User's Manual

JOHANNUS

Festivo and Jubilate

Document information

Document Code	FEJUV102US.wpd
Document Title	User's Manual JOHANNUS Festivo and Jubilate
Issue date	Januari 2000
Serial number	

Introduction

Congratulations on your decision to purchase a new JOHANNUS organ. You are now the owner of an instrument with a well-chosen and balanced selection of stops. This organ gives you the opportunity to perform the full repertoire of classical and liturgical organ music.
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This User's Manual contains a lot of useful information. First we present an overview of the organ, and then we present tips on use. Finally, we investigate all of your organ's technical possibilities, including how to choose another temperament, using free combinations, MIDI applications and so on.

In the appendices you will find options, technical information, MIDI implementation charts and registration examples.

Table of Contents

An overview

The organ cabinetry

The organ cabinet consists of the console shell, music-rack, pedalboard and bench.
Our standard organ cabinet is designed in dark or light oak with solid wood panels.
Your organ may be custom-ordered in another finish, color or wood.

The console

Typically, the console consists of two manuals and several accessories.
The keyboards have a church organ touch and are normally designed with synthetic key surfaces.

The music rack

The music rack is typically not yet installed at the time of delivery. You can insert the music rack into the groove provided on the top panel of the organ cabinet.

The roll-top

The wooden roll-top cover is provided with a lock and key. The lock is placed behind the music-rack on the top of the organ.

Open the organ in the following way:

1. Put the key in the lock.

2. Rotate the key a quarter turn; the lock moves upwards.

3. Push the roll-top upwards.

Lock the organ in the following way:

1. Make certain that you have the key handy (see warning).

2. Pull at the roll-top toward you.

3. Push in the cover-lock.

Warning
You **can** lock the organ without using the key. However, the key is necessary to open the organ. Therefore, always take care that the key is not left within the console before depressing the lock.

The pedalboard

Typically, the organ has a 13-, 27-, or 30-note flat pedalboard.

The 27- and 30-note models have a removable pedalboard. At the front of each of these pedal keys is a magnet. This magnet normally sits in close proximity to a reed switch, which is invisibly mounted behind the black painted front panel at the bottom of the console. When you depress a pedal key, the reed switch is activated by the magnet at the end of the key.

The 27- and 30-note models have lighting above the pedalboard which is switched on and off automatically with the organ.
The following points are important for installing the pedalboard to the 27- and 30-note models:

1. Make sure that the surface under the console in combination with the pedalboard is flat.

2. For the best alignment of the pedalboard, it may be necessary to adjust the console height slightly while positioning the pedalboard.

3. Shift the pedalboard against the black painted front panel as close as possible.

The organ bench

Your organ is provided with a bench that contains a music shelf. If you wish, you can order an adjustable-height bench.

Set up

Connecting the organ

Pay close attention to the following points when you connect the organ:

1. Check the main voltage before you connect the organ. This voltage must be the voltage as printed on the serial numberplate located on the left side under the keyboards.

2. Connect the organ to a grounded outlet. When this is not possible there is a chance some functions will not work properly.

Switching on he organ

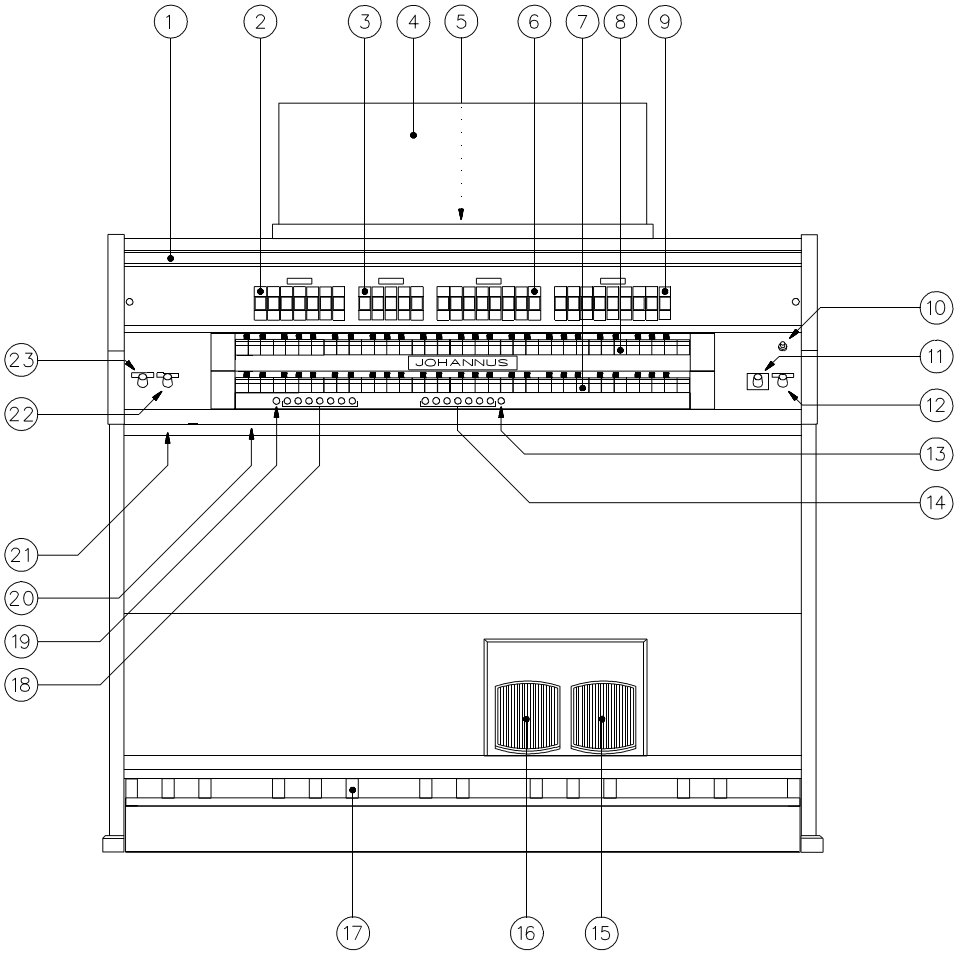
Switch on the organ by depressing the main power switch located on the right side of thekeyboards. The red pilot lamp will light up as soon as the organ is switched on. It takes a few seconds before all controls are working. The computer circuit needs this time to initialize.

The console in detail

Overview of the controls per type

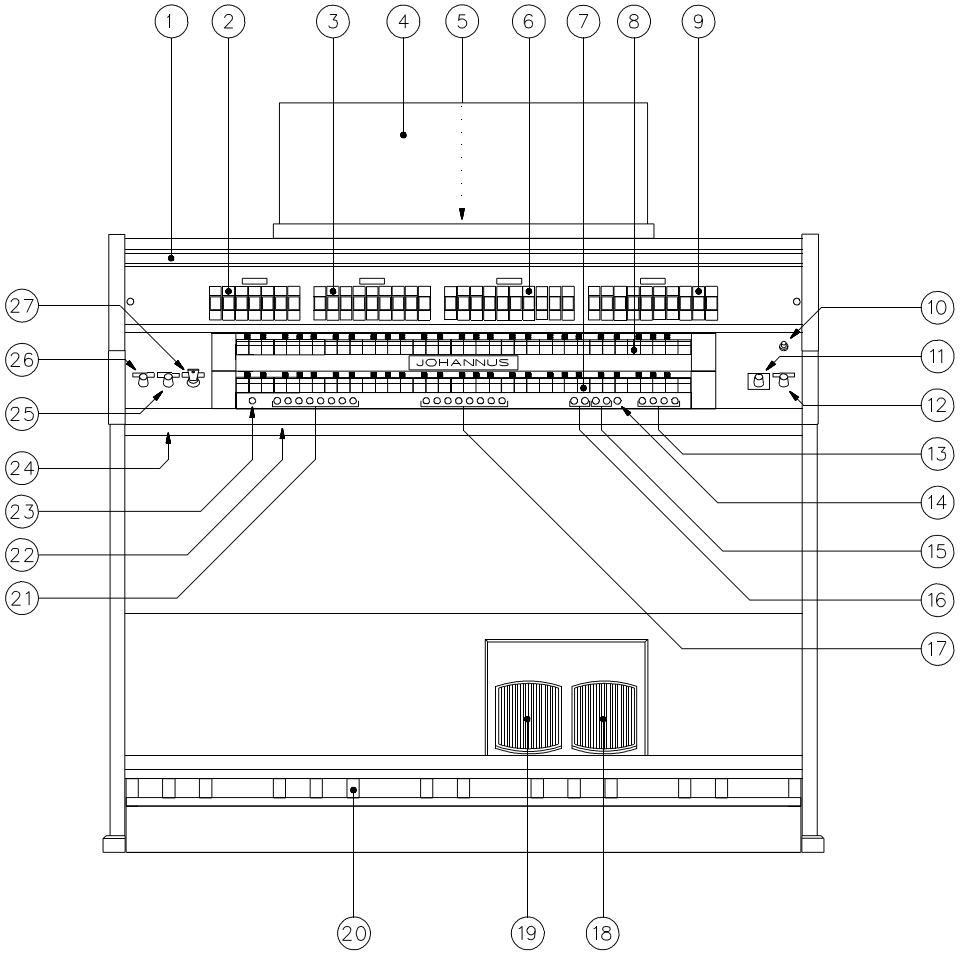
The number and the location of the controls are different by type. The following pages show controls of the different models.

Festivo



1. Roll-top cover
2. Accessories
3. PEDAL stops
4. Music rack
5. Roll-top cover lock
6. GREAT stops
7. Great keyboard
8. Swell keyboard
9. SWELL stops
10. Power switch
11. TRANSPOSER control
12. PITCH control
13. Thumb piston
    • MB (Manual Bass)
14. Thumb pistons
    • Presets
15. Expression pedal SWELL
16. Expression pedal GREAT+PEDAL
17. Pedal
18. Thumb pistons
    • 1 thru 7
19. Thumb piston
    • SET
20. Serial number plate
21. External connections
22. ACOUSTICS control
23. VOLUME control

Jubilate



1. Roll-top cover
2. Accessories
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11. TRANSPOSER control
12. PITCH control
13. Thumb pistons
    - M1 thru M4
14. Thumb piston
    - FA (Fix Accessories)
15. Thumb pistons
    - MB (Manual Bass)
    - CF (Cantus Firmus)
16. Thumb pistons
    - WM (Werckmeister)
    - MT (Meantone)
17. Thumb pistons
    - Presets
18. Expression pedal SWELL
19. Expression pedal GREAT+PEDAL
20. Pedal
21. Thumb pistons
    - 1 thru 8
22. Serial number plate
23. Thumb piston
    - SET
24. External connections
25. ACOUSTICS control
26. VOLUME control
27. Key switch MEMORY LOCK

Accessories

The following accessories are standard:

- Couplers
- Tremulants
- Chorus
- Intonation 2

Couplers
All couplers are full unison couplers. This means all depressed keys are coupled.

Swell - Great
This coupler couples the Swell to the Great. When playing keys on the Great, the corresponding keys on the Swell will be played as well. This way you can add all stops of the Swell to the Great.

Great - Pedal
This coupler couples the Great to the Pedal. When playing keys on the Pedal, the corresponding keys on the Great will be played as well. This way you can add all stops of the Great to the Pedal.

Swell - Pedal
This coupler couples the Swell to the Pedal. When playing keys on the Pedal, the corresponding keys on the Swell will be played as well. This way you can add all stops of the Swell to the Pedal.

Tremulants
The tremulants are meant to vibrate the sound of the organ especially with slow or soft music. Every division has its own independent tremulant.

When you use couplers and/or the CF piston the tremulants will be coupled to the corresponding keyboards.

Chorus
To avoid the organ sounding too sterile, the instrument is designed with various stops tuned differently in relation to each other. These small differences give the organ a broader, more lively character. Switching on this stop will intensify the difference in tuning between the various voices.

Intonation 2
Intonation determines the sound of the organ. In pipe organ-building the voicing is a very important part of the building process. Every stop will be adjusted note by note to the room where the organ is installed.

Your organ has two intonations, a romantic and a baroque intonation. In general a romantic organ is wider and sounds symphonic, while a baroque organ is brighter and more tightly tuned. Also see under “Choice of temperament”.

Stops

The stops are on so-called tab stops. These are switches that will come back in their middle position after being switched on or off. Therefore, in every tab a light will light up when that stop is switched on. These stop lights also work with the use of presets and free combinations.

The last stop of each group is a MIDI-stop. For the use of these stops see chapter “MIDI applications”.

On a pipe organ you switch a rank of pipes on or off with the stops. By varying the combinations of stops the organist can create dynamic and colorful changes. This means that some knowledge of the traditional pipe organ is necessary to make good stop combinations. You should know a little bit about the different sounds of the different organ stops. That is why we give a brief explanation about these different kinds of organ stops.

In the appendices you will find extensive examples of registrations.

Organ pipes can be divided in two main groups:
- Flues
- Reeds

Flue pipes
Flue pipes occur in two versions: open or (half) stopped. An example of a half-stopped pipe is the Rohrflute. On the canister-stopper a small open tube has been soldered. An example of an open flue pipe is the Principal. Normally the pipes of this stop are located in the facade of a pipe organ. Flues can be subdivided in the following categories:

Principals
Principals are the Principal, Octave, Twelfth, Superoctave, Mixture, Scharff, Cymbal, Rauschpfeife and Sesquialter. The last 5 stops sound with more than one pipe of different pitch together per note. So called multi rank stops.

Strings
These are the narrow scaled, open flue pipes like: Viola di gamba, Vox Celeste and Salicional.

Flutes
Flute stops, open as well as stopped, are made of metal or wood. For example: Stopped Flute, Gedackt, Bourdon, Subbass, Nazard, Waldflute, Gemshorn and Rohrflute.

Reeds
In a reed pipe the wind is blown into the pipe bringing a reed into resonance. This resonance is ‘amplified’ and ‘colored’ by a tube (resonator). Reeds with a conical resonator are: Bombarde, Trumpet, Schalmei, etc. The group of cylindrical resonators are: Fagotto, Cromorne, Krummhorn, etc. The following reeds have a short resonator: Regal, Vox Humana, Ranket, etc.

Overview of stops per type

You will find an overview of stops per organ in the appendix under examples of registrations. Next to the stopnames you normally find the length, e.g. 8'. This means that the body of this pipe for the lowest C key is 8' (appr. 240 cm). A stop with 16' sounds one octave lower.

Volume adjustment

The volume is adjustable in the following ways:

VOLUME control
With the VOLUME control you adjust the General Volume, independent of the position of the expression pedals. Therefore, this control has influence on each keyboard.

Expression pedal Great + Pedal
With the left expression pedal you adjust the Great and Pedal volume at the same time.

Expression pedal Swell
With the right expression pedal you adjust the volume of the Swell.
Both expression pedals work independently of the position of the VOLUME control.

Thumb pistons

WM = Werckmeister (only for Jubilate)
By pushing this piston you choose for the Werckmeister temperament. See under chapter “Choice of temperament”.

MT = Meantone (only for Jubilate)
By pushing this piston you choose for the Meantone temperament. See under chapter “Choice of temperament”.

MB = Manual Bass
By pushing this piston the pedal will be coupled to the Great keyboard automatically. When you play a chord on the Great, the lowest key of this chord will be coupled from the Pedal to the Great.

CF = Cantus Firmus (only for Jubilate)
By pushing this piston the Swell will be coupled to the Great keyboard. When you play a chord on the Great, the highest key of this chord will be coupled from the Swell to the Great. This way the effect of an automatic solo can be achieved. In case the Swell to Great coupler is already in use the CF function has no effect.

FA = Fix Accessories (Freeze Accessories, only for Jubilate)
When you use the couplers and tremulants in the fixed combinations (presets) or in the free combinations (capture system) or by using the thumb piston “0" (cancel) these will change too. You can avoid this by using the FA thumb piston. As long as this piston is switched on, you can only switch the couplers and tremulants on or off by hand.

SET
A thumb piston to program free combinations. See under chapter “Using the free combinations”.

1 thru 8 (Festivo 1 thru 7)
Thumb pistons to store a personal registration into the capture memory by giving these registrations a number (1 thru 8, Festivo 1 thru 7)) within a memory level (bank). These thumb pistons you need again to call these stored registrations from the capture memory. See under chapter “Using the free combinations”.

M1 thru M4 (only for Jubilate)
Thumb pistons with which you store a personal registration into the capture memory (M1 thru M4). These thumb pistons you need again to call these stored registrations from thecapture memory. See under chapter “Using the free combinations”.

PP thru T
The fixed combinations (presets) are registrations, preset according to musical standards, starting by PP (Pianissimo: very soft) thru T (Tutti: full organ).

The Tutti piston has two functions. When you play a stop combination chosen by yourself or from the presets (PP thru F) the T piston calls the full organ: the normal function of this piston. However, when you push the T once more you will recall the previous registration.

These presets have been fixed in the factory and cannot be changed by the user.

When you push one of the preset pistons the factory programmed stops will light up accordingly. It is always possible to switch stops on or off by hand.

0
The "0" (cancel) piston is located to the right of the T piston.

The piston has two functions. It may happen that you switch on a preset or add a stop by hand by mistake. By pushing the “0" once quicky you will undo the latest change.

Example
You play the registration of Flute 8', Flute 4', and Flute 2'. After some time you add the Principal 8' and Principal 4'. There is always a very short time between switching on the Principal 8' and the Principal 4'. By pushing the 0 piston briefly only the Principal 4' will be switched off (undo the last change). Not the Principal 8' as well as the Principal 4' will be switched off (according to the organist this would be his last change). Actually the organ sees the Flute 8', Flute 4', Flute 2' and the Principal 8' as the previous registration and the organist the combination Flute 8', Flute 4', and Flute 2' as the last one.

When pushing the “0" piston longer all stops will be switched off at once. Exceptions are: the couplers and the tremulants when the FA piston is switched on and the stops Chorus, Intonation 2 and the MIDI.

RO = reeds off (only for Jubilate)
Located to the far right of the presets is the RO (Reeds Off) thumb piston. By pushing this piston all reeds will be switched off at once. As long as the RO piston is switched on no reeds can be switched on.

Controls

PITCH
With this control you can adjust the temperament of the organ in quarter steps.
This control has a central position indication, which means that, when turning, you can feel this control click in this central position. This central position is meant to tune the organ (with the TRANSPOSER control on position 0) on A=440 Hz

TRANSPOSER
With this control it is possible to transpone the organ. This means that the organ can be transposed 1, 2 or 3 set half steps lower or higher. When the position of the control is 0, the standard pitch for the organ is A=440 Hz, on the condition that the PITCH control is in central position.

When using the TRANSPOSER in combination with the PITCH control it is possible to adjust the organ 3 half steps higher or lower.

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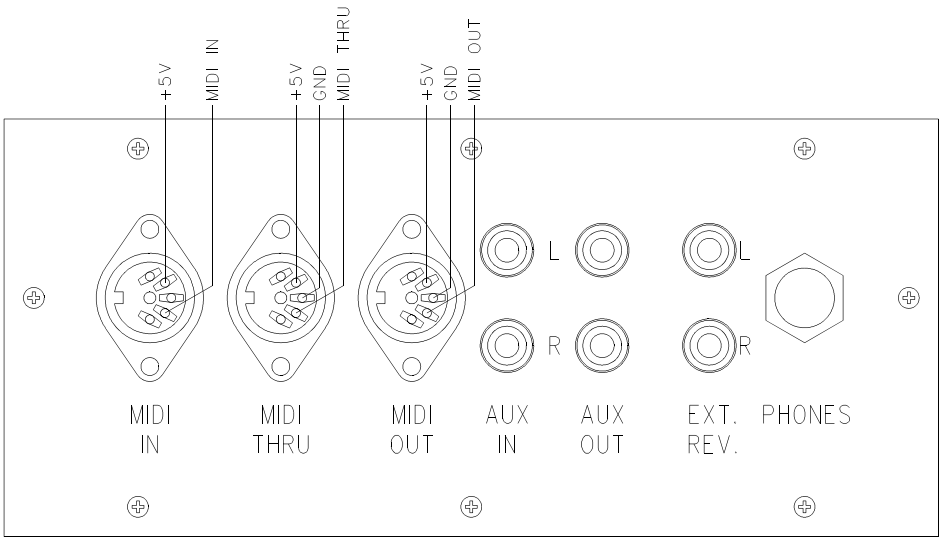
ACOUSTICS
The build-in digital acoustics provide a spacial reverberation of the organ sound. With this ontrol the volume of the reverberation can be adjusted. To completely switch off the reverberations you turn the control to the left.

Memory lock

MEMORY LOCK (only for Jubilate)
To save your registrations or to modify stored registrations, this switch must be switched on. See chapter “Using free combinations”.

External connections



The following external conceptions are located left under the console:

MIDI IN
To receive MIDI-codes from the otherdevices.

MIDI THRU
For relaying incoming MIDI codes from other devices.

MIDI OUT
To send MIDI-codes to other devices.

AUX IN
This input can be used to amplify the sound of an external device through the speakers of the organ. E.g., it is possible to play the sound of an expander module that is controlled by the organ's MIDI out through the organ's speakers.

The volume of the device that is connected to the AUX IN cannot be adjusted by the expression pedals or the VOLUME control (except external devices that are controlled by the organ's MIDI OUT).

AUX OUT
This output is meant to connect an external stereo amplifier.

EXT. REV.
The connection EXTERN REVERB is specifically for the JOHANNUS external surround acoustics device. This system, that works with 4 independent loudspeaker boxes in the room, creates a realistic acoustical impression of a concert hall, church or cathedral. It is not recommended to use this output for other purposes.

PHONES
This is the connection for a stereo headphone and suited for up to 2000 ohm.
Using a low impedance headphone (e.g. 8 ohm) may give a too loud a volume. This can be regulated with the VOLUME control.

When using a headphone the organ loudspeakers will be automatically switched off. All loudspeaker channels will be divided stereophonically through the two headphone channels.

Choice of temperament (only for Jubilate)

The temperament is the way the different notes within an octave are tuned. This has been changed through the ages, depending on taste, different instruments and new instruments.

On this JOHANNUS organ you may choose from 3 different temperaments:

- Equal temperament
- Werckmeister III temperament
- Meantone temperament

Equal temperament

Today the most widely used and accepted temperament is the “equal temperament”. This is a tuning where all 12 quints have been undertuned and all tierces have been overtuned to keep the octave pure. Equal temperament is standard on the Johannus organ. In addition you have a choice out of a Romantic voicing and a Baroque voicing. On an instrument with Equal temperament you may play in any key.

Werckmeister III temperament

Andreas Werckmeister introduced his tuning approximately in 1691 in Germany. Within this temperament the often used tierces are more or less pure tuned. Every key has his own specific character. This effect has been used extensively in the baroque age and even after that. Johann Mattheson writes in 1713 that e.g. f-flat is used to express a resigned, deep and desperate agony. According to him C major is impertinent, but not unsuitable to also express feelings of joy. This temperament is recommended with “intonation 2".

Meantone temperament

In Meantone the often used tierces are tuned pure. E.g. c-e, d-f#, etc. Because the tierces in chords with quints and tierces are determining the purity of a chord we experience these pure chords as very restful. Playing a chromatic scale it appears there are clear differences between the half steps. It is impossible to play pure sounding chords on the a#, f#, g# and b in a Meantone temperament.

This Meantone temperament was in use until appr. 1650. Music from this period of time is based on this temperament. Because all the half steps the chromatical parts of the music sounds violent. This possibility has often been used to create special feelings among the listeners. The more false the chords, the deeper the emotion.

From the period of time of appr. 1550-1650 there are many examples where also the less pure chords have been used for expressive purposes. Composers that lived and worked then were e.g. Michael Praetorius (1571-1621) and Jan Pieterszoon Sweelinck (1562-1621).

In fact this music needs a Meantone temperament to give it an extra dimension. In our modern equal temperament this music sounds accentless and the true dimension gets lost. This Meantime temperament sounds best with the “intonation 2" switched on.

Using free combinations (capture system)

What are free combinations?

Free combinations are a special kind of presets. The combination of stops in presets are fixed. With free combinations you are able to store your choice of stop combinations into the memory and recall them when needed. This, of course, is especially helpful when many different registrations occur in a piece of music. It makes the help of assistants redundant.

The memory of free combinations is protected so that is cannot be erased when you switch off the organ or when you unplug the organ from the main power.

The capture system consists of the following:
- Key switch MEMORY LOCK (only for Jubilate)
- Thumb pistons M1 - M4 (only for Jubilate)
- Thumb piston SET
- Thumb pistons 1 thru 8 (Festivo thumb pistons 1 thru 7)

With the capture system on the Jubilate you can program 32 personal registrations. These registrations can be recalled at any time. The capture system has four memory banks to be chosen with the thumb pistons M1 thru M4). Every memory bank can store 8 combinations, accessible by the pistons 1 thru 8. On every setter location you may store a personal registration. Only the accessories Chorus, Intonation 2 and the MIDI-stops cannot be stored in the capture system.

On the Festivo you can store 7 personal registrations.

How to set free combinations

On the Jubilate a free combination is programmed as follows:

1. Make the memory accessible by turning the MEMORY LOCK a quarter turn to the right.

2. Choose the registration you want to store in the capture system.

3. Choose a memory bank (e.g. memory bank M2).

4. Push on SET (keep on pushing) and choose the memory number (e.g. piston number 3).

5. First release the piston for the memory number (in this example number 3) and then the SET piston.

6. Close the memory by turning the key switch MEMORY LOCK a quarter turn to the left and remove, if necessary, the key from the switch.

7. Write the programmed combination (e.g. M2-3) in your music paper where you want to use it.

The personal registration has now been stored in memory bank 2 in number 3.

On the Festivo a free combination is programmed as follows:

1. Choose the registration you want to store in the capture system.

2. Push on SET (keep on pushing) and choose the memory number (e.g. piston number 3).

3. First release the piston for the memory number (in this example number 3) and then the SET piston.

The personal registration has now been stored in memory number 3.

Recalling the free combinations

To recall the personal registrations on the Jubilate it is not necessary to make the capture system accessible with the key switch MEMORY LOCK. Recalling goes as follows:

1. Determine the setter combination you want to recall (e.g. M2-3).

2. Choose the memory bank (e.g. M2).

3. Then choose the memory number (e.g. push piston 3).

In the registration you recalled you may add or remove stops by hand,

On the Festivo the recalling of a personal registration goes as follows:

1. Determine the setter combination you want to recall (e.g. 3).

2. Choose the memory number (e.g. 3).

MIDI applications

What is MIDI?

MIDI is the abbreviation of Musical Instruments Digital Interface. With MIDI different musical instruments can be connected with each other or a computer. For example, it is possible to play on your organ and at the same time on a synthesizer or an expander module. The MIDI standard is partly based on hardware. Next to that it is a worldwide agreement about the way music and sound are being interpreted and communicated between devices that have MIDI capability. The MIDI codes sent by a Johannus organ tell e.g. which key is played.

MIDI consists of the following parts:
- MIDI-connections (MIDI IN, MIDI THRU, MIDI OUT)
- MIDI-stops
- A device (e.g. synthesizer) that you want to connect through MIDI
- Connection cables

The MIDI-stops are the last in the group of stops of the Pedal, Great and Swell.

The MIDI stops have a number. The MIDI number for Great is number 1. This number indicates the MIDI channel used to transfer key information when playing the Great. MIDI has at least 16 channel to transfer data. The MIDI stops determine from which keyboard(s) you send key information to other device(s).

How and what to connect?

Imagine you want to connect 3 expanders to your organ. One you want to play from the Great, the other from the Swell and the third from the Pedal.

The following has to be done:

1. Connect the expanders with the MIDI cables (DIN).

2. Switch on MIDI stop Great 1. The expander must be configured so that it can only receive data through channel 1.

3. Switch on MIDI Swell 2. Set the second expander for channel 2.

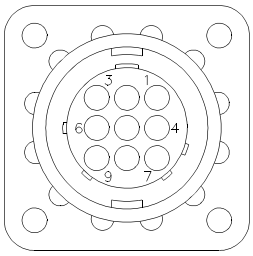
4. Switch on MIDI stop Pedal 3. Set the third expander for channel 3.

Options

External Loudspeaker system

The organ can be extended with an external loudspeaker system, for example a pipe facade with several speaker boxes behind it. At the back side (or kept internally) is an connector (octal socket). With a special cable you connect the loudspeaker system to the instrument. In that case there will be a 3-position switch on the instrument too.

The 8 pins of the octal socket are connected as follows:



Number	Channel	Organ model
1 2	Ground (–) ch. 1 Signal (+) ch. 1	Festivo and Jubilate
3 4	Ground (–) ch. 2 Signal (+) ch. 2	Festivo and Jubilate
5 6	Ground (–) ch. 3 Signal (+) ch. 3	Festivo and Jubilate
7 8	Ground (–) ch. 4 Signal (+) ch. 4	Jubilate

3-position switch

This switch enables you to choose between loudspeakers in the organ and the external loudspeakers.

The switch has the following positions:

Position A
The organ sound comes from the loudspeakers in the organ console and not from the external loudspeakers.

Position AB
The organ sound comes from the loudspeakers in the organ console as well as from the external loudspeakers. However, the sound from the loudspeakers in the organ console is softer than the A-position.

Position B
The organ sound comes from the external speakers and not from the console speakers.

Maintenance

The console consists of wooden veneer and solid wooden parts.

To clean the cabinet use a normal duster or a light wet cloth or chamois and polish with a dry cloth.

We do not recommend furniture- or teak oil, because it may be harmful for the lacquer. Direct sunlight may change the color of the cabinet, especially light oak consoles.

The keys can be treated the same as the woodwork. Little scratches that may originate from playing can be removed with car polish. **NEVER** try to remove spots with aggressive liquors like thinner, acetone, etc. These will irrevocably damage the instrument.

Guarantee

With the purchase of your JOHANNUS Organ you received a limited warrantee card. Please read the conditions carefully and send the bottom part to JOHANNUS Orgelbouw b.v. in Ede as soon as possible. Again we want to emphasize that modifications on the organ or incompetent handling will end the warrantee.

Appendices

Technical specifications

	Festivo	Jubilate
Voices: Romantic Baroque	1919	2626
Keyboards (church organ touch): 5 octaves (C-c’’’’) synthetic	2	2
Amplifiers/channels (50 Watt max. 8Ω each)	3	4
Acoustics (adjustable volume)	●	●
Transposer (6 steps +/- 3 half steps)	●	●
Pitch (+/- ¼ tone adjustable)	●	●
Fixed combinations (Presets) PP-P-MF-F-FF-T	●	●
Free combinations (Capture system)	7	32
General volume (MIDI controlled)	●	●
Expression pedals (MIDI controlled)	2	2
3-position switch for external loudspeakers	option	option
Pedal: 13 note (C-c) 27 note straight (C-d’) 30 note straight (C-f’)	 option option ●	 option option ●
Accessories: Couplers Tremulants Chorus MB = Manual Bass CF = Cantus Firmus FA = Fix Accessoires RO = Reeds off 0 = Cancel	 3 2 ● ● - - - ●	 3 2 ● ● ● ● ● ●
Temperament: Equal Werckmeister III Meantone	 ● - -	 ● ● ●
External connections: MIDI In-Thru-Out Headphone Stereo up to 2kΩ External Reverb 470Ω/300mV Aux In1kΩ/70mV (stereo) Aux Out 470Ω/300mV (stereo) Loudspeaker Outputs 8Ω	 ● ● ● ● ● option	 ● ● ● ● ● option

Technical specifications cabinet

	Festivo	Jubilate
Furniture:		
Dark oak or light oak	●	●
Other colors or kinds of wood	option	option
Wooden roll cover	●	●
Wooden expression pedals	option	option
Pedal lights	●	●
Bench with storage space	●	●
Bench with lid	option	option
Bench with adjustable height	option	option
Dimensions:		
Height (without music rack)	117 cm	117 cm
Height (with music rack)	139 cm	139 cm
Width (27 note straight pedal)	114 cm	114 cm
Width (30 note straight pedal)	132 cm	132 cm
Depth (without pedalboard)	63 cm	63 cm
Depth (with 27/30 note straight pedal)	91 cm	91 cm

MIDI Implementation charts

JOHANNUS Organ — Date: Jan. 2000
Festivo — **MIDI Implementation Chart** — Version 1.00

Functions		Transmitted	Recognized	Remarks
Basic Default **Channel** Changes [1]		1, 2, 3, 12 1, 2, 3	1, 2, 3, 12 N	1 = Great 2 = Swell 3 = Pedal 12 = Stops
Mode	Default Messages Altered	Mode 3 N * * * * * * * *	Mode 3 N N	
Note Number	True voice	36 - 96 * * * * * * * *	36 - 96 36 - 96	
Velocity	Note ON Note OFF	9nH (v=64) 9nH (v=0)	9nH v=1 - 127 9nH v=0, 8nH v=*	*=irrelevant
After Touch	Keys Channels	N N	N N	
Pitch Bend		N	N	
Control Change	7 11 100/101/6 100/101/6	Y Y Y Y	Y Y N N	General volume Expression pedals Pitch Transposer
Program Change	:True#	0 - 30 [2] * * * * * * * *	0 - 30 [2] 0 - 30 [2]	0 - 4 Stops Pedal 6 - 14 Stops Great 16 - 23 Stops Swell 24 - 30 Accessories [3]
System Exclusive		Y	Y	All stops off
Common	:Song Pos :Song Sel :Tune	N N N	N N N	
System Real Time	:Clock :Commands	N N	N N	
Aux	:Reset All Controller :Local On/OFF :All Notes OFF :Active Sense :Reset	N N N N N	N N Y N N	
Notes		[1] Only note events can be changed [2] Except 5 and 15 [3] Couplers, Tremulants, Chorus and Intonation 2		

Mode 1: OMNY ON, POLY — **Mode 2**: OMNY ON, MONO — Y = YES
Mode 3: OMNY OFF, POLY — **Mode 4**: OMNY OFF, MONO — N = NO

JOHANNUS Organ
Jubilate

MIDI Implementation Chart

Date: Jan. 2000
Version 1.00

Functions		Transmitted	Recognized	Remarks
Basic Default **Channel** Changes [1]		1, 2, 3, 12 1, 2, 3	1, 2, 3, 12 N	1 = Great 2 = Swell 3 = Pedal 12 = Stops
Mode	Default Messages Altered	Mode 3 N * * * * * * * *	Mode 3 N N	
Note Number	True voice	36 - 96 * * * * * * * *	36 - 96 36 - 96	
Velocity	Note ON Note OFF	9nH (v=64) 9nH (v=0)	9nH v=1 - 127 9nH v=0, 8nH v=*	*=irrelevant
After Touch	Keys Channels	N N	N N	
Pitch Bend		N	N	
Control Change	7 11 100/101/6 100/101/6	Y Y Y Y	Y Y N N	General volume Expression pedals Pitch Transposer
Program Change	:True#	0 - 38 [2] * * * * * * * *	0 - 38 [2] 0 - 38 [2]	0 - 8 Stops Pedal 10 - 19 Stops Great 21 - 30 Stops Swell 32 - 38 Accessories [3]
System Exclusive		Y	Y	All stops off
Common	:Song Pos :Song Sel :Tune	N N N	N N N	
System Real Time	:Clock :Commands	N N	N N	
Aux	:Reset All Controller :Local On/OFF :All Notes OFF :Active Sense :Reset	N N N N N	N N Y N N	
Notes		[1] Only note events can be changed [2] Except 9, 20 and 31 [3] Couplers, Tremulants, Chorus and Intonation 2		

Mode 1: OMNY ON, POLY
Mode 2: OMNY ON, MONO
Mode 3: OMNY OFF, POLY
Mode 4: OMNY OFF, MONO

Y = YES
N = NO

Registration examples

Registration examples Festivo

		ppp	*pp*	*p*	*mf*	*f*	*ff*	*t*	Solo on Great	Solo on Swell	Trio 1	Trio 2	Romantic	Plenum
PEDAL														
Subbass	16'	●	●	●	●	●	●	●	●	●	●	○	●	●
Octave	8'	○	○	○	●	●	●	●	○	○	○	○	○	●
Gedackt	8'	○	○	●	●	●	●	●	●	○	●	●	○	○
Fagotto	16'	○	○	○	○	○	○	●	○	○	○	○	○	○
GREAT														
Principal	8'	○	○	○	●	●	●	●	●	○	○	○	○	●
Rohrflute	8'	●	●	●	●	●	●	●	○	●	●	●	●	○
Octave	4'	○	○	○	●	●	●	●	○	○	○	○	○	●
Flute	4'	○	○	●	●	●	●	●	○	○	○	○	●	○
Octave	2'	○	○	○	○	○	●	●	○	○	●	○	○	●
Sesquialter	II	○	○	○	○	○	○	○	●	○	○	○	○	○
Mixture	II-IV	○	○	○	○	○	○	●	○	○	○	○	○	●
Trumpet	8'	○	○	○	○	○	○	●	○	○	○	○	○	○
SWELL														
Stopped Flute	8'	○	●	●	●	●	●	●	●	○	●	○	●	●
Viola di Gamba	8'	●	●	●	●	●	●	●	○	○	○	●	●	○
Vox Celeste	8'	○	○	○	○	○	○	○	○	○	○	○	●	○
Koppelflute	4'	○	○	●	●	●	●	●	●	○	●	○	○	●
Flute Twelfth	$2^2/_3$'	○	○	○	○	●	●	●	○	○	●	○	○	●
Waldflute	2'	○	○	○	○	●	●	●	○	○	●	○	○	●
Oboe	8'	○	○	○	○	●	●	●	○	●	○	○	○	○
ACCESSORIES														
Swell-Great		○	●	●	●	●	●	●	●	○	○	○	●	●
Great-Pedal		○	○	●	●	●	●	●	○	●	○	○	●	●
Swell-Pedal		●	●	●	●	●	●	●	●	○	○	○	●	●
Tremulant Great		○	○	○	○	○	○	○	○	○	○	○	●	○
Tremulant Swell		○	○	○	○	○	○	○	○	●	○	○	●	○
Chorus		○	○	○	○	○	○	○	○	○	○	○	●	○

Personal registrations Festivo

PEDAL														
Subbass	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Gedackt	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Fagotto	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
GREAT														
Principal	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Rohrflute	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Flute	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
Sesquialter	II	○	○	○	○	○	○	○	○	○	○	○	○	○
Mixture	II-IV	○	○	○	○	○	○	○	○	○	○	○	○	○
Trumpet	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
SWELL														
Stopped Flute	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Viola di Gamba	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Vox Celeste	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Koppelflute	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Flute Twelfth	$2^2/_3$'	○	○	○	○	○	○	○	○	○	○	○	○	○
Waldflute	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
Oboe	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
ACCESSORIES														
Swell-Great		○	○	○	○	○	○	○	○	○	○	○	○	○
Great-Pedal		○	○	○	○	○	○	○	○	○	○	○	○	○
Swell-Pedal		○	○	○	○	○	○	○	○	○	○	○	○	○
Tremulant Great		○	○	○	○	○	○	○	○	○	○	○	○	○
Tremulant Swell		○	○	○	○	○	○	○	○	○	○	○	○	○
Chorus		○	○	○	○	○	○	○	○	○	○	○	○	○

Registration examples Jubilate

		ppp	*pp*	*p*	*mf*	*f*	*ff*	*t*	Solo on Great	Solo on Swell	Trio 1	Trio 2	Romantic	Plenum
PEDAL														
Principal	16'	○	○	○	○	●	●	●	○	○	○	○	○	●
Subbass	16'	●	●	●	●	●	●	●	●	●	●	○	●	●
Octave	8'	○	○	○	●	●	●	●	○	○	●	○	○	●
Gedackt	8'	○	○	●	●	●	●	●	●	○	○	●	○	○
Choralbass	4'	○	○	○	○	○	●	●	○	○	○	○	○	●
Contra Trumpet	16'	○	○	○	○	○	○	●	○	○	○	○	○	○
Trumpet	8'	○	○	○	○	○	●	●	○	○	○	○	○	○
GREAT														
Bourdon	16'	○	○	○	○	○	●	●	○	○	○	○	○	○
Principal	8'	○	○	○	●	●	●	●	○	○	○	○	○	●
Rohrflute	8'	●	●	●	●	●	●	●	●	●	●	●	●	○
Octave	4'	○	○	○	●	●	●	●	○	○	○	○	○	●
Open Flute	4'	○	○	●	●	●	●	●	●	○	○	○	○	○
Twelfth	$2^2/_3$'	○	○	○	○	●	●	●	○	○	○	○	○	●
Octave	2'	○	○	○	○	○	●	●	○	○	●	○	○	●
Cornet	IV	○	○	○	○	○	○	○	●	○	○	○	○	○
Mixture	V	○	○	○	○	○	○	●	○	○	○	○	○	●
Trumpet	8'	○	○	○	○	○	○	●	○	○	○	○	○	○
SWELL														
Stopped Flute	8'	○	●	●	●	●	●	●	●	○	●	○	○	●
Viola di Gamba	8'	●	●	●	●	●	●	●	●	○	○	●	●	○
Vox Celeste	8'	○	○	○	○	○	○	○	○	○	○	○	●	○
Koppelflute	4'	○	○	●	●	●	●	●	●	○	●	○	○	●
Flute Twelfth	$2^2/_3$'	○	○	○	○	●	●	●	○	○	●	○	○	●
Waldflute	2'	○	○	○	○	●	●	●	○	○	○	○	○	●
Tierce	$1^3/_5$'	○	○	○	○	○	○	○	○	○	●	○	○	○
Scharff	III	○	○	○	○	○	●	●	○	○	○	○	○	●
Oboe	8'	○	○	○	○	●	●	●	○	●	○	○	○	○
ACCESSORIES														
Swell-Great		○	●	●	●	●	●	●	●	○	○	○	●	●
Great-Pedal		○	○	●	●	●	●	●	○	●	○	○	●	●
Swell-Pedal		●	●	●	●	●	●	●	●	○	○	○	●	●
Tremulant Great		○	○	○	○	○	○	○	○	○	○	○	●	○
Tremulant Swell		○	○	○	○	○	○	○	○	●	○	○	●	○
Chorus		○	○	○	○	○	○	○	○	○	○	○	●	○

Personal registrations Jubilate

PEDAL														
Principal	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
Subbass	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Gedackt	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Choralbass	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Nachthorn	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
Contra Trumpet	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
Trumpet	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
GREAT														
Bourdon	16'	○	○	○	○	○	○	○	○	○	○	○	○	○
Principal	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Rohrflute	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Open Flute	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Twelfth	$2^2/_3$'	○	○	○	○	○	○	○	○	○	○	○	○	○
Octave	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
Cornet	IV	○	○	○	○	○	○	○	○	○	○	○	○	○
Mixture	V	○	○	○	○	○	○	○	○	○	○	○	○	○
Trumpet	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
SWELL														
Stopped Flute	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Viola di Gamba	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Vox Celeste	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
Koppelflute	4'	○	○	○	○	○	○	○	○	○	○	○	○	○
Flute Twelfth	$2^2/_3$'	○	○	○	○	○	○	○	○	○	○	○	○	○
Waldflute	2'	○	○	○	○	○	○	○	○	○	○	○	○	○
Tierce	$1^3/_5$'	○	○	○	○	○	○	○	○	○	○	○	○	○
Scharff	III	○	○	○	○	○	○	○	○	○	○	○	○	○
Oboe	8'	○	○	○	○	○	○	○	○	○	○	○	○	○
ACCESSORIES														
Swell-Great		○	○	○	○	○	○	○	○	○	○	○	○	○
Great-Pedal		○	○	○	○	○	○	○	○	○	○	○	○	○
Swell-Pedal		○	○	○	○	○	○	○	○	○	○	○	○	○
Tremulant Great		○	○	○	○	○	○	○	○	○	○	○	○	○
Tremulant Swell		○	○	○	○	○	○	○	○	○	○	○	○	○
Chorus		○	○	○	○	○	○	○	○	○	○	○	○	○