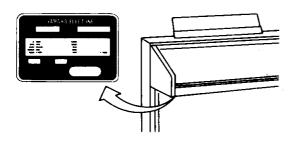
YAMAHA ELECTONE AME - 300 ME - 200 ME - 200

WELCOME TO THE MUSICAL WORLD OF YAMAHA

INSTALLATION AND MAINTENANCE

Installation

- 1. WARNING: Do not allow your Electone or its bench to rest on or be installed over power cords of any type. An electrical shock and/or fire hazard could possibly result from this type of improper installation
- 2. WARNING: Do not place objects on your Electone power cord or place it in a position where anyone could trip over, walk on or roll anything over it. An improper installation of this type creates a personal injury/fire hazard possibility.
- 3. Main Power Supply Verification: Your Electone has been manufactured specifically for the main supply voltages used in your area. If you should move, or if any doubt exists, please consult your local authorized Electone dealer for instructions. The main supply voltage is printed on the name plate.



- 4. Environment: Your Electone should not be installed in a position that exposes the cabinet to direct sunlight or air currents having high humidity or heat levels. This type of installation can cause contact oxidation, case joint separation, and cabinet finish problems.
- 5. Electromagnetic Interference (RFI): Your Electone 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.

Maintenance

- SERVICE: Your Electone contains no user serviceable components. Refer all service to qualified service technicians only.
- BENCH STRUCTURAL INTEGRITY: If any motion or an "unsteady" sensation is noted in the bench, please check its structural integrity immediately. Discontinue use until any and all discrepancies are resolved.
- 3. CLEANING/CARE
 - A) GENERAL: DO NOT use chemically harsh (i.e., alcohol, paint thinners, etc.) or abrasive cleaners on any portion of your Electone.
 - B) KEYS/CONTROL PANEL: When cleaning the keys and control panels of your Electone, please use a soft absorbenttype cloth that has been dampened with a very mild solution of liquid soap and lukewarm water.
 - C) CABINET/BENCH: Clean the cabinet portions of your Electone with a slightly dampened cloth containing a neutral cleaning agent. The cleaning agent selected should not contain a high wax content or any other substance that would have a tendency to form a "build-up" on the cabinet.
- **4. Vinyl Products:** Do not set vinyl items, (i.e., headphones, vinyl doilies, etc.) on the finished surfaces of your Electone or use polyvinyl material to cover the unit for any extended period of time. A chemical reaction many occur between the finish chemical and those contained in the polyvinyl products, resulting in a permanent marring of the finish.

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 the manufacturer. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty terms may be denied if the unit is/has been modified. The warranty of title (patent infringement, etc.) will not be defended by the manufacturer in the area(s) that relate to the modification. Implied warranties may also be affected.

Introduction

Thank you for purchasing an ME-Series Yamaha Electone. The ME-Series is a totally new type of Electone, utilizing the very latest in electronic technology, made possible by Yamaha's experience as a musical instrument manufacturer for nearly a century. Some of the many exciting features included are the Chord Sequence Programmer, which lets you preprogram the accompaniment (CHORDS/BASS) before you actually begin to play the melody; the Registration Menu which offers you a choice of 16 complete registrations at a touch of a single button; and the Voice Menu which provides an additional 22 voices that may be transferred to any voice section you choose.

Thanks to these outstanding features, your playing potential becomes almost limitless. In addition, the basic performance features such as sound authenticity, auto rhythm and auto accompaniment functions have also been greatly improved,

providing you with an instrument which offers you whole new worlds of musical expression.

This manual has been designed to help you get acquainted with your ME-Series Electone and to bring its fascinating possibilities easily within your reach. We recommend that you actually sit at your Electone while carefully reviewing these materials.

Thanks again for choosing Yamaha. Your fun has just begun! Before you begin to explore the vast array of resources your Electone makes available to you, please take a moment to read the "Installation and Maintenance" section.

Contents

I.	Before Playing	Page
	Let's Produce Some Sounds	2
II.	The Basic Features of your Yamaha Electone	;
	1. Now, Let's Create Some Registrations	3
	2. Using Effects for an Even Richer Sound	5
	3. Adding Rhythm	6
	4. Having Fun With Automatic Accompaniment	
	5. Harmonizing the Melody	10
	6. Memorizing Your Favorite Registrations	11
	7. Transferring Information to a Pack	12
III.	What Multi Menu Can Do For You	
	1. You Can Recall 16 Different Registrations	13
	2. 22 Additional Voices Can be Trasnferred	
	To The Control Panel	14

	3.	You Can Also Memorize Vibrato and	
		Sustain Effects	15
	4.	Transposing	16
	5.	Programming the Accompaniment	17
		Transferring Information to a Cassette	
IV.		seful Information	
	•	Accessory Jacks	22
		Electromagnetic Interference	
		Troubleshooting	
		Specifications	
		MIDI Implementation Chart	

Let's Produce Some Sounds

- 1 First of all, make sure that the plug is firmly inserted in the wall power outlet.
- 2 Turn the Electone "On" by pressing the POWER SWITCH.



3 Set the MASTER VOLUME control.

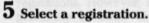
This control lets you adjust the overall volume of your instrument. For now, place it in about a 2:00 position.

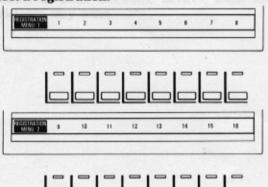




4 Place your right foot on the EXPRES-SION PEDAL, which controls the overall volume while playing, for increased musical expression.

Push forward with your toes to make it louder, and back with your heel to make it softer.





Now, let's operate the REGISTRATION MENU which provides a choice of 16 registrations, each available at the touch of a single button. Rotate the MULTI MENU thumbwheel until you see one of the panels illustrated above, then press one button (numbered 1, 2, 3...16) on the selected panel. (See page 13 for additional details.)





6 Play some notes.

Now press some notes on the upper or lower keyboard. You will hear some of the sounds available on your new Electone.

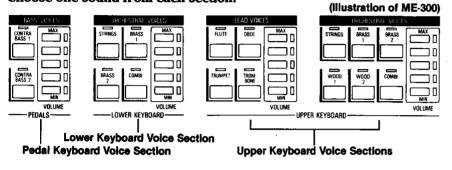


1. Now, Let's Create Some Registrations

VOICE SECTIONS

Both the ME-300 and the ME-200 have two voice sections for the upper keyboard, one voice section for the lower keyboard, and one for the pedal keyboard.

1 Choose one sound from each section.



ORCHESTRAL VOICES: These sounds are polyphonic, which means that multiple notes can be played simultaneously.

LEAD VOICES: This section contains solo instruments such as flute, and trombone. These sounds are monophonic, which means that only one note may be played at any given time.

BASS VOICES: This section consists of two contrabass sounds. In order to hear your pedal sounds, please be sure that "Single Finger" and "Fingered Chord" (Auto Bass Chord Section) is "Off".

2 Set the volume.

Please set the volume to the desired level for each of these sections. Your Electone lets you select one of five volume levels—the bottom one (MIN) being OFF and the top one (MAX) being full volume.

In case you do not need the sound from a particular Voice Section, set the volume level of that section to its bottom position (MIN).



3 Play the keyboards.

The voices you have selected will be produced as you play each keyboard. Let's change the voices to other settings and compare the sounds.

[Number of notes able to be produced on each keyboard]

Upper/Lower keyboard: Up to 7 notes can be played simultaneously on each keyboard.

Pedal keyboard and Lead Voices: Normally, only one note can be played at a time. When more than two notes are played at the same time, the note farthest to the right has priority.

[Memory when power is off]

When the power is turned off, the control panel settings (Registration) will be stored in memory. The memorized registration will automatically be recalled when the power is again turned on.

[Additional Information]

- Sounds from Voice Menus 1, 2 and 3 can be transferred from the Multi Menu to any of the grey buttons in the voice sections. (See page 14 for details.)
- In addition to the "ORCHESTRAL VOICES" section, the lower keyboard also has an ARPEGGIO CHORD section for producing rhythmic accompaniment. (See page 4 for details.)
- When you wish to produce sound by playing the pedal keyboard, turn off the SINGLE FINGER and FINGERED CHORD functions of AUTO BASS CHORD.

REGISTRATIONS FOR BEGINNERS

By pressing a button, you can call to your Electone one of five Basic Registrations (five sets of voices) which are perfect for practicing your playing.

1 First, set the POWER switch to OFF. Next, set the POWER switch back to ON while depressing the red Memory [M.] button.

While depressing the red Memory button of the REGISTRATION MEMORY section, set the POWER switch to ON.

2 Press one numeric button from 1 to 5.

The lamp of the pressed button will light up, and the corresponding Basic Registration will automatically be set at the Electone.

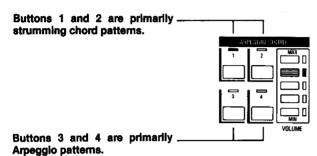
[Voices of the Basic Registrations]

	1	2	3	4	5
Sound	String Ensemble	Brass Ensemble	Flute/Piano Ensemble	Cosmic Sound	Synthesizer Sound
Upper keyboard	Strings	Brass	Flute	Cosmic	Synth Brass
Lower keyboard	Strings	Brass	Piano	Cosmic	Synth Brass
Pedal keyboard	Contra Bass	Tuba	Contra Bass	Cosmic	Synth Bass

ARPEGGIO CHORD

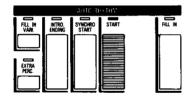
This feature provides harmonic background accompaniment that is synchronized with the rhythm based on the notes you play on the lower keyboard.

1 Using ARPEGGIO CHORD.



Choose one of these pattern selectors and set the desired volume. If ARPEGGIO CHORD is not desired, set its volume level to the bottom position (MIN).

${f 2}$ Select an auto rhythm and start it.

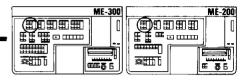


Choose a rhythm pattern and set the desired volume and tempo. Now turn the auto rhythm on. (See page $\,6\,$ for details.)

3 Press some keys on the lower keyboard.



You will now hear an "ARPEGGIO CHORD" pattern based on the notes you have pressed, played at the same tempo (speed) as the rhythm unit. Try some of the other patterns, as well as different rhythms, to hear some of the numerous possibilities.



[ARPEGGIO CHORD patterns]

The Arpeggio Chord patterns and the instruments used in each pattern will change according to the rhythm selected to ensure that an appropriate accompaniment is obtained for each rhythm.

[Use this feature with Auto Bass Chord, tool] Arpeggio Chord can also be used with the Auto Bass Chord system. The Automatic Bass pattern will change as you move from one Arpeggio Chord pattern to another. When the MEMORY button is pressed, the Arpeggio Chord accompaniment will continue even if you remove your fingers from the lower keyboard. (See page 8 for details.)

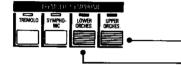
- •Since this feature is synchronized with the rhythm, please be sure to start the auto rhythm in order to hear the Arpeggio Chords.
- When the FILL IN or ENDING buttons are pressed, the Arpeggio Chord pattern is also automatically changed. (See page 7 for details.)

2. Using Effects for an Even Richer Sound

TREMOLO/SYMPHONIC (ME-300only)

These effects add another dimension to the Upper and Lower ORCHESTRAL VOICES sections.

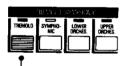
- 1 Choose one sound from the ORCHESTRAL VOICES Section of the upper keyboard, and one sound from the corresponding section for the lower keyboard. Then set the volume levels.
- ${f 2}$ Press the UPPER ORCHES. and LOWER ORCHES. buttons.



This switch adds the effect to the upper keyboard.

This switch adds the effect to the lower keyboard.

3 Add the TREMOLO effect. Now play some keys on both the upper and lower keyboards.



TREMOLO simulates the sound of a rotating speaker system. (fast speed)

4 Add the SYMPHONIC effect. Now, play some keys on both the upper and lower keyboards.



SYMPHONIC produces an "electronic" animation that gives the impression that a large number of instruments are playing together.

[CHORUS effect]



When the Tremolo and Symphonic effects are OFF, a CHORUS effect will be produced. (slow tremolo)

[Additional Information]

 There are other effects designed to enhance your playing. See page 15-16 for information regarding USER VIBRATO and SUSTAIN.

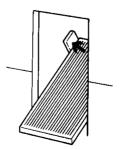
GLIDE (ME-300 only)

This effect allows you to temporarily lower the pitch of a LEAD VOICES sound by approximately one-half step.

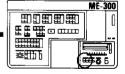
- 1 Turn both FOOT SWITCH related selectors "OFF". (See page 7.)
- 2 Select a LEAD VOICES sound, then move the foot switch to the left while holding some notes on the upper keyboard.

While the foot switch is being held to the left, the pitch of the LEAD VOICE selected (on the upper keyboard) is lowered by approximately a halfstep. When the foot switch is released, the pitch slowly returns to normal.





- This effect is particularly useful in the simulation of acoustic instruments, that are customarily played using a glide effect...such as trombone, guitar, and violin.
- While the Glide effect is on, the Vibrato effect applied to LEAD VOICES becomes inactive.



3. Adding Rhythm

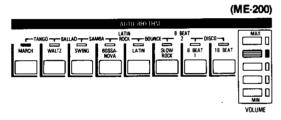
AUTO RHYTHM

This effect automatically produces various rhythm patterns consisting of authentic percussion sounds. It also has functions, such as FILL IN and INTRO./ENDING, for varying the rhythm.

1 Select one of the rhythm patterns and set the desired volume level.



The ME-300 has 16 different rhythm patterns. Choose one pattern from among the above pattern selectors.



The ME-200 has 15 distinct rhythm patterns. To choose one of the eight patterns displayed on the bottom row (MARCH, WALTZ, SWING, etc.), press the appropriate button. To choose one of the seven patterns displayed on the top row (TANGO, BALLAD, SAMBA, etc.), simultaneously press the two adjacent buttons below the desired pattern name (both of their indicator lamps will be illuminated.) (For example, to choose TANGO, simultaneously press the MARCH and WALTZ buttons.)

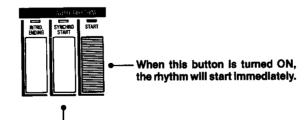
${f 2}$ Adjust the tempo (Speed) of the rhythm.

This knob is used to control the speed of the rhythm. The tempo will increase if you turn the knob clockwise and will decrease when you turn it counter-clockwise.

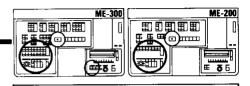


3 Turn the rhythm on.

if you turn this button ON, the rhythm will wait and start with you when you play a note on the lower (or pedal) keyboard.



Once the rhythm has been started, pressing one of these buttons again will stop the rhythm.



[TEMPO lamp]



Once the rhythm has been activated, this lamp will flash at the first beat (downbeat) of each measure.

In addition, when SYNCHRO START is in use, this lamp will act as a silent visual metronome, indicating the exact tempo (in quarter notes) until the rhythm is started.

[Numerals on TEMPO knob]

Please refer to these values as a "yardstick" for setting the speed of the rhythm.

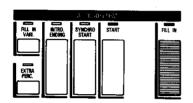
[Additional Information]

Since Synchro Start enables the rhythm and accompaniment to be started at the same time, it is very convenient when playing accompaniment using Auto Bass Chord or Arpeggio Chord. (See page 8.)

FILL IN

- 1 Start the rhythm.
- ${f 2}$ Press the FILL IN switch when you want to add this feature.

FILL IN provides a variation to the basic rhythm pattern. At the time you press the switch, the Fill In pattern will play until the end of that measure, and the rhythm will automatically return to the original pattern at the start of the next measure.



[FILL IN VARIATION]



This feature offers you an alternative Fill In pattern.

[Additional Information]

- Should you desire a longer Fill In pattern, hold the FILL IN button.
- If you press the FILL IN button before starting the rhythm, the Fill In pattern will act as an intro.

INTRO./ENDING

1 Press the INTRO./ENDING switch and then press the start switch.

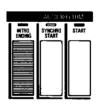
You will now hear a one measure rhythm introduction.

INTRO SYNCHO START START

•INTRO./ENDING can be used even when Synchro Start has been used to start the rhythm.

2 When you are almost finished with a song, press the INTRO./ENDING switch.

At the moment this switch is pressed, an ending pattern (two measures maximum) is played. As soon as the ending pattern is completed, the rhythm will stop automatically.



EXTRA PERCUSSION

This feature will add additional percussion sounds to the normal rhythm patterns.





 Some of the instruments added in Extra Percussion are hand clap, tambourine and cow bell, and vary from rhythm to rhythm.

FOOT SWITCH (ME-300 only)

 ${f 1}$ Press one of the FOOT SWITCH selectors and start the rhythm.

This allows you to stop (and restart) the rhythm with the foot switch.



This will allow you to add a Fill In pattern with the foot switch.

2 Move the Foot Switch to the left.

At the time the Foot Switch is moved, the function selected in (1) will be immediately performed.

[ENDING control]

If both the RHYTHM STOP and RHYTHM FILL IN buttons are on, and the foot switch is moved to the left, you will obtain an ending pattern and then the rhythm will stop.



When both FOOT SWITCH selectors are off, the Glide effect can be obtained. (See page 5 .)

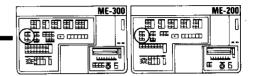
[Additional Information]

•When RHYTHM STOP is used to stop the rhythm, the foot switch can also be used to restart it again. The lamp above the STOP button will flash until the rhythm is reactivated.

4. Having Fun With Automatic Accompaniment

AUTO BASS CHORD

This function automatically produces chord and bass accompaniment. There are three different ways that you can use this feature, and we're sure that you'll find one just right for you.



SINGLE FINGER

This feature allows you to obtain many different chords (and bass) by using just one finger.

1 Press the button labeled SINGLE FINGER.



(Illustration of ME-300)

2 Select an Arpeggio Chord pattern and your desired volume level. (See page 4.)

Arpeggio Chord provides the rhythm accompaniment for A.B.C. You can also add other lower keyboard voices to your accompaniment.



3 Select a pedal sound and your desired volume level. (See page 3.)

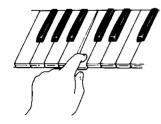


4 Select a rhythm. (See page 6.)

Once you've chosen a rhythm pattern, adjust the tempo to a speed comfortable for you. Then set your desired volume level and turn on SYNCHRO START.



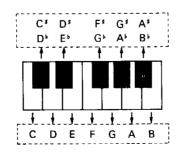
5 Press a key on the lower keyboard.



You will now hear a major chord and bass accompaniment in synchronization with the rhythm.

The note you have played is called the "root". A chord derives its name from its root such as C major, F major, etc.

[Relationship between the lower keyboard notes and corresponding major chords]



[Let's try playing other chords!]

Minor chords: Simultaneously press the root (name) as well as any black key to the left of it. (Example: Am)



Seventh chords: Simultaneously press the root (name) as well as any white key to the left of it. **(Example: G7)**



Minor seventh chords: Simultaneously press the root (name) as well as any black key and any white key to the left of it.

(Example: Gm7)



- When you change Arpeggio Chord patterns, the bass pattern will automatically be changed.
- With Single Finger, the chord produced will sound in the same octave regardless of where it is played on the lower keyboard.
- When you want to change chords, please lift your finger completely from the lower keyboard for a moment before pressing the next key.

MEMORY

This feature allows the chord and bass accompaniment to continue even after you have lifted your fingers from the lower keyboard.



 Memory is linked with the auto rhythm and therefore will operate only if the rhythm is on (whether or not Auto Bass Chord is in use).

(Illustration of ME-300)

FINGERED CHORD

This feature permits you to play a variety of chords and will automatically provide the proper bass note.

1 Press the button labeled FINGERED CHORD.



2 Select an Arpeggio Chord pattern and your desired volume level. (See page 4.)

You can also add other lower keyboard voices to your accompaniment.

 $oldsymbol{3}$ Select a pedal sound and your desired volume level. (See page 3.)

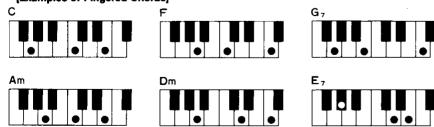
4 Select a rhythm. (See page 6.)

Once you've chosen a rhythm pattern, adjust the tempo to a comfortable speed and set your desired volume. If you use SYNCHRO START, the automatic accompaniment and rhythm will start when you play a chord on the lower keyboard.

5 Play a chord on the lower keyboard. You will now hear a chord and bass accompaniment in synchronization with the rhythm. The chord you play forms the basis for the automatic accompaniment. You can also add Memory, if you like.



[Examples of Fingered Chords]



With Fingered Chord, a variety of other chords becomes available to you, above and beyond the four basic types obtainable with Single Finger.

Your Electone will automatically play the proper bass accompaniment to whatever chord you play.

[CUSTOM A.B.C.]

Custom A.B.C. allows you to play a chord and pedal, and it will automatically create accompaniment patterns for you!

1) Press the button labeled CUSTOM A.B.C.



- 2) Choose instruments for the lower keyboard (including Arpeggio Chord, if you like) and the pedal keyboard. Set all volumes to the level of your choice.
- 3) Select a rhythm.
- 4) Play a chord on the lower keyboard and press one note on the pedal keyboard.

You will now hear a chord and bass accompaniment in synchronization with the rhythm. Since the note pressed on the pedal keyboard can be any note (i.e., it does not have to be the "root" of the chord played on the lower keyboard), more sophisticated automatic accompaniments become available to you.

- When Auto Bass Chord is used without the auto rhythm, your Electone will still provide the chords and bass, but the background will be stationary (not "animated").
 - Note: Arpeggio Chords will not work without rhythm. (See page 4.)
- •Some of the chords available in the Fingered Chord mode are the following: major, minor, 7th, minor 7th, major 7th, dim, aug, aug7, sus4, 7sus4, 6th, min7-5, major-5, 7-5, min6.
- When using Custom A.B.C., the MEMORY button will be used to memorize only the bass accompaniment.
- •In the Custom A.B.C. mode, when playing pedals that are not necessarily a part of the chord, select from the upper row of Arpeggio Chord buttons (strumming patterns).

5. Harmonizing the Melody

MELODY ON CHORD

With this function, single note melodies are transformed into beautiful harmonies automatically, enhancing your playing even further.

1 Press one of the MELODY ON CHORD buttons.



 ${f 2}$ Select an instrument to play the melody. (See page 3.)

Select the sound you want to perform your melody from among the voices available on the upper keyboard, and set the volume level.

3 Select your Harmony voices.



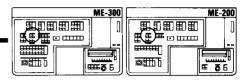
Select the sound with which you want to perform your melody from among the voices available on the upper keyboard, and set the volume level.

4 Select a voice for the lower keyboard. (See pages 3 and 4.)
Once you've chosen one, remember to set your volume level.

5 Play a chord on the lower keyboard and the melody on the upper keyboard.

Harmonies will be automatically added to the melody, and your playing will sound more professional than ever!





[When both Buttons 1 and 2 are turned on]



If MELODY ON CHORD 1 and 2 buttons are used simultaneously, you will obtain a three note harmony that is somewhat reminiscent of "open harmony".

[Use this feature with Auto Bass Chord tool] MELODY ON CHORD 1 and 2 can also be used with A.B.C. For example, if you use Single Finger, the chords automatically produced (by one finger) will be added as harmonies to the melody. If Memory and Auto Rhythm are in use, the harmonies with continue even after you have lifted your fingers from the lower keyboard.

- •The automatically added harmony sound is derived from chords played on the lower keyboard. Therefore, no harmony will result when you play only the upper keyboard.
- When a melody is played on the lower range of the upper keyboard, harmony sounds will sometimes not be produced.

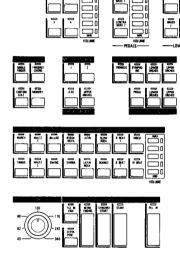
6. Memorizing Your Favorite Registrations

REGISTRATION MEMORY

This feature lets you store some of your favorite sounds in memory and have them conveniently accessible at the touch of a button.

How to Memorize a registration i

 ${f 1}$ By using the control panel, set up your desired registration.



It is possible to memorize most of the settings on the control panel, including the various VOICE Sections, ARPEGGIO CHORD, patterns and TEMPO of the AUTO RHYTHM, AUTO BASS CHORD, and MELODY ON CHORD. In addition, such settings as the Voice Menu sounds transferred to the control panel, User Vibrato, and Sustain settings can also be memorized.

While pressing the red M. (Memory) button, press the numbered button (1, 2, 3, 4, 5) where you wish to store the sound.

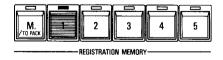


The lamp above the numbered button you pressed will flash briefly, indicating that this registration has been memorized here. Store your other favorite registrations in the same way, utilizing the remaining numbered buttons.

How to Recall a Registration From Memory



l Press one of the numbered buttons.

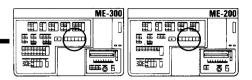


As soon as a numbered button is pressed, the registration that was placed in memory will instantly be set up on the control panel.

2 Additional registrations can be recalled by pressing the appropriate numbered buttons.



Whenever you press a different numbered button, the control panel setting will instantly change. You can easily see what settings have been memorized.



[The Memorization Operation and Button Lamps]



Though the lamp of one of Registration Memory buttons 1-5 is always lit, the memorization operation for registration data can be performed regardless of the ON/OFF status of the lamps.

When memorizing a registration to a lit button: The new registration is stored at the lit button. The pertinent lamp will flash during the memorization process, then return to its lit status. When memorizing a registration to an unlit button: A new registration is stored at that unlit button which already contains registration data, but the memory contents of the lit button remains unchanged. The lamp of the unlit button will flash only during the memorization process, then return to its unlit status.

[Altering a Registration]

Any registration may be altered to any extent by simply changing the desired controls.

Even if you have changed the control panel settings, the memorized registration will not be affected and will remain as it was programmed. If you wish this "altered" registration to be stored in memory, simply hold M. (Memory) button, and press the numbered button (1,2,3,4,5) where you wish to store it.

[Protecting Memorized Data]

The data stored in Registration Memory will be retained for at least a week, even when the power is turned off. The memorized data can also be stored by transferring it to a cassette tape. (See pages 21.)

- Registration Memory will not affect the following: Start, Synchro Start, Fill In, Intro/ Ending, C.S.P., Transposition, Cassette, Master Volume, Expression Pedal.
- When using C.S.P., the data stored in Registration Memory will be replaced. (See page 19.)
- When a registration is stored in one of the numbered buttons, the previous contents of that respective memory are automatically replaced.
- •If the power is turned off for a long period of time, the sounds stored in the Registration Memory Section will be automatically replaced by the first four sounds from the Registration Menu. The previous registrations will be erased.

7. Tranferring Information to a Pack

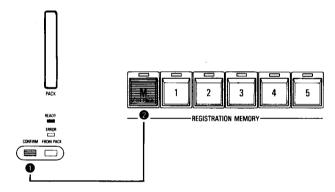
PACK

It is possible for the information of Registration Memory and of C.S.P. (see Page 17) that has been memorized into the electone to be transferred to a RAM Pack (optional). Also, the information transferred to a RAM Pack can be transferred back to the electone.

How to Transfer Information to a RAM Pack (TO PACK)

- 1 Memorize the desired information into Registration Memory or C.S.P. (See Pages 11 and 17)
- **2** Insert a RAM Pack (RP-3) into the electone.

 Insert the RAM Pack securely into the electone so that its top side (with the label) faces left. The green READY lamp will light up.
- 3 While depressing the CONFIRM button, press the TO PACK button.



With the CONFIRM button pressed down, press the TO PACK button. (The TO PACK button also functions as the MEMORY button of Registration Memory.)

The READY lamp will flash several times to indicate that the electone's information has been transferred to the RAM Pack.

How to Return Information from the RAM Pack (FROM PACK)

1 Insert the RAM Pack, which contains the transferred information, into the electone.

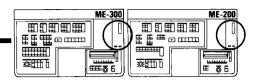
The Green READY lamp will light up.

2 While depressing the CONFIRM button, press the FROM PACK button.

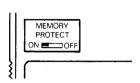
With the CONFIRM button pressed down, press the FROM PACK button.

The READY lamp will flash to indicate that the information of the RAM Pack has been transferred back to the electone.





[MEMORY PROTECT]



If you wish to prevent the information that was transferred to the RAM Pack from being erased, set the MEMORY PROTECT switch of the RAM Pack to "ON". Even if you later unintentionally attempt a TO PACK operation, the information previously memorized into the RAM Pack will be protected without the new information being memorized. (The FROM PACK operation, however, can be executed.) Furthermore, if you wish to memorize new data onto that RAM Pack at a later time, just return the MEMORY PROTECT switch to "OFF".

[If the ERROR lamp flashes]

In the following cases, the red ERROR lamp will flash for about one second and the alarm will sound three times. Please check that you are using the proper operating procedures.

- When an unused RAM Pack is first inserted into the electone. (In this case, press the CONFIRM button then perform the TO PACK operation.)
- •When the Pack is not completely inserted.
- •When a TO PACK operation is attempted while the MEMORY PROTECT switch of the RAM Pack is set to "ON".
- •When the information memorized in the RAM Pack is for an electone of a different model.

[Precautions on RAM Pack Use]

- •When a TO PACK operation is performed, the previously stored information in that RAM Pack is erased and written over with the new information. When the FROM PACK operation is performed, the previously stored information in the electone is erased and written over with the information from the RAM Pack.
- When transferring information memorized in a RAM Pack back to an electone, be sure that an electone of the same model is being used.

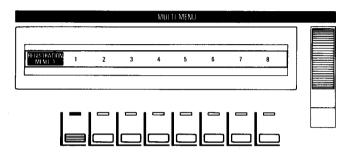
1. You Can Recall 16 Different Registrations

REGISTRATION MENU

These two menu pages offer 16 preprogrammed registrations that can be used directly from the Multi-Menu, all available at the touch of a button.

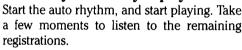
REGISTRATION MENU 1	1	2	3	4	5	6	7	8	
REGISTRATION MENU 2	9	10	11	12	13	14	15	16	

${f 1}$ Press one of the buttons in REGISTRATION MENU 1 or 2.



That registration will now be set up on the control panel (including voices on each keyboard, volumes, rhythm selection, effects and A.B.C.)

2 ...and you're ready to play! Start the auto rhythm, and start playing. Take





[Altering a Preprogrammed Registration]

When using the Registration Menu, any registration may be altered to any extent by simply changing the selected controls. In fact, you may want to store the "altered" Registration as new registrations in the Registration Memory.

[Additional Information]

- The Registration Menu not only uses the sounds normally available on the control panel, but in some cases, the sounds from the Voice Menus have been transferred to the "grey" buttons. (See page 14.)
- •All Registration Menu settings have been preprogrammed using the Single Finger (Chord) mode. To use Fingered Chord or Custom A.B.C., press the respective button to alter the setting.

[The preset sounds]

REGISTRATION MENU 1	Music Style	Rhythm used
. 1	March/Polka	MARCH
2	Pipe organ	(8 BEAT 1)
3	Woodwind ensemble	MARCH
4	Jazz organ	BALLAD
5	Jazz combo 1	SWING
6	Jazz combo 2	BOSSANOVA
7	Big band 1	SWING
8	Big band 2	BALLAD

REGISTRATION MENU 2	Music Style	Rhythm used
9	Country	MARCH
10	String ensemble	WALTZ
11	Pops ensemble 1	8 BEAT 1
12	Pops ensemble 2	LATIN ROCK
13	Pops ensemble 3	SAMBA
14	Fusion sound 1	16 BEAT
15	Fusion sound 2	DISCO
16	Fusion sound 3	BOUNCE

2. 22 Additional Voices Can be Transferred To The Control Panel

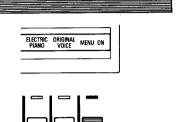
VOICE MENU

You can choose your favorites from among these 22 voices and transfer them to the grey buttons on the control panel.

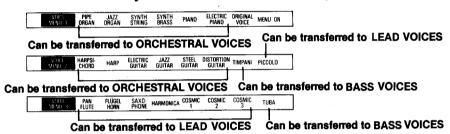
VOICE MENU 1	PIPE ORGAN	JAZZ ORGAN	SYNTH String	SYNTH Brass	PIANO	ELECTRIC PIANO	ORIGINAL VOICE	MENU ON
VOICE MENU 2	HARPSI- CHORD	HARP	ELECTRIC Guitar	JAZZ GUITAR	STEEL GUITAR	DISTORTION GUITAR	TIMPANI	PICCOLO
VOICE MENU 3	PAN FLUTE	FLÜGEL Horn	SAXO- PHONE	HARMONICA	COSMIC 1	COSMIC 2	COSMIC 3	TUBA

How to Transfer Sounds

1 Display the VOICE MENU 1 panel and turn on the MENU ON button.



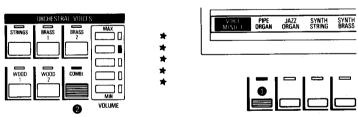
 ${f 2}$ Decide which voice you wish to transfer and where you want to transfer it.





The grey buttons are located in the lower right corner of the voice sections. You can transfer any voice you want to any voice section.

3 While holding the button corresponding to the voice you'd like to transfer, press one of the grey buttons to indicate where you want to put that sound.



The light above the grey button you just pressed will start to flash, indicating that the sound has been transferred. Now, try transferring other voices in a similar manner.

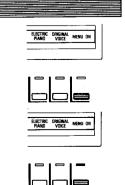
Cancelling and Recalling [

1 Turn off the MENU ON button.

At this time, the voices transferred to the grey button (in the various voice sections) will be cancelled and these grey buttons will now contain the voices indicated above each of them.

2 Turn on the MENU ON button.

The VOICE MENU sounds that were previously transferred to the grey buttons will now be recalled. These sounds will remain as transferred regardless of the page displayed on the MULTI MENU.

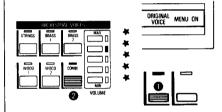


[Checking the transferred Voices]

When the MENU ON button is on, and you press a grey button, the voice which has been transferred to that grey button will illuminate on one of the pages of VOICE MENU. If no voices have been illuminated on that Voice Menu, be sure to check the other Voice Menus.

If no voice had been transferred to that grey button, the light corresponding to "ORIGINAL VOICE" will illuminate, meaning that the sound indicated above that grey button has not been changed.

[ORIGINAL VOICE]



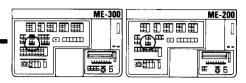
By pressing this button, you can cancel the VOICE MENU sounds transferred to the grey buttons, one at a time, thereby returning these grey buttons to the voice indicated on the control panel. To operate, hold the ORIGINAL VOICE button, and press the grey button that you wish to cancel.

- The voices transferred to grey buttons can be memorized in the C.S.P. and REGISTRATION MEMORY.
- •The voices transferred to the grey buttons can be stored for at least a week without being erased even if the power is turned off.
- When VOICE MENU settings have been transferred to LEAD or BASS VOICES, they automatically become "monophonic" voices, meaning that only one note at a time can be played.
- ●The 22 voices can all be transferred to any desired voice section. Note, however, that due to differences in the pre-programmed vibrato effect for each voice, voices transferred to sections other than those mentioned in step 2 will give a somewhat different impression than intended. In such a case, the original characteristics of that voice can be obtained by changing the User Vibrato setting. (Please see page 15).
- •The same voice can also be transferred to the grey buttons in more than one section.

3. You Can Also Memorize Vibrato and Sustain Effects

USER VIBRATO

A vibrato effect, where appropriate, is already incorporated into the LEAD VOICES and ORCHESTRAL VOICES of the upper keyboard. However, you can alter the degree of the Vibrato effect to sult your personal taste, and this change can also be stored in memory.



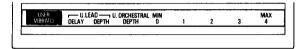
USER U.LEAD — U. ORCHESTRAL MIN MAX
VIBRATO DELAY DEPTH DEPTH 0 1 2 3 4

1 On the control panel, turn on the USER VIBRATO LEAD button, then select a LEAD VOICE.





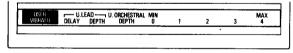
2 In the MULTI MENU, press the U.LEAD DEPTH button, then select the level of Vibrato Depth you prefer.





While actually playing a note, press one of the 5 degrees buttons. The larger the number, the stronger the vibrato effect obtained. If you choose the 0 button, no vibrato effect will be added.

 $oldsymbol{3}$ Turn on the U.LEAD DELAY button, then set your desired Delay level.





Similarly, you may choose from a total of 5 buttons. The larger the number, the longer it will take for vibrato to be added after pressing a key on the upper keyboard.



4 Turn this LEAD button on, whenever you wish to add your customized vibrato.

Your memorized vibrato settings can be added to the Lead Voices at any time by simply turning this button on.



[Memorizing vibrato for UPPER ORCHES-TRAL VOICES]

- On the control panel, turn on the USER VIBRATO UPPER ORCHES. button, then select a voice from ORCHESTRAL VOICES on the upper keyboard.
- 2) Turn on the U. ORCHESTRAL DEPTH button, then select the level of Vibrato Depth you prefer.



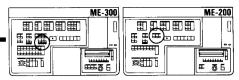


3) By turning on the USER VIBRATO UPPER ORCHES, button on the control panel, your customized Vibrato effect will be obtained.



- A customized vibrato setting will be memorized into the C.S.P. or Registration Memory.
- •The vibrato setting memorized in the USER VIBRATO memory will be stored for at least a week without being erased, even if the power is turned off.

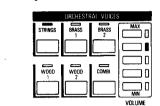
This Multi Menu page permits you to memorize a Sustain effect for each keyboard.



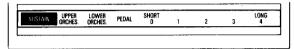
SUSTAIN	UPPER Orches.	LOWER ORCHES.	PEDAL	SHORT 0	1	2	3	LONG 4

1 Turn on the SUSTAIN UPPER ORCHES. button, then select a voice from ORCHESTRAL VOICES on the upper keyboard.



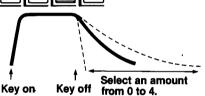


2 In the MULTI MENU, press the UPPER ORCHES. button then set the Sustain length of your choice.





While actually pressing and releasing a note, choose one of these 5 buttons. The larger the number, the longer the note will sustain (or "linger") after a Key is released.



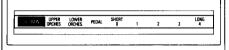
3 Turn the UPPER ORCHES. button on, whenever you wish to add your desired sustain level to the upper keyboard.

Your memorized sustain settings can be added to the upper ORCHESTRAL VOICES section at any time by simply turning this button on.



[Memorizing sustain effect for the PEDAL VOICES or Lower ORCHESTRAL VOICES]

- 1) On the control panel, turn on SUSTAIN PEDAL, the select a Bass voice.
- Press the PEDAL button on the MULTI-MENU Sustain page, then set the Sustain length to your desired level.





 By turning on SUSTAIN PEDAL on the control panel, your customized Sustain effect will be produced.



The Sustain effect for the LOWER ORCHESTRAL VOICES can also be memorized by using this same procedure.

[Additional Information]

- Customized Sustain settings will be memorized into the C.S.P. or Registration Memory.
- •The sustain setting memorized in the SUSTAIN memory will be stored for at least a week without being erased, even if the power is turned off.

4. Transposing

TRANSPOSITION

This feature allows you to change the key of the entire instrument in half step increments.

C.S.P.
PLAY MODE REPEAT INTRO. CHORD * TRANS POSITION NORMAL ...

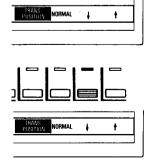
1 Press the (\downarrow) or (\uparrow) button.

(1) **button:** The pitch will be lowered by a one-half step each time this button is pressed. (Maximum: 6 steps)

(1) **button:** The pitch will be raised by a one-half step each this button is pressed. (Maximum: 6 steps)

2 Press the NORMAL button to return your Electone to the normal key.

You can also return to the normal key by turning the POWER switch off and on.

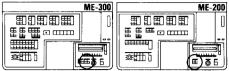


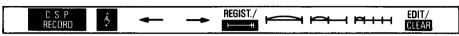
- ◆The lamps corresponding to the (1) button and (1) button indicate whether the instrument's key is currently below or above normal.
- Transposition will not be memorized in C.S.P. or the Registration Memory.

5. Programming the Accompaniment

CHORD SEQUENCE PROGRAMMER

This feature allows you to easily memorize chord progressions as well as registrations one at a time by simply pressing certain buttons.



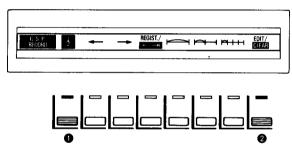


How to Record a Sequence

1 Memorize the voices, etc. to be used for the performance in Registration Memory, then select the registration you wish to use at the beginning of the song (see Page 11).

Before you start programming, set the voices, rhythm patterns, etc. suited to the song you will perform, then store them at Registration Memory buttons 1-5. Next, press one of the Registration Memory buttons 1-5 to recall the registration you wish to use at the beginning of the song.

2 Turn to the Multi Menu page marked C.S.P. RECORD, then while pressing the () treble clef button, press the EDIT/CLEAR button.

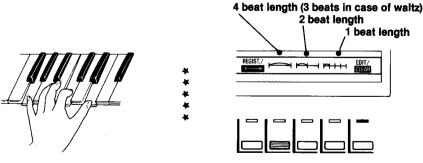


3 Select one of the SONG buttons.

While these buttons are flashing, press one of them. The corresponding lamp for the song you have selected and the EDIT/CLEAR lamp will stay illuminated.



 $oldsymbol{4}$ While playing the first chord, press a duration button.



If you wish, you can use the SINGLE FINGER feature from the Auto Bass Chord section, thereby enabling you to memorize the chords by using a single finger. (See page 8 for details).

When a duration button is pressed, you will hear a "beep", indicating that the chord has been stored in memory. Continue programming the remaining chords in this same manner.

[Registrations can be Memorized in C.S.P., too!]

The data stored at Registration Memory buttons 1-5 will be automatically programmed upon entering a recording operation. At such time, the data indicating which button is in ON status will also be programmed.

If a different numbered button (1-5) is pressed during programming then the REGIST. button is pressed, the data indicating the number of the newly selected button will be programmed. Registration data that is changed at the panel, however, will not be programmed.

Though the majority of data stored in Registration Memory is programmed as is into C.S.P., note that Your Electone is designed so that only the Rhythm Tempo and Auto Bass Chord settings will not be programmed.

[Memory Capacity]

Each of the SONG buttons can store up to about 150 events such as chords, Fill In, etc., in its memory. When this memory is completely full, a warning sound (3 beeps) will be heard.

[No-Chord]

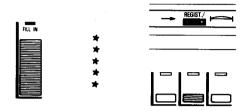
If you wish a measure without Chords, simply press a duration button without playing any notes on the lower keyboard.

[Additional Information]

 Before programming, make sure that the SONG 1 and 2 buttons are off before pressing the Treble Clef and EDIT/CLEAR buttons.

5 If you wish to add a Fill In pattern at any point while pressing the Fill In button, press the REGIST. button.

The Intro./Ending patterns can also be preprogrammed. See [Intro./Ending Program] on the right.



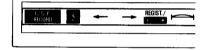
6 If registration changes are desired during programming, while pressing the appropriate numbered button in the Registration Memory section, press the REGIST. button.

From this point on, the new registration will be used.



REGIST./

When you have completed the chord sequence, end the program by holding the treble clef button and press the REGIST./ending () button.



8 Turn OFF the EDIT/CLEAR button.

Because the SONG button remains ON though the EDIT/CLEAR button is turned OFF, if the rhythm is started in that status, you can play back the chord progressions that you just recorded. Moreover, if you wish to record on another SONG button, turn the SONG button that is ON to OFF then perform Steps 1 to 8.

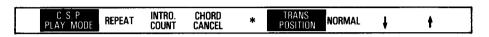


[Intro./Ending Program]

Intro.: At the beginning of the program, while pressing the INTRO./ENDING button, press the REGIST.button. Next, press the () button to ensure that no chords are heard during this one measure introduction.

Ending: At the beginning of the second measure from the end of the song, while pressing the INTRO./ENDING button, press the REGIST. button, thereby programming a two-measure ending.

- Before turning off the EDIT/CLEAR, you may want to check what you have programmed and make any corrections that you feel are necessary. (See page 20 for details on how to EDIT.)
- Even if you don't use the ending symbol, it will automatically be added at the end of a SONG when the EDIT/CLEAR button is turned off.
- ◆It is not possible to consecutively memorize different registrations without musical data between them. If you made a mistake in registration during programming, press the (←) button and then enter the correct registration.



How to Play back a Sequence !

1 Select one of the SONG buttons.

The registration memorized for the beginning of the song will be set up on the control panel.



2 Turn to the C.S.P. Play Mode page in the Multi Menu. If you wish, you can now select either the REPEAT or INTRO. COUNT functions.

REPEAT provides a continuous playback of the sequence until it is stopped. INTRO. COUNT provides one measure of "metronome" (count-off) before the actual playback of the sequence starts.



C.S.P. REPEAT INTRO.

3 Start playback by turning on the auto rhythm. Adjust the rhythm tempo and press the START switch. Playback will commence.



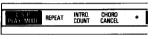
4 You may now play the melody while the lower keyboard and pedal keyboard accompaniment are being played back automatically as programmed.

You may now play a melody on the upper keyboard along with this accompaniment. The registrations will also change automatically as programmed.

When playback has been completed, the auto rhythm will stop (unless REPEAT is on).









This button cancels the playback of the chord and bass accompaniment. In this way you can play the song manually, and use any registration changes programmed in the sequence. You might say that you have "Registration Sequence Programmer" too!

[Protecting C.S.P. Data]

The memorized data will be retained in the C.S.P. memory for at least one week even if the power is turned off.

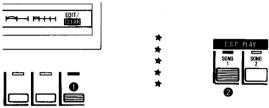
If you wish to store these sequences for a longer period of time, you can use RAM pack or cassette tapes for this purpose. (See pages 12 and 21 for details.)

- The C.S.P. Play Song buttons will operate at any time regardless of the position of the Multi-Menu.
- You can also manually change registrations during C.S.P. playback from the control panel without affecting the contents of C.S.P. memory.
- When the C.S.P. Play Song 1 or 2 buttons are pressed, the control panel settings (and Registration Memory contents will be replaced by those used during programming (Recording).



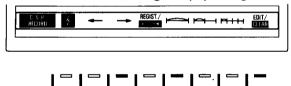
Making Changes/Corrections in the Sequence

1 Press the EDIT/CLEAR button, and while the SONG lamps are flashing, select one of them.



The registration memorized for the beginning of the SONG is immediately set up on the control panel, and the first memorized chord will be heard. One of the duration buttons will also be illuminated.

2 Check each item, one at a time, using the $(\ensuremath{\rightarrow})$ data pointer shift button.



(One of these lamps will light up, indicating what has been memorized.)

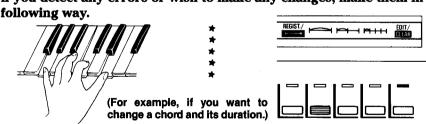
Every time the (\rightarrow) button is pressed, the data pointer will advance to the next item. The information stored at each item is indicated by sounds and lamps in the following manner: **Chords:** The memorized chord will be heard and the corresponding duration button will light up.

Fill In, Intro./Ending or Altered Registration: The REGIST. lamp lights up, no sound is heard, and the FILL IN or INTRO./ENDING lamp will be illuminated.

If registrations have been changed the REGIST lamp lights up, and the control panel.

If registrations have been changed, the REGIST. lamp lights up and the control panel is changed to the new registration.

3 If you detect any errors or wish to make any changes, make them in the following way.



When making Changes/Corrections, move the data pointer to the point where you wish to make the change and do the following:

Chord correction: While playing the correct chord, press a duration button.

Duration correction: While playing the same chord, press the correct duration button.

Inserting Fill In, Intro./Ending or Registrations: First move the data pointer to the next data point after the desired position of insertion. Next, turn on FILL IN or INTRO./ENDING then press the REGIST. button. Also, changing to a different numbered button in the Registration Memory then pressing the REGIST. button allows a new registration to be inserted.

4 Turn the EDIT/CLEAR button off.

[Various ways of using the data pointer shift buttons]

There are four different ways you can use the data pointer. They are shown in the following table:

-	Advances to the next item (one at a time).
←	Moves back to the preceding item (one at a time).
<i>ķ</i> →	Immediately advances to the last item in the sequence.
ĕ ←	Immediately moves back to the first item in the sequence.

[Revising a Preprogrammed Registration]

If the data pointer is at the very beginning of a song, you can change the beginning registration by changing to your new registration and then pressing the REGIST. button.

While EDIT/CLEAR is on, if a new (or revised) registration is stored in Registration Memory, it can also be inserted into the program (see item #3 on the left).

[Checking with the rhythm on]

While EDIT/CLEAR is on, when the rhythm is started, the programmed accompaniment will be played exactly as it would during normal playback. However, in this mode it is possible to stop the auto rhythm at any time during playback to correct any errors found.

- When you want to check or correct items after the EDIT/CLEAR button has been turned off, you must turn on the EDIT function.
- IMPORTANT! If the [] and EDIT/CLEAR buttons are pressed at the same time, all of the memorized information will be erased.
- During the EDIT process, the original length of a song can only be altered by adding chords after the very last bit of data in the program.

6. Transferring Information to a Cassette

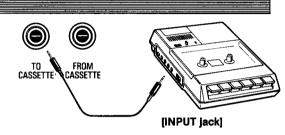
CASSETTE

The C.S.P. and Registration Memory Data can be transferred to a cassette tape.

CASSETTE

TO CASSETTE

I Connect a data recorder to the Electone.



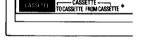
Connect the TO CASSETTE jack on the Electone to the IN (or MIC) jack on your data recorder using a shielded cable. Then insert a cassette tape. (Though an ordinary audio cassette recorder can be substituted for the data recorder, the use of a recorder specifically designed for data recording is recommended.)

${f 2}$ Press the RECORD button on the data recorder.

If your recorder has a counter, you may wish to note the starting and ending numbers to facilitate later use.

 $oldsymbol{3}$ Turn to the Multi-Menu-page-marked "Cassette" press the TO CASSETTE

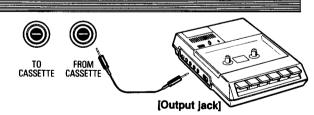
This starts the transfer of the C.S.P. data and also Registration Memory data in the Electone to the cassette tape. During this procedure, the TO CASSETTE indicator lamp will stay on. Once this procedure is completed, a buzzer will sound, the lamp will flash briefly, then go off. When the lamp goes out, press the STOP button of the data recorder.





FROM CASSETTE

l Connect a data recorder to the Electone.



Connect the FROM CASSETTE jack on the Electone to the OUT (or EAR) jack on your data recorder using a shielded cable. Insert the cassette tape on which you have saved the desired data and rewind it to the point where the saving operation was started. Set the playback volume of the data recorder to a level slightly higher than medium level.

2 Press the FROM CASSETTE button in Multi Menu.



3 Press the PLAY button on the data recorder.

This starts the transfer of the data from the cassette tape to the Electone. During this procedure, the FROM CASSETTE indicator lamp will stay on. Once this operation is completed, a buzzer will sound, the lamp will flash briefly, then go off. When the lamp goes out, press the STOP button of the data recorder.

[When Data Cannot be Transferred]

When the TO CASSETTE procedure has not been properly performed, the TO CASSETTE lamp will remain illuminated. When the FROM CASSETTE function has not been properly performed, either three warning beeps are sounded or the FROM CASSETTE lamp remains lit up. In such cases, confirm the checkpoints below:

- (1) Is the cable between the Electone and data recorder securely connected?
- (2) Are the connecting jacks plugged into the proper sockets or is there an error in the operating procedure?
- (3) Is the playback volume of the recorder at the proper level? When the VOLUME control has a 10-step scale, set the volume from 6 to 8.
- (4) Is the recording head dirty?
- (5) Is the proper cassette tape being used?
- Be sure to use a tape specifically designed for computer use or a normal low-noise audio tape (30- or 45-min. tape).
- * Use only new tapes whenever possible.
- * Check the tape for twists, seams, wrinkles, etc. (When using tape with a "leader" (i.e. normal audio tape), fast forward the tape past this "leader".)
- (6) Is an appropriate recorder being used? With an ordinary audio cassette recorder, some of its characteristics may render it unusable for data recording or cause difficulties in recording. Use of a data recorder is strongly recommended.

- ●The TO CASSETTE or FROM CASSETTE procedure normally requires about 60 seconds
- During the TO CASSETTE or FROM CASSETTE procedure, you cannot play your Electone. Also, all indicator lamps on the control panel will
- •When the FROM CASSETTE procedure is performed, any data previously stored in the Electone will be erased.



ACCESSORY JACKS

HEADPHONES Jack

This jack is used to connect headphones (optional). When headphones are connected, there will be no sound from the Electone's speakers. This allows you to play your Electone at any time without disturbing others.



IMPORTANT: Do no use this jack for any purpose other than headphones!

AUX. OUT Jack

This jack is used to produce a more powerful sound by connecting an external amplifier or other devices. If this jack is connected to the LINE IN jack of a tape recorder, direct recording is also possible. (Nominal Impedance: 470Ω)

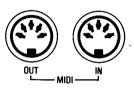


●EXP. IN Jack

This jack accepts a monaural signal from a synthesizer or similar accessory. The volume of the equipment connected here will be controlled by the Electone Expression Pedal.



●MIDI IN/OUT Jacks



conform to the MIDI standard for digital electronic instruments. These jacks enable you to connect your Electone to a computer or other MIDI compatible electronic instruments for data communication.

●TO CASSETTE/FROM CASSETTE Jacks





TO FROM CASSETTE CASSET

These jacks are used to connect the Electone to cassette recorders for data transmission/reception. (See page 20 for details.)

WARNING: The connection or disconnection of any accessory, (other than headphones) while the Electone is ON, can result in extensive damage to the Electone and/or the accessory. Damage caused by the improper connection/disconnection of accessories is not covered by the manufacturer's warranty.

The MIDI (Musical Instrument Digital Interface) terminals

ELECTROMAGNETIC INTERFERENCE

"Interference" can be a two way street; something you are operating can interfere with others or, something someone else has may interfere with something of yours.

Naturally, it is also possible that two or more of your own electronic (electric) devices may interfere with each other. Your Electone has been designed to minimize all these possibilities and meets all applicable standards worldwide.

Electromagnetic interference with your Electone can show itself in variety of ways. You may hear speech, music, "beeps", static, or a buzzing sounds. Yamaha Electones are designed to reject RF (radio frequency) signals that are many times the levels found in any normal environment. If, however, you are in the immediate proximity of a very high power transmitter, some interference may still occur. If this should happen, please try to identify the radio (TV) station and record the time of day that the interference occurs. Station identification is essential in order that the offending frequencies can be established and the authorized (legal) operating power level of the transmitter causing the interference can be verified. If the interference continues, please follow the corrective measure suggestions provided later in this section.

If the interference is in the form of occasional buzzing or static, it is highly probable that the cause can be traced to the turning on or off of some household appliance. The offending appliance can also be outside your own residence. Usually a "time" pattern

(i.e., evenings only, etc.) will be involved. Noises of this type rarely orginate in the Electone itself. If the condition continues, please contact your local authorized Yamaha Electone dealer for assistance.

Main power line disturbances and electrical storms (lightning) can also be the source of static interference. Generally speaking, problems generated by these two sources will also be present in your other audio or video equipment. Lightning can also be very destructive. The following special warning also applies to virtually all electronic products.

IMPORTANT NOTICE

Modern electronic products, (i.e., computers, video games, electronic organs, etc.), contain components that, under normal conditions, extend the service free life of the products they make up an almost unbelievable period of time. This is especially true when you consider the vast number of equivalent components incorporated within one given part. These "parts," called "integrated circuits," are however, subject to destruction by high voltage discharges, such as a close proximity lightning strike. This can occur even if the unit is turned off.

IN PERIODS OF ELECTRICAL STORM PROBABILITY, IT IS ADVISABLE THAT YOU DISCONNECT ANY ELECTRONIC DEVICE NOT ACTUALLY IN USE, FROM ITS WALL SOCKET.

TROUBLESHOOTING

Phenomenon	Cause and Solution
Only one sound is heard when two notes are simultaneously played on either the pedal keyboard, or when Lead Voices are used by themselves.	For practical performance reasons, this Electone has been designed so that only one note can be played at a time on the pedal keyboard or with the Lead Voices. (See page 3.)
VOICES for each keyboard have been selected and keys are pressed, but no sound is produced.	First check the MASTER VOLUME and EXPRESSION PEDAL, then check if the volume levels of the desired VOICE sections are set to MIN. To produce sound from the pedal keyboard, turn off SINGLE FINGER and FINGERED CHORD in the AUTO BASS CHORD section. (See pages 2-4.)
The Arpeggio Chord feature does not seem to work.	The Arpeggio Chord function is synchronized with, and controlled by, the Auto Rhythm section, and therefore, rhythm must be "on" for this feature to operate. (See page 4.)
When you lift your hand off the lower keyboard and no pedals are being played, the rhythm, lower keyboard and pedal sounds stop.	When the Synchro Start function is used, the rhythm stops when both the lower keyboard and the pedal keyboard are not being played. If you want the sounds to continue, turn on the Auto Bass Chord MEMORY feature. (See page 8.)
When using the Single Finger function, the chord does not change even when you press different keys.	When the lower keyboard is played legato style, the chords may not change properly even though you are pressing different keys. You must lift your fingers completely from the keyboard when changing chords. (See page 8.)
No harmony sounds are heard even though the Melody On Chord section is turned on.	When using Melody On Chord, the harmony sounds are provided by the Orchestral Voices section of the upper keyboard. You must select a voice in this section, and adjust the volume. (See page 10.)
Some functions cannot be memorized in the Registration Memory.	The following functions cannot be memorized: Auto Rhythm Start, Synchro Start, Intro/Ending, Fill In, Master Volume, Transposition, Expression Pedal, etc. (See page 11.)
When a "grey" button is pressed, a sound other than the displayed sound is produced.	This is because a voice had been transferred to that position from a VOICE MENU. When the original (labeled) sound is desired, turn off the (Voice) MENU ON button. (See page 14.)
Although the User Vibrato or Sustain button is on, no effect in obtained.	The User Vibrato and Sustain settings must first be memorized in the appropriate section of the Multi Menu. (See page 15-16.)
EDIT/CLEAR of C.S.P. cannot be turned on.	This is because the SONG 1 or 2 button is on. Turn Song 1 or 2 off, press EDIT/CLEAR then a song button. (See page 17.)
Some/All chords were not memorized in the C.S.P.	Possibly the Duration button was pressed after you had lifted your fingers off the lower keyboard. To enter chord data into the C.S.P., you must press the Duration button while holding a chord. (See page 17.)
When programming C.S.P., three warning beeps are sounded.	When the memory capacity of a C.S.P. program has been reached, three warning beeps sound, indicating that further programming is impossible. (See page 17.)
After playing back C.S.P., the registrations which were previously memorized in Registration Memory are no longer there.	When a C.S.P. is played back, the contents of the Registration Memory when the C.S.P. was originally programmed replaces the current settings in the Registration Memory. If you wish to preserve the current settings, first transfer them to a RAM pack or a cassette tape. (See pages 12, 19, 21.)
The FROM CASSETTE operation is performed, but data is not transferred to the Electone.	Check the cord connection, procedures, playback volume of the recorder, type of cassette tape and recorder being used, etc., then repeat the FROM CASSETTE procedure. If an error re-occurs, replace the recorder. (See page 21.)
The control panel or similar parts do not function normally or the memorized data changes in content.	Though a rare occurrence, electrical disturbances (such as that caused by lightning) may cause abnormal functioning of the Electone or changes in memorized data. In these instances, turn off the POWER switch, then turn it on again while depressing the leftmost Multi-Menu button. The Multi-Menu can be turned to any page except CASSETTE.

*Specifications subject to change without notice.

			ME-300	ME-200			
KEYBOAR	D		UPPER: 44KEYS (F ₂ -C ₆), LOWER: 44KEYS (F ₁ -C ₅), PE	EDAL: 13KEYS (C ₀ -C ₁)			
UPPER OF	RCHES	TRAL VOICES	STRINGS, BRASS 1 • 2, WOOD 1 • 2, COMBI., VOLUME	STRINGS, BRASS, WOOD 1•2, VOLUME			
UPPER LE	AD VO	ICES	FLUTE, OBOE, TRUMPET, TROMBONE, VOLUME				
LOWER O	RCHES	STRAL VOICES	STRINGS, BRASS 1•2, COMBI., VOLUME				
BASS VOICES			CONTRA BASS 1 • 2, VOLUME				
ARPEGGIO CHORD			1•2•3•4, VOLUME				
EFFECTS TREMOLO		TREMOLO/SYMPHONIC	TREMOLO, SYMPHONIC, UPPER ORCHES., LOWER ORCHES.				
	-	GLIDE	GLIDE (FOOT SWITCH)				
	-	USER VIBRATO	LEAD, UPPER ORCHES.				
	-	SUSTAIN	UPPER ORCHES., LOWER ORCHES., PEDAL				
AUTO RHY	THM	PATTERNS	MARCH, TANGO, WALTZ 1, WALTZ 2 (ME-300 only), LATIN ROCK, LATIN, BOUNCE, SLOW ROCK, 8 BEA				
	; . 	CONTROLS	VOLUME, START, SYNCHRO START, TEMPO, TEMPO INTRO./ENDING, EXTRA PERCUSSION	O LAMP, FILL IN, FILL IN VARI.,			
		FOOT SWITCH	RHYTHM STOP, FILL IN, ENDING, (GLIDE)				
AUTO BAS	SS CHO	ORD	SINGLE FINGER, FINGERED CHORD, CUSTOM A.B.C., MEMORY				
MELODY (MELODY ON CHORD		1•2•(1+2)				
REGISTRA	TION I	MEMORY	MEMORY, 1•2•3•4•5				
PACK			CONFIRM, FROM PACK, TO PACK, READY, ERROR				
C.S.P. PLA	Y		SONG 1•2				
MULTI-	REGI	STRATION MENU 1	1-2-3-4-5-6-7-8				
MENU	REGI	STRATION MENU 2	9•10•11•12•13•14•15•16				
	VOIC	E MENU 1	PIPE ORGAN, JAZZ ORGAN, SYNTH. STRING, SYNT ORIGINAL VOICE, MENU ON	H. BRASS, PIANO, ELECTRIC PIANO,			
	VOIC	E MENU 2	HARPSICHORD, HARP, ELECTRIC GUITAR, JAZZ GU TIMPANI, PICCOLO	JITAR, STEEL GUITAR, DISTORTION GUITAR,			
	VOIC	E MENU 3	PAN FLUTE, FLÜGEL HORN, SAXOPHONE, HARMO	DNICA, COSMIC 1•2•3, TUBA			
	USER	VIBRATO	U.LEAD = DELAY • DEPTH, U.ORCHESTRAL DEPTH,	0 • 1 • 2 • 3 • 4			
	SUST	AIN	UPPER ORCHES., LOWER ORCHES., PEDAL, 0-1-2	•3•4			
	C.S.P	. RECORD	I , ←, →, REGIST./ I , ⊢, ⊢, ED	IT/CLEAR			
	C.S.P	. PLAY MODE	REPEAT, INTRO. COUNT, CHORD CANCEL				
	TRAN	ISPOSITION	NORMAL, ↓,↑				
CASSETTE		ETTE	CASSETTE = TO CASSETTE, FROM CASSETTE				
MAIN CON	NTROL		MASTER VOLUME, EXPRESSION PEDAL, POWER	(
ACCESSO	RY JA	CKS	HEADPHONES, AUX. OUT, EXP. IN, MIDI IN-OUT, TO CASSETTE, FROM CASSETTE				
AMPLIFIE	R		20 W				
SPEAKER	S		30 cm×2, 5 cm×1	20 cm×2, 5 cm×1			
DIMENSIO	NS		114(W) × 56(D) × 93(H)cm				
WEIGHTS			56kg	54kg			

Electone ME-300/ME-200

MIDI Implementation Chart

Date: 11/15, 1986

Version: 1.0

Function		Transmitted	Recognized	Remarks		
Basic Channel	Default	1	1	UK (PRESET)		
	Delaon	2	2	LK (PRESET)		
		3	3	PK (PRESET)		
			16	CONTROL (PRESET)		
	Changes	×	×			
	Default	Mode 3	Mode 3			
Mode	Messages	×	×			
	Altered	******	×			
Note Number		53-96	36-96	UK		
		41-84	36-96	LK		
		36-48	36-96	PK		
	True Voice	*****	36-96	UK, LK, PK		
Velocity	Note ON	× 9nH, v=64	× 9nH, v=1-127			
,	Note OFF	× 9nH, v=0	× 9nH, v=0, 8nH			
After Touch	Key's	×	×			
	Ch's	×	×			
Pitch Bender		×	×	- Au		
Control Change		×	×			
Program Change		0-4, 32-47	0-4, 32-47	Regist. Memory &		
	True #	*****	0-4, 32-47	Regist. Menu		
System Exclusive		0	0	FILL SW		
				INTRO./ENDING SW FOOT SW		
	Song Pos	×	×	1.001.00		
System Common	Song Sel	×	×			
2,2.0 00	Tune	×	×			
System Real Time	Clock	0	0	*		
-,	Commands	0	0	(FA, FC)		
Aux Messages	Local ON/OFF	×	×	·		
	All Notes OFF	×	Ô	** (123)		
	Active Sense	Ô				
	Reset	×	0			
Notes		* Recognize only when External Mode				
		** Recognize only chann				

Mode 1: OMNI ON, POLY Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO Mode 4: OMNI OFF, MONO O: Yes

×: No

