Systemair AB reserves the rights to alter their products without notice.
This also applies to products already ordered, as long as it does not affect the previously agreed specifications.
Contents

1 General ................................................................. 1
   1.1 Start-up wizard ............................................. 2
   1.2 Key board .................................................... 3
   1.3 Symbol description ........................................ 3
   1.4 User levels .................................................. 4

2 Alarms ................................................................. 4
   2.1 Alarm list ..................................................... 4

3 Controller settings ................................................... 5
   3.1 Data & Settings ............................................... 5
      3.1.1 Operation overview .................................... 5
      3.1.2 In- and output status ................................... 5
      3.1.3 Temperature control .................................... 6
      3.1.4 Fan control ............................................. 6
      3.1.5 Demand control ......................................... 6
      3.1.6 Fire/Smoke ............................................... 6
      3.1.7 Humidity control ....................................... 7
   3.2 Flow chart .................................................... 7
   3.3 Language ....................................................... 7
   3.4 Time Settings ................................................ 8
   3.5 Configuration ................................................ 9

4 Advanced HMI (Human Machine Interface)
   Settings .......................................................... 10

5 No communication ...................................................... 11
1 General

NaviPad is Systemair's user interface with a 7" capacitive touch screen. The user interface provides operation information about the connected air handling units and allows you to control all functions. You navigate by pressing the touchscreen, to activate a function, change setting or by reading values in real time.

After 5 min inactivity the screen activate sleep mode, you return to the screen you left by pressing the touchscreen. After additional 10 min. inactivity you return to the system overview dashboard (figure 3) and have to log in again.

Editable text and values are shown in blue and differs depending on user level.

Since the user interface of the air handling unit consists of a web server with web pages it is possible to use a computer to browse the user interface. Identify the IP address of the air handling unit with NaviPad, see Example 4 and then write it in the address field of an internet browser.

---

**Important**

- The air handling unit and the NaviPad as well as any computer has to be connected on a local network with the same IP subnet.
- Chrome browser for computer is supported to navigate the web pages of the air handling unit.

---

![Fig. 1](image1.png)

Fig. 1 (1) Home button, (2) USB connection, reboot button, (3) power supply and communication

![Fig. 2](image2.png)

Fig. 2 Holder for NaviPad, (1) fixing points, (2) cable hook

Attach holder to air handling unit with enclosed screws (wall mounting is also possible, use fastenings suitable to the walls structure).
1.1 Start-up wizard

At the first start up of NaviPad you need to calibrate the screen by pressing lightly on the cross marks.

Then you will be requested to fill in following information:

- Language
- Time & Date

Available air handling units will be shown in the device list. Choose the air handling unit you want to pair with your NaviPad. Use the controller’s serial number in the air handling unit to be sure to pair the correct air handling unit with NaviPad.

If the start-up wizard is cancelled it will start again during next power up of the NaviPad, this will continue until start-up wizard is successfully finished.

Version: PR1.2 (1.1.0.128) and later

After the start-up wizard is completed the system overview dashboard is shown. Press on the picture of the air handling unit to access.

Figure 3: System dashboard
Figure 4: The home page shows an overview of the air handling unit operation status.

Note:
You can always return to system overview dashboard by pressing the home button, figure 1, (1).

1.2 Key board
When a name, value or password need to be changed/written a key board will appear at the bottom of the touchscreen.

1.3 Symbol description

Home (home page)
Data and settings
Shows operating information and settings
Flow diagram
A schematic overview of the air handling unit and its components
Language
Change language
Time and date
Weekly schedule
Configuration
Alarm and functions configurations, I/O allocation settings
Alarm symbol, indicates if there are active alarms. One press on the symbol will direct you to the alarm list.
1.4 **User levels**

[Diagram of user levels]

- **End user** - When logged out
  - Read/write — Home page (Figure 1)
  - Possible actions in end user mode are to stop the air handling unit for maintenance (e.g. filter exchange), change the time for extended run and change the temperature setpoint.
  - Flow diagram and active alarms in alarm list are visible.

- **Operator mode** — log in with 1111
  - Logged in
  - Read and write privileges (except Configuration).
  - Acknowledge/block/unblock alarms and view the alarm history.

- **Service mode** — log in with 0612
  - Logged in
  - Full read and write privileges.

2 **Alarms**

A LED-light in the home button, figure 1, (1) indicate the status of the air handling unit.

- Fixed green — Status ok (no active alarms).
- Flashing red — Active/returned alarms in one or several air handling units.
- Fixed red — Acknowledgedblocked alarms in one or several air handling units, alarms not reset.

**Different alarm levels**

- **Class A alarm**
  - Needs to be acknowledged

- **Class B alarm**
  - Needs to be acknowledged

- **Class C alarm**
  - Returns when the cause of the alarm disappear

2.1 **Alarm list**

[Table of alarm list]

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter guard 1</td>
<td></td>
<td>Alarmed</td>
</tr>
</tbody>
</table>

- **Alarm status:**
  - Alarmed
  - Acknowledged
  - Blocked
  - Returned

  Accessible when pressing the alarm symbol.

Enter the current alarm and choose action; acknowledge, block or unblock.
3 Controller settings

Menus and functions may differ depending on actual configuration and/or application version running in the air handling unit.

3.1 Data & Settings

- Operation overview
- In-/Output status
- Temperature control
- Fan control
- Demand control
- Fire/Smoke
- Alarm list

3.1.1 Operation overview

Value of active signals
I/O signals and operation mode.
- Temperature
- Air flow/pressure
- CO2
- RH
- Heating
- Exchanger
- Cooler
- Recirculation

3.1.2 In- and output status

I/O status
Total overview of:
- Sensors
- I/O
- Fan control
- Temperature sequencing
- Running mode
All can be controlled in manual mode.
- Manual setting of temperature sensor
- Locking of fans at adjustment
- Manually I/O testing of external functions
- Raw values
3.1.3 **Temperature control**

Settings for temperature.
- Limit values
- **Setpoint for current control type (Example 1)**
- Min/max limitation
- Outdoor temperature values

**Example 1: Setpoint for current control type**

<table>
<thead>
<tr>
<th>Data &amp; Settings &gt; Temperature control &gt; Supply air controller</th>
<th>13 Dec 11:33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply air temperature</td>
<td>10.4 °C</td>
</tr>
<tr>
<td>Setpoint adjustment</td>
<td>0 °C</td>
</tr>
<tr>
<td>Setpoint adjustment low speed</td>
<td>0 °C</td>
</tr>
<tr>
<td>Setpoint adjustment high speed</td>
<td>0 °C</td>
</tr>
<tr>
<td>Setpoint Supply air</td>
<td>18 °C</td>
</tr>
</tbody>
</table>

Example show temperature control type set to supply air. To change the setpoint, press on the current value and change to desired setting in the following pop-up menu. Confirm with ok. (Editable text and values are shown in blue on NaviPad.)

3.1.4 **Fan control**

Settings for fan control.
- Setpoint for different fan speed
- Fan compensation e.g. outdoor compensated fan curves
- Start delay of fans, shut of dampers etc.
- SFP menu
- External fans

3.1.5 **Demand control**

Settings for:
- CO2
- Recirculation
- Support control
- Free cooling

3.1.6 **Fire/Smoke**

Settings for:
- Fire dampers
- Smoke detector status
- Fire damper test
3.1.7 Humidity control

Setpoints and settings for dehumidification and humidification

3.2 Flow chart

Dynamic flow chart of current configured air handling unit. Active sensors and components are visible with values shown in real time. When pressing on values or items marked in blue you will be forwarded to related settings and/or overview page.

3.3 Language

Settings of language.

- To synchronize NaviPad with all connected air handling units, go to system dashboard by pressing the home button figure 1, (1). Press and , choose language.

- Using in selected air handling units homepage via NaviPad or computer will only change language in the selected air handling unit.
### 3.4 Time Settings

In this menu date and time can be changed as well as other system settings.

**Settings for:**
- Date and time
- Schedule for operating time (Example 2 & 3)
- Schedule for holiday
- Schedule for extra time groups

Each day has up to two individual running periods, set desired start and stop time.

For holidays, set the dates in **Time settings > Schedule > Holiday calendar** and the time in **Time settings > Schedule > Fan Low Speed/Fan Normal Speed/High Speed**.

#### Example 2: Schedule for normal fan speed

<table>
<thead>
<tr>
<th>Time settings &gt; Schedule &gt; Fan Normal Speed</th>
<th>13 Dec 11:33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday (12-hour clock system)</td>
<td></td>
</tr>
<tr>
<td>Start</td>
<td>5:00 AM</td>
</tr>
<tr>
<td>Stop</td>
<td>6:00 PM</td>
</tr>
<tr>
<td>Start</td>
<td>12:00 AM</td>
</tr>
<tr>
<td>Stop</td>
<td>12:00 AM</td>
</tr>
<tr>
<td>Monday (24-hour clock system)</td>
<td></td>
</tr>
<tr>
<td>Start</td>
<td>05:00</td>
</tr>
<tr>
<td>Stop</td>
<td>18:00</td>
</tr>
<tr>
<td>Start</td>
<td>00:00</td>
</tr>
<tr>
<td>Stop</td>
<td>00:00</td>
</tr>
</tbody>
</table>

In above example, the air handling unit starts at a normal fan speed at 5:00 AM (05:00) and stops at 6:00 PM (18:00). The second running period is deactivated.

#### Example 3: Schedule for low fan speed

<table>
<thead>
<tr>
<th>Time settings &gt; Schedule &gt; Fan Low Speed</th>
<th>13 Dec 11:33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday (12-hour clock system)</td>
<td></td>
</tr>
<tr>
<td>Start</td>
<td>6:00 PM</td>
</tr>
<tr>
<td>Stop</td>
<td>24:00 AM</td>
</tr>
<tr>
<td>Start</td>
<td>12:00 AM</td>
</tr>
<tr>
<td>Stop</td>
<td>5:00 AM</td>
</tr>
<tr>
<td>Monday (24-hour clock system)</td>
<td></td>
</tr>
<tr>
<td>Start</td>
<td>18:00</td>
</tr>
<tr>
<td>Stop</td>
<td>24:00</td>
</tr>
<tr>
<td>Start</td>
<td>00:00</td>
</tr>
<tr>
<td>Stop</td>
<td>05:00</td>
</tr>
</tbody>
</table>

In above example, the air handling unit starts at a low fan speed at 6:00 AM (18:00) and stops at 24:00 AM (24:00). The second running period on low fan speed is between 12:00 AM (00:00) and 5:00 AM (05:00).
3.5 Configuration

- System settings
- Configuration wizard (Example 4)
- Function configuration (Example 5)
- I/O allocation settings
- Alarm configuration (Example 6)
- PID controllers

The configuration wizard is a menu that simplify the procedure to Activate and Configure common accessories and functions and Allocate its in- and outputs. The wizard makes necessary configurations automatically and guide the user through limited options.

Example 4: Configuration wizard

If the configuration wizard does not cover the desired accessory or function it can still be configured via the configuration menu.

Example 5: Function configuration

To activate a function go to Function activation. Choose function to activate and set Yes in the following pop-up menu. Values for the activated function are now visible and can be adjusted in Data Settings.

If required, allocate in- and outputs in I/O allocation settings.
Example 6: Alarm configuration

- **Configuration > Alarms**

  - Filter alarm supply air
  - Filter alarm extract air
  - Alarm low air flow
  - Freeze protection guard
  - Defrosting guard exchanger
  - Fire alarm
  - Smoke alarm

<table>
<thead>
<tr>
<th>Filter alarm supply air</th>
<th>13 Dec 11:33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action: No action</td>
<td></td>
</tr>
<tr>
<td>Level: Class B</td>
<td></td>
</tr>
<tr>
<td>Delay: 300 s</td>
<td></td>
</tr>
<tr>
<td>No: 53</td>
<td></td>
</tr>
<tr>
<td>Name: Filter alarm supply air</td>
<td></td>
</tr>
</tbody>
</table>

  - **Configuration > ... > Filter alarm supply air**

<table>
<thead>
<tr>
<th>Filter alarm supply air</th>
<th>13 Dec 11:33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action: No action</td>
<td></td>
</tr>
<tr>
<td>Level: Class B</td>
<td></td>
</tr>
<tr>
<td>Delay: 300 s</td>
<td></td>
</tr>
<tr>
<td>No: 53</td>
<td></td>
</tr>
<tr>
<td>Name: Filter alarm supply air</td>
<td></td>
</tr>
</tbody>
</table>

4 Advanced HMI (Human Machine Interface) Settings

Return to system overview dashboard by pressing on the home button, figure 1, (1). Go to Advanced HMI settings. Login required — 1111

- **NaviPad settings**

  - Home
  - Language
  - Time & Date setting
  - Advanced HMI settings
  - Restart NaviPad

- Available devices (air handling units) (Example 7)
- Change Password
- Ethernet setting: IP address can be configured to either obtain an IP address from a DHCP server (dynamic) or set manually as a static IP address
- Restore NaviPad Factory Settings (Example 8)
- Software Update

For further support setting a static IP address, see “Access Manual Communication”
Example 7: Available devices (air handling units)

The air handling unit will appear, press the button to select the air handling unit to pair it with the NaviPad. If there are several air handling units at the same IP subnet, a list of available air handling units will be presented.

The IP address of NaviPad itself is presented above the Select device header

Example 8: Restore NaviPad factory settings

You will be requested to confirm your action.

All settings including password will be reset and Start-Up wizard will run again.

5 No communication

If the above symbol are shown the communication to the selected air handling unit is lost. One reason could be that the IP number has changed. Go back to available devices (air handling units), figur 4, and first deactivate all the air handling units and then activate them again.