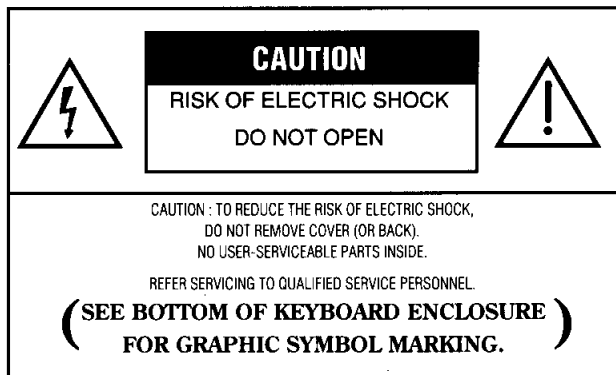


YAMAHA Electone®

EL-40
EL-60

OWNER'S MANUAL

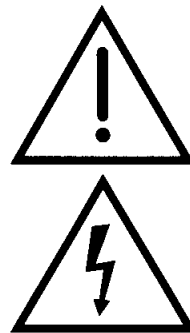
SUPPLEMENTAL MARKING INFORMATION



Yamaha electronic products will have either a label similar to the graphic shown above or a molded/stamped facsimile of the graphic on its enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated.

The Exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



IMPORTANT SAFETY AND INSTALLATION INSTRUCTIONS

INFORMATION RELATING TO POSSIBLE PERSONAL INJURY, ELECTRIC SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING - When using electronic products, basic precautions should always be followed, including the following:

1. Read all Safety and Installation Instructions, Supplemental Marking and Special Message Section data, and assembly instructions (where applicable) BEFORE using your Yamaha electronic product. Check unit weight specifications before you attempt to move this instrument!
2. Main Power Supply Verification: Your Yamaha electronic product has been manufactured specifically for the main supply voltage used in your area. If you should move, or if any doubt exists, please contact your dealer for instructions. The main supply voltage required by your electronic product is printed on the name plate. For name plate location see graphic in Special Message Section.
3. This product may be equipped with a polarized line plug (one blade wider than the other). If you are unable to insert the plug into the outlet, contact an electrician to have your obsolete outlet replaced. Do NOT defeat the safety purpose of the plug. Yamaha products not having polarized plugs incorporate construction methods and designs that do not require line plug polarization.
4. **WARNING** - Do NOT place objects on your electronic product's power cord or place the unit a position where anyone could trip over, walk over, or roll anything over cords of any kind. Do NOT allow your electronic product or its bench to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.
5. Environment: Your electronic product should be installed away from heat sources such as a radiator, heat registers and/or other products that produce heat. Additionally, the unit should not be located in a position that exposes the cabinet to direct sunlight, or air currents having high humidity or heat levels.
6. Your Yamaha electronic product should be placed so that its location or position does not interfere with its proper ventilation.
7. Some Yamaha electronic products may have benches that are either a part of the product or supplied as an optional accessory. Some of these benches are designed to be dealer assembled. Please make sure that the bench is stable before using it. The bench supplied by Yamaha was designed for seating only. No other uses are recommended.
8. Some Yamaha electronic products can be made to operate with or without the side panels or other components that constitute a stand. These products should be used only with the components supplied or a cart or stand that is recommended by the manufacturer.
9. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period 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.
10. Do not use your Yamaha electronic product near water or in wet environments. For example, near a swimming pool, spa, or in a wet basement.
11. Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through openings.
12. Your Yamaha electronic product should be serviced by a qualified service person when:
 - a. The power-supply cord or plug has been damaged: or
 - b. Objects have fallen, or liquid has been spilled into the product: or
 - c. The product has been exposed to rain: or
 - d. The product does not operate, exhibits a marked change in performance: or
 - e. The product has been dropped, or the enclosure of the product has been damaged.
13. When not in use, always turn your Yamaha electronic product "OFF". The power-supply cord of the product should be unplugged from the outlet when it is to be left unused for a long period of time. Notes: In this case, some units may lose some user programmed data. Factory programmed memories will not be affected.
14. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.
15. Electromagnetic Interference (RFI). This series of Yamaha electronic products utilizes digital (high frequency pulse) technology that may adversely affect Radio/TV reception or the operation of other devices that utilize digital technology. Please read FCC information for additional information.
16. **WARNING: CHEMICAL CONTENT NOTICE!**
The solder used in the manufacture of this product contains LEAD. In addition, the electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.
DO NOT REMOVE ANY ENCLOSURE COMPONENTS!
There are no user serviceable parts inside. All service should be performed by a service representative authorized by Yamaha to perform such service.
IMPORTANT MESSAGE: Yamaha strives to produce products that are both user safe and environmentally "friendly". We sincerely believe that our products meet these goals. However, in keeping with both the spirit and the letter of various statutes we have included the messages shown above and others in various locations in this manual.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE!

FCC INFORMATION (U.S.A.)

1. IMPORTANT NOTICE : DO NOT MODIFY THIS UNIT !

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

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

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

installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

- Relocate either this product or the device that is being affected by the interference.
- Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s
- In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA 90620

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

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THIS DIGITAL APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

This applies only to products distributed by Yamaha Canada Music Ltd.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIO ELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Music Ltd.

Dette apparat overholder det gældende EF-Direktiv vedrørende radiostøj.

Cet appareil est conforme aux prescriptions de la directive communautaire 87/308/CEE.

Diese Geräte entsprechen der EG-Richtlinie 82/499/EWG und/oder 87/308 EWG.

This product complies with the radio frequency interference requirements of the Council Directive 82/499/EEC and/or 87/308/EEC.

Questo apparecchio è conforme al D.M. 13 aprile 1989 (Direttiva CEE/87/308) sulla soppressione dei radiodisturbi.

Este producto está de acuerdo con los requisitos sobre interferencias de radio frecuencia fijados por el Consejo 87/308/CEE.

YAMAHA CORPORATION

*Wichtiger Hinweis für die Benutzung in der Bundesrepublik Deutschland.

Bescheinigung des importeurs

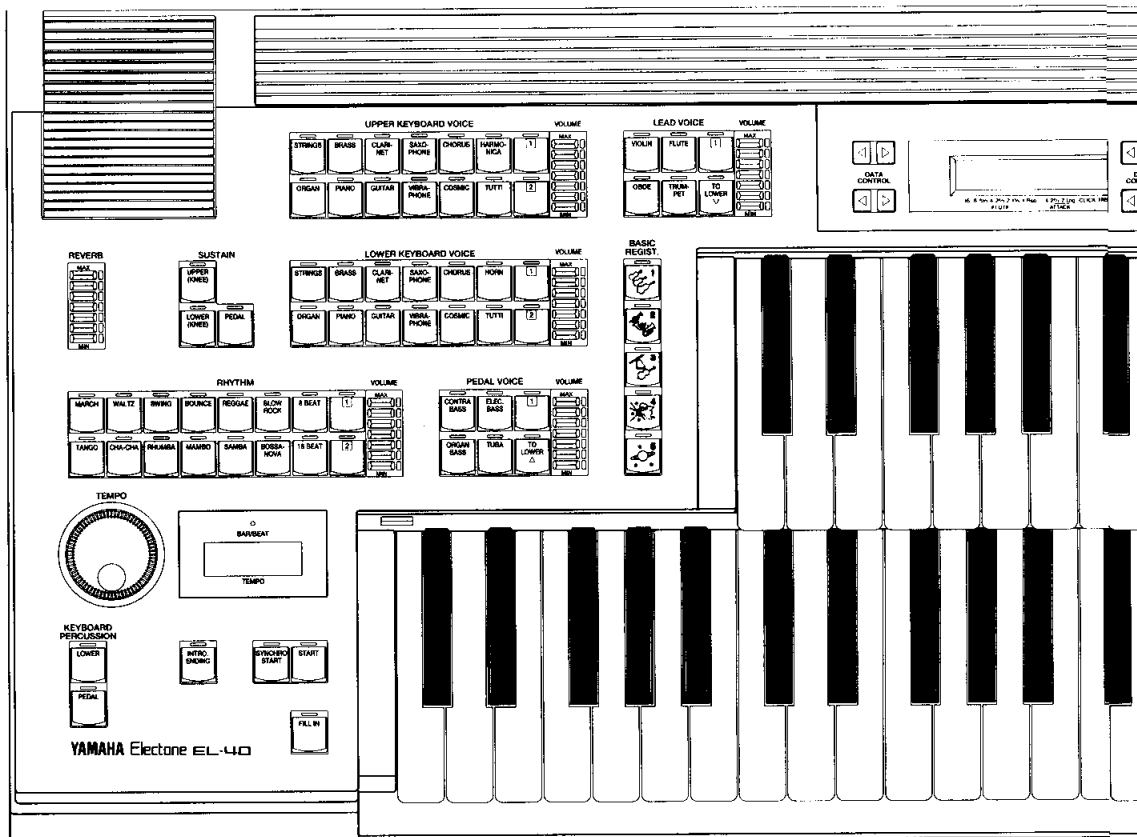
Hiermit wird bescheinigt daß der/die/das Elektronische Orgel Typ: EL-60, EL-40 in Übereinstimmung mit den Bestimmungen der VERFÜGUNG 1046/84.

(Amtsblattverfügung)funkt-entstört ist.

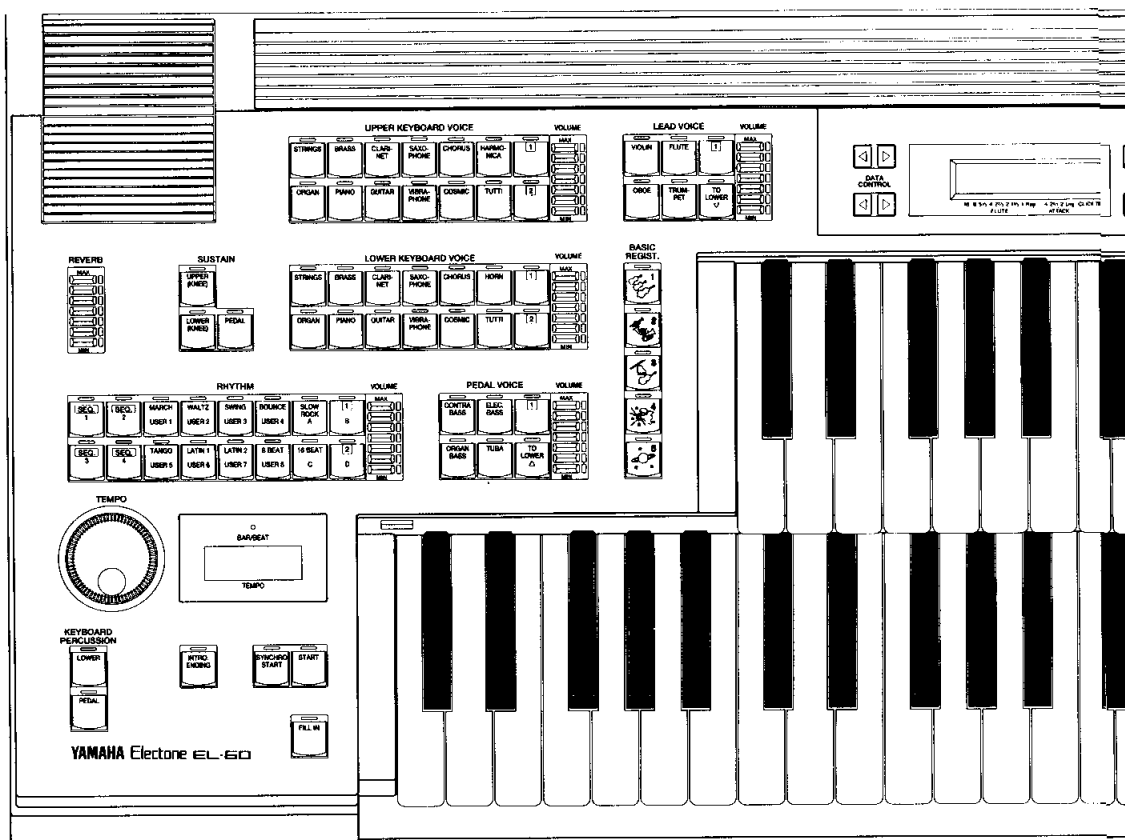
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EL-40



EL-60



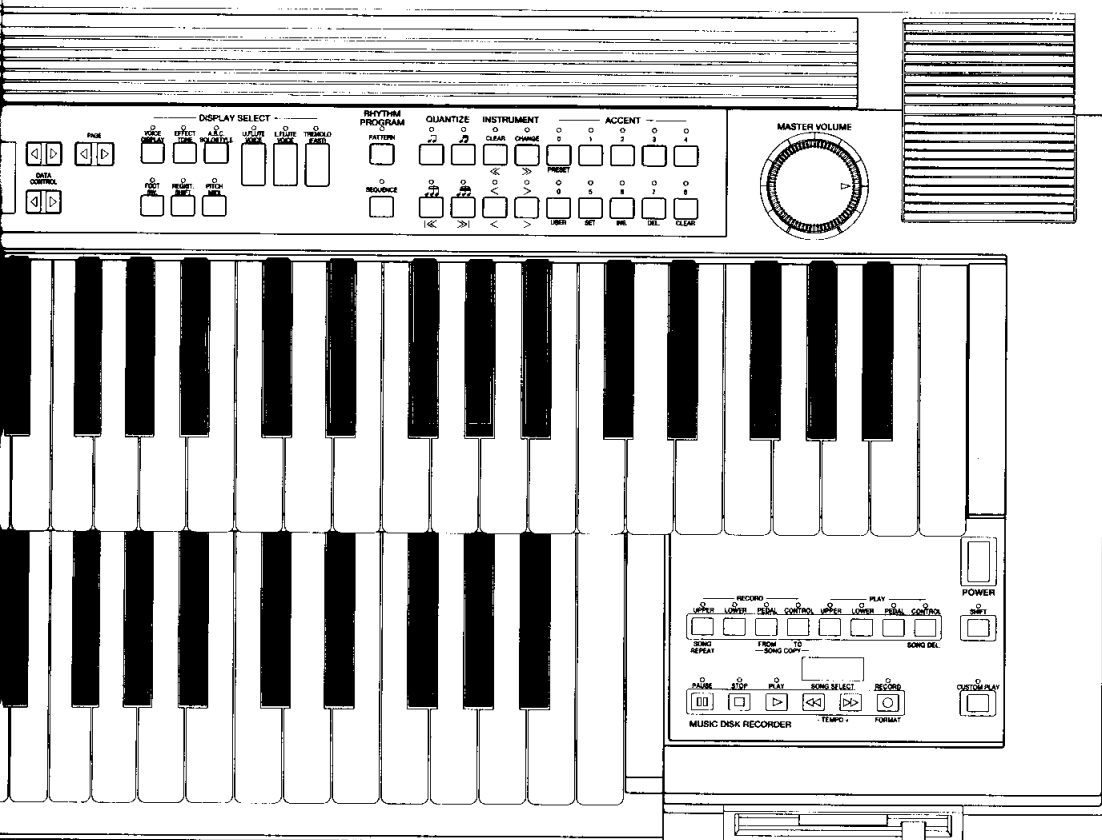
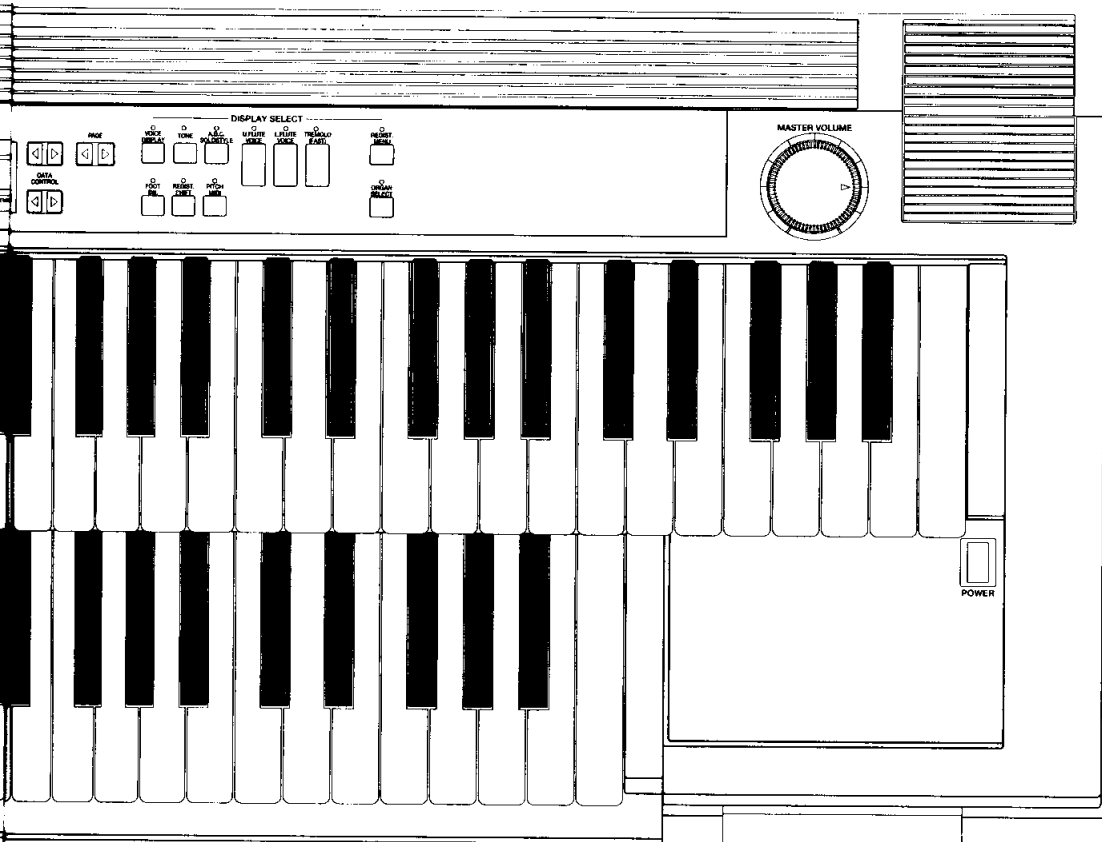


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Main Features

Your Yamaha Electone is packed with many sophisticated functions. Yet it is amazingly easy to use. The main features are briefly described here so that you can quickly understand the capabilities of your Electone.

Included among the main features are:

Astoundingly True-to-life Sounds

The new AWM (Advanced Wave Memory) and FM (Frequency Modulation) tone generation technologies combined with authentic touch response for individual instrument voices, make this Electone a truly expressive musical instrument.

Limitless Variety of Organ Sounds

The Electone also has separate voice sections that feature classic organ sounds — from jazz and pop to church and theater — and lets you easily create your own organ sounds by adjusting the volumes of the various flute footages. (See page 24.)

High-quality Digital Effects

Electone voices can also be enhanced with a full range of high-quality digital effects, including Tremolo (for reproducing the sound of a rotating speaker), Reverb, and (on the EL-60) Flanger and Delay. (See page 27.)

Dynamic Rhythm Patterns

The Rhythm section of the Electone features authentic drum and percussion sounds, used by expert rhythm programmers in creating a total of 66 rhythm patterns, ranging across all styles of music. (See page 38.) A Keyboard Percussion function is also provided for playing the realistic percussion sounds from the Lower keyboard and Pedalboard. (See page 50.)

Comprehensive Automatic Accompaniment

The Electone is also equipped with various automatic accompaniment functions, including Auto Bass Chord, Accompaniment, Melody On Chord and the exciting SoloStyle feature. Together or individually, they provide entertaining and inspiring instrumental backing and embellishments for your performance. (See pages 46—53.)

Wide Variety of Registration Menus

The Electone is equipped with convenient Registration Menus that allow you to instantly change all settings for the entire instrument in real time, as you play. Each Registration has been specially created by professional Electone artists to match virtually any style of music you play. The EL-60 has 80 registrations available on disk, while the EL-40 has 61 registrations and Organ Select presets built in. (See page 8.)

Recording of Performances with the Music Disk Recorder (EL-60)

The EL-60 Electone also features a Music Disk Recorder for recording your performances. (The Music Disk Recorder is available as an option for the EL-40.) The recording is completely digital and is stored to disk, which means that no matter how many times you play back the recording, it will always sound exactly the same as the original performance. (See page 68.)

Sophisticated Rhythm Pattern and Rhythm Sequence Programming (EL-60)

The Rhythm Pattern Programmer and Rhythm Sequence Programmer let you use the realistic Keyboard Percussion sounds, along with 32 additional percussion sounds, to create and record your own rhythm patterns, then combine them (and the preset rhythms, if you wish) to make complete automatic rhythm tracks. (See page 86.)

Quick Introductory Guide

PLAYING YOUR EL-60/40 ELECTONE

Whether you are an advanced Electone performer or have never touched an electronic keyboard in your life, we recommend that you take the time to go through this basic section. It shows you in the simplest possible manner how to start playing your Electone. The basic operations and functions that you learn in this section will also be important when you later use the Electone's more advanced features.

Getting Started

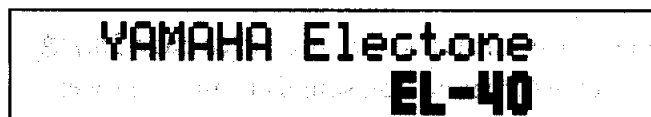
Once you've set up your Electone and plugged the power cord into an electrical outlet, you're ready to get started and play.

1. Turn on the Electone by pressing the POWER switch.

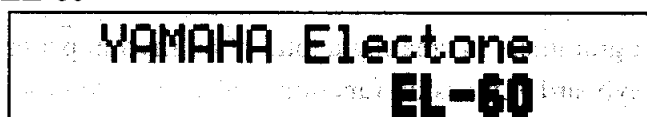
When you turn on the Electone, the following displays will appear in succession in the LCD:



EL-40



EL-60



This last display, Voice Display, shows the currently assigned voice settings for each voice section of the instrument, with the abbreviation for each voice section beside the voice name: Upper (U), Lower (L), Lead (LL), and Pedalboard (P).

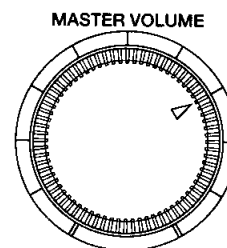
Turning the Electone off erases all panel settings you have made. When the Electone is turned on, Basic Registration 1 is automatically selected. If you have made panel settings you wish to keep, save them to Registration Memory (see page 54) before turning the Electone off. You can, however, restore the panel settings that were made before the Electone was last turned off. In doing this, first be careful NOT to press any panel buttons (excepting those in Basic Registration) after you turn the Electone back on. Then, to restore the previous settings, hold down the M (Memory) button and press the D (Disable) button.

2. Set the MASTER VOLUME control.

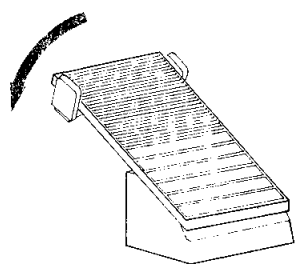
The MASTER VOLUME control is an overall control which affects the volume of the entire instrument.

3. Press the Expression pedal down with your foot.

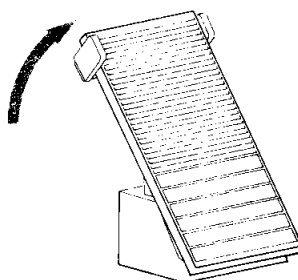
The Expression pedal also controls the entire volume of the Electone. Once you have set the MASTER VOLUME control to a suitable level, you can use the Expression pedal to change the volume with your foot as you play.



Set the control to roughly this position.
This is the normal playing level.



Maximum volume



Minimum volume

For now, press the pedal down slightly beyond the halfway point.

Playing Your Electone

Your new Electone is fully equipped with an exceptionally wide variety of voices, rhythms, effects and other convenient functions. Since it may take some time to master the wealth of features available, the Electone includes convenient Registrations that let you completely and instantly change the voices and other settings for all of the keyboards, even as you play. Each registration is pre-programmed to be used for a specific music style or instrumental combination.

Basic Registrations

The Basic Registration section has five factory preset registrations, each with a different set of voices for the Upper/Lower keyboards and Pedalboard and each specially suited for playing in a different music style.

When you turn the power on, the Electone automatically selects Basic Registration 1. If another registration has been selected (the lamp on the button will be lit), press the button for Basic Registration 1.



Try playing the melody line of following piece of music on the Upper keyboard, using the indicated registration.

Basic Registration 1 **From the New World** *A. Dvořák* [Pops Orch 1] Tempo ♩ = 82

Now, try out the rest of the Basic Registrations with the following music examples. Press the appropriate buttons to select the registrations. Each music example has been chosen to best suit its companion registration.

Basic Registration 2 **Little Brown Jug** *American Folk Song* [Bigband 1] Tempo ♩ = 182

Basic Registration 3 **Cradle Song** *B. Flies* [Standard 1:EL-60 ; Standard:EL-40] Tempo ♩ = 106

Basic Registration 4 **Twinkle, Twinkle Little Star** *German Folk Song* [Baroque] Tempo ♩ = 76

Basic Registration 5 **Ode to Joy** *L.V. Beethoven* [March 1] Tempo ♩ = 123

The chart below lists the voices that have been set for the Upper/Lower keyboards and Pedalboard in each of the five Basic Registrations.

	Basic Registration 1	Basic Registration 2	Basic Registration 3	Basic Registration 4	Basic Registration 5
Upper keyboard voice	Strings 1	Brass	Flute	Cosmic 1	Synth. Brass
Lower keyboard voice	Strings 1	*Horn (1)	Piano	Cosmic 2	Cosmic 3
Pedal voice	Contra Bass	Tuba	Contra Bass	Cosmic 2	Synth. Bass

*EL-60: Horn 1; EL-40: Horn

Registration Menu

In addition to the Basic Registrations, many more registrations are available on your Electone. These registrations include voice and rhythm selections and have been specially created by professional Electone performers to suit a variety of music styles. With the variety of registrations available, you're certain to find the right registration that perfectly suits any style of music you play.

There are certain differences in this function between the EL-40 and the EL-60. Please read the instructions that correspond to the particular model you own.

EL-40

Registration Menu / Organ Select — EL-40

The EL-40 is equipped with a total of 46 specially programmed registrations, selected with the Registration Menu button on the panel. The EL-40 also has an Organ Select function that lets you call up one of 15 different organ combinations.

To select a registration from Registration Menu, or an organ sound from Organ Select:

1. Press the corresponding button on the panel (REGIST. MENU or ORGAN SELECT).



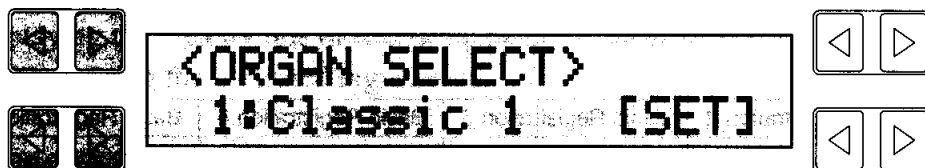
2. From the display that appears, select the desired registration or organ sound.

Jumps back ten numbers.

Jumps ahead ten numbers.

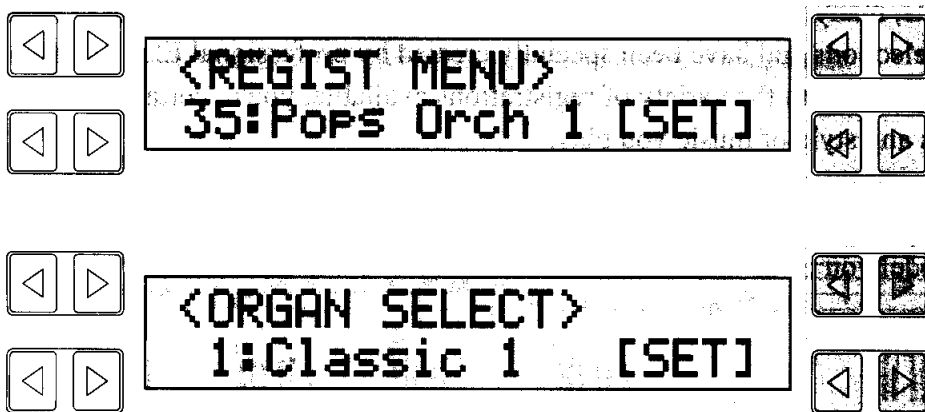
Selects next number.

Selects previous number.



The bottom left Data Control buttons step through the various selections, while the top left Data Control buttons are used to jump ahead or back by ten selections.

3. Finally, call up the selected registration or organ sound by selecting SET in the display.



You can now play the registration or organ sound. If you wish, try out some of the other selections by repeating the above steps. Then, skipping the section on the EL-60 below, go on to step #4 in the following section, and try out the rhythm and accompaniment features of your Electone (page 11).

A separate chart included with this manual provides a list of all the available music styles, along with the rhythm patterns used.

EL-60

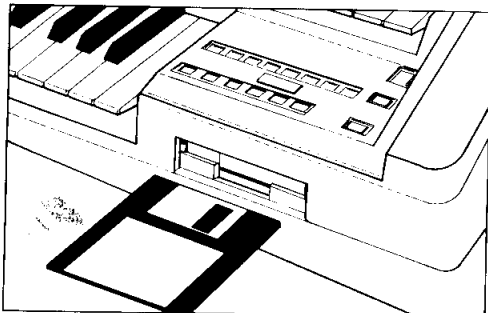
Registration Menu Disk — EL-60

Included with your EL-60 is a Registration Menu Disk. The disk features a total of 80 specially programmed registrations, including 16 organ combinations, which can be selected with the Music Disk Recorder.

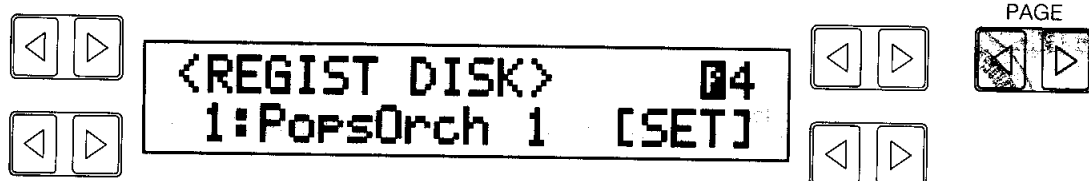
The 80 registrations have five pages and are divided into five categories: Page 1 — Classic, Page 2 — Jazz/Contemporary, Page 3 — Latin, Page 4 — Pops/Folk, and Page 5 — Organ Sounds. Each category contains 16 different music styles.

To select registrations from the Registration Menu Disk:

1. Put the Registration Menu Disk into the Disk slot, located just under the Music Disk Recorder at the right side of the Electone.



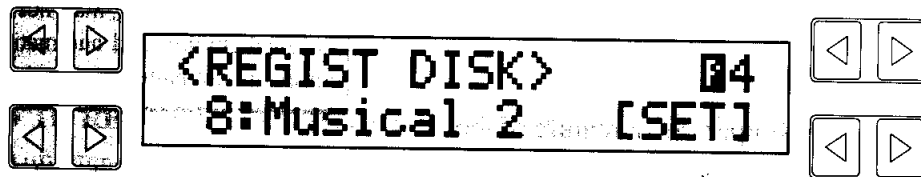
2. From the display that appears, first press the Page ► button to select the various menu "pages" of registrations available on the disk...



...then, select the desired registration from each 16-style menu.

Jumps back ten numbers.

Jumps ahead ten numbers.



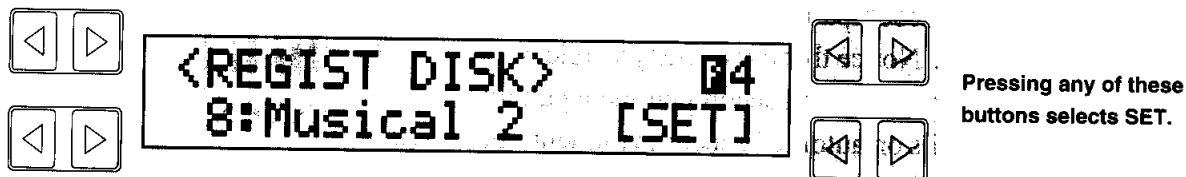
Selects next number.

Selects previous number.

The bottom left Data Control buttons step through the various selections, while the top left Data Control buttons are used to jump ahead or back by ten selections.

Note: The Registration Menu Disk does not operate when the RHYTHM PROGRAM button is on.

3. Finally, call up the selected registration by selecting SET in the display.

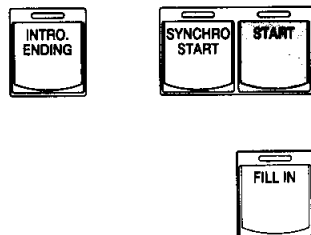


Pressing any of these buttons selects SET.

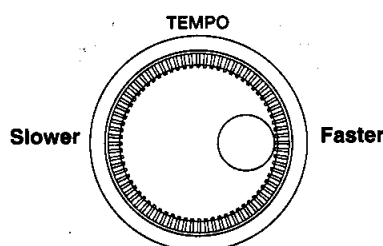
You can now play the registration. If you wish, try out some of the other selections by repeating the above steps. Then go on to step #4 below, and try out the rhythm and accompaniment features of your Electone.

A separate chart included with this manual provides a list of all the available music styles, along with the rhythm patterns used.

4. Once you've selected a registration (in the EL-40 or EL-60 instructions above), press the **START** button in the Rhythm section. This step starts up a rhythm pattern appropriate to the music style you have selected. (To turn the pattern off, press the **START** button again.)



You can also adjust the tempo of the rhythm to your liking by turning the **TEMPO** dial, as indicated in the illustration below.



Rhythms are an important part of each registration. Each registration's rhythm has been carefully chosen and programmed to best match the particular music style.

The A.B.C. (Auto Bass Chord) automatic accompaniment feature of the Electone also plays an important role and is used in conjunction with the registrations and rhythm patterns. Like the rhythm patterns, A.B.C. patterns have been programmed to best match the selected registration. They allow you to add sophisticated bass and chord accompaniment patterns that suit the music, simply by playing chords on the Lower keyboard.

To use the A.B.C. automatic accompaniment feature:

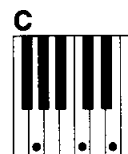
5. Press a chord on the Lower keyboard. (Try the chord shown in the illustration on the right.)

This function provides automatic accompaniment specially tailored for the music style in which you play. Notice that even after you release your fingers from the keyboard, the chord and accompaniment patterns continue to sound. For more details on automatic accompaniment, see page 47.

6. Now return to the first five written music examples in the Basic Registrations section above. (See page 7.) Select the registration indicated at the top right of the score (for example, "Pops Orch 1" in the first song). Refer back to the steps on selecting registrations on the EL-40 or EL-60 above (page 8, 9) if necessary.

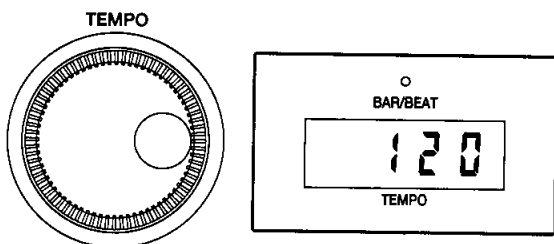
Note: Some of the registrations in the Registration Menus, especially in the Organ Sounds, may not have assigned rhythm and automatic accompaniment patterns.

Example:



Play a C chord on the keyboard.

7. Adjust the tempo of the rhythm for each song by turning the Tempo dial until the tempo number indicated in the display matches that shown at the top right of each score.



Rhythm tempo

8. Play the melody line as you did before with your right hand on the Upper keyboard. This time, however, use the A.B.C. automatic accompaniment by pressing the chords with your left hand. The keys you should press are indicated by the small diagrams just below the melody in the score.

Example:



9. Now that you've heard what A.B.C. can do, try selecting other registrations from the Registration Menu.

(Refer to the instructions below on the EL-40 or the EL-60, depending on the instrument you own.)

HOW TO RETURN TO THE REGISTRATION MENU DISPLAY

If you unintentionally change the display by pressing a button on the panel, the following explanation shows you how to return to the Registration Menu.

EL-40

Return to the display of the Registration Menu/Organ Select by pressing the REGIST. MENU or ORGAN SELECT buttons.

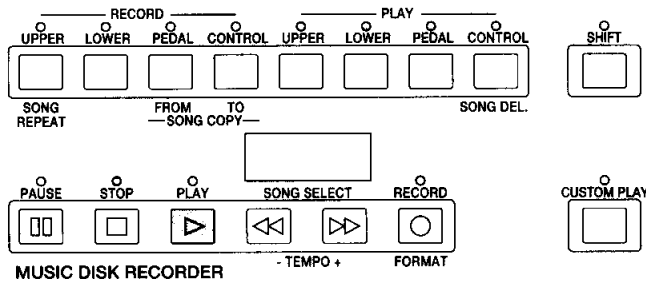


<REGIST MENU>
1:Str9s Ens. [SET]

<ORGAN SELECT>
1:Classic 1 [SET]

EL-60

Return to the display of the Registration Menu by pressing the **PLAY** button in the Music Disk Recorder section.



Go on to select various other registrations and use the A.B.C. function with the newly selected registrations as well, to get a better idea of the wide stylistic range of your Electone.

See how easy it is? And remember, you don't have to hold the key down. Just press the key once and the automatic accompaniment will continue until you press the next key.

Canceling the A.B.C. Automatic Accompaniment Function

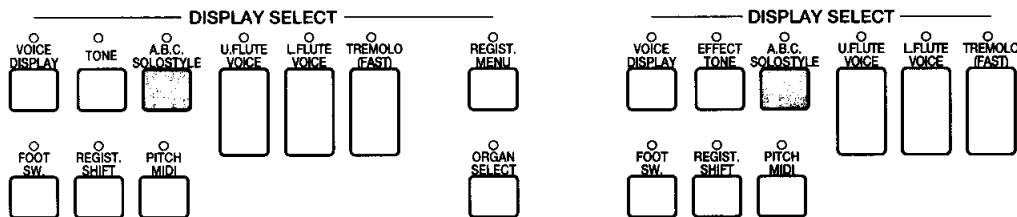
You can, of course, cancel the automatic accompaniment patterns (Fingered mode) if you want and play the accompaniment by yourself on the Lower keyboard and Pedalboard.

To cancel the A.B.C. Automatic Accompaniment:

1. Press the A.B.C./SOLOSTYLE button in the DISPLAY SELECT section, to the right of the LCD Display.

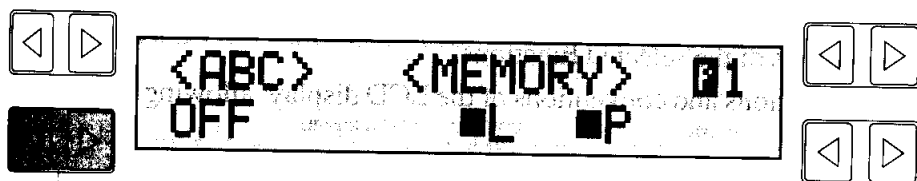
EL-40

EL-60



This display shows the current A.B.C. mode and Memory settings.

2. Press one of the bottom left Data Control buttons repeatedly until "OFF" appears below ABC in the LCD.



These buttons correspond to the bottom left of the LCD and let you step through the various A.B.C. modes.

3. Turn the Memory function off as well by using the bottom right Data Control buttons.



Turns the Pedalboard Memory (P) on and off.

Turns the Lower keyboard Memory (L) on and off.

A solid or dark box in the LCD indicates that the function is on; an empty or outlined box indicates that the function is off. Make sure the boxes next to L (Lower) and P (Pedal) are both off, as shown in the example LCD above.

This short introductory section has shown you just a small portion of the vast potential of your Electone. Now that you know how to select among the Basic Registrations and use the A.B.C. Automatic Accompaniment, take some time to explore the other registrations and their rhythm patterns. There's a great wealth of realistic voices, authentic orchestration and stylistically varied rhythms — all instantly available on the EL-40 from the Registration Menus and Organ Select features, or from the Registration Menu Disks on the EL-60.

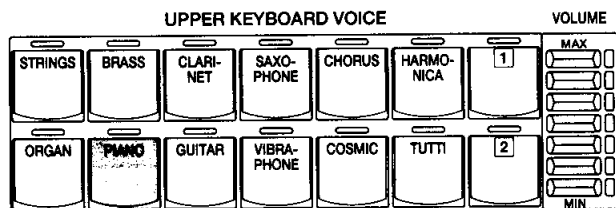
Note: Before going on to explore the remaining sections of this manual, we suggest that you turn the A.B.C. automatic accompaniment and memory functions off. Otherwise, single notes played on the Lower keyboard will sound as full chords, and the Pedal voices will not sound when playing the Pedalboard. To do this, return to the section "Canceling the A.B.C. Automatic Accompaniment Function" above and select the OFF setting in A.B.C. and press the buttons that correspond to LOWER and PEDAL in the display to turn memory off.

Using The LCD Display

The many sophisticated functions of the EL-60/40 are shown and controlled from the LCD display. The LCD display lets you see at-a-glance the current settings of the selected functions.

This section introduces you to the control functions and conventions of the LCD display, allowing you to operate your new Electone quickly and effectively.

- 1.** First, call up the Voice Menu LCD display for the Piano voice of the Upper keyboard by pressing the PIANO button in the Upper Keyboard Voice section.

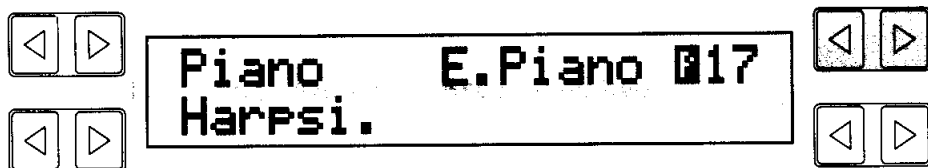


The following display will appear:



- 2.** Press either one of the top right Data Control buttons (as indicated below) to select the E. Piano voice.

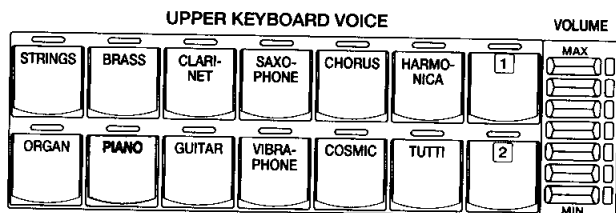
The first character flashes to indicate the selected voice.



Data Control Buttons

These buttons are used to select or adjust the settings shown on the display. Generally, each pair of buttons corresponds to the section of the display directly next to it. In this example, the top right Data Control buttons correspond to the top right quarter of the display (E. Piano).

3. Let's call up another display to see some of the other uses of the Data Control buttons. Press the PIANO button in the Upper Keyboard Voice section once again (the same one you pressed in step #1 above) to call up the Voice Condition display for the Piano voice.



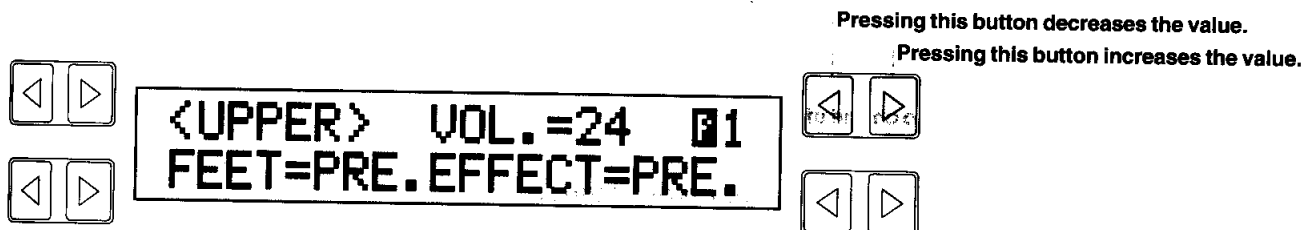
The following display will appear:



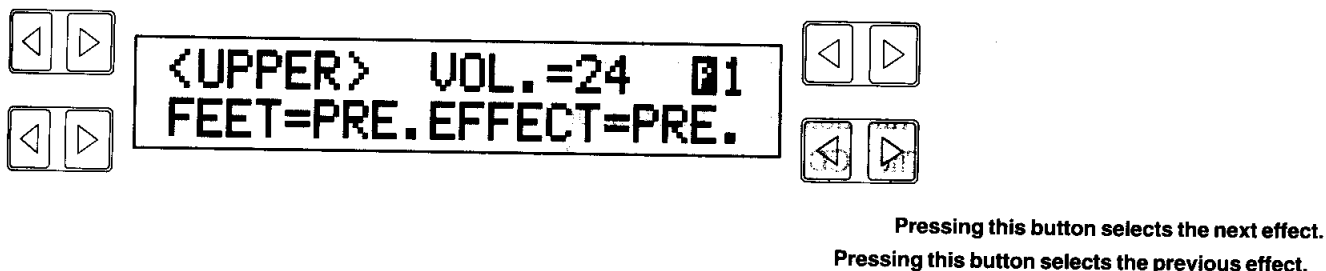
You can change three different settings of the voice from this display: the volume, the octave (or "feet") setting, and the effect type.

4. First, let's change the volume value. Press the left button in the top right Data Control button pair (indicated below).

Notice that the value of the volume decreases each time you press the button. Try also pressing the right button in this Data Control button pair and notice that the value increases.

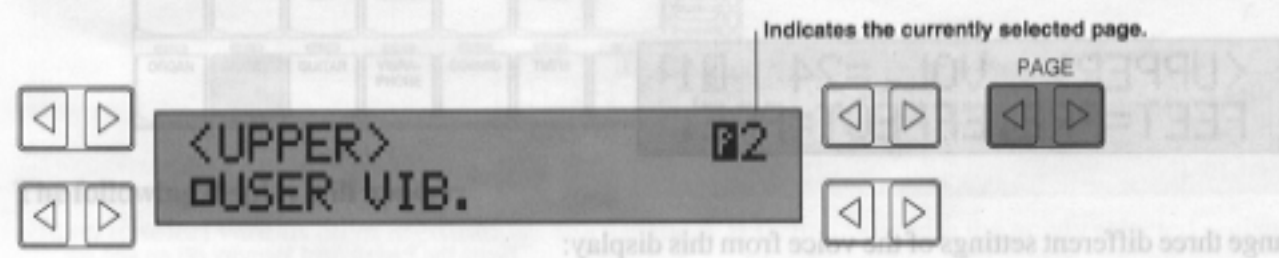


5. Try changing the effect setting now. Use the bottom right Data Control button pair in much the same way as you did with the volume setting above: Press the right button to select the next effect setting, and the left button to select the previous one.

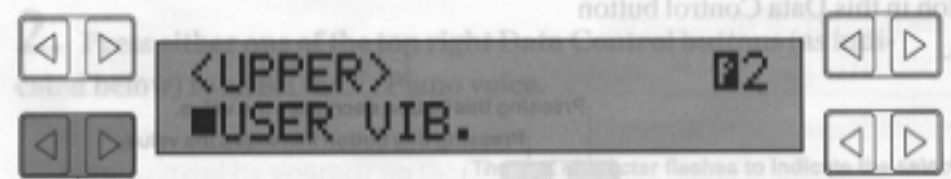


The Data Control buttons are nearly always used in the ways you've seen in the above steps. You'll have noticed that the left button of a Data Control button pair is usually used in a "negative" fashion — for instance, to decrease a value, or select a previous setting or position. The right button is used in a "positive" fashion — to increase a value, or select the next setting or position. In some cases, the buttons are also used to turn functions on and off.

6. Next, we'll use the Page Select buttons. These buttons are used to select (when available) the various "pages" of the display, the numbers of which appear at the top right of the LCD. Press Page ► to select the page shown below.



7. From the page you've just selected, try pressing one of the bottom left Data Control buttons (indicated below). These turn the User Vibrato (USER VIB.) function on and off.



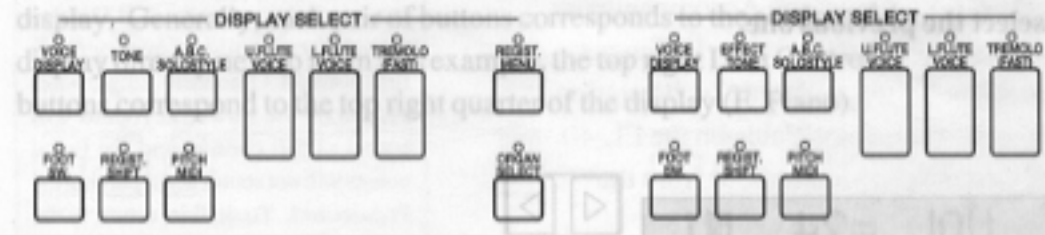
Pressing either of these buttons turns User Vibrato on and off.

The box next to "USER VIB." in the LCD indicates the on/off status; a solid box means ON, and an outlined box means OFF.

Display Select Buttons

EL-40

EL-60



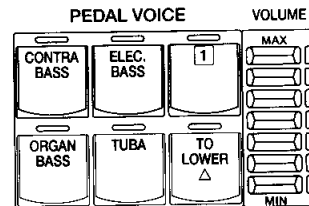
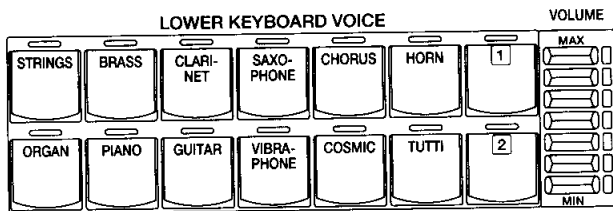
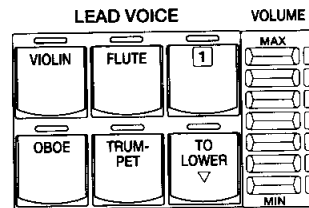
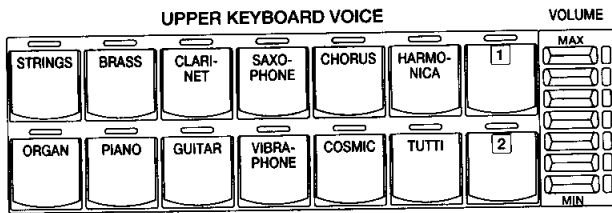
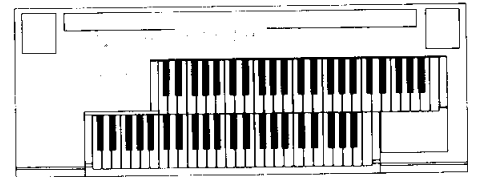
These buttons access some of the major functions of the Electone and call up their respective LCD displays. The LCD display changes when another function has been selected.

There are two ways to call up LCD displays: One is by pressing the panel's voice/rhythm buttons or the sustain controls; the other is by pressing the DISPLAY SELECT buttons.

The LEDs above the buttons momentarily flash when the buttons are pressed. The LEDs of the UPPER/LOWER FLUTE VOICE and TREMOLO (FAST) buttons remain lit when the buttons are pressed (indicating ON status) and turn off when pressed again.

Note: Turning on Tremolo with the TREMOLO button in the DISPLAY SELECT section does not call up an LCD display.

1 Voice Sections

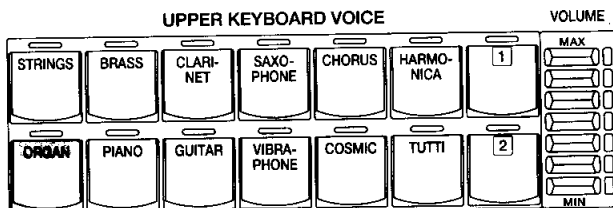


The Electone has four voice sections: Upper Keyboard Voice, Lead Voice, Lower Keyboard Voice, and Pedal Voice. All voices are playable from the Upper or Lower keyboards or Pedalboard, allowing you to create richly textured voice layers on a single keyboard.

Selecting Voices from the Panel

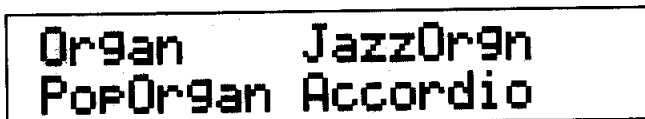
Since selection of panel voices follows the same procedure throughout the various voice sections, instructions for only the Upper Keyboard Voice section are given here.

1. Select a voice from the Upper Keyboard Voice section by pressing one of the Voice buttons in that section.



Note: Voices of the Upper and Lower Flute Voice sections are selected by a different procedure. Refer to the Flute Voices section below for details.

If, for example, you have selected the ORGAN voice, the following display will appear:

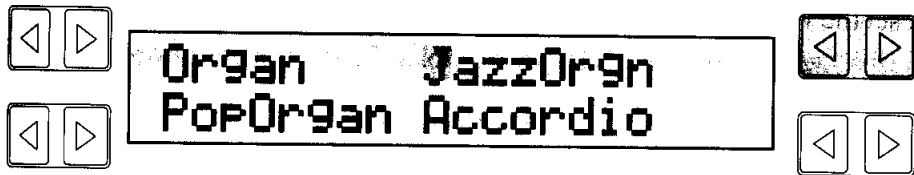


Notice that several different voice names are shown on this display. These are variations of the basic Organ voice category.

Note: Some voice buttons have only one voice.

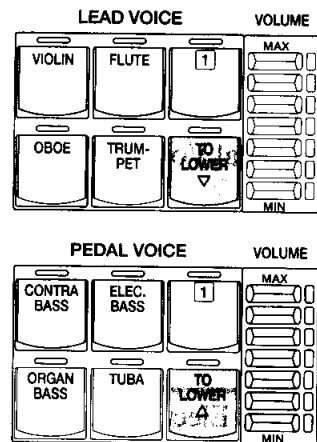
To select one of these voice variations:

- Press one of the Data Control buttons that corresponds to the voice you wish to select.



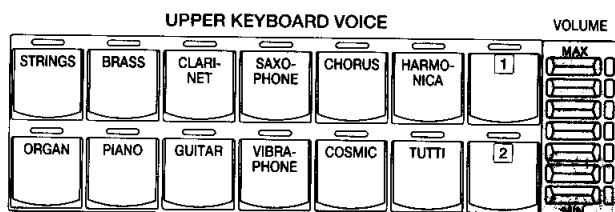
PLAYING LEAD AND BASS VOICES FROM THE LOWER KEYBOARD:

The Electone has a special "To Lower" function that lets you assign Lead or Bass voices to the Lower keyboard. Simply press the TO LOWER button on the voice section you wish to assign, and that voice will be playable from the Lower keyboard.



- Set the volume for each voice section. There are two volume controls: Coarse and Fine.

Coarse: Use the VOLUME controls of each voice section on the panel to set the desired level for each voice. The controls have seven volume settings, from a minimum of 0, or no sound, to a maximum of full volume.



Fine: Pressing the same panel voice button again calls up the Voice Condition display.



Pressing this button decreases the value.
Pressing this button increases the value.

Use the Data Control buttons that correspond to the Volume setting to change the level of the desired voice. The relative level is indicated by a numeric value (from 0 — 24).

Note: Pressing a voice button once calls up that voice's Voice Menu display. Pressing it a second time calls up the Voice Condition display (as shown at left). Successive presses alternate between the two displays.

ABOUT VOICE SECTION VOLUMES:

The Upper Keyboard and Lead voices (when not using the "To Lower" function) sound together in a layer, and the balance of the voices in the layer is determined by the VOLUME controls of each section. In order to hear or audition one voice section, set the volume of the other voice section to the minimum level.

4. Now select voices for the Lower keyboard and Pedalboard as you did for the Upper keyboard above. Also set the volumes of the voices.

Follow steps #1 — #3 above, now using the controls of the Lower Keyboard and Pedal Voices.

Note: The Lead Voice and Pedal Voice sounds one note at a time; when you simultaneously press two or more keys, only the highest note will sound.

Selecting Additional Voices — Dotted Buttons and User Voices

The EL-60/40 Electone has a variety of voices from which you can choose — far greater than what is immediately apparent from the front panel controls. You've already learned in the section above how to select the different voices that are available in the Voice Menu display of each panel voice. The Electone also has dotted buttons in each voice section, giving you access to even more voices. Optional Voice Disk voices are also available for storing to User Voices (EL-60, or EL-40 equipped with the optional Music Disk Recorder).

Selecting Voices From the Dotted Buttons

Each voice section has one or two dotted buttons, found on the right side of each voice section. These dotted buttons function as "wild card" Voice Menu selectors; any internal or User voices can be selected from these buttons.

The dotted buttons have the following basic uses:

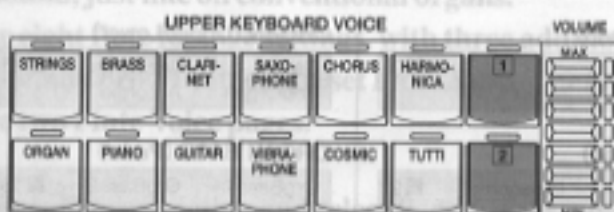
1) For playing any voice of the Voice Menus from any of the keyboards or Pedalboard. You can play on the Upper keyboard, for example, voices from the twenty-two Voice Menu pages (including User), and not be limited to only the twelve buttons (equivalent to twelve Voice Menu pages) that make up the Upper Voice section. Another advantage to this feature is that when the normally monophonic (one note) Lead and Pedal voices are assigned to the Upper or Lower keyboard voice sections, they can be played polyphonically.

2) For having three different voices from the same Voice Menu page available for selection in the same song. For example, you can assign one of the voices to a dotted button in the Upper Keyboard Voice section, the second voice to the other dotted button in the same section, and the third one on the Voice Menu.

- 3) For storing voices from a Voice Disk (on the EL-60, or on the EL-40 equipped with the optional Music Disk Recorder). (See page 83.)

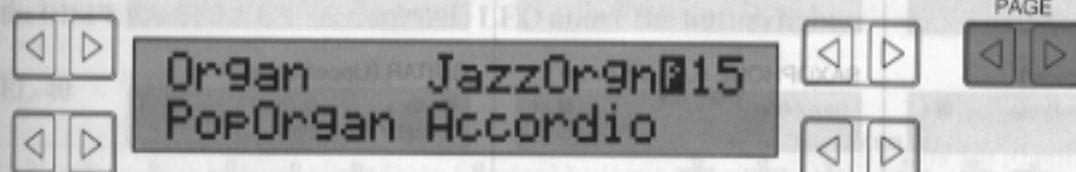
To select a voice from a dotted button:

1. Press one of the dotted buttons in any of the voice sections.



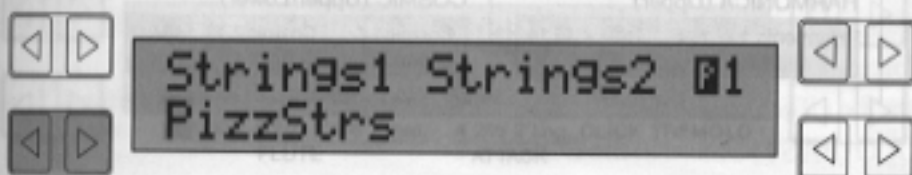
Note: You can directly view and select Voice Menu pages by holding down one of the dotted buttons and simultaneously pressing the desired voice buttons in succession.

2. Select one of the pages with the Page Select buttons.



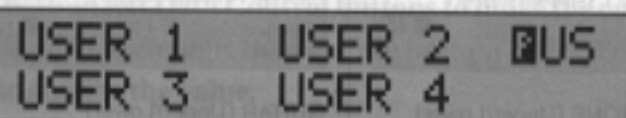
Each voice group appears in the LCD display when the page has been selected.

3. Select a voice from the display (PizzStrs, for example).



Note: The first character of the selected voice's name flashes to indicate that the voice has been selected. As long as you do not select a voice, this indication will not appear.

Select the USER page when you wish to use a voice from a Voice Disk (on EL-60 or EL-40 equipped with the optional Music Disk Recorder). (See page 83.)



Voice Menus

The following chart lists the voices available and their button/page assignment. The numbers shown in the list correspond to the page numbers shown in the display.

EL-40

STRINGS (Upper/Lower)

Strings1	Strings2	■ 1
PizzStrs		

VIOLIN (Lead)

Violin	■ 2
--------	-----

CONTRA BASS (Pedal)

ContBass	PizzBass	■ 3
----------	----------	-----

BRASS (Upper/Lower)

Brass	SynBrass	■ 4
-------	----------	-----

HORN (Lower)

Horn	■ 5
------	-----

TRUMPET (Lead)

Trumpet	■ 6
Trombone	

TUBA (Pedal)

Tuba	Timpani	■ 7
------	---------	-----

FLUTE (Lead)

Flute	■ 8
Whistle	

OBOE (Lead)

Oboe	Bassoon	■ 9
------	---------	-----

CLARINET (Upper/Lower)

Clarinet	■ 10
----------	------

SAXOPHONE (Upper/Lower)

Saxophon	■ 11
----------	------

TUTTI (Upper/Lower)

Tutti	■ 12
-------	------

CHORUS (Upper/Lower)

Chorus	■ 13
--------	------

HARMONICA (Upper)

Harmonic	■ 14
----------	------

ORGAN (Upper/Lower)

Organ	JazzOrgn	■ 15
PopOrgan	Accordio	

ORGAN BASS (Pedal)

OrgBass1	OrgBass2	■ 16
----------	----------	------

PIANO (Upper/Lower)

Piano	E. Piano	■ 17
Harpsi.		

GUITAR (Upper/Lower)

Guitar1	Guitar2	■ 18
E.Guitar	Harp	

VIBRAPHONE (Upper/Lower)

Vibrphon	Glocken.	■ 19
Marimba		

ELECTRIC BASS (Pedal)

E. Bass 1	E. Bass 2	■ 20
SynBass		

COSMIC (Upper/Lower)

Cosmic1	Cosmic2	■ 21
Cosmic3	Cosmic4	

EL-60

STRINGS (Upper/Lower)

Strings1	Strings2	■ 1
PizzStrs		

VIOLIN (Lead)

Violin	■ 2
--------	-----

CONTRA BASS (Pedal)

ContBass	PizzBass	■ 3
----------	----------	-----

BRASS (Upper/Lower)

Brass	SynBrass	■ 4
-------	----------	-----

HORN (Lower)

Horn1	Horn2	■ 5
-------	-------	-----

TRUMPET (Lead)

Trumpet1	Trumpet2	■ 6
Trombone		

TUBA (Pedal)

Tuba	Timpani	■ 7
------	---------	-----

FLUTE (Lead)

Flute	■ 8
Whistle	

OBOE (Lead)

Oboe	Bassoon	■ 9
------	---------	-----

CLARINET (Upper/Lower)

Clarinet	■ 10
----------	------

SAXOPHONE (Upper/Lower)

Saxophon	■ 11
----------	------

TUTTI (Upper/Lower)

Tutti1	Tutti2	■ 12
--------	--------	------

CHORUS (Upper/Lower)

Chorus	■ 13
--------	------

HARMONICA (Upper)

Harmonic	■ 14
----------	------

ORGAN (Upper/Lower)

Organ	JazzOrgn	■ 15
PopOrgan	Accordio	

ORGAN BASS (Pedal)

OrgBass1	OrgBass2	■ 16
----------	----------	------

PIANO (Upper/Lower)

Piano	E. Piano	■ 17
Harpsi.		

GUITAR (Upper/Lower)

Guitar1	Guitar2	■ 18
E.Guitar	Harp	

VIBRAPHONE (Upper/Lower)

Vibrphon	Glocken.	■ 19
Marimba	SynChime	

ELECTRIC BASS (Pedal)

E. Bass 1	E. Bass 2	■ 20
SynBass		

COSMIC (Upper/Lower)

Cosmic1	Cosmic2	■ 21
Cosmic3	Cosmic4	

2 Flute Voices

To select preset voices:

The Flute Voice feature allows you to create your own organ voices, giving you access to an unlimited combination of organ sounds. With this function, you can recreate all of the classic organ sounds by adjusting the flute footage levels and the percussive sound, just like on conventional organs.

There are eight flute footage settings, with three additional footage settings for the attack sound. You can select specially programmed Preset Flute Voices, or create your own by adjusting the footage settings.

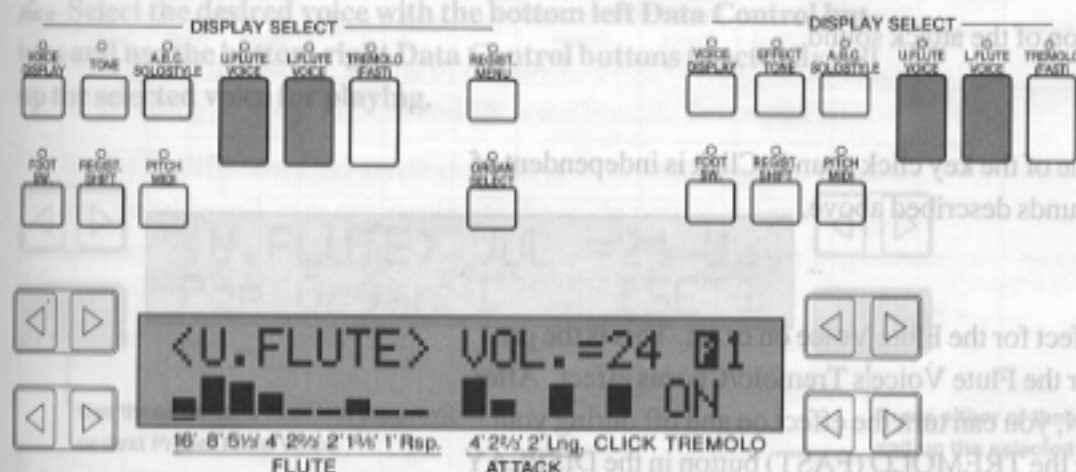
There are two Flute Voice pages.

To use the Flute Voice function and select Page 1 (Edit page):

1. Press one of the Flute Voice buttons (UPPER or LOWER) in the DISPLAY SELECT section. The LED above the button lights.

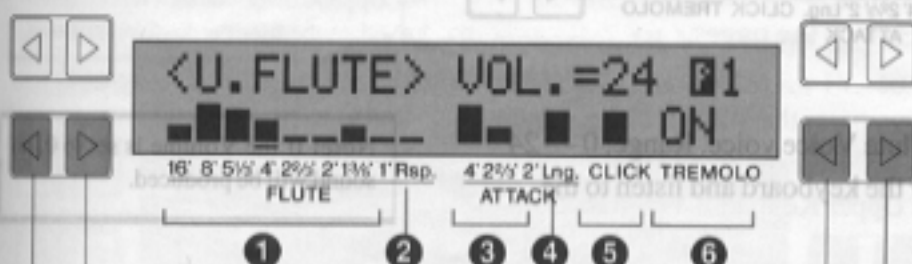
EL-40

EL-60



Pressing the button again turns the Flute Voice function off (the LED also turns off), and changes the LCD to the Voice Display. Each of the buttons acts as an on/off switch.

2. Use the bottom left Data Control buttons to move the cursor to the setting you wish to change, then use the bottom right Data Control buttons to change the value.



Moves the cursor one space to the right.

Moves the cursor one space to the left.

Increases the value at the cursor.

Decreases the value at the cursor.

Note: When you use the Upper/Lower Flute Voice sections and/or other voices at the same time, only one of the voices can be shown in the LCD at one time—even though all voices may be operative and both of the Upper and Lower Flute Voice LEDs are lit.

Note: Remember that the UPPER and LOWER FLUTE VOICE buttons are on/off switches. In the process of turning on a Flute Voice, then switching to another function and returning to the Flute Voice, you may unintentionally turn the Flute Voice off. Check whether the Flute Voice LEDs are on or off before you start to play.

1 Footages

Determines the level of each flute footage. The level of each footage is indicated by a dark bar in the LCD. Whole number footages are in octaves; for example, 16' has the lowest pitch, 8' is one octave above 16', 4' is one octave above 8', and so on. The fractional footages (5-1/3, 2-2/3, 3, etc.) are intermediate pitches.

2 Response

Determines the overall response speed of the sound. Higher settings make the keyboard response faster; lower settings result in a slower response, creating a pipe organ effect.

3 Attack Footages

Determines the level of each sound in the percussive portion of the voice. Footage settings are 4', 2-2/3' and 2'.

Note: When you play and hold several notes, only the first note played will have attack; all other notes played while the first is held have no attack.

4 Attack Length

Determines the duration of the attack sound.

5 Click

Determines the volume of the key click sound. Click is independent of the Attack Footage sounds described above.

6 Tremolo

Turns the Tremolo effect for the Flute Voice on or off. This is the primary on/off switch for the Flute Voice's Tremolo/Chorus effect. After this has been set to ON, you can turn the effect on and off during your performance by using the TREMOLO (FAST) button in the DISPLAY SELECT section. (See the Tremolo section, page 32, for more information.)

3. Adjust the volume by using the top right Data Control buttons.

Decreases the volume.
Increases the volume.

<U.FLUTE> VOL.=24 01

16' 8' 5 1/3' 4' 2 2/3' 2' 1 1/3' 1' Resp. 4' 2 2/3' 2' Lng. CLICK TREMOLO

FLUTE ATTACK

Volume

Determines the overall volume of the Flute Voice voice. Range: 0 — 24
Try adjusting these settings as you play the keyboard and listen to the changes in the sound.

Note: If the Volume is set to 0, no sound will be produced.

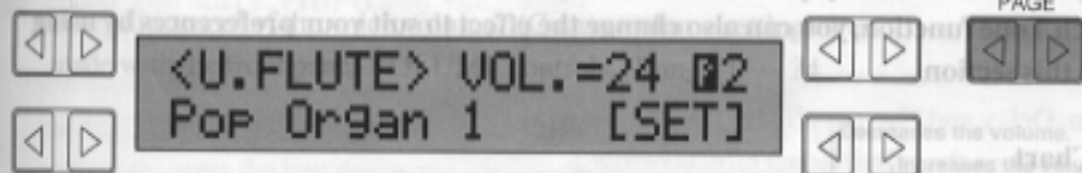
SAVING FLUTE VOICES: You can save the original organ voices that you create with the Flute Voice feature for future use. After creating a voice, save it by storing it to a Registration Memory button. (Refer to the Registration Memory section, page 54.)

Selecting Preset Flute Voices

To select preset voices:

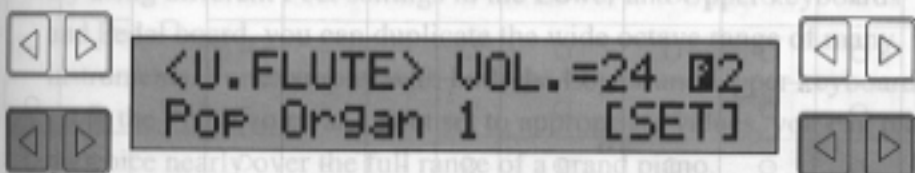
- From Page 1, press the Page ► button.

Page 2



This page allows you to select Preset Flute Voice voices. Eight factory-preset voices (four Jazz Organ and four Pop Organ voices) are provided.

- Select the desired voice with the bottom left Data Control buttons and use the bottom right Data Control buttons to actually call up the selected voice for playing.



Use these buttons to select the previous or next Preset Flute Voice.

Press either of these buttons to actually call up the selected Preset Flute Voice. These correspond to "SET" in the LCD.

- Once you select "SET" to actually call up a voice, the following display momentarily appears in the LCD.

<U.FLUTE> VOL.=24 02
Completed...!!

Note: When you switch between Upper and Lower Flute Voices, the preset Flute Voice name shown in the LCD may not be the one actually selected.

