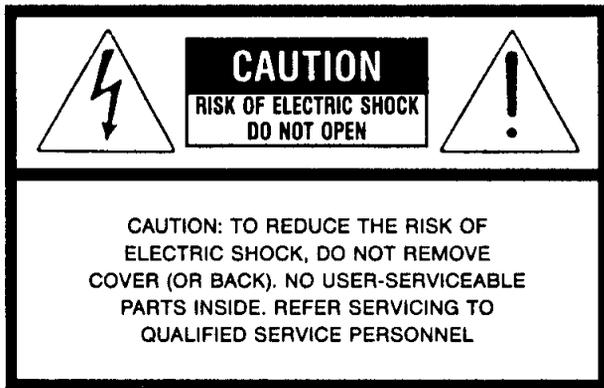# OWNERS GUIDE

YAMAHA

US-1

SUPPLEMENTAL MARKING INFORMATION
SPECIAL MESSAGE SECTION

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

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

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

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

NAME PLATE LOCATION: The graphic below indicates the location of the Name Plate on your Yamaha Electronic Keyboard. The Model, Serial Number, Power requirements, etc., are indicated on this plate. You should note the model, serial number and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.

ELECTROMAGNETIC INTERFERENCE (RFI): Your Yamaha Electronic Keyboard Product has been type tested and found to comply with all applicable regulations. However, if it is installed in the immediate proximity of other electronic devices, some form of interference may occur. For additional RFI information see FCC information section located in this manual.
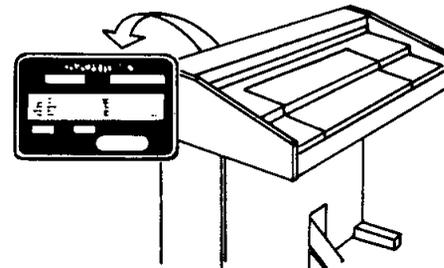
IMPORTANT NOTICE: This product has been tested and approved by independent safety testing laboratories in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

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

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

STATIC ELECTRICITY CAUTION: Some Yamaha Electronic Keyboard products have modules that plug into the unit to perform various functions. The contents of a plug-in module can be altered/damaged by static electricity discharges. Static electricity build-ups are more likely to occur during cold winter months (or in areas with very dry climates) when the natural humidity is low. To avoid possible damage to the plug-in module, touch any metal object (a metal desk lamp, a door knob, etc.) before handling the module. If static electricity is a problem in your area, you may want to have your carpet treated with a substance that reduces static electricity build-up. See your local carpet retailer for professional advice that relates to your specific situation.

Model _____

Serial No. _____

Purchase Date _____
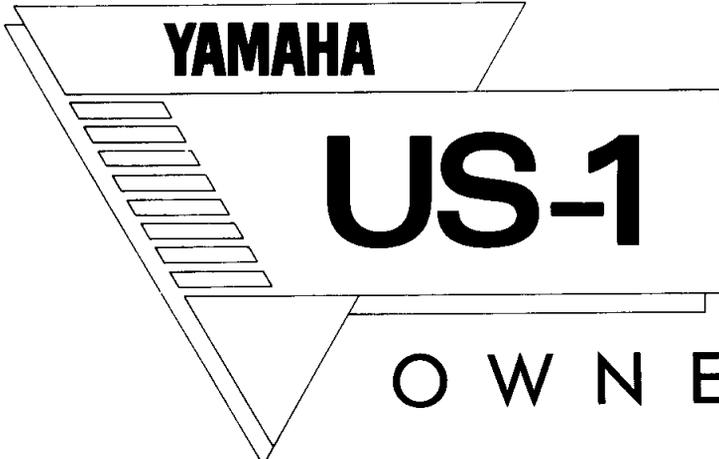
YAMAHA US-1

OWNERS GUIDE

Welcome to the Yamaha Electone™ US-1! As the owner of this fine instrument, you probably already know something of its expressive range and musical power. This manual serves to give you the complete picture, telling you all you need to know to tap the resources of the US-1.

From the lifelike sounds of its AWM (Advanced Wave Memory) sound generation, to its full keyboards and extended pedal range, to its automatic rhythm patterns and Auto Bass Chord system, to advanced features such as the Music Disk Recorder, your US-1 promises a depth of features that can provide you with virtually unlimited musical satisfaction. What are you waiting for? Let's get started!

CONTENTS

IMPORTANT
SAFETY AND INSTALLATION INSTRUCTIONS

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

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

1. Read all Safety and Installation Instructions, Supplemental Marking and Special Message Section data, and assembly instructions (where applicable) BEFORE using your Yamaha electronic keyboard. Check unit weight specifications before you attempt to move this instrument!

2. Main Power Supply Verification: Your Yamaha electronic keyboard has been manufactured specifically for the main supply voltage used in your area. If you should move, or if any doubt exists, please contact your dealer for instructions. The main supply voltage required by your electronic keyboard is printed on the name plate. For name plate location see graphic in Special Message Section.

3. This product may be equipped with a polarized line plug (one blade wider than the other). If you are unable to insert the plug into the outlet, contact an electrician to have your obsolete outlet replaced. Do NOT defeat the safety purpose of the plug. Yamaha products not having polarized plugs incorporate construction methods and designs that do not require line plug polarization.

4. **WARNING** – Do NOT place objects on your electronic keyboard's power cord or place the unit in a position where anyone could trip over, walk over, or roll anything over cords of any kind. Do NOT allow your electronic keyboard or its bench to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.

5. Environment: Your electronic keyboard should be installed away from heat sources such as a radiator, heat registers and/or other products that produce heat. Additionally, the unit should not be located in a position that exposes the cabinet to direct sunlight, or air currents having high humidity or heat levels.

6. Your Yamaha electronic keyboard should be placed so that its location or position does not interfere with its proper ventilation.

7. Some Yamaha electronic keyboards may have benches that are either a part of the product or supplied as an optional accessory. Some of these benches are designed to be dealer assembled. Please make sure that the bench is stable before using it. The bench supplied by Yamaha was designed for seating only. No other uses are recommended.

8. Some Yamaha electronic keyboards can be made to operate with or without the side panels or other components that constitute a stand. These products should be used only with the components supplied or a cart or stand that is recommended by the manufacturer.

9. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

10. Do not use your Yamaha electronic keyboard near water or in wet environments. For example, near a swimming pool, spa, or in a wet basement.

11. Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through openings.

12. Your Yamaha electronic keyboard should be serviced by a qualified service person when:
    a. The power-supply cord or plug has been damaged; or
    b. Objects have fallen, or liquid has been spilled into the product; or
    c. The product has been exposed to rain; or
    d. The product does not operate, exhibits a marked change in performance; or
    e. The product has been dropped, or the enclosure of the product has been damaged.

13. When not in use, always turn your Yamaha electronic keyboard "OFF". The power-supply cord of the product should be unplugged from the outlet when it is to be left unused for a long period of time. Note: In this case, some units may lose some user programmed data. Factory programmed memories will not be affected.

14. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

15. Electromagnetic Interference (RFI). This series of Yamaha electronic keyboards utilizes digital (high frequency pulse) technology that may adversely affect Radio/TV reception or the operation of other devices that utilize digital technology. Please read FCC Information (below) for additional information.

FCC INFORMATION

This instrument uses frequencies that appear in the radio frequency range, and if installed in the immediate proximity (within three meters) of some types of audio or video devices, interference may occur.

This instrument has been type-tested and found to comply with the specifications for a Class B computing device in accordance with those specifications listed in Subpart J of Part 15 of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur. If your instrument should be suspected of causing interference with other electronic devices, verification can be made by turning the instrument off and on. If the interference continues when the instrument is off, the instrument is not the source of the interference. If the instrument does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures:

- Relocate either the instrument or the electronic device that is being affected by the interference.

- Use power outlets for the instrument and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install AC line filters.

- In the case of radio-TV interference, relocate the antenna or, if the antenna lead-in is a 300-ohm ribbon lead, change the lead-in to a coaxial cable.

If these corrective measures do not produce satisfactory results, please contact your Authorized Yamaha dealer for suggestions and/or corrective measures. If you cannot locate an Authorized Yamaha dealer in your general area, contact the Service Division, Yamaha Music Corporation, U.S.A., 6600 Orangethorpe Ave., Buena Park, CA 90620.

If for any reason you should need additional information relating to radio or TV interference, you may find a booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402 – Stock #004-000-345-4.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE!

GETTING STARTED

This first section of the Owner's Manual gives you a quick, hands-on look at what your Yamaha Electone US-1 can do. The musical examples that appear on the following pages are taken from the YAMAHA ELECTONE COMPANION books that are packaged with your US-1. The complete songs can be found there.

Step 1: Press the POWER switch (to the right of the Upper Keyboard) to turn the US-1 ON. Numerous lamps on the control panel will light up, and the MULTI MENU (near the center of the panel) will display the following:

```
        YAMAHA
     ELECTONE US-1
```

Step 2: In the AUTO BASS CHORD section (at the left end of the control panel), turn ON the A.B.C., LOWER MEMORY, and PEDAL MEMORY buttons. The lamps will light up, and the MULTI MENU will display the following (The "XXXXXX" will vary.):

```
A.B.C.    MODE = XXXXXX
 S.F.   F.C.  CUSTOM
```

If this display does not appear, turn the A.B.C. button OFF, then ON again.

Step 3: Press the appropriate button below the MULTI MENU to select the accompaniment mode you wish to use; press S.F. for Single Finger Chords, F.C. for Fingered Chords, or CUSTOM for Custom A.B.C. accompaniment. (The accompaniment modes are explained on page 31.) The lamp of the button you press will light up.

Step 4: Turn the MASTER VOLUME dial (located above the POWER switch) to about the middle position. (You can use the Expression Pedal, recessed in the front of the cabinet, to control the volume further as you play.)

Step 5: Press the ｜P.｜ button (located between the keyboards). It will light up. This activates the Preset Registrations.

Step 6: Press one of the numbered buttons ｜1｜ - ｜16｜ (located between the keyboards), as indicated on the musical examples on the following pages. The button you press will light up, activating that Preset Registration Number. Each of the 16 buttons automatically activates a different registration for the US-1, including selection of Voices, Effects, Rhythm, Tempo, etc. The name of the Preset Registration you select is displayed in the MULTI MENU.

Step 7: Press the SYNC. START button (located to the left of the Lower Keyboard) to turn it ON. The lamp will light up.

Step 8: Play the musical example on the following pages that corresponds to the Preset Registration Number you activated. Play the melody on the Upper Keyboard, the chords on the Lower Keyboard (according the the chord mode you chose in Step 3 above), and (if you are using the Custom A.B.C. mode) the bass on the Pedal Keyboard.

Step 9: At the end of the musical example, press the SYNC. START button to turn it OFF. The lamp goes out and the automatic accompaniment stops.

Repeat Steps 6-9 for each of the 16 musical examples.

PRESET REGISTRATION 1 : MARCHING BAND

Do-Re-Mi
(From "THE SOUND OF MUSIC")

Words by Oscar Hammerstein II
Music by Richard Rodgers

Doe... a deer, a fe - male deer, Ray... a drop of gold - en sun,

PRESET REGISTRATION 2 : ELECTRONIC ORGAN

Around The World

Words and Music by
Victor Young and Harold Adamson

A - round the world I've searched for you. I trav-eled on when hope was gone to keep a ren - dez - vous.

PRESET REGISTRATION 3 : HAWAIIAN STYLE

The Hawaiian Wedding Song

English Words by Al Hoffman and Dick Manning
Hawaiian Words and Music by Charles E. King

This is the mo - ment I've wait - ed for. I can hear my heart sing - ing; Soon bells will be ring - ing.

PRESET REGISTRATION 4 : DIXIELAND BAND

Five Foot Two, Eyes Of Blue
(Has Anybody Seen My Girl?)

Words by Joe Young and Sam Lewis
Music by Ray Henderson

Five foot two, eyes of blue, But oh! what those five foot could do,— Has an - y - bod - y seen my girl?

4

PRESET REGISTRATION 5 : WOODWIND ENS.

Harbor Lights

Words and Music by
Jimmy Kennedy and Hugh Williams

I saw the har - bor lights, They on - ly told me we were part - ing, The same old har - bor lights that once brought you to me.

PRESET REGISTRATION 6 : SAX ENSEMBLE

On A Clear Day
(You Can See Forever)

Words by Alan Jay Lerner
Music by Burton Lane

On a clear day____ Rise and look a - round you,____ And you'll see who____ you are;____

PRESET REGISTRATION 7 : TRBN. ENSEMBLE

How High The Moon
(From "TWO FOR THE SHOW")

Words by Nancy Hamilton
Music by Morgan Lewis

Some-where there's mu - sic,____ How faint the tune!____ Some-where there's heav - en,____ How high the moon!____

PRESET REGISTRATION 8 : FULL BIG BAND

A String Of Pearls

Words by Eddie DeLange
Music by Jerry Gray

Ba - by Here's__ a five and dime, Ba - by Now's__ a - bout the time For a string__ of pearls a - la Wool - worth.

5

PRESET REGISTRATION 9 : FLUTE ENSEMBLE
The Girl From Ipanema
(Garota De Ipanema)

Original Words by Vinicius De Moraes
English Words by Norman Gimbel
Music by Antonio Carlos Jobim

Tall and tan and young and {love-ly the girl / hand-some, the boy} from I - pa - ne-ma goes walk-ing, and when {she pass-es, each one she / he pass-es, each girl he} pass-es goes "aah!"___

PRESET REGISTRATION 10 : MARIMBA
Spanish Harlem

Words and Music by
Jerry Leiber and Phil Spector

There is a rose in Span-ish Har - lem,___ A red rose up in Span-ish Har - lem.___

PRESET REGISTRATION 11 : CLARINET ENS.
If Ever I Would Leave You

Words by Alan Jay Lerner
Music by Frederick Loewe

If ev - er I would leave you ___ It would-n't be in sum-mer.___ See-ing you in sum-mer I nev - er would go.

PRESET REGISTRATION 12 : PIANO + ORGAN
More
(Theme From "MONDO CANE")

English Words by Norman Newell
Music by Riz Ortolani and Nino Oliviero

More than the great - est love the world has known, This is the love I'll give to you a - lone;

6

PRESET REGISTRATION ⌐13⌐: COUNTRY GUITAR

Your Cheatin' Heart

Words and Music by
Hank Williams

Your cheat - in' ___ heart ___ will make you weep, ___ You'll cry and ___ cry ___ and try to sleep; ___

PRESET REGISTRATION ⌐14⌐: COUNTRY FIDDLES

Let It Be Me
(Je T'appartiens)

English Words by Mann Curtis
French Words by Pierre DeLanoe
Music by Gilbert Becaud

I bless the day I found you, I want to stay a - round you, And so I beg you, let it be me.

PRESET REGISTRATION ⌐15⌐: GUITAR + CHORUS

Endless Love

Words and Music by
Lionel Richie

My love There's on - ly you in my life ___ The on - ly thing that's right ___

PRESET REGISTRATION ⌐16⌐: PIANO + GUITAR

My Funny Valentine

Words by Lorenz Hart
Music by Richard Rodgers

My fun - ny val - en - tine, Sweet com - ic val - en - tine, You make me smile with my heart. ___

7

ABOUT THE YAMAHA US-1

Cabinet

Beyond the information provided on the page entitled "Important Safety and Installation Instructions," a few words might be said about the cabinet of your US-1. In general, treat it as you would any other fine piece of furniture: Be careful not to set heavy objects on it, place it near a radiator or other heater, or expose it to prolonged direct sunlight. Do dust it from time to time, but DO NOT use spray waxes or cleaners on it or near it.

Fall Board

The US-1 is provided with a roll-top fall board to protect the keyboards and controls when the instrument is not in use and to enhance the elegant styling of the cabinet. When pulling the fall board down or putting it up, always use TWO HANDS, one at each end, so that it moves smoothly, without jamming.

A key is also provided with the instrument, which allows you to lock the fall board if you wish.

Music Rack

The acrylic music rack on the top of the instrument folds up into place, and is held up by two metal supports on the back of it. When moving the instrument, unfold the supports and lower the music rack so that it lays back flat.

To clean the music rack, use a soft cloth slightly dampened with water. Don't use any cleaning fluids or other solvents.

Lights
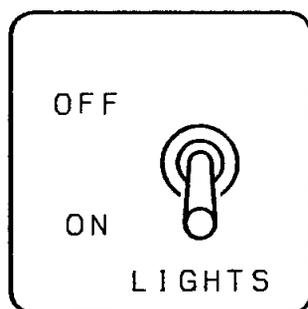
There are lights built into your US-1, which illuminate the control panel for improved visibility and enhanced appearance. A toggle switch beneath the keyboards, toward the right end of the instrument, turns these lights on and off.

Keyboards and Pedals

For the greatest possible musical enjoyment and the ability to play music in any style, your US-1 is equipped with two 61-note keyboards and a 20-note pedalboard. Although the right hand generally plays the upper keyboard and the left hand usually plays the lower, the full five octaves that each keyboard provides will accommodate the most sophisticated music and allow the hands to switch keyboards freely.

Similarly, the left foot generally plays the pedals. But the extended range of the pedalboard on the US-1 allows you to use your right foot as well, if you want to get fancy!

Care and cleaning of the keys and pedals is similar to that of the music rack. Dust with a soft, dry cloth. Use a soft, damp (not wet!) cloth to clean smudges; if necessary, add a little mild soap to the water to clean persistent smudges.

Controls

The controls on the instrument will be described one by one through the course of this manual. Little needs to be said here, except perhaps that it's a good idea to keep the fall board down when not using the instrument. This helps prevent dust from getting into the switches.

MULTI MENU

```
          MULTI  MENU
        ┌─────────────────────────┐
        │        YAMAHA           │
        │   ELECTONE  US-1        │
        └─────────────────────────┘

 DATA      [○    ]  [○    ]  [○    ]  [○    ]
```
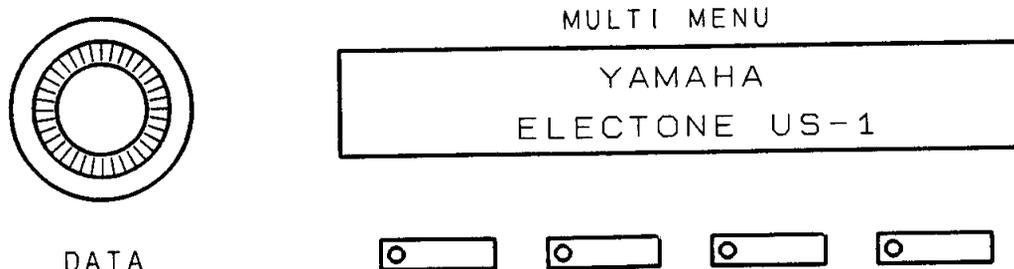
Although it's true that the buttons on the control panel allow you to select an amazing variety of sounds and effects, the versatility of the US-1 doesn't stop there. Many of the buttons offer a deeper layer of choices, accessed by the MULTI MENU.

This feature allows you to customize the US-1 to suit your preferences. If, for example, you would prefer a different flute sound when you press the FLUTE button, you can change it, choosing from a selection of several sounds in that family. Other buttons offer a similar range of variation.

Two groups of controls work with the MULTI MENU to access the different options available: the DATA dial and the row of four buttons beneath the display.

> Turning the DATA dial usually changes a value or selection in the display. Turning clockwise increases the value; turning counterclockwise decreases it. Selections of voices or rhythm patterns that are assigned to buttons are arranged cyclically, so that if you keep turning the dial, you can move through the range of selections over and over.

> The four buttons beneath the MULTI MENU are used to select one of up to four choices. When these buttons are available for use, the bottom line of the MULTI MENU will list the choices, each one appearing above the button that selects it. Press the button to make the selection you desire; the LED (light-emitting diode) in the button will illuminate.

For some functions, both the DATA dial and the selection buttons are active, giving you several layers of control over a given item.

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NOTE: The MULTI MENU generally displays the data pertaining to the last button that was turned on. If you wish to change the data of a function that is already on, turn the button OFF and then ON again to display the data in the MULTI MENU.

As each feature on the US-1 is explained in this manual, the use of the MULTI MENU and associated controls is explained as it applies to that feature. This manual will stress the features that the MULTI MENU provides; it is the "hub" around which much of the instrument revolves. Get to know it; it's a potent ally in giving your music a personal touch!

Jacks
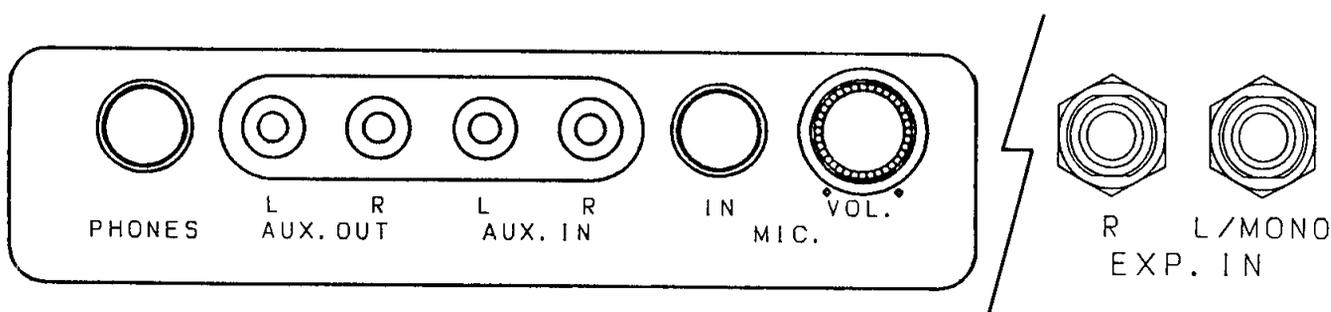
Beneath the keyboards, toward the left end of the instrument, there is a group of jacks, which allow you to connect external equipment to the US-1.

PHONES accepts a pair of stereo headphones. When you plug the headphones in, they automatically disconnect the internal speakers. This lets you play and practice without disturbing—or being disturbed by—others.

AUX. OUT (Left and Right) permit you to connect your Electone™ to most stereo tape recorders that have Line In jacks. This allows direct recording without any outside noise.

AUX. IN (Left and Right) can be used to connect a stereo tape player or other line-level sound source to the US-1 so that it can be heard through the internal sound system. This allows you to play along with a recording, for example. NOTE: The sounds reproduced using these jacks are not controlled by the expression pedal.

MIC. IN accepts a microphone, the signal of which is sent through the internal sound system of the instrument. This is a perfect way to combine singing and playing. MIC. VOL. lets you adjust the strength of the microphone signal to compensate for the sensitivity of the microphone.

EXP. IN (Left/Mono and Right) are similar to the AUX. IN jacks, but are meant for connecting external musical instruments rather than tape recorders. The expression pedal of the US-1 controls the volume of the sounds that are connected to these jacks.

There is also a set of MIDI ports located with these other jacks. These ports are explained in the section of this manual devoted to MIDI, on page 78.

POWER

This switch turns the Electone on and off. A light-emitting diode (LED) on the front of the instrument illuminates when the instrument is on. This way, you can see if the power is on, even if the fall board is down.

When you turn the instrument on, the following message appears in the MULTI MENU:

```
┌─────────────────────────┐
│        YAMAHA           │
│     ELECTONE US-1       │
└─────────────────────────┘
   ┌──┐  ┌──┐  ┌──┐  ┌──┐
   │o │  │o │  │o │  │o │
   └──┘  └──┘  └──┘  └──┘
```

Turning ON the power recalls all the panel settings of the Electone that were active when it was last turned OFF, except for the items below:

P. is always turned OFF.

D. is always turned OFF.

TRANSPOSITION is always turned OFF and reset to 0.

MINUS PLAY of the MUSIC DISK RECORDER is always turned OFF.

The following EXTRA CONTROL settings are always made:

PITCH	440.0 Hz
RHYTHM SYNC	INTERNAL
EXP. PEDAL	INTERNAL
LEAD CONTROL	INTERNAL
MIDI ACC. CONTROL	INTERNAL
U/L TRANSMIT	NORMAL

POWER-ON RESET

By pressing the leftmost button below the MULTI MENU when turning ON the power, you can reset the instrument to the defaults established at the factory.

WARNING: This procedure erases all user-definable settings and data.

Specifically, a reset does the following:

Sets Registration Memory locations 1 - 16 to be the same as the GENERAL group of Preset Registrations.

Clears the C.S.P. of all programmed sequences.

Sets the user-definable Rhythm patterns to standard defaults.

Sets the user-definable Voices to standard defaults.

Returns all Vibrato, Effect, Reverb, and other settings to standard defaults.

Sets the User Assign settings for Keyboard Percussion to be the same as Preset Assign settings.

After completing these settings, the operation of the Electone is identical to when the power is turned ON normally.

MASTER VOLUME

REMOTE
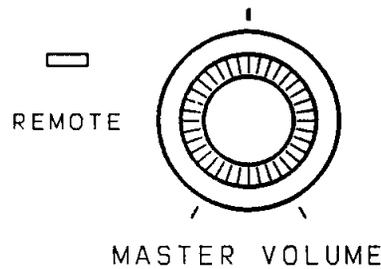
MASTER VOLUME

The MASTER VOLUME control does as its name suggests: It controls the overall volume (loudness) of the instrument. Turn it clockwise to increase volume, counterclockwise to decrease volume.

When the REMOTE lamp next to this control is illuminated, it indicates that the volume of the US-1 is being controlled by the wireless remote control of the Music Disk Recorder, or by playback of the Music Disk Recorder, rather than by the MASTER VOLUME control.

EXPRESSION PEDAL
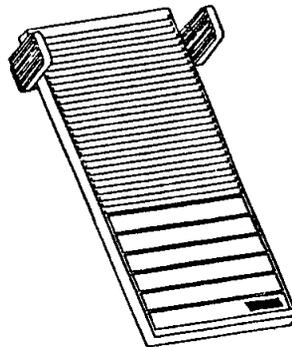
Whereas the MASTER VOLUME control sets a general level for the loudness of the instrument, the EXPRESSION PEDAL gives you some variation within that general level. In short, as the name says, it allows you to make your music expressive!

Place your entire right foot on the expression pedal. To make the music louder, press down with the toe of your foot. To make the music softer, press back with your heel.

There are also FOOT SWITCHES on either side of the EXPRESSION PEDAL, which are explained on pages 33-35.

VOICE SECTIONS
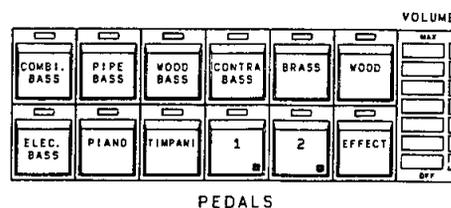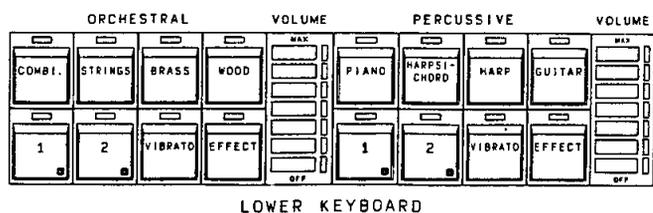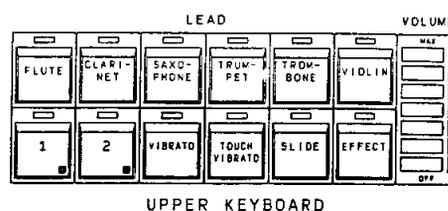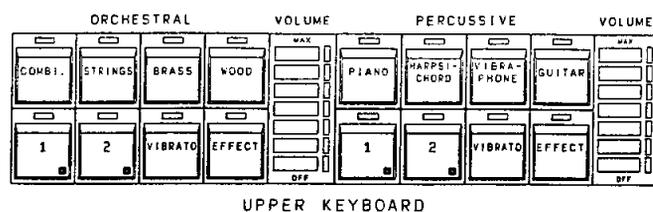
Overview

The upper keyboard, lower keyboard, and pedals have at their disposal a variety of sounds, usually referred to as "voices."

There are three voice sections for the UPPER KEYBOARD: ORCHESTRAL, PERCUSSIVE, and LEAD.

> The ORCHESTRAL sounds sustain for as long as you hold a key down; they represent instruments that are blown or bowed. These voices are capable of playing full chords as well as single-note melodies.
>
> The PERCUSSIVE sounds complement the ORCHESTRAL sounds by providing voices that decay (fade away) if a key is held down; these voices represent instruments that are plucked or struck to produce their sounds. These sounds are also capable of playing full chords, if you wish.
>
> The LEAD sounds play only one note at a time. When you play full chords (or have the US-1 provide full chords for you automatically via the Melody On Chord function—explained on page 21), the LEAD voice plays only the top note. In this way, it reinforces the "lead line," or melody, as often happens in a real instrumental ensemble. (When the UPPER ORCHESTRAL and UPPER PERCUSSIVE sections are both OFF, the UPPER LEAD section always sounds the most recent note you play.)

There are two voice sections for the LOWER KEYBOARD: ORCHESTRAL and PERCUSSIVE. These offer the same kinds of sounds as the sections for the upper keyboard that bear the same names.

The PEDALS have one voice section at their disposal.

In each voice section, one voice can be selected at a time. So the UPPER KEYBOARD can have as many as three voices sounding at one time, since it has three voice sections (ORCHESTRAL, PERCUSSIVE, and LEAD) at its disposal. Similarly, the LOWER KEYBOARD can have two voices sounding at one time.

A Closer Look

Let's look more closely at the controls available in the voice sections, taking as our example the UPPER KEYBOARD LEAD section. The other voice sections function similarly.

LEAD   VOLUME

FLUTE CLARI- SAXO- TRUM- TROM- VIOLIN
        NET   PHONE   PET   BONE

1   2   VIBRATO   TOUCH   SLIDE   EFFECT
                   VIBRATO

UPPER KEYBOARD
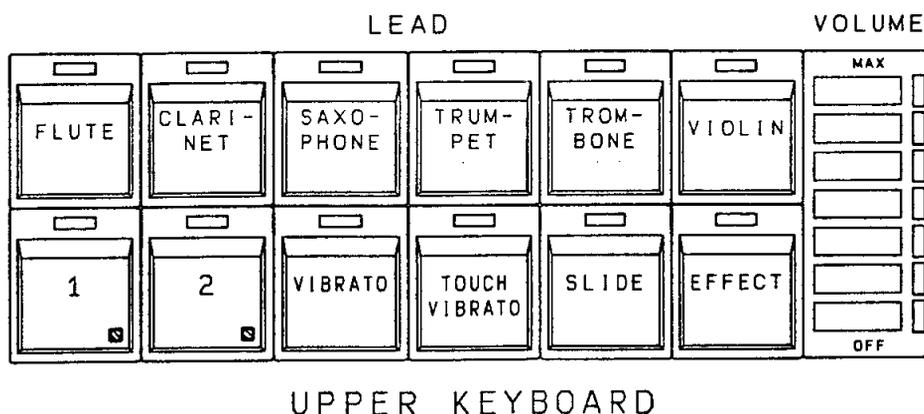
VOICE BUTTONS

The buttons with instrument names on them are voice buttons. To activate a voice for this section, press the voice button you desire. The LED in that button will illuminate to let you know that that voice is active, and the MULTI MENU will show the name of the voice you have selected.

In reality, each of the voice buttons represents not a certain fixed instrument, but a family of instrument sounds. For example, if you press FLUTE, you might see something like this in the MULTI MENU:


```
LEAD        1:FLUTE
```
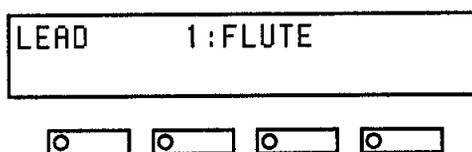
By turning the DATA dial, you can change the voice from FLUTE to PICCOLO, JAZZ FLUTE, PAN FLUTE, or WHISTLE.

All other voice buttons work similarly, allowing you to customize the sound of your US-1 easily.

Furthermore, the buttons numbered 1 and 2 in each voice section can be assigned ANY of the sounds available (not just those within a single instrumental family). These buttons become the "wild cards" in your deck of sounds! (See page 92 for a complete list of the voices that can be assigned to buttons 1 and 2 in each of the voice sections.)

NOTE: When the voice is changed, the Tremolo Effect or other Effects are automatically turned ON or OFF, based on the preset data for that voice.

14

VOLUME

Each voice section has a VOLUME control to set the loudness of that section. When you press one of the VOLUME buttons, the LED next to that button illuminates to inform you of the level you've set. In addition, the MULTI MENU shows the VOLUME setting.

```
LEAD VOLUME    VALUE = 10
```

At this point, you can use the DATA dial to change the VOLUME setting. The DATA dial offers more gradations of volume than do the VOLUME buttons, so it can be used to "fine tune" the volume.

To silence a voice section, set the VOLUME to OFF, either by pressing the bottom VOLUME button (labeled OFF) or by turning the DATA dial counterclockwise until the VOLUME VALUE = OFF.

The values for VOLUME cover a range of 25 steps: OFF, 1-23, and MAX.

VIBRATO

VIBRATO is a wavering of the pitch that makes many instrumental sounds more "human" and expressive. If you've ever seen how a violinist's left hand rocks back and forth when a note is being played, that's vibrato.

It's important to understand that when the VIBRATO button is OFF, it does NOT necessarily mean you'll hear no vibrato! In order to provide you with the best possible sound as easily as possible, the US-1 includes built-in vibrato settings for many of the sounds.

So when the VIBRATO button is OFF, it means that whatever the PRESET VIBRATO settings for the active voice are, they will be in effect. If you change voices, the new voice may have different preset vibrato settings.

When the VIBRATO button is ON, USER VIBRATO settings override the preset settings. These user settings will remain the same even if you change voices.

When you turn the VIBRATO button on, the MULTI MENU displays the current vibrato value. It also allows you to change the vibrato values (you're the USER!).

```
LEAD VIB.      VALUE = 10
DELAY DEPTH SPEED
```

To change a value, press the button below the appropriate item (DELAY, DEPTH, or SPEED; these are explained below). The LED on that button will illuminate and the current value for that item will appear in the top line of the MULTI MENU. Turn the DATA dial to change the value.

You can change three different aspects of the vibrato:

DELAY is the amount of time after you press a key before the vibrato starts. Singers, and players of string and wind instruments, often use delayed vibrato. The range of values is 0-100.

DEPTH is the degree to which the pitch varies as it vibrates. The range of values is 0-100.

SPEED is how fast the pitch varies.The range of values is 0-100.

VIBRATO is not available in the PEDALS section.

15

TOUCH VIBRATO

TOUCH VIBRATO, which is available only for UPPER KEYBOARD LEAD voices, offers an alternative to VIBRATO. You can activate either VIBRATO or TOUCH VIBRATO, but not both at the same time.

When TOUCH VIBRATO is ON, you control the addition of vibrato to the LEAD voice by "leaning into" the key after you have played it. This is called "aftertouch," or "key pressure."

```
┌─────────────────────────────────┐
│TOUCH VIB.     VALUE = 10         │
│    DEPTH SPEED                   │
└─────────────────────────────────┘
```

```
┌───┐  ┌───┐  ┌───┐  ┌───┐
│○  │  │●  │  │○  │  │○  │
└───┘  └───┘  └───┘  └───┘
```

When you turn TOUCH VIBRATO ON, the MULTI MENU allows you to see and change the DEPTH and SPEED of the vibrato. As with VIBRATO, press the appropriate button below the MULTI MENU and turn the DATA dial to change the value. DEPTH and SPEED each has a range of 0-100.

SLIDE

SLIDE, which is also available only for UPPER KEYBOARD LEAD voices, causes the pitch of the LEAD voice to slide from one note to the next, rather than playing distinctly separate pitches. (For some of the voices that can be assigned to buttons 1 and 2, SLIDE is not appropriate—e.g., acoustic piano. For these voices, SLIDE does not work.)

You control the sliding by playing notes legato (connected) to slide between them, and detached for no sliding.

```
┌─────────────────────────────────┐
│SLIDE USER     VALUE = 10         │
│PRESET USER                       │
└─────────────────────────────────┘
```

```
┌───┐  ┌───┐  ┌───┐  ┌───┐
│○  │  │●  │  │○  │  │○  │
└───┘  └───┘  └───┘  └───┘
```

The MULTI MENU lets you choose between PRESET and USER SLIDE. When the button below PRESET is on, the speed of the slide is set automatically. When the button below USER is on, you can set the speed of the slide with the DATA dial; the range of values is 0-100.

NOTE: The KNEE LEVER can also turn the SLIDE function ON and OFF. Even if the SLIDE lamp is ON, therefore, the Slide function may not always operate. The following rules summarize the operation of the SLIDE:

If the SLIDE button is OFF,
then SLIDE is inoperative.

If the SLIDE button is ON *and either*
    the KNEE button is OFF *or*
    the KNEE button is ON but KNEE CONTROL SLIDE in the MULTI MENU is OFF,
then SLIDE is operative at all times.

If the SLIDE button is ON *and*
    the KNEE button is ON *and* KNEE CONTROL SLIDE is turned on in the MULTI MENU,
then SLIDE is operative only when the KNEE LEVER is moved to the right *or* if it is left up.

EFFECT

Each Voice Section is provided with an EFFECT button, which can be used to change the Effect for that Voice Section. Turn the EFFECT button ON to add an Effect to that voice section. The MULTI MENU displays the currently selected Effect.

By turning the DATA dial, you can cycle through the six types of Effects available to select the one you desire. You can change the settings for an EFFECT by pressing the buttons below the MULTI MENU and, in some cases, turning the DATA dial.

Below are descriptions of the six EFFECTS and the settings for each.

```
LEAD    SYMPHONIC
MODE1  MODE2
```

SYMPHONIC produces a "symphony-like" effect by electronically dividing the sound into several channels. These individual channels are shifted in phase and recombined to produce the impression that many instruments are playing in unison.

MODE 1 is a less complex sound than MODE 2.

```
LEAD    CELESTE
MODE1  MODE2
```

CELESTE is similar to SYMPHONIC, except that the sense of motion in the sound is slower.

MODE 1 is a less complex sound than MODE 2.

```
LEAD    PHASER
STAGE   FREQ.  DEPTH  F.B.
```

PHASER splits the audio signal into just two channels, and applies phase shifting to one of them.

STAGE controls the degree of phase shift. The range is 1-3.

FREQ. controls the frequency of modulation (equivalent to the speed of vibrato) applied to the phase-shifted channel. The range is 0-100.

DEPTH controls the amount of modulation (equivalent to the depth of vibrato) applied to the phase-shifted channel. This, together with FREQ., is what imparts "motion" to the sound. The range is 0-100.

F.B. governs feedback. This makes the sound more complex by "feeding back" some of the resulting signal for more phase shifting. The range is 0-100.

> NOTE: If one of the buttons beneath the MULTI MENU is illuminated, press it to turn it off in order to use the DATA dial to select a different Effect.

```
┌─────────────────────────────────┐
│LEAD    FLANGER                  │
│D.TIME  DEPTH  FREQ.  F.B.       │
└─────────────────────────────────┘
  [o  ]  [o  ]  [o  ]  [o  ]
```

FLANGER takes a split signal and delays one of them very slightly.

D.TIME controls the time by which the delayed signal is offset. The range is 0-100.

DEPTH controls the amount of modulation applied to the delayed channel. The range is 0-100.

FREQ. controls the frequency of modulation applied to the delayed channel. The range is 0-100.

F.B. governs feedback. The range is 0-100.

NOTE: If one of the buttons beneath the MULTI MENU is illuminated, press it to turn it off in order to use the DATA dial to select a different Effect.

```
┌─────────────────────────────────┐
│LEAD    DELAY                    │
│D.TIME  F.B.  DIRECT  DELAY      │
└─────────────────────────────────┘
  [o  ]  [o  ]  [o  ]  [o  ]
```

The DELAY Effect produces discrete "echoes."

D.TIME controls the time between echoes. The range is 0-100.

F.B. governs feedback, which in this case determines the number of echoes (this value does not necessarily correspond to the exact number of echoes produced). The range is 0-100.

DIRECT controls the volume of the original audio signal. The range is 0-100.

DELAY controls the volume of the delayed (echo) signal. The range is 0-100.

NOTE: If one of the buttons beneath the MULTI MENU is illuminated, press it to turn it off in order to use the DATA dial to select a different Effect.

```
┌─────────────────────────────────┐
│LEAD    WAH                      │
│SPEED   FREQ.  DEPTH             │
└─────────────────────────────────┘
  [o  ]  [o  ]  [o  ]  [o  ]
```

WAH changes the timbre (tone color) of the sound by "sweeping" up and down the range of frequencies present in the sound.

SPEED controls the speed of the modulation that produces the sweeping. The range is 0-100.

FREQ. determines the highest frequency that will be allowed in the sound. It controls the overall brightness of the sound. The range is 0-100.

DEPTH controls the amount of modulation, which determines how far up and down the frequencies are swept. The range is 0-100.

NOTE: If one of the buttons beneath the MULTI MENU is illuminated, press it to turn it off in order to use the DATA dial to select a different Effect.

NOTES:

The Electone contains one of each of the six Effects. For example, when the Delay Effect is being used at the UPPER KEYBOARD and LOWER KEYBOARD ORCHESTRAL sections, both Voice Sections share the same Delay Effect settings. If the Delay settings are changed in this case, the Delay Effect will simultaneously be changed for the UPPER KEYBOARD and LOWER KEYBOARD ORCHESTRAL Sections.

However, *different* settings for each Effect can be stored in each Registration Memory Number. If you wish to apply the Wah Effect in two different ways, for example, you can set different settings for the Wah Effect at Registration Memory 1 and Registration Memory 2.

18

TOUCH TONE

TOUCH
TONE

TOUCH TONE allows you to use initial touch (how hard you strike the keys) and aftertouch (key pressure) to make your playing more expressive. When TOUCH TONE is ON, the sound becomes louder and brighter when you strike the keys forcefully or "lean into" them after you play them.

When you turn TOUCH TONE ON, you activate the TOUCH TONE mode. The MULTI MENU displays the four sections to which TOUCH TONE can be applied:

```
TOUCH TONE
LEAD UPPER LOWER PEDAL
```

For each of the four sections, you can turn TOUCH TONE ON or OFF by turning the appropriate button below the MULTI MENU ON or OFF. (In the example above, TOUCH TONE is ON for the UPPER KEYBOARD LEAD section only.) These buttons can be turned ON and OFF in any combination.

MANUAL BALANCE

MANUAL
BALANCE
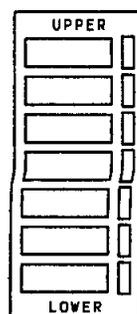
MANUAL BALANCE sets the balance between the volume levels of the Upper and Lower Keyboards. Press any of the MANUAL BALANCE buttons to change the balance. The higher the button, the louder the Upper and softer the Lower; the lower the button, the louder the Lower and softer the Upper.

```
MAN. BALANCE  VALUE =+10
```

When you press one of the MANUAL BALANCE buttons, the MULTI MENU displays the current balance value. By turning the DATA dial, you can adjust the balance with greater precision, over a 25-step range from −12 to +12.

TREMOLO
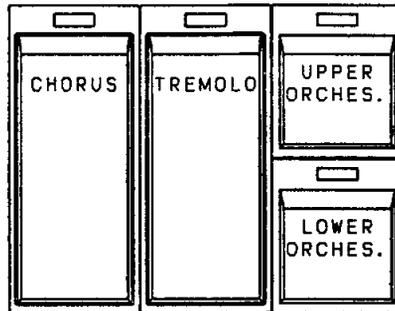
Just as VIBRATO is a variation in pitch, TREMOLO is a variation in volume. It's an effect that simulates the sound produced by the rotating speakers often used with electronic organs.

The two large buttons in this section, CHORUS and TREMOLO, allow you to choose the kind of rotating-speaker effect you desire. CHORUS simulates a slow rotation; TREMOLO simulates a fast rotation.

The two small buttons let you assign the active CHORUS or TREMOLO to either the UPPER KEYBOARD ORCHESTRAL section, the LOWER KEYBOARD ORCHESTRAL section, or both.

NOTE: Only *one* effect (DELAY, FLANGER, TREMOLO, etc.) can be applied to a voice section at one time. For example, when a TREMOLO effect is selected for a given voice section, the EFFECT button for that section is automatically turned OFF, and vice versa.

```
TREMOLO SPEED VALUE = 60
```

When you turn the TREMOLO button on, the MULTI MENU displays the current TREMOLO speed. Use the DATA dial to change this value.

When you change from CHORUS to TREMOLO or vice versa, the change in speed happens gradually, just as with a real rotating speaker.

20
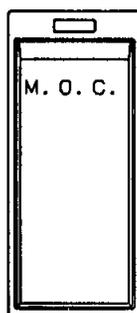
M.O.C. (MELODY ON CHORD)

M.O.C. (Melody On Chord) automatically creates three- or four-part harmony when you play a single-note melody. It does this by selecting harmonizing notes from the chords you play on the lower keyboard (regardless of whether you are using Auto Bass Chord or not).

When you turn the M.O.C. button ON, you enable M.O.C. The MULTI MENU displays the current M.O.C. mode. Use the buttons below the MULTI MENU to select the M.O.C. mode. The following musical example illustrates the modes:

NOTE: The KNEE LEVER can also turn the M.O.C. function ON and OFF. Even if the M.O.C. lamp is ON, therefore, the M.O.C. function may not always operate. The following rules summarize the operation of the M.O.C.:

If the M.O.C. button is OFF,
then M.O.C. is inoperative.

If the M.O.C. button is ON *and either*
    the KNEE button is OFF *or*
    the KNEE button is ON but KNEE CONTROL M.O.C. in the MULTI MENU is OFF,
then M.O.C. is operative at all times.

If the M.O.C. button is ON *and*
    the KNEE button is ON *and* KNEE CONTROL M.O.C. is turned on in the MULTI MENU,
then M.O.C. is operative only when the KNEE LEVER is moved to the right *or* if it is left up.

For more information on the KNEE LEVER, see page 22.

SUSTAIN

UPPER   LOWER   PEDAL
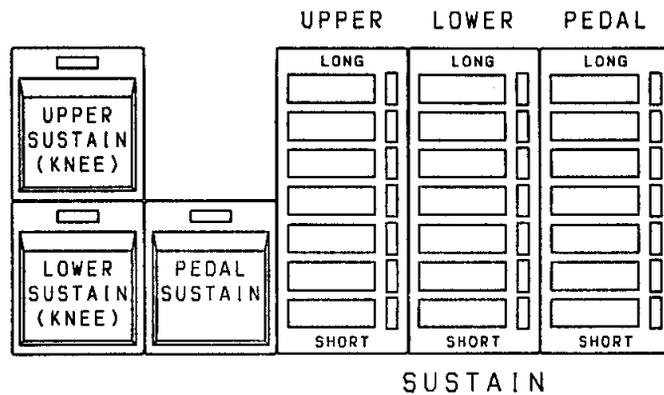
SUSTAIN

SUSTAIN causes the sound of a note to linger after a key or pedal has been released.

Each section—UPPER, LOWER, and PEDAL—has a set of buttons to control the length of the sustain, from SHORT to LONG. Simply press the appropriate button for the desired section to set the length of the SUSTAIN. (NOTE: SUSTAIN length cannot be varied for PIANO 1 or PIANO 2.)

SUSTAIN for the UPPER and LOWER keyboards can also be controlled by the KNEE LEVER. When the UPPER SUSTAIN (KNEE) or LOWER SUSTAIN (KNEE) button is on, moving the knee lever to the right will cause the notes played on that keyboard to sustain.

SUSTAIN for the PEDAL section is turned on by turning on the PEDAL SUSTAIN button (the knee lever is not used for PEDAL SUSTAIN). This is useful in making bass lines sound smooth.

KNEE LEVER
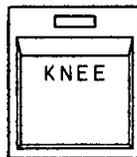
Beneath the keyboards is a Knee Lever that you can use to add certain effects in addition to SUSTAIN as you wish during a performance. To use the lever, fold it down so that it points straight down. You use your right knee to move the lever to the right to turn on the effect(s) you select for knee control.

When not using the knee lever, fold it up to the left, so that it rests against the cabinet, beneath the keyboards.

The knee lever is activated by turning on the KNEE button. Doing so causes the MULTI MENU to show the current status of the items controlled by the knee lever.

```
KNEE CONTROL
M.O.C.  SLIDE
```


In this display, you can assign the knee lever to control M.O.C., SLIDE, or both. Simply press the button below the appropriate item in the display to turn it on or off; the LED in the button will illuminate when an item is on.

The knee lever produces no effect when the KNEE button is OFF, or if the KNEE button is ON but both items in the KNEE CONTROL MULTI MENU are OFF.

22

REVERB

REVERB

```
   ┌──MAX──┐
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   │ ┌───┐ │ ▯
   │ └───┘ │
   └──OFF──┘
```
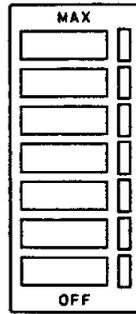
REVERB, or reverberation, gives your Electone a sense of spaciousness that heightens the realism of the sounds. REVERB affects the sound of the entire instrument.

The REVERB buttons control the volume of the reverberant sound. Pressing one of these buttons causes the MULTI MENU to display the current REVERB VOLUME.

```
┌──────────────────────────┐
│REVERB VOLUME VALUE = 20   │
│MODE1 MODE2 MODE3 MODE4    │
└──────────────────────────┘
```

```
  [○   ]  [○   ]  [●   ]  [○   ]
```

You can use the DATA dial to change the REVERB VOLUME over a 25-step range, from OFF to MAX.

You can press one of the buttons beneath the MULTI MENU to change the REVERB MODE, which determines the length of the reverberation. MODE 1 provides the shortest reverberation, MODE 4 the longest. MODE 3 is the factory default.

RHYTHM

MARCH	POLKA	WALTZ	COUNTRY	BALLAD	SWING	BOUNCE	SLOW ROCK		MAX
BOSSA-NOVA	CHA-CHA	BEGUINE	SAMBA	1	2	3	4		OFF
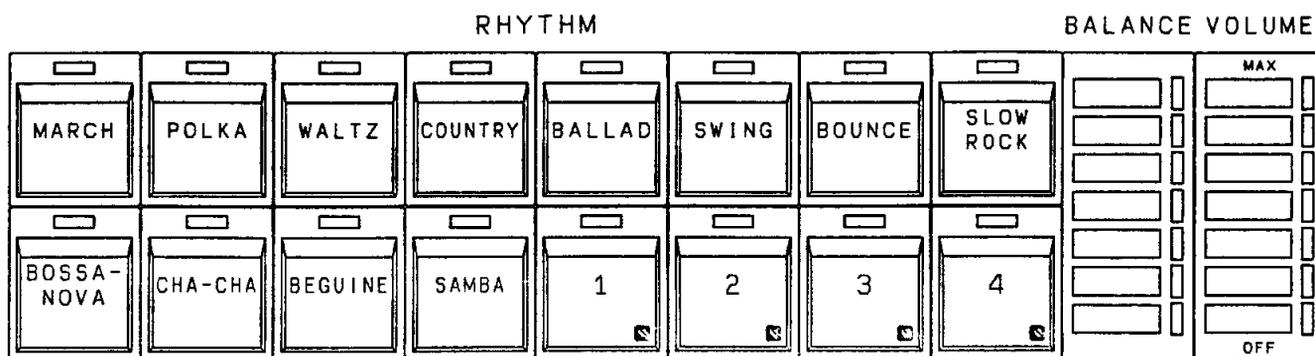
The RHYTHM section provides you with automatic drum and percussion patterns that add a beat to your playing. No matter what the style or mood, there's an appropriate RHYTHM pattern available.

PATTERNS

Select a Rhythm pattern by pressing a named pattern button or one of the numbered buttons 1-4.

```
RHYTHM    1:MARCH 1
ACC.1 ACC.2 ACC.3 ACC.4
```

The MULTI MENU displays the selected Rhythm pattern. As with the Voice sections, each of the named buttons can be assigned a pattern within the family indicated by the name on the button by turning the DATA dial, while the numbered buttons 1-4 can each be assigned any of the Rhythm patterns. (See page 93 for a complete list of the Rhythm patterns that can be assigned to buttons 1-4.)

The four buttons below the MULTI MENU can be used to change the ACCOMPANIMENT pattern and the accompaniment voice that plays along with the Rhythm. For each Rhythm, ACC. 1 is the simplest pattern and ACC. 4 is the most complex. Press the button for the pattern you desire; the LED will illuminate to show you which pattern is active.

VOLUME

The Rhythm volume can be changed by pressing a button in the VOLUME control.

```
RHYTHM VOLUME VALUE = 10
```

The MULTI MENU displays the current volume value. By turning the DATA dial, the volume level can be adjusted to a setting within a 25-step range: OFF, 1-23, MAX.

24

BALANCE

The balance among the Rhythm instruments can be changed by pressing a button in the BALANCE control.

```
RHY. BALANCE  VALUE =+10
```
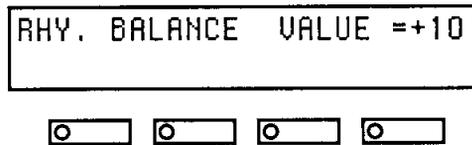
The MULTI MENU displays the current BALANCE value. By turning the DATA Dial, the BALANCE value can be adjusted within a 25-step range from –12 to +12. A positive value makes the high-pitched sounds (such as Cymbals) louder, whereas a negative value makes the low-pitched sounds (such as Drums) louder.

STARTING AND STOPPING
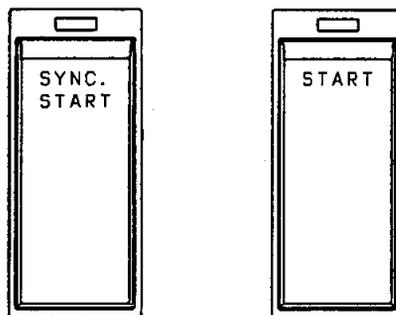
To start the Rhythm, press START. The LED will illuminate to tell you it is on.

To synchronize the start of the Rhythm with the first note you play on the Lower or Pedal keyboard, press SYNC. START. The LED will illuminate to tell you it is ready, and waiting for you to play.

To stop the Rhythm, press whichever button—START or SYNC. START—you pressed to start the Rhythm. The LED will go out to tell you it is now off.

INTRO., ENDING, AND FILL IN
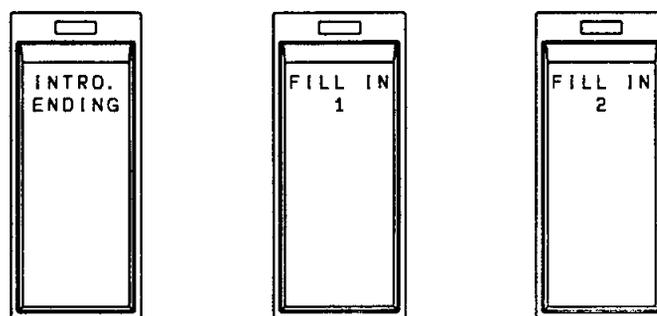
Instead of just starting the Rhythm with the normal pattern, you can begin with an automatic introduction. Simply press the INTRO./ENDING button (the LED will illuminate to tell you it is ready) and then press START. A one-bar introduction will precede the start of the regular pattern.

To end with a flourish, press INTRO./ENDING while the Rhythm is running. An ending of up to two bars will bring the music to a professional-sounding close.

While the rhythm is running, you can vary the normal pattern by pressing either FILL IN 1 or FILL IN 2. These buttons each provide a one-bar "drum fill" that's perfect during the last bar of a musical phrase or section, or whenever you want a little variety.

25
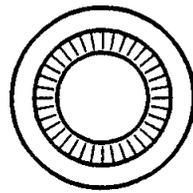
TEMPO

BAR/BEAT ☐
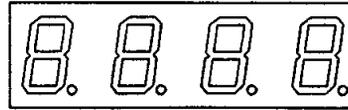
TEMPO

You can use the TEMPO dial to change the Tempo (speed) of the Rhythm. The display shows the current tempo, in beats per minute, when the Rhythm is not running. It also shows the tempo briefly if it is changed while the Rhythm is running.

While the Rhythm is running, the display shows the current bar and beat since the Rhythm was started.

The small BEAT light flashes on the first beat of every bar when the Rhythm is running, and on every beat before the Rhythm starts when SYNC. START is on; this allows you to see the tempo before you start playing.

KEYBOARD PERCUSSION

When you turn KEYBOARD PERCUSSION on, you allow Rhythm instruments to be sounded using the Upper, Lower, and Pedal Keyboards. You can also determine which Rhythm instrument will be assigned to which key.

Press the KEYBOARD PERCUSSION button to turn this feature ON. The LED will illuminate to tell you it is on.

The MULTI MENU shows the KEYBOARD PERCUSSION MODES. Either PRESET or USER will be ON, as indicated by the LEDs in the buttons below the MULTI MENU.

```
KYBD. PERC. MODE
PRESET USER        ASSIGN
```

PRESET: Rhythm instruments can be sounded using the Lower Keyboard. (The correspondence between the Rhythm instruments and the keyboard is shown by the pictures of the Rhythm instruments printed in front of the Lower Keyboard.)

USER: Rhythm instruments can be sounded using the Upper, Lower, and Pedal keyboards. (The correspondence between the Rhythm instruments and the keyboards is set by using the Assign function.)

You can switch back and forth between these two modes by pressing the appropriate button.

ASSIGN

When assigning KEYBOARD PERCUSSION sounds, you may wish to turn the volumes of the Voice sections OFF, so you can hear the percussion sounds alone.

Press the button below ASSIGN in the MULTI MENU to turn ON the Assign function. (The KEYBOARD PERCUSSION lamp blinks.)

The MULTI MENU displays the name of the Rhythm instrument that can be assigned to a keyboard.

```
KYBD. PERC. ASSIGN
 1:RIDE CYMBAL
```

27

Selecting an Instrument and an Effect

Turn the DATA dial to select the Rhythm instrument that you wish to assign to a key.

```
KYBD. PERC. ASSIGN
 2:RIDE CUP
```
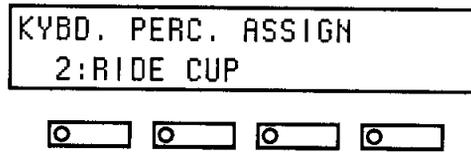
You can press a button below the MULTI MENU to select whether to apply an Effect to the Rhythm instrument.

1st button on the left: Cancel Effect
2nd button from the left: Flanger
3rd button from the left: Delay

```
KYBD. PERC. ASSIGN
128:RIDE CUP      DELAY
```
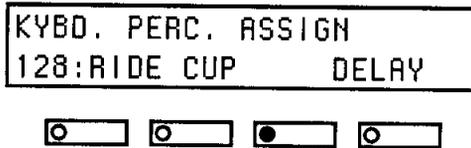
Assigning the Instrument to a Key or a Pedal

Assigning instruments involves the leftmost *black* key of the Lower Keyboard.

While pressing the leftmost black key of the Lower Keyboard, press the key of the Upper, Lower, or Pedal Keyboard to which you wish to assign the instrument. (At this time, the displayed Rhythm instrument is sounded to indicate that the instrument has been assigned.)

By repeating the sequence of selecting and assigning instruments, the Rhythm instruments will be sounded on the assigned keys when KEYBOARD PERCUSSION is ON and set to USER mode.

Checking Key Assignments

When you press a key at the Upper, Lower, or Pedal Keyboard to check its assignment, the MULTI MENU shows the instrument and the key to which it is assigned. The Rhythm instrument is also sounded so you can also check its sound.

```
KYBD. PERC. ASSIGN    D3
 3:CRASH CYMBAL
```
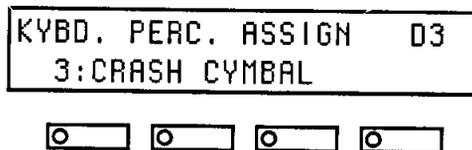
When that key is released, the display that appeared prior to pressing the key returns to the MULTI MENU.

Cancelling Key Assignments

Cancelling assignments involves the leftmost *white* key of the Lower Keyboard. When this key is held down while in ASSIGN mode, the following MULTI MENU appears:

```
┌─────────────────────────┐
│KYBD. PERC. ASSIGN        │
│ALL                       │
└─────────────────────────┘
   ┌o──┐  ┌o──┐  ┌o──┐  ┌o──┐
   └───┘  └───┘  └───┘  └───┘
```
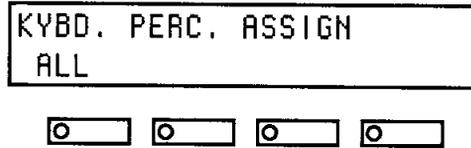
The keyboard percussion assignment can be cancelled in two ways:

1. By key.

   Use this method when you which to cancel the keyboard assignment of Rhythm instruments for a *specific* key or pedal.

   While pressing the leftmost white key of the Lower Keyboard, press the required key of the Upper, Lower, or Pedal Keyboard. After this operation is performed, the cancelled Rhythm instrument will not be sounded even if that key is later pressed.

2. For all keys.

   While pressing the leftmost white key of the Lower Keyboard, press the ALL button below the MULTI MENU. The following MULTI MENU appears:

```
┌─────────────────────────┐
│KYBD. PERC. ASSIGN        │
│CLEAR ORIGINAL      QUIT  │
└─────────────────────────┘
   ┌o──┐  ┌o──┐  ┌o──┐  ┌o──┐
   └───┘  └───┘  └───┘  └───┘
```
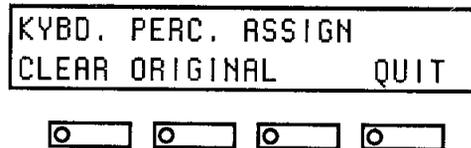
Now you have three choices:

A. To recall the Preset Assign data: Press ORIGINAL.

B. To cancel the assignment for all keyboards: Press CLEAR.

C. To quit or escape the Assign operation: Press QUIT.

In any case, the MULTI MENU display indicates the last instrument you were working with.

Exiting ASSIGN Mode

Press the KEYBOARD PERCUSSION button to exit ASSIGN mode. The KEYBOARD PERCUSSION lamp stops blinking and remains illuminated continuously.

NOTES:

RHYTHM VOLUME and BALANCE controls how audible the Rhythm instruments are, even when they are used in KEYBOARD PERCUSSION.

Even if the KEYBOARD PERCUSSION lamp is lit, no Rhythm instruments will be sounded in USER mode if all of the previously assigned data has been cleared by the Assign ALL CLEAR function.

Even if the KEYBOARD PERCUSSION lamp is lit, the keyboard assignments made using the Assign function will not take effect if the PRESET mode is selected. The USER mode must be selected in order to use the assignments made in ASSIGN mode.

The Effects applied to the Rhythm instruments are identical to the Flanger and Delay effects used for the Voices. Therefore, the way an Effect is applied to a Rhythm instrument can also be changed by following the procedure described in the explanation of EFFECT settings in the VOICES section, on pages 17-18. (These effect parameters cannot be changed from within the KEYBOARD PERCUSSION mode.)

AUTO BASS CHORD (A.B.C.)

AUTO BASS CHORD

```
┌─────────┬─────────┐
│  ▭      │   ▭     │
│         │ ┌─────┐ │
│ ┌─────┐ │ │LOWER│ │
│ │     │ │ │MEMORY│ │
│ │A.B.C.│ │ └─────┘ │
│ │     │ ├─────────┤
│ │     │ │   ▭     │
│ │     │ │ ┌─────┐ │
│ │     │ │ │PEDAL│ │
│ │     │ │ │MEMORY│ │
│ └─────┘ │ └─────┘ │
└─────────┴─────────┘
```
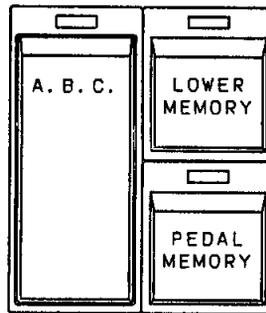
AUTO BASS CHORD (A.B.C.) lets your Electone do much of the work of making you sound great! With A.B.C. ON, sophisticated accompaniment patterns that keep perfect time with the Rhythm are produced automatically.

```
┌─────────────────────────────┐
│ A.B.C.    MODE = S.F.        │
│ S.F.   F.C.  CUSTOM          │
└─────────────────────────────┘
```

```
┌──●──┐ ┌──○──┐ ┌──○──┐ ┌──○──┐
└─────┘ └─────┘ └─────┘ └─────┘
```

Press the A.B.C. button to turn AUTO BASS CHORD ON (the LED illuminates) or OFF. When you turn it ON, the MULTI MENU gives you a choice of A.B.C. modes:

S.F. (SINGLE FINGER): In this mode, you can produce a fully automated chord-and-bass accompaniment by playing single finger chords on the Lower Keyboard. This mode is often preferred by musical novices. (A chart of Single Finger chords can be found on page 96.)

F.C. (FINGERED CHORDS): In this mode, playing standard three- or four-note chords on the Lower Keyboard results in automatic accompaniment. This is the mode of choice for those with experience playing keyboard instruments such as the piano. (A chart of Fingered chords can be found on page 96.)

CUSTOM: This mode, geared especially for those with previous experience playing the organ, produces automatic accompaniment patterns for the fingered chords you play on the Lower Keyboard, but, rather than producing automatic bass patterns as well, allows you to play the pedals yourself. Automatic bass patterns are available by holding a pedal down.

Press the appropriate button below the MULTI MENU to select the A.B.C. mode of your choice. The lamp of the selected button lights up, and the mode is also displayed in the top line of the MULTI MENU.

LOWER MEMORY

When this button is ON, it allows you to lift your hand from the Lower Keyboard without interrupting the playing of the automatic accompaniment.

PEDAL MEMORY

When this button is ON, it allows you to lift your hand from the Lower Keyboard (in Single Finger or Fingered Chord mode) or your foot from the pedals (in Custom mode) without interrupting the playing of the automatic bass line.

31

ACCOMPANIMENT VOICE

VOLUME
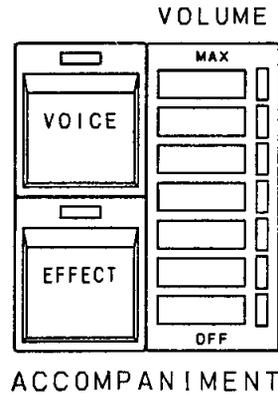
ACCOMPANIMENT

The Auto Bass Chord plays its accompaniment patterns using the Accompaniment Voice. When the ACCOMPANIMENT VOICE button is OFF, appropriate Preset Voices are selected to complement each of the Rhythm patterns and Accompaniment variations (ACC. 1-4) chosen. Consequently, when changing Rhythm patterns, the Accompaniment Voice often will change, as well.

When the ACCOMPANIMENT VOICE button is ON, you can select a Voice by turning the DATA dial, as in other Voice sections.

```
ACC.       1:JAZZ ORGAN
```
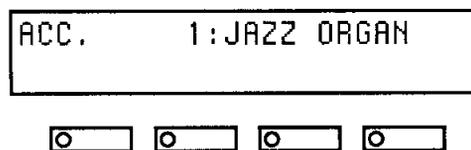
NOTE: When the Voice is changed, the Effects are automatically turned ON or OFF, based on that Voice's preset data.

One advantage of having the ACCOMPANIMENT VOICE button ON is that the voice you select will remain in force even when you change Rhythm patterns or Accompaniment variations. This continuity can sometimes be important.

VOLUME AND EFFECT

The procedures and MULTI MENU functions of the VOLUME and EFFECT buttons in the ACCOMPANIMENT section are identical to those described in the VOICES section of this manual, on pages 15 and 17-18, respectively.

The VOLUME and EFFECT controls affect whatever Accompaniment Voice is active, regardless of whether the ACCOMPANIMENT VOICE button is OFF or ON.

32

FOOT SWITCH
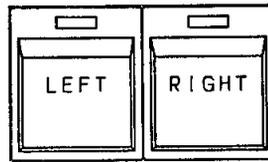
```
┌──────────┬──────────┐
│ ┌──────┐ │ ┌──────┐ │
│ │ ▭    │ │ │  ▭   │ │
│ └──────┘ │ └──────┘ │
│ ┌──────┐ │ ┌──────┐ │
│ │      │ │ │      │ │
│ │ LEFT │ │ │RIGHT │ │
│ │      │ │ │      │ │
│ └──────┘ │ └──────┘ │
└──────────┴──────────┘
     FOOT SWITCH
```

There are Foot Switches on the expression pedal—one on the Left side, one on the Right—which give you further control over your Electone. Turning on the LEFT and RIGHT FOOT SWITCH buttons, respectively, will activate these Foot Switches and allow you to determine their function.

When activated, a Foot Switch will do what it is set to do when it is pressed by the side of the foot.

LEFT FOOT SWITCH

When you turn on the LEFT button, the MULTI MENU displays the function that is currently being controlled by the Left Foot Switch.

Turn the DATA dial to change the function; the choices are RHYTHM, GLIDE, and TEMPO.

Rhythm

```
┌─────────────────────────────┐
│ LEFT SWITCH = RHYTHM        │
│ STOP ENDING FILL1 FILL2     │
└─────────────────────────────┘
     ┌───┐  ┌───┐  ┌───┐  ┌───┐
     │o  │  │o  │  │o  │  │o  │
     └───┘  └───┘  └───┘  └───┘
```

Use the buttons below the MULTI MENU to select one of the following Rhythm functions: STOP, ENDING, FILL IN 1, or FILL IN 2. (The lamp of the selected function lights up.)

These functions duplicate those that are activated by buttons on the control panel. They allow you to use your foot when your hands might be busy playing. Only one Rhythm function can be assigned to the Foot Switch at a time.

Glide

```
┌─────────────────────────────┐
│ LEFT SWITCH = GLIDE         │
│ LEAD U.ORC.U.PER.L.ORC.     │
└─────────────────────────────┘
     ┌───┐  ┌───┐  ┌───┐  ┌───┐
     │o  │  │o  │  │o  │  │o  │
     └───┘  └───┘  └───┘  └───┘
```

Use the buttons below the MULTI MENU to select the Voice Section(s) to which the Glide function is to be applied. (The lamp of the selected Voice Section(s) lights up.)

The Voice Sections can all be turned ON or turned OFF.

Glide lowers the pitch of the selected Voice Section(s) by a half step; releasing the Foot Switch causes the pitch to "glide" back up to normal. This can be an effective way of duplicating instrumental sounds as diverse as the Hawaiian guitar, the clarinet, the trombone, and the violin.

To use Glide properly, press the Foot Switch to the left *before* playing the note; then play and hold the note, and release the Foot Switch.

Tempo

```
LEFT SWITCH = TEMPO
SLOW  FAST
```

```
[o  ]  [o  ]  [o  ]  [o  ]
```

Use the buttons below the MULTI MENU to select either Slow or Fast. (The lamp of the selected tempo lights up.) Only one of these can be activated at a time.

SLOW: While the Left Foot Switch is being pressed, the tempo will gradually slow down.

FAST: While the Left Foot Switch is being pressed, the tempo will gradually speed up.

NOTES:

The MULTI MENU can only display one Left Foot Switch function (RHYTHM, GLIDE, or TEMPO) at a time. Even if the function is not being displayed, the setting of that function using the buttons below the MULTI MENU will be memorized by the Electone. That is, it is possible to have the Left Foot Switch perform Rhythm, Glide, and Tempo functions simultaneously.

When the LEFT lamp is changed from OFF to ON, the Left Foot Switch function that was last displayed will appear. If the lamp is changed from OFF to ON immediately after the Electone is turned ON, the Rhythm display appears.

RIGHT FOOT SWITCH

When you turn on the RIGHT button, the MULTI MENU displays the function that is currently being controlled by the Right Foot Switch.

Press the appropriate button below the MULTI MENU to select the function; the choices are **REGISTRATION** and **TREMOLO**. (The LED in the active button will illuminate.)

Only one of these functions can be selected at a time.

Registration

Turn the DATA Dial to set one of 17 different operations: JUMP 1 to JUMP 16 or SHIFT.

```
RIGHT SWITCH = JUMP 1
REG. TREMOLO
```

```
[●  ]  [o  ]  [o  ]  [o  ]
```

These operations work in conjunction with the 16 square buttons (Registration Memory $\boxed{1}$ - $\boxed{16}$) located between the keyboards. When JUMP 1 is selected, pressing the Right Foot Switch causes the registration to change from whatever it is at that moment to Registration Memory 1. JUMP 2 would cause it to "jump" to Registration Memory 2 instead, and so on.

SHIFT allows you to move sequentially through the Registrations, simply by using the Right Foot Switch. If you plan your registrations ahead of time, this can be a powerful capability in performance.

Tremolo

```
┌─────────────────────────────┐
│ RIGHT SWITCH = TREMOLO       │
│ REG. TREMOLO                 │
└─────────────────────────────┘
```

When TREMOLO is selected, pressing the Right Foot Switch repeatedly will alternate between the TREMOLO (fast) and CHORUS (slow) effects. In other words, the Foot Switch acts as a speed control for the electronically generated "rotating speaker" sound.

Note that either the UPPER ORCHES. button or the LOWER ORCHES. button (or both) in the TREMOLO section must be ON in order for the TREMOLO and CHORUS effects to be audible.

PRESET REGISTRATIONS

$\boxed{\text{P.}}$

When the $\boxed{\text{P.}}$ button is ON, buttons $\boxed{1}$ - $\boxed{16}$ located between the keyboards select the 16 Preset Registrations that are set at the factory. (NOTE: A "Registration" is defined as a complete setup of the control panel, including selection of Voices and Rhythm pattern, and settings of Volumes and Effects.)

When the $\boxed{\text{P.}}$ button is OFF, buttons $\boxed{1}$ - $\boxed{16}$ select the 16 registrations located in the Registration Memory, which you set to the sounds of your choice.

When the $\boxed{\text{P.}}$ button is turned ON, the MULTI MENU displays the names of the Preset Registration groups. There are two groups of Preset Registrations: GENERAL and THEATER/CLASSICAL.

Press the appropriate button below the MULTI MENU to select the desired Preset Registration group.

```
PRESET REGISTRATION MENU
GENERAL THEATER/CLASS.
```

⌷ ⌷ ● ⌷

The following table lists the Preset Registrations.

REG. NO.	GENERAL	THEATER/CLASSICAL
1	MARCHING BAND	THEATER 1
2	ELECTRONIC ORGAN	THEATER 2
3	HAWAIIAN STYLE	THEATER 3
4	DIXIELAND BAND	THEATER 4
5	WOODWIND ENS.	THEATER 5
6	SAX ENSEMBLE	THEATER 6
7	TRBN. ENSEMBLE	THEATER 7
8	FULL BIG BAND	THEATER 8
9	FLUTE ENSEMBLE	CLASSICAL 1
10	MARIMBA	CLASSICAL 2
11	CLARINET ENS.	CLASSICAL 3
12	PIANO + ORGAN	CLASSICAL 4
13	COUNTRY GUITAR	CLASSICAL 5
14	COUNTRY FIDDLES	CLASSICAL 6
15	GUITAR + CHORUS	CLASSICAL 7
16	PIANO + GUITAR	CLASSICAL 8

BUTTONS [1] - [16]

When a Registration button from [1] to [16] is turned ON while the [P.] lamp is ON, the corresponding Preset Registration is recalled from whichever group (GENERAL or THEATER/CLASSICAL) is active.

The MULTI MENU displays the name of the Registration.

```
┌─────────────────────────────┐
│PRESET REGISTRATION MENU      │
│15:CLASSICAL 7                │
└─────────────────────────────┘
```

[o___] [o___] [o___] [o___]

NOTE: AUTO BASS CHORD settings are not changed by Preset Registrations. So you can set the A.B.C., LOWER MEMORY, and PEDAL MEMORY buttons as you prefer, without fear that you will lose those settings by activating a different Preset Registration.

REGISTRATION MEMORY

$\boxed{\text{M.}}$ $\quad$ $\boxed{1}$...$\boxed{16}$

You can use buttons $\boxed{1}$ - $\boxed{16}$, in conjunction with the $\boxed{\text{M.}}$ button, to store and recall your own Registrations.

STORING A REGISTRATION

After setting the controls as you wish to have them stored, hold down the $\boxed{\text{M.}}$ button and press one of the buttons $\boxed{1}$ - $\boxed{16}$. The lamp of the pressed button will blink.

When the Registration is completely stored, the lamp stops blinking. That Registration is now stored for recall by pressing that numbered button, and you will notice that the MULTI MENU will indicate "USER."

NOTES:
It's not possible to store another Registration while a Registration Memory lamp is still blinking.

You can store (but not recall) a Registration Memory even while the $\boxed{\text{P.}}$ lamp is ON.

If you store a Preset Registration (GENERAL or THEATER/CLASSICAL) in Registration Memory, the name of the Preset Registration will appear in the MULTI MENU as the name of the Registration Memory. But if you change the settings of any controls, the name of the Registration Memory will be changed to "USER."

What CAN be stored in each of the 16 Registration Memory locations
Voices

> Data regarding which Voice buttons have lit (ON) lamps
> ON/OFF status of ACC. VOICE
> Contents of each Voice button, as well as 1 and 2
> Volume of the Voices

Sustain, Vibrato, Touch Vibrato, and Slide

> Sustain ON/OFF status and Sustain Length value of UPPER/LOWER/PEDALS
> ON/OFF status of Vibrato and Vibrato parameters
> ON/OFF status of Touch Vibrato and Touch Vibrato parameters
> ON/OFF status of Slide and Slide parameters (USER/PRESET and Slide value)

Effects

> ON/OFF status of EFFECT
> The Effect set at each EFFECT button and the settings of the Effect parameters
> ON/OFF status of UPPER ORCHES./LOWER ORCHES. in TREMOLO Section
> Selection status of TREMOLO and CHORUS lamps
> Tremolo speed
> Reverb volume

Rhythm functions

Data regarding which RHYTHM buttons have lit (ON) lamps
Contents of each RHYTHM button and 1-4 (Rhythm pattern and ACC. variation data in MULTI MENU when each button is turned ON)
Rhythm volume, Rhythm balance, and Tempo value
ON/OFF status of Keyboard Percussion
Mode setting (USER or PRESET) of Keyboard Percussion

Automatic performance functions

ON/OFF status of AUTO BASS CHORD and A.B.C. mode setting
ON/OFF status of LOWER MEMORY and PEDAL MEMORY
ON/OFF status of M.O.C. and M.O.C. mode setting

Miscellaneous

Manual balance
ON/OFF status of Touch Tone and LEAD/UPPER/LOWER/PEDAL selection of Touch Tone
ON/OFF status of Knee control and M.O.C./Slide selection of Knee control
ON/OFF status of Left Foot Switch control and selection of the Left Foot Switch functions

What CANNOT be stored in the 16 Registration Memory locations

Reverb mode setting

ON/OFF status of Right Foot Switch control and selection of the Right Foot Switch functions

ON/OFF status and functions related to MUSIC DISK RECORDER

ON/OFF status and value of Transposition

Pitch value

Mode settings of MIDI

START/STOP, FILL IN, INTRO./ENDING, etc. of Rhythm

User Assign data of Keyboard Percussion

ON/OFF status of | P. | and | D. | buttons

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RECALLING A REGISTRATION

When the ⬚P. button is OFF, press a button from ⬚1 to ⬚16 that corresponds to the desired Registration. (The lamp of the pressed button lights up.)

The MULTI MENU displays the name of the Registration.

```
┌─────────────────────────────┐
│ REGISTRATION MEMORY         │
│ 15:USER                     │
└─────────────────────────────┘
```

```
┌──┐  ┌──┐  ┌──┐  ┌──┐
│o │  │o │  │o │  │o │
└──┘  └──┘  └──┘  └──┘
```
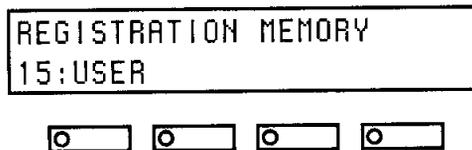
NOTE: While the ⬚D. lamp is ON, the functions related to automatic features will not change when a Registration is called up. (For more information, see "Rhythm Disable," page 41.)

Changing the Name of the Registration Memory Presets

By using the buttons below the MULTI MENU and the DATA dial, you can set the name of the Registration you have programmed, if you wish.

Step 1: Enter the Name Input mode.

> Press the leftmost button below the MULTI MENU. (Its lamp lights up and a cursor appears below the first character in the Registration name.)

Step 2: Move the cursor to the character to be changed.

> Use the two middle buttons below the MULTI MENU to move the cursor to the left or right.

Step 3: Change the character.

> Turn the DATA dial to change the character indicated by the cursor in alphabetic sequence.

Repeat Steps 2 and 3 for any other characters to be changed.

Step 4: Store the name.

> Press the rightmost button below the MULTI MENU to store the name.

> The leftmost lamp below the MULTI MENU goes OFF and the Name Input mode is exited.

NOTES:

Unless Step 4 (storing the name) is performed, the name input on the MULTI MENU will not be memorized by the Electone.

While you are changing the Registration name (the leftmost lamp below the MULTI MENU is ON), if you press the leftmost button below the MULTI MENU, the Name Input mode will be terminated without the input name being stored, and the previous name will be restored.

RHYTHM DISABLE

$$\boxed{\text{D.}}$$

Turning the $\boxed{\text{D.}}$ button ON (so that the lamp illuminates) allows you to change Registrations without changing the settings of the RHYTHM Pattern, Balance, and Volume; ACCOMPANIMENT Variation, Voice, Effect, and Volume; TEMPO; AUTO BASS CHORD Mode, Lower Memory, and Pedal Memory; or MELODY ON CHORD (M.O.C.). By allowing you to change keyboard sounds without changing automatic features, it can maintain continuity between Registrations within a song.

C.S.P. (CHORD SEQUENCE PROGRAMMER)

C. S. P.
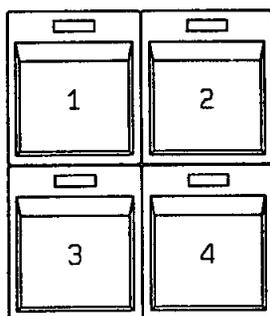
This C.S.P. Section controls recording and playback of the Chord Sequence Programmer. This feature allows you to store "sequences" of chords, Rhythm patterns, and registration changes that can be played back automatically, so that you can play along with them.

The four numbered C.S.P. buttons can be used to store up to four different sequences. In each of these buttons, the four types of Performance data below can be recorded:

Chords and their duration (number of beats)

Registration Memory Numbers $\boxed{1}$ - $\boxed{16}$

RHYTHM pattern selection

Use of Fill In 1, Fill In 2, and Intro./Ending

C.S.P. Playback

BASIC PLAYBACK METHOD

Step 1: Turn ON the C.S.P. button corresponding to the song to be played back. (The lamp of the selected song lights up.)

Step 2: Start the Rhythm.

When these steps are performed, the performance recorded in the C.S.P. is started.

When the song is finished, the Rhythm automatically stops and the previously lit C.S.P. lamp goes OFF.

CONSECUTIVE PLAYBACK OF MULTIPLE SONGS

Step 1: Turn ON the C.S.P. buttons corresponding to each of the songs to be played back. (The lamp of each selected song lights up.)

Step 2: Start the Rhythm.

When these steps are performed, the performances recorded in the C.S.P. are started. The songs will be played back sequentially from the song with the lowest number. For example, if 1, 3, and 4 are selected, they will be played back in the sequence of 1, 3, and 4.

When the last song is finished, the Rhythm automatically stops and all previously lit C.S.P. lamps go OFF.

NOTES:

Once you have selected the song(s) to be played back, pressing a button with a lit lamp will turn its lamp OFF.

If nothing is recorded in the selected C.S.P. song, and the Rhythm START button is pressed, no sound will be heard.

During C.S.P. playback, pressing keys on the Lower and Pedal Keyboards will produce no sound because these keyboards will be played automatically according to the pre-recorded C.S.P. data. If you wish to play the Lower and Pedal Keyboards yourself during C.S.P. playback, change the PLAY mode as described in "Setting the PLAY mode," below.

During C.S.P. playback, pressing any C.S.P. button will cause playback to stop.

SETTING THE PLAY MODE:

C.S.P. allows you to set the status of three functions in the PLAY mode:

TACT: A Tact (one-measure count-in) is added to the beginning of the song.

REPEAT: Playback of selected song(s) is repeated.

CHORD: Select whether the Lower and Pedal Keyboards will be played automatically by the C.S.P. data or will be played by you.

When a C.S.P. song is selected for playback, the C.S.P. PLAY mode will always be initially set as follows:

TACT: OFF; REPEAT: OFF; CHORD: ON (The Lower and Pedal Keyboards are played by the C.S.P. data)

Setting the PLAY mode for single-song selection

Step 1: When a C.S.P. song is selected, the display below appears.

```
C.S.P. MODE
PLAY  REC.  EDIT
```

Step 2: When the PLAY button is pressed, the display below appears so that you can change the PLAY mode, if you wish. Initially, the PLAY mode will be set to: TACT: OFF; REPEAT: OFF; CHORD: ON.

```
C.S.P. PLAY MODE
TACT REPEAT        CHORD
```

```
[o   ] [o   ] [o   ] [●   ]
```

Step 3: Press the TACT, REPEAT, or CHORD buttons as you wish to set the PLAY mode. (Pressing a button causes a lit lamp to go OFF or an unlit lamp to light up.)

Setting the PLAY mode for multiple-song selection

When multiple songs are selected, the MULTI MENU automatically changes to the PLAY mode selection display.

To change the PLAY mode, press the TACT, REPEAT, or CHORD buttons as necessary (as in Step 3 above for playback of single-song selection).

Setting the PLAY mode during playback

During playback, the PLAY mode selection display appears.

To set the PLAY mode, press the TACT, REPEAT, or CHORD buttons as necessary (as in Step 3 above for playback of single-song selection).

C.S.P. Recording

STARTING RECORDING

Step 1: Turn ON the C.S.P. button to which you wish to record the song. (The lamp of the pressed button lights up and the display below appears.)

```
C.S.P. MODE
PLAY   REC.   EDIT
```

```
[o   ] [o   ] [o   ] [o   ]
```

Step 2: Press the REC. button below the MULTI MENU.

Press this button when you wish to clear all data for that Song Number from the C.S.P. memory and record the entire song from the beginning (REC. mode).

When the REC. button is turned ON, the display below appears to confirm whether to start recording, because recording of new data will erase all previously recorded data for that Song Number.

```
C.S.P. NEW RECORD
RECORD OK ?    YES    NO
```

```
[o   ] [o   ] [o   ] [o   ]
```

NO: The MULTI MENU returns to the display for single-song selection.

YES: A beep is heard,* the data of that song is cleared, the lamp of the selected C.S.P. button blinks to indicate that data may be recorded, and the MULTI MENU displays the following:

```
┌─────────────────────────┐
│ *****                    │
│   ○      ♩      ♪      ♪  │
└─────────────────────────┘
  [○──] [○──] [○──] [○──]
```
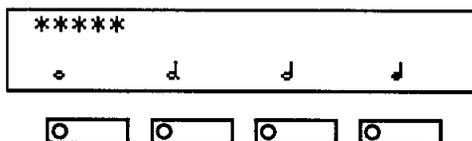
RECORDING

The MULTI MENU above is displayed throughout REC. mode.

The asterisks in the top line mean that the MULTI MENU is currently displaying the end of the data that has been recorded so far for that song. This line will also display the names of chords as you play them.

The notes in the bottom line indicate the durations that can be programmed by using the four corresponding buttons beneath the MULTI MENU display.

The BAR/BEAT (red LED) display shows the current C.S.P. data position within the song in bars and beats. So before you have recorded anything, this display will read "1.1" (bar 1, beat 1). If the first thing you record is a half-note chord, the display advances to "1.3" (bar 1, beat 3, which is the current point at which the next event can be recorded). And so on.

Recording chords

Step 1: On the Lower Keyboard, play a chord that you wish to record.

You can check the chord you play before you program it, because the chord name is displayed in the top line of the MULTI MENU.

```
┌─────────────────────────┐
│ *****        Db7sus4     │
│   ○      ♩      ♪      ♪  │
└─────────────────────────┘
  [○──] [○──] [○──] [○──]
```
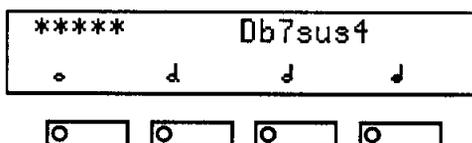
Step 2: While holding the chord, press the button below the MULTI MENU corresponding to the desired chord duration.

A beep is sounded and the chord is recorded.

The BAR/BEAT display is automatically incremented according to the selected chord duration. (If a quarter note is selected, for example, the display changes from "1.1" to "1.2".)

NOTES:

If a button below the MULTI MENU is pressed without pressing a Lower Keyboard chord, the selected duration will be regarded as a rest (No Chord).

If "???" appears in the chord display, only the Pedal Keyboard sound will be produced during playback but the Lower Keyboard (including the Accompaniment) will not be sounded. This is because the identity of the chord could not be determined from the key(s) pressed on the Lower Keyboard.

*NOTE: In order to hear the beeps that the US-1 produces to confirm various operations, the RHYTHM Volume must be up (i.e., at a setting higher than "OFF.").

Recording Registration Numbers

Step 1: Press the Registration Memory button of the Registration Number you wish to record.

While a Registration Memory button is depressed, the display below, including the appropriate Registration Number, appears in the MULTI MENU.
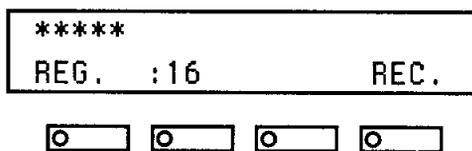
```
*****
REG.  :16            REC.
```
```
|o___|  |o___|  |o___|  |o___|
```

Step 2: Press the REC. button below the MULTI MENU while pressing the appropriate Registration Memory button.
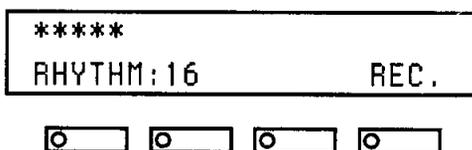
A beep is sounded and the Registration Number is recorded.

The BAR/BEAT display does not change.

Recording Rhythm Patterns

Step 1: Press the button of the Rhythm pattern you wish to record.

While a Pattern button is depressed, the display below, including the appropriate Rhythm Number, appears in the MULTI MENU.

```
*****
RHYTHM:16           REC.
```
```
|o___|  |o___|  |o___|  |o___|
```

The Pattern buttons are numbered 1-8 from left to right in the top row and 9-16 from left to right in the bottom row.

Step 2: Press the REC. button below the MULTI MENU while pressing the appropriate Rhythm pattern button.

A beep is sounded and the Rhythm Number is recorded.

The BAR/BEAT display does not change.

Recording Fill In, Intro., and Ending

Step 1: Press the FILL IN 1, FILL IN 2, or INTRO./ENDING button, depending on which function you wish to record.

While one of these buttons is depressed, a display similar to that for Registration and Rhythm appears in the MULTI MENU, with the name of the button and "REC." in the bottom line. ("INTRO" appears if you press INTRO./ENDING at the beginning of recording; "ENDING" appears if you press INTRO./ENDING at any other time during recording.)

Step 2: Press the REC. button below the MULTI MENU while pressing the appropriate FILL IN or INTRO./ENDING button.

A beep is sounded, indicating the function selected in Step 1 is recorded.

The BAR/BEAT display does not change.

Recording Repeat Marks

Step 1: Press the leftmost *black* key of the Lower Keyboard.

While that black key is depressed, the display below appears in the MULTI MENU.

```
*****
Segno  Coda  D.S.
```

```
[o===] [o===] [o===] [o===]
```
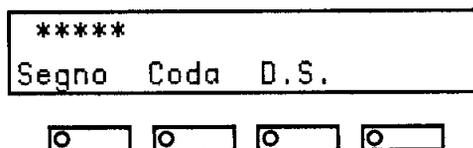
Step 2: Press the button corresponding to the desired Repeat Mark while pressing the black key.

A beep is sounded, indicating the Repeat Mark is recorded.

The BAR/BEAT display does not change.

The Repeat Marks have the following significance:

"Segno" corresponds to an "%" sign or a beginning repeat sign. Use it to mark the beginning of a repeated section.

"Coda" corresponds to a "To Coda" sign or the beginning of a first-ending bracket. Use it to mark the place at which the repeated passage skips ahead to the Coda or second ending.

"D.S." corresponds to the "D.S. al Coda" sign or the ending repeat sign. Use it to mark the end of the repeated passage—that is, the point at which the music goes back to the "Segno," or to the beginning of the song if there is no "Segno."

Anything recorded after the "D.S." constitutes the Coda or second ending (if you do not record a "Coda" Repeat Mark, it constitutes the continuation of the music after the repeated section).

# ENDING RECORDING

Ordinary ending method

By pressing the C.S.P. button with the blinking lamp, you can turn OFF the lamp and end recording.

Special ending method

If you wish to end recording by erasing all the data following the data currently displayed on the MULTI MENU, perform the steps below. (This will not erase the currently displayed data.)

Step 1: Press the leftmost *white* key of the Lower Keyboard.

While that white key is depressed, a display similar to the one below appears in the MULTI MENU.
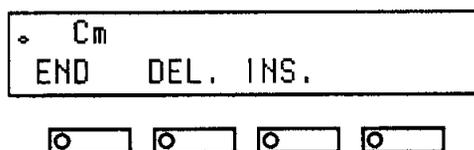
```
o  Cm
END    DEL.  INS.
```

```
[o===] [o===] [o===] [o===]
```

Step 2: Press the END button below the MULTI MENU while pressing the white key.

A beep is sounded, any data following the displayed data is erased, and recording is ended. (The C.S.P. lamp goes OFF.)

In the sample display above, the Cm whole note is recorded but all data following Cm is erased.

LISTENING TO THE DATA WHILE RECORDING

By starting the rhythm, you can listen to the C.S.P. data being recorded.

This procedure can be performed at any time during C.S.P. recording (while a C.S.P. lamp is blinking).

NOTES:

The performance will begin being played from the position of the data currently displayed on the MULTI MENU.

If the rhythm is stopped during this procedure, the data being performed at that time is displayed on the MULTI MENU.

CHECKING THE DISPLAYED DATA

It is possible to check recorded data at any position within the song.

This procedure can be performed at any time during C.S.P. recording (while a C.S.P. lamp is blinking).

To view the data, simply turn the DATA dial.

When turned counterclockwise (to the left), you can view earlier data. This is analogous to the Rewind control on a tape recorder.

When turned clockwise (to the right), you can view later data. This is analogous to the Fast Forward control on a tape recorder.

The top row of the MULTI MENU displays the C.S.P. data.

Chord data is indicated by the duration (note value) followed by the chord name (or "OFF" if no chord was programmed). The chord name is duplicated to the right; this duplicate will change to show whatever chord you play on the Lower Keyboard. This allows you to record over (replace) the chord that is displayed on the left (for more information, see "C.S.P. Editing," pages 49-50).
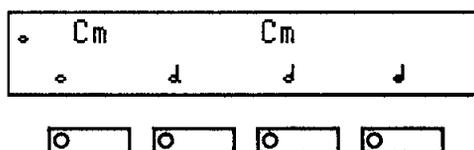
Other data are displayed in the same form in which you recorded them. These include REGISTRATION, RHYTHM, FILL IN, INTRO., ENDING, and REPEAT MARK data.

When the top line shows "*****", it indicates the end of the data that have been recorded so far.

The BAR/BEAT display indicates the position within the song of the data displayed on the MULTI MENU.

RESTRICTIONS ON RECORDING

Restrictions on Rhythm selection

During C.S.P. operation, the MULTI MENU cannot be used to change the assignment of Rhythm patterns to each button.

While recording data, the MULTI MENU display for rhythm selection will not appear even if a Rhythm button is turned ON. Therefore, be sure to perform any necessary changes in the Rhythm either before or after recording the data to C.S.P.

Restrictions on the setting of Registration Names

During C.S.P. operation, the MULTI MENU cannot be used to change the Registration Memory Name.

While recording data, the MULTI MENU display for setting a Registration Memory Name will not appear even if a Registration Memory button is turned ON. Therefore, be sure to perform any necessary changes in the Registration Names either before or after recording the data to C.S.P.

Restrictions on the MULTI MENU functions

Most panel buttons are provided with a MULTI MENU function. But during C.S.P. operation, these MULTI MENU functions will operate only while the button corresponding to the desired function is held down.

For example, to change the UPPER KEYBOARD ORCHESTRAL Voice selection from STRINGS 1 (the current Voice) to STRINGS 7, press the STRINGS button while you turn the DATA dial to select STRINGS 7. (REMINDER: If you wish such a change to remain in effect upon playback of the sequence, you must store it in the Registration Memory—see page 38 for instructions.)

When you release the STRINGS button, the C.S.P. display returns to the MULTI MENU.

BAR/BEAT DISPLAY DURING RECORDING

During C.S.P. recording, the BAR/BEAT display indicates the position of the data within the song, in bars and beats.

Once the MARCH Rhythm pattern is selected, for example, even if the rhythm is changed to WALTZ during the recording of data, the calculation of the displayed data position will be based on four beats per measure as long as the new Rhythm Pattern is not entered into the sequence.

PRECAUTIONS ON CHANGING THE NUMBER OF BEATS

If you record a Rhythm Pattern or Registration in which the meter changes within a measure, the BAR/BEAT display will show "unnatural" data positions.

If the meter is always changed at the beginning of a measure (when the Beat Number is "1" in the BAR/BEAT display), the display will accurately reflect the actual data position based on the change in meter.

As long as the time signature remains the same, recording of the Rhythm Patterns or Registrations in which the Rhythm Pattern changes within a measure will not affect the way data positions appear in the BAR/BEAT display.

C.S.P. Editing

You can change (edit) data during recording, by turning the DATA dial to the location you desire and entering the new data. If you enter a chord, rest (no chord), or other data, it will record over ("overwrite") the data currently displayed in the top line of the MULTI MENU.

But after you have finished recording, you can go back and edit with a greater range of control. You do this from a special EDIT mode.

ENTERING EDIT MODE

Step 1: Press the C.S.P. button for the sequence you wish to edit. (The lamp of the pressed button lights up and the display below appears.)

```
C.S.P. MODE
PLAY   REC.   EDIT
```
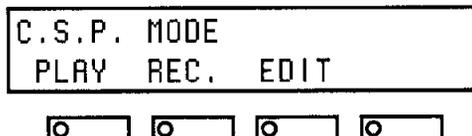
Step 2: Press the EDIT button below the MULTI MENU.

A beep is heard, the BAR/BEAT display will read "1.1", and the MULTI MENU will show the first item of data in the recorded sequence.

Step 3: Turn the DATA dial until the data you wish to edit is displayed on the MULTI MENU.

Step 4: Edit the data by using one of the four EDIT mode operations: OVERWRITING, DELETION, INSERTION, or END. These are described on the following pages.

OVERWRITING

OVERWRITING replaces the displayed data with new data.

Follow the same steps as in the section on "Recording" (pages 44-46) to record the necessary data.

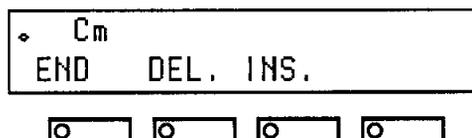The displayed data is overwritten with the new data.

The MULTI MENU changes to display the next data in the sequence.

DELETION

DELETION erases the displayed data.

Step 1: Press the leftmost *white* key of the Lower Keyboard.

While that white key is depressed, a display similar to the following appears in the MULTI MENU.

```
⋄  Cm
END    DEL.  INS.
```

Step 2: Press the DEL. button below the MULTI MENU while pressing the white key.

A beep is sounded, the displayed data is deleted, and any subsequent data is shifted forward accordingly.

The MULTI MENU changes to display the next data in the sequence. (In the sample display above, the Cm whole note is deleted and the next data will be displayed.)

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INSERTION

INSERTION adds new data immediately BEFORE the displayed data.

Step 1: Press the leftmost *white* key of the Lower Keyboard.

> While that white key is depressed, a display similar to the following appears in the MULTI MENU.

```
 ° DM7
 END    DEL.  INS.
```
```
[o___] [o___] [o___] [o___]
```
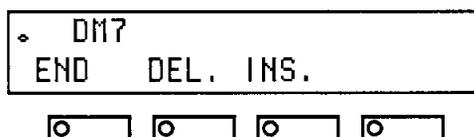
Step 2: Press the INS. button below the MULTI MENU while pressing the white key.

> When the INS. button is pressed, Insert mode is entered. (You can release the white key after pressing the INS. button.)

> "INS" appears at the top right of the MULTI MENU to indicate that insertion is now possible.

```
 ° DM7        DM7      INS
    °     ♩     ♩       ♩
```
```
[o___] [o___] [o___] [o___]
```
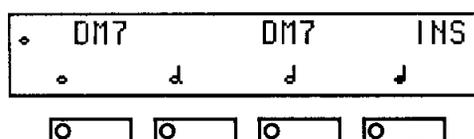
Step 3: Follow the steps in the section on "Recording" (pages 44-46) to record the necessary data.

> The data just recorded is added BEFORE the displayed data so that all subsequent data is shifted back accordingly.

> The MULTI MENU does not change except that the "INS" display is cleared.

NOTES:

Insert mode is cancelled after the insertion of each item of data. (The "INS" display is cleared.)

To insert multiple data, repeat Steps 1-3 for each item of data to be inserted.

If you enter Insert mode by mistake, you can press the INS. button while pressing the leftmost white key of the Lower Keyboard again to cancel Insert mode. (The "INS" display is cleared and the data is not changed.)

END

END allows you to insert a new ending point for the sequence.

Step 1: Press the leftmost *white* key of the Lower Keyboard.

> While that white key is depressed, a display similar to the following appears in the MULTI MENU.

```
 ° DM7
 END    DEL.  INS.
```
```
[o___] [o___] [o___] [o___]
```
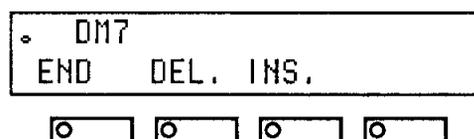
Step 2: Press the END button below the MULTI MENU while pressing the white key.

> The data that were displayed in the MULTI MENU, and all subsequent data in the sequence, are erased. "*****" appears in the top line of the MULTI MENU, indicating the end of the sequence.