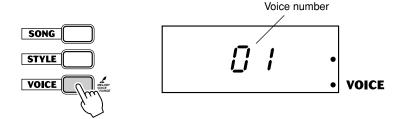
• Try playing one of the special DJ voices (#098, #099) with the DJ song. (See page 27.)

Selecting and Playing Voices

The EZ-150 features 100 authentic voices that have been created with Yamaha's sophisticated AWM (Advanced Wave Memory) tone generation system. Many of these voices also have special preset characteristics or embellishments. The voices are divided into various categories depending on their characteristics or the effects used.

Selecting and Playing a Voice

Press the [VOICE] button.



2 Select the desired voice number.

Use the numeric keypad. The basic categories of voices and their numbers are shown on the panel.

VOICE

PI/	NO
01	GRAND PIANO
02	HONKY-TONK
03	~06 E PIANO1~4
07	HARPSICHORD
80	CLAVI
09	CELESTA

ORGAN
10~11 VIBRATO OFF/ON
12~13 HARMONY OFF/ON
14~15 ATTACK OFF/ON
16~17 WAVE OFF/ON
18 PIPE ORGAN
19 ACCORDION
20 HARMONICA

GUITAR/BASS 21 SOFT GUITAR 22 FOLK GUITAR 23 12ST GUITAR 24 JAZZ GUITAR 25 E GUITAR 26 DIST GUITAR 27 WOOD BASS

42 FRENCH HORN

43 BRASS SECT 44 ALTO SAX 45 TENOR SAX

46 OBOE 47 CLARINET

49 PAN FLUTE

48 FLUTE

SYNTHESIZER	58 CHORUS
50 THICK LEAD	59~68 HARMONY
51 SIMPLE LEAD	69~73 SPLIT
52 THICK SAW	74~78 SUSTAIN
53 SIMPLE SAW	79~88 ECHO
54 SYNTH BASS	89~97 DUAL
55 SY STRINGS	98~99 DJ
56 SY BRASS	00 DRUM KIT
01 0144 0770	

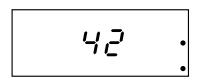
Selecting and Playing Voices

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

■ Using the numeric keypad

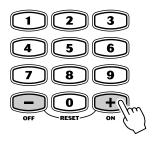
Enter the digits of the voice number as printed on the panel. For example, to select voice #42, press "4" on the numeric keypad, then "2." For voice numbers beginning with zeroes (such as #06), the initial zeroes may be omitted. In this case, there is a short pause before the indication appears.





■ Using the [+]/[-] buttons

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



NOTE

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.

• Four of the Organ voices are effect "pairs." Switching between each of the paired voices (with the [+]/[-] buttons) turns the effect of the voice on or off. For example, for the Vibrato pair (#10 and #11), selecting #10 turns the vibrato effect off, while selecting #11 turns vibrato on. The same applies to the Harmony, Attack and Wave voices (#12 - #17).

ORGAN

10~11 VIBRATO OFF/ON
12~13 HARMONY OFF/ON
14~15 ATTACK OFF/ON
16~17 WAVE OFF/ON

 You can select the One Touch Setting Voice (a b) by pressing both [+]/[-] buttons simultaneously. (See page 28.)

Play the selected voice.





• The EZ-150 is polyphonic up to a maximum of 16 notes. (Depending on the voice selected — such as split voices and dual voices fewer notes may be available.) This includes not only the notes played from the keyboard, but also the notes in a style pattern, the notes played by a Pad (page 53), and so on. Thus, if you play too many notes at one time, some may not sound and/or others may be cancelled.

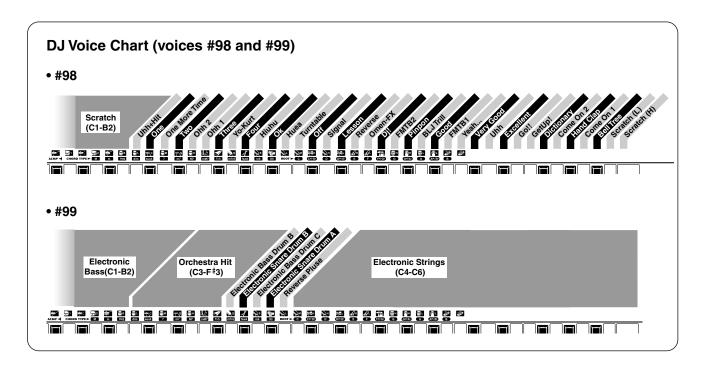
Harmony voices (#59 - #68) automatically add a one-, two- or three-note harmony to the original voice. **Split voices** (#69 - #73) feature two separate voices, each playable from opposite area of the keyboard — the lower voice playable up to B2 and the upper voice from C3 (middle C). **Sustain voices** (#74 - #78) have a special sustained release for playing slower or legato passages. **Echo voices** (#79 - #88) provide an echo effect that adds delayed repeats to the original voice. **Dual voices** (#89 - #97) blend two voices together for a rich, layered sound.

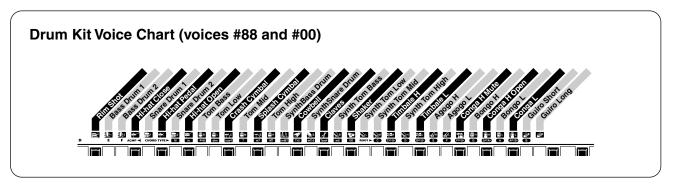
There's even a dynamic set of **DJ voices** (#98 - #99) that provides a wealth of exciting sounds for playing many of today's popular music styles. The EZ-150 also features special **Drum Kit voices** — #88 (with Echo) and #00 — that let you play a variety of drum and percussion sounds from the keyboard. (Refer to the Drum Kit Voice Chart below.) Icons representing each sound are printed above the keyboard, conveniently indicating which sounds are played from which keys.



About the Harmony voices

Since Harmony voices are designed to automatically play two or more notes with the notes you play on the keyboard, only one note can be played on the keyboard at a time. If several notes are played together, only the last note or highest note played will be used for the harmony effect.





One Touch Setting

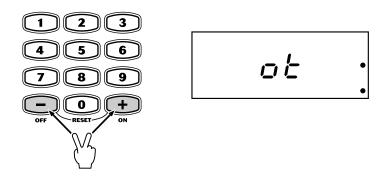
The powerful One Touch Setting ($\sigma \xi$) feature lets you instantly and automatically call up an appropriate voice and other settings when you select a style or song. In other words, when One Touch Setting is active, selecting a desired style or song also automatically selects the best suited voice and Multi Pad bank.

Press the [VOICE] button.



2 Select the One Touch Setting voice (ot).

Pressing both [+] and [-] buttons simultaneously calls up One Touch Setting.



To turn One Touch Setting off, select another voice.

Transpose and Tuning

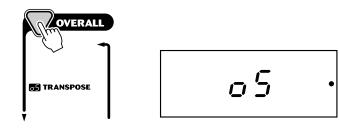
You can also adjust the tuning and change the transposition (key) of the EZ-150 with the Transpose and Tuning functions.

■ Transpose ••••••

Transpose determines the key of both the main voice and the bass/chord accompaniment of the selected style. It also determines the pitch of the songs and the Multi Pads. This allows you to easily match the pitch of the EZ-150 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 \pm 12 semitones (\pm 1 octave).

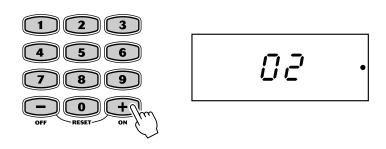
Select the Transpose function in the Overall menu.

Press the [OVERALL] button, repeatedly if necessary, until " σ 5" appears in the display.



2 Change the value.

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





 Transpose has no effect on voices #88 (Echo Drum Kit), #98 and #99 (DJ), or #00 (Drum Kit). Also, this setting cannot be changed during song playback.

Resetting the Transpose Value

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

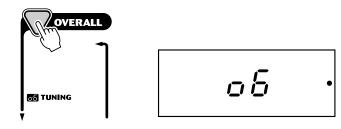
Selecting and Playing Voices

■ Tuning • • • • • • •

Tuning determines the fine pitch setting of both the main voice and the bass/chord accompaniment of the selected style. It also determines the pitch of the songs and the Multi Pads. This allows you to accurately match the tuning with that of other instruments. The Tuning settings can be adjusted over a range of \pm 50 (approx. \pm 0.5 semitones).

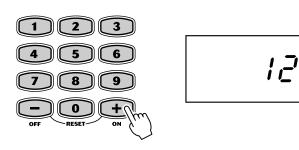
Select the Tuning function in the Overall menu.

Press the [OVERALL] button, repeatedly if necessary, until " $\sigma \delta$ " appears in the display.



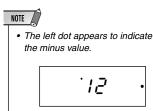
2 Change the value.

Use the numeric keypad to set the desired Tuning value (-50 - +50). To tune the pitch down, simultaneously press the [-] button and use the numeric keypad to type in the (negative) value. You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.



Resetting the Tuning Value

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



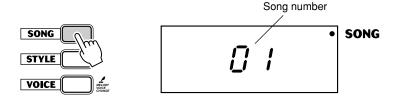


The Song mode features 100 special songs that have been created using the rich and dynamic sounds of the EZ-150.

The songs are generally for your listening enjoyment; however, you can also play along with them on the keyboard. The songs of the EZ-150 can also be used with the powerful Lesson feature (page 36), a convenient tool that makes learning songs fun and easy.

Selecting and Playing a Song

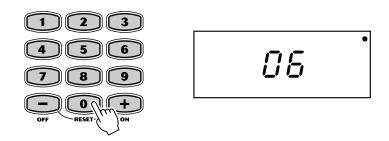
Press the [SONG] button.



2 Select the desired song number.

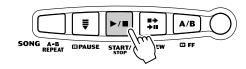
Use the numeric keypad. The basic categories of songs and their numbers are shown at the left of the panel.

Song numbers can be selected in the same way as with the voices (see page 26). You can use the numeric keypad to directly enter the song number, or use the [+]/[-] buttons to step up and down through the songs.



3 Start the selected song.

Press the [START/STOP] button.



4 Stop the song.
Press the [START/STOP] button.

NOTE

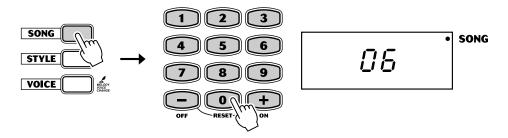
- You can play along with the song using the currently selected voice, or even select a different voice for playing along. Simply press the [VOICE] button while the song is playing back and select the desired voice. There's also a Melody Voice Change function (below) that lets you change the song's melody voice to the one currently selected voice.
- The EZ-150 also has a convenient Tap Tempo function that allows you to "tap" a new tempo in real time. (See page 46.)

Melody Voice Change

The EZ-150 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.

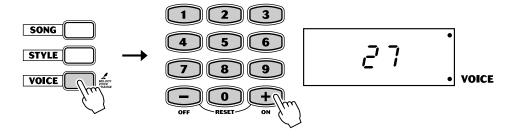
Select the desired song.

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



2 Select the desired voice.

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



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

The selected panel voice has replaced the song's original melody voice.



Changing the Tempo

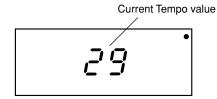
The tempo of song playback can be adjusted over a range of 10 - 60 (40 - 240 bpm).

The relative tempo value is indicated in the display. (For actual tempo values, see chart below.)

Indication	Actual value in bpm (beats per minute)
10	40
20	80
30	120
40	160
50	200
60	240

Press the [TEMPO/TAP] button.

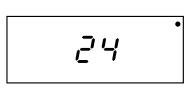




2 Change the value.

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



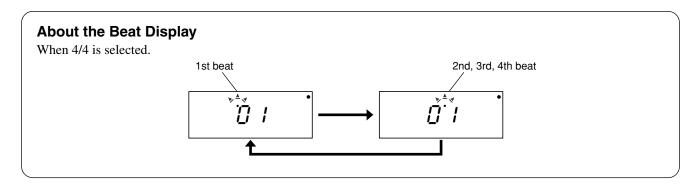


The EZ-150 also has a convenient Tap Tempo function that allows you to "tap" a new tempo in real time. (See page 46.)

Resetting the Tempo Value

Each song and style has been given a default or standard Tempo setting. You can instantly restore this default Tempo setting by pressing both [+]/[-] buttons simultaneously (when Tempo is selected).

Also, the tempo of a song or style returns to the default setting when selecting a different song or style. (The set tempo remains, however, when switching styles during playback except when OTS is on.) When you turn on the power of the EZ-150, the tempo is automatically set to 29.



Adjusting the Song Volume

The playback volume of the song can be adjusted. This volume control affects only the song volume. The volume range is 00 - 99.

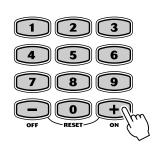
Select the Song Volume function in the Overall menu.

Press the [OVERALL] button, repeatedly if necessary, until "o 7" appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Song Volume value (00 - 99). You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.

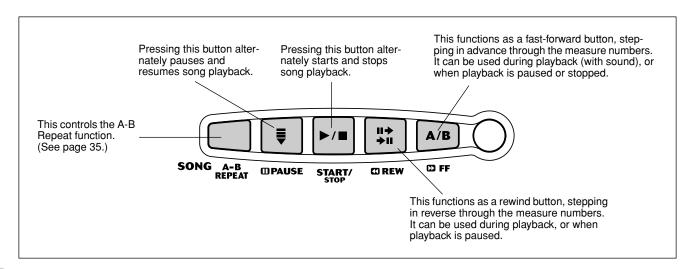


Resetting the Song Volume Value

If you've changed the Song Volume setting, you can instantly restore the default setting of "110" by pressing both [+]/[-] buttons simultaneously (when Song Volume is selected).

Song Controls

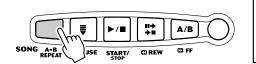
The panel buttons below the display function as song controls.

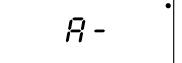


A-B Repeat

This useful function is ideal for practicing and learning purposes. It allows you to specify any phrase of a song (between point A and point B) and repeat it — while you play or practice along with it.

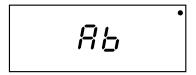
While playing back a song, set point A (the start point). Select and play back the desired song. (See page 31.) Then, while the song is playing back, press the [A-B REPEAT] button once at the start point of the phrase to be repeated.





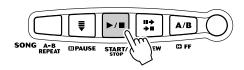
2 Set point B (the end point).

Press the [A-B REPEAT] button once again, at the ending point of the phrase to be repeated. The selected phrase repeats indefinitely until stopped.



3 Pause or stop playback as needed.

Use the [PAUSE] and [START/STOP] buttons. 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. This can be done either when the song is stopped or during playback.



HINT

- You can also set the A-B Repeat function while the song is stopped. Simply use the [☑ REW]/[☑ FF] buttons to select the measures for the A and B points in the song, then start playback.
- While the song is playing back (but before setting the A/B points), try slowing down the Tempo (page 33). This makes it easier to accurately set the A and B points. Slowing down the Tempo also makes it easier to practice the parts you want to learn
- To set the A point at the beginning of a song, press the [A-B REPEAT] button before starting song playback.

NOTE

 Selecting a different song number (or changing to the Style mode) automatically cancels the A-B Repeat function.

Song Lesson

The Lesson feature provides an exceptionally fun and easy-to-use way to learn how to play the keyboard. All of the 100 songs of the EZ-150 can be used with these educational features. Lesson lets you practice the left- and right-hand parts of each song independently, step by step, until you've mastered them and are ready to practice with both hands together. These practices are divided into four Lesson steps, as described below. Lessons 1 - 3 apply to each hand; press the appropriate button, L (left) or R (right) to select the desired part for practice. Try practicing with the Lessons, following the Light Guide.

■ 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 EZ-150 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 (following the Light Guide) yourself — in rhythm and at the proper tempo.

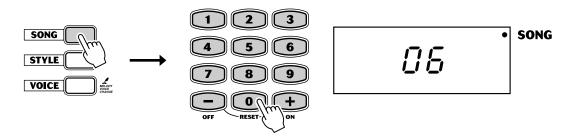
■ Lesson 4 — Both Hands

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

Select one of the Lesson songs.

Press the [SONG] button, then use the numeric keypad or [+]/[-] buttons to select the desired song (from 00 - 99).



Many of the songs are divided into different categories or music genres, including Piano/Classical, World and Christmas, plus a special set of DJ Game songs.

SONG

FAVORITES

01 Hey Jude

02 A Hard Day's Night

03 Can't Help Falling In Love
04 Englishman In New York
05 Against All Odds
11~40 PIANO/CLASSICAL
41~80 WORLD
81~85 CHRISTMAS

06 Just The Way You Are

07 Linus And Lucy

08 The Look Of Love

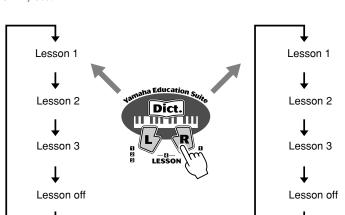
09 Stella By Starlight

10 Edelweiss

86~00 DJ GAME

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

If you want to work on the right-hand part, press the [R] button; to work on the left, press the [L] button. Pressing either button repeatedly cycles through the available Lesson steps in order: Lesson $1 \to \text{Lesson } 2 \to \text{Lesson } 3 \to \text{Off} \to \text{Lesson } 1$, etc.





 When the Talking function (page 42) is on, the EZ-150 "announces" the current Lesson step.

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







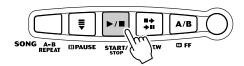
 When a DJ song is selected, the left (L) and right (R) lessons are identical.

3 Start the Lesson.

The Lesson and song playback start automatically (following a lead-in count) as soon as the Lesson step is selected. When the Lesson is finished, your performance "grade" is announced (if the Grade function is turned on; page 41). After a short pause, the Lesson begins again automatically.



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



The EZ-150 exits from the Lesson feature automatically when the [START/STOP] button is pressed.

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.
- Make sure to turn on the Light Guide and Talking function when using the Lesson.

- Select one of the songs.
- **2** Select Lesson 1.

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



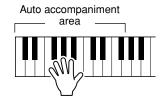
3 Play the appropriate melody or chord with the song.

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

Regarding chords and the use of the left hand, the EZ-150 actually has two different types of songs: 1) songs with normal left-hand chords, and 2) songs in which the left hand plays 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.

In the case of the second type, play the left-hand part with the same timing as the melody.



Lesson 2 — Waiting

In this lesson step, the EZ-150 waits for you to play the correct notes before continuing playback of the song. This lets you practice playing the correct keys at your own pace. The Light Guide shows you which keys to play.



 Make sure to turn on the Light Guide and Talking function when using the Lesson.

Select one of the songs.

2 Select Lesson 2.

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



 Depending on the selected song, the rhythm part may be muted for Lesson 2.



3 Play the appropriate melody or chord with the song.

After the lead-in, the song starts automatically, and the Light Guide shows you which keys to play. 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 EZ-150 plays back the song with one part muted (either the left part or the right)— letting you play and master the missing part yourself according to the Light Guide.

Select one of the songs.

2 Select Lesson 3.

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



3 Play the appropriate part with the song.

After the lead-in, the song starts automatically, and the Light Guide shows you which keys to play. 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.

- Select one of the songs.
- **2** Select Lesson 4.

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



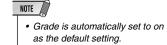
3 Play both the left- and right-hand parts with the song. After the lead-in, the song starts automatically, and the Light Guide shows you which keys to play. In Lesson 4, both parts (left and right) are muted, letting you play the entire song by yourself.

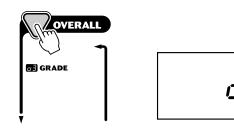
Grade

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." When the Talking function (page 42) is on, the EZ-150 announces your grade.

Select the Grade function.

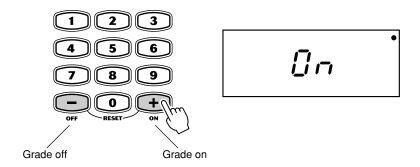
Press the [OVERALL] button, repeatedly if necessary, until " σ 3" appears in the display.





2 Set Grade to on or off as desired.

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



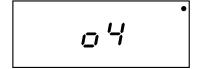


This feature "talks" to you through the speakers, "announcing" the Grade comments as well as the titles of the Lesson steps and the names of certain functions.

Select the Talking function.

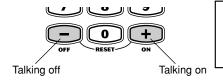
Press the left Overall button, repeatedly if necessary, until "a 4" appears in the display.





Set Talking to on or off as desired.

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







• Talking is automatically set to on as the default setting.

The Talking function includes the following "announcements":

- D.I • LESSON 1 Good
- LESSON 2
- LESSON 3 • LESSON 4
- LESSON OFF

OK

- Very Good
- Excellent
- Dictionary



Turning the Light Guide On and Off

You can switch the Light Guide on or off.

The Light Guide can be used as a keyboard guide during song playback, while you are using the Lesson or the Dictionary function.

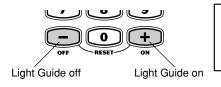
Press the [OVERALL] button repeatedly if necessary, until "o /" appears in the display.





Turn the Light Guide ON or OFF.

Use the [+]/[-] buttons.





CAUTION

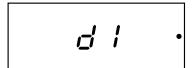
· Playing while looking at the lights for a long period of time may cause eyestrain or stiffness in your neck and shoulders. For your health and comfort, we recommend that you take a ten-minute break after every hour of playing.



The Dictionary feature 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.

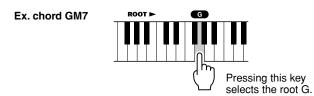
Press the [Dict.] button.



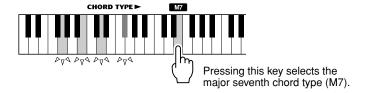


2 Specify the root of the chord.

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



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).



4 Play the chord.

Play the chord by pressing the keys that light in the ACMP area of the keyboard. A "congratualtions" melody is played when the correct notes are held down. (Inversions for many of the chords are also recognized.)



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

Selecting and Playing Styles

The EZ-150 provides dynamic rhythm/accompaniment patterns — as well as voice settings appropriate for each pattern — for various popular music styles.

A total of 100 different styles are available, in several different categories. Each style is made up of separate "sections" — Intro, Main A and B (with 2 Fill-ins), and Ending — letting you call up different accompaniment patterns 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 (labeled "ACMP" above the keyboard, at F#2) is for the auto accompaniment function.

The EZ-150 also features the convenient Dictionary function. Dictionary provides you with a built-in "chord encyclopedia" that teaches you how to play any chord you specify by showing you which keys to play.

Selecting and Playing a Style

Press the [STYLE] button.



2 Select the desired style number.

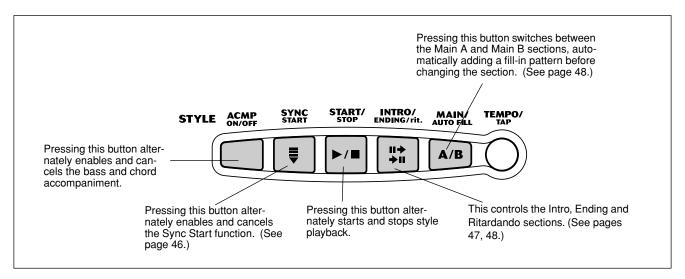
Use the numeric keypad. Available styles are listed at the center of the panel.



Style numbers can be selected in the same way as with the voices (see page 25). You can use the numeric keypad to directly enter the style number, or use the [+]/[-] buttons to step up and down through the style numbers.

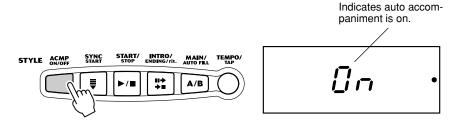
Playing the Accompaniment

When the Style mode is active, the panel buttons below the function as style controls.



Press the [ACCOMPANIMENT ON/OFF] button.

This enables the auto accompaniment.

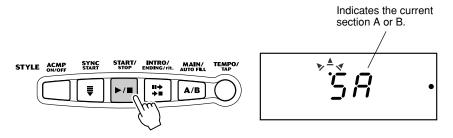


2 Start the style.

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 either by repeatedly pressing the [MAIN/AUTO FILL] button, before pressing the [START/STOP] button.)



Selecting and Playing Styles

■ Using Tap Tempo to start

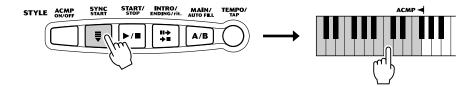
This useful feature lets you tap out the speed (tempo) of the auto accompaniment and automatically start the accompaniment at that tapped speed.



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

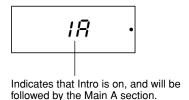
■ Using Sync Start

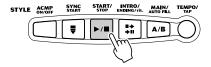
The EZ-150 also has a Sync Start function that allows you to start the rhythm/accompaniment by simply pressing a key on the keyboard. To use Sync Start, first press the [SYNC START] button (the Left dot flashes to indicate Sync Start stand-by), then press any key in the ACMP area of the keyboard (or any key when accompaniment is off).



Starting with a section A or B

First, press the [MAIN/AUTO FILL] button, repeatedly if necessary, to select which section (A or B) is to follow the Intro. Next, press the [INTRO/ENDING/rit.] button to set the Intro to standby.





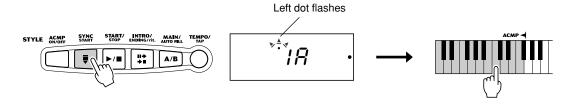
To actually start the Intro section, press the [START/STOP] button.

Using Sync Start with an Intro section

First, press the [MAIN/AUTO FILL] button, repeatedly if necessary, to select which section (A or B) is to follow the Intro. Next, press the [INTRO/ENDING/rit.] button.



Finally, press the [SYNC START] button to enable Sync Start, and start the Intro section and style by playing any key in the ACMP 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.



The [ACCOMPANIMENT ON/ OFF] button can also be used to turn off and on the bass/chord accompaniment while playing allowing you to create dynamic rhythmic breaks in your performance.



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

Selecting and Playing Styles

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/rit.] button. The style stops after the Ending section is finished.

■ Pressing the [SYNC START] button

This stops the style and automatically enables Sync Start, letting you re-start the style by simply playing a chord or key in the ACMP area of the keyboard (or any key when accompaniment is off).



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

Changing the Tempo

The Tempo of song (and style) playback can be adjusted over a range of 10 - 60 (40 - 240 bpm). For instructions on changing the Tempo, see page 33.



Each style has been given a default or standard tempo. 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.)



 You can also use the convenient Tap Tempo function to change the tempo by "tapping" a new one in real time. (See page 46.)

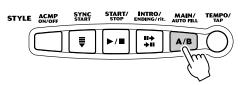
Sections (Main A, Main B) and Fill-ins

While the style is playing you can create dynamic variation in the rhythm and 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.

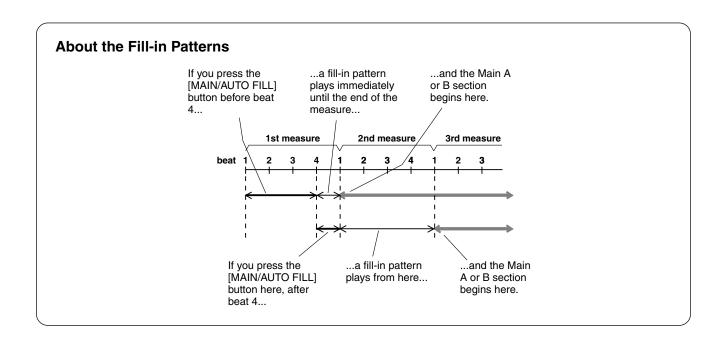
You can also select either the Main A or B section to start by pressing the [MAIN/AUTO FILL] button before starting the style.



 Fill-in patterns are not available when one of the Pianist styles (#81 - #00) are selected.



5*R* ·

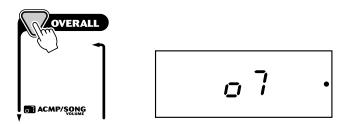


Adjusting the Accompaniment Volume

The playback volume of the accompaniment can be adjusted. This volume control affects only the style volume. The volume range is 00 - 99.

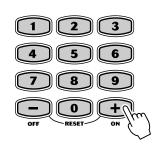
Select the Accompaniment Volume function in the Overall menu.

Press the [OVERALL] button, repeatedly if necessary, until "o 7" appears in the display.



2 Change the value.

Use the numeric keypad to set the desired Accompaniment Volume value (00 - 99). You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value.





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

Resetting the Accompaniment Volume Value

If you've changed the Accompaniment Volume setting, you can instantly restore the default setting of "90" by pressing both [+]/[-] buttons simultaneously (when Accompaniment Volume is selected).

Using Auto Accompaniment — Multi Fingering

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 ACMP 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 EZ-150 "understands" what chord you indicate and then automatically generates the accompaniment.

Chords that can be produced in Single Finger operation are major, minor, seventh and minor seventh. The illustration below 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, Bb7 is played as Bb and A.)



To play a major chord: Press the root note of the chord.



To play a minor chord: Press the root note together with the nearest black key to the left of it.



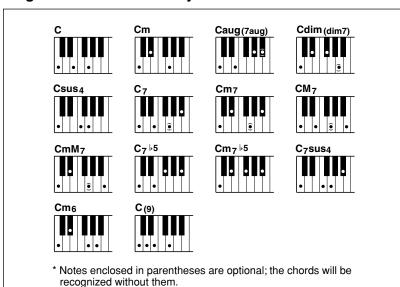
To play a seventh chord: Press the root note together with the nearest white key to the left of it.



To play a minor seventh chord: Press the root note together with the nearest white and black keys to the left of it (three keys altogether).

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

Fingered Chords in the Key of C





If the chord is inverted (i.e., C-E-G is played as G-C-E), the EZ-150 will still recognize it as a C chord. The chord recognition system also has the following rules and exceptions:

- Minor 6th chords are recognized only in root position, however; all other inversions are interpreted as minor 7th/flatted 5th.
- If augmented and diminished 7th chords are inverted, the lowest note will be recognized as the root.
- 7th flatted 5th chords may be played with the lowest note as the root or the flatted
 7th
- Augmented 7th and diminished 7th chords are interpreted as simple augmented and diminished.



• The following chords are not recognized:

B minor 6, B♭ minor 6, and B augmented.

•••• What is a Chord? •••

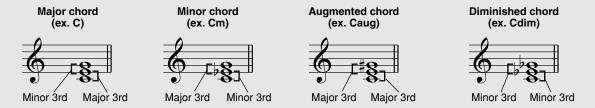
The simple answer: Three or more notes played simultaneously is a chord. (Two notes played together is an "interval" — an interval being the distance between two different notes. This is also referred to as a "harmony.") Depending on the intervals between the three or more notes, a chord can sound beautiful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



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.

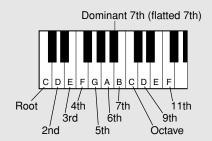
First, write the root note of the chord in an uppercase letter. If you need to specify sharp or flat, indicate that to the right of the root. The chord type should be indicated to the right as well. Examples for the key of C are shown below.



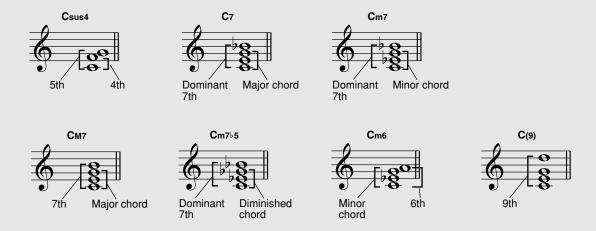
One important point: Chords are made up of notes "stacked" on top of each other, and the stacked notes are indicated in the chord name of the chord type as a number — the number being the distance of the note from the root. (See the keyboard diagram below.) For example, the minor 6th chord includes the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

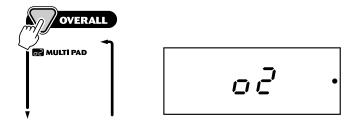


Multi Pads

These convenient pads let you instantly trigger various musical and rhythmic phrases as you play the EZ-150. There are a total of 40 different sounds or phrases (10 banks, with four pad sounds for each bank). The phrases play back at the same speed as the Tempo setting, and they also change harmonically along with the accompaniment chords (both in the Style and Song modes).

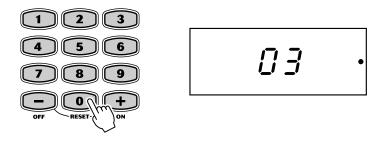
Select the Multi Pads function in the Overall menu.

Press the [OVERALL] button, repeatedly if necessary, until "o c" is selected in the display.



2 Select the desired bank.

Use the numeric keypad to select the desired bank number (01 - 10). You can also use the [+]/[-] buttons to increase or decrease the value. Holding down either button continuously increases or decreases the value. For a complete list of the available banks and their contents, see page 58.



3 Play the Multi Pads.

Press one of the Pads. The phrase plays uninterrupted until it is finished. Pressing it repeatedly (before the phrase completely plays back) creates a "stutter" effect.



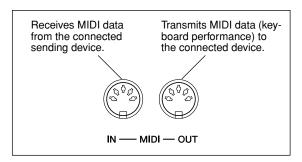
In the Style mode, melodic-type sounds correctly follow the chord changes. All sounds play back in perfect time with the current Tempo setting. When One Touch Setting (page 28) is on, appropriate Multi Pad banks for the selected style are automatically called up. This applies to the DJ and Portable Grand features as well.



 In the DJ GAME, you can play the Multi Pads as well as the keyboard.



The EZ-150 also features MIDI terminals, allowing you to interface the EZ-150 with other MIDI instruments and devices.



■ About MIDI • • • • • •

MIDI (Musical Instrument Digital Interface) is a worldwide standard that is built into many electronic musical instruments and other digital music related devices, allowing them to be connected and "communicate" with each other.

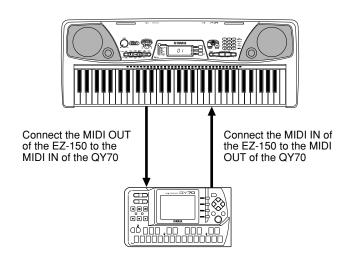
For two MIDI instruments to communicate, they must be connected by MIDI cables. In a basic example, the MIDI IN and MIDI OUT terminals of the EZ-150 could be connected to the MIDI OUT and MIDI IN terminals of a sequencer, allowing you to record and play back performance data from the EZ-150.

The instruments communicate with each other by sending "messages" or MIDI data. The sending instrument usually assigns the data to one of sixteen MIDI channels, then transmits it over the MIDI cable. The cable itself, however, is not divided up into sixteen channels. Just as with a television set that receives programs on different channels, it is up to the receiving instrument to "tune into" the proper MIDI channel. If the sending and receiving channels on the respective instruments do not match, the receiving instrument may not understand or respond to the one sending.

■ How Can MIDI be Used? • • • •

In the simple, yet powerful MIDI application example below, the Yamaha QY70 Music Sequencer is used to record and play back performance data played on the EZ-150 keyboard.

Before actually recording to the sequencer, press the [STYLE] button once or twice to make sure that the current settings are sent.





- On the EZ-150, the following channels (eight total) are enabled for MIDI reception: 1, 2, 3, 4, 5, 6, 7, 10. The MIDI transmit channels are fixed to the following data:
 - Ch. 1 : Keyboard, harmony Ch. 2 : Bass
 - Ch. 2 : Bass Ch. 3 : Chord Ch. 4 - 7 : Other Ch. 10 : Rhythm
- Parts that have been recorded using the EZ-150 should also be played back from the EZ-150. Data may not play back as expected when using other sound sources (such as the internal sounds of the QY70). Also, a connected sound source may sound at a different octave from that originally played on the EZ-150.
- MIDI data cannot be transmitted during song playback.
- Avoid using MIDI cables 15 meters or longer, since doing so can result in MIDI errors.



MIDI Data and Light Guide

 With the Light Guide feature, you can see the incoming MIDI data. MIDI note data received over channel 1 will conveniently light up the appropriate keys when the Light Guide feature is turned on.



The following voices can be selected when the Voice mode is active, or when the Voice Change function is on. They can also be selected by a connected MIDI device; the corresponding bank select messages are: MSB = 00H, LSB = 70H.

When selecting voices via MIDI:

Panel Voice List

Voice No.	MIDI Program Change No.	Voice Name	Used Notes
	•	PIANO	
01	0	GRAND PIANO	2
02	1	HONKY-TONK PIANO	2
03	2	ELECTRIC PIANO 1	2
04	3	ELECTRIC PIANO 2	2
05	4	ELECTRIC PIANO 3	2
06	5	ELECTRIC PIANO 4	2
07	6	HARPSICHORD	2
08	7	CLAVI	1
09	8	CELESTA	1
	1	ORGAN	
10	9	VIBRATO OFF	2
11	10	VIBRATO ON	2
12	11	HARMONY OFF	2
13	12	HARMONY ON	2
14	13	ATTACK OFF	2
15	14	ATTACK ON	2
16	15	WAVE OFF	2
17	16	WAVE ON	2
18	17	PIPE OGAN	2
19	18	ACCORDION	2
20	19	HARMONICA	1
	1	GUITAR/BASS	
21	20	SOFT GUITAR	1
22	21	FOLK GUITAR	1
23	22	12STRINGS GUITAR	2
24	23	JAZZ GUITAR	1
25	24	ELECTRIC GUITAR	2
26	25	DISTORTION GUITAR	2
27	26	WOOD BASS	1
28	27	FINGER BASS	1
29	28	SLAP BASS	1
		STRINGS/MALLET	
30	29	STRINGS	1
31	30	VIOLIN	1
32	31	CELLO	1
33	32	HARP	1
34	33	SITAR	1
35	34	BANJO	1
36	35	VIBRAPHONE	1
37	36	MARIMBA	1
38	37	STEEL DRUMS WIND	1
39	38	TRUMPET	1
40	38	TROMBONE	1
41	40	MUTE TRUMPET	1
41	40	FRENCH HORN	1
42	41	BRASS SECTION	1
43	43	ALTO SAX	1
44	43	TENOR SAX	1
	44	OBOE SAX	1
46 47	45	CLARINET	1
	46	FLUTE	1
48 49	47	PAN FLUTE	1
49	1 40	SYNTHESIZER	1
50	49	THICK LEAD	2
51	50	SIMPLE LEAD	1
52	51	THICK SAWTOOTH	2
	J 31	I I II OK GAWTOOTTI	

No. 53 54	Change No. 52		
54		SIMPLE SAWTOOTH	Notes 1
	53	SYNTH BASS	1
55	54	SYNTH STRINGS	1
56	55	SYNTH BRASS	2
57	56	SLOW STRINGS	1
58	57	CHORUS	1
50	37	HARMONY	'
59	58	PIANO TRIO	3
60	59	PIANO COUNTRY	2
61	60	ELECTRIC PIANO TRIO	3
62	61	HARPSICHORD TRIO	3
63	62	ELECTRIC ORGAN TRIO	3
64	63	VIBRAPHONE DUET	2
65	64	TRUMPET DUET	2
66	65	HORN DUET	2
67	66	CLARINET TRIO	3
68	67	FLUTE DUET	2
	07	SPLIT	
69	68	WOOD BASS / PIANO	1
70	69	STRINGS / PIANO	1
71	70	FINGER BASS / ELECTRIC PIANO	1
72	71	HARP / VIOLIN	1
73	72	FRENCH HORN / TRUMPET	1
73	12	SUSTAIN	<u> </u>
74	73	SUSTAIN SUSTAIN SUSTAIN PIANO	1
75	74	SUSTAIN FIANO SUSTAIN ELECTRIC PIANO 1	1
76	75	SUSTAIN ELECTRIC PIANO 2	1
77	75 76	SUS VIBRAPHONE	1
78		SUSTAIN STRINGS	1
70	11	ECHO	<u> </u>
79	78	ECHO PIANO	1
80		ECHO ELECTRIC PIANO	1
81	80	ECHO HARPSICHORD	1
82	81	ECHO CELESTA	1
83	82	ECHO FOLK GUITAR	1
84	83	ECHO BANJO	1
85	84	ECHO VIBRAPHONE	1
86	85	ECHO MARIMBA	1
87	86	ECHO STEEL DRUMS	1
88	*1	ECHO DRUM KIT	1
- 00	ı	DUAL	1
89	88	PIANO CONCERTO	2
90	89	ELECTRIC PIANO CONCERTO	2
	90	FAIRY LAND	2
91 92	90	MOOD GUITAR	2
92	92	RICH GUITAR	2
93	93	HOT ORGAN	2
_			
95	94	EXCEL VIOLIN	2
96	95	CRYSTAL	2
97	96	STAR SHIP	2
00	07	DJ Voice	1 4
98	97	DJ VOICE 1	1
99	98	DJ VOICE 2	1
00	*0	DRUMS	
00	*2	DRUM KIT	1

^{*1} MSB=7FH, LSB=00H, Prg Ch#=1

^{*} The Harmony voices (#59 - #68) and Echo voices (#79 - #88) are sounded without the respective harmony and echo effects.

^{*2} MSB=7FH, LSB=00H, Prg Ch#=2

Voice List

The following voices cannot be directly selected from the panel controls; they are special voices programmed into the songs of the EZ-150 and are selected automatically in song playback. However, they can be selected by a connected MIDI device; the corresponding bank select messages are: MSB = 00H, LSB = 00H.

MIDI Program		
Change No.	Voice Name	Used Notes
0	Piano	1
3	Honky-tonk Piano	2
4	Electric Piano 1	2
5	Electric Piano 2	2
6	Harpsichord	1
7	Clavi	1
8	Celesta	1
11	Vibraphone	1
12	Marimba	1
16	Electric Organ 1	2
17	Electric Organ 2	2
19	Pipe Organ	2
21	Accordion	1
22	Harmonica	1
23	Wave Organ	2
24	Soft Guitar	1
25	Folk Guitar	1
26	Jazz Guitar	1
27	Electric Guitar	1
28	12Strings Guitar	2
29	Rich Guitar	2
30	Distortion Guitar	1
32	Wood Bass	1
33	Finger Bass	1
34	Mute Bass	1
36	Slap Bass	1
38	Synth Bass	1
40	Violin	1
42	Cello	1
46	Harp	1
49	Strings	1
51	Synth Strings	1

MIDI Program Change No.	Voice Name	Used Notes
52	Choir	1
56	Trumpet	1
57	Trombone	1
59	Muted Trumpet	1
60	French Horn	1
61	Brass Section	1
63	Synth Brass	1
65	Alto Sax	1
66	Tenor Sax	1
68	Oboe	1
71	Clarinet	1
73	Flute	1
75	Pan Flute	1
80	Lead	1
81	Sawtooth	1
88	Piano Concerto	2
89	Electric Piano Concerto	2
90	Fairy land	2
91	Hot Organ	2
92	Mood Guitar	2
93	Excel Violin	2
94	Star ship	2
95	Slow Strings	1
98	Crystal	2
104	Sitar	1
105	Banjo	1
114	Steel Drums	1
123	Wood Bass / Piano	1
124	Strings / Piano	1
125	Finger Bass / Electric Piano	1
126	Harp / Violin	1
127	Horn / Trumpet	1



- Each percussion voice uses one note.
- The MIDI Note # and Note are actually one octave lower than listed. For example, the "Bass Drum 2" (Note# 36/Note C1) corresponds to (Note# 24/Note C0).
- Voices with the same Alternate Note Number (*1 2) cannot be played simultaneously. (They are designed to be played alternately with each other.)

				12-
	ank N ank L			127 0
Progr	am (nge No.	0
Keybo	oard No		Alternate assign	Drum Kit
12	C	те -1	assign	
13	C#	-1		
14	D."	-1		
15 16	D# E	-1 -1		Hi Q
17	F	-1		Scratch H
18	F#	-1		Scratch L
19	G C#	-1		
20	G# A	-1 -1		
22	A#	-1		
23	В	-1		
24 25	C C#	0		
26	D D	0		
27	D#	0		Brush Slap
28	Е	0		Reverse Cymbal
29 30	F#	0		Electronia Rosa Drum
31	G G	0		Electronic Bass Drum
32	G#	0		Electronic Snare Drum
33	Α	0		
34	A# B	0		Race Drum 1
35 36	C	1		Bass Drum 1 Bass Drum 2
37	C#	1		Rim Shot
38	D	1		Snare Drum 1
39	D#	1		Electronic Floor Tom
40	F	1		Snare Drum 2 Floor Tom
42	F#	1	1	Hi-hat Closed
43	G	1		Electronic Low Tom
44	G#	1	1	Hi-Hat Pedal
45 46	A A#	1	1	Low Tom
47	В	1		Hi-Hat Open Electronic Mid Tom
48	С	2		Mid Tom
49	C#	2		Crash Cymbal
50	D#	2		High Tom
51 52	D# E	2		Ride Cymbal 1 Electronic High Tom
53	F	2		Ride Cymbal Cup
54	F#	2		Tambourine
55 56	G G#	2		Splash Cymbal Cowbell
57	A	2		Cowbell
58	A#	2		
59	В	2		Ride Cymbal 2
60	C	3		Bongo H
61 62	C# D	3		Bongo L Conga H Mute
63	D#	3		Conga H Open
64	Е	3		Conga L
65	F.	3		Timbale H
66 67	F# G	3		Timbale L Agogo H
68	G#	3		Agogo L
69	Α	3		
70	A#	ο		
71 72	B C	3		
73	C#	4		Guiro Short
74	D	4		Guiro Long
75	D#	4		Claves
76 77	E F	4		
77	F#	4		
79	G	4		
80	G#	4	2	Triangle Mute
81	A A#	4	2	Triangle Open
82 83	A# B	4		Shaker
84	С	5		Bell Tree
85	C#	5		Electronic Bass Drum A
86	D	1 ح		Electronic Bass Drum B
87 88	D# E	5 5		Electronic Bass Drum C Electronic Snare Drum A
89	F	5		Electronic Snare Drum B
90	F#	5		Electronic Rim Shot
91	G	5		Reverse Pulse
92 93	G# A	5		Hand Clap Orchestra Hit
93	A#	5		Scratch 1
95	В	5		Scratch 2
96	С	6		Scratch 3

Style List & Multi pads

● Style List

	•
No.	Style Name
	8BEAT
01	8Beat Pop
02	8Beat Uptempo
03	8Beat Standard
04	8Beat Shuffle
05	Folkrock
06	Pop Rock
07	Crystal Pop
08	8Beat Medium
	16BEAT
09	16Beat Shuffle
10	16Beat Pop
	BALLAD
11	8Beat Ballad
12	Epic Ballad
13	Piano Ballad
14	Soul Ballad
15	Slow Rock
16	6/8 Ballad
17	Harp Arpeggio 1
18	Harp Arpeggio 2
19	Harp Arpeggio 3
20	Music Box
	DANCE
21	Dance Pop
22	Techno
23	Eurobeat
24	Нір Нор
25	70s Disco

No.	Style Name
	DJ
26	Euro Techno
27	Funky Trip Hop
28	Pop Reggae
29	Acid House
30	Shakin'
	ROCK
31	8Beat Rock Ballad
32	16Beat Rock Ballad
33	Hard Rock
34	Rock Shuffle
35	6/8 Heavy Rock
36	US Rock
	ROCK & ROLL
37	Rock & Roll
38	Boogie
39	Twist
F	RHYTHM & BLUES
40	R&B
41	Funk
42	Soul
43	Gospel Shuffle
44	6/8 Gospel
45	4/4 Blues
	JAZZ
46	Jazz Ballad
47	Jazz Waltz
48	Fusion
49	Big Band Swing

No.	Style Name
50	Big Band Ballad
51	Jazz Quartet
52	Dixieland
СО	UNTRY & WESTERN
53	Bluegrass
54	2/4 Country
55	Country Ballad
56	Country Shuffle
	BALLROOM
57	Rhumba
58	Tango Continental
59	Jive
	MARCH & WALTZ
60	March
61	6/8 March
62	Light March
63	Crystal March
64	Polka
65	Standard Waltz
66	German Waltz
67	Viennese Waltz
68	Crystal Waltz
69	Orchestra Waltz 1
70	Orchestra Waltz 2
71	Music Box Waltz
	LATIN
72	Bossa Nova
73	Salsa
74	Samba

No.	Style Name
75	Mambo
76	Beguine
77	Merengue
78	Bolero Lento
	CARIBBEAN
79	Reggae 1
80	Reggae 2
	PIANIST
81	2beat
82	Stride
83	Concerto
84	8beat
85	Honky-Tonk
86	Piano Ballad
87	Pop Ballad
88	Arpeggio 1
89	Arpeggio 2
90	Dance Pop
91	Rock & Roll
92	Tight Rock
93	Swing
94	Jazz Waltz
95	Ragtime
96	Beguine
97	Cha Cha
98	March
99	6/8 March
00	Galop

Multi pads

Bank No.	Bank Name
01	Pianist
02	Twinkle
03	Organ Play
04	Guitar Play
05	Percussion
06	Drums
07	DJ Drums
08	DJ
09	Techno
10	1234



MIDI Implementation Chart

YAMAHA	[EZ-150] Model EZ-19	150 MIDI Impleme	Implementation Chart	Date:4-MAR-2003 Version : 1.0
		Transmitted	Recognized	Remarks
Func	Function			
Basic Channel	Default Changed	1 - 7,10 *	1 - 7,10 *	
Mode	Default Messages Altered	3 X ******	8 x x	
Note Number :	True voice	0 - 127	0 - 127 0 - 127	
Velocity	Note ON Note OFF	o 9nH, v=1-127 *1 x 9nH, v=0	o 9nH,v=1-127 x 9nH,v=0 or 8nH	
After Touch	Key's Ch's	× ×	× ×	
Pitch Bend	K	×	×	
	0,32	*2	0	Bank Select LSB, MSB
	7	0	0	Volume
	10	0	0	Pan
	6,38	×	×	Data Entry
Control	64	0 >	0 >	Sustain
Change		€ 0	€ 0	Portamento Cntrl
		×	×	
	- 1	×	×	RPN Inc, Dec
	66'86	×	×	NRPN LSB, MSB
	100-101	×	×	RPN LSB, MSB

Prog Change : True #	0 0 - 127 *3	0 0 - 127 *3	
System Exclusive	0	0	
: Song Pos. Common : Song Sel. : Tune	× × ×	× × ×	
System : Clock Real Time: Commands	××	××	
Aux :All Sound OFF :Reset All Chtrls :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	****0*	****	
Mode 1 : OMNI ON , POLY	Mode 2	ONOM, NO INMO :	o : Yes

NOTE:

×

4

Mode

Mode

- *1 Playing the keyboard does not produce any changes in velocity data; the transmitted velocity value is fixed. The velocity value generated by playing the key is predetermined for each voice and may differ depending on the selected voice.
- *2 MSB can be used to change the voice for the Melody or Rhythm.

MSB=00H :Melody Voice MSB=7FH : Rhythm Voice LSB: Refer to Voice list.

- *3 For program change values, refer to the voice list.

 Program change and other like channel messages received will

 not affect the EZ-150 panel settings or what is being played on
 the keyboard.
- *4 < GM System on > F0H,7EH,7FH, 09H, 01H, F7H All data is restored to the default values.
- *5 MIDI does not function (transmit/receive) in the Song mode.

Problem	Possible Cause and Solution
When the EZ-150 is turned on or off, a popping sound is temporarily produced.	This is normal and indicates that the EZ-150 is receiving electrical power.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the EZ-150 may produce interference. To prevent this, turn off the mobile phone or use it further away from the EZ-150.
The sound of the voices or rhythms seems unusual or strange.	The battery power is too low. Replace the batteries. (See page 10.)
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 that Light Guide is turned on in the Lesson mode.
When playing back one of the Pianist styles (#81 - #00), 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.
The auto accompaniment doesn't turn on, even when pressing the [ACCOMPANIMENT ON/OFF] button.	Make sure the Style mode is active before using the auto accompaniment. Press the [STYLE] button to enable style operations.
Not all notes are heard when playing a number of notes simultaneously.	Too many keys are pressed at the same time. The EZ-150 is polyphonic up to a maximum of 16 notes.
Playing keys in the right hand section of the keyboard does not produce any sound.	When using the Dictionary function (page 43), the keys in the right hand section are used only for entering the chord root and type.
The accompaniment does not sound properly.	Make sure that the Accompaniment Volume (page 49) is set to an appropriate level.
The Multi Pad sound is cut off or sounds unusual.	The EZ-150 is polyphonic up to a maximum of 16 notes. If a style or song is playing back at the same time a Multi Pad is played, some notes/ sounds of the Multi Pad may be omitted (or "stolen") from the accompaniment or song.
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.
The Light Guide does not match the keys actually played.	When auto accompaniment is on, the Light Guide shows the specific notes of the chords you play in the auto accompaniment area of the keyboard. If you play a single finger chord, or an inversion of a chord, the corresponding chord will be appropriately shown — even if the lighting keys do not exactly match the pressed keys.

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Memo			



Keyboard

61 standard-size keys (C1 - C6) with light guide

Display

LED display

Setup

STANDBY/ON

MASTER VOLUME: MINI-MAX

Panel controls

Overall, SONG, VOICE, STYLE, DEMO, POTABLE GRAND, DJ, METRONOME, Dict., L, R, TEMPO/TAP, numeric keypad (0 - 9, +, -)

Voices

100 panel voices (max. polyphony: 16)

Effects

Dual (Included in Voice),

Harmony/Echo (Included in Voice),

Split (Included in Voice),

Sustain

Style

100 styles

Fingering: Multi Fingering

Sections: Intro, Main A, B, Ending, Ritardando, Fill

Overall controls

Light On/Off, Multi Pad, Grade, Talking, Transpose, Tuning, Accompaniment Volume, Song Volume,

Metronome Volume

Style controls

ACMP On/Off, Sync-Start, Start/Stop, Intro/Ending/rit.,

Main A, B (Auto Fill)

Song controls

Start/Stop, Pause, A-B Repeat, Fast Forward, Rewind,

Melody Voice Change

One Touch Setting

1/style, 1/song

Multi Pads

4 pads x 10 banks

Yamaha Education Suite

Dictionary, Lesson 1-4

Preset songs

100 songs

Amplifier

2.0W + 2.0W

MIDI

IN/OUT

Auxiliary jacks

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

Speakers

12cm x 2

Power consumption

9W

(when using PA-3C power adaptor)

Power supply

Adaptor: Yamaha PA-3C or PA-3B AC power adaptor

Batteries: Six "D" size, R20P(LR20) or equivalent

batteries

Dimensions

931 x 349 x 128 mm (36-2/3" x 13-3/4" x 5-1/16")

Weight

4.7kg (10 lbs., 6 oz.)

Supplied accessories

Music Rest, Owner's Manual, Song Book

Optional accessories

Headphones: HPE-150
AC power adaptor: PA-3C or PA-3B
Keyboard stand: L-2L, 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.

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:

EZ SERIES OF PORTATONE ELECTRONIC KEYBOARDS

If during the first 90 days that immediately follows the purchase date, your new Yamaha product covered by this warranty is found to have a defect in material and/or workmanship, Yamaha and/or its authorized representative will repair such defect without charge for parts or labor.

If parts should be required after this 90 day period but within the one year period that immediately follows the purchase date, Yamaha will, subject to the terms of this warranty, supply these parts without charge. However, charges for labor, and/or any miscellaneous expenses incurred are the consumers responsibility. Yamaha reserves the right to utilize reconditioned parts in repairing these products and/or to use reconditioned units as warranty replacements.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY WHICH YAMAHA MAKES IN CONNECTION WITH THESE PRODUCTS. ANY IMPLIED WARRANTY APPLICABLE TO THE PRODUCT, INCLUDING THE WARRANTY OF MERCHANT ABILITY IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY. YAMAHA EXCLUDES AND SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations that relate to implied warranties and/or the exclusion of incidental or consequential damages. Therefore, these limitations and exclusions may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

CONSUMERS RESPONSIBILITIES

If warranty service should be required, it is necessary that the consumer assume certain responsibilities:

- 1. Contact the Customer Service Department of the retailer selling the product, or any retail outlet authorized by Yamaha to sell the product for assistance. You may also contact Yamaha directly at the address provided below.
- 2. Deliver the unit to be serviced under warranty to: the retailer selling the product, an authorized service center, or to Yamaha with an explanation of the problem. Please be prepared to provide proof purchase date (sales receipt, credit card copy, etc.) when requesting service and/or parts under warranty.
- 3. Shipping and/or insurance costs are the consumers responsibility.* Units shipped for service should be packed securely.

*Repaired units will be returned PREPAID if warranty service is required within the first 90 days.

IMPORTANT: Do NOT ship anything to ANY location without prior authorization. A Return Authorization (RA) will be issued that has a tracking number assigned that will expedite the servicing of your unit and provide a tracking system if needed.

4. Your owners manual contains important safety and operating instructions. It is your responsibility to be aware of the contents of this manual and to follow all safety precautions.

EXCLUSIONS

This warranty does not apply to units whose trade name, trademark, and/or ID numbers have been altered, defaced, exchanged removed, or to failures and/or damages that may occur as a result of:

- 1. Neglect, abuse, abnormal strain, modification or exposure to extremes in temperature or humidity.
- 2. Improper repair or maintenance by any person who is not a service representative of a retail outlet authorized by Yamaha to sell the product, an authorized service center, or an authorized service representative of Yamaha.
- 3. This warranty is applicable only to units sold by retailers authorized by Yamaha to sell these products in the U.S.A., the District of Columbia, and Puerto Rico. This warranty is not applicable in other possessions or territories of the U.S.A. or in any other country.

Please record the model and serial number of the product you have purchased in the spaces provided below.

Model	Serial #	Sales Slip #
Purchased from		Date

YAMAHA CORPORATION OF AMERICA Electronic Service Division 6600 Orangethorpe Avenue Buena Park, CA 90620

KEEP THIS DOCUMENT FOR YOUR RECORDS. DO NOT MAIL!

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

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

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