# GUIDE TO YOUR YAMAHA ELECTONE BK-20A

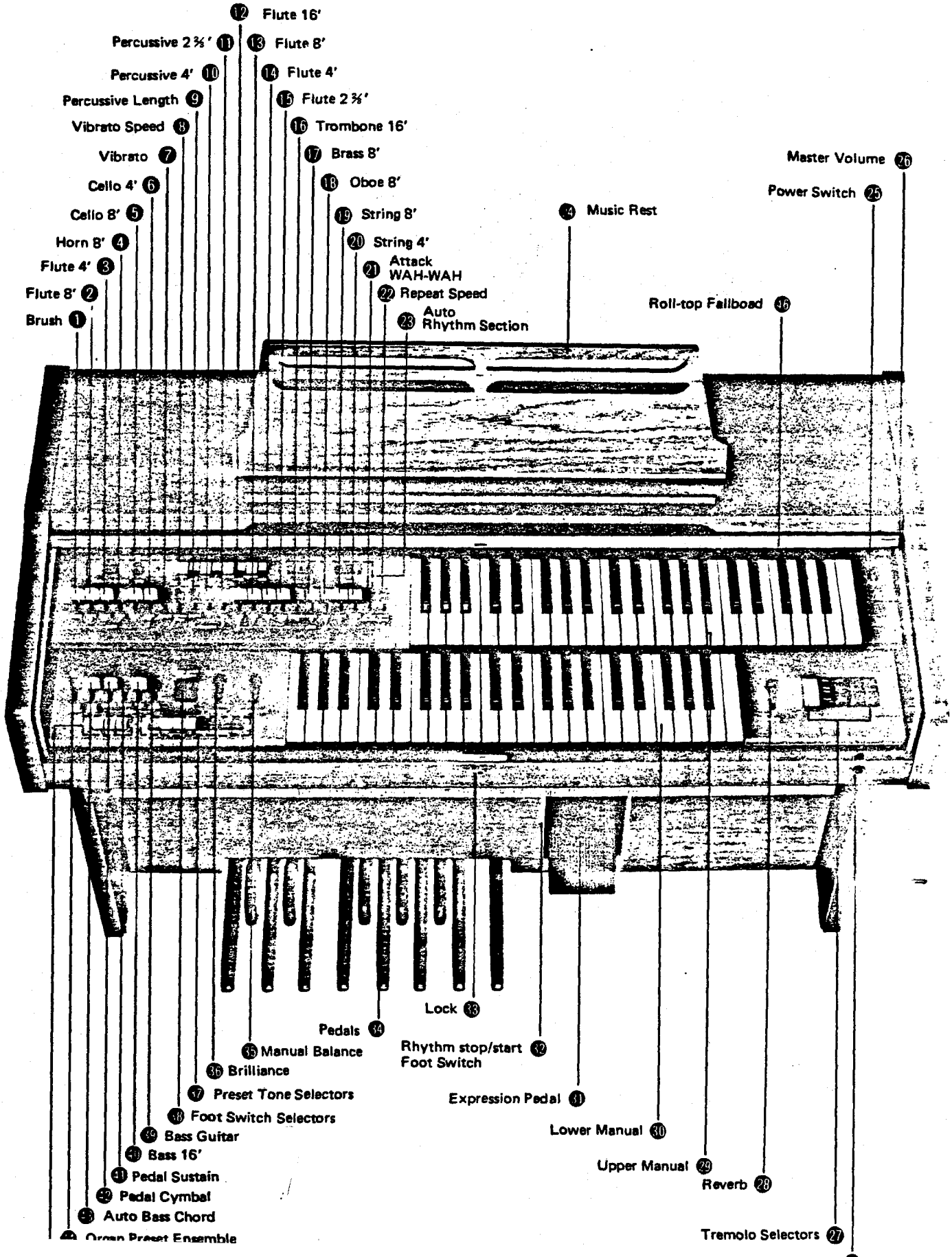
YAMAHA ABC Auto Bass/Chord System

# Contents

# 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 BK-20A



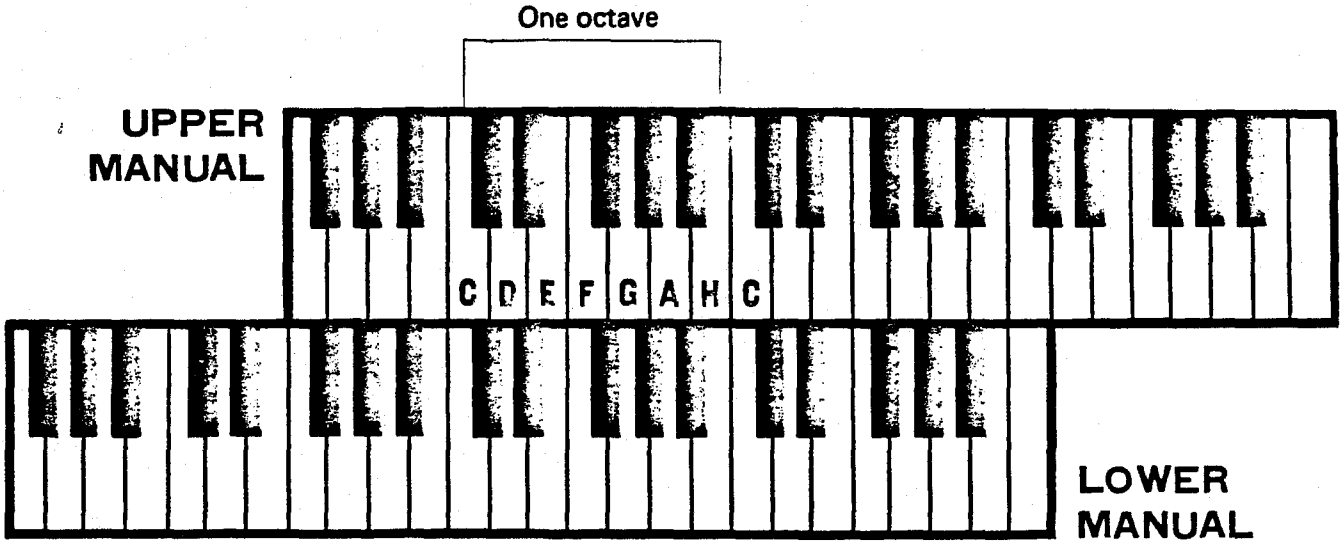
# Keyboards

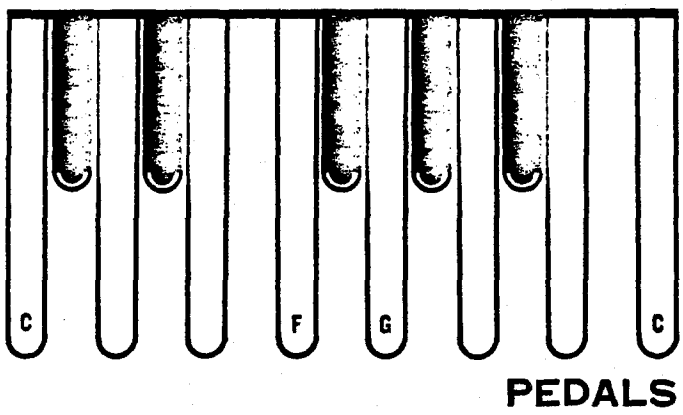
The BK-20A has three keyboards. The upper two are called "manuals" and the other, for the feet, composed of "pedals."

| | | |
|---|---|---|
| Upper Manual | 44 keys | (3 2/3' octaves) |
| Lower Manual | 44 keys | (3 2/3' octaves) |
| Pedals | 13 pedals | (1 octave) |

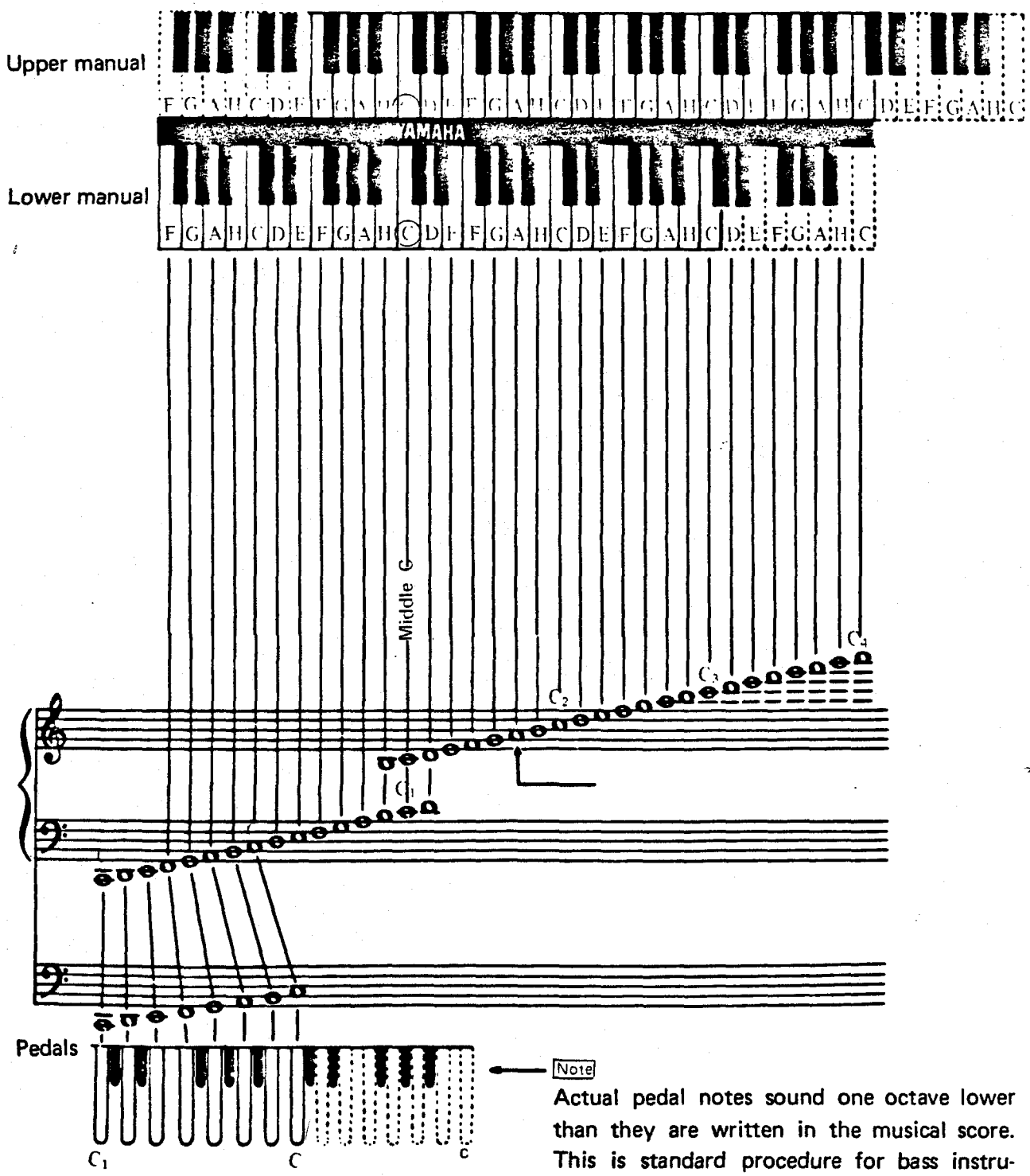
The Electone is designed to permit playing the melody on the upper manual with the right hand, the chords on the lower manual with the other, and bass notes on the pedals with either foot.

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 is called an "octave."



# The Compass of the Electone BK-20A



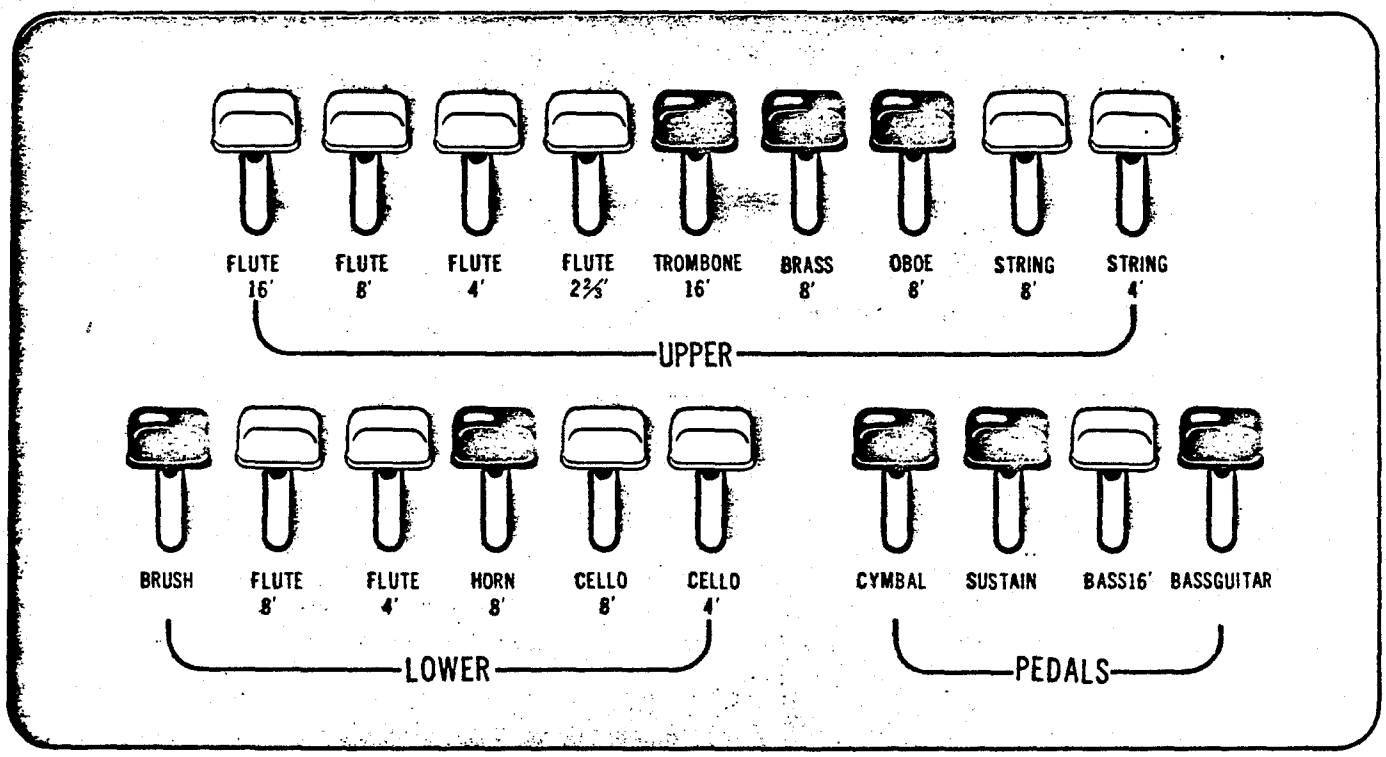

Note

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

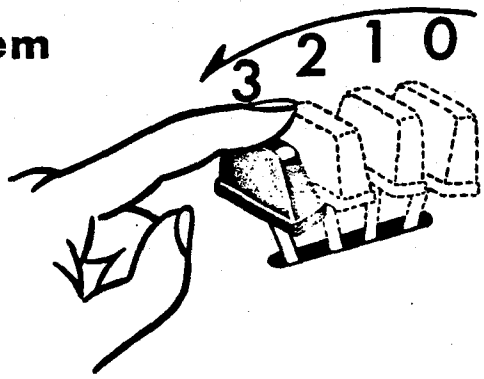
# Tone Levers

To the left of both upper and lower manuals are a series of tone levers which control the voices (instrument sounds) which will sound when the keys are depressed. They are divided into groups for upper, lower and pedals, so that different registration can be set for each.

| | |
|---|---|
| Upper Manual Levers | 9 voices |
| Lower Manual Levers | 5 voices |
| Pedals | 2 voices |

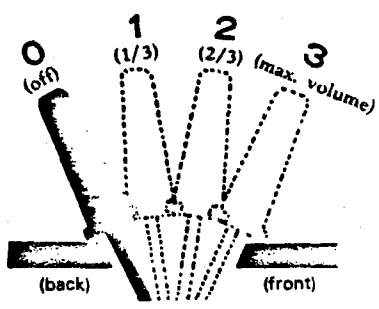



## Exclusive Yamaha Tone Lever System



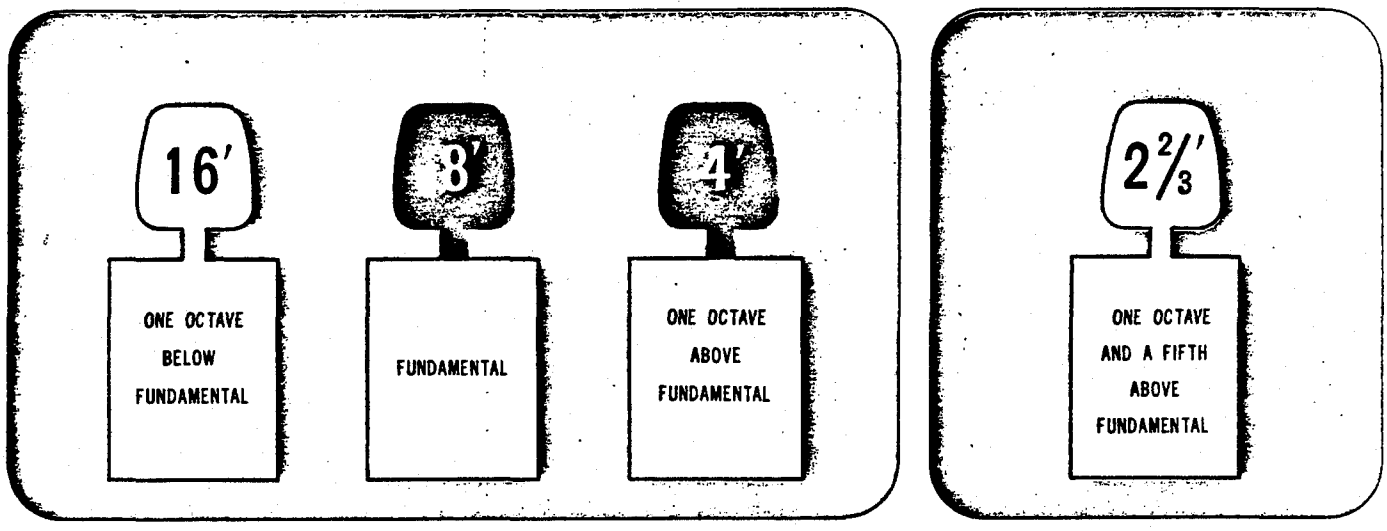

Each lever provides two methods of control. One is by continuously moving the lever from off to full, to achieve the exact setting for that tone, and thus balancing the overall tone setting with perfect precision. Each lever also has two easy-to-feel click stops, at 1/3 and 2/3 positions. This lets you refind any setting with mathematical precision and no guesswork in a matter of seconds.

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.

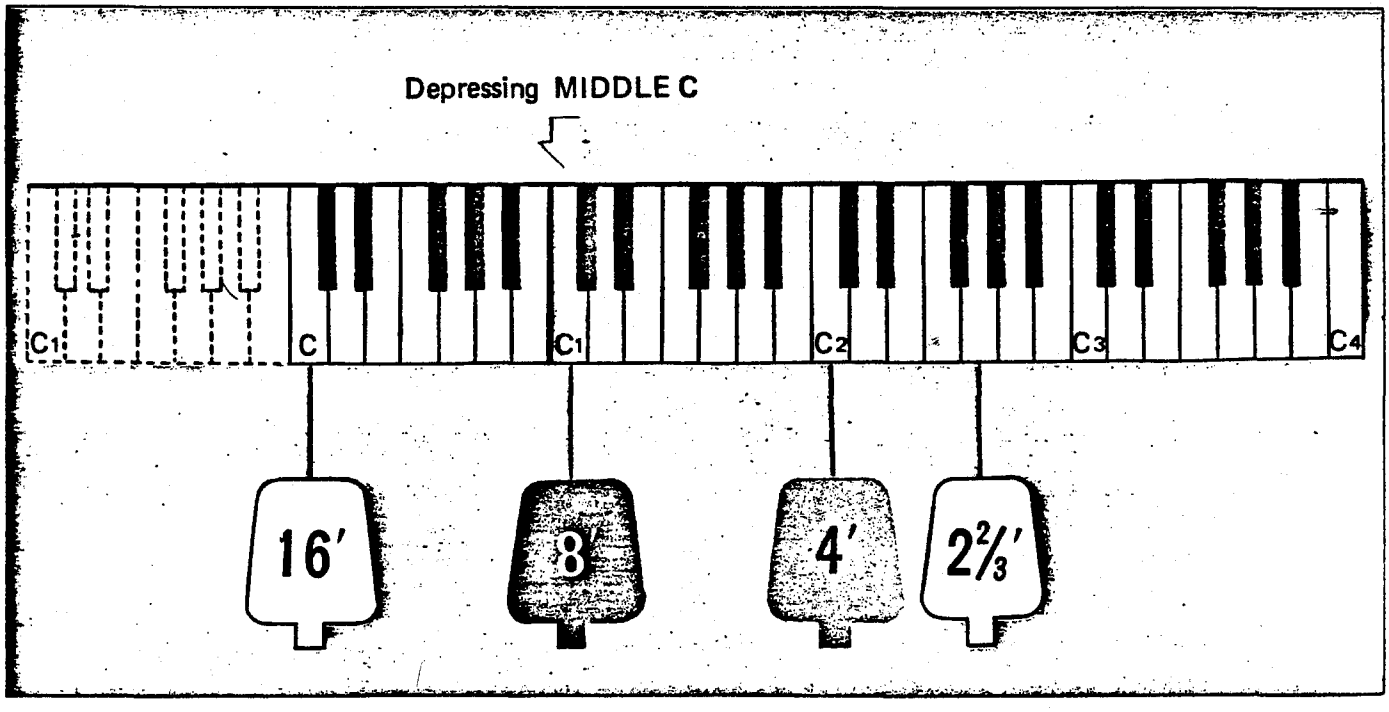


## Harmonics

The BK-20A has four different tonal harmonics, indicated by the numbers 16', 8', 4' and 2⅔'. These are standard organ abbreviations showing the tone's pitch in relation to the fundamental (written note). An 8' tone will sound just as it has been written. 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, and 2⅔' tones one octave and a fifth above the fundamental.




For example, if you press middle C, corresponding to the keys in the chart below will sound be produced.




In other words, the 16' lever extends the lower manual a full octave as shown by the dotted line in the

# Tone Levers Registration

For the best result of your performance, you should always take into consideration the correlative tone volume balance among the three keyboards i.e., upper manual, lower manual and pedals.

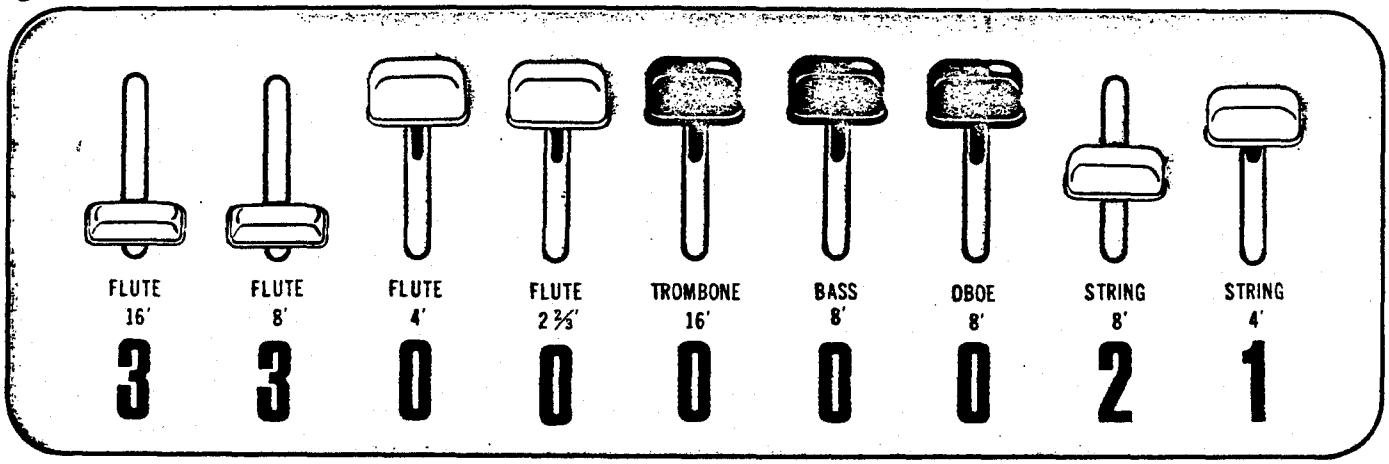
When you wish to emphasize the melody played on the upper manual, for example, the volume of the lower manual and pedals should be kept under that of the upper manual. On the contrary, if you want to stress the accompaniment part on the lower manual or pedals, the volume of that particular keyboard should be adjusted relatively larger than the others.

Yamaha's unique variable volume control tone levers enable you to control this correlative tone volume among three keyboards. Judge by your own ears and adjust the position of tone levers in advance. Each tone lever slides continuously from off to full volume for sensitive balance control.

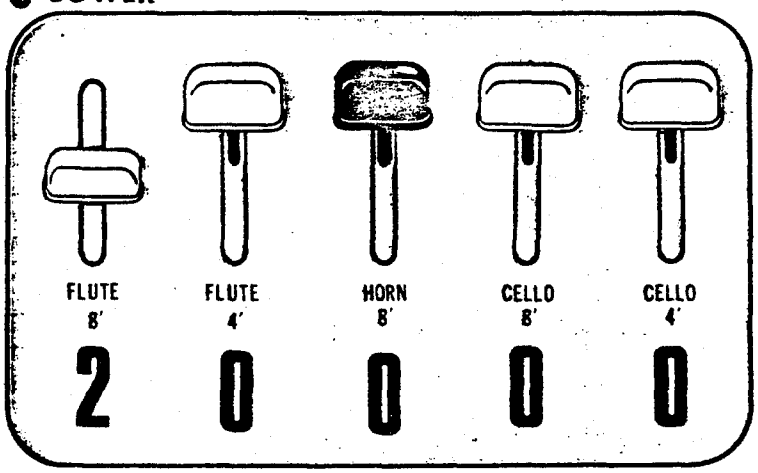
Three distinct stops also convenient to click your favorite tonal combinations into place for quick, easy, easy settings.

(EXAMPLE)

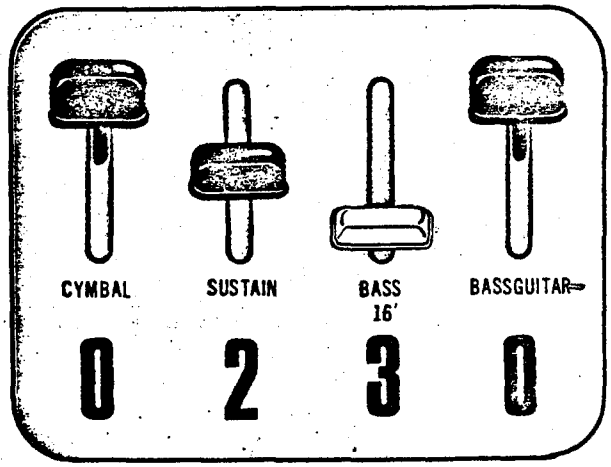
● UPPER

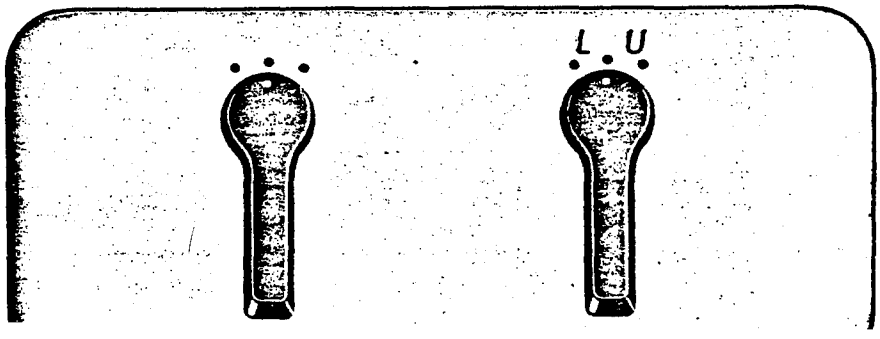



● LOWER



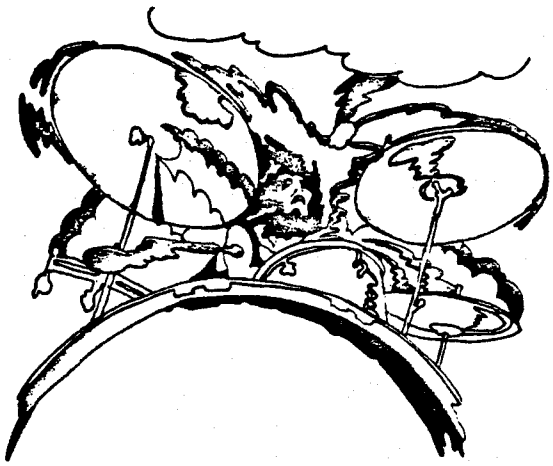

● PEDALS



# Effect Levers

These levers control a variety of effects which add a host of tonal variations to the Electone's voices. Each lever works in the same way as the tone levers, with both infinitely-variable continuous control and click-stop settings.



● Upper Percussive : ❾❿⓫

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 2⅔′ percussive drive can be smoothly blended into all upper manual tones with two variable levers (4′ and 2⅔′), and a separate lever Length regulates the length of decay for these effects.

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

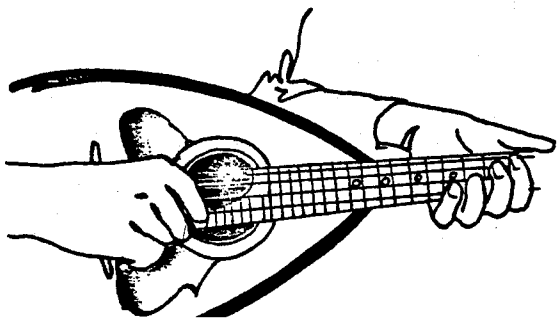
● Vibrato : ❼ ❽

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.

● Repeat Speed : ⓬

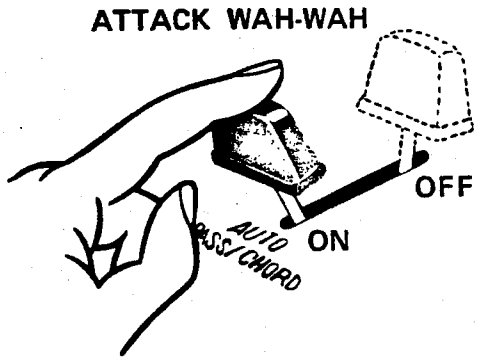
Cuts and repeats each note just like the double-strumming effect of a mandolin. The lever provides continuous speed adjustment to create a full variety of different moods.

Affects upper manual notes only.



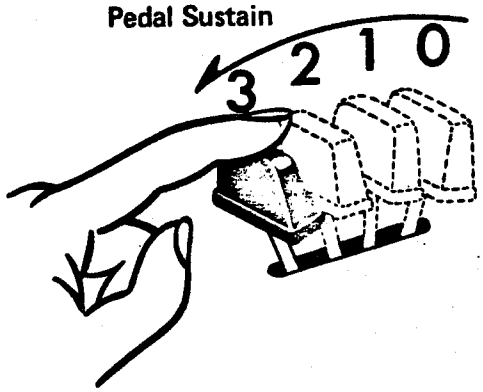
● **Attack Wah Wah : ⓫**

Provides a subtle muting effect at the beginning of each upper manual note. It works on successive notes even if the first is held down.




● **Pedal Sustain: ⓬**

This control provide continuous adjustment of the sustain effect on the pedals concerned. For the pedals, this is the only sustain control, and it affects all pedal tones with the exception of Bass Guitar with sustains Automatically.

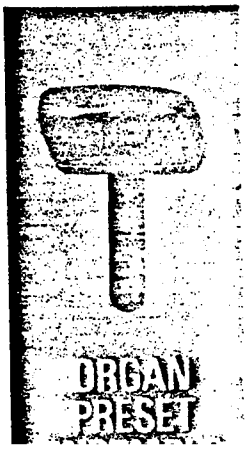



● **Pedal Cymbal: ⓭**

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

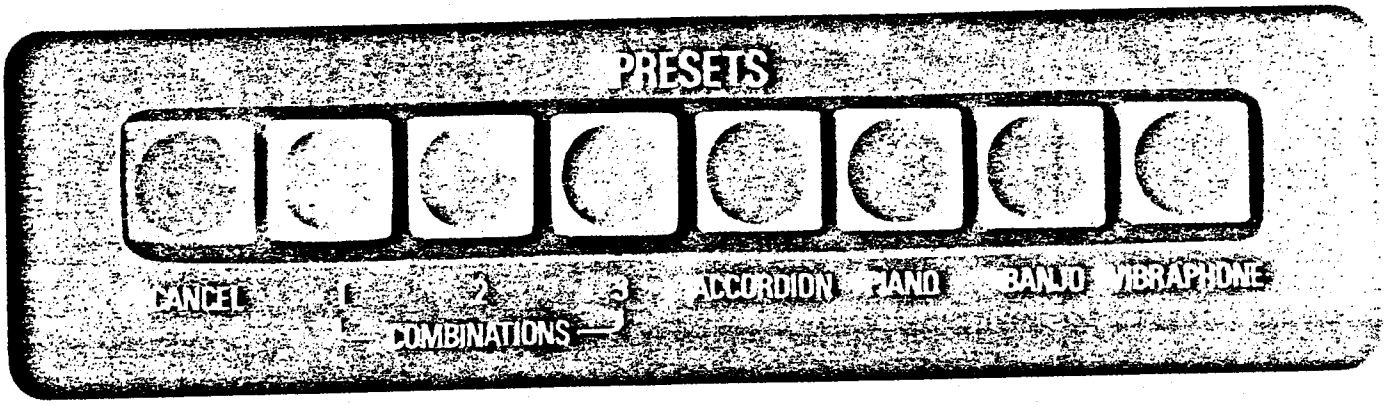
● **Organ Preset Ensemble: ⓮**

This lever controls the effect which add the upper tone to the upper preset tone (Accordion, Piano, Banjo, Vibraphone.) (See page 10).



# Upper Preset Tones

To the left of the lower manual are eight Upper Preset Tone controls (seven tones plus Cancel). These on/off switches are special tonal blends that most closely resemble the instruments they name (Accordion, Piano, Hawaiian Guitar, Banjo) as well as three special preset combinations.



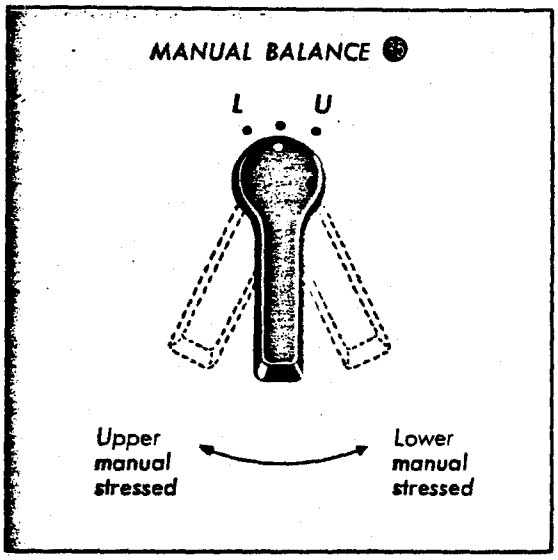

These selectors have two characteristics which must be remembered. Since they are factory preset, they automatically cancel all other upper manual tone lever settings. This lets you switch back and forth.
In addition, precedence is to the right. This means that if two or more buttons are pressed, the one to the right will take effect. To switch from one button to another it is not necessary to first press the cancel button.

# Effect Controls and Selectors

● **Manual Balance : ㉕**

This control governs the relative strength of the upper and lower manuals. It is normally left in the center position, but can be shifted to stress the melody or accompaniment in a selection or passage.

This control can also be used to compensate for a higher number of total tone lever settings (which would ordinarily result in higher volume) on one of the two manuals.

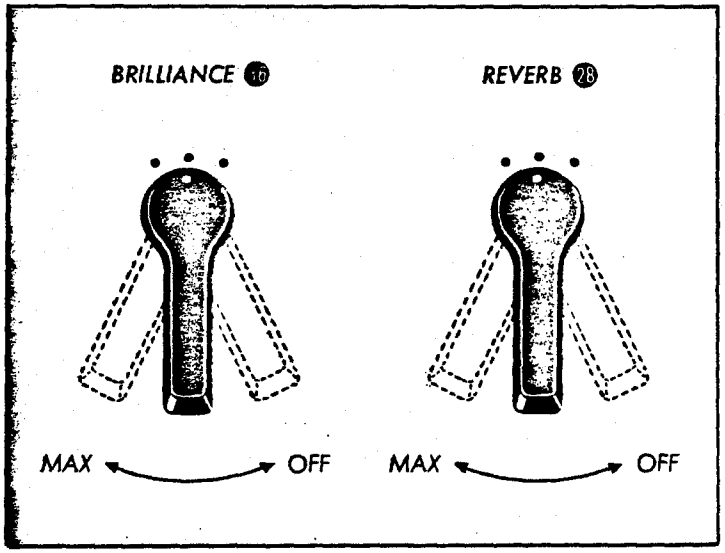


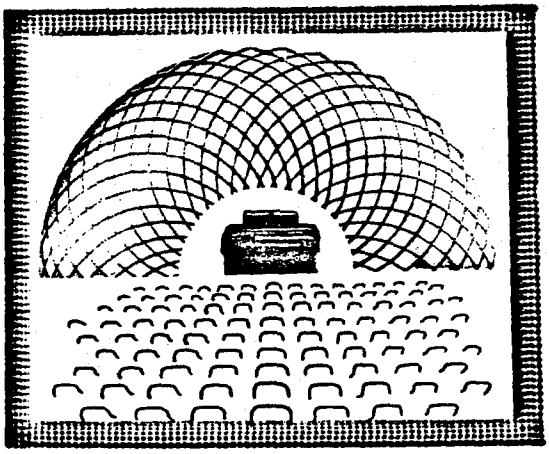

● **Brilliance : ㉖**

With this single, continuously-variable control you can pinpoint the degree of overall softness or clarity desired for any mood of music.

● **Reverb : ㉘**

Reverberation is the quality that makes your playing sound full and rich, as if you were on the stage of a large hall or auditorium. This control is continuous, so that the reverberatory effect can be set to any degree of strength, as the music requires.



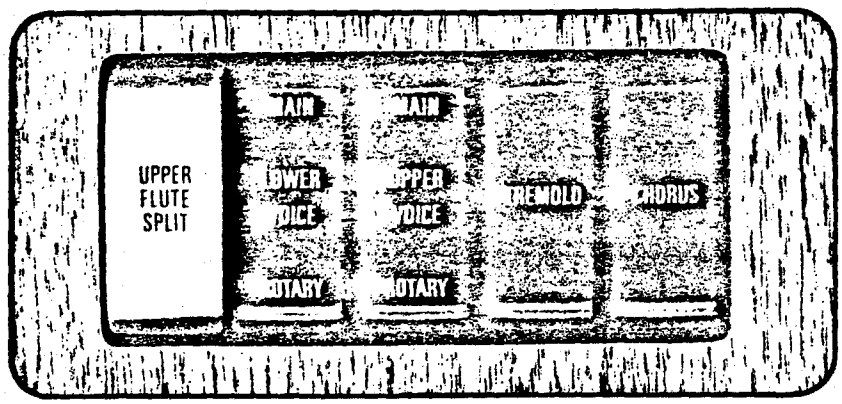



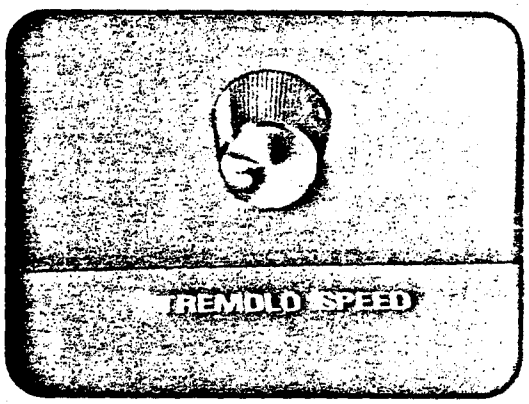
● **Glide (Located to the left of the lower manual and Expression Pedal) :**

Turning the Glide tablet "ON" and depressing any key, all notes will sound slightly lower (approx. 100 cents) than the true pitch when the foot switch on the expression pedal is pushed to the left with your toe on Expression Pedal. When the foot switch is released, the pitch will gradually return to normal. This effect is suggested to be used when playing Hawaiian music.

# Sound-in-Motion Tremolo

The Electone's special throbbing tremolo is produced by a smaller-size Natural Sound speaker that really spins just behind the tremolo speaker grille on the side of the cabinet.
On the BK-20A there are four tremolo selectors, located on the right side of the lower manual, each with an on/off function They are complemented by a continuous tremolo speed control knob just above them.



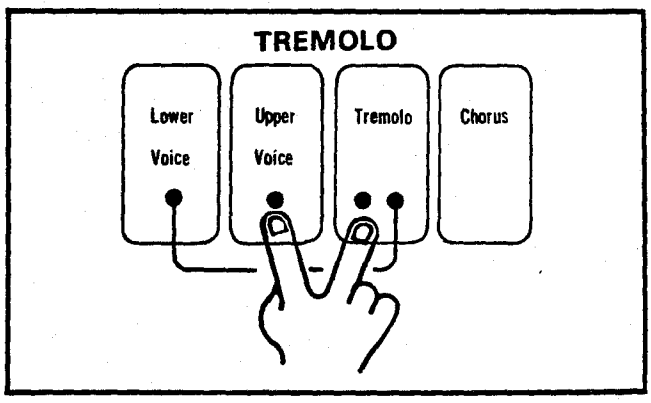



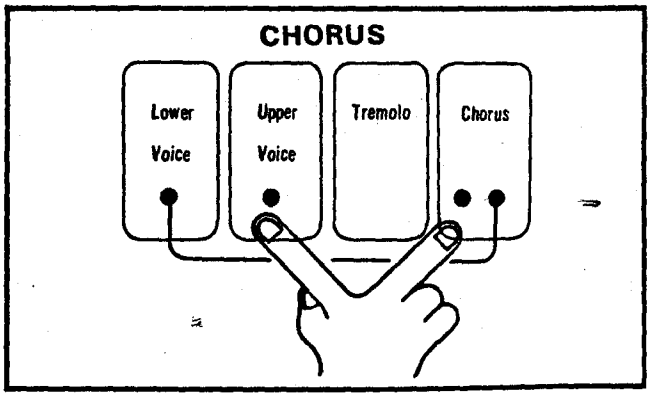

● **Upper Voice (Main/Rotary) :** ⑰
Lets you divert upper manual tones from the main to the tremolo speaker.

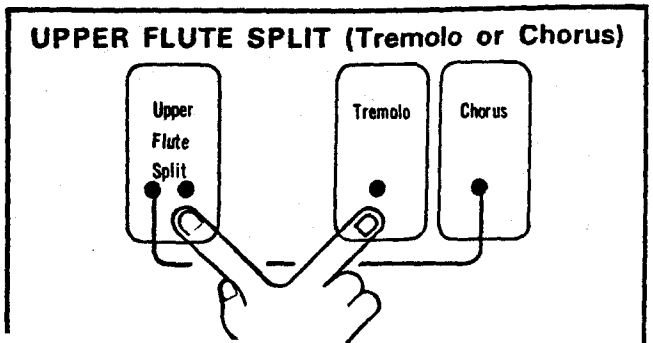
● **Lower Voice (Main/Rotary) :** ⑰
Does the same for lower manual tones.

● **Upper Flute Split :** ⑰
This tablet feeds only Flute tones of the upper manual and upper preset buttons 1, 2, 3 to the tremolo speakers. Combined with other upper manual tones through the main speaker it creates a rich, singing blend.

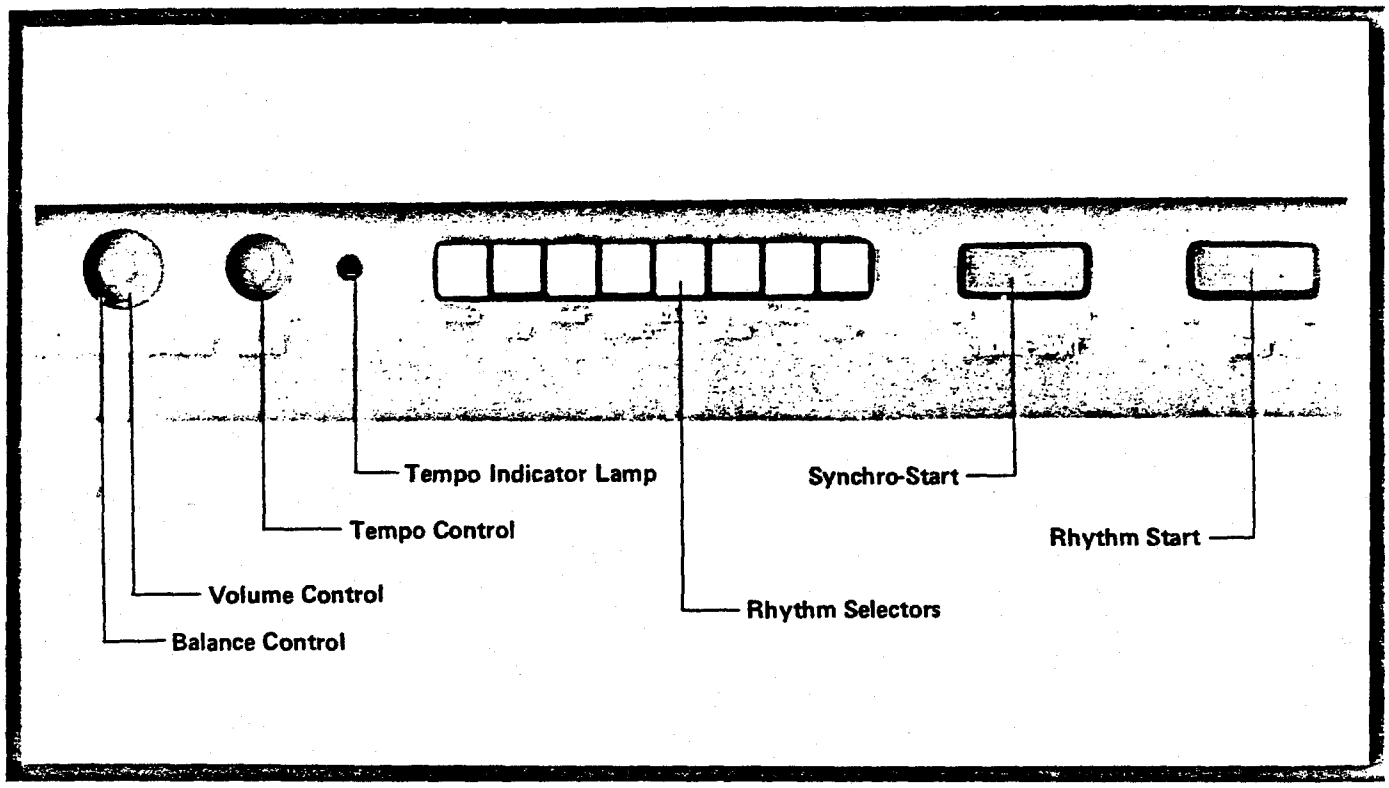
When the speed control is set to its central position, the Tremolo tablet will turn the speaker at seven revolutions per second. The Chorus tablet will turn it at one revolution per second.
Once either tablet is switched on, it takes several seconds for the tremolo speaker to attain the standard speed. This is also true when switching to a slower speed (Tremolo to Chorus). If one of the other tremolo control tablets is switched on during this speed change period, the speed variation will be heard in the music.
If you wish an instant tremolo or chorus sound, be sure to switch on that tablet well in advance of one of the speaker selectors. For special selections you can use this speed variation by switching the speaker



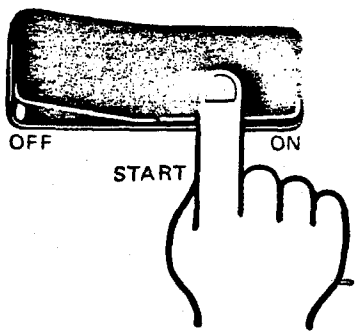



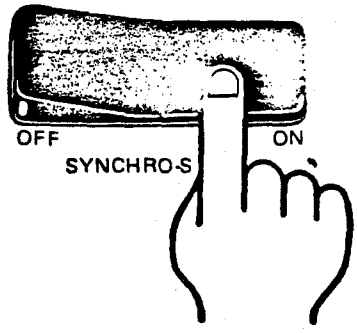
This section provides eight catchy rhythms, each one called forth by a simple button.
In addition to a combined volume and balance knob, tempo control and tempo indicator light, there are two other switches: ordinary Start and the exclusive Yamaha Synchro-Start which begins the rhythm accompaniment on the first beat of a measure when the first lower manual or pedal note is struck. A foot switch fitted on the expression pedal lets you cut and restart the rhythm at any point during play.




## How to use the Auto Rhythm




● **Rhythm Start**
For instant rhythm at the beginning of a selection. Push the rhythm selector desired, get the beat set in your mind by watching the indicator lamp, when set Synchro-Start switch on and then turn the Start switch on.

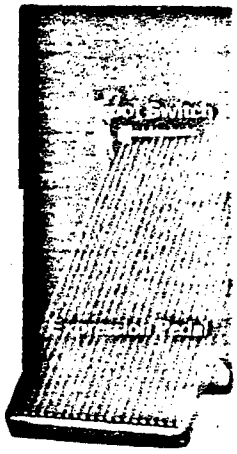



● **Synchro-Start**
Select the rhythm, switch on the Synchro-Start and begin to play once you have the beat established. The rhythm will begin as soon as you strike a lower manual or pedal note. This switch permits you to lead in with a rhythm-free melody at first if so desired.

● **Rhythm Stop (Foot Switch) : ❷**

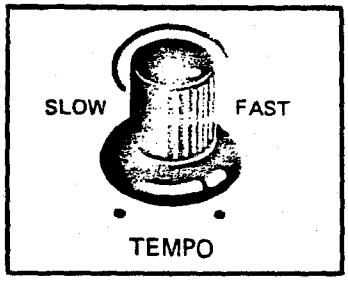
This switch is located in the expression pedal housing to the left of the pedal. Once the rhythm is on, push this switch once to instantly stop it, once again to restart. It lets you stop and restart the rhythm in the middle of a selection without using your hand.

Note : After the foot switch has been used, be sure it is reset to normal after you finish playing your selection, and then make sure both Start and Synchro-Start switches are off. Otherwise you may turn on one of the switches in the middle of a new number only to find the rhythm still canceled.



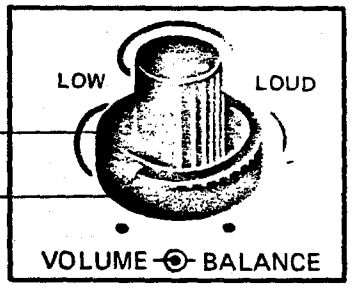
● **Tempo Control**

The tempo of the Auto Rhythm section can be adjusted by a continuous control knob. This is best accomplished by turning on the Synchro-Start switch. Although no sound will be produced, the indicator lamp will flash each quarter note letting you visually check the tempo while you adjust.



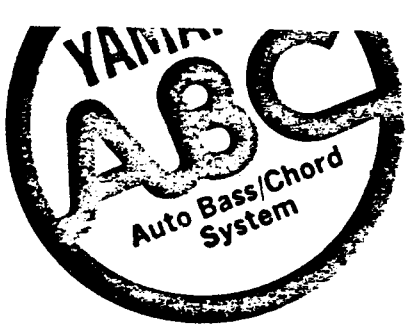

● **Volume Control**

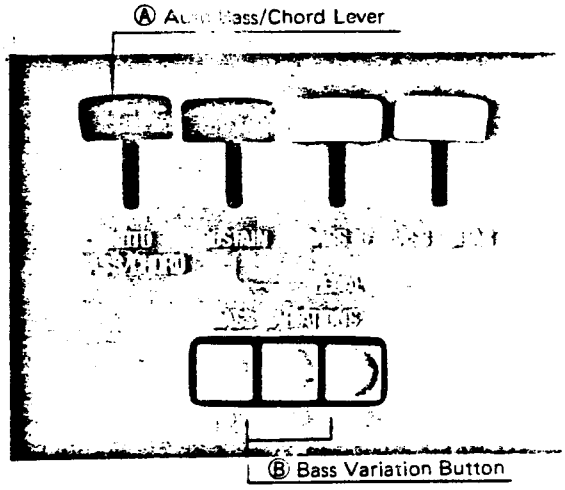
Use it to balance the volume of the rhythm section and the manuals.
This volume is then varied during the selection by the expression pedal, just like that of the other tones.




● **Balance Control**

This control lets you balance the low rhythm sounds, such as drums, and the high sounds (i.e. cymbals) according to your mood and the selection. It can make a big difference even when using the same rhythm. Turn the knob to the right to accentuate the higher (treble) sounds, to the left for lower (bass). If you accentuate the treble sounds the rhythm becomes brighter and more cheerful.
Check the playing hints for specific settings.



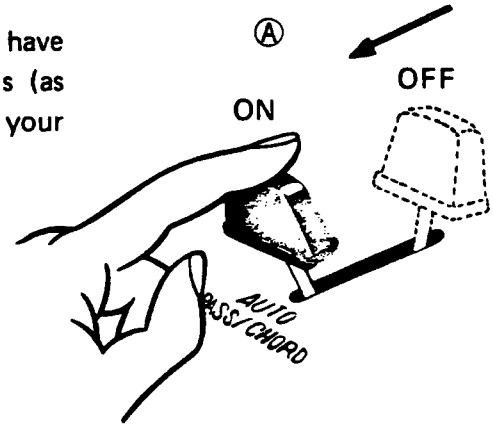




● **Instructions for Operation of "Auto Bass/Chord"**

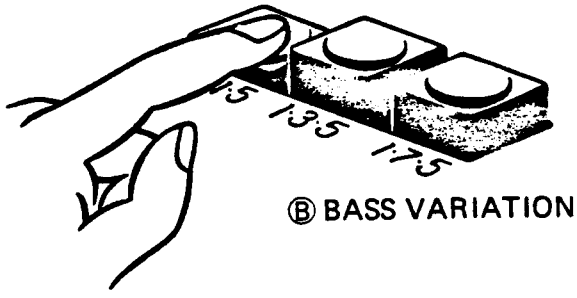
Your new Yamaha Electone, Model BK-20A, is equipped with a lever marked "Auto Bass/Chord" Ⓐ . When used in conjunction with the "Automatic Rhythm" (see page 13). It enables you to play just about any combination of alternating bass-chord rhythms simply by sustaining (holding down constantly) a chord on the lower keyboard. From your very first, simple melody, you will be sounding like a pro. Here is all you have to do.

● **Move the Auto Bass/Chord**

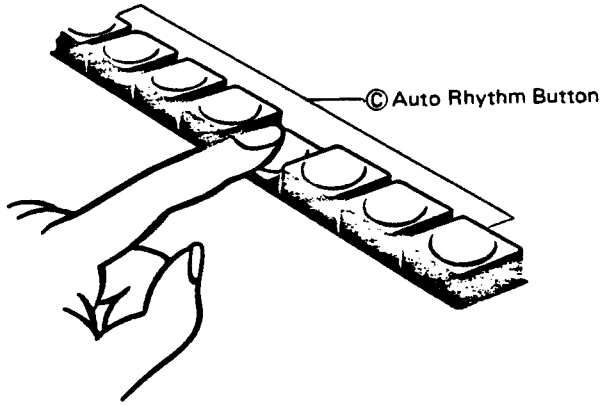
Move the "Auto Bass/Chord" lever toward you Ⓐ . You have now engaged the memory system and deactivated the pedals (as long as this lever is in the engaged position, you cannot play your BK-20A as a conventional organ).




● Push the Bass variation button marked 1-5 right below the "Auto Bass/Chord" Button Ⓑ .




● Select one of the automatic rhythm patterns and push the corresponding button down until it clicks and stays down Ⓒ .



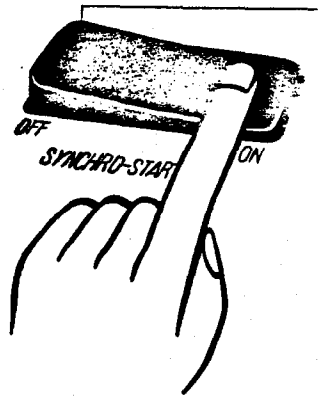
Immediately to the right of the rhythm button you will find two rocker type switches Ⓓ . Push the "on" side (right) of the one marked "Synchro-Start" (the one marked simply "start" is to be used when you wish to continue hearing the automatic rhythm even after releasing your chord on the lower keyboard). Now, be sure you have at least one stop for each: Upper Keyboard, Lower Keyboard, and Pedal. You are now ready to play.

Form one of the following type of chords on the lower manual with your left hand in any inversion:

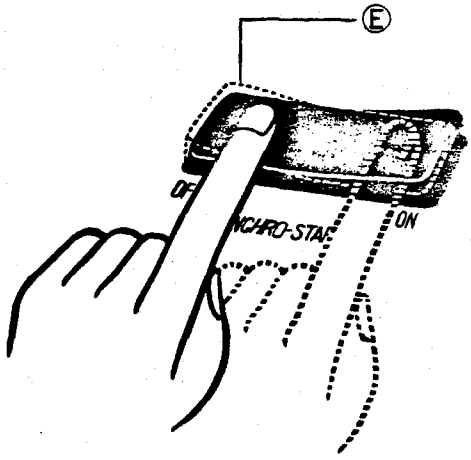
| | |
|---|---|
| Major | Seventh |
| Minor | Minor Seventh |

(These are the only chord types for which the memory unit can supply the proper bass note.) Play all the notes in the chord at the same time. The unit should now be working. Adjustments may be necessary to the "Tempo" and "Volume" knob to the left of the "Automatic Rhythm" unit (See page 14).

Ⓓ Synchro-Start Switch




Adjustments may also be required to balance the relative volume of bass, chords, and solo (upper) keyboard; do this in the same way you would if playing conventionally. When the first chord is played, the unit will begin to operate on the downbeat, or first beat of the measure. When the chord is released you will not hear any more sound, but the unit is still operating within it's cycle. To start unit on a downbeat again, when beginning a new song, it is necessary to re-set the "Synchro-Start" switch Ⓔ .

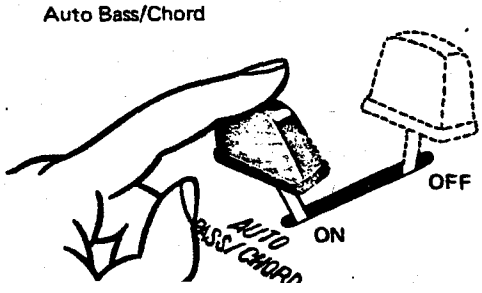



**Bass Variation Buttons :**

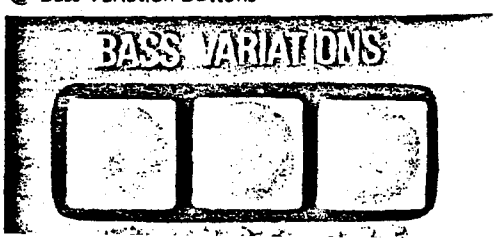
Just below the "Auto Bass/Chord" lever are three "Bass Variation Buttons" Ⓑ , marked 1 · 5 (left) 1 · 3 · 5 (center), and 1 · 7 · 5 (right). The numbers under the buttons correspond to the notes on the musical scale in any given key and indicate what bass notes are available in the memory unit when a particular button is depressed. The type of chord and the automatic rhythm used will determine the actual note (and their sequence) that you hear.

There now follows a chart which indicates by scale step what bass notes will sound with each possible combination (Note: for the unit to perform correctly, at least one but not more than one button should be down in each section), "Bass Variation" "Automatic Rhythm".

Auto Bass/Chord




Ⓑ Bass Variation Buttons



| Bass Variation | Type of Chord | Rhythms Effected | Bass Notes Played |
|---|---|---|---|
|  1.5 | Major<br>Minor<br>Seventh<br>Minor Seventh | Swing, Waltz, Bossanova<br>Slow rock, Rhumba | 1.5 |

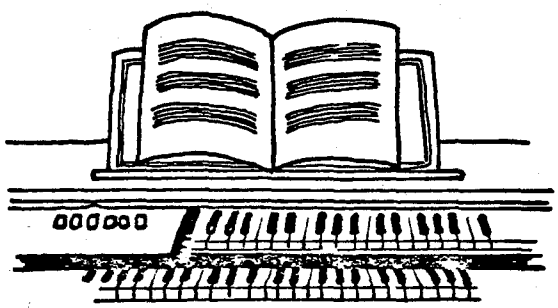
Explanation: This is the basic pattern and alternates the root (1) and fifth (5) in the bass regardless of rhythm chosen for type of chord. The one exception is the "jazz rock" rhythm, which never plays anything but the root in the bass.

| Bass Variation | Type of Chord | Rhythms Effected | Bass Notes Played |
|---|---|---|---|
|  1.3.5 | Major<br>Minor<br>Seventh<br>Minor Seventh | Swing, Waltz, Bossanova<br>Slow rock, Rhumba | 1.5<br>1.3.5 |

Explanation: This selector effects only the Slow Rock, Rhumba rhythms with which it will play a root (1), third (3), fifth (5) pattern. All other rhythms function as with the (1.5) selector.

| Bass Variation | Type of Chord | Rhythms Effected | Bass Notes Played |
|---|---|---|---|
|  1.7.5 | Major<br>Minor | Swing, Waltz, Bossanova<br>Slow Rock, Rhumba | 1.5<br>1.3.5 |
| | Seventh<br>Minor Seventh | Swing, Waltz, Bossanova<br>Slow Rock, Rhumba | 1.5<br>1.7.5 |

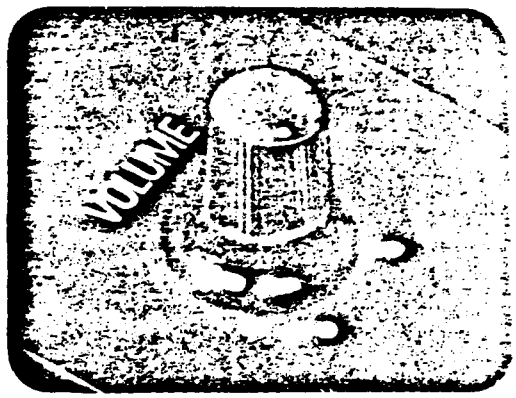
Explanation: This selector effects only the Slow Rock, Rhumba rhythm when a seventh or minor seventh chord is being played, with which you will hear the root (1), seventh (7), and fifth (5) bass rootes. When playing a major or minor chord the unit will perform exactly as it does with the second "Bass Variation" selector (1.3.5).
Remember, the Jazz Rock rhythm is not affected by the "Bass Variation" selector, it plays only the root (1).



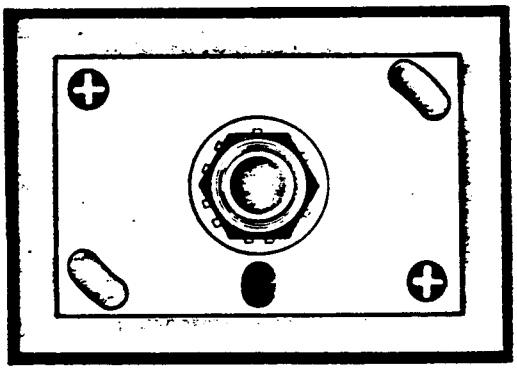
# To Fully Enjoy Your Electone

## Other Controls

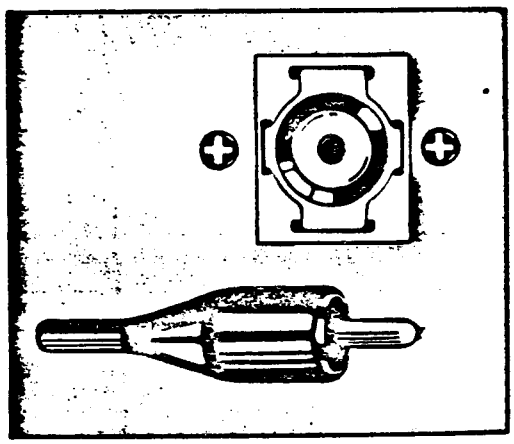
**Master Volume :**
Determine the maximum volume obtainable by depressing the expression pedal.



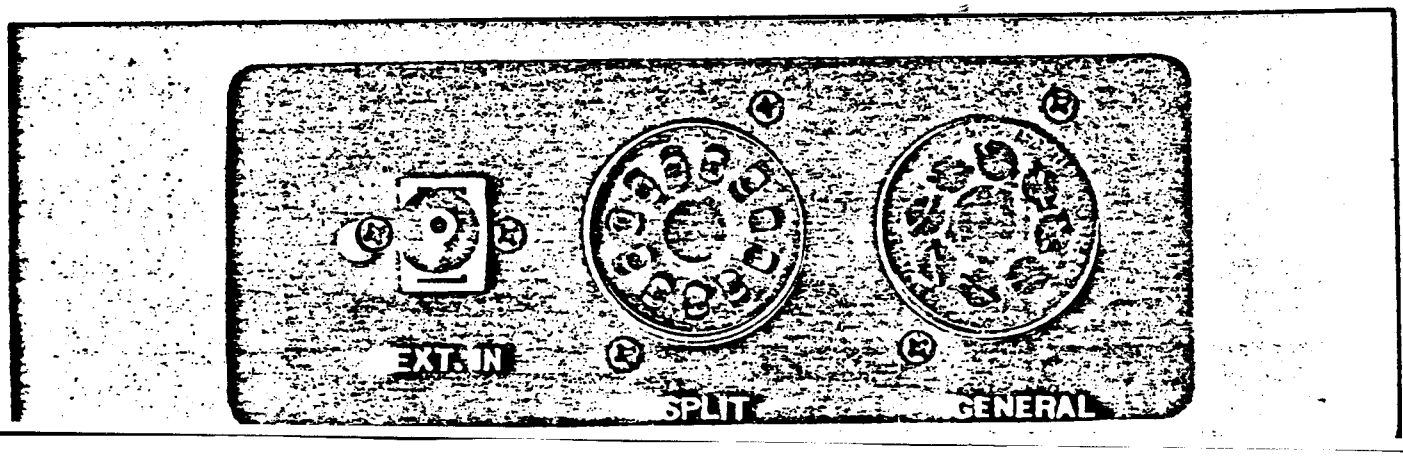

**Headphone Jack**
Plug a headphone set (optional accessory) into the jack under the keyboard and you can play with the volume as high as you like without disturbing anyone, even in the middle of the night.



**External Input Jack (EXT IN)**
Can be used to feed any sound source through the Electone Natural Sound Speaker radio, record player or tape recorder. Since the volume of these sound sources is not affected by the expression pedal, you can play along on the Electone with any other performance.



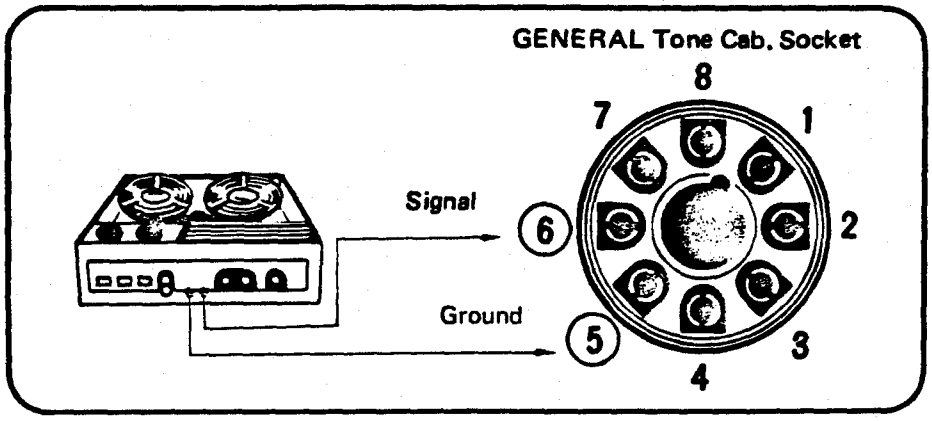
**Tone Cabinet Sockets**
This socket is on the rear panel. Use it to connect a Yamaha Tone Cabinet, without any rewiring required. Yamaha Cabinet R-60B housing Yamaha Natural Sound Speakers, will give increased tonal power.



**Record and Playback**

You can record your Electone selections through the headphone jack then play them back via the Ext. In. jack (phone type plug required).

For recording your tape recorder must be equipped with a high impedance input jack, for the Electone headphone output signal is 5Vp-p (output resistance 390 Ω ). When recording, it must be remembered that the signal to the Electone speaker will be cut off, so sound monitoring must be done via the tape recorder monitor system.



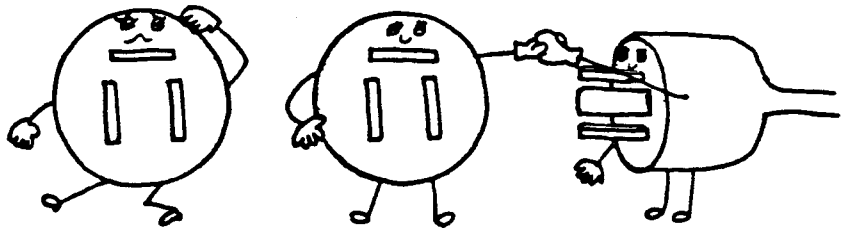

**Note :**

1. Connections between the EXT. IN jack and the output jack of a tape recorder should be made with shielded cable. Use a spare plug inserted in the EXT. IN jack.
2. Volume setting for playback will differ according to the 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.

# Care of Your Electone

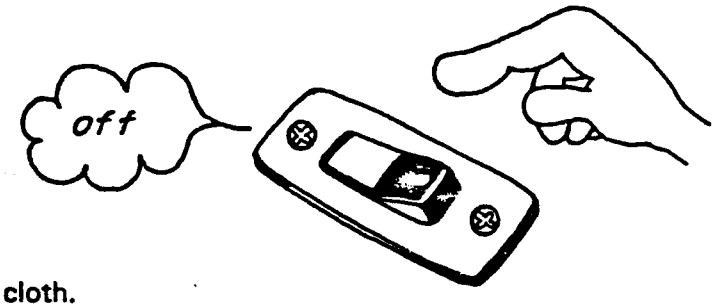
In general you should treat your Electone with the same care you would give any fine musical instrument. However, the following points are suggested to assure optimum enjoyment.

1. Be sure to use your Electone only on the correct voltage.
   If any changes are required, please consult your Yamaha Electone service agent.



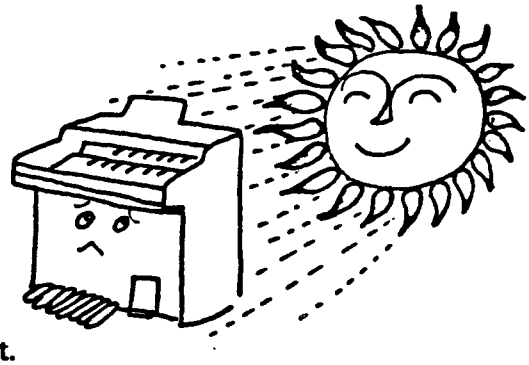

2. If any trouble develops, contact your service agent.
   Never touch the circuits or the internal elements of the Electone yourself.

3. When you have finished playing, be sure to turn off the power switch.




4. In order to clean the keys, tabs, etc., use a damp cloth.
   Never apply organic solvents such as alcohol, for they will damage the materials.

5. Do not expose the Electone cabinet to the direct rays of the sun. This can bleach the finish and lead to separation along the joints. It is also best to choose a location free of humidity and currents of heated air.

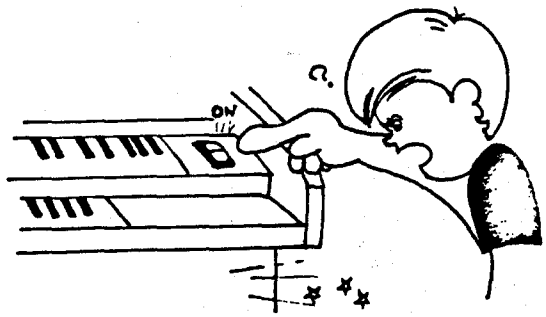


6. Be careful not to strike or scratch the cabinet with a hard object.

7. In opening and closing the fallboard, grasp the front lip with both hands and slide it gently in its groove. Never attempt to raise the fallboard directly upwards. Do not place heavy objects on it.

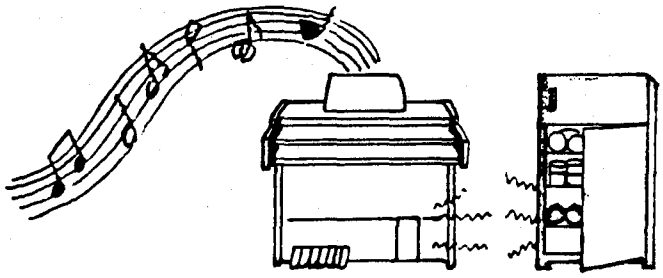
# Do Not Be Alarmed If....

1. A note should sound the instant you turn on the switch.
   This merely indicates normal operation consequent to a surge of electricity in the main amplifier.

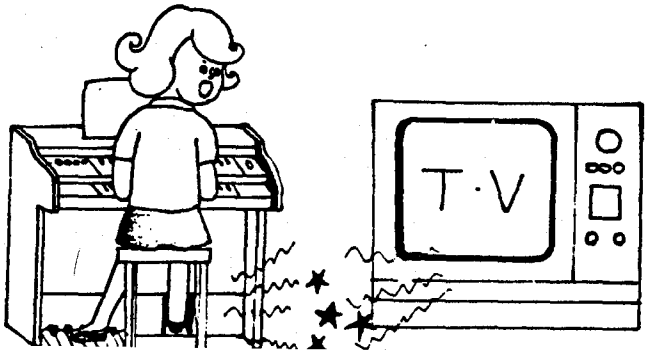



2. Only one note is produced even when two pedals are depressed simultaneously.
   In order to achieve tonal clarity, the Electone is designed so that a note is electronically supressed the instant the next note is struck. If two pedals are struck simultaneously, only the higher one sounds.

3. Occasional unpleasant static occurs.
   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 annoying, poses no danger to the Electone circuitry.
   If the cause is a fault in a neon or fluorescent lighting fixture, it should be repaired. When the cause is unknown, or in case of doubt, contact your Yamaha dealer.



4. The Electone can at times reproduce radio or TV sound signals.
   This can occur when there is a powerful radio or TV transmitter, or an amateur radio operator located in the vicinity. If the situation is distracting, contact your Yamaha dealer.



5. Sound rattling (sympathetic vibration) occurs.
   All materials have critical resonance frequencies at which they vibrate. Since the Electone produces continuous tones, it is only normal that some will cause windows, shelves, etc. to rattle.

6. Pedal notes sound too high, and upper manual notes too low.
   This feeling may be especially strong for players who switch from the piano, because of the difference in tonal construction. Each piano note is a combination of complicated harmonics, and can be heard only in its interaction with the surroundings. But Electone harmonics are only multiples of the integral (base) tone, and so the instrument cannot be tuned in the same way as a piano. The same is true of other organs, pipe and reed types.

7. Brilliance does not function with Flute sounds.
   In order to reduce multiple harmonics in the high range, special resistors and condensers are used. They unfortunately limit the Brilliance effect for flute and wood sounds, as well as pedal tones. Brilliance really shines for strings, oboe and brass, where the harmonics are desired and therefore left untouched.

8. There is a bit of noise when the rotary speaker is switched on.
   This too is a mechanical noise stemming from the spinning speaker. Special mountings help keep this sound at an absolute minimum.

# Specifications

■ KEYBOARDS

| | | |
|---|---|---|
| Upper Manual | 44 keys (3⅔ octaves) | f ~ $c_4$ |
| Lower Manual | 44 keys (3⅔ octaves) | F ~ $c_3$ |
| Pedals | 13 keys (1 octave) | $C_1$ ~ C |

■ TONE LEVERS

| | | |
|---|---|---|
| Upper Manual | Flute | 16′ |
| | Flute | 8′ |
| | Flute | 4′ |
| | Flute | 2⅔′ |
| | Trombone | 16′ |
| | Brass | 8′ |
| | Oboe | 8′ |
| | String | 8′ |
| | String | 4′ |
| Lower Manual | Flute | 8′ |
| | Flute | 4′ |
| | Horn | 8′ |
| | Cello | 8′ |
| | Cello | 4′ |
| Pedals | Bass | 16′ |
| | Bass Guitar | |

■ UPPER PRESET TONE SELECTORS
- Combination 1 ~ 3
- Accordion, Piano,
- Hawaiian Guitar, Banjo,
- Cancel

■ EFFECT LEVERS
- Vibrato
- Vibrato Speed
- Percussive 4′ (Upper)
- Percussive 2⅔′ (Upper)
- Percussive Length (Upper)
- Attack Wah-Wah (Upper)
- Repeat Speed (Upper)
- Organ Preset Ensemble (Upper)
- Lower Brush
- Pedal Cymbal
- Pedal Sustain

■ EFFECT CONTROLS
- Brilliance
- Reverb
- Manual Balance (Upper/Lower)

■ EFFECT SELECTOR
- Glide (Foot control)

■ TREMOLO SELECTORS
- Upper Flute Split
- Upper Voice (Main/Rotary)
- Lower Voice (Main/Rotary)
- Tremolo
- Chorus

■ AUTO RHYTHM SECTION
- Rhythm Selectors
  - March
  - Jazz Rock
  - Swing
  - Bossanova
  - Slow Rock
  - Samba
- Rhythm Controls
  - Rhythm Start
  - Synchro-Start
  - Rhythm Stop (Foot control)
  - Tempo
  - Volume
  - Tone Balance
- Tempo Indicator Lamp

■ AUTO ACCOMPANIMENT SECTION
- Auto Bass/Chord Lever
- Bass Variation Selectors
  - 1 · 5
  - 1 · 3 · 5
  - 1 · 7 · 5

■ OTHER CONTROLS
- Master Volume
- Expression Pedal
- Foot Effect Switch
- Tremolo Speed Control
- Power Switch
- Pilot Lamp

■ OTHER FITTINGS
- Headphone Jack
- External Input Jack
- Tone Cabinet Sockets (Gen., Split)
- Roll-top Fallboard with Lock
- Music Rest
- Matching Bench with Music Storage Space

■ NATURAL SOUND SPEAKERS

| | | |
|---|---|---|
| Main: | JA-5101 | 59 x 48cm (23¼ x 14½″) |
| Rotary: | JA-1701A | 16 x 23cm (6½ x 9″) |

Electro-control 2-speed

■ CIRCUITRY
- Solid State (Incl. ICs and FETs)
- Main Amplifier: OCL Dual-channel System
- Total Output Power: 60 Watts (RMS)
- Power Consumption: 120 Watts
- Power Source: 100/110/117/125/220/240V AC 50/60Hz

■ DIMENSIONS

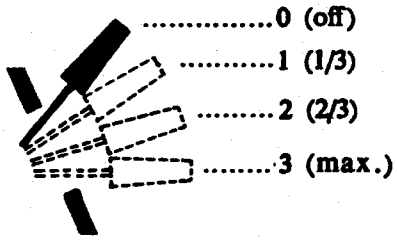
| | BK-20A | BK-20AS |
|---|---|---|
| Width: | 120cm (47″) | 122cm (48″) |
| Depth: | 56cm (22″) | 56cm (22″) |
| Height: | 90cm (35½″) | 91cm (36″) |

■ WEIGHT

| | | |
|---|---|---|
| | 72kg (158 lbs.) | 75kg (165 lbs.) |

■ FINISH
- BK-20A, BK-201A: Natural American walnut, oil finish
- BK-20AS: Antique oak, oil finish

# YAMAHA




## Electone ORGAN

# BK-20 REGISTRATION GUIDE

As the proud owner of a new YAMAHA BK-20, may we suggest a few registrations for starters so that you may exploit the versatility of this magnificent instrument immediately. The following suggested registrations are designed to provide you with just a few of the unlimited combinations available. Once you become familiar with these, feel free to experiment, on your own, for registrations best suited to your individual taste.

ALL SPECIAL EFFECTS are played on the 44 note UPPER manual unless specified. Suitable ACCOMPANIMENT registrations are included for the LOWER Manual.

All controls not shown in the registration SHOULD be in the OFF position.

For best results, always keep in mind the SOUND and RANGE of the effect you are re-creating.

## A B C

With the exclusive Electone ABC (Automatic Bass Chord) Any Body Can play this DELUXE HOME SPINET from the very first day. 1. Select the rhythm – 2. Turn on the ABC selector – 3. Play your chord (in any inversion) with the left hand and your BK-20 automatically responds with rhythmic bass patterns and left hand chord accompaniment; all tied in with the Auto-Rhythm pattern of your choice.

**NOTE:** Because individual tastes differ, set the "BRILLIANCE" all the way on for all registrations then reduce the intensity of your own likeness.

## POPULAR

**LOWER:**
Flute 8' (3)
Flute 4' (1)
**PEDAL:**
Pedal Sustain (2)
Bass (2)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**PRE-SETS:**
Combination #2
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (2)
Cello 8' (2)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**PRE-SETS:**
Combination #3
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (1)
**UPPER:**
Flute 16 (3)
Flute 4' (3)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (2)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (2)
Cello 8' (2)
Vibrato (1)
**UPPER:**
Flute 16 (3)
Flute 8' (3)
Flute 4' (2)
Brass 8' (3)
String 8' (2)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Upper Flute Split On
Lower Voice Rotary
Upper Voice Rotary
Tremolo On

## MODERN ROCK JAZZ

**LOWER:**
Horn 8' (3)
**PEDAL:**
Pedal Sustain (1)
Bass 16 (2)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Main
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (1)
Cello 8' (1)
Perc. Length 2-2/3 (3)
**UPPER:**
Flute 16 (3)
Flute 4' (3)
**PEDAL:**
Pedal Sustain (1)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Main
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (1)
Perc. Lngth 4' (3)
**UPPER:**
Flute 16 (3)
**PEDAL:**
Pedal Sustain (1)
Bass 16 (2)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Main
Tremolo On

**LOWER:**
Flute 8' (3)
Flute 4' (2)
Perc. Length 2-2/3 (2)
**UPPER:**
Flute 16 (3)
Flute 8' (3)
Flute 4' (3)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Main
Tremolo On

## "CLASSICAL-SACRED"

**LOWER:**
Flute 8' (3)
Flute 4' (2)
**UPPER:**
Flute 16 (3)
Flute 8' (3)
Flute 4' (3)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (2)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Chorus On

**LOWER:**
Flute 8' (2)
Flute 4' (1)
Cello 8' (3)
**UPPER:**
Flute 4' (3)
Brass 8' (3)
Oboe 8' (3)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Upper Flute Split On
Lower Voice Rotary
Upper Voice Rotary
Tremolo On

**LOWER:**
Horn 8' (3)
Cello 8' (3)
**UPPER:**
Flute 4' (3)
Trombone 16 (3)
Brass 8' (3)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Chorus On

**LOWER:**
Flute 4' (2)
Horn 8' (3)
Cello 8' (2)
**PEDAL:**
Pedal Sustain (2)
Bass 16 (3)
**EFFECT CONTROLS:**
Brilliance
Manual Balance
Reverb
**PRE-SETS:**
Combination #3
**EFFECT SWITCHES:**
Lower Voice Rotary
Upper Voice Rotary
Chorus On

# "SPECIALTYS & NOVELTYS"

## MANDOLIN AND ORGAN

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (2) |
| Flute | 4' | (1) |
| Horn | 8' | (1) |

**UPPER:**

| | | |
|---|---|---|
| Flute | 8' | (1) |
| Flute | 4' | (3) |
| Flute | 1-2/3 | (2) |
| String | 8' | (3) |
| String | 4' | (2) |
| Repeat Speed | | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Flute Split | On |
| Lower Voice | Rotary |
| Upper Voice | Rotary |
| Tremolo | On |

## HARPSICHORD

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (2) |
| Flute | 4' | (1) |

**UPPER:**

| | | |
|---|---|---|
| Oboe | 8' | (1) |
| String | 8' | (3) |
| String | 4' | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |
| Bass Guitar | | (1) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Upper Flute Split | On |
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## THEA. ENSEMBLE

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Horn | 8' | (3) |
| Cello | 4' | (2) |
| Vibrato | | (1) |

**UPPER:**

| | | |
|---|---|---|
| Flute | 16 | (3) |
| Flute | 8' | (3) |
| Flute | 4' | (3) |
| Trombone | 16 | (3) |
| Brass | 8' | (2) |
| Oboe | 8' | (3) |
| String | 8' | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Flute Split | On |
| Lower Voice | Rotary |
| Upper Voice | Rotary |
| Tremolo | On |

## ACCORDION

**LOWER:**

| | | |
|---|---|---|
| Horn | 8' | (2) |
| Cello | 8' | (1) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (2) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**PRE-SETS:**

| | |
|---|---|
| Accordion | On |

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |

## PIANO

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (1) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (1) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**PRE-SETS:**

| | |
|---|---|
| Piano | On |

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## HAWAIIAN GUITAR

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (1) |
| Vibrato | | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (1) |

**FOOT SELECT**

| | |
|---|---|
| Glide | On |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**PRE-SETS:**

| | |
|---|---|
| Hawaiian Guitar | On |

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## BANJO

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (2) |
| Flute | 4' | (1) |

**UPPER:**

| | | |
|---|---|---|
| Repeat Speed | | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (2) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**PRE-SETS:**

| | |
|---|---|
| Banjo | On |

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## WAH WAH TRUMPET

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Flute | 4' | (2) |

**UPPER:**

| | | |
|---|---|---|
| Brass | 8' | (3) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |
| Bass Guitar | | (1) |

**EFFECT CONTROLS:**

Brilliance
Mutual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## SLIDE TROMBONE

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Cello | 4' | (1) |
| Vibrato | | (1) |

**UPPER:**

| | | |
|---|---|---|
| Trombone | 16 | (3) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Brass | 16 | (3) |
| Brass Guitar | | (1) |

**FOOT SELECT:**

| | |
|---|---|
| Glide | On |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## MARIMBA/VIBS

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Flute | 4' | (1) |
| Cello | 8' | (2) |

**UPPER:**

| | | |
|---|---|---|
| Flute | 8' | (2) |
| Flute | 4' | (3) |
| Repeat Speed | | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## CHIMES

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Flute | 4' | (1) |
| Percussive Length | | (3) |
| Perc. Lngth | 4' | (3) |
| Perc. Lngth | 2-2/3 | (2) |

**UPPER:**

| | | |
|---|---|---|
| Flute | 8' | (1) |
| Brass | 8' | (1) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Upper Flute Split | On |
| Lower Voice | Rotary |
| Upper Voice | Main |
| Tremolo | On |

## FULL FLUTE'S

**LOWER:**

| | | |
|---|---|---|
| Flute | 8' | (3) |
| Flute | 4' | (2) |
| Cello | 8' | (2) |
| Vibrato | | (2) |
| Vibrato Speed | | (2) |

**UPPER:**

| | | |
|---|---|---|
| Flute | 16 | (3) |
| Flute | 8' | (2) |
| Flute | 4' | (3) |
| Flute | 2-2/3 | (2) |

**PEDAL:**

| | | |
|---|---|---|
| Pedal Sustain | | (2) |
| Bass | 16 | (3) |

**EFFECT CONTROLS:**

Brilliance
Manual Balance
Reverb

**EFFECT SWITCHES:**

| | |
|---|---|
| Lower Voice | Rotary |
| Upper Voice | Rotary |
| Tremolo | On |