GUIDE TO YOUR YAMAHA ELECTONE

B-10BR

CONTENTS

© 1972 by NIPPON GAKKI CO.,LTD.

Introduction

We of Yamaha wish to thank you for selecting the Electone B-10BR. 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 B-10BR's special characteristics. We would suggest that you occasionally re-read it from time to time as you progress.

Packed with extras for years of fun

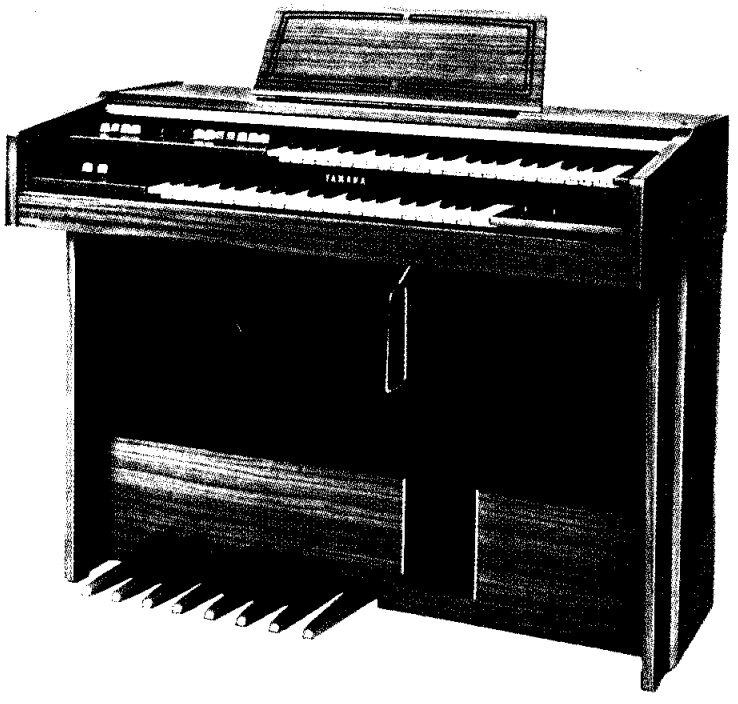
A riotous party when the gang's all there—a quiet moment alone with your emotions. At moments like these and many others, throughout your years and those of your children, what greater joy than the possibility of adding a musical dimension to every occasion?

With the brilliant Electone B-10BR you get this and much more: unequalled playing ease that gives even a child a chance for real musical creativity from the very first day, an unstinting range of expression thanks to the dozens of unique features which set Electones apart from every other organ, and some of the world's most advanced IC-FET circuitry for long years of reliable musical enjoyment.

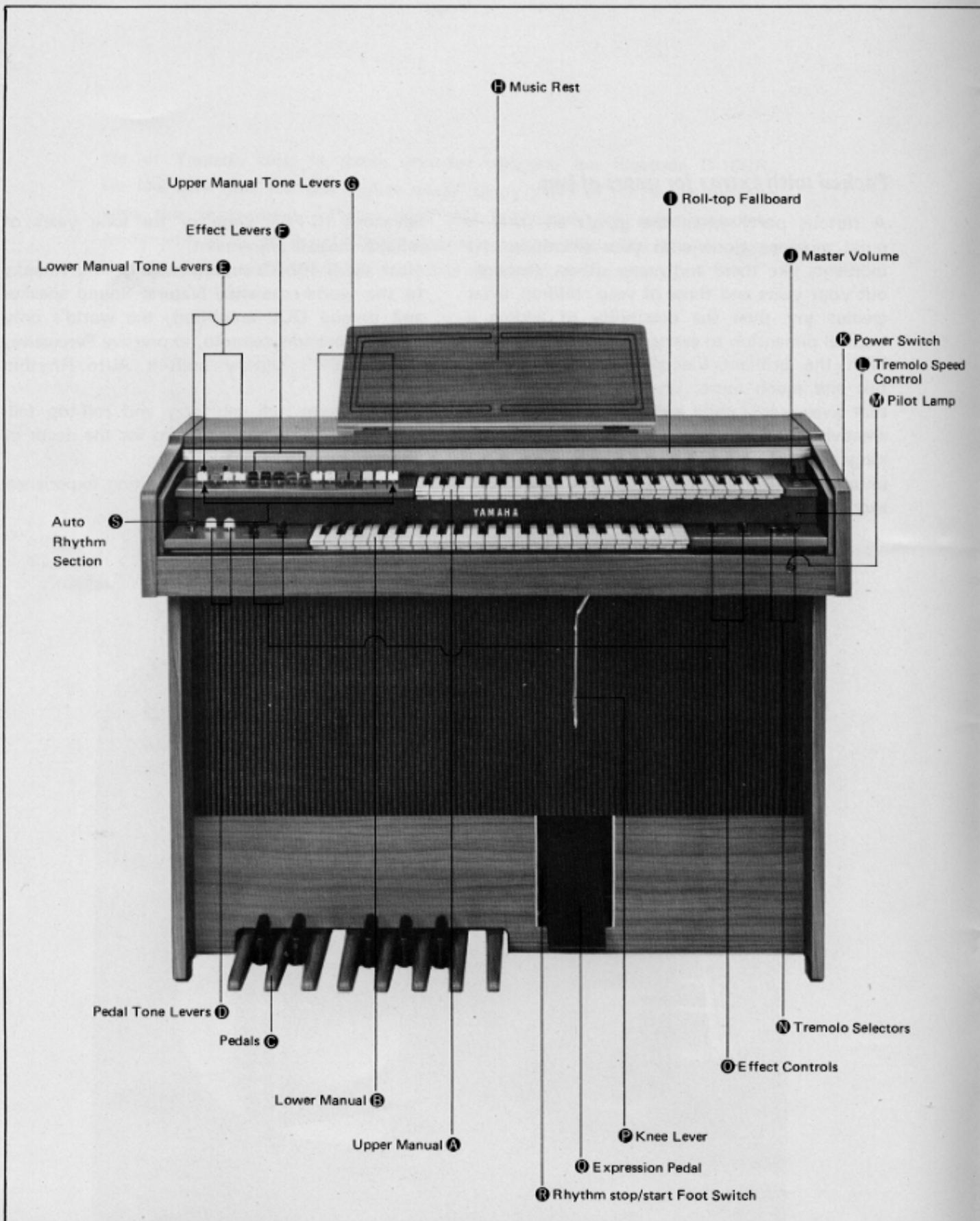
Hear the B-10BR's superb tonal beauty (thanks to the world-renowned Natural Sound speaker and unique OCL amplifier), the world's only sound-in-motion tremolo, expressive Percussive, the B-10BR's snappy built-in Auto Rhythm section.

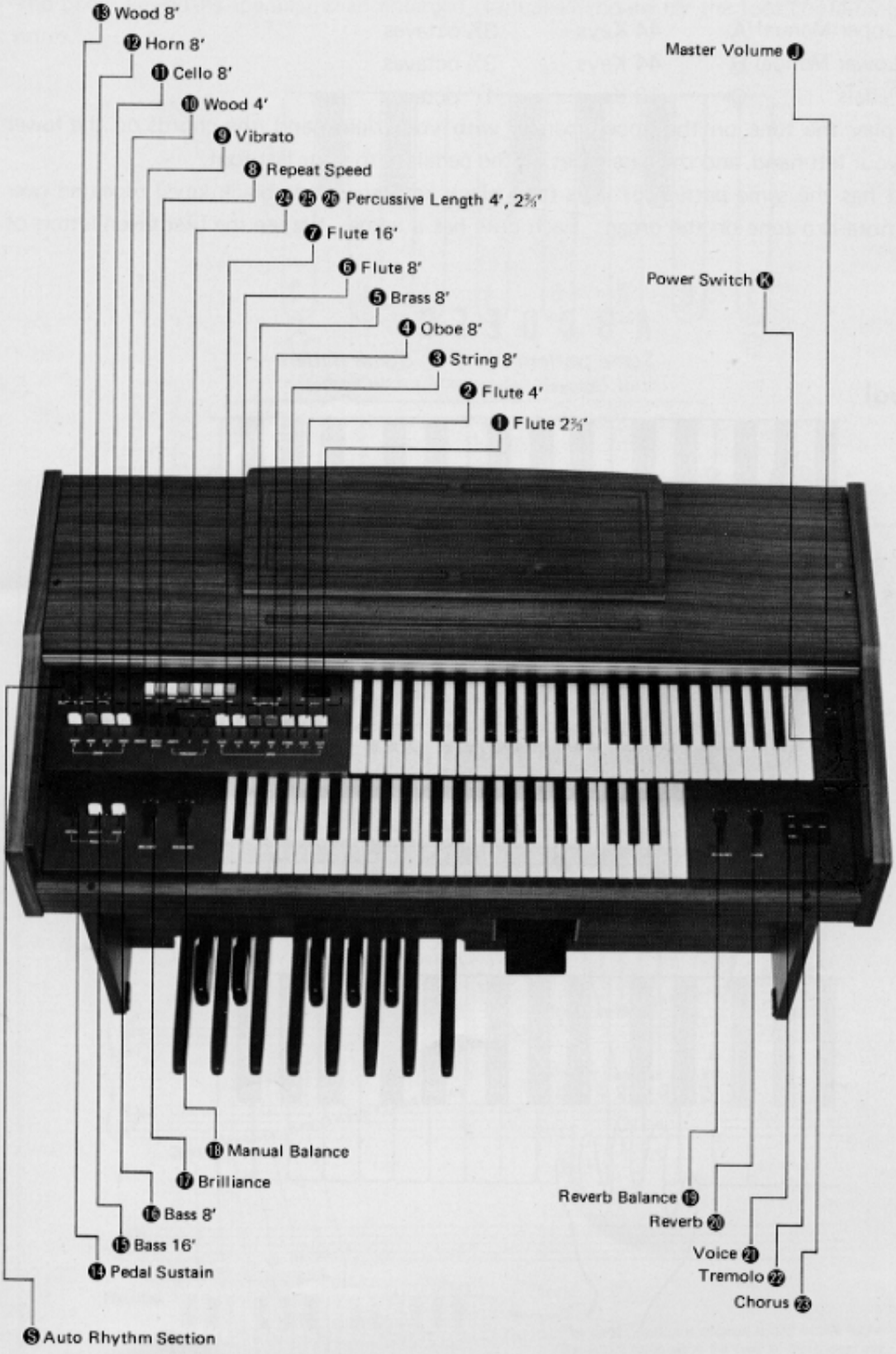
See its warm rich cabinetry and roll-top fallboard, imagine what it will do for the decor of any room in your home.

The Yamaha B-10BR: an exciting experience in so many ways.



Here is your Yamaha Electone B-10BR





NOTE : *The circled numbers refer to expranatory sections in the text to follow.*

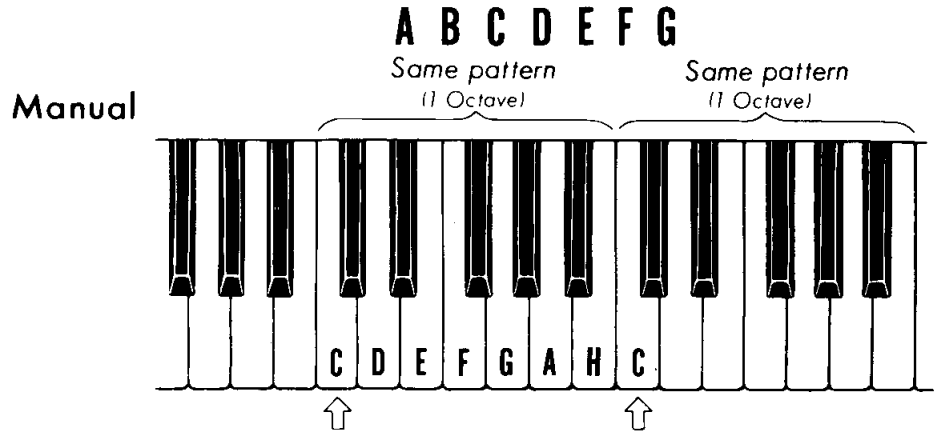
Keyboards

The Electone B-10BR has THREE KEYBOARDS. Two of them are called "MANUALS" and the other is called "PEDALS".

Upper Manual	Ⓐ	44 Keys	3⅔ octaves
Lower Manual	Ⓑ	44 Keys	3⅔ octaves
Pedals	Ⓒ	13 Keys	1 octave

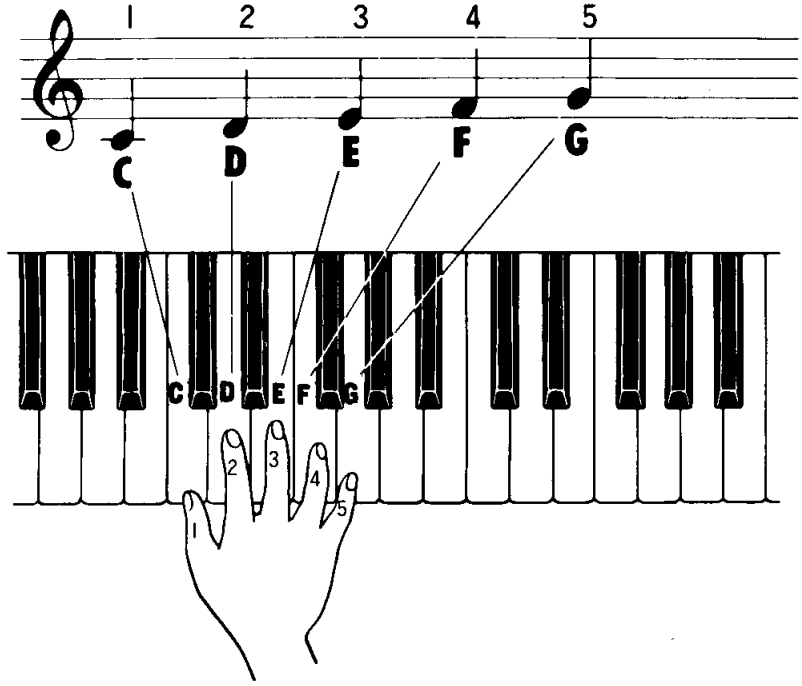
So, you can play the tune on the upper manual with your right hand, the chords on the lower manual with your left hand, and the bass notes on the pedals with your left foot.

The keyboard has 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:



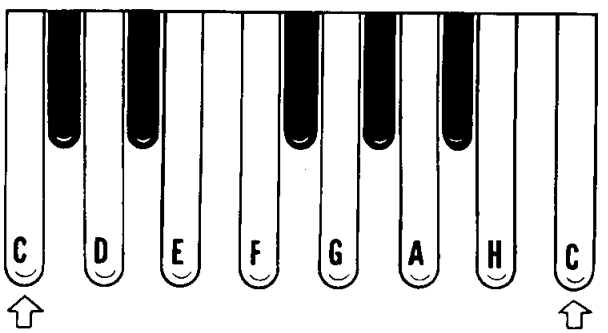
"C" is always at the bottom of the group of two black keys.

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



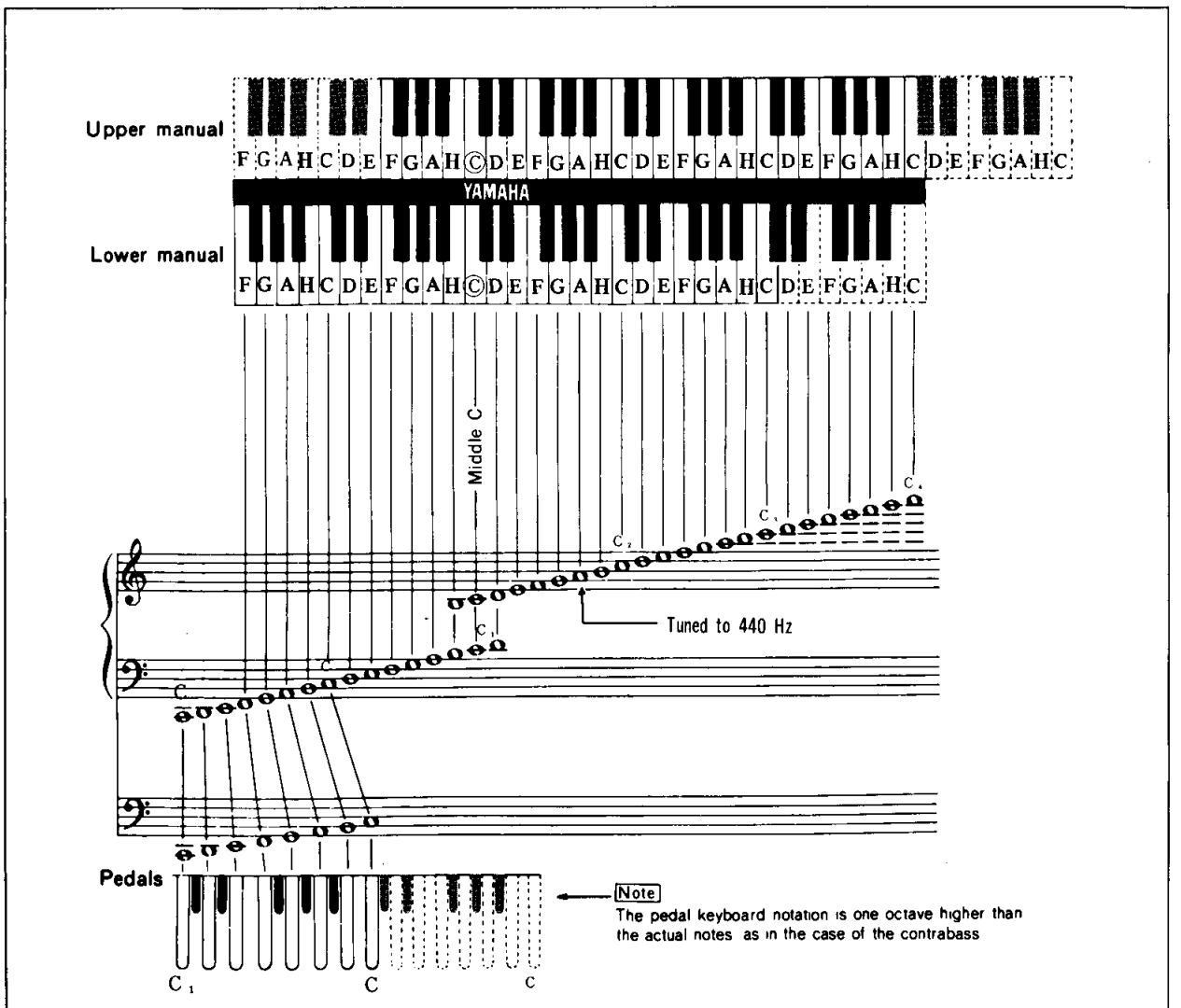
Pedals

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



Both ends of the pedals are "C"

The Compass of the Electone B-10BR



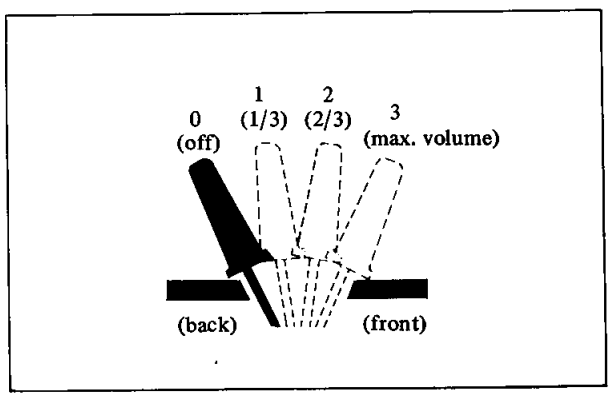
Tone Levers

On the control panel to the left of the upper and lower manuals of the Electone are arrayed the tone levers. They are divided into three groups:

(1) Upper Manual Tone Levers Ⓖ: 7 voices
(2) Lower Manual Tone Levers Ⓔ: 4 voices
(3) Pedal Tone Levers Ⓓ: 2 voices

Yamaha's Exclusive Tone Lever System

Each tone lever serves to impart a distinctive tonal quality to each note played. However instead of the usual simple on-off action of other systems, the Yamaha tone lever offers the unique advantage of continuously variable control. 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. For quick changes, another aid to precision is provided: As the tone lever is pulled, 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.
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 B-10BR is thus able to satisfy even the most demanding professional orgainst.



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 contro is also useful in adjusting the balance among the three keyboards.

How does each Tone Lever sound?

Upper Manual Tone Levers Ⓖ

Flute 16' : ⑦

In the Electone B-10BR an even greater richness and vibrancy has been added to the flute voice. A new harmony and beauty can also be achieved with other voices, as the result of the unstinted use of transistorized components in designing a completely new tone filter. When the Flute 16' tone lever is pulled together with any 8' voice, a flute tone one octave lower will be added to the fundamental 8' tone (i.e., the note as played on the manual). This lower note will give added harmonic breadth, and provide great depth to a selection of music.

Flute 8' : ⑥

The flute is originally an open-pipe woodwind with a strong fundamental and relatively small harmonic component. It thus gives a simple yet darkened feeling to the mood of the music.

Flute 4' : ②

The sound of the flute one octave higher than 8' tone. When this tone is added to the fundamental, the sound becomes more vivid, and by lessening the 8' component or playing the 4' alone, the range can be extended one octave higher.

Flute $2\frac{2}{3}'$: ①

This gives a flute tone a fifth above the octave of the fundamental and the resulting richness of tonal quality brings a new dimension to the interpretation.

Brass 8' : ⑤

Harmonics multiply and remultiply toward the upper registers to produce a rich, penetrating sound that recalls the brilliant clarity of the brass instruments.

Oboe 8' : ④

This lever lessens the fundamental and enriches the harmonics to produce the plaintive, haunting timbre characteristic of the double reed woodwinds. It is excellent in adding harmonic color to quiet passages and, when combined with a string tone, produces an extremely clear but penetrating effect.

String 8' : ③

The wealth of harmonic color which can only be achieved by the higher stringed instruments.

Lower Manual Tone Levers Ⓔ

Wood 8' : ⑬

This is a characteristic tone of the woodwind instrument. It is rather simple, but with a slightly stronger harmonic component to produce a brighter tone than the Flute 8'.

Wood 4' : ⑩

An octave higher wood wind tone. Particularly suited to bringing out with clarity, melodic played on the lower manual. Of course, it may also be used to broaden the range of the lower manual.

Horn 8' : ⑫

Overtones multiply to produce the rich, smooth texture of the horns.

Cello 8' : ⑪

Rich harmonics blend to produce the soft, mellow tone characteristic of the cello.

Pedal Tone Levers Ⓓ

Bass 16': ⑮

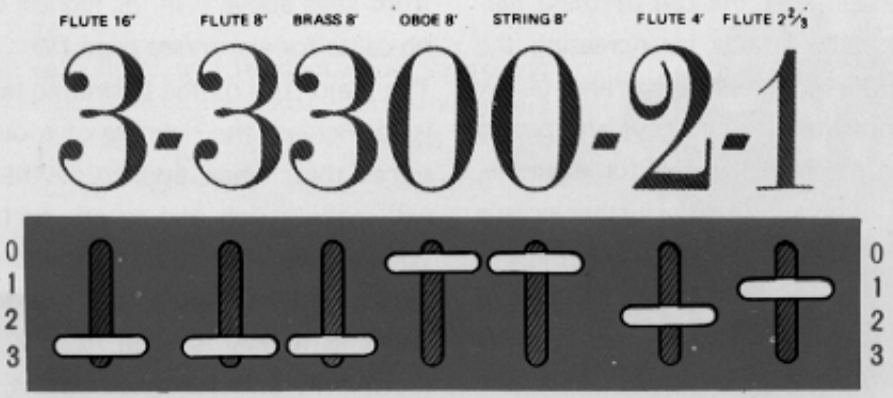
With great penetrating power, this lever sounds the lowest reaches of the B-10BR's compass.

Bass 8' : ⑯

By pitching the note an octave above the Bass 16' this lever allows a clearer penetration of bass sound, and thus permits melody to be played on the pedals.

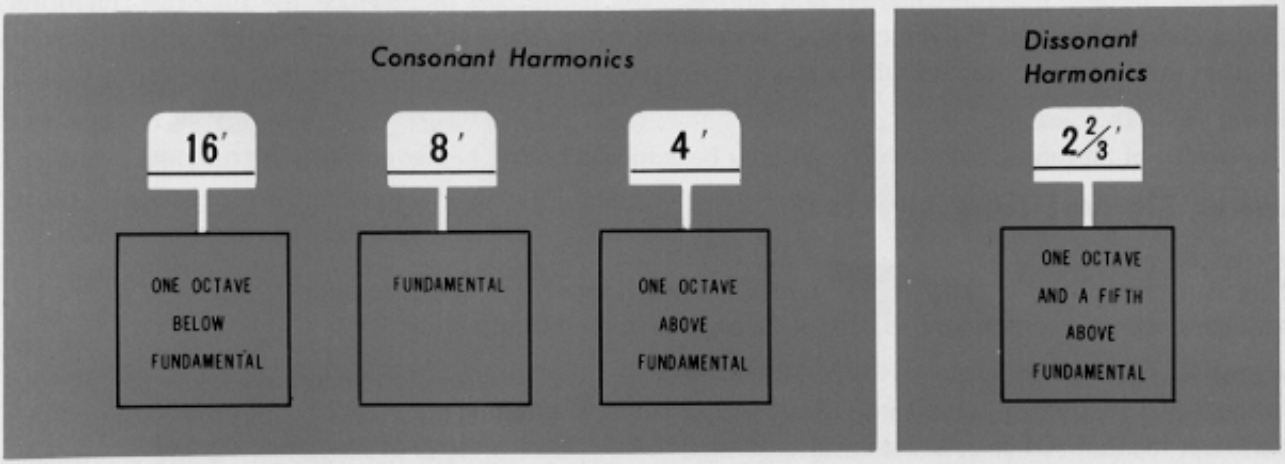
Tone Lever Registration

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.

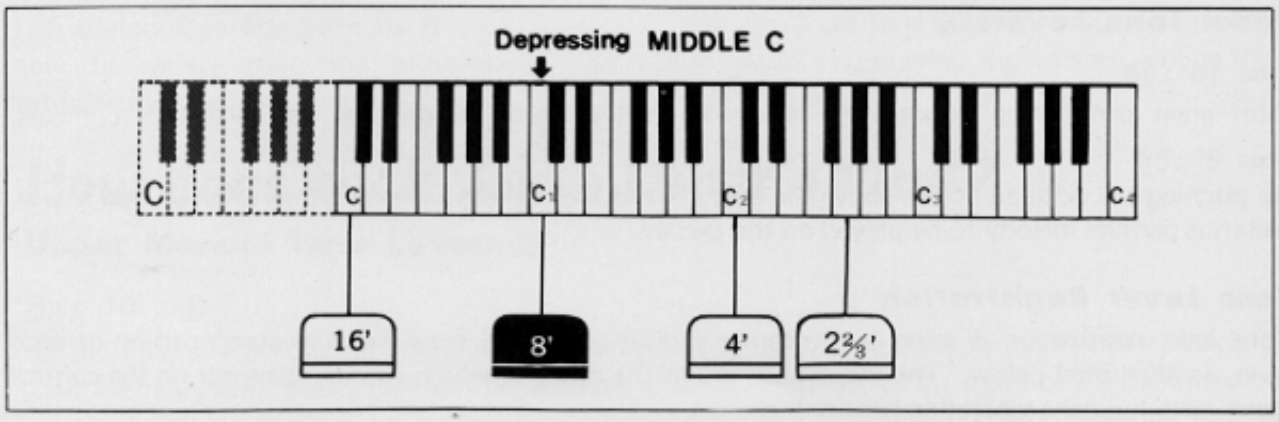


Harmonics

Tone levers are of several varieties: 8', 16', 2⅔', 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)

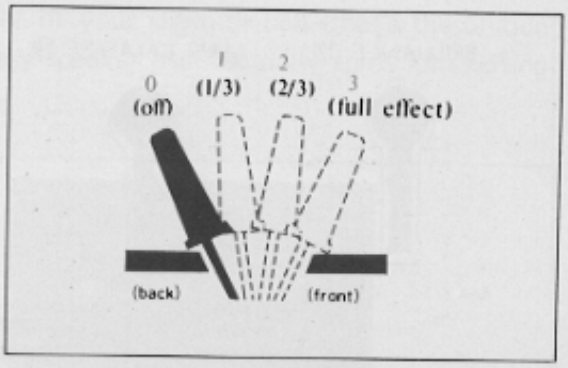


It can thus be seen that the use of these harmonic levers actually results in increasing the Electone B-10BR's compass above and below that which is indicated by the keys and pedals alone. The use of the 16' lever, for example, will extend the manuals down a further octave to C, *(see dotted line above).* Similarly the 2⅔' lever raises the tone one octave and a 5th but, in actual practice, the highest note on the B-10BR is c_5. Thus Flute 2⅔' voice is not obtainable from keys above F in the highest octave. This is no cause for alarm *(see page 19).*

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 remember not to overuse this effect as it may weaken its effectiveness. Use it primarily only for special effect.

Effect Levers

Effect levers Ⓕ of the Electone B-10BR 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 depth of their effects according to their stop positions, as illustrated.



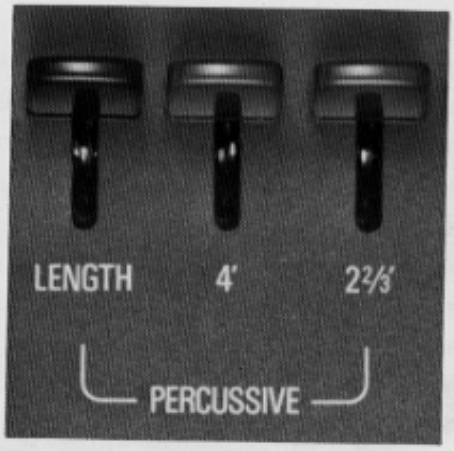
Vibrato : ⑨

Vibrato is a scarecely noticeable waving of the tone. You will see violin and cello players use it freely by an oscillating motion of the left hand. It increases the emotional quality of the violin tone. This vibrato lever produces the same vibrato effect. Use of this lever will add a charming and lively air to the tone of your Electone.

Upper Percussive : ㉔ ㉕ ㉖

Changing the beginning of some or all notes can do wonders for lively selections. This is where the B-10BR really shines, thanks to a variety of percussive effects that provide subtle but important shading at the moment each note is heard.

The special popping 4' and/or 2 ⅔' percussive drive can be smoothly blended into all upper tones with two variable levers ㉕ and ㉖ , and a separate lever ㉔ regulates the length of decay for these effects. When using percussive effects, use a ***staccato*** fingering. Each note should be played cleanly; slurred notes will diminish the percussive effects.



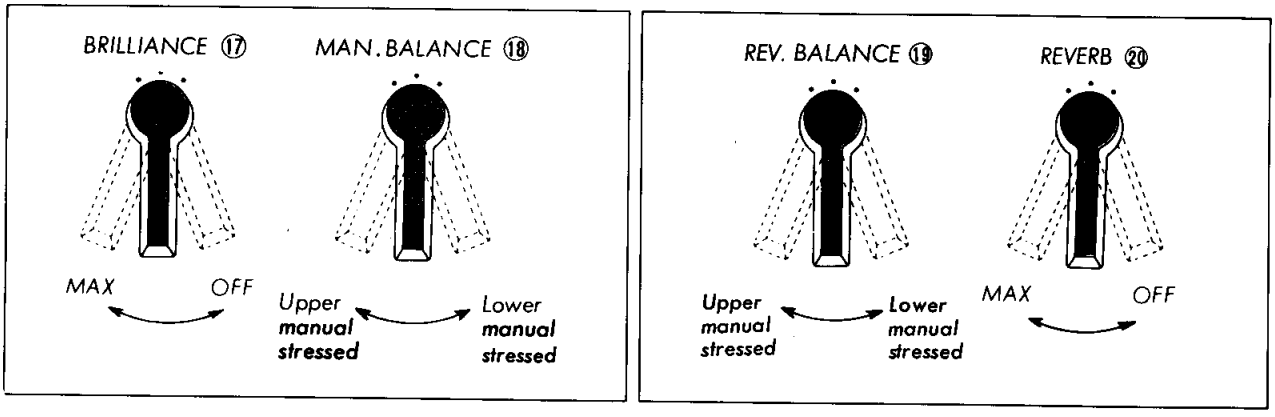
Repeat Speed : ⑧

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 sepak, notes played on the upper manual, deriving a double-strummed effect similar in sound to the mandolin. The lever gives a continuous spectrum of speed adjustment.

Pedal Sustain : ⑭

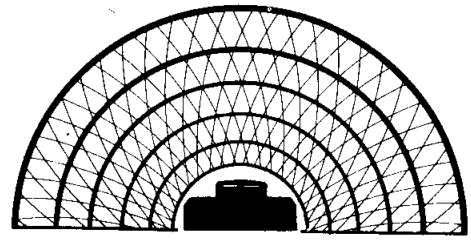
This lever works with the 8' and 16' bass voices to provide bass pizzicato effects. Release the pedal—the sound lingers on for precisely as long as you want, thanks to the continuous adjustment.

Effect Controls



Reverb : ⑳

Reverberation is the quality that makes your playing sound full and rich as if you were playing in 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 control includes a regulator so that the strength of the reverberatory effect can be varied continuously softer or louder as the music requires. For passage-by-passage, or even phrase-by-phrase reverb control, the Knee Lever Ⓟ should be operated with the right knee. (See page 15.)



Reverb Balance : ⑲

To balance the Reverb effect between the Upper and Lower Manuals; when used to strengthen the Upper Manual, it brings you an effect similar to SUSTAIN on more expensive models.

Manual Balance : ⑱

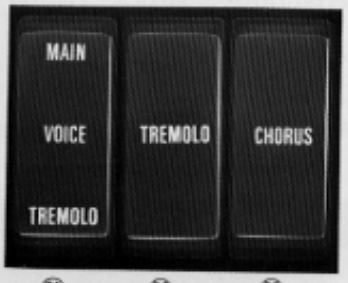
Governs the relative strength of the upper and lower manuals. It is normally left in the center position. But when it is desired to strengthen one manual, for example, when the upper manual plays a melody and the lower its accompaniment, the knob can be turned (in this case to the right) to emphasize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

Brilliance : ⑰

Stop-free adjustment lets you pinpoint the degree of overall clarity or softness according to your mood and that of the music.

Sound in Motion

Mellow, throbbing harmony that sings from every corner of your room or hall—that's the unique Yamaha Tremolo. A true moving sound source, the rotary speaker itself actually spins for exciting richness no mere moving baffle could equal.



㉑ ㉒ ㉓

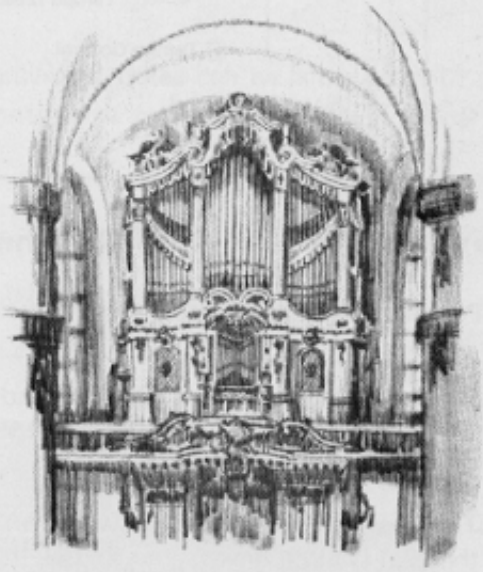
Tremolo Speed Control

The Tremolo selectors Ⓝ which accomplish this are three tablets located to the right of the lower manual. Each has a simple ON-OFF type action which allows quick operation while playing.
Tailor any of Tremolo or Chorus effect to an individual selection.
For extra-sensitive expressive possibilities use the Yamaha-only continuous Tremolo speed control Ⓛ to match any mood or selection.

Voice : ㉑
This selector switches the Electone sound from the main speaker to the rotary speaker and vice versa.

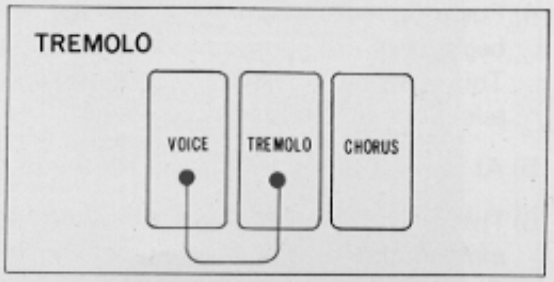
Tremolo : ㉒
Turning on this selector turns the rotary speaker at seven revolutions per second producing Tremolo effect.

Chorus : ㉓
This selector turns the rotary speaker at one revolution per second producing Chorus effect.



Producing the Tremolo Effect

Set the voice and tremolo selectors as shown in the figure. 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 tremolo effect is especially useful for rich, tremulant work.



Producing the Chorus Effect

Set the voice and chorus selectors as shown in the figure. It provides the dignity and solemnity of choral voices which is so effective in the performance of sacred music or other works of slow tempo.