

OWNER'S MANUAL

MODEL-FL-1959





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A STORY OF THE PAST

Well over two thousand years ago the first organ pipes were developed. Through the centuries the organ grew in versatility—but it also grew in size, in weight and in cost. By the end of the 19th century some organs had as many as six—and even seven keyboards (manuals). For example, at Convention Hall in Atlantic City is an organ with seven manuals and some 30,000 pipes. Eight of the largest pipes are up to 32 feet in height, and the longest one weighs 2,200 pounds! The Wanamaker store in Philadelphia has an organ which weighs 187 tons (the console weighs nearly two and one-half tons), covers some 118,000 square feet and has more than 30,000 pipes. And in the conservatory of Pierre S. Du Pont at Wilmington, Delaware, is an organ with 10,000 pipes. Fourteen freight cars were required to ship this instrument.

Not many years ago, only a few of the wealthiest families were able to build a small pipe organ into their homes—even by today's standards a costly undertaking. Normally wealthy families couldn't afford such an extravagance if for no other reason than insufficient space to permit the installation of pipes, air bellows and pumps to supply the air. It was not until recent years that a home organ was available. But thanks to modern science, you have it now. This truly remarkable electronic instrument has solved the three problems of enormous cost, excessive space required, and tremendous weight. As an example, a pipe organ, the equivalent of your Lowrey, would have enough pipes to fill the average home. A number of them would be sixteen feet high! Also, it would cost many, many times what your Lowrey did, and it couldn't possibly match the versatility of your Lowrey.

a few words about the Lowrey organ

Since 1894, Lowrey has spent many pioneering years in research and development of fine organ tone. Some work was done as early as 1910 and, beginning in 1918, a great deal of research went into several types of electronic generators. With the advent of the electronic vacuum tube, Lowrey began in 1928 to develop what later became known as an "electronic" organ.

Through the 1930's and 1940's many different generating systems were developed, some of them which are now being used by other companies. These were all abandoned by Lowrey in favor of the new "Eccles-Jordan" circuit, which today is the most advanced and stable circuit in the industry. Thus, your Lowrey is different than any other organ in that it starts with the odd harmonics of a clarinet tone, and

as a result can produce not only excellent reed tones but also clear, clean flute tones and fine string tones, rich in harmonics.

The Lowrey was not an "over-night" discovery. The many pioneering years spent in organ research and development have resulted in the creation, design and manufacture of a high quality, dependable organ which is considered as an outstanding achievement.

So, pause for a moment in the quiet and comfort of your own living room, in the peace and solitude of a church, or wherever you may be. Here before you is one of man's greatest accomplishments. It is a development of 2,000 years—centuries and centuries of creative effort and painstaking labor. It is yours to command with a movement of the hand—a touch of the finger tip.

are you Artist, Amateur or Beginner

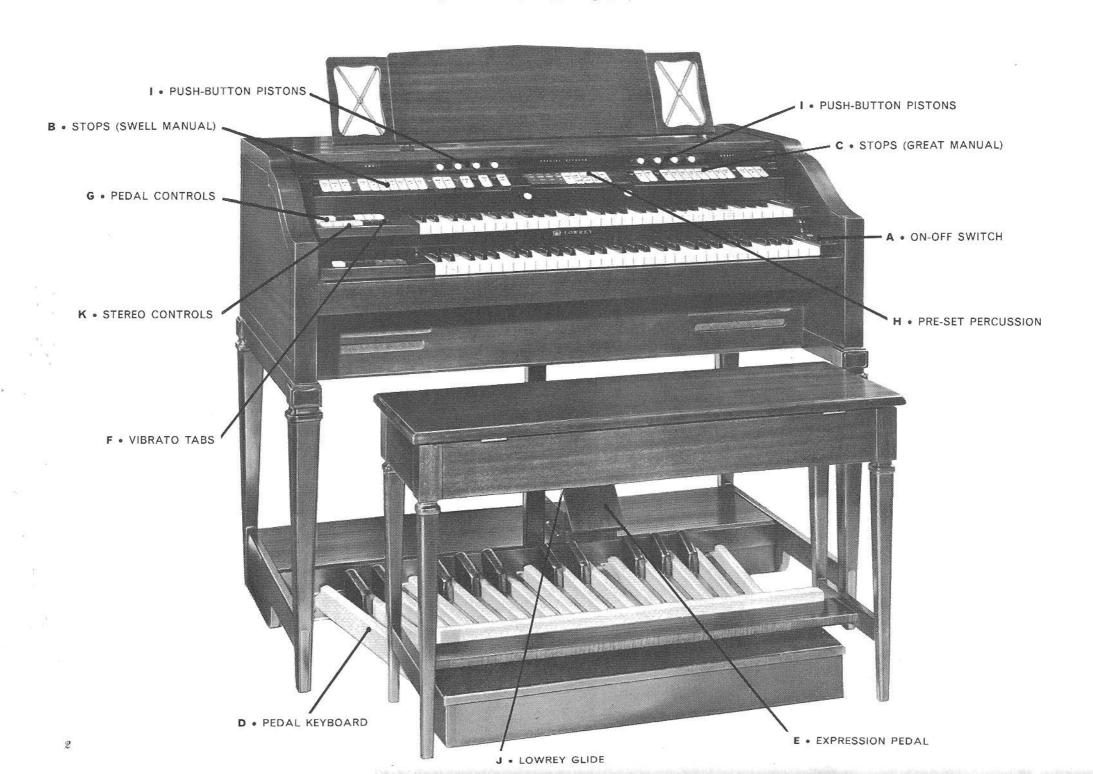
If you have had experience with an acceptable organ, you will be familiar with the strange words of "stops"—"footages"—"solo"—"sustain," etc. Thus, you will instantly feel very much "at home" with your Lowrey Festival.

If you have had experience with a keyboard instrument but not with the organ, you will want to read all that follows. The organ is different than any other keyboard instrument, since it encompasses practically every field of tone and has a greater dynamic range than any other musical instrument. You'll be amazed at how quickly you can understand and absorb the explanations. The selection of a particular voice or combination of voices is no problem on the Lowrey because each tablet or "stop tab" is at your finger tips and clearly marked to instantly bring into action all the fullness and the rich harmonics of fine organ music.

Even for the person who has never played a keyboard instrument (piano, organ or accordion), there are endless hours of enjoyment in store. We do suggest a few simple steps. Start by reading the pages of this manual, paying particular attention to the sections on "Controls and Their Operation," and "Stop Tabs and What They Mean."

With the wealth of fine Lowrey organ methods that are available today, everybody can play the Lowrey Organ (even though you have never played a note before). If you wish to purchase organ music, you will find that there is a vast quantity of Lowrey organ music available from most music dealers. You can use the suggested registrations on the Lowrey music, or create your own. When inquiring about music, be sure to ask for Lowrey organ music.

CONTROLS AND THEIR OPERATION



Just to make sure you understand the basic parts of your Lowrey Festival, carefully read each of the following paragraphs with the organ in view. A good knowledge of your instrument and what it can do will assure you of greater ease in playing it, and thus greater satisfaction and enjoyment.

A on-off switch

This "On-Off Switch" to the right of the lower keyboard controls the entire organ. It will "warm up" in about fifteen seconds, but a few seconds additional time may be required for the vibrato section to take effect.

B | stops (swell manual)

The fifteen stop tabs in the upper left section of the console control the tones for the Swell Manual, or "Upper Keyboard," and they may be played singly or in any combination. They are called "Stops" because they stop the particular voice when the tab is in the "Off" position. Tilting the tab downward "turns on" that particular voice. Notice how easy it is to quickly select the voice or voices you desire.

c | stops (great manual)

The thirteen stops which affect the Great Manual, or "Lower Keyboard," are those in the upper right section of the console. Play them singly or in any combination. You will notice that as you keep adding stops, you increase the volume as well. In organ language, you thus build to what is known as "full organ." The red and black tabs will be fully discussed later.

p] pedal keyboard

Note that you have two full octaves of 25 pedal keys, the equivalent of 16' and 8' pipes, from C through C two octaves above. The tones from these pedal keys add a rhythm, or in faster or popular music, a "beat." Thus, as in an orchestra, while the pedals keep a rhythm, one hand can play the melody and the other hand can add an accompaniment. As you listen to an orchestra, generally you will hear these three "levels" of music.

E | expression pedal

As with all organs and unlike the piano, there is no way to control volume or get "expression" from the keyboard. Therefore, the Expression Pedal, operated with the foot, permits you to change the volume from loud to soft—just as a singer varies the volume of his voice or as an orchestra changes the amount of sound it produces.

F | vibrato tabs

These are the three black tabs to the right in the second row of controls. They permit you to add "wavering" effects to all types of music. Their convenient location and ease of operation will enable you to add an amazing variety to your music.

G | pedal controls

These are the five white and two black tabs below the stops for the Swell Manual. They give the Pedalboard variety so that you can adapt it to all types of music. These tabs will be discussed later, and after you have had a chance to practice and experiment with them, you will marvel at the great versatility of your Lowrey Festival.

н] pre-set percussion

The group of five white tabs printed in red under "Special Effects" are known as "Pre-Set Percussion." In other words, just as with large and very expensive organs, several qualities have been drawn together and connected to a single stop tab so that you can instantly get different voices to produce various effects.

I | push-button pistons

These are the eight white buttons, four for the Swell Manual and four for the Great Manual, above the Stops. Four different combinations of voices on the Swell Manual and the Great Manual are instantly available by use of these Push-Button Pistons. These "Pistons" provide for rapid changes of registration without a pause to select several tabs.

J | Lowrey glide

This patented control is exclusive with Lowrey Organs—no other instrument offers this wonderful feature. It helps to complete the illusion of the guitar, trombone, trumpet and strings as they are played in an orchestra. For those who are not too familiar with the organ, we suggest that this control, mounted to the left of the Expression Pedal, not be used until some degree of familiarity with the instrument has been developed.

k stereo controls

These are the four white tabs to the left in the second row of controls. These controls will be discussed at greater length under the heading of "Moving-Stereo."

STOP TABS AND WHAT THEY MEAN



Originally, the word "stop" in a pipe organ referred to a control which "stopped" the wind to a specific group of pipes. Later, it signified a set of pipes for the whole manual, one pipe for each key all of which produced the same tone color. With the developments in the 20th century, organs now have two classes of stops—"speaking" stops which bring forth the actual voices or tones; and "mechanical" stops which by themselves produce no tone but create different effects on the individual speaking stops. If this sounds somewhat confusing we suggest that you reread this paragraph so that you know the difference between the two types of stops.

In this section we will first cover the speaking stops so that you will know something about the history and use of each one. Following this, each of the mechanical stops will be covered in detail.

speaking stops or voices

If you are not familiar with the many stops in the vast field of organ terminology, the subject must appear confusing. However, it is really quite simple. All stops fall into one of four families known as Flute, String, Reed and Diapason, The Diapason tones form the foundation of the organ and all other stops supplement it and combine with it. It is a tone peculiar to the organ in that it has no counterpart in the orchestra. The diapason is not an orchestral voice, but a full, round, and dignified structural stop around which an infinite variety of expression can be built. Flute tones may be described as pure and round, very mellow and with practically no overtones. The opposite are the String tones which have a vibrant, keen quality that in certain voices can be biting or harsh—they often resemble the string instruments in an orchestra. The Reed tones defy description as a group because there are so many varieties. They are "individual" and provide complete contrast to other stops. The reed voices make outstanding solo voices and are extremely effective in the creation of orchestral coloring.

footage

On your Lowrey Festival each voice is marked with a "footage" designation such as 16', 8', 4', 2', 51% and 23%. These are so marked because this is the organist's unit of measure. So you can quickly understand this subject, just consider an 8' group of pipes as the basic pitch. It is called 8' because the longest pipe (the bottom C on the manuals) in this group is physically 8' high in a pipe organ. As we go up the scale, each pipe becomes progressively shorter—however, each pipe in the series is referred to by the actual length of the longest pipe even though the rest of them are smaller. So, although there are no bulky, space-consuming pipes in the modern and versatile Lowrey Festival, the stops are marked in "footages" for your convenience.

Now, turn on the Flute 8' on the Swell Manual and play Middle C. Press this key and you will hear the 8' voice. Holding the same key, if you now add the Flute 4' you also hear a "tone" exactly one octave higher in pitch. Add the Piccolo 2' and you will hear a third tone two octaves higher. If you add the Flute 16' you will hear a fourth tone one octave lower in pitch than the 8' voice. When you add the Quint 5\frac{1}{3}' you will hear the G immediately above Middle C. And, by adding the Twelfth 2\frac{2}{3}' you will hear G an octave higher than Middle C. With these six tabs in the "on" position you will hear six tones and in the organist's language, you have "coupled" these six sets of pipes so that every time you press one key you will hear six tones. If you play a chord of four notes you will produce twenty-four tones. This is what gives the organ its full body and richness of tone.

Just remember that 8' is the basic pitch. The 16' stops sound one octave lower, the 4' stops sound one octave higher and the 2' stops sound two octaves higher. The Quint $5\frac{1}{3}$ ' plays a fifth above and the Twelfth $2\frac{2}{3}$ ' plays a twelfth above. These will be explained in detail under the discussion of these voices in the next section.

STOP TABS AND WHAT THEY MEAN

SPECIAL EFFECTS · Pre-set Percussion

accordion

This voice duplicates the rich harmonics of the accordion reed and generally is played without Vibrato and with the Manual Attack tab in the "Slow" position. Use single notes or chords and play in a legato fashion. Generally, as each note or chord is played, the Expression Pedal is opened and then retarded rather quickly, Try it with your favorite accordion numbers such as "Peg Of My Heart" or "Twilight Time." An advantage of your Lowrey is that you can add other tabs to this Accordion voice for different effects. For example, in the upper register you might wish to add the Strings. For another quality, add the Flute, Trumpet or Clarinet—or all of them. Note that the addition of the Clarinet adds an "echo chamber" effect, found only on better accordions. By adding the "Medium" Sustain you create the impression of an accordion played in a large hall or auditorium. For a deep voice in the lower register use the Cello singly or in combination with the above tabs. As with all these pre-sets, experiment and try different combinations to find those which best fit your mood, the way you play and the effects you wish to create.

harpsichord

For this effect use the "Medium" Sustain and no Vibrato. We suggest that you use this voice with the Swell to Great 8'-4'-2' coupler so that the voice carries to the Great Manual—you now have a 122-note keyboard. Play in a completely staccato fashion



with both hands and try "18th Century Drawing Room," Paderewski's "Minuet In G," etc. For a more brilliant Harpsichord, try adding the Strings to the Harpsichord pre-set.

vibraharp

This voice is always played with the "Long" Manual Sustain and a Slow-Heavy Vibrato. The technique of the fingers is definitely staccato and can be played in single notes or with chords. However, all notes of the chord should not be struck at once; they should be "rolled" to duplicate the vibraharp which you frequently hear in popular music. When learning the technique you might start with selections such as "Song Of The Islands," "Melody Of Love," "Sleep," etc. For accompaniment on the Great Manual you can couple the same voice by using the Swell to Great 8'-4'-2' coupler, or the Melodia 8', French Horn 8' or Viola 8' from the Great Manual voices.

guitar

With this voice use the Long Sustain and Slow-Heavy Vibrato—try "Blue Hawaii" or one of the selections mentioned under Vibraharp. Start with single notes. Do not hold the keys. Depending upon the selection and the speed with which it is played, the technique can be staccato or the key can be held for a small fraction of a second each time. Your own judgment will help you after you listen to guitar music. To complete the sound of the Guitar, use the Lowrey Glide Control on certain notes, pressing the Glide Control with the right foot at the same time you strike

certain notes. Do not press the Glide Control for every note played!

This voice can be changed slightly by adding the Clarinet 8' or the Flute 8'. In fact, a 'steel guitar' effect can be created with just the Flute 8' and Fast-Heavy Vibrato. To introduce a string-like quality, add either the 8' or 4' String, whichever seems preferable for the selection being played.

$music\ box$

This is a soft voice and it generally should be played without the Solo 8' tab. Use the Long Manual Sustain and no vibrato. As a pure music box, it should be played with both hands in the upper half of the keyboard in an extremely staccato fashion. The Great Manual and pedal board are not used for this effect. For slightly different voices, add either the Flute 4' or String 4'.

chimes (all swell 8', 4' and 2' voices)

The Chimes were painstakingly developed in the Lowrey laboratories and carefully checked against the voices of actual chimes. To create the Chimes—pull the "Chimes-Effects" knob at the right of the Swell Manual, turn the Manual Sustain tabs "On" and in the "Long" position, and put on any of the Swell 8′, 4′ or 2′ voices. You now have 18 notes of chimes on the Swell Manual—from C an octave above Middle C to the top F as indicated by the gold line on the black channel. Remember, you can still play conventional organ on the lower section of the Swell Manual (36 notes), either with arpeggios or sustained chords, creating an interesting "three-manual" organ effect. When playing the

STOP TABS AND WHAT THEY MEAN

chimes (continued) keys for Chimes, do not hold the key but strike it in a very staccato fashion. Only a few of the multiple uses of the Chimes are suggested below.

> If you have a combination of Flute 8', Trumpet 8' and Flute 4' (with the "Long" Sustain and the "Chimes-Effects" knob out), a large full chime or "Carillon" will be heard. For a smaller and more brilliant chime, use just the Flute 4'. To create the delightful sound of little "Swiss-Bells," try the Piccolo 2'. Also, for a beautiful "Harp" accompaniment with the Chimes, use the 8' and 4' Flutes and "roll" the chords on the lower section of the Swell Manual (36 notes), or couple the 8' and 4' Flutes down to the Great Manual (Swell to Great 8'-4'-2'), and you will have a full Harp of 61 notes for arpeggios. Thus, with your Lowrey Festival you can produce sounds which the world has never heard before.

Lowrey Voices · SWELL MANUAL

flute 16' (flute family)

A basic stop having a deep mellow tone of the pure flute family. Pitched one octave below the Flute 8', its clear, singing, and reposeful qualities make it ideal for a flute ensemble, diapason chorus—and in every direction in which it may be employed.

trombone 16' (reed family)

Principally, the function of this stop is similar to that of the bass trombone in an orchestra. The tone of the Trombone 16' is smooth, poetical, and full of beauty. In the lower register it is dark and liquid—brilliant and triumphant in the high compass. To simulate the orchestral instrument, use a Vibrato setting of Slow-Heavy with the occasional use of the exclusive Lowrey Glide. An unusual voice can be obtained with the Quint $5\frac{1}{3}$ in any vibrato setting to suit the music.

cello 16' (string family)

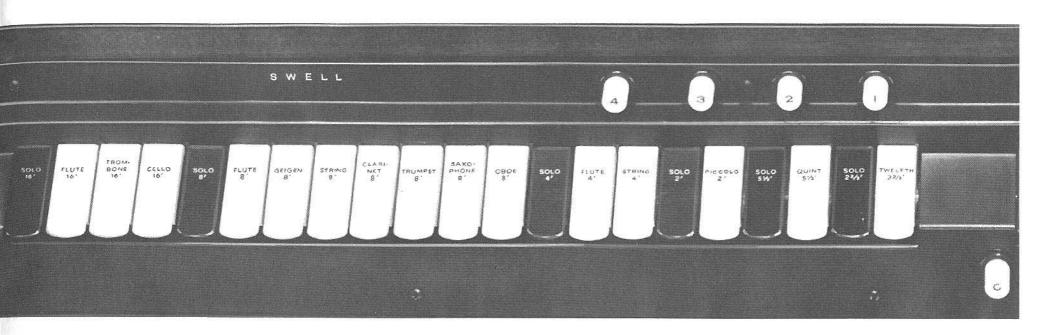
This is truly an orchestral stop. It has been carefully voiced clear, singing, and reposeful with the proper harmonics so that it has all the richness, resonance, and liquid tones of the orchestral instrument for which it has been named. Depending upon the selection played, either the Slow-Light or Slow-Heavy Vibrato should be used. The voice is typically cello in the lower range of the manual —in the upper range of the manual it has an excellent viole quality. For many organ selections it has an excellent foundation quality making it valuable in every direction in which it may be employed.

flute 8' (flute family)

This stop is a companion to the Flute 16' but plays one octave higher. Of all the stops of the organ, the flutes lend themselves most readily and efficiently to effective registration, combining perfectly with the stops of every other tonality.

geigen 8' (diapason family)

This is primarily a pipe organ voice—a combination of pure organtone with a bright string-tone, the latter imparting that richness to the foundation tone which has won the stop universal approval.



string 8' (string family)

This is a foundation stop which is appreciated by the pipe organist because of its delicate, silvery, singing quality. When played without a vibrato you will hear the rich harmonics of a fine pipe organ. With the Fast-Heavy Vibrato in the upper register, it closely resembles the fullness of an orchestral violin. By playing in the lower portion of the keyboard a viole effect can be obtained with the use of the Slow-Heavy Vibrato. In combination with other stops, this string tone adds a richness and brilliance to the tone quality.

clarinet 8' (reed family)

This is an excellent solo stop. No other organ has such a fine clarinet. When played without vibrato, it closely resembles the orchestral clarinet because it has a smooth, hollow, reed tone of great beauty. It not only possesses this richness of the orchestral clarinet, but in the middle portion of the keyboard it is superior to the orchestral instrument, because it is less shrill. The classical music lover will prefer this voice with the "Slow" Manual Attack for a "lip" action. When combined with the Quint 51/3' or Twelfth 23/3', many unusual and "oriental" effects can be obtained. For related effects, it is desirable to also add the trumpet or string voices.

trumpet 8' (reed family)

A bright silvery voice with just sufficient brassiness to give it true

character. When played as a solo in the middle register of the keyboard with a Slow-Heavy Vibrato, this stop to some extent produces the effect of an orchestral trumpet. Quite often, it is used to combine with other stops to give a brilliance to the music being played. In such cases the addition of a Fast-Heavy Vibrato for popular music is most desirable.

saxophone 8' (reed family)

Here is a lovely voice for ballads and romantic selections—soft and penetrating in the higher octaves, full and rich in the lower octaves. It does not appear on many organs because it is a difficult sound to create. However, the Lowrey Festival being an unusually fine organ, it can closely reproduce the sounds of the saxophone by the addition of a Fast-Heavy or Fast-Light Vibrato and the occasional use of the exclusive Lowrey Glide.

oboe 8' (reed family)

A melodial voice, having a pastoral character, full of tenderness. It is an excellent solo stop, closely resembling the plaintive voice of the orchestral instrument. For those who know the orchestral instrument, we merely mention that this stop has a greater range. A fascinating and haunting quality can be obtained by adding the Clarinet and the Twelfth 2%. In such case, the effect is created with or without vibrato and may be played throughout the entire keyboard.

STOP TABS AND WHAT THEY MEAN

flute 4' (flute family)

This stop is typical of the Lowrey's clear, clean flutes and is the "little brother" of the 8' and 16' Flutes previously discussed. It plays one octave higher than the 8' Flute and two octaves higher than the 16' Flute. When you play arpeggios without vibrato, your result will be celeste and bell-like tones; you will also notice a brightness and keen quality when you combine this with other stops. When the Flute 4' is played with the Long Sustain and combined with the 16' Flute, it creates an "echo chamber" effect.

string 4' (string family)

This is the companion of the String 8' and plays one octave higher. When played as a solo with the Fast-Heavy Vibrato, it closely resembles the "Gypsy" or orchestral violin in a higher register. When combined with other stops, it adds a rich, "biting" quality, very brilliant in nature. It is absolutely essential for many types of organ music.

piccolo 2' (flute family)

This brilliant flute stop is pitched two octaves above the Flute 8'. The duty of the Piccolo 2' is, principally, to extend the range of the 8' and 4' flutes in the high register. Its beauty of tone and clarity of pitch give it wide use in any register on the keyboard. The "whistling," piercing quality of the Piccolo 2' in its highest compass is extraordinarily powerful, making it of extreme value in both solo-work and artistic registration.

quint 51/3' (flute family)

This stop should never be played alone. The reason is that it produces a tone a "fifth" above the key which is pressed. In other words, when you press a "C" only the "G" will be heard—if you press a "D" only the "A" will be heard. The stop is a "must" on all fine organs because in combination with other stops, it adds a richness called "tone coloring." In combination with the Oboe, Clarinet, Trombone and other stops (played without vibrato) it lends an "Oriental" atmosphere to any melody. Continued experimentation with this stop will determine its best uses.

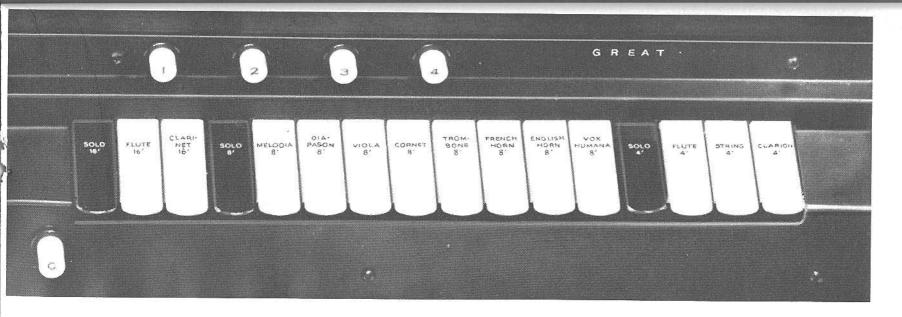
twelfth 22/s' (flute family)

Like the Quint $5\frac{1}{3}$ this stop should never be played alone. The reason is that it sounds the "twelfth" note (an octave and a fifth) above the key which is pressed. Just as with the Quint $5\frac{1}{3}$, when you pressed a "C" only the "G" was heard—with the Twelfth $2\frac{3}{3}$ when you press a "C", the "G" an octave above will be heard. When the Twelfth $2\frac{3}{3}$ is used in combination with other stops it reinforces the upper harmonics and provides additional color and brilliance. The Twelfth $2\frac{3}{3}$ and Quint $5\frac{1}{3}$ are invaluable in building-up and delicately tinting other distinctive voices.

Lowrey Voices · GREAT MANUAL

flute 16' (flute family)

Flute stops are essential to any competent organ. A good flute



should be round and mellow, clear and clean without overtones or "fuzziness." A great deal of research has gone into the flutes of the Lowrey. You will enjoy the fine quality of this and the other flute stops since they add a "mellowness" which combines beautifully with all other stops on the manuals.

clarinet 16' (reed family)

The "Bass" Clarinet, though strongly resembling the tone of the Clarinet 8' on the Swell Manual, is of darker color in the low register—a rich "throaty" quality. It is a beautiful solo stop and can be combined with other voices to produce many rich ensembles and colorful combinations.

melodia 8' (flute family)

A beautiful flute-tone organ stop with a smooth, singing quality. To maintain the real beauty of tone, it has been carefully voiced so as not to be over-powering. When arpeggios are played in the upper register, it has a lovely "bell-like" quality which makes a delicate accompaniment for the String and Clarinet voices on the Swell Manual.

diapason 8' (diapason family)

The Diapason's tone has always been, and always will be, the unique and special glory of the organ. It has a full, round, and dignified tone giving a foundation on which to build compound tones of surpassing grandeur and beauty.

viola 8' (string family)

The full and rich tones of the Viola 8' will impart strength and color to every combination that it is used with—creating valuable tonal colorings in registration in which brightness is desired without a cutting quality.

cornet 8' (reed family)

This voice has powerful and dominating tones and will become the delight of the organist in his registrations, forming with stops of all tonalities—combinations of rare beauty and charm.

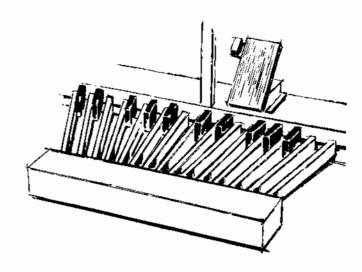
trombone 8' (reed family)

This stop has the same "liquid" tones as the Trombone 16' on the Swell Manual, but it sounds one octave higher. When played alone on the Great Manual, it offers the ideal accompaniment for the Trombone 16'. In combination with other stops, it adds a resonance or "body" to the voicing.

french horn 8' (reed family)

This stop can be used with the Solo 8' to play either melody or counter-melody on the Great Manual. Without a vibrato it closely resembles the orchestral instrument. It has been made a "must" on all Lowrey Organs since, in recent years, the French Horn has become a very important voice on many expensive organs. It should be used frequently as the accompaniment for softer voices and combinations on the Swell Manual.

STOP TABS AND WHAT THEY MEAN



english horn 8' (reed family)

A beautiful solo stop and valuable in artistic registration, producing in combination with softly-voiced stops of contrasting and harmonic-corroborating qualities compound voices of remarkable tonalities.

vox humana 8' (reed family)

This stop requires the aid of the Vibrato in a Fast-Heavy setting, imparting a distinctive coloring to soft combinations of contrasting tonalities. Played alone in full chords, its tones are rich and beautiful.

flute 4' (flute family)

A clear flute stop pitched an octave higher than the Melodia 8'—giving a special brilliancy and vivid coloring to solos as well as ensembles.

string 4' (string family)

A string stop with velvety rich voicing pitched an octave higher than the Viola 8'. It is extremely valuable in the production of rich and quiet colorings.

clarion 4' (reed family)

This brilliant stop reinforces the reed chorus, providing additional support to the upper harmonics. It is voiced similar in all respects to the Cornet 8', to which stop it stands in the relationship of a true octave.

Lowrey Voices · PEDALS

bourdon 16' (flute family)

A basic stop of 16' pitch having a deep rich tone of the pure flute family. It provides an ideal foundation for solo or accompaniment playing—and because of its character and voicing, it has an amazing carrying power without being loud or overpowering.

string bass 8' (flute family)

A colorful stop voiced with the foundational characteristics of the flute as well as the richness of the string. This beauty of voicing gives the clear, resonant tones of the "string bass" section of an orchestra—providing the depth and foundation to the music you play. For a "bull-fiddle" effect, add the Pedal Sustain in the "Medium" position and play the pedals with a light, quick touch in the upper octave.

Either of these 16' and 8' pitches can be used individually or in combination on the 25 note pedal keyboard of your Lowrey Festival. The judgment is left entirely to the discretion of the player, based upon his style and the music.

In addition, there are four settings of pedal intensity—very soft, soft, medium, and full. (The three white tabs located in the top row of controls.) This versatile arrangement offers the equivalent of 12 individual pedal stops to balance properly to any combination of manual keyboard voices. A complete description of these tabs is discussed on page 15.

MECHANICAL STOPS

vibrato

This interesting and appealing variation is controlled by the three black tabs at the right end of the second row of controls. They create the wavering effect which you notice most in the violin, the cello and other string instruments. Listen to a singer and you will hear the same vibrato. However, the "speed" of the vibrato (wavers per second) varies with the instrument or voice. So does the "depth" which is the extent of the vibrato above or below the accurate pitch. Some instruments have a great deal of vibrato—others have very little—some have none.

With the right hand vibrato tab in the "Off" position, it makes no difference what is "set up" on the other two. The tone will resemble that of a pipe organ which obviously adapts music played in this way to many religious selections as well as some classical music. (However, since music is an expression of a composer's or musician's feelings, there is no positive rule for the use of vibrato.)

Here is the first effect. With the three vibrato tabs off, hold a tone. Then turn the right hand tab to the "On" position. You are now using a "Slow-Light" Vibrato which is ideal for offertories and voluntaries in church music and is used frequently for operatic, light classical, and some ballad selections.

Second, (holding the same tone) move the left-hand tab from Slow to Fast. Now you have a "Fast-Light" Vibrato which can be used for almost any type of music.

For a third vibrato, move the center tab from Light to Heavy. Now, all three tabs are in the "on" position so you have a "Fast-Heavy" Vibrato. This is used to a great extent for ballad and popular music. The string voices sound unusually rich and full when this vibrato is used. Unusual "Theater Organ" effects can be obtained when using the flute stops.

For the fourth vibrato combination, move the left hand tab to the Slow position. This Slow-Heavy combination is used less frequently than any of the others but it does have a desirability for Trombone, Trumpet and for solo Cello and Hawaiian effects. This unusual vibrato is applied differently by different musicians. Note that this simple tab arrangement will permit you to vary your music frequently while you play. Sometimes you will use a particular vibrato for only a few measures—or, by just turning the right-hand tab to Off, you suddenly have no vibrato and after playing four or eight measures, you can easily go back to the previous vibrato.

In summary then, change the vibratos frequently and you will never have the feeling that your music is becoming monotonous. This is the "seasoning" which you can add to make your music just that much more delightful.

solo 16', 8', 4', 2', $5^{1/s'}$, $2^{2/s'}$

These nine Solo tabs are another feature originated and developed by Lowrey engineers which will make you both happy and proud that you have selected a Lowrey Festival. They produce no sound in themselves but they are probably the most valuable tabs at your finger tips, because they greatly multiply the number of voice combinations from your Lowrey Festival.

The Solo 16', 8' and 4' on the Great Manual increases the volume of any or all of the thirteen Great Manual voices. For example, you may find that a solo melody of single notes in the left hand (or just staccato chords) may not be loud enough. Without adding more voices but just turning on the Solo tabs, the volume of the notes played on the Great Manual will increase and offer the proper contrast to the voices on the Swell Manual.

Generally, voice combinations are set up for the Swell Manual without any of the Solo tabs. Try this by setting up the six flute voices of 16′, 8′, 4′, 2′, Quint 5½′ and Twelfth 2¾′. Now, if you wish to emphasize the lower register of this combination, turn on the 16′ Solo. By the same token, the 8′ Solo brings out the middle range and the 4′ and 2′ Solos emphasize the higher ranges. The "coloring" quality of the Quint 5½′ and Twelfth 2¾′ are accentuated by the use of their solo tabs. In other words, these six solos double the number of Swell Manual voices. Each of the voices is an accompaniment or "soft" stop—by applying a Solo tab, you make them a solo or "loud" stop.

MECHANICAL STOPS

Solo (Continued) Remember, if a selection is played on both manuals and you feel that the volume intensity of one manual should be increased. there is no need to add more voices as you would have to do on other instruments. Merely turn on a Solo tab or two of your choice and you suddenly lift the melody so it stands out just like a solo instrument in an orchestra.

> When Solo tabs are not used in either manual you have thousands of tonal combinations which, like other organs, can be arrived at purely by the use of the voice tabs. However, by adding the various "Solos," you bring into play additional thousands of combinations which will make your music just that much more enjoyable and interesting. No other comparable instrument offers you this "Solo" method of easily and simply selecting so many additional tonal combinations.

coupler—swell to great 8'-4'-2'

The red tabs at the extreme right of the bottom row of controls will "couple" any combination of the pre-sets and 8', 4' and 2' Swell Manual voices to the Great Manual. These tabs are colored red to show you that they are associated with all the solid red tabs above as well as with the white tabs printed in red. Turn on any of the red tabs for the Swell Manual—then, holding a key on the Great Manual, turn on the right-hand "coupler." You will notice that you get the same voice and effect of the Swell Manual but it is softer. This is because the left-hand tab is in the "Soft" position. When you change the left-hand tab to the "Loud" position, you will have the same result and volume as you do from the identical key above.

Only a few of the multiple uses for these tabs are suggested below. You might wish to accompany the Accordion voice on the Swell Manual with the same voice on the Great Manual with the "Soft" coupler. This would also be true of the Vibraharp and Guitar. In the case of the Harpsichord and Music Box, you probably will wish to couple the voice to the Great Manual using the "Loud" position.

If you have a combination of 16', 8', 4', 2', Quint 51%' and Twelfth 23's' voices with Sustain on the Swell Manual, you can couple down only the 8', 4', and 2' voices to the Great Manual for a complete sustain effect below. Also, just as you are able to get a combination of staccato and sustain voices on the Swell Manual, so you can get the same effect on the Great Manual. For example, using a sustained Vibraharp and 16' Flute on the Swell Manual and coupled "Soft" to the Great Manual, add the Solo 8' and Melodia to the Great Manual. You now have a registration which will permit staccato chords on the Great Manual with some "reverberation" coming from the Swell Manual.

The setting of these two tabs will depend to a great extent on the volume from the Swell Manual and the technique in playing each manual. Your own judgment will guide you after you have had some experience with these new tabs. Remember, the "couplers" do not couple down any of the 16', Quint 5\\\3' or Twelfth $2\frac{2}{3}$ voices.

coupler—swell to pedal 8'-4'-2'

The pedal section versatility of your Lowrey Festival is further enhanced by the Swell to Pedal 8'-4'-2' Coupler. This tab (the third red tab to the left in the bottom row of controls) will "couple" down any combination of the seven 8' voices, two 4' voices, the 2' voice, and the five Pre-Set Percussion voices of the Swell Manual to the 25 note pedal keyboard. This vast variety makes it possible to play anything from a delightful Piccolo solo to a full ensemble with the 16' and 8' voices of the pedal section. No other instrument offers the tremendous array of colorful solo voices, and beautiful tonal combinations that can be played with the feet.

manual sustain—medium, long

These are the two red tabs located in the "Special Effects" division they control the seven 8' voices, the six pre-sets, the two 4'



voices, the 2' voice and of course, the three red "solos" on the Swell Manual. For your convenience, the voice tabs are printed in red and the mechanical Solo tabs are solid red. Turning both of the Sustain Tabs "on" will cause the 8', 4' and 2' Swell Manual voices to die away over a period of about two seconds after a key is released. By turning the left hand tab to Medium, there is a sustain which lasts about one second. These two tabs can create many different instrumental effects. However, the wide scope of the Manual Sustain does not stop here.

Reverberation of a most authentic nature can be obtained with your new Lowrey Festival. Use any selection of the 16′, 8′, 4′ and 2′ voices and play something in the conventional organ manner. As with any organ if acoustics are poor (due to the smallness of the room, carpeting, draperies, and other factors which deaden sound), the resulting organ tone will seem suppressed and restricted in its tonal quality. Then, introduce the "Medium" Manual Sustain and later the "Long" Sustain. You will notice that the walls of the room seem to "disappear" because you have added a natural reverberation which normally could come only from a large vaulted chamber or auditorium with hard floors, walls and ceiling where the sound would echo and so improve the tones produced. Your new Lowrey Festival will sound beautiful no matter how small or acoustically "dead" the room may be.

For "echo chamber" effects, try the 16' Flute and the 4' Flute with the Long Manual Sustain. Play a novelty tune or any bright melody with a staccato touch in the middle to the upper section of the Swell Manual. The 16' Flute will be definitely staccato, but the 4' Flute will "ring out" as if it were played in an echo chamber. Try this also with the 2' Piccolo or any of the 8' voices for a thrilling new adventure in the realm of reverberation and echo effects.

staccato and manual attack

These two stops should be discussed together since they are related to each other. With both tabs in the "off" position, the

attack of the 8', 4' and 2' voices is "normal"—neither slow nor "popping" as found on some older organs. Move the Manual Attack tab to the "Slow" position and you will notice that the tones are somewhat delayed as they would be on an accordion or a pipe organ. To obtain the brilliant or "popping" attack, desired by some professionals for fast and popular music, the Staccato tab should be turned to the "on" position.

Note that even if you are using the Sustain on the upper manual, you can move directly to a staccato attack by turning the Staccato tab on without touching the sustain tabs. This desirable arrangement permits you to change the character of your music from one extreme to the other with just the flip of a single tab.

Thus, your Lowrey gives you the choice of three different kinds of manual attack. For example, play the Clarinet voice without vibrato. With the two Attack tabs in the "off" position, the Clarinet will have the soft attack of the French instrument. When the Staccato tab is turned "on," the brilliant attack is at your command. Use these various attacks to make your music more interesting, more versatile and more enjoyable.

pedal—soft, medium, full

These are the three white tabs in the top row of controls marked "Pedal," and they control the volume of the twenty-five "keys" played with the feet. With the three white tabs in the "off" position, place the Bourdon 16' in the "on" position, then hold a pedal key and place the expression pedal about half way. This is a "very-soft" pedal position, sufficient for the soft voices such as the String 4' or Oboe 8' on the Swell Manual, and the Vox Humana 8' or English Horn 8' on the Great Manual. Now, still holding the pedal key with your left foot and without moving the expression pedal, turn on the Soft, Medium and Full tabs in that order. Here you have three additional degrees of volume or "pedal intensity." You will find this wide range of four pedal volumes helpful in matching any stop registration you select.

MECHANICAL STOPS

Pedal (Continued)

For soft classical or liturgical music where there is no definite rhythm, the pedal setting should probably be soft. With a rhythm tune like a waltz or a popular song, you may wish to use the Medium intensity and as you add voices to both manuals and increase the volume from the keyboards, you will probably then wish to use a Full pedal volume.

As you play different selections you will sense the necessity for more or less pedal volume and will soon become accustomed to making the various changes.

pedal sustain—medium, long

This is an outstanding Lowrey feature, welcomed by the professional and absolutely essential for proper pedal control by the less experienced. With these two tabs in the "off" position, press a pedal key several times. The effect is similar to that of most electronic organs since they do not have a "Pedal Sustain." Now with these tabs in the "on" position, press a pedal again. After releasing the key, the pedal tone reverberates and dies away in about four or five seconds. It resembles a pipe organ tone in a large cathedral or amphitheater, or the resonance of a bass viol. Thus, you can lift your foot from one key and the sound will continue for several seconds, giving you time to press the next key. You can even get a "pedal legato" when you play from "C" to "G"—or any other keys which are widely separated on the pedalboard.

Note that this has been engineered so that the first pedal note is cancelled the instant you play the second note.

The Long Pedal Sustain may be too long for certain types of music when less sustain is desired. For that reason, Lowrey engineers have developed the Medium Sustain, used by turning the right-hand tab to the "off" or "med." position. The use of this exclusive Lowrey feature is dependent upon the music and the way you play it. Therefore, as you play different selections, experiment with these three settings until you are familiar with their many uses.

This Pedal Sustain, developed by Lowrey engineers, is most desirable not only because it closely approximates the results associated with a pipe organ, but because it also offers a marvelous "assist" to the relatively inexperienced organist.

organ volume

In many respects your Lowrey Festival is like a pipe organ since the volume keeps building as voice after voice is added to the manuals. Therefore, the Lowrey Festival has been equipped with the "Organ Volume" tab (located to the far left on the bottom row of controls) to govern the overall volume of the entire instrument including both manuals and pedals.

When you play with just one or a few stops, you will prefer to have this control in the "Solo" position. When you use many stops on both manuals (which requires increasing the pedal volume as well), you will undoubtedly prefer to place this control in the "Normal" position. With just a moderate amount of stops for both manuals and pedals, the control can be in either position as your judgment dictates.

Remember, this is an *overall* volume control, so when you feel the output of the organ is too loud, place the tab in the Normal position. When you play with just a few voices, you will then wish to place the control in the Solo position.

manual volume (swell and great) soft, full

This is an outstanding Lowrey feature which gives you complete control of the volume of each manual. (The black tabs located to the left in the bottom row of controls.) You now have three volume intensities for the voices on the Swell and Great Manuals. For example: turn "on" the Melodia 8' on the Great Manual and play a chord—now add the Solo 8'—finally the Great Manual Volume control in the "Full" position. This makes it possible for the exact volume of each manual to balance properly to any combination of voices.

REGISTRATIONS



If you have absorbed the material in the previous pages, you should have a fairly clear understanding of the various terms used by the organist as well as a knowledge of many organ stops. You are now in a position to absorb knowledge of organ 'registration.'

To begin with, organ registration is nothing more than selecting and combining various voices of an organ so a desired effect is produced when the music is played. Actually, the word "registration" is the same thing to organ music that "orchestration" is to orchestral music. Keep in mind the stops of an organ are to the organist what the palette is to the painter—they each have colors to mix and the final result is dependent upon the ability to understand the individual colors with which they work.

Beyond that, all a person needs when playing an organ is a personal taste and imagination. Just as a painter may have a fine knowledge of colors, and yet be a poor painter because of lack of imagination when using those colors—so may a performer be familiar with music, and yet not please his audience because of his lack of imagination when using the voices.

One more thing. Unless a person is a "sound engineer" one room may look about the same as another—however, the acoustics may be very different. Any instrument or voice, particularly an organ, will sound much different in a large room than a small room. Generally, in a large room, an organ sounds better—but if the room is heavily draped, fully carpeted and contains a lot of furni-

ture (people too) the result will appear muffled or "dead."

Placement of the organ in the room is also very important. There is no way to determine this in advance—only through experiment can the best results be obtained. It will sound better in one place than it will in another—actually it should face an open area so that the sound will not be restricted. Therefore, a particular tab arrangement might sound a little differently if the organ is moved about the room or particularly if it is moved to another room. Avoid if possible, acoustic tile on walls and ceiling, drapes, carpeting and other materials which will absorb sound.

With this understanding, the following registrations are merely "suggested." You will notice they are quite different and you should consider them as basic—in other words try them but undoubtedly you will wish to make some changes to fit the particular selections which you play. Also, you may use several different registrations for one selection because you may play it in various ways and thus create different effects.

Above all, remember this—there is no one prescribed tonal combination for any selection of music. As a master chef seasons a fine dinner because he knows what to use and how to use it—or as an artist mixes his colors in just the right amounts—so you can blend the many fine voices and different effects of the Lowrey Festival Organ. Through experiment and a good knowledge of the stop tabs, gained from the previous pages, you can suit your own musical taste and meet the need or mood of any occasion.

PUSH-BUTTON PISTONS · Pre-sets

The Push-Button Pistons, the eight white buttons located above the Swell and Great voices, actuate the stop tabs for the Swell and Great manuals. Four different combinations of voices for the Swell manual, as well as four for the Great manual are instantly available to the organist by use of these Push-Button Pistons. Use the Pistons in combinations or individually—this will enable you to change registrations rapidly without pausing to select several voices. They will also provide a complete tonal "build-up" or crescendo. Hold a chord, either on the Swell or Great manuals, and push the Pistons in order—1, 2, 3 and 4.

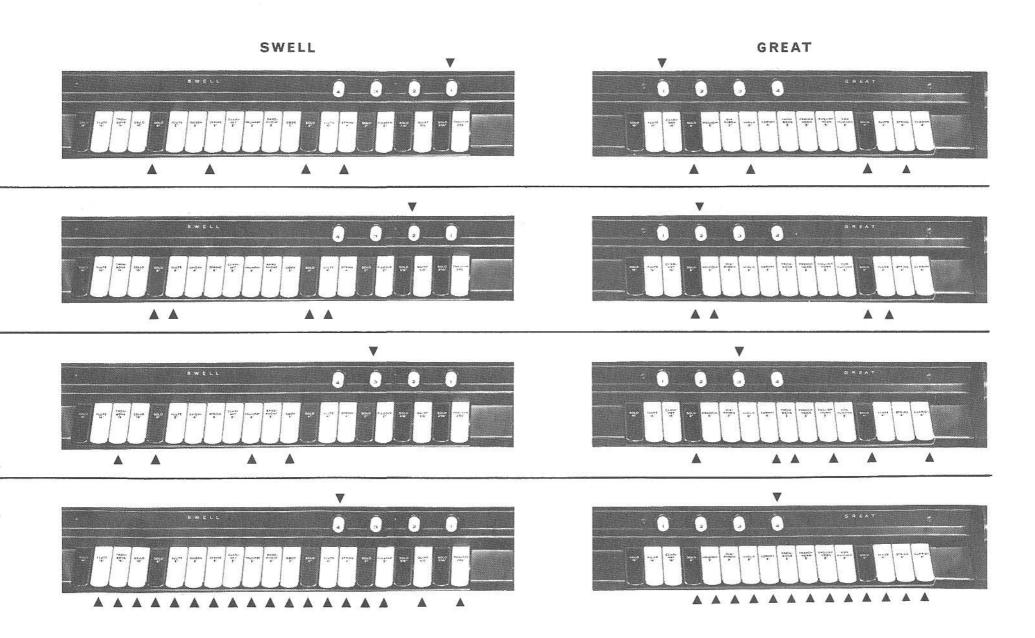
With Piston No. 1 you will hear the silvery, rich tones of the 8' and 4' strings. Now press Piston No. 2 and the smooth, singing flute voices will blend perfectly in building-up and delicately tinting the ensemble. For a special brilliancy and vivid coloring, the reed chorus on Piston No. 3 reinforces the string and flute tones—yet does not overpower. With the pressing of Piston No. 4 you will have "full organ"—forming a foundation of unsurpassing grandeur and beauty.

You can cancel or clear all of the voices and Pre-Set Percussion tabs for each manual by pushing the cancel buttons—the two white buttons located under the Swell and Great voices.

The 4th Piston of each manual can be changed to permit any combination of voices you desire. (Consult your Lowrey dealer.)

By becoming familiar with the combinations on each of the Pistons, you will notice that they will add smoothness and ease of playing to your music.

SWELL	GREAT
Piston No. 1 (String Chorus) Solo 8' String 8' Solo 4' String 4'	Piston No. 1 (String Chorus) Solo 8' Viola 8' Solo 4' String 4'
Piston No. 2 (Flute Chorus) Solo 8' Flute 8' Solo 4' Flute 4'	Piston No. 2 (Flute Chorus) Solo 8' Melodia 8' Solo 4' Flute 4'
Piston No. 3 (Reed Chorus) Trombone 16' Solo 8'. Trumpet 8' Oboe 8'	Piston No. 3 (Reed Chorus) Solo 8' Cornet 8' Trombone 8' English Horn 8' Solo 4' Clarion 4'
Piston No. 4 (Full Organ) all except Solo 16' Solo 5'/4' Solo 23/4'	Piston No. 4 (Full Organ) all 8' & 4' Stops



LOWREY MOVING STEREO

Much of the Festival's unusual splendor and excitement is due to Lowrey's MOVING-STEREO—sound that comes "alive" in its proper place.

What actually happens is that you are placed in a relationship to music probably never before experienced. Let's compare this exciting sound to the dimensional experience of stereo-viewing. When a stereoptic slide is seen in a viewer, the eyes focus by combining both photographs into a unified picture in its true perspective, creating a third-dimensional effect. Similarly, Lowrey Moving-Stereo gives you an over-all spaciousness and roundness to sound—as if one were listening from a point suspended in air. Enveloped in solid sound, you will hear the overlapping and blending of music in its true perspective.

Now for the first time, with the addition of a tone cabinet, you will be able to add two exciting new dimensions to your playing—
depth and direction. Depth—because you can balance all the subtle inner voices in the background that lend emotional color to the main melodies in the foreground. Direction—because you can place any orchestral voice or combination in any direction you so desire. Thus, with the touch of a tab, you can hear—better than ever—the great conversations of your music. This is the magic of LOWREY MOVING-STEREO!

The four white tabs, in the second row of tabs, control the Lowrey Moving-Stereo. With these tabs you will be able to "place" the sound of all the voices on both manuals and the pedalboard.

Moving Stereo—for great and swell manuals

To help you to understand all of the exciting ways that your

music can be "moved" from side to side, or to completely surround you—set the following combination on your Festival, place a hand on each manual, and try each of the Moving-Stereo positions shown.

swell (Piston No. 2)	great (Piston No. 1)	pedal
Solo 8'	Solo 8'	Bourdon 16'
Flute 8'	Viola 8'	String Bass 8'
Solo 4'	Solo 4'	Soft
Flute 4'	String 4'	Pedal Sustain on Med

Moving Stereo—more manual positions

For additional Moving-Stereo positions, place both hands on the Great Manual and "couple" any of your Swell Manual 8', 4', 2', and pre-set percussion voices down to the Great in either the "soft" or "loud" position. Then repeat the seven Moving-Stereo settings.

Moving Stereo—for manual and solo pedal

Now couple down any of the Swell Manual 8', 4', 2' and pre-set percussion voices to the Pedal, then with both hands on the Great Manual, and any of the Great Manual voices, you will create new positions by repeating the Moving-Stereo tab positions shown.

Thus with the self-contained speakers of your Festival, and with the aid of one external speaker, you can create all of the sounds of the "live" orchestra, a huge Cathedral Organ, a small combo . . . in fact, any sound—and in any position!





SPEAKER

	MAIN	MAIN	OFF
MAIN TO ECHO	SWELL	GREAT	ECHO TREM
200	ЕСНО	ЕСНО	ON

The voices on both manuals will be heard just through the self-contained speakers of the Festival.

	MAIN	MAIN	OFF
ADD MAIN TO ECHO	SWELL	GREAT	ECHO TREM
38 18	ECHO	ЕСНО	ON

The voices on the great manual will be heard through the speaker on the right. The voices on the swell manual will be heard through the self-contained speakers of the Festival.

	ECHO	ЕСНО	ON
MAIN TO ECHO	SWELL	GREAT	ECHO TREM
400	MAIN	MAIN	OFF

The voices on the swell manual will be heard through the speaker on the right. The voices on the great manual will be heard through the self-contained speakers of the Festival.

	ECHO	ECHO	ON-
ADD MAIN TO ECHO	SWELL	GREAT	ECHO TREM
400	MAIN	MAIN	OFF

The voices on both manuals will be heard just through the speaker on the right.

10000	MAIN	MAIN	OFF
MAIN TO ECHO	SWELL	GREAT	ECHO TREM
20110	ECHO	ЕСНО	ON

The voices on both manuals will be heard through the speaker on the right and through the self-contained speakers of the Festival.

4.00	MAIN	MAIN	OFF
ADD MAIN TO ECHO	SWELL	GREAT	ECHO TREM
	ЕСНО	ЕСНО	ON

The voices on the great manual will be heard just through the self-contained speakers of the Festival. The voices on the swell manual will be heard through the speaker on the right and through the self-contained speakers of the Festival.

	MAIN	MAIN	OFF
ADD MAIN TO ECHO	SWELL	GREAT	ECHO TREM
LONO	ЕСНО	ECHO	ON

The voices on the swell manual will be heard just through the self-contained speakers of the Festival. The voices on the great manual will be heard through the speaker on the right and through the self-contained speakers of the Festival.

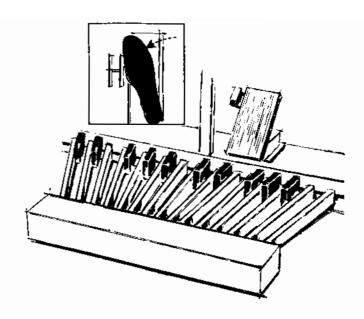
LOWREY GLIDE CONTROL

There are many reasons why your Lowrey is such a superior instrument. If you have carefully read the previous portions of this book, you are now aware of those many advantages. Once you feel you have obtained some familiarity with your new instrument, you are ready to move into the use of the *exclusive* Lowrey Glide Control.

Musicians everywhere—amateur, artist, and professional—all say that the exclusive Lowrey Glide Control is the greatest organ development in recent years. Some organists are not even aware that it is available; and not many realize the wonderful way in which it enhances the orchestral voices of the trombone, clarinet, trumpet, strings, flutes, etc.

The white tab marked "Glide" at the left end of the bottom row of controls, governs the Glide Control on the left side of the Expression or "swell" pedal. When you have the Glide tab in the "Cont." position, or "controlled" position, you can push the Glide Control to the left with the inside of the right foot and the entire instrument will "flat" about a semi-tone. (Also, the vibrato will stop completely.) As long as you hold the control to the left, it will stay that way because you "control" it. When the Glide Control is released by the foot, the tones will "glide" back to normal pitch and vibrato as determined by the stop tabs. Now, turn the tab to the "Auto." position, which means that the return to normal pitch and vibrato will be automatic. Hold a tone on the manuals and press the Glide Control, holding it to the left. You will notice that the tone will "glide" instantly to the proper pitch and vibrato and return without your having to release the control.

For the best playing technique, the Glide Control should be pressed with the foot at the exact instant certain keyboard notes



are played—and then released at once. For example, start using the Glide Control by trying it with the Trombone 16' and a Slow Heavy Vibrato. Play Tommy Dorsey's familiar "I'm Getting Sentimental Over You" with "glide," and you'll be able to duplicate that well-known trombone "smear." No other organ can do this!

Also, you can get a realistic string "glissando" by using the Lowrey Glide Control together with the String 8' of the Swell Manual, and the Fast-Heavy Vibrato. Try Victor Herbert's beautiful "Sympathy," or any other of your favorite violin selections. The Glide Control will supply the "glissando" of the strings. Adding the Manual Sustain will give the effect of "singing strings."

For Hawaiian guitar effects, you can use the Clarinet 8' with a Slow-Heavy Vibrato, the Flutes 8' or 4' with a Fast-Heavy Vibrato, or a combination of any of these tabs, with any Hawaiian selection of your choice. Be sure to use the Long Manual Sustain and play in a semi-staccato fashion. Press the "glide" the instant you strike a key. However, use it infrequently—do not abuse it by playing most notes with glide. The realism of this Hawaiian Guitar effect will amaze you.

Like anything new, a few minutes of practice are necessary for you to become adept with the Lowrey Glide Control. As time goes by, however, you will find more and more uses for it. Of course, your ability to use it will also improve. To quickly improve your use of the glide, listen carefully to records, radio and television. Pay particular attention to the way musicians play their various instruments.

Also, whenever you try these different effects with Glide Control, be sure to remember that it is important to select the correct vibrato. Making sure of this is just as important as selecting the proper individual voice tabs on the manual.

The care of your LOWREY

console and bench

The finest woods, both solid and veneer, have been used so that the cabinet will retain its beauty—and its appearance will improve over the years. It has been hand-rubbed to give you a highly finished piece of furniture. A soft, clean, dry cloth cannot be surpassed for dusting. To remove fingerprints or dulling film use a soft cloth slightly dampened with water and a little mild soap. Immediately wipe dry with a soft cloth.

keys and stop tabs

To remove stickiness or greasiness which may have accumulated, use a clean soft cloth dampened in water and a little mild soap. Do not use any solvents, thinners or dryers such as alcohol, gasoline, lighter fluid, carbon tetrachloride, etc. They may attack either or both the lettering and the finish on the tabs and keyboards.

foot pedals

These can be cleaned with a damp cloth and mild soap solution as recommended above.

sun, heat and cold

Here is a final word about the care of the Console. Do not place it where the sunlight will be directed on the cabinet. In time, as with any piece of fine furniture, the sun will bleach the finish. Also, heat from the sun can damage the finish. If the instrument is placed near a window which is opened in winter, sudden blasts of cold air on a cabinet at room temperature can cause damage. Placing the cabinet next to a radiator or hot air register is also undesirable. Heavy objects should not be left standing on the top of the case since in time they can mar the finish.

moving the Lowrey organ

The weight of your instrument is carried on the 4 legs of the Console. When moving the instrument from one part of the room to another, care should be taken (especially on heavy carpets) so that undue strain is not placed on any one leg.

There is no need for bolting or fastening any internal part of the Lowrey when moving. Merely be sure that all screws which hold the back in position are securely fastened. Careful consultation with your mover will assure you of a satisfactory moving job without damage.

Electrical Information

NEVER PLUG THE ORGAN INTO A DC OUTLET—DAMAGE MAY RESULT. The line cord from the rear of the Console MUST BE PLUGGED INTO STANDARD 117 Volt, AC LINE. (If the power supplied in your area is other than 117 Volt AC, 50-60 cycles, be sure there is a notice on the back of the Console that corresponds to your special power requirements.) Normal voltage fluctuations won't affect your Lowrey, although regulation by your electrician may be required if voltage goes above 125 or below 100 volts.

"off-on" switch

The "OFF-ON" switch is located to the right of the lower keyboard. The near-by pilot light indicates when the switch is "On." Connected to the "Off-On" switch, under the lower keyboard, is a "Damp-Chaser" or heater which will protect your Lowrey against dampness. It does not operate when the organ is in use but it comes on automatically when you turn off the organ. Very little electricity is consumed by this heater so we recommend that you keep the line cord plugged into the wall outlet at all times.

master volume control

The master volume control permits overall adjustment of the speaker volume. This control is the slide switch on the amplifier chassis. It should be set to the requirements of the room size and the playing habits of the individual. Remember, the amount of power delivered to the speakers depends upon the degree of swell pedal used, the number of stops turned on and the number of keys being played. For best musical effects, the master volume control should be set as high as possible—but so that the speakers do not distort.

The Lowrey Festival is powered by a sturdy 40 watt amplifier driving two heavy duty speakers—one woofer and one mid-range driver. In addition, there is sufficient power to add still other speakers if you desire.

AUXILIARY SPEAKER sockets are provided at the center of the power-supply chassis. The MAIN socket is wired across the output transformer secondary. It is used for adding an external speaker—or another amplifier which in turn can drive an additional speaker or speakers. Lowrey Sound Equipment is available—it is matched to your organ to assure best possible results. See your Lowrey Dealer, or write for descriptive literature. The ECHO socket is wired across an Echo Driver Line Transformer—to be used with an external amplifier speaker combination of no less than 10,000 ohm input impedance.

tuning

Because Lowrey's electronic circuits are very stable, your Lowrey Organ will probably never need to be tuned. The positively locked oscillator system was carefully tuned at the factory. If a special use requires a change in pitch of the entire organ, such as playing with a piano or orchestra not using the standard A-440 pitch, this can be easily and quickly accomplished with the Lowrey—there are only twelve tuning adjustments on the entire instrument. We recommend that you contact your Lowrey Dealer for this service. Do not tune until the organ has been "on" for about twenty minutes.

Why your LOWREY tones are superior

One of the reasons for the superior tonal effects found only in the Lowrey Organ is the use of the finest tone generators ever developed employing the "Eccles-Jordan" circuit. Over a quarter-century of research in the electronic production of sound is back of these truly remarkable generators giving you the string tones so rich in harmonics. Because of these same generators, protected by a number of exclusive patents, your Lowrey can also produce the finest of reed tones and the purest of flute tones. Anyone who understands the vast field of harmonics and the "harmonic structure" of orchestral instruments can verify that your Lowrey can produce all four basic organ tones . . . diapason, flute, reed and string.

The Underwriters' Laboratories seal on your Lowrey is further proof for you of its fine quality and workmanship.

Technical Information

Our past experience has shown us that although many purchasers of Lowrey Organs have no technical understanding of the vast field of electronics, others do have widely varying degrees of electronic knowledge. In the limited space here we cannot presume to give anyone an education in electronics; so this has been prepared for those who know something of the subject.

If you have had no education or experience in electronics, we recommend that you call your Lowrey dealer if service is required. However, if you have replaced tubes in radio or television receivers, you will find tube replacement in your Lowrey equally as easy—just read the simple instructions which follow.

There are only seven different types of tubes used in the entire instrument. They are located in four different areas of the organ that have been designated: 1. Tone Generators, 2. Quality Control Chassis, 3. Pedal Keyboard, and 4. Power Amplifier. The diagram on the Generator Chassis shows a rear view of the organ with the back removed and the tubes identified.

TONE GENERATOR TUBES: The two long horizontal rows of tubes near the center of the instrument contain the tone generator tubes. They are arranged in 12 groups of 5 or 6 tubes each. Each group represents all of the tone sources for one family of tones in the chromatic scale (F, F#, G, G#, etc.) and the family designation is stamped on the chassis near the square can that contains the tuning coil. Some of these tubes are type 6X8 and some are type 6FH8. Failure of any tube in this area will produce a defect, or a number of defects on both keyboards on that particular family of tones. To find a defective tube, first locate the five or six tubes for that particular family. Then, remove these, one at a time, and "borrow" one of like type from another tone chassis and install here. Install the removed tube in the vacated socket. If the problem moves to the other family of tones, you have located a bad tube and a replacement is needed.

CAUTION: Be sure that you substitute the proper type of tube into each socket. Types 6X8 and 6FH8 are not interchangeable!

QUALITY CONTROL CHASSIS: All of the tubes in the Quality Control Chassis are type 12AX7. These have a variety of functions but in general, failure here will produce difficulties on certain tabs on one keyboard or the other. To locate a defective tube, pull out the tube farthest to the left on this chassis and in its place substitute the one from the socket next to it. Put the tube removed into the socket that has been vacated. Check the instrument and notice whether or not the nature of the defect has changed. If it has not, these two tubes are good. If the problem changes in character, then one of these two tubes is defective and the exact one can be determined by substituting still another 12AX7 tube in each one of these individually. Repeat this with each two tubes along the line until you locate the faulty one.

PEDAL KEYBOARD: The four tubes in a vertical row to the left of the Tone Generator tubes are only for the pedal keyboard circuit. Try tube replacement here in case of failure of *Pedals* only. The top tube is type 12AU7, the three below it, type 6X8.

POWER AMPLIFIER: Failure of any tube on the power amplifier will produce a condition that is not common to any particular family of tones or any group of tabs or keys on either manual. It will be a condition that is found generally on the entire instrument. The tubes here are somewhat specialized, and in order to locate a defective one, it is necessary to obtain one each of these and substitute the new tubes into the proper sockets.

CHECK LIST

If your Lowrey Organ becomes inoperative or does not function properly, first follow this simple step-by-step Check List before calling for service.

- Make certain that the line cord is plugged into LIVE AC outlet.
 Hum from the speakers may be reduced by reversing the line-cord plug in the wall outlet.
- 2. Be sure that "Off-On" switch is ON. Pilot light will indicate, but as these occasionally burn out, check back of console to see if any tubes are lighted.
- 3. At least one white voice tab must be "on" before a manual will play.
- 4. The Volume Pedal must be depressed to bring up volume.
- 5. Check speaker selector switch (Stereo Controls) to be sure it is in position.
- 6. FUSES: There are two fuses—one for the Tone Generator tubes and one for the Amplifier-Power Supply and Quality Control tubes. If all the Tone Generator tubes are out, replace 5 amp fuse. If the tubes in the Control Chassis are not lighted, replace 2 amp fuse. (Fuses are located in Power Supply Chassis at

- lower right rear of organ when standing in back of organ.) Fuses are easily removed. Turn cap counterclockwise until it comes out. The fuse can then be pulled from the cap and a new one installed.
- 7. If all of the above have been checked and operation is still not normal (and you are sure all the tubes are in tight), there may be a faulty tube. Read the following pages which contain information of a semi-technical nature.
- The name plate containing model and serial number of your Lowrey Organ is located on the rear of center post. Include model and serial number in any correspondence.

A competent service technician should be consulted if difficulties persist. Your Lowrey Dealer is best qualified to handle this, although any good radio-television technician should be able to handle necessary repairs. Schematic diagrams and circuit descriptions will be furnished to owners upon request. Please send check or money order for \$2.00 and INCLUDE MODEL AND SERIAL NUMBER IN ANY CORRESPONDENCE.

4/068 CAUTION: Use only fuse sizes recommended.

GUARANTEE

The Lowrey Organ is guaranteed to be free from defective material and workmanship and the manufacturer agrees to remedy any such defects, or to furnish a new part in exchange for any part of its manufacture which under normal installation, use and service discloses such defect, provided the instrument is delivered by the owner to us or the authorized dealer from whom the instrument was purchased, intact for our examination, with all transportation charges prepaid to our factory, within one year from the date of sale to the original purchaser, and provided such examination discloses in our judgment that it is defective.

This guarantee does not apply to vacuum tubes and the loudspeakers covered by the guarantee of their makers, which is ninety days from date of purchase. We assume no liability under this guarantee if the instrument has been subjected to misuse, neglect, accident, incorrect wiring not our own, or any changes made to the circuits or any part of the instrument, except substitution of resistors and condensers and promodel FL Serial 410689

vided said resistors and condensers are of high quality brand names of manufacturers whose products have been approved by us, and provided further that there has been no improper installation or use of the instrument other than provided for in the instructions accompanying the purchase of the instrument, nor does this guarantee apply to parts which have been repaired outside of our factory, nor to instances where the serial number of the instrument has been removed or defaced, or changed, nor to accessories not of our own manufacture used therewith.

This guarantee is in lieu of all other guarantees expressed or implied, and no representative or person is authorized to assume for us any other liability in connection with the sale of the instrument.

THE LOWREY ORGAN COMPANY
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Your Keys to the World of Music