**JOHANNUS** 

# Diwaldi

User Manual



Manufacturer Johannus Orgelbouw b.v.

Address Keplerlaan 2

6716 BS EDE

Country The Netherlands

Telephone +31 (0)318 63 74 03

Fax +31 (0)318 62 22 38

E-mail inform@johannus.com

Website www.johannus.com

Version 1.0

Date Juli 2011

# © 2011, Johannus Orgelbouw b.v

All rights reserved. Nothing in this publication may be reproduced, stored in a data file or made public in any form or in any way either electronically, mechanically by way of photocopying, recording or in any other way without the prior written permission of Johannus Orgelbouw b.v.

# **CONTENTS**

1	SAFE	ETY	. 5
	1.1	Safety instructions	. 5
		Symbols on the organ	
	1.3	Symbols in the manual	. 5
2	INST	ALLATION	. 6
	2.1	Installation and connection	. 6
	2.2	Switch on	. 7
	2.3	Transport and storage	. 7
		Open and close the rolltop cover	
3		CRIPTION OF THE ORGAN	
		Overview of the main components	
		Overview of controls	
	3.2.1		
	3.2.2		
	3.3	Connect and switch on the peripherals	
		External connections	
4		RATION	
-	_	Volume controls	
		Expression pedals	
		Acoustics (Adaptive Surround Reverb ASR 12)	
		Intonations	
		Factory intonation	
		Orchestrals	
		Stops	
		Couplers	
		Accessories	
		Toe studs	
		Change the registration	
		Pre-programmed memory locations Vivaldi 37	
		Capture memory	
	4.13.	,	
	4.13.		
	4.14	Sequence - and +	
		Transposer	
		General Crescendo	
		Johannus Menu	
	4.17.	1 Crescendo	19
	4.17.	2 Datadump	19
	4.17.	3 Demo Songs	19
	4.17.	4 Display Contrast	20
	4.17.	5 Keyboard Config	20
	4.17.	6 Key Volumes	20
	4.17.	7 MIDI Config	22
	4.17.	8 Orchestrals	22
	4.17.	9 Reset Procedures	23
	4.17.	10 Reverb Settings	24
	4.17.	11 Startup Settings	24
	4.17.	12 Temperaments	25
	4.17.	13 Tracker Action	26
	4.17.	14 Tuning	26
	4.17.	15 Tweeter Settings	26
		QuickAccess	
5		NTENANCE, TROUBLESHOOTING AND WARRANTY	28
	5.1	Maintenance	28

	5.1.1	Cabinet maintenance	28
		Maintenance of the manuals	
		Problems	
		Reposition the pedal	
		Warranty	
6	MIDI	IMPLEMENTATIONS	30
		MIDI Implementation Chart	
		MIDI specifications	

# 1 SAFETY

# 1.1 Safety instructions



- Position the organ on a stable, horizontal surface.
- Connect the organ to an earthed power socket.
- Turn off the organ when it is not in use.
- Do not place the organ in a damp area.
- Do not expose the organ to liquids.
- Follow the instructions and precautionary measures in this user manual.
- Keep this user manual with the organ.
- The organ may only be opened by a technician authorised by Johannus Orgelbouw b.v. The organ contains static-sensitive components. The warranty is void if the organ is opened by a non-authorised person.

# 1.2 Symbols on the organ



Warning



Warning for electric shock



Warning for static-sensitive components

# 1.3 Symbols in the manual

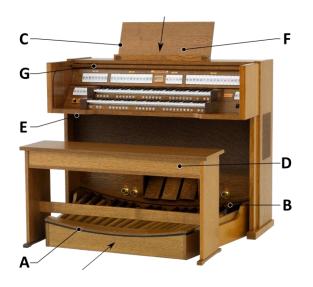


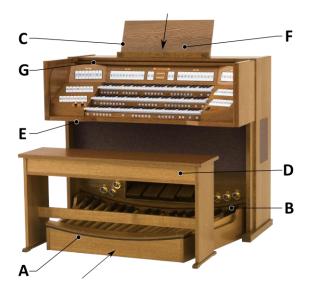
Warning or important information



Note

# 2 INSTALLATION





Vivaldi 27 Vivaldi 37

# 2.1 Installation and connection

- 1. Position the organ on a stable, horizontal surface.
- 2. Lean the organ slightly backward.
- 3. Slide the pedalboard (A) against the organ (B).
- 4. Set the organ upright.
- 5. Put the music desk (C) in the groove on the cover of the organ.
- 6. Place the organ bench (D) over the pedal.
- 7. Make sure the voltage of the organ matches the voltage of the mains. See the serial plate (E).
- 8. Connect the organ to an earthed power socket.
- 9. Put the appropriate key in the rolltop cover lock (F) behind the music desk.
- 10. Turn the key a quarter turn to the left.
- 11. Slide the rolltop cover (G) upward.

# 2.2 Switch on

Switch on the organ with the on/off piston at the right, next to the manuals. Wait several seconds. Starting the control functions and the settings will take some time.

The lamps of the on/off, SET and CAN pistons light up and the settings appear on the display.

# 2.3 Transport and storage

Pay attention to the following during transport and storage:

- Remove the music desk and the pedalboard from the organ.
- Relative humidity within the storage area: 40 to 60%.

# 2.4 Open and close the rolltop cover

The organ can be closed with a wooden rolltop cover that has a lock. The rolltop cover lock is behind the music desk.

# **Opening**

- 1. Put the appropriate key in the rolltop cover lock.
- 2. Turn the key a quarter turn to the left. The lock now rises out of the rolltop.
- 3. Slide the rolltop cover upward.

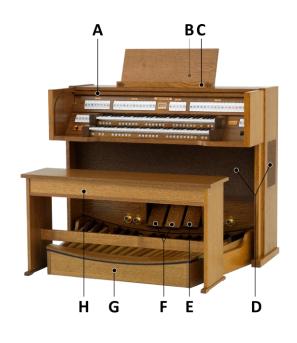
# Closing

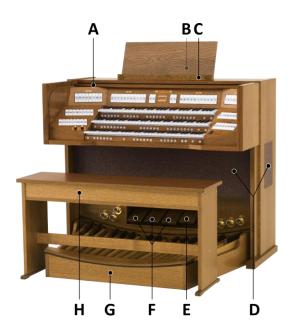


Never leave the key in the area that can be closed.

- 1. Slide the rolltop cover downward.
- 2. Press the rolltop cover lock.
- 3. Turn the key a quarter turn to the right.

# 3 DESCRIPTION OF THE ORGAN





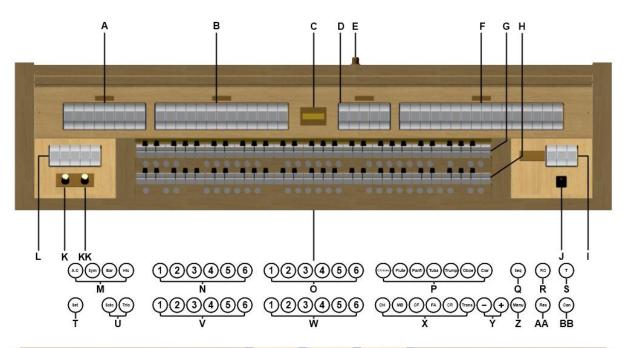
Vivaldi 27 Vivaldi 37

# 3.1 Overview of the main components

- A Rolltop cover
- B Rolltop cover lock (behind music desk)
- C Music desk with tweeters
- D Loudspeakers
- E General Crescendo pedal
- F Expression pedals
- G Pedal
- H Organ bench

#### 3.2 **Overview of controls**

### 3.2.1 Vivaldi 27





Α	Pedal	stops
---	-------	-------

Swell stops В

Display С

D Swell stops and tremulant

Ε Rolltop cover lock

F Great stops, tremulant and coupler

G Manual Swell

Н **Manual Great** 

MIDI stops

J On/Off

Volume control organ K

Volume control acoustics

Pedal stops and couplers L

M Main group intonations

Ν Memory bank generals

Memory bank Swell stops 0

Solo Orchestrals

Q Sequence

Reeds Off R

S Tutti

Т SET / Enter

U Subgroup intonations

٧ Memory bank Pedal

W Memory bank Great Χ

Chorus, Manual Bass

Cantus Firmus, Fix Accessories, General Crescendo, Transposer

- and + pistons Υ

Ζ Menu

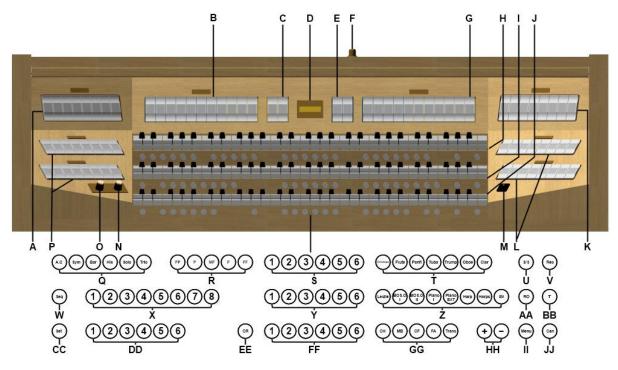
Recall AA

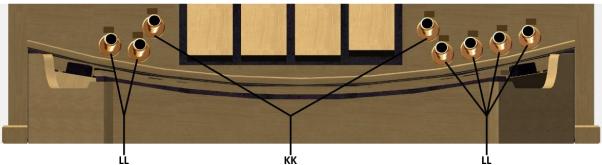
Cancel BB

CC Seq – and Seq + toe studs

Couplers toe studs DD

#### 3.2.2 Vivaldi 37





Α	Swell	sto	ps
---	-------	-----	----

**B** Swell stops and tremulant

C MIDI stops Pedal and Swell

**D** Display

E MIDI stops Great and Choir

F Rolltop cover lock

**G** Great stops

H Manual Swell

I Manual Great

J Manual Choir

**K** Great stops, tremulant and couplers

L Choir stops, tremulant, coupler and

Keyboard Transfer

M On/Off

N Volume control acoustics

O Volume control organ

P Pedal stops and couplers

**Q** Intonations

R Pre-programmed memory locations

S Memory bank Swell stops

T Solo Orchestrals

U All swells to Swell

V Recall

W Sequence

X Memory bank generals

Y Memory bank Great

**Z** Orchestrals

AA Reeds Off

**BB** Tutti

CC SET / Enter

**DD** Memory bank Pedal

EE General Crescendo

FF Memory bank Choir GG Chorus, Manual Bass

Cantus Firmus, Fix Accessories,

Transposer

HH - and + pistons

II Menu

JJ Cancel

**KK** Seq – and Seq + toe studs

LL Couplers toe studs

# 3.3 Connect and switch on the peripherals

You can connect accessories (for example, a MIDI device) to the organ.

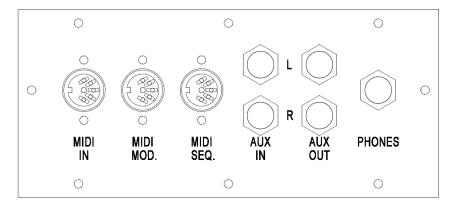


Follow the instructions provided in the documentation for the accessory.

- 1. Switch off the organ and the accessory.
- 2. Connect the accessory to the organ.
- 3. Switch the accessory on.
- 4. Switch on the organ.

# 3.4 External connections

The external connections are on the left under the console.



- MIDI IN: This is an input for receiving MIDI codes from other devices.
- **MIDI MOD.**: This is a programmable MIDI output for connecting a module or expander, for example.
- **MIDI SEQ.**: This is a non-programmable MIDI output for connecting a sequencer or PC (with the optional Johannus Intonat program), for example.
- **AUX IN**: This is a (stereo) input for playing the sound of an external device through the amplifiers of the organ. For example, an expander connected to the organ through the MIDI MOD. can be played through the instrument's loudspeakers.
  - The volume of the device that is connected through the AUX IN cannot be adjusted with the general volume or the expression pedals. However, this is possible when the volume setting of the external device is controlled by means of MIDI codes through the MIDI MOD, connection of the instrument.
- AUX OUT: This is an output for connecting an external (stereo) device.
   (eg. amplifier, recording unit)
- **PHONES**: This connection for a (stereo) headphone is suited for a headphone with an impedance of 30  $\Omega$  or more (see headphone specifications).
- When the headphone is used, the internal and/or external loudspeakers of the organ are switched off automatically.

# 4 OPERATION

### 4.1 Volume controls

- Organ: You can adjust the volume of the organ with the ORGAN volume control.
- Acoustics: The acoustics volume can be adjusted smoothly with the ACOUSTICS volume control.

# 4.2 Expression pedals

Expression pedals adjust the volume of the Great/Pedal, the Swell and the Choir (Vivaldi 37).

# 4.3 Acoustics (Adaptive Surround Reverb ASR 12)

The ASR 12 reverb system produces a digital acoustic effect. This effect provides a spatial reproduction of the organ sound that can be adjusted continuously.

Turn the volume control to adjust the reverb volume.

The reverb length can be set using the Johannus Menu. See § 4.17.10. The length can be set for each reverb type. The most recent setting of each reverb type is saved.

The following 12 reverb types can be selected for each style and intonation in the Johannus Menu:

- Music Room
- Marble Room
- Royal Auditorium
- Village Chapel
- Hill Church
- Palace Hall
- Abbey Church
- Town Church
- Concert Hall
- Marble Church
- Basilica
- City Cathedral

For the reverb options of each style and intonation, see § 4.17.10.

# 4.4 Intonations

The intonations are divided into a main group and a subgroup.

The main group consist of:

- American Classic (A.C.)
- Symphonic (SYM.)
- Baroque (BAR.)
- Historic (HIS.)

The subgroup consist of:

- Classic
- Solo (SOLO)
- Trio (TRIO)
- 1. Select a main group by pressing the A.C, SYM, BAR or HIS piston.
- 2. Then select a subgroup by pressing the SOLO or TRIO piston.



If no subgroup is selected, Classic is selected automatically.

# 4.5 Factory intonation

#### Saving the intonation settings



You require the Johannus intonation program to save the intonation settings.

- 1. Connect a PC to the organ. Use the MIDI SEQ. output, see § 3.4.
- 2. Save the intonation settings on the PC using the intonation program from Johannus.

#### **Restoring the factory intonation**



The current intonation settings will be lost if the settings are not saved on a PC.

- 1. Switch off the organ.
- 2. Press the pistons 1 and 6 (Vivaldi 27) or 1 and 8 (Vivaldi 37) of the Generals. Hold in the pistons.
- 3. Switch on the organ.
- 4. The following text will appear in the menu: Reset procedures
- 5. Select NO to only reset the intonation to the factory settings.
- 6. Select Yes to automatically go through all resets
- 7. Press the MENU piston to cancel the resets.

# 4.6 Orchestrals

Orchestrals are high-quality, classical instrument voices.

#### Solo orchestrals Vivaldi 27 / 37:

Chimes : Chimes
Flute : Flute
Panfl.: : Panflute
Tuba : Tuba
Trump.: : Trumpet
Oboe : Oboe
Clar.: : Clarinet

#### Orchestrals Vivaldi 37:

Leslie : Leslie effect 1)
 Gos.O.I : Gospel Full organ 2)
 Gos.O.II : Gospel Jazz organ 2)

Piano I : Piano <sup>3) 4)</sup>
 Piano Ext. : Piano <sup>3) 4) 5)</sup>
 Harp : Harp <sup>3) 4)</sup>
 Harps. : Harpsichord <sup>4)</sup>
 Str. : Strings <sup>6)</sup>

- The Leslie only has an effect on the Gospel Organ. If the Leslie has not been activated, the (slow) chorus effect will be heard on the Gospel Organ. If the Leslie has been activated, the (fast) tremolo effect will be heard on the Gospel Organ.
- When coupling the manual on which the Gospel Organ can be played to the pedal, the Gospel Organ bass stop will sound through the pedal.
- When the Piano or Harp is activated, the pedal can only be played from C e (the first 17 keys). The f sharp key of the pedal is given the function of the sustain (for piano) or subdue (for harp) pedal and the f key can be used as a rest for the right foot for proper operation of the sustain/subdue pedal. The display will briefly show this pedal switch as a message. The Piano and Harp cannot be switched on simultaneously.
- When the Harpsichord, Harp or Piano is switched on and the 'Special Stops Mode' is set to 'enable' (see § 4.17.11), the entire organ will switch to the Special Stops Mode. On the display, the following text will appear: 'Special Stops Mode for Harpsichord, Harp and Piano'.
- When Piano Ext. is activated, the Piano can be played on all manuals. Only the Great sounds on 'normal pitch', the Choir sounds one octave lower, and the Swell one octave higher. This way a manual range of 7 octaves is achieved.
- When coupling the manual on which the Strings can be played to the pedal, the Contrabass will also sound through the pedal.



Most Orchestrals can by default be played on the Great.

The Strings can by default be played on the Swell.

The Harpsichord and the Chimes can by default be played on the Choir See § 4.17.8. to change this setting.



With all Orchestrals, the display will for a short moment display the selected manual and the selected voice/alternative.

# 4.7 Stops

The stops are activated via rocker switches or the capture memory. See § 4.13. The lamp in the rocker switch lights when the associated stop is active.

The stops are divided into four groups:

- Pedal: Activates the stops associated with the Pedal
- Choir: Activates the stops associated with the Choir (Vivaldi 37)
- Great: Activates the stops associated with the Great
- Swell: Activates the stops associated with the Swell

# 4.8 Couplers

Vivaldi 27:

Manual coupler:

Swell – Great: Fully couples all keys of the Swell to the Great.

■ Pedal couplers:

Great – Pedal: Fully couples all keys of the Great to the Pedal. Swell – Pedal: Fully couples all keys of the Swell to the Pedal.

Vivaldi 37:

Manual couplers:

Swell – Choir: Fully couples all keys of the Swell to the Choir. Swell – Great: Fully couples all keys of the Swell to the Great. Choir – Great: Fully couples all keys of the Choir to the Great.

Pedal couplers:

Choir – Pedal: Fully couples all keys of the Choir to the Pedal.

Great – Pedal: Fully couples all keys of the Great to the Pedal.

Swell – Pedal: Fully couples all keys of the Swell to the Pedal.

Keyboard transfer: Stop on the Choir that switches the Choir manual with the Great manual.

Vivaldi 27 and Vivaldi 37

- Manual Bass (MB): Couples the pedal monophonically to the Great. Only the lowest note played on the Great is coupled from the pedal to the Great. Activate the Manual Bass with the MB piston. If only the lowest tone of a chord is released, the tone activated by the MB mode is lost until a new lowest tone is played. This should prevent the MB tones from 'jumping'.
- Cantus Firmus (CF): Couples the Swell monophonically to the Great. Only the highest tone played on the Great is coupled from the Swell. Use the CF piston to activate the Cantus Firmus. If only the highest tone of a chord is released, the tone activated by the CF mode is lost until a new highest tone is played. This should prevent the CF tones from 'jumping'.

# 4.9 Accessories

- Chorus (CH): This is a function for lightly detuning the organ stops to give it a broader and livelier sound. Use the CH piston to activate the Chorus.
- Fix Accessories (FA): This is a function for fixing accessories. As long as this piston is active, the couplers and tremulants can only be switched on and off manually.

- Reeds Off (RO): This is a function to switch off all reeds simultaneously. As long as this piston is pressed, no reeds can be activated. When this function is switched off, the reeds that were on are activated again. Use the RO piston to activate the Reeds Off function.
- General Crescendo pedal (CR): This is a function for switching the General Crescendo pedal on and off. See § 4.16.

# 4.10 Toe studs

### ■ Couplers:

If a coupler toe stud is pressed, the corresponding rocker switch will light up. See § 4.8 for a describtion of the couplers.

■ Sequence - and Sequence +:

With toe studs SEQ - and SEQ + you can step backward and forward through the general memory locations. See § 4.14 for a description of the sequence function.

# 4.11 Change the registration

The REC and CAN pistons cancel registrations at two levels:

- Press the REC piston: Only the last change is recalled.
- Press the CAN piston: All registrations are cancelled.

# 4.12 Pre-programmed memory locations Vivaldi 37

Pre-programmed memory locations are available by operating pistons PP to T. These six memory locations have factory settings (presets) appropriate for the quiet pianissimo to the loud tutti.

# Calling up a pre-programmed memory location

1. Press a pre-programmed memory location (PP-T). The active stops light up.

#### Programming a pre-programmed memory location



The current setting of the pre-programmed memory location will be lost.



Programming the pre-programmed memory location is limited to the text on the piston. For example, it is not advisable to program a pianissimo registration under the tutti piston.

- 1. Select the desired stops.
- 2. Press the SET piston. Hold in the piston.
- 3. Press the desired pre-programmed memory location (PP-T).
- 4. Release the pre-programmed memory location piston (PP-T).
- 5. Release the SET piston.

# 4.13 Capture memory

Through use of the capture memory, a registration can be made active with just one piston. The capture memory consists of 50 levels. These levels are shown on the display (Mem:..).

The capture memory locations are initially empty (with the exception of level 1) and for the user to be programmed.

Each manual and pedal has its own bank of 6 pistons. The Generals bank (Vivaldi 27: 6 pistons, Vivaldi 37: 8 pistons) operate on all manuals and pedal.

# 4.13.1 Programming a capture memory location



The current setting of the capture memory location will be lost.

- Select the desired stops.
- 2. Use the and + pistons to select a level (1-50) on the display.
- 3. Press the SET piston. Hold in the piston.
- 4. Press the desired memory location (1-6, or 1-8).
- 5. Release the SET piston.

# 4.13.2 Retrieve a capture memory location

- 1. Use the and + pistons to select the desired level (1-50) on the display.
- 2. Press the desired memory location (1-6 or 1-8). The active stops light up.



If the SEQ piston is activated, the generals operate as SEQ + and the pedal memory bank as SEQ -. See § 4.14.

# 4.14 Sequence - and +

Sequence is a function for choosing memory locations in a sequential way.

With toe studs SEQ - and SEQ + you can step backward and forward. As soon as piston SEQ is activated, all pistons of the Pedal memory bank will function as SEQ - and all pistons of the general memory bank will function as SEQ +.

# 4.15 Transposer

The Transposer function shifts the pitch by half-tone increments (from -8 to +8). The set pitch can be read on the display (Tr:..).



The pitch can only be changed and programmed when the TRANS. piston is lit.

# Changing the transposer

- 1. Press the TRANS piston.
- 2. Use the and + pistons to set the pitch.



The pitch shift is not stored in memory. When the organ is switched on again, the most recently programmed pitch will be active.

#### **Programming the transposer**

- 1. Press the TRANS piston.
- 2. Use the and + pistons to set the pitch.
- 3. Press the SET piston.



The pitch shift is stored in memory. When the organ is switched on again, the programmed pitch will be active.

### 4.16 General Crescendo

The General Crescendo pedal can be used to activate different registrations step-by-step. These registrations start with very quiet (pianissimo) to very loud (tutti).

#### **Activate the General Crescendo pedal**

When the General Crescendo pedal is not activated, the CR: -- message is on the display.

1. Press the CR piston to activate the General Crescendo pedal. The display indicates which step has been set.

#### **Change the General Crescendo pedal**

The default set stop combinations of the crescendo steps can be changed and saved in the memory.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Crescendo mode on the display and press SET.
- 3. Use the and + pistons to select the step to be changed.
- 4. Change the registration by switching a register on or off.
- 5. Press SET to save the registration.
- 6. Press the MENU piston to exit the Crescendo menu.
- 7. Press the MENU piston again to exit the Johannus Menu

### 4.17 Johannus Menu

The Johannus Menu is an operating system the settings of which can be read on the display. The Johannus Menu is operated with the - and + pistons and the SET and the MENU pistons.

The Johannus Menu consists of the following functions:

- Crescendo
- Datadump
- Demo Sonas
- Display Contrast
- Keyboard Config
- Key Volumes

- MIDI Config
- Orchestrals
- Reset Procedures
- Reverb Settings
- Startup Settings
- Temperaments
- Tracker Action
- Tuning
- Tweeter Settings

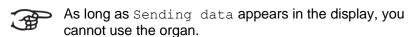
### 4.17.1 Crescendo

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Crescendo mode on the display and press SET.
- 3. Use the and + pistons to select the step to be changed.
- 4. Change the registration by switching a register on or off.
- 5. Press SET to save the registration.
- 6. Press the MENU piston to exit the Crescendo menu.
- 7. Press the MENU piston again to exit the Johannus Menu

# 4.17.2 Datadump

The Datadump Mode sends settings from the organ to a storage medium (for example a sequencer) through the MIDI SEQ. output. See § 3.4.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Datadump on the display.
- 3. Press the SET piston. The following text appears in the display: Press SET to send data.
- 4. Make sure the desired storage medium is properly connected.
- 5. Press the SET piston again. When data is being sent, Sending data appears on the display.



6. Press the MENU piston to exit the Johannus Menu.

# 4.17.3 Demo Songs

The Demo Songs mode plays several different demo songs.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Demo Songs function.
- 3. Press the SET piston. The title of the first demo song appear on the display.
- 4. Use the and + pistons to select one of the demo songs.
- 5. Press the SET piston to select a demo song.
- 6. Use the and + pistons to choose whether to play the selected demo song (play one) or all demo songs (play all).
- 7. Press the SET piston to start playing the selected demo song(s).

- a. Press the CAN piston to stop playing the demo song.
- b. Use the Organ volume control to adjust the volume before or while playing the demo song.
- c. Use the Acoustics volume control to adjust the acoustics volume before or while playing the demo song.
- 8. Press the MENU piston after having played the demo song(s). You will automatically return to the main menu.
- 9. Press the MENU piston again to exit the Johannus Menu.

# 4.17.4 Display Contrast

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Display Contrast function on the display.
- 3. Press the SET piston.
- 4. Use the and + pistons to select a contrast setting from 1 to 15 (Default: 9).
- 5. Press the SET piston. The display contrast setting is now saved in the memory.
- 6. Press the MENU piston to return to the main menu.

# 4.17.5 Keyboard Config

The Keyboard Config mode sets the operation of the keys.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Keyboard Config function on the display.
- 3. Press the SET piston.
- 4. Use the and + pistons to select the manual which must be changed.
- 5. Press the SET piston.
- 6. Use the and + pistons to select a setting for the operation of the keys.
  - Automatic: The manual has been set to High. When activating a programmable MIDI or Orchestral stop, the manual will be set to Velocity automatically.
  - High: The keys respond when touched very lightly.
  - **Low**: The keys respond when pressed further.
  - Velocity: The keys are force-sensitive.
- 7. Press the SET piston. The manual setting is now saved in the memory.
- 8. Press the MENU piston to return to the main menu.
- 9. Press the MENU piston again to exit the Johannus Menu.

# 4.17.6 Key Volumes

If you are asked to enter a PIN code, the Key Volumes mode has been secured at the request of the owner. Contact the owner or dealer to retrieve the PIN code. Enter the code using the pistons of the capture memory and press the SET piston.

The Key Volumes mode consists of the following submodes:

Adjust

- Reset one stop
- Reset ALL stops

#### Adjust:

The Adjust mode sets the volume per key, stop and intonation.

- 1. Switch off all stops.
- 2. Select an intonation.
- 3. Press the MENU piston.
- 4. Use the and + pistons to select the Key Volumes function on the display.
- 5. Press the SET piston.
- 6. Use the and + pistons to select the Adjust function on the display.
- 7. Press the SET piston.
- 8. Activate one stop.
- 9. Press one key on the corresponding division and hold the key. The display will now show following Key: the key indicator and following Volume: the volume.
- 10. Use the and + pistons to set the desired volume.
- 11. Press the SET piston after having changed one or more keys.
- 12. The display shows a prompt for confirmation. Use the and + pistons to select No or Yes.
- 13. Press the SET piston for confirmation.
- 14. Press the MENU piston to return to the main menu.
- 15. If the change has not been saved, the display will show Discard changes?. Use the and + pistons for Yes and press the SET piston to cancel the changes.
- 16. Press the MENU piston twice to exit the Johannus Menu.

#### Reset one stop:

The Reset one stop mode resets the key volumes for one stop in one intonation to the factory setting.

- 1. Switch off all stops.
- 2. Select an intonation.
- 3. Press the MENU piston.
- 4. Use the and + pistons to select the Key Volumes function on the display.
- 5. Press the SET piston.
- 6. Use the and + pistons to select the Reset one stop function on the display.
- 7. Press the SET piston.
- 8. Activate one stop.
- 9. The display shows a prompt for confirmation. Use the and + pistons to select No or Yes.
- 10. Press the SET piston.
- 11. Press the MENU piston twice to exit the Johannus Menu.

#### **Reset ALL stops:**

The Reset ALL stops mode resets the key volumes of all stops in one intonation to the factory setting.

- 1. Select an intonation.
- 2. Press the MENU piston.
- 3. Use the and + pistons to select the Key Volumes function on the display.
- 4. Press the SET piston.
- 5. Use the and + pistons to select the Reset ALL stops function on the display.
- 6. Press the SET piston.

- 7. The display shows a prompt for confirmation. Use the and + pistons to select No or Yes.
- 8. Press the SET piston.
- 9. Press the MENU piston twice to exit the Johannus Menu.

# 4.17.7 MIDI Config

MIDI is a protocol for communication between the organ and other devices, such as:

- PC
- Sequencer
- Other musical instruments

#### **Programming MIDI Config**

The programmable MIDI stops allow you to control any module voice through any MIDI channel (1-16).

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the MIDI Config mode on the display.
- 3. Press the SET piston. The display shows the text MIDI.
- 4. Select the MIDI stop to be programmed (for example MIDI Swell). The display will now show following: Swell: Channel and on the second line the settings for Channel, MSB, LSB and Voice.
- 5. Use the and + pistons to select the desired MIDI channel (Channel).
- 6. Press the SET piston. The display will show following: Swell: MSB.
- 7. If necessary, use the and + pistons to select the required MSB value (MSB).
- 8. Press the SET piston. The display will show following: Swell: LSB.
- 9. If necessary, use the and + pistons to select the required LSB value (LSB).
- 10. Press the SET piston. The display will show following: Swell:
- 11. Use the and + pistons to select the desired module Voice value (Voice).
- 12. Press the SET piston to save the change.
- 13. Select another MIDI stops to be programmed, if required.
- 14. Press the MENU piston to return to the main menu.
- 15. Press the MENU piston again to exit the Johannus Menu.

#### 4.17.8 Orchestrals

The Orchestrals mode sets the voices per manual.

#### **Programming Orchestrals**

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Orchestrals mode on the display.
- 3. Press the SET piston. In the display the first Orchestrals will appear.
- 4. Use the and + pistons to select the desired voice.
- 5. Press the SET piston.
- 6. Use the and + pistons to select the alternative you wish to use.

- Press a key on the manual for which you wish to use this voice. Your 7. choice will be displayed in the menu.
- Press the SET piston. The selected setting is saved in the memory 8. and you automatically return to the menu.
- Press the MENU piston to return to the main menu.
- 10. Press the MENU piston again to exit the Johannus Menu.

You can choose from the following voices with corresponding alternatives:

: Chimes, Carillon or Orchestral Chimes Chimes

Flute : Flute. Piccolo or Recorder

Panflute : Panflute, Chrysoglott or Handbells 

Tuba : Tuba, Horn or Timpani

: Trumpet, Trumpet alternate or Ranket 8' Trumpet Oboe : Oboe, Oboe alternate or Choir 1 : Clarinet, Clarinet alternate or Choir 2 Clarinet

: Gospel Full Organ, Tibia Organ or Reed Gospel Full Organ

Organ Gospel Jazz Organ : Gospel Jazz Organ, Gospel Organ 1 or

Gospel Organ 2

Piano : Piano, Electronic Piano 1 or Electronic

Piano 2

: Harp, Glassharp or Woodharp Harp : Harpsichord, Celesta 1 or Celesta 2 Harpsichord Strings : Strings, Bell Strings or Warm Strings

#### **Voicing Orchestrals**

To voice Orchestral voices, optional voicing software Johannus Intonat 5.2 128 4x3 is needed.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Orchestrals mode on the
- 3. Press the SET piston. The display shows the first Orchestral.
- 4. Use the and + pistons to select the Voicing Orch. mode on the display.
- 5. Press the SET piston. The display shows All orchestrals on
- 6. While in this mode, all orchestral voices can be played from the Great manual and can be voiced using the optional voicing software.
- 7. Press the MENU piston to return to the Orchestral menu.
- 8. Press the MENU piston to return to the main menu.

#### 4.17.9 **Reset Procedures**

The Reset Procedures mode is used to delete the capture memory or to reset some settings to the factory settings.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Reset Procedures function on the display.
- 3. Press the SET piston. The display shows the menu for the Reset Procedures.
- 4. Use the and + pistons to select the desired procedure.
  - Crescendo default
  - Memory default
  - MIDI default
  - Orchestrals default

- Preset default
- Reverb Program default
- Reverb Length default
- Special Stop mode def.
- Tracker Action default
- Tweeter Volume default
- 5. Press the SET piston. The display shows a prompt for confirmation.
- 6. Use the and + pistons to select No or Yes.
- 7. Press the SET piston for confirmation.
- 8. Press the MENU piston to return to the main menu.
- 9. Press the MENU piston again to exit the Johannus Menu.

# 4.17.10 Reverb Settings

- 1. Use the ROM, SYM, BAR, HIS (styles), SOLO and TRIO (intonation) pistons to activate the style and intonation the reverberation of which must be changed.
- 2. Press the MENU piston.
- 3. Use the and + pistons to select the Reverb function on the display.
- 4. Press the SET piston. The activated style and intonation appear on the line at the top of the display. The line at the bottom indicates the selected reverberation.
- 5. Use the and + pistons to select the desired reverberation.
- 6. Press the SET piston. The selected reverb is now stored in memory. The option Length appears on the display.
- 7. Use the and + pistons to select the desired length.
- 8. Press the SET piston. The option 3D Surround On/Off appears on the display.
- 9. Use the and + pistons to switch the 3D Surround On or Off.



Select Off for a standard reverberation to produce a clearer and more transparent sound.

Select On for an extra addition to the reverberation to produce a fuller sound.

- 10. Press the SET piston. The selected 3D Surround setting is stored in the memory and you return to the main menu automatically.
- 11. Press the MENU piston to exit the Johannus Menu.

# 4.17.11 Startup Settings

Using the Startup Settings mode, you can save your preferred settings. These settings will be loaded when you start up the organ.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Startup Settings mode on the display.
- 3. Press the SET piston. The display shows the menu for the Startup Settings.
- 4. Use the and + pistons to select the desired option.
  - Chorus On/Off: Switch Chorus on or off.
    - Select On or Off and press the SET piston.
  - **Default Intonation.** Select one of the main intonations.
    - Choose the desired intonation and press the SET piston.
  - **Headphone / Aux:** Volume setting for headphone and aux-out

- Choose the desired volume and press the SET piston.
- **Side Speakers:** Volume settings for the side speakers.
  - Select Level Left or Level Right and press the SET piston
  - Use the and + pistons to select the desired volume and press the SET piston.
  - If necessary, repeat for the other option.
  - Press the MENU piston to return to the Startup Settings menu.
- Special Stops Mode: Switch the Harp, Piano and Harpsichord mode on or off.
  - Select Enable or Disable and press the SET piston.
  - If you choose Disable, you will return to the Startup Settings menu.
  - If you choose Enable, you will be shown 5 choices with which to set the Special Stops Mode as desired.
    - Reverb Program; Use the and + pistons to choose the desired program and press the SET piston.
    - Reverb Length; Use the and + pistons to choose the desired length and press the SET piston.
    - Reverb Volume; Use the and + pistons to select the desired volume and press the SET piston.
    - Rev. 3D Surround; Use the and + pistons to switch the 3D Surround effect on or off and press the SET piston.
    - Tweeter Setttings; Use the and + pistons to select the desired level for the tweeters and press the SET piston.
  - Press the MENU piston 2 times to return to the Startup Settings menu.
- 5. Press the MENU piston to return to the Johannus Menu.

# 4.17.12 Temperaments

The Temperaments mode sets the temperament.

#### **Programming Temperaments**

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Temperaments function on the display.
- 3. Press the SET piston. The display shows the current temperament.
- 4. Use the and + pistons to select the desired temperament.

You can choose from twelve temperaments:

- **Equal**: (normal or equal temperament)
- Young II
- Vallotti
- Kirnberger III
- Kirnberger II
- Neidhardt III
- Werckmeister III
- 1/6 Meantone
- 1/5 Meantone
- 1/4 Meantone
- Pythagorean

- Press the MENU piston. You will automatically return to the main menu
- 6. Press the MENU piston again to exit the Johannus Menu.

#### 4.17.13 Tracker Action

The Tracker Action mode is for setting the volume of the key mechanism.

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Tracker Action function.
- 3. Press the SET piston. The display shows the current intonation style (Am. Classic, Symphonic, Baroque or Historic) and setting of a manual.
- 4. Use the and + pistons to select the manual the setting of which must be changed.
- 5. Press the SET piston.
- 6. Use the and + pistons to set the desired volume.
- 7. Press the SET piston to save the change.
- 8. If desired use the and + pistons to select another manual or push a style piston to select another intonation style and repeat items 4 7.
- 9. Press the MENU piston to return to the main menu.
- 10. Press the MENU piston again to exit the Johannus Menu.

# 4.17.14 Tuning

The Tuning Mode function shifts the pitch in fourteen steps of 1 Hz (from 426 Hz to 454 Hz). The set pitch can be read on the display.

#### **Programming Tuning**

- 1. Press the MENU piston.
- 2. Use the and + pistons to select the Tuning function on the display.
- 3. Press the SET piston. The display shows the current tuning setting (Tune: ...Hz).
- 4. Use the and + pistons to select the desired pitch.
- 5. Press the SET piston. The selected settings are stored in the memory and you will automatically return to the main menu.
- 6. Press the MENU piston to exit the Johannus Menu.

# 4.17.15 Tweeter Settings

The Tweeter mode is used to enable or disable the tweeters and to adjust the volume of the tweeters.

- 1. The display shows the set intonation and On or Off.
- 2. Use the and + pistons to enable or disable the tweeters.
- 3. Press the SET piston. If the tweeters are on, you can now adjust the volume. If not, you will go to the main menu.
- 4. If the tweeters are on, the display shows Tweeter level:..
- 5. Use the and + pistons to set the desired volume.
- 6. Press the SET piston. The selected volume level has now been saved in the memory and you will automatically return to the main menu.
- 7. Press the MENU piston to exit the Johannus Menu.

# 4.18 QuickAccess

Using QuickAccess, you will be taken straight to the menu item you want to use, without having to go through the menu first. Press the SET piston, followed by the desired mode you wish to open.

The following modes support QuickAccess:

- General Crescendo;
  - You will be taken immediately to item 3 of § 4.17.1
- Orchestrals;

You will be taken immediately to item 6 of § 4.17.8

# 5 MAINTENANCE, TROUBLESHOOTING AND WARRANTY

### 5.1 Maintenance

#### Overview

Component	Maintenance	Frequency	
Cabinet	Cleaning. See § 5.1.1.	As required	
Manuals	Cleaning and removing scratches. See § 5.1.2.	As required	

# 5.1.1 Cabinet maintenance

The cabinet is made of solid wood and wood veneer.



- Do not use furniture polish or teak oil to clean the organ cabinet.
- Direct sunlight may discolour the organ cabinet.
- 1. Clean the cabinet with a damp cloth.
- 2. Rub the cabinet dry with a lint-free cloth.

### 5.1.2 Maintenance of the manuals

The manuals are plastic.



Do not use aggressive cleaning agents such as paint thinner or acetone to remove dirt.

- 1. Clean the manuals with a damp cloth.
- 2. Rub the manuals dry with a lint-free cloth.
- 3. Remove any scratches with car polish.

# 5.2 Problems

#### Overview

Problem	Cause	Solution
Pedal does not work properly	The pedal magnet is making poor contact with the magnetic switch at the rear of the pedalboard.	Reposition the pedal. See § 5.2.1.
Organ functions do not work properly	The organ is not earthed.	Connect the organ to an earthed power socket.

# 5.2.1 Reposition the pedal

- 1. Make sure the organ is placed on a stable, horizontal surface.
- 2. Lean the organ slightly backward.
- 3. Slide the pedal against the pedalboard
- 4. Set the organ upright.
- 5. Make sure the pedalboard works properly.
- 6. Contact your dealer if the pedalboard does not work properly.

# 5.3 Warranty

The conditions are specified in the warranty certificate. The warranty is void if changes or repairs are made to the organ by persons or organisations that are not authorised by Johannus Orgelbouw b.v.

# 6 MIDI IMPLEMENTATIONS

# 6.1 MIDI Implementation Chart

JOHANNUS Organs

**MIDI Implementation card** 

Date: September 2008 Version 1.00

Functions		Transmitted	Recognized	Remarks
Basic Channel	Default Changes	See MIDI Specs See MIDI Specs	See MIDI Specs Y <sup>1</sup>	See MIDI Specs
Mode	Default Messages Altered	Mode 3 N * * * * * * *	Mode 3 N N	
Note Number	True Voice	36 - 96		
Velocity	Note ON Note OFF	9nH v=1 - 127 9nH (v=64) 9nH (v=0)	9nH v=1 – 127 9nH v=1 – 127 9nH v=0, 8nH v=*	Velocity ON Velocity OFF *=irrelevant
After Touch	Keys Channels	N N		
Pitch Bend		N		
Control Change	7 11 100/101/6 100/101/6	Y Y Y Y		General Volume Expr. pedals Pitch Transposer
Program Change	: True#	See MIDI Specs	See MIDI Specs See MIDI Specs	See MIDI Specs See MIDI Specs
System Exclusive		See MIDI Specs	See MIDI Specs	See MIDI Specs
Common	: Song Pos : Song Sel : Tune	N N N	N N N	
System Real Time	: Clock : Commands	N N	N N	
Aux	: Reset All Contr. : Local ON/OFF : All Notes OFF : Active Sense : Reset	N N Y N N	N N Y N	
Notes		<sup>1</sup> Depends on num	nber of divisions	

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

# 6.2 MIDI specifications

This paragraph describes the specifications on the MIDI Implementation Chart in more detail.

#### Default basic channels (transmitted/ recognized)

2-manual instrument (with standard keyboard layout):

- 1: Great
- 2: Swell
- 3: Pedal
- 12: Stops

3-manual instrument (with standard keyboard layout):

- 1: Choir
- 2: Great
- 3: Swell
- 4: Pedal
- 12: Stops

#### **Basic channel changes (transmitted)**

Can be programmed through the MIDI program.

#### **Control changes (transmitted)**

Controller 7 (07h) General volume, with volume values 40 (28h) –

127 (7Fh).

Controller 11 (0Bh) Expression pedals, with volume values 63 (3Fh) –

127 (7Fh).

Controller 6 (06h) Pitch, with pitch values 33 (21h) - 95 (5Fh).

Pitch value 64 (40h) = A = 440Hz. The following applies to the pitch:

LSB 100 (64h) 1 (01h) and the MSB 101 (65h) 0

(00h).

Transposer, with transposer values 61 (3Dh) - 67

(43h).

Transposer value 64 (40h) = A = 440Hz. The following applies to the transposer:

LSB 100 (64h) 2 (02H) and the MSB 101 (65h)

0(00h).

# Control changes (recognized)

Controller 7 (07h) General volume, with volume values 0 (00h) –

127 (7Fh).

Controller 11 (0Bh) Expression pedals, with volume values 0 (00Fh) –

127 (7Fh).

#### Program changes (transmitted/recognized)

Organ stops: Depends on the number of stops and the sequence of stops. MIDI stops (programmable): 1-128.

#### System exclusive messages (transmitted/recognized)

Each 'sys ex' (system exclusive) message largely looks the same. The first 7 bytes and the last byte are always the same. Only the value of the 8th byte varies. This is the 'sys ex message' that Johannus generally uses: F0 00 4A 4F 48 41 53 XX F7 (hexadecimal). The 'sys ex messages' described below only indicates the value of the 8th byte (XX) and the output from which it is transmitted.

#### All stops off

The 'all stops off' sys ex code is 7F. This sys ex code is transmitted through the MIDI SEQ. output when the 0 piston is pressed for a long time. When an 'all stops off' sys ex code is received, all stops on the instrument are switched off.

#### **Pushbutton values**

When a piston is pressed, a sys ex code is transmitted with the value of the piston that is pressed (for example PP = 00 P = 01) through the MIDI MOD. output.

These sys ex codes are only important when the Johannus sound module CSM 128 is connected to your instrument.

### Other MIDI codes (transmitted)

Press the 0 piston to transmit the sys ex code, 'all stops off' and all volume settings through the MIDI SEQ. output.

#### Sys ex code stops (Program Changes)

When a MIDI stop is switched on and off, an extra Program Change code (preceded by the sys ex code 3F) is transmitted through the MIDI SEQ. output, besides the usual Program Change. This is to distinguish between a 'normal' organ stop and a MIDI stop before transmitting a module. When a stop is switched on and off, the following codes are transmitted:

Organ stop: Through MIDI SEQ.: CB XX MIDI stop: Through MIDI MOD.: CX XX.

Through MIDI SEQ.: CB XX and 3F CX XX