

Rodgers  
Instrument Corporation

690

Owner's Manual



RODGERS®  
INSTRUMENT CORPORATION



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



**WARNING:**  
TO REDUCE THE RISK OF  
FIRE OR ELECTRIC  
SHOCK, DO NOT EXPOSE  
THIS APPLIANCE TO RAIN  
OR MOISTURE.

**PATENTS**  
G.B. 1312161  
F.R.G. 22 02 658  
CANADIAN 951550  
(1974)

**ATTENTION:** RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIIR

**CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK:**

**DO NOT REMOVE COVER OR BACK.**

**NO USER-SERVICEABLE PARTS INSIDE.**

**REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

## NOTICE TO USERS

Information in this document is subject to change without notice. No part of this manual may be translated into any language, stored in a retrieval system, reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of **Rodgers Instrument Corporation**.

### **RODGERS INSTRUMENT CORPORATION**

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# SAFETY INSTRUCTIONS

## INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS

### IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** When using this instrument, always follow basic precautions, including the following:

1. Read all the instructions before using, adjusting or repairing this instrument.
2. To reduce the risk of injury, supervise children closely when they are around the instrument.
3. Use this instrument only in the manner recommended by Rodgers Instrument Corporation.
4. Do not use this instrument near water, for example, near a swimming pool or a damp/wet room.
5. Use of this instrument, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. **DO NOT** operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
6. Locate the instrument so its position does not interfere with its proper ventilation.
7. Locate the instrument away from heat sources such as radiators, heat registers or other products that radiate heat directly onto the instrument.
8. Protect the instrument from dust as much as possible.
9. Connect the instrument to a power source only of the type described in the operating instructions or as marked on the instrument. Do NOT attempt to defeat the grounding connection of the three-prong attachment plug. *This is a safety feature.* If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do NOT defeat the safety purpose of the plug.
10. Unplug the power cord of the instrument from the power source when left unattended for a long period of time.
11. Do not walk on or place objects on top of the power cord.
12. Do not pull the cord to unplug. Hold the plug when unplugging from the power source.
13. When setting up with other instruments or peripherals, follow the procedures in accordance with Rodgers' owner's manual.
14. Take care that objects do not fall or liquids spill into the instrument.
15. Service the instrument with qualified service personnel when:
  - a. The power cord or plug has been damaged.
  - b. Objects have fallen or liquid has spilled into the instrument.
  - c. The instrument has been exposed to rain or other weather damage.
  - d. The instrument does not appear to operate normally or exhibits a marked change in performance.
  - e. The instrument has been dropped or the enclosure has been damaged.
16. Do not attempt to service the instrument beyond that described in the owner's manual. Refer all other servicing to qualified technical service personnel.

**WARNING:** THIS INSTRUMENT MUST BE EARTH GROUNDED.

You must GROUND instruments equipped with a TYPE AC, 3 WIRE GROUND PLUG.

**SAVE THESE INSTRUCTIONS**

# FCC NOTICE

## Radio and Television Interference

The Rodgers 690 uses and generates small amounts of radio-frequency (RF) energy. The instrument complies with the limits set for Class B digital devices. FCC Rules, Part 15, Subpart B define the limits for radio and television interference in a residential installation.

Follow the installation and the use instructions in the manual, or the instrument could potentially cause interference with some radio or television reception. In the unlikely event this occurs, we encourage the user to try the following corrective measures:

- ✓ Turn the instrument OFF to see if it is the actual source of the interference.
- ✓ Disconnect the peripheral devices and their input/output cables one at a time. If the interference stops, it is caused by the peripheral device or its I/O cable.
- ✓ Try coiling and uncoiling the instrument's power cord in different ways.
- ✓ Connect the instrument's power cord to a power outlet on a different circuit.
- ✓ Move the instrument farther away from the radio or television receiver.
- ✓ Turn the radio or television receiver until the interference stops.
- ✓ Connect the radio or television receiver to a different power circuit.
- ✓ Reorient or move the receiver antenna farther away from the instrument. Consider installing a rooftop antenna with coaxial cable lead-in between the antenna and receiver.
- ✓ Consult the nearest Rodgers dealer for more information if the above corrective measures don't remove the interference.

(PEDAL)			
21	3	16'	Principal
21	4	16'	Subbass
22	2	8'	Octave
22	4	8'	Gedackt
22	6	4'	Chorallbass
24	2	16'	Fagott
24	6	4'	Rohr Schalmel

(COUPLERS AND OTHER CONTROLS)			
25	3	Great to Pedal	
25	5	Swell to Pedal	
26	6	Swell to Great	
31	3	Swell Flute Tremulant Full	
4	4	Great Tremulant	
11	6	Swell Tremulant	

### Changing SysEx Device ID Transmission

At power-up, the 690 transmits a 10H SysEx Device ID. To change the Device ID which is transmitted in stop messages, use the following procedure:

- 1) Hold SET and press MIDI on Great (MIDI on Great will flash).
- 2) Hold piston #5 and press a key on the Great manual which corresponds to the Device ID desired:

Low "C"	10H
Low "C#"	11H
Low "D"	12H
Low "D#"	13H
Low "E"	14H
Low "F"	15H
Low "F#"	16H
Low "G"	17H
Low "G#"	18H
Low "A"	19H
Low "A#"	1AH
Low "B"	1BH
Tenor "C"	1CH
Tenor "C#"	1DH
Tenor "D"	1EH
Tenor "D#"	1FH

or

any other key      00H

The transmit SysEx Device ID will remain changed until the organ is turned off. The 690 will always respond to Device IDs 00H - 0FH plus the Device ID specified above.

## 2) Memory Dump

This message is transmitted when the organist sends ("dumps") a combination memory to a sequencer. The body of the message contains a portion of the data from a combination memory; several such messages are usually necessary to transmit the complete contents of a memory.

Subcommand byte: 03H

Offset byte: mm This byte contains the zero-indexed number of the combination memory being dumped.

Data Bytes: dd, dd, ... The data for the memory is converted from one byte with 8 significant bits to two bytes with 4 significant bits each. The high order bits are contained in the low order nibble of the first byte. The low order bits are contained in the low order nibble of the second byte. The contents of the piston data structure is proprietary and not disclosed.

Table 1. Stop SysEx Code Assignments

BYTE	BIT	STOP NAME
		(GREAT)
0	3	8' Principal
1	0	8' Nason Gedackt
1	2	8' Flauto Dolce
1	3	8' Flute Celeste II
1	5	4' Octave
1	6	4' Spitzflöte
2	1	2' Super Octave
2	3	1 1/3' Quintflöte
2	6	IV Mixture
3	4	8' Cromorne
4	1	Chimes
1	2	16' Lieblich Bourdon
		(SWELL)
8	0	8' Viola
8	1	8' Viola Celeste II
8	4	8' Bourdon
9	3	4' Prestant
9	4	4' Koppelflöte
9	5	2 2/3' Nazard
10	0	2' Blockflöte
10	4	IV Plein Jeu
10	6	16' Contre Basson
11	1	8' Trompette
11	2	8' Hautbois
10	1	1 3/5' Tierce

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## Rodgers Instrument Corporation MIDI System Exclusive Code

Rodgers organs use a subset of the Roland standard MIDI System Exclusive format. All Rodgers SysEx packets use the Roland "Data Set" command, listed under "One Way Transfer Procedure" in the Roland System Exclusive format specification. The first five bytes of this type of packet are as follows:

Byte	Function
F0H	Begin System Exclusive
41H	Roland/Rodgers SysEx ID
10H	Device ID*
30H	Model ID (30 = organ)
12H	Data Set Command

\*Note: This byte is usually 10H; however, the organ receives 00H - 0FH and can be set to transmit Device ID 00H or transmit and receive any Device ID between 10H and 1FH. See the last page of these notes for more information.

This header is then followed by the message body. The message body contains a *subcommand byte*, an optional *offset byte* and a variable number of *data bytes* followed by a *checksum byte* and a *MIDI End Exclusive byte* (F7). The checksum byte value is such that if all bytes beginning with the subcommand byte and ending with the checksum byte are added, the lower 7 bits of the result will be all zeroes.

The following messages are used by Rodgers as of the introduction of model 690:

### 1) Stop Change

This message is transmitted each time one or more stops, couplers, or auxiliary controls changes state. The state of each control is represented as a bit in one of the message data bytes. The assignment of controls to specific bits is standardized for all Rodgers organs by use of the master code assignment list included herein. Activated controls ("on") are represented by ones in the bit map. This message is transmitted on the Sequencer and Pipe ports only on organs which have a separate MIDI Instrument port. It can, however, be received on the Instrument port as well.

Subcommand byte: 01H

Offset byte: 00H - 22H

This byte indicates the offset of the first data byte from the beginning of the bit map. Normally, this will be zero, and the entire map (35 bytes) will be transmitted. It is possible, though, to send only part of the map beginning with the byte indicated by this value.

Data Bytes: dd, dd, ...

The data bytes represent the new state of the bit map beginning at the offset specified above. Any number of data bytes up to the full length of the bit map may be sent, although the entire map is usually transmitted. Refer to the included chart for stop map assignments.

### MIDI (Musical Instrument Digital Interface)

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### MIDI Implementation Chart

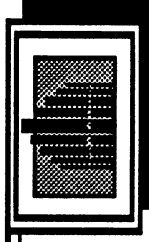
Function	Transmitted	Recognized	Remarks
Basic Default:	1-3, 12-14 *1	12-14 *1	12=Great 13=Swell 14=Pedal MIDI on GT only
Channel Changed:	1-16		
Mode Default: Messages: Altered:	Mode 3 X *****	Mode 3 X *****	
Note Number True Voice	22-112	22-112	
Velocity Note On: Note Off:	O O	X X	
After Touch Key's: Ch's:	X X	X X	
Pitch Bender	X	X	
Control 7	O	O	Channel 12: Great Expression
Change 64	O		Channel 13: Swell Expression
Program Change True #	1-128 *****	1-10, 20, 31, 32, 33, 34 *****	Channel 14: Pedal Expression
System Exclusive	O *2	O *2	MIDI on GT Channel
System Common :Song Pos :Song Sel :Tune	X X X	X X X	
System Real Time :Clock :Commands	X X	X 0	
Aux Messages :Local ON/OFF :All Notes Off :Active Sense :Reset	X O (123) O X	X O (123) O X	
Notes: *1 *2 *3	Able to choose between O and X. SysEx used for stop changes, combination memory dumps. Received Start sends current stop and expression status. Received Stop restores expression to shoe positions. Received Continue sets expression to values at last Stop.		

Mode 1: OMNI ON, POLY  
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO  
Mode 4: OMNI OFF, MONO

O : Yes  
X : No

## OVERVIEW OF THE 690



Thank you for choosing the Rodgers 690. This instrument is a high quality classical organ in both sound and construction, designed to provide years of reliable service.

This instrument is a two-manual classical organ that incorporates an eclectic specification and authentic pipe organ sounds. The 690 has 31 speaking stops, dual expression, crescendo pedal, tutti control, antiphonal on/main off controls, a four-channel (stereo x 2) audio system with external speakers and many other features.

The console is constructed of the finest woods and veneers, suitable in the most elegant surroundings. It is unsurpassed in beauty and longevity.

The 690 utilizes lighted tilt tab stop controls. Traditional couplers are included, as well as an adjustable combination action (pistons) featuring divisionals as well as generals with four memories.

This instrument is completely voiced and tuned for optimum tonal authenticity. A Rodgers factory-trained technician can provide additional voicing and finishing as required.

The 690 offers full MIDI (Musical Instrument Digital Interface) capability, allowing the organist to control other MIDI devices (keyboards, sequencers, rhythm units, sound modules, etc.). MIDI allows the performer full recording and playback capabilities using an external MIDI device.

Rodgers organs are built in Hillsboro, Oregon, USA. Through the most advanced technology available, the Rodgers Instrument Corporation, a member of the Roland Group, delivers proven reliability, design innovation and a tradition of musical excellence, marking our position as

***The Sound Choice!***

*"Leadership through technology for the musician of today and tomorrow."*



# BRIEF TOUR

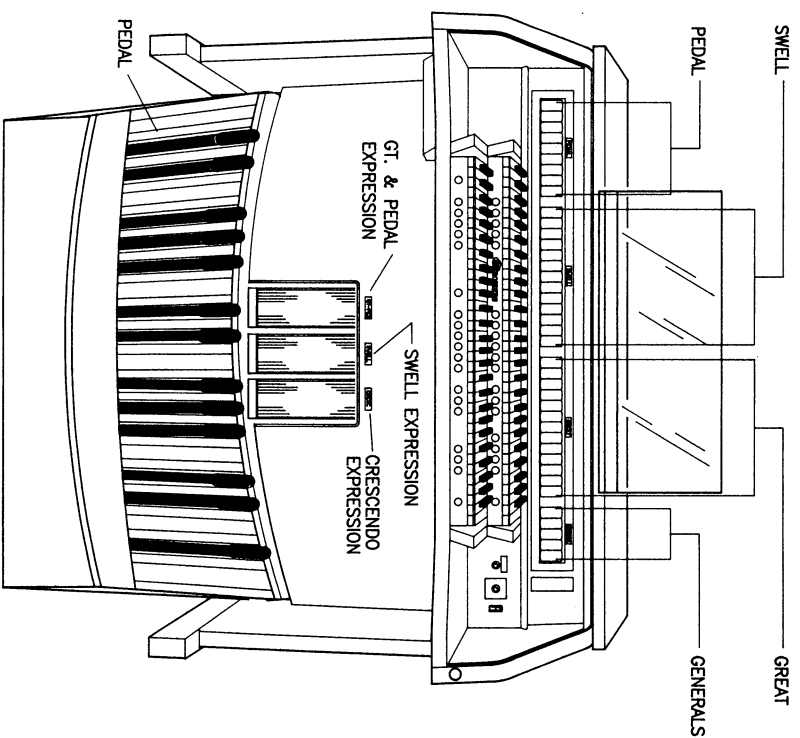
To get started, here is a brief tour of the basic operations of the Rodgers 690:

## TURN ON/TURN OFF

To turn the organ on, press the power rocker switch at the top (1). In approximately 5 seconds, the SET and GENERAL CANCEL pistons will light, indicating the power is on and the organ is ready to play. To turn the power off, press the power rocker switch at the bottom (0). The power to the organ is off.

## DIVISIONS

The following groupings of stops (tilt tabs) affect the indicated manuals (keyboards) or pedalboard:



## PEDAL

- Pedal Master Channel output = 14 or off
- Pedal Master Channel input = 14 or off
- MIDI on Pedal channel output = 3 or off
- MIDI on Pedal output octave transpose -1, 0, +1

Send Program Change on MIDI on Pedal channel.

Send GS Variation Select on MIDI on Pedal channel.

Pedal Note on/off sends fixed velocity.

Great Expression Shoe send MIDI volume message on MIDI on Pedal channel.

## GENERAL

Local Control on/off (all manuals).

Save combination action memory to MIDI (in MIDI System Exclusive packets).

Restore combination action memory from MIDI (from MIDI System Exclusive Packets). Organ Stop information in MIDI System Exclusive packet.

System Exclusive Device ID is selectable 0, 16-31.

Send MIDI Active Sensing.

On loss of MIDI Active Sense signal, all active MIDI notes are turned off.

Rodgers Instrument Corporation is an active registered member of the MIDI Manufacturers Association.



## Rodgers 690 Organ MIDI Features

The following is a general outline of MIDI features available in the Rodgers 690.

### GREAT

Great Master Channel output = 12 or off  
 Great Master Channel input = 12 or off  
 MIDI on Great channel = 1-16 (default is 1) or off  
 MIDI on Great channel output octave transpose -1, 0, +1

Receive Program Change on Great Master Channel:

1-10 = general pistons 1-10  
 20 = General Cancel  
 31 = memory 1  
 32 = memory 2  
 33 = memory 3  
 34 = memory 4

Send Program Change on MIDI on Great channel.

Send GS Variation Select on MIDI on Great channel.

Great MIDI note on/off sends keyboard velocity or fixed velocity.

Great Expression Shoe sends MIDI volume message on Master Channel and MIDI on Great channel.  
 MIDI volume message on Great Master Channel input controls great expression.

### SWELL

Swell Master Channel output = 13 or off  
 Swell Master Channel input = 13 or off  
 MIDI on Swell channel output = 2 or off  
 MIDI on Swell channel output octave transpose -1, 0, +1

Send Program Change on MIDI on Swell channel.  
 Send GS Variation Select on MIDI on Swell channel.

Swell MIDI note on/off sends keyboard velocity or fixed velocity.

Swell Expression Shoe sends MIDI volume message on Master Channel and MIDI on Swell channel. MIDI volume message on Swell Master Channel input controls great expression.

## SELECTING OR RETIRING A STOP

Press the bottom of the desired tilt tab to turn it on. It will light, indicating it is on. Press the top of the tilt tab to turn off the stop. The light will go off, indicating the stop is off.

All of the 690 stops are controlled with lighted tilt tabs, with the exception of the Chimes on the Great manual, which are controlled by a lighted piston located underneath the Swell manual.

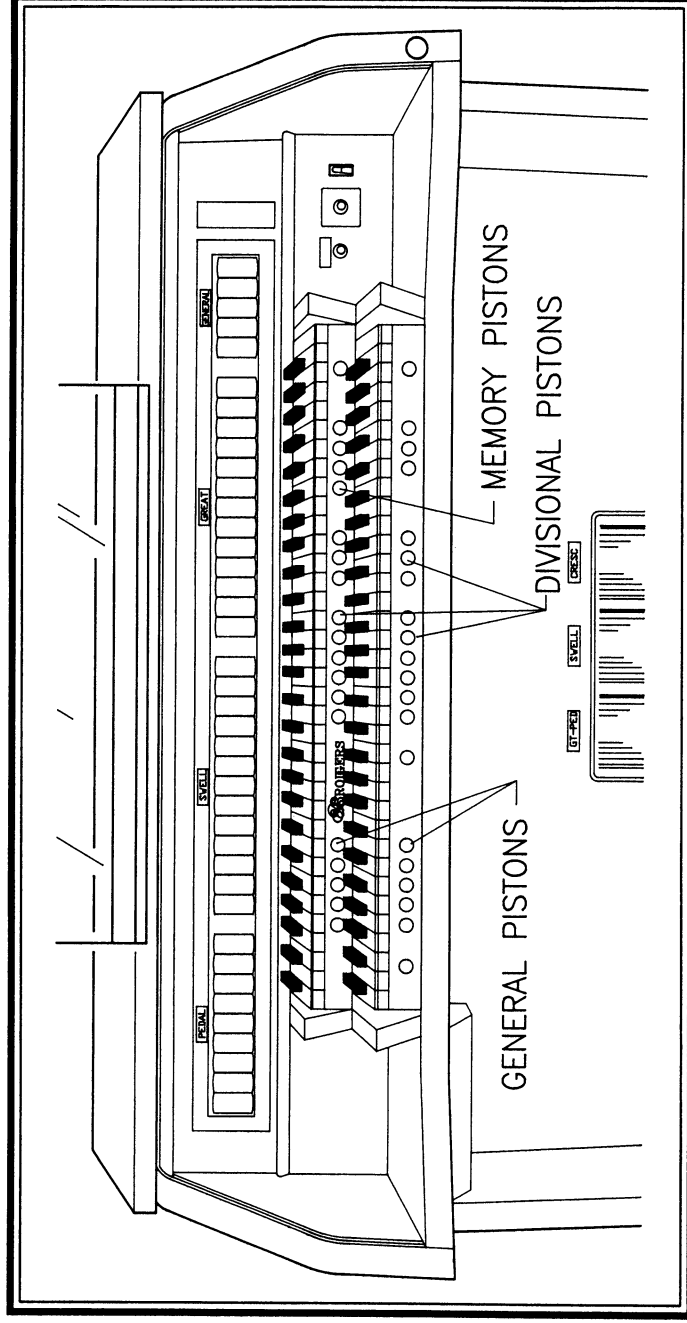
Press this piston to activate the Chime stop on the Great (the piston will light). Press this piston again to retire the Chime stop (the light will go out).



## COMBINATION ACTION (Pistons)

The 690 features a combination action easily changed by the organist from the console. The organist can pre-select favorite registrations and make rapid changes in tone color using this advanced system. The pistons will light when pressed.

The 690 combination action includes ten General pistons, six Great and Swell Divisional pistons, three Pedal Divisional pistons, a SET piston and a GENERAL CANCEL piston with four memory levels (M1, M2, M3 and M4). General pistons affect all Divisions of the organ (Great, Swell and Pedal). Divisional pistons affect the specific Division.



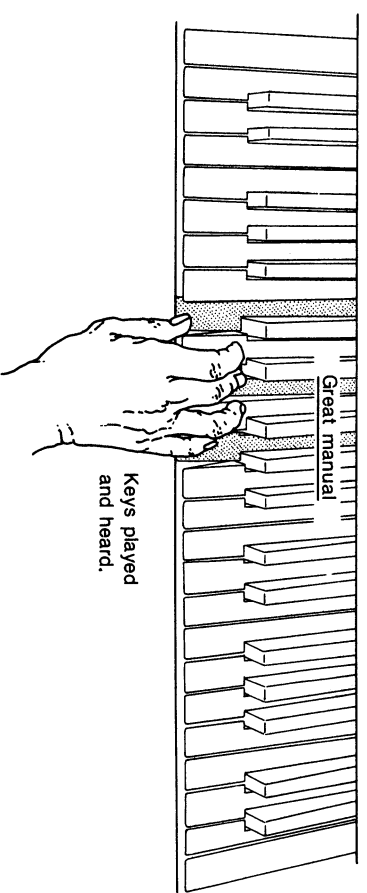
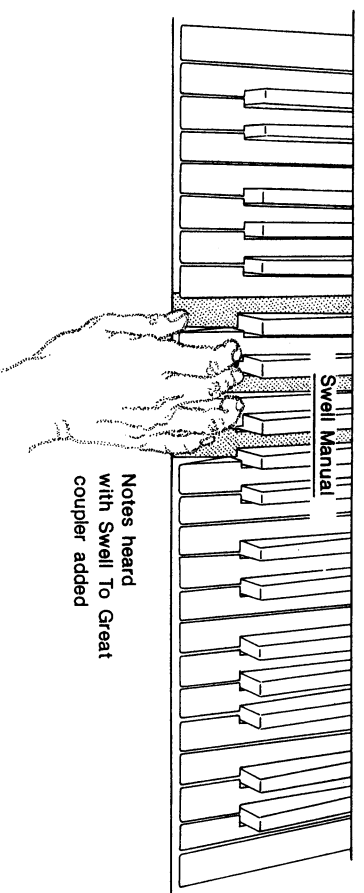
#### • HOW TO SET THE PISTONS:

1. Select a memory by pressing M1, M2, M3 or M4.
2. Select the stops desired.
3. Press the SET piston and hold.
4. While holding the SET piston, press the desired piston, and then release both pistons simultaneously.



#### COUPLERS

• Couplers enable stops of one Division to be played on another keyboard or pedalboard. The couplers on the 690 are GREAT TO PEDAL, SWELL TO PEDAL and SWELL TO GREAT. The 690 features a GREAT TO PEDAL reversible thumb piston.



#### CARE AND MAINTENANCE

As with any fine musical instrument, reasonable care is necessary to protect your investment. Normally no difficulties should be experienced, as only the finest component parts are used by Rodgers. If your instrument should require 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. 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. 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 of furniture, neither the console nor finished speaker cabinets should be placed over a heat register or near an open window.

#### • KEYBOARDS AND TILT TABS

Keyboards and tilt tabs 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.).



**FIVE ACCOMPANIMENT  
VOICES (SWELL)**

- |        |     |                              |
|--------|-----|------------------------------|
| Swell: | (1) | Viola 8'<br>Viola Celeste 8' |
|        | (2) | Bourdon 8'                   |
|        | (3) | Bourdon 8'<br>Koppelflöte 4' |
|        | (4) | Viola 8'<br>Bourdon 8'       |
|        | (5) | Viola 8'<br>Prestant 4'      |

**FOUR ACCOMPANIMENT  
VOICES (PEDAL)**

- |        |     |  |
|--------|-----|--|
| Pedal: | (1) | Subbass 16'  |
|        | (2) | Subbass 16'<br>Gedackt 8'                                  |
|        | (3) | Principal 16'<br>Subbass 16'<br>Gedackt 8'                 |
|        | (4) | Principal 16'<br>Subbass 16'<br>Gedackt 8'<br>Nachthorn 4' |

**TREMULANTS**

Tremulants create changes in pitch (sharp and flat) or amplitude (volume). The use of tremulants adds warmth to solo or small ensemble combinations and is useful in gospel and romantic music. The 690 has a regular TREMULANT which is useful for classical music. It also has a FLUTE TREMULANT FULL that affects all the flute voices on the organ. This tremulant has a wider excursion (depth) and faster rate than other tremulant settings. The tremulants are adjustable for both speed and depth. It is recommended that these adjustments be made by a **Factory-Trained Technician**.

**EXPRESSION PEDALS**

The pedal in the middle controls the overall volume of the Swell Division. The pedal on the left controls the overall volume of the Great and Pedal Divisions. These pedals are used to give variety of expression to the music played. Pressing the pedal forward increases the volume; drawing back decreases the volume.

When the Expression Pedals are in use, the Expression indicators will light in green segments (from bottom to top), as the pedal is depressed and more volume is created. The Expression indicators are located to the right of the stop rail above the Swell manual, and are engraved **GT** and **SW**. (Note: The indicators will reflect the actual expression of volume, not necessarily the physical position of the Expression Pedal.)

**GREAT TO SWELL EXPRESSION COUPLER**

The Great to Swell Expression Coupler allows the Great and Swell Divisions to be expressed by using the middle Expression Pedal.

**CRESCENDO PEDAL**

The slightly raised pedal to the right of the Expression Pedals is the Crescendo Pedal, which gradually adds a factory 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. Stops added by the Crescendo Pedal do not light.

When the Crescendo Pedal is in use, the Crescendo/Tutti indicator will light in green segments (from bottom to top), as the pedal is depressed and more stops are added. The Crescendo/Tutti indicator is located to the right of the stop rail above the Swell manual, and is engraved **CR**.

**TUTTI**

There are times when a full organ registration is needed immediately. The 690 is equipped with a Tutti piston. Press the piston to turn on the Tutti, and press again to turn it off. When Tutti is on, the Tutti piston lights, and the top segments of the Crescendo/Tutti indicator will light red. The Crescendo/Tutti indicator is located to the right of the stop rail above the Swell manual.

## THE BASS COUPLER

This feature's name is derived from the ancient term "Basso Continuo," meaning thoroughbass. When this piston is pressed, it will light. Any stops or couplers on in the Pedal Division will sound from the lowest key being played on the Great manual. This provides a pedal bass without having to actually play the pedalboard with the feet.

In its normal setting, the Bass Coupler affects keys 1 through 24 of the Great manual, but its range is programmable.

### HOW TO SET THE RANGE OF THE BASS COUPLER:

1. Hold SET and press the BASS piston, which will start flashing.
2. Release the SET piston and BASS piston.
3. While the BASS piston is flashing, press a key which corresponds to the highest note the range is to extend. Any note from key 1 to key 61 may be selected. Keys above 32 will play external MIDI devices but will not play the Pedal stops. After the selected key has been pressed, the BASS piston will stop flashing. (Note: When key is pressed to set the range, no sound will be heard even if stops are on, so no disturbance will be made if programming during a performance.)



#### FOUR ACCOMPANIMENT VOICES (GREAT)

- |        |     |                     |
|--------|-----|---------------------|
| Great: | (1) | Flauto Dolce 8'     |
|        | (2) | Flute Celeste II 8' |
|        | (3) | Nason Gedackt 8'    |

- |  |     |                                   |
|--|-----|-----------------------------------|
|  | (4) | Nason Gedackt 8'<br>Spitzflöte 4' |
|--|-----|-----------------------------------|

#### FIVE ACCOMPANIMENT VOICES (SWELL)

- |  |     |                              |
|--|-----|------------------------------|
|  | (1) | Viola 8'<br>Viola Celeste 8' |
|  | (2) | Bourdon 8'                   |

- |  |     |                              |
|--|-----|------------------------------|
|  | (3) | Bourdon 8'<br>Koppelflöte 4' |
|--|-----|------------------------------|

- |  |     |                        |
|--|-----|------------------------|
|  | (4) | Viola 8'<br>Bourdon 8' |
|--|-----|------------------------|

- |  |     |                         |
|--|-----|-------------------------|
|  | (5) | Viola 8'<br>Prestant 4' |
|--|-----|-------------------------|

#### TWO ACCOMPANIMENT VOICES (PEDAL)

- |  |     |                           |
|--|-----|---------------------------|
|  | (1) | Subbass 16'               |
|  | (2) | Subbass 16'<br>Gedackt 8' |

#### TRUMPET TUNE

- |        |   |
|--------|---|
| Great: | Principal 8'<br>Nason Gedackt 8'<br>Spitzflöte 4' |
|--------|---|

- |        |                             |
|--------|-----------------------------|
| Swell: | Trompette 8'<br>Hautbois 8' |
|--------|-----------------------------|

- |        |             |
|--------|-------------|
| Pedal: | Subbass 16' |
|--------|-------------|

- |           |                                     |
|-----------|-------------------------------------|
| Couplers: | Great to Pedal<br>Melody (optional) |
|-----------|-------------------------------------|

CORNET

Great: Nason Gedackt 8'  
 Swell: Bourdon 8'  
 Nazard 2 2/3'  
 Pedal: Subbass 16'  
 Couplers: Great to Pedal

FIVE SOLO VOICES  
(GREAT)

Great: (1) Nason Gedackt 8'  
 (2) Spitzflöte 4'  
 (3) Nason Gedackt 8'  
 Spitzflöte 4'  
 (4) Cromorne 8'  
 (5) Cromorne 8'  
 Spitzflöte 4'

FIVE SOLO VOICES  
(SWELL)

Swell: (1) Hautbois 8'  
 (2) Contre Basson 16'  
 (3) Trompette 8'  
 (4) Bourdon 8'  
 Nazard 2 2/3'  
 (5) Bourdon 8'  
 Koppelflöte 4'  
 Nazard 2 2/3'  
 Tremulant

THE MELODY COUPLER

When the MELODY piston is pressed, it will light. Any stop or coupler of the Swell Division will sound from the highest key being played on the Great manual. This allows a solo melody and an accompaniment to be played from the same manual.

In its normal setting, the Melody Coupler affects keys 25 through 61 on the Great manual, but its range is programmable.

HOW TO SET THE RANGE OF THE MELODY COUPLER:

1. Hold SET and press the MELODY piston, which starts flashing.
2. Release the SET piston and MELODY piston.
3. While the MELODY piston is flashing, press a key which corresponds to the lowest note the range is to extend. Any note from key 1 to key 61 may be selected. After the selected key has been pressed, the MELODY piston will stop flashing.



## TUNING CONTROL

The 690 is equipped with a TUNING control. This allows the entire organ to be tuned easily and quickly to a piano or musical instrument not at standard concert pitch (A 440). If the TUNING control is pushed in, the organ will remain at standard concert pitch, and turning the control will have no effect. To alter the pitch, pull the TUNING control out until it clicks, then turn the control to set the pitch.

## CHORUS CONTROL

The 690 features a CHORUS function, which allows the Swell Division to be detuned from the Great Division, providing even greater "warmth" to the tonal character of the organ. To select the CHORUS function, press the CHORUS piston. To change the amount of detuning, hold the SET piston and press the CHORUS piston. The CHORUS piston will begin to flash. By using the TUNING CONTROL, the CHORUS setting may be adjusted.

## TRANSPOSER CONTROL

Turning the TRANSPOSER control will raise or lower the pitch of the organ up to four semitones (half steps). Many singers need a key change to accommodate their voice range. The TRANSPOSER is especially useful for accompanying soloists, eliminating the need to mentally transpose music on a printed sheet into a more suitable key. The TRANSPOSER helps the organist accomplish this effortlessly.

## ANTIPHONAL ON/MAIN OFF

The 690 is prepared with ANTIPHONAL ON/MAIN OFF pistons which can operate an additional stereo audio system. An antiphonal speaker system is usually installed at the opposite end of the building from the main organ, allowing greater musical flexibility. The ANTIPHONAL ON piston activates this additional audio system, and the MAIN OFF piston turns off the main organ. (Note: If the MAIN OFF piston is lighted, the ANTIPHONAL ON piston must be lighted also, or the organ will not sound through either system.)



## ENGLISH CATHEDRAL

Great: Principal 8'  
Nason Gedackt 8'  
Spitzflöte 4'

Swell: Lieblich Bourdon 16'

Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'  
Blockflöte 2'  
Contre Basson 16'  
Trompette 8'  
Hautbois 8'

Pedal: Principal 16'  
Subbass 16'

Couplers: Swell to Pedal  
Swell to Great

## CLASSIC CHORUS (FOR BACH)

Great: Principal 8'  
Octave 4'  
Super Octave 2'  
Mixture IV

Swell: Bourdon 8'  
Prestant 4'  
Blockflöte 2'

Pedal: Subbass 16'  
Octave 8'  
Choralbass 4'

Couplers: Great to Pedal

## TRIO PLAYING

Great: Nason Gedackt 8'  
Spitzflöte 4'  
Quintflöte 1 1/3'

Swell: Bourdon 8'  
Blockflöte 2'

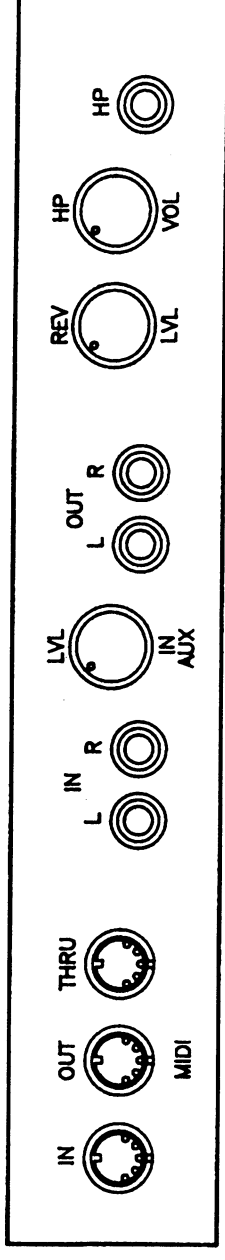
Pedal: Subbass 16'  
Gedackt 8'

- Great:
- Principal 8'
  - Nason Gedackt 8'
  - Octave 4'
  - Spitzflöte 4'
  - Super Octave 2'
  - Mixture IV
- Swell:
- Principal 8'
  - Bourdon 8'
  - Prestant 4'
  - Koppelflöte 4'
  - Blockflöte 2'
  - Plein Jeu IV
  - Contre Basson 16'
  - Trompette 8'
- Pedal:
- Principal 16'
  - Subbass 16'
  - Octave 8'
  - Gedackt 8'
  - Choralbass 4'
  - Fagott 16'
- Couplers:
- Swell to Pedal 8'
  - Swell to Great 8'



## USER I/O PANEL

The Rodgers User I/O Panel allows the organist to conveniently make adjustments to the headphone volume level, reverb level, auxiliary audio input level and to make audio input and output and MIDI in/out and thru connections from the front of the organ. This panel is located under the keydesk on the left side. The following descriptions detail the controls and their functions:



## MIDI IN/OUT/THRU

These are the jacks used to connect to the Rodgers organ to an external sequencer, voice module, computer or other external MIDI device or instrument.

## AUXILIARY INPUTS (Left and Right)

These are auxiliary audio inputs allowing the organist to connect the audio outputs of a MIDI voice module, cassette player, compact disc player or other stereo audio device to the organ. This allows the sound of the audio device to be heard through the organ speakers.

## AUXILIARY INPUT LEVEL

This control allows you to increase or decrease the volume level of the external audio device connected to the auxiliary audio inputs. This is factory set and rarely has to be changed, but is provided should the volume level of the external device need adjustment.

## AUXILIARY OUTPUTS (Left and Right)

These auxiliary audio outputs may be connected to the audio inputs of an external audio mixer, amplifier, cassette recorder, DAT recorder or other external audio device of this type.

## REVERB LEVEL

This control adjusts the amount of digital reverbation affecting the organ voices.

## HEADPHONE VOLUME AND JACK

The volume level of the headphone set is adjusted by this control.

The 690 has a headphone jack. When a set of headphones is plugged into the jack, the speaker system shuts off, allowing the organist privacy when playing. It is recommended that you use stereo headphones with an impedance of not less than 8 ohms ( $\Omega$ ).



## FOUNDATIONS, MIXTURES and REEDS

### Great:

Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'  
Mixture IV

### Swell:

Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'  
Blockflöte 2'  
Plein Jeu IV  
Contre Basson 16'  
Trompette 8'  
Hautbois 8'

### Pedal:

Principal 16'  
Subbass 16'  
Octave 8'  
Gedackt 8'  
Choralbass 4'  
Fagott 16'

### Couplers:

Swell to Pedal  
Swell to Great



**FOUNDATIONS 8', 4' and 2'**

**Great:**  
Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'

**Swell:**  
Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'  
Blockflöte 2'

**Pedal:**  
Subbass 16'  
Octave 8'  
Gedackt 8'

**Couplers:**  
Swell to Pedal  
Swell to Great

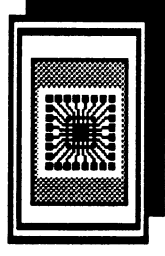
**FOUNDATIONS and MIXTURES**

**Great:**  
Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'  
Mixture IV

**Swell:**  
Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'  
Blockflöte 2'  
Plein Jeu IV

**Pedal:**  
Principal 16'  
Subbass 16'  
Octave 8'  
Gedackt 8'  
Choralbass 4'

**Couplers:**  
Swell to Pedal  
Swell to Great



**MIDI (Musical Instrument Digital Interface)**

The Rodgers 690 features velocity-sensing keyboards, and possesses some of the most advanced MIDI capabilities in the world. MIDI voices are activated via three MIDI coupler tilt tabs. The MIDI channels these coupler tilt tabs control are:

Great Channel	1*	MIDI ON GREAT
Swell Channel	2	MIDI ON SWELL
Pedal Channel	3	MIDI ON PEDAL

\* May be changed to any of the sixteen MIDI channels.  
To change this channel, see "Channel Reassignment."

**SENDING A PROGRAM CHANGE**

1. Hold SET and press the bottom of a MIDI coupler tilt tab. The tilt tab will flash, indicating the MIDI Set Mode is active. Release SET and the MIDI coupler.
2. Choose the desired Program Change (sound), and press the corresponding key (see the Program Change chart).

PROGRAM CHANGE CHART		
	KEY	PROGRAM CHANGE
GREAT	LOW C - HIGH C	1 - 61
SWELL	LOW C - HIGH C	62 - 122
PEDAL	LOW C - LOW F	123 - 128

If SET is held while pressing a key to send a Program Change, the Program Change will be sent, but the MIDI Set Mode will be "locked on." Once this happens, further Program Changes may be sent by holding SET and pressing a corresponding key. This allows the organist to try several sound selections until the appropriate one is found. The MIDI Set Mode will remain active until the flashing MIDI coupler or General Cancel is pressed.

Once a Program Change has been sent on a MIDI coupler, that same Program Change will be sent each time the tilt tab is activated. The Program Change will also be saved on any combination piston including that MIDI coupler.

**VELOCITY INFORMATION**

As a default, the Great and Swell MIDI channels send detected velocity messages. The harder a key is played, the louder the MIDI sound will be. The Pedal always sends a fixed velocity.

It is possible to have the Great or Swell MIDI coupler send a fixed velocity message. To change the Great or Swell MIDI coupler from detected velocity to fixed velocity:

1. Hold SET and press the MIDI coupler to be changed. The coupler will flash. Release SET and the MIDI coupler.
2. Press the sustain switch (located to the left of the Great Expression Pedal) to the left. The coupler will stop flashing.

To change the coupler back to detected velocity, repeat steps 1 and 2 under "Velocity Information." The velocity status of the Great and Swell MIDI couplers will be stored in the combination action of the organ.

### CHANNEL REASSIGNMENT

All MIDI couplers transmit on fixed channels except MIDI ON GREAT. To set the transmit channel for this coupler:

1. Hold SET and press the bottom of MIDI ON GT. It will flash. Release SET and MIDI ON GT.
2. Hold piston 1, and press any key on the Great manual between low C and tenor D# to signify the desired MIDI channel. Low C is Channel 1, low C# is Channel 2, etc. The MIDI ON GT coupler will stop flashing.

The new Great MIDI Channel assignment will be stored in the combination action of the organ.

### OCTAVE TRANSPOSE

Normally, all MIDI couplers play at standard pitch (middle C = note 60). The Octave Transpose parameter may be reset to cause any MIDI coupler to play one octave above or below standard pitch.

1. Hold SET and press the bottom of the desired MIDI coupler. It will flash. Release SET and the MIDI coupler.
2. To transpose up one octave, turn the TRANSPOSER control to +1, +2, +3 or +4.
3. To transpose down one octave, turn the TRANSPOSER control to -1, -2, -3 or -4.
4. Exit this mode by pressing General Cancel.
5. Return the TRANSPOSER to the desired setting.

The Octave Transpose status of each MIDI coupler will be stored in the combination action of the organ.

### FOUNDATIONS 8' *mf*

Great: Principal 8'  
Spitzflöte 4'

Swell: Principal 8'  
Bourdon 8'  
Koppelflöte 4'

Pedal: Subbass 16'

Couplers: Swell to Pedal 8'  
Swell to Great 8'  
Positiv to Great 8'

### FOUNDATIONS 8' and 4'

Great: Principal 8'  
Octave 4'  
Spitzflöte 4'

Swell: Principal 8'  
Bourdon 8'  
Prestant 4'  
Koppelflöte 4'

Pedal: Subbass 16'  
Gedackt 8'

Couplers: Swell to Pedal 8'  
Swell to Great 8'

**SOFT FOUNDATIONS**

**Great:** Nason Gedackt 8'

**Swell:** Bourdon 8'  
Viola 8'

**Pedal:** Subbass 16'

**Couplers:** Swell to Pedal  
Swell to Great

**Great:** Principal 8'  
Spitzflöte 4'

**Swell:** Bourdon 8'  
Viola 8'  
Koppelflöte 4'

**Pedal:** Subbass 16'

**Couplers:** Swell to Pedal  
Swell to Great

**Great:** Principal 8'  
Octave 4'  
Spitzflöte 4'

**Swell:** Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'

**Pedal:** Subbass 16'  
Gedackt 8'

**Couplers:** Swell to Pedal  
Swell to Great

**FOUNDATIONS 8' *mf***

**ENABLING/DISABLING MIDI MASTER CHANNELS**

The following MIDI channels are used to control the organ through MIDI:

Great Master Channel	12
Swell Master Channel	13
Pedal Master Channel	14

It is possible to stop the transmission or reception of MIDI information on these Master Channels.

To disable reception of information on a MIDI Master Channel:

1. Hold SET and press the bottom of the MIDI coupler corresponding to the channel to be disabled. It will flash. Release SET and the MIDI coupler.
2. While the coupler is flashing, press the top of the MIDI coupler (as if turning off). It will stop flashing.

To enable reception of information on a MIDI Master Channel:

1. Hold SET and press the bottom of the MIDI coupler corresponding to the channel to be enabled. It will flash. Release SET and the MIDI coupler.
2. While the coupler is flashing, press the bottom of the MIDI coupler (as if turning on). It will stop flashing.

When transmission on all MIDI Master Channels is inhibited, then no stop change (MIDI System Exclusive stop change) is transmitted.

To disable transmission of information on a MIDI Master Channel:

1. Hold SET and press the MIDI coupler corresponding to the MIDI Master Channel to disable. It will flash. Release the MIDI coupler.
2. While the coupler is flashing, hold SET and press the top of the MIDI coupler (as if turning off). It will stop flashing.

To enable transmission of information on a MIDI Master Channel:

1. Hold SET and press the bottom of the MIDI coupler corresponding to the MIDI Master Channel to enable. It will flash. Release the MIDI coupler.
2. While the coupler is flashing, hold SET and press the bottom of the MIDI coupler (as if turning on). It will stop flashing.

The send and receive status of all MIDI Master Channels will be saved in the combination action of the 690.

## GS Format Sound Selection Instructions

The leading-edge MIDI capabilities of the 690 organ from Rodgers include a function known as **GS Format Sound Selection**. GS Format Sound Selection greatly increases the control that Rodgers owners have with MIDI (or Musical Instrument Digital Interface).

To this point, MIDI has used 128 different **Program Change messages** to select sounds. Page 11 of this Owner's Manual contains instructions on using Program Change messages to select sounds in a separate MIDI sound module.

However, some sound modules have more than 128 sounds. The GS Format Sound Selection was developed to allow MIDI users access to more sounds. With the GS Format Sound Selection feature on your Rodgers organ, you have the ability to select 16,384 different sounds!

Rodgers is the first manufacturer in the organ market to introduce this powerful capability. By following these steps, you will be able to put this exciting feature to work.

### How does GS Format Work?

In the past, MIDI has used 128 Program Change messages to select sounds. Each of these program changes is still used in the GS Format; however, 128 **Variation Select messages** are now used to select variations of each sound.

For instance, study the graph below:

*Variation 127*

*etc.*

<i>Variation 3</i>	Detuned Piano	Thin Strings	Detuned E. Piano	Muted Trumpet	Detuned Harps.	Rain
<i>Variation 2</i>	Dull Piano	Warm Strings	Dull E. Piano	Stab Trumpet	Lute	Thunder
<i>Variation 1</i>	Bright Piano	Slow Strings	Bright E. Piano	Piccolo Trumpet	Coupled Harps.	Bird
	Piano 1	Strings	Electric Piano 1	Trumpet	Harp- sichord	Dog

*Program Changes*      1      2      3      4      5      6      *etc.*      128

Sending a Program Change message by itself will select a sound in the lowest variation of voices, shown above with no shading. This variation of voices is often called "Variation 0". For instance, sending Program Change #1 would select "Piano 1"; sending Program Change #4 would select "Trumpet".

As you can see, there are variations of each sound located in the variations above Variation 0. By combining a Variation Select message (actually called a "Controller 0" message) with a Program Change message, the sounds in the variations above Variation 0 can be selected. For example, sending Variation Select #2 and Program Change #1 would select "Dull Piano"; sending Variation Select #3 and Program Change #4 would select "Muted Trumpet".

## ENSEMBLE COMBINATIONS

### SOFT PRAYER HYMN

Great: Flute Celeste II 8'  
Tremulant (optional)

Swell: Viola 8'  
Viola Celeste II 8'

Pedal: Subbass 16'

Couplers: Swell to Pedal  
Swell to Great

### STRING CHORUS

Great: Principal 8'  
Flute Celeste II 8'  
Tremulant (optional)

Swell: Viola 8'  
Viola Celeste II 8'  
Koppelflöte 4'

Pedal: Subbass 16'

Couplers: Swell to Pedal  
Swell to Great

### FULL STRING CHORUS

Great: Nason Gedackt 8'  
Flute Celeste II 8'  
Spitzflöte 4'  
Tremulant (optional)

Swell: Bourdon 8'  
Viola 8'  
Viola Celeste II 8'  
Prestant 4'  
Koppelflöte 4'  
Tremulant

Pedal: Subbass 16'  
Couplers: Swell to Pedal  
Swell to Great

**FULL SWELL**

Bourdon 8'  
Viola 8'  
Prestant 4'  
Koppelflöte 4'  
Blockflöte 2'  
Plein Jeu IV  
Contre Basson 16'  
Trompette 8'  
Hautbois 8'

**PEDAL ORGAN**

*Given Suggestions*

*Appropriate Registrations*

**SOFT BASS**

Subbass 16'  
Subbass 16'  
Gedackt 8'

**FLUTES**

**FOUNDATIONS *mf***

Principal 16'  
Gedackt 8'

**FOUNDATIONS *f***

Subbass 16'  
Octave 8'  
Gedackt 8'  
Choral Bass 4'

**FOUNDATIONS *ff***

Principal 16'  
Subbass 16'  
Octave 8'  
Gedackt 8'  
Choral Bass 4'

**FULL PEDAL**

Principal 16'  
Subbass 16'  
Octave 8'  
Gedackt 8'  
Choral Bass 4'  
Fagott 16'

To send a Variation Select and Program Change message from a MIDI coupler:

1. Hold SET.
2. Press and hold selected MIDI coupler (coupler will flash as it is held).
3. Release SET and press key which corresponds to the variation desired:

Low C (Great)	Variation 0
Low C# (Great)	Variation 1
Low D (Great)	Variation 2
etc.	
Low C (Swell)	Variation 61
Low C# (Swell)	Variation 62
etc.	
Low C (Pedal)	Variation 122
Low C# (Pedal)	Variation 123
etc.	
Low F (Pedal)	Variation 127

4. After Variation is selected, release MIDI coupler (it will continue to flash).

5. Press key which corresponds to the Program Change desired:

Low C (Great)	Program Change 1
Low C# (Great)	Program Change 2
Low D (Great)	Program Change 3
etc.	
Low C (Swell)	Program Change 62
Low C# (Swell)	Program Change 63
etc.	
Low C (Pedal)	Program Change 123
Low C# (Pedal)	Program Change 124
etc.	
Low F (Pedal)	Program Change 128

If no Variation Select message is specified, Variation 0 will be used.

Pressing General Cancel at any time during will exit the procedure.

## SAVING A COMBINATION MEMORY

The contents of any combination memory may be saved into a MIDI sequencer and later reloaded into the organ. To save a memory:

1. The Master Clock on the sequencer must be ON.
2. Select the memory to be saved.
3. Hold SET. Start the sequencer, and wait for it to begin recording.
4. Release SET to begin the transmission of memory information. Each piston will light as it is saved to the sequencer.
5. Stop the sequencer after all pistons have been saved.

To restore a memory from the sequencer:

1. Select the memory to be loaded into the 690.
2. Hold SET and start the sequencer playback. Each piston will light as it receives memory information.
3. Release SET after the final memory as been received.

## RECEIVING A PROGRAM CHANGE

Registrations may be selected on the organ by sending a Program Change from another MIDI device. The following is a list of Program Changes the 690 will respond to on Channel 12:

<u>PROGRAM CHANGE</u>	<u>WILL SELECT</u>
1	piston 1
2	piston 2
3	piston 3
4	piston 4
5	piston 5
6	piston 6
7	piston 7
8	piston 8
9	piston 9
10	piston 10
20	General Cancel
31	memory 1
32	memory 2
33	memory 3
34	memory 4

## SWELL ORGAN

### *Given Suggestions*

### *Appropriate Registrations*

STOPPED FLUTE	Bourdon 8'
STRINGS	Viola 8'
	Viola Celeste II 8'
STRING ENSEMBLE	Bourdon 8'
	Viola 8'
	Viola Celeste II 8'
	Koppelflöte 4'
	Tremulant
	Hautbois 8'
SOLO REED I <i>mf</i>	Contre Basson 16' (play 8va)
SOLO REED II <i>mf</i>	Trompette 8'
SOLO REED <i>f</i>	Bourdon 8'
CORNET	Koppelflöte 4'
	Nazard 2 2/3'
FOUNDATIONS <i>mf</i>	Bourdon 8'
	Viola 8'
	Koppelflöte 4'
FOUNDATIONS <i>f</i>	Bourdon 8'
	Viola 8'
	Prestant 4'
	Koppelflöte 4'
	Blockflöte 2'
FOUNDATIONS <i>ff</i>	Bourdon 8'
	Viola 8'
	Prestant 4'
	Koppelflöte 4'
	Blockflöte 2'
	Plein Jeu IV



## SUGGESTED REGISTRATIONS

The following pages of registrations are guidelines for selecting appropriate stops to match broad suggestions given in most printed organ literature. There will be variances of registration, depending upon the music, acoustics of the room, and the spirit of the performance.

### GREAT ORGAN

#### *Given Suggestions*

FLUTE

Nason Gedackt 8'

SOFT FLUTE

Flute Celeste II 8'

FOUNDATIONS *p*

Nason Gedackt 8'  
Flauto Dolce 8'  
Spitzflöte 4'

FOUNDATIONS *mf*

Principal 8'  
Spitzflöte 4'

FOUNDATIONS *f*

Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'

FOUNDATIONS *ff*

Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'  
Mixture IV

FULL GREAT

Principal 8'  
Nason Gedackt 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'  
Quintflöte 1 1/3'  
Mixture IV  
Cromorne 8'

### LOCAL ON/OFF

The 690 is equipped with a LOCAL ON/LOCAL OFF control. When the organ is set to LOCAL ON, it operates normally.

When the organ is set to LOCAL OFF, none of the organ stops sound when keys or pedals are pressed. MIDI information is, however, generated on activated MIDI Master Channels and MIDI coupler channels. In addition, movement of the Expression Pedal generates MIDI volume information on activated MIDI Master Channels and MIDI Coupler Channels but does not affect the organ stop volume. An application for this is when sequencing, the volume of the organ may be sequenced one way, and the volume of the MIDI voices another way.

MIDI information received on the MIDI Master Channels will still control the 690 when the organ is set to LOCAL OFF.

To set the organ to LOCAL OFF:

1. Hold SET, and press any MIDI coupler. It will flash.
2. Hold SET, and press and release General Cancel. The General Cancel light will go off, signifying LOCAL OFF is activated.

To set the organ to LOCAL ON:

1. Hold SET, and press any MIDI coupler. It will flash.
2. Hold SET, and press and release General Cancel. The General Cancel light will go on, signifying LOCAL ON is activated.

The Local On/Off status can be saved in the combination action of the organ.

### RETURNING TO DEFAULT SETTINGS

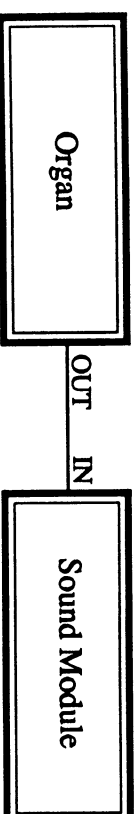
To return to the default settings for Send Channel, Detected/Fixed Velocity, Octave Transpose, MIDI Master Send Channel, Primary Receive Channel and Local On/Off:

1. Hold SET.
2. Press General Cancel.

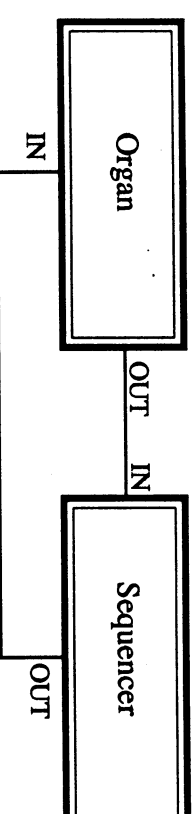
In addition, an All Notes Off message is generated to clear any problems with other MIDI equipment, so this can be used as a "Panic Button" should any other MIDI devices get confused. If the SET and General Cancel buttons are held in until the SET button lights again, then the combination action for the current memory level will be reloaded with factory defaults selections.

## COMMON MIDI CONNECTIONS

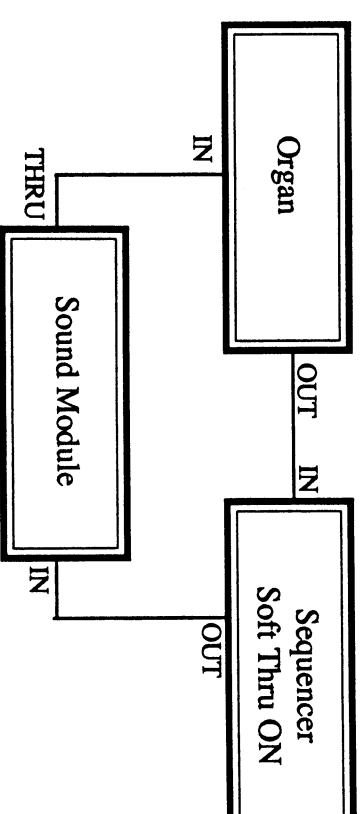
### Organ with Sound Module



### Organ with Sequencer



### Organ with Sound Module and Sequencer



## 690 SPECIFICATIONS

### GREAT ORGAN

Bourdon 16'  
Principal 8'  
Nason Gedackt 8'  
Flauto Dolce 8'  
Flute Celeste II 8'  
Octave 4'  
Spitzflöte 4'  
Super Octave 2'  
Quintflöte 1 1/3'  
Mixture IV  
Cromorne 8'  
Chimes  
Tremulant  
Swell to Great

### SWELL ORGAN

Bourdon 8'  
Viola 8'  
Viola Celeste II 8'  
Prestant 4'  
Koppelflöte 4'  
Nazard 2 2/3'  
Blockflöte 2'  
Tierce 1 3/5'  
Plein Jeu IV  
Contre Basson 16'  
Trompette 8'  
Hautbois 8'  
Tremulant

### PEDAL ORGAN

Principal 16'  
Subbass 16'  
Octave 8'  
Gedackt 8'  
Choral Bass 4'  
Fagott 16'  
Rohr Schalmey 4'  
Great to Pedal  
Swell to Pedal

### GENERAL

Flute Tremulant Full  
Great to Swell Expression  
MIDI on Pedal  
MIDI on Swell  
MIDI on Great  
Bass Coupler  
Melody Coupler

### CONSOLE FEATURES

Velocity-Sensitive Keyboards  
Antiphonal On/Main OFF Controls  
Transposer Control  
Tuning Control  
Chorus Control  
Headphone Jack and Headphone Volume  
External Audio Jacks (L/R IN and OUT)  
Great/Pedal Expression Pedal with Indicator  
Swell Expression Pedal with Indicator  
Crescendo Pedal with Indicator  
Tutti with Indicator  
10 General Pistons  
6 Great and Swell Divisional Pistons  
3 Pedal Divisional Pistons  
Four Memory Levels  
Set  
General Cancel  
Digital Reverb with Level Control  
MIDI In  
MIDI Out  
MIDI Thru  
Lighted Music Rack  
Pedalboard Light  
Hidden Cable Routing  
Locking Rolltop



## Addendum to Owner's Manual

Please follow the instructions below to properly operate the Bass Coupler and the Melody Coupler. This is to replace pages 6 and 7 in your Owner's Manual. 12/1/93.

### THE BASS COUPLER

This feature's name is derived from the ancient term "Basso Continuo," meaning thoroughbass. When this piston (690 & 610) or tilt tab (595) is pressed, it will light. Any stops or couplers on in the Pedal Division will sound from the lowest key being played on the Great manual. This provides a pedal bass without having to actually play the pedalboard with the feet.

In its normal setting, the Bass Coupler affects keys 1 through 24 of the Great manual, but its range is programmable.

#### • HOW TO SET THE RANGE OF THE BASS COUPLER:

1. Hold SET and press the BASS piston or tilt tab, which will start flashing.
2. Release the SET piston and BASS piston or tilt tab.
3. While the BASS piston or tilt tab is flashing, press a key which corresponds to the highest note the range is to extend. Any note from key 1 to key 61 may be selected. Keys above 36 will play external MIDI devices but will not play the Pedal stops. After the selected key has been pressed, the BASS piston or tilt tab will stop flashing.

Note: When a key is pressed to set the range, no sound will be heard even if stops are on, so no disturbance will be made if programming during a performance.



## THE MELODY COUPLER

When the MELODY piston (690 & 610) or tilt tab (595) is pressed, it will light. Any stop or coupler of the Swell Division will sound from the highest key being played on the Great manual. This allows a solo melody and an accompaniment to be played from the same manual.

In its normal setting, the Melody Coupler affects keys 25 through 61 on the Great manual, but its range is programmable.

### • HOW TO SET THE RANGE OF THE MELODY COUPLER:

1. Hold SET and press the MELODY piston or tilt tab, which starts flashing.
2. Release the SET piston and MELODY piston or tilt tab.
3. While the MELODY piston or tilt tab is flashing, press a key which corresponds to the lowest note the range is to extend. Any note from key 1 to key 61 may be selected. After the selected key has been pressed, the MELODY piston or tilt tab will stop flashing.

Note: When a key is pressed to set the range, no sound will be heard even if stops are on, so no disturbance will be made if programming during a performance.



### **Chorus Control**

The 690 and 610 features a CHORUS function, which allows the Swell Division to be detuned from the Great Division, providing even greater "warmth" to the tonal character of the organ. To select the CHORUS function, press the CHORUS piston.

To change the amount of detuning, hold the SET piston and press the CHORUS piston. The CHORUS piston will begin to flash. The amount of detuning may then be adjusted by rotating the tuning control. Press the CHORUS piston to save the new CHORUS adjustment. Pressing General Cancel (0) instead of the CHORUS piston will cancel the new CHORUS adjustment and return the organ to its previous CHORUS setting.

### **Sustain Switch**

This switch is located on the far left side of the Great/Pedal expression pedal. This switch will sustain voices playing from the MIDI ON GREAT coupler. Press the switch to sustain, release to stop. Pressing this switch sends a MIDI Sustain Message on the MIDI ON GREAT coupler channel. If the MIDI ON GREAT coupler is on then pressing the sustain switch will cause a MIDI Sustain Message to be sent out the corresponding MIDI Channel.

### **Receiving Program Changes and GS Variation Select Changes from a PR-300**

When in a MIDI set Mode, if a Program Change or a Variation Select on the MIDI Channel for the flashing coupler is received, it will be saved and retransmitted each time the coupler is turned on.

### **How to Set the TUTTI on the 690**

1. Select the stops desired.
2. Hold SET and press TUTTI.

When the TUTTI is activated, the selected stop tabs do not light.

## Restoring the Factory Settings

The 690 and 610 factory settings can be restored in three stages using the SET and GENERAL CANCEL pistons as follows:

1. Hold SET and press GENERAL CANCEL. The SET light will go off and the MIDI coupler data blocks will be set to factory default.
2. Continue to hold SET and GENERAL CANCEL for about 5 seconds until the SET light comes back on. The General and Divisional pistons for the selected memory will be restored to factory default. Repeat this procedure for each memory bank you wish to restore.
3. Continue to hold SET and GENERAL CANCEL for about 5 seconds more until memory 1 piston lights. The Melody and Bass Couplers will be restored to their factory default split points and the Chorus will be set to its factory tuning. The Tutti on the 690 will also be set to the factory default setting.

## Receiving A Program Change

In addition to the program changes shown on page 16, Divisional pistons will respond to Program Changes as follows:

### Channel 12

Program Change 21-26 will select Great Divisional pistons 1-6.

### Channel 13

Program Changes 21-26 will select Swell Divisional pistons 1-6.

### Channel 14

Program changes 21-23 will select Pedal Divisional pistons 1-3.

## Octave Transpose

To return a MIDI Coupler to standard pitch repeat the procedure described on page 12 and return the TRANSPOSER from +1 to 0 if returning from one octave sharp. Return the TRANSPOSER from -1 to 0 if returning from one octave flat.

# RODGERS APPLICATION NOTES

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SUBJECT : ADDING A CABLE ROUTING COVER TO THE 550, 580 OR 685 ORGAN BACK

DATE : June 26th, 1992

The new 550, 580 and 685 Classic Keyboard Organs have been designed so that audio and MIDI cables can be routed through the organ console back and out the organ kneeboard, rather than leaving the cables draped over the side of the organ. To do this, Rodgers is using a device called a Cable Routing Cover.

The Cable Routing Cover has been factory installed on the organ kneeboard, but must be installed in the organ back by the Dealer or technician, should the end-user elect to use this feature. An alternative to adding the Cable Routing Cover to the back is to use the cable notches located on both the left and right lower sides of the back.

## 550/580

These instruments have fabric covered backs, and have two cutouts hidden under the fabric for the Cable Routing Cover. They are positioned above and below the deck, and are located along the upper right side of the back.

A. Remove the back from the organ.

B. Determine which one of the two openings is most appropriate to use.

C. Using the tip of a hot electric soldering pencil (25 watts is perfect), push it through the fabric along the inside edge of the opening, using the opening as a template, and carefully "cut" the fabric from the inside of the opening. The soldering pencil is used to provide a clean "cut", and to seal the ends of the fabric, which prevents unraveling. See diagram 1.

D. Remove the Cap of the Cable Routing Cover by pulling it from the Flange .

E. Press the Flange into the opening from the *inside surface* (the painted surface, not the fabric-covered surface) with a smooth, even pressure. This is a tight friction fit, and generally doesn't require adhesives to hold it in place. See diagram 2.

F. Hold the Cap in your hand and gently slide the door down to unlatch it. When the door is unlatched, swing it in to expose the cable opening. See diagram 3.

G. Route the cables through the organ, make the cable connections, and press the Caps into the Flanges.

## 685

These instruments have wooden backs, and require the Dealer or technician to drill a hole in the back to install the Cable Routing Cover.

A. Remove the back from the organ.

B. Determine the most appropriate place to drill the hole.

C. Carefully drill a 1-3/4" diameter hole from the outside surface.

D. Remove the Cap of the Cable Routing Cover by pulling it from the Flange .

E. Press the Flange into the hole from the *inside surface* with a smooth, even pressure. This is a tight friction fit, and generally doesn't require adhesives to hold it in place. See diagram 2.

F. Hold the Cap in your hand and gently slide the door down to unlatch it. When the door is unlatched, swing it in to expose the cable opening. See diagram 3.

G. Route the cables through the organ, make the cable connections, and press the Caps into the Flanges.

DIAGRAM 1

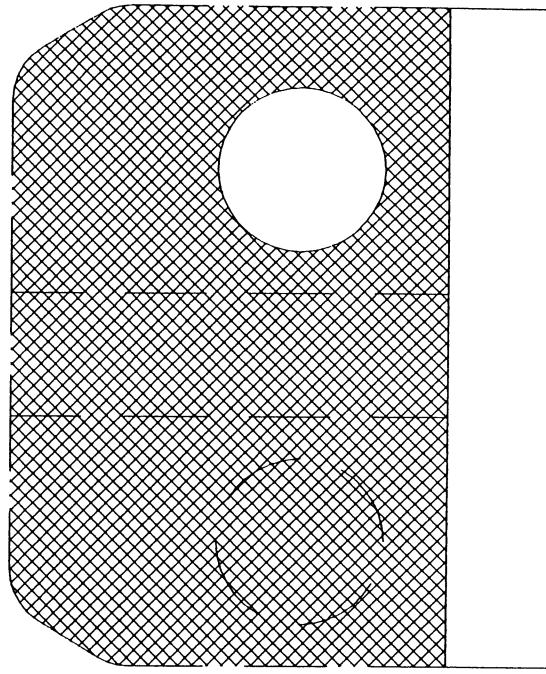


DIAGRAM 2

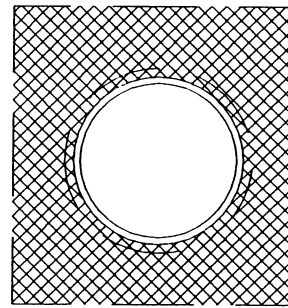


DIAGRAM 3

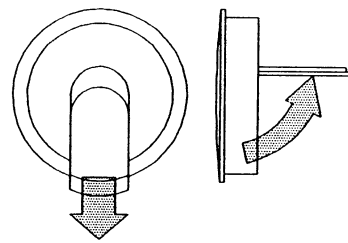
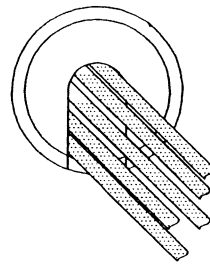


DIAGRAM 4



### **Chorus Control**

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