YAMAHA Electone®

EL-28

OWNER'S MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE INSTRUCCIONES

Bescheinigung des Importeurs

Hiermit wird bescheinigt, daß der/die/das

Gerät: Elektronische Orgel Typ: EL-28
(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

VERFÜGUNG 1046/84
(Amtsblattverfügung)

funkentstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtgung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Yamaha Europa GmbH
(Name des Importeurs)

Dies bezieht sich nur auf die von der YAMAHA EUROPE GmbH vertriebenen Produkte.

Wichtiger Hinweis für die Benutzung in der Bundesrepublik Deutschland.

Dit produkt is gefabriceerd in overeenstemming met de radiostoringsvoorschriften van de Richtlijn van de Raad (82/499/EEG).

ΑΥΤΗ Η ΣΥΣΚΕΥΗ ΑΝΤΑΠΟΚΡΙΝΕΤΑΙ ΣΤΙΣ ΑΠΑΙΤΗΣΕΙΣ ΤΩΝ ΟΔΗΓΙΩΝ ΤΗΣ ΕΥΡΩΠΑΙΚΗΣ ΟΙΚΟΝΟΜΙΚΗΣ ΚΟΙΝΟΤΗΤΑΣ 82/499/Ε.Ο.Κ..

Este produto está de acordo com o radio de interferencia frequente requiridos do Conselho Diretivo 82/499/EEC.

Dette apparat overholder det gaeldende 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/ECC and/or 87/308/ECC.

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 frequencia fijados por el Consejo Directivo 87/308/CEE.

YAMAHA CORPORATION

IMPORTANT

THE WIRES IN MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
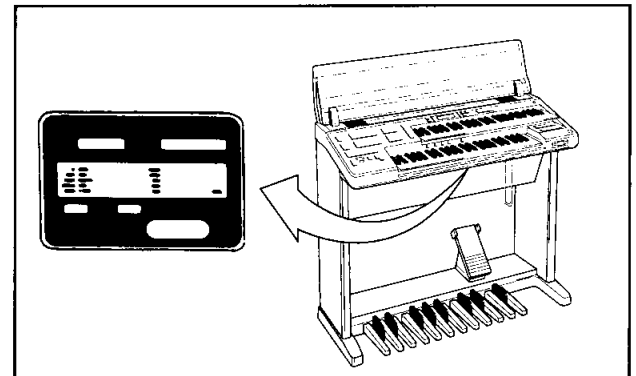
Blue: NEUTRAL
Brown: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. 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 _____

Included Accessories	Mitgeliefertes Zubehör	Accessoires fournis	Accesorios incluidos

• Owner's Manual
• Assembly Instructions
• Bench
• Disks   Blank 2DD Floppy Disk (1)
     Registration Menu (1)
     Demonstrations (1)
     Voice Disk (1)
	•Bedienungsanleitung
	•Aufbauanleitung
	•Sitzbank
	•Disketten Leerdiskette 2DD (1)
	     Registrierungs-Menu (1)
	     Demonstrationsstücke (1)
	     Voice Disk (1)
		•Mode d'emploi
		•Instructions de montage
		•Banc
		•Disquettes Disquette 2DD vierge (1)
		     Menu de registrations (1)
		     Démonstrations (1)
		     Disquette de voix (1)
			• Manual de Instrucciones
			• Instrucciones de montaje
			• Banqueta
			• Discos Disquete 2DD virgen (1)
			     Menús de Registros (1)
			     Demostraciones (1)
			     Disco de Voces (1)

Taking Care of Your Electone

Your Electone will give you years of playing pleasure if you observe the simple rules given below:

1. Avoid Humidity & Heat
Avoid placing the Electone in areas that are subject to excessive humidity or heat. Do not leave the instrument near heaters or in a car exposed to direct sunlight, for example.

2. Avoid Dust & Moisture
Avoid locations in which the instrument is likely to be exposed to excessive dust or moisture.

3. Handle With Care
Never apply excessive force to the controls, connectors or other parts of your Electone, and avoid scratching or bumping it with hard objects. Further, always turn the POWER switch off after use, and cover the instrument with the key cover.

4. Clean Carefully
Clean the cabinet and keys of your Electone only with a clean, slightly damp cloth. A neutral cleanser may be used if desired. Never use abrasive cleansers, waxes, solvents or chemical dust cloths since these can dull or damage the finish.

5. Never Tamper With the Internal Circuitry
Never open the Electone cabinet and touch or tamper with the internal circuitry. Tampering with the circuitry can result in electrical shock!

6. Electric Interference
Since the Electone contains digital circuitry, it may cause interference if placed too close to radio or television receivers. If this occurs, move the instrument further away from the affected equipment.

7. Check Your Power Supply
Make sure that your local AC mains voltage matches the voltage specified on the name plate on the rear panel.

Entretien de l'Electone

L'Electone vous donnera de grandes satisfactions pendant de longues années si vous observez les quelques mesures de précaution suivantes:

1. Evitez humidité et chaleur
Ne placez jamais l'Electone là où il pourrait être soumis à une humidité ou à une chaleur excessive, comme par exemple à proximité d'un appareil de chauffage ou dans un véhicule stationné en plein soleil.

2. Evitez poussière et humidité
Evitez tous les endroits où l'instrument pourrait être soumis à de la poussière ou à une humidité excessive.

3. Manipulez avec précaution
Ne manipulez jamais les commandes, les connecteurs et autres pièces de l'Electone avec une force excessive et évitez de rayer ou de heurter l'instrument avec des objets durs. Après utilisation de l'instrument, n'oubliez pas de couper son alimentation électrique et recouvrez-le avec la housse fournie.

4. Nettoyez avec soin
Nettoyez le coffret et le clavier du Electone en utilisant exclusivement un chiffon propre légèrement humide. Il est possible d'utiliser un produit de nettoyage neutre. N'utiliser jamais un produit de nettoyage décapant, de la cire, un solvant, ou un chiffon imprégné de produits chimiques car cela risquerait de ternir et d'endommager le fini.

5. N'essayez jamais d'altérer les circuits internes
N'ouvrez jamais le Electone et n'essayez jamais de toucher ou d'altérer les circuits internes. Le fait de toucher aux circuits internes pourrait provoquer un choc électrique!

6. Parasites électriques
Du fait que le Electone contient des circuits numériques, il peut provoquer des parasites et du bruit lorsqu'il est placé trop près d'un récepteur de télévision ou d'un tuner. Si un tel problème se produit, éloignez l'instrument de l'appareil affecté.

7. Vérifiez la source d'alimentation
Vérifiez que la tension spécifiée sur le panneau arrière correspond à la tension du secteur.

Pflege Ihrer Electone

Wenn Sie die folgenden, einfachen Regeln beachten, werden Sie viele Jahre Spaß an Ihrer Electone haben:

1. Vor Staub und Feuchtigkeit schützen
Stellen Sie Ihre Electone nicht an Orten auf, wo es übermäßiger Feuchtigkeit oder Wärme ausgesetzt ist. Lassen Sie das Instrument auch nicht neben Heizkörpern oder in einem in der prallen Sonne stehenden Fahrzeug liegen.

2. Vor Staub und Nässe schützen
Vermeiden Sie Aufstellungsorte, an denen das Instrument übermäßig viel Staub oder Nässe ausgesetzt ist.

3. Mit Umsicht handhaben
Wenden Sie beim Betätigen der Schalter und Regler sowie beim Anschließen und Abtrennen von Steckern nicht zu viel Kraft auf. Schützen Sie die Electone auch vor Stößen und Kratzern. Vergessen Sie nach Gebrauch nicht, das Instrument mit dem POWER-Schalter auszuschalten und mit der mitgelieferten Staubschutzhaube abzudecken.

4. Regelmäßig reinigen
Reinigen Sie das Gehäuse und die Tasten Ihrer Electones ausschließlich mit einem sauberen Tuch, das bei Bedarf ein wenig angefeuchtet werden kann. In besonders hartnäckigen Fällen kann auch ein neutrales Reinigungsmittel verwendet werden. Verwenden Sie niemals Scheuermittel, Wachs, Lösungsmittel oder chemisch behandelte Staubtücher, da diese die Gehäuseoberfläche angreifen.

5. Keinesfalls Schaltungen verändern
Niemals das Gehäuse Ihrer Electone öffnen und interne Schaltungen berühren oder verändern. Ein eigenmächtiger Eingriff kann einen elektrischen Schlag zur Folge haben!

6. Elektrische Störungen
Da die Electone digitale Schaltungen enthält, könnte bei zu dichter Plazierung bei einem Fernseh- oder Rundfunkgerät der Empfang beeinträchtigt werden. Stellen Sie Ihr Instrument in einem solchen Fall bitte einfach etwas weiter entfernt auf.

7. Netzspannung überprüfen
Vergewissern Sie sich vor dem Anschließen an das Stromnetz, daß die örtliche Netzspannung den Betriebsspannungswerten auf dem Typenschild an der Rückseite des Instruments entspricht.

Cuidados del Electone

El Electone le proporcionará muchos años de placer de interpretación si observa las simples reglas que se mencionan a continuación:

1. Evite la humedad y el calor
No ponga el Electone en lugares que estén sujetos a excesiva humedad o calor. No deje el instrumento, por ejemplo, cerca de estufas ni dentro de un automóvil expuesto a la luz directa del sol.

2. Evite el polvo y el agua
Evite los lugares en los que el instrumento pueda quedar expuesto a polvo excesivo o al agua.

3. Manipule con cuidado el instrumento
No aplique nunca fuerza excesiva a los controles, conectores ni otras partes del Electone, y no la raye ni golpee con objetos duros. Además, desconecte siempre el interruptor POWER después de utilizarla, y cubra el instrumento con la cubierta de teclado suministrada.

4. Limpie el instrumento con cuidado
Limpie la caja y las teclas del Electone solo con un paño limpio y un poco humedecido. Podrá utilizar un detergente neutro si lo desea. No emplee nunca limpiadores abrasivos, ceras, ni solventes o paños de polvo químico porque podrían ensuciar o dañar el acabado.

5. Nunca manipule los circuitos internos
No abra nunca la caja del Electone ni toque los circuitos internos. ¡La manipulación de los circuitos puede resultar en una descarga eléctrica!
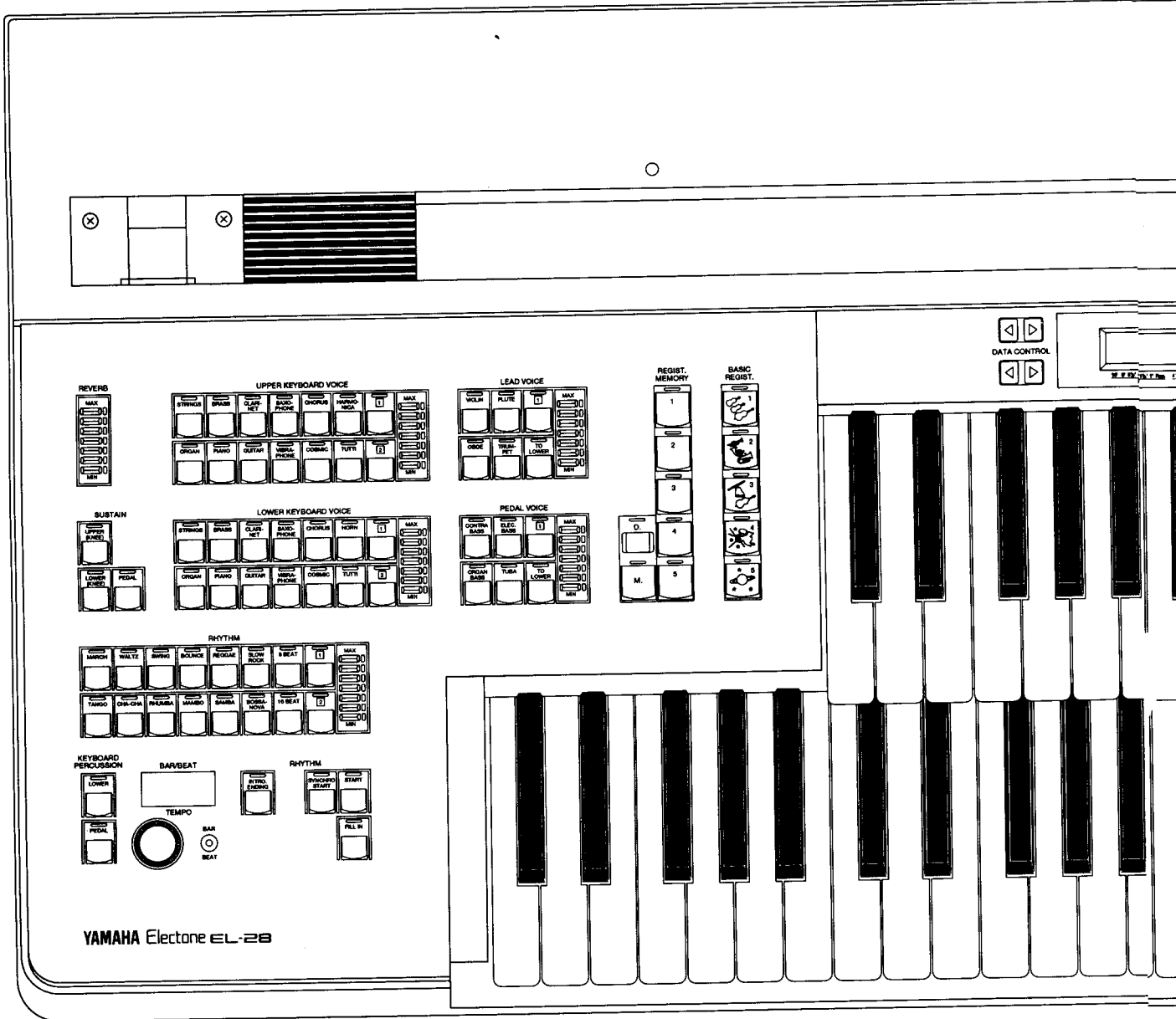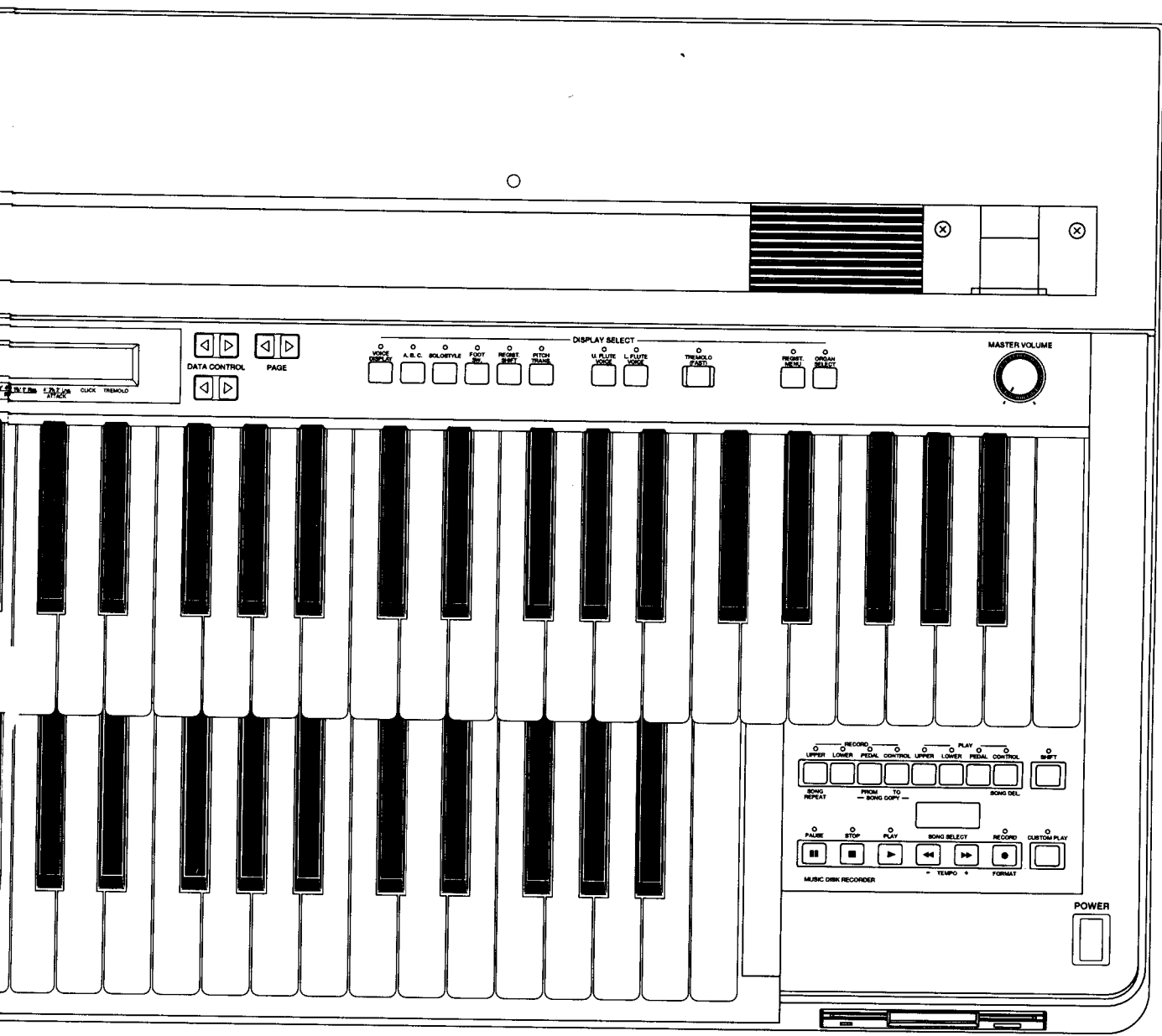
6. Interferencias eléctricas
Puesto que el Electone contiene circuitos digitales, puede causar interferencia si se coloca demasiado cerca de una radio o televisor. Si así le ocurre, aparte el instrumento del equipo afectado.

7. Compruebe la alimentación de su área
Asegúrese de que tensión de alimentación de CA de su área corresponde con la tensión especificada en la placa de características del panel posterior.

EL-28

REVERB
MAX
MIN

UPPER KEYBOARD VOICE

STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HARMO-NICA | 1

ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2

MAX
MIN

LEAD VOICE

VIOLIN | FLUTE | 1

OBOE | TRUM-PET | TO LOWER

MAX
MIN

REGIST. MEMORY
1
2
3
D.
4
M.
5

BASIC REGIST.
1
2
3
4
5

DATA CONTROL

SUSTAIN
UPPER (KNEE)
LOWER (KNEE) | PEDAL

LOWER KEYBOARD VOICE

STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HORN | 1

ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2

MAX
MIN

PEDAL VOICE

CONTRA BASS | ELEC. BASS | 1

ORGAN BASS | TUBA | TO LOWER

MAX
MIN

RHYTHM

MARCH | WALTZ | SWING | BOUNCE | REGGAE | SLOW ROCK | 8 BEAT | 1

TANGO | CHA-CHA | RHUMBA | MAMBO | SAMBA | BOSSA-NOVA | 16 BEAT | 2

MAX
MIN

KEYBOARD PERCUSSION
LOWER

PEDAL

BAR/BEAT

TEMPO

BAR
BEAT

INTRO. ENDING

RHYTHM
SYNCHRO START | START

FILL IN

YAMAHA Electone EL-28

DATA CONTROL PAGE

ATTACK CLICK TREMOLD

DISPLAY SELECT

VOICE DISPLAY A. B. C. SOLO/STYLE FOOT SW. REGIST SHIFT PITCH TRANS. U. FLUTE VOICE L. FLUTE VOICE TREMOLO (FAST) REGIST. MENU ORGAN SELECT

MASTER VOLUME

RECORD PLAY
UPPER LOWER PEDAL CONTROL UPPER LOWER PEDAL CONTROL SHIFT

SONG REPEAT FROM TO SONG COPY SONG DEL.

PAUSE STOP PLAY SONG SELECT RECORD CUSTOM PLAY

TEMPO FORMAT

MUSIC DISK RECORDER

POWER

Main Features

Your Yamaha Electone is packed with many sophisticated functions. Yet it is amazingly easy to use. The main features are 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 the EL-28 a truly expressive musical instrument. (See page 15.)

Limitless Variety of Organ Sounds
The EL-28 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 21.)

Recording and Playback of Performances with the Music Disk Recorder
The EL-28 Electone features a Music Disk Recorder for recording and playing back your performances. It also allows you to use the included Demo Disk, for enjoying professionally recorded performances, and the Voice Disk, for using additional voices with your Electone. (See page 54.)

Wide Range of Voice Controls and Effects
Electone voices can also be enhanced with a variety of voice controls and effects, including octave settings, Sustain, Reverb, Tremolo (for reproducing the sound of a rotating speaker) and Vibrato. (See page 24.)

Dynamic Rhythm Patterns
The Rhythm section of the EL-28 features authentic drum and percussion sounds, used by expert rhythm programmers in creating a total of 41 rhythm patterns, ranging across all styles of music. (See page 31.)
A Keyboard Percussion function is also provided for playing the realistic percussion sounds from the Lower keyboard and Pedalboard. (See page 41.)

Comprehensive Automatic Accompaniment
The EL-28 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 embellishment for your performance. (See pages 37-43.)

Wide Variety of Registration Menus
Your Electone also has 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. With the 56 built-in Registrations and the 80 on the included disk, you have access to a total of 136 Registrations. (See page 5.)

MIDI Compatibility
The Electone is equipped with the worldwide standard Musical Instrument Digital Interface (MIDI), allowing your Electone to control (or be controlled by) other MIDI instruments. (See page 51.)

Table of Contents

Quick Introductory Guide

Playing Your EL-28 Electone

No matter what your level of playing experience, 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.
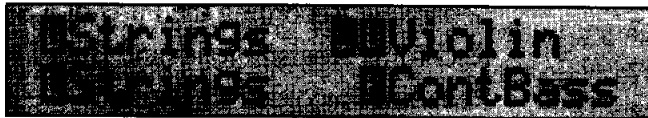
Getting Started

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.

POWER

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

This last display (Voice Display) shows the currently assigned voice settings for each voice section of the instrument, with the abbreviation for each beside the voice name: Upper (𝗨), Lower (𝗟), Lead (𝗟𝗗), 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 44) 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.
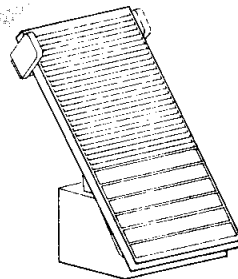
MASTER VOLUME

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

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.
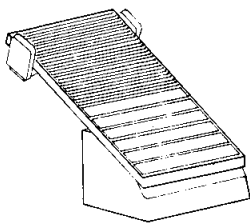
Maximum volume   **Minimum volume**

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

Playing Your Electone

Your new Electone is equipped with an exceptionally wide variety of voices, rhythms, 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 the following piece of music on the Upper keyboard, using the indicated registration.

BASIC
REGIST.

3

Basic Registration 1 **From the New World** *A. Dvořák* [32: 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 **Down by the Riverside** *Traditional* [13: Bigband 2] Tempo ♩=95

Basic Registration 3 **Emperor Waltz** *J. Strauss* [9: Vienna Waltz] Tempo ♩=190

Basic Registration 4 **Twinkle, Twinkle Little Star** *German Folk Song* [16: Dixieland] Tempo ♩=112

Basic Registration 5 **Ode to Joy** *L. V. Beethoven* [10: March 1] Tempo ♩=123

4

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	Brass	Flute	Cosmic 1	Synth. Brass
Lower Keyboard voice	Strings	Horn	Piano	Cosmic 2	Cosmic 3
Pedal voice	Contra Bass	Tuba	Contra Bass	Cosmic 2	Synth. Bass

Registration Menu

In addition to the Basic Registrations, many more registrations are available on your Electone. The EL-28 features 56 built-in registrations including special organ sounds, plus an additional 80 Registration Menus that can be loaded from the included Registration Menu Disk.

These registrations include voice and rhythm/accompaniment selections and have been created by professional Electone performers to suit a variety of music styles. With the variety of registrations available — both on the Registration Menu Disk and built into the Electone — you're certain to find the right registration that perfectly suits any style of music you play.

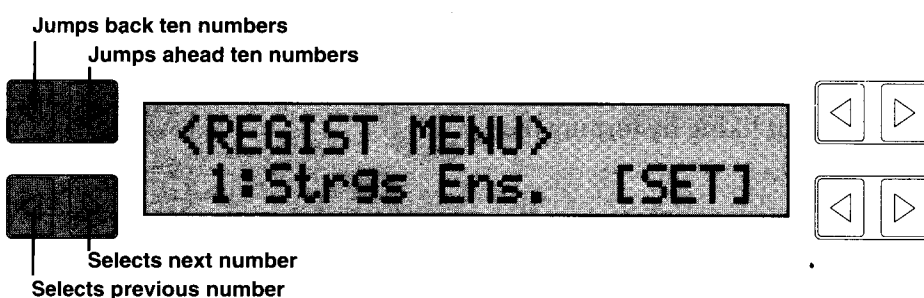## Built-in Registration Menu / Organ Select

The EL-28 is equipped with a total of 41 specially programmed registrations, selected with the Registration Menu button on the panel. There is also an Organ Select function that lets you call up one of 15 different organ combinations.
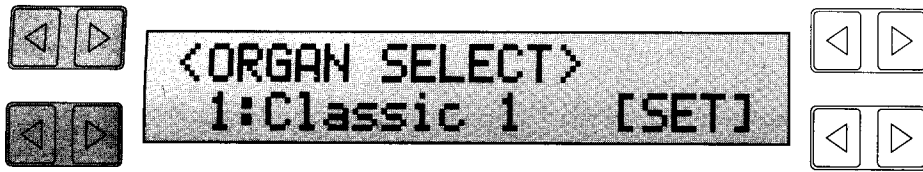
To select a registration from the built-in Registration Menu, or an organ sound from Organ Select:

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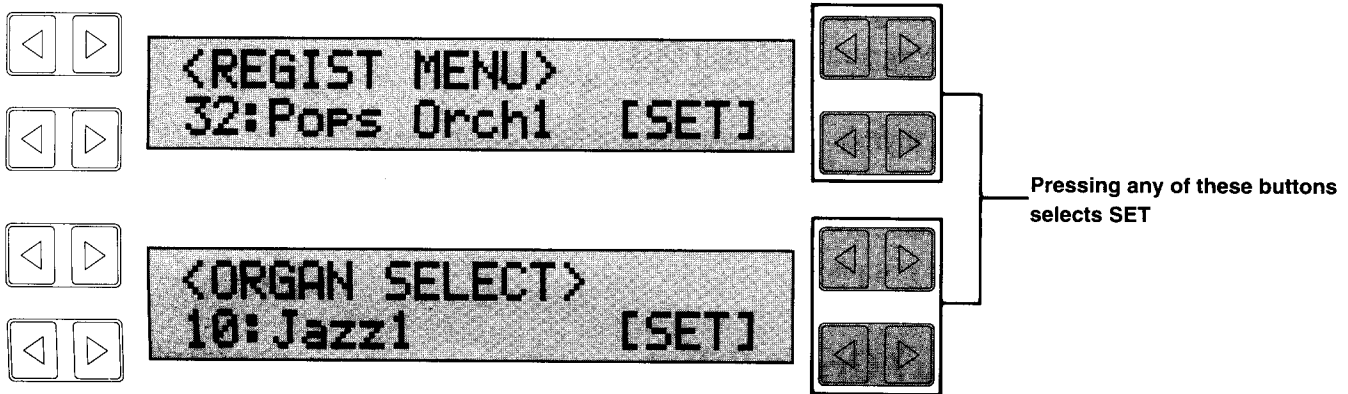
DISPLAY SELECT

VOICE DISPLAY A. B. C. SOLOSTYLE FOOT SW. REGIST. SHIFT PITCH TRANS. U. FLUTE VOICE L. FLUTE VOICE TREMOLO (FAST) REGIST. MENU ORGAN SELECT
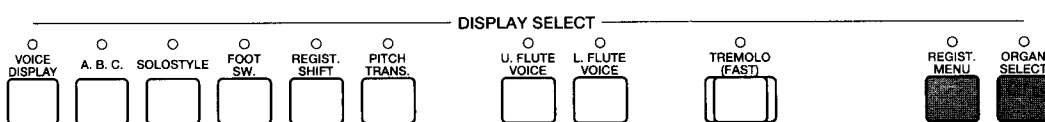
2. From the display that appears, select the desired registration or organ sound.

Jumps back ten numbers
Jumps ahead ten numbers

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

Selects next number
Selects previous number

```
┌──────┐  ┌─────────────────────────────────────┐  ┌──────┐
│◁  ▷ │  │ <ORGAN SELECT>                      │  │◁  ▷ │
│◀  ▶ │  │ 1:Classic 1        [SET]            │  │◀  ▶ │
└──────┘  └─────────────────────────────────────┘  └──────┘
```

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.
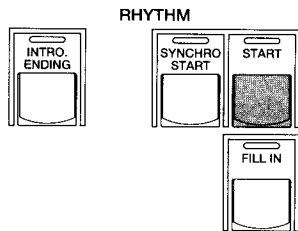
3. Finally, call up the selected registration or organ sound by selecting SET in the display. (Pops Orch 1 [No. 32] and Jazz 1 [No. 10] here, for example.)

```
┌──────┐  ┌─────────────────────────────────────┐  ┌──────┐
│◁  ▷ │  │ <REGIST MENU>                       │  │◁  ▷ │
│◁  ▷ │  │ 32:Pops Orch1      [SET]            │  │◀  ▶ │
└──────┘  └─────────────────────────────────────┘  └──────┘

┌──────┐  ┌─────────────────────────────────────┐  ┌──────┐
│◁  ▷ │  │ <ORGAN SELECT>                      │  │◀  ▶ │
│◁  ▷ │  │ 10:Jazz1           [SET]            │  │◀  ▶ │
└──────┘  └─────────────────────────────────────┘  └──────┘
```

Pressing any of these buttons selects SET

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 go on to step #4 and try out the rhythm and accompaniment features of your Electone.
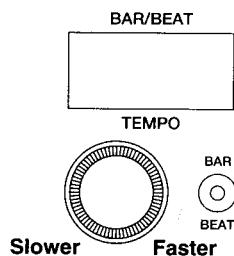
A chart included with this manual provides a list of all the available music styles, along with the rhythm patterns used. (See page 10.)

4. Once you've selected a registration, 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.)

```
                    RHYTHM
        ┌────────┐  ┌────────┬────────┐
        │ INTRO. │  │SYNCHRO │ START  │
        │ ENDING │  │ START  │        │
        │        │  │        │        │
        └────────┘  └────────┴────────┘
                             ┌────────┐
                             │FILL IN │
                             │        │
                             └────────┘
```

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

BAR/BEAT

TEMPO

BAR
○

BEAT

Slower　　**Faster**

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 38.

**Example:**

C
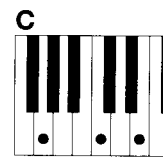
Play a C chord on the keyboard

6. **Now return to the first five written music examples in the Basic Registrations section above. (See page 4.) Select the registration indicated at the top right of the score (for example in the first song, "Pops Orch 1" number 32). Refer back to the steps on selecting registrations above (Page 5) if necessary.**

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.**

BAR/BEAT

8 2————Rhythm tempo

TEMPO

BAR
○

BEAT
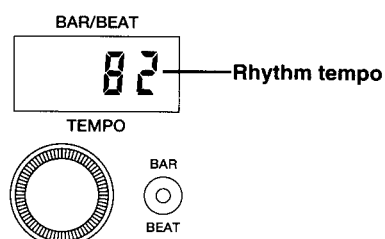
8. Play the melody line as you did before with your right hand on the Upper keyboard. This time, however, use the A.B.C. automatic accompaniment by pressing the chords with your left hand. The keys you should press are indicated by the small diagrams just below the melody in the score.
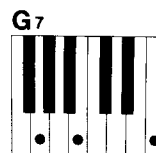
9. Now that you've heard what A.B.C. can do, try selecting other registrations from the Registration Menu. Use the A.B.C. function with these newly selected registrations as well, to get a better idea of the wide stylistic range of your Electone.
See how easy it is? And remember, you don't have to hold the key down to use the automatic accompaniment. Just press the key once and the automatic accompaniment will continue until you press the next key.

> **Note:** If you have unintentionally changed the display by pressing a button on the panel, return to step #1 above (pressing the REGIST. MENU or ORGAN SELECT buttons) to return to the Registration Menu.

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. button in the DISPLAY SELECT section, to the right of the LCD Display.

DISPLAY SELECT

VOICE DISPLAY A. B. C. SOLOSTYLE FOOT SW. REGIST. SHIFT PITCH TRANS. U. FLUTE VOICE L. FLUTE VOICE TREMOLO (FAST) REGIST. MENU ORGAN SELECT

〈ABC〉　　〈MEMORY〉
Fingered　■L　■P
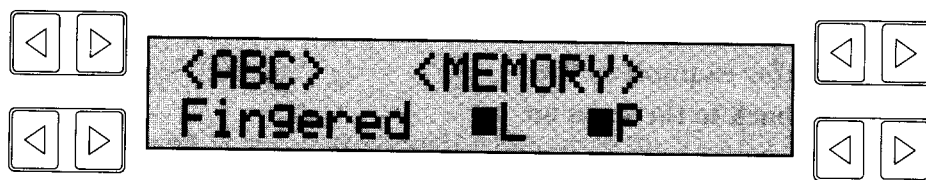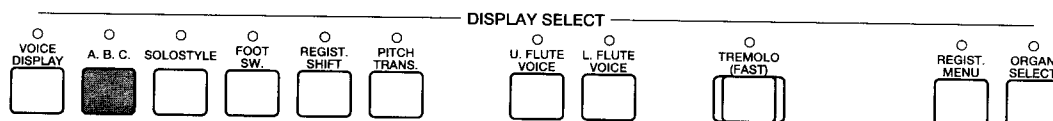
This display shows the current A.B.C. mode and Memory settings.

> **Note:** 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.

2. Press one of the bottom left Data Control buttons repeatedly until "OFF" appears below ABC in the LCD.
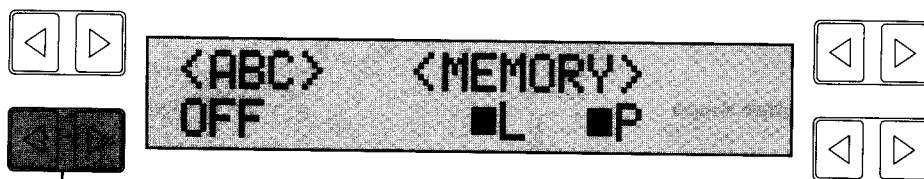
〈ABC〉　　〈MEMORY〉
OFF　　　　■L　■P

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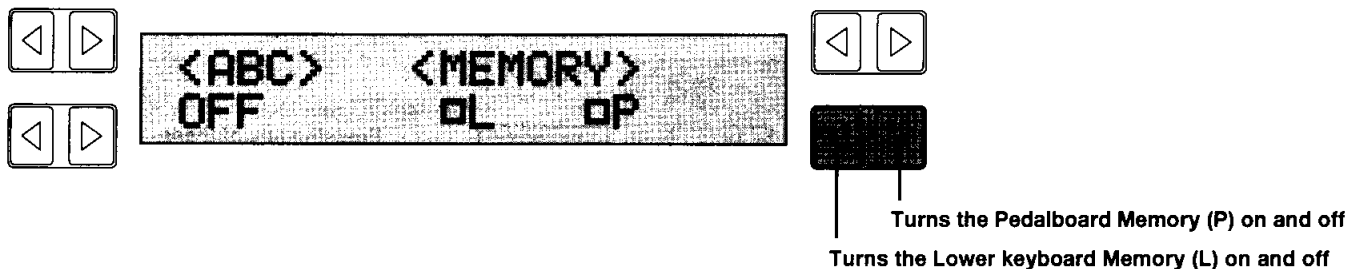
A solid or dark box in the LCD indicates that the function is on; an empty or outlined box indicates that the function is off. Make sure the boxes next to L (Lower) and P (Pedal) are both off, as shown in the example LCD above.

Note: As in the operation described above, the Data Control buttons are also used simply to turn functions on and off.

Registration Menu Disk

Included with your Electone is a special Registration Menu Disk that features an additional 80 Registration Menus. (The Registration Menu Disk is divided into 5 pages, and each page contains 16 registrations.)

1. Insert the included Registration Menu Disk face up into the disk slot under the M.D.R., until it clicks in place.
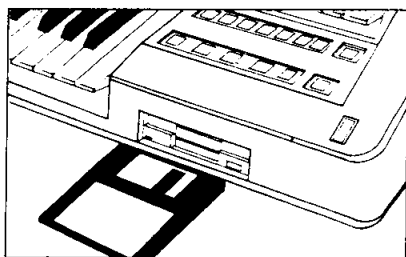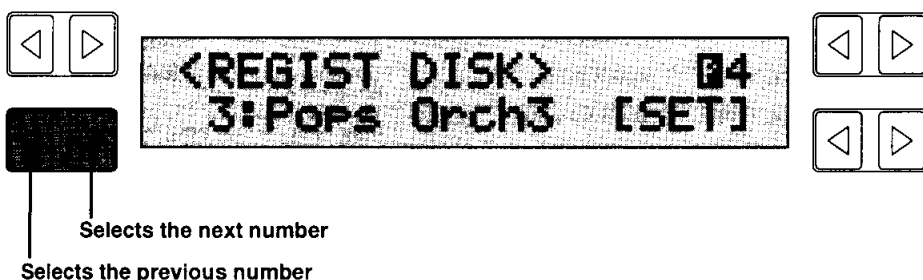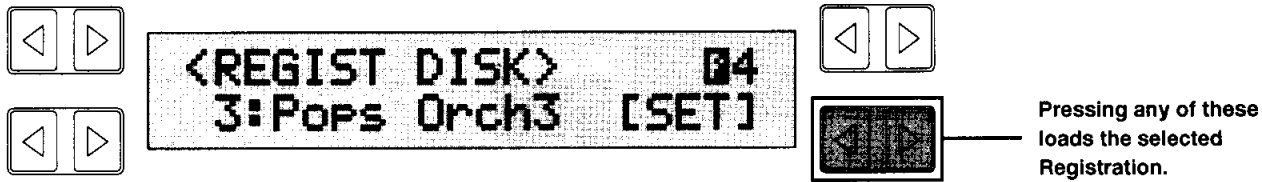

The Registration Menu is shown in the LCD.

2. Select the desired page with the PAGE buttons.

Selects the next page.

Selects the previous page.

3. Step through the Registration Menu selections by pressing the bottom left Data Control buttons.

Selects the next number

Selects the previous number

9

4. Load the desired Registration by pressing any of right Data Control buttons, corresponding to SET in the LCD.

```
<REGIST DISK>    ■4
3:Pops Orch3  [SET]
```

Pressing any of these loads the selected Registration.

A "Completed...!!" message appears briefly in the LCD, followed by the name of the selected Registration. Other Registrations can be loaded in the same way.

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 from the Registration Menus and Organ Select features, as well as the included Registration Menu Disk.

> **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.

Registration Menu/Organ Select List

Regist. Menu (Built-in)

Classic

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
1 String Ensemble	Strgs Ens.				Strings	Serenade, C major, str. orch., op 48 (Tchaikovsky) Symphony No.40 (Mozart)
2 Pizzicato Ensemble	Pizz. Ens.				Pizzicato Strings	Pizzicato Polka (J. Strauss)
3 Orchestra 1	Orchestra 1				Strings & Brass	The mastersingers of nuremberg (Wagner) Symphony No.1 (Brahms)
4 Orchestra 2	Orchestra 2				Wood winds & Strings	The marriage of Figaro (Mozart)
5 Flute & Harp	Flute/Harp				Flute & Harp	Sicilienne (Fauré) Menuet, L'Arlésienne (Bizet)
6 Wood Winds Ensemble	Wood Winds				Oboe, Flute & Bassoon	Happy birthday to you Four Swans, The Swan Lake
7 Piano & Strings	Piano/Strg				Piano & Strings	Piano Concerto (Mozart) Piano Concerto (Tchaikovsky)
8 Choir Ensemble	Choir Ens.				Chorus	Swanee River (Foster) Sacred songs
9 Vienna Waltz	Wien. Waltz	Waltz 2	♩=190	MOC TYPE 1	Flute & Strings	Story of the Vienna forest (J. Strauss) Spring feeling (J. Strauss)
10 March 1	March 1	March 1	♩=123	MOC TYPE 1	Brass & Trumpet	The Star & Stripes forever Under the double eagle march (Wagner)
11 March 2	March 2	March 2	♩=128	SoloStyle	Horn	The Washington post El capitán

Jazz/Contemporary

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
12 Big Band 1	Big Band 1	Swing 1	♩=182	SoloStyle	Brass	Take the A train Just friends
13 Big Band 2	Big Band 2	Bounce 2	♩=95	MOC TYPE 1	Clarinet & Sax	Moonlight serenade
14 Jazz Waltz	Jazz Waltz	Jazz Waltz	♩=168	SoloStyle	Flute	Bluesette
15 Jazz Ballad	Ballad	Jazz Ballad	♩=60		Saxophone	Misty What's new
16 Dixieland	Dixie	Dixie	♩=112	SoloStyle	Clarinet & Piano	12th street rag The easy winners
17 Euro. Beat	Euro. Beat	Dance Pop	♩=120		Cosmic	Toy boy Locomotion
18 Crossover 1	Crossover 1	16 Beat 1	♩=85		Electric Piano	We are all alone Tomorrow
19 Crossover 2	Crossover 2	Samba 3	♩=112		Jazz Guitar	Copacabana Captain caribe

Latin

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
20 Samba 1	Samba 1	Samba 2	♩=110		Marimba & Flute	Samba de Orfeu Copacabana
21 Samba 2	Samba 2	Samba 1	♩=110		Piano	Brasil Tico tico
22 Bossanova	Bossanova	Bossanova 1	♩=126	SoloStyle	Flute	The girl from Ipanema Desafinado
23 Bossanova 66	Bossa 66	Bossanova 3	♩=164		Piano	Mas que nada Joker
24 Mambo	Mambo	Mambo	♩=98	SoloStyle	Trumpet	Mambo No.5 Mambo jumbo
25 Chacha	Cha-cha	Chacha	♩=132	SoloStyle	Flute & Piano	Tea for two
26 Rhumba	Rumba	Rhumba	♩=122	SoloStyle	Marimba	Bésame mucho Miami beach rhumba
27 Beguine	Beguine	Beguine	♩=118	SoloStyle	Piano	Begin the beguine Andalucia
28 Tango 1 (Argentine)	Tango 1	Tango 1	♩=120	MOC TYPE 1	Accordion	Kiss of fire Caminito
29 Tango 2 (Continental)	Tango 2	Tango 2	♩=120		Strings	The song of pearl fisher Blue tango
30 Bolero	Bolero	Bolero	♩=132	SoloStyle	Trumpet	Granada Malagueña
31 Caribbean	Carib	Reggae 2	♩=132		Whistle	Don't worry, be happy Master blaster

Pops/Folk

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
32 Pops Orchestra 1	Pops Orch 1	8 Beat 1	♩=82	MOC TYPE 1	Oboe & Strings	Sun flower The way we were
33 Pops Orchestra 2	Pops Orch 2	Slow Rock 1	♩=80	SoloStyle	Flute	The end of the world Can't help falling in love
34 Rock'n'Roll	Rock & Roll	8 Beat 3	♩=160		Saxophone & Trumpet	Diana Rock and roll music
35 60's Pop	60's Pop	Slow Rock 2	♩=74		Elec. Guitar	Where the boys are Blue Hawaii
36 Musical	Musical	Broadway	♩=132		Marimba & Tutti	There's no business like show business
37 Popular Standard	Standard	Waltz 1	♩=106	MOC TYPE 1	Violin & Strings	Fascination La-la-lu
38 Bounce	Bounce	Bounce 1	♩=136		Whistle	Les champs-elysées Get out and get under the moon
39 Country	Country	Country	♩=120	SoloStyle	Harmonica & Piano	Oh, bury me not on the lone prairie The five pennies
40 Folklore	Folklore	Tango 3	♩=97		Pan Flute	El condor pasa
41 Hawaiian	Hawaiian	Jazz Ballad	♩=84		Hawaiian Guitar	Blue Hawaii Hawaiian Wedding Song

Organ Select (Built-in)

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
1 Classic Organ 1	Classic 1					Wedding march (Mendelssohn) Gothic suite op.25-I
2 Classic Organ 2	Classic 2					Toccata in D minor BWV565 Wedding march (Wagner)
3 Classic Organ 3	Classic 3					Silent night Vater unser Himmelreich
4 Classic Organ 4	Classic 4					Fugue in Gm Jesus bleibet meine Freude
5 Classic Organ 5	Classic 5					Sheep may safely graze Choral No.1 in E
6 Theatre Organ 1	Theatre 1	Swing 1	♩=100			My romance Love is a many splendored thing
7 Theatre Organ 2	Theatre 2	Broadway	♩=130			Start of somethin' big I could have a dance all night
8 Theatre Organ 3	Theatre 3	Swing 1	♩=80			As long as he needs me Alley cat
9 Theatre Organ 4	Theatre 4	Bounce 2	♩=125			Starlight serenade Try to remember
10 Jazz Organ 1	Jazz 1	Swing 1	♩=150			Satin doll Softly, as in a morning sunrise
11 Jazz Organ 2	Jazz 2	Samba 2	♩=105			A night in Tunisia The cat
12 Jazz Organ 3	Jazz 3	Swing 1	♩=80			What's new Here's that rainy day
13 Jazz Organ 4	Jazz 4	Bossanova 2	♩=180			Summer samba Days of wine and roses
14 Pop Organ 1	Pop 1	Jazz Ballad	♩=68			Ebb tide I left my heart in San Francisco
15 Pop Organ 2	Pop 2	8 Beat 3	♩=80			A whiter shade of pale Yesterday

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Registration Menu List (Disk)

Page 1 (DISK)

Classic

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
1 Fanfare	Fanfare				Brass & Percussion	
2 Brass Ensemble	Brass Ens.				Trumpet, Horn, Trombone & Tuba	Joy to the World / Ebony and Ivory
3 Horn & Strings	Hrn. & Strg.				Horn & Strings	Waltz of Flowers / Introduction of "Blue Danube" Waltz / "Der Freischütz" Overture
4 String Ensemble 1	StrgsEns.1				Strings & Organ	Albinoni's Adagio / Jesu, Joys of Man's Desiring / Interlude from "Cavalleria Rusticana"
5 String Ensemble 2	StrgsEns.2				Low Strings (16') (for U.K.)	Liebestraum (F. Liszt) / The Swan (Saint-Saëns)
6 String Ensemble 3	StrgsEns.3				Violin	Eine Kleine Nachtmusik (Mozart's Serenade) / Eleanor Rigby
7 Trumpet Echo	Trump.Echo			SoloStyle (Bolero)	Trumpet	Trumpet Voluntary / "Triumphal March" from Aida / A Trumpetter's Lullaby
8 Guitar Concerto	Gt.Concert				Guitar & Strings	Concierto de Aranjuez / Recuerdos de la Alhambra
9 Piano Concerto	Pf.Concert				Piano & Strings	Piano Concerto No.1 (Tchaikovsky) / So in Love (C. Porter)
10 Sugarplum	Sugarplum				Celesta	Dance of the Sugar-plum Fairy
11 March Whistle	MarchWhisl	March 1	♩=123	SoloStyle	Whistle	Colonel Bogey / "The Great Escape" March
12 March Trio	March Trio	March 1	♩=123		Wood Winds & Glockenspiel	For "Trio" Section of 2 beat marches
13 Music Box	Music Box				Music Box	Nocturne in E♭ major (Chopin) / Melody In F major (Rubinstein)
14 Carousel	Carousel				Organ	Turkey in the Straw / Mockin' Bird Hill
15 Cosmic 1	Cosmic1				Cosmic	Clair de Lune (C. Debussy) / Rêverie (C. Debussy)
16 Cosmic 2	Cosmic2				Cosmic	Gymnopédie (Satie) / "Jupiter" from the Planets (Holst)

Page 2 (DISK)

Jazz

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLE
1 Big Band 1	Big Band1	Swing 2	♩=166	SoloStyle	Trumpet & Saxophone	Mack the Knife / Jumpin' at the Woodside / C Jam Blues
2 Big Band 2	Big Band2	Swing 1	♩=142		Saxophone	Til I Met You / April in Paris
3 Combo 1	Combo1	Swing 1	♩=120		Vibraphon	Lullaby of Birdland / It's Only a Paper Moon / Softly as in a Morning Sunrise
4 Combo 2	Combo2	Jazz Waltz	♩=186		Jazz Organ	Greensleeves / Waltz for Debby / Someday My Prince Will Come
5 Clarinet Solo	Clari.Solo	Swing 2	♩=100		Clarinet & Bigband	Sentimental Journey / Get Out And Get Under the Moon
6 Trombone Ensemble	Tromb.Ens.	Jazz Ballad	♩=95	MOC TYPE 1	Trombone	Mood Indigo / Somewhere Beyond Me / Unforgettable
7 Cocktail	Cocktail	Jazz Ballad	♩=126	MOC TYPE 1	Vibraphone & Piano	It's Only a Paper Moon / But Not For Me / Embraceable You
8 Trumpet Dixie	Trp. Dixie	Dixie	♩=95		Trumpet	Hello, Dolly / The Battle Hymn of the Republic
9 Honky Tonk Piano	Honky-Tonk	Dixie	♩=100		Honky Tonk Piano	Bagdad Cafe / Hello, Dolly
10 Ballad Piano	Ballad Pf.	Jazz Ballad	♩=60		Piano (16')	Misty / My Romance / My Foolish Heart / If I Had You
11 Ballad Orch.	BalladOrch	Jazz Ballad	♩=60	MOC TYPE 2	Strings & Horn	Over the Rainbow / Tenderly / I Left My Heart in San Francisco
12 Cross Over 1	CrossOver1	16 beat 1	♩=114		Piano	Night Birds / Feel Like Making Love
13 Cross Over 2	CrossOver2	Samba 3	♩=112		Saxophone	Little Linda / Morning Shower / Captain Carib
14 Cross Over 3	CrossOver3	Funk	♩=111		Synth. Brass	Cameleon
15 Dance	Dance	Dance Pop	♩=125	SoloStyle	Metallic Sound	Like a Virgin / Material Girl / Papa Don't Preach
16 Club Music	Club Music	16 beat 3	♩=118	SoloStyle	Orchestra Hit	

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Page 3 (DISK)

Latin

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES -
1 Samba 1	Samba1	Samba 3	♩=110	SoloStyle	Guitar & Flute	Penuts Vender / One Note Samba Bitter Samba
2 Samba 2	Samba2	Samba 1	♩=114		Organ	Sudden Samba / Brasil Last Tango in Paris
3 Bossanova 1	Bossanova1	Bossanova 1	♩=140		Saxophone	Desafinado / A Girl from Ipanema Summer Samba
4 Bossanova 2	Bossanova2	Bossanova 2	♩=134	﹅	E. Piano & Flute	Wave
5 Bossanova 3	Bossanova3	Bossanova 1	♩=96		Piano (16')	Shadow of Your Smile The Look of Love
6 Organ Bossa	OrganBossa	Bossanova 1	♩=168		Jazz Organ	Jazz Samba Meditation
7 Mambo	Mambo	Mambo	♩=110		Brass & Saxophone	Mambo No.5 / Mambo No.8 Mambo Jumbo
8 Rhumba	Rumba	Rhumba	♩=112		Trombone	Taboo / Besame Mucho Historia de Un Amor
9 Salsa	Salsa	Salsa	♩=120	SoloStyle	Piano	Amor
10 Mexican	Mexican	Cha-cha	♩=194	MOC TYPE 1	Trumpet & Marimba	La Bamba
11 Caribbean 1	Caribbean1	Reggae 1	♩=132		Steel Drums	Bananaboat Song Matilda
12 Caribbean 2	Caribbean2	Reggae 2	♩=120	SoloStyle	Organ	Master Blaster
13 Tango	Tango	Tango 1	♩=120	SoloStyle	Strings	Jealousy / Adios Pampa Mia A Media Luz
14 Milonga	Milonga	Tango 3	♩=110	SoloStyle	Piano & Bandoneon (Simulation)	Amanecer
15 Flamenco	Flamenco	Bolero	♩=160	SoloStyle	Guitar	Malagueña Granada
16 Lambada	Lambada	Mambo	♩=114	SoloStyle	Accordion	Lambada

Page 4 (DISK)

Pops/Folk

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
1 Pops Orchestra 1	Pops Orch.1	8 Beat 1	♩=126		Piano & Harpsichord	Petite Melodie Music Box
2 Pops Orchestra 2	Pops Orch.2	8 Beat 2	♩=76		Strings & Horn	L' Amour est Bleu / Beauty and Beast The Way We Were
3 Pops Orchestra 3	Pops Orch.3	Jazz Ballad	♩=108	MOC TYPE 1	Flute & Strings	Michel
4 Pops Orchestra 4	Pops Orch.4	Slow Rock	♩=64		Strings	Mr. Lonely / Memory A Summer Place
5 Sweet Voice	SweetVoice	8 Beat 1	♩=82	SoloStyle	Vocal	Concerto Pour Une Voix Penelope
6 Brass 16 Beat	Brass16bt.	16 Beat 2	♩=100	SoloStyle	Brass	Theme from Rocky Feel So Good
7 Rock'n' Roll	Rock&Roll	8 Beat 3	♩=160		Rock Organ	Surfing USA Rock'n' Roll Music
8 Blues Organ	BluesOrgan	Slow Rock 3	♩=66	SoloStyle	Organ	Basin Street Blues / Heartbreak Hotel Georgia on My Mind
9 Organ Waltz	OrganWaltz	Waltz 1	♩=80		Organ	Fascination Moon River
10 Rain Bounce	RainBounce	Bounce 1	♩=118	MOC TYPE 1	Glockenspiel & Pizzicato	Singing in the Rain / Pennie Lane Raindrops Keep Falling on My Head
11 Harmonica Pop	Harmonica	Slow Rock 3	♩=120		Harmonica	Isn't She Lovely / Got to Get You into My Life With a little Help from My Friend
12 EP Ballad	EP Ballad	Slow Rock 1	♩=68		E. Piano	Saving All My Love Memory
13 Guitar Arpeggio	Gt.Arpeg.	8 Beat 1	♩=82		Harmonica & Guitar	Sound of Silence / Yesterday Green, Green Grass of Home
14 Oriental Pop	Orient.Pop	Cha-cha	♩=106		Taisho-Koto (Simulation)	Merry X'mas, Mr. Laurence
15 Polka	Polka	Broadway	♩=122	MOC TYPE 2	Clarinet & Accordion	Clarinet Polka O Brenelli
16 Bagpipe	Bagpipe	March 1 Vol. OFF	♩=120	MOC TYPE 2	Bagpipe (Simulation)	Amazing Grace

Organ

STYLE	LCD DISPLAY	RHYTHM	TEMPO	SoloStyle/MOC	FEATURED VOICE(S)	SONG EXAMPLES
1 Classic 1	Classic1				Brass Trumpet	
2 Classic 2	Classic2					
3 Classic 3	Classic3					
4 Classic 4	Classic4					Hallelujah
5 Ballad Organ	Ballad Org.				Chorus & Strings	
6 Novelty 1	Novelty1				Oboe & Strings	Nola
7 Novelty 2	Novelty2				Marimba & Piano	Tea for Two
8 Full Theatre	FullTheat.	Broadway	♩=130			
9 Jazz 1	Jazz1	Swing 2	♩=168			Satin Doll
10 Jazz 2	Jazz2	Bounce 2	♩=168			
11 Jazz 3	Jazz3	Swing 2	♩=168			
12 Jazz 4	Jazz4	Bounce 2	♩=168			
13 Pops 1	Pop1	Bossanova 2	♩=158			Wave
14 Pops 2	Pop2	Bossanova 2	♩=158			Girl from Ipanema
15 Pops 3	Pop3	Samba 2	♩=120			Tico Tico
16 Pops 4	Pop4	Samba 2	♩=120			

14
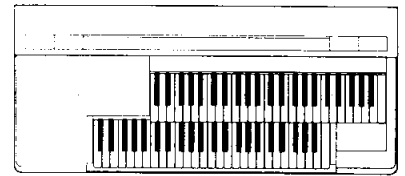
1 Voice Sections

The following illustration shows the various available voice sections.

UPPER KEYBOARD VOICE

| STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HARMO-NICA | 1 | MAX ... MIN |
| ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2 | |

LEAD VOICE

| VIOLIN | FLUTE | 1 | MAX ... MIN |
| OBOE | TRUM-PET | TO LOWER | |

LOWER KEYBOARD VOICE

| STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HORN | 1 | MAX ... MIN |
| ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2 | |

PEDAL VOICE

| CONTRA BASS | ELEC. BASS | 1 | MAX ... MIN |
| ORGAN BASS | TUBA | TO LOWER | |

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.

Voice Display

You can see at-a-glance which voices are currently selected for each of the voice sections by calling up the Voice Display. To do this, press the VOICE DISPLAY button in the DISPLAY SELECT section.

DISPLAY SELECT

VOICE DISPLAY | A. B. C. | SOLOSTYLE | FOOT SW. | REGIST. SHIFT | PITCH TRANS. | U. FLUTE VOICE | L. FLUTE VOICE | TREMOLO (FAST) | REGIST. MENU | ORGAN SELECT

```
■Strings   L■Violin
■Strings   ■ContBass
```
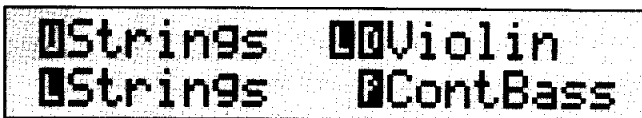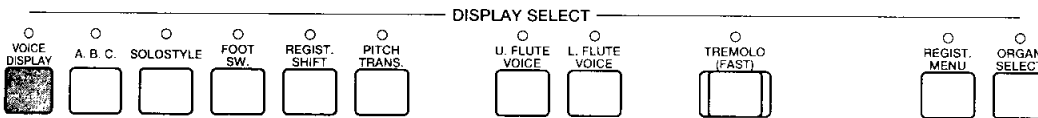
Selecting Voices from the Panel

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.

UPPER KEYBOARD VOICE

| STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HARMO-NICA | 1 | MAX ... MIN |
| ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2 | |

15
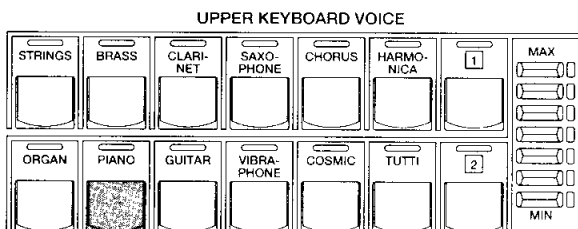
If, for example, you have selected the PIANO voice, the following display will appear:

```
█iano      E.Piano █17
Harpsi.
```

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

To select one of these voice variations:

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

The first character flashes to indicate the selected voice.

```
Piano      █.Piano █17
Harpsi.
```
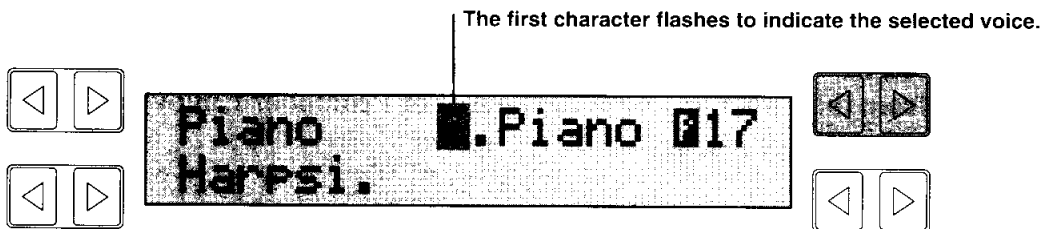
PLAYING LEAD AND PEDAL VOICES FROM THE LOWER KEYBOARD:

The Electone has a special "To Lower" function that lets you assign Lead or Pedal 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.

LEAD VOICE

| VIOLIN | FLUTE | 1 | MAX |
| OBOE | TRUM-PET | TO LOWER | MIN |

PEDAL VOICE

| CONTRA BASS | ELEC. BASS | 1 | MAX |
| ORGAN BASS | TUBA | TO LOWER | MIN |
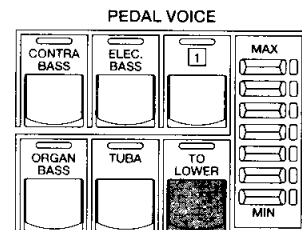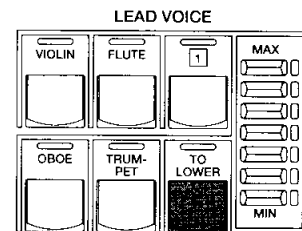
3. Set the volume for each voice section. There are two volume controls: Coarse and Fine.

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.

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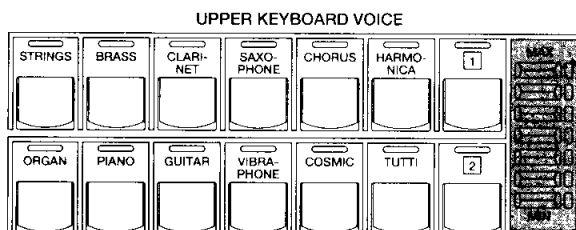
Fine:
Pressing the same panel voice button again calls up the Voice Condition display.

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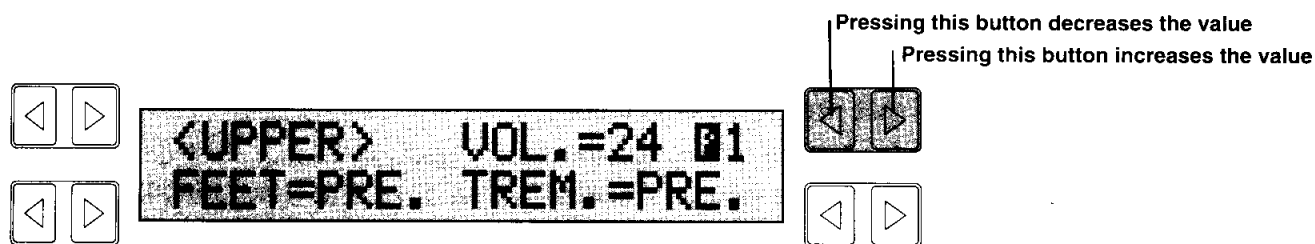
Use the Data Control buttons that correspond to the Volume setting to change the level of the desired voice. The relative level is indicated by a numeric value (from 0 - 24).

> **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.

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-28 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 convenient access to any voice.

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 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. The opposite is also the case: Upper or Lower voices assigned to the Lead or Pedal sections will be monophonic.

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.**
The included Voice Disk lets you use additional Voices with your EL-28.

To select a voice from a dotted button:

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

UPPER KEYBOARD VOICE

| STRINGS | BRASS | CLARI-NET | SAXO-PHONE | CHORUS | HARMO-NICA | 1 | MAX |
| ORGAN | PIANO | GUITAR | VIBRA-PHONE | COSMIC | TUTTI | 2 | MIN |
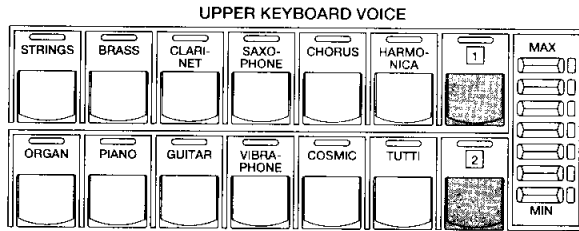
> **Note:** You can directly view and select Voice Menu pages by holding down one of the dotted buttons and simultaneously pressing the desired voice buttons in succession.

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

PAGE

```
Strings      1
PizzStrs
```
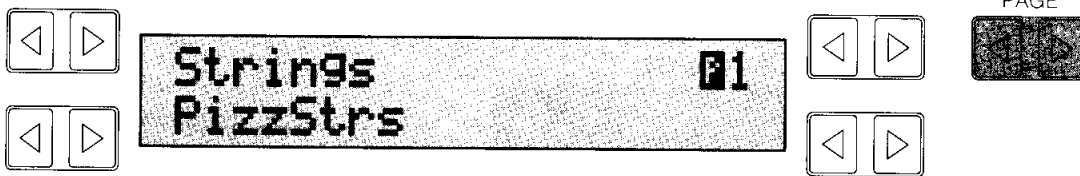
Each voice group appears in the LCD display when the page has been selected.

> **ABOUT 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 the Page ▶ and ◀ buttons to select the pages.

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

```
Strings      1
▉izzStrs
```

Select the USER page when you wish to use a voice from a Voice Disk (See page 70 for more information.)
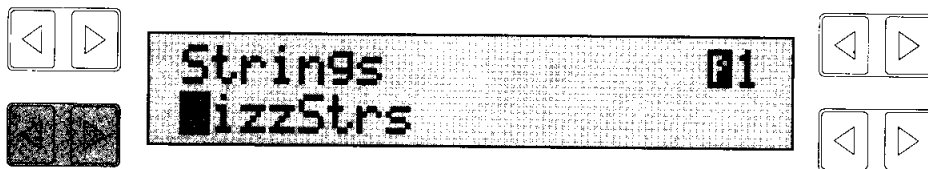
> **Note:** The first character of the selected voice's name flashes to indicate that the voice has been selected. As long as you do not select a voice, this indication will not appear.

```
USER 1   USER 2   ▉US
USER 3   USER 4
```

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. (Refer to page 72 for a list of the Voice Disk Voices.)

STRINGS (Upper/Lower)

| Strings | 🅿 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 | 🅿 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 |

ORGAN BASS (Pedal)

| OrgBass | 🅿 16 |

PIANO (Upper/Lower)

| Piano | E. Piano | 🅿 17 |
| Harpsi. | | |

GUITAR (Upper/Lower)

| Guitar | 🅿 18 |
| E.Guitar | |

VIBRAPHONE (Upper/Lower)

| Vibrphon | Glocken | 🅿 19 |
| Marimba | | |

ELECTRIC BASS (Pedal)

| E. Bass | 🅿 20 |
| SynBass | |

COSMIC (Upper/Lower)

| Cosmic1 | Cosmic2 | 🅿 21 |
| Cosmic3 | | |

| USER 1 | USER 2 | 🅿 US |
| USER 3 | USER 4 | |

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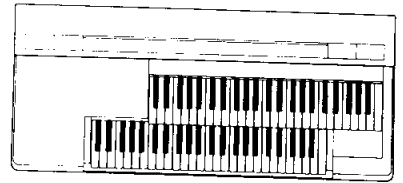
The Flute Voice feature allows you to create your own organ voices, giving you access to an unlimited combination of organ sounds. With this function, you can recreate all of the classic organ sounds by adjusting the flute footage levels and the percussive sound, just like on conventional organs.

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.

DISPLAY SELECT

VOICE DISPLAY | A. B. C. | SOLOSTYLE | FOOT SW. | REGIST. SHIFT | PITCH TRANS. | U. FLUTE VOICE | L. FLUTE VOICE | TREMOLO (FAST) | REGIST. MENU | ORGAN SELECT

Page 1

```
<U.FLUTE>  VOL.=24 ▌1
▄██▄__▄___   █▄ █ █ ON
```
16' 8' 5⅓' 4' 2⅔' 2' 1³⁄₅' 1' Rsp.   4' 2⅔' 2' Lng. CLICK TREMOLO
FLUTE   ATTACK

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.

> **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.

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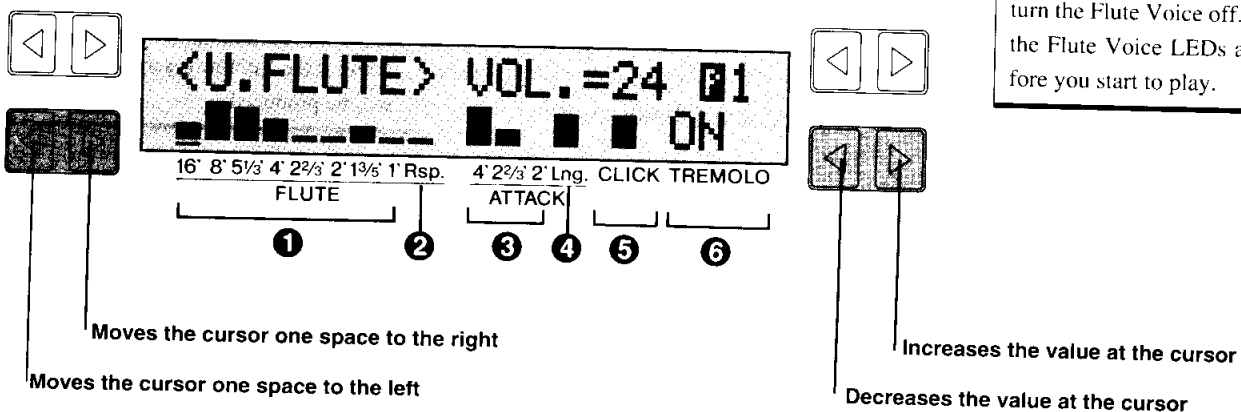
> **Note:** Remember that the UPPER and LOWER FLUTE VOICE buttons are on/off switches. In the process of turning on a Flute Voice, then switching to another function and returning to the Flute Voice, you may unintentionally turn the Flute Voice off. Check whether the Flute Voice LEDs are on or off before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

```
<U.FLUTE>  VOL.=24 ▌1
▄██▄__▄___   █▄ █ █ ON
```
16' 8' 5⅓' 4' 2⅔' 2' 1³⁄₅' 1' Rsp.   4' 2⅔' 2' Lng. CLICK TREMOLO
FLUTE   ATTACK

❶   ❷   ❸ ❹ ❺   ❻

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

21

❶ 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', etc.) are intermediate pitches.

❷ Response

Determines the overall response speed of the sound. Higher settings make the keyboard response slower, creating a pipe organ effect.

❸ Attack Footages

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

❹ Attack Length

Determines the duration of the attack sound.

❺ Click

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

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.

❻ 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 28, 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 ▮1
▄▐▐▄___▄__   ▐▄ ▆ ▆ ON
16' 8' 5⅓' 4' 2⅔' 2' 1⅗' 1' Rsp.   4' 2⅔' 2' Lng. CLICK TREMOLO
        FLUTE                      ATTACK
```
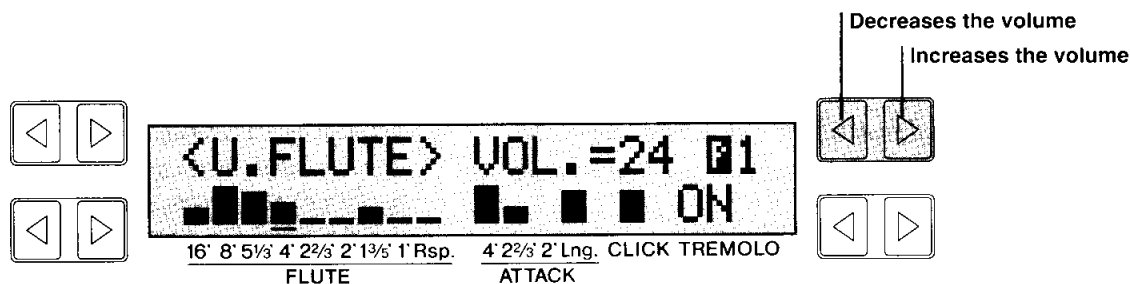
Volume

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 44.)

Selecting Preset Flute Voices

To select preset voices:

1. From Page 1, press the Page ► button.

Page 2

PAGE

```
<U.FLUTE> VOL.=24 █2
Pop Organ 1      [SET]
```
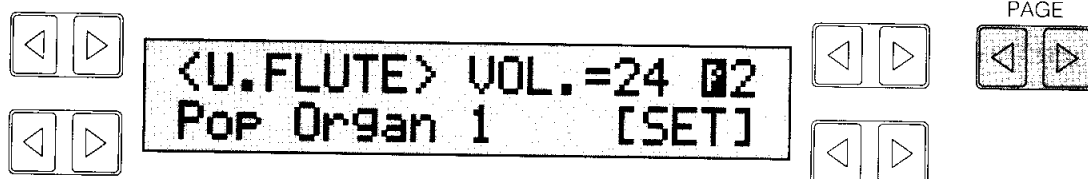
This page allows you to select Preset Flute Voice voices. Eight factory-preset voices (four Jazz Organ and four Pop Organ voices) are provided.

2. 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.

```
<U.FLUTE> VOL.=24 █2
Pop Organ 1      [SET]
```
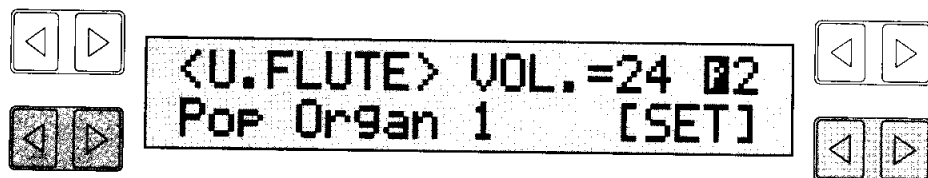
Use these buttons to select the previous or next Preset Flute Voice.

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

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

```
<U.FLUTE> VOL.=24 █2
    Completed...!!
```
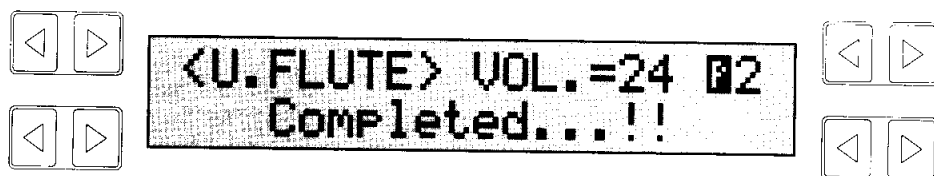
Note: When you switch between Upper and Lower Flute Voices, the preset Flute Voice name shown in the LCD may not be the one actually selected.

3 Voice Controls and Effects
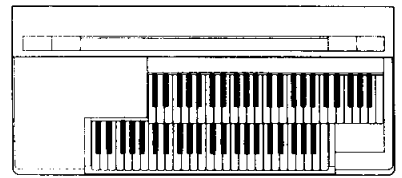
The Electone is equipped with two general kinds of functions that can be used to change the sound of the voices: Voice Controls and Effects.

These are used to change various aspects of the voices, such as the volume or octave (footage) settings, or enhance the sound of the voices, such as with Reverb or Tremolo.

Each voice has been given certain factory-preset settings to best enhance its sound. However, with the exception of the Touch Tone function, you can also change the settings to suit your preferences by using the controls described in this section.

Voice Condition Pages

To select the Voice Condition pages for changing the settings:
Choose a voice on the panel, then press that voice's panel button twice. Use the Page Select buttons to change the pages.

> **Note:** The Pedal Condition display has only one page.

For the Lead Voice example shown below, press the VIOLIN button in the Lead Voice section twice. To call up the corresponding Upper Voice example, press the PIANO button in the Upper Keyboard Voice section twice.

> **Note:** There are some differences between the functions in the Lead and Upper/Lower voices. Where appropriate, the different displays are shown.

LEAD VOICE · UPPER KEYBOARD VOICE

Voice Condition — Page 1

LEAD ❶

```
<LEAD>     VOL.=24 ▮1
FEET=PRE.  TREM.=PRE.
```
❷ ❸

UPPER ❶

```
<UPPER>    VOL.=24 ▮1
FEET=PRE.  TREM.=PRE.
```
❷ ❸
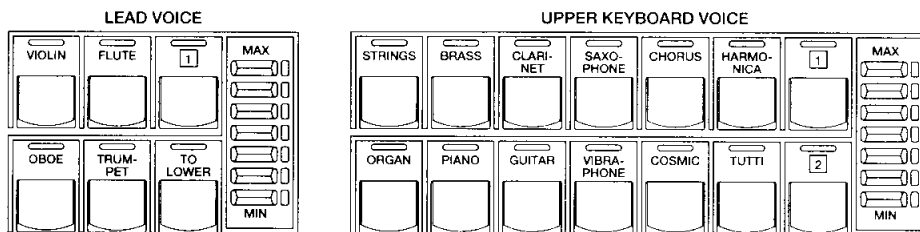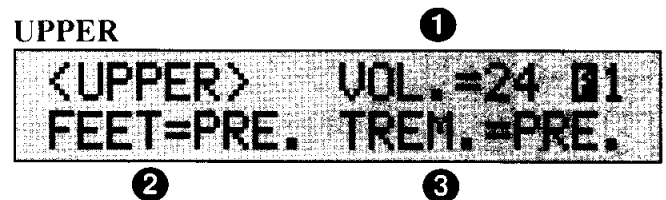
❶ **Volume**

Fine adjustment of the voice volume. (Coarse volume settings are made with the front panel VOLUME controls.) Range: 0 - 24

| Decreases the volume
| Increases the volume


```
<LEAD>     VOL.=24 ▮1
FEET=PRE.  TREM.=PRE.
```
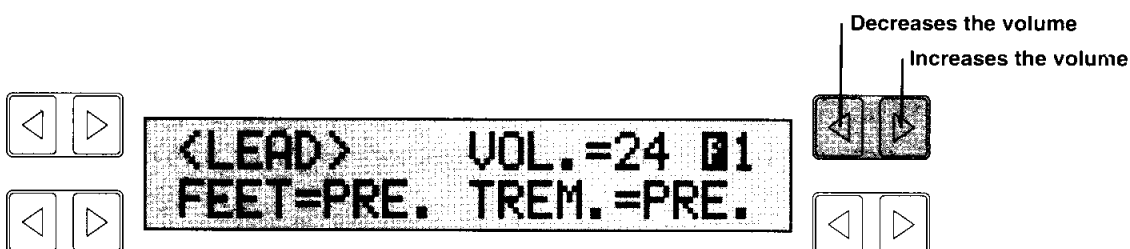
❷ **Feet**

Determines the octave setting of the voice. PRE. (Preset) is the original (factory) setting; 4' is the highest and 16' is the lowest. Settings: PRE., 4', 8', 16'

By using different Feet settings in the Lower and Upper keyboards, you can duplicate the wide octave range of many instruments. For example, with both the Lower and Upper keyboards set to the Piano voice and Feet set to appropriate values, you can play the voice nearly over the full range of a grand piano.

```
┌──┐┌──┐   ┌────────────────────────────┐   ┌──┐┌──┐
│ ◁ ││ ▷ │   │ <LEAD>       VOL.=24 ▣1 │   │ ◁ ││ ▷ │
└──┘└──┘   │ FEET=PRE.  TREM.=PRE. │   └──┘└──┘
┌──────┐   └────────────────────────────┘   ┌──┐┌──┐
│██████│           ┌─────┐                    │ ◁ ││ ▷ │
└──────┘           │ PRE.│                    └──┘└──┘
   │  Selects next setting  │  4'│
   │                        │  8'│
   │  Selects previous setting  │ 16'│
                            └─────┘
```
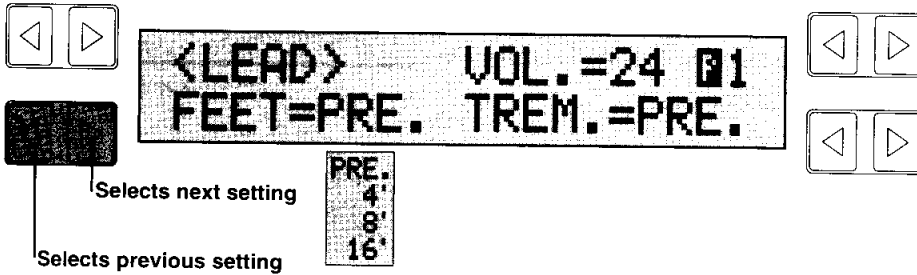
❸ **Tremolo**

Determines the Tremolo setting of the voice. PRE. (Preset) selects the original (factory) Tremolo setting, while ON and OFF respectively enable or cancel Tremolo. Settings: PRE., OFF, ON.

```
┌──┐┌──┐   ┌────────────────────────────┐   ┌──┐┌──┐
│ ◁ ││ ▷ │   │ <LEAD>       VOL.=24 ▣1 │   │ ◁ ││ ▷ │
└──┘└──┘   │ FEET=PRE.  TREM.=PRE. │   └──┘└──┘
┌──┐┌──┐   └────────────────────────────┘   ┌──┐┌──┐
│ ◁ ││ ▷ │           ┌─────┐                │ ◁ ││ ▷ │
└──┘└──┘           │ PRE.│                └──┘└──┘
                    │ OFF │   Selects next setting
                    │ ON  │   Selects previous setting
                    └─────┘
```
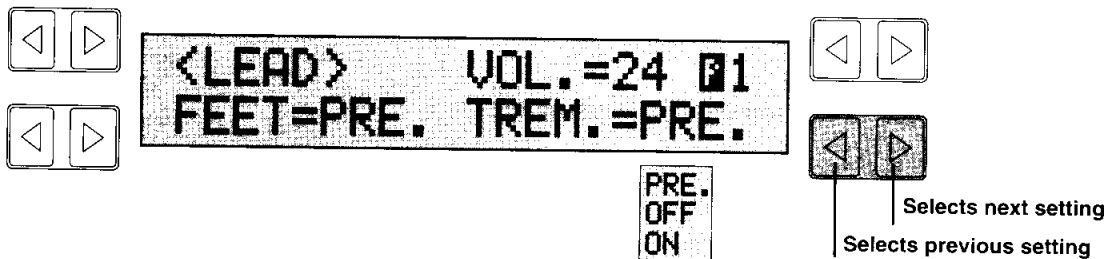
In order to actually apply the Tremolo effect, one more step is necessary. Refer to the section on Tremolo (page 28).

Vibrato

Vibrato is an effect that periodically, or regularly, varies the pitch of a voice for a quavering sound. Used properly, it can make a voice sound richer and more natural.

The following diagram graphically shows the vibrato effect and its related controls.

Vibrato Controls
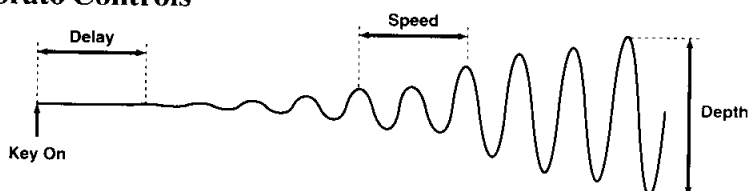
Call up the Vibrato setting on Voice Condition Page 2 by using the Page
Select buttons.

Voice Condition — Page 2

```
<LEAD>            P2
□USER VIB.
```
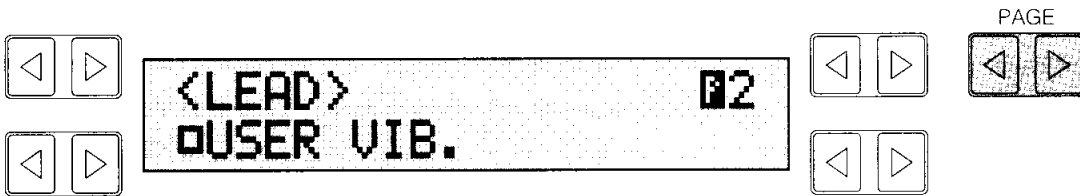
User Vibrato (USER VIB.)

When this is turned on, you can adjust the vibrato settings: Delay, Depth
and Speed for Lead voices, and Depth for Upper/Lower voices.

Note: Vibrato cannot be applied to the
Pedalboard voices.

The Delay, Depth and Speed settings are set in the next page, Voice
Condition Page 3. The Delay, Depth and Speed settings are not dis-
played and cannot be adjusted unless USER VIB. has been turned on in
this setting.

```
<LEAD>            P2
■USER VIB.
```
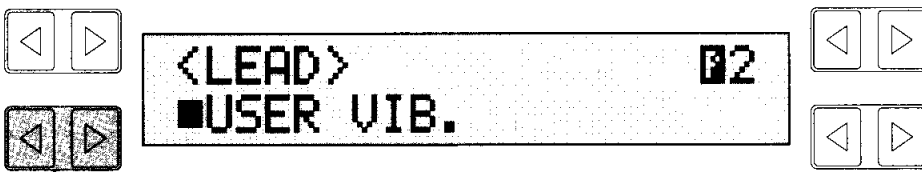
ˌPress either of these buttons to turn on User Vibrato.

Call up the User Vibrato settings on Voice Condition Page 3 by using the
Page Select buttons.

Voice Condition — Page 3

LEAD ❶

```
<LEAD>VIB. DELAY=003
DEPTH=0      SPEED=0
```
❷   ❸

UPPER

```
<UPPER>VIB.          P3
DEPTH=0
```
❷

26
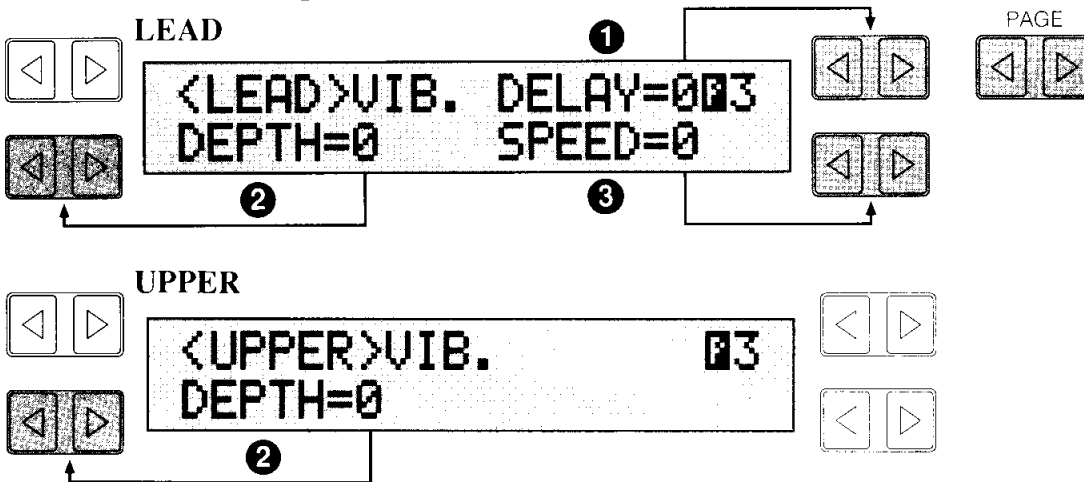
❶ Delay (Lead Voice only)

Determines the amount of time that elapses between the playing of a key and the start of the vibrato effect (see Vibrato Controls diagram on page 25). Higher settings increase the delay of the vibrato onset. Range: 0 - 7

❷ Depth

Determines the intensity of the vibrato effect (see diagram). Higher settings result in a more pronounced vibrato. Range: 0 - 7

❸ Speed (Lead Voice only)

Determines the speed of the vibrato effect (see diagram). Range: 0 - 7

If User Vibrato has not been turned on, the following display appears when Page 3 is selected.

```
<LEAD>VIB.            P3
      PRESET VIBRATO
```
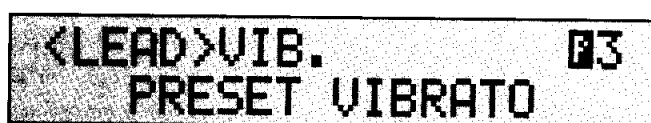
Touch Tone

The Touch Tone function gives you expressive control over the volume and timbre of a voice. Specifically, it provides initial touch response over the voices, controlling volume and timbre according to the velocity at which you strike the keys. The harder you strike the keys, the greater the volume and the brighter the timbre will become.

> **Note:** The Touch Tone function is provided as a factory preset for each voice and cannot be adjusted.

Reverb

Reverb adds an echo-like effect to the sound, giving the impression of a performance in a large room or concert hall. The effect is applied equally and simultaneously to all voice sections.

To adjust the reverb effect:

Press one of the REVERB buttons, located at the far left of the panel. These controls determine the depth of the reverb effect. There are seven settings, from a minimum of 0, or no reverb, to the maximum.

REVERB
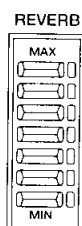
Sustain

Sustain is selectable for the Upper, Lower and Pedal voices and makes the sound gradually fade out when the keys are released. The sustain on/off and sustain length settings are independent for each keyboard, providing maximum expressive control.

To add sustain to the voices and call up the Sustain Length page:
Press the UPPER button in the SUSTAIN section.

> **Note:** Sustain cannot be applied to the Lead voices.

SUSTAIN

UPPER
(KNEE)
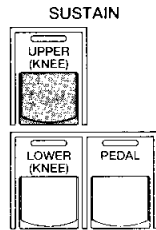
LOWER
(KNEE)   PEDAL

The lamp of the button lights up to indicate that sustain is on. Press the button again to turn sustain off.

> **Note:** If knee lever control of the Upper or Lower sustain has been turned on, pressing the Upper or Lower buttons here will not add sustain unless the knee lever is pushed. (See page 48.)

Sustain Length Page

< SUSTAIN > UPPER=12
LOWER=10 PEDAL=0

> **Note:** The values here must be set high enough for the sustain effect to be noticeable.
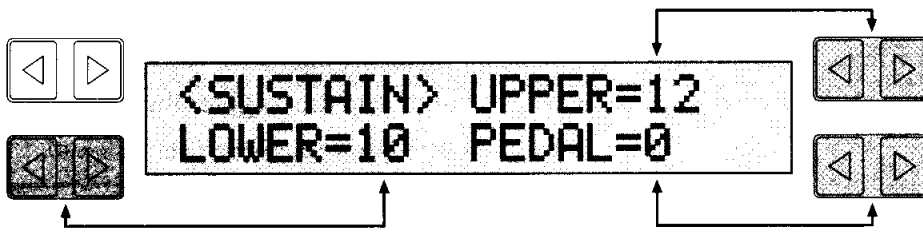
Upper, Lower, Pedal
Determines the length of sustain applied to each voice section. The display shows the current sustain length values for each voice section. Range: 0 - 12.

> **Note:** Remember that the SUSTAIN buttons are on/off switches. If you use them to simply check the sustain length values, you may unintentionally change the on/off status of the effect. Remember to check whether the sustain button lamps are on or off before you start to play.

Tremolo/Chorus

Tremolo recreates the rich, swirling sound of the popular rotating speaker effect. Just as with a conventional rotating speaker, you can switch the effect on and off as you play. And like a motor-driven speaker, the characteristic tremolo effect gradually changes speed after it is switched. Tremolo can be switched in real time as you play with the TREMOLO (FAST) button on the panel.

> **Note:** All voices of the Electone are given a preset Tremolo setting; this can be overridden by using the ON/OFF control in the Voice Condition page. (See page 25.)

Tremolo Operation
1) For Panel Voices (Voice Menu): Turn on Tremolo effect in each Voice Condition display
2) For Upper/Lower Flute Voices: Turn on Tremolo effect in Page 1 of Flute Voice
3) Turn on Tremolo as you play with the panel Tremolo button.

Turning On The Tremolo Effect

Before you can switch Tremolo on and off in real time, you must first turn the effect on in the various voice sections. This doesn't actually start the effect, but merely puts Tremolo in a "standby" condition. Tremolo can be applied selectively to the voice sections.

To turn on the Tremolo effect (set to standby):

For Lead, Upper, Lower and Pedal Voices

Press the desired voice button on the panel twice, then select ON by using the bottom right Data Control buttons.

```
<LEAD>     VOL.=24 ■1
FEET=PRE.  TREM.=ON
```

Selecting ON turns Tremolo on for
the selected voice section.
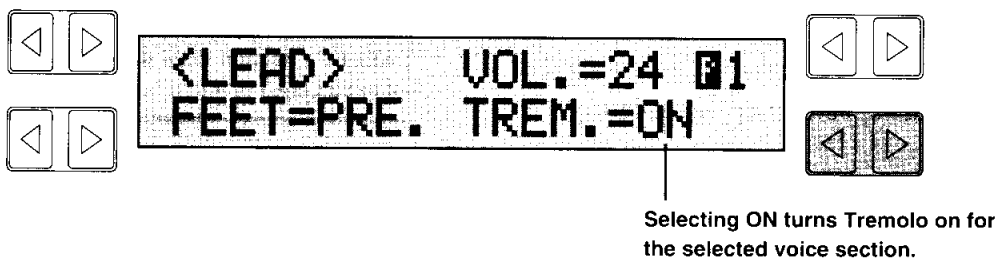
For Flute Voices

Press the U.FLUTE VOICE button and/or L.FLUTE VOICE button in the DISPLAY SELECT section, then select Page 1.

```
<U.FLUTE> VOL.=24 ■1
■■■■____■___  ■_ ■ ■  ON
```

16' 8' 5⅓' 4' 2⅔' 2' 1³⁄₅' 1' Rsp.   4' 2⅔' 2' Lng. CLICK TREMOLO
       FLUTE   ATTACK

Selecting ON turns on Tremolo for
the current Flute Voice.
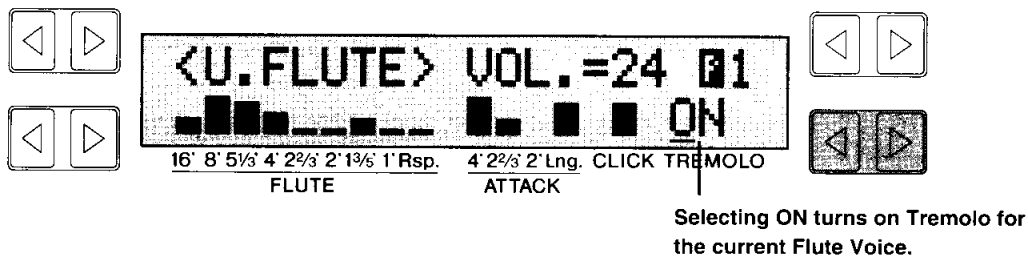
Move the cursor to the Tremolo setting in the LCD with the bottom left Data Control buttons, and use the bottom right Data Control buttons to set Tremolo to the standby condition.

Actual application of the Tremolo effect is described in the next section.

Real-Time Control of Tremolo Effect

Once the Tremolo effect has been turned on and set, you can control the effect in real time from the TREMOLO (FAST) button on the panel.

Simply press the TREMOLO (FAST) button in the DISPLAY SELECT section to turn the Tremolo effect on and off while you're playing.

DISPLAY SELECT

| VOICE DISPLAY | A. B. C. | SOLOSTYLE | FOOT SW. | REGIST. SHIFT | PITCH TRANS. | U. FLUTE VOICE | L. FLUTE VOICE | TREMOLO (FAST) | REGIST. MENU | ORGAN SELECT |
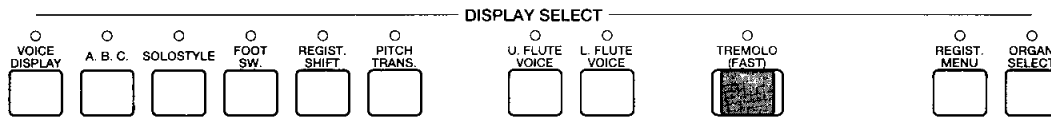
This button functions just like the fast/slow switch on an actual rotating speaker cabinet. When Tremolo is on, the rotation effect is fast; when it is off (Chorus), the rotation is slow. The speed change is gradual, effectively reproducing the slowing down and speeding up of a rotating speaker.

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

Glide

Glide is a footswitch-activated effect; pressing the footswitch immediately lowers the pitch of the selected voice or voices by a half-step. (Refer to the footswitch function on page 47.)

4 Rhythm, Accompaniment and Percussion
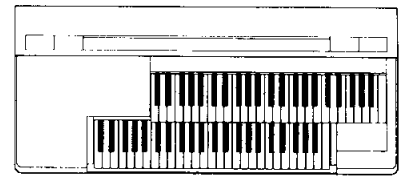
The Rhythm features of the Electone use actual drum and percussion sampled sounds to automatically play various rhythm patterns. Automatic Accompaniment functions are used with the rhythm patterns, providing appropriate and completely automatic accompaniment to match the style of the rhythm pattern selected. Moreover, the Electone has a Keyboard Percussion feature that allows you to play drum and percussion sounds from the Lower keyboard and Pedalboard.

Rhythm Patterns

Fourteen different rhythm categories in various styles can be instantly selected from the front panel. The Electone has additional "hidden" rhythm patterns, however. A total of 41 rhythm patterns are available, and can be selected by using the LCD display.

To select and play a rhythm pattern:

1. Choose a rhythm pattern by pressing one of the Rhythm buttons in the Rhythm section on the panel.
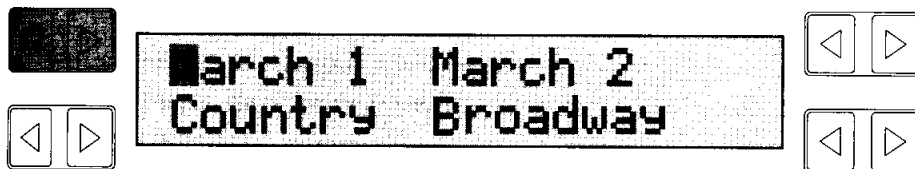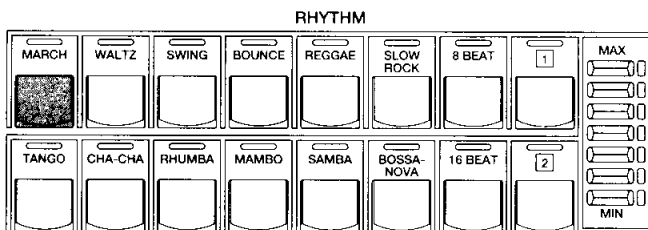
To select a rhythm pattern from each category in the display, press the Data Control button corresponding to the rhythm you wish to play, as you do with the voices. The first character of the selected rhythm pattern's name flashes. (Refer to the Rhythm Menu list on page 36 for a list of available rhythms.)

From the example display shown below, select Broadway.
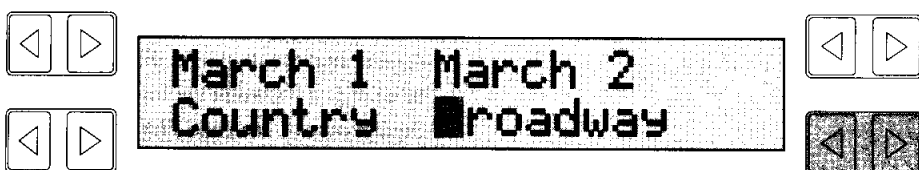
Press either of these Data Control buttons that correspond to Broadway in the display.

2. Turn the rhythm on. You can use one of three buttons to turn on the rhythm:
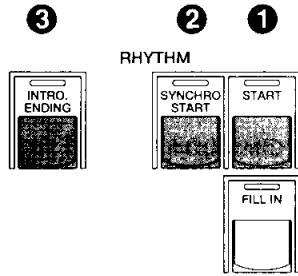
❶ START
This button does as its name indicates; the rhythm begins as soon as the button is pressed. To stop the rhythm, press this button again.

❷ SYNCHRO START
This button puts the rhythm pattern in "stand-by"; the rhythm will start when you press a note on the Lower keyboard or Pedalboard. To stop the rhythm, press this button again.

❸ INTRO. ENDING
Pressing this button automatically plays a short introduction (of up to eight measures) before starting the actual rhythm pattern. First, press the INTRO. ENDING button, then the START or SYNCHRO START buttons. While the introduction is playing, the TEMPO Display shows the countdown to the first measure of the pattern. For example, if there is an eight-measure lead-in for a pattern in 4/4 time, the following display appears:
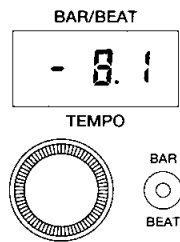
Pressing the INTRO. ENDING button again while the pattern is being played will automatically add an ending phrase before stopping the rhythm.

LEAD IN

Pressing the START button while holding down the INTRO. END-ING button automatically plays a special one-measure Lead In, with a click on each beat, to cue you in to the beginning of the song.

Note: The left footswitch can also be used to turn the rhythm off and on in the middle of a song. However, it cannot be used to start the rhythm at the beginning of a song. (To assign the footswitch for rhythm control, see page 47.)

ABOUT SYNCHRO START:

The Synchro Start feature functions quite differently when Auto Bass Chord is turned on and Accompaniment Memory is turned off. The rhythm pattern starts when a key on the Lower keyboard is played, but then immediately stops when the key is released. To keep this from happening, turn the Memory function on. (Refer to the Automatic Accompaniment section, page 38, for details on Auto Bass Chord and Memory.)

---

3. Set the volume.

Press the VOLUME controls to the right of the Rhythm buttons to set the desired level of the rhythm. The controls have seven volume settings, from a minimum of 0, or no sound, to a maximum of full volume.

Note: When the Electone is turned on, the rhythm volume is automatically set to 0.

Fine adjustments in the volume of the rhythm pattern can also be made from the Rhythm Condition page (See page 35.)

4. Set the tempo.

BAR/BEAT

```
1 2 0
```
TEMPO

BAR
BEAT
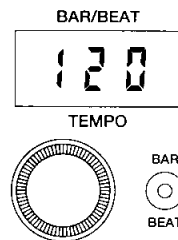
❶ TEMPO Dial

For adjusting the speed of the rhythm. Turn the dial clockwise to increase the tempo, and counter-clockwise to decrease it.

❷ TEMPO Display

Shows the current tempo. (Displayed values are given in beats per minute, just as on a conventional metronome.) The tempo range is 40 to 240 beats per minute.

When the rhythm pattern begins playing, the TEMPO display changes function to a bar/beat indicator.

BAR/BEAT

```
4 3
```
TEMPO
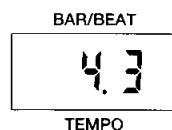
The number on the left indicates the current bar or measure and the one on the right indicates the number of the beat in each bar. The beat indicator lamp below the display also indicates the beats.

33

Fill In Patterns

Fill In patterns are designed to be used as temporary and regular rhythmic breaks to spice up a repeating rhythm pattern. Like the regular rhythm patterns, all Fill In patterns have been designed to perfectly match the bass and chord parts of the Automatic Accompaniment feature.

To use the Fill In patterns:

1. Select and play a rhythm pattern.

2. As you play the Electone along with the rhythm pattern, occasionally press the FILL IN button.
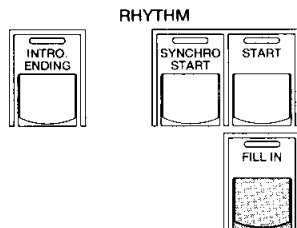
RHYTHM

For best results, press the FILL IN button just at the beginning or the first
beat of a measure.

USING A FILL IN FOR THE START OF A SONG:
Fill In patterns can also be used as introductions; simply press the FILL IN button before starting the rhythm with the START or SYNCHRO START buttons.

PLAYING PARTIAL FILL IN PATTERNS:
You can also start Fill In patterns within a bar, in order to play only the final one or two beats of the Fill In pattern and create additional rhythmic interest. Since the Fill In feature is very sensitive to bar/beat boundaries, you should be very careful to "play" the FILL IN button precisely on (or just slightly before) the beat that you want the Fill In pattern to begin.

Auto Variation and Percussion Volume

These two settings are controlled from each voice's Rhythm Condition pages. There are three Rhythm Condition pages.

To select the Rhythm Condition pages:
Choose a rhythm pattern, and press that pattern's panel button again.
(The button should be pressed only once if the Rhythm display has
already been called up; otherwise press the button twice.)

Rhythm Condition Page 1

These buttons turn the Auto Variation function on and off.

Increases the volume

Decreases the volume
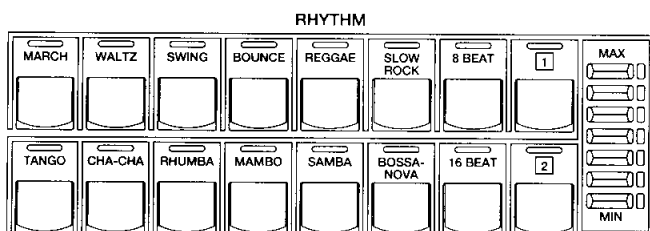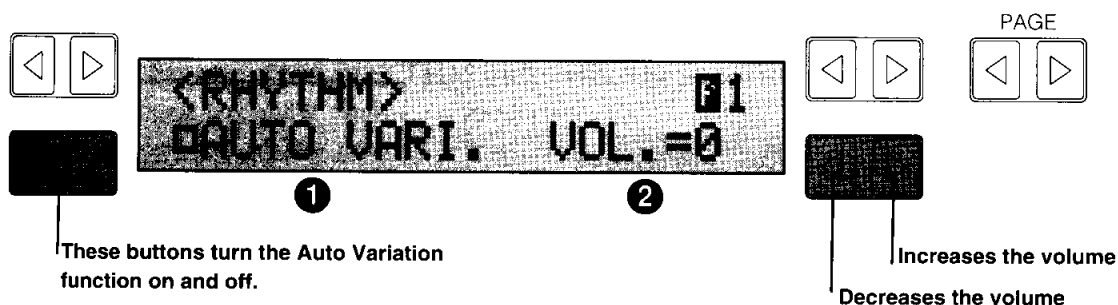
❶ Auto Variation

The Auto Variation function lets you set pattern variations to be played automatically. When set to on, Auto Variation automatically substitutes additional pattern variations to make the rhythm more interesting and complex.

> **Note:** The Auto Variation function is not applied to some of the rhythm patterns.

❷ Volume

Fine adjustment of the overall volume of the rhythm patterns and Keyboard Percussion. Range: 0 - 24

> **Note:** Rhythm Condition Pages 2 and 3 are described later in this section. (See pages 37-38.)

Dotted Buttons

The Rhythm section also has, like the voice sections, dotted buttons from which rhythm patterns can be selected. These dotted buttons function as "wild card" rhythm pattern selectors; any of the rhythm patterns available from the panel buttons or from the pattern displays can be selected from these buttons.

As with the Voice sections' dotted buttons, you can set two or three rhythm patterns from the same page to be selected from different buttons (one from the original Rhythm button, and the others from the dotted buttons).

To select a rhythm pattern from a dotted button:

1. Press one of the dotted buttons on the right side of the Rhythm section.

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

```
Swing 1  Swing 2  P3
J.Ballad Dixie
```
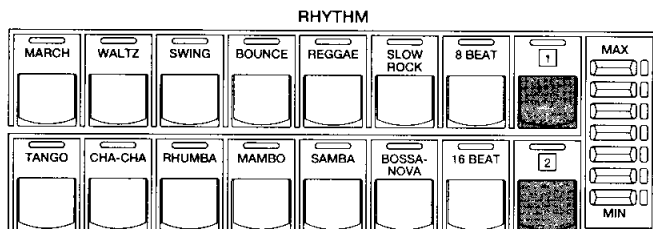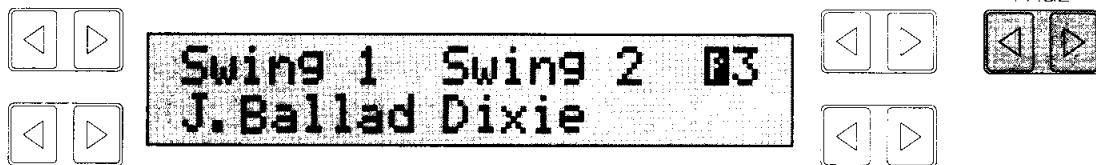
3. Select one of the rhythms by pressing one of the appropriate Data Control buttons.

```
Swing 1  Swing 2  P3
J.Ballad ■ixie
```
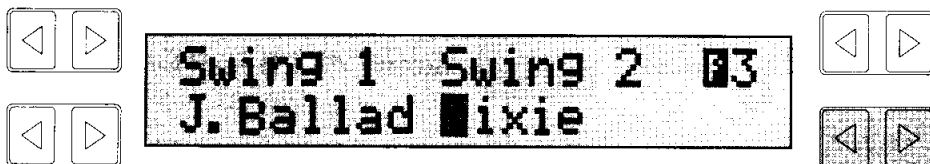
Note: While you scroll through the pages with the Page Select buttons, the originally selected rhythm pattern will sound until you select another pattern with the Data Control buttons.

For example, select Dixie by pressing one of the bottom right Data Control buttons.

| Rhythm Menus

This chart lists all 41 of the rhythm patterns available on the Electone. The numbers in the chart correspond to the page numbers shown in the display.

March 1	March 2	P1
Country	Broadway	

Cha-cha		P8

Waltz 1	Waltz 2 ·	P2
J.Waltz	Bolero	

Rhumba	Beguine	P9

Swing 1	Swing 2	P3
J.Ballad	Dixie	

Mambo	Salsa	P10

Bounce 1	Bounce 2	P4

Samba 1	Samba 2	P11
Samba 3		

Reggae 1	Reggae 2	P5

Bossa. 1	Bossa. 2	P12
Bossa. 3		

S. Rock 1	S. Rock 2	P6
S. Rock 3		

8 Beat 1	8 Beat 2	P13
8 Beat 3	D. Pop	

Tango 1	Tango 2	P7
Tango 3		

16 Beat 1	16 Beat 2	P14
16 Beat 3	Funk	

36

Accompaniment Controls

The Accompaniment function here is independent of the A.B.C. accompaniment and works with the Rhythm section to automatically add arpeggiated chords and other instrumental embellishments. The Accompaniment controls include the setting of the Accompaniment type and its volume.

To select the Accompaniment controls in the Rhythm Condition pages:

1. Press any one of the RHYTHM buttons on the panel twice.

RHYTHM


```
<RHYTHM>           ▣1
□AUTO VARI.   VOL.=0
```
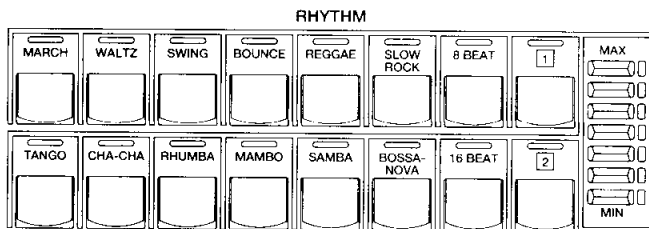
2. Once the Rhythm Condition Page 1 display (above) has been called up, use the Page Select buttons to select Page 2.

Sets volume to minimum value.

Sets volume to maximum value.

PAGE

```
<ACCOMPANIMENT>    ▣2
TYPE=2        VOL.=0
```

❶ Selects the Accompaniment type.

❷ Increases volume.

Decrease volume.
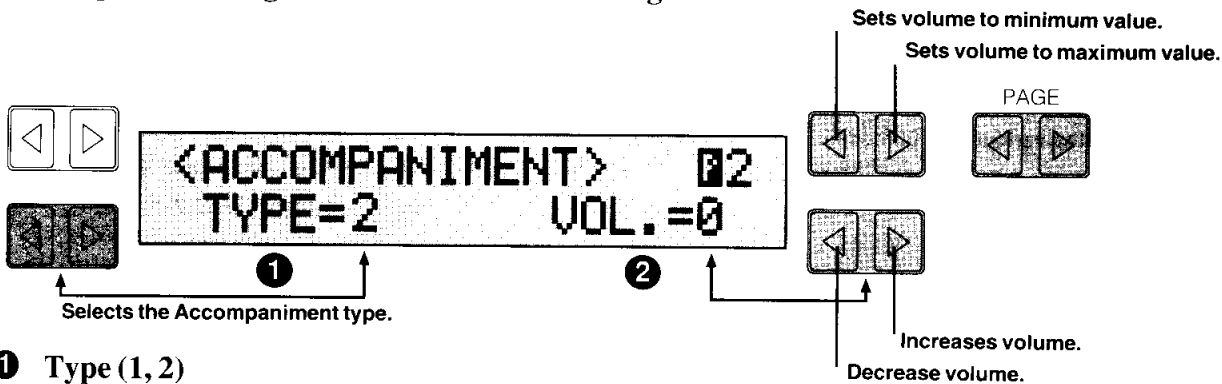
❶ **Type (1, 2)**

These settings provide two different types of rhythmic and melodic accompaniment, Type 2 being more complex than Type 1.

❷ **Volume**

Determines the volume of the Accompaniment. The Accompaniment can be turned off by setting this parameter to the minimum value. Range: 0 - 24

Note: Even if the Accompaniment Type is changed, the Intro/Ending pattern remains the same.

Automatic Accompaniment — Auto Bass Chord

The Auto Bass Chord (A.B.C.) function works with the Rhythm section of the Electone to automatically produce chord and bass accompaniment as you play. Depending on the feature or mode selected, you can play anything from a single note to a full chord on the Lower keyboard and hear complete, rhythmical bass and chord accompaniment.

There are three Auto Bass Chord modes — Single Finger, Fingered Chord and Custom A.B.C. — and they are selected from either Rhythm Condition Page 3 or the A.B.C. page.

To select the A.B.C. function:

1. Press the A.B.C. button. (Or, alternately, press any of the RHYTHM buttons twice to call up the Rhythm Condition pages, then use the Page Select buttons to select Page 3, the A.B.C. & Memory page.)

Rhythm Condition — Page 3

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

Turns the Pedalboard Memory (P) on and off

Turns the Lower keyboard Memory (L) on and off
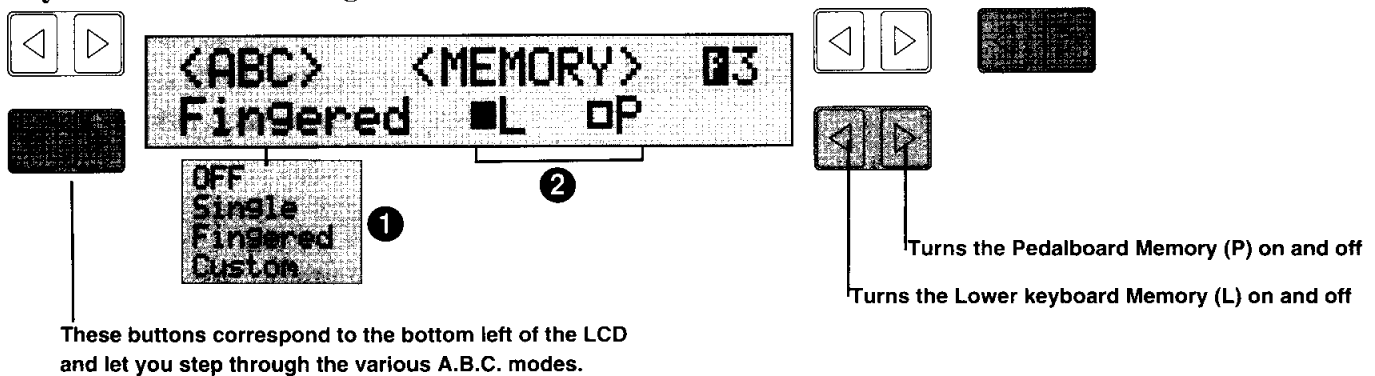
Auto Bass Chord

❶ Mode: Off, Single, Fingered, Custom

Off
Cancels the Auto Bass Chord function.

Single (Single Finger mode)
The Single Finger mode provides the fastest and easiest means to obtain many different chord/bass combinations, by simply using one, or at most, two or three fingers to play the chords.

Refer to the chart below, "Chords Recognized in the Single Finger Mode," for details on playing chords in this mode.

Fingered (Fingered Chord mode)

The Fingered Chord mode automatically produces bass and chord accompaniment for chords played in the Lower keyboard. It allows you to use a wider range of chord types than in the Single Finger mode. In the Fingered Chord mode, you play all the notes of the chord while the Auto Bass Chord function automatically selects the appropriate bass pattern and rhythmic accents.

Refer to the chart below, "Chords Recognized in the Fingered Chord Mode," for details on playing chords in this mode.

Custom (Custom A.B.C. mode)

The Custom A.B.C. mode is a slight variation on the Fingered Chord mode. It allows you to determine what bass notes will be played in the accompaniment by playing a note on the Pedalboard along with the chords you play in the Lower keyboard. In this way, you have greater control over the actual notes of the accompaniment and the freedom to use a wider variety of chords and voicings, yet are still able to take advantage of the automatic accompaniment capabilities of the Auto Bass Chord feature.

❷ Memory

The Memory function allows you to have the bass and chord accompaniment continue even after you release your fingers from the keyboard. Independent Memory settings are available for the Lower keyboard and Pedalboard, making it possible, for example, to have the bass continue with the rhythm while the chord accompaniment "rests." The Memory function can also be used independently from the A.B.C. feature.

The bottom right Data Control button pair is used to control the Memory function. The left button corresponds to the Lower keyboard, and the right button corresponds to the Pedalboard.

L (Lower)

When Lower is set to on (solid box), the chord accompaniment of the Lower Keyboard voices continues to play even after you release your fingers from the Lower keyboard.

P (Pedal)

When Pedal is set to on (solid box), the bass accompaniment of the Pedalboard voices continues to play even after you release your fingers from the Lower keyboard.

Chords Recognized in the Single Finger Mode (Key of C)

Major, minor, 7th and minor 7th chords can all be played in the Single Finger mode.

Chords Roots on the Lower Keyboard

Major chords:

Press the root of the chord (the note that corresponds to the chord's name).

C

Minor chords:

Simultaneously press the root and any one black key to the left of it.

Cm
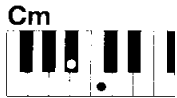
7th chords:

Simultaneously press the root and any one white key to the left of it.

C7
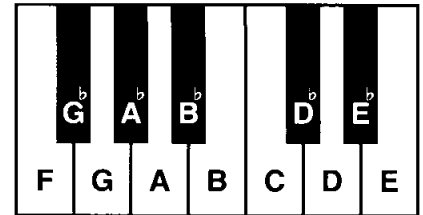
Note: Minor, 7th and minor 7th chords with black key roots (such as B♭ or G♭) are played in the same way as those with white key roots.

Minor 7th chords:

Simultaneously press the root as well as any black key and any white key to the left of it.

Cm7

Note: With Single Finger, the chord produced will sound in the same octave regardless of where it is played on the Lower keyboard.

PLAYING SINGLE FINGER CHORDS WITHOUT RHYTHM:

Auto Bass Chord is generally used with rhythm patterns to create full rhythmic accompaniment, but it can also be used in the Single Finger mode to add full continuous chords to your performance without the use of the rhythm. Simply leave the rhythm off in Single Finger mode, and play Single Finger chords from the Lower keyboard.

Note: If you forget to cancel the Single Finger or Fingered Chord accompaniment functions, single notes that you play will be sounded as continuous chords.

Chords Recognized in the Fingered Chord Mode (Key of C)

C **Cm** **C7** **Cm7** **Cmaj7**

Cm maj7 **C+5** **C7+5** **Cdim** **C7sus4**

Cm7-5 **C-5** **C7-5** **C6** **Cm6**

40
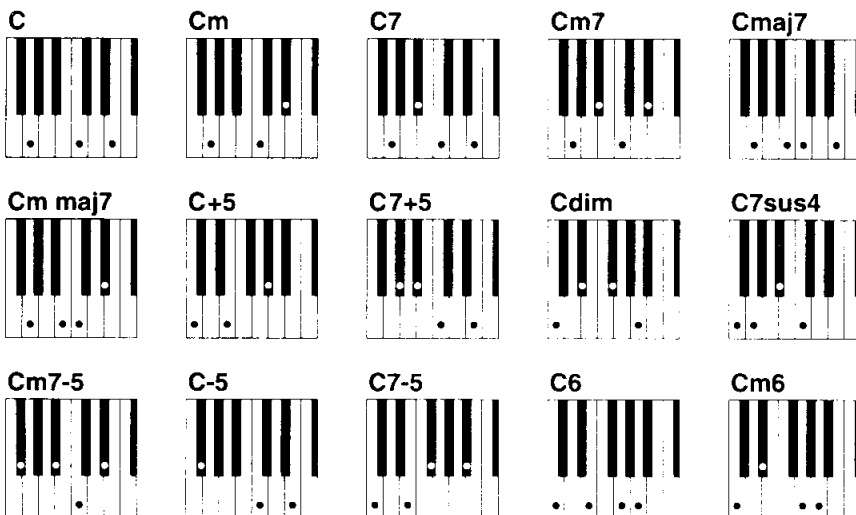
Keyboard Percussion

To play the Keyboard Percussion sounds:

1. Turn on the Keyboard Percussion function by pressing either
or both the LOWER and PEDAL buttons in the KEYBOARD PER-
CUSSION section.
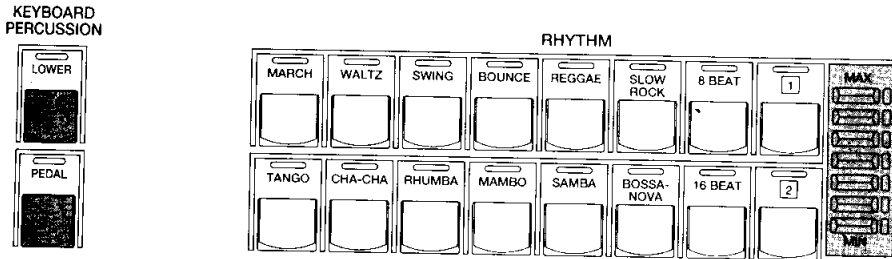
2. Set the volume.
The volume of the percussion sounds is set together with that of the
rhythm by using the VOLUME controls in the Rhythm section. Set the
volume to the desired level.

3. Turn off all the Lower and Pedal voices by setting each voice's
volume to MIN.

4. Play some notes on the Lower keyboard and Pedalboard. The
various percussion sounds (a total of 43 are available) have been
assigned to the keyboards as shown in the charts below.

Percussion Assignments for the Lower Keyboard
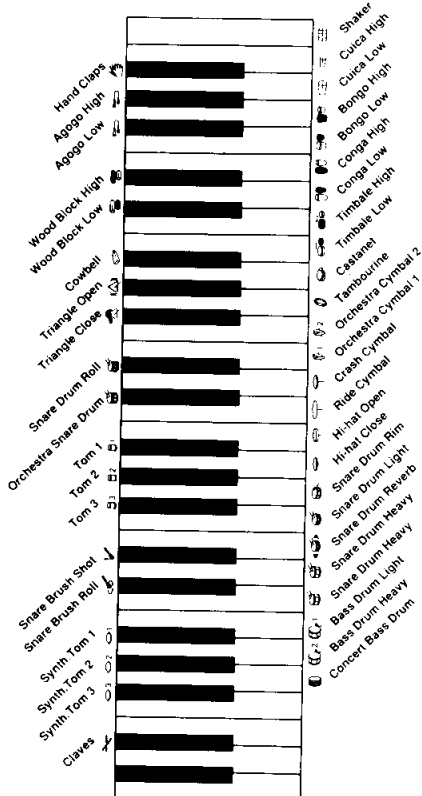
Percussion Assignments for the Pedalboard
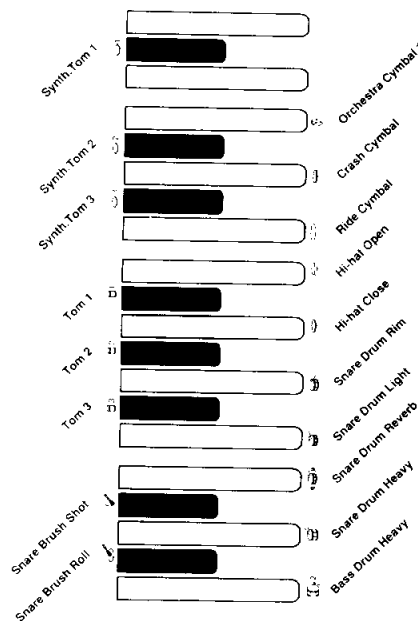
Melody On Chord

The Melody On Chord (M.O.C.) feature automatically adds a harmony part to the melodies you play on the Upper keyboard. The harmony is derived from the chords you play on the Lower keyboard — or from the chords that are played for you, if you use the A.B.C. Automatic Accompaniment.

Melody On Chord has three different types, each providing a different set of harmonies to accompany the melody played. The Melody On Chord feature is selected from the SOLO/MOC page.

To select the M.O.C. function:
Press the SOLOSTYLE button in the DISPLAY SELECT section.
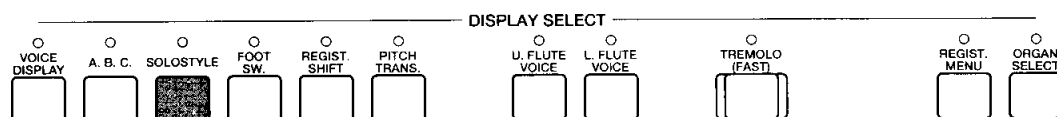
SOLO/MOC Page
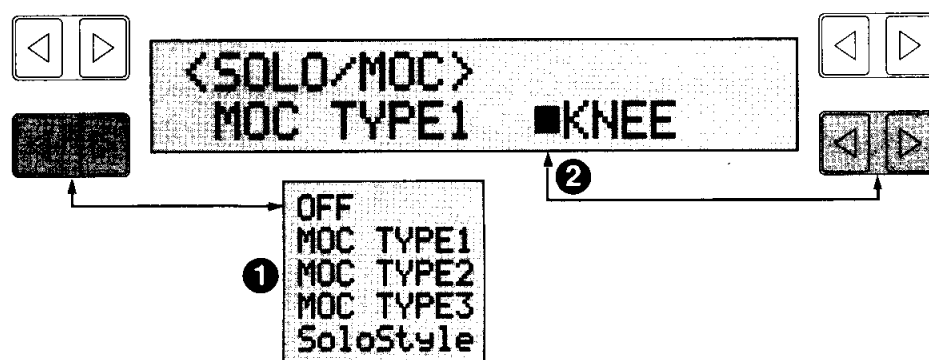
❶ **Type**

Off
Cancels the Melody On Chord/SoloStyle function.

MOC Type 1
Produces harmonies of up to two notes in a range close to the melody played.

MOC Type 2
Produces harmonies of up to three notes in a range close to the melody played.

MOC Type 3
Produces harmonies of up to four notes in a range relatively distant from the melody played.

SoloStyle
(Refer to the following section on SoloStyle.)

> **Note:** Even when Melody On Chord is on, if the Upper keyboard voices are set to 0, the function will not sound.

4 Rhythm, Accompaniment
and Percussion

❷ **Knee**

On/off switch for knee lever control over Melody On Chord/SoloStyle operation. When this is on, pressing the knee lever to the right activates the Melody On Chord/SoloStyle function. (Refer to Knee Lever Control, page 48.)

SoloStyle

The SoloStyle function generally works with the rhythm patterns and automatically produces various kinds of musical embellishments (harmonies, delayed repeats, or sequenced phrases) to the Lead voice you play on the Upper keyboard. There are 41 different SoloStyle patterns, one for each of the rhythm patterns.

When turned on, SoloStyle automatically sets the volume of the Lead voice to nearly the maximum level and plays the ideal embellishment to match the rhythm style. (Refer to the SoloStyle Voice Assignments List, page 81.)

> **Note:** The Accompaniment type cannot be changed.

To select the SoloStyle function:

1. Press the SOLOSTYLE button in the DISPLAY SELECT section.

2. Select SOLOSTYLE by using the bottom left Data Control buttons.

```
<SOLO/MOC>
SoloStyle  □KNEE
```
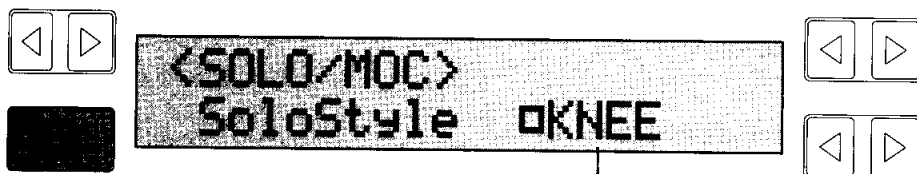
This Knee setting is the same as described above in the M.O.C. section. It serves as an on/off switch for knee lever control over SoloStyle operation. (Also refer to Knee Lever Control, page 48.)

> **Note:** M.O.C. and SoloStyle are highly distinctive effects, and as such it may not be musically appropriate to keep them on for the duration of a song. Use the Knee Lever to turn the functions on and off as necessary; this is a convenient way to add dynamic changes to your performance as you play.

5 Registration Memory
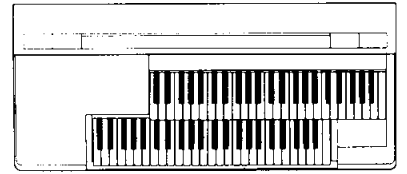
Registration Memory allows you to store virtually all the settings you make on the panel and with the LCD, providing a convenient way to instantly change all voice settings and rhythms while you're playing, with the simple touch of a single button in the REGIST. MEMORY section.

Virtually all of the front panel settings and the functions and settings accessible from display pages, such as effects and accompaniment, can be memorized to Registration Memory.

The following functions and settings cannot be memorized:

Pitch/Transpose settings
Registration Shift settings
MIDI settings
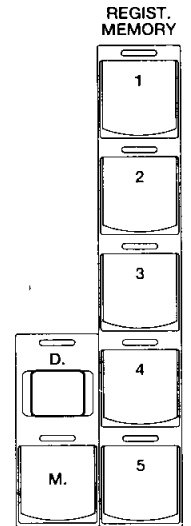
Saving Registrations

Newly created registrations you make can be saved to the Registration Memory panel buttons. All registrations in Registration Memory can also be saved to disk for future recall (See page 62 for details).

To store registrations to the Registration Memory:

1. After creating your original registration, decide which numbered button you wish to replace (1 - 5).

2. While holding down the M (Memory) button in the Registration Memory section, press the numbered button to which you wish to save your registration.

When the registration is stored, the numbered button flashes momentarily.

To select registrations from Registration Memory:
Simply press the numbered button that corresponds to the registration you wish to select.

1) While holding down M button...

2) ...press desired numbered button.

44
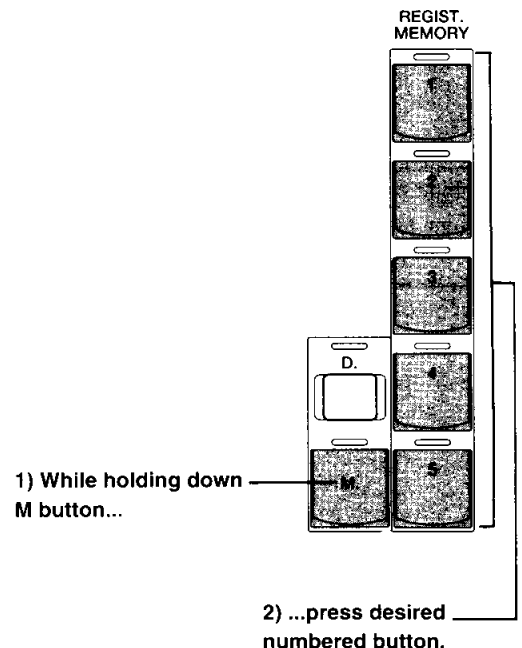
USING THE D (DISABLE) BUTTON:

Rhythm and automatic accompaniment patterns also change when you select different Registration Memory buttons. Pressing the D (Disable) button allows you to keep the same rhythm and accompaniment patterns throughout all your registration changes.
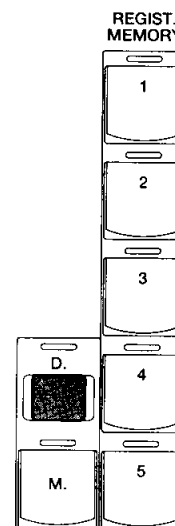
Registration Shift

The Registration Shift function allows you to change registrations on the Registration Panel without taking your hands from the keyboards. By using the right footswitch on the expression pedal, you can step through the panel registrations in sequence.

To select the Registration Shift functions:

1. Press the REGIST SHIFT button in the DISPLAY SELECT section.
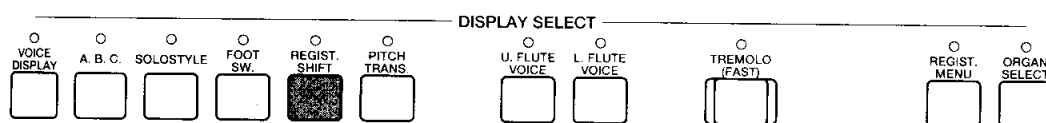
2. Select SHIFT in the display by pressing any one of the bottom Data Control buttons.
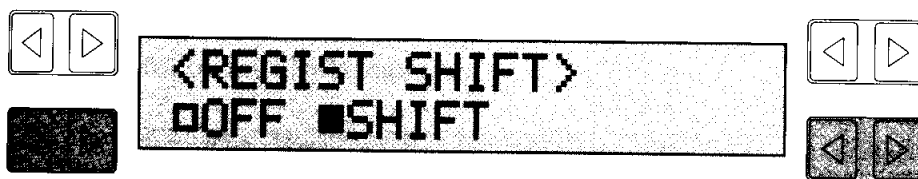
In the SHIFT mode, each press of the right footswitch selects the Registration Memory buttons in their numerical order. After the last preset is reached, the function "wraps around" to select the first button again. The numbered buttons light up as they are selected.

Resetting the Registration Memory Buttons (Power On Reset)

All current registrations can be deleted at once by using the Power On Reset function. This replaces the registrations you stored with the preset registrations loaded at the factory. To do this:

1. Turn off the power.

2. While holding down the top left Data Control button, turn the power back on.

POWER
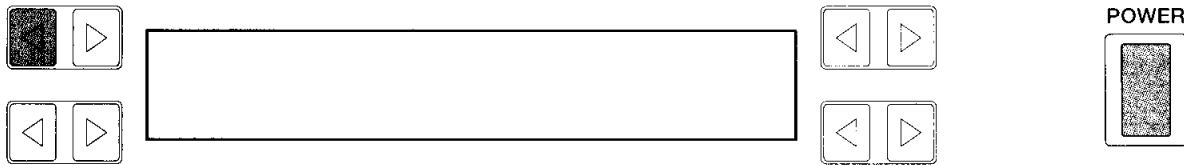
Be careful when using this operation, since it erases all your Registration Memory settings.

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 44) 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.

6 Footswitches and Knee Lever

These leg- and foot-operated controls allow you to turn on and execute various performance functions without taking your hands from the keyboards. Controllable functions include Registration Shift, Glide, Sustain, and Melody On Chord/SoloStyle, as well as Rhythm operations such as stop, ending and Fill In.

Footswitch Control

The Electone has two footswitches on the expression pedal that can be used to control various functions. The right footswitch is used for the Registration Shift functions (see page 45). The left footswitch can be set to control one of the following functions: Glide, rhythm stop, rhythm ending, and rhythm Fill In. Assignments of the functions are made in the Footswitch pages.

To select the Footswitch pages:
Press the FOOT SW. button in the DISPLAY SELECT section.
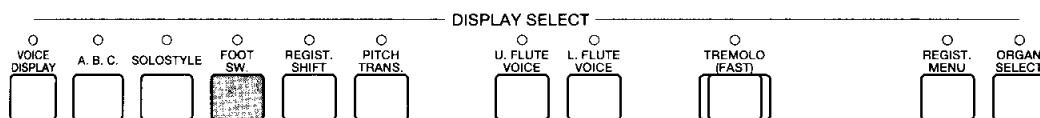
Use any of these Data Control buttons to select the footswitch mode.

$$\langle FOOT\ SW \rangle MODE:OFF$$
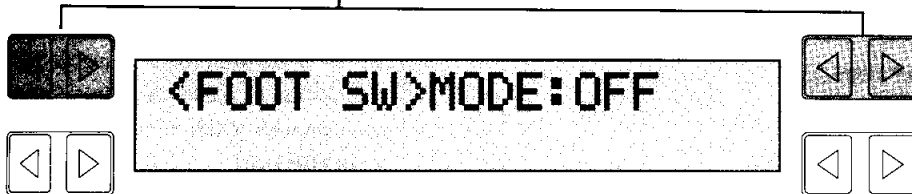
Three modes are available: OFF, RHYTHM, and GLIDE. Select the desired mode with the top right or top left Data Control buttons.

Off
Cancels left footswitch control.

Rhythm Mode
Selection of left footswitch control over rhythm functions. When this is chosen, the following display appears:

$$\langle FOOT\ SW \rangle MODE:RHYTHM$$
$$\square STOP\ \square ENDING\ \square FILL$$

❶   ❷   ❸
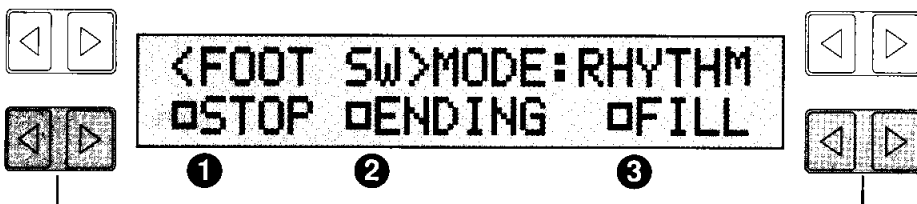
Use any of these Data Control buttons to select the three settings, STOP, ENDING or FILL.

Select one of the three Rhythm Control functions from this display.
Pressing the footswitch executes the corresponding function:

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❶ STOP

Functions as an off/on switch for the rhythm pattern.

❷ ENDING

Switches the rhythm to the Ending pattern, after which the rhythm is stopped.

❸ FILL (Fill In)

Switches the rhythm to the Fill In pattern.

Glide Mode

Selection of footswitch control over Glide. Pressing the footswitch immediately lowers the pitch of the selected voice or voices by a half-step. When the Glide setting is chosen, the following display appears:

Selects LEAD
Selects UPPER
Either of these selects LOWER
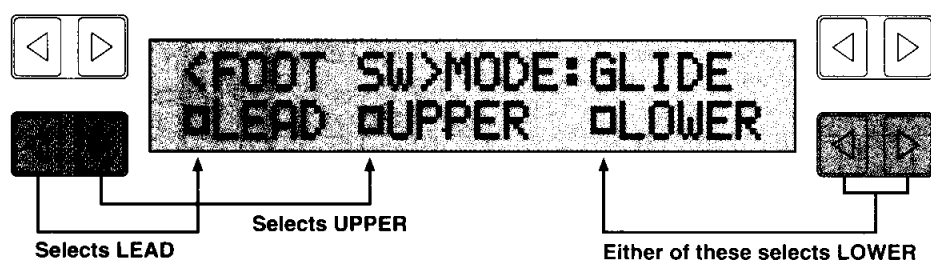
The Glide function can be applied to any one or all of the voice sections shown in the display: Lead, Upper, and Lower. Select the desired voice section(s).

> **Note:** When using the footswitch to control Glide, be careful to keep pressing the footswitch for as long as you want Glide to remain in effect. Also note that when Glide is applied, Vibrato is not effective.

Knee Lever

The knee lever, located on the underside of the keyboard panel, can be used to turn one of the following functions on and off: Melody On Chord/SoloStyle or the Sustain effect.

Sustain

To select knee lever control over Sustain:

Make sure that the Upper and/or Lower Sustain effect panel controls have been turned on; otherwise, the knee lever will have no effect.

(ON)
(OFF) (ON)
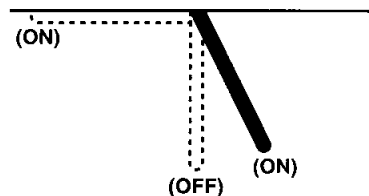
To use the knee lever:

Fold the knee lever down and press it to the right with your knee when you want to have sustain.

When the knee lever is vertical:

The sustain effect is cancelled.

When the knee lever is continuously pressed to the right:

The sustain effect is on.

When the knee lever is folded up:

The sustain effect is applied constantly, as long as the front panel sustain buttons are on.

Melody On Chord and SoloStyle

To select knee lever control over Melody On Chord and SoloStyle:

Press the SOLOSTYLE button in the DISPLAY SELECT section. Set the KNEE control to ON, and select one of the modes.

```
<SOLO/MOC>
MOC TYPE1   ■KNEE
```

49
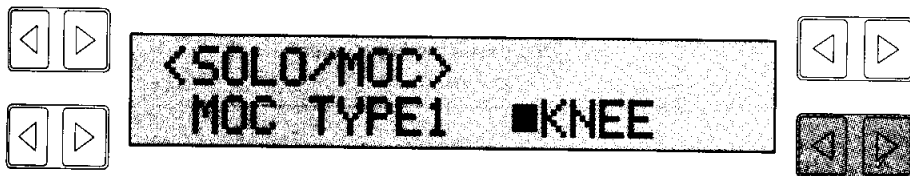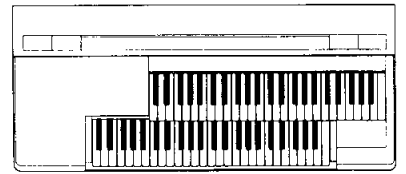
7 Pitch Controls

There are two pitch-related controls on the Electone: Transpose and Pitch. Transpose allows you to change the key of the instrument and Pitch lets you finely adjust the tuning. These features make it easy to change the key of a song to accommodate a vocalist's range or to precisely match the tuning of another instrument. The Pitch controls are located on the PITCH TRANS. page.

To select the PITCH TRANS. page (Page 1):
Press the PITCH TRANS. button in the DISPLAY SELECT section.

DISPLAY SELECT

VOICE DISPLAY — A. B. C. — SOLOSTYLE — FOOT SW. — REGIST. SHIFT — PITCH TRANS. — U. FLUTE VOICE — L. FLUTE VOICE — TREMOLO (FAST) — REGIST. MENU — ORGAN SELECT

```
<TRANS.> <PITCH>  ▣1
     0      A=440.0Hz
```

Increases the Transpose value
Decreases the Transpose value

Increases the Pitch value
Decreases the Pitch value

Transpose (TRANS.)

Determines the coarse pitch setting of all the voices, and is adjustable in half-steps (semitones). Range: -6 — +6 (one octave)

Pitch

Determines the fine pitch setting of all the voices. Range: 438.8 Hz — 444.5 Hz

8 MIDI Controls

MIDI (Musical Instrument Digital Interface) is a sophisticated communication system for electronic musical instruments. It is built into most every modern digital musical instrument and allows different instruments to "talk" to each other and control each other's functions. For example, the Upper keyboard of your Electone could be used to play sounds on a connected synthesizer. In another application, a rhythm machine can be programmed to play its rhythm patterns in perfect synchronization with the tempo set on the Electone.

To use the MIDI functions you must, of course, have a second MIDI device (such as a synthesizer or rhythm machine), and a set of MIDI cables. Connect the MIDI cables as shown in the illustration below:
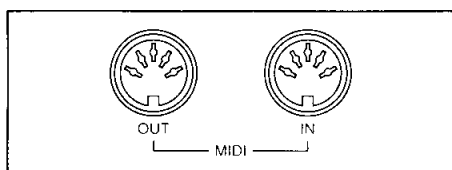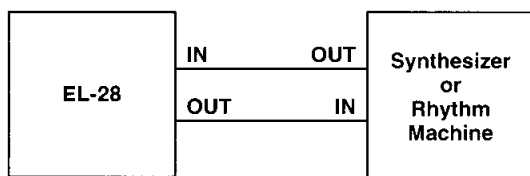
Note: In order to use the non-M.D.R. MIDI functions described in this section, make sure to disconnect the MIDI cables going to the M.D.R.

All MIDI functions are controlled from the two pages that follow the PITCH TRANS. page. (See page 50.)

To select the MIDI pages:
Press the PITCH TRANS. button in the DISPLAY SELECT section, and select Page 2 and Page 3 with the Page Select buttons.

Page 2 — Output Channels

These select the MIDI channel for Upper keyboard.

These select the MIDI channel for Lower keyboard.

Note: When using another MIDI device to play the Electone's voices, you must set the MIDI transmit channel(s) of the connected device to match the receive channel(s) of the Electone. The MIDI receive channels of the Electone are automatically set to the following values:

    Upper: 1
    Lower: 2
    Pedal: 3
   Keyboard
  Percussion: 15
     (receive channel only)

This determines the channels over which MIDI information will be transmitted. The Upper keyboard can be set to send over channels 1 or 4, while the Lower keyboard can send over 2 or 5. The Pedalboard automatically sends over channel 3. The MIDI receive channel of each connected MIDI device should match the numbers set here.

These select the Lead setting.

INT.
EXT.

❶

<MIDI IN>LEAD=INT.03
SYNC=INT.EXP.=AUTO

❷   INT.   ❸   AUTO
    EXT.   INT.
                EXT.

These select the Sync setting.   These select the Expression Pedal setting.

❶ **Lead**

Determines Internal or External control of the Lead Voices. When set to Internal, Lead Voices are played from the Electone and the sounds from a connected MIDI instrument can be played via MIDI channel 1 (or channel 2, when the To Lower function is on). When set to External, the Lead Voices can only be played from the connected instrument via MIDI channel 4.

❷ **Sync**

Determines the source of the timing control, for rhythm synchronization purposes. Setting this to Internal gives the Electone timing control over the connected rhythm machine. This also allows you to start and stop the rhythm patterns of the connected rhythm machine from the Electone's panel controls. Setting this to External gives timing control to the connected rhythm machine.

❸ **Expression (EXP.)**

Determines the control of the expression functions. Ordinarily, this control is set to AUTO. However, when it is set to INT., you can manually control the expression pedal during M.D.R. playback. When set to EXT., another (external) Electone can be used to control the expression pedal functions.

> **Note:** Accompaniment pattern sounds cannot be controlled via MIDI.

9 Accessory Jacks

On the left underside of the Electone keyboard is a separate panel equipped with several input/output terminals, the functions of which are described below.
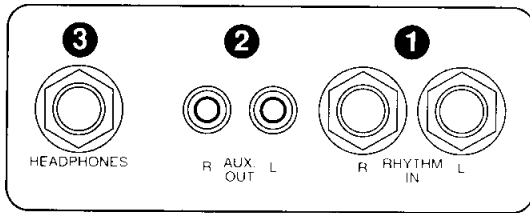
❶ RHYTHM IN (Left and Right)

This pair of phone jacks are for connection to an external rhythm machine. The sound of the connected device is mixed with the sound of the Electone and played through the speaker system. The volume of the rhythm machine can be controlled by the Expression pedal of the Electone.

❷ AUX. OUT (Left and Right)

This set of stereo outputs (RCA pin jacks) is for connection to external amplification/speaker systems. Typically, they are for direct connection to a home audio system or cassette deck.

❸ HEADPHONES

For connection of a stereo or monaural headphone set. When head-phones are connected to this jack, sound to the Electone's built-in speaker system is automatically cut off, allowing you to play without disturbing others.

10 Music Disk Recorder

About Data Compatibility:

The data created on the EL-28 Electone is basically readable on the upper model Electones as well:
EL-60, EL70, EL-90, and ELX-1.
However, some types of data recorded on the upper models cannot be read by the EL-28.

About Floppy Disk Care and Use

■ **Do NOT eject the disk during recording or playback or while the disk drive LED is on.**
Doing so may damage both the disk and the M.D.R.

■ **Do NOT turn off the Electone while the disk is still inserted. Always eject the disk before turning ff the Electone.**

■ **When ejecting a floppy disk from the disk slot:**
  • To eject a floppy disk, press the eject button slowly as far as it will go. Then, when the disk is fully ejected, remove it by hand.

  • The disk may not be ejected properly if the eject button is pressed too quickly, or if it is not pressed in far enough. (The eject button may become stuck halfway with the disk extending from the slot by only a few millimeters.) If this is the case, do not attempt to pull out the partially ejected disk. Doing so may damage the disk drive mechanism and/or the floppy disk. To remove a partially ejected disk, try pressing the eject button once again, or push the disk back into the slot, then repeat the eject procedure carefully.

  • Do not insert anything but floppy disks into the disk drive. Other objects may cause damage to the disk drive or floppy disk.

■ **Dirt and dust accumulate on the head of the disk drive unit during the course of normal use, and may cause errors in reading/writing of data. You should periodically clean the head with a 3.5-inch head cleaning disk.**

■ **Disk Compatibility**
  • Use either double-sided double-density (2DD) or double-sided high-density (2HD) 3.5-inch microfloppy disks with the M.D.R.

■ **Precautions on Floppy Disk Use**
  • Never open the disk's shutter. Dirt or dust on the internal magnetic surface will cause data errors.

  • Never leave disks near a speaker, TV or other device that emits a strong magnetic field.

  • Do not store disks in places exposed to direct sunlight or sources of high temperature.

  • Do not place heavy objects, such as books or notebooks, on top of the disks.

  • Avoid getting the disks wet.

  • Make sure to store the disks in environmental conditions as specified below:
      Storage temperature: 4° to 53°C (39° to 127°F)
      Storage humidity: 8 to 90% relative humidity
      Location where disks are unlikely to be exposed to dust, sand, smoke, etc.

  • Be sure to apply the label at the proper position. When changing the label, never cover the old label with a new label; always remove the new label first.

The Music Disk Recorder (M.D.R.) is a sophisticated recording device that lets you record your performances. It works like a cassette tape recorder, but it records performance data instead of sounds. The M.D.R. not only records the notes you play; it also remembers the voises and rhythms you select, the front panel controls you change, as well as all expression pedal, footswitch and knee lever positions, to reproduce your performance exactly as you play it. Moreover, you can separately record different parts of your performance, building up a song part by part.

Using Disks With the Music Disk Recorder

The M.D.R. records all your performance data to disks. A blank disk has been included with your Electone for you to record your performances.

Inserting the disk:

Put the included disk, face up, into the disk slot under the M.D.R.
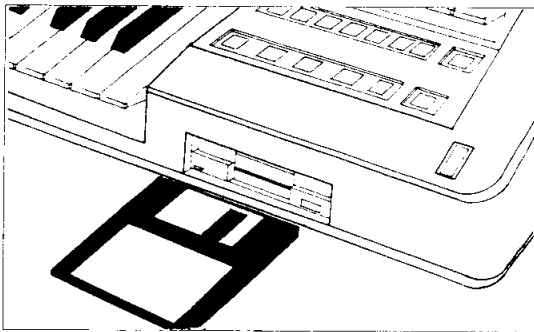
LED lights briefly when disk is inserted.
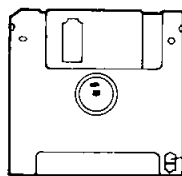
Write-Protect tab

Write-Protect ON   Write-Protect OFF
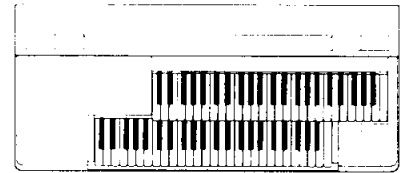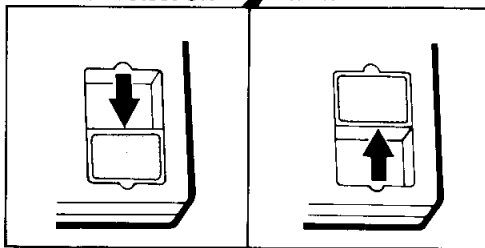
Note: Either double-sided double-density (2DD) or double-sided high-density (2HD) 3.5-inch microfloppy disks can be used with the M.D.R.

Note: When you wish to record to a disk, make sure the disk's Write - Protect tab is set to OFF. Set it to ON when you wish to protect valuable data from being accidentally erased.

Note: The EL-28 and the M.D.R. are connected by MIDI cables. The M.D.R. functions cannot be used if the MIDI cables have been disconnected from the MIDI terminals located on the underside of the EL-28 keyboard.

Ejecting the disk:

To remove the disk, press the EJECT button next to the disk slot.

Floppy disk slot

Disk drive LED   Eject button
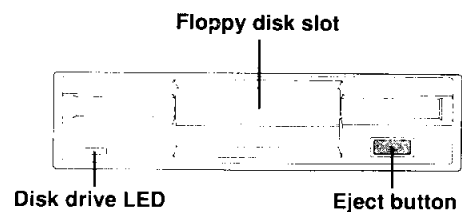
Formatting a Disk

Before recording a performance to your blank disk,
the disk must first be formatted.

To format a disk:

1. Put the disk, label facing up, into the disk drive.

"Fort"(Format) appears and blinks on the LED display to
indicate that the disk has not been formatted.
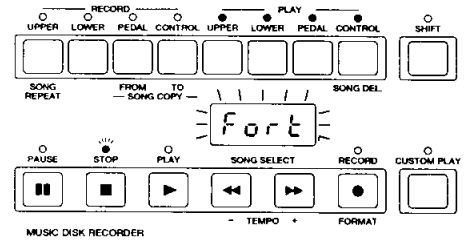
2. While holding down the SHIFT button, press the FORMAT button.

This step puts the format operation on stand-by,
indicated by the dashes in the M.D.R. display and the
flashing LED above the FORMAT button.
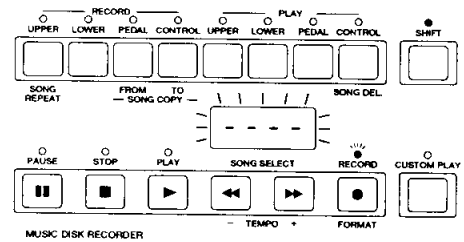
> **Note:** If you format a disk that contains previously recorded data, all data on the disk will be erased. To avoid inadvertently formatting a disk after this step, press the STOP button.

3. Press the FORMAT button again to begin formatting.

The LED above the FORMAT button stays lit. The
number "160" appears in the M.D.R. display and
counts down to "001" as the disk is being formatted.
When formatting is completed, operation returns to
the original STOP status.
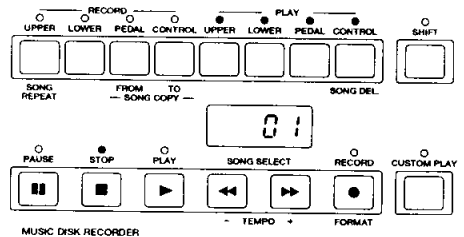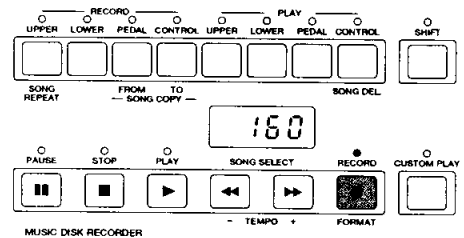
About the Shift Button

Some buttons on the M.D.R. panel have function names printed below the buttons as well as above them.
The SHIFT button allows you to use these secondary functions: Simultaneously hold down the SHIFT
button and press the button you wish to use.

Making a Recording

Recording with the Music Disk Recorder is as easy as using a tape recorder. In this section, you'll learn how to record your first complete performance with the Music Disk Recorder.

To record a song:

1. Set the desired registrations on the Electone.
Make all the Electone settings necessary for the song you will record. This means entering the all registrations you will need for the entire performance in the Registration Memory. Make sure also to select the registration that you will use at the beginning of the song.

Note: Up to 40 songs can be stored on a disk. However, the actual number of songs may be less if some songs contain a large amount of data. (See page 70 for more information about remaining memory.)

2. Put a formatted disk into the disk slot.

3. Use the SONG SELECT (◄◄, ►►) buttons to select the song number for recording.
Up to 40 songs can be stored on a disk. When a disk is first inserted, song number 01 is automatically selected.
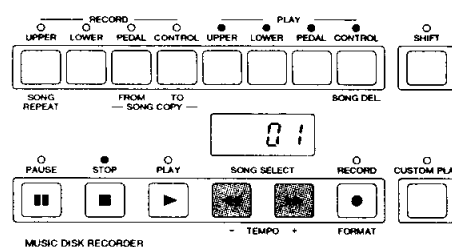
Note: If the disk has songs already recorded to it, use the SONG SELECT buttons to search for a song number that has not yet been recorded to.

4. Press the RECORD button.
The RECORD lamp lights up and the PLAY lamps begins blinking, indicating that the Music Disk Recorder is ready to record.
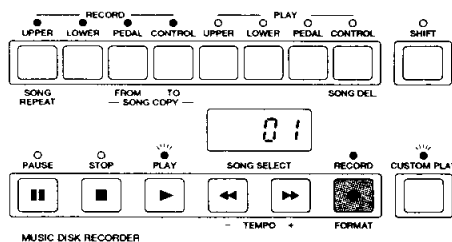
Note: If the song already contains recorded data, small bars (‑ ‑) appear at the left side of the song number on the M.D.R. display, and flash along with the song number, to warn you that the selected song number has data recorded to it. To avoid erasing the data, cancel the operation by pressing the STOP button.

5. Press the PLAY button.
The PLAY lamp lights up and small bars flash across the M.D.R. display from left to right, indicating that the recorder is being set up.
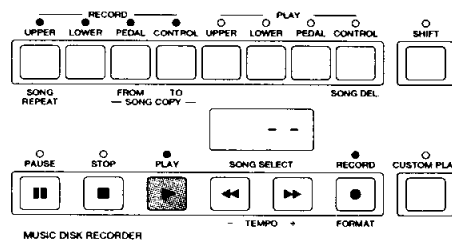
Note: In this step, the registrations and other settings on the Electone are recorded — before the recording of any performance data.

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6. After numbers appear in the display of the Recorder, begin playing.

Once the setup operation in step #5 is complete, a number will appear on the recorder display indicating that you can begin recording your performance. The number also indicates the amount of memory left on the disk.
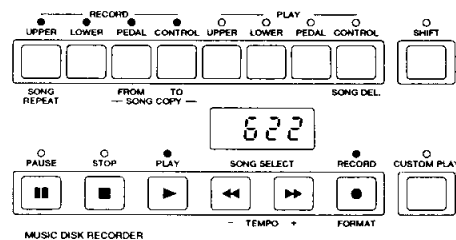
> **Note:** The short time it takes to set up for recording is recorded as well, causing a short pause before playback of the song.

If you make a mistake during recording:
Press the PLAY button while the recorder is still running...

This stops the recording and returns you to the starting point of the song. The letters "rE" (retry) appear on the left side of the M.D.R. display and the PLAY and CUSTOM PLAY LEDs start flashing, indicating that you can re-record the song.

...then press PLAY again to begin re-recording the song.

Re-recording starts from the beginning of the song and replaces the previously recorded performance with the newly recorded performance.

---
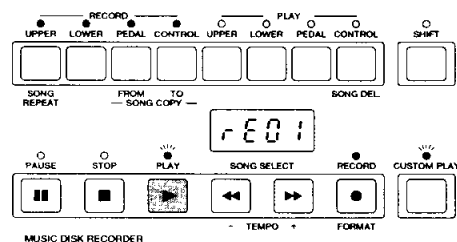
7. When you finish playing, press the STOP button.

When the STOP button is pressed, both the RECORD and PLAY lamps go out, and recording is stopped.
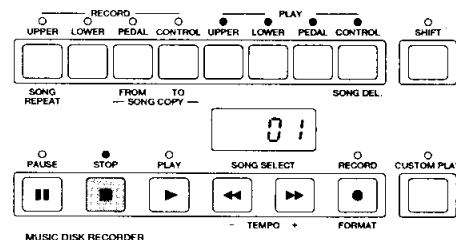
> **Note:** When the available memory reaches "008" or less, the numbers begin flashing to warn you. If this happens, stop recording before the display reaches "000."

---

8. To hear your newly recorded performance, press the PLAY button.

Playback will begin after a couple of seconds.

> **Note:** For more information on playback and other playback-related functions, see the Normal Playback section below.

Outline of M.D.R. Operation

Though the M.D.R. is as easy to operate as a cassette tape recorder, it is far more versatile. Since it records all Electone settings and control movements as well as the notes you play as digital data, it allows you much more flexibility and control than even the most sophisticated tape recorder. Basically, the M.D.R. independently records the following three types of data:

1) Registration data (including Bulk data)

All registrations stored to the Registration Memory numbered buttons as well as the registration currently set to the panel, are recorded at the beginning of a song, before the actual recording of your performance. Bulk data is also saved to the song with the Registration data.

2) Performance data

The M.D.R. records your performance on the keyboards and pedalboard of the Electone exactly as you play it, even recording the strength at which you play the keys and how hard you press them down while playing. The various types of performance data — Upper, Lower and Pedal — are recorded to independent "tracks," so that you can change any one of them without affecting the others.

3) Control data

All changes you make on the Electone during your performance are recorded in real time. These include registration changes (excepting those made from the LCD display), and the use of the expression pedal, footswitches and knee lever.

Separately Recording the Parts of a Song

You can also record the parts of your performance independently; for example, first recording the chords and bass to the song (using the Lower and Pedal parts), and after that recording the melody. This function also lets you record keyboard percussion and performance control data, such as registration changes and expression pedal operation, separately from the other parts of the song.

To record parts separately:

1. Set up the Music Disk Recorder for recording, as you did in the section Making a Recording above.

The first steps in recording parts separately are the same as for normal recording:

1) Memorize all the registrations needed for your performance to the Registration Memory numbered buttons, and set the registration that will be used at the beginning of the song.

2) Insert a formatted disk.

3) Select the song number to which you will record your performance.

4) Press the RECORD button.

2. **If you wish to, you can select individual parts for recording by pressing the appropriate RECORD buttons in the upper row. (For this example, record LOWER, PEDAL and CONTROL.)**
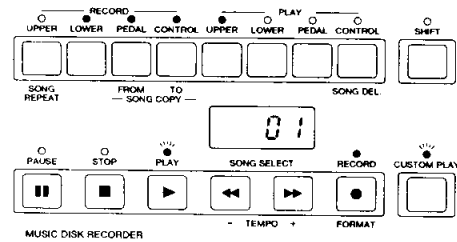
LEDs above selected parts light.

UPPER – Selects performance data of the Upper keyboard, on or off.

LOWER – Selects performance data of the Lower keyboard, on or off.

PEDAL – Selects performance data of the Pedalboard, on or off.

CONTROL – Selects Control functions (e.g., expression pedal and footswitch movements, and registration changes), on or off.

The LED lamps above the buttons indicate the record status of the parts.

This example operation disables recording of the Upper part.

> **Note:** If you want to record any one or all of these four basic parts (Upper, Lower, Pedal and Control) at the same time, this step is actually unnecessary. Pressing the RECORD button automatically sets up the M.D.R. to record the above four parts. The Upper, Lower, Pedal and Control performance data will automatically be selected when you press the RECORD button, but only those parts that you actually play will be recorded. Later (in step #6 below), you can also record the Upper part without having to select it here in step #2.

[Hidden Functions on MDR]

If you wish to select the Keyboard Percussion part for separate recording:

Hold down the SHIFT button and simultaneously press the K.PERC. button in the top row. The button (indicated in the illustration at right) functions as a Keyboard Percussion selector in the record mode.

K.PERC. – Selects performance data of Keyboard Percussion. (Keyboard Percussion can be recorded and played independent of the Rhythm patterns.)

Holding down the SHIFT button in the record condition lets you select this "hidden" function. The lamp above the button will also change to indicate the status of the SHIFT- selected part.
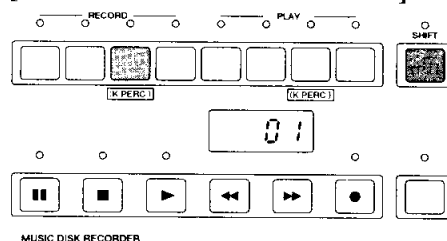
> **Note:** The Keyboard Percussion part can be selected for playback in the Play or Record functions by using the button in the PLAY section (indicated in the illustration above).

> **Note:** When recording or playing back the Keyboard Percussion part, make sure the Keyboard Percussion button on the Electone is turned off. Otherwise, the Keyboard Percussion sounds will be played twice, resulting in cancellation of some sounds and a strange "flanging" sound in others.

---

3. **Press the PLAY button, and start playing after numbers appear in the display.**

For this example, play the lower keyboard and pedalboard. Press the STOP button when you are finished with your performance to stop recording.

> **Note:** The Lead voices cannot be recorded separately.

4. Now that you've recorded the first parts of your performance, press RECORD to set up recording of the next part.
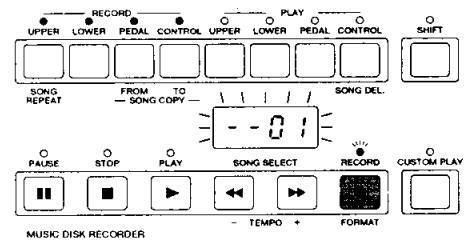
> **Note:** Since the song now contains recorded data of the Lower and Pedal parts (recorded in step#2), small bars ("– –") appear at the leftmost part of M.D.R. display and flash along with the song number, warning you that the selected song number already contains recorded data.
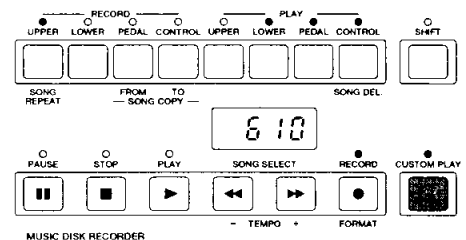
5. Press the RECORD button again and switch the parts you recorded in step #2 to Play in the PLAY section.

The PLAY and CUSTOM PLAY LEDs start flashing, indicating the stand-by status.
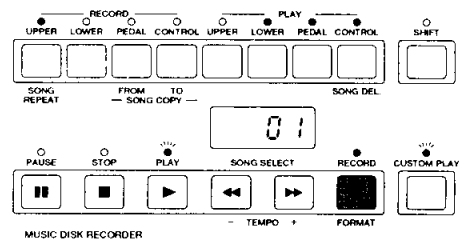
> **Note:** If you want to record the Keyboard Percussion part separately, or if you want to re-record any individual parts, you should select those parts here before going to the next step. (See step #2 above.)

6. Press the CUSTOM PLAY button to start recording of the new part or parts.

Playback of the previously recorded parts starts immediately.

The CUSTOM PLAY button is used here to record only the parts that have been selected for recording, and play back only those parts that have been selected for playback. Since registration data has already been recorded with the first parts of the song, recording begins immediately.

> **Note:** The length of a subsequently recorded part cannot exceed the length of the previously recorded parts.

7. While you listen to the parts being played back, start playing the melody on the Upper keyboard.

When the end of the recorded performance is reached, playback is automatically stopped and the STOP status is resumed.

Recording Registrations (and Bulk Data)

You can also record registrations by themselves, without recording a performance. Bulk data, including Registration Memory and Registration Shift settings, and User voices, is also saved in the operation.

To record only the registrations:

1. On the Electone, set the registrations and all other data you wish to record.

2. Select the song number to which you wish to record the registrations.

If the selected song number already contains recorded data, select another song number.

3. Press the RECORD button.

> **Note:** Songs that already contain recorded data are indicated by small bars on the left side of the M.D.R. display .when the RECORD button is pressed in the next step.(See page 57.)

4. Press the PLAY button to record the registrations, then press the STOP button as soon as you see the small bars flash across the M.D.R. display.

The small bars that flash across the display indicate that the M.D.R. is being set up for normal recording; pressing the STOP button interrupts this process. The bars then flash simultaneously, indicating that only registration and other data is being recorded.

Recalling Recorded Registrations (and Bulk Data)

The registrations (and bulk data) recorded to song numbers in the above operation can be loaded back to the Electone by simply selecting the appropriate song number and pressing the PLAY button.
When the operation has been completed, the M.D.R. returns to STOP status.

The M.D.R. also makes it possible to use more than the 5 Registration Memory registrations in a performance — without having to alter the current panel settings. This would come in handy when performing several songs in succession that use more than 5 registrations.

To do this:

1. First record the registrations you need into several song numbers on the M.D.R. before the performance. (You should also try to record them in the order that you'll use them, if possible.)

2. During the performance, after all 5 registrations from a certain song number have been used, select the next song number and press the PLAY button on the M.D.R. This replaces all 5 registrations in Registration Memory with the new ones from the selected song number.

3. By repeating the above steps, you can run through an entire performance without having to change the panel settings.

Replacing Registrations

The M.D.R. also lets you change the registrations of an existing song without changing the performance data.
The procedure is the same as that of Recording Registrations mentioned in the previous page.

Normal playback

You can play back your recorded performance by simply pressing the PLAY button. Registrations and other data will be recalled to the Electone. You can also play back recorded performances on the included "Demonstrations" Disk, as well.

To play back a song:

1. Select the number of the song you wish to play back by using the SONG SELECT buttons.
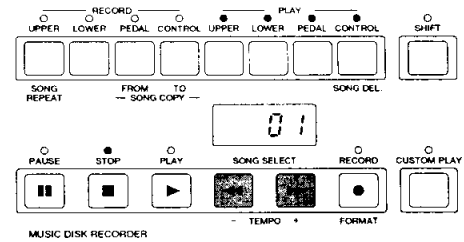
> **Note:** The Keyboard Percussion part is automatically selected for playback in this operation, and the LED above the K.PERC. button in the PLAY section lights.

2. Press the PLAY button.

The PLAY lamp lights up and a small bar moves across the display, indicating that the Recorder is resetting registrations on the Electone.
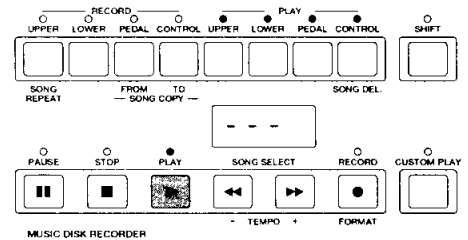
> **Note:** The time required to reset the registrations is the same as the time required during recording.

3. Playback of the song begins after the Electone data is reset and the song time is shown on the recorder's display.

Playback automatically stops at the end of a song.
You can, however, stop playback in the middle of a song by pressing the STOP button.
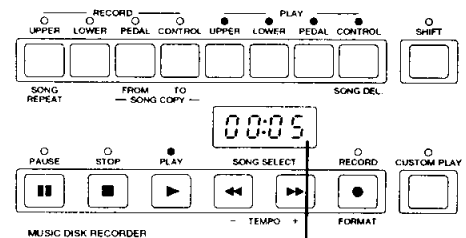
Elapsed time of song

> **Note:** Never turn off the power switch when a floppy disk is still engaged in the MDR disk drive slot. Also do not press the Eject button during recording or playback.

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Playback of Selected Parts

You can also play back selected parts of your recorded performance, while other parts are temporarily turned off. This function is especially useful for playing a single part, such as the melody, over previously recorded accompaniment parts.

To select specific parts for playback:

1. Select the number of the song to be played back.

2. Set the parts you wish to mute to OFF, by pressing the appropriate PLAY button. The LED of the selected part should be off.
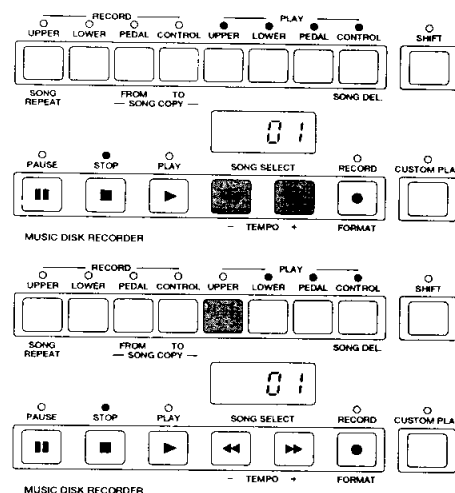
3. Select the parts you wish to play back by setting them to ON.
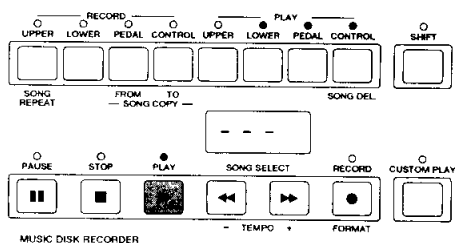
4. Press the PLAY button.
First the PLAY LED lights and the registration and other data are transmitted, then playback of the performance starts (excepting the parts that were turned off in step #2).

5. Now perform your new part or parts over the playback parts.
When the end of the recorded performance is reached, playback is automatically stopped and the STOP status is resumed.

Repeated Playback

This feature allows you to repeatedly play back either all songs on a disk or only one specific song.

To repeat playback of a song or songs:

1. Select the song number you wish to play back.
If you wish to play back all songs on a disk, this selects the first song that will be played back. The others will follow in order.
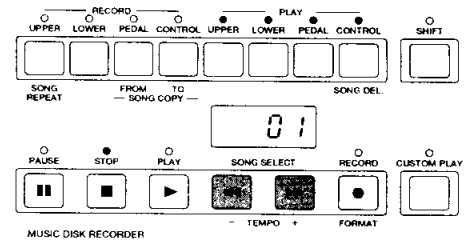
2. Hold down the SHIFT button and simultaneously press the SONG REPEAT button.
The LEDs above SHIFT and SONG REPEAT light up, and "ALL" appears in the M.D.R. display.
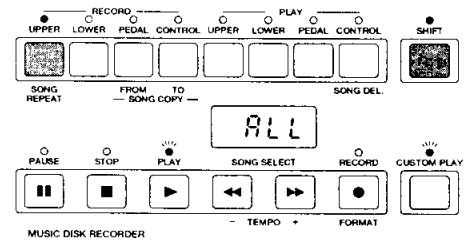
To repeatedly playback all songs starting with the selected song:
Press the PLAY button at this point (go to step #3 below).

To repeatedly playback only the selected song:
Again hold down the SHIFT button and simultaneously press the SONG REPEAT button.
"SinG" appears in the M.D.R. display to indicate that a single song will be repeatedly played back.
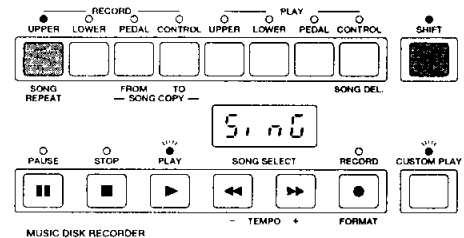
3. Press the PLAY button to begin playback of the song or songs.
Playback will begin from the song selected and repeat indefinitely. To stop playback, press the STOP button.
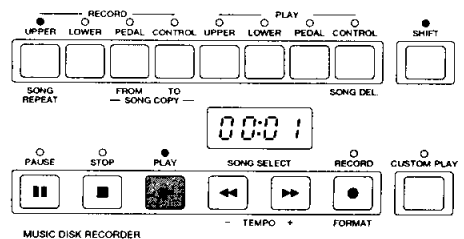
Other Functions

Custom Play

If you want to play back the song without resetting the registrations and other data, press the CUSTOM PLAY button. This displays the song time and starts playback immediately.
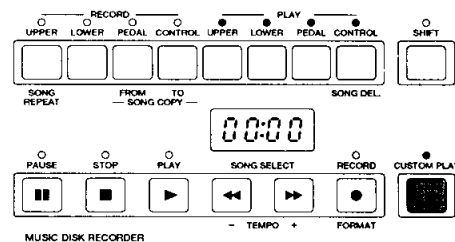
Pause

If you want to temporarily stop playback of the song or songs, press the PAUSE button. To resume playback from the point at which the song was paused, press the PAUSE button again.
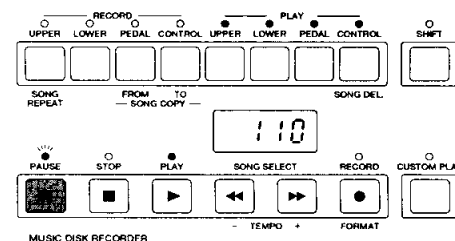
Note: When the PAUSE button is pressed while the A.B.C. Lower Keyboard/Pedalboard Memory is ON, the Lower Keyboard/Pedalboard voice continues to sound.

Fast Forward and Fast Reverse

During playback, these buttons function as fast forward and fast reverse buttons, much like those of a tape recorder. Press ►► to advance to a later point in the song or press ◄◄ to return to an earlier position. While either of these buttons is held down, playback stops and the song time is advanced or reversed accordingly. Hold down the button until the desired song time is shown. When the button is released, playback is paused. To resume playback from the point you've advanced or reversed to, press the PLAY button.
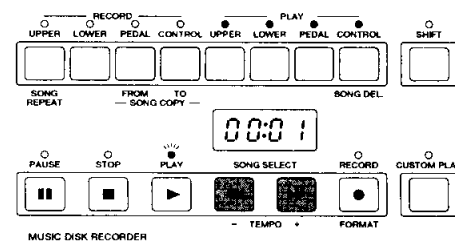
**Note:** Fast Forward and Fast Reverse operate at five times the normal playback speed.

Changing the Tempo

You can change the tempo of the song as the song is playing on the M.D.R. by holding down the SHIFT button and pressing the TEMPO + or TEMPO – button. (The Tempo dial on the Electone panel cannot be used to change the tempo on the Music Disk Recorder.)
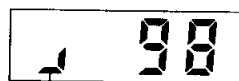
Each press of the button slows down or speeds up the tempo by a small amount. Changing the tempo does not change the pitch of the music.
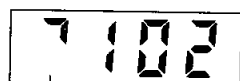
Indicates faster tempo
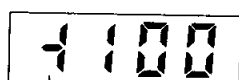
Indicates original tempo

Indicates slower tempo

To restore the original recording tempo of a song, hold down the SHIFT button and simultaneously press both TEMPO buttons.
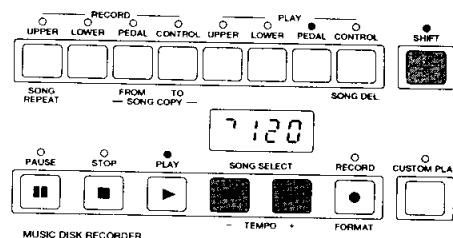
Song Copy

This function lets you copy the data recorded at one song number to another song number.

To use the Song Copy function:

1. Select the song number to be copied with the SONG SELECT buttons.

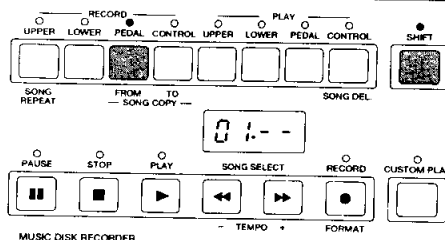**2.** While holding down the SHIFT button, press the SONG COPY FROM button.
The song number to be copied from appears at the left of the M.D.R. display.

Note: When tempo is changed, the M.D.R. display indicates the change as a percentage of the original recording tempo (100). Values less than 100 indicate a slower tempo; values greater than 100 indicate a faster tempo.
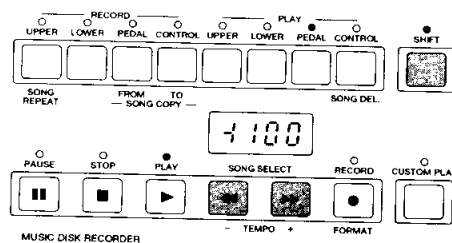

Note: Tempo changes remain in effect even through changes in song number. If you have changed the tempo in one song, you should perform the above step to restore the original tempo before playing another song. Turning the power switch off and on again also restores the original tempo.

Note: If the specified song number has no recorded data, the M.D.R. automatically searches for and selects the next song that contains recorded data.

3. While holding down the SHIFT button, press the SONG COPY TO button.

The M.D.R. automatically searches for an empty song number to copy the data to, and displays that number at the right side of the display. If all song numbers contain recorded data, "FULL" appears on the M.D.R. display. In this case, you should erase one of the songs on the disk by using the Song Delete function (see below).
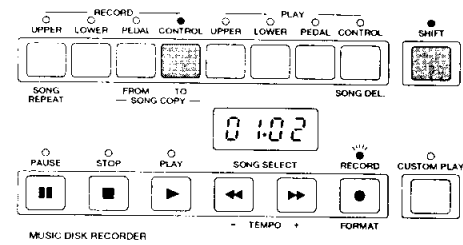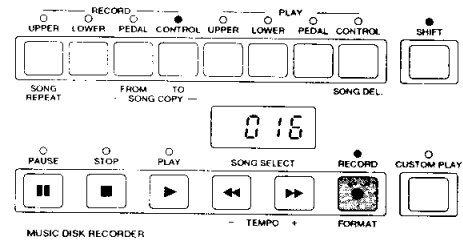
4. Use the SONG SELECT buttons to select a destination song number for copying.

Follow this step if you wish to select a different destination song number than the one displayed. The M.D.R. will display only those song numbers that have no data.

5. Press the RECORD button to execute the Song Copy function.

The RECORD LED stops flashing and remains lit, indicating that the Song Copy function is in process. The M.D.R. display shows the "size" of the song in numbers, and counts down as the data is being copied. When the display shows "000", the song has been completely copied.

Song Delete

You can erase a song on disk by performing this function.

To use Song Delete:

1. Use the SONG SELECT buttons to select the number of the song you wish to delete.

2. While holding down the SHIFT button, press the SONG DEL. button.

The letters "dL" appear on the left side of the M.D.R. display, next to the selected song number. If you wish to, you can still select a different song number in this step by using the SONG SELECT buttons.

3. Press the RECORD button to execute the Song Delete function.

The RECORD LED stops flashing and remains lit, indicating that the Song Delete function has begun. When the Song Delete function is completed, the STOP status is automatically resumed.
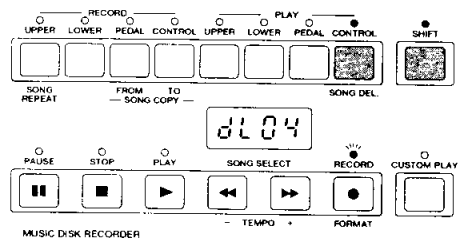
Checking the Remaining Memory

While playback is stopped, you can check the amount of memory available for additional recording. To do this, simultaneously hold down the SHIFT button and the PAUSE button (indicated in the illustration at right as REM.MEM.). The maximum amount of memory is 620 for 2DD disks or 1240 for 2HD disks.
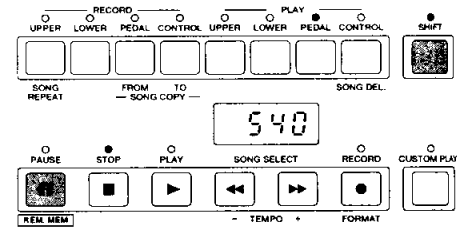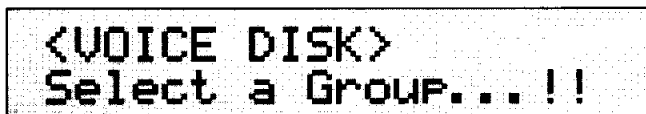
Copy Protect

Some of the disks available for the Electone are purposely protected from being copied or erased. If you try to load data from such a copy-protected disk to the Electone, a "Protected Disk" (Pr##) message will appear on the M.D.R. display. The data cannot be saved to disk.
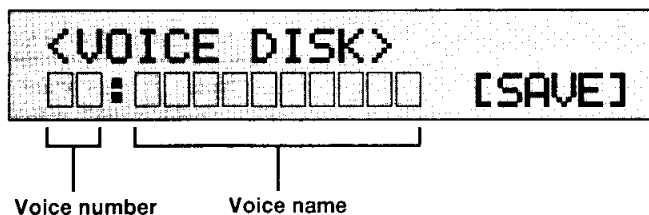
Voice Disk

The M.D.R. also lets you use voices from the included Voice Disk. You can play these voices and save them to User memory for future recall.

To select voices from the disk and save them to User memory:

1. Insert the Voice Disk into the Disk slot under the Music Disk Recorder. The following display appears, prompting you to select the voice group (Upper, Lower, Lead or Pedal).

```
<VOICE DISK>
Select a Group...!!
```

Note: Make sure that the FEET and TREM. (Tremolo) parameters in Voice Condition Page 1 are set to PRE. (Preset), before loading voices to the Electone. The voices may not be loaded correctly if these parameters are not set to PRE. (Preset).
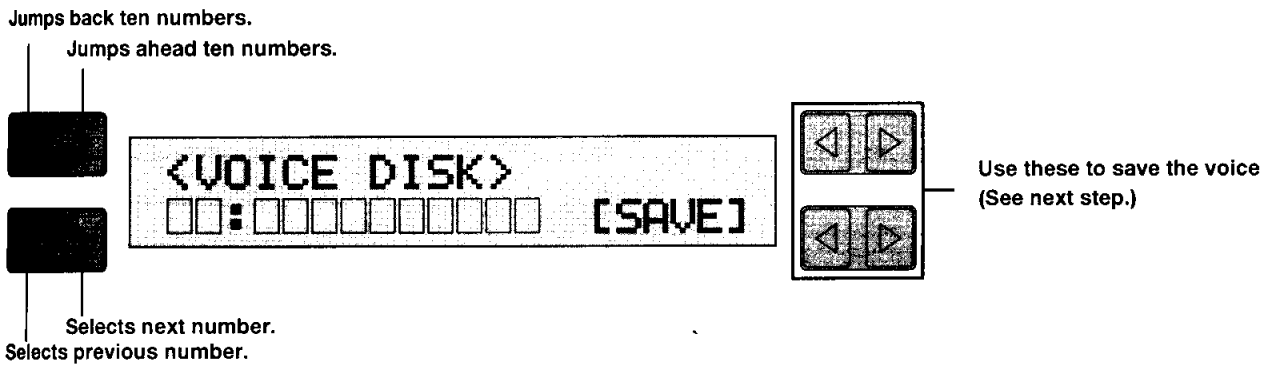
2. Press one of the panel voice buttons in the voice section in which you wish to use the new voice. After you've pressed a panel voice button, the Voice Disk's voice name will appear on the LCD.

```
<VOICE DISK>
██:██████████   [SAVE]
```

Voice number   Voice name

70

3. Select the desired voice by using the left Data Control buttons.

Jumps back ten numbers.

Jumps ahead ten numbers.

<VOICE DISK>
□□:□□□□□□□□□□ [SAVE]

Use these to save the voice
(See next step.)

Selects next number.

Selects previous number.

Pressing the bottom left buttons steps through the voice numbers; pressing the top left buttons jumps ten numbers back or forward. The name of each voice appears on the display with the number. Refer to the list shown below for voice names and numbers. You can audition the voices as you select them by playing them on the appropriate keyboard.

4. To save the selected voice, press one of the right Data Control buttons corresponding to SAVE in the display. The following display showing User voices 1-4 appears.

To USER 1   USER 2
   USER 3   USER 4
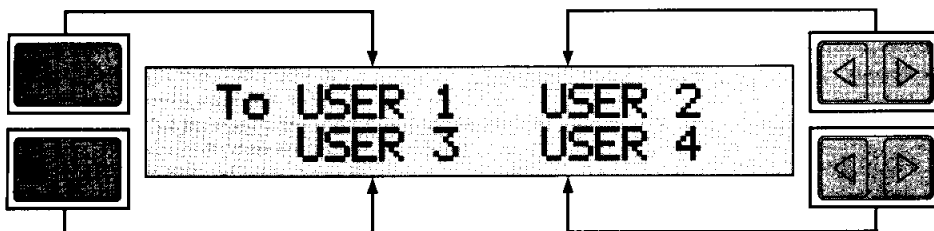
5. Select the User number to which you wish to save the voice, and press the corresponding Data Control button.

6. The folowing display appears, prompting you for confirmation of the operation. Select "OK" to actually save the voice, or "CANCEL" to abort the operation.

Save To USER 3
[OK] [Cancel]

These select "OK"

These select "CANCEL"
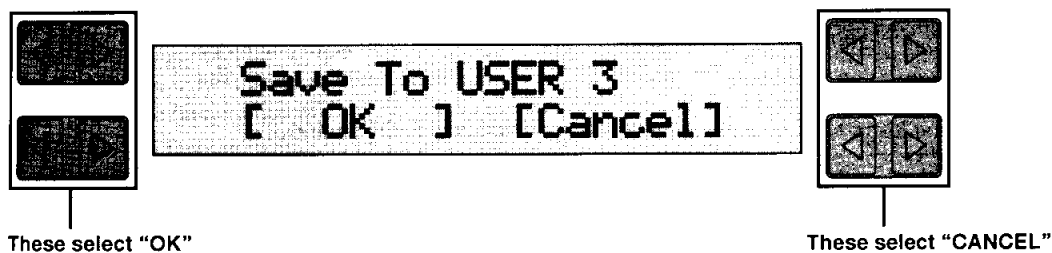
When the voice has been saved, a "completed" message appears.

Voice Menu List (Disk)

1	Jazz Organ 1	17	Jazz Guitar
2	Jazz Organ 2	18	12-string Guitar
3	Theatre Organ 1	19	Steel Guitar
4	Theatre Organ 2	20	Distortion Guitar
5	Organ Bass 2	21	Electric Piano
6	Organ Bass 3	22	Honky Tonk Piano
7	Accordion	23	Harp
8	Strings 1	24	Banjo
9	Strings 2	25	Glockenspiel
10	Cello	26	Xylophone
11	Piccolo	27	Chime
12	Pan Flute	28	Timpani
13	Saxophone	29	Upright Bass
14	Muted Trumpet	30	Electric Bass 1
15	Flugelhorn	31	Electric Bass 2
16	Brass	32	Synth. Bass

Messages on the MDR LED Display

Display	Description of the Messages
InSt	No disk is installed. Install a disk.
Fort	The installed disk is not formatted. Format the disk. (See page 56.)
Prot	1) The installed disk is write-protected, so the Record, Song Copy, and Song Delete jobs cannot be performed. Set the disk's write Protect tab to the OFF position. (See page 55.) 2) If you are using a copy-protected playback-only disk, this message may appear when you attempt the Record, Song Copy, or Song Delete operations.
FULL	1) The disk's memory capacity is full, so the Record or Song Copy operation cannot be performed. Install another formatted disk. 2) Data is already recorded at all song numbers, so the Song Copy operation cannot be performed. Press the STOP button, then delete any unnecessary songs.
EPty	None of the song numbers contain recorded data, so the Song Copy operation cannot be performed. Press the STOP button.
-out	An error occurred because the disk was removed during recording or playback. Replace the disk, press the STOP button, then start the operation over again.
diSc	The installed disk cannot be played back on the M.D.R. Press the STOP button, then insert a compatible disk.
LotS	Recording cannot be performed because too much data was received at once. Press the STOP button.
bAd	The disk is defective and cannot be formatted. Press the STOP button, then insert another disk.
Eror	An error occurred during the transmission or reception of data. Press the STOP button.
db##	This indicates that two kinds of registration data are recorded to the song number which is currently displayed. Press the [PLAY] button again to start playback.
oooo	This indicates that an incompatible disk has been inserted. Insert a compatible disk. It may also indicate problems with MIDI data; check that the MIDI cables are properly connected.

Troubleshooting

Please note that appearance of any of following phenomena does not indicate a mechanical failure of the Electone.

Problem	Possible Cause and Solution
GENERAL OPERATION	
Some of the LEDs in the DISPLAY SELECT section do not light.	The LEDs of on/off buttons [UPPER/LOWER FLUTE VOICES, and TREMOLO (FAST)] are lit when those functions are turned on. The LEDs of other function's buttons momentarily flash when the functions are selected.
No sound is produced from the Electone's speakers.	The plug of the cable from the speaker unit is disconnected. Refer to the separate"Assembly Instructions," and reconnect the plug securely.
A crackling noise is sometimes heard.	Noise may be produced when either an electrical appliance is turned on or off, or an electric power tool (such as a drill) is used in the proximity on the Electone. If this occurs, plug the Electone in to an electrical outlet located as far as possible from the device that seems to be the source of the problem.
Interference from radio, TV, or other sources occurs.	This is caused by the proximity of a high- power broadcasting station or amateur ham radio setup.
The sound of the Electone causes surrounding objects to resonate.	Because the Electone is capable of producing powerful bass sounds, resonance may be caused in surrounding objects, such as cabinets or glass windows. To avoid this, relocate the objects or lower the Electone's volume.
The Electone panel does not function normally or the content of the memorized data has changed.	This happens very rarely. Occasionally, power surges and spikes due to electrical storms or other reasons may cause the Electone to malfunction and/or alter the contents of memorized data. If this happens, perform the Power On Reset operation to reset the Electone. (See page 46.)
VOICES/RHYTHMS	
When too many keys are pressed, not all of the notes sound.	Total polyphonic capacity (notes sounding for both Upper and Lower keyboards) is 11 notes. Polyphonic capacity is 12 for the Upper and Lower Flute Voices and 6 each for the Upper and Lower Attack sound.
When playing a Pedal voice from the Lower keyboard (using the To Lower function), pressing the Lower keyboard's Sustain button dose not turn on Sustain.	Even though the Pedal voice is being played from the Lower keyboard, it is still a Pedal voice; turn the Sustain on with the Pedal Sustain button. (See page 28.)
The sound is too soft, despite the volume being set to the maximum.	Check all of the volume controls, making sure that they are set to suitable levels: the panel Volume controls for each voice section, the Master Volume dial, and the Expression Pedal.
Switching voices causes the volume to change, despite their having identical volume settings.	The volume of certain voices may seem lower than that of others. Adjust the balance of the sound with the Volume control within the appropriate Voice Condition display.
When keys on the Lower keyboard or Pedalboard are pressed, the sounds of percussion instruments are also heard.	The Keyboard Percussion function has been turned on. When not using the function, be sure to turn it off. (See page 41.)
Only one sound is heard when two notes of the Lead or Pedal voices are simultaneously played.	For practical performance reasons, the Electone has been designed so that one note of the Lead or Pedal voices can be played at a time. If several keys are pressed at once, only the highest note will be sounded (high-note priority).
The Pedal voices do not sound, even when though the volume is properly set.	The Single Finger or Fingered Chord mode of Auto Bass Chord is on. Turn off the mode in the display. (See page 38.)
While an intro./Ending pattern is automatically playing, the Lower keyboard does not produce any sound, even when the keys are played.	Since the Accompaniment chords play automatically one after another, the Lower keyboard is designed not to produce any sound during the play of an Intro./Ending pattern.
EFFECTS	
The Tremolo effect cannot be heard, even when the TREMOLO (FAST) button in the DISPLAY SELECT section is on.	Tremolo must be selected first in the Voice Condition display (for panel voices), or in Page 1 of Flute Voice (for Flute Voices). (See page 28.)

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Problem	Possible Cause and Solution
ACCOMPANIMENT AND OTHER FUNCTIONS	
Despite its volume being set to a suitable level, the Accompaniment cannot be heard.	The rhythm has not been started. Be sure to use Accompaniment together with the rhythm.
The pitch in the Single Finger mode does not change. even when pressing different keys of the keyboard.	Single Finger mode will only produce notes when played within a fixed octave interval on the Lower keyboard. If notes with the same letter name are pressed outside of that range, the chords that are sounded will share the same pitch.
The harmony notes of the Melody On Chord function cannot be heard.	The Upper keyboard has been set to sound only Lead voices. Increase the volume of the Upper voices.
MUSIC DISK RECORDER	
Recording or playback cannot be performed.	1) Problems in recording or playback may be caused by improper operation of the M.D.R. Refer to the LED Display Messages chart above. 2) The PLAY or RECORD section buttons for selecting parts may be turned off. Turn on the appropriate PLAY or RECORD buttons.
A total of 40 songs cannot be recorded.	If some song numbers contain a large amount of recorded data, the disk may not have enough available memory left to record the normal maximum of 40 songs.
Recording is stopped before the performance is finished, or the Song Copy function cannot be executed.	The amount of recorded data on the disk is close to the maximum limit. Either use another disk or delete the data of any unnecessary song number. (See page 69.)
The Keyboard Percussion part has not been recorded, or plays back a different rhythm from the one recorded.	When recording, you forgot the following operation: press the RECORD button, then hold down the SHIFT button while you press the PEDAL button (selecting Keyboard Percussion). Other causes may be involved, so refer to the procedure for recording parts separately. (See page 59.)
The rhythm does not start at the beginning of a recording, or stops in the middle of the performance.	The M.D.R. is designed so that the rhythm cannot be started at the very beginning of a recording. if you wish to use the rhythm, start it after the available memory display appears on the M.D.R. display.
The notes of the recording are "stuck" and sound continuously.	During playback, you removed the disk by pressing the EJECT button. Whenever you wish to stop playback, always press the STOP button.

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Specifications/Technische Daten/Caractéristiques/Especificationes

		EL-28
KEYBOARD	**Keyboards**	Upper: 49 keys, Lower: 49 keys, Pedal: 20 keys
	Touch Tone	Initial (Upper, Lower; preset for each voice)
VOICE	**Tone Generation**	New AWM & FM
	Upper/Lower Keyboard	Strings, Pizz.Strings; Brass, Synth.Brass; Clarinet; Saxophone; Chorus; Organ, Piano, Elec.Piano, Harpsichord; Guitar, Elec.Guitar; Vibraphone, Glockenspiel, Marimba; Cosmic 1, 2, 3; Tutti; [Upper] Harmonica; [Lower] Horn; User 1-4; (23 Voices) Volume Fine
	Lead (Upper)	Violin; Flute, Whistle; Oboe, Bassoon; Trumpet, Trombone; User 1-4; To Lower; (7 Voices) Volume Fine
	Pedalboard	ContraBass, Pizz.Bass; Elec.Bass, Synth.Bass; Organ Bass; Tuba; User 1-4; To Lower; (6 Voices) Volume Fine
	Voice Display	Upper, Lower, Lead, Pedal
	Upper/Lower Flute Voice	Flute Voices (16', 8', 5 1/3', 4', 2 2/3, 2', 1 3/5', 1'); Attack (4', 2 2/3, 2'; Length); Click; Response; Tremolo On/Off; Volume; 8 Presets; On/Off Control: Upper, Lower
MELODY ON CHORD/SOLOSTYLE		Mode: Off, MOC 1, 2, 3, SoloStyle, Knee: On/Off
EFFECT/ CONDITION	**Digital Reverb**	Depth
	Sustain	Upper (Knee), Lower (Knee), Pedal; Length
	Tremolo/Chorus	Upper, Lead, Lower, Pedal, Flute Voice; Tremolo (Fast)/Chorus
	Vibrato	Upper/Lower: Preset/User (Depth), Lead: Preset/User (Delay, Depth, Speed)
	Feet	Upper, Lead, Lower, Pedal: Preset/4'/8'/16'
	Glide	Lead, Upper, Lower
RHYTHM	**Rhythms**	March 1, 2, Country, Broadway; Waltz 1, 2, Jazz Waltz, Bolero; Swing 1, 2, Jazz Ballad, Dixieland; Bounce 1, 2; Reggae 1, 2; Slow Rock 1, 2, 3; 8 Beat 1, 2, 3, Dance Pop; Tango 1, 2, 3; Cha-cha; Rhumba, Beguine; Mambo, Salsa; Samba 1, 2, 3; Bossanova 1, 2, 3; 16 Beat 1, 2, 3, Funk; (41 Rhythms); Volume Fine
	Variations	Fill-In, Intro, Ending, Lead In, Auto Variation: On/Off
	Others	Start, Synchro Start, Tempo, Bar/Beat LED, Volume
KEYBOARD PERCUSSION		On/Off: Lower, Pedal; 43 Sounds
ACCOMPANIMENT	**Auto Bass Chord (A.B.C.)**	Mode: Off, Single Finger, Fingered Chord, Custom A.B.C., Memory: Lower/Pedal
	Accompaniments	Type: 1, 2; Volume Fine
REGISTRATION MEMORY		M (Memory), 1-5; Disable Button, Mode: Off, Shift
BASIC REGISTRATION		1-5
REGISTRATION MENU/ORGAN SELECT		Registration Menu: 41, Organ Select: 15
MUSIC DISK RECORDER		Play/Record: Upper, Lower, Pedal, Keyboard Percussion, Control; Pause; Stop; Song Select; Song Repeat; Song Delete; Song Copy: From/To; Tempo; Shift; Format; Custom Play; Remaining Memory; LED Display; Eject
FOOTSWITCH		[Left] Mode: Off, Rhythm (Stop, Ending, Fill-In), Glide (Upper, Lower, Lead), [Right] Regist. Shift Mode: Off, Shift
KNEE LEVER		On/Off: Sustain (Upper, Lower), MOC/SoloStyle
LCD DISPLAY		20 × 2 characters
OTHER CONTROLS		Power On/Off, Exp. Pedal, Pitch Control, Transpose, Master Volume, Display Select, Data Controls, Page, MIDI (Out: Upper, Lower; In: Lead Int./Ext., Sync. Int./Ext., Exp. Auto/Int./Ext.)
OTHER FITTINGS		Matching Bench, Key Cover, MIDI In/Out, Headphone Jack, Rhythm In (Phone; R/L), Aux Out (RCA; R/L)
OPTIONAL ACCESSORIES		YHE-5 Headphones
SOUND SYSTEM	**Power Amplifiers**	55 W
	Speakers	20 cm (8") ×1; 5 cm (2") ×1; Monitor × 2
DIMENSIONS Width × Depth × Height		108 cm (42 1/2") × 47 cm (18 1/2") × 95 cm (37 3/8")
WEIGHT		53.0 kg (116 lbs., 10 oz.)
FINISH		Simulated Mahogany Grain

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1, 2, 3, 16	1, 2, 3, 16	****
	Changed	4, 5	4	
Mode	Default	Mode 3	Mode 3	
	Messages	×	×	
	Altered	**************************	×.	
Note Mumber		36-96*	36-96**	UK
	True Voice	**************************		
Veiocity	Note ON	9nH, v=1-127	9nH, v=1-127	
	Note OFF	9nH, v=0	9nH, v=0, 8nh	
AfterTouch	Key	×	×	
	Ch's	×	×	
Pitch Bender		×	×	
Control Change	1	×	×	Modulation wheel
	4	×	×	2nd Expression pedal
	11	○	○***	Expression pedal
	64	×	×	Sustain
Program Change		0-4 112-116	0-4 112-116	
	Range	**************************	**************************	
System Exclusive		○	○	
System Common	Song Pos	×	×	
	Song Sel	×	×	
Notes	Tune	×	×	
System Real Time	Clock	○	○***	
	Commands	○	○	FAH, FCH
Aux Mesages	Local ON/OFF	×	×	
	All Notes OFF	×	×	
	Active Sense	○	○	
	Reset	×	×	
Notes		* CH1: 48-96, CH2: 36-84, CH3: 36-55		
		** CH15 only: 36-127, Others: 36-96		
		*** Recognized only in External mode		
		**** CH1: UK, CH2: LK, CH3: PK, CH4 Transmitted: UK, Recognized: LEAD, CH5: LK		

Mode 1: OMNI ON, POLY   Mode 2: OMNI ON, MONO
Mode 3: OMNI OFF, POLY   Mode 4: OMNI OFF, MONO

○ : YES
× : NO

MIDI Specifications

■CHANNEL MESSAGES

Code	Function	Transmitted	Recognized	Remarks
8nH, nnH (Note No.), 00H-7FH	Note OFF	×	CH 1	UK
		×	CH 2	LK
		×	CH 3	PK
		×	(CH 4)∗	LEAD
		×	CH 15	Keyboard Percussion
9nH, nnH (Note No.), 00H (OFF) 01-7FH (ON)	Note OFF Note ON	CH 1	CH 1	UK
		CH 2	CH 2	LK
		CH 3	CH 3	PK
		(CH 4)∗	(CH 4)∗	Transmitted: UK Recognized:LEAD
		(CH 5)∗	×	LK
		×	CH 15	Keyboard Percussion
BFH, 08H, 00H-7FH	Expression Pedal	CH 16	CH 16	CONTROL
CnH, nnH (Regist. No.)	Program Change (Registration Memory)	×	CH 1	UK
		×	CH 2	LK
		×	CH 3	PK
		CH 16	CH 16	CONTROL

∗ Alternate setting for MIDI send and receive channels.

■SYSTEM REALTIME MESSAGES

Code	Function	Transmitted	Recognized	Remarks
F8H	Clock	○	○	Recognized in Ext. mode
FAH	Start	○	○	
FCH	Stop	○	○	
FEH	Active Sensing	○	○	

1. Electone common messages

■BULK DUMP Related Messages

Code	Messages	Transmitted	Recognized
F0H, 43H, 70H, 70H, 00H, ... (data) ...., F7H	Bulk Dump data	×	○
01H	Request-to-Send Voice Parameter data	×	○
02H	Request-to-Receive Voice Parameter data	×	○
F0H, 43H, 70H, 70H, 10H, F7H	Request-to-Send all RAM data	×	○
11H	Request-to-Send Registration data	×	○
16H	Request-to-Send USER Voice data	×	○
F0H, 43H, 70H, 70H, 20H, F7H	Request-to-Receive all RAM data	×	○
21H	Request-to-Receive Registration data	×	○
26H	Request-to-Receiver USER Voice data	×	○
F0H, 43H, 70H, 70H, 30H, F7H	Request-to-Send Model ID data	×	○
F0H, 43H, 70H, 70H, 38H, 7FH, F7H	Bulk Dump Acknowledge	○	×
00H	Ignore	○	×

■ CONTROL CHANGE

Code	Messages		Transmitted	Recognized
F0H, 43H, 70H, 70H, 40H, 45H, 7FH, F7H 00H	FOOT SWITCH LEFT	ON OFF	◯ ◯	◯ ◯
F0H, 43H, 70H, 70H, 40H, 47H, 7FH, F7H 00H	KNEE LEVER	ON OFF	◯ ◯	◯ ◯
F0H, 43H, 70H, 70H, 40H, 48H, 7FH, F7H 00H	FILL IN	ON OFF	◯ ◯	◯ ◯
F0H, 43H, 70H, 70H, 40H, 4BH, 7FH, F7H 00H	INTRO./ENDING	ON OFF	◯ ◯	◯ ◯
F0H, 43H, 70H, 70H, 40H, 50H, TIH, ThH, F7H	TEMPO		◯	◯

■ MDR STATUS

Code	Messages		Transmitted	Recognized
F0H, 43H, 70H, 70H, 70H, 01H, 7FH	PLAY	Start	✕	◯
02H	PLAY	Stop	✕	◯
03H	RECORD	Start	✕	◯
04H		Stop	✕	◯
05H	FF▶▶	Start	✕	◯
06H		Stop	✕	◯
09H	Rhythm Pointer Reset *1		✕	◯
20	Disk eject		✕	◯
23	Registration Menu Disk insert		✕	◯
24	Registration Menu Disk compatible		◯	✕
25	Voice Menu Disk insert		✕	◯
26	Voice Menu Disk compatible		◯	✕
27, nn (data No.), F7	Request for Menu data transmission		◯	✕
28, nn (data No.), F7	Number of Voice Menu data		✕	◯
2F, nn (data No.), F7	Registration Menu display data		✕	◯

*1 Rhythm pointer reset and fast forward messages are transmitted in the rewind function.

■ OTHERS

Code	Messages	Transmitted	Recognized
F0H, 43H, 70H, 70H, 78H, SCH, NCH, F7H	Bar signal	◯	◯

2. EL-28 common message

Code	Messages	Transmitted	Recognized
F0H, 43H, 70H, 78H, 00H, ... (data) ...., F7H	Bulk Dump data	◯	◯
01H	Request-to-Send Voice Parameter data	✕	◯
02H	Request-to-Receive Voice Parameter data	✕	◯
F0H, 43H, 70H, 78H, 10H, F7H	Request-to-Send all RAM data	✕	◯
11H	Request-to-Send Registration data	✕	◯
16H	Request-to-Send USER Voice data	✕	◯
F0H, 43H, 70H, 78H, 20H, F7H	Request-to-Receive all RAM data	✕	◯
21H	Request-to-Receive Registration data	✕	◯
26H	Request-to-Receive USER Voice data	✕	◯
F0H, 43H, 70H, 78H, 41H, ...(data)........,F7H	Panel Switch Event data *1	◯	◯
F0H, 43H, 70H, 78H, 42H, ...(data) F7H	Current Registration data	◯	◯

*1 Refer to the "Table of Switch-Related MIDI Codes."

● Table of SW MIDI codes [F0H, 43H, 70H, 78H, 41H, CODE, DATA, F7H]
Switch Code

Functions/Switches		Code	Data	Remarks
Selector	UK Voice	02H	00H-0DH	SW no.
	LK Voice	03H	00H-0DH	
	Lead Voice	06H	00H-04H	
	PK Voice	07H	00H-04H	
	Rhythm	0BH	00H-0FH	
Volume	UK Voice	12H	00H-7FH	Volume data
	LK Voice	13H	00H-7FH	
	Lead Voice	16H	00H-7FH	
	PK Voice	17H	00H-7FH	
	Rhythm	1AH	00H-7FH	
	Reverb	1BH	00H-7FH	Depth data
ON/OFF	Upper Flute Voice	30H	00H, 01H	00H = Off 01H = On
	Lower	31H	00H, 01H	
To Lower	Lead Voice	36H	00H, 01H	00H = Off 01H = On
	PK Voice	37H	00H, 01H	
Sustain	UK	50H	00H, 01H	00H = Off 01H = On
	LK	51H	00H, 01H	
	PK	52H	00H, 01H	
Keyboard Percussion	LK	5BH	00H, 01H	00H = Off 01H = On
	PK	5CH	00H, 01H	
Disable		5FH	00H, 01H	00H = Off 01H = On
Tremolo		60H	00H, 01H	00H = Chorus 01H = Tremolo

3. Model-Specific messages

Code	Messages	Transmitted	Recognized
F0H, 43H, 70H, nnH, 00H, F7H	Model ID Data	○	×
00H, ... (data) ...., F7H	Bulk Dump data	×	○
01H,	Request-to-Send Voice Parameter data	×	○
02H	Request-to-Receive Voice Parameter data	×	○
F0H, 43H, 70H, nnH, 10H, F7H	Request-to-Send all RAM data	×	○
11H	Request-to-Send Registration data	×	○
16H	Request-to-Send USER Voice data	×	○
F0H, 43H, 70H, nnH, 20H, F7H	Request-to-Receive all RAM data	×	○
21H	Request-to-Receive Registration data	×	○
26H	Request-to-Receive USER Voice data	×	○

"nnH" can be sent/received by using $41.

4. Electone/Single Keyboard common messages

Code	Messages	Transmitted	Recognized
F0H, 43H, 73H, 01H, 02H, F7H	Request for Internal Synchronous mode	×	○
03H	Request for External Synchronous mode	×	○

SoloStyle Voice Assignments / Zuordnung der SoloStyle-Stimmen
Voix de la fonction SoloStyle / Asignaciones de Voces SoloStyle

Rhythm Style	Mode	Lead Voice	Additional Voices
1. MARCH 1	Harmony	Clarinet	Saxophone, Flutes
2. MARCH 2	Harmony	Horn	Horn, Brass
3. COUNTRY	Harmony	Piano	Pianos
4. BROADWAY	Harmony	Strings	Strings, Marimba
5. WALTZ 1	Delay	Flute	Flutes
6. WALTZ 2	Harmony	Strings	Strings
7. J. WALTZ	Harmony	Flute	Flute, Clarinet, Saxophone
8. BOLERO	Delay	Trumpet	Trumpets
9. SWING 1	Harmony	Brass	Brass, Trumpets
10. SWING 2	Sequence	Saxophone	Saxophones
11. DIXIE	Harmony	Piano	Pianos
12. J. BALLAD	Sequence	Saxophone	Vibraphones
13. BOUNCE 1	Delay	Cosmic	Cosmic
14. BOUNCE 2	Harmony	Vibraphone	Vibraphone, E. Guitar
15. REGGAE 1	Harmony	Trombone	Trumpet, Saxophone
16. REGGAE 2	Harmony	Jazz Organ	Jazz Organ
17. S. ROCK 1	Harmony	Flute	Oboes, Clarinet
18. S. ROCK 2	Harmony	Strings	Strings
19. S. ROCK 3	Harmony	Jazz Organ	Jazz Organ
20. 8 BEAT 1	Sequence	Flute	Cosmic
21. 8 BEAT 2	Harmony	Chorus	Horn, Organ
22. 8 BEAT 3	Delay	Trumpet	Trumpet, Saxophones
23. D. POP	Sequence	Jazz Organ	Jazz Organ
24. TANGO 1	Harmony	Violin	Violin, Strings, Piano
25. TANGO 2	Harmony	Violin	Violin
26. TANGO 3	Harmony	Piano	Piano
27. MAMBO	Sequence	Trumpet	Trumpets
28. SALSA	Delay	Trombone	Trumpets, Trombone
29. CHA-CHA	Harmony	Flute	Pianos, Flute
30. RHUMBA	Sequence	Marimba	Marimba
31. BEGUINE	Harmony	Piano	Pianos
32. SAMBA 1	Delay	Trombone	Flutes, Trombone
33. SAMBA 2	Delay	Flute	Flutes
34. SAMBA 3	Harmony	Guitar	Flutes
35. BOSSA 1	Delay	Flute	E. Guitar
36. BOSSA 2	Harmony	Flute	Strings
37. BOSSA 3	Harmony	Saxophone	Saxophones
38. 16 BEAT 1	Delay	Harmonica	Harmonicas
39. 16 BEAT 2	Delay	Trumpet	Trumpet, Saxophone, Brass
40. 16 BEAT 3	Delay	Tutti	Tutti, Brass
41. FUNK	Delay	Syn. Brass	Syn. Brass, Brass

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