

CONTENTS

Page
Introduction 1
This is Your Yamaha Electone E-10AR 2
Keyboards
Tone Levers 6
Preset Tones
Effect Levers
Vibrato and Percussion Levers
Effect Controls
Effect Selectors
Foot Switch and Tablets 14
Sound-in-Motion Tremolo
Auto Rhythm Section
Other Controls
To Fully Enjoy Your Electone
Care of Your Electone
Do not Be Alarmed If
Playing the Yamaha Electone
Posture
Technique
Specifications

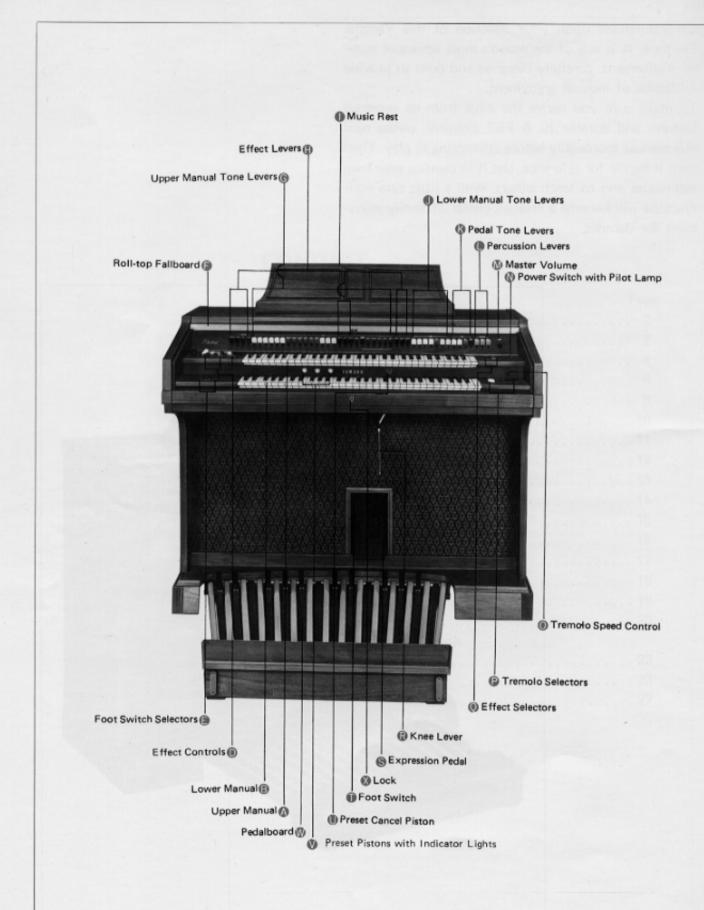
Introduction

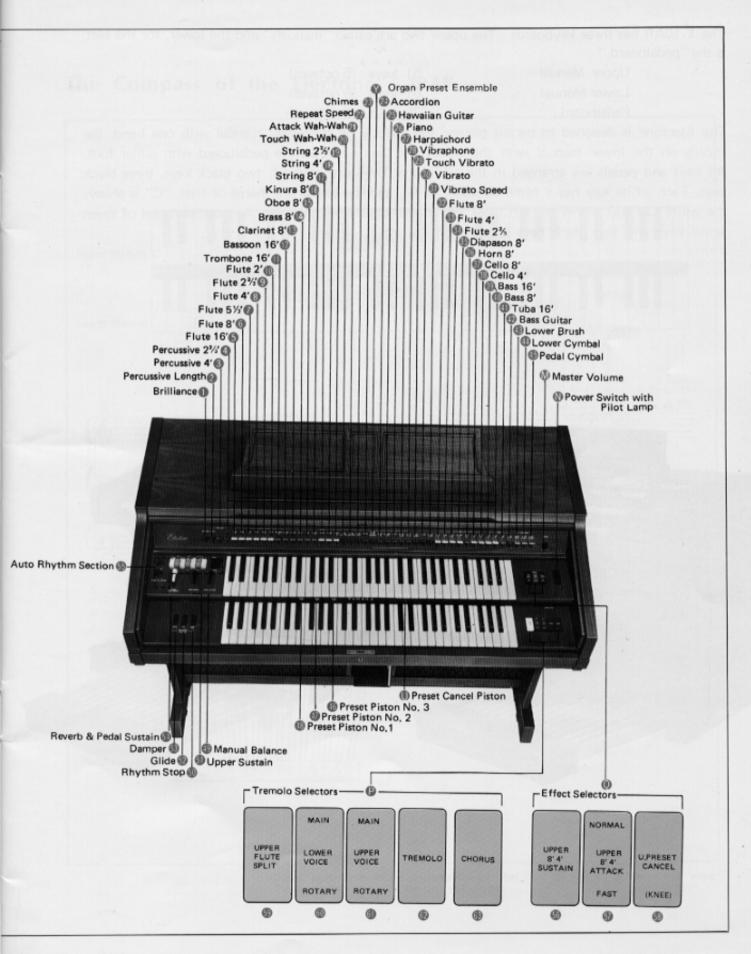
Congratulations upon your selection of this Yamaha Electone. It is one of the world's most advanced musical instruments, carefully designed and built to provide a lifetime of musical enjoyment.

To make sure you derive the most from its generous features and durable IC & FET circuitry, please read this manual thoroughly before attempting to play. Then keep it handy for reference. Use it to develop your own techniques and to teach others. With a little care your Electone will become a creative center of family enjoyment for decades,



This is Your Yamaha Electone E-10AR





Keyboards

The E-10AR has three keyboards. The upper two are called "manuals" and the lower, for the feet, is the "pedalboard."

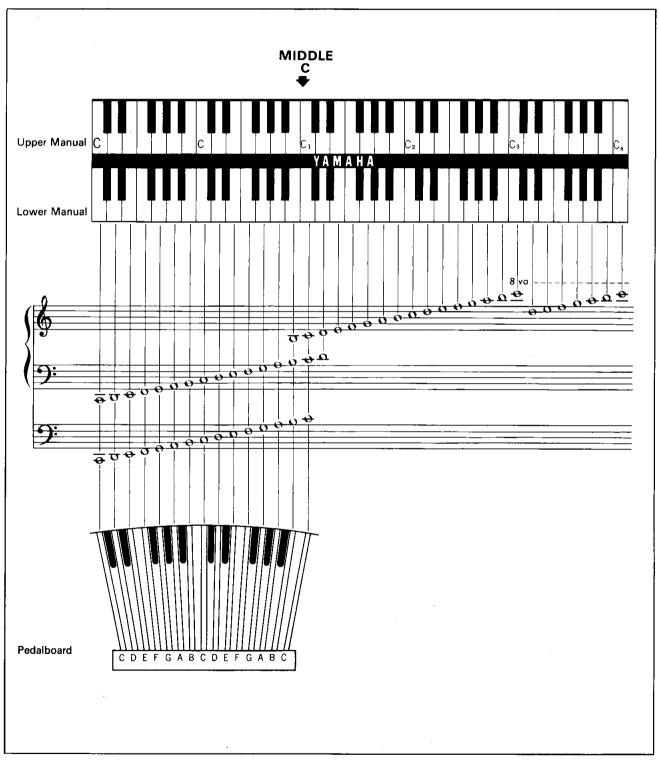
Upper Manual 61 keys (5 octaves) Lower Manual 61 keys (5 octaves) Pedalboard 25 keys (2 octaves)

The Electone is designed to permit playing the melody on the upper manual with one hand, the chords on the lower manual with the other, and bass notes on the pedalboard with either foot. All keys and pedals are arranged in the traditional keyboard method: two black keys, three black keys. Each white key has a name (from A to G), and the blacks are sharps or flats. "C" is always the white key just below the left black key in the two-black-key group. Any complete set of seven white keys and five black keys is called an "octave."





The Compass of the Electone E-10AR

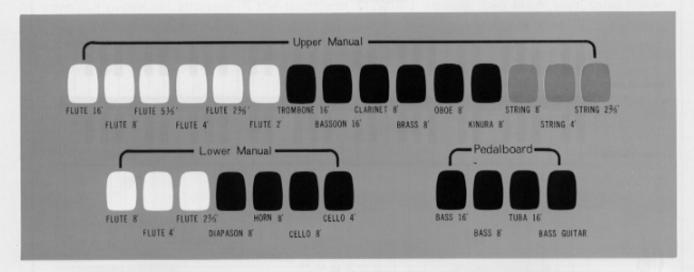


Note: Actual pedal notes sound one octave lower that they are written in the musical score. This is standard procedure for bass instruments.

Tone Levers

On the control panel above the upper manual is a series of tone levers which control the voices (instrument sounds) which sound when the keys are played. They are divided into groups for upper, lower and pedalboard, so that contrasting tones can be set for each.

Upper Manual Levers 15 voices
Lower Manual Levers 7 voices
Pedalboard Levers 4 voices



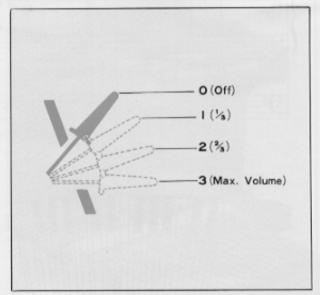
Exclusive Yamaha Tone Lever System

Each lever provides two methods of control. One is by continuously moving the lever from off to full, to achieve the exact setting for that tone, and thus balancing the overall tone setting with perfect precision.

This infinite range of possible settings is rather confusing for beginners, who find it difficult to remember a particular balance and then refind it. For that reason, each lever also has two easy-to-feel click stops, at 1/3 and 2/3 positions. This lets you refind any setting with mathematical precision and no guesswork in a matter of seconds.

The most important point in developing good tone registration techniques is a mastery of the tone levers. It is a good practice to listen the different types of music and then try to approximate the sounds on the Electone.

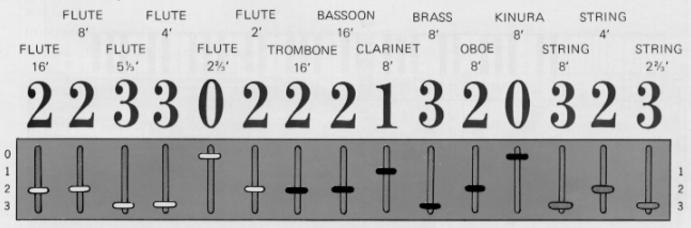
Bear in mind that the total tone lever settings for a particular manual will affect that manual's overall volume. This will be an expressive aid if used properly, a drawback if it is forgotten.



Tone Lever Registration

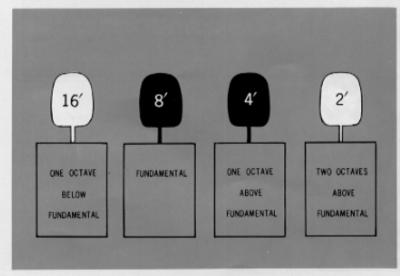
This can best be remembered by assigning numerical values to each lever position as shown below. In addition to making resetting an extremely simple operation, the total value of the settings for each manual can be compared to determine that manual's overall volume. This volume can then be adjusted with the Manual Balance control.

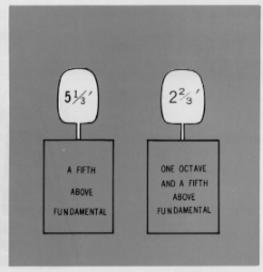
(EXAMPLE)



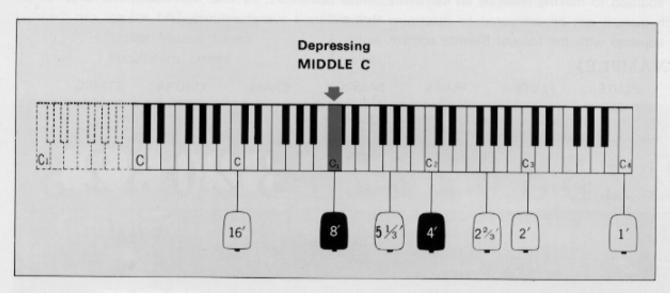
Pitches or Footages

The E-10AR has six different pitch levels, indicated by the numbers 16', 8', $5\frac{1}{3}'$, 4', $2\frac{1}{3}'$ and 2'. These are standard musical abbreviations showing the tone's pitch in relation to the fundamental (written note). An 8' tone will sound just as it has been written. As the numbers increase, the tones lower. A 16' tone (meaning that the wave length of the vibrations are twice as long as 8', or half as fast) will provide a tone exactly one octave lower than the written note. Similarly, 4' tones are one octave higher than the written note, $2\frac{1}{3}'$ tones one octave and a fifth higher, and 2' tones two octaves above the fundamental. Tones at octave intervals from the written notes are "consonant harmonics," while all others are "dissonant."





For example, if you press middle C (noted in music as "c1") using the different types of harmonics, notes corresponding to the keys in the chart below will sound.



In other words, these harmonic actually increases Note: One limitation on this is the fact that the Electone's compass above and below that indicated by the keys and pedals. For example, the 16' lever extends the lower manual a full octave as shown by the dotted line in the illustration.

the highest note the E-10AR is c5.

This means that the Flute 2' voice will not be avilable above C# in the highest octave, a limitation which should pose no problem for even the most demanding talent.

The major use of the harmonic levers, however, is to increase the richness of tone. They are the spices that, when applied to the fundamental, will make a rich and savory performance. Let your ear be your guide to the creation of pleasing combinations, and always remember that overuse will weaken any effect.



Preset Tones

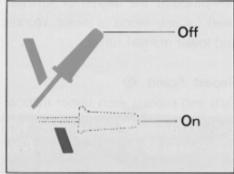
Preset Levers @~@

At the right end of the upper manual tone levers are six preset tone levers. These on/off levers are special tonal blends that most closely resemble the instruments they name (Chimes, Accordion, Hawaiian Guitar, Piano, Harpsichord, Vibraphone).

These levers have two characteristics which must be remembered. Since they are factory preset, they automatically cancel all other upper manual tone lever settings. This lets you switch back and forth.

In addition, precedence is to the right. This means that if two or more of these preset levers are pressed, the one to the right will take effect.





Preset Pistons (1)

These four pistons are located along the vertical plate that separates the upper and lower manuals. They serve to apply or cancel the special upper manual voice combination preset at the factory. An indicating lamp lights when one of the pistons is pushed, and it goes off when the piston is cancelled. Just push one of these pistons to call forth its voice combination — all upper manual voice settings are then bypassed. To cancel the piston, push the cancel piston or another one. When switching from one piston to another it is not necessary to first push cancel.

Works with the Upper Preset Cancel selector (see p. 13).



This lever controls the effect which add the upper tone to the upper preset tone (Accordion, Hawaiian Guitar, Piano, Harpsichord, Vibraphone).

Effect Levers

These levers control a variety of effects which add a variety of tonal variations to the Electone's voices. Most of these levers work in the same way as the tone levers, with both infinitely-variable continuous control and click-stop settings, but two (Touch Wah-Wah and Attack Wah-Wah) have simple on/off functions.

Brilliance 0

With this single, continuously-variable control you can pinpoint the degree of softness or clarity desired for any mood or music. Works on both upper and lower manual tones,

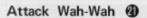
Repeat Speed @

Cuts and repeats each upper manual note just like the double-strumming effect of a mandolin. The lever provides continuous speed adjustment to create a full variety of different moods. Affects upper manual notes only.

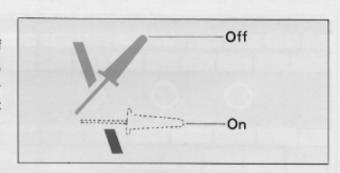
Upper Percussive 2 3 4

Changing the beginning of some or all notes can do wonders for lively selections. Your Electone's percussive effects provide subtle but important shading at the moment each note is heard. The special popping 4' and/or $2\frac{2}{3}'$ percussive drive can be smoothly blended into all upper manual tones with two variable levers, and a separate lever regulates the length of decay for these effects.

With percussive, use a staccato fingering. Each note should be played cleanly; slurred notes will diminish the percussive impact.



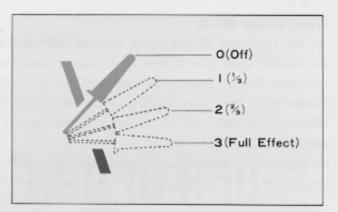
Provides a spicy wah-wah sound at the beginning of every upper manual tone. With Attack Wah-Wah, use a staccato fingering. Each note should be played cleanly; slurred notes will diminish the Attack Wah-Wah effect.

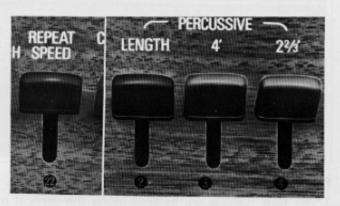


Touch Wah-Wah @

Differs from Attack Wah-Wah in that this effect can be achieved at any time (not just the beginning of a note) by the lateral movement of the finger on the key.

Organ Preset Ensemble (see page 9)







Vibrato and Percussion Levers

Touch Vibrato @

This world-famous Yamaha exclusive gives to the organist the same expressive fingertip vibrato enjoyed by the violinist. With this effect, vibrato can be applied to any upper manual by the lateral vibration of the hand, and its speed will correspond exactly to the hand's vibration.

Vibrato, Vibrato Speed 1 1

Vibrato is an emotional wavering applied to a tone, most noticeable in the trembling left hand of violinists and cellists. It can add a great deal to the emotional depth of a passage, especially string voices. The Vibrato lever provides continuous adjustment of this effect's depth, while Vibrato Speed lets you continuously set the vibration speed.





Lower Brush, Lower Cymbal, Pedal Cymbal (8) (9)

Provide lively brush (hissing snare drum brush) and cymbal percussion sounds with each lower manual or pedal note.

