

# JOHANNUS

## *OWNERS MANUAL*

### *SWEELINCK*

# 20

LAST REVISION: 22 - 07 - 96

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## **JOHANNUS ORGELBOUW**

*JOHANNUS ORGELBOUW can boast a broad experience in building electronic classical organs.*

*They started building classical church organs from a workshop. It was on March 4, 1971 when the first organ was delivered.*

*A short time after, study organs were added to the assortment.*

*There was a great demand for this JOHANNUS organ, as it enabled more and more organ players to study classical and liturgical music, since not everyone had the possibility to play on a church organ frequently.*

*Because of the fast increase in production, the workshop soon was small. Therefore they had to move to a larger premisses in Veenendaal in 1972. This is where the study organs type S, HII and HIII, and the church organs type KII, KIIB, KIIC and KIIC were developed.*

*By 1976 though also this factory wasn't large enough anymore and JOHANNUS ORGELBOUW decided to build its own factory and the wish of the artistic as well as the production staff could be fulfilled.*

*A complete auditorium was, according to modern requirements multi functional, equipped in the factory building: Besides using it as a concert hall, the auditorium can be used for demonstration and pre-intonation of church organs as well.*

*The new building in Ede was opened on March 12, 1976 by the world famous organist FEIKE ASMA. In recognition of his valuable advises and guidance which helped to create the characteristic JOHANNUS sound, the auditorium was named "FEIKE ASMA ZAAL".*

*To mark the occasion of the opening of its new buildings, JOHANNUS ORGELBOUW introduced the successful OPUS-series for study- as well as church organs.*

*JOHANNUS ORGELBOUW has, since the early beginnings, always been precursor in the field of developing electronic classical organs.*

*That's why, early in 1982, a totally renewed organ-series, the 200-series, was released, using the newest chip-technology.*

*As a result of the experiences gained with these new technologies, again these series got renewed and more perfected in 1986. This series became to be the last generation of analogue organs.*

*Early in 1988 the age of the digital technologies was ushered in with the revolutionary OPUS-1000 series. This changeover from analogue to digital technologies, comparable with the changeover from the ancient pick-up to the compact disk player, has offered JOHANNUS ORGELBOUW the possibility to develop its unique, individual and meanwhile worldwide praised JOHANNUS"-sound more and more.*

*As a result of the fast development of all computer-technologies, JOHANNUS ORGELBOUW, has, using these advanced technologies, designed a new organ-series: THE SWEELINCK series.*

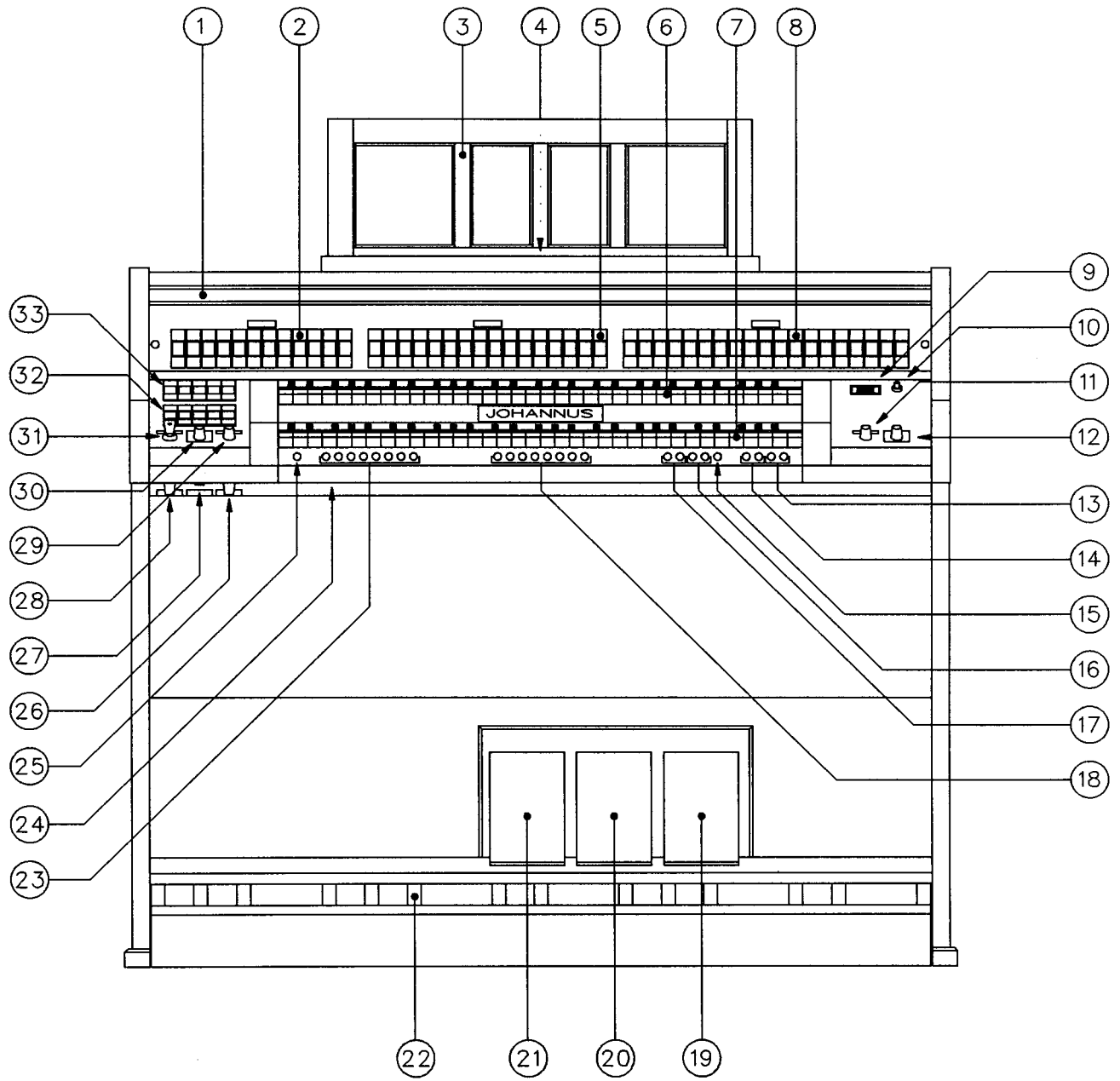
*Using the possibilities of these modern technologies and the flexibility of the company, JOHANNUS ORGELBOUW is not only able to build standard instruments, but also custom-designed organs.*

*To this day, we, the employees of JOHANNUS ORGELBOUW, are building "small" and "large" organs with joy and devotion. 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 suite the individual organist, churches, concert halls and many other prestigious location where classical organs are situated.*

*JOHANNUS ORGELBOUW wishes you lots of playing-enjoyment with this organ!*

<b>Voices</b> (18-bit quality)	Pedal	12
	Great	16
	Swell	19
<b>Intonation</b>	Romantic + baroque	2
<b>Stops</b>	Lighted Rocker tabs	●
	Overall rotary stoplight intensity control	●
<b>Keyboards</b> (church organ touch)	2x5 octaves (C-c <sup>m</sup> ) synthetic	●
	2x5 octaves (C-c <sup>m</sup> ) wood with toggle touch	option
<b>Pedalboard</b> (magnet contact system)	30-note straight (C-f)	●
	30-note concave (C-f)	option
	32-note radial concave (C-g)	option
	32-note AGO (C-g)	option
<b>Couplers</b>	Manual couplers	1
	Pedal couplers	2
	Manual bass	●
	Cantus firmus	●
<b>Tremulants</b>	Independent	2
<b>Amplifiers/channels</b> (100 Watt / 8Ω each)	Total 600 Watt (maximum)	6
<b>Cathedral</b>	Overall rotary volume control	●
	Programs	6
<b>Pitch</b>	+ / - ¼ note overall rotary control	●
<b>Transposer</b>	6 steps (+ / - 3 half notes)	●
	Equal	●
<b>Tunings</b>	Mean tone	●
	Werckmeister III	●
	Slight detuning between voices	●
<b>Chorus</b>	PP-P-MF-F-FF-T	●
<b>Presets</b>	RO (reeds off)	●
	0 (cancel)	●
	CA (cancel accessories)	●
<b>Capture</b>	64 (8 x 8) programmable combinations (generals)	●
	192 (3 x 8 x 8) programmable combinations (separate)	option
<b>Toe pistons</b>	Capture	option
	Reversible Couplers	option
	Tutti	option
<b>General Crescendo</b> (programmable)	20 steps	●
<b>General volume</b>	Midi controlled	●
<b>Expression pedals</b>	Great+Pedal midi controlled	●
	Swell midi controlled	●
<b>External connections</b>	Midi In-Thru-Out	●
	Headphones Stereo up to 2kΩ	●
	Aux In 1kΩ/70mV	●
	Reverb Out 470Ω/300mV	●
	External loudspeakers 8Ω each channel	option
	Dark or light oak	●
<b>Console</b>	Wooden rollcover (with lock)	●
	Wooden expression pedals	●
	Lighted pedalboard	●
	Bench with musicspare	●
	Bench with adjustable height	option
<b>Dimensions</b>	Height (without music rack)	117cm 3'10"
	Height (with music rack)	139cm 4' 7"
	Width	134cm 4' 5"
	Depth (without pedalboard)	63cm 2' 1"
	Depth (with 30-note straight pedalboard)	92cm 3' 1"
<b>Weight</b>	Console (without pedalboard, without bench)	109kg 241lbs

# CONSOLE SWEELINCK 20



## ***EXPLANATION FIGURES***

1. *ROLLCOVER*
2. *STOPS PEDAL*
3. *MUSIC RACK*
4. *ROLLCOVER LOCK*
5. *STOPS GREAT*
6. *KEYBOARD SWELL*
7. *KEYBOARD GREAT*
8. *STOPS SWELL*
9. *DISPLAY CAPTURE MEMORY AND GENERAL CRESCENDO STEP*
10. *MAINS SWITCH*
11. *GENERAL VOLUME CONTROL*
12. *TRANSPOSER*
13. *PISTONS GENERAL CRESCENDO*
14. *+/- PISTONS CAPTURE AND GENERAL CRESCENDO*
15. *CANCEL ACCESSORIES*
16. *ACCESSORIES (MANUAL BASS / CANTUS FIRMUS)*
17. *ACCESSORIES (WERCKMEISTER III / MEAN TONE)*
18. *PRESET-, CANCEL-, REEDS OFF PISTONS*
19. *GENERAL CRESCENDO PEDAL*
20. *EXPRESSION PEDAL SWELL*
21. *EXPRESSION PEDAL GREAT+PEDAL*
22. *PEDALBOARD*
23. *PISTONS CAPTURE MEMORIES*
24. *SERIAL NUMBER PLATE*
25. *SET PISTON CAPTURE AND GENERAL CRESCENDO*
26. *CONTROL STOP LAMP INTENSITY*
27. *STEREO HEADPHONES OUTPUT*
28. *PITCH CONTROL*
29. *VOLUME CONTROL CATHEDRAL*
30. *PROGRAM SWITCH CATHEDRAL*
31. *MEMORY LOCK*
32. *ACCESSORIES (MIDI / CHORUS / INTONATION-CHOICE)*
33. *ACCESSORIES (COUPLERS / TREMULANTS)*

## **INTRODUCTION**

*You are now the proud owner of a JOHANNUS SWEELINCK 20 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 and liturgical organ music. This manual will assist you to make you of the many possibilities offered by this JOHANNUS SWEELINCK 20 organ.*

*The different control functions will be explained step by step.*

*The encircled figures in the text (e.g. ⑨) are always referring to the encircled figures in the illustration of the console on page 5.*

*Some registration examples are given on page 18.*

*Page 19 can be used to incorporate your own favorite and/or often used registrations. The last page of this owners manual is reserved for own notes and remarks.*

*Please spend a few minutes reading this important information and experience the wonderful potential of your new organ. We wish you lots of pride in your organ for many years!*

## **MUSIC RACK**

*The music rack ③ comes separately with the organ. The music rack support, with a slit for placing the music rack, is mounted on the top panel of the organ. The music rack can easily be feed through this slit.*

## **ROLLCOVER**

*The rollcover ① can be locked. The rollcover lock ④ is placed behind the music rack. The organ can be locked easily by shifting the rollcover to yourselves and depressing the rollcover lock. The rollcover is now locked. The rollcover can be unlocked by inserting the key and turning it a quarter of a turn anti clockwise.*

*ATTENTION: It is also possible to lock the rollcover lock without using the key. Therefore, always take care that the key never is kept within the lockable part of the console.*

## **PEDALBOARD**

*The pedalboard ② of the organ is equipped with magnets which are activating reed switches. The reed switches are (invisible) mounted behind the black painted front panel against which the pedalboard has to be shifted. A magnet is mounted into the front end of each pedal key. As each pedal note is played, the reed switches are activated by the magnets.*

*It is important to ensure that the pedalboard is correctly situated in relation to the reed switches. For a properly work. Therefore, the pedalboard must be shoved against the black painted front panel as far as possible. It can be necessary to tilt the organ a little bit backwards in order to shift the pedalboard correctly against the black painted front panel. Besides it is important to place the organ on a flat floor.*



## **MAINS VOLTAGE**

*It is important to check the mains voltage of the AC outlet with the voltage setting of the organ. This is printed on the serial numberplate ⑳, which is located on the left side beneath the manuals.*

## **MAINS SWITCH**

*The mains switch ⑩ is located on the right side of the keyboards. The red pilot lamp inside the mains switch will light up as soon as the organ is switched on. As, after switching the organ on, the electronic circuits need some time to tune, it takes a few seconds before all controls are working.*

*At the same time the display ⑨ will reflect the digit 1. The function of this display will be described further on in the owners manual, when explaining the capture system and the general crescendo.*

## **STOPS**

*Your organ is equipped with so called rockertabs. When switching on or off one of the stops, the stop switches would jump back to their middle position. Therefore a stoplamp is put in each stop switch to indicate if a stop is switched on or off. The stop lamps are working when using hand registration as well as when using the presets, the capture system or the general crescendo pedal.*

*Two groups of accessories (couplers and tremulants ⑳, midi switches, chorus and intonation-2 ㉓) are located on the left side of the keyboards. The speaking stops are located above the keyboards. The group of speaking stops are (starting on the left): 12 pedal stops ㉒ to be played on the pedalboard ㉒, 16 great stops ㉓ to be played on the great manual ㉑, and 19 swell stops ㉔ to be played in the swell manual ㉑.*

## **STOP LAMP INTENSITY**

*The stop lamp intensity is adjustable with the overall rotary control STOP LAMPS ㉖. This control is located on the left side beneath the keyboard shelf.*

## **GENERAL VOLUME**

*The general volume is, independent of the position of the expression pedals, adjustable with the overall rotary control VOLUME ㉗.*

## **EXPRESSION PEDALS**

*The volume of the great division together with the pedal division is (independent of the position of the general volume control) adjustable with the left expression pedal ②.*

*The volume of the swell division is (independent of the position of the general volume control) adjustable with the middle expression pedal ②.*

## **COUPLERS**

*The three coupler stops are located ③ to the left of the keyboards.*

*When switching on the coupler SWELL TO GREAT, the stops of the swell division can be played not only on the swell manual but also on the great manual (in combination with the stops of the great division).*

*Using the coupler GREAT TO PEDAL, the stops of the great division can be played not only on the great manual but also on the pedalboard (in combination with the pedal stops).*

*The coupler SWELL TO PEDAL can be used to play the stops of the swell division not only on the swell manual but also on the pedalboard (in combination with the pedal stops).*

*The three above mentioned couplers are full couplers. This means: all depressed keys are coupled. This in contrary to the two couplers described below.*

## **MANUAL BASS**

*The pedal stops can be coupled to the great manual by pressing the switch MB ⑬.*

*This coupler is not a full coupler: Only the lowest note of the chord, played on the great manual, is coupled to the great manual.*

## **CANTUS FIRMUS**

*By pressing the switch CF ⑭, the swell stops are coupled to the great manual. Also this coupler is (in contrary to the stop SWELL TO GREAT) not a full coupler: only the highest note of a chord, played on the great manual, is coupled to the great manual. With this coupler the effect of a so called cantus firmus can be created.*

*When using the coupler SWELL TO GREAT, the CF piston would have no effect.*

## **TREMULANTS**

*The great division as well as the swell division have their own, independent tremulants. With the tremulant stops TREMULANT GREAT and TREMULANT SWELL ③ the tremulants of the great division respective the swell division can be switched on.*

*Using the coupler SWELL TO GREAT or the coupler CF, the tremulant of the swell division is also coupled to the great manual.*

*Using the couplers GREAT-PEDAL and/or SWELL-PEDAL, the tremulants of the concerning divisions are also coupled to the pedalboard.*

## **PITCH**

*The overall rotary PITCH control ② enables the organist to tune the instrument a quarter tone up or a quarter tone down.*

*With the rotary control in the middle position the tuning is on A=440 Hz (ensure the transposer is in the "O" position). Because it is almost impossible to tune the instrument close at 440Hz without a tuning fork, the rotary control is equipped with a mechanical indication for the middle position. When the control reaches the middle position during rotation, you will feel a mechanical "click".*

*Turning the pitch control while playing a chord does not change the pitch. The pitch will only be changed after playing the next key(s).*

## **TRANSPOSER**

*The TRANSPOSER switch ① allows the organist to change the key in which the music is played. This means: With the transposer switch the organ can be tuned either 1, 2 or 3 half-notes up or down. With the transposer in the 0 position the organ is tuned at A=440Hz, if the pitch control is in the middle position.*

*N.B. Using the transposer in combination with the pitch control the organ can be adjusted continuously three half notes up or down.*

## **CHORUS**

*To avoid that the organ sounds too unimaginative, we designed the instrument such that various stops are tuned a little bit different in relation to each other. These small differences are giving the organ a broader, more vivacious character. Switching on the stop CHORUS ② will intensify the difference in tuning between the various voices.*

*Switching on or of the stop chorus while playing a chord, will not result in the above explained changings. The chorus effect will be noticeable only after playing the next key(s).*

## **TUNINGS**

*Through the centuries, several systems (tunings) were used in order to calculate and lay down the tone height of each separate key of e.g. keyboard instruments.*

*Nowadays mostly the so called equal tuning is used. This tuning is the default tuning of the organ. On an equal tuned instrument, music in every key can be played.*

*But sometimes also other tunings are still being used. Especially for the interpretation of ancient music. Two well-known ancient tunings are the "Werckmeister III tuning" and the "mean tone tuning". The drawback of both these tunings is, that music can not be played in all keys. Music played in particular keys can result in sounding out of tune.*

*By pressing the piston WM ⑰ (Werckmeister III) or MT ⑰ (mean tone) the organ can be switched from equal tuning to the Werckmeister III or the mean tone tuning. When both pistons are depressed, automatically the tuning of the last pressed piston will be chosen.*

*Pressing one of the pistons WM or MT while playing a chord will not result in changing from one to another tuning. The organ changes to the chosen tuning only after having played the next key(s).*

## **INTONATION 2**

*The organ is equipped with two different intonations namely a romantic and a baroque one. A romantic intonated organ has a more "round" sound and a baroque intonated organ sounds more "bright". With the accessory INTONATION 2 ⑳, the choice can be made between the two different intonations. The romantic intonation is the default (accessory intonation 2 off). The baroque intonation can be obtained by switching on the accessory intonation 2.*

## **CATHEDRAL**

*The built in digital cathedral effect gives acoustic properties normally associated with the reverberation effect in large buildings. It gives the wide level and range of reverberation which enhances the tonal quality of sound produced from the organ.*

*The cathedral effect can be adjusted with the help of the program switch ㉑ and the overall rotary control ㉒.*

*With the program switch, one of six cathedral effects can be chosen. The six programs varies in length as well as brightness.*

*The volume of the cathedral effect can be adjusted continuously with the overall rotary control.*

*To eliminate the cathedral effect totally can be done by turning the overall rotary control ㉒ fully anti clockwise. At this, it does not matter which program is chosen.*

## **PRESETS**

The preset pistons ⑱ with the text PP-P-MF-F-FF-T-0-RO are located in the center of the lower rail below the great manual ⑦.

Presets (or fixed combinations) are combinations of pre-programmed stops according to musical standards, from PP (pianissimo) to T (tutti).

These presets are fixed at the time of manufacture. They can't be changed by the user anymore.

Pressing one of the preset pistons will light up the stop belonging to that preset.

It is possible to switch on or off stops within a selected preset.

The 0-piston, or all stops off piston, is located to right of the T-piston. Pressing this piston will switch off all stops (with a few exceptions) in one action. The exceptions are:

1. Stops switched on by using the general crescendo pedal. The general crescendo pedal is described further on.
2. The group of accessories marked with the figure ③③ (couplers and tremulant) when the CA-piston is pressed. The function of the CA-piston is described further on.
3. The group of accessories marked with the figure ③② (midi-switches, chorus and intonation 2).

The most right located piston of the preset group is the RO (reeds off) piston. Pressing this piston will switch off all reeds in one action. As long as the RO-piston is pressed, no reed stop can be switched on.

Reeds are the red colored stops.

## **CAPTURE**

The capture system enables the user to store 64 personal registrations into a memory, and to recall or change them at any time.

It is not possible to store the accessories marked with the figure ③② into the capture system.

Changing a stored capture-combination is only possible when the capture memory is unlocked with the memory lock ③①.

The 64 capture-combinations are divided into 8 memories. Each memory has 8 locations. Each location can be used for storing one, personal registration.

A memory can be chosen by using the + and - pistons ⑭. The digit in the display ⑨ shows the actual memory.

A location in a memory can be chosen by pressing one of the pistons 1 - 8 ②③, located to the left of the rail below the great manual.

*The following instructions are required in order to store a personal combination:*

- 1. Check if the pistons GC and PG ⑬ are not pressed. This is to avoid changing the general crescendo-combinations by accident.*
- 2. Unlock the capture memory by turning the key in the MEMORY LOCK ③ a quarter turn clockwise.*
- 3. Select the registration you wish to store into the memory by switching on the stops.*
- 4. Choose a memory (e.g. memory 6) by pressing one or several times the + or the - piston ⑰ till the required memory is shown in the display ⑨ (in this example the digit 6).*
- 5. Press the SET-piston ⑳ (located left from the pistons 1 - 8) hold the SET-piston, and press one of the pistons 1 - 8 ㉓ (e.g. 3). As long as the SET-piston, together with one of the pistons 1 - 8, is pressed, the digit in the display shows now the letter P. This to confirm that the capture is programming.*
- 6. First release the pressed capture piston (in this example piston 3) and only thereafter the SET-piston.*
- 7. Now the selected registration is stored in memory 6, location 3.*

*Like this seven more registrations can be stored into memory 6, into the locations 1, 2, 4, 5, 6, 7 and 8. Another 56 registrations can be stored in the memories 1, 2, 3, 4, 5, 7 and 8.*

*The stored registrations can be protected from undesired erasing or changing by turning the key in the memory lock ③ a quarter turn anti clockwise and take out the key.*

*The following instructions are required in order to recall a personal registration:*

- 1. Choose, with the help of the + and - pistons ⑰ the required memory.*
- 2. Press one of the pistons 1 - 8 ㉓ left beneath the great manual.*

*To recall a personal combination, it is not necessary to unlock the capture memory; the key is not required.*

*During any performance, registrations which have been produced through the capture system, can be changed by simply pressing the appropriate individual stops required, exactly as you do when using the presets.*

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

## **CANCEL ACCESSORIES**

*Couplers and tremulants ㉔ used in preset- or capture combinations or when using the 0-piston will also change. If this is not requested, this can be avoid by pressing the CA piston ⑮. As long as the CA piston is pressed, couplers and tremulants can only be switched on or off by hand.*

## **GENERAL CRESCENDO**

*With the general crescendo pedal ⑲, stops can be switched on in 20 steps, from pianissimo (very soft) to Tutti (very loud).*

*To use the general crescendo pedal, the GC piston ⑬ must be pressed. As soon as the GC piston is pressed, the display ⑨ does not show the actual capture memory anymore, but the actual general crescendo step.*

*The 20 general crescendo steps are pre-programmed according to musical standards.*

*The general crescendo pedal always has priority over hand registration, presets and capture combinations.*

*Stops, activated by the general crescendo pedal, can not be switched off by hand nor by using the 0 piston. It is possible though to switch on stops within a general crescendo combination.*

*Reeds, switched on by the general crescendo pedal can be switched off by the RO piston.*

*The user can, if requested, change each pre-programmed general crescendo combination (except step 0, all stops off).*

*The following instructions are required in order to change a registration of a general crescendo step:*

- 1. Unlock the general crescendo memory by turning the key in the MEMORY LOCK ③ a quarter turn clockwise.*
- 2. Press the pistons GC and PG ⑬. Now the display shows the digit 0. Also the point to the right of the digit 0 will light up now. (The digit 0 indicates step 0 of the general crescendo pedal while the point confirms that the general crescendo pedal is now in the program mode).  
Also all stops are switched off now.  
Changing the position of the general crescendo has no effect anymore.*
- 3. Choose, with the + and - pistons ⑭ one of the general crescendo steps (1 - 20) you wish to change.*
- 4. Switch on the stops you wish to program into the chosen general crescendo step.*
- 5. Press the SET piston ⑵ (barely touch). The stops switched on will now be off for a short moment. After less than a second they will switch themselves on again. This to confirm that the particular register combination now is stored in the particular general crescendo step.*
- 6. As soon as the PG piston is switched off again, the general crescendo pedal can be used as usual.*

*Like this all steps of the general crescendo pedal can be modified.*

*The stored personal general crescendo steps can be protected from undesired erasing or changing by turning the key in the memory lock ③ a quarter turn anti clockwise and take out the key.*

*The memory of the general crescendo is protected even when the organ is switched off. The memory is not affected by turning the organ off or disconnecting it from the mains supply.*

*One can always recall the factory setting of the general crescendo pedal, but only all 20 steps at the same time. Your own programmed registrations would be deleted as well.*

*The following instructions are required in order to recall the factory setting of the general crescendo:*

- 1. Unlock the general crescendo memory by turning the key in the MEMORY LOCK ⑬ a quarter turn clockwise.*
- 2. Press the pistons GC and PG ⑬ . Now the display shows the digit 0. Also the point to the right of the digit 0 will light up now. (The digit 0 indicates step 0 of the general crescendo pedal while the point confirms that the general crescendo pedal is now in the program mode).  
Also all stops are switched off now.  
Changing the position of the general crescendo has no effect anymore.*
- 3. Press the 0-piston ⑭ hold the 0-piston and press the SET-piston ⑳ .*
- 4. First release the SET-piston, and only thereafter the 0-piston.*
- 5. As soon as the PG piston is switched off again, the general crescendo pedal can be used as usual.*

## **TOE PISTONS (OPTION)**

*Depending on the ordered features, your organ is equipped with following toe pistons. Their functions are:*

### **REVERSIBLE COUPLER PISTONS (3);**

*With these pistons you can operate the couplers. The coupler pistons are reversible, this means:*

- if a coupler is switched off, you can switch it on with the companion piston;*
- if a coupler is switched on, you can switch it off with the companion piston.*

### **TUTTI PISTON (1):**

*This piston has the same function as the T-piston of the presets.*

### **SETZER PISTONS (8):**

*These pistons have the same function as the 8 capture pistons ⑳.*

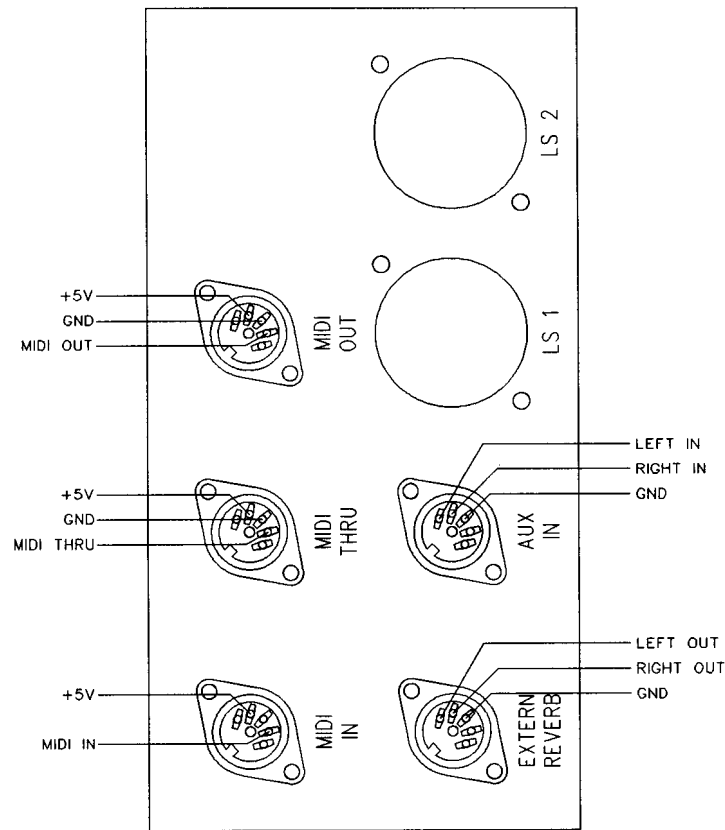
## **HEADPHONES**

*The headphones output ⑳ is stereo and is suitable for any headphones with an impedance up to 2000Ω. When using low impedance headphones (8Ω) volume may increase beyond a comfortable level. The volume of the instrument should then be controlled by the general volume rotary control ⑪ .*

*When using the headphone socket the internal speakers of the organ are automatically silenced. The various channels of the instrument are then spread throughout the two headphones channels.*



## **EXTERNAL CONNECTIONS (REAR SIDE ORGAN)**



*At the rear of the console (seen from the rearside at the very right, in the middle) several DIN connectors are located (see above drawing). The functions of these connectors are the following:*

### **AUX IN:**

*This input is for use when amplifying the sound of an external device throughout the amplifiers of the organ. E.g. an expander, controlled throughout the MIDI OUT of the organ, can be played throughout the speakers of the organ. The volume of the device, connected to the AUX IN connector, can not be controlled with the expression pedals of the organ.*

### **EXTERN REVERB:**

*This output specifically is meant to connect a JOHANNUS external acoustic system. By means of 4 loudspeakerboxes, this external acoustic system creates an acoustical environment within any building and allows for further development of the cathedral effect. We strongly advise against using this output for other purposes.*

### **MIDI IN:**

*To receive Midi codes from other devices.*

### **MIDI THRU:**

*To pass Midi codes received from other devices.*

### **MIDI OUT:**

*To transmit Midi codes to other devices.*

## **MIDI**

*MIDI is the abbreviation of Musical Interface for Digital Instruments. The ability of the Midi allows to connect different devices to each other. Midi allows the addition of other Midi compatible equipment i.e. keyboards, expanders, computers, sequencers, etc. which can then be operated through the organ at the same time as you are playing the JOHANNUS organ.*

*How does MIDI work? Midi transmits/receives digital information only. I.g. Midi does not transmit/receive audio signals but the digital information tells the connected devices which key is selected and how long etc.*

*With the accessories MIDI GREAT 1, MIDI SWELL 2 and MIDI PEDAL 3 you can decide from which division (manual or pedalboard) you would like to transmit midi codes with key information. If none of the Midi accessories are switched on, no key information will be available on the MIDI-OUT connector.*

*Midi information from Midi devices connected to the MIDI-IN will be processed independent from the position of the Midi-switches.*

*The number behind e.g. MIDI GREAT 1 corresponds with the channel number which is used to transmit key information if the Great division is being played.*

*The Midi standard has 16 different channels which can be used in order to transmit/receive Midi codes. E.g. an expander can be controlled throughout channel 1 while at the same time throughout channel 2 a second expander can be controlled. The expanders must be installed such that they are receiving the right channel.*

*More Midi information is given on the MIDI IMPLEMENTATION CHART of the SWEELINCK 20 organ on page 20.*

## **MAINTENANCE**

*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 with a soft chamois. 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 the cabinet especially light oak. Small scratches on the keys can be removed with car polish. NEVER try to remove spots with aggressive liquids such as thinner, acetone, etc. as they immediately would damage the instrument.*

# REGISTRATION EXAMPLES SWEELINCK 20

		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>														
DOUBLE BASS	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
SUBBASS	16'	●	●	●	●	●	●	●	●	●	●	○	●	●
OCTAVE	8'	○	○	○	○	●	●	●	○	○	●	●	○	●
GEDACKT	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CHORALBASS	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
BASS FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
NACHTHORN	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
RAUSCHPFEIFE	IV	○	○	○	○	○	○	○	○	○	○	○	○	○
BOMBARDE	32'	○	○	○	○	○	○	○	○	○	○	○	○	○
CONTRA TRUMPET	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CLARION	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>GREAT</b>														
BOURDON	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
PRINCIPAL	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN DIAPASON	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
HOHL FLUTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
FLUTE CELESTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
GAMBA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
CONICAL FLUTE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
CORNET	IV	○	○	○	○	○	○	○	○	○	○	○	○	○
MIXTURE	VII	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
VOX HUMANA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>SWELL</b>														
QUINTATON	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN DIAPASON	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
ROHR FLUTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
VIOLA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CELESTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
COPPEL FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
SALICIONAL	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
WALDFLUTE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	1'	○	○	○	○	○	○	○	○	○	○	○	○	○
SESQUIALTER	II	○	○	○	○	○	○	○	○	○	○	○	○	○
SCHARFF	III	○	○	○	○	○	○	○	○	○	○	○	○	○
FAGOTTO	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
FESTIVAL TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CROMORNE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OBOE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>ACCESSORIES</b>														
SWELL-GREAT		○	○	○	○	○	○	○	○	○	○	○	○	○
GREAT-PEDAL		○	○	○	○	○	○	○	○	○	○	○	○	○
SWELL-PEDAL		○	○	○	○	○	○	○	○	○	○	○	○	○
TREMULANT GREAT		○	○	○	○	○	○	○	○	○	○	○	○	○
TREMULANT SWELL		○	○	○	○	○	○	○	○	○	○	○	○	○
CHORUS		○	○	○	○	○	○	○	○	○	○	○	○	○

# OWN REGISTRATIONS SWEELINCK 20

		A	B	C	D	E	F	G	H	I	J	K	L	M
<b>PEDAL</b>														
DOUBLE BASS	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
SUBBASS	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
GEDACKT	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CHORALBASS	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
BASS FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
NACHTHORN	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
RAUSCHPFEIFE	IV	○	○	○	○	○	○	○	○	○	○	○	○	○
BOMBARDE	32'	○	○	○	○	○	○	○	○	○	○	○	○	○
CONTRA TRUMPET	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CLARION	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>GREAT</b>														
BOURDON	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
PRINCIPAL	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN DIAPASON	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
HOHL FLUTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
FLUTE CELESTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
GAMBA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
CONICAL FLUTE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
CORNET	IV	○	○	○	○	○	○	○	○	○	○	○	○	○
MIXTURE	VII	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
VOX HUMANA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>SWELL</b>														
QUINTATON	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
OPEN DIAPASON	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
ROHR FLUTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
VIOLA	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CELESTE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
COPPEL FLUTE	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
SALICIONAL	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
FLUTE TWELFTH	2 <sup>2</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
WALDFLUTE	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
NAZARD	1 <sup>1</sup> / <sub>3</sub> '	○	○	○	○	○	○	○	○	○	○	○	○	○
OCTAVE	1'	○	○	○	○	○	○	○	○	○	○	○	○	○
SESQUIALTER	II	○	○	○	○	○	○	○	○	○	○	○	○	○
SCHARFF	III	○	○	○	○	○	○	○	○	○	○	○	○	○
FAGOTTO	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
FESTIVAL TRUMPET	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
CROMORNE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
OBOE	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
<b>ACCESSORIES</b>														
SWELL-GREAT		○	○	○	○	○	○	○	○	○	○	○	○	○
GREAT-PEDAL		○	○	○	○	○	○	○	○	○	○	○	○	○
SWELL-PEDAL		○	○	○	○	○	○	○	○	○	○	○	○	○
TREMULANT GREAT		○	○	○	○	○	○	○	○	○	○	○	○	○
TREMULANT SWELL		○	○	○	○	○	○	○	○	○	○	○	○	○
CHORUS		○	○	○	○	○	○	○	○	○	○	○	○	○

Functions		Transmitted	Recognized	Remarks
<b>Basic Channel</b>	Default Changes <sup>1</sup>	1, 2, 3, 12 1, 2, 3	1, 2, 3, 12 N	1 = Great 2 = Swell 3 = Pedal 12 = Stops
<b>Mode</b>	Default Messages Altered	Mode 3 N * * * * *	Mode 3 N N	
<b>Note Number</b>	True voice	36 - 96 * * * * *	36 - 96 36 - 96	
<b>Velocity</b>	Note ON Note OFF	9nH (v=64) 9nH (v=0)	9nH v=1 - 127 9nH v=0, 8nH v=*	* = irrelevant
<b>After Touch</b>	Keys Channels	N N	N N	
<b>Pitch Bend</b>		N	N	
<b>Control Change</b>	7 11 100/101/6 100/101/6	Y Y Y Y	Y Y N N	General volume Expression pedals Pitch Transposer
<b>Program Change</b>	:True#	0 - 68 <sup>2</sup> * * * * *	0 - 68 <sup>2</sup> 0 - 68 <sup>2</sup>	47 - 68 Accessories <sup>2</sup> 0 - 11 Stops Pedal 12 - 27 Stops Great 28 - 46 Stops Swell
<b>System Exclusive</b>		Y	Y	All stops off
<b>Common</b>	:Song Pos :Song Sel :Tune	N N N	N N N	
<b>System Real Time</b>	:Clock :Commands	N N	N N	
<b>Aux</b>	:Reset All Controller :Local On/OFF :All Notes OFF :Active Sense :Reset	N N N N N	N N Y N N	
<b>Notes</b>		<sup>1</sup> Only note events can be changed <sup>2</sup> Except 52-63		

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

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

Y = YES  
N = NO

