RODGERS

Exeter 770
and
Exeter 770 Pipe Augmented
Owner's Manual

OWNER'S MANUAL

FOR

RODGERS

EXETER 770
EXETER 770 PIPE AUGMENTED

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RODGERS ORGAN COMPANY
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YOUR RODGERS ORGAN

Your new RODGERS EXETER 770 was created to satisfy the many varied musical demands placed upon the contemporary organ. Because RODGERS is dedicated to tonal authenticity, extra time and care has been taken to produce an organ that will tonally satisfy the most discriminating musicians and listeners.

All RODGERS ORGANS are manufactured to console specifications set forth by the American Guild of Organists. These specifications establish the compass of keyboards (61 notes), compass of pedalboard (32 notes), placement of keys to pedalboard, and a tonal requirement of a basic complete organ.

With the increasing demand on organs to provide more contemporary American sounds for worship, certain characteristics of this school have been incorporated in the permanent design of the EXETER 770 ORGANS. Rodgers' patented microprocessor unit controls all the mechanical functions of your Rodgers organ. However, time proven independent oscillators and tone generators are used to create your organ's fine, authentic pipe organ sounds.

This manual gives you a basic description of your new instrument. Your imagination will be stimulated by the musical resources your new Rodgers Organ places at your fingertips.

Your organ contains the following divisions: The Great Organ; the Positiv Organ; the Swell Organ; and the Pedal Organ. Each division derives its name from its function in the tonal scheme of the organ.

The GREAT ORGAN has the boldest Principal (Diapason) ensemble and a solid Flute ensemble to support the Principals. An appropriate word for ensemble is "chorus," which generally means that two or more pitch levels (8′, 4′, 2′, etc.) of a tonal family are sounding simultaneously. There are softer accompanimental stops of Flute and Principal tone which provide a subtle texture to support the solo stops of the Swell Organ.

The optional POSITIV division plays from the Swell keyboard giving the player the flexibility of a secondary pipe division to act as a foil to the Great. It has Principal and Flute Choruses that add sparkle to the Swell Division and are very useful for hymn playing. The Positiv pipes are affected by the Swell Couplers.

The name for the SWELL ORGAN originated when pipes were placed inside a special chamber called a swellbox. One side of the swellbox has Venetian shutters which are controlled by an expression pedal. This pedal enables the organist to control the dynamic level (loudness and softness) of this division by gradually opening and closing the shutters, thereby creating crescendos and decrescendos. This was not possible in earlier organs, as the dynamics were determined only by the number of stops drawn. The modern Swell Organ has a secondary Principal Chorus, complete Flute Chorus and Reed voices, and couplers at the 16′ and 4′ pitches, which give this division large tonal flexibility.

The PEDAL ORGAN was so named because its keys are played by the feet. Rodgers Exeter 770 has a complete pedal organ which will provide a suitable foundation for any manual registration.

THE MUSICAL RESOURCES OF YOUR RODGERS ORGAN

There are two major categories of organ tone—Flue and Reed.

FLUE: This category includes Principals (Diapasons), Flutes, and Strings. These voices are produced by similarly constructed pipes called flue pipes. The pipe makes a sound when air enters it and is channeled through a thin opening, directing the air column upward against the lip of the pipe. This vibrating air sheet sets up vibrations in the column of air inside the pipe which creates the musical tone. Its principle is that of a whistle.

REED: In this pipework, sound is generated by a metal tongue (reed) vibrating against a metal shallot, with flat, open portion of the shallot facing the tongue. These parts are contained in the "boot" of the pipe. The resonator (uppermost tubular section) affects the timbre (color) and pitch of the particular pipe. Reed voices on the EXETER 770 include the TROMPETTE, OBOE, CONTRE TROMPETTE, KRUMMHORN, FESTIVAL TRUMPET, VOX HUMANA, AND CLAIRON. They are easily recognizable because their stop tablets are engraved in red and a red LED (light emitting diode) on the stop tablet lights when these voices are engaged.

THE PRINCIPAL (OR DIAPASON) FAMILY

The Principals are the tonal family that is unique to the organ. There is no orchestral counterpart to the Principal, nor can it be duplicated by any orchestral instrument. When played in chorus, such as 8′ PRINCIPAL, 4′ OCTAVE, and 2′ SUPEROCTAVE on the Great manual, the resulting sound provides body, clarity, and the base to which the other tone families of the organ must relate and blend.

The Mixture stops are made up of several pitches of high-pitched Principal pipes. The pitches selected augment the natural harmonic overtone series. The prime function of the Mixture is to add sparkle to the Foundation tone of the organ. The Roman numeral on the stop tablet indicates the number of pitches sounding when a single note is depressed, e.g., MIXTURE IV (four pitches).

When used sensitively with suitable Foundation stops and/or Reeds, the Mixture provides the crown of the tonal spectrum. Mixtures provide pitch clarity useful for hymn playing, which result in better congregational singing.

A special feature of the EXETER 770 is two thumb pistons labeled ALT MIX. These are the Alternate Mixture controls and will change the manual mixtures to a higher mixture composition. There are times when a higher mixture is musically desirable to allow for greater transparency of sound or simply to dramatize the Principal chorus, especially when used with Reeds.

THE FLUTE FAMILY

The Flute family has a dual role in good organ design. The Flutes must support the Principals and offer another source of tone color for solo and accompaniment voices. The Flute voices of the Great are pitched at 8′, 4′, 2-2/3′, and 2′ to form their own chorus. The Sesquialtera II is a traditional classic stop pitched at 2-2/3′ and 1-3/5′ and is used with 8′ and 4′ Flutes. The resulting sound is commonly referred to as the Cornet (Kor-nay) and is frequently called for in Classic and Contemporary literature.

The Swell has the most developed Flute Chorus ranging form 16′ to 1′ including the 2-2/3′ Nasard and 1-3/5′ Tierce stops (which are Flute Family). Using the 2-2/3′ and 1-3/5′ stops (these are non-unison stops) the Cornet can also be registered on the swell.

The Positiv has 8′ and 4′ Flute stops plus the 1-1/3′ Quint which provides subtle sparkle to any combination.

The Pedal division has Flutes from 32′ to 2′, which give the gravity (16′) to the sound of the organ as well as subtle clarity (4′ and 2′).

THE STRING FAMILY

Strings are small scaled (reduced diameter) Principals which are reduced in volume and have a brighter timbre. Strings are very useful as accompanimental stops because of their clarity of pitch which allows complex chords to be heard with distinction. The Great String is the 8′ Gemshorn and the Swell Strings are the Gamba and Echo Gamba 8′. The Viola Pomposa sometimes is considered to be the broad member of the string family.

CELESTES

A Celeste is a special musical effect pioneered in the 17th Century and greatly developed in the early 20th Century, which has the specific purpose of creating an "orchestral effect" of multiple identical instruments, e.g., a section of violins. The resulting sound is very useful for enriching the Flute and String tones, but is never employed with Reeds.

The EXETER 770 has two celeste stops, which engage two separate and tunable note by pitch sources to produce an authentic organ Celeste. The Great Flute Celeste II and Viola Celeste II on the Swell provide a tonal kaleidescope of warm, romantic, organ tone.

REEDS

The Reeds provide color and a capping tone quality to the organ. Reeds can be used as solo voices, in combination with Foundation stops (Principals and Flutes), and as Reed Choruses (16′, 8′, and 4′ Reeds played simultaneously).

The EXETER 770 has a multitude of Reed voices including the Reed Chorus on the Swell (16′ Contre Trompette, 8′ Trompette, and 4′ Clairon) in addition to the solo voices of the Oboe, Vox Humana, and Krummhorn. The EXETER 770 also has an 8′ Festival Trumpet (with independent ff control) for use as a brilliant solo stop, especially appropriate for festival occasions.

PERCUSSIONS

The Percussions on the Rodgers EXETER 770 are the Harp and Carillon. There are three alternate tunings for the Carillon, controlled by a knob located to the right of the keyboards. The knob is labeled "OPTION" and has three settings: 1) Major tuned bells, 2) Minor tuned bells, and 3) Flemished tuned bells. The Carillon is most effective and musically correct when played one (1) note at a time. A suitable accompaniment registration on the Swell would be the Viola Celeste II 8′ on the EXETER 770.

The Harp is very effective used either as a single accompanimental stop or in combination with the softer 8′ voices on the Great. The Harp will decay in sound (like the real harp does) momentarily after the key is depressed. You need not play short note values to get the harp effect.

OPTIONAL PERCUSSIONS

The Piano, Harpsichord, and Glockenspiel are optional percussions on the EXETER 770. The Piano provides the percussive nature so useful in contemporary choral accompaniments with the Harpsichord being useful for a more traditional approach to percussive tone. The Glockenspiel can be very effective when used sparingly and preferably one note at a time.

RODGERS PIPES

Your Rodgers Organ's microprocessor has been programmed to accept the addition of 1, 2, 4, 6, or 8 ranks of Rodgers pipes. Stops that are programmed to play pipes are marked with an asterisk in the specification page at the end of this book. By using Pipes Off and Ancillary On stop tablets those voices can be set to play pipes, electronic voices, or both.

At the heart of Rodgers tradition of organ-building are the pipes, exquisitely built from the finest materials. Our techniques originate with old world organ builders, whose pipe making methods go back centuries. Their experience led to Rodgers' integrated pipe augmented designs, which combine time-honored pipe practices with electronic technology. To preserve the classical pipe making practices, we keep cut-ups as low as possible and use low wind pressures. This allows the whole pipe to resonate with greater richness of tone, and provides a rich palette of harmonics.

Perhaps the most crucial step in pipe making is the scaling. Pipes are variably scaled, or sized, according to the specific requirements for their role in the tonal scheme. Variable mouths, cut-ups and tapering are used in the scaling, tailoring each rank to its most useful musicality. The resulting effect is a sound much more full-bodied and emphatic than the size or number of ranks would suggest.

Finally, when all the ranks of pipes have been completed and passes numerous inspections, they are ready for installation. Under the strict supervision of Rodgers experts, pipes are voiced according to the specific characteristics of their surroundings. It is this classic blend that makes the Rodgers Pipe Augmented Organ a stunning masterpiece of visual and acoustical art.

SPECIAL FEATURES

TURN-ON/TURN-OFF

To turn the organ on, press the POWER switch firmly and release it. During the short delay in turning on, your organ's microprocessor tests your instrument to insure proper operation in accordance with its specifications, then the power switch lights up and the organ is ready to play. Should the microprocessor test uncover problems in the instruments operation, it will not turn on. If repeated attempts fail to light up your instrument's power switch, contact an authorized Rodgers dealer or serviceman.

To turn off the organ, press and release the POWER switch again.

The organ automatically turns itself off if left idle for more than two hours. Just before turning off, the computer flashes the POWER lamp as a warning to the organist. Pressing any piston or key will prevent the organ from turning off for another two hours. This feature prevents the organ from being left on by mistake.

COUPLERS

There are two kinds of couplers on your Rodgers Organ: intermanual and intramanual couplers.

The function of an *Intermanual Coupler* is to enable the stops of one division or keyboard to be played on another keyboard or the pedalboard. Examples of Intermanual Couplers are SWELL TO GREAT 8′ and SWELL TO GREAT 4′.

The function of an *Intramanual Coupler* is to enable the stops of one division to be played an octave higher and/or an octave lower on the same keyboard. Examples of Intramanual Couplers are SWELL TO SWELL 16′ and SWELL TO SWELL 4′. Couplers greatly increase the flexibility of your Rodgers organ.

DUAL MEMORY COMBINATION ACTION

One of the exciting features of your Rodgers Organ is a combination action that is programmable by the organist from the console. This enables the organist to select favorite registrations and to make rapid changes of tone color.

Rodgers Microprocessor Combination Action is a unique dual memory system totally adjustable from the console.

The pistons can only be set if the organist possesses the proper code for unlocking the memories of the combination action. For further information see section below.

Either memory can always be used, but they can only be changed IF THE PROPER CODE IS USED.

TO SET THE MEMORY ACCESS CODES

1. Write down the code(s) you want to enter. (The code can be any numeric sequence of up to eight digits where no digit is used consecutively.)
2. Place the "Combination Access Key" magnet just in front of the headphone jack under the keydesk. The power lamp should now start flashing.
3. Press the M1 memory piston.
4. Enter your personal code for Memory 1 on the General pistons. (All of the organs are set with code "1" at the factory. You may change the code as you wish.
5. Press the SET piston.
6. To access Memory 2, repeat steps 3, 4, & 5, but use the M2 piston. (All of the organs are set with code "2" at the factory, for this memory. You may change the code as you wish.)
7. Now press the General Cancel piston (0 piston).

TO UNLOCK A MEMORY

1. While holding the SET piston in, press M1 or M2. The selected memory piston will start flashing.
2. Enter the "Access Code" on the General pistons. The Selected memory lamp will stop flashing.

NOTE: If a mistake is made, press General Cancel "0" which will stop the lamp flashing, leaving the memory locked.

HOW TO SET THE PISTONS

1. Select the Memory (1 or 2) to receive the registrations by pushing M1 or M2.
2. Select your registration.
3. Push the Set piston and hold.
4. While pushing the Set piston, push the desired piston and then release both pistons simultaneously.

We have just described the Capture system. Your Combination Action also functions as a "Hold and Set" system. To use it this way, simply press and hold the numbered piston you wish to set all the way in and push the tab you wish to set. The desired memory must, of course, be unlocked.

CHORUS CONTROL

The chorus effect is patterned after the natural interaction of pipes in a pipe organ. Rodgers Organs utilize digital techniques to produce this effect. The Main Chorus stop tablet is located in the General Division. This tab affects most flue voices in the organ. To experience the enriched sound, turn on the 8′ GAMBA, 8′ GEDACKT, 4′ PRINCIPAL, and 2′ BLOCKFLOTE on the Swell manual.

While holding down a chord on the Swell manual, turn the Main Chorus on and off and listen to the difference.

Besides authentic pipe organ voices, your Rodgers organ includes these additional dimensions based on real pipe organ characteristics.

CHIFF AND AIR PUFF

Chiff and Air Puff are natural speech characteristics of Classically voiced pipes. These characteristics give additional clarity to both pitch and attack. There are several chiff circuits on your Rodgers Organ affecting the Principal and Flute voices, and they are always on. Their level is also adjustable to the requirements of the room in which your organ is located.

TREMULANTS

A special effect necessary in creating an orchestral feeling. Tremulants can be most useful when judiciously used.

Tremulants are adjustable for both speed and depth. It is recommended by the factory that these adjustments be made by AUTHORIZED SERVICE PERSONNEL ONLY.

The Flute Tremulant Full tablet affects all the Flute voices on the manual divisions of the organ. It is a deeper tremulant than those mentioned above and therefore can be useful where Evangelistic music is used. It also has an independent speed and depth control.

THE CONTINUO PISTON

The name of this accessory device has been borrowed from the ancient term "Basso Continuo" meaning thoroughbass. When this lighted piston (located under the Swell manual) is pressed, any stops or couplers on the Pedal Organ will sound from the lowest key being played in the bass of the Great manual, providing a Pedal bass without having to actually use the feet! Rodgers microprocessor circuitry prevents its "jumping" allowing repeated bass notes to be played with proper effect.

In its normal setting, the CONTINUO affects keys 1-24 of the Great manual, but its compass is programmable. As few notes as 1-13, or as many as 1-32 may be programmed. The procedure for programming the compass is as follows:

1. Hold in SET and press CONTINUO. The CONTINUO piston will start flashing.
2. Release both pistons.
3. While CONTINUO is flashing, press any key which corresponds to the *highest* note to which you wish the compass to extend. You may select any note from key 13 to key 32. After you have pressed the key, the CONTINUO piston will shut off.

NOTE: When you press the key to set the compass, no sound will be heard, so that you will not make a disturbance if you program the compass during a performance.

4. To use the new compass, press the CONTINUO piston.

NOTE: When the organ is turned off, the compass of the CONTINUO will revert to 24 notes.

SOLO PISTON

When this lighted piston (located under the Swell manual) is pressed, it allows any stop or coupler of the Swell Organ to sound from the highest key being played on the Great manual. Thus, a solo melody and an accompaniment can be played from the same manual. The unique control allows the player to repeat notes without the SOLO "jumping" so use of this device does not require a special technique.

In its normal setting, the SOLO affects keys 25-61 of the Great manual, but its compass is programmable, and may be extended downward to key 13, or stopped at key 49. The procedure for programming the compass is as follows:

1. Hold in SET and press SOLO. The SOLO piston will start flashing.
2. Release both pistons.
3. While SOLO is flashing, press the key which corresponds to the *LOWEST* note to which you wish the compass to extend. You may select any note from key 13 to key 49. After you have pressed the key, the SOLO piston will shut off.

NOTE: When you press the key to set the compass, no sound will be heard, so that you will not make a disturbance if you program the compass during a performance, provided no Great Stops or Swell to Great Couplers are on.

4. To use the new compass, press the SOLO piston.

NOTE: When the organ is turned off, the compass of the SOLO will revert to keys 25-61.

USING THE CONTINUO AND SOLO

Some very interesting effects are made possible with these two accessory devices.

Suppose you wish to play a solo on the Swell OBOE, with accompaniment on the Great 8′ BOURDON and GEMSHORN, with an appropriate Pedal.

1. Select the Swell OBOE and TREMULANT. Select the Great 8′ BOURDON and the Great GEMSHORN. Draw the Pedal BOURDON DOUX 16′ and the GREAT TO PEDAL 8′. Press CONTINUO and SOLO pistons.
2. Play on the Great manual. The lowest note being played will sound the Pedal combination, the highest note will sound the OBOE, and the notes between will play the accompaniment from the Great.

Experimentation will reveal a myriad of special effects and very useful improvisational devices which would be impossible on conventional organ systems.

SOSTENUTO

The Sostenuto allow a chord to be sustained without holding the keys down. There are times when a sustained chord is necessary overlayed by arpeggios or other moving melodic or harmonic activity. This is quite frequently found in piano transcripts of orchestral accompaniments for choral works. To engage the Sostenuto, press the SOSTENUTO piston. While holding a chord on the Great Manual, slide your right foot (placed on the expression pedal) towards the left. You will feel a small toe switch. Pressing and holding the switch will engage the Sostenuto on the Great Manual. Now remove your hand from the Great Keyboard and you will notice the chord continues to sound. To disengage the sound, release the toe switch. Any number of notes can be held. You will find that the Sostenuto can be useful to sustain a chord when making a registration change that requires two hands to complete. The Sostenuto will affect all stops and couplers on the Great Manual.

ALTERNATE MIXTURE PISTONS

Very often, in modern organs, Mixture stops which are appropriate for the playing of great organ literature are too high pitched, or of the wrong harmonic emphasis to be useful in accompanimental role. For example, the Swell PLEIN JEU—which would be used in choral accompaniments as well as for a complementary harmonic crown to the Reeds. The choral accompaniment would require lower pitches to blend with the voices, whereas the Reed Chorus needs high, sharper mixture tone to add the essential eclat to this exciting sound. ALTERNATE MIXTURE pistons solve this problem.

For each manual Mixture stop, there is a lighted ALT MIX piston. When operated, it directs the microprocessor to assign a completely different Mixture—different in pitch and structure—to the Mixture stop tablet with which it is associated. In the unaltered state, the Mixtures are in the lower, more "accompanimental" form. When the ALT MIX is pressed, it lights and indicates that the altered state—higher pitched and brighter composition—is in effect. The ALTERNATE MIXTURE pistons may be set on their respective divisional pistons or on the Generals.

CRESCENDO AND EXPRESSION PEDALS

The EXETER 770 has a Crescendo Pedal and two Expression Pedals. The pedal on the right (which is slightly raised) is the Crescendo Pedal which gradually adds a pre-determined selection of stops as it is pressed forward. The Crescendo Pedal does not affect the stops already set up on the organ but merely adds to them.

On the EXETER 770, the Crescendo Pedal also has another function. It is equipped with an ORCHESTRAL CRESCENDO which can be set by the organist.

By pushing the Orchestral Crescendo (ORCH CRESC) thumb piston, located under the Swell Manual, you will disengage the standard Crescendo and engage the Orchestral Crescendo. Instructions for setting the Orchestral Crescendo are as follows:

1. Both memories must be unlocked to allow the Crescendo sequence to be changed.
2. Hold SET and press the ORCH CRESC piston. It will start flashing.
3. The combinations on the first position of the Crescendo shoe will be displayed. Make any changes you desire and press SET.
4. Repeat Step 3 for the remaining 60 positions.
5. After the last position has been set, the ORCH CRESC piston stops flashing.

On the EXETER 770, the pedal in the middle is the Swell Expression Pedal which controls the overall volume or loudness of the Swell organ. The pedal on the left is the Great Expression Pedal which controls the overall volume or loudness of the Great and Pedal divisions. Expression pedals are used to give variety of expression to the music played. Pressing the pedal forward increases the volume. Drawing back decreases the volume. (NOTE: The Great and Positiv pipes are not expressed.)

TUTTI PISTON AND TOE STUD

Sometimes it is desirable to have a full organ registration suddenly and quickly. To do so, simply push the TUTTI Piston or TUTTI Toe Stud. To cancel the full organ (TUTTI), push the TUTTI Piston or the TUTTI Toe Stud again.

On your Rodgers Organ you can actually set your own Tutti. To do so, follow the instructions below.

TO READ WHAT IS SET ON TUTTI:

While holding TUTTI in, press the SET piston.

TO SET TUTTI:

Unlock either Memory 1 or Memory 2.

Set up your desired combinations, then while holding SET in, press TUTTI.

Turn off the organ to relock the memory. Your new TUTTI combination will be retained.

TO SET THE PRE-PROGRAMMED FACTORY COMBINATIONS

1. Insure the slide switch on the multifunction board (inside the organ) is in the UP position. This switch is behind the uppermost hole on the CPU cover.
2. Turn the organ on.
3. Hold the SET button in and press the POWER Switch until it begins flashing.
4. While continuing to hold the SET button in, press General Piston 5.
5. Press General Cancel. Memory 1 and Memory 2 and the Orchestral Crescendo and Tutti are now pre-programmed to standard factory settings. You can change any of these by following the directions in other sections of this manual.
6. Factory pre-programmed combinations that are recalled by the above procedure are listed in the registration section of this Owner's Manual. (NOTE: Alternate stop voice and chiff levels are also recalled to the factory settings.)

MAIN OFF/ANTIPHONAL ON CONTROLS

These tablets operate when an antiphonal speaker is connected to your Rodgers Organ.

The basic concept of an antiphonal division is to place antiphonal speakers at the opposite end of the room from the main sound source. This placement allows greater musical flexibility because the sound originates from either end of the listening area, or from both ends simultaneously.

The MAIN OFF tab shuts off the sound of the main body of speakers, and the ANTIPHONAL ON tab turns on the auxiliary, or antiphonal speakers.

Note: If the MAIN OFF tab is depressed, the ANTIPHONAL ON must also be depressed, or the organ will not sound through either system.

In pipe augmented models, the ANCILLARY tablets turn on electronic voices duplicating those stops on the Great organ which play pipes. In this way, the organist may choose to augment the pipe stops by adding their electronic duplicates for a fuller sound, or may even choose to play only the electronic voices without any pipes sounding at all.

To add the Ancillary voices, simply turn on the ANCILLARY tablet. To silence the pipes, press the GREAT/PEDAL PIPES OFF tablet.

If the PIPES OFF tablet is engaged, the ANCILLARY ON tablet must be turned on, or no sound will come form the stops affected.

TRANSPOSER

The Transposer will raise or lower the pitch of the organ four semitones (half-steps) in either direction. The Transposer is controlled by a knob on the right key cheek. The Transposer is especially useful for accompanying, eliminating the need to mentally transpose music on the printed sheet into a different key. Many singers need a key change to accommodate their voice range, sometimes as far as a major third in either direction. The Transposer accomplishes these key changes by turning transposer knob. A lighted numeral will indicate the number of ½ steps, sharp or flat, from the original key.

Another important feature of the Transposer is the circuitry that returns the setting to the normal pitch (0 piston) automatically when the organ is shut off, or when the combination action Cancel piston is pushed. This avoids the problem of the organ being in the wrong key the next time it is played.

LEVELING GLIDES

To assure optimum performance and life of the moving parts of the console it should always be level. Uneven floors tend to distort the case over a period of time. and extreme stresses will damage the casework and equipment. The Leveling Glides are under each corner of the console and bench and are mounted on heavily-threaded pins. These may be adjusted as much as 1-1/2 inches to compensate for irregularities in the floor. A carpenter's spirit level can assure the most accurate settings.

TUNING KNOB

Your Rodgers organ is equipped with a tuning compensation knob which allows you to tune the organ easily and quickly to a piano or other instrument which may not be at "Concert Pitch" when played with the organ. When the control knob is pushed in, the organ returns to "Concert Pitch" (A440).

If your organ is Pipe Augmented, the Tuning Knob will bring the pipes and electronics into tune with each other.

OPTION KNOB

Turning the Option Knob allows you to select Major, Minor, or Flemish-tuned carillons on the EXETER 770.

HEADPHONE JACK

Your Rodgers Organ has a Headphone Jack located under the keydesk near your right knee. When you plug in a set of head phones, the speaker system shuts off, allowing you to play in privacy. If your organ has pipes, they will also shut off. It is recommended that you use a standard eight (8) ohm headphone set. Your Headphone Jack is designed to run only ONE set of headphones at a time.

ZIMBELSTERN

Your organ is prepared for the optional ZIMBELSTERN. A reversible toe stud is provided to operate this feature.

PROGRAMMABLE ALTERNATE LEVEL SELECTIONS

In order to perform the following program features, the selector switch on the multifunction board (MFB) must be in the UP position.

(1) DUAL-LEVEL STOPS (MFB Switch Up)

Most of the Principal, Flute, and some reed stops are provided with selectable loud and soft volume levels. These levels are preset at the factory, but may be individually changed to their alternate levels if desired.

To select the desired stop volume level, press and hold the SET piston and press the POWER switch. The POWER switch light will start flashing. With the POWER switch flashing, press and hold SET and press General piston number 1. All stops on soft level will show LEDS with a steady light while loud levels will be shown by flashing LEDS. Non-programmable stops will remain dark. To change a stop volume level, simply depress the stop. The alternate level will then be displayed. Stop voices may not be heard at this time. To hear your selection press the POWER switch and the processor returns the organ to the playing mode with the new stop volume levels you have selected.

(2) CHIFF LEVELS (MFB Switch Up)

Most flute and some principal stops have selectable chiff levels. Chiff levels are preprogrammed at the factory, but may be changed or turned off.

To select the desired chiff levels, press and hold the SET piston and press the POWER switch. The POWER switch will start flashing. With the POWER switch flashing, press and hold SET and press General piston number 2. A selectable chiff is available on all stops that show a lighted LED when depressed. Now strike a key on the appropriate manual. The chiff level for that octave will be displayed on the transposer (this operation is on an octave-by-octave basis). Number 1 "sharp" is Chiff Off while 2, 3 and 4 "sharp" are volume levels. To turn off the chiff on a particular stop, turn the transposer knob to number 1 "sharp" and play a note in each octave of the keyboard, each time turning the transposer knob to number 1 "sharp" and restriking the key. To raise the volume level of the chiff follow the same procedure for each octave on the keyboard, but select number 2, 3 or 4 "sharp" on the transposer as desired. You may restrike the keys to hear the selection you have made. To return to the playing mode simply press the POWER switch. Your selections will be retained.

(3) LOCKING IN ALTERNATE LEVELS

Place the selector switch on the multifunction board (MFB) in the DOWN position. This will prevent anyone changing the Alternate Levels you have selected.

Care And Maintenance Of Your Rodgers Organ

As with any fine musical instrument, reasonable care is necessary to protect your investment in your Rodgers Organ. Normally, you should experience no difficulties because it has been carefully designed, and only the finest component parts are used in its manufacture. Even the finest equipment, however, is subject to occasional service. Your Rodgers Service Representative is fully equipped and qualified to handle any service problems which may arise.

Your new Rodgers organ is not only a fine musical instrument, but also a fine piece of custom-made furniture, finished to hold its attractiveness through generations of use. Only the best woods are used, carefully checked for uniformity of grain and intensity of figure and carefully hand assembled. Each finish coat is thoroughly dried before the next coat is applied. This results in a finish that is lasting and easy to keep looking beautiful. Following are a few tips on caring for your Rodgers Organ.

CONSOLE AND PEDALBOARD

A frequent dusting with a soft, clean cloth is usually all that is required. For a lacquered finish, a small amount of commercial polish on the cloth will keep the organ smudge-free and help remove fingerprints. Waxes, oils, or silicone base polishes should not be used. For an oiled finish, a fine quality furniture oil will enhance the beauty of the wood. Always wipe the surfaces with the grain, using straight, even strokes.

Since extreme cold, heat, or exposure to sunlight may injure the finish of any fine piece if furniture, neither the console nor finished speaker cabinets should be placed over a heat register or near an open window.

KEYBOARDS AND LED STOP TABLETS

Keyboards and LED Stop Tablets should be cleaned with a soft cloth slightly dampened with water and a mild soap. Avoid dripping water between the keys. DO NOT USE SOLVENTS (alcohol, gasoline, carbon tetrachloride, etc.).

PLEXIGLAS MUSIC RACK

To clean your music rack use a soft cloth with a mild solution of soap and warm water. Wipe dry.

PIPES, ON PIPE AUGMENTED INSTRUMENTS

To keep the pipes of your Rodgers organ beautiful, refrain from touching them with ungloved hands. You should not attempt to clean or polish them.

Because handling in any way by non-trained persons can spoil tuning or even cause damage, it is strongly suggested that the pipes never be handled or touched by anyone but organ service persons.

Rodgers Five-Year Limited Warranty

The Rodgers Organ Company warrants every part of your Rodgers console against defective materials or workmanship for a period of five years beginning on the date of first retail purchase.

IT IS IMPORTANT THAT YOU COMPLETE THE WARRANTY REGISTRATION CARD INCLUDED WITH THIS MANUAL AND *RETURN IT TO US TO VALIDATE YOUR WARRANTY!*

Rodgers Limited Warranty provides any needed replacement parts during its five-year term. Labor, in connection with the replacement of parts, is not covered by the factory warranty. Contact your authorized Rodgers dealer for details on his labor warranty.

Complete factory terms are spelled out in the Rodgers Limited Warranty certificate available at your Rodgers dealer or mailed to you upon receipt of your Warranty Registration Card.

Stop And Coupler List
Exeter 770
And Exeter 770 Pipe Augmented

GREAT	SWELL	POSITIV	PEDAL
PRINCIPALS			
8′ PRINCIPAL	8′ VIOLA POMPOSA	4′ PRINCIPAL	16′ PRINCIPAL
4′ OCTAVE	4′ PRINCIPAL	2′ OCTAVE	8′ OCTAVE
2′ SUPEROCTAVE	PLEIN JEU IV		4′ CHORALBASS
MIXTURE IV			MIXTURE IV
FLUTES			
8′ BOURDON	16′ BOURDON DOUX	8′ BOURDON	32′ CONTRE BOURDON
4′ FLUTE	8′ GEDACKT	4′ FLUTE	16′ SUBBASS
2⅔′ NASAT	4′ NACHTHORN	1⅓′ QUINT	16′ BOURDON DOUX
2′ WALDFLÖTE	2⅔′ NASARD		8′ FLUTE
SESQUIALTERA II	2′ BLOCKFLÖTE		4′ NACHTHORN
	1⅗′ TIERCE		2′ FLUTE
	1′ SIFFLÖTE		
STRINGS			
8′ GEMSHORN	8′ GAMBA		
	8′ ECHO GAMBA		
CELESTES			
8′ FLUTE CELESTE II	8′ VIOLA CELESTE II		
REEDS			
16′ CONTRE TROMPETTE	16′ CONTRE TROMPETTE		16′ CONTRE TROMPETTE
8′ KRUMMHORN	8′ FESTIVAL TRUMPET		4′ CLAIRON
	8′ TROMPETTE		
	8′ OBOE		
	8′ VOX HUMANA		
	4′ CLAIRON		
PERCUSSIONS			
HARP	GLOCKENSPIEL (option)		16′ GRAND PIANO (option)
CARILLON			
PIANO (option)			
HARPSICHORD (option)			
PIANO/HARPSICHORD UNEXPRESSED (option)			
TREMULANT			
TREMULANT	TREMULANT	PIPE TREMULANT	
COUPLERS			
4′ GREAT TO GREAT	16′ SWELL TO SWELL		8′ GREAT TO PEDAL
16′ SWELL TO GREAT	SWELL UNISON OFF		8′ SWELL TO PEDAL
8′ SWELL TO GREAT	4′ SWELL TO SWELL		4′ SWELL TO PEDAL
4′ SWELL TO GREAT			

GENERALS (Left Top Rail)
FLUTE TREMULANT FULL
MAIN CHORUS
FESTIVAL TRUMPET FF

GENERALS (Right Top Rail)
MAIN OFF
ANTIPHONAL ON
GREAT/PEDAL PIPES OFF
GREAT/PEDAL ANCILLARY ON

Registration Suggestions

The following registration suggestions are meant to serve as a guide for organists. These are basic registrations that will allude to printed registrations in addition to some suggestions for using the unique features of the EXETER 770.

Most of the given ensemble registrations are appropriate for hymn playing and standard classical organ repertoire. There are some ensemble registrations that are specifically tonally designed to suit a particular musical need.

Stops in parenthesis are optional, to be either added or omitted from proposed combinations based on personal taste.

Basic Foundation Tone Guide For The Exeter 770

Printed Suggestion	Recommendation		
	GREAT	**SWELL**	**PEDAL**
Foundations P	8′ GEMSHORN	8′ GAMBA	16′ BOURDON DOUX
Foundations mF	8′ BOURDON 8′ GEMSHORN	8′ GAMBA 4′ NACHTHORN	16′ BOURDON DOUX 8′ FLUTE
Foundations F	8′ BOURDON 8′ GEMSHORN 4′ OCTAVE 2′ WALDFLÖTE	8′ GEDACKT 8′ GAMBA 4′ PRINCIPAL 4′ NACHTHORN	16′ SUBBASS 8′ OCTAVE 8′ FLUTE 4′ CHORALBASS
Foundations FF (Including Mixtures)	8′ PRINCIPAL 4′ OCTAVE 4′ FLUTE 2′ SUPEROCTAVE MIXTURE IV	8′ GEDACKT 8′ GAMBA 4′ PRINCIPAL 4′ NACHTHORN PLEIN JEU IV	16′ SUBBASS 8′ OCTAVE 8′ FLUTE 4′ CHORALBASS 2′ FLUTE MIXTURE IV

Normal use of couplers would include the Swell to Great 8′ and Swell to Pedal 8′. Check printed suggestions for actual use of couplers.

We recommend that the Main Chorus Tab (located in the General Division) always be engaged.

Larger Ensemble Sounds

FULL ENGLISH SWELL COUPLED TO F FOUNDATIONS ON GREAT

SWELL	GREAT	PEDAL	GENERAL
8′ GAMBA	8′ PRINCIPAL	32′ CONTRE BOURDON	MAIN CHORUS
4′ PRINCIPAL	8′ BOURDON	16′ SUBBASS	
4′ NACHTHORN	4′ OCTAVE	16′ BOURDON DOUX	
2′ BLOCKFLÖTE	4′ FLUTE	8′ OCTAVE	
PLEIN JEU IV	16′ SWELL TO GREAT	8′ FLUTE	
8′ TROMPETTE	AND/OR	4′ CHORALBASS	
16′ SWELL TO SWELL	8′ SWELL TO GREAT	8′ SWELL TO PEDAL	

Both hands are on the Great Manual. For Variation, both hands can be placed on the Swell.

For a special emphasis on the melody line; add the Swell to Swell 4′ coupler and press the Solo piston. Playing with both hands on the Great you will have the top note emphasized by 16′, 8′, and 4′ Swell voices.

SUGGESTED FULL ORGAN

SWELL	GREAT	PEDAL	GENERAL
16′ BOURDON DOUX	8′ PRINCIPAL	32′ CONTRE BOURDON	MAIN CHORUS
8′ GEDACKT	8′ BOURDON	16′ SUBBASS	
8′ GAMBA	4′ OCTAVE	16′ BOURDON DOUX	
4′ PRINCIPAL	4′ FLUTE	8′ OCTAVE	
4′ NACHTHORN	2′ SUPEROCTAVE	8′ FLUTE	
2′ BLOCKFLÖTE	MIXTURE IV	4′ CHORALBASS	
PLEIN JEU IV	8′ SWELL TO GREAT	16′ CONTRE TROMPETTE	
8′ TROMPETTE	4′ SWELL TO GREAT	8′ GREAT TO PEDAL	
		8′ SWELL TO PEDAL	

SUGGESTED SOLO REGISTRATIONS

	GREAT	SWELL	PEDAL	GENERAL
REED SOLO (For Lyric Use)	8′ GEMSHORN	8′ OBOE	16′ BOURDON DOUX	
REED SOLO (For Processionals)	8′ BOURDON 8′ GEMSHORN 4′ OCTAVE (2′ WALDFLÖTE)	8′ TROMPETTE	16′ SUBBASS 8′ OCTAVE 8′ FLUTE 4′ NACHTHORN	MAIN CHORUS
FLUTE SOLO (with orchestral accompaniment)	8′ BOURDON	8′ GAMBA	16′ BOURDON DOUX	
May be inverted as follows	8′ GEMSHORN (TREMULANT)	8′ GEDACKT	16′ BOURDON DOUX	
CORNET (On Swell with mP Foundations on Great)*	8′ GEMSHORN (4′ FLUTE) (TREMULANT)	8′ GEDACKT (4′ NACHTHORN) 2⅔′ NASARD 2′ BLOCKFLÖTE 1⅗′ TIERCE	16′ BOURDON DOUX 8′ FLUTE (4′ NACHTHORN)	
DIALOGUE FLUTES (Uncouple manuals and pedal)	8′ BOURDON 4′ FLUTE	8′ GEDACKT 2⅔′ NASARD (1′ SIFFLÖTE)	16′ BOURDON DOUX 8′ FLUTE (2′ FLUTE)	

*Common Classic-Baroque sound of French and German origin.

A General Guide For Accompanying And Leading Congregational Singing

Since the primary use of keyboard instruments in the worship service is for rhythm leadership and pitch reference, a few words about the general use of pitch registers, i.e., 8′, 4′, 2′, etc., might be useful.

The human ear can identify pitch much easier if the tone richness is increased by the addition of upper harmonics (overtones). When playing for a group of singers, it is better to use manual stops of various pitches, not just 8′ stops! If the group singing is in excess of 50 people, it is usually beneficial to the singers to add the Swell Plein Jeu IV as the first Mixture, followed by the Great Mixture IV. These would be added, of course, after the Foundations are playing at 8′, 4′, and 2′. It is also essential to build the musical tone upon a good foundation, so be sure there is adequate 16′ pedal tone to support the manual registration.

You will discover that the organ can be played at a lower dynamic level when it includes more upper harmonics. When the sound is brighter, a lower volume can lead congregational singing without offending listeners with the instrument's overall loudness. This is true whether the organ is either pipe, electronic, or a combination of pipes and electronics.

It is generally recommended that organists use the Foundations F or Foundations FF registrations for bold and majestic hymns and use the Foundation P and Foundations mF for more expressive and contemplative hymns. It is also musically correct to discreetly add the Swell to Great 4′ coupler in addition to the Swell to Great 8′ coupler when additional brilliance is required.

Since many denominations use more vibrant organ tones for congregational singing, we are including some registrations designed specifically with tremulants on, especially the Flute Tremulant Full tab (which affects both pipes and electronics).

SOFT FOUNDATION TONE

SWELL

8′ GEDACKT
8′ GAMBA
4′ NACHTHORN

GREAT

8′ BOURDON
8′ GEMSHORN
(HARP)
MAIN TREMULANT

PEDAL

16′ BOURDON DOUX
8′ FLUTE

POSITIV (instruments with pipes)

4′ FLUTE
PIPE TREMULANT

GENERAL

FLUTE TREMULANT FULL
GREAT/PEDAL ANCILLARY ON

SWELL MELODIC SOLO (with mF Accompaniment Great)

SWELL

8′ GEDACKT
8′ GAMBA
4′ NACHTHORN
2⅔′ NASARD
1⅗′ TIERCE
1′ SIFFLÖTE
8′ OBOE

GREAT

8′ BOURDON
8′ GEMSHORN
4′ FLUTE
(HARP)
MAIN TREMULANT

PEDAL

16′ SUBBASS
8′ FLUTE
8′ GREAT TO PEDAL

POSITIV (instruments with pipes)

8′ BOURDON
4′ FLUTE
PIPE TREMULANT

GENERAL

FLUTE TREMULANT FULL
GREAT/PEDAL ANCILLARY ON

For a variation using the Solo piston, add the 16′ Swell to Swell coupler and the Swell Unison Off, playing with both hands on the Great Manual.

FULL ENSEMBLE (right hand plays the Swell)

SWELL

8′ GEDACKT
8′ GAMBA
4′ PRINCIPAL
4′ NACHTHORN
2⅔′ NAZARD
2′ BLOCKFLÖTE
1′ SIFFLÖTE
8′ TROMPETTE
16′ SWELL TO SWELL

GREAT

8′ PRINCIPAL
8′ BOURDON
4′ OCTAVE
4′ FLUTE
8′ SWELL TO GREAT
TREMULANT

PEDAL

16′ SUBBASS
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE
8′ GREAT TO PEDAL

POSITIV (instruments with pipes)

8′ BOURDON
4′ PRINCIPAL
4′ FLUTE

GENERAL

FLUTE TREMULANT FULL
GREAT/PEDAL ANCILLARY ON

For an ensemble sound with both hands playing on the Great Manual, the Swell to Great 4′ coupler should be added.

On instruments with pipes, it might be desirable to not have the pipes playing form the Great Manual. Therefore, the Great/Pedal Pipes Off and Great/Pedal Ancillary On tabs should be used.

SPECIAL ENSEMBLE CHORUSES

At times it is necessary to have the reinforcement of the same sound played at varying pitch levels simultaneously. This is accomplished by the use of Suboctave (16′) and Octave (4′) couplers. These do not transfer the pitch but will add to the unison pitch.

STRING CHORUS

SWELL

8′ GAMBA
16′ SWELL TO SWELL
4′ SWELL TO SWELL

GREAT

8′ PRINCIPAL
8′ BOURDON
4′ FLUTE
8′ SWELL TO GREAT
4′ SWELL TO GREAT

PEDAL

16′ SUBBASS
8′ FLUTE
8′ SWELL TO PEDAL

REED CHORUS AND PRINCIPAL CHORUS

Very commonly called for in organ literature are the Reed Chorus and Principal Chorus. It is also common to include the Swell Plein Jeu IV (the Swell Mixture) with the 8′ Trompette to give additional sparkle and texture to the Reed tone.

SWELL

PLEIN JEU IV
8′ TROMPETT
16′ SWELL TO SWELL
4′ SWELL TO SWELL

GREAT

8′ PRINCIPAL
4′ OCTAVE
2′ WALDFLÖTE
MIXTURE IV
(16′ SWELL TO GREAT)
8′ SWELL TO GREAT
(4′ SWELL TO GREAT)

PEDAL

16′ SUBBASS
8′ OCTAVE
8′ FLUTE
4′ CHORALBASS
MIXTURE IV
8′ SWELL TO PEDAL

Explanation Of Exeter 770 Memory One Registrations

GENERAL 1

The Viola Celeste and Flute Celeste give a quiet, transparent sound suitable for meditative musical requirements. Either keyboard can be played.

GENERAL 2

The Oboe stop is a solo voice with the Flute Celeste II and Harp as the accompaniment. The 4′ Nachthorn is optional, but does add an interesting color to the Oboe.

GENERAL 3

This is a special setting that requires the organist to play the melody on the Great (most effective when played around Middle "C") and the accompaniment plays on the Swell. The 16′ Swell to Swell should be turned off if the accompaniment notes are played below the Middle "C" octave. The 32′ Contre Bourdon is optional, but effective with this registration. This is a good registration for meditative or prayer hymns.

GENERAL 4

This combination is from the Baroque era and is frequently called for in French literature. It is not used as a solo-accompaniment type registration, but is used for two independent voice lines. Generally, the Great (Krummhorn, 4′ Flute) is for the bass line and the Swell Registration (called a Cornet "Kor-nay") is for the treble voice.

GENERAL 5

This registration gives three individual Principal Choruses of contrasting color. It can be used for a hymn registration with some verses played on the other keyboard for contrast. The Swell to Great 8′ can be added for the last verse with both hands playing on the Great.

GENERAL 6, GENERAL 7, AND GENERAL 8

These three pistons are settings for hymns or choral accompaniments beginning with a mezzo-forte sound (6) building to a forte (8). In addition to getting louder, each ascending piston adds more brilliance by the addition of the higher pitched stops (2′s and Mixtures). Both hands would be on the same keyboard at the same time. The Great manual would most frequently be used.

GENERAL 9

This trumpet solo combination is best used for processionals and music of a festive nature. It is recommended that the organist also engage the solo piston, which allows the top note of the Great keyboard to sound the Swell registration, while playing with both hands on the Great.

GENERAL 10

This is an example of a full organ registration. If additional brilliance is desired, the Great to Great 4′ and/or the Swell to Great 4′ can be added.

The divisional pistons are set with frequently called for manual registration. The Great pistons are as follows:

1. 8′ Flute Celeste II
2. 8′ Bourdon, 4′ Flute (often called Foundation P)
3. 8′ Principal, 8′ Bourdon, 4′ Flute (often called Foundation F)
4. 8′ Principal, 8′ Bourdon, 4′ Octave, 4′ Flute, 2′ Superoctave (often called Foundation Chorus)
5. 8′ Krummhorn, 4′ Flute

The Swell pistons are frequently called for by the following:

1. Swell Celestes
2. Swell Flutes
3. Swell Solo Reeds
4. Swell Foundation Chorus
5. Swell Solo Trumpet

The Pedal divisionals are arranged form soft to loud.

EXETER 770 COMBINATION MEMORY 1 SETTINGS

GREAT	SWELL	PEDAL	GENERAL
GENERAL 1			
8′ FLUTE CELESTE II	8′ VIOLA CELESTE II	16′ BOURDON DOUX	GREAT TO PEDAL
TREMULANT	8′ ECHO GAMBA	8′ SWELL TO PEDAL	ANTIPHONAL ON
8′ SWELL TO GREAT			
TREMULANT			
GENERAL 2			
8′ FLUTE CELESTE II	4′ NACHTHORN	16′ BOURDON DOUX	GREAT TO PEDAL
HARP	8′ OBOE	8′ GREAT TO PEDAL	ANTIPHONAL ON
TREMULANT	TREMULANT		
GENERAL 3			
8′ PRINCIPAL	8′ VIOLA CELESTE II	32′ CONTRE BOURDON	GREAT TO PEDAL
8′ BOURDON	8′ GAMBA	16′ SUBBASS	ANTIPHONAL ON
4′ FLUTE CELESTE II	8′ VOX HUMANA	16′ BOURDON DOUX	
4′ FLUTE	TREMULANT	8′ SWELL TO PEDAL	
8′ KRUMMHORN	16′ SWELL TO SWELL		
TREMULANT	4′ SWELL TO SWELL		
8′ SWELL TO GREAT			
GENERAL 4			
4′ FLUTE	8′ GEDACKT	16′ SUBBASS	GREAT TO PEDAL
8′ KRUMMHORN	4′ NACHTHORN	8′ FLUTE	ANTIPHONAL ON
	2⅔′ NASARD	4′ NACHTHORN	MAIN CHORUS
	1⅗′ TIERCE		
GENERAL 5			
8′ PRINCIPAL	8′ GEDACKT	16′ SUBBASS	GREAT TO PEDAL
4′ OCTAVE	4′ PRINCIPAL	8′ OCTAVE	ANTIPHONAL ON
2′ WALDFLÖTE	2⅔′ NASARD	4′ CHORAL BASS	MAIN CHORUS
	PLEIN JEU IV		

GREAT	SWELL	PEDAL	POSITIV
GENERAL 6			
8′ PRINCIPAL	8′ VIOLA POMPOSA	16′ PRINCIPAL	8′ BOURDON
4′ FLUTE	8′ GEDACKT	16′ BOURDON DOUX	
8′ SWELL TO GREAT	8′ GAMBA	8′ FLUTE	
	4′ NACHTHORN	8′ SWELL TO PEDAL	
GENERAL 7			
8′ PRINCIPAL	8′ VIOLA POMPOSA	16′ PRINCIPAL	8′ BOURDON
4′ OCTAVE	8′ GEDACKT	16′ SUBBASS	4′ PRINCIPAL
4′ FLUTE	8′ GAMBA	8′ OCTAVE	
2′ WALDFLÖTE	4′ PRINCIPAL	8′ FLUTE	
8′ SWELL TO GREAT	4′ NACHTHORN	4′ CHORALBASS	
	2′ BLOCKFLÖTE	2′ FLUTE	

EXETER 770 COMBINATION MEMORY 1 SETTINGS (Cont.)

GREAT	SWELL	PEDAL	POSITIV
GENERAL 8			
8′ PRINCIPAL	8′ VIOLA POMPOSA	16′ PRINCIPAL	8′ BOURDON
4′ OCTAVE	8′ GEDACKT	16′ SUBBASS	4′ PRINCIPAL
4′ FLUTE	8′ GAMBA	16′ BOURDON DOUX	1⅓′ QUINT
2′ SUPEROCTAVE	4′ PRINCIPAL	8′ OCTAVE	
MIXTURE IV	4′ NACHTHORN	8′ FLUTE	
8′ SWELL TO GREAT	2′ BLOCKFLÖTE	4′ CHORALBASS	
	IV PLEIN JEU	2′ FLUTE	
		8′ SWELL TO PEDAL	
GENERAL 9			
8′ PRINCIPAL	8′ FESTIVAL TRUMPET	32′ CONTRE BOURDON	
4′ OCTAVE	8′ TROMPETTE	16′ SUBBASS	
2′ SUPEROCTAVE	4′ SWELL TO SWELL	16′ BOURDON DOUX	
MIXTURE IV		8′ OCTAVE	
		4′ CHORALBASS	

*The setting for the GENERAL is constant for Generals 6 to 10. The Main Chorus and Great to Pedal Ancillary On are the only General stops engaged.

GENERAL 10			
8′ PRINCIPAL	8′ VIOLA POMPOSA	32′ CONTRE BOURDON	8′ BOURDON
4′ OCTAVE	8′ GEDACKT	16′ PRINCIPAL	4′ PRINCIPAL
4′ FLUTE	8′ GAMBA	16′ SUBBASS	
2′ SUPEROCTAVE	4′ PRINCIPAL	16′ BOURDON DOUX	
2′ WALDFLÖTE	4′ NACHTHORN	8′ OCTAVE	
MIXTURE IV	2′ BLOCKFLÖTE	4′ CHORALBASS	
8′ SWELL TO GREAT	1′ SIFFLÖTE	2′ FLUTE	
	PLEIN JEU IV	MIXTURE IV	
	16′ CONTRE TROMPETTE	16′ CONTRE TROMPETTE	
	8′ TROMPETTE	8′ GREAT TO PEDAL	
	4′ CLAIRON	8′ SWELL TO PEDAL	

DIVISIONALS (Memory One)

SWELL 1	**GREAT 1**	**PEDAL 1**
8′ VIOLA CELESTE II	8′ FLUTE CELESTE II	16′ BOURDON DOUX
8′ ECHO GAMBA		
SWELL 2	**GREAT 2**	**PEDAL 2**
8′ GEDACKT	8′ BOURDON	16′ SUBBASS
4′ NACHTHORN	4′ FLUTE	8′ FLUTE
SWELL 3	**GREAT 3**	**PEDAL 3**
4′ NACHTCHORN	8′ PRINCIPAL	16′ SUBBASS
8′ OBOE	8′ BOURDON	16′ BOURDON DOUX
TREMULANT	4′ OCTAVE	8′ OCTAVE
		4′ FLUTE

DIVISIONALS (Memory One) (Cont.)

SWELL 4
- 8′ VIOLA POMPOSA
- 8′ GEDACKT
- 4′ PRINCIPAL
- 4′ NACHTHORN
- 2′ BLOCKFLÖTE

SWELL 5
- 8′ FESTIVAL TRUMPET
- 8′ TROMPETTE

GREAT 4
- 8′ PRINCIPAL
- 8′ BOURDON
- 4′ OCTAVE
- 4′ FLUTE
- 2′ SUPEROCTAVE

GREAT 5
- 4′ FLUTE
- 8′ KRUMMHORN

PEDAL 4
- 16′ PRINCIPAL
- 16′ SUBBASS
- 8′ OCTAVE
- 8′ FLUTE
- 4′ CHORALBASS

PEDAL 5
- 32′ CONTRE BOURDON
- 16′ PRINCIPAL
- 16′ SUBBASS
- 8′ OCTAVE
- 8′ FLUTE
- 4′ CHORALBASS
- 2′ FLUTE
- MIXTURE IV
- 16′ CONTRE TROMPETTE

EXETER 770 MEMORY TWO REGISTRATIONS

Memory Two registrations have been designed for an Evangelical use and requires a different musical approach to the use of your EXETER 770. The Flute Tremulant Full is used except for the General 4.

GENERAL 1

This combination is useful as a subtle accompanimental sound. The lead line is played on the Swell and the accompaniment is played on the Great. If additional reinforcement to the lead line is needed either the 8′ Viola Celeste II or the 4′ Nachthorn may be added.

GENERAL 2

This is a plaintive Flute Solo (on the Swell) against a transparent accompaniment.

GENERAL 3

This is a special combination that requires a single note melody played on the Swell.

GENERAL 4

This is a basic forte hymn combination without tremulants.

GENERAL 5

This is a brighter sounding hymn combination with full tremulants.

GENERAL 6, 7, 8, 9 AND 10

These combinations are designed to provide a solid lead sound (with 16′) on the Swell beginning at a piano (P) dynamic level building to a double forte (FF).

The Manual divisionals are programmed with the most useful sounds that will compliment the General Combinations.

EXETER 770 MEMORY TWO
COMBINATION SETTINGS

GENERAL 1

GREAT	SWELL	PEDAL	GENERAL
HARP	8′ GEDACKT	16′ BOURDON DOUX	FLUTE TREMS FULL
4′ GREAT TO GREAT	8′ VOX HUMANA		GREAT TO PEDAL
	TREMULANT		ANTIPHONAL ON

GENERAL 2

GREAT	SWELL	PEDAL	GENERAL
8′ FLUTE CLESTE II	4′ NACHTHORN	16′ BOURDOUX	GREAT TO PEDAL
TREMULANT	TREMULANT	8′ GREAT TO PEDAL	ANTIPHONAL ON

GENERAL 3

GREAT	SWELL	PEDAL	GENERAL
8′ FLUTE CELESTE II	8′ VIOLA CELESTE II	16′ SUBBASS	FLUTE TREMS FULL
8′ GEMSHORN	4′ NACHTHORN	16′ BOURDON DOUX	GREAT TO PEDAL
HARP	2⅔′ NASARD	8′ GREAT TO PEDAL	ANTIPHONAL ON
TREMULANT	2′ BLOCKFLÖTE		
	8′ OBOE		
	16′ SWELL TO SWELL		
	TREMULANT		
	SWELL UNISON OFF		

GENERAL 4

GREAT	SWELL	PEDAL	GENERAL
8′ PRINCIPAL	8′ VIOLA POMPOSA	16′ PRINCIPAL	PIPE TREMULANT
8′ BOURDON	8′ VIOLA CELESTE II	16′ SUBBASS	GREAT TO PEDAL
8′ FLUTE CELESTE II	8′ GEDACKT	16′ BOURDON DOUX	ANTIPHONAL ON
8′ SWELL TO GREAT	4′ PRINCIPAL	8′ OCTAVE	
TREMULANT	4′ NACHTHORN	8′ FLUTE	**POSITIV**
		4′ NACHTHORN	8′ BOURDON

GENERAL 5

GREAT	SWELL	PEDAL	GENERAL
8′ PRINCIPAL	8′ VIOLA POMPOSA	16′ PRINCIPAL	FLUTE TREMS FULL
8′ BOURDON	8′ VIOLA CELESTE II	16′ SUBBASS	GREAT TO PEDAL
8′ FLUTE CELESTE II	8′ GEDACKT	16′ BOURDON DOUX	ANTIPHONAL ON
8′ GEMSHORN	8′ GAMBA	8′ OCTAVE	
4′ OCTAVE	4′ PRINCIPAL	8′ FLUTE	**POSITIV**
4′ FLUTE	4′ NACHTHORN	4′ NACHTHORN	8′ BOURDON
2′ WALDFLÖTE	2′ BLOCKFLÖTE		4′ FLUTE
8′ SWELL TO GREAT	8′ VOX HUMANA		
	TREMULANT		

EXETER 770 MEMORY TWO
COMBINATION SETTINGS (Cont.)

GENERAL 6

GREAT

8′ FLUTE CELESTE II
8′ GEMSHORN
TREMULANT

SWELL

8′ VIOLA POMPOSA
8′ VIOLA CELESTE II
8′ GEDACKT
4′ NACHTHORN
2⅔′ NASARD
8′ OBOE
8′ VOX HUMANA
TREMULANT

PEDAL

16′ SUBBASS
16′ BOURDON DOUX

GENERAL

FLUTE TREMS FULL
GREAT TO PEDAL

POSITIV
8′ BOURDON

GENERAL 7

GREAT

8′ FLUTE CELESTE II
HARP
4′ GREAT TO GREAT

SWELL

16′ BOURDON DOUX
8′ VIOLA POMPOSA
8′ VIOLA CELESTE II
8′ GEDACKT
8′ ECHO GAMBA
4′ NACHTHORN
8′ VOX HUMANA
TREMULANT

PEDAL

16′ SUBBASS
16′ BOURDON DOUX
8′ GREAT TO PEDAL

GENERAL

FLUTE TREMS FULL
GREAT TO PEDAL

POSITIV
4′ FLUTE

GENERAL 8

GREAT

8′ FLUTE CELESTE II
4′ FLUTE
HARP

SWELL

8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
4′ NACHTHORN
8′ VOX HUMANA
6′ SWELL TO SWELL
TREMULANT

PEDAL

16′ SUBBASS
16′ BOURDON DOUX
8′ FLUTE

GENERAL

GREAT TO PEDAL
ANTIPHONAL ON

POSITIV
8′ BOURDON
4′ FLUTE

GENERAL 9

GREAT

8′ PRINCIPAL
8′ BOURDON
8′ FLUTE CELESTE II
8′ GEMSHORN
4′ FLUTE
8′ SWELL TO GREAT

SWELL

8′ VIOLA POMPOSA
8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
8′ ECHO GAMBA
4′ PRINCIPAL
4′ NACHTHORN
2⅔′ NASARD
2′ BLOCKFLÖTE
8′ OBOE
8′ VOX HUMANA
16′ SWELL TO SWELL
TREMULANT

PEDAL

16′ PRINCIPAL
16′ SUBBASS
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE
8′ GREAT TO PEDAL

GENERAL

FLUTE TREMS FULL
GREAT TO PEDAL
ANTIPHONAL ON

POSITIV
8′ BOURDON
4′ FLUTE
PIPE TREM

EXETER 770 MEMORY TWO
COMBINATION SETTINGS (Cont.)

GENERAL 10

GREAT

8′ PRINCIPAL
8′ BOURDON
8′ FLUTE CELESTE II
8′ GEMSHORN
4′ FLUTE
8′ SWELL TO GREAT

SWELL

8′ VIOLA POMPOSA
8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
8′ ECHO GAMBA
4′ PRINCIPAL
4′ NACHTHORN
2⅔′ NASARD
2′ BLOCKFLÖTE
8′ OBOE
8′ VOX HUMANA
16′ SWELL TO SWELL
TREMULANT

PEDAL

16′ PRINCIPAL
16′ SUBBASS
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE
16′ CONTRE TROMPETTE
8′ GREAT TO PEDAL

GENERAL

FLUTE TREMS FULL
GREAT TO PEDAL
ANTIPHONAL ON

POSITIV
8′ BOURDON
4′ FLUTE
PIPE TREM

DIVISIONALS (Memory Two)

SWELL 1

8′ VIOLA CELESTE II
8′ GAMBA
4′ NACHTHORN
TREMULANT

GREAT 1

8′ FLUTE CELESTE II
HARP

PEDAL 1

16′ BOURDON DOUX
8′ FLUTE

SWELL 2

8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
4′ NACHTHORN
2⅔′ NASARD

GREAT 2

8′ FLUTE CELESTE II
8′ GEMSHORN

PEDAL 2

16′ SUBBASS
16′ BOURDON DOUX
8′ FLUTE

SWELL 3

8′ GEDACKT
4′ NACHTHORN
1′ SIFFLÖTE
8′ VOX HUMANA
16′ SWELL TO SWELL
SWELL UNISON OFF
TREMULANT

GREAT 3

8′ BOURDON
8′ FLUTE CELESTE II
8′ GEMSHORN
4′ FLUTE

PEDAL 3

16′ SUBBASS
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE

DIVISIONALS (Memory Two) (Cont.)

SWELL 4

8′ VIOLA CELESTE II
8′ GAMBA
4′ NACHTHORN
2⅔′ NASARD
8′ VOX HUMANA
16′ SWELL TO SWELL
SWELL UNISON OFF
TREMULANT

GREAT 4

4′ FLUTE
2⅔′ NASARD
8′ KRUMMHORN
TREMULANT

PEDAL 4

16′ SUBBASS
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE

SWELL 5

16′ BOURDON DOUX
8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
4′ PRINCIPAL
4′ NACHTHORN
2′ BLOCKFLÖTE
16′ CONTRE TROMPETTE

GREAT 5

CARILLON

PEDAL 5

32′ CONTRE BOURDON
16′ PRINCIPAL
16′ BOURDON DOUX
8′ OCTAVE
8′ FLUTE

EXETER 770 AND EXETER 770 PIPE AUGMENTED

SPECIFICATIONS

GREAT ORGAN:

* 8′ PRINCIPAL
* 8′ BOURDON
8′ FLUTE CELESTE II
8′ GEMSHORN
* 4′ OCTAVE
* 4′ FLUTE
*2⅔′ NASAT
* 2′ SUPEROCTAVE
* 2′ WALDFLÖTE
SESQUILATER II
MIXTURE IV
16′ CONTRE TROMPETTE (SW)
8′ KRUMMHORN
TREMULANT
4′ GREAT TO GREAT
16′ SWELL TO GREAT
8′ SWELL TO GREAT
4′ SWELL TO GREAT
HARP
CARILLON
16′ GRAND PIANO†
8′ PIANO†
HARPSICHORD†
PIANO/HARPSICHORD UNEXPRESSED†

SWELL ORGAN:

16′ BOURDON DOUX
8′ VIOLA POMPOSA
8′ VIOLA CELESTE II
8′ GEDACKT
8′ GAMBA
8′ ECHO GAMBA
4′ PRINCIPAL
4′ NACHTHORN
2⅔′ NASARD
2′ BLOCKFLÖTE
1⅗′ TIERCE
1′ SIFFLÖTE
PLEIN JEU IV
16′ CONTRE TROMPETTE
8′ FESTIVAL TRUMPET
8′ TROMPETTE

SWELL ORGAN

8′ OBOE
8′ VOX HUMANA
4′ CLAIRON
TREMULANT
16′ SWELL TO SWELL
SWELL UNISON OFF
4′ SWELL TO SWELL

POSITIV ORGAN:

* 8′ BOURDON
* 4′ PRINCIPAL
* 4′ FLUTE
* 2′ OCTAVE
*1⅓′ QUINT
PIPE TREMULANT

PEDAL ORGAN:

32′ CONTRE BOURDON
16′ PRINCIPAL
16′ SUBBASS
16′ BOURDON DOUX (SW)
8′ OCTAVE
8′ FLUTE
* 4′ CHORALBASS
* 4′ NACHTHORN
* 2′ FLUTE
MIXTURE IV
16′ CONTRE TROMPETTE (SW)
4′ CLAIRON (SW)
8′ GREAT TO PEDAL
8′ SWELL TO PEDAL
4′ SWELL TO PEDAL

GENERALS:

CELESTE
FLUTE TREMS FULL
MAIN CHORUS
FESTIVAL TRUMPET FF
MAIN OFF
ANTIPHONAL ON
GREAT/PEDAL PIPES OFF
GREAT ANCILLARY ON

OPTIONS:

TRACKER TOUCH KEYBOARDS
WOODEN CORE KEYBOARDS
REVERSE COLOR WOODEN KEYBOARDS
PIPE EXTENSIONS
CUSTOM FINISHES
37-NOTE STRUCK BAR GLOCKENSPIEL
PIANO/HARPSICHORD PACKAGE

DIMENSIONS:

HEIGHT 48¼″
WIDTH: 59⅝″
DEPTH WITHOUT PEDALBOARD: 31″
DEPTH WITH PEDALBOARD: 49¾″
CONSOLE WEIGHT: 600 LBS.

†Prepared for
*Indicates pipes or pipe/electronic doubling on Pipe Augmented instruments

FCC NOTICE

This instrument uses and generates small amounts of radio frequency energy. It has been type tested and found to comply with the most stringent limits for a class A or B computing device in accordance with the specifications in Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against radio and television interference in a residential installation.

If not installed and used in accordance with the instruction manual, this instrument might cause interference to some radio and television reception. In the unlikely event this occurs, the user is encouraged to try to correct the interference. The measures listed below are in order of simplicity.

A. Turn the organ off and on to see if it is really the cause of the interference.
B. Move the line cord around (coil and uncoil it a different way), or route it differently to the power outlet, or try another outlet on a different circuit.
C. Move the organ farther away form the radio or television receiver, or orient one or both in a different direction.
D. Re-orient the receiver antenna, or move the antenna farther away from the organ.
E. Your dealer or serviceman will have other remedies, depending on your specific situation.

NOTES

General Terminology

These definitions apply to Rodgers electronic organs, pipe augmented organs and full pipe organs. Most definitions apply to the products of other builders, as well.

ACCESS CODE—A numeric sequence of up to eight digits that is chosen by the organist to be used as the combination to unlock one of the combination action memories for programming registrations.

ACTIVITY—An effect which in pipe organs, causes a slight random change, or a fluttering of the pure tone. In Rodgers electronic organs, unique digital circuitry causes random variation of the voices, imparting this pipe organ characteristic. The Chorus control activates this simulation of the natural interaction of pipes in a pipe organ.

AEOLIAN-SKINNER ORGAN COMPANY—The famous Boston-based organ builder, directed by G. Donald Harrison, that was responsible for many notable pipe organ installations and for the development of the "AMERICAN CLASSIC" school of organ building. In 1974, Rodgers purchased the complete scalings, records, drawings and files of this celebrated organ builder.

A.G.O.—The organization of organists, the American Guild of Organists. The A.G.O. grants proficiency degrees on the basis of annual examinations: Associate (A.A.G.O.) and Fellow (F.A.G.O.). It publishes a monthly magazine, *The American Organist*. This organization has set specifications for the standardization of organ consoles, placement and order of organ stop controls, inclusion of proper couplers, etc.

AIR PUFF—A natural speech characteristic of classically voiced pipes. It is a transitory effect that gives the initial breathiness heard from windblown pipes.

ALTERABLE CARILLON—A special programming of the Carillon stop on most Rodgers instruments that allows the organist access to three separate tunings: (1) Major-tuned bells, (2) Minor-tuned bells, and (3) Flemish-tuned bells.

ALTERNATE MIXTURE—An altered state for a mixture voice, where the microprocessor assigns a completely different mixture—higher in pitch and brighter in composition—to the mixture stop control. The alternate mixture provides the harmonic crown to the Reeds, while the normal mixture is designed for choral accompaniments.

ANCILLARY—On Rodgers Pipe Augmented Organs an electronic division that supplements stops that normally play pipes. The organist may choose to play only pipes, only electronics or both on these voices by using the Ancillary On and Pipes Off stop controls.

ANTIPHONAL—This organ division is usually placed at the opposite end of a room from the main organ. It is used for echo effects, alternating choruses, or for augmenting the the main organ in congregational singing. In pipe organs the Antiphonal is a separate division. In electronic instruments it would normally include most divisions speaking through a separate amplification and speaker system.

AUDIO CHANNELS—Separate electronic networks with amplification that carry the electronic organ's voices to the speaker system. Normally three (two manual channels and a separate pedal channel) is the least separation acceptable in a classical electronic organ.

AUTOMATIC TURN-OFF—Rodgers instruments are programmed to automatically turn themselves off if left idle for more than two hours. A warning is flashed to the organist before turning off, in case the organist wishes to reset the instrument. This feature prevents the organ from being left on by mistake.

BLOWER—Electric motor-driven units that produce the air supply necessary in a pipe organ.

CELESTE—A celeste is a special musical effect designed to create the "orchestral sound" of multiple identical instruments playing at the same time, e.g., as section of violins. On pipe organs and many Rodgers organs a double set of separate and individually tunable pitch sources are used to create celeste voices. Celeste effects and celeste tunings are methods of creating celeste sound when a separate set of pitch sources are not available.

CELESTE TRANSFER—A special microprocessor controlled coupler that allows celeste voices to transfer from the Swell Organ to the Great Organ creating celeste accompaniment on the Great for solo voices on the Swell Organ.

CHEST—A Honduras Mahogany airtight box that contains electric actions to release air streams into each pipe according to the keys operated causing the pipes to sound.

CHAMBER—A room, open on one side, in which the pipes are placed. The open side is often finished with grille cloth or opens directly into the church or auditorium. Tone chambers should ideally have an interior finish of hard plaster or Masonite for proper tone dispersion.

CHIFF—The transient harmonic component that precedes the tone in a pipe voiced in the classical manner. On electronic organs, this is created by the momentary keying of a higher pitch than the pitch being played. This type of articulation is useful in playing contrapuntal music.

CHOIR ORGAN—Generally denotes the bottom keyboard of a three-manual organ. This division operates as an accompanimental division, and also provides the stops for the traditional Positiv division. It contains both Principal and Flute ensembles with full couplers available to increase its flexibility.

COAXIAL CABLE—This single wire supply line that carries the data stream from the organ console to pipe chests or Glockenspiel.

COMBINATION ACTION—Any device on an organ by which previously selected groups of stops can be brought on at will by the depressing of a button (piston) or toe stud. The means by which these combinations are retained are:

- **Pre-Set:** Combinations that do not visibly affect the stops already set up on the stop rail. These combinations are selected and wired in at the factory. This system is used on very small pipe organs and on some inexpensive electronic organs, generally not of the type suitable for church use.
- **Hold-and-Set:** The combinations are retained by depressing the desired piston and physically moving the tabs to the desired positions while holding the piston in.
- **Capture:** The combinations are set by depressing a Setter Piston (marked SET) and then depressing the piston on which the combination is to be set. Releasing both pistons then *captures* the new combination.

Rodgers Dual Memory Combination Action operates in both the Hold-and-Set and Capture modes. No preset systems are used with Rodgers Organs.

CONCERT PITCH—All Rodgers organs are set at the factory at "concert pitch " (A440) where middle A is tuned to a frequency of 440 Hertz (cycles) per second. Rodgers Tuning control allows variation from A440 to match another instrument or pipes, then instantly retunes to A440 when the selector is pushed in.

CONTINUO—A special microprocessor device that allows stops or couplers of the Pedal Organ to sound from the lowest key being played in the bass of the Great Organ. This provides pedal bass without having to use the pedal keys. It is an extremely important feature for pianists substituting on the organ while learning pedal technique.

COUPLERS—There are two basic types:

- **Inter-Manual:** Enables an entire division to be played on another keyboard, usually at three different pitch levels (e.g., 16′ Swell to Great, 8′ Swell to Great, 4′ Swell to Great).
- **Intra-Manual:** Enables an entire division to be played against itself an octave higher or lower (e.g., 16′ Great to Great, 4′ Swell to Swell), or silenced altogether (e.g., Great Unison Off).

Sub couplers are at the 16′ pitch level, Unison couplers at the 8′ pitch and Super couplers at the 4′ pitch level. A.G.O. console specifications include all of these various types of couplers. Couplers greatly increase an organ's flexibility and are particularly important in increasing their resources available on moderate size instruments.

C.P.U.—Central Processing Unit. This is the microprocessor unit that controls a Rodgers organ. Many of the unique features of a Rodgers organ and much of Rodgers' high reliability level start with this special organ computer.

CRESCENDO—In organ terminology, a Crescendo Pedal gradually adds a pre-selected succession of stops as it is depressed. When fully depressed, the Crescendo Pedal results in a Forte organ sound. Normal crescendo sequences cut out all percussion, celeste and tremulants when they are about one-third open. Rodgers Programmable Orchestral Crescendos give organists the chance to create their own crescendo sequences which may include celestes and tremulants for Romantic uses.

DIVIDED EXPRESSION—Denotes more than one expression pedal on an organ, so that voices on one division may be brought up in volume, while voices in another division may be kept soft.

DRAWKNOB—The oldest and most traditional manner of operating the stops of the organ. A knob, with the name of the stop on it, is drawn out to turn on the stop, pushed in to turn it off. Rodgers offers a lighted drawknob system which illuminates when turned on. Lighted drawknobs provide an immediate unmistakable indication of stops currently in use and do not tend to stick or have high current draw of mechanical systems. Because there is no physical movement when lighted drawknobs are activated by the combination action, the system is not only extremely reliable, but totally silent.

ECHO ORGAN—An antiphonal organ of refined and soft tone, often used for effects of a very ethereal nature.

EN CHAMADE—On pipe organs, a loud, horizontal solo reed stop. On Rodgers electronic organs, a special exponential horn and driver system with its own amplification, which carries only the loudest reed voice.

EXPRESSION SHOE—A foot-operated pedal which, on a pipe organ, opens and closes the venetian shutters of a swellbox, controlling the volume of an organ division. On Rodgers electronic organs, the expression shoe controls not only the volume, but also the treble, giving a "caged" sound when closed. This more closely resembles a pipe organ sound that a volume-only control can.

FACADE—The front display pipes that are exposed and visible on a pipe organ.

FINISHING—The judgmental process whereby the various tonal elements of an organ are adjusted, controlled, modified, and harnessed to provide the musical personality of the instrument. Finishing must be done on-site by a person with a fine ear and a sure knowledge of music. To be finished, an instrument must be voiceable. This custom fitting of an organ to its playing environment is vital to fine organ installations. Digital tone electronic organs cannot properly provide for on-site finishing since they cannot really be voiced in any manner analogous to voicing in a pipe organ.

FLEMISH-TUNING—The cluster of partials of Flemish Carillon where the tertian is flattened instead of natural as in the English Carillon. Flemish tuning is an alternate on most Rodgers carillons.

FLUE STOPS—Non-reed stops, namely the Foundation, Flute, and String families. Flues generate their tones by the action of a sheet of wind against a sharp lip. This sets a column of air in motion within the walls of the pipe, in the manner of a toy whistle.

FLUTES—The tonal family that supports the Principals and also provides another set of tonal colors for solo and accompaniment voices. Flutes may be open or stopped. Open flutes are full length flue stops such as the Hohlflote. Tapered flutes such as the Spitzflote are nar-

rower at their open tops. Stopped flutes speak an octave lower than their length would suggest because of the cap or stopper which closes the top of the pipe. The Holzgedackt and Bourdon are stopped flutes.

FOOT (PITCH)—The general term used to indicate the manner in which pitch is designated in an organ. A rank of pipes, the longest of which is 8 feet, will produce the standard concert pitch on an organ keyboard; consequently, such a stop is called an 8′ stop. A 16′ stop speaks the octave below; a 4′ stop speaks the octave above, etc.

FRACTIONAL PITCHES—Organ stops that speak other than unison or octave pitches (e.g., 5⅓′, 2⅔′, 1⅗′, 1⅓′). These are also called Mutations, and are useful in building up synthetic solo combinations or adding color to ensembles.

FUNDAMENTAL—The portion of the musical tone that defines the pitch of the tone to the ear, usually the lowest pitched harmonic of the tone.

GENERATOR (PITCH)—An electronic oscillator which generates a fixed pitch which, in Rodgers designs, is used as the pitch reference for a single note on the instrument. Divider oscillators are a shared or unified pitch generation system that, while less expensive to build, create problems in tonal versatility and sound. The single master clock (oscillator) system is the least expensive pitch generation system, but this shortcut results in poor organ ensemble and unauthentic celestes. In Rodgers organs, single master clock units are used only for piano/harpsichord voices. All actual organ voices use individual oscillators for pitch generation.

GENERATOR (TONE)—The distinct voicing network that shapes one of the waveforms generated by the pitch generator. Thus, a single pitch generator may generate different waveforms which are used to make many different voices in the organ. On Rodgers organs, the output of the pitch generator is fed into individual note voicing circuits. Each pitch has its own individual waveform with the volume of each note individually set for perfect scaling. Divider oscillator and master clock (oscillator) systems typically use only one waveshape per voice and all pitches of a voice are created from the exact same waveform. This results in the unauthentic bass and treble found on these instruments.

GLOCKENSPIEL—An authentic struck metal bar percussion voice that can provide an effective tonal accent. It is a separate device designed to be located remotely from the console.

GREAT ORGAN—The most important division of the organ. Other manual divisions usually couple to it with sub, unison, and super couplers. It is characterized by complete development of the Principal Chorus, the sound which is unique to the organ. It is the lower manual on two-manual organs, the middle manual on three-manual instruments.

HARMONIC—Any one of the many pitch partials that give a musical tone its primary quality is called a harmonic. The relative intensity of these harmonics, conversely, determines the tone quality of a given sound.

HEADPHONE JACK—A special jack for use with stereo headphones that, when actuated, shuts off organ speakers and pipes to allow silent practice without disturbing others.

KEYING—The process by which a pipe or tone generator is made to speak and cut off. On Rodgers electronic organs, individual voice keyers include separate attack and release controls by note. Digital recall systems and overall filter systems are unified in their attack and decay, typically using one overall system for all voices rather than the individual attack and decay by note of each voice found on the Rodgers.

KEYER—The circuitry which blocks or transmits an audio signal corresponding to one note of a scale. A keyer circuit may modify the input waveform and impart certain attack and decay characteristics. A keyer may be identified by type of waveform it transmits, or actual voice. If a device analogous to a rank of pipes exists within the electronic organ, it is the keyer. However, state-of-the-art electronics allow use of a single keyer note at various volume and filter levels which effectively allows one keyer to give the effect of many ranks of pipes. This is not true in organs creating voices from single digital waveforms or single overall voice filters.

LED—Light Emitting Diode, used to indicate on or off for organ voices on Rodgers LED stop tablet consoles. LEDs have lower current drain and are longer lasting than incandescent lamps.

MAIN ORGAN—The body of the instrument, usually containing the Choir, Great, Swell, and Pedal divisions. Echo divisions are built elsewhere in the auditorium.

MANUALS—Keyboards played with the hands.

MIXTURE—A compound stop consisting of two or more ranks of high-pitched unison and fifth sounding principal tone. These stops are used to reinforce the natural upper harmonics of a full ensemble, and add brilliance and definition. Alternate mixtures designed for use with reed choruses in playing great organ literature are standard on most Rodgers organs.

MUTATION—See "Fractional Pitches."

NATURALS—The white keys on the manuals and maple keys on the pedalboard. On some instruments, manual keys are "reversed" in color with a dark grenadilla wood used for the naturals.

OSCILLATOR—An electronic device that produces a sustained alternating impulse of electricity at a fixed pitch. The oscillator provides the pitch references for each note of the instrument. Rodgers oscillators are unaffected by temperature and humidity, with the highest stability in the industry, virtually eliminating the need for periodic organ tunings. Oscillators may be individual and tunable as on Rodgers electronic organs or unified without any individual adjustment available as on a master clock (oscillator) systems where one or a few oscillators are shared to create all pitches in the instrument. Rodgers does not use master clock systems except in its piano/harpsichord circuitry where a double system is used.

PEDAL—The organ division played by the feet. This division provides the bass line and foundation for the manual registrations, and has its own solo stops as well.

PEDALBOARD—The Pedal keyboard (clavier). The A.G.O. specifies a concave and radiating pedalboard of 32 notes.

PERCUSSIONS—Typical percussion voices on a classical organ include the Harp Carillon or Chimes and often, on electronic organs, the Harpsichord and Piano. The Piano is used to provide the percussive sounds often called for in contemporary organ literature, while the Harpsichord is useful for a more traditional approach to percussive organ sound.

PIPE—The metal or wood single note windblown tone producing device that is the basis for pipe organ sound. The two basic types are the flue pipe and the reed pipe. Each pipe is its own pitch generator, tone generator, and audio system.

PIPE AUGMENTATION—The combining of windblown pipes with electronic voices to create a combination instrument with the main principal and flute choruses coming from real pipes and supplementary voices being generated electronically. Current Rodgers organs are programmed for the addition of pipes upon the installation or at a future date.

PISTONS—Finger operated push-button switches that access the organ's memory in the combination action. They are located on the piston rails below each keyboard. These pistons are also used to access special microprocessor test and voicing programs built into each Rodgers console.

PRINCIPALS—The tonal family unique to the organ that has no orchestral counterpart. The Principal Chorus (8′, 4′, 2′) is the base to which all other organ voices relate. Also sometimes called the Diapason. Rodgers principals are the most authentic and pipe-like of any electronic manufacturer.

PRESETS—See "Combination Action," number 1. Preset systems are no longer used on Rodgers organs.

RANK—In pipe terminology, a rank is defined as a set of pipes possessing a uniform tone quality, one pipe for each note on the keyboard. A rank, in electronic organs, is nearly impossible to define, due to the multiple sounds available from a single tone generator.

REED—One of the two classes of organ stops. A reed pipe generates its tone by the vibration of a brass tongue against a rectangular opening, the resulting tone being given security of pitch and timbre by a resonator placed on the reed assembly. Reeds are the most colorful organ family. They are used in choruses and as solo stops.

REGISTRATION—Choosing and combining stops to play a given piece of music. The art of combining the sounds of an organ in a given room to properly enhance the music being played.

REGULATION—A voicing procedure in which each note of each stop is adjusted to assure its proper relation to the other notes of the stop and that stop's relation to the rest of the organ.

REGULATOR—An air regulation device used to maintain even pressure within the pipe chest. This may be a separate device located between the blower and chest, or built into the chest itself (the Schwimmer system).

REVERBERATION—The ability of a room to sustain a sound. This quality is to be distinguished from an Echo, which is an undesirable repeated "bounce" between two parallel surfaces. Reverberation is generally measured in terms of the number of seconds required for a sound to die away completely.

REVERSIBLE ACTION—A device applied to certain critical couplers or stops on an organ that allows them to be drawn or retired through the operation of a piston or toe stud. Pressing the piston once turns on the device; pressing the piston again reverses the action. Reversibles are generally applied to the following: 8′ Great to Pedal, 8′ Swell to Pedal, 8′ Swell to Great, 32′ Stops.

SCALING—The modification of the harmonic structure throughout the compass of an individual voice. Rodgers electronic organ voices are scaled in imitation of organ pipes. Uniform harmonic structures, as in overall filter systems or digital tone systems, are less expensive to build, but are lifeless and musically uninteresting in comparison to a properly scaled voice.

SCHWIMMER—A built-in air regulator system used in many Rodgers pipe chests.

SET BUTTON—The piston that is pressed before pressing the piston on which a combination is to be set. This applies only to Capture Action.

SHARPS—The typically black keys of manuals and pedalboards. On Rodgers wooden-core keyboards, manual sharps are made of real ebony or rosewood (a nice variation to the more common black).

SOLO COUPLER—A special Rodgers microprocessor device that allows any stop or coupler of the Swell organ to sound from the highest key played on the Great manual. Thus, a solo and accompaniment can be played from the same manual. The Solo Coupler can be used with the Continuo to give the effect of two manuals and pedal all played from the Great keyboard.

SOSTENUTO—The Sostenuto allows a chord to be sustained without holding the keys down. Its use is called for frequently in piano transcriptions of orchestral accompaniments for choral works. It is also useful to sustain a chord when making registration changes or changing pages of music.

STOP—Strictly speaking, a stop is a chromatic series of tones of like tone quality, one tone for each key on the keyboard. In practice, a distinction is made between **speaking stops**

(defined above), and **non-speaking stops** (couplers, tremulants, antiphonal controls, expression couplers, etc.).

STOP TABLET—The hand engraved plastic tongue that identifies a stop (voice) and actuates that voice when turned on. Most Rodgers stop tablets use LEDs for an instantaneous indication of voices on. Totally silent when actuated by a memory piston, Rodgers LED stop tablets offer improved reliability over older, mechanical action designs. On Rodgers LED stop tablet consoles, the stop tablets are arranged in two rows with the Swell organ the first division on the top row and the Pedal organ first on the lower row, in line with A.G.O. console specifications.

STRAIGHT ORGAN—A pipe organ term for an organ that has a separate individual pipe for each note of each available voice on the instrument. Such a design can often be expanded musically by judicious unification, which increases the versatility of the instrument. No electronic organs can be properly termed "straight organs" since all involve the use of a number of pitch generators, tone generators and audio channels to create the effect of pipe organs with many more pitch, tone and sound sources.

STRINGS—These are smaller scaled principal stops that are decreased in volume and have brighter timbre. Strings are useful as accompanimental stops.

SUSTAIN—A device that permits a more gradual (decay) of the tone of a sound. Most commonly affecting only Flute, Harp, and Carillon stops.

SWELL ORGAN—The more romantic division of the organ, named for the fact that it is enclosed in a box with shutters on the front, giving it the ability to "swell" in volume. The Swell contains Solo and Chorus Reeds, as well as the Strings and Celeste stops and full intramanual couplers. It is normally the top manual on two or three manual organs.

SYNTHETIC REED—Using mutation pitches on the organ, one can often synthesize reed sounds that aren't found on that particular instrument. For instance, Flutes at 8′, 2⅔′, and 1⅗′, drawn together and played as a solo melody will make a fairly respectable Clarinet. A 4′ and 2⅔′ Flute (or an 8′ String and a 2⅔′ Flute) makes a good solo Oboe.

TEST FUNCTIONS—Rodgers instruments include several microprocessor self-test programs that may be used as an aid in trouble-shooting organ problems. In addition, the organ test mode also includes special chiff and level adjustment programs used in voicing the instrument.

TOE STUDS—Foot operated chrome switches that duplicate the memory pistons and are also used for the Tutti and reversibles.

TRANSPOSER—A device that raises or lowers the pitch of the organ in semitones (half-steps) allowing the organ to sound at a different pitch than it is played. Transposers should return to normal pitch when the memory cancel is used or the organ is shut off. In Rodgers Pipe Augmented organs, both the pipes and the electronics transpose.

TRACKER TOUCH—A mechanism applied to the keyboards of the modern organ, which simulates the top-resistant type of touch characteristic of the tracker-action pipe organ. This touch, available as an option on the Rodgers, promotes clean, articulate playing.

TREMULANT—A rhythmic undulation in pitch and/or volume that is used as a special effect. Individual divisions usually have their own tremulants with a Flute Tremulant Full used to create a Gospel sound from the flute stops.

TUNING CONTROL—A special control that allows Rodgers organs to be quickly tuned to a piano or other instrument not at "concert pitch." Pushing the control knob in quickly retunes the organ to A440. The tuning control does not affect the pipes on Rodgers Pipe Augmented instruments.

TUTTI—A Reversible Action which, when operated, instantly brings on Full Organ. When engaged again, the organ reverts back to its original registration, since this action does not affect the stop tabs. Rodgers' Tuttis are programmable by one organist.

TWEETER—The high-frequency reproducing unit of a High-Fidelity speaker; essential for clarity and brilliance in organ sound.

UNIFICATION—The switching process whereby a set of pipes or tone generators can be played at another pitch level (16′, 8′, 4′, 2⅔′, etc.) and/or another division of the organ to increase the instrument's versatility. Unification in an electronic organ is often combined with individual level controls, filters, etc., eliminating the missing notes and lack of tonal variation that are negatives to pipe organ unification. All electronic organs are unified. Pitch generators and tone generators are widely shared in all electronic organ designs with master clocks and a limited number of wave shapes unified to create electronic organs often claiming equivalency to relatively large pipe organs.

VAN ZOEREN, INC.—A pipe organ firm headed by Allan Van Zoeren, a noted pipe organ finisher and tonal expert. In 1984, CBS purchased Van Zoeren, Inc. as part of an expansion of Rodgers pipe organ building capabilities.

VOICING—The complex process following the testing of an organ, in which every stop in the instrument is carefully scaled and graded for correct tone quality. This also involves making sure that each stop adds into the ensemble, without asserting itself unduly. A good deal of this is done at the factory, but it culminates in the finishing process at the installation site. Digital tone organ systems are incapable of on-site voicing by individual notes or voices. Overall filter per voice organ systems may or may not include voicing by voice, but do not allow for adjustment of individual notes.

WOOFER—The large cone-type loudspeakers responsible for the production of the powerful low-frequency tones of an organ. For the profound 32′ tones, Rodgers uses specially designed twin 15″ woofers in a ported cabinet or the 30″ super woofer.

ZIMBELSTERN—A mechanical struck-bell device often located high up in the facade of European organs. Rodgers Zimbelstern uses eleven high-pitched bells struck by strategically placed clappers to produce a continuous series of high-pitched bell sounds, which augment the tonal color of the organ.

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