



# JOHANNUS

## *INSTRUCTION BOOKLET*

*CH-35*

*CH-45*

*CH-55*

JOHANNUS Orgelbouw b.v.

Morsestraat 28 - 6716 AH Ede - Tel. (08380) 37403 - Fax (08380) 22238



---

## CONTENTS

<b>JOHANNUS - THE COMPANY</b> .....	5
<b>INTRODUCTION</b> .....	6
<b>VOLTAGE</b> .....	6
<b>ON-OFF SWITCH</b> .....	6
<b>PEDALBOARD</b> .....	6
<b>VOLUME CONTROL</b> .....	7
<b>TRANSPOSER</b> .....	7
<b>PITCH</b> .....	7
<b>CATHEDRAL</b> .....	7
<b>TREMULANTS</b> .....	8
<b>COUPLERS</b> .....	8
<b>CHORUS</b> .....	8
<b>MANUAL BASS</b> .....	8
<b>EXPRESSION PEDALS</b> .....	8
<b>GENERAL CRESCENDO PEDAL</b> .....	9
<b>TOE PISTONS</b> .....	9
<b>FIXED COMBINATIONS</b> .....	9
<b>CAPTURE SYSTEM</b> .....	10
<b>MIDI</b> .....	11
<b>REGISTRATION</b> .....	11
<b>EXTERNAL CONNECTIONS</b> .....	12
Midi .....	12
Aux-In .....	12
Acoustic .....	12
<b>CARE OF THE JOHANNUS ORGAN</b> .....	12
<b>TECHNICAL SPECIFICATIONS</b> .....	13
<b>REGISTRATION EXAMPLES</b> .....	
Registration Examples CH-35 .....	14
Own Registrations CH-35 .....	15
Registration Examples CH-45 .....	16
Own Registrations CH-45 .....	17
Registration Examples CH-55 .....	18
Own Registrations CH-55 .....	19
<b>PERSONAL NOTES</b> .....	20



Johannus Organs commenced building classical organs in 1971 from the basement of a house in the town of Ede in Holland. Such was the enthusiasm for the new organs that the company soon had to move to factory premises in the nearby town of Veenendaal to allow for the increase in production.

By 1976 Johannus had returned to Ede and opened new premises which incorporated factory building facilities, research and development departments, administration offices and a complete concert hall.

To mark the occasion the company dedicated its new beginnings on March 12th 1976, by naming their concert hall after the world famous Dutch organist Feike Asma, in recognition of his advise and guidance in those early days which helped create the characteristic Johannus sound.

Since then Johannus has continued to develop its unique and individual sound, producing classical organs for a worldwide market. Careful attention to tonal quality and craftsmanship has become the hallmark of Johannus. Now the company enjoys worldwide recognition and credibility as a builder of classical organs to suit the individual organist, Churches, Concert Halls and many other prestigious locations where classical organs are situated.

---

## INTRODUCTION

You are now the proud owner of an JOHANNUS Organ, an instrument with a well chosen and balanced selection of stops which allow the player the opportunity to perform the full repertoire of classical organ music. This manual will assist you to make use of the many possibilities offered by the JOHANNUS organ. At the conclusion of this manual you will find some registration examples. There is also a space to incorporate your own registrations. Please spend a few minutes reading this important information and experience the wonderful potential of your new organ.

---

## VOLTAGE

It is important to check your supply voltage with the voltage setting of the organ. This is printed on the serial numberplate which is located on the left side beneath the manuals.

---

## ON-OFF SWITCH

The On-Off switch is situated on the right side of the manuals. The switch lights up when the organ is switched on and, after a few seconds, the amplifiers will be automatically activated.

---

## PEDALBOARD

The pedalboard of the organ is equipped with magnets which activate reed switches. These switches are invisibly mounted behind the base panel against which the pedalboard is located. The magnets are mounted into the front end of the pedal. As each pedal note is played the reed switches are activated by the magnets.

It is important to ensure that the pedalboard is correctly sited. In some models brass pins are supplied to locate the console and pedalboard in the correct position. Please ensure these pins are fully pushed into the locating socket at all times.

---

## VOLUME CONTROL

With the volume control you can adjust the volume of the internal monitor speakers. When turning the volume control completely to the left the internal monitor speakers do not sound. When the volume control is turned to the right the internal monitor speakers sound on maximum volume.

---

## TRANSPOSER

The TRANSPOSER allows the player to change the key in which the music is played. This variation is achieved by three half tones up or down from the zero position which is the normal key: A = 440 Hz. (Check that the pitch control is in the middle position). When accompanying other instruments or singers who prefer to sing in a higher or lower register than the original key, the transposer provides the ability to do so.

---

## PITCH

The PITCH Control enables the player to tune the instrument through finer controls of tuning than the transposer. In the middle position the tuning is on A = 440 Hz (Ensure the transposer is in the "O"-position).

---

## CATHEDRAL

The digital Cathedral effect gives acoustic properties associated with the resonance of large buildings and aims to give the wide level and range of resonance which enhances the tonal quality of sound produced from the organ. This effect is adjustable both by volume and programme. The program control is graduated 1-2-3-4-5-6 and allows the performer to choose one of six different cathedral settings. The rotary control allows the player to alter the amount of cathedral effect against any of the six programmes. The regulation of these two controls is a matter of individual choice and can be adjusted to suit different styles of performance.

---

## TREMULANTS

Each manual has independent tremulants.

---

## COUPLERS

The three (CH-35/CH-45) or six stops (CH-55) allow Swell to Great, Great to Pedal and Swell to Pedal (+ CH-55: Positif to Great, Positif to Pedal and Swell to Positif) coupling to be achieved according to the requirements of the organist and the musical programme.

---

## CHORUS

The CHORUS Control works when a manual coupler is in use and allows the generators between the manuals to become slightly detuned to create a greater degree of tonal resonance and articulate sound reproduction.

---

## MANUAL BASS

The Manual Bass control tab allows the stops of the pedalboard to be played through the Great manual. When the tab is activated the lowest note of the chord, played on the Great manual, reproduces the tone from the stops of the Pedal division whilst the performer uses only the lower manual.

---

## EXPRESSION PEDALS

**CH-35/CH-45**

Volume Great + Pedal	Volume Swell	General Crescendo
-------------------------------	-----------------	----------------------

**CH-55**

Volume Positif	Volume Great + Pedal	Volume Swell	General Crescendo
-------------------	-------------------------------	-----------------	----------------------



---

## GENERAL CRESCENDO PEDAL

The General Crescendo Pedal registers the organ from Pianissimo to Tutti as the organist depresses the pedal. As the General Crescendo Pedal is depressed, stops are activated according to standard musical procedure. The General Crescendo Pedal always has priority over Presets, Free Combinations or Hand Registrations. It is still possible to switch off the Reeds using the RO button whilst the General Crescendo Pedal is in use.

---

## TOE PISTONS **Optional**

According to the model of the organ, Toe pistons are supplied which operate as follows.

### **Toe Piston-Couplers**

Swell to Great, Great to Pedal, Swell to Pedal, (CH-55 also Swell to Positif, Positif to Great and Positif to Pedal) operate as per the detail given in the section entitled "Couplers".

Toe piston-coupler are reversible.

### **Toe Piston Tutti - Pre-programmed at factory**

When depressed, this piston over-rides any combination in use and brings in Full organ. This piston is not reversible.

To cancel the Tutti piston depress the "O" piston. Press any other piston to regain a registration. This will automatically cancel the Tutti registration.

### **Toe Pistons - Programmable**

These pistons can be used to programme all departments of the organ, either manuals or pedals. Setting Toe Pistons is achieved by following the procedure as for the Capture System.

---

## FIXED COMBINATIONS (presets)

The preset pistons allows the organist the choice of fixed combinations which are factory programmed at the time of manufacture. These pistons are located in the centre of the lower rail below the manuals: PP - P - MF - F - FF - T. Fixed combinations are groups of useful registrations which have been pre-selected according to traditional musical standards from P (Pianissimo) to T (Tutti). It is also possible to switch individual voices on and off within the fixed combination by simply pressing the appropriate stop. Similarly additional voices not already in the fixed combination programme can be added in the same manner. The lighted or moved register tabs clearly indicate which voices are in use at any time.

---

The Capture System enables the organist to store 24 personal choices of combinations of registration into a memory, and to recall or change them at any time.

The combinations are divided into three groups: M1, M2 and M3, each group having 8 combination abilities. The buttons for controlling the groups (M1, M2, M3) are located on the right side of the console below the lowest manual. In each of the groups (M1, M2, M3) 8 different combinations can be programmed. The buttons for the 8 different combinations (numbered 1 to 8) are located to the left side of the lowest manual.

The following instructions are required in order to store personal combinations:

1. Switch memory to open position by turning the key of the MEMORY LOCK to the right. This key is located on the left of the manuals.
2. Select the registration you wish to store.
3. Select and push the memory button (for example M1) into which the registration is to be stored.
4. Push the SET-button (located to the left of the pistons 1 - 8), Hold the SET button in and push one of the buttons 1 - 8 (for example 1).
5. Release the combination button (in this example button 1), then release the SET-button.

Your chosen combination has now been stored within group 1 in piston 1.

Continuing the process through pistons 2 - 8 allows further registrations to be stored in group 1. In order to store into group 2 or 3 repeat the above procedure with the appropriate group 2 or 3 button pressed and then using the pistons 1 - 8 to store further registrations.

Stored registrations are further protected from erasure or cancellation by turning the key of the memory lock back to the original position. Stored combinations are now locked into the memory and cannot be erased or changed whilst the key is in the lock position.

During any performance registrations which have been produced through the capture system can be added to or changed by simply pressing the appropriate individual stops required. To recall the original personal combination the relative piston should be pressed again.

It is important to note that when personal combinations are programmed into the memory system any accessories (all couplers, tremulants and Midi-switches) should be incorporated into the programma at the time of registering. In this way the accessories will appear with each programme. However, it is possible to set all combinations without the accessories and simply add them at the time of performance. The CA button (located to the right of the M1, M2, M3 pistons) is to cancel accessories. Upon pressing the CA button the combination of accessories programmed by the individual will remain whilst other piston combinations are changed.

The Reeds Off button (RO) located in the centre of the lower rail, can be used with Free Combinations, Fixed Combinations, Hand registrations and General Crescendo Pedal. Upon depressing the RO piston all Reeds are cancelled. Releasing the RO button recalls the reeds again. All Reed voices are designated on the console with red coloured stop labels.

The 0 piston (located beside the pre-set pistons) allows the instrument to be cancelled of all registrations except those being switched on by the General Crescendo Pedal.

The memory of a capture system is protected even when the organ is switched off. Memory is not affected by turning the organ off or disconnecting it from the mains supply.

---

## MIDI

Midi is the abbreviation of Musical Interface for Digital Instruments. The ability of the Midi allows different instruments to be played through the classical organ. This device therefore allows the addition of other Midi compatible equipment i.e. keyboards, expanders or disc drive units which can then be played through the organ.

MIDI how does it work? Midi does not send audio signals through its connectors! Midi information only tells the connected device which key is selected and how long. The organ is provided with three MIDI-switches.

The switches: "MIDI PEDAL 3", "MIDI GREAT 1" and "MIDI SWELL 2" allows the performer to decide if the corresponding manual or pedal has to send Midi-codes through the output connector. If none of the MIDI-switches are switched on, no keying-information will be available on the MIDI-out connector.

Midi-information from Midi devices connected to the Midi-in of the rearside connections will be processed independent from the position of the Midi-switches.

NOTE: In order that MIDI switching should work correctly, it's important to engage the MIDI switches required prior to controlling external devices, and only to turn it off after the playing has been completed. If the MIDI switch is turned off while playing, the MIDI-information sent will be incomplete. This can result in ciphers of the last chord played. To correct this problem switch on the MIDI again without selecting any keys.

The Midi standard has 16 different channels. Each manual has its own channel. This channel number corresponds with the number on the switch (i.e. MIDI GREAT 1 sends the MIDI-information through channel 1).

---

## REGISTRATION

Registration is essential to the art of organ playing and is an expression of the organist's own musical taste and tonal appeal. With this owners manual are some examples of registrations for different types and styles of music.

All Johannus organs incorporate a compliment of stops which clearly define the principle voice groups of the classical organ. These include strings, flutes, diapasons and reeds. In addition, according to the modal of the instrument, mutations are incorporated to enhance the flute voices whilst mixtures add further credence tot the diapason chorus.

As in all organ music the variety of stops to be used varies according to the music to be played. Practice and experimentation provides the player with many exciting options and combinations of sound. It is also important to remember that, in all Johannus organs, the use of the expression pedals and tremulants can add further effect and definition to the performance of the player.

At the rear of the console various sockets are located to allow for the connection of speakers, MIDI equipment or acoustical systems. These sockets are designated as follows:

### **Midi Connection**

Midi-In: To receive Midi-codes from other instruments.

Midi-Thru: For passing codes received.

Midi-Out: To send Midi-codes to other instruments.

### **Aux-In**

This input is for use when connecting other audio equipment to the Johannus organ.

### **Acoustic Connection (AK-4)**

This connection allows the Johannus 4 channel acoustic system to be connected to the organ. This system creates an acoustical environment within any building and allows for further development of the cathedral effect.

---

## **CARE OF THE JOHANNUS ORGAN**

The cabinet of Johannus organs consists of either solid wood or high quality compacted wood board with veneer finish. Consoles should be cleaned with a soft polishing cloth and the keyboards cleaned with a soft chamois leather.

We do not recommend use of wax, oils or spray polishes as these cleaning compounds may cause damage to the lacquer of the organ cabinet.

Direct sunlight can cause discoloration of cabinet especially light oak.

# TECHNICAL SPECIFICATIONS

		CH-35		CH-45		CH-55	
		standard	AGO	standard	AGO	standard	AGO
<b>Digital Sampled Voices</b>		38		46		52	
<b>Manuals (C-c''' 5 octaves)</b>		2		2		3	
<b>Pedalboard</b>	30-n. straight	●	-	●	-	●	-
	30-n. straight concave	optional	-	optional	-	optional	-
	32-n. radial concave (A.G.O.)	-	●	-	●	-	●
<b>Couplers</b>		3		3		6	
<b>Tremulants</b>		2		2		3	
<b>Manual Chorus</b>		●		●		●	
<b>Amplifiers</b>	for internal (monitor) speakers	4		4		4	
	for external speakers	6		8		10	
<b>Expression Pedals</b>		2		2		3	
<b>General Crescendo Pedal</b>		1		1		1	
<b>Manual Bass</b>		●		●		●	
<b>Volume Control Internal Monitor Speakers</b>		●		●		●	
<b>Cathedral</b>	Programs	6		6		6	
	Volume Control	●		●		●	
<b>Transposer</b>		●		●		●	
<b>Capture System</b>	24 Combinations	●		●		●	
	48 Combinations	optional		optional		optional	
<b>Toe Pistons</b>	Couplers	optional		optional		optional	
	Tutti	optional		optional		optional	
	Programmable	optional		optional		optional	
<b>Lighted Pedalboard</b>		●		●		●	
<b>DeLuxe Cabinet</b>		●		●		●	
<b>Wooden Rollcover with lock</b>		●		●		●	
<b>Finished Back</b>		●		●		●	
<b>Bench with Music spare</b>		●		●		●	
<b>Dimensions (cm)</b>	Height	137	137	137	137	137	137
	Width	176	176	176	176	176	176
	Depth excl. Pedal	80	80	80	80	80	80
	Depth incl. Pedal	100	130	100	130	100	130
<b>External Connections</b>							
<b>Midi</b>	In	●		●		●	
	Thru	●		●		●	
	Out	●		●		●	
<b>Output for external Acoustics</b>		●		●		●	
<b>Auxiliary - Input</b>		●		●		●	
<b>External Loudspeaker Socket</b>		●		●		●	

08-04-1993

		PPP	PP	P	MF	F	FF	T	SOLO	ON	GREAT	SOLO	ON	SWELL	TRIO I	TRIO II	ROMANTIC	PLENUM
		A	B	C	D	E	F	G	H	I	J	K	L	M				
<b>PEDAL</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
DOUBLE BASS	16'	O	O	O	O	O	●	●	O	O	O	O	O	●				
SUBBASS	16'	●	●	●	●	●	●	●	●	●	●	●	●	●				
OCTAVE	8'	O	O	O	●	●	●	●	O	O	O	●	O	●				
GEDACKT	8'	O	O	●	●	●	●	●	●	●	●	O	●	O				
CHORALBASS	4'	O	O	O	O	●	●	●	O	O	O	O	O	●				
BASSFLUTE	4'	O	O	O	●	●	●	●	O	O	O	O	O	O				
OPEN FLUTE	2'	O	O	O	O	O	●	●	O	O	O	O	O	●				
MIXTURE	III	O	O	O	O	O	O	●	O	O	O	O	O	●				
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O				
CONTRA TRUMPET	16'	O	O	O	O	O	●	●	O	O	O	O	O	O				
TRUMPET	8'	O	O	O	O	●	●	●	O	O	O	O	O	O				
CLARION	4'	O	O	O	O	O	●	●	O	O	O	O	O	O				
MIDI PEDAL	3	O	O	O	O	O	O	O	O	O	O	O	O	O				
<b>GREAT</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
BOURDON	16'	O	O	O	O	O	●	●	O	O	O	O	O	O				
OPEN DIAPASON	8'	O	O	O	●	●	●	●	●	●	●	●	●	●				
ROHRFLUTE	8'	●	●	●	●	●	●	●	O	●	O	●	●	O				
GAMBA	8'	O	●	●	●	●	●	●	O	O	O	O	●	O				
OCTAVE	4'	O	O	O	●	●	●	●	O	O	●	O	O	●				
OPEN FLUTE	4'	O	O	●	●	●	●	●	O	O	O	O	O	O				
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	O	O	O	●	O	●				
SUPEROCTAVE	2'	O	O	O	O	O	●	●	O	O	●	O	O	●				
CORNET	IV	O	O	O	O	O	O	●	O	O	O	O	O	O				
MIXTURE	V-VII	O	O	O	O	O	●	●	O	O	O	O	O	●				
CONTRA TRUMPET	16'	O	O	O	O	O	●	●	O	O	O	O	O	O				
TRUMPET	8'	O	O	O	O	●	●	●	O	O	O	O	O	O				
MIDI GREAT	1	O	O	O	O	O	O	O	O	O	O	O	O	O				
<b>SWELL</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
QUINTATON	16'	O	O	O	O	O	O	●	O	O	O	O	O	O				
OPEN DIAPASON	8'	O	O	O	●	●	●	●	O	O	O	O	O	●				
HOHLFLUTE	8'	O	●	●	●	●	●	●	●	O	●	●	●	O				
VIOLA	8'	●	●	●	●	●	●	●	●	O	O	O	●	O				
CELESTE	8'	O	O	O	O	O	O	O	●	O	O	O	O	O				
OCTAVE	4'	O	O	O	●	●	●	●	O	O	O	O	O	●				
ROHRFLUTE	4'	O	O	●	●	●	●	●	O	O	O	O	●	O				
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	●	●	O	O	●	O	O	O				
WALDFLUTE	2'	O	O	O	O	●	●	●	O	O	O	●	O	●				
TIERCE	1 <sup>3</sup> / <sub>5</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O				
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	●	●	O	O	●	O	O	●				
RAUSCHPFEIFE	III-V	O	O	O	O	O	O	●	O	O	O	O	O	●				
CROMORNE	8'	O	O	O	O	●	●	●	O	●	O	O	O	O				
OBOE	8'	O	O	O	O	O	●	●	O	O	O	O	O	O				
MIDI SWELL	2	O	O	O	O	O	O	O	O	O	O	O	O	O				
<b>ACCESSORIES</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
SWELL TO GREAT		O	●	●	●	●	●	●	●	O	O	O	●	●				
GREAT TO PEDAL		O	O	O	●	●	●	●	O	O	O	O	●	●				
SWELL TO PEDAL		O	O	●	●	●	●	●	●	O	O	●	●	●				
TREMULANT GREAT		O	O	O	O	O	O	O	●	O	O	O	●	O				
TREMULANT SWELL		O	O	O	O	O	O	O	●	●	O	O	●	O				
CHORUS		O	●	●	●	●	●	●	O	O	O	O	●	O				
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O				

# OWN REGISTRATIONS CH-35

## PEDAL

		A	B	C	D	E	F	G	H	I	J	K	L	M
DOUBLE BASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
SUBBASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GEDACKT	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CHORALBASS	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
BASSFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	III	O	O	O	O	O	O	O	O	O	O	O	O	O
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CLARION	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI PEDAL	3	O	O	O	O	O	O	O	O	O	O	O	O	O

## GREAT

		A	B	C	D	E	F	G	H	I	J	K	L	M
BOURDON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GAMBA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SUPEROCTAVE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
CORNET	IV	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	V-VII	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI GREAT	1	O	O	O	O	O	O	O	O	O	O	O	O	O

## SWELL

		A	B	C	D	E	F	G	H	I	J	K	L	M
QUINTATON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
HOHLFLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
VIOLA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CELESTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
WALDFLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
TIERCE	1 <sup>3</sup> / <sub>5</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
RAUSCHPFEIFE	III-V	O	O	O	O	O	O	O	O	O	O	O	O	O
CROMORNE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OBOE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI SWELL	2	O	O	O	O	O	O	O	O	O	O	O	O	O

## ACCESSORIES

		A	B	C	D	E	F	G	H	I	J	K	L	M
SWELL TO GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
GREAT TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
SWELL TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT SWELL		O	O	O	O	O	O	O	O	O	O	O	O	O
CHORUS		O	O	O	O	O	O	O	O	O	O	O	O	O
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O

		PPP	PP	P	MF	F	FF	T	SOLO	ON	GREAT	SOLO	ON	SWELL	TRIO	TRIO II	ROMANTIC	PLENUM
		A	B	C	D	E	F	G	H	I	J	K	L	M				
<b>PEDAL</b>																		
DOUBLE BASS	16'	O	O	O	O	O	●	●	O	O	O	O	O	O				
SUBBASS	16'	●	●	●	●	●	●	●	●	●	●	●	●	●				
OCTAVE	8'	O	O	O	●	●	●	●	O	O	O	O	O	O				
GEDACKT	8'	O	●	●	●	●	●	●	●	●	●	●	●	●				
CHORALBASS	4'	O	O	O	●	●	●	●	O	O	O	O	O	O				
BASSFLUTE	4'	O	O	O	O	●	●	●	O	O	O	●	●	●				
OPEN FLUTE	2'	O	O	O	O	O	O	●	O	O	O	O	O	O				
MIXTURE	III	O	O	O	O	O	O	●	O	O	O	O	O	O				
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O				
CONTRA TRUMPET	16'	O	O	O	O	O	O	●	O	O	O	O	O	O				
TRUMPET	8'	O	O	O	O	●	●	●	O	O	O	O	O	O				
CLARION	4'	O	O	O	O	O	●	●	O	O	O	O	O	O				
<b>GREAT</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
BOURDON	16'	O	O	O	O	O	O	●	O	O	O	O	O	O				
OPEN DIAPASON	8'	O	O	O	●	●	●	●	●	O	●	O	●	●				
ROHRFLUTE	8'	O	●	●	●	●	●	●	O	●	O	●	●	●				
GAMBA	8'	●	●	●	●	●	●	●	O	●	O	O	●	O				
OCTAVE	4'	O	O	O	●	●	●	●	O	O	O	O	O	O				
SALICIONAL	4'	●	O	O	O	O	O	O	O	●	O	O	●	O				
OPEN FLUTE	4'	O	O	●	●	●	●	●	O	●	O	O	●	O				
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	O	O	●	O	O	●				
SUPEROCTAVE	2'	O	O	O	O	O	●	●	O	O	O	O	O	●				
FLUTE	2'	O	O	O	O	●	●	●	O	O	●	●	O	●				
LARIGOT	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	●	●	O	O	●	●	O	O				
CORNET	IV	O	O	O	O	O	O	O	O	O	O	O	O	O				
SESQUIALTER	II	O	O	O	O	O	O	O	●	O	O	O	O	O				
MIXTURE	V-VII	O	O	O	O	O	O	●	O	O	O	O	O	●				
CONTRA TRUMPET	16'	O	O	O	O	O	O	●	O	O	O	O	O	O				
TRUMPET	8'	O	O	O	O	●	●	●	O	O	O	O	O	O				
<b>SWELL</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
QUINTATON	16'	O	O	O	O	O	●	●	O	O	O	O	O	O				
OPEN DIAPASON	8'	O	O	O	●	●	●	●	O	O	●	O	●	●				
STOPPED FLUTE	8'	O	●	●	●	●	●	●	●	O	O	●	●	●				
VIOLA	8'	●	●	●	O	O	●	●	●	O	O	O	●	O				
CELESTE	8'	O	O	O	O	O	O	O	●	O	O	O	●	O				
OCTAVE	4'	O	O	O	●	●	●	●	O	O	●	O	O	●				
VIOLON	4'	●	O	O	O	O	●	●	●	O	O	O	●	O				
ROHRFLUTE	4'	O	O	●	●	●	●	●	O	O	O	O	●	O				
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	O	O	O	●	●	●				
WALDFLUTE	2'	O	O	O	O	●	●	●	O	O	●	●	O	●				
TIERCE	1 <sup>3</sup> / <sub>5</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O				
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	●	●	O	O	●	O	O	O				
SIFFLUTE	1'	O	O	O	O	O	O	O	O	O	O	●	O	O				
RAUSCHPFEIFE	III-V	O	O	O	O	O	●	●	O	O	O	O	O	O				
CYMBAL	II-III	O	O	O	O	O	O	●	O	O	O	O	O	●				
CROMORNE	8'	O	O	O	O	●	●	●	O	O	O	O	O	O				
VOX HUMANA	8'	O	O	O	O	O	O	●	O	O	O	O	O	O				
OBOE	8'	O	O	O	O	O	O	●	O	●	O	O	O	O				
<b>ACCESSORIES</b>		A	B	C	D	E	F	G	H	I	J	K	L	M				
SWELL TO GREAT		O	O	●	●	●	●	●	O	O	O	O	●	●				
GREAT TO PEDAL		O	O	O	O	O	O	●	O	●	O	●	●	O				
SWELL TO PEDAL		O	O	●	●	●	●	●	●	O	●	O	●	●				
TREMULANT GREAT		O	O	O	O	O	O	O	●	●	O	O	●	O				
TREMULANT SWELL		O	O	O	O	O	O	O	●	●	O	O	●	O				
CHORUS		O	O	●	●	●	●	●	O	O	O	O	●	O				
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O				
MIDI GREAT	1	O	O	O	O	O	O	O	O	O	O	O	O	O				
MIDI SWELL	2	O	O	O	O	O	O	O	O	O	O	O	O	O				
MIDI PEDAL	3	O	O	O	O	O	O	O	O	O	O	O	O	O				



# OWN REGISTRATIONS CH-45

		A	B	C	D	E	F	G	H	I	J	K	L	M
<b>PEDAL</b>														
DOUBLE BASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
SUBBASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GEDACKT	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CHORALBASS	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
BASSFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	III	O	O	O	O	O	O	O	O	O	O	O	O	O
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CLARION	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>GREAT</b>														
BOURDON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GAMBA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
SALICIONAL	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SUPEROCTAVE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
FLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
LARIGOT	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
CORNET	IV	O	O	O	O	O	O	O	O	O	O	O	O	O
SESQUIALTER	II	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	V-VII	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>SWELL</b>														
QUINTATON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
STOPPED FLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
VIOLA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CELESTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
VIOLON	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
WALDFLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
TIERCE	1 <sup>3</sup> / <sub>8</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SIFFLUTE	1'	O	O	O	O	O	O	O	O	O	O	O	O	O
RAUSCHPFEIFE	III-V	O	O	O	O	O	O	O	O	O	O	O	O	O
CYMBAL	II-III	O	O	O	O	O	O	O	O	O	O	O	O	O
CROMORNE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
VOX HUMANA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OBOE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>ACCESSORIES</b>														
SWELL TO GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
GREAT TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
SWELL TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT SWELL		O	O	O	O	O	O	O	O	O	O	O	O	O
CHORUS		O	O	O	O	O	O	O	O	O	O	O	O	O
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI GREAT	1	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI SWELL	2	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI PEDAL	3	O	O	O	O	O	O	O	O	O	O	O	O	O

# REGISTRATION EXAMPLES CH-55

		PPP	PP	P	MF	F	FF	T	SOLO	ON	GREAT	ON	SWELL	ROMANTIC	PLENUM
		A	B	C	D	E	F	G	H	I	J	K	L	M	
<b>PEDAL</b>															
DOUBLE BASS	16'	O	O	O	O	O	●	●	O	O	O	O	O	●	●
SUBBASS	16'	●	●	●	●	●	●	●	●	●	●	●	●	●	●
OCTAVE	8'	O	O	O	●	●	●	●	O	O	O	O	O	●	●
GEDACKT	8'	O	O	●	●	●	●	●	●	●	●	●	●	●	O
CHORALBASS	4'	O	O	O	O	O	●	●	O	O	O	O	O	●	●
BASSFLUTE	4'	O	O	O	O	●	●	●	O	O	O	O	O	O	●
OPEN FLUTE	2'	O	O	O	O	O	●	●	O	O	O	O	O	O	●
MIXTURE	III	O	O	O	O	O	●	●	O	O	O	O	O	O	●
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	●	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	●	●	O	O	O	O	O	O	O
CLARION	4'	O	O	O	O	O	●	●	O	O	O	O	O	O	O
<b>POSITIF</b>															
LIEBLICH GEDECKT	16'	O	O	O	O	O	O	●	O	O	O	O	O	O	O
BOURDON	8'	●	●	●	●	●	●	●	●	●	●	●	●	●	●
OCTAVE	4'	O	O	O	●	●	●	●	O	O	O	O	O	●	●
NACHTHORN	4'	O	O	●	●	●	●	●	●	●	●	●	●	O	O
NAZARD	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	●	●	●	●	●	O	O
SPITZFLUTE	2'	O	O	O	O	●	●	●	O	O	●	●	●	O	O
TIERCE	1 <sup>3</sup> / <sub>5</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O	O
SIFFLUTE	1'	O	O	O	O	O	O	O	O	O	O	O	O	O	●
CYMBAL	II-III	O	O	O	O	O	O	●	O	O	O	O	O	O	●
CLARINET	8'	O	O	O	O	O	●	●	O	O	O	O	O	O	O
<b>GREAT</b>															
BOURDON	16'	O	O	O	O	O	●	●	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	●	●	●	●	O	O	●	●	●	●	●
GAMBA	8'	●	●	●	●	●	●	●	O	O	O	O	O	●	●
ROHRFLUTE	8'	O	●	●	●	●	●	●	●	●	O	O	O	●	O
OCTAVE	4'	O	O	O	●	●	●	●	O	O	O	O	O	●	●
OPEN FLUTE	4'	O	O	●	●	●	●	●	●	●	●	●	●	O	O
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	●	●	●	●	●	O	●
SUPEROCTAVE	2'	O	O	O	O	O	●	●	O	O	O	●	O	●	●
CONICAL FLUTE	2'	O	O	O	O	●	●	●	O	O	●	O	O	O	O
CORNET	IV	O	O	O	O	O	O	O	●	O	O	O	O	O	O
MIXTURE	V-VII	O	O	O	O	O	●	●	O	O	O	O	O	O	●
SCHARF	III-V	O	O	O	O	O	O	●	III-V	O	O	O	O	O	●
CONTRA TRUMPET	16'	O	O	O	O	O	O	●	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	●	●	●	O	O	O	O	O	O	O
<b>SWELL</b>															
QUINTATON	16'	O	O	O	O	O	●	●	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	●	●	●	●	O	O	●	●	●	●	●
VIOLA	8'	●	O	O	●	O	●	●	●	O	O	O	O	●	O
CELESTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	●	O
STOPPED FLUTE	8'	O	●	●	●	●	●	●	●	●	O	O	O	●	O
OCTAVE	4'	O	O	O	●	●	●	●	O	O	O	O	O	●	●
ROHRFLUTE	4'	O	O	●	●	●	●	●	●	●	O	O	O	O	O
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	●	●	●	O	O	●	O	O	O	O
WALDFLUTE	2'	O	O	O	O	●	●	●	O	O	●	●	●	O	O
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	●	●	O	O	●	●	●	O	●
OCTAVE	1'	O	O	O	O	O	O	O	O	O	O	O	O	O	●
SESQUIALTER	II	O	O	O	O	O	O	O	O	●	O	O	O	O	O
RAUSCHPFEIFE	III-V	O	O	O	O	O	●	●	O	O	O	O	O	O	●
FAGOTTO	16'	O	O	O	O	O	O	●	O	O	O	O	O	O	O
CROMORNE	8'	O	O	O	O	●	●	●	O	O	O	O	O	O	O
VOX HUMANA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>ACCESSORIES</b>															
POSITIF TO GREAT		●	●	●	●	●	●	●	●	O	O	O	O	●	●
SWELL TO GREAT		●	●	●	●	●	●	●	●	O	O	O	O	●	●
SWELL TO POSITIF		O	O	O	●	●	●	●	●	O	O	O	O	●	●
POSITIF TO PEDAL		O	O	O	O	●	●	●	●	O	O	O	O	●	●
GREAT TO PEDAL		●	●	●	●	●	●	●	●	O	O	O	O	●	●
SWELL TO PEDAL		O	O	●	●	●	●	●	●	O	O	O	O	●	●
TREMULANT POSITIF		O	O	O	O	O	O	O	●	O	O	O	O	●	O
TREMULANT GREAT		O	O	O	O	O	O	O	●	●	O	O	O	●	O
TREMULANT SWELL		O	O	O	O	O	O	O	●	●	O	O	O	●	O
CHORUS		O	O	O	●	●	●	●	●	O	O	O	O	●	O
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI POSITIF	1	O	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI GREAT	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI SWELL	3	O	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI PEDAL	4	O	O	O	O	O	O	O	O	O	O	O	O	O	O

# OWN REGISTRATIONS CH-55

		A	B	C	D	E	F	G	H	I	J	K	L	M
<b>PEDAL</b>														
DOUBLE BASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
SUBBASS	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GEDACKT	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CHORALBASS	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
BASSFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	III	O	O	O	O	O	O	O	O	O	O	O	O	O
BOMBARDE	32'	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CLARION	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>POSITIF</b>														
LIEBLICH GEDECKT	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
BOURDON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
NACHTHORN	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
NAZARD	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SPITZFLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
TIERCE	1 <sup>3</sup> / <sub>5</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SIFFLUTE	1'	O	O	O	O	O	O	O	O	O	O	O	O	O
CYMBAL	II-III	O	O	O	O	O	O	O	O	O	O	O	O	O
CLARINET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>GREAT</b>														
BOURDON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
GAMBA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN FLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
SUPEROCTAVE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
CONICAL FLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
CORNET	IV	O	O	O	O	O	O	O	O	O	O	O	O	O
MIXTURE	V-VII	O	O	O	O	O	O	O	O	O	O	O	O	O
SCHARFF	III-V	O	O	O	O	O	O	O	O	O	O	O	O	O
CONTRA TRUMPET	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
TRUMPET	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>SWELL</b>														
QUINTATON	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
OPEN DIAPASON	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
VIOLA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
CELESTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
STOPPED FLUTE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
ROHRFLUTE	4'	O	O	O	O	O	O	O	O	O	O	O	O	O
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
WALDFLUTE	2'	O	O	O	O	O	O	O	O	O	O	O	O	O
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	O	O	O	O	O	O	O	O	O	O	O	O	O
OCTAVE	1'	O	O	O	O	O	O	O	O	O	O	O	O	O
SESQUIALTER	II	O	O	O	O	O	O	O	O	O	O	O	O	O
RAUSCHPFEIFE	III-V	O	O	O	O	O	O	O	O	O	O	O	O	O
FAGOTTO	16'	O	O	O	O	O	O	O	O	O	O	O	O	O
CROMORNE	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
VOX HUMANA	8'	O	O	O	O	O	O	O	O	O	O	O	O	O
<b>ACCESSORIES</b>														
POSITIF TO GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
SWELL TO GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
SWELL TO POSITIF		O	O	O	O	O	O	O	O	O	O	O	O	O
POSITIF TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
GREAT TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
SWELL TO PEDAL		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT POSITIF		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT GREAT		O	O	O	O	O	O	O	O	O	O	O	O	O
TREMULANT SWELL		O	O	O	O	O	O	O	O	O	O	O	O	O
CHORUS		O	O	O	O	O	O	O	O	O	O	O	O	O
MANUAL BASS		O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI POSITIF	1	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI GREAT	2	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI SWELL	3	O	O	O	O	O	O	O	O	O	O	O	O	O
MIDI PEDAL	4	O	O	O	O	O	O	O	O	O	O	O	O	O

