

Skandinavisk Orgelcentrum

User manual for

Danhild VARIO

- the classical organ for everyone

Electrical height adjustable keyboards!
Electrical height adjustable organ bench!
Full 30-note pedal board!
32 speaking stops!

Danish design and quality - all the way!

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1 SAFETY

1.1 Safety instructions



Position the organ and the pedal board 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 authorized by Skandinavisk Orgelcentrum.
The organ contains static-sensitive components.
The warranty is void if the organ is opened by a non-authorised person.

In spite of the built-in security sensors, the power of the lifting mechanisms is **VERY strong !**

THEREFORE: Do NOT leave minors unattended while using the height adjustment of either the Keyboards or the bench ! Always be very careful during any adjustment !

The manufacturer, distributors and dealers will therefore not in any way become responsible for any personal accidents and injuries!

1.2 Symbols on the organ



Warning



Warning for electric shock



Warning for static-sensitive components

1.3 Symbols in this manual



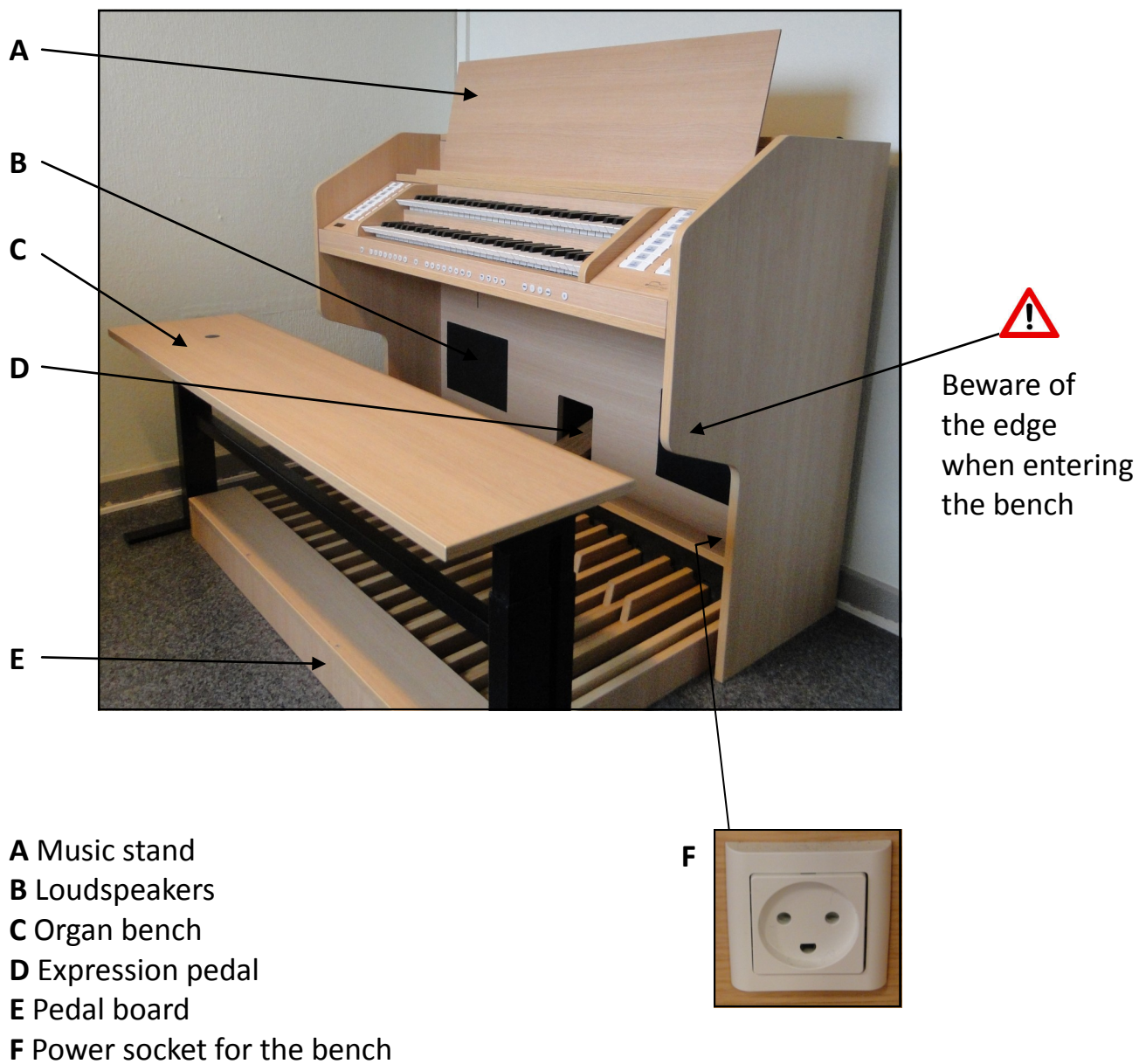
Warning or important information



Note

2 DESCRIPTION OF THE ORGAN

2.1 Overview of the main components



3 INSTALLATION

3.1 Installation and connection

3.1.1 Installation organ



1. Position the organ on a stable, horizontal surface.
2. Install the music stand, see 3.1.2.
3. Install the pedal board, see 3.1.3.
4. Place the organ bench (C), (see page 5), over the pedal board (E).
5. Connect the cord/plug from the organ bench to the power socket (F) in the organ.
6. Make sure the voltage of the organ matches the voltage of the mains. See the serial plate (I).
7. Connect the organ to an earthed power socket.

3.1.2 Installation music stand

The included music stand (A) is placed in the slot (G) above the keyboards. Be aware that the music stand can be placed only in one way downwards.

3.1.3 Installation pedal board

Install the pedal board (E), by pushing the pedal board against the black pedal front cover (H). The surface on which the pedal board is positioned must be stable and horizontal and in the same level as the surface on which the organ is positioned.

3.2 Switch on

Switch on the organ with the on/off switch at the top of the organ, next to the upper/lower button.

Wait some seconds.

Starting the control functions and the settings will take some time.

The lamps of the standard set functions light up.

The settings appear in the display.

Initializing...

Please wait

Mem: 1

Tr: 0/440

3.3 Light, music stand:

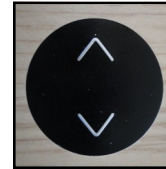
The light in the music stand is switched on and off with the button to the left of the music stand.

3.4 Light, pedalboard:

The light for the pedal board is switched on and off automatically with the organ. The light to the pedal board can not be switched on and off separately; but will always be switched on and off simultaneously with the organ.

3.5 The up/down function, keyboards:

The keyboards can be raised/lowered (infinitely adjusted in the height) using the large button (with arrows on it) that is located furthest forward on the top of the right side the organ.



3.6 Transport and storage

Pay attention to the following during transport and storage:

1. Remove the music stand and the pedal board from the organ.
2. Relative humidity within the storage area: 40 to 70%.
3. Temperature: 10 to 40 Celcius degrees.

3.7 The up/down function, organ bench:

The organ bench can be raised/lowered (infinitely adjusted in the height) using the large button (with arrows on it) that is located to the left on top of the organ bench.

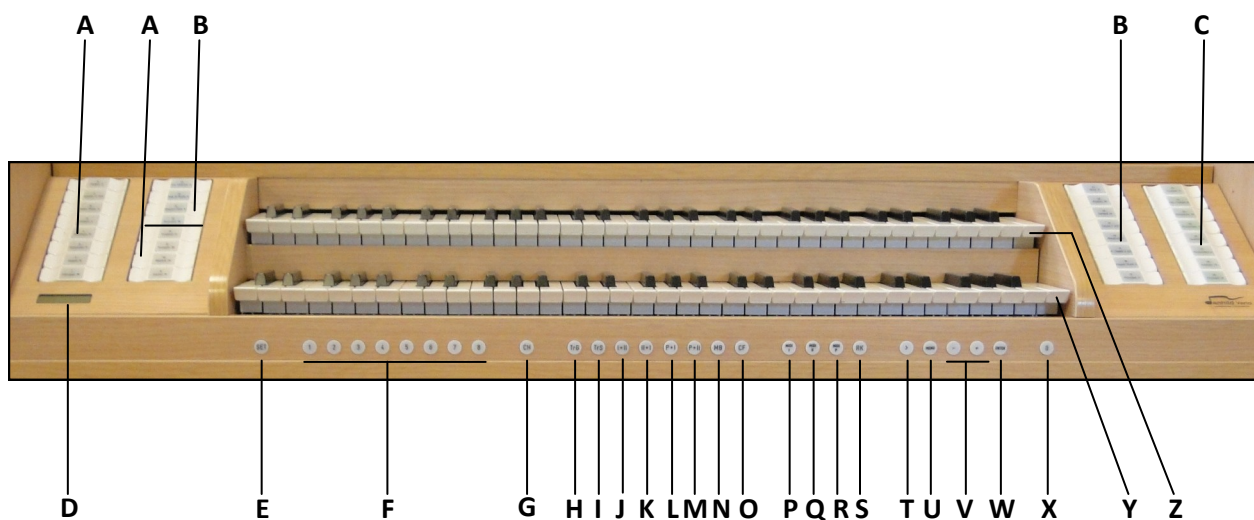


In spite of the built-in security sensors, the power of the lifting mechanisms is **VERY strong !**

THEREFORE: Do NOT leave minors unattended while using the height adjustment of either the Keyboards or the bench ! Always be very careful during any adjustment !

The manufacturer, distributors and dealers will therefore not in any way become responsible for any personal accidents and injuries!

3.8 Overview of controls



A	Great stops (Black)
B	Swell stops (Blue)
C	Pedal stops (Green)
D	Display
E	SET: Programming capture system
F	(1 - 8): Capture memory locations
G	CH: Chorus
H	TrG: Tremulant - GREAT
I	TrS: Tremulant - SWELL
J	I+II: SWELL to GREAT (couples all keys from Swell to Great)
K	II+I: GREAT to SWELL (couples all keys from Great to Swell)
L	P+I: GREAT to PEDAL (couples keys from Great to Pedal)
M	P+II: SWELL to PEDAL (couples keys from Swell to Pedal)
N	MB: Manual Bass (Chosen stops on Pedal will be played as lowest tone on Great)
O	CF: Cantus Firmus (Chosen stops on Swell will be played as highest tone on Great)
P	MIDI I: Midi control of external Midi unit, lower keyboard
Q	MIDI II: Midi control of external Midi unit, upper keyboard
R	MIDI P: Midi control of external Midi unit, pedal
S	RK: Reverse keyboards (Great will be played from the upper keyboard)
T	>: Memory Step forward
U	MENU
V	- and + pistons
W	ENTER
X	0: Recall / Reset
Y	Manual Great

3.9 Connect and switch on the peripherals

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

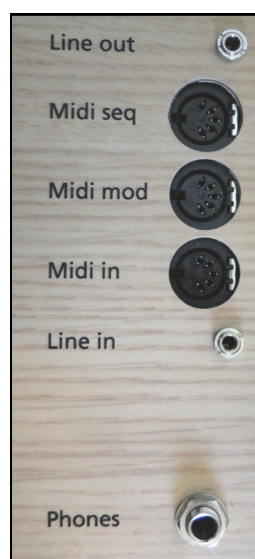


Follow the instructions provided in the documentation for the accessory.

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

3.10 External connections

The external connections are on the top of the organ to the left.



Midi seq: A non-programmable MIDI output for connecting a sequencer or PC, for example.

Midi mod: A programmable MIDI output for connecting a sound module or expander, for example.

Midi in: An input for receiving MIDI codes from other devices.

Line in: A stereo audio 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.

Line out: A stereo audio output for connecting an external device (amplifier or recording device, for example).

Phones:

The phones connection is at the left on the top plate next to the Midi connections. This connection for a (stereo) headphone is suited for a headphone with an impedance of 30 Ω or more (see headphone specifications).



When the headphone is used, the loudspeakers of the organ are switched off automatically.

4 OPERATION

4.1 General Volume

Organ: You can adjust the volume of the organ in 30 steps in the menu.

The volume level can be read directly on the display.

1. Press the MENU piston.
2. Use the - and + pistons to select the General Volume function on the display.
3. Press the ENTER piston.
The current volume level appears on the display.
4. Use the - and + pistons to select the desired volume level.
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
General Volume

General Volume
level 25

Menu:
General Volume

Mem: 1	Vol: 25
Tr: 0/440	Exp: SW

4.2 Expression pedal

With the expression pedal the volume of the Swell can be changed. Using the expression pedal also changes the timbre of the Swell stops. By this the effect of a swell box of a pipe organ is simulated.

4.3 Surround Reverb

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

The Danhild Reverb system contains a variety of 4.800 combinations per intonation style.

The reverb length can be set using the Menu. See § 4.9.5.

The length can be set for each intonation style.

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

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

See § 4.9.5 for assigning a reverb to an intonation style.

4.4 Intonation styles

The organ has four intonation styles:

Romantic (ROM), Symphonic (SYM), Baroque (BAR) and Historic (HIS).

Select an intonation style, ROM, SYM, BAR or HIS in the menu, see Intonation § 4.9.1.

When you have pressed ENTER the chosen Intonation will become the default by next Switch on.

4.5 Stops

The stops are activated via rocker tab switches or capture memory locations.

The lamp in the rocker tab switch lights up, when the associated stop is active.

The stops are divided into three groups:

Pedal: Activates the stops associated with the Pedal. (Green rocker tab switches)

Great: Activates the stops associated with the Great. (Grey rocker tab switches)

Swell: Activates the stops associated with the Swell. (Blue rocker tab switches)

4.6 Couplers

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. (P + I)

SWELL - PEDAL: Fully couples all keys of the Swell to the Pedal. (P + II)

Manual Bass:

Couples the Pedal monophonic to the Great. Only the lowest key that is played on the Great is coupled from the Pedal to the Great.

Activate the Manual Bass with the MANUAL BASS button. (MB)

If only the lowest key of a chord is released, the pedal key activated by the Manual Bass function is dropped until a new lowest key is played.

This should prevent the bass keys from "jumping".

4.7 Accessories

Chorus (CH):

Chorus 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.

Recall / Reset function (0):

The 0 piston cancels registration in two ways:

1. A short press on the 0 piston: Only the last change is cancelled.
2. A long press on the 0 piston: All stops in the current registrations are cancelled.

4.8 Capture memory (Setzer-combinations):

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 can be seen on the display (Mem: ...). Each level has eight memory locations (thumb pistons 1-8). The 400 capture memory locations are not pre-programmed and can be programmed by the musician.

Programming a capture memory location:



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

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

Calling up 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 (1-8). The active stops light up.

4.9 Danhild VARIO Menu

In the Menu several functions of the organ can be set.

Press the MENU piston to activate the Danhild Vario Menu on the display.

Navigating the menu is done with the - and + pistons.

Confirmation of a choice is done with the ENTER button.

Cancel or step back in the menu is done with the MENU button.

The Danhild VARIO Menu consists of the following functions:

Function	More info:
Intonation	§ 4.9.1
Transposer	§ 4.9.2
Tuning	§ 4.9.3
Temperaments	§ 4.9.4
Reverb Settings	§ 4.9.5
Startup Settings	§ 4.9.6
Keyboard Config	§ 4.9.7
MIDI Config	§ 4.9.8
Datadump	§ 4.9.9
Display Contrast	§ 4.9.10
Expression pedal	§ 4.9.11
General Volume	§ 4.9.12
Key Volumes	§ 4.9.13
Reset Procedures	§ 4.9.14
Version	§ 4.9.15

4.9.1 Intonation

Organ: You can adjust the intonation of the organ in the menu.

The intonation style can be read directly on the display.

1. Press the MENU piston.
2. Use the - and + pistons to select the intonation function on the display.
3. Press the ENTER piston.
The current intonation appears on the display.
4. Use the - and + pistons to select the desired intonation.
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
Intonation

Intonation
Baroque

Intonation
Historic

Menu:
Intonation

Mem: 1
Tr: 0/440

4.9.2 Transposer

Organ: You can adjust the transposition in semi tones in the menu.

The transposition level can be read directly on the display.

1. Press the MENU piston.
2. Use the - and + pistons to select the Transposition function on the display.
3. Press the ENTER piston.
The current transposition level appears on the display.
4. Use the - and + pistons to select the desired transposition level.
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
Transposition

Transposition
0 Semi Tones

Transposition
+ 3 Semi Tones

Menu:
Transposition

Mem: 1
Tr: +3/440

4.9.3 Tuning

The Tuning function shifts the pitch in steps of 1 Hz from 426 Hz to 454 Hz (standard pitch is a = 440 Hz).

The current pitch can be read on the display directly behind the transposer setting.

1. Press the MENU piston.
2. Use the - and + pistons to select the Tuning function on the display.
3. Press the ENTER piston. The current tuning setting appears on the display.
4. Use the - and + pistons to select the desired pitch.
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
Tuning

Tuning
440 Hz

Menu:
Tuning

Mem: 1
Tr: 0/443

4.9.4 Temperaments

The Temperaments function sets the temperament.



This setting cannot be saved. When the organ is switched off and on again, it is set to Equal automatically.

1. Press the MENU piston.
2. Use the - and + pistons to select the Temperaments function on the display.
3. Press the ENTER piston. The current temperament appears on the display.
4. Use the - and + pistons to select the desired temperament. There is choice out of eleven different temperaments:
 Equal (normal temperament)
 Young II
 Vallotti
 Kirnberger III
 Kirnberger II
 Neidhardt III
 Werckmeister III
 1/6 Meantone (1/6 comma meantone)
 1/5 Meantone (1/5 comma meantone)
 1/4 Meantone (1/4 comma meantone)
 Pythagorean

Menu:

Temperaments

Temperaments

Equal

5. Press the MENU piston to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:

Temperaments

Mem: 1

Tr: 0/440

4.9.5 Reverb Settings

The Reverb Settings function is used to change reverb settings for each separate intonation style. The setup provides you a choice of 4.800 reverb combinations.

1. Select the intonation style, ROM, SYM, BAR or HIS, in the menu (see §4.9.1) the reverberation of which must be changed.
2. Press the MENU piston.
3. Use the - and + pistons to select the Reverb Settings function on the display.
4. Press the ENTER piston. The first function of the Reverb Settings appears on the display.
5. Use the - and + pistons to select the desired reverb function which has to be changed. The following functions are available:
 Reverb Program, Reverb Length,
 Reverb Volume and Reverb 3D Surround.
6. Press the ENTER piston to confirm. The activated intonation style appears on the first line of the display.

Menu:

Reverb Settings

Reverb Settings

Reverb Program

Romantic

Town Church

7. Use the - and + pistons to change the setting of the selected reverb function.
8. Press the ENTER piston to confirm and to return to the Reverb Settings menu.
9. Press the MENU piston to return to the main menu.
10. Press the MENU piston to exit the menu.

Reverb Settings
Reverb Program

Menu:
Reverb Settings

Mem: 1
Tr: 0/440

4.9.6 Startup Settings

The Startup Settings function is used to select the startup defaults for Chorus and intonation style.

1. Press the MENU piston.
2. Use the - and + pistons to select the Startup Settings function on the display.
3. Press the ENTER piston. The first option of the Startup Settings appears on the display.
4. Use the - and + pistons to select the desired start up setting which has to be changed. The following options are available:
Chorus On/Off and Default Into.
5. Press the ENTER piston.
6. Use the - and + pistons to select the desired setting.
- Under Chorus On/Off there is a choice for on or off.
- Under Default Into. there is a choice for one of the four intonation styles: Romantic, Symphonic, Baroque or Historic.
7. Press the ENTER piston to confirm and to return to the Startup Settings menu.
8. Press the MENU piston to return to the main menu.
9. Press the MENU piston to exit the menu.

Menu:
Startup Settings

Startup Settings
Chorus On/Off

Startup Settings
Chorus On/Off

Menu:
Startup Settings

Mem: 1
Tr: 0/440

4.9.7 Keyboard Config

The Keyboard Config function 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 ENTER piston. The display shows the current setting of one of the manuals.
4. Use the - and + pistons to select the manual the setting of which must be changed.
5. Press the ENTER piston. The cursor moves to the second line of the display.
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 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 touch-sensitive (force).
7. Press the ENTER piston. The keyboard setting is now saved in the memory and the cursor moves back to the first line of the display.
8. Press the MENU piston to return to the main menu.
9. Press the MENU piston to exit the menu.

Menu:
Keyboard Config

>Great
Automatic

>Great
Automatic

>Great
Automatic

Menu:
Keyboard Config

Mem: 1
Tr: 0/440

4.9.8 MIDI channel Config

MIDI is a protocol for communication between the organ and other devices, such as PC, Sequencer or other musical instruments. MIDI means **M**usic **I**nstrument **D**igital **I**nterface.

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

The four parts of the programmable MIDI code are: Channel, Msb, Lsb and Voice.

1. Press the MENU piston.
2. Use the - and + pistons to select the MIDI Config function on the display.
3. Press the ENTER piston. A question to select a MIDI stop to configure appears on the display.
4. Activate the MIDI stop which has to be configured (MIDI from the Swell, for example).
The display shows on the first line: *Swell Channel* (the selected MIDI stop and the first part of the MIDI code) and on the second line the settings of all four parts: Channel, Msb, Lsb and Voice.

Menu:
MIDI Config

Select a MIDI
Stop to config

Swell Channel
2 0 0 1

5. Use the - and + pistons to select the desired MIDI-channel.

6. Press the ENTER piston. The display shows:
Swell Msb

Swell Msb

2 0 0 1

7. If needed, use the - and + pistons to select the desired Msb setting.

8. Press the ENTER piston. The display shows: Swell Lsb.

Swell Lsb

2 0 0 1

9. If needed, use the - and + pistons to select the desired Lsb setting.

10. Press the ENTER piston. The display shows:
Swell Voice.

Swell Voice

2 0 0 1

11. Use the - and + pistons to select the desired Voice setting.

12. Press the ENTER piston.
The selected configuration is now stored in memory.
The first of the four parts of the programmable MIDI code appears on the display.

Swell Channel

2 0 0 1

13. Press the MENU piston to return to the main menu.

Menu:

MIDI Config

14. Press the MENU piston to exit the menu.
(You can read about MIDI codes on page 27)

Mem: 1

Tr: 0/440

4.9.9 Datadump

The Datadump function sends settings from the organ to a storage medium

(a sequencer, for example) through the MIDI SEQ output. See § 3.9 (External Connections).

The settings to send are: the content of all capture memory locations and all settings which can be set via the Danhild VARIO Menu, except Key Volumes. Key Volume settings are a part of the intonation data.

1. Press the MENU piston.

Menu:

2. Use the - and + pistons to select the Datadump function on the display.

Datadump

3. Press the ENTER piston. The Press ENTER-text appears on the display.

Datadump

Press ENTER

4. Make sure your storage medium is properly connected.

5. Press the ENTER piston. When data is being sent, Sending data... appears on the display.
Sending data will take some time.

Datadump

Sending data...



Do not use the organ when the Sending data... text is on the display.

6. If the data dump is complete, the main menu appears on the display.

Menu:

Datadump

7. Press the MENU piston to exit the menu.

Danhild Mem: 1

Tr: 0/440

Uploading data can be done in any moment, when the organ is switched on and needs no choice from the Danhild Menu system !

4.9.10 Display Contrast

The Display Contrast function adjusts the display contrast.

1. Press the MENU piston.
2. Use the - and + pistons to select the Display Contrast function on the display.
3. Press the ENTER piston. The current contrast level appears on the display.
4. Use the - and + pistons to select the desired contrast level.
5. Press the ENTER piston to confirm and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
Display Contrast

Display Contrast
Level: 9

Menu:
Display Contrast

Mem: 1
Tr: 0/440

4.9.11 Expression Pedal

The Expression Pedal function sets the desired expression on the divisions.

General Swell: Expression on both divisions.

Swell on Swell: Expression on swell division.

1. Press the MENU piston.
2. Use the - and + pistons to select the Expression Pedal function on the display.
3. Press the ENTER piston.
The current setting appears on the display
4. Use the - and + pistons to select the desired Expression.
 - General Swell
 - Swell on Swell
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:
Expression Pedal

Expression Pedal
General Swell

Expression Pedal
Swell on Swell

Menu:
Expression Pedal

Mem: 1
Tr: 0/440

4.9.12 General Volume

The General Volume function adjusts the total volume in 30 steps.

The volume level can be read directly on the display.

1. Press the MENU piston.
2. Use the - and + pistons to select the General Volume function on the display.
3. Press the ENTER piston.
The current volume level appears on the display.
4. Use the - and + pistons to select the desired volume level.
5. Press the ENTER piston to store the selected setting in the memory and to return to the main menu.
6. Press the MENU piston to exit the menu.

Menu:

General Volume

General Volume

level 25

Menu:

General Volume

Mem: 1

Vol: 25

Tr: 0/440

Exp: SW

4.9.13 Key Volume functions



If you are asked to enter a code, the Key Volume functions have been secured at the request of the owner. Contact the owner or dealer to retrieve the code. Enter the code using the pistons of the capture memory locations and press the ENTER piston.

Enter code:

The Key Volume functions consist of the following subfunctions (which you should use with care):

Adjust
Reset one stop
Reset ALL stops

Adjust

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

1. Switch off all stops.
2. Select an intonation style.
3. Press the MENU piston.
4. Use the - and + pistons to select the Key Volumes function on the display.
5. Press the ENTER piston.
6. Use the - and + pistons to select the Adjust function on the display.
7. Press the ENTER piston. A question to select a stop to adjust appears on the display.
8. Activate one stop. A question to press a key appears on the display.

Key: press a key

Vol: -/+

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.

Key: 3 C

Vol: 83 -/+

10. Use the - and + pistons to set the desired volume.

11. Press the ENTER piston to save the change.

12. The display requests confirmation. Use the

- and + pistons to select **No** or **Yes**.

Save changes?

No/Yes

13. Press the ENTER piston for confirmation.

14. Press the MENU piston to return to the main menu.

Menu:

Key Volumes

15. If the changes have not been saved, the display will show **Discard changes?**.

If no changes have to be saved use the - and + pistons to select **Yes** and press the ENTER piston.

Discard changes?

No/Yes

16. If the changes have to be saved use the - and + pistons to select **No** and press the ENTER piston.

Key: press a key

Vol: -/+

17. Press the ENTER piston. The display requests confirmation.

Save changes?

No/Yes

18. Use the - and + pistons to select **Yes**. Press the ENTER piston for confirmation.

19. Press the MENU piston to return to the main menu.

Menu:

Key Volumes

20. Press the MENU piston to exit the menu.

Studio Mem: 1

Tr: 0/440



More key volumes can be changed by pressing another key or by selecting another stop.

Reset one stop

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

1. Switch off all stops.
2. Select an intonation style.
3. Press the MENU piston.
4. Use the - and + pistons to select the Key Volume functions on the display.

Menu:

Key Volumes

5. Press the ENTER piston.

6. Use the - and + pistons to select the Reset one stop function on the display.

Key Volumes

Reset one stop

7. Press the ENTER piston. A question to select a stop to reset appears on the display.

Select a stop

to reset

8. Activate one stop.
9. The display requests confirmation. Use the - or + pistons to select **No** or **Yes**.
10. Press the ENTER piston to confirm and to return to the Key Volumes menu.
11. Press the MENU piston to return to the main menu.
12. Press the MENU piston to exit the menu.

Reset this stop?

No/Yes

Key Volumes

Reset one stop

Menu:

Key Volumes

Mem: 1

Tr: 0/440

Reset ALL stops

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

1. Select an intonation style.
2. Press the MENU piston.
3. Use the - and + pistons to select the Key Volumes function on the display.
4. Press the ENTER piston.
5. Use the - and + pistons to select the Reset ALL stops function on the display.
6. Press the ENTER piston.
7. The display requests confirmation. Use the - and + pistons to select **No** or **Yes**.
8. Press the ENTER piston to confirm and to return to the Key Volumes menu.
9. Press the MENU piston to return to the main menu.
10. Press the MENU piston to exit the Menu.

Menu:

Key Volumes

Key Volumes

Reset ALL stops

Reset ALL stops?

No/Yes

Key Volumes

Reset ALL stops

Menu:

Key Volumes

Mem: 1

Tr: 0/440

4.9.14 Reset Procedures

The Reset Procedures function is used to reset a number of 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 ENTER piston. The first option of the Reset Procedures appears on the display.
4. Use the - and + pistons to select the desired reset 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 pre-programmed memory locations.
 - Reverb default: Resets the factory settings of the reverb.
5. Press the ENTER piston. The display requests confirmation.
6. Use the - and + pistons to select No or Yes.
7. Press the SET piston for confirmation and to return to the Reset Procedures menu.
8. Press the MENU piston to return to the main menu.
9. Press the MENU piston to exit the menu.

Menu:
Reset Procedures

Reset Procedures
Memory default

Memory default
No/Yes

Reset Procedures
Memory default

Menu:
Reset Procedures

Mem: 1
Tr: 0/440

4.9.15 Version

The Version function shows the version number of the software of the organ.

1. Press the MENU piston.
2. Use the - and + pistons to select the Version function on the display.
3. Press the ENTER piston. The data of the software of the organ appears on the display.
4. Press the MENU piston to return to the main menu.
5. Press the MENU piston to exit the menu.

Menu:
Version

Danhild Vario
OC 2 13 11 4

Menu:
Version

Mem: 1
Tr: 0/440

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 Maintenance of the cabinet



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 remedies 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

Problem	Cause	Solution
Pedal board does not work properly	The pedal magnet is making poor contact with the magnetic switch at the rear of the pedal front cover.	Reposition the pedal board. See § 3.1.3
Organ functions do not work properly	The organ is not earthed.	Connect the organ to an earthed power socket.

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 **Skandinavisk Orgelcentrum**.

6 MIDI IMPLEMENTATIONS

6.1 MIDI Implementation Chart

Danhild VARIO Organ

Date: May 2015, Version 1.00

MIDI Implementation card

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: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

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

Y=YES
N=NO

See MIDI specs and MIDI codes on page 27

6.2 MIDI Specifications

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

Default basic channels (transmitted/recognized)

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

Basic channel changes (transmitted)

Can be programmed through the MIDI Channel Config. See § 4.9.8.

Control changes (transmitted)

Controller 7 (07h) General volume, with volume values 40 (28h) - 127 (7Fh).

Controller 11 (0Bh) Expression pedal, with volume values 55 (37h) - 127 (7Fh).

Controller 6 (06h) Pitch, with pitch values 28 (1Ch) - 99 (63h).

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 56 (38h) - 72 (48h).

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).

Volume values less than 40 (28h) are treated as 40 (28h).

Controller 11 (0Bh) Expression Pedal, with volume values 0 (00h) - 127 (7Fh).

Volume values less than 55 (37h) are treated as 55 (37h).

Program changes (transmitted/recognized)

Organ stops: Depends on the number of stops and the sequence of stops.

MIDI stops (programmable): 1-128. See § 4.9.8.

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 is generally used: 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 longer time. When an 'all stops off' sys ex code is received, all stops on the instrument are switched off.

About MIDI codes [MSB](#) (Most Significant Byte) and [LSB](#) (Least Significant Byte) information.

Low-cost synthesizers may only read the MSB thus giving you only 128 distinct values.
Better synths will apply both the MSB and LSB to Pitch Bend giving you 16,384 steps.

The official MIDI Spec has set aside LSB values for [Continuous Controllers](#) ranging between CC#0 to CC#31 (which are themselves used as MSB values).
The LSB values for those are defined by the value of CC#32 through CC#63.
These are paired off like: CC#0 = MSB & CC#32 = LSB, CC#1 = MSB & CC#33 = LSB, etc.

For now, there's not much you can do with this if your Controller doesn't send LSB or if your synth doesn't receive LSB on Continuous Controllers. The one exception is CC#0/CC#32 which is Bank Change MSB/LSB.

Unfortunately, each synth company independently interpreted which CC# was MSB and which CC# was LSB.
So now most synths just listen to both CC#0 and CC#32 and pretend both of them are MSB for Bank Change (a.k.a. [Bank Select](#)). This will cause problems in the future someday when synths have hundreds of Banks.

For MIDI specs in general go to https://en.wikipedia.org/wiki/General_MIDI

7 TECHNICAL SPECIFICATIONS

Disposition

GREAT		SWELL		PEDAL	
1	Principal 16'	13	Bourdon 16'	25	Principal 16'
2	Octave 8'	14	Stopped Flute 8'	26	Subbass 16'
3	Salicional 8'	15	Viola di Gamba 8'	27	Octavebass 8'
4	Rohrflute 8'	16	Vox Celeste 8'	28	Gedackt 8'
5	Octave 4'	17	Principal 4'	29	Choralbass 4'
6	Open Flute 4'	18	Koppel Flute 4'	30	Bombarde 32'
7	Quint 2 2/3'	19	Fl Quint 2 2/3'	31	Contra Trumpet 16'
8	Octave 2'	20	Waldflute 2'	32	Trumpet 8'
9	Cornet IV	21	Tierce 1 3/5'		
10	Mixture IV	22	Scharff III		
11	Trumpet 16'	23	Fagotto 16'		
12	Trumpet 8'	24	Oboe 8'		

Danhild Menu System

Intonations Romantic, Symphonic, Baroque, Historic

Transposer

Tuning (Pitch Fine Tune)

Temperaments (11)

Reverb Settings (4800 combinations)

Start up Settings Intonation 1, 2, 3 or 4 Keyboard Choice CH on/off

Keyboard Config (auto, upper/lower contact, velocity)

MIDI Channel Choose for MIDI out

MIDI dump (to store settings to computer)

Display Contrast

Expression Pedal Config (Swell or both)

General Volume

Key Volume

Reset Procedures

Version of Danhild Vario organ

Dimensions

Height (excluding music stand)	106 cm
Height (including music stand)	137 cm
Width	135 cm
Depth (excluding pedal board)	64 cm
Depth (including pedal board and bench)	110 cm
Weight (incl. Pedal keyboard and bench)	Approximately 150 kg

Finish

Light oak laminate is standard

Optional dark oak, mahogany or black laminate

Manuals (electrical adjustable 26 cm is standard)

Synthetic keyboards (61 keys with valve touch)	standard
Same as above with wooden core	optional
Mechanical fully adjustable Wooden keyboards	optional

Pedal board

30-note BDO straight pedal board	standard
30-note BDO concave pedal board	optional
30-note AGO pedal board	optional

Expression pedal

Expression pedal with choice of function (Swell/both)

Bench

Bench electrical adjustable 29 cm is standard

External connections

MIDI (In, MOD-out, SEQ-out)	standard
Line In	standard
Line Out	standard
Phones > 30 Ohm	standard

Audio

330 Watt total 5-speaker full range Danhild system

Reverb system

4800 combinations

Intonation styles

Romantic, Symphonic, Baroque, Historic

Programmable Setzer memory (capture system)

600 memories with step forward function

THUMB	PISTONS
1	Set
2	1
3	2
4	3
5	4
6	5
7	6
8	7
9	8
10	Chorus
11	Tremulant Great
12	Tremulant Swell
13	I + II
14	II + I
15	P + I
16	P + II
17	Manual Bass
18	Cantus Firmus
19	Midi Out I
20	Midi Out II
21	Midi Out P
22	Reverse Keyboards
23	Setzer Step Forward
24	Menu
25	-
26	+
27	Enter
28	Stops Off

Special Functions

4 Couplers

2 Tremulants

RK (Reverse Keyboards) - Great will be played from the upper keyboard

CF (Cantus Firmus) - Chosen stops on Swell will be played as highest tone on Great

MB (Manual Bass) - Chosen stops on Pedal will be played as lowest tone on Great

CH (chorus) - Detuning of all chosen stops - More stops = More detuning