

JOHANNUS

Symphonica

User Manual

Symphonica

combined traditions, lifelike sounds

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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.
- Only a technician authorised by Johannus Orgelbouw b.v. may open the organ. The organ contains static-sensitive components. The warranty will become null and 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

2.1 Install and connect

1. Position the organ on a stable, horizontal surface.
2. Lean the organ slightly backward.
3. Slide the pedal (A) against the pedalboard of the organ (B).
4. Put the organ upright.
5. Place the music desk (C) using the music desk supports in both holes in the stop panel.
6. Place the organ bench over the pedal.
7. Make sure the voltage of the organ matches the voltage of the mains. See the serial plate (D).
8. Connect the organ to an earthed power socket.



2.2 Switch on

Switch on the organ with the on/off key switch on the right next to the manuals.

Wait for a few seconds. Starting the control functions and the settings will take some time.

The lamps of the SET and 0 buttons 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: 10-90%.

3 DESCRIPTION OF THE ORGAN

3.1 Overview of the main components



Symphonica 35

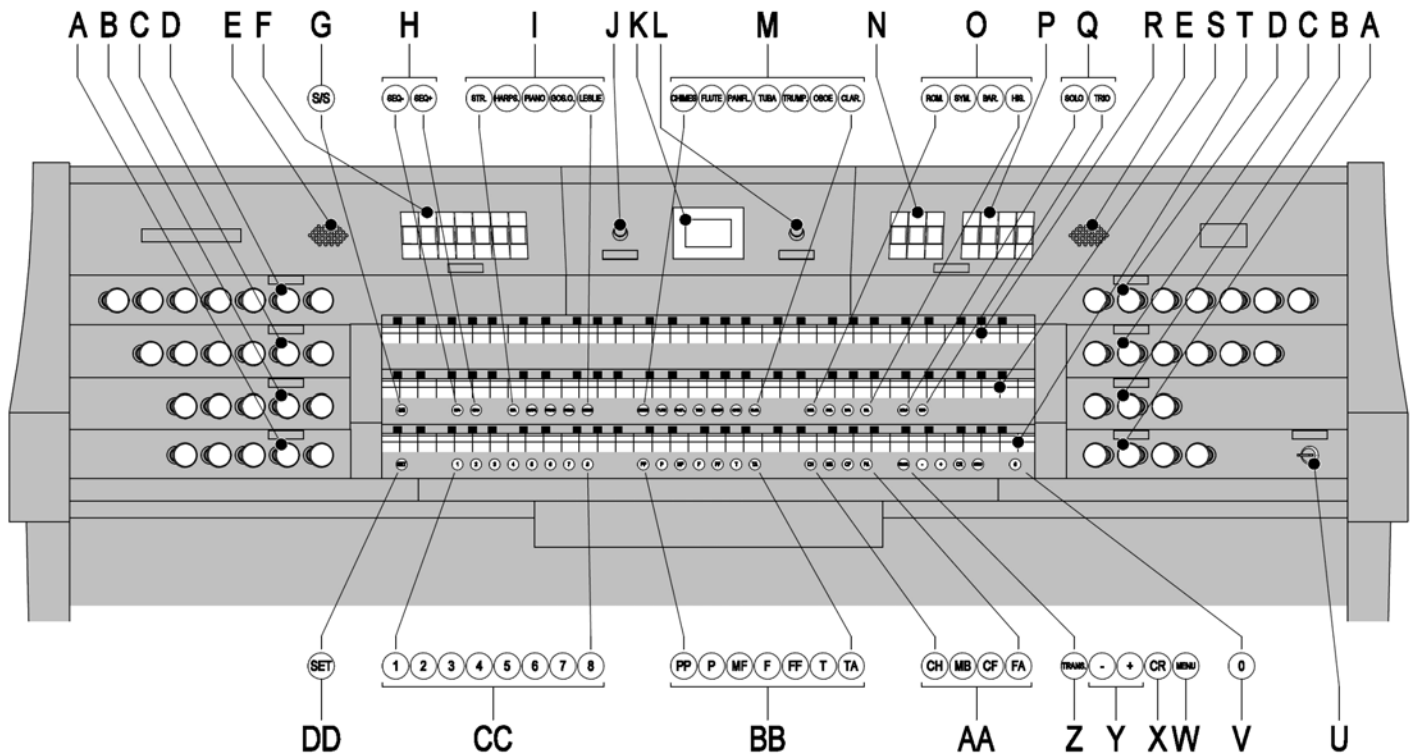


Symphonica 45

- A Tweeters
- B Music desk
- C Surround loudspeakers
- D Subwoofer system
- E Loudspeakers
- F General Crescendo pedal
- G Expression pedals
- H Pedal
- I Organ bench

3.2 Overview of controls

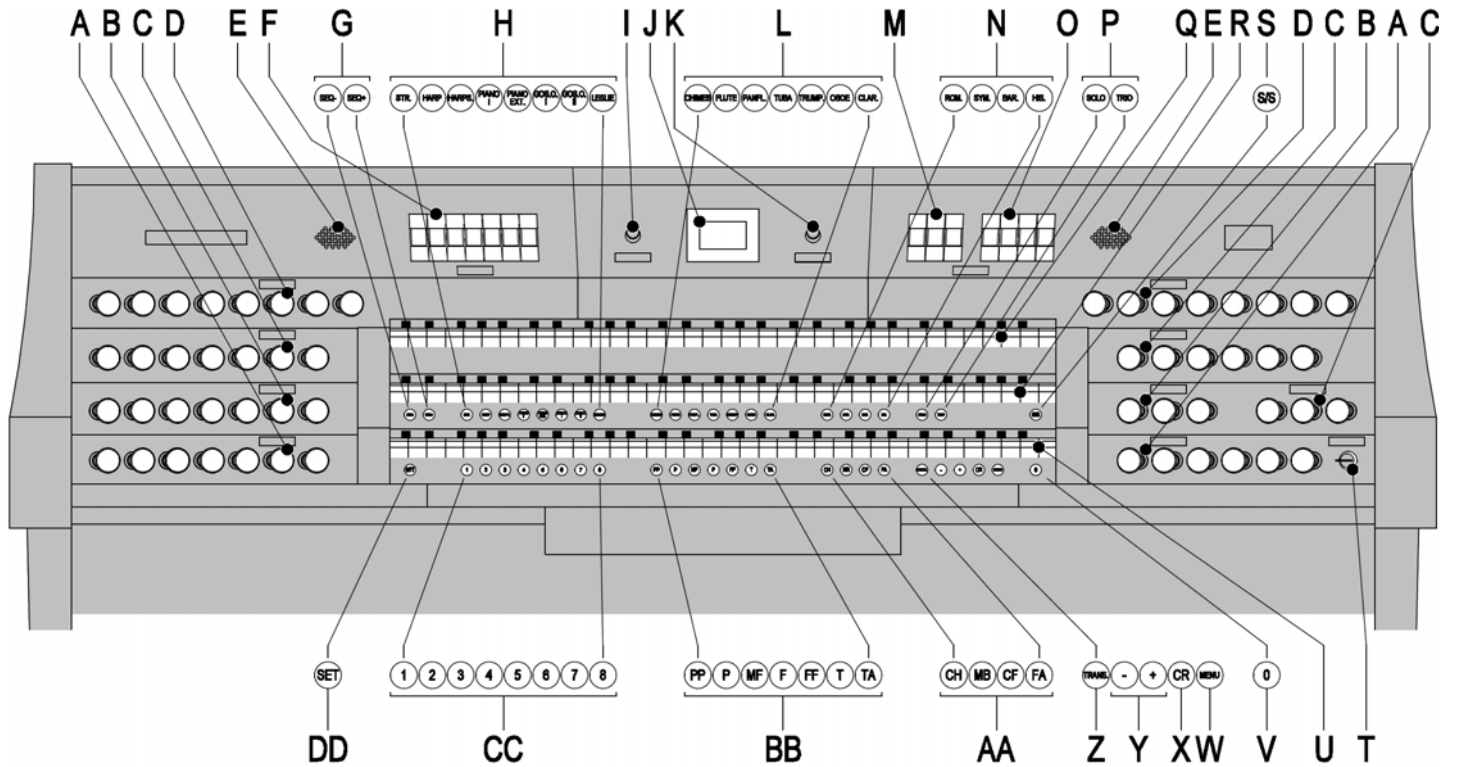
3.2.1 Symphonica 35



- | | |
|--------------------------------------|---------------------------------|
| A Pedal stops | M Orchestrals (solo) |
| B Choir stops | N Tremulants |
| C Great stops | O Main group intonations |
| D Swell stops | P MIDI stops |
| E Tweeters | Q Subgroup intonations |
| F Couplers, Keyboard transfer | R Manual Swell |
| G All Swells to Swell | S Manual Great |
| H Sequence -, Sequence + | T Manual Choir |
| I Orchestrals (key) | U On/off key switch |
| J Volume control organ | V 0 and reset button |
| K Display | W MENU |
| L Volume control acoustics | X General Crescendo |
| | Y - and + buttons |
| | Z Transposer |

- AA** Chorus, Manual Bass, Cantus Firmus, Fix Accessories
BB Pre-programmed memory locations
CC Capture memory locations
DD SET/Enter

3.2.2 Symphonica 45



- | | | | |
|----------|-----------------------------|-----------|---|
| A | Pedal stops | P | Subgroup intonations |
| B | Choir stops | Q | Manual Swell |
| C | Great stops | R | Manual Great |
| D | Swell stops | S | All Swells to Swell |
| E | Tweeters | T | On/off key switch |
| F | Couplers, Keyboard transfer | U | Manual Choir |
| G | Sequence -, Sequence + | V | 0 and reset button |
| H | Orchestra (key) | W | MENU |
| I | Volume control organ | X | General Crescendo |
| J | Display | Y | - and + buttons |
| K | Volume control acoustics | Z | Transposer |
| L | Orchestra (solo) | AA | Chorus, Manual Bass, Cantus Firmus, Fix Accessories |
| M | Tremulants | BB | Pre-programmed memory locations |
| N | Main group intonations | CC | Capture memory locations |
| O | MIDI stops | DD | SET/Enter |

3.2.3 Symphonica 55 Not taken into production yet

3.3 Connect and switch on the peripherals

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

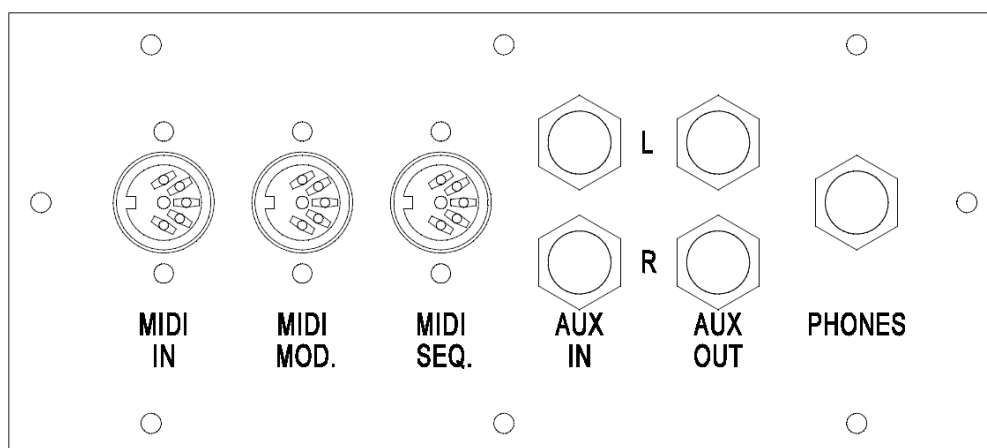


Follow the instructions in the documentation for the peripherals.

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

3.4 External connections

The external connections are on the left beneath the console.



- **MIDI IN:** This input is 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 Johannes 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 controlled by 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. of the instrument.

- **AUX OUT:** This is an output for connecting an external (stereo) amplifier.
- **EXT. REV.:** This is an output for connecting Johannus external acoustics. This system imitates the spatial effect of a concert hall or cathedral.



Do not use this output for other purposes.

- **PHONES:** This connection for a (stereo) headphone is for a headphone with an impedance of 30 Ω 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 overall volume of the organ with the ORGAN VOLUME control.
- **Acoustics:** The acoustics volume can be continuously adjusted using the ACOUSTICS VOL. control.

4.2 Expression pedals

Expression pedals control the volume of Great/Pedal, the Swell and the Choir.

4.3 Acoustics

The LIVEreverb™ acoustics system creates a true to nature acoustic effect.

This effect provides a spatial reproduction of the organ sounds that can be continuously adjusted.

Turn the volume control to adjust the volume of the acoustics system.

12 different acoustics can be selected in the Easy Menu.

In order of reverberation length these are:

- | | |
|-------------------------------------|-------|
| ■ St. Salvius church, Limbricht | 2.5 s |
| ■ Zuidervermaning, Westzaan | 2.5 s |
| ■ Frogner Kirke, Oslo | 3.5 s |
| ■ Feike Asma hall, Johannus Ede | 3.5 s |
| ■ Plantage church, Zwolle | 4.5 s |
| ■ St. Jozef, Utrecht | 4.5 s |
| ■ Old Church, Ede | 5 s |
| ■ Old Church, Amsterdam | 5.5 s |
| ■ St. Peter, Bonn-Vilich | 6 s |
| ■ Kruisverheffingskerk, Raalte | 6.5 s |
| ■ Bovenkerk, Kampen | 7 s |
| ■ Église Notre Dame, La Grand-Combe | 8 s |

For the acoustics options of each style and intonation see § 4.15.11.

4.4 Intonations

The intonations have been divided into a main group and a subgroup.
The main group consist of:

- **Romantic (ROM.)**
- **Symphonic (SYM.)**
- **Baroque (BAR.)**
- **Historic (HIS.)**

The subgroup consist of:

- **Classic**
- **SOLO**
- **TRIO**

1. Select a main group by pressing the ROM, SYM, BAR or HIS button.
2. Then select a subgroup by pressing the SOLO or TRIO button.



If not subgroup is selected, Classic is selected automatically.

4.5 Factory intonation settings

Save the intonation settings



The Johannus intonation program is required for saving 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 Johannus intonation program.

Restore the factory intonation settings



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

1. Switch off the organ.
2. Press buttons 1 and 8. Hold the buttons.
3. Switch on the organ.
4. Wait until the lamp in the 0 button lights up.
5. Release buttons 1 and 8.

4.6 Orchestrals

Orchestrals are high-quality, classical instrument voices especially for playing key instruments and/or solos. Possible options are:

Keyboard instruments:

- **Str.** : strings ¹⁾
- **Harps.** : harpsichord ²⁾
- **Piano** : piano ³⁾
- **Gos.O.** : gospel organ ⁴⁾
- **Lesley** : lesley effect ⁵⁾

Solo instruments:

- **Flute** : flute
- **Panfl.:** : pan flute
- **Tuba** : tuba
- **Trump.:** : trumpet
- **Oboe** : oboe
- **Clar.:** : clarinet
- **Chimes** : chimes

- 1) If the manual on which the Strings is played has been linked with the pedal, the Contrabass will also sound through the pedal.
- 2) When the Harpsichord is switched on and the Harpsichord settings are on 'enable' (see § 4.15.10), the entire organ will switch to the Harpsichord Mode. The display will then briefly show the text 'Harpsichord Mode'.
- 3) When the piano 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 pedal and the F key can be used as a rest for the right foot for proper operation of the sustain pedal. The display will briefly show this pedal switch as a message.
With the piano, the acoustics effect will not be activated.
- 4) When linking the manual on which the Gospel Organ can be played to the pedal, the Gospel Organ bass stop will sound through the pedal.
- 5) The Lesley only has an effect on the Gospel Organ. If the Lesley Effect has not been activated, the (slow) chorus effect will be heard on the Gospel Organ. If the Lesley Effect has been activated, the (fast) tremolo effect will be heard on the Gospel Organ.



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 § 4.15.1. to change this setting.

4.7 Stops

The stops are activated using rocker switches or through the capture memory. See § 4.12.

The lamp in the rocker switch is on when the corresponding stop is active.

The stops have been divided into four groups:

- Pedal: Enables the stops associated with the Pedal.
- Choir: Enables the stops associated with the Choir.
- Great: Enables the stops associated with the Great.
- Swell: Enables the stops associated with the Swell.

4.8 Couplers

- **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.
- **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. Enable the Manual Bass using the MB button. 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 annoying 'jumping' of the MB tones.
- **Cantus Firmus (CF):** Couples the Swell monophonically to the Great. Only the highest tone played on the Swell is coupled to the Great. Enable the Cantus Firmus using the CF button. 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 annoying 'jumping' of the CF tones.
- **Keyboard transfer:** Stop on the Choir switching the manual with the Great manual. The stops on the Choir can now be played on the Great manual and the stops on the Great can be played on the Choir manual.

4.9 Accessories

- **Chorus (CH):** Is a mode for slightly detuning the organ stops for a broader and livelier sound. Use the CH button to activate the Chorus.
- **Fix Accessories (FA):** This is a mode for fixing accessories. As long as this button is enabled, the couplers and tremulants can only be switched on and off manually.
- **Reeds Off (RO):** This is a mode for switching off all reeds at once. No reeds can be enabled as long as this button is pressed. When switching off this mode, the reeds that were on are activated again. Enable the Reeds Off mode using the RO button.
- **General Crescendo pedal (CR):** This is a mode for switching the General Crescendo pedal on and off. See § 4.14.
- **All Swells to Swell (S/S):** This mode replaces all swells with one swell, being the swell of the Swell.

4.10 Change the registration

The 0 button cancels registrations at two levels:

- Briefly press the 0 button: This cancels only the last change.
- Press the 0 button for a long time: All registrations are cancelled.

4.11 Pre-programmed memory locations

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

Retrieve a pre-programmed memory location

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

Programme 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 button. For example, it is not advisable to programme a pianissimo registration under the tutti button.

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

4.12 Capture memory

Using the capture memory, a registration can be activated with one button. The capture memory consists of eight levels. Each level has eight memory locations. These levels are shown on the display (Mem: . .). The 256 capture memory locations are initially empty and for the user to be programmed.

Programme a capture memory location



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

1. Select the required stops.
2. Select a level (1-32) on the display using the - and + buttons.
3. Press the SET button. Hold the button.
4. Press the required memory location (1-8).
5. Release the SET button.

Retrieve a capture memory location

1. Use the - and + buttons to select the required level (1-32) on the display.
2. Press the required memory location (1-8). The active stops light up.



With the SEQ- and SEQ+ buttons you can select a lower or higher (respectively) memory location in steps of one. The lit capture button and the display indicate which memory location has been selected.

4.13 Transposer

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



The pitch can only be programmed when the TRANS. button is lit.

Change the transposer

1. Press the TRANS. button.
2. Set the pitch using the - and + buttons.



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

Programme the transposer

1. Press the TRANS. button.
2. Set the pitch using the - and + buttons.
3. Press the SET button.



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

4.14 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 has not been enabled, the display shows the message *Cresc: Off.*

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

Change the General Crescendo pedal

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



Only step 0 cannot be changed.

1. First press the CR button, then the MENU button.
2. Use the - and + buttons to select the step to be changed.
3. Set the required registration for the step.
4. Press the SET button.
5. If necessary, select another step to be changed.
6. Press the MENU button to switch off the programming mode.
7. Press the CR button to switch off the General Crescendo mode.

4.15 Easy Menu

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

The Easy Menu consists of the following modes:

- Orchestrals
- MIDI Config
- Tuning
- Temperaments
- Keyboard Config
- Reset Procedures
- Datadump
- Demo Songs
- Startup Settings
- Reverb
- Key Volumes
- Tracker Action
- Tweeter settings

4.15.1 Orchestrals

The Orchestrals mode sets the voices per manual.

Programme Orchestrals

1. Press the MENU button.
2. Use the - and + buttons to select the `Orchestrals` mode on the display.
3. Press the SET button. The display shows the Strings and the manual on which the voice is playing.
4. Use the - and + buttons to select the required voice.



You can choose from following different voices:

Keyboard instruments:

- **Str.** : strings
- **Harps.** : harpsichord
- **Piano** : piano
- **Gos.O.** : gospel organ
- **Lesley** : lesley effect

Solo instruments:

- **Flute** : flute
- **Panfl.:** : pan flute
- **Tuba** : tuba
- **Trump.:** : trumpet
- **Oboe** : oboe
- **Clar.:** : clarinet
- **Chimes** : chimes

5. Press the SET button.
6. Use the - and + buttons to select the manual on which the voice must play.



With the piano you can also select 'Extended' instead of one of the manuals. Now the piano plays on all manuals 'normal pitch' only on the great stops, one octave lower on the choir and an octave higher on the swell. In this way a manual range of 7 octaves is achieved.

The piano must not be set to 'Extended' when playing piano MIDI files.

7. Press the SET button. The selected setting is saved in the memory and you automatically return to the menu.
8. Press the MENU button to return to the main menu.
9. Press the MENU button again to exit the Easy Menu.

4.15.2 MIDI Config

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

- PC
- Sequencer
- Other musical instruments

Programme MIDI Config

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

1. Press the MENU button.
2. Use the - and + buttons to select the MIDI Config mode on the display.
3. Press the SET button. The display shows the text Manual: and the text Channel MSB LSB Voice below this.
4. Select the MIDI stop to be programmed (for example MIDI III). The display will now show following Manual: the selected keyboard and the selected settings below the text Channel MSB LSB Voice. The arrow preceding the number indicates the setting that can be changed.
5. Use the - and + buttons to select the desired MIDI channel (Channel).
6. Press the SET button. The selected setting is saved in the memory and the arrow now goes to the next setting: MSB.
7. If necessary, use the - and + buttons to select the required MIDI channel (Channel).
8. Press the SET button. The selected setting is saved in the memory and the arrow now goes to the next setting: LSB.
9. If necessary, use the - and + buttons to select the required LSB value (LSB).
10. Press the SET button. The selected setting is saved in the memory and the arrow now goes to the next setting: Voice
11. Use the - and + buttons to select the required module voice LSB value (LSB).
12. Select another MIDI stop to be programmed, if required.
13. Press the MENU button to return to the main menu.
14. Press the MENU button again to exit the Easy Menu.

4.15.3 Tuning

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

Programme Tuning

1. Press the MENU button.
2. Use the - and + buttons to select the `Tuning` mode on the display.
3. Press the SET button. The display shows the current tuning setting (Tune: ...Hz).
4. Use the - and + buttons to select the required pitch.
5. Press the SET button. The selected settings are stored in the memory and you automatically return to the main menu.
6. Press the MENU button to exit the Easy Menu.

4.15.4 Temperaments

The Temperaments mode sets the temperament.

Programme Temperaments

1. Press the MENU button.
2. Use the - and + buttons to select the `Temperaments` mode on the display.
3. Press the SET button. The display shows the current temperament.
4. Use the - and + buttons to select the required 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:** (meantone temperament)
 - **1/5 Meantone:** (meantone temperament)
 - **1/4 Meantone:** (meantone temperament)
 - **Pythagorean**
 - **Custom** (temperament to be programmed by the user)
5. Press the SET button. The selected settings are stored in the memory and you automatically return to the main menu.
 6. Press the MENU button again to exit the Easy Menu.

4.15.5 Programme your own temperament

1. Press the MENU button.
2. Use the - and + buttons to select the `Temperaments` mode on the display. Press the SET button.
3. Use the - and + buttons to select the `Custom Programming` mode on the display. Press the SET button.
4. Press one key on the central octave of the great stops and hold the key. The display shows behind `Note:` the key indication and behind `Cents:` the detuning of that key in cents with respect to the normal or equal temperament.
5. Use the - and + buttons to select the required detuning.



The detuning can be set between -50 and +50 cents. 100 cents is exactly half a tone.

The changes are directly noticeable, but they have not yet been stored in the memory.

-
6. Press the SET button after having changed one or more keys. The set own temperament is saved in the memory and you automatically return to the main menu.



The changes you make on the central keyboard of the great stops are automatically implemented on the entire organ.

7. Press the MENU button again to exit the Easy Menu.

4.15.6 Keyboard Config

The Keyboard Mode sets the operation of the keys.



This mode is not available on organs with wooden keyboards.

1. Press the MENU button.
2. Use the - and + buttons to select the `Keyboard Config` mode on the display.
3. Press the SET button. The display shows the current manual setting of one of the manuals.
4. Use the - and + buttons to select the manual the setting of which must be changed.



- **Choir:** Choir
- **Great:** Great
- **Swell:** Swell

5. Press the SET button.
6. Use the - and + buttons to select a setting for the operation of the keys.



- **Automatic:** The manual has been set to High. When enabling a programmable MIDI stop, the manual will automatically be set to Velocity.
- **High:** The keys respond when touched very lightly.
- **Low:** The keys respond when pressed further.
- **Velocity:** The keys are velocity-sensitive.

7. Press the SET button. The manual setting is now saved in the memory.
8. Press the MENU button to return to the main menu.
9. Press the MENU button again to exit the Easy Menu.

4.15.7 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 button.
2. Use the - and + buttons to select the `Reset Procedures` mode on the display.
3. Press the SET button. The display shows the menu for the Reset Procedures.
4. Use the - and + buttons to select the required procedure.



- **Memory default:** Clears the entire capture memory.
- **MIDI default:** Resets the factory settings of the MIDI stops.

- **Preset default:** Resets the factory settings of the fixed combinations.
- **Crescendo default:** Resets the factory settings of the General Crescendo pedal.
- **Reverb Program:** Resets the factory settings of the acoustics.

5. Press the SET button. The display shows a prompt for confirmation.
6. Use the - and + buttons to select *Yes* or *No*.
7. Press the SET button to confirm.
8. Press the MENU button to return to the main menu.
9. Press the MENU button again to exit the Easy Menu.

4.15.8 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 button.
2. Use the - and + buttons to select the *Datadump* on the display.
3. Press the SET button. The text *Press Set piston* appears on the display.
4. Make sure the required storage medium has been properly connected.
5. Press the SET button again. The display shows *Sending data while data is being sent*.



Do not use the organ while the display shows the text *Sending Data*.

6. Press the MENU button to return to the main menu.
7. Press the MENU button again to exit the Easy Menu.

4.15.9 Demo Songs

The Demo Songs mode plays thirteen different demo songs.

1. Press the MENU button.
2. Use the - and + buttons to select the *Demo Songs* mode.
3. Press the SET button. The title and composer of the first demo song appear on the display.
4. Use the - and + buttons to select one of the thirteen demo songs.
5. Press the SET button to select a demo song.
6. Use the - and + buttons to choose whether to play the selected demo song (*play one*) or all demo songs (*play all*).
7. Press the SET button to start playing the selected demo song(s).
 - a. Press the 0 button to stop playing the demo song.
 - b. With the Organ volume control you can 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 button after having played the demo song(s). You will automatically return to the main menu.
9. Press the MENU button again to exit the Easy Menu.

4.15.10 Startup Settings

The Startup Settings mode saves the required default intonation in the memory.

Intonation:

1. Press the MENU button.
2. Use the - and + buttons to select the `Startup Settings` mode.
3. Press the SET button. The display shows the set intonation.
4. Use the - and + buttons to select an intonation (`Romantic`, `Symphonic`, `Baroque` or `Historic`) that must be enabled when switching on the organ.
5. Press the SET button. The selected intonation is saved in the memory. After this, the `Chorus on` or `Chorus Off` option appears on the display.
6. Use the - and + buttons to select whether the Chorus (CH) accessory must be enabled or disabled when switching on the organ.
7. Press the SET button.

Acoustics:

1. Press the MENU button.
2. Use the - and + buttons to select the `Startup Settings` mode.
3. Press the SET button a few times until the option `Ext. Reverb On` or `Ext. Reverb Off` appears.
4. Use the - and + buttons to select whether the 3D 2.1 Surround acoustic system must be enabled or disabled when switching on the organ.
5. Next, the option to adjust the left and right volume of the 3D 2.1 Surround acoustics system appears on the display.
6. Use the - and + buttons to set the required volume of the left channel (`Level Left`). Press the SET button.
7. Use the - and + buttons to set the required volume of the right channel (`Level Right`). Press the SET button.

Harpsichord:

1. Press the MENU button.
2. Use the - and + buttons to select the `Startup Settings` mode. Press the SET button a few times until the option `Harpsichord Mode Enabled` or `Harpsichord Mode Disabled` appears. See §3.4.
3. Use the - and + buttons to select `Enabled` or `Disabled`. Press the SET button.
4. Next, the `Harpsichord Reverb Prog.....` option appears. Use the - and + buttons to select the required acoustics. See § 3.4.
5. Press the SET button.
6. After this, the option for setting the volume of the selected acoustics appears.
7. Use the - and + buttons to select the required acoustics volume. Press the SET button.
8. After this, the option for setting the tweeters volume appears.

-
9. Use the - and + buttons to select the required tweeters volume. Press the SET button.
 10. All selected settings are saved in the memory and you automatically return to the main menu.
 11. Press the MENU button to exit the Easy Menu.



When exiting the Startup Settings (press the MENU button) between times, all Startup Settings changed until that moment are stored in the memory.

4.15.11 Reverb

1. Use the ROM, SYM, BAR, HIS (styles), SOLO and TRIO (intonation) buttons to activate the style and intonation the acoustics of which must be changed.
2. Press the MENU button.
3. Use the - and + buttons to select the *Reverb* mode on the display.
4. Press the SET button. The top line of the display will show the activated style and intonation. The lines below indicate the selected acoustics.
5. Use the - and + buttons to select the required reverberation.
6. Press the SET button. The selected reverberation has now been saved in the memory and you will automatically return to the main menu.
7. Press the MENU button to exit the Easy Menu.

4.15.12 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 buttons of the capture memory and press the SET button.

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 button.
4. Use the - and + buttons to select the *Key Volumes* mode on the display.
5. Press the SET button.
6. Use the - and + buttons to select the *Adjust* mode on the display.
7. Press the SET button.
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 *Vol*: the volume.
10. Use the - and + buttons to set the required volume.
11. Press the SET button after having changed one or more keys.

-
12. The display shows a prompt for confirmation. Use the - and + buttons to select *Yes* or *No*.
 13. Press the SET button to confirm.
 14. Press the MENU button to return to the main menu.
 15. If the change has not been saved, the display will show *Discard changes?*. Use the - and + buttons for *Yes* and press the SET buttons to cancel the changes.
 16. Press the MENU button twice to exit the Easy 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 button.
4. Use the - and + buttons to select the *Key Volumes* mode on the display.
5. Press the SET button.
6. Use the - and + buttons to select the *Reset one stop* mode on the display.
7. Press the SET button.
8. Activate one stop.
9. The display shows a prompt for confirmation. Use the - and + buttons to select *Yes* or *No*.
10. Press the SET button.
11. Press the MENU button twice to exit the Easy 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 button.
3. Use the - and + buttons to select the *Key Volumes* mode on the display.
4. Press the SET button.
5. Use the - and + buttons to select the *Reset ALL stops* mode on the display.
6. Press the SET button.
7. The display shows a prompt for confirmation. Use the - and + buttons to select *Yes* or *No*.
8. Press the SET button.
9. Press the MENU button twice to exit the Easy Menu.

4.15.13 Tracker Action

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

1. Press the MENU button.
2. Use the - and + buttons to select the `Tracker Action` mode.
3. Press the SET button. The display shows the current manual setting of one of the manuals.
4. Use the - and + buttons to select the manual the setting of which must be changed.



- **Choir:** Choir
- **Great:** Great
- **Swell:** Swell
- **Pedal:** Pedal

5. Press the SET button.
6. Use the - and + buttons to set the required volume.
7. Press the SET button to save the change.
8. Press the MENU button to return to the main menu.
9. Press the MENU button again to exit the Easy Menu.

4.15.14 Tweeter Settings

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

1. Use the ROM, SYM, BAR, HIST buttons to activate the style the tweeter setting of which you wish to change.
2. Press the MENU button.
3. Use the - and + buttons to select the `Tweeter Settings` mode.
4. Press the SET button.
The display shows the set intonation and `Tweeter On` or `Tweeter Off`.
5. Use the - and + buttons to enable or disable the tweeters.
6. Press the SET button. If the tweeters are on, you can now adjust the volume. If not, you will go to the main menu.
7. If the tweeters are on, the display shows `Level: . .`
8. Use the - and + buttons to set the required volume.
9. Press the SET button. The selected reverberation has now been saved in the memory and you will automatically return to the main menu.
10. Press the MENU button to exit the Easy Menu.

5 MAINTENANCE, TROUBLESHOOTING AND WARRANTY

5.1 Maintenance

Overview

Component	Maintenance	Frequency
Cabinet	Clean. See § 5.1.1.	As required
Manuals	Clean and remove 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 makes poor contact with the magnetic switch at the rear of the pedalboard.	Reposition the pedal. See § 5.2.1.
Organ modes do not work properly	The organ has not been 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. Put the organ upright.
5. Check the functioning of the pedalboard.
6. Contact your dealer if the pedalboard does not work properly.

5.3 Warranty

The stipulations are specified in the warranty certificate. The warranty will become null and 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

Date: December 2009

MIDI Implementation card

Version 1.00

Functions		Transmitted	Recognized	Remarks
Basic Channel	Default Changes	See MIDI Specs See MIDI Specs	See MIDI Specs Y ¹	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 N	
Notes	¹ Depends on number 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/recognised)

3-manual instrument (with default keyboard layout):

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

Basic channel changes (transmitted)

Can be programmed using 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 = 440 Hz. 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 = 440 Hz. The following applies to the transposer: LSB 100 (64h) 2 (02H) and the MSB 101 (65h) 0(00h).

Control changes (recognised)

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/recognised)

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

System exclusive messages (transmitted/recognised)

Each 'sys ex' (system exclusive) message mainly 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 indicate 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 button is pressed for a long time. At receiving an 'all stops off' sys ex code, all stops on the instrument are switched off.

Pushbutton values

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

These sys ex codes are only important when the Johannes sound module CSM 128 has been connected to the instrument.

Other MIDI codes (transmitted)

Press the 0 button 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