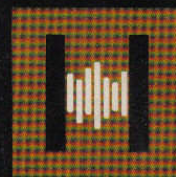


HAMMOND



T-SERIES
OWNER'S
MANUAL



YOU'VE SELECTED THE WORLD'S MOST POPULAR ORGAN

Welcome to the exclusive circle of Hammond organ owners. We're proud you recognize the distinctive quality that has made it the overwhelming choice of beginners, "buffs," and professionals since Hammond first introduced the electric organ in 1935.

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(RETAIN FOR PERSONAL USE)

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ONE YEAR WARRANTY

Please complete, tear off, and return the attached Warranty Certificate for your organ. Hammond Organ Company is obligated to replace or repair, at our factory, authorized service station, or designated dealer, any part proving defective in material or workmanship for the period of the warranty. Damage to the woodwork or to other parts, due to abuse, accident or improper operation, is not covered by the warranty. The warranty is void if the Warranty Certificate below is returned to the company within 30 days of the date of purchase. We would like to provide you with answers to our questions. If we can learn a little more about you, we'll be better able to serve you and to bring you pleasure as well as to others as well.

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Address _____ STREET _____ CITY _____ STATE _____ ZIP _____

Purchased From _____

Address _____ STREET _____ CITY _____ STATE _____ ZIP _____

Model No. _____ Serial No. _____ Date _____

Previously Owned: Organ ☐ Piano ☐ None ☐ / Make _____ Model _____

Location	User	Age of Owner	Educational Attainment	Family Income
Home <input type="checkbox"/>	Husband <input type="checkbox"/>	Under 25 <input type="checkbox"/>	Grade School <input type="checkbox"/>	Under \$3000 <input type="checkbox"/>
Church <input type="checkbox"/>	Wife <input type="checkbox"/>	25-34 <input type="checkbox"/>	High School <input type="checkbox"/>	\$3000 - \$5000 <input type="checkbox"/>
School <input type="checkbox"/>	Children <input type="checkbox"/>	35-44 <input type="checkbox"/>	College <input type="checkbox"/>	\$5000 - \$7000 <input type="checkbox"/>
Business <input type="checkbox"/>	Professional <input type="checkbox"/>	45-54 <input type="checkbox"/>	Post College <input type="checkbox"/>	\$7000 - \$10,000 <input type="checkbox"/>
		55-64 <input type="checkbox"/>		\$10,000 - \$15,000 <input type="checkbox"/>
		65 & over <input type="checkbox"/>		\$15,000 and over <input type="checkbox"/>

47-14820

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Your instrument is valuable. Please take a minute to complete the enclosed warranty card and return promptly to Hammond Organ Company. Only if this card is received will your organ be under warranty protection. It protects your organ for the life of the warranty.

Receipt of Your Warranty Card Entitles You to The Hammond Times

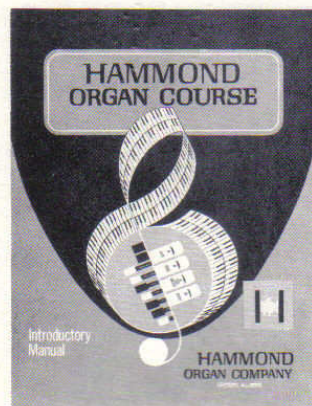
Once we receive your warranty certificate, we'll add your name to the Hammond Times mailing list. This 16-page, 2-color magazine is published every other month. It contains instructional articles to make your playing more enjoyable.

It reviews all levels of organ music. It comments on current organ records. It informs you about the latest Hammond developments and events. And it contains a host of colorful feature articles on a variety of organ topics. The Hammond Times is the finest publication of its kind in the industry. Make certain you send in your warranty certificate so that we can reserve a Hammond Times subscription for you.

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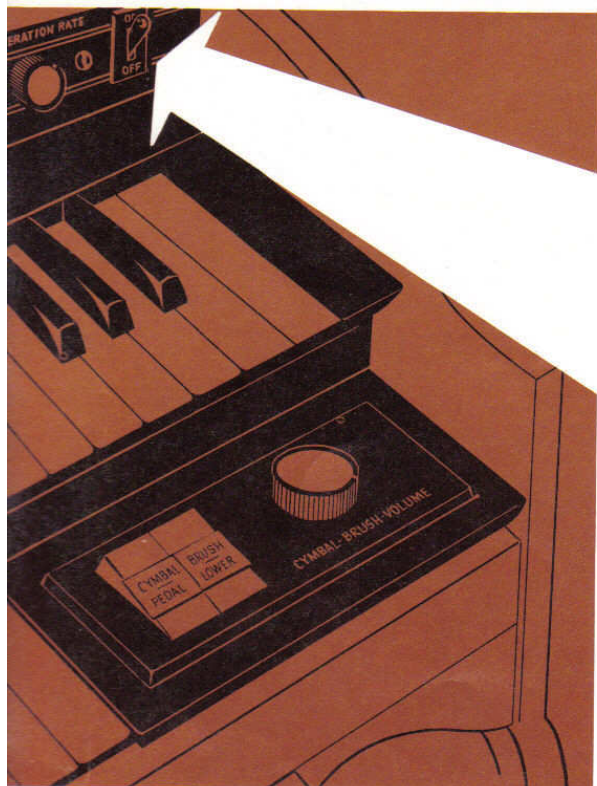
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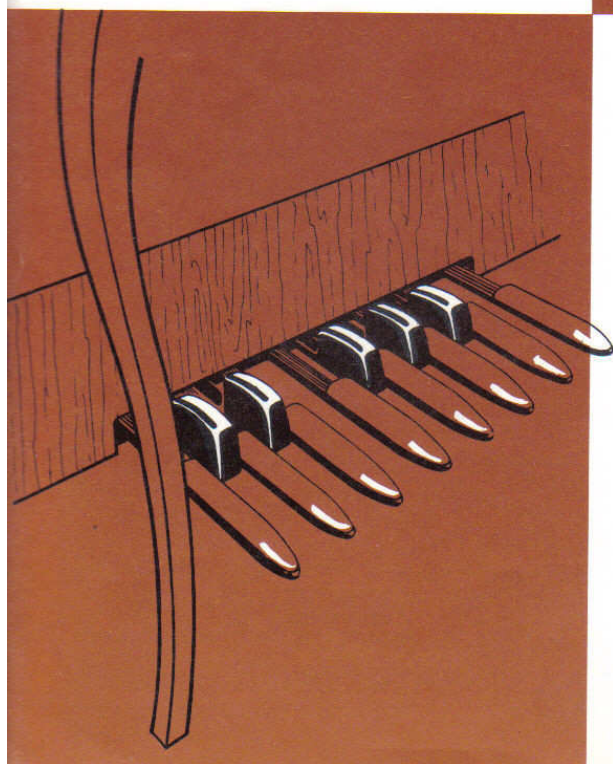


PLAYING INTRODUCTION



TURN THE ORGAN ON

At the top right hand corner of the organ, above the upper manual, you will find a single toggle switch. Push the switch up into the "ON" position. To shut off the organ simply push the switch down to the "OFF" position. A small pilot light is located to the left of the switch, letting you know at a glance whether the organ is ON or OFF. For the moment, let's leave the organ running so you can try out the various suggestions that follow.

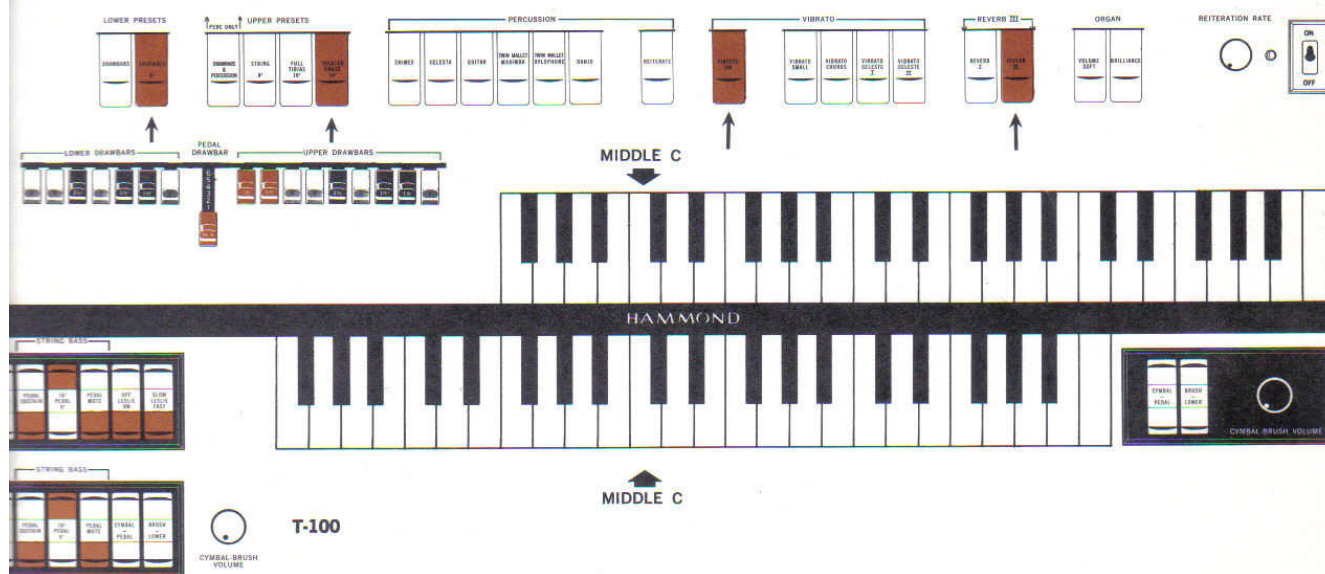
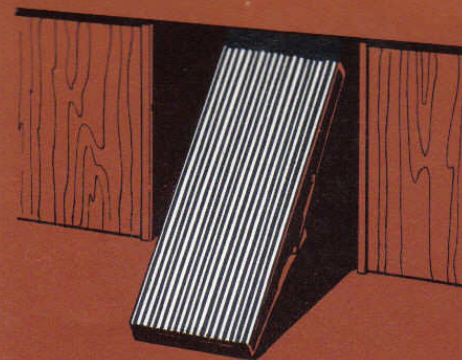


THE PEDAL KEYBOARD

To the left of the front panel, and close to the floor, you will find the pedal keyboard, consisting of thirteen bass notes, which correspond exactly to the same thirteen notes on the manuals, except that they are lower in pitch. The pedal notes provide 16' and 8' pitches and are designed to provide a deep, rich background for the tonal colors of the manuals. These pedals have been especially designed to simplify pedal playing; where the foot plays the bass notes, the left hand then is free to play the harmony, and the pedal note will blend in smoothly since the foot can sustain the bass note as long as desired.

THE EXPRESSION PEDAL (SWELL PEDAL)

To the right and just above the pedal keyboard is the expression pedal, which you operate with your right foot, and with which you vary the volume of the organ to create "expression." One reason it is so easy to play the organ is that, unlike other keyboard instruments, you do not need to vary your touch nor learn a difficult finger technique in order to provide expression for your music. You play the manuals and pedals with a minimum of pressure (famous organists tell us that the Hammond Organ requires less physical effort than any other instrument) and you use the expression pedal to let your music swell to grand effects, die away to a thrilling whisper, and for all the many variations of expression in between. Pressing forward with the front of your foot increases the volume; pressing back with your heel decreases it.



KEYBOARD CONTROLS

The illustration above pictures the playing controls as they will appear to you while seated at the instrument. Each group of controls is labeled for simplicity and convenience of operation. The function of each tab is explained in detail in another section of this guide.

For the moment, put all tablets in their "off" or up position. Run your fingers across the bottoms of each group of tablets making sure they are "off", (up position). Also depress the rear of the tabs located at the left end of the lower keyboard. On the T-200 Series, depress the rear of the tabs located at the right end of the lower keyboard (Cymbal and Brush). Now, depress those tabs indicated by an arrow in the illustration above. In the case of tabs located at either end of the lower keyboard, depress the front of the tab or that end nearest the player.

BEGINNERS — Follow the outline on the next four pages and discover how truly easy and enjoyable it is to play a tune on the Hammond Organ.

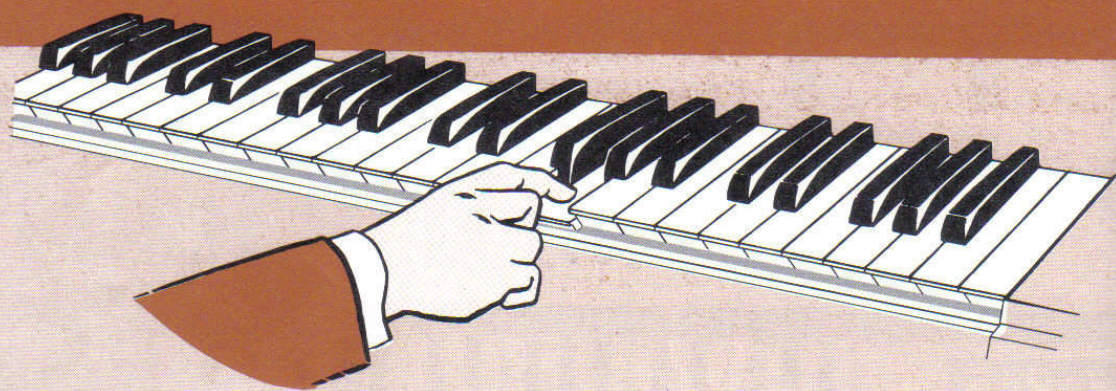
OTHERS — Those who have played an organ before may experiment with their favorite song, as the instrument is ready to be played.

To the left of the upper keyboard are three groups of drawbars, the left group controlling tones for the lower keyboard, the center, single drawbar controlling pedal tones and the right hand group controlling tones on the upper keyboard.

Hammond Harmonic Drawbars are moved in and out as opposed to the tabs which move up and down. You will notice that each drawbar has numbers on it (1 through 8). Later you will learn how to use these numbers to set up literally thousands of different tones. At this point, however, push all the drawbars in or to their "off" position. Now pull the center drawbar out to 6 as shown in the illustration.

Position yourself comfortably on the organ bench at about the center of the instrument. Your left foot should be able to reach the pedals. Put your right foot on the expression or volume pedal.

It's easy to play the Hammond organ ...for two simple reasons!

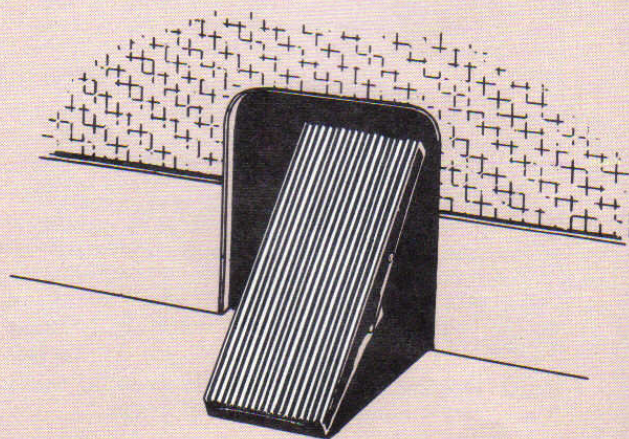


Sustained tone

By just pressing a key you sound a beautiful ORGAN tone that continues to sound as long as the key is down. A professional organist can not make that one note sound any better than you can. This permits the beginner to sound professional from the very start.

Expression (loud and soft)

On the organ it is not necessary to strike keys lightly or heavily to produce changes in volume. All keys may be played with a light touch because the volume or expression pedal controls the loudness.



Why two keyboards? (called manuals)

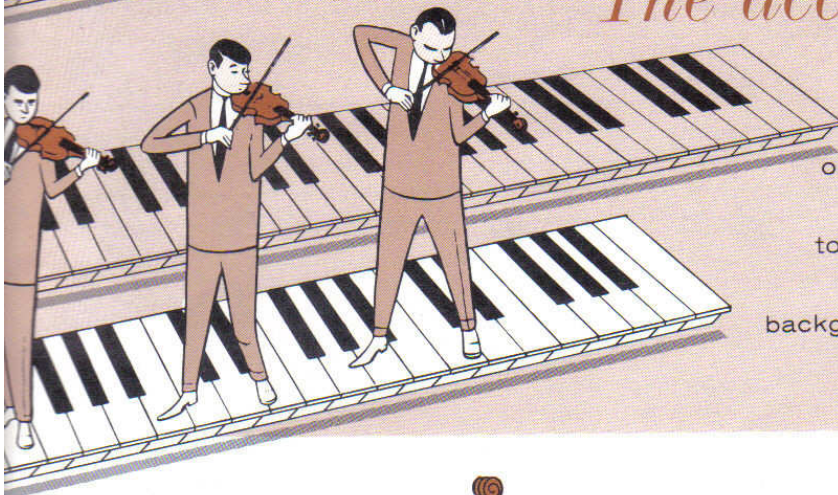


The melody

is played on the upper keyboard using a solo tone of one color—just as a solo instrument plays the melody in an orchestra.

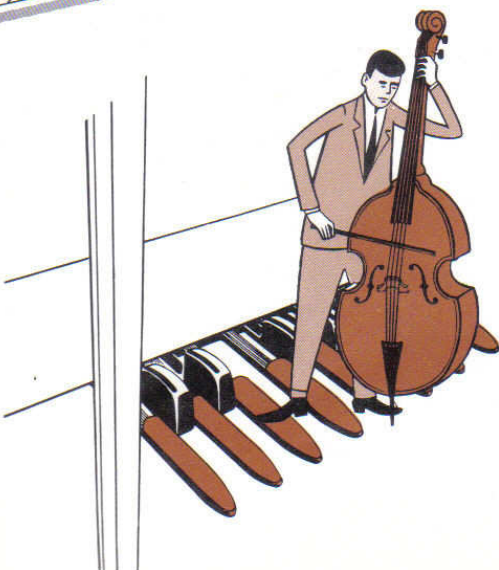
The accompaniment

or background is played on the lower keyboard using a softer tone of a contrasting color—just as the orchestra plays a soft background for the solo instrument.



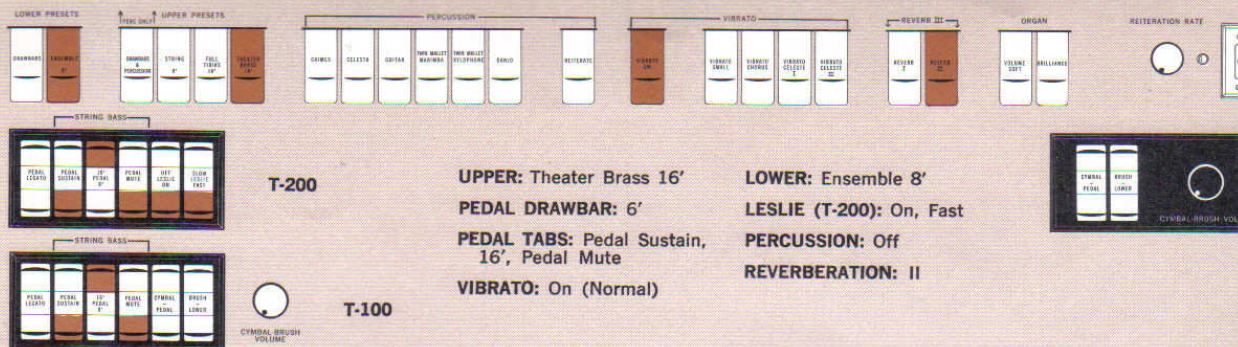
The bass

is played on another keyboard called the pedal keyboard. These low tones add depth and body and rhythm to the music—just as the bass violin adds these qualities to the orchestra.

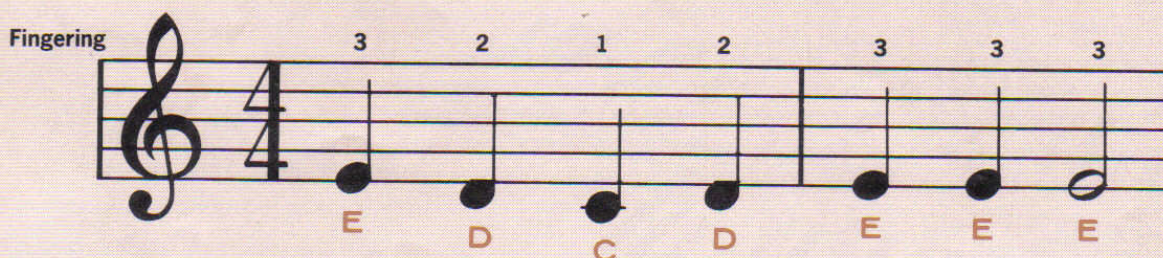


How you do it!

The illustration below indicates those tablets you are using (from instructions on previous page).



PLACE YOUR RIGHT HAND on the upper keyboard with your thumb on middle C, index finger on D, middle finger on E, ring finger on F, little finger on G. If you wish you may use the keyboard guide "A" for the upper manual (Located inside the back cover of this book). Keep your right hand in this position and play the melody notes of "Merrily We Roll Along". Start with the middle finger.



NOW...on the lower keyboard we add the chords. (you may use keyboard guide "B").

Place little finger on G, index finger on C and thumb on E.

The first chord is

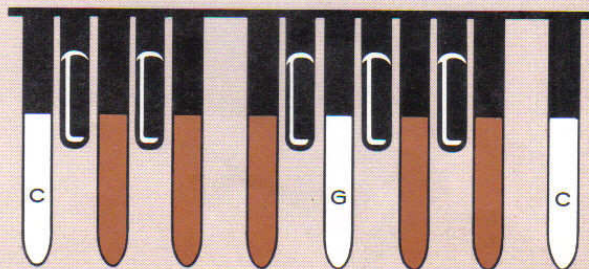


Keep little finger on G, move index finger and thumb from C and E to B and D (one note to the left).

The next chord is



THE PEDALS are next ...press either "C" pedal with the **C** chord and the "G" pedal with the **G** chord.



All together now!

"MERRILY WE ROLL ALONG"

Fingering

3 2 1 2 3 3 3

2 2 2 3 5 5 3 2 1 2

3 3 3 2 2 3 2 1

E D C D E E E

D D D E G G E D C D

E E E D D E D C

*Easy...
and fun too-
wasn't it?*

The difference between the organ and all other instruments lies in the fact that the organist can vary the tones of his instrument. He can have the sound of flutes, violins, trumpets, theater organ sounds or church organ sounds and all at virtually the touch of a finger. Changing tones is called registration. For your convenience there are three pre-set registrations available on the upper keyboard. Press the tab marked "Full Tibias 16'" and play "Merrily We Roll Along" with a deep throated theater organ sound. You may even wish to try the "String 8'". Further on, you will discover how easy it is to change registration with the famous Hammond Harmonic Drawbars.

YOUR HAMMOND ORGAN

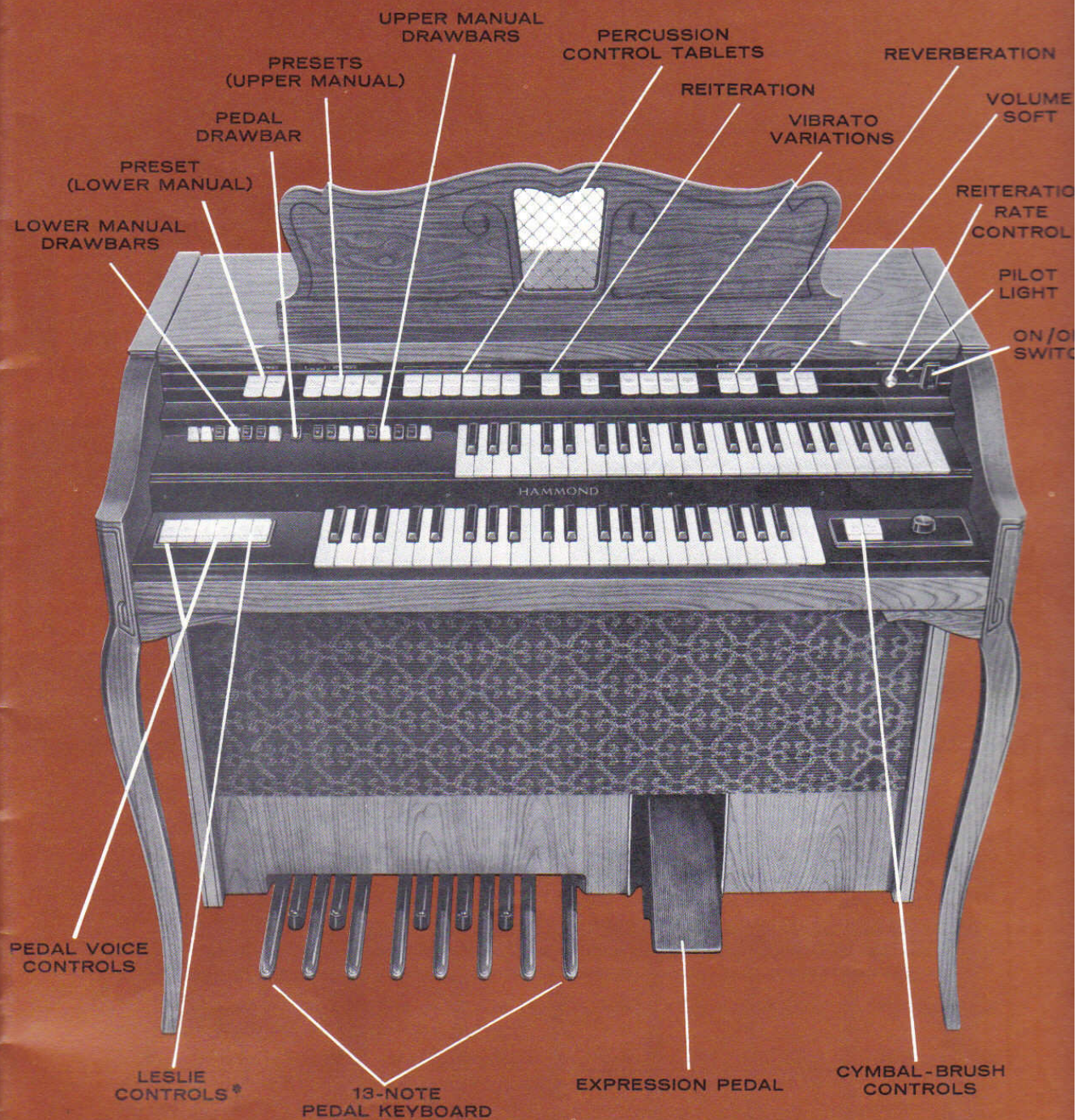


Here is a capsule list of the features of your Hammond Organ. These playing features will provide you with a lifetime of musical pleasure, satisfaction and challenge. The instrument's rugged construction will provide you with a lifetime of trouble-free service.

- Two 44 Note Manuals
- Overhanging Keys
- 13-Note Pedalboard
- Exclusive Hammond Tone Wheel Generator
- Reverberation
- Four Preset Tabs
- Six Pre-Voiced Percussion Tones
 - Chimes Marimba
 - Celesta Xylophone
 - Guitar Banjo
- Percussion Reiteration
- Twin Mallet Reiteration on Xylophone—Marimba
- Vibrato, Vibrato Chorus & Celeste
- Pedal Legato
- String Bass (Pedal Sustain)
- Pedal Mute
- Cymbal & Brush (Rhythm Effects)
- Earphone Jack
- Two-Speed Leslie Speaker*
- Built-in Tone Cabinet Connection
- 34 Watts of Music Power Output

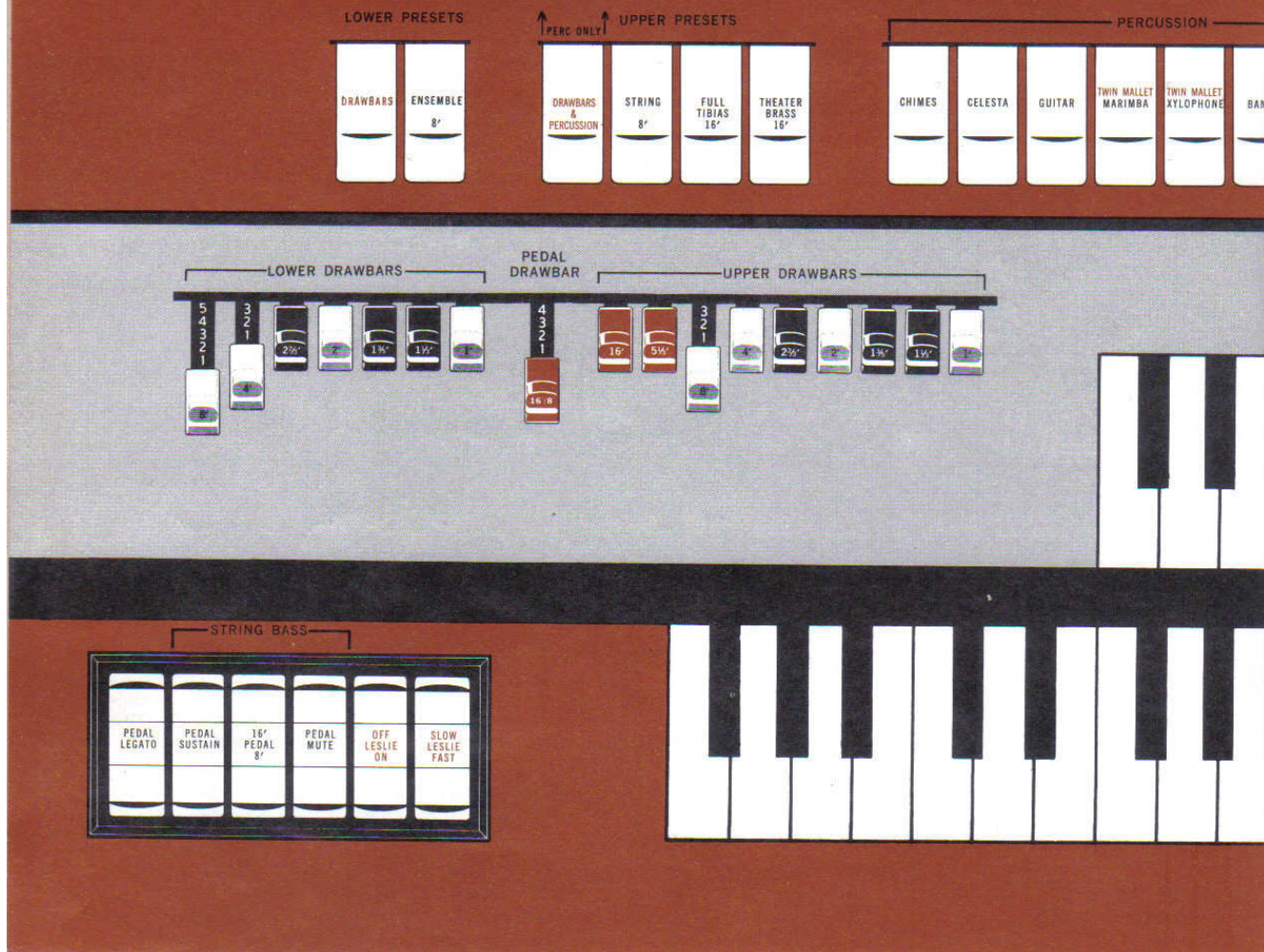
* T-200 Series only

THE T-100, T-200 SERIES ORGAN

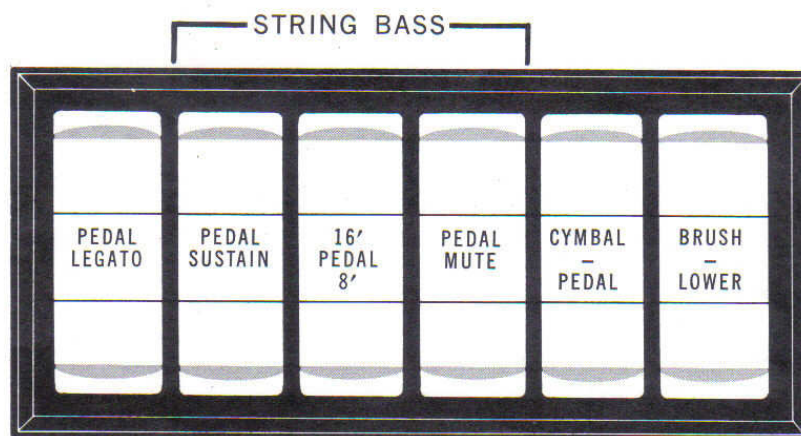


*NOTE: The T-100 series has the same controls with the exception of the Off/Leslie/On and Slow/Leslie/Fast tabs. In their place will be found the Cymbal and Brush Controls.

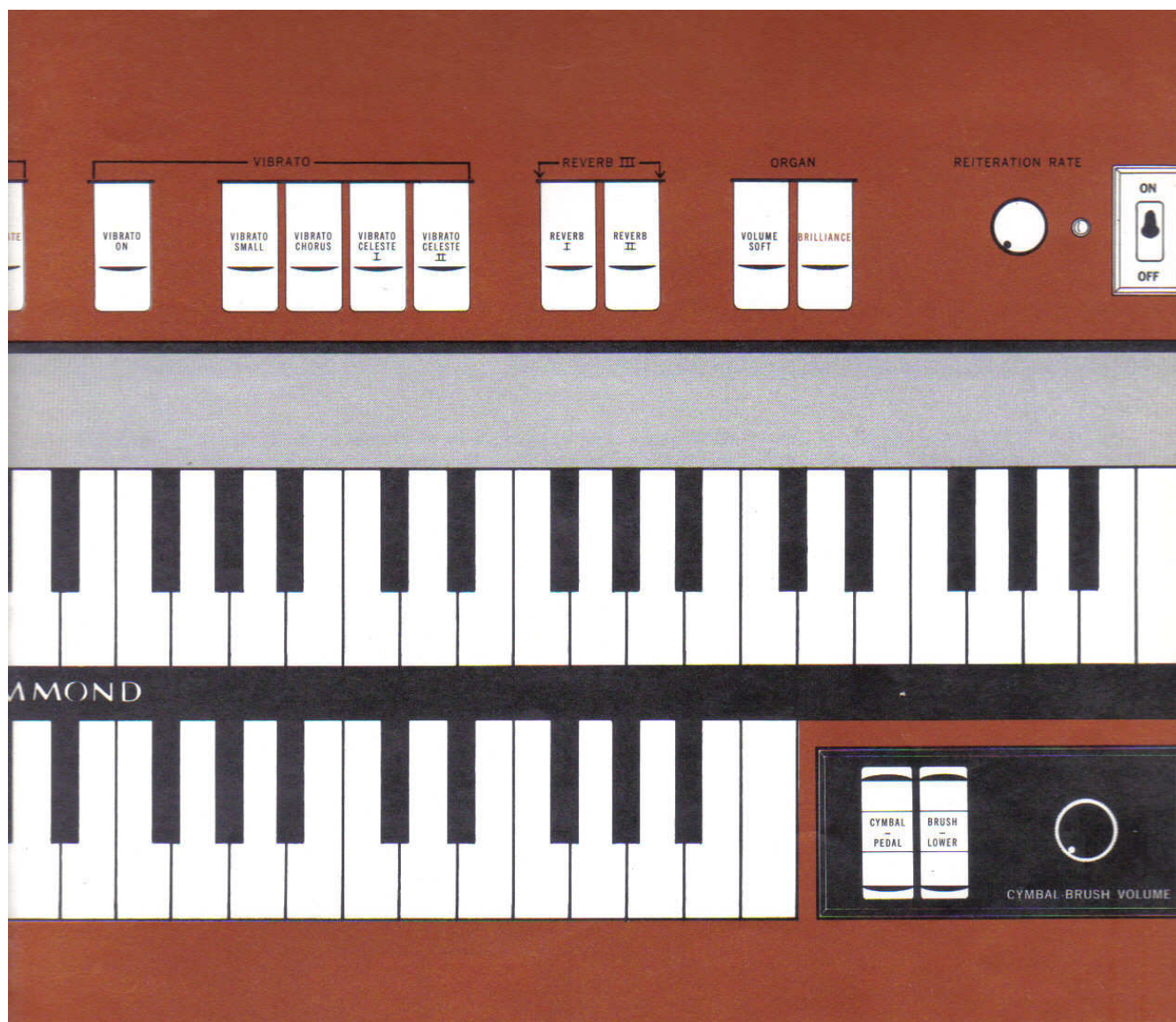
THE KEYBOARD AND CONTROLS



T-100 SERIES - Left End Block Rocker Tabs



CYMBAL-BRUSH
VOLUME



The illustrations picture the keyboard and the control tabs found on both the T-100 and T-200 Series Hammond Organs. All groups of controls as well as individual finger tabs (above the keyboards) and rocker tabs located at either the left end or both ends of the lower keyboard are clearly marked for quick and easy visual identification.

The control tabs are simple to operate and allow you to add great expression and variety of color to your music at the touch of a finger.

You will notice that the difference between the T-100 and the T-200 instruments is in the area of the rocker tabs at the left end of the lower keyboard.

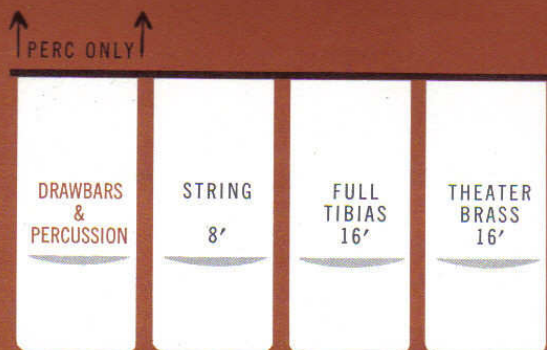
The T-200 pictured in the large illustration has the Cymbal and Brush controls located at the right end of the lower keyboard to allow room for the two Leslie speaker controls located in the rocker tab group at the left end of the lower keyboard.

The T-100 Series instrument which does not have a built-in Leslie speaker houses the Cymbal and Brush rocker tabs in the lower left hand group of tabs.

On the following pages is a complete explanation of these controls. It will be to your advantage to thoroughly familiarize yourself with their various uses and effects.

UPPER PRESETS

The tabs in this group select the tones set up on the drawbars, preset tabs for the upper manual or percussion voices.



DRAWBARS & PERCUSSION... This tab when depressed renders the tones set up on the harmonic drawbars effective for the upper manual. It also serves to "Turn on" any percussion tab depressed in the Percussion section. In its "up" position it renders the drawbar registration silent permitting only percussion voices to sound. Depressed, it permits a combination of drawbars plus percussion.

STRINGS 8'... Heavy upper harmonic development, organ string quality. Same as drawbar setting of 00 8888 666.

FULL TIBIAS 16'... Produces a beautiful theatrical quality. Drawbar setting of 80 6808 006.

THEATER BRASS 16'... Combination of the more powerful tones available on the organ. Drawbar setting of 84 8868 666.

LOWER PRESETS

*The tabs in this group select the tones set up on the drawbars or preset for the lower manual.**



DRAWBARS... This tab when used renders the tone set up on the harmonic drawbars effective for the lower manual.

ENSEMBLE 8'... A general purpose accompaniment tone used by most organists to balance with upper presets or "full" drawbar combinations. Its voice is a combination of strings and orchestral tones. Drawbar setting of 00 8666 444.

**One of these tabs must be depressed in order for the lower manual to sound. They are always used one at a time and cannot be used in combination. Depressing one tab releases the other.*

VIBRATO VARIATIONS

The effects produced by the Hammond Vibrato make your music richer and fuller, and add greater depth. Tones containing vibrato are much more pleasing and less tiring to the ear than even the most beautiful tone without vibrato.



This group of tabs controls the degree of Vibrato on both manuals. Only when you have the "VIBRATO ON" tab depressed will any of the controls in this group be effective.

VIBRATO SMALL . . . Pressing this tablet reduces the degree of vibrato. When it is up, the vibrato is "normal."

VIBRATO CHORUS . . . The chorus effect (Sound of many voices) is a combination of vibrato signal with direct signal. When used with the "Vibrato Small" tab the vibrato chorus effect will become "small."

VIBRATO CELESTE I and II . . . These tabs give a more theatrical effect similar to a blend of several vibratos. The two tabs give different degrees of celeste, and the two can be used together to give the maximum effect. Pressing the "vibrato small" tab will reduce the amount of celeste.

REVERBERATION

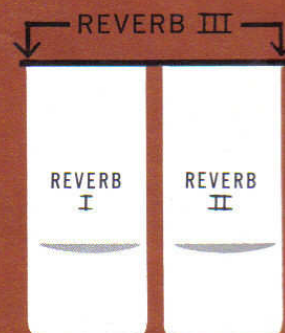
Reverberation, or "echo", is present in some degree when listening to any music. Natural reverberation is that part of any sound which reaches the ear by *reflection* from walls, ceilings and floor, as distinguished from the part which reaches the ear by a direct path through the air from the source of the sound.

REVERBERATION I & II . . . These may be used separately or in combination to give three degrees of reverberation. You can set them to provide the correct amount of reverberation to compensate for the lack of reflective sound which would be normally present in an acoustically treated room.

ORGAN

VOLUME SOFT . . . This tab is a volume control which allows you to play either at normal or at "soft" volume. While you can also play the organ softly by keeping the expression pedal partly closed, depressing this tab reduces volume while giving you the entire range of the expression pedal.

BRILLIANCE . . . Normally the organ produces a mellow combination of voices. However, when extra brilliance is desired on such families of tone as brass, reeds and strings, the brilliance tab substantially brightens the sound of the entire instrument.



PERCUSSION VOICES



Organ tones are normally "sustained" in that they are steady in their loudness. The opposite of this is "percussion," which refers to a tone that is not steady and fades away gradually — like a piano, chimes or a plucked string.

The addition of pre-set percussion voices to the Hammond Organ opens the door to an entirely new world of fascinating effects like chimes, banjo, marimba, xylophone, and others. The percussion voices pictured above may be used individually, combined with other percussion voices or combined with drawbar tones. You'll find many hours of additional enjoyment with your Hammond Organ through exploring the percussion possibilities.

All the voices of the percussion division are made playable through the upper manual "drawbar" tab. It is marked "Drawbars and Percussion." For instance, if you are playing a melody on the

upper manual using "Theater Brass 16'" and add the preset "Banjo" tab, the "banjo" will not sound.

To hear the percussion voice either the tab marked "Drawbars and Percussion" must be depressed or the "Theater Brass 16'" tab must be moved to its off position. In the latter case only the percussion voice will sound. If the "Drawbars and Percussion" tab is depressed you will hear the percussion voice as well as the combination set up on the upper manual drawbars.

Try the percussion voices one at a time. First, however, turn off or lift all four upper manual preset tabs including "Drawbars and Percussion." As you press each key you will notice that the tones fade away while you are holding the key. This is a true percussion effect. For a pure percussion tone it is suggested that the Leslie speaker, on the T-200 Series Model, not be used.

CHIMES . . . Provides a beautiful chime-like tone. Play in single note style, preferably in the range of tubular chimes, from G below Middle C to the second G above Middle C.

CELESTA . . . A beautiful 4 ft. celesta quality which may be used by itself or with a soft drawbar setting such as 006000 000.

GUITAR . . . May be played in several ways. Played in single note fashion it has the characteristics of the Spanish Guitar. It may be used to create the effect of the Flamenco Guitar by pressing the Reiterate tab and adjusting the rate control to suit your taste. The Hawaiian Guitar effect may also be created, an example of which is included in the music section.

MARIMBA . . . An excellent choice for fast moving music using single notes or chords. When used with reiteration a twin mallet effect is heard which lends greater authenticity to the sound.

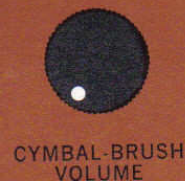
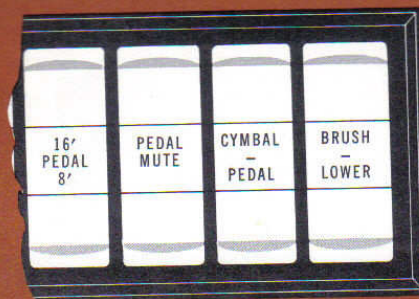
XYLOPHONE . . . Also an excellent choice for fast moving music. May be used in single notes or chords. As with the Marimba and Reiteration, produces a most authentic alternating twin mallet effect.

BANJO . . . Delightful for fast moving melodies in single notes or chords. With the Reiteration tab down and the rate adjusted to suit your personal taste an exceptionally realistic banjo sound is created.

REITERATE . . . Depressing this tab produces a repeating or reiterating effect on Chimes, Celesta, Guitar and Banjo. In the case of Marimba and Xylophone, the effect is that of twin mallets alternating between two notes. The rate of reiteration or alternation is controlled by the "Reiteration Rate" control located just to the left of the organs on/off switch. Experimentation is the best guide to where it should be set (slow to fast).

CYMBAL AND BRUSH (RHYTHM EFFECTS)

T-100 SERIES... The Cymbal/Pedal and Brush/Lower tabs and Volume control are located just to the *LEFT* of the lower manual.



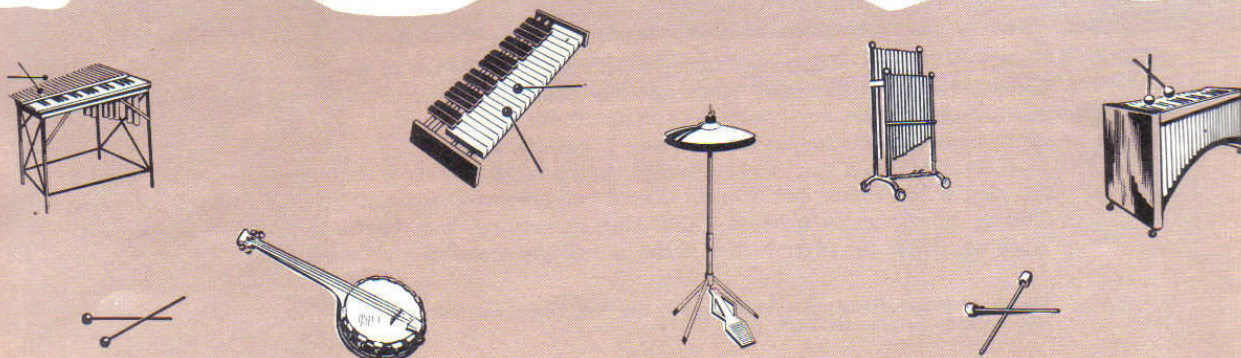
T-200 SERIES... Cymbal/Pedal and Brush/Lower tabs and Volume control are located to the *RIGHT* of the lower manual.



CYMBAL/PEDAL... This valuable, new rhythm effect is playable through the pedal division. The crash of a cymbal is heard each time a pedal is depressed. When the pedal drawbar is used, the cymbal sound is superimposed over the pedal tone. Cymbal/Pedal is especially useful in rhythmic music.

BRUSH/LOWER... Invaluable in the playing of rhythmic music. Latin American tunes are given a new life and spice. Fox trots and waltzes seem to come to life. May be used alone, with a drawbar registration or the lower manual preset ensemble. This effect simulates the sound of a drummer's brush striking or brushing the head of a snare drum.

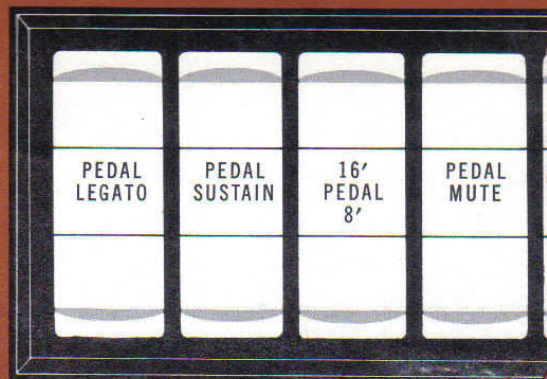
CYMBAL-BRUSH VOLUME... may be regulated by the Cymbal-Brush Volume control which is continuously variable . . . (soft to loud).



PEDAL TONES

The single brown drawbar located between the "Lower Drawbars" group and the "Upper Drawbars" group controls the volume of the pedal tone.

The pedal tone is further controlled and voiced by four rocker tabs located to the left of the lower manual.



PEDAL LEGATO... provides the longest decay time permitting the beginner to play a pedal, remove his foot, look for the next pedal and play it without a noticeable break in tonal continuity.

PEDAL SUSTAIN... provides a short decay time similar to a string bass. The best string bass effect is created by using Pedal 8', Pedal Mute and Pedal Sustain.

Remember that these pedal controls, *Pedal Legato* and *Pedal Sustain* determine the time it takes for the pedal tone to die away after the pedal is released.

16'/PEDAL/8'... The most important tab control is the one marked 16'/pedal/8'. This tab determines the pitch at which the pedal will sound. Depressing the back (16') produces a deep or low tone when the pedal is played. Depressing the front of the tab (8') produces a higher pitched tone when the pedal is played.

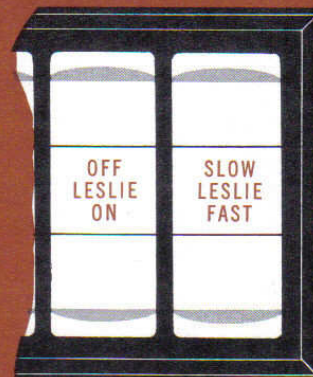
PEDAL MUTE... determines the relative brightness of the pedal tone. In its "OFF" position (back depressed) both 16' and 8' pedal tones will be crisp and bright. In its "ON" position (front depressed) both 16' and 8' pedal tones will be mellow in character. Therefore you have four pedal tones to choose from:

1. 16' Mute off (bright)
 2. 16' Mute on (mellow)
 3. 8' Mute off (bright)
 4. 8' Mute on (mellow)
- Normal usage will be 16', Mute on.

TWO-SPEED LESLIE (T-200 SERIES)

Leslie may be used by itself or in conjunction with Vibrato, Vibrato chorus or Celeste I, II, or III. It is not advisable to use Leslie when using any of the percussion voices as the percussion voice tends to lose its authenticity.

There are no hard-and-fast rules governing the use of Vibrato, Vibrato Chorus, Celeste I, II, and Leslie. By helping to carry the tone colors these various forms of animation substantially enhance the flexibility of the instrument. Your own ear is the best guide to the sound you like best.



OFF/LESLIE/ON... The rocker tabs controlling the Leslie are to the left of the lower manual. Leslie ON/OFF when turned "On" will introduce the sound created by the Leslie in its fast or slow position.

SLOW/LESLIE/FAST... The built-in two-speed Leslie speaker is another form of sound animation similar to Vibrato and Vibrato Chorus but produced mechanically. It is actually a built-in rotating diffuser which when on FAST lends an exciting, lush theatrical quality to organ tones. When on SLOW the effect is that of the undulating sound of a church organ.

The speed (Slow or Fast) may be pre-set by the Slow/Fast rocker tab and brought into play instantly by pressing Leslie ON.



THE HARMONIC DRAWBARS

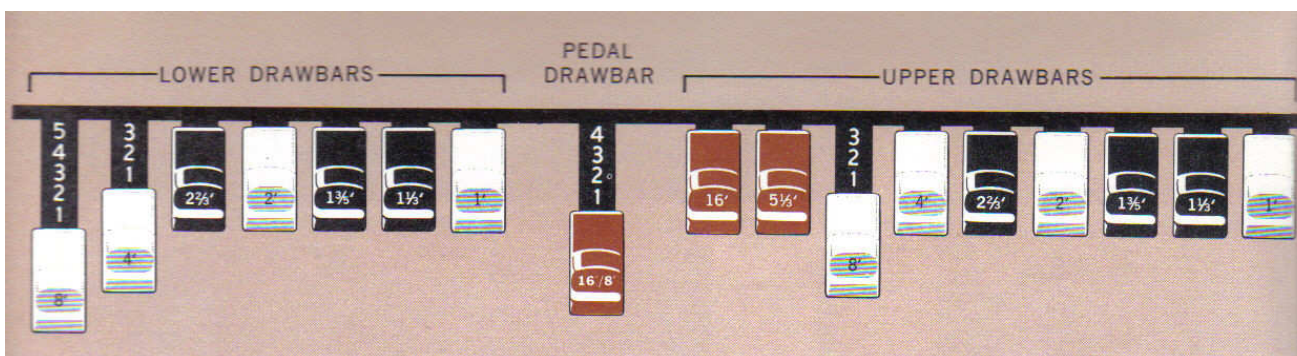
How the Harmonic Drawbars Provide You Many Thousands of Beautiful Tones

To take the fullest advantage of the wonderful harmonic drawbars of the Hammond Organ, it is necessary to understand what "music" really is. All sounds—musical or otherwise, are created by sending impulses or vibrations through the air. These are "felt" in the sensitive mechanism of our ears—a process we call "hearing." While you may think that you hear a single individual sound, actually each sound, or musical note, consists of a "fundamental" or basic tone, and a number of "harmonics" or overtones—the latter being different when the same note is played on different instruments.

For instance, when you play "A" above middle "C" on any instrument—organ, piano, violin or any other—you are creating a vibration at the rate of 440 impulses per second, provided of course that the instrument is in tune. This is known as the "fundamental" of this "A." However, the harmonics or overtones which accompany this fundamental of "A" on the piano would be quite different from those you would hear if you played the same note, on say, a violin or any other instrument. These different harmonics are created by a combination of differences in the materials and shape of the instrument, and the manner of playing.

Now it is apparent that if you have available a source of sound which will provide the fundamental sound of each note on the keyboard, plus a source of a large number of harmonics, you are in a position to combine these fundamentals and harmonics into musical tones similar to those of almost any instrument you can name. And that is just what the harmonic drawbars of the Hammond Organ do for you. The first white drawbar in any group of Hammond drawbars provides the fundamental of every note on the manual controlled by that set of drawbars. The rest of the drawbars provide harmonics, or "overtones," and in some cases, sub-octave tones, in such a way that you can instantly combine the drawbars into many thousands of beautiful tone colors.

The drawbars make the Hammond Organ the only instrument in the world on which you can mix beautiful tone colors as an artist mixes the paints on his palette. Instead of giving you a limited number of already-fixed tones which would be all you could ever play on the organ, the Hammond Organ gives you the ingredients for creating any of the standard tone effects you may want, plus thousands of other interesting tone colors which may be variations of the standard tones, or entirely different.



THE COLORS OF THE DRAWBARS

In the illustration above you will notice that there are a number of drawbars on the "T" Series Hammond Spinet Organ, and that these are located to the left of the upper manual. The first seven drawbars are the harmonic drawbars which set up tone colors for the lower manual. Next is a single brown drawbar (set slightly apart from the other drawbars) which controls the volume of the pedals; finally, there is a set of nine harmonic drawbars which set up tone colors for the upper manual.

WHITE DRAWBARS

As you know, the first white drawbar for each manual represents the fundamental tone. All the other *white* drawbars are octave intervals or harmonics of the fundamental tone — when you play the organ first with the fundamental drawbar alone and then, one by one, add the white drawbars in sequence you will hear the addition of the same note an octave higher in each case. The tonal brilliance is greatly increased by adding white drawbars but the harmonics added are always in "consonance" or harmony.

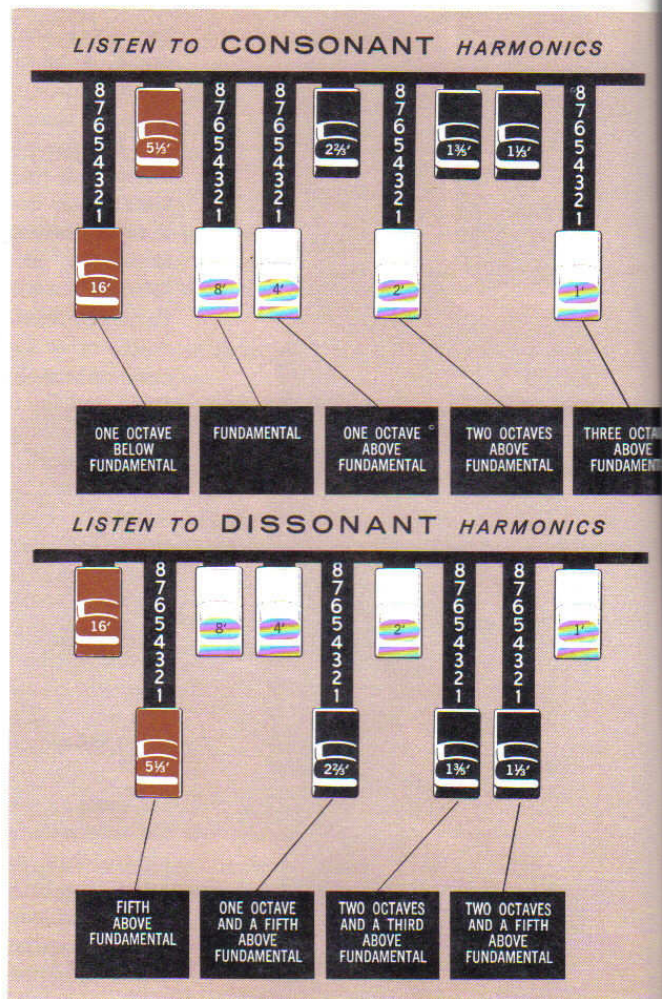
BLACK DRAWBARS

The black drawbars on the Hammond Organ represents the *dissonant* (discordant) harmonics which are also necessary in building rich tone colors. It must not be assumed that the dissonant harmonics are unmusical — you will find them present in varying degrees in many organ and orchestral voices. For instance, the mellowness of a horn, the pungency of strings, and the brilliance of reeds all owe much of their character to the presence of these harmonics in different degrees.

In general, however, the black drawbars should not be emphasized strongly above the white drawbars. If a black drawbar is to be emphasized, it is a good rule to use adjacent white drawbars to strengths within two steps of the black drawbar. A combination such as 00 1282 882, for instance, contains so much of the dissonant harmonics that it will sound off key.

BROWN DRAWBARS

In addition to the white and black drawbars, there are two brown drawbars in the group controlling the upper manual on your Spinet Model of the Hammond Organ. These two drawbars produce "sub-octave" effects. The first brown drawbar is the sub-octave of the fundamental and the second brown drawbar is the sub-octave of the third harmonic. These are used to add depth and richness to many combinations. They also increase the range of the keyboard by one octave, since a solo registration for "8 foot" or normal pitch can be set up using the first brown drawbar as the fundamental, and played one octave higher.

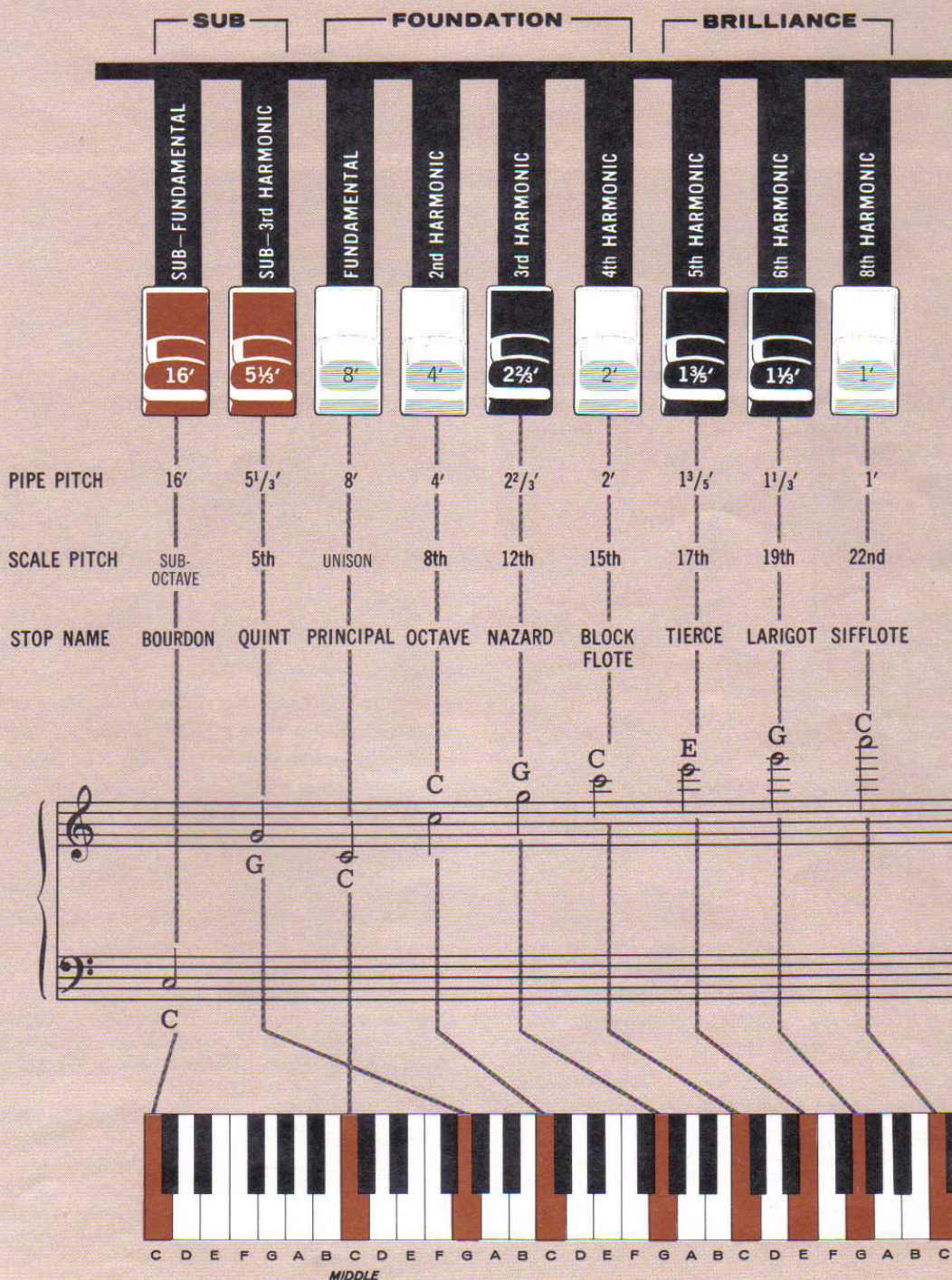


The reason a Hammond Organ sounds so rich and full relates to the fact that when a *single* note is played on the keyboard as many as nine separate tones or pitches can be heard simultaneously. As an aid in identifying the nine pitches available each drawbar is marked with the pitch at which it sounds.

You will note that the fundamental drawbar is marked 8' and the sub-fundamental (one octave below) is marked 16'. This is pipe organ terminology and means that the pipe used to produce the fundamental tone on a pipe organ is actually eight feet high (for the lowest key on the manual) while that used for the octave *below* is sixteen feet high. The pipe length or footage for the octave above the 8' fundamental is only half the size or four feet high. The next higher octave is marked 2' and finally the third octave above the 8' fundamental is marked 1'.

The remaining drawbars marked $5\frac{1}{3}'$, $2\frac{2}{3}'$, $1\frac{3}{5}'$, and $1\frac{1}{3}'$ produce harmonics or pitches that fall between the octaves.

Assuming you were holding Middle "C" on the upper manual and, one by one, from left to right drew each drawbar all the way out. You would hear the note or pitches indicated in the illustration below. The same is true of the lower manual with the exception of the first two brown drawbars.



REGISTERING TONE FAMILIES BY SHAPE

Regardless of the size of a pipe organ or its number of stops, all of its voices are related to four basic families of tones. For instance, the string family includes such voices as Violin, Cello, Viola, Aeoline, etc. The reed family includes such voices as Oboe, Clarinet, Bassoon, English Horn, etc.

Tone families may be quickly set-up on the harmonic drawbars by relating a pattern or shape to each family. The four families of organ tone are:

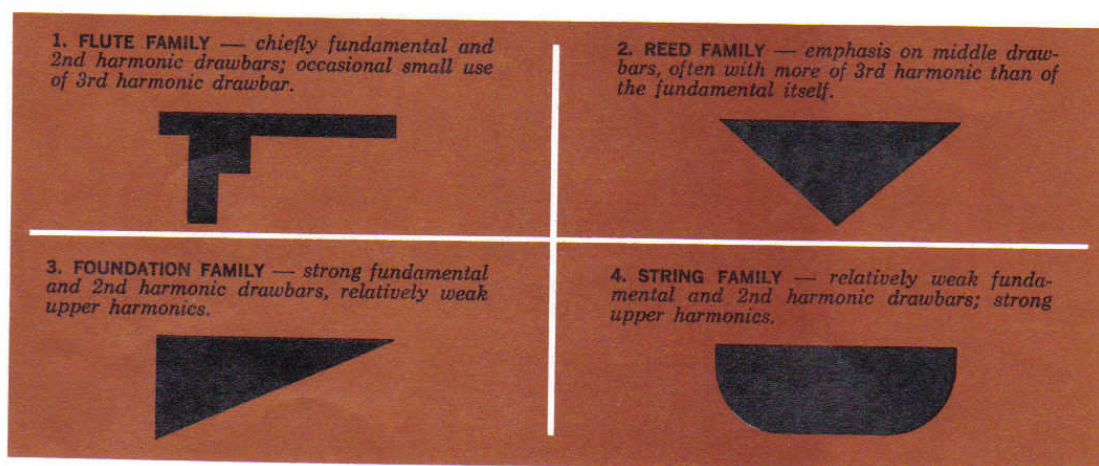
1. Flute family

2. Reed family

3. Foundation or Diapason family

4. String family

The illustration below pictures the shapes or patterns related to each of the four tone families.



These are the generalities which apply to the tonal resources of the organ, and in themselves produce pleasant and usable effects. However, real beauty of tone is secured in two ways—the *first* is the use of registrations which have been worked out by fine organists, such as those published on much organ music. The *second*—and eventually the one that best expresses your own feeling for the music

—is to create your own tonal effects, trying out and perfecting the tones with which you play your favorite selections and marking your music with those you like best. Don't always play the same selection with the same registration, explore other new tones, because you can play each piece in hundreds of different ways on the Hammond Organ.

GETTING THE EXACT TONES YOU WANT

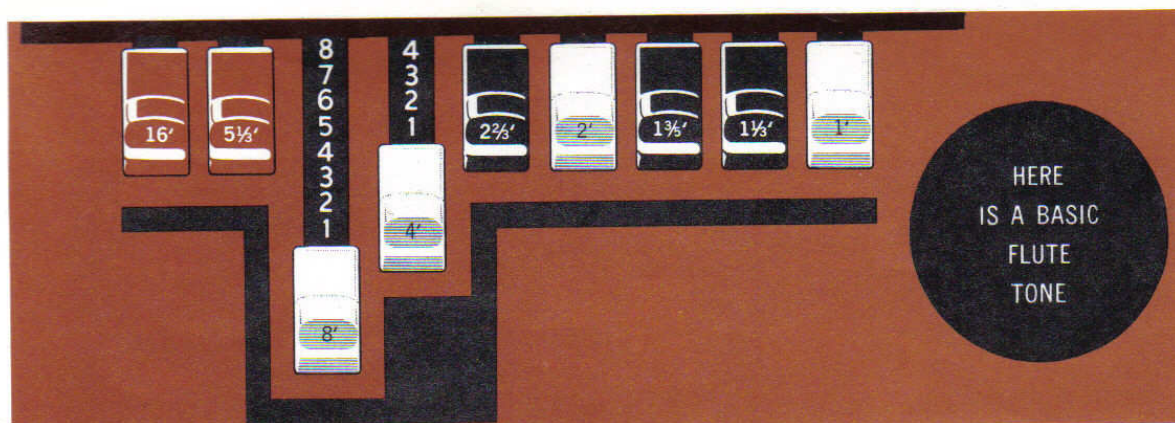
It might happen that a trumpet quality registration suggested in a musical selection is not exactly the tone you have in mind. If you were playing on an organ on which all the "stops" had been set up at the factory, you would have to be satisfied with one or a few trumpet tones.

The Hammond Organ, however, allows you not only to set up any tonal effect you want, but also to make many fine variations of the tone. Only on the Hammond Organ can you play exactly the shade of tone you want for every selection and, perhaps even more important, for every size and type of room in which you play.

The matter of the right shade of tone for every enclosure is very important, because the acoustics of the room in which you play have much to do with the beauty of your music. So important is this matter of acoustics that expensive custom-built organs are "voiced" after they are installed in order to adapt the tone of the pipes to the acoustics of the church or hall.

With the Hammond Organ, a touch of a finger is all that is needed to make the tone quality softer or more brilliant, richer in one harmonic or another, in fact, *exactly right*. Great musicians declare this to be one of the most wonderful of the many exclusive features of the Hammond Organ.

THE FLUTE FAMILY (TWO STEP PATTERN)



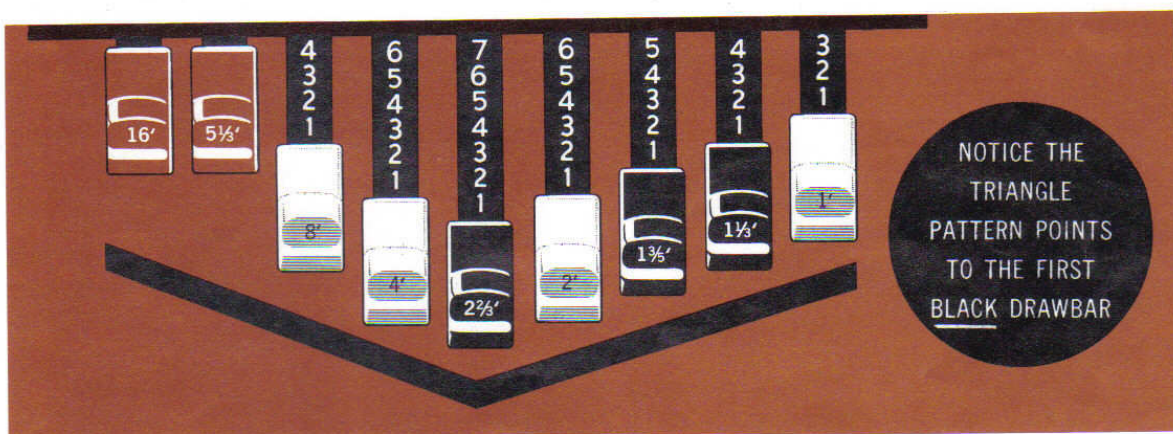
TRY THESE EIGHT (OR TRY SOME SIMILAR)

Chorus of flutes	80 8605 002
8' flute	00 6201 000
4' flute	00 0602 001
2' flute	00 0106 004
Soft flutes	00 4000 000
Stopped flutes	00 5020 000
Tibia (Theater)	80 8605 004
T-200 add Leslie/Fast	
Light Concert flute	00 3700 000

Of the four families of tones, the flute tones represent the simplest harmonic development, using chiefly the fundamental (first white drawbar) and the octave harmonic (second white drawbar) with occasional use of a very small amount of the first black drawbar. The relative proportions of these harmonics vary for the different kinds of flutes.

There are literally hundreds of flute tones available on the Hammond Organ, in contrast to any other type of organ on which you can play only the one or perhaps two or three which are set up at the factory. By simply changing the relative positions of the 3rd and 4th drawbars to 00 3700 000 you can create a light concert type of flute. Or by closing the 4th drawbar altogether and adding a little of the 5th drawbar plus a heavier fundamental, you can get a solo type tibia—00 0820 00. This should be used with Normal Vibrato on the T-100 and Leslie/Fast on the T-200. Using any combination of white drawbars provides a variety of flute tones. Add the first brown drawbar to give depth to any flute combination.

THE REED FAMILY (TRIANGLE PATTERN)



TRY ANY OF THESE REED TONES

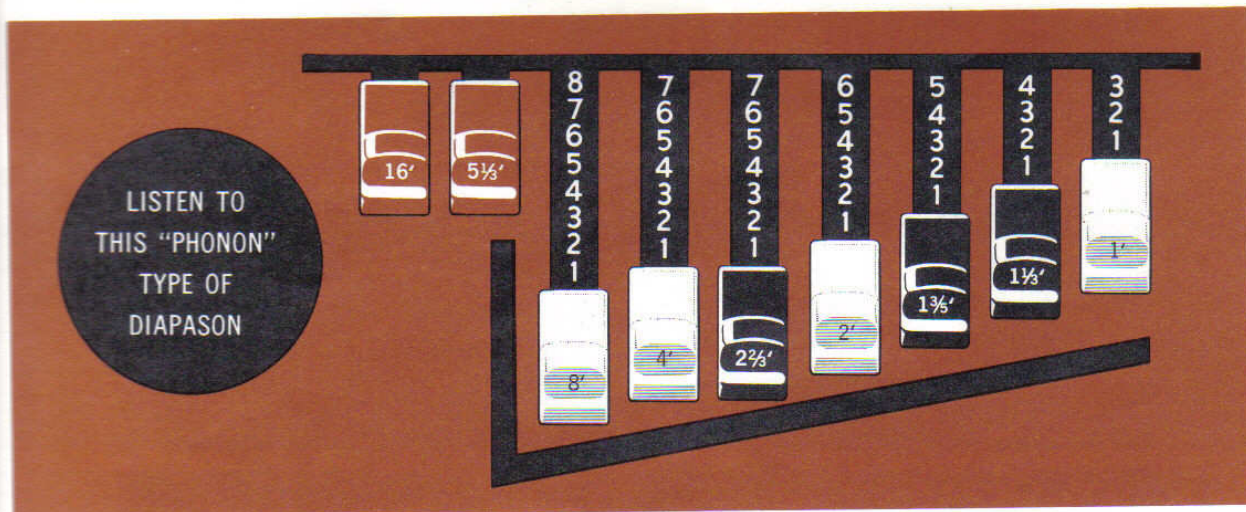
Chorus Reed	00 6876 540
(Trumpet type)	00 3678 660
English Horn	00 4764 210
Oboe	00 6260 210
Clarinet	00 6070 540
Trumpet	00 6777 770
Bassoon 8'	08 7500 000
Bassoon 16'	04 7400 000
French Horn	00 7654 321
Bass Horn	06 7888 800

The reeds are more brilliant and more numerous than any other group, and many are used as solo stops rather than as accompaniments because of their strong personalities.

While, as you have seen, the flutes concentrate their harmonic development chiefly on the fundamental and second white drawbars, the reeds are characterized by heavy upper harmonic development. In fact, reed tones often have upper harmonic development as great as that of the fundamental and second white drawbar.

The reed tones of the organ are numerous. They include the brasses and woodwinds, the tones of the latter instruments being created by vibrating reeds. The oboe is a typical reed, with emphasis on the drawbars in the middle of the group and with nearly as much of the first black drawbar as of the fundamental itself. In fact, use of this first black drawbar is characteristic of many reed registrations and creates a "triangle" pattern that is very easy to remember. Used in a less powerful registration, 00 2333 200, this triangle pattern is a useful accompaniment tone on the lower manual.

THE DIAPASON FAMILY (RIGHT ANGLE PATTERN)



LISTEN TO
THIS "PHONON"
TYPE OF
DIAPASON

SOME OF THE MAGNIFICENT DIAPASON TONES

Diapason Chorus 00 5756 254

Full Organ 54 7878 766

Bright Diapason 00 8777 666

Full Organ (Theater Type)

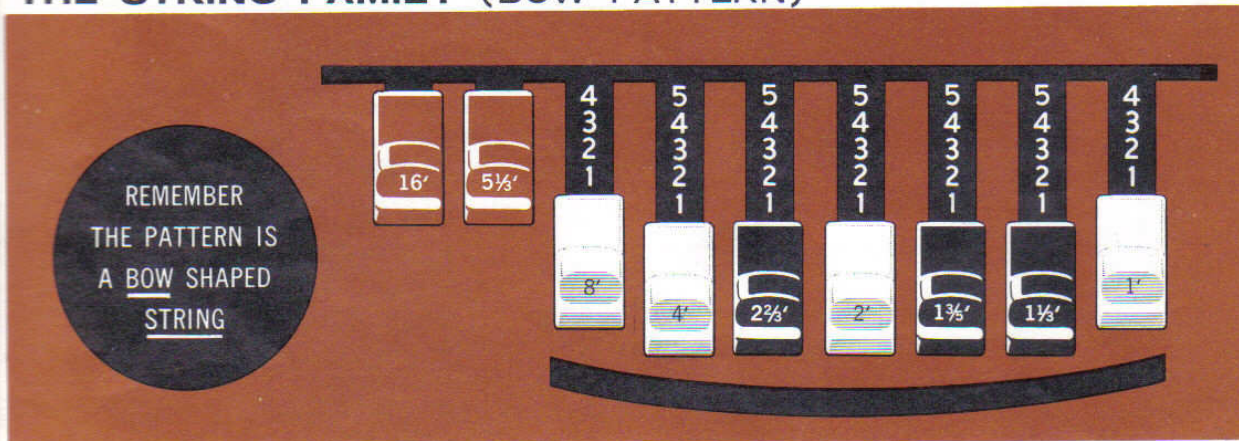
T-100 Vib. Normal

T-200 Vib. Normal Leslie/Fast

All diapason tones are characterized by a strong fundamental and second harmonic with relatively weak upper harmonics. There is much disagreement among professional organists as to what constitutes a "good diapason," perhaps because of the fact that diapason tones are more affected by good or bad acoustics than are the tones of more pronounced character, and the registration that is good in one location may not be satisfactory in another. The "Phonon" type of diapason, for which a suggested registration is given above, was developed on pipe organs by designers who wanted to produce a soft fluty type of diapason or foundation tone.

In discussing tone as a structure, it may be said that the diapason tones lie between the flute tones, which are almost devoid of upper harmonics, and the string tones which are characterized by strong upper harmonic development.

THE STRING FAMILY (BOW PATTERN)



REMEMBER
THE PATTERN IS
A BOW SHAPED
STRING

SOME OF THE HUN- DREDS OF POSSIBLE COMBINATIONS FOR STRINGS

String Chorus	12 3333 444
Salicional	00 2343 332
Aeoline	00 1222 221
Gamba	00 3484 443
Violin type	00 4345 554
Vox Celeste	00 2434 432
Vox Humana	00 1300 400
Soft Strings	00 1324 321

You have seen how the harmonic drawbars of the Hammond Organ make it possible for you to produce thousands of beautiful tones which belong to three of the tonal families of the organ—flute, reed and foundation. The fourth and last of these "organ family" groups is the string tones, both organ and orchestral.

String tone qualities are characterized by especially strong upper harmonic development. The fundamental and second harmonic may be relatively weak, which is the exact opposite of the harmonic structure of the flutes, as you will remember.

There are many hundreds of possible string tone registrations, and every string tone can be made either "dull" or "bright" by varying the amount of the upper harmonics. In fact, the string tones are considered the most versatile of the four tone families of the organ. They can be soft or loud, single strings or groups, and are used both as solo registrations and as accompaniments.

ADDING REGISTRATIONS

Just as the full organ effect is achieved by adding the "voices" of the organ together, you can very easily combine any tones you wish on the Hammond Organ. It is simpler than arithmetic. Let's say that you want to combine the following:

01 6788 540
00 8210 000
00 1354 321

In order to get a registration which will sound as if all three of these tones are being played together, you take the largest figure for each drawbar, making the result.....

01 8788 541

or take another example

TIBIA	8'	00 8240 000
VOX HUMANA	8'	00 2423 321
THE TWO		00 8443 321

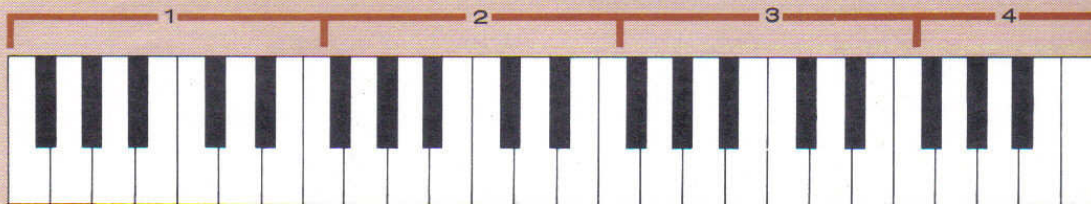
USING CORRECT VOLUME AND RANGE

It is well to keep in mind that all organ tones are characterized not only by their individual harmonics but by the loudness with which they are played and the range in which they are used. String tones, for instance, should be played softly. You cannot open the expression pedal so that a string registration sounds as loud as a tuba and

expect it to sound like a string! If you play a violin registration low on the keyboard it may be beautiful but it will not sound like a violin. Here are some suggestions for the range in which to play various instrumental effects, counting the lowest octave on the keyboard (F to F) as 1, the second octave as 2, etc.:

Clarinet..... 1st and 2nd octaves
French horn..... 1st and 2nd octaves
Muted horn..... 1st octave
Trumpet..... 1st and 2nd octaves
Orchestral oboe..... 1st and 2nd octaves
English horn..... 1st and 2nd octaves
Flute..... Entire Range

Tibia..... 2nd, 3rd and 4th octaves
Orchestral flute..... 2nd, 3rd and 4th octaves
Grosse flute..... 2nd and 3rd octaves
Flute 8' & strings..... Entire Range
Flute 16' & strings..... 2nd, 3rd and 4th octaves
Oriental tone..... 1st and 3rd octaves



PUBLISHED MUSIC

When buying organ music, choose those folios or selections which are arranged for Hammond Organs. Almost all organ music carries Hammond Organ registrations. The purpose of registering music for the Hammond Organ is to indicate to the player: (1) Hammond Drawbar settings, (2) amount of vibrato, (3) use of percussion, if called for. Registration suggested are just that—suggestions. In the final analysis, the players "ear" determines which tones or combinations of tones he or she likes best.

Because your instrument represents a new series incorporating new features, the music you buy won't indicate exactly how to set the controls. However, basic drawbar settings remain the same, making it relatively simple to adapt any Hammond Organ registration to your "T" Series instrument.

Registrations for console Hammond Organs are indicated by letters within circles and squares. A circle always means upper manual while a square always means the lower manual. For example, you will see $\textcircled{A\#}$ 86 5544 333 $\textcircled{A\#}$ 00 6544 333. On the "T" Series, you would set 86 5544 333 on the upper manual drawbars and 00 6544 333 on the lower manual drawbars. When using lower manual drawbar registrations indicated in nine digits al-

ways disregard the first two digits. Often you will see a circle or square with other letters such \textcircled{G} , \textcircled{A} , $\textcircled{D\#}$, etc. These refer to the preset keys on console models. The drawbar registration equivalent of each of the console preset tones appears in the "Standard Voices" preset chart below. The "Theater Organ" presets found on the H-100 Series Hammond Organ are listed on the other chart.

Use of Vibrato, Leslie, Percussion and Cymbal-Brush are a matter of personal taste.

However, if vibrato #1 or #2 is called for in a registration, use Small Vibrato on your "T" Series. If Vibrato #3 or "Full Vibrato" is called for, use Normal Vibrato on your T-100 or Normal Vibrato and Leslie, fast, on your T-200 Series.

The important thing to strive for in registration is good tonal balance between the manuals and pedals. If the accompaniment overpowers the melody either soften the accompaniment or make the melody registration louder.

A wealth of beautiful tones are at your fingertips through drawbars and preset tabs. Explore your instruments' vast tonal resources and use those tones that appeal to your personal taste and mood.

HAMMOND ORGAN PRESET CHART (STANDARD VOICES)

UPPER MANUAL

PRE-SET KEYS	DRAWBAR SETTING	TONE QUALITY
C		Cancel
D	00 4432 000	Stopped Flute
C#	00 5320 000	Dulciana
D#	00 8740 000	French Horn
E	00 4544 222	Salicional
F	00 5403 000	Flutes 8' & 4'
F#	00 4675 300	Oboe Horn
G	00 5644 320	Swell Diapason
G#	00 6876 540	Small Trumpet
A	32 7645 222	Full Swell
A#	Adjust drawbars in 1st Group, Upper Manual	
B	Adjust drawbars in 2nd Group, Upper Manual	

LOWER MANUAL

PRE-SET KEYS	DRAWBAR SETTING	TONE QUALITY
C		Cancel
C#	00 4545 440	Cello
D	00 4423 220	Flute & String
D#	00 7373 430	Clarinet
E	00 4544 220	Diapason, Gamba & Flute
F	00 6644 322	Great, no reeds
F#	00 5642 200	Open Diapason
G	00 6845 433	Full Great
G#	00 8030 000	Tibia Clausa
A	42 7866 244	Full Great with 16'
A#	Adjust drawbars in 1st Group, Lower Manual	
B	Adjust drawbars in 2nd Group, Lower Manual	

H-100 PRESET VOICES (THEATER ORGAN)

UPPER MANUAL

PRE-SET KEYS	DRAWBAR SETTING	TONE QUALITY
C		Cancel
C#	00 8740 000 00	French Horn 8'
D	00 8408 004 00	Tibias 8' & 2'
D#	00 8080 840 60	Clarinet 8'
E	08 8800 880 04	Novel Solo 8'
F	60 8088 000 00	Theater Solo 16'
F#	00 4685 300 00	Oboe Horn 8'
G	60 8807 006 00	Full Tibias 16'
G#	00 6888 654 44	Trumpet 8'
A	76 8878 667 66	Full Theater Brass 16'
A#	Adjust drawbars in 1st Group, Upper Manual	
B	Adjust drawbars in 2nd Group, Upper Manual	

LOWER MANUAL

PRE-SET KEYS	DRAWBAR SETTING	TONE QUALITY
C		Cancel
C#	00 4545 442 1	Cello 8'
D	00 4432 000 0	Dulciana 8'
D#	00 4800 000 0	Vibraharp 8'
E	00 3800 345 8	Vox 8' & Tibia 4'
F	00 6554 322 2	String Accomp. 8'
F#	00 5642 200 0	Open Diapason 8'
G	43 5434 334 3	Full Accomp. 16'
G#	00 8030 000 0	Tibia 8'
A	84 7767 666 4	Bombarde 16'
A#	Adjust drawbars in 1st Group, Lower Manual	
B	Adjust drawbars in 2nd Group, Lower Manual	

A TYPICAL THEATER ORGAN STOP LIST

Tibia 16'72 0020 000	Tibia 8'00 8240 000	Flute 4'00 0803 030
Bourdon 16'54 3100 000	Concert Flute 8' . .00 6421 000	Piccolo 4'00 0600 000
Diapason 16'64 3322 000	Diapason 8'00 5642 110	Octave 4'00 0545 321
Solo Strings 16' . .25 4421 000	Solo Strings 8' . . .00 2366 542	Solo Strings 4' . . .00 0436 555
Contra Viol 16' . .24 3210 000	Viol d'Orchestre 8' 00 2444 322	Viol 4'00 0344 232
Contra Celeste 16' .23 4321 000	Viole Celeste 8' . .00 2323 211	Octave Celeste 4' .00 0324 220
Vox Humana 16' . .14 3110 000	Vox Humana 8' . . .00 3400 332	Vox Humana 4' . . .00 0433 042
Oboe Horn 16' . . .47 5430 000	Oboe Horn 8'00 4763 000	Oboe Horn 4'00 0606 310
Saxophone 16' . . .27 3210 000	Saxophone 8'00 2478 500	Clarion 4'00 0515 230
Clarinet 16'35 2000 000	Clarinet 8'00 8382 700	Tibia 2'00 0006 001
English Horn 16' . .25 3442 100	English Horn 8' . . .00 3577 540	Piccolo 2'00 0005 111
Ophicleide 16' . . .47 7600 000	Tuba 8'00 5680 400	Twelfth00 0060 020

SOME OTHER DISTINCTIVE TONE QUALITIES

Melodies (single or double-note)

00 4680 006	00 5288 822
00 3460 704	00 1478 630
00 5070 052	00 6080 808
00 3558 808	00 8005 005
00 6005 700	36 0000 008
00 2268 888	08 6000 808
00 4678 333	07 5646 006

Ensembles and accompaniments

04 3508 863	00 5334 003
05 7800 006	00 6654 321
20 3004 845	00 2353 221
46 8080 008	35 8857 004
00 5006 006	00 1377 865
00 5000 345	00 3500 420
00 5505 403	52 4660 055 (8va.)

Melody

Tibia 8'00 8240 000
Oboe Horn 8'00 4763 000
Saxophone 8'00 2478 500
Krumet 8'00 0185 786
English Horn 8'00 3577 540
Solo Strings 8'00 2366 542
Vox Humana 8'00 3400 332
Oboe Horn 16'47 5430 000

Accompaniment

Vox Humana 8'3400 332
Viole Celeste 8'2323 211
Soft Tibia6130 000
Soft Tibia5120 000
Concert Flute 8'6421 000
Concert Flute 8'6421 000
Soft Concert Flute4210 000
Viole Celeste2323 211

TRY YOUR OWN DRAWBAR REGISTRATIONS

Part of the fun of playing your Hammond Organ is to experiment with your own drawbar arrangements. It is not essential that you use the registrations set up on any music you may have. These registrations merely represent the preference of the composer or arranger and may not be your choice of tonal color at all. You may also find that the acoustics of the room in which you are playing may make it desirable to vary slightly the

registrations used. You may especially wish to supply a little more or a little less "brilliance" by varying the amount of the upper drawbars used. Do not hesitate to experiment with tonal colors on your Hammond Organ—there are many thousands of beautiful tones in the instrument and part of the enjoyment of the organ lies in creating new and lovely tones to make your music more interesting.

CHANGING DRAWBAR REGISTRATIONS

Sometimes music that carries registration for the Hammond Organ shows the liking of the arranger for a great many changes of tonal colors in a selection; sometimes, changes suggested are very "contrasty" in character and occasionally they come at places in the music where it is difficult to make them while continuing to play without a break in your music. Here, again, these suggested changes or registrations are a matter of taste and need not be made. In fact, many fine organists point out that it is usually undesirable to make drastic changes of tonal color. Ordinarily, changes of tone on big pipe organs are made by "bringing in" or dropping out one or more pipes so that the changes of tonal color represents an addition or subtraction from the basic tone. This method of changing tonal colors gives you a very smooth and natural flow of music. It is therefore suggested that you practice making very simple drawbar changes—one drawbar or two, at most, which you can do in a split second, and which will give you a noticeable change of tone yet one that is a natural transition from the tone you have been using.

You will enjoy creating tonal colors yourself, and will want to keep your favorites in a little notebook or mark them on your music.



PLAYING THE ORGAN

Now that you have acquainted yourself with the various controls and have proven to your own satisfaction that it is easy to learn to play the Hammond Organ, let's try some tunes, on the following pages, to demonstrate the different tonal effects possible.

Set the Harmonic Drawbars and Control Tabs of your Hammond Organ as indicated at the top of each of the following pieces of music. It is important to remember that while drawbar registrations (or combinations as they are often called) are indicated by number, it is not necessary to set these numbers *exactly*, as the drawbars make contact between the numbers as well as on the numbers. In the section on Harmonic Drawbars, a simple method of creating tone families by pattern instead of by numbers was explained. You will soon discover why these continuous-contact drawbars make it simple to get the different tones you want.

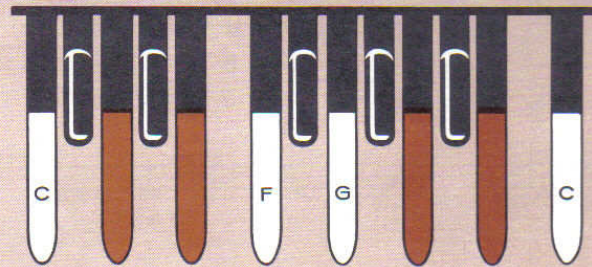
PLAYING WITH A LEGATO TOUCH . . . The beauty of a typical sustained organ tone is illustrated in the beginning tunes of the music section. You will note that the organ continues to play as long as you hold each note. You will almost instinctively play with a smooth, or legato touch, rather than a staccato touch, because your ear tells you that organ music should flow evenly from note to note. The notes are not "struck" as on a piano. A very slight finger pressure is sufficient to depress the key.

MUSIC SECTION

The following musical selections have been specifically arranged for your immediate musical pleasure. All are in the key of C (no sharps or flats) and use only three chords. The C, F and G chords are plainly marked on the lower manual keyboard guide attached to the back cover of this book. The melody notes in the music are named for your playing convenience. As you progress with your lessons you will learn to read notes quickly and easily. For now, however, you may use the handy keyboard charts to help you find the melody notes and accompanying chords.

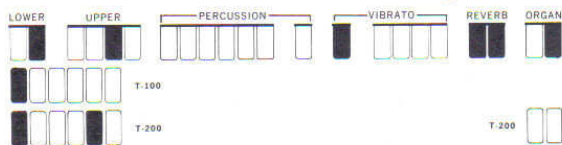
When playing the pedals, use the chord name to determine the proper accompanying pedal note.

Play the C pedal with the **C** chord, G pedal with the **G** chord and the F pedal with the **F** chord.



After you have played these easy-to-learn selections, experiment with different drawbar and tab settings. You will soon develop your own favorite tone combinations.

SILENT NIGHT



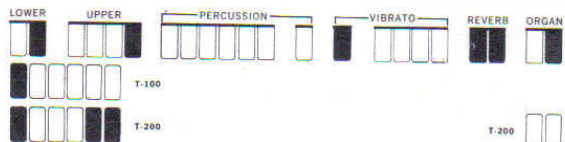
LOWER: ENSEMBLE 8'
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 6
PEDAL TABS: 16',
PEDAL LEGATO
ORGAN: BRILLIANCE

UPPER: FULL TIBIAS 16'
PERCUSSION: OFF
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): ON, SLOW

Andante

C **G7** F. Gruber

LONG, LONG AGO



LOWER: ENSEMBLE 8'
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 6
PEDAL TABS: 16',
PEDAL LEGATO
ORGAN: BRILLIANCE

UPPER: THEATER BRASS
16'
PERCUSSION: OFF
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): ON, FAST

Slowly

T. H. Bayly

Sheet music for "LONG, LONG AGO" by T. H. Bayly. The music is written in 4/4 time and consists of eight staves. The notes are as follows:

- Staff 1: C, C, D, E, E, F, G, A, G. Chord C is indicated above the first measure.
- Staff 2: E, G, F, E, D, F, E, D. Chord G is indicated above the second measure.
- Staff 3: C, C, C, D, E, E, F, G, A, G. Chord C is indicated above the first measure.
- Staff 4: E, G, F, E, D, E, D, C. Chord G is indicated above the second measure. Chord C is indicated above the eighth measure.
- Staff 5: G, F, E, D, D, D, F, E, D. Chord G is indicated above the second measure.
- Staff 6: C, G, F, E, D, D, D, F, E, D. Chord C is indicated above the first measure. Chord G is indicated above the second measure.
- Staff 7: C, C, C, D, E, E, F, G, A, G. Chord C is indicated above the first measure.
- Staff 8: E, G, F, E, D, E, D, C. Chord G is indicated above the second measure. Chord C is indicated above the eighth measure.

TWINKLE, TWINKLE, LITTLE STAR

LOWER: 4322 221
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 4
PEDAL TABS: 16',
PEDAL LEGATO
ORGAN: BRILLIANCE

UPPER: 50 5000 000
PERCUSSION: CELESTA
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): OFF

Slowly

Folk Song

Slowly

Folk Song

C C G G A A G F F E E D D C

G G F F E E D G G F F E E D

C C G G A A G F F E E D D C

GOOD-NIGHT, LADIES

LOWER: ENSEMBLE 8'
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 7
PEDAL TABS: 16'
PEDAL LEGATO
ORGAN: BRILLIANCE

UPPER: 83 7635 225
PERCUSSION: OFF
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): ON, FAST

Moderato

Traditional

[illegible]



The following music is written in the conventional two-staff manner. Chord names appear above the music while the actual notes of those chords appear on the bass clef. As you progress with your lessons you will learn to read bass clef notations as well as chord symbols.



Home Sweet Home

LOWER UPPER PERCUSSION VIBRATO REVERB ORGAN

T-100 T-200 T-200

LOWER: 6544 321
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 7
PEDAL TABS: 16',
PEDAL LEGATO,
PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 80 8626 425
PERCUSSION: OFF
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): ON, FAST

Upper

Lower

Pedal

Chord symbols: C, F, G

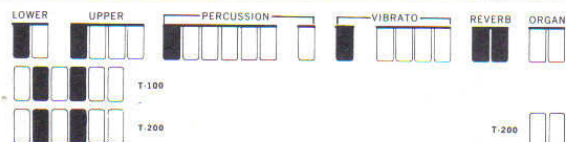
Notes: C D, E F A, G E G, F E F D, E C D, E F A, G E G, F E F D, C G, C B A G, G E G, F E F D, C

CHIMES

Here is a lovely hymn tune which demonstrates the richness of your chime percussion voice. The chime voice is most effective in the range from G below middle C to the second G above middle C.



Sweet Hour of Prayer



LOWER: 7502 002
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 5
PEDAL TABS: 16'
PEDAL SUSTAIN,
PEDAL MUTE
ORGAN: OFF

UPPER: 30 0000 000
PERCUSSION: CHIMES
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): OFF

Upper

Lower

Pedal

(C) (F)

(C) (G)

(C) (F)

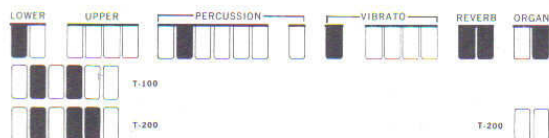
(C) (G) (C)

CELESTA

The Celesta is a beautiful 4 ft. bell-like tone which may be used by itself or to lend a percussive quality to a drawbar registration. Begin this tune with the Drawbars and Percussion in the up or off position. As indicated in measure nine,

depress the drawbars tab and you will hear a soft sustained organ voice come in under the percussive celesta quality. T-200 owners may use the Leslie on slow speed to enhance the celesta quality.

BRAHM'S LULLABY



LOWER: 5300 000
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 4
PEDAL TABS: 16',
PEDAL SUSTAIN,
PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 00 3000 000
PERCUSSION: CELESTA
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): ON, SLOW

Upper

Lower

Pedal

(C)

E E G E E G E C B A

(G)

A G D E F D D E F D F B A G B

(C) ADD DRAWBARS UPPER MANUAL (F) (C) (G)

C C C C A F G E C F G A

(C) (F) (C) (G) (C)

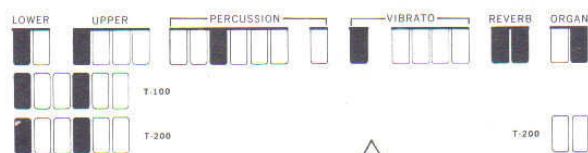
E G C C C A F G E C F E D C



Aloha Oe

HAWAIIAN GUITAR

This fascinating effect is made possible by combining the pre-voiced guitar tab with a drawbar registration. The guitar percussion voice will sound and decay without vibrato over a sustained vibrato drawbar combination. This creates the illusion of the singing tones of the Hawaiian Guitar. Where wavy vertical lines appear next to melody notes "roll" those notes. Play the bottom one first, very quickly followed by the top note.



LOWER: 8606 000
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 4
PEDAL TABS: 16'
PEDAL LEGATO,
PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 00 8888 000
PERCUSSION: GUITAR
REVERBERATION: I, II
CYMBAL/PEDAL: OFF
BRUSH/LOWER: OFF
LESLIE (T-200): OFF

Upper

Lower

Pedal

F

C

G

A F

C A

F A

A F

G E

C E

G

C

E G

C E

B F

A F

B F

C F

D F

D F

F A

F A

E G

F

C

C E

G

A F

C A

F A

A F

G E

C E

G

C

E G

C G

B F

C F

E G

D F

B F

G

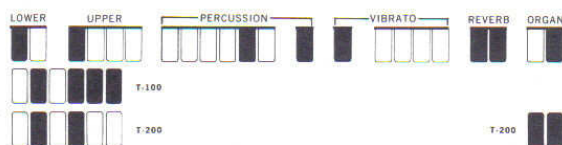
C E

Skaters Waltz



XYLOPHONE

The xylophone sounds similar to the marimba but the tone is brighter. The playing technique remains the same. You may wish to use the cymbal and brush for a light rhythmic effect. Of course, the xylophone is also an excellent solo voice without reiteration. Remember, you may add drawbars at any time by simply pressing the upper manual "drawbars and percussion" tab and adding those drawbars of your choice.



LOWER: 6433 321
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 7
PEDAL TABS: 16'
PEDAL SUSTAIN,
PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 00 5000 000
PERCUSSION: XYLOPHONE,
REITERATION
REVERBERATION: I, II
CYMBAL/PEDAL: ON
BRUSH/LOWER: ON
LESLIE (T-200): OFF

Upper C G

Lower

Pedal

C

Am Dm

G C

DU, DU, LIEGST MIR IM HERZEN

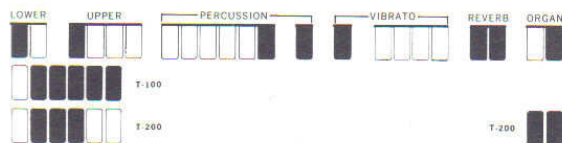
RHYTHM EFFECTS

(Cymbal & Brush)

Your T-Series Hammond Organ features rhythm effects which lend exciting color and sparkle to your music.

The cymbal effect is playable through the pedals while the brush effect is playable through the lower manual. They may be used separately or together.

Following is an easy waltz which demonstrates the flexibility of the cymbal and brush. Experiment by using the brush only or the cymbal only. Of course, these effects may be applied to any type of music. Set the tabs and drawbars as indicated below and listen to how music comes alive with these sparkling rhythm effects.



LOWER: 6433 321
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 7
PEDAL TABS: 8'
PEDAL SUSTAIN,
PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 00 4000 000
PERCUSSION: BANJO,
REITERATION
REVERBERATION: I, II
CYMBAL/PEDAL: ON
BRUSH/LOWER: ON
LESLIE (T-200): OFF

Upper

Lower

Pedal

Chord symbols: C, G

Notes: E, E, E D E, G F, D

Chord symbols: C, G

Notes: D, D G F, E, E, E, E D E

Chord symbols: G, C, F

Notes: G F, D E F, A G B, C, A

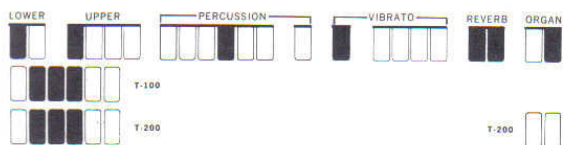
Chord symbols: C, G, C, F, G, C

Notes: G, B, C, D E F, A G B, C



Exciting, professional String Bass effects are made possible in your T-100 or T-200 Series instrument through the use of the rocker tab marked "Pedal Sustain".

Here is a musical example of the String Bass effect. Set the tabs and drawbars as indicated below. Play the pedals in a detached or staccato manner.



LOWER: 6544 221
VIBRATO: ON, NORMAL
PEDAL DRAWBAR: 8
PEDAL TABS: 8',
 PEDAL SUSTAIN,
 PEDAL MUTE
ORGAN: BRILLIANCE

UPPER: 80 0000 000
PERCUSSION: MARIMBA
REVERBERATION: I, II
CYMBAL/PEDAL:
 (OPTIONAL)
BRUSH/LOWER:
 (OPTIONAL)
LESLIE (T-200): OFF

Upper

Lower

Pedal

Play staccato or detached.

etc.

C6 E7 F6 G7

Am D9 3 Dm7 G7 C6

HOW TO PRACTICE

How wonderful it would be if every organist could study with a truly great teacher. It's a remarkable experience. A great teacher will inspire his students to strive for perfection and be content with nothing less. Music will assume a new dimension. It will begin to be more than just notes on paper. The student will begin to take seriously his responsi-

bility, as the middle man in the Composer-Performer-Listener relationship. He will try to project to the listener the qualities which he, himself, feels in the music.

The organist who has the time and inclination to practice, and who wishes to do a meticulously perfect performance, should remember four things.

1.

The choice of registrations, assuming that the notes are played correctly, is what makes one organist sound different from another. Two organists can play the same piece of music, one will sound thrilling, the other will be a perfect bore. Choice of registrations makes the difference. Therefore, spend plenty of time selecting registrations to fit the type of music you are playing. Many professional organists spend hours on one number, trying this, trying that, until they finally arrive at precisely the best registration possible.

2.

Probably the greatest single factor in good organ playing is correct fingering. Figure out your fingering *before* you start to practice. Write it in the music, then stick to the fingering you've chosen. Keep in mind the necessity for a smooth legato, and in order to preserve this legato use finger substitution and the thumb glissando. Remember that an organist plays *with his fingers*; arm and hand motion should be kept to a minimum. Develop precise finger motion, press the keys firmly.

3.

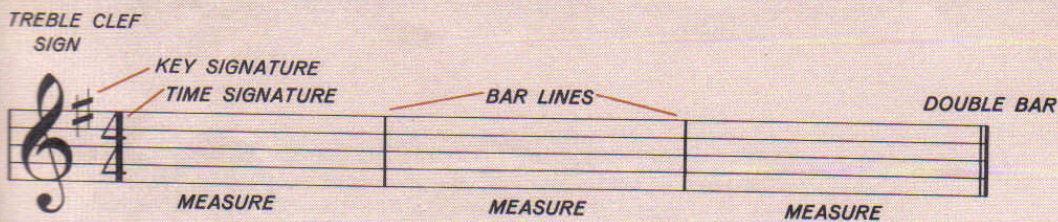
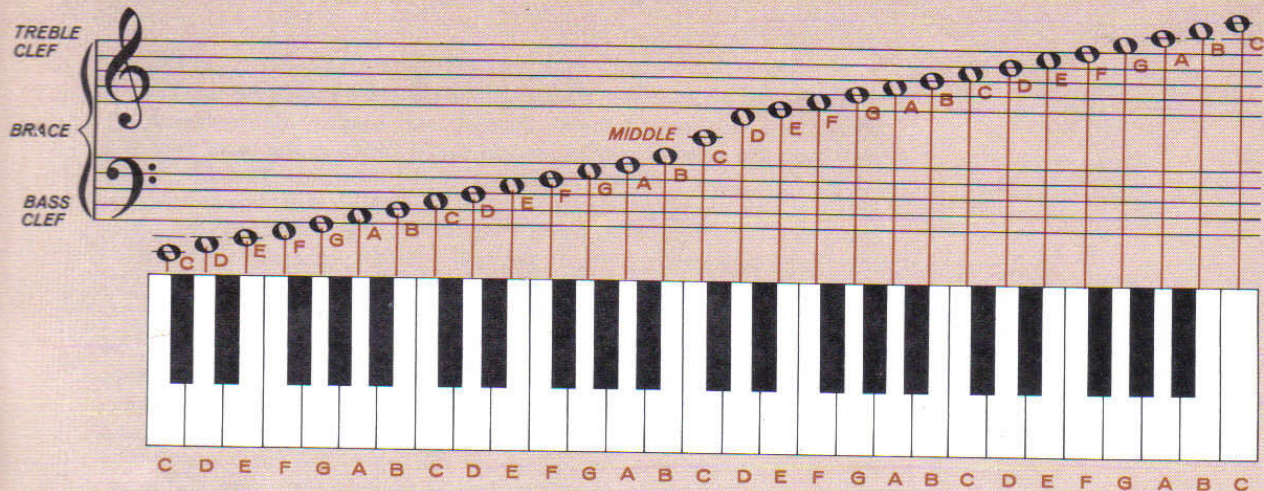
SLOW, CORRECT, PRECISE, THOUGHTFUL practice is the way to really *learn* a piece of music. Basically the process of learning is this. We impress upon the muscles of the fingers a PATTERN—the order in which the fingers are used. If then, every time the music is practiced, the *same* fingers will be used on the *same* keys, constant repetition will impress this pattern so thoroughly that the fingers will give back, automatically, exactly what they've learned. It's a question of FINGER MEMORY. That's why, once the music has been thoroughly learned, the player can be thinking of something else, and the fingers will go right on playing by themselves. That's why we start practicing SLOWLY and THOUGHTFULLY so that every time the music is played it will be done perfectly. Gradually the tempo will increase, and at the same time perfection of playing will be maintained. Learning music by this method will actually take no longer than learning by hit-and-miss methods, and the results will be far superior.

4.

Every organist should LISTEN TO HIMSELF PLAY. He should listen in a detached manner as though hearing someone else. You'd be surprised how many players do not listen to what they are doing. Once a teacher was giving a lesson to a pupil. After a particularly horrible performance, the teacher paused a moment, then asked the student, "How did that sound to you?" The reply was, "I don't know. I wasn't listening!" Finger memory was doing the work, and the poor fingers didn't have much to remember.

THE LANGUAGE

THE GRAND STAFF



TIME SIGNATURES

Upper number determines counts per measure.

Lower number determines value of note getting one count.

The letter "C" (or C) following the clef sign means "common time" or $\frac{4}{4}$

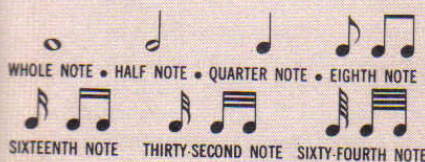
$\frac{4}{4}$	$\frac{3}{4}$	$\frac{2}{4}$	$\frac{6}{8}$	$\frac{3}{8}$	$\frac{3}{2}$	$\frac{9}{8}$
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KEY SIGNATURES

The sharps (#) or flats (b) appearing at the beginning of each staff indicate the key of the composition. For example:

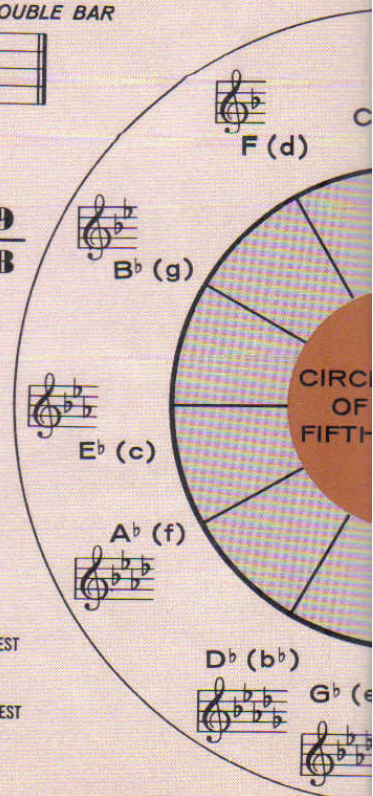
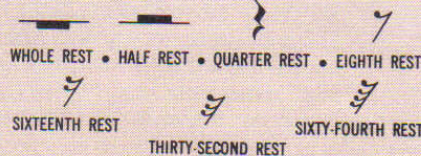


NOTE VALUES



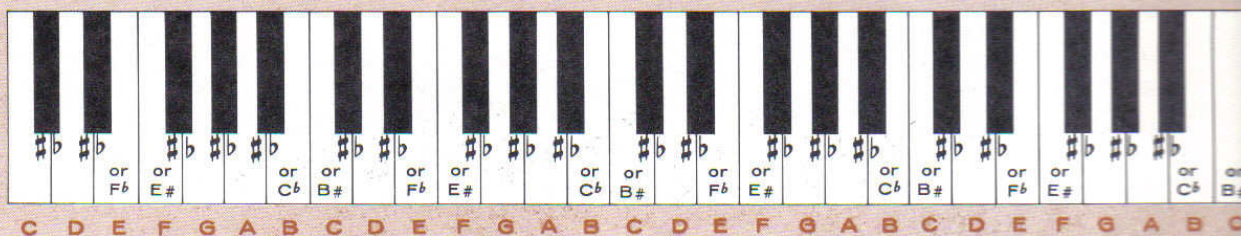
A dot following a note augments its value by one-half.

RESTS

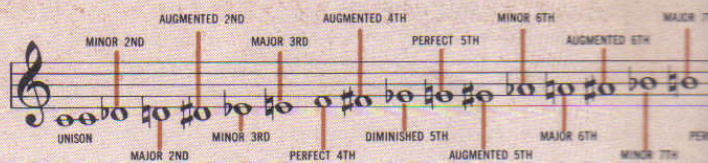


GE OF MUSIC

THE KEYBOARD

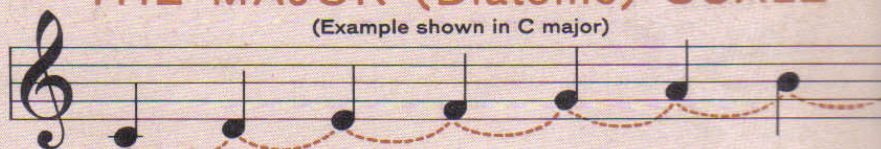


INTERVAL: the difference in pitch between two notes (here shown relative to middle C).



THE MAJOR (Diatonic) SCALE

(Example shown in C major)



PATTERN

ALPHABET

SOLFEGGIO

NUMBERS

(Denoting degrees of scale)

ROMAN NUMERALS

(Denoting chord, harmony)

	WHOLE STEP	WHOLE STEP	HALF STEP	WHOLE STEP	WHOLE STEP	WHOLE STEP	HALF STEP
ALPHABET	C	D	E	F	G	A	B
SOLFEGGIO	DO	RE	MI	FA	SOL	LA	TI
NUMBERS	1	2	3	4	5	6	7
ROMAN NUMERALS	I	II	III	IV	V	VI	VII

NAMES OF DEGREES OF THE SCALE

I	II	III	IV	V	VI	VII
T	S	M	S	D	S	L
O	U	E	B	O	U	E
N	P	A	M	M	A	M
I	D	I	I	I	I	I
C	R	N	N	N	N	N
	T	I	I	I	I	I
	O	C	C	C	C	C
	N	I	I	I	I	I
	C	C	C	C	C	C

TRIADS

MAJOR: 1-3-5

MINOR: 1-b3-5

AUGMENTED: 1-3-#5

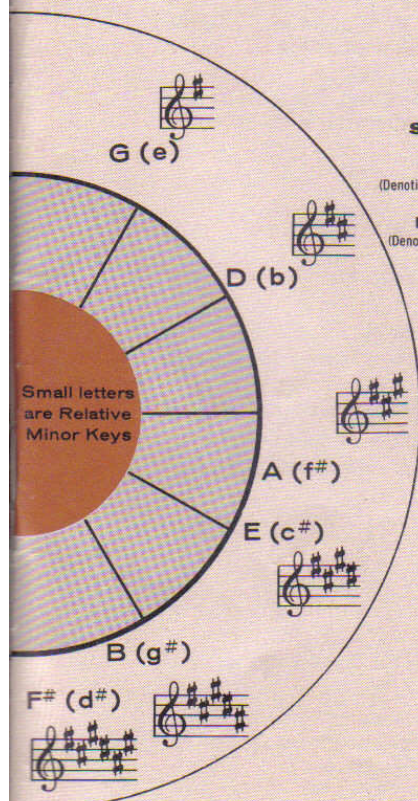
DIMINISHED: 1-b3-b5

MOST COMMONLY USED CHORDS

I or TONIC

IV or SUBDOMINANT

V or DOMINANT


















MUSIC GLOSSARY

Some useful musical terms and their definitions

- A cappella** — Choral music without instrumental accompaniment.
- Accelerando** — Becoming faster.
- Accidental** — Sign of chromatic alteration, momentarily introduced for single notes or measures.
- Adagio** — Slow, tranquil.
- Agogic** — Denoting all the subtleties of performance achieved by modification of tempo.
- Alla marcia** — In march style.
- Allegretto** — Quite lively, moderately fast (faster than Andante, slower than Allegro).
- Allegro** — Lively, rapid.
- Andante** — Moving, moderately slow.
- Andantino** — A little faster than Andante.
- Appoggiatura** — Note of embellishment, grace note.
- Attack** — The speed with which an organ speaks; time between the playing of a note and the resulting tone.
- Augmented Interval** — Interval increased by a half step.
- Aria** — An elaborate solo song.
- Arpeggio** — Notes of a chord when played one after another.
- A tempo** — Return to the original rate of speed.
- Cantabile** — In a singing style.
- Chromatic scale** — Composed of successive half steps.
- Coda** — A concluding section added to a composition.
- Con brio** — With vigor and spirit.
- Con moto** — With movement.
- Consonance** — A combination of tones in agreement of sound.
- Counterpoint** — A study of melodies and their interrelationships.
- Da capo al fine** — Repeat from the beginning to the end (D.C.).
- Dal Segno al fine** — Repeat from the sign (♯) to the end (D.S.).
- Decay** — The time during which one or more sustained notes die away.
- Diminished Interval** — Interval decreased by a half step.
- Diapason** — A flue-pipe work of the organ which forms the backbone of each manual; the characteristic full (foundation) sound of the organ.
- Diatonic** — Denoting the natural scale consisting of five whole steps and two half steps, e.g. as it is produced on the white keys of the keyboard.
- Dissonance** — A combination of tones in disagreement, unrestful, needing a consonance to follow for completeness.
- Dolce** — Sweet, soft.
- Duet** — Composition for or rendition by two performers.
- Dynamic marks** — Words, signs, etc., indicating degree of sound volume.
- Etude** — A study, primarily designed to aid the student in the development of his mechanical and technical ability.
- Fine** — Close, end.
- Flat** — Sign (b) which indicates lowering the pitch of a note by a half step.
- Forte (f)** — Loud.
- Fortissimo (ff)** — Very loud.
- Glissando** — The execution of rapid scales by a sliding movement of the hand or finger over the keys.
- Half Step** — Next adjacent key up or down.
- Harmonics** — Over-tones (or integral multiples of fundamental frequency) that make up tone color.
- Il canto ben marcato** — The melody played very distinctly.
- Largo** — Extremely slow, broad.
- Lento** — Slow
- Legato** — Connected, smooth.
- Ledger lines** — Lines added above or below the staff for those notes too high or low to be represented on the staff.
- Meno** — Less.
- Mezzo** — Half.
- Mezzo forte (mf)** — Moderately loud.
- Mezzo piano (mp)** — Moderately soft.
- Misterioso** — In a style suggestive of mystery.
- Moderato** — Moderate rate of speed.
- Molto** — Much.
- Non tanto** — Not so much.
- Octave** — Interval embracing eight diatonic tones; e.g. C to C, up or down.
- Percussion** — Pertaining to those instruments which are sounded by striking or shaking.
- Perdendo** — Gradually dying away.
- Perfect Interval** — The unison, 4th, 5th, and octave which retain the same character when inverted.
- Pesante** — Heavy.
- Piano (p)** — Soft.
- Pianissimo (pp)** — Very soft.
- Poco a poco** — Little by little
- Presto** — Very quick.
- Prestissimo** — As fast as possible.
- Primo** — First.
- Rallentando** — Gradually growing slower (rall.).
- Rinforzando** — A sudden stress applied to a single note or chord.
- Ritardando** — Gradually growing slower (rit.).
- Ritenuto** — Immediate reduction of speed.
- Root** — That note on which a chord is built.
- Secondo** — Second.
- Semplice** — Simple.
- Sempre** — Always.
- Senza** — Without.
- Sforzando (sfz)** — A sudden and strong accent on a single note or chord.
- Sharp** — The sign (#) which indicates a raising of a note by a half step.
- Smorzando** — Dying away.
- Solfeggio** — Singing the degrees of the scale by syllables (usually DO, RE, MI, etc.).

- Sopra** — Above.
Sotto — Under.
Strepitoso — Noisy.
Stringendo — Quickening.
Subito — Suddenly.
Syncopation — Any deliberate upsetting of the normal pulse of meter, accent, and rhythm.
Tacet — Is silent.
Tanto — Much, so much.
Tempo — Rate of speed of a composition.
Teneramente — Tenderly.
Tenuto — Hold, sustain.
Timbre — The color or quality of tone.
Timoroso — Timid, fearful.
Triad — Three-toned chord: root, third, and fifth.
Troppo — Too much.
- Turn** — An embellishment consisting of four or five notes (usually a principal note played in alternation with its higher and lower auxiliary).
Tremolo — A continuous fluctuation of loudness producing a tremulous effect. Sometimes combined with a pitch variation.
Tremulant — A mechanical organ device which produces pulsations of tone.
Una corda — In piano, a direction to use the left (soft) pedal.
Unison — The pseudo-interval formed by a tone and its duplication.
Veloce — Quick.
Vibrato — A continuous fluctuation of pitch used to increase the emotional quality of tone.
Vivace — Lively, brisk.
Vivo — Lively.
Whole step — Two half steps.

Some Musical Symbols and what they mean

-  **Crescendo** — Increasing in loudness.
-  **Decrescendo or Diminuendo** — Decreasing in loudness.
-  **Slur** — Curved line spanning two or more different notes to show they are played legato.
-  **Tie** — Hold for total count of notes. (Curved line spanning same notes)
-  **Hold** — Prolong time value of note or rest at performer's discretion.
-  **Time signature**
-  **Treble clef sign**
-  **Bass clef sign**
-  **Sharp sign**
-  **Flat sign**
-  **Natural sign**
-  **Staccato** — Played detached.
-  **Triplet** — Three notes played in the count of one note of the next higher value.
-  **Grace Note** — Short appoggiatura.
-  **Repeat Signs** — See "Dal Segno al fine".

SOME FACTS YOU SHOULD KNOW ABOUT YOUR HAMMOND ORGAN

CARE AND MAINTENANCE

You may place a Hammond Organ anywhere in your home, knowing that this sturdy instrument shrugs off all tone problems. It is impervious to too much or too little heat, too much dampness and sudden changes in temperature.

Connect only to power supply of voltage and frequency shown on the name plate. Place console at least two inches from the wall for best acoustical results and for ventilation.

PLASTIC KEYS AND STOP TABLETS

Clean lightly with a soft, damp cloth or chamois. Wiping with a dry cloth builds up an electrostatic charge which will attract dust particles from the air.

If cleaning agents are necessary, use pure facial soap and lukewarm water. Dry without excessive rubbing.

Do not use boiling water, strong solvents, such as alcohol, dry cleaning fluids or window cleaning fluids which contain such solvents.

WOODWORK

Dust with a soft damp cloth or chamois. If cleaning agents are necessary, use a soft cloth lightly dampened with a solution of mild soap and lukewarm water. Remove solution, using soft cloth dampened with clean water. Dry thoroughly, rubbing with the grain.

Use a good grade furniture wax or polish. Avoid use of paste waxes or oil-type polishes.

Excessive rubbing in one spot or at edges may result in damage to the finish.

PACKING FOR MOVING OR SHIPPING

If the organ is to be shipped by a carrier other than a regular furniture mover, arrange with your local Hammond Organ dealer to have it properly packed.

ACCESSORIES

BUILT-IN EARPHONE JACK

Earphones can be hooked into the Hammond T-Series quickly and easily using Hammond's Built-in Earphone Jack. They are a very useful accessory which you may want to purchase since they permit you to practice at any hour without disturbing others. Dynamic-type earphones will give best results, although other types can be used. *Your dealer can supply earphones just right for your Hammond Organ.*

BUILT-IN TONE CABINET RECEPTACLE

If greater volume is wanted to boost the sound of your Hammond T-Series for playing in large auditoriums or churches, a tone cabinet can be easily attached through Hammond's Built-in Tone Cabinet Receptacle. *Your dealer can supply you with a suitable tone cabinet.*

Hammond Organ T-100, T-200 Series Owner's Manual
Scanned July 29, 2008 by John Phillips