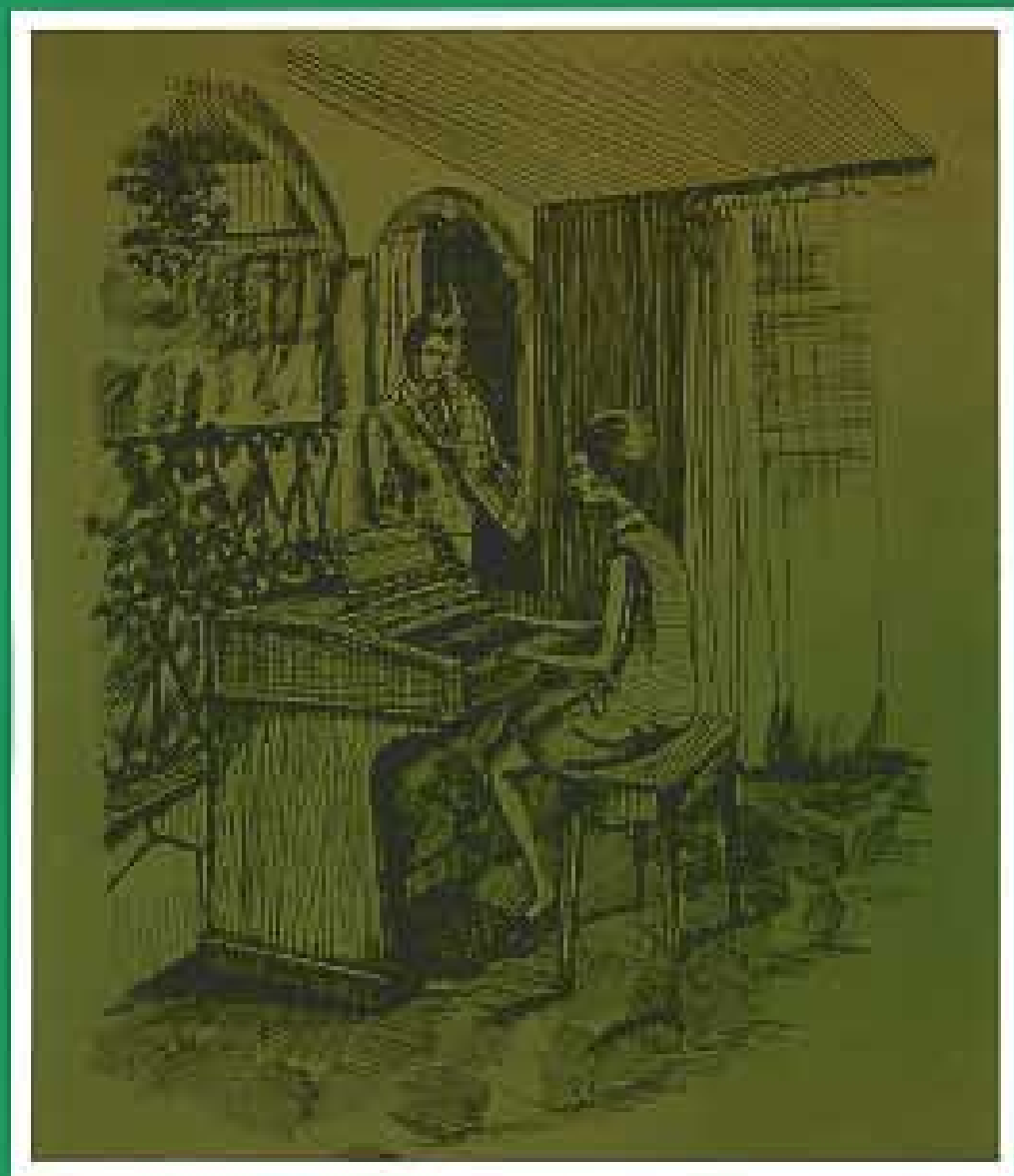


GUIDE  
TO YOUR  
YAMAHA  
ELECTONE  
MODEL D-7



NIPPON GAKKI CO., LTD.

Hamamatsu, Japan

SINCE 1887

# ELECTONE D-7 PLAYING GUIDE

## CONTENTS

	Page
Introduction .....	2
Here is your Yamaha Electone D-7 .....	4
Keyboards .....	6
Tone levers .....	8
Voice presets .....	13
Effect levers .....	15
Touch vibrato .....	16
Effect controls .....	17
Effect selectors .....	19
Sound in motion .....	20
Percussion section .....	22
Other controls .....	25
To fully enjoy your Electone .....	26
A word about Yamaha's exclusive	
Natural Sound speaker .....	28
Care of your Electone .....	29
Do not be alarmed if .....	30
Specifications of model D-7 .....	31

### APPENDIX

Music Notation for model D-7

# Introduction

---

We of Yamaha wish to thank you for selecting the D-7 Electone. We feel sure that you will realize many happy years of playing enjoyment with this instrument. Please read this guidebook for more complete enjoyment of all of the D-7's special characteristics. We would suggest that you occasionally re-read it from time to time as you progress.



---

The purchase of a fine musical instrument is not repeated every few years; the organ you select today should be yours for a lifetime and more, and the priceless gift of music it brings to generations should offer the same immense range of creative expression to today's beginner as it will to tomorrow's concert artist. The Yamaha Electone D-7 does that and much more. With power and performance capabilities worthy of the most professional surroundings, the exciting new D-7 is nevertheless distinctively a home organ, designed to complement even the most luxurious decor with the unobtrusive elegance of its fine wood cabinetry.

Sit down at the keyboard and discover for yourself how easy it is to fill your home with a thrilling new dimension in music; at your fingertips is a veritable rainbow of tonal effects, with infinite shades of expression springing from Yamaha's exclusive Variable Tone Lever System: three-position volume control levers for every one of the Electone D-7's glorious voices.

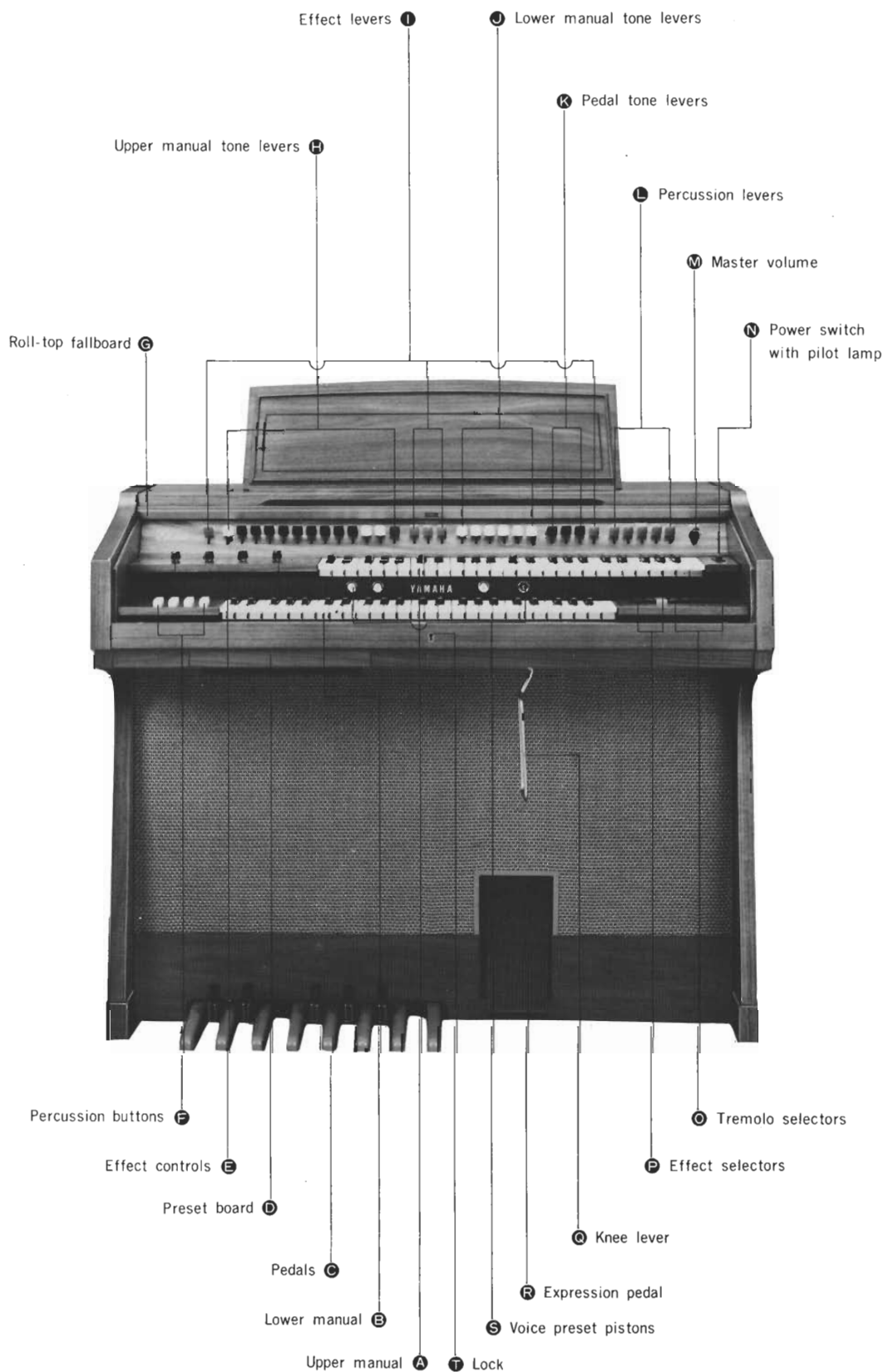
You may be picking out your first notes, but it's almost impossible to sound like a beginner, thanks to an unparalleled range of special Yamaha features such as preset board selection for three manual versatility, a unique sound-in-motion split tremolo system (with its own amplifier), the world's only Touch Vibrato that lets you really "play" each key the same as you would a violin, and a repertoire of percussive effects to accentuate or amuse.

As your talent progresses you will better realize the true significance of the vibrant Yamaha Natural Sound speaker system, as well as making fuller use of the Electone D-7's generous 49-key range.

Years from now, when you've perhaps forgotten your Yamaha serviceman's name, you may be struck by the decades-dependable durability of the Electone D-7's revolutionary Integrated Circuitry and the impeccable craftsmanship that goes into every part. In the meantime, your whole family will be busy growing musically with the world's finest home organ, exploring a new dimension in creative expression.



# Here is your Yamaha Electone D-7



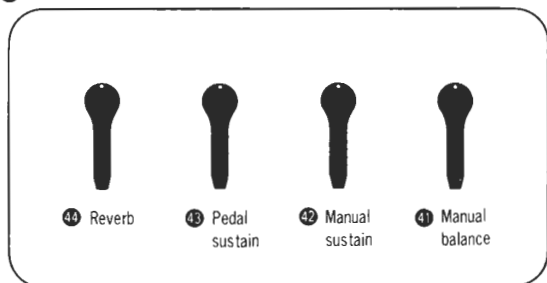
- Brilliance ①
- Flute 16' ②
- Flute 8' ③
- Diapason 8' ④
- Clarinet 8' ⑤
- Brass 8' ⑥
- Oboe 8' ⑦
- Kinura 8' ⑧
- String 8' ⑨
- Flute 4' ⑩
- String 4' ⑪
- Flute 2 2/3' ⑫
- Flute 2' ⑬
- Chimes ⑭
- Repeat ⑮
- Touch vibrato ⑯
- Vibrato ⑰
- Wood 16' ⑱
- Wood 8' ⑲
- Horn 8' ⑳
- Cello 8' ㉑
- Wood 4' ㉒
- Cello 4' ㉓
- Bass 16' ㉔
- Bass 8' ㉕
- Tuba 8' ㉖
- Pedal attack ㉗
- Lower I ㉘
- Lower II ㉙
- Pedal ㉚
- Button I ㉛
- Button II ㉜
- Master volume M
- Power switch N



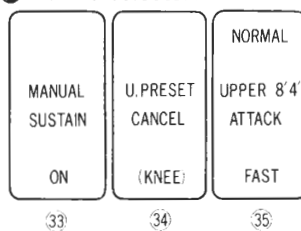
- ① Preset cancel piston
- ② Preset piston No.3
- ③ Preset piston No.2
- ④ Preset piston No.1
- ⑤ Pitch control

- ⑥ Preset board
- ⑦ Percussion buttons

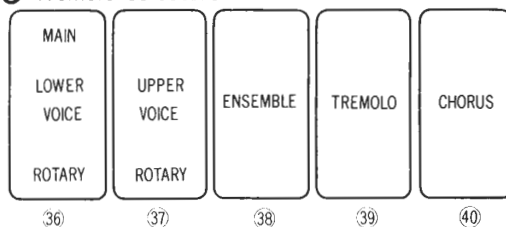
**E** Effect controls



**P** Effect selectors



**O** Tremolo selectors



**Note:** The circled numbers and letters refer to explanatory sections in the text to follow.

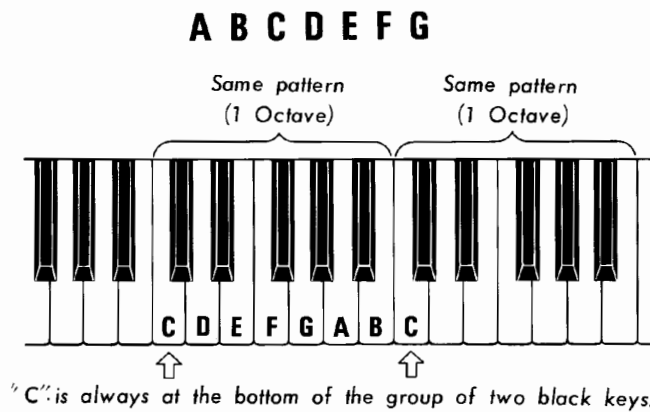
# Keyboards

The Yamaha Electone Model D-7 has three keyboards.

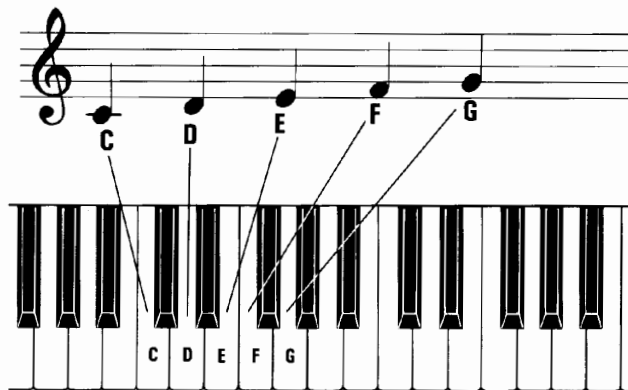
They are: Upper Manual ① 49 keys c - c<sub>4</sub> (4 octaves)  
Lower Manual ② 49 keys C - c<sub>3</sub> (4 octaves)  
Pedals ③ 13 keys C<sub>1</sub> - C (1 octave)

Manual and pedal keys are made of durable material and, in both touch and appearance, are designed for maximum ease of playing.

The keyboard has the the same pattern of keys (two black keys and three black keys) repeated over and over. A note is a tone on the organ. Each note has a name. We use the first seven letters of the alphabet:

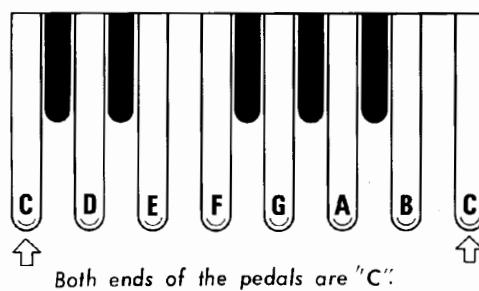


Let's see how the letter names of the notes match the letters on the keys.

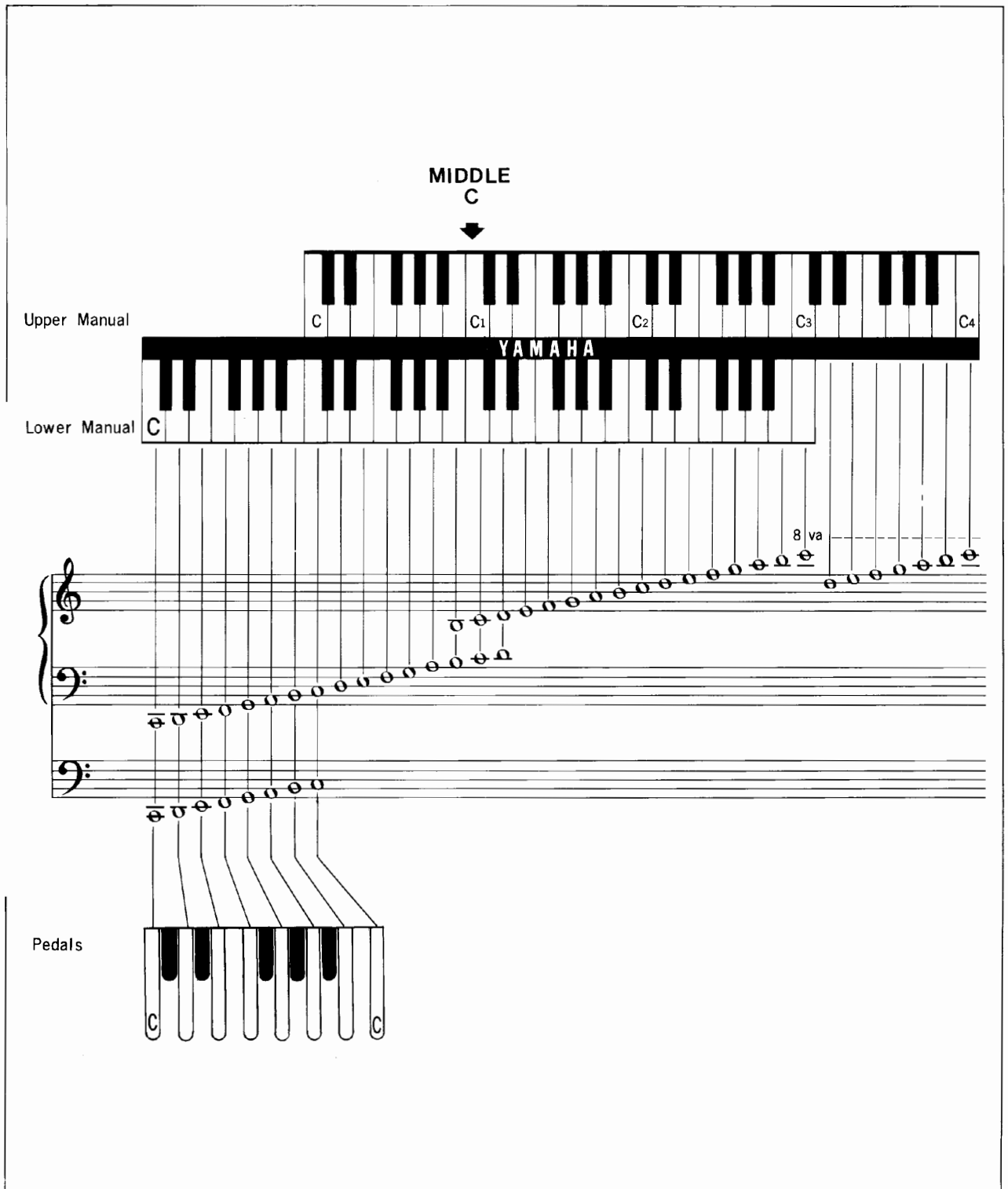


## Pedals

The pedal keyboard (pedals) is an enlarged manual keyboard for the foot containing one octave of notes.



## The Compass of the Electone D-7



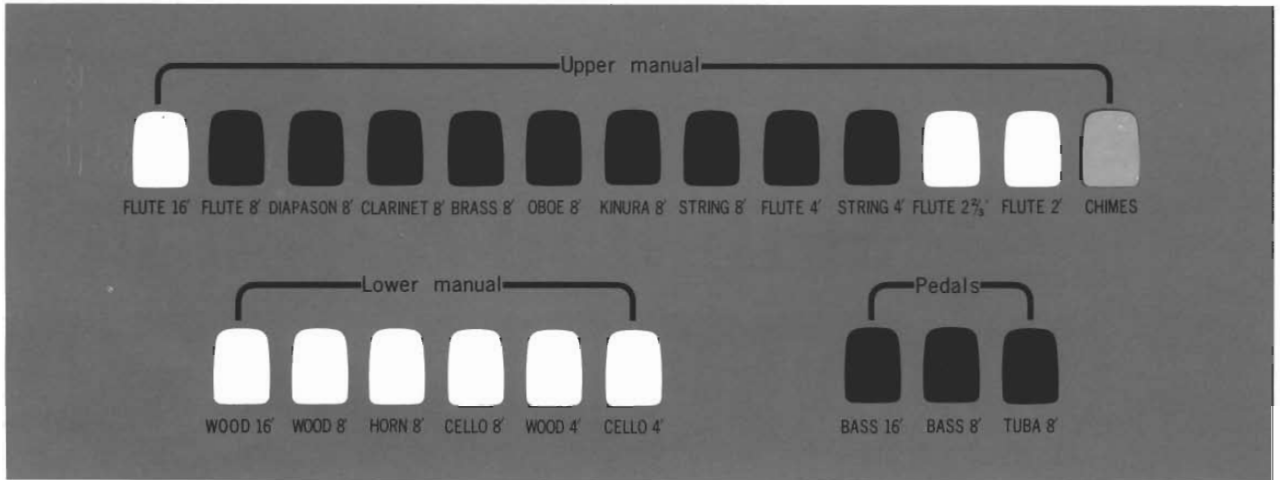
- Note:**
1. The notes shown in this chart are those obtained using the fundamental tone levers; i.e., the 8' tone levers on the manuals and the 16' levers on the pedals.
  2. The pedalboard notation is one octave higher than the actual notes.
  3. The use of tone levers in other than the 8' range will result in broadening the compass. (See *Harmonics*, page 9).



# Tone Levers

On the control panel above the Upper Manual of the Electone are arrayed the tone levers. They are divided into three groups:

- (1) Upper Manual Tone Levers (Ⓜ) : 13 voices
- (2) Lower Manual Tone Levers (Ⓛ) : 6 voices
- (3) Pedal Tone Levers (Ⓟ) : 3 voices

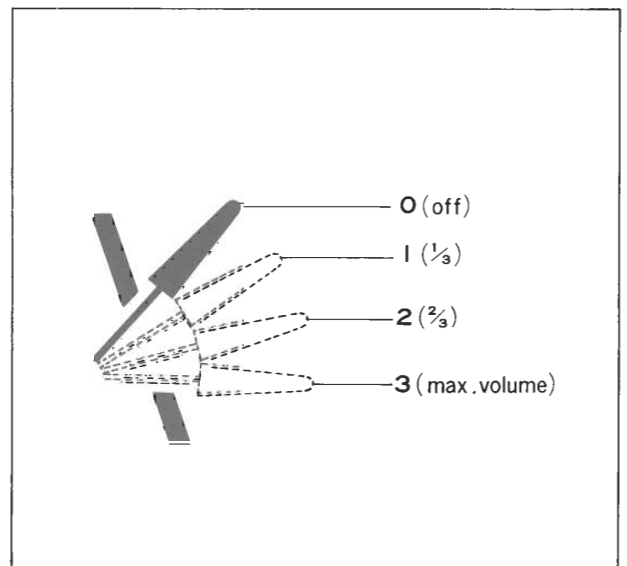


## Yamaha's Exclusive Tone Lever System

Each tone lever serves to impart a distinctive tonal quality to each note played. Instead of the usual simple on-off action of other systems, however, the Yamaha tone lever offers the unique advantage of continuously variable control from off to full. This means that even the finest shadings of volume control can be obtained from each and every lever, surely an amazing advantage in breadth of expression and ease of playing.

In addition, as the tone lever is depressed, two 'click-stop' positions are felt, where the lever catches slightly. These indicate 1/3 and 2/3 of the maximum setting attained when the lever is fully depressed. These handy click-stops provide mathematically accurate formulas the beginner can use with assurance, but they do not affect the subtle adjustments required by the keyboard master.

This exclusive Yamaha tone lever system allows the combination of these tones, giving a virtually limitless range of tone, with a full spectrum of rich harmonics. The Electone D-7 is thus able to satisfy even the most demanding professional organist. The most important point in developing good tone registration is the early mastery of the tone levers.

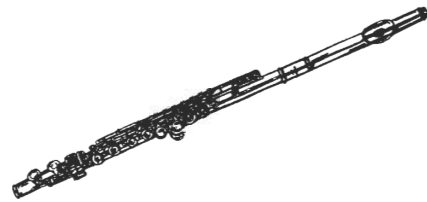
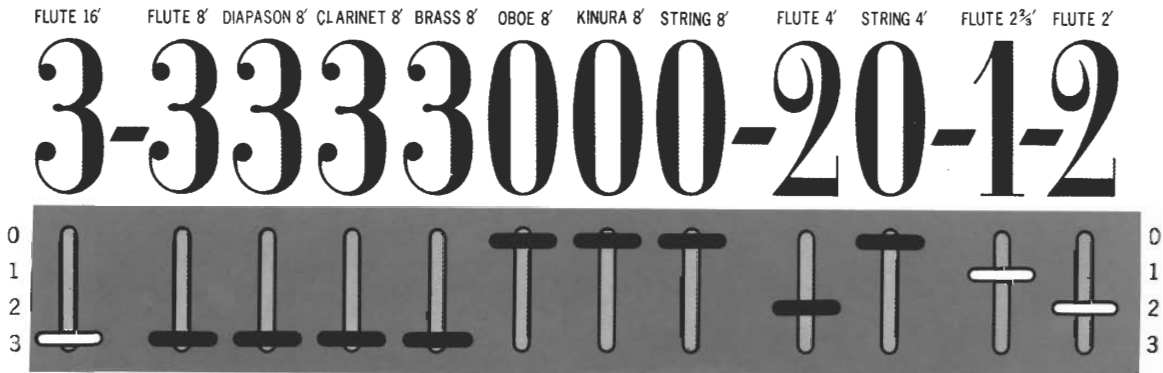


Make it a practice to listen to good music and build your "taste" for sounds so that you can use the tone levers in combination. Experiment in the creation of tone colors to suit your own taste.

This use of the tone levers for volume control also serves to adjust the balance among the three keyboards.

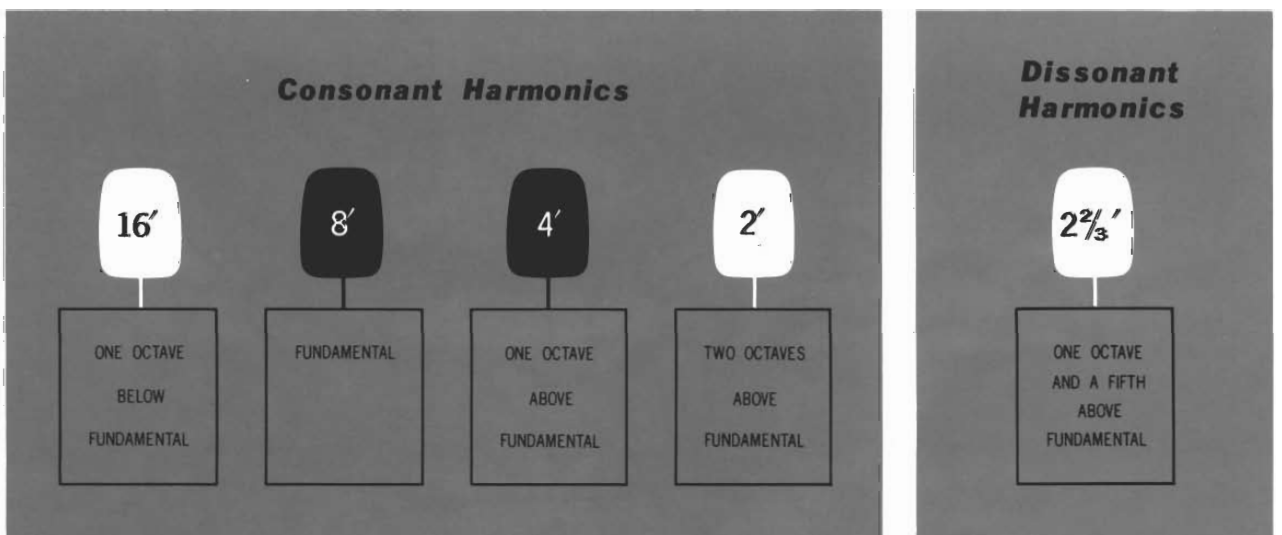
## Tone Lever Registration

Tone lever registration is given by numerical indications which show the click-stop position of each lever, as illustrated below. The indications are in the order in which the levers appear on the control panel, with hyphens separating harmonic groups.

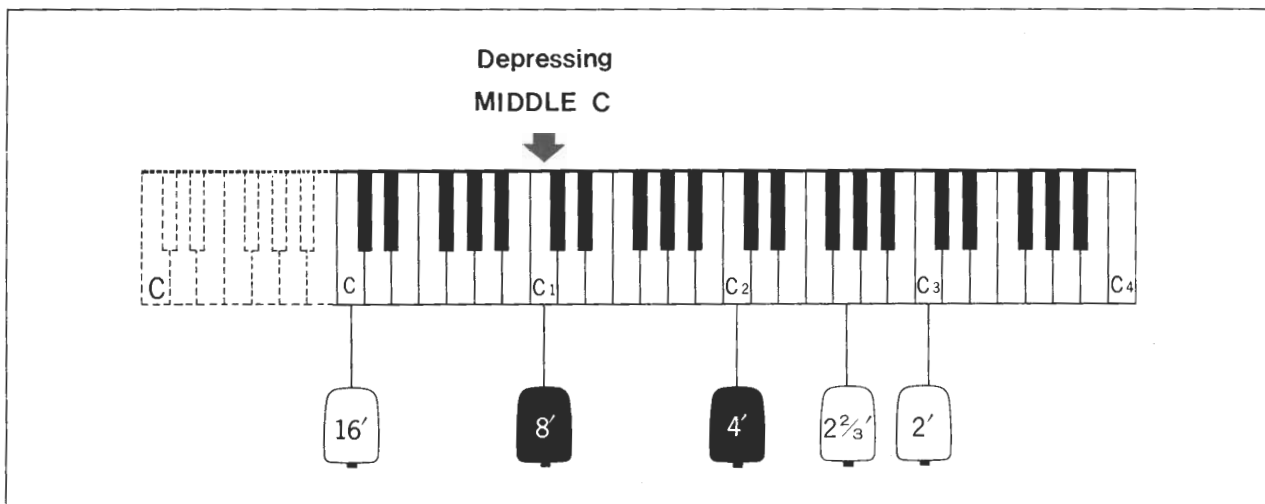


## Harmonics

Tone levers are of several varieties: 8', 16', 2 $\frac{2}{3}$ ', etc., each variety having a different pitch. The 8' tone levers are 'fundamentals', that is, they have the same pitch as the written note (*see the Compass Chart, page 7*). The others, called 'harmonics', are pitched a certain interval above or below the fundamental. Harmonics can be further subdivided into *consonants*, at octave intervals from the fundamental, and *dissonants*, separated by a third or a fifth from the fundamental.



As an example of what this means when you play, let us see which note can be produced by using one of the tone levers and pressing the key of middle C ( $c_1$ ). Pressing middle C and using the 4' tone lever, for example, will result in the same note as would be produced by pressing  $c_2$  (using the 8' tone lever, i.e., its fundamental).



It can thus be seen that the use of these harmonic levers actually results in increasing the Electone D-7's compass above and below that which is indicated by the keys and pedals alone.

The use of the 16' lever, for example, will extend the manuals down a further octave to  $C_1$ , (see dotted line above). Similarly the 2' lever raises the tone two octaves but, in actual practice, the highest note on the D-7 is  $b_5$ . Thus Flute 2' voice is not obtainable from the highest key ( $c_4$ ). This is no cause for alarm (see page 30). It is inherent in the design of

the D-7 and will cause you no inconvenience whatever when playing.

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 good music, always remembering not to overuse this effect as it may weaken its effectiveness. Use it primarily only for special effect.



**Flute 2'** This sharp tone will increase brilliance, and is particularly effective when used with 8' tones on the upper manual.

**Kinura 8'** When VIBRATO is set to "O" and SUSTAIN is used together with this lever, you can produce an amusing tone color.

**Chimes** One of the upper manual tone levers which is neither a fundamental nor a harmonic. This green Chime lever has two settings—on and off. When the lever is turned ON, and a key depressed, sharp, clear sound of real chimes is heard through the Natural Sound speaker. The effect of any tone levers in use when the Chimes are applied is temporarily cancelled, and reappears when the chimes are turned OFF. The wide two-octave range spanned by the chime effect is indicated by lines on the control panel above the upper manual.



## Some Suggested Tone Lever Registrations

Of course the final choice in tone lever selection depends on the preference of the organist as to the tonal effects most suitable to the piece being played. However we have tried to set out some suggestions which may be found helpful in realizing the specific characteristics of the Electone D-7. The figure in brackets ( ) indicates the applicable click-stop position (*see page 8*)

### 1. Full Organ

Upper Manual: Flute 16'(3), Flute 8'(3), Diapason 8'(3), Clarinet 8'(3),  
 Brass 8'(3), Flute 4'(3), Flute 2 $\frac{2}{3}$ '(2) Flute 2'(3)  
 Lower Manual: Wood 16'(3), Wood 8'(3), Horn 8'(3), Wood 4'(3)  
 Pedals: Bass 16'(3), Bass 8'(3), Tuba 8'(2)  
 Effects: Vibrato (0), Brilliance (3), Pedal Sustain (Off) Manual Balance ( )

**Note** 1) Using the chorus effect produces organ sound just like a real church organ.  
 (See page 27.)



2) You can automatically obtain another example of full organ tone by pushing the Preset Piston ③.

### 2. Upper Manual Registrations

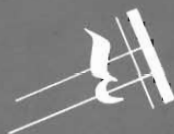
#### A) Combinations of the Flute Tone Family



- |   |                                      |
|---|--------------------------------------|
| 1. Flute 16', 8', 4', 2 $\frac{2}{3}$ ', 2' |                                      |
| 2. Flute 16', 8', 4', 2'                    |                                      |
| 3a. Flute 16', 4'                           | 3b. Flute 16', 4', 2'                |
| 4a. Flute 16', 2'                           | 4b. Flute 16', 2 $\frac{2}{3}$ ', 2' |
| 5a. Flute 16', 2 $\frac{2}{3}$ '            | 5b. Flute 16', 4', 2 $\frac{2}{3}$ ' |
| 6a. Flute 8', 2'                            | 6b. Flute 16', 8', 2 $\frac{2}{3}$ ' |
| 7a. Flute 8', 2 $\frac{2}{3}$ '             | 7b. Flute 16', 8', 2'                |
| 8. Flute 8', 4'                             |                                      |
| 9. Flute 8', 4', 2 $\frac{2}{3}$ ', 2'      |                                      |
| 10. Flute 8', 2 $\frac{2}{3}$ ' 2'          |                                      |
| 11. Flute 8', 4', 2'                        |                                      |
| 12. Flute 4', 2 $\frac{2}{3}$ ', 2'         |                                      |
| 13. Flute 4', 2 $\frac{2}{3}$ '             |                                      |
| 14. Flute 4', 2'                            |                                      |



B) Combinations of Various Tone Levers



1. Clarinet 8', Flute 2 $\frac{2}{3}$ '
2. Oboe 8', Flute 2 $\frac{2}{3}$ ', Flute 2'
3. Oboe 8', Flute 2 $\frac{2}{3}$ '
4. Kinura 8', Flute 2 $\frac{2}{3}$ ', Flute 2'
5. Kinura 8', Flute 2 $\frac{2}{3}$ '
6. Oboe 8', Kinura 8', String 8', Flute 2 $\frac{2}{3}$ ', Flute 2'
7. Flute 16', Oboe 8', Kinura 8', String 8', Flute 2 $\frac{2}{3}$ ', Flute 2'
8. Flute 16', Kinura 8'
9. Flute 16', Kinura 8', String 4'

**Note:**

- 1) Use full brilliance in 4-9 above.
- 2) Applying the sustain effect and playing *staccato*, you can enjoy more versatile sound.
- 3) With the subtle adjustments of each tone lever, you can enjoy a virtually limitless range of tone-color.
- 4) Use Tremolo, Chorus, Vibrato or Repeat effects to obtain more sophisticated sounds.

C) Combinations with Sustain Effect (Play all notes *staccato*.)



- |                                  |                                       |
|----------------------------------|---------------------------------------|
| 1. Flute 8', 4'                  | 2. String 8', 4'                      |
| 3. Oboe 8', Kinura 8', String 8' | 4. Diapason 8', Clarinet 8', Brass 8' |
| 5. Flute 4', String 4'           | 6. Flute 8', String 4'                |
| 7. Kinura 8', String 4'          | 8. Brass 8', String 4'                |

**Note:**

- 1) Using Repeat effect will enhance your performance.
- 2) Use Tremolo, Chorus, Vibrato or other effects for more versatile range of sounds.



**3. Lower Manual Registrations**

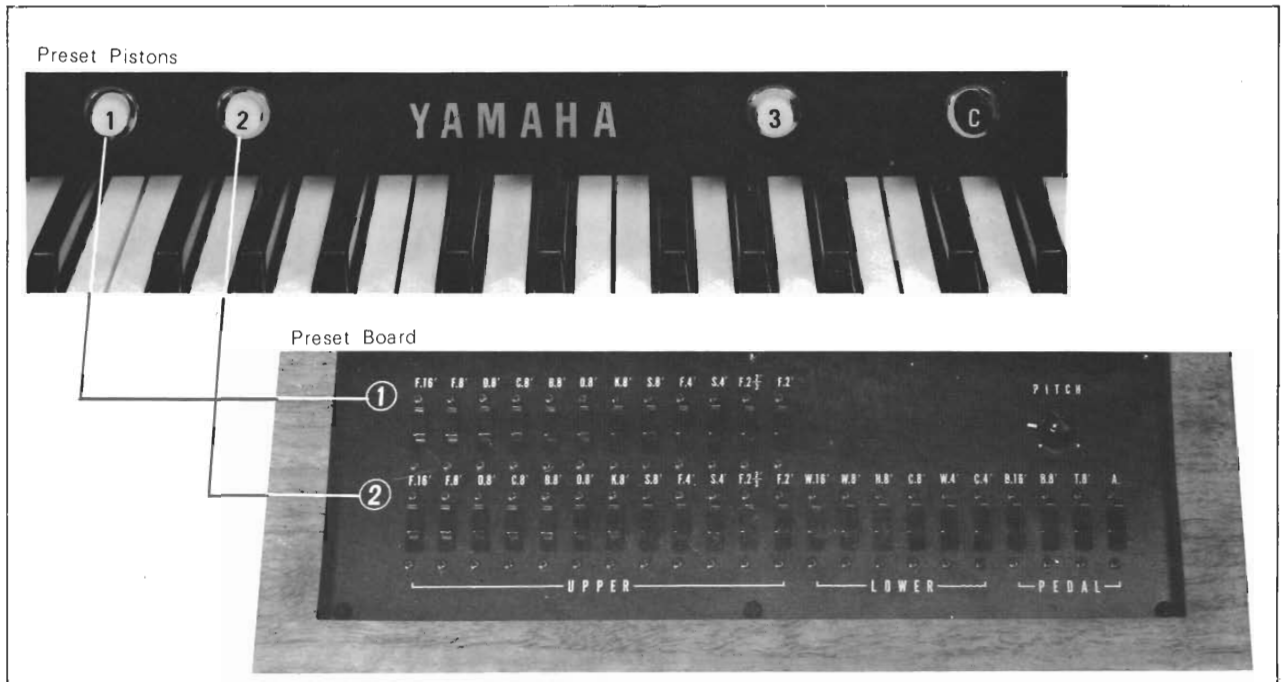
- |  |                         |
|--|-------------------------|
| 1. Wood 16'(1), Wood 8'(3), Wood 4'(2) | } .....for counter-back |
| 2. Wood 8'(3), Wood 4'(3)              |                         |
| 3. Horn 8'(3), Wood 4'(3)              |                         |
| 4. Cello 8'(3), Cello 4'(3) .....      | .....for block chord    |

**4. Pedals Registrations**



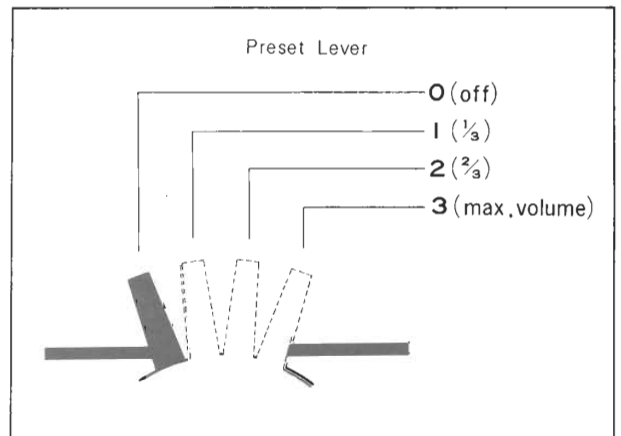
1. Bass 16'(3), Bass 8'(3), Tuba 8'(2) .....for chord or melody
2. Bass 16'(1~2), Bass 8'(3) plus Pedal Attack (2~3) .....for rhythm

# Voice Presets



All the dramatic tonal contrasts afforded by old-world concert organ—they're yours in the Electone D-7, thanks to this drawer-type Preset Board. It has the same full range of continuously variable tone levers in miniature ②, plus an extra set for the upper manual ①. The letter above each preset lever indicates the voice name; F for Flute, S for String and so on. These two rows of miniature tone levers allow the pre-setting of corresponding keyboards' voices. Each of these preset combinations is linked to a correspondingly numbered piston, so that by simply pressing the appropriate piston, you can select the desired preset combination instantly.

Depending upon the tune, a large change in the tone will result in improved effect during the performance. In this case, if the player pre-sets the desired voice(s) on the pre-set board before the



performance, he can select that voice (those voices), at any desired time during the performance, by operating the pre-set piston(s). After use, shut the pre-set board by closing the drawer.



This piston is used to select another upper manual voice preset at ① on the preset board.



This piston serves to select another whole organ voice preset at ② on the preset board.



This is a factory set full organ combination scientifically composed to bring out fully the Electone D-7's characteristics. There are thus no corresponding levers on the Preset Board.



Pressing this piston returns the organ to the settings made on the console panel, and extinguishes the indicator light in the previously used preset piston.

Identification of the combination in use can be made at a glance, since each piston has a built-in indicator light which lights when it is pressed. When a second piston is pressed, the indicator light for the first piston will go off and the light for the second will go on.

### Knee Lever Voice Changeover...A Three-Manual Organ!

In addition to these three preset combinations, the Yamaha Electone D-7 also features an **Upper Preset Cancel** selector ㉔, which works in a dual arrangement with the **Knee Lever** ㉑ to allow instantaneous switching during the performance from the preset voices to those registered on the console tone levers. It thus gives the D-7 a range equivalent to that of a full three-manual organ, the only organ in its class with this advanced feature.

Just turn on the Upper Preset To Panel selector and you can switch from the selected preset voice to the upper console tone lever voice: open the knee lever and you are suddenly playing on another manual, with all the brilliant harmonic contrasts that shift makes possible. Release the knee lever and the original tonal balance returns. You can achieve a dramatic 'conversation', just as if the D-7 organ were a full three-manual organ (see *Effect Selectors*, page 19).



In order to prevent sudden changes in organ volume when instantaneous changeover is made with the Preset Pistons, the miniature preset levers should be registered so as to line up the acoustic levels (①, ② and ③ ④). As a guide, it is a good idea to try to keep the numerical total of the click stop positions for each row of preset tone levers approximately the same as that for the respective keyboard's console tone levers. Each total then, for example, of ① and the Upper Manual portion of ② should ideally equal the total of the settings on the Upper Manual console tone levers. the same is true for the Lower Manual portion of ② and the Lower Manual console tone levers, etc.

### Some Suggested Preset Registrations

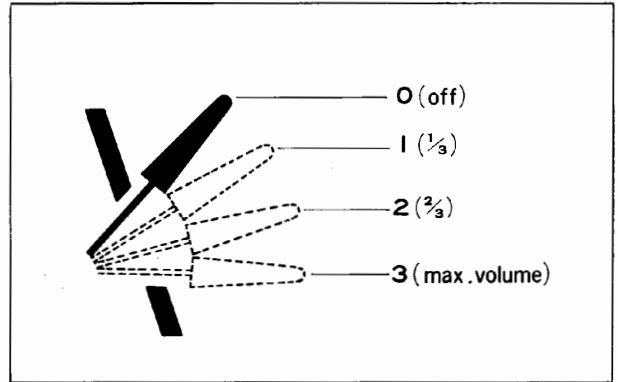
Brackets ( ) indicate click-stop positions.

①	Upper: Flute 16'(3), Flute 2 $\frac{2}{3}$ '(3)
	Upper: Oboe 8'(3), Kinura 8'(3), String 8'(3), String 4'(3)
②	Lower: Wood 16'(1), Wood 8'(3), Horn 8'(1~2), Cello 8'(1), Wood 4'(2)
	Pedals: Bass 16'(1), Bass 8'(3), Attack (1~3)

In addition, free use may be made of the Tone Lever Registrations suggested on page 11. sections 1 and 2. Always keep in mind, however, that balance must be maintained among the various preset combinations.

# Effect Levers

The effect levers ① of the Electone D-7 provide a wide range of tonal effects which add to the breadth and variety of possible interpretations. These levers have the same operation as the tone levers and allow the organist to vary the degree of their effects according to their stop positions, as illustrated.

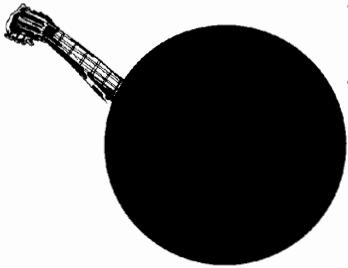


## Brilliance ①

This is the lever used to obtain the difference in mood necessary in the performance of quiet, sombre works or in the production of brighter, richer tonal effects. When this lever is set to off, a softer, more mellow tone is imparted, reminiscent of muted violins. An example of a work suited to this type of tonal treatment would be Sarasate's 'Zigeunerweisen'. This effect can also resemble the

distant sound of a flute played *pianissimo*. On the other hand, depressing this lever produces a progressively richer, brighter tonal quality. When applied to 8' voices with coupled harmonics, the brilliance lever provides the possibility of a light and dazzling treatment both of a single melodic line, and of chords.

## Repeat ⑮



Everyone will enjoy the fun of the many thrilling and exciting sounds that are possible with repeat percussion. Use of this lever 'chops up' so to speak, notes played on the upper manual, deriving a double-strummed effect similar in sound to the mandolin. The lever gives a continuous spectrum of strength adjustment.

## Touch Vibrato ⑯

The explanation of this lever is given under *Touch Vibrato*, page 16.

## Vibrato ⑰

The use of vibrato increases the emotional quality of the tone and adds a brisk and lively air to passages of relative simplicity. Its depth is controlled by this lever. The sensational **Touch Vibrato**, a Yamaha exclusive, is a considerably more sophisticated effect. (See page 17.)

## Pedal Attcak ⑳

By accenting the initial portion of each note, this lever provides an effective rhythmical element, reminiscent of the string bass played *pizzicato*. This effect is particularly effective in rhythmic works. Depressing the lever gradually increases the strength of the effect.





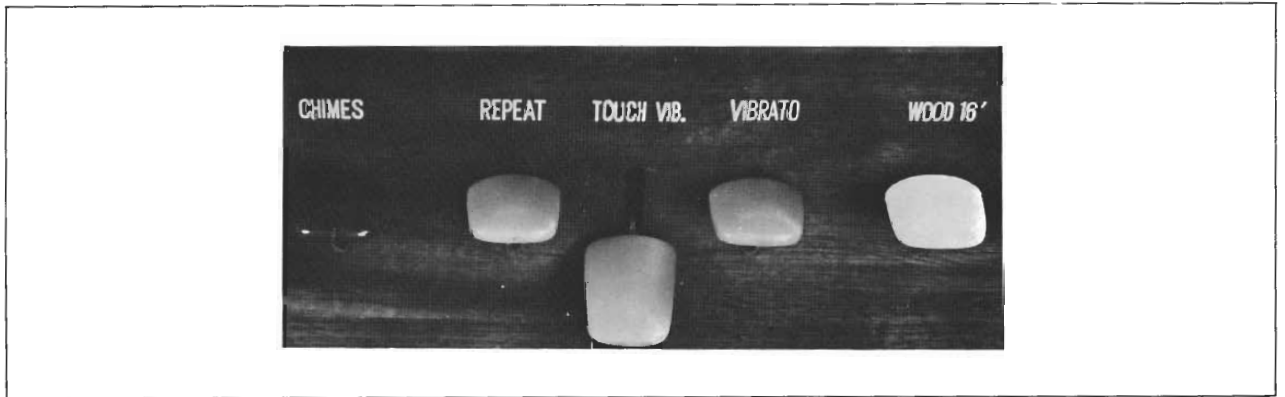
# Touch Vibrato

## Play with True Feeling

Vibrato to a violinist is the language of his heart speaking through his fingers. Why should this expression be denied the organist?

It's yours in the Electone, the world's only organ which provides a vibrato controlled by the vibration of the fingers on the keys. What's more, the intensity of this dramatic technique can be tailored to any selection because it is controlled by its own Variable Control Lever.

The result: a level of response to your every musical whim and passion, impossible in conventional electronic organs.



The middle of the three effect levers ① shown in the above photo is the Touch Vibrato control lever ⑯. When this lever is depressed, vibrato can be applied to any upper manual key by the lateral vibration of the hand, and its speed will correspond exactly to the hand's vibration. This is the Touch Vibrato, which is exclusive in the Yamaha Electone.

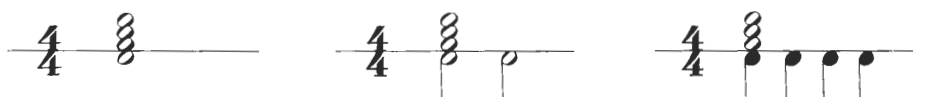
Through it, the organist obtains the vital personal touch which has always been characteristic of the violinist, and can communicate emotional nuance to the audience as never before.

Using this variable control lever, the player can adjust the Touch Vibrato to the desired intensity.

The touch vibrato can really shine in passages where a single note forms the melodic line.

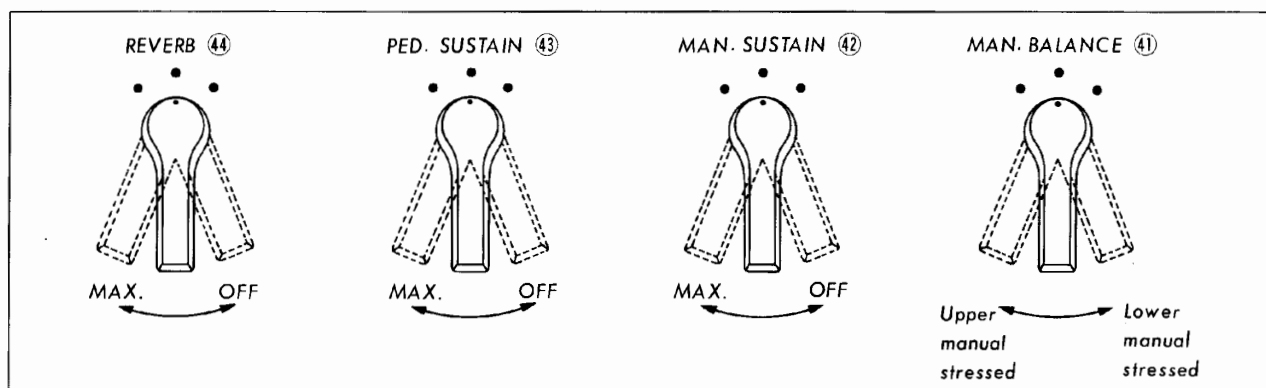


1. Please note that Touch Vibrato does not supersede the regular vibrato with Vibrato Lever ⑰ unless Touch Vibrato Lever ⑯ is fully depressed (to position 3). Slight regular Vibrato with Lever ⑯ may sometimes bring better musical results when used with Touch Vibrato.
2. Too heavy a touch may cause fluctuation in the pitch of the note to which vibrato is applied. Try always for a light, natural fingering.
3. Touch vibrato playing will be easier if the rhythm from the left hand and foot is kept as simple as possible. For example:



# Effect Controls

The four black knobs situated to the left of the upper manual are the effect controls ④. These controls are all continuously variable for the maximum in expressive freedom as shown below.



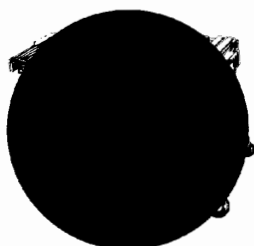
**Manual Balance ④** The manual balance control governs the relative strength of the upper and lower manuals, and is normally left in the center position. But when it is desired to strengthen one manual—for example, when the upper manual plays the melody and the lower its accompaniment—the knob may be turned (in this case to the right) to emphasize the upper manual. Similarly, the balance knob is turned to the left when a strongly played accompaniment is required or when the melody is played on the lower manual and requires greater emphasis.

**Reverb ④** Reverberation is the quality that is imparted to musical sound as a result of the acoustical properties of a large auditorium or hall. The use of this effect, therefore, allows you to attain this grandeur at will, evoking the aura of professional performance in your own living room. The knob serves to regulate the strength of the reverberatory effect, softer or louder as the music requires.

**Pedal Sustain ④** The pedal sustain control provides a sustain effect for all the voices of the pedalboard. The length of the effect can be controlled as illustrated. If used together with the pedal attack lever ②, it produces a real bass tone played *pizzicato*.

**Manual Sustain ④** Sustain effect, the prolonging of notes on the upper manual, is so essential in effective legato performance. It permits sharp tones to be produced simultaneously with smoother treatment, thereby further increasing the expressive range.

The manual sustain effect is in the form of a dual control with the control ④ linked to the sustain selector ③. Their respective functions may be outlined as follows:



---

**Sustain Control** ④②

This control is used to set the maximum possible sustain, and may be set before or during the performance. It is turned fully to the left for no sustain, and progressively to the right to lengthen the effect.

**Sustain Selector** ④③

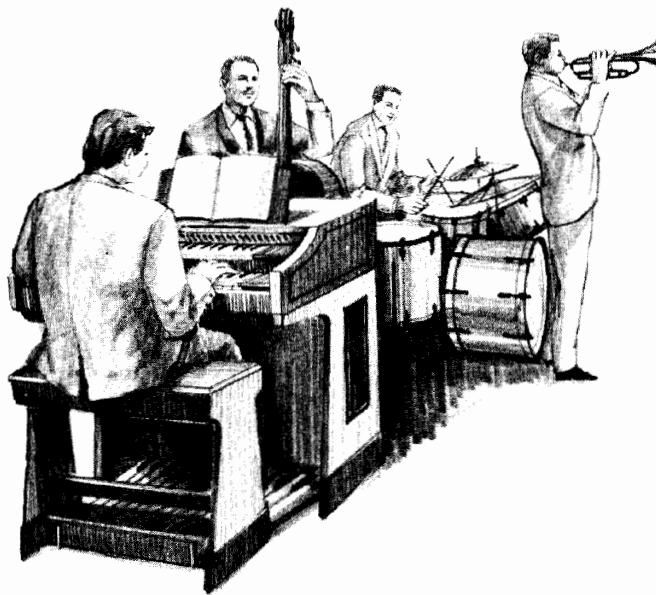
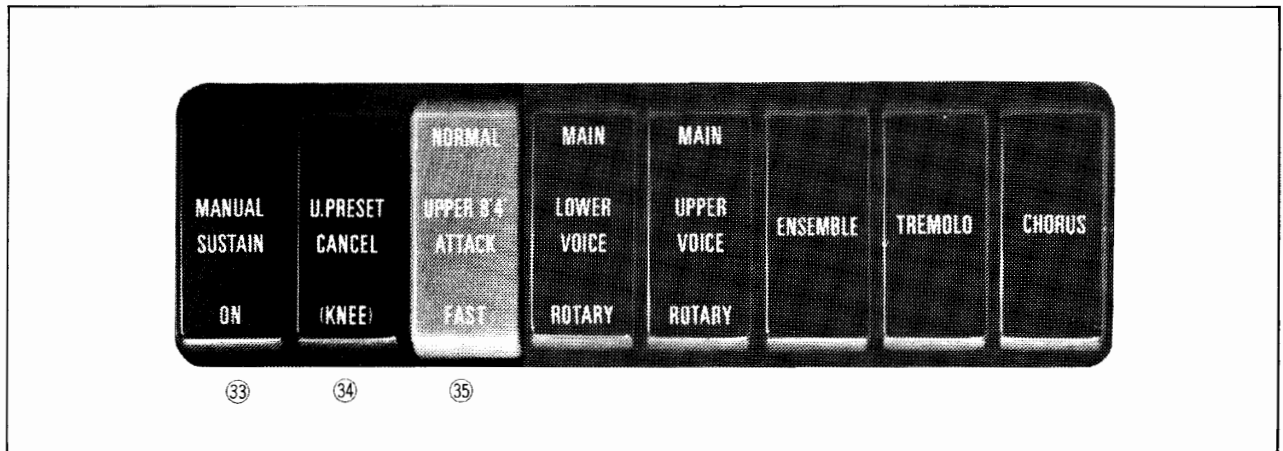
This tablet is used before or during the performance for instantaneous implementation or stop of the sustain effect preset by the sustain control.

Manual sustain can be applied to all upper voices governed by black (8' and 4') tone levers, over the full 49-key range of upper manual.



# Effect Selectors

The three tablet controls situated to the right of the lower manual are called Effect Selectors <sup>®</sup>. They are all of a two-position design for easy selection while playing.



**Manual Attack <sup>®</sup> 36** Controlled by the red tablet, this effect gives greater definition to the beginning and end of notes played on the 8' and 4' voices of the upper manual, imparting new clarity and vigor to jazz and other lively pieces. Please note that this attack effect cannot be obtained when the manual sustain <sup>®</sup> 33 is on.

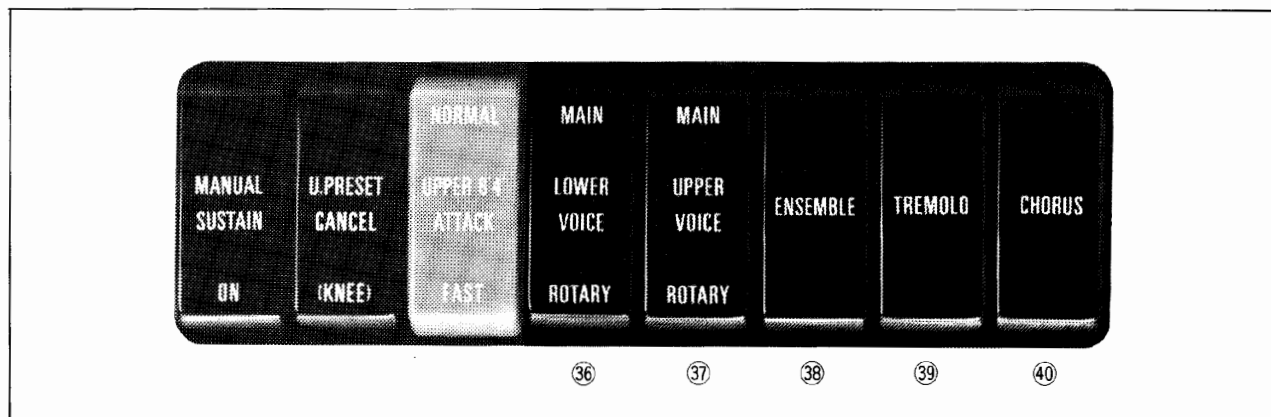
**Upper Preset Cancel <sup>®</sup> 34** This tablet works in a dual arrangement with the knee lever <sup>®</sup> Q to allow instantaneous switching during the performance from the preset voices to those registered on the console tone levers.

For more about this important feature, see *Voice Presets, page 13*.

**Manual Sustain <sup>®</sup> 33** The explanation of this tablet is given under *Manual Sustain, page 17*.

# Sound in Motion


A rich, vibrant rush of sound that can only leave you wondering whether its source is really a single instrument ! This is the tremolo which imparts a vibrancy subtly different from that of the vibrato to all notes played on the Yamaha D-7.

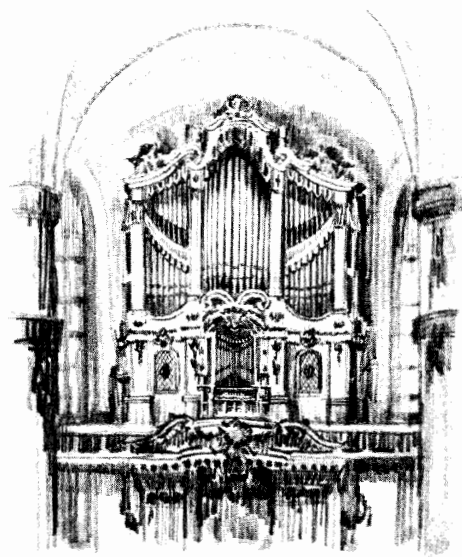


A rotating baffle in front of a speaker gives a fairly good approximation of what tremolo really sounds like, but the real thing requires a moving sound source. This is why the Electone D-7 rotates the speaker itself—a smaller version of the Main NS speaker described later, powered by its own amplifier. The difference is an added dimension of mellow expression that makes the walls of your room seem to sing when you use the TREMOLO effect. The CHORUS tablet provides a slower version of the same richness, especially suitable for liturgical music.

For an exciting combination of the stable main speaker plus rotary, use the handy ENSEMBLE tablet.

Tailor any of these full-bodied features to an individual selection by choosing the upper or lower manual only, or both together.

The Tremolo selectors  which accomplish this are five black tablets to the right of the lower manual. Each has a simple ON-OFF type action which allows quick operation while playing.



## **Lower Voice & Upper Voice**

These tablets channel the sound from the two manuals into the main speakers or the rotary speaker, as desired.

## **Ensemble**

The use of this tablet with the voice tablets above allows sound to flow from both rotary and main speakers simultaneously.

## **Tremolo**

Turning this tablet on turns the rotary speaker at seven revolutions per second.

## **Chorus**

This tablet turns the rotary speaker at one revolution per second.

### Producing the Tremolo Effect

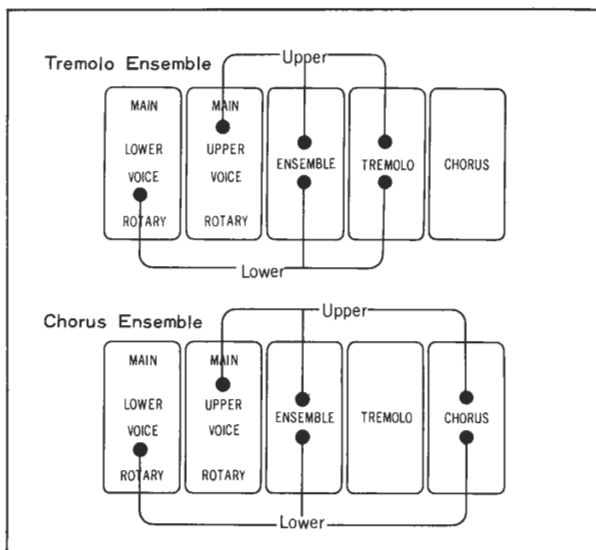
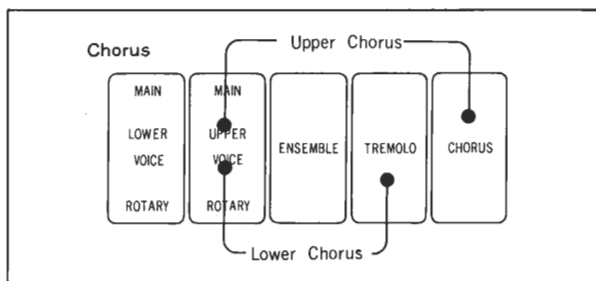
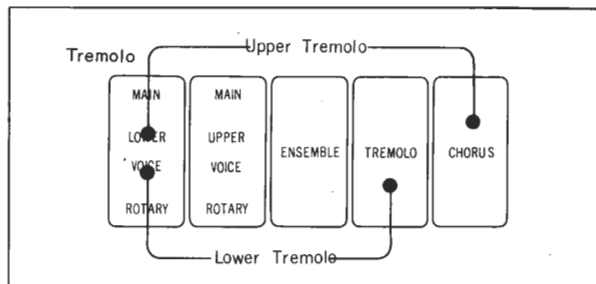
Set the tablets as shown in the figure. The use of two voice tablets will apply the tremolo effect to the whole organ. Moving and natural pulsations of sound lend greater depth, fuller meaning to serious passages and add a touch of genius to pieces which have perhaps lost some of their original freshness. This effect is especially useful for rich, tremulant work.

### Producing the Chorus Effect

Set the voice and chorus tablets as in the figure. The use of two voice tablets will apply the Chorus effect to the whole organ, providing the dignity and solemnity of choral voices which is so effective in the performance of sacred music or other works of slow tempo.

### Producing the Ensemble Effect

Set the ensemble tablet in combination with either the Tremolo or Chorus setting. Sound flows from both the rotary and main speakers in an 'ensemble' effect which not only enhances tonal richness, but also acts as a softer, medium strength Tremolo or Chorus.



#### 1. Slower pieces:

Play melody on the upper manual without tremolo.

Play chords on the lower manual with tremolo.

#### 2. A softer treatment of slow pieces indicates the reverse:

Melody on the upper manual with tremolo.

Chords on the lower manual without tremolo.

#### 3. In pieces of ordinary tempo:

Melody on the upper manual with tremolo.

Counter-back on the lower manual without tremolo.

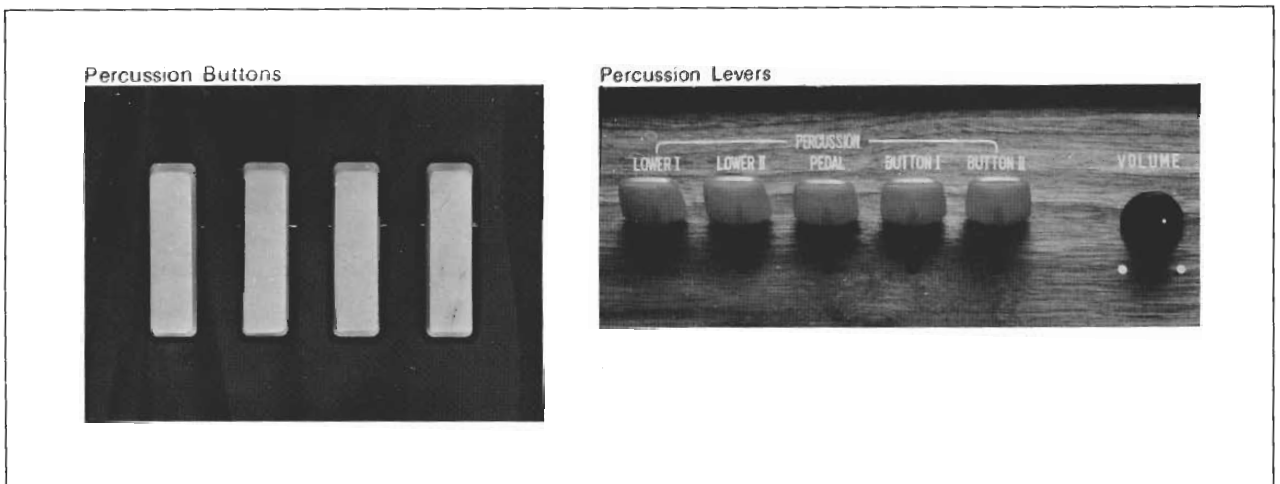
#### 4. Up-tempo pieces:

Chop notes—i.e., *play with strong staccato*—or block chords on the upper manual with tremolo.

Rhythm and chords on the lower manual without tremolo.

# Percussion Section

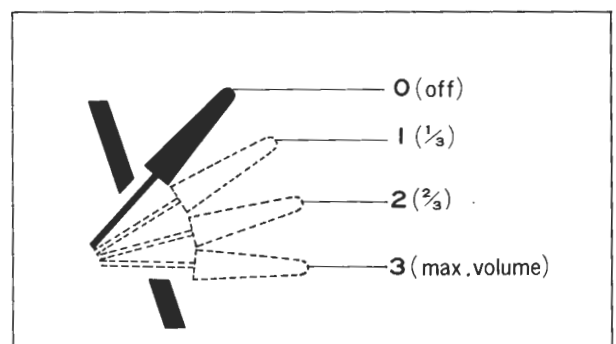
Startling percussive effects are simple to create, but the Yamaha Electone D-7 has carefully selected their tones and methods of control to create the perfect complement to a wide range of light music selections. The pedal percussion lever overlays notes on the pedals with a clear, stirring cymbal effect, while the Lower I and Lower II levers provide for pinched and brushed cymbal effects on lower manual notes. The two button percussion levers can be used either individually or in combination and, as a result, four percussion buttons can be used to apply a wide range of instrumental and novelty effects, entirely independent of the manuals and pedals.



Percussion levers (Ⓢ)	Percussive sounds			
Lower I (Ⓢ) Lower II (Ⓢ) Pedal (Ⓢ)	Pinched cymbal (or maracas) Brush cymbal Pedal cymbal			
	1	2	3	4
Button I (Ⓢ) Button II (Ⓢ)	Conga Crash cymbal	Bongo Triangle	Claves Novelty I	Brush snare Novelty II

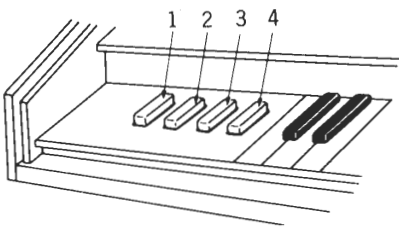
What is most useful is that the volume of the percussive effects can be varied independent of the melody according to the click-stop position of each lever, bringing a new dimension of realism to your interpretation.

It can easily be seen that in accenting martial music or in playing up-tempo jazz or Latin music, the presence of these percussive effects is essential to the achievement of a natural rendition.





The percussion buttons allow you to make and accentuate rhythms with the left hand by striking two or more buttons in sequence. This will mean that the left hand is unavailable for chording and, if only the bass sound is used, the harmony will be insufficient. The right hand is therefore used to compensate. When playing in an ensemble or accompanying other melodic instruments, use the left hand with the percussion buttons for rhythm and the right hand on the upper or lower manual for chords. The following are a few of the many possible effects which may be practiced to add to your musical enjoyment. The numbered references to the buttons follow the table on Page 22.



- 1—fourth space
- 2—third space
- 3—second space
- 4—first space



### Using the 'Button 1' lever

*Rumba*

*Beguine*      *Samba*

*Bossa nova*

*Cha-cha*      *Baion*





# Other Controls

## Master Volume <sup>Ⓜ</sup>

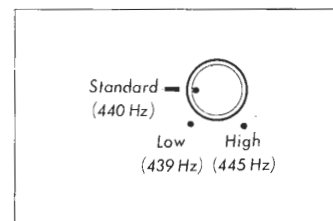
This knob determines the maximum volume obtained from the Electone, and can be varied as desired.

## Expression Pedal <sup>Ⓡ</sup>

Expressive shading within each piece and the accenting of individual notes can be achieved with this pedal, within the overall range set by the Master Volume Control.

## Pitch Control <sup>④⑤</sup>

The pitch control (mounted on the preset board) turns the whole Electone range up or down, so you can tune to a piano, etc., for duets and group selections.

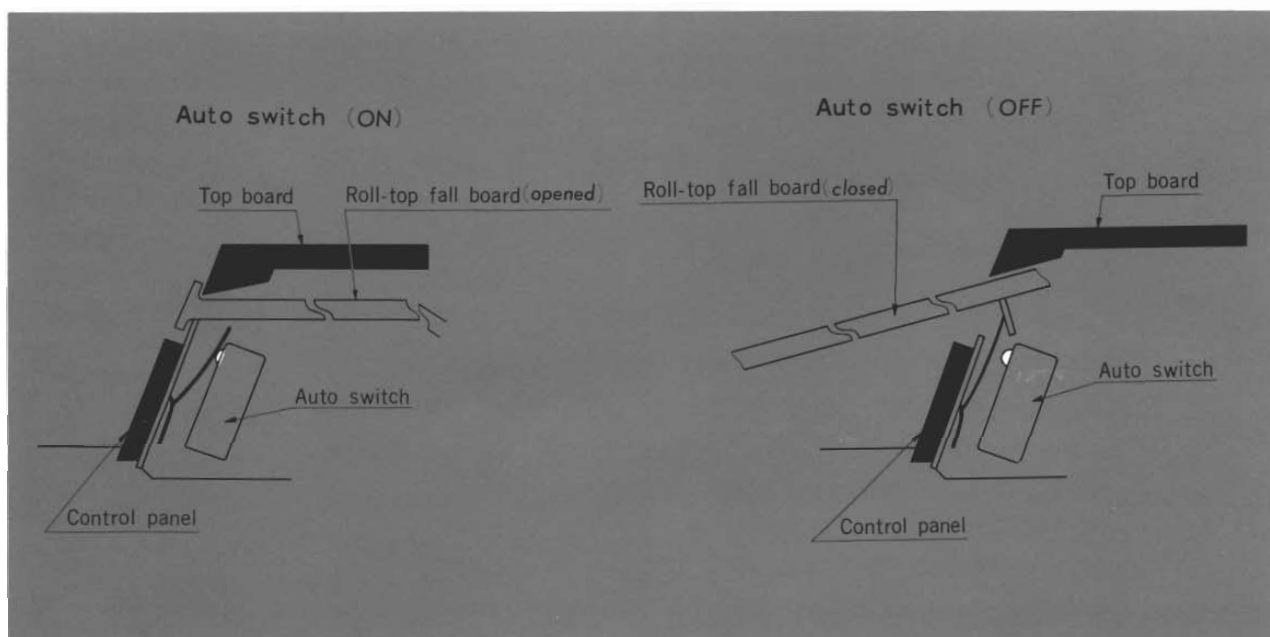


## Knee Lever <sup>Ⓚ</sup>

The metal lever folded horizontally underneath the key bed is the knee lever. It allows passage by passage precision control of voice switching in conjunction with the Upper Preset Cancel tablet<sup>③④</sup>. See *Voice Presets on page 13*.

## Automatic Power Switch

The automatic power switch is linked to the roll-top fallboard. When the fallboard is closed, the Electone is automatically switched off, and the Electone will be turned on again when the fallboard is reopened. There is thus no danger of the organ being left on inadvertently. This is, however, designed as a safeguard, and power should normally be turned on and off by using the main switch.



# To Fully Enjoy Your Electone

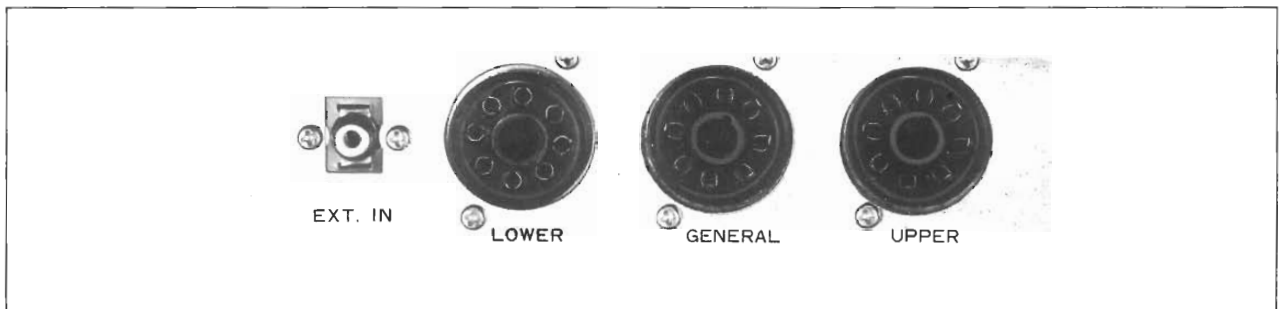
Besides the many tone and effect controls through which almost infinite varieties of voice and expression can be obtained, the Yamaha Electone D-7 offers you a number of additional features to further enhance your playing pleasure.

## Headphone Jack

Plug a Yamaha headphone set (optional accessory) into the jack under the key bed and you can play with the volume as high as you like without disturbing anyone, even in the middle of the night.



## Tone Cabinet Sockets



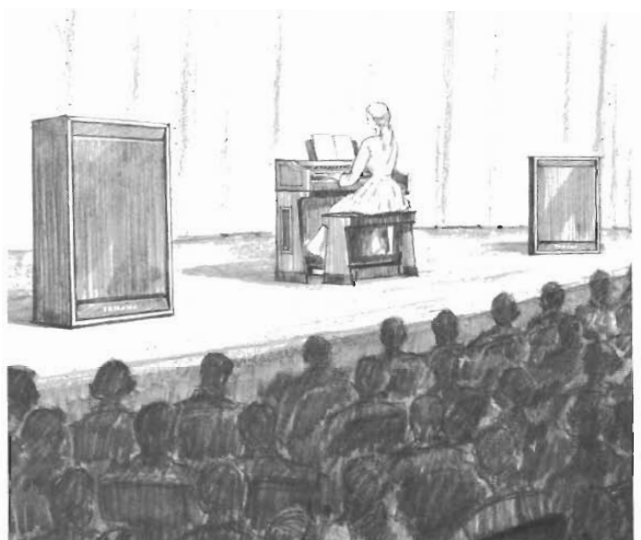
Three sockets are located at the lower left-hand corner of the back of the Electone (see the photo above). Thus when you are playing in a stage situation or require greater tonal power, you can connect Yamaha Tone Cabinets without the necessity of rewiring the amplifier.

All of them are US-type tone cabinet sockets: UPPER, GENERAL, and LOWER.

**UPPER:** This socket isolates the voice from the upper manual for separate transmission to a tone cabinet

**LOWER:** Isolates the voice of the lower manual. Thus the use of two Yamaha Tone Cabinets, one connected to the upper socket and one to the lower, will combine the augmented tonal power with an authentic stereo effect.

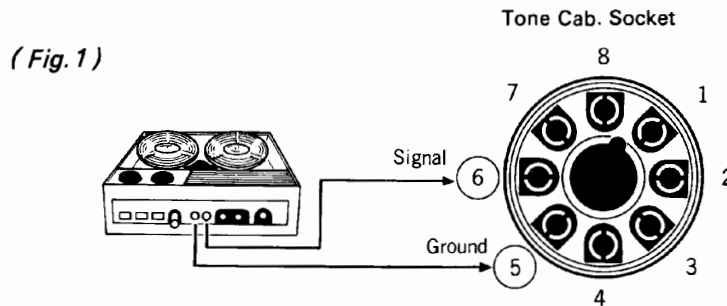
**GENERAL:** When only one tone cabinet is to be used, it should be connected to this socket to secure a balanced mix of upper manual, lower manual and pedal tones.



## Recording

When it is desired to record your performance, the use of the tone cabinet sockets will provide a much clearer, higher fidelity tape than will a microphone. To connect a tape recorder to the US-type socket (see Fig. 1) obtain a US-type plug and connect

the signal terminal of the tape recorder 'record' plug to terminal #6 and the ground terminal to #5. For monaural recording (single track), use the GENERAL socket; for stereo, the UPPER and LOWER sockets.



**Note:** Be sure to adjust the recording level of the tape recorder to the most suitable level before recording.

## External Input Jack

This jack is located to the right of the tone cabinet socket (see the photo on page 27). It allows you to connect a tape recorder, record player or radio directly, using the amplifier and Natural Sound Speaker of the Electone. Thus these external inputs will come to life under Natural Sound reproduction and give you an opportunity to broaden your musical experience.

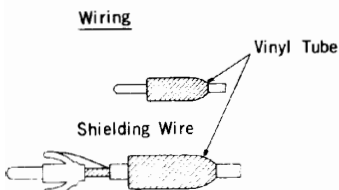
Since their tones are not controlled by the expression pedal, you can play a tape recording or record of an orchestral concert and 'sit in' yourself on the Electone.

Alternatively, you can record yourself playing a piano or the Electone, replay the tape, and be your own duet partner.

In addition, the 'Mini-Pops', a rhythm cabinet distributed by Yamaha, may be connected here for even more advanced percussion effects.

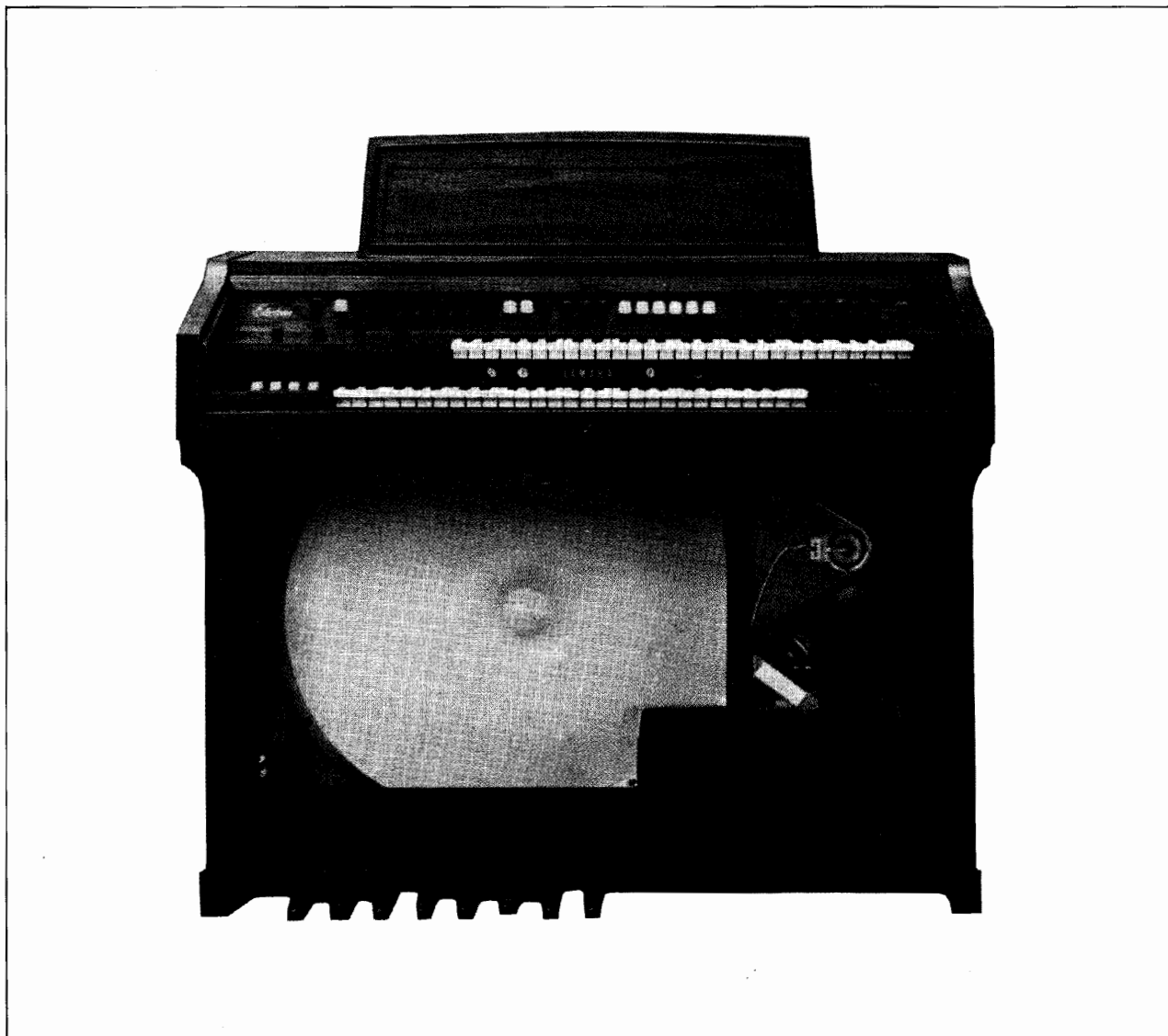


- Note:**
- 1 Connect the EXT. IN Jack and the output jack of a tape recorder with shielded wire. Use a spare plug inserted in the EXT. IN Jack.
  - 2 Volume setting for playback tends to differ with the make or model of tape recorder.
  - 3 Adjust the volume of the Electone and the tape recorder to avoid distortion of the sound quality.
  - 4 Make absolutely sure never to touch or otherwise interfere with the circuits or internal elements of the Electone.



# A Word about Yamaha's Exclusive Natural Sound Speaker

---



In this age of electronic marvels, we are accustomed to speakers which offer 'only X% distortion' or 'high fidelity throughout the range'. One almost gets the feeling that human perception is left out in the search for technical perfection.

And if you examine the 'tonal characteristics curve' of a violin, or of a cello, or piano or organ, you will realize that this is exactly what has happened. The natural imperfections which are the emotion and the power of live performance will obviously elude the scientists intent on mathematical exactness and symmetry.

We at Yamaha believe that music must satisfy the man, not the equation. This is why we have built the Natural Sound Speaker.

Here is a speaker which is not symmetrical. It is not

a cone, nor a horn nor any other conventional shape. It consists, in essence, of a diaphragm with a fixed edge, the whole surface of which vibrates according to the principle of multi-dimensional flexion.

The shape is derived from that of the piano sounding board, and like the sounding board of any other musical instrument, it is 'imperfect'. Like your ear and like everything else in nature, it follows no pat formula, it obeys no regular rule. It is not a Hi-Fi speaker, for what musician wishes to be faithful to someone else's concept of sound?

Surely the musician, as a creative artist, deserves a sound system which is designed for the human ear; designed for Nature; designed not for reproduction but for creative musicianship. We believe the Natural Sound Speaker fulfills this aim.

# Care of Your Electone

---

In general, you should treat your Electone D-7 with the same care you would give any fine musical instrument. However the following points are suggested to assure optimum enjoyment.

1. Be sure to use your Electone only on the correct voltage. If it is necessary to change the voltage of the Electone, please consult your Yamaha Electone service agent.
2. If any trouble develops, contact your Yamaha service agent immediately. Do not attempt to touch or otherwise interfere with the circuits or internal elements of the Electone.
3. When you have finished playing, be sure to turn off the main power switch.
4. In order to clean the manual keys, tabs, etc., use a damp cloth. Never apply organic solvents such as alcohol as they may result in damage to the plastic materials used.
5. Do not expose the Electone cabinet to the direct rays of the sun, as this may result in bleaching of the finish or separation along the joints of the wood.
6. It is also advisable to place the Electone in such a way that it is not exposed to excessive humidity or currents of heated air.
7. In opening and closing the roll-top fallboard, grasp the handle with both hands and slide the fallboard gently in its groove. Never attempt to raise the fallboard directly upwards, and do not place heavy objects on it.



# Do not Be Alarmed If...

---

**1. A note should sound the instant you turn on the switch.**

This merely indicates normal operation consequent to a flow of electricity in the main amplifier.

**2. The highest note on the Electone D-7 is b<sub>5</sub>.**

Therefore, Flute 2' voice is not obtainable from the highest key (c<sub>4</sub>).

**3. Only one note is produced even when two pedals are depressed simultaneously.**

When the pedal sustain effect is used, notes overlap following notes. In order to achieve tonal clarity, the Electone is designed so that a note is electronically suppressed the instant the next note is struck. If two pedals are struck simultaneously, only the higher one sounds.

**4. Occasional unpleasant static.**

In the majority of such cases, the cause can be traced to the turning on or off of refrigerators, washing machines, electric pumps or other household appliances. Electrical fault in a neighboring outdoor neon sign may also be to blame.

When the cause is a home appliance, connect the Electone to an outlet as far as possible away from the offending appliance. This phenomenon, although perhaps annoying, poses no danger to the Electone's circuitry.

If the cause is a fault in neon or fluorescent lighting fixtures, the fault should be repaired. When the cause is unknown, or in case of doubt, contact your Yamaha dealer.

**5. The pedalboard seems pitched high, or the treble of the upper manual low.**

This is particularly noticeable in comparison with the piano, and results from the difference in the harmonic composition of the tones. The piano has a greater wealth of harmonic overtones, particularly in the upper and lower reaches of the compass. Thus tuning cannot be done on the basis of the fundamental alone but must take into account the many harmonics. On the other hand, the Electone has a set number of harmonics and therefore cannot be tuned like the piano. It must be tuned on the basis of the fundamental alone. In this sense, the piano and the Electone are fundamentally different. This is common in all organs.

**6. The Electone reproduces radio or TV sound signals.**

This kind of phenomenon can occur when there is a powerful radio or TV transmitter, or an amateur radio operator, located in the vicinity. If this situation is distracting, contact your Yamaha dealer.

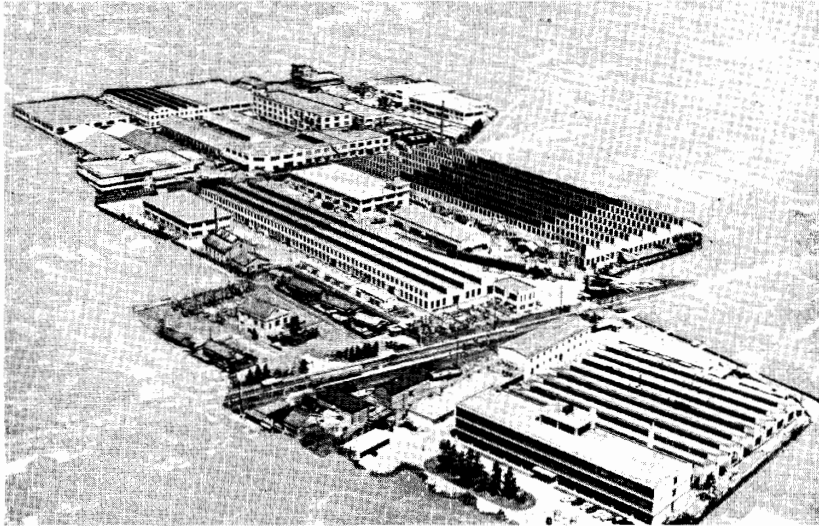


# Specifications of Model D-7

KEYBOARDS		
Upper Manual	49 keys c—c <sub>4</sub>	(4 Octaves)
Lower Manual	49 keys C—c <sub>3</sub>	(4 Octaves)
Pedals	13 keys C <sub>1</sub> —C	(1 Octave)
TONE LEVERS		
Upper Manual	Flute	16'
	Flute	8'
	Diapason	8'
	Clarinet	8'
	Brass	8'
	Oboe	8'
	Kinura	8'
	String	8'
	Flute	4'
	String	4'
	Flute	2 $\frac{2}{3}$ '
	Flute	2'
	Chimes	(2 Octaves)
Lower Manual	Wood	16'
	Wood	8'
	Horn	8'
	Cello	8'
	Wood	4'
	Cello	4'
Pedals	Bass	16'
	Bass	8'
	Tuba	8'
EFFECT LEVERS		
	Brilliance	
	Repeat (Upper)	
	Touch Vibrato (Upper)	
	Vibrato	
	Pedal Attack	
EFFECT CONTROLS		
	Reverb	
	Pedal Sustain	
	Manual Sustain	
	Manual Balance	
EFFECT SELECTORS		
	Manual Sustain	
	Upper Preset Cancel	
	Manual Attack (Normal/Fast)	
TREMOLLO SELECTORS		
	Upper Voice (Main/Rotary)	
	Lower Voice (Main/Rotary)	
	Ensemble	
	Tremolo	
	Chorus	

PERCUSSION SECTION	
Percussion Levers	
	Lower I
	Lower II
	Pedal
	Button I
	Button II
Percussion Buttons (Four)	
VOICE PRESET SECTION	
Preset Board (Drawer type)	
Preset Pistons	
1	Upper Manual
2	General
3	General (factory set)
C	Cancel
OTHER CONTROLS	
Master Volume	
Expression Pedal	
Pitch Control	
Knee Lever	
Power Switch (Man. & Auto) w/Pilot Lamp	
OTHER FITTINGS	
Headphone Jack	
External Input Jack	
Tone Cabinet Sockets (Upper/Lower/General)	
Roll-top Fallboard with Lock	
Music Rest	
Matching Bench with Music Storage Space	
NATURAL SOUND SPEAKERS	
Main:	JA-6001 35 × 25"
Tremolo:	JA-1701 6 $\frac{1}{2}$ × 9"
Electro-control 2-speed	
CIRCUITRY	
Fully transistorized	
ICs:	24
Transistors:	384
Diodes:	204
Main Amplifier:	Dual-channel (SEPP)
Total Output Power:	45 Watts
Power Consumption:	130 Watts
117V AC 60Hz	
DIMENSIONS	
Width	45"
Depth	27 $\frac{1}{2}$ "
Height	37"
WEIGHT	253 lbs.
FINISH	
Natural American Walnut, Oil Finish	





**YAMAHA.....**  
**where quality craftsmanship is always first**

Yamaha, as the world's largest producer of keyboard instruments, has a long and proud heritage extending over 80 years in which painstaking care has been devoted to Yamaha's tradition of creation of unmatched beauty of sound. Exciting features, advanced engineering and the ultimate in design and craftsmanship have made the Yamaha name synonymous with perfection in electronic organs.

These electronic organs encompass the complete range from compact home models, regular home models, larger models for hotels, restaurants and clubs, to those very large models for churches, theaters and the like.

Each organ model is different in certain respects: the line includes a model to meet the widest variety of requirements, however particular they might be.

Furthermore, every organ bearing Yamaha's proud name is, as you would of course expect, manufactured to the most exacting specifications to meet the high quality standards which have made Yamaha a world leader. Years of experience and research in both musical instruments and electronics have given Yamaha the unique, and very necessary combination of skills required for electronic organ perfection.

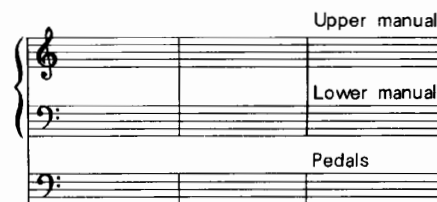
Carefully-skilled craftsmen, workers who have spent their working life with musical instruments and whose family for generations before has, in many instances, been part of Yamaha's proud heritage, oversee and blend their artistic skills into every crucial step of the production.

And from this proud lineage has come the unsurpassed tone and superb quality that are the hallmark of every organ bearing the Yamaha name.

# Music Natation for Model D-7

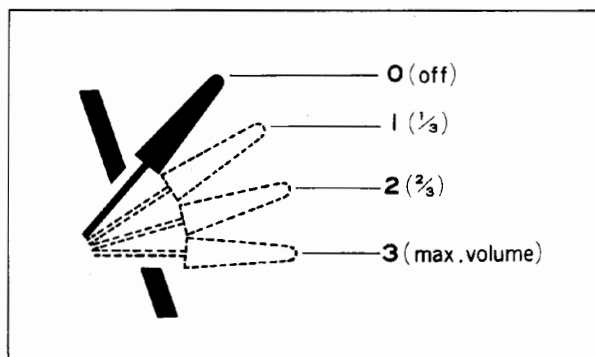
## 1. Score

The score for the Electone is normally written with three staves. Unless otherwise specified, the upper staff (treble clef) is for the right hand, the middle (bass clef) is for the left hand and the lower staff (bass clef) is for the pedals (left foot). Normally the upper staff has a treble clef (G clef) and the middle and lower staves have bass clefs (F clef). Bar lines are not continued between the middle and lower staves.



## 2. Tone Levers

The registration for the tone lever is given by the numerical indications which show the click-stop positions of each lever. The indications are in the order in which the tone levers appear on the control panel, with hyphens separating harmonic groups.



FLUTE 16'    FLUTE 8'    DIAPASON 8'    CLARINET 8'    BRASS 8'    OBOE 8'    KINURA 8'    STRING 8'    FLUTE 4'    STRING 4'    FLUTE 2 2/3'    FLUTE 2'

**3-3333000-20-1-2**

## 3. Effect & Percussion Levers

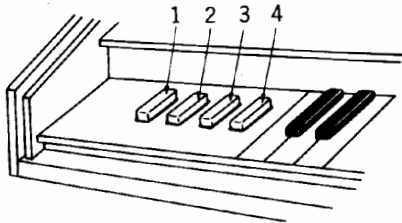
Brilliance .....	<i>Abbr.</i> Bril.	Lower I .....	<i>Abbr.</i> P.L.I
Repeat .....	Rp.	Lower II .....	P.L.II
Vibrato .....	Vib.	Pedal .....	P.P.
Touch Vibrato .....	T.Vi.b.	Button I .....	P.B.I
Pedal Attack .....	A.	Button II .....	P.B.II

Notation is made using the abbreviated name of the lever with the appropriate click-stop position indication as, for example:

Bril. 3    Rep.3    Vib. 0    A. 3    P.L.I. 2    P.P. 2    P.B.I 3

#### 4. Percussion Buttons

Placing a diamond in the spaces of the middle staff as follows :



- 1—fourth space
- 2—third space
- 3—second space
- 4—first space



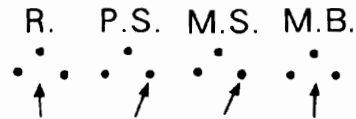
**Note:** In this case, time value is exactly the same as in the musical notes.



#### 5. Effect Controls

Notation for these three-position knobs is made using the abbreviation and an arrow :

	<i>Abbr.</i>
Reverb .....	R.
Pedal Sustain .....	P.S.
Manual Sustain .....	M.S.
Manual Balance .....	M.B.



#### 6. Effect & Tremolo Selectors

	<i>abbr.</i>
Manual Sustain .....	M.S.
Upper Preset Cancel .....	P.C.
Manual Attack .....	M.A.
Lower Voice .....	L.V.
Upper Voice .....	U.V.
Ensemble .....	En.
Tremolo .....	Tr.
Chorus .....	Ch.



Their operation is indicated by arrows: ↓ for ON and: ↑ for OFF.  
 The order of the arrows is the same as the order in which the selectors are arranged. With hyphens separating Singing Vibrato from Manual Attack, and Manual Attack from Lower Voice.

