

NOOXS THINK TANK CONTROL

OPERATING INSTRUCTIONS



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INTRODUCTION

All NOOXS Think Tanks are delivered with parameters that are specifically tailored to the respective room size. Adjustments or changes to these values are therefore not necessary. Changes are only recommended if they need to be adapted to special requirements (e.g. more/less air intake) or the customer's specific conditions.

Scope

This user manual applies to all NOOXS Think Tank control systems (except for the Phone Booth)

From delivery date: week 29/2025.

For connection of the control system, see the NOOXS Think Tank assembly manual (WP_MB275).

1. DESCRIPTION OF COMPONENTS

Control

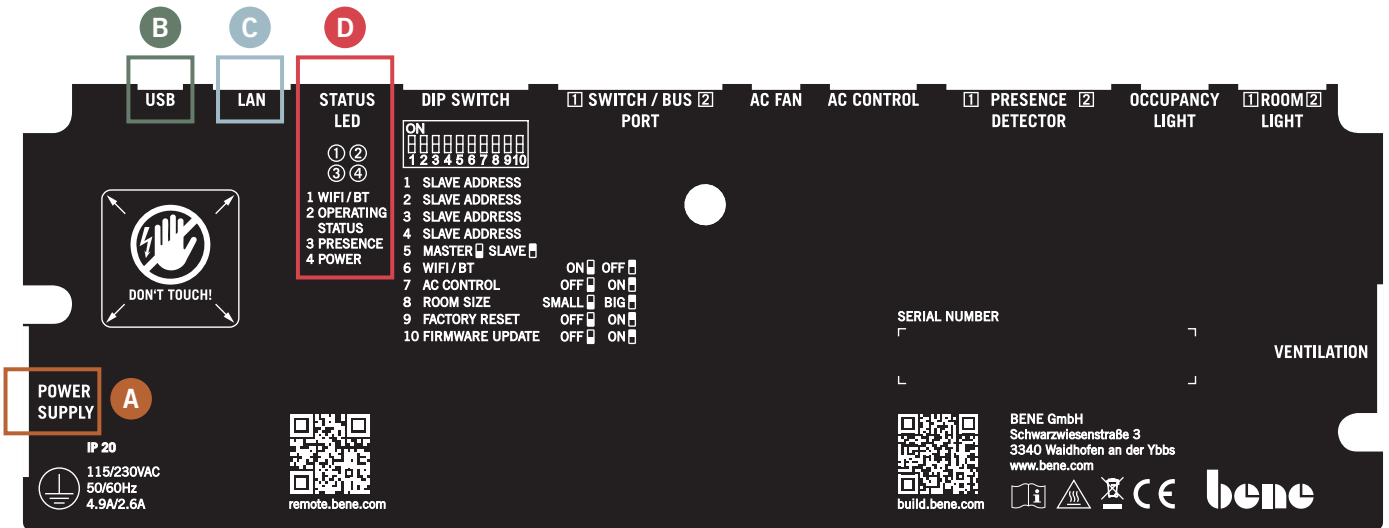
Position: on the ceiling of the NOOXS Think Tank

Connection of components (foil switch, light, ventilation, optional AC module → see assembly manual WP_MB275)



1. DESCRIPTION OF COMPONENTS

Sticker on the control housing

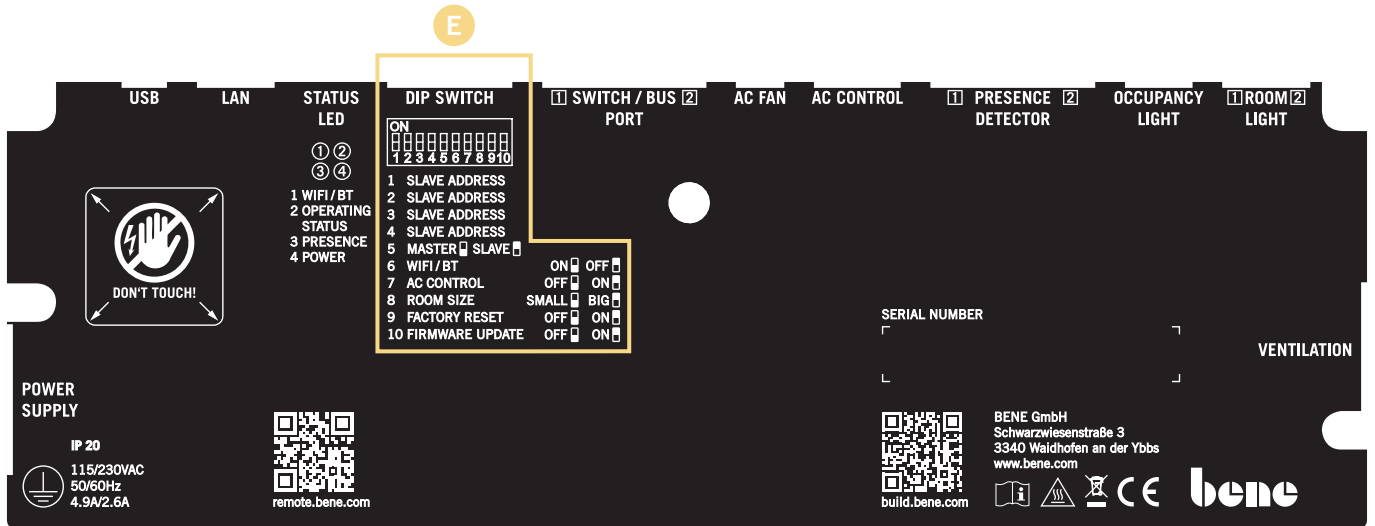


Power Supply: 115 / 230 VAC, 50 / 60 Hz, 4.9 A / 2.6 A
 Protection Class: IP 20
 Usage: For indoor use only

- A POWER SUPPLY**
 Connection point for the power supply (115 VAC or 230 VAC) via GST18 plug.
- B USB**
 Currently, the USB port is not in use. Under **no circumstances** should a USB storage device or any USB device be connected.
- C LAN**
 Currently, the LAN port is not in use. Only connect to this port after explicit instructions from Bene technical personnel.
- D STATUS LED**
 - 1 - WIFI/BT:** ON: Enables Bluetooth connection – CAUTION: The Bluetooth interface is only active when the control system has been set to maintenance mode via the foil switch on the door. When the **maintenance mode** is deactivated, this status LED will not light up. The WIFI (WLAN) function is currently not in use, so no WIFI signal (WLAN signal) is transmitted.
 - 2 - OPERATING STATUS:** A green LED indicates that both hardware and software are functioning correctly.
 - 3 - PRESENCE:** This LED lights up only when the motion detector detects presence. It is also used to check the proper functioning of the motion detector.
 - 4 - POWER:** Lights up green when power supply is active.

1. DESCRIPTION OF COMPONENTS

Sticker on the control housing



E DIP SWITCH

1 - 4 SLAVE ADDRESS: This function is exclusively for Bene service personnel.

5 MASTER/SLAVE: This function is exclusively for Bene service personnel.

6 WIFI/BLUETOOTH: To enable Bluetooth functionality for the maintenance mode, this switch must be set to „ON“. Set it to „OFF“, and the control system will not be able to establish a Bluetooth connection. If a Think Tank should not be adjustable in settings, this can be prevented using this switch. CAUTION: The WIFI (WLAN) function is currently not installed; no WIFI signal (WLAN signal) will be transmitted under any circumstances.

7 AC CONTROL: When an AC module (air conditioning) is connected to the Think Tank, this switch MUST be set to „ON“.

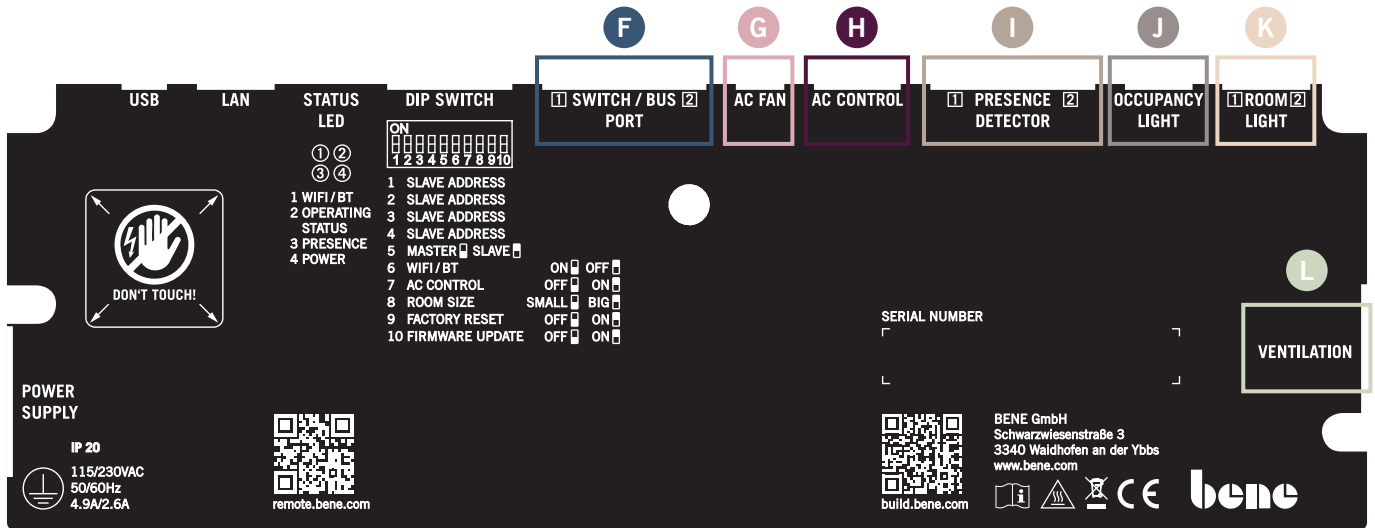
8 ROOM SIZE: During installation, the room must be correctly configured by the Bene installation team. Rooms with a width of up to 3000 mm are defined as „small rooms“, and larger rooms are defined as „big rooms“. This will load control parameters tailored to the room size. Settings can, of course, be manually overridden. If the configuration is reset to the factory preset, the system will load parameters corresponding to the room size set at the DIP switch.

9 FACTORY RESET: To overwrite the current settings and reset all parameters to factory settings, this switch must be set to „ON“. For further instructions, see section 4 – Resetting to Factory Settings.

10 FIRMWARE UPDATE: This function is exclusively for Bene service personnel. To apply a firmware update (Factory Reset), this switch must be set to „ON“. CAUTION: Firmware updates should only be applied after consultation with Bene’s technical department!

1. DESCRIPTION OF COMPONENTS

Sticker on the control housing



- F SWITCH / BUS PORT**
Connection point for the foil switch.
Connect to either Port 1 or 2.
- G AC FAN**
Connection point for the fan of the AC module.
- H AC CONTROL**
Connection point for the control of the AC module.
- I PRESENCE DETECTOR**
Connection point for the motion detector.
Connect to either Port 1 or 2.
- J OCCUPANCY LIGHT**
Connection point for the occupancy display.
- K ROOM LIGHT**
Connection point for the two LED light strips.
- L VENTILATION**
Connection point for the room air fan of the NOOXs Think Tank ceiling.

1. DESCRIPTION OF COMPONENTS

Membrane key

Position: Installed in the door frame (clip connection).

Variants

NOOXS Think Tank with AC module

Control of:

- Light
- Ventilation
- AC module
- On/off



NOOXS Think Tank without AC module

Control of:

- Light
- Ventilation
- On/off



NOOXS Think Tank semi-open

Control of:

- Light
- On/off



Function	Factory preset
Room light	Default-Level: 2 LED Colour: white Brightness: adjustable
Ventilation	Default-Level: 2 LED Colour: white Brightness: adjustable
AC module	Default-Level: 2 LED Colour: white Brightness: adjustable
Manual I/O	Default-Level: on LED Colour: RGB Colour management: in the web interface Brightness: adjustable

Default Colours „door switch manual I/O LED“ (factory preset):

→ see section 2 – factory settings – tab: colours

1. DESCRIPTION OF COMPONENTS

Web interface

Explanation: The web interface is used to adjust the modifiable values of the control system and can be accessed via the domain „remote.bene.com“.



remote.bene.com

Each NOOXS Think Tank is delivered with factory settings and is immediately ready for operation. **NO adjustments** to the settings are necessary for normal operation. Adjustments are only required if one or more settings, as outlined below, need to be changed.

Prerequisites

To change the values, a device (laptop, tablet, or smartphone) with an internet connection, Bluetooth functionality, and a Chrome-based browser (e.g., Chrome or Microsoft Edge) is required. Currently, only tablets or smartphones with Android operating systems version 13 or higher are supported. Devices with iOS (iPhone, iPad) cannot establish a connection at this time.

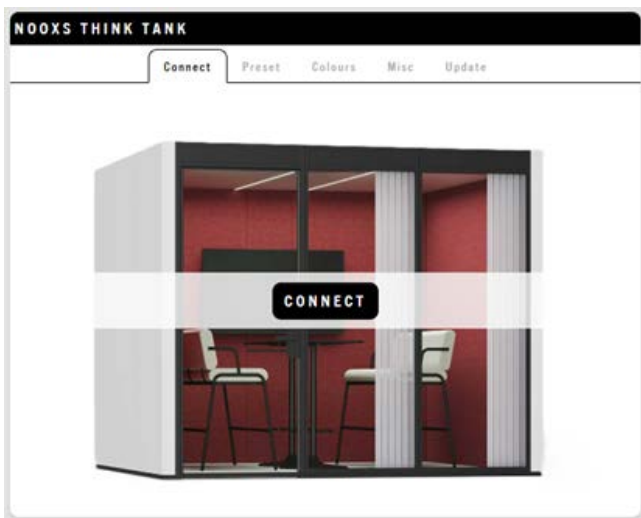
Contents/Setting options

- Tabs of the web interface
- Values for light, ventilation, and AC module including default values
- Colour of the occupancy display (occupancy light) for different statuses
- Colour of the on/off LED on the foil switch for different statuses
- Program timings (hold and wait times, flush time, flush intensity)
- Firmware update

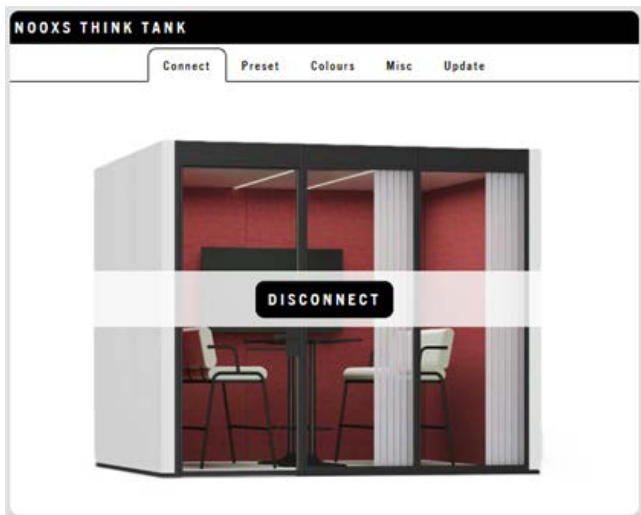
2. FACTORY SETTINGS

Tabs of the web interface

Homepage - no NOOXS Think Tank connected



Homepage - NOOXS Think Tank connected



2. FACTORY SETTINGS

Link: remote.bene.com

To change the values, a connection to the desired NOOXS Think Tank must first be established → see section 3 - Changing Values. Below is a list of the factory default settings for the individual parameters.

Tab: Preset - Active Room Type: Small Room (less than 3000 mm in width)

Function	Default	Off	Level 1	Level 2	Level 3
Light brightness	2	0 %	25 %	45 %	65 %
Ventilation	2	0 %	25 %	50 %	55 %
AC fan	2	0 %	25 %	75 %	100 %

Function	Default-Level	Off	Level 1	Level 2	Level 3	Notes
Light brightness (room)	2	0 %	25 %	45 %	65 %	
Ventilation	2	0 %	25 %	50 %	55 %	Values higher than 70% will lead to increased noise inside!
AC fan	2	0 %	25 %	75 %	100 %	

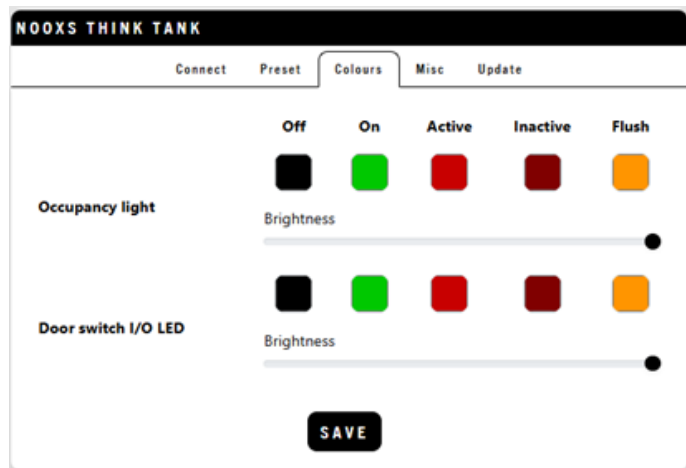
Tab: Preset - Active Room Type: Big Room (greater than 3000 mm in width)

Function	Default	Off	Level 1	Level 2	Level 3
Light brightness	2	0 %	25 %	45 %	65 %
Ventilation	2	0 %	27 %	57 %	67 %
AC fan	2	0 %	25 %	75 %	100 %

Function	Default-Level	Off	Level 1	Level 2	Level 3	Notes
Light brightness (room)	2	0 %	25 %	45 %	65 %	
Ventilation	2	0 %	27 %	57 %	67 %	Values higher than 70% will lead to increased noise inside!
AC fan	2	0 %	25 %	75 %	100 %	

2. FACTORY SETTINGS

Tab: Colours



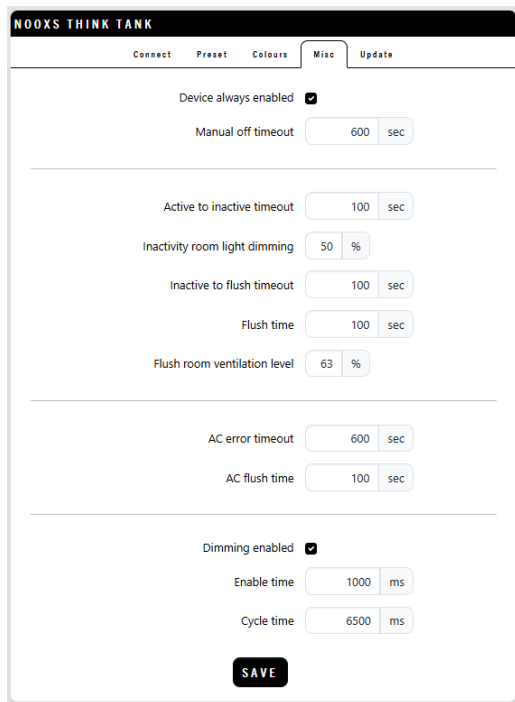
	Off	On	Active	Inactive	Flush
Occupancy light	black	green	red	dark red	yellow
RGB Code	0/0/0	0/200/0	255/0/0	128/0/0	255/149/0
Door switch I/O LED	black	green	red	dark red	yellow
RGB Code	0/0/0	0/200/0	255/0/0	128/0/0	255/149/0

The RGB codes can be set by clicking on the respective colour field.

Note: The actual colour representation on the occupancy display may vary, as the LED colour mixer does not allow for 100% reproducible colour reproduction, and the black diffuser used may cause a colour shift.

2. FACTORY SETTINGS

Tab: Misc (Miscellaneous)



- **„Device always enabled“: Yes (checked):** This ensures that the NOOXS Think Tank, after manual deactivation when no presence is detected, will automatically return to automatic mode once the „Manual off timeout“ time component has elapsed. If this option is unchecked, the Think Tank will remain off after manual deactivation.

- **Active to inactive timeout: 100 sec:** If no presence is detected by the motion sensor (e.g., when users leave the room), the control system waits until the status changes from „Active“ to „Inactive“. Status „Inactive“ → the room light is dimmed (value: Inactivity dimming in the web interface) → the occupancy display colour changes from red to dark red.

- **Inactivity room light dimming: 50%:** The light is dimmed by this value to indicate to the user that no presence has been detected.

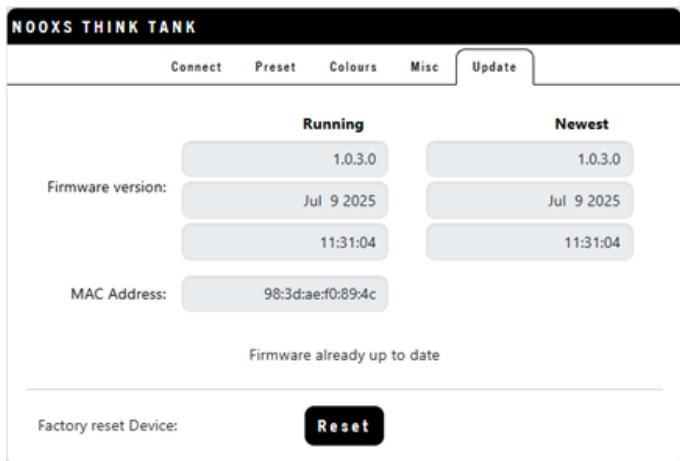
- **Inactive to flush timeout: 100 sec:** If no presence is detected, the control system waits until the status changes from „Inactive“ to „Flush“ (flush phase).

- **AC flush time: 100 sec:** Flush time for the AC module (if available).
- **AC error time out: 600 sec:** This value defines the waiting time for the control system before an error in the AC module is displayed (if available).
- **Room ventilation flush time: 100 sec:** Defines the length of the ventilation flush phase.
- **Room ventilation flush level:** Dependent on the set room size:
 → Small rooms: 63%
 → Big rooms: 80%
- **Manual off timeout: 600 sec:** If the Think Tank is manually turned off by pressing the On/Off button on the door switch, the program flow is interrupted, and all functions are turned off. As long as the Think Tank is in use (presence detection), it remains off. When no further presence is detected, the control system returns to automatic mode after the „Manual off timeout“ time has elapsed.
- **Dimming enabled:** If this option is checked, the push-dim function on the membrane switch is activated.
- **Enable time:** Defines the minimum time the button must be pressed to allow continuous adjustment of the values.
- **Cycle time:** Defines the duration in which the power values change from 0% to 100% and back to 0%.



2. FACTORY SETTINGS

Tab: Update



Display of the current firmware version and the latest version.
 Updates only after consultation/approval by Bene's technical department.

3. INITIAL INSTALLATION

After the installation of a Think Tank is complete and the power supply to the control system is established, the foil switch automatically and independently downloads the latest software from the control system (Bootload).

This process takes about 1 to 2 minutes, during which the LED on the I/O button blinks blue.

Once the process is completed, the LED will light up continuously red (operational), and the Think Tank can be put into operation.

4. CHANGING VALUES

Prerequisites

To change the control values, a suitable device (laptop, tablet, or smartphone) with an active internet connection, Bluetooth, and a Chrome-based browser (e.g. Chrome, Microsoft Edge) is required. Currently, only tablets or smartphones with the Android operating system, version 13 or higher, are supported. Devices with iOS (iPhone, iPad) cannot establish a connection at this time.

Procedure

- a) Put the Think Tank into Maintenance Mode: Press the „Light“ and „On/Off“ buttons simultaneously and hold them for about 5 seconds. The LED on the On/Off button will now blink blue.
- b) Open the website „remote.bene.com“ on your mobile device.
- c) In the „Connect“ tab, click the „Connect“ button in the middle.
- d) In the pop-up window, select the desired Think Tank and click on „Pairing“. Note: Only Think Tanks (no other Bluetooth devices) will be displayed in this pop-up window, and only those that are in maintenance mode (LED on the On/Off button blinks blue). Hint: If multiple Think Tanks appear in this pop-up window, it is advisable to check neighbouring Think Tanks to ensure they are in Maintenance Mode (LED on On/Off button blinks blue) and return them to Normal Mode (press the „Light“ and „On/Off“ buttons simultaneously for about 5 seconds) to ensure a unique identification.
- e) After successful pairing, the web interface will automatically switch to the „Preset“ tab.
- f) Select the tab corresponding to the value you want to change.
- g) Change the values according to your preferences and then click the „Save“ button.
- h) After successful saving, the message „Saved successfully“ will appear.
- i) To activate the changes, press any button on the door switch (foil switch).
- j) Then, switch to the „Connect“ tab and press the „Disconnect“ button in the middle to disconnect from the Think Tank.
- k) Finally, make sure to disable the Think Tank's Maintenance Mode by holding the „Light“ and „On/Off“ buttons simultaneously for 5 seconds. After successful deactivation of Maintenance Mode, the LED on the On/Off button will light up continuously in a single colour (depending on the current status). If the Maintenance Mode is not deactivated, the Manual I/O LED on the foil switch will blink blue, and the status colours will not be displayed.

5. PROGRAM FLOW - DIAGRAM

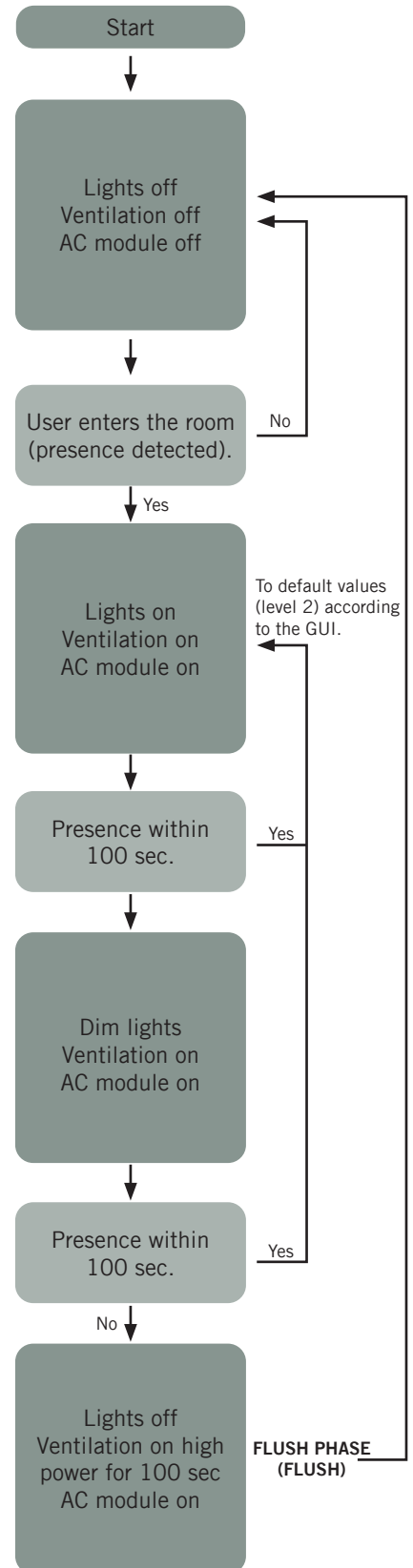
AUTOMATIC MODE

STATUS	FUNCTION	DEFAULT VALUES see point 2 „Factory Settings“	WEBINTER- FACE
STANDBY (OFF)	Light	off (0%)	Preset
	Ventilation	off (0%)	Preset
	AC module	off (0%)	Preset
	Motion sensor	active	
	Occupancy indicator	according to colour setting, value „occupancy light“	Colours

ACTIVE	Light	level 2	Preset
	Ventilation	level 2	Preset
	AC module	level 2	Preset
	Motion sensor	active	
	Time until INACTIVE	value "active to inactive timeout"	Misc
	Occupancy indicator	according to colour setting, value „occupancy light“	Colours

INACTIVE	Light	according to colour setting, value "occupancy light"	Misc
	Ventilation	level 2 or according to current setting	Preset
	AC module	level 2 or according to current setting	Preset
	Motion sensor	active	
	Waiting time until flush phase	value „inactive to flush timeout“	Misc
	Occupancy indicator	according to colour setting	Colours

FLUSH	Light	off (0%)	Preset
	Ventilation	value „flush room ventilation level“	Preset
	Motion sensor	active	
	Flush duration	value „flush time“	Misc
	Flush strength (fan power)	value „flush room ventilation level“	Misc
	Occupancy indicator	according to colour setting	Colours
	AC module	active	Preset
	AC module flush duration	value „AC flush time“	Misc



5. PROGRAM FLOW - DIAGRAM

MANUAL OFF MODUS

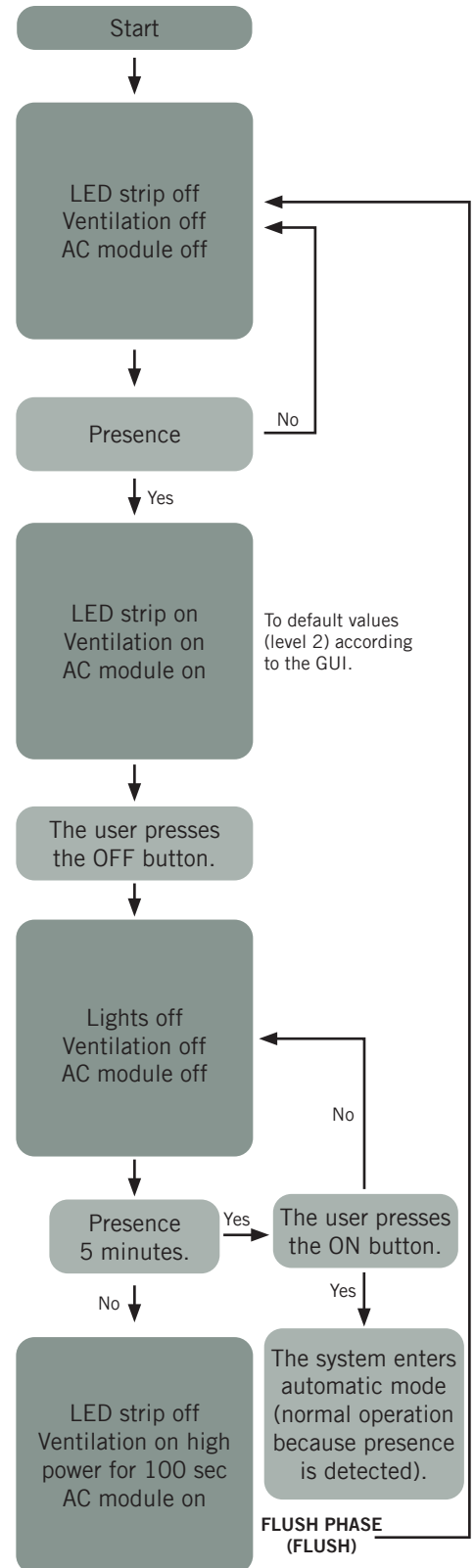
Sometimes it might be useful to turn off the Think Tank by pressing the I/O button on the door frame. In this case, the lights, ventilation, and (if present) the air conditioning module will be deactivated, but the motion sensor remains active.

STATUS	FUNCTION	DEFAULT VALUES see point 2 „Factory Settings“	WEBINTER-FACE
STANDBY (OFF)	Light	off (0%)	Preset
	Ventilation	off (0%)	Preset
	AC module	off (0%)	Preset
	Motion sensor	active	
	Occupancy indicator	according to colour setting, value „occupancy light“	Colours

ACTIVE	Light	level 2	Preset
	Ventilation	level 2	Preset
	AC module	level 2	Preset
	Motion sensor	active	
	Time until INACTIVE	value „active to inactive timeout“	Misc
	Occupancy indicator	according to colour setting, value „occupancy light“	Colours

MANUAL OFF	Light	off (0%)	Preset
	Ventilation	off (0%)	Preset
	AC module	off (0%)	Preset
	Time until automatic reactivation	value „manual off timeout“	Misc
	General reactivation yes/no	value „device always enabled“	Misc

FLUSH	Light	off (0%)	Preset
	Ventilation	value „flush room ventilation level“	Preset
	Motion sensor	active	
	Flush duration	value „flush time“	Misc
	Flush strength (fan power)	value „flush room ventilation level“	Misc
	Occupancy indicator	according to colour setting	Colours
	AC module	active	Preset
	AC module flush duration	Vvalue „AC flush time“	Misc



6. FACTORY RESET

Option 1 - Hardware Reset

The NOOXS Think Tanks have different preset values depending on the room size.

Possible options:

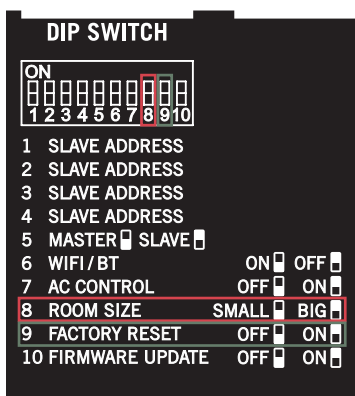
- Small room
- Big room

The settings for the two room sizes differ only in the values in the „Presets“ tab. All other settings are identical.

In general, for a small room (small room), the ventilation is set to lower values since such rooms do not require large amounts of air circulation.

Procedure

- a. By default, the DIP switch for room size should be set to the appropriate setting. If it is not, adjust it accordingly.
Definition: Small rooms – up to 3m in width, large rooms – 3m and above.
- b. Set the DIP switch for Factory Reset to „on.“
- c. Disconnect the control unit from the power supply and wait until the POWER LED goes out (unplug the power connector). Then restore the power supply.
- d. Wait for 15 seconds until the update is complete (no feedback).
- e. Afterward, set the DIP switch „Factory Reset“ back to „off.“
- f. Disconnect the control unit from the power supply again, wait for the POWER LED to go out, and then restore the power supply.



Important

The room size and the associated preset are configured using the DIP switch on the control unit housing (red frame). To reload the values, the DIP switch „Factory Reset“ must be set to „ON.“

Option 2: Software Reset

Open the **web interface (remote.bene.com)** and connect your mobile device to the NOOXS Think Tank as described above. Navigate to the „Update“ tab and click the „Reset“ button at the bottom of the window. To activate the changes, press any button on the door button.

7. TROUBLESHOOTING

a) The Think Tank does not activate.

Check: The „Power“ status LED on the control unit is not lit.

Cause: No power supply.

Solution: Ensure that the control unit is correctly connected to the power supply and that the power cable is functional.

Disconnect the power cable from the unit and reconnect it.

b) The Think Tank does not activate when entering the room, the LED under the I/O button is lit.

Check: When entering the room, the „Presence Detector“ status LED on the control unit remains off.

Cause: Motion sensor is defective or not connected.

Solution: Check if the motion sensor is correctly connected to the control unit.

Remove the connector by pressing the white locking mechanism and reconnect it until it clicks into place.

If the issue persists, you can manually control the Think Tank via the I/O button on the door button.

c) The functions (light, ventilation, etc.) cannot be controlled, the LEDs on the door button are lit.

Check: The „Operating Status“ LED on the control unit is red.

Cause: Software error.

Solution: In most cases, a firmware update resolves the software issue.

Contact trained personnel within your company or perform a firmware update as described in „Factory Settings“ under the „Update“ section.

For any other errors, questions, uncertainties, or missing information, please contact your responsible sales partner.

NOTES



A series of horizontal dotted lines spanning the width of the page, intended for taking notes.

WP_MB512