

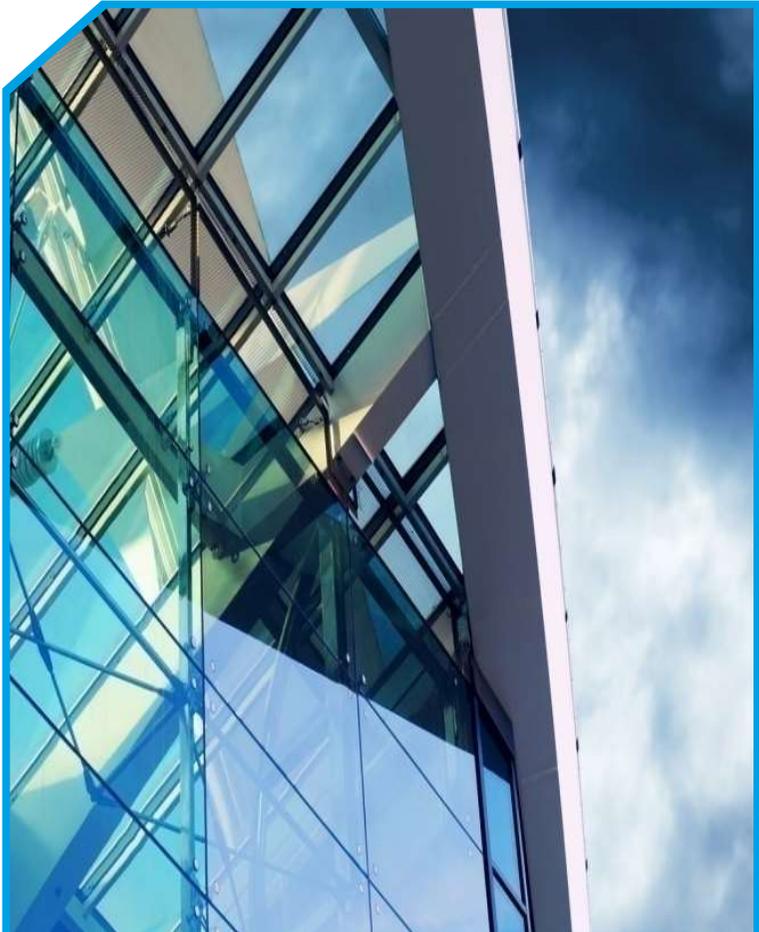


your comfort. our world.



**DUK SE57 Madoka BRC1H519 Remote Controller
Installation & Commissioning**

Introduction



- ▣ Welcome
- ▣ Safety Instructions
- ▣ Training



Trainee Responsibility



- ✔ We assume that all trainees are qualified to work with electricity
- ✔ Should this not be the case, then you have to inform the instructor. We will only allow you to watch the exercises



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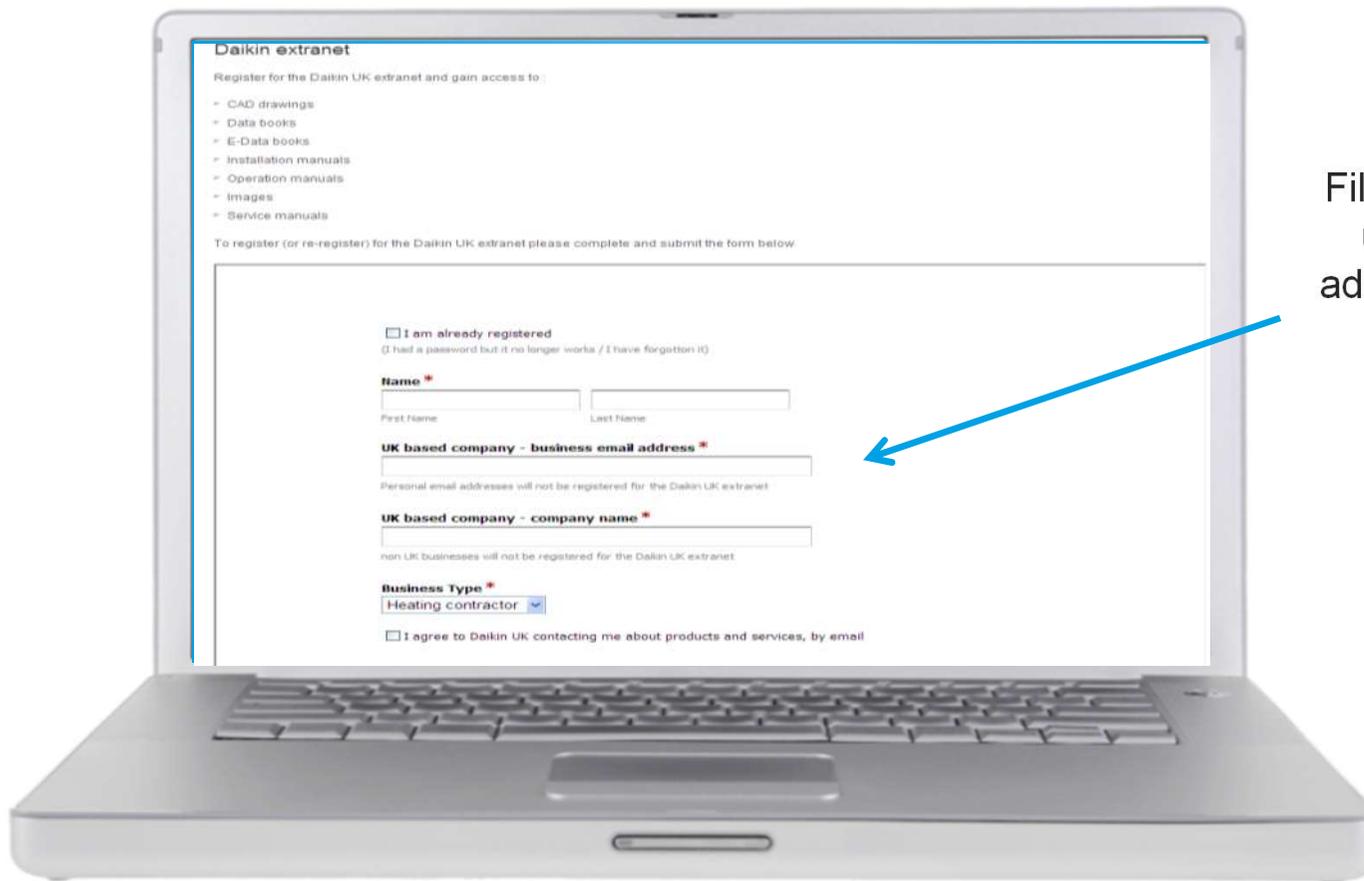


Daikin Website & Business Portal

How To Register For The Business Portal

www.daikin.eu

https://my.daikin.eu/content/denv/en_US/login.html



Daikin extranet

Register for the Daikin UK extranet and gain access to:

- CAD drawings
- Data books
- E-Data books
- Installation manuals
- Operation manuals
- Images
- Service manuals

To register (or re-register) for the Daikin UK extranet please complete and submit the form below

I am already registered
(I had a password but it no longer works / I have forgotten it)

Name *

First Name Last Name

UK based company - business email address *

Personal email addresses will not be registered for the Daikin UK extranet

UK based company - company name *

non UK businesses will not be registered for the Daikin UK extranet

Business Type *

Heating contractor

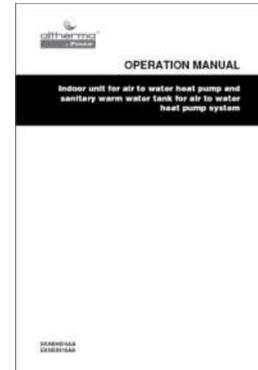
I agree to Daikin UK contacting me about products and services, by email

Fill in your company details using a company email address, then click "Submit"



Technical Data Books

- ✔ Electrical specifications
- ✔ Technical specification
- ✔ Pipe sizes
- ✔ Unit sizes
- ✔ Sound data
- ✔ Optional accessories



Operation Manuals

- ✔ Controller functions
- ✔ Cleaning filter
- ✔ End user information



Installation Manuals

- ✔ Pipe work sizing
- ✔ Pipe work installation
- ✔ Pressure testing
- ✔ Additional refrigerant calculations



Service Manuals

- ✔ Description of system functions
- ✔ Field setting information (If available)
- ✔ Fault code descriptions

Manuals can be downloaded from www.daikin.eu
https://my.daikin.eu/content/denv/en_US/login.html

Business Portal & Additional Assistance

Once you receive your Business Portal **LOGIN** and **PASSWORD**

You will be able to log into the Business Portal and access installation manuals,
technical data books and Daikin selection software,

Additional Assistance:

Daikin Air Conditioning Helpdesk: 0845 641 9200
(From a mobile : 01932 879 200)

Daikin Altherma Helpdesk: 0845 641 9277
(From a mobile : 01932 879 277)

Fault Code SMS Text Service: 07797 801 908



Smart Phone App: Daikin Service





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Introduction To Madoka



What is Madoka?

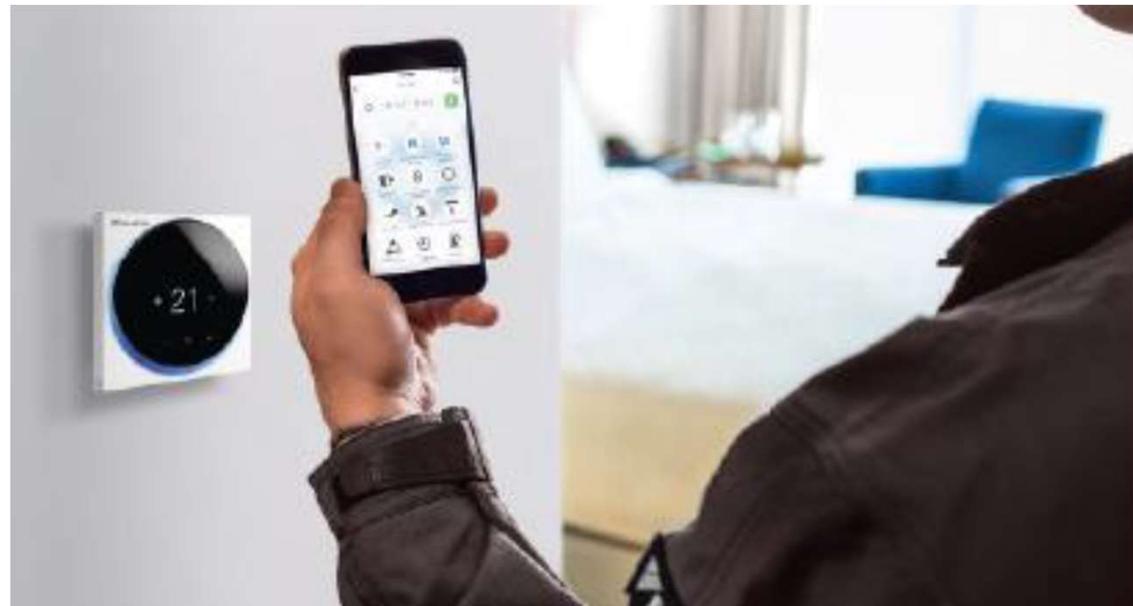
The Madoka is a multi prestigious award winning, Bluetooth enable, simplified, compact, hard wired remote controller.

It maintains all the advanced control features of the standard Daikin BRC1E53 remote controller, whilst employing a simple to use, stylish end user interface.

This is achieved by keeping the basic control functions on the remote controller, whilst transferring the advanced functions to a mobile App.



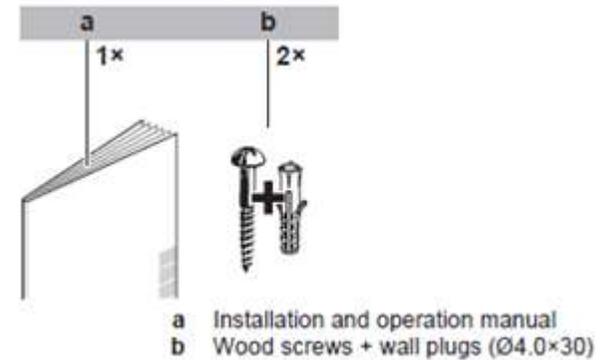
red dot



What is Madoka?

The Modaka is available in 3 colours, White, Silver & Black.

All 3 models are functionally identical and are provided with a separate surface mount backbox, Installation & Operation manual, raw plugs & mounting screws.



BRC1H519W



BRC1H519S



BRC1H519K

Compatibility

The Madoka is compatible with all units fitted with P1/P2 controller connections:-

VRV fan coil units since K series R22.

HRV (VAM) units F series.

SkyAir fan coil units.

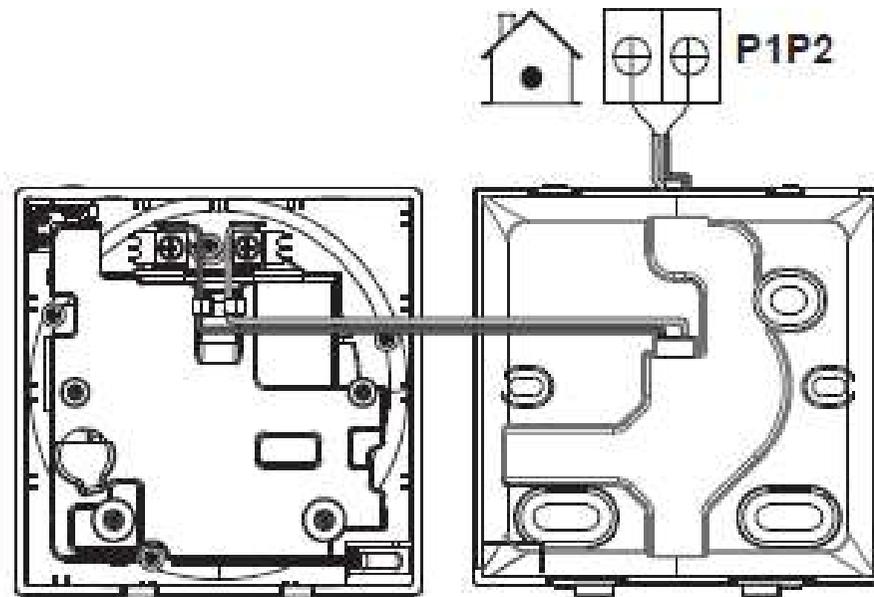
Split fan coil units (those fitted with P1/P2 connections).

Installation

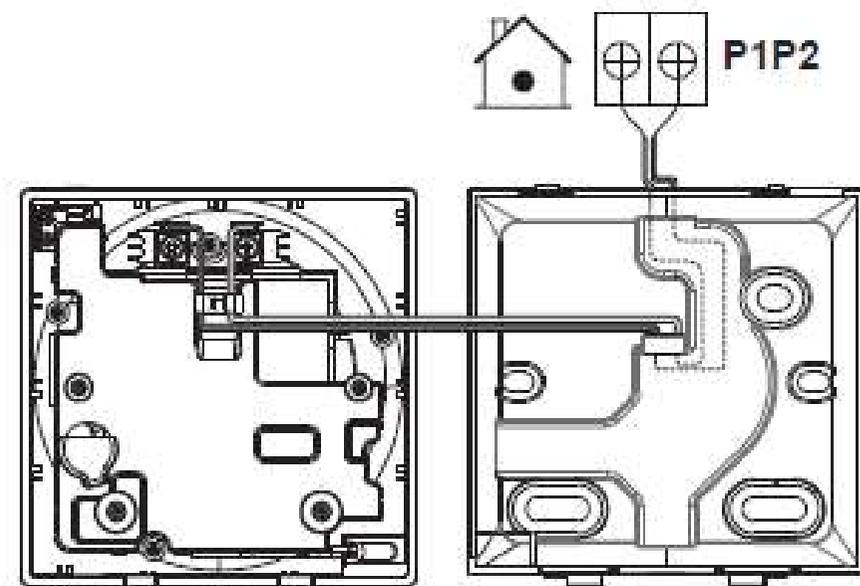
Although the Madoka is compact (85x85mm), care must be taken whilst positioning the control to allow for cable routing.

There are four possible options:- Rear, Top, Bottom & Left.

From the rear

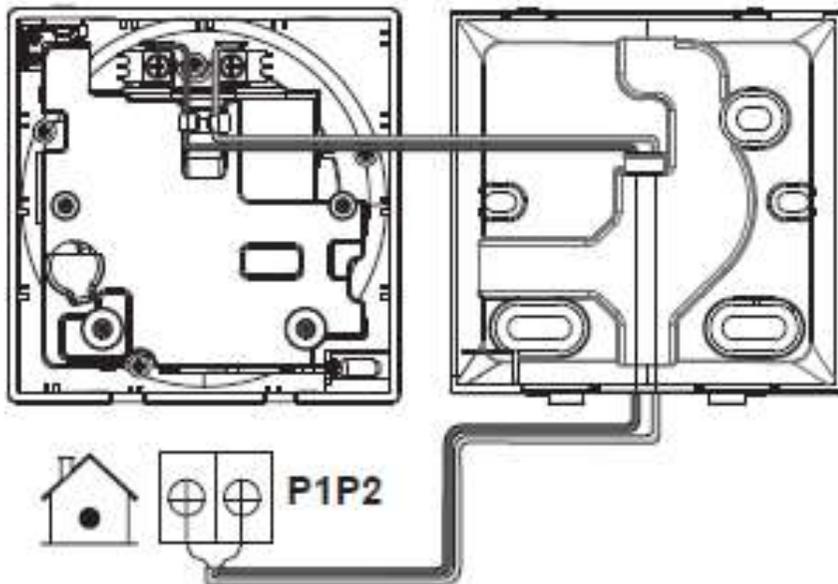


From the top

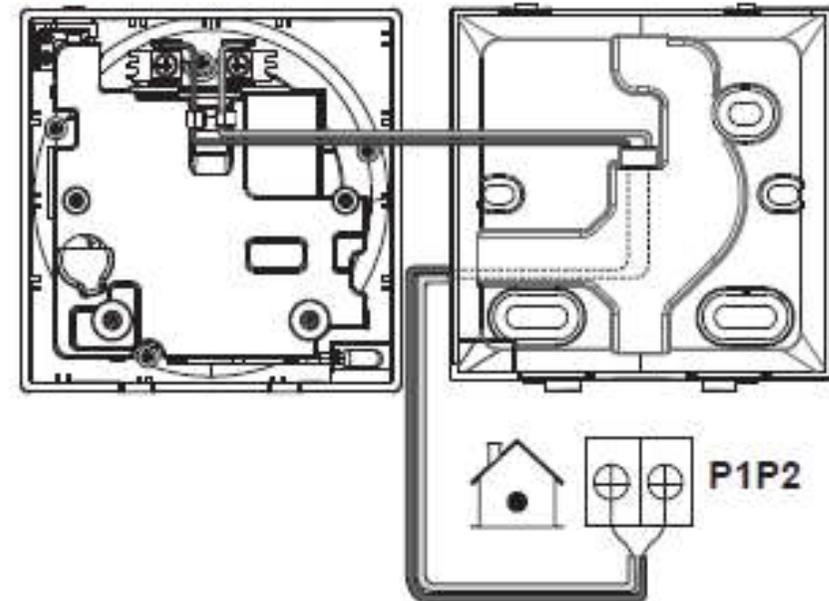


Installation

From the bottom



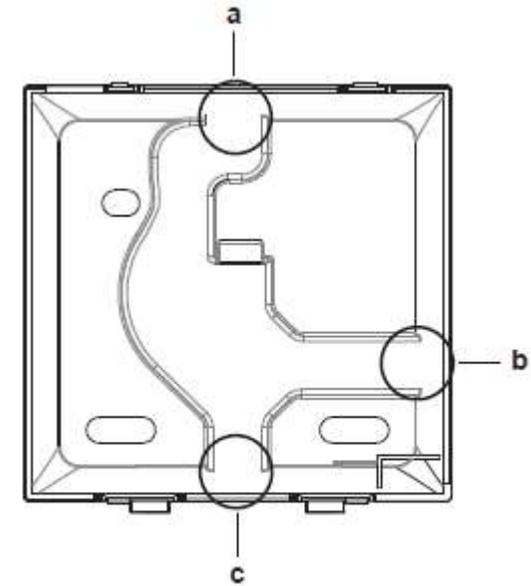
From the left



Installation

For Top, Bottom & Left cable routing, it will be necessary to remove a piece of the rear mounting box.

Ensure that the correct specification of cable is employed, that the outer sheath of the cable is removed and that only the 2 inner cables pass through the mounting box.



- a Wiring from the top
- b Wiring from the left
- c Wiring from the bottom

Wire specification	Value
Type	Sheathed vinyl cord or cable (2 wires)
Section	0.75~1.25 mm ²
Maximum length	500 m

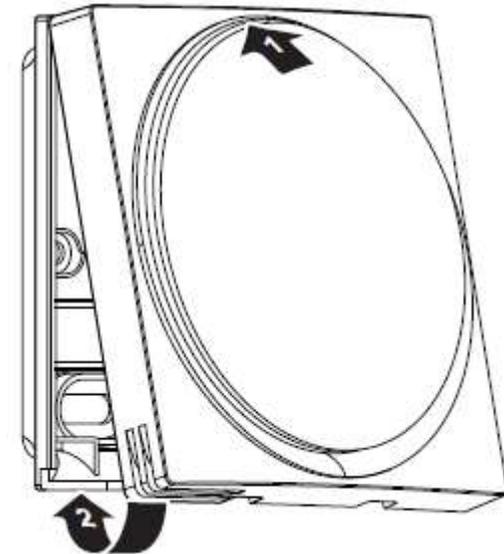
Installation

The 2 separate cores can then be wired into the screw terminals located on the back of the controller – N.B. the P1/P2 wiring is **NOT** polarity sensitive.

The controller can then be closed by mounting the top of the controller on the 2 tabs located on the mounting plate. Then pushing closed at the bottom of the controller.

N.B. Please take care not to 'pinch' the 2 cable cores whilst closing the controller.

Removal of the controller is achieved by inserting a flat bladed screwdriver in lower slots (one at a time), pushing up and twisting. If you only twist the screwdriver, it will result in the snapping of the lower tabs.



Using the Madoka Remote Controller

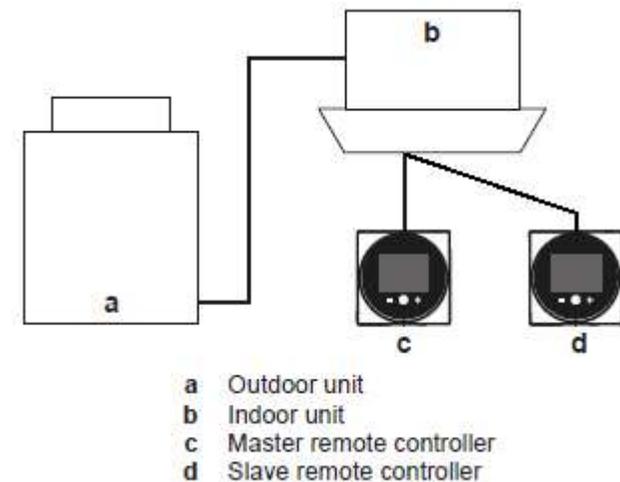
On initial power up the remote controller will flash with the number 1 in a circle for approximately 10 seconds. This indicates that the remote controller is starting in 'master' mode.



This is the factory default and is normal where only one P1/P2 device is connected into the indoor unit.

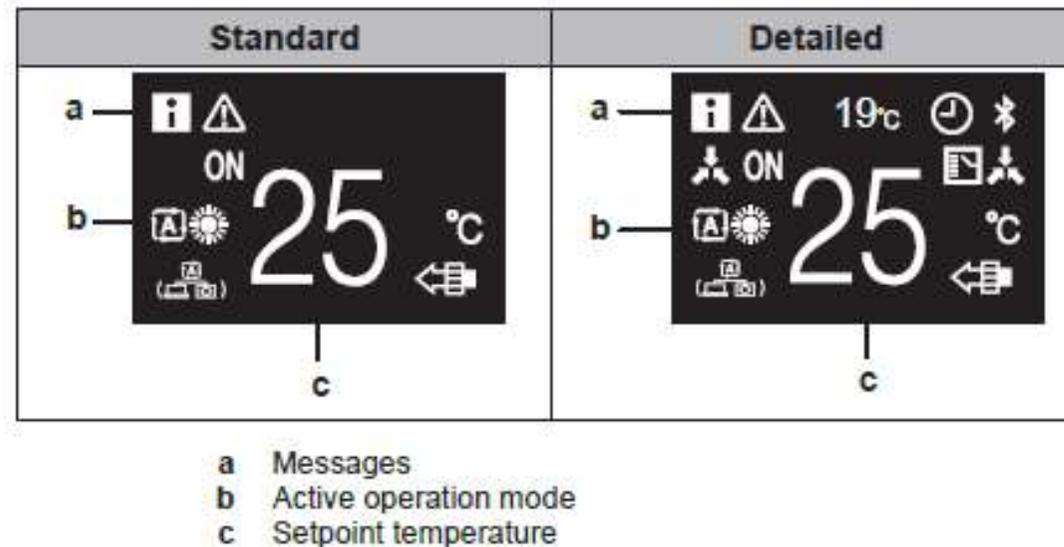
Should there be 2 control devices connected into the P1/P2 connection, then it will be necessary to set one of the devices as 'slave'.

How to change a Madoka between 'master' and 'slave' will be illustrated later.



Using the Madoka Remote Controller

Once the controller has initialised, then you will be presented with the home screen, showing the current status of the unit.



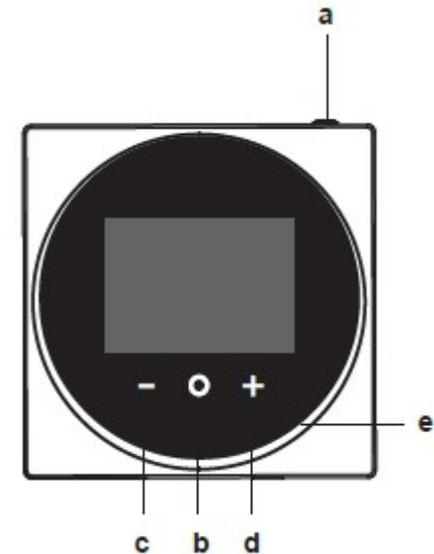
This display can be changed to the detailed display, which will be illustrated later.

N.B. The display will dim after 5 seconds of last button press and then turn off after a further 30 seconds. Press any button to awaken the screen.

Using the Madoka Remote Controller

The controller only employs 4 buttons (1 physical & 3 heat sensitive):

- a. On/Off (physical button located on the top of the controller). – Used to switch the unit between running and stopped.
- b. Enter/Activate/Set. – From the home screen enters the main menu. From the main menu enters a sub menu. From a sub menu activates/confirms a setting.
- c. '-'. – From the home screen lowers the set point. From the main menu cycles left. From a sub menu lowers a value.
- d. '+'. – From the home screen increases the set point. From the main menu cycles right. From a sub menu increases a value.
- e. Status indicator light (Daikin eye). – Blue illuminated light when the unit is running, off when the unit is stopped and blinking when the unit is in fault (this light operation can be changed and will be illustrated later).



Using the Madoka Remote Controller

So, we can adjust the unit set point from the home screen by using the '+' & '-' buttons.

However to make another other adjustments to the operation of the unit we have to enter the main menu. To do this you press the 'O' button once.

You are then presented with the following icons (only 3 shown at any one time) that you can cycle through (non valid selections, based on connected unit(s), are not shown).

Use the '+' & '-' to scroll along and 'O' to enter the setting (current selection shown in bold white box).

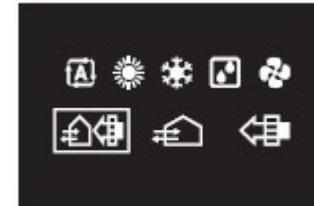
You will be auto timed out of this menu or any sub-menu, back to the home screen, 5 seconds after the last button press.



Using the Madoka Remote Controller



Operation mode.



Entering the operation mode will display the units current mode.

Pressing the '+' or '-' will allow you to cycle through the available options.

Pressing 'O' will confirm the change and return you to the home screen.

Icon	Operation mode
	Cooling. In this mode, cooling will be activated as required by the setpoint.
	Heating. In this mode, heating will be activated as required by the setpoint.
	Fan Only. In this mode, air circulates without heating or cooling.
	Dry. In this mode, the air humidity will be lowered with a minimal temperature decrease. The temperature and fan speed are controlled automatically and cannot be controlled by the controller. Dry operation will not function if the room temperature is too low.

Icon	Operation mode
	Ventilation. In this mode, the space gets ventilated, but not cooled or heated.
	Air Clean. In this mode, the optional air cleaning unit operates.
	Ventilation + Air Clean. Combination of ventilation and air clean operation.
	Auto. In Auto mode, the indoor unit automatically switches between heating and cooling mode, as required by the setpoint.

Using the Madoka Remote Controller



Louver position

(Selection missing if unit does not have louvers).



Entering the louver position will display the louvers current position (in white).

Pressing the '+' or '-' will allow you to cycle through the available options.

If all positions are shown in white, then this indicates 'Auto swing'.

Pressing 'O' will confirm the change and return you to the home screen.

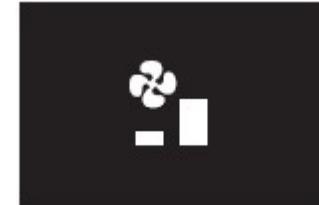
Only all louvers at once can be adjusted from here – even if the unit is equipped with individual louver control.

Using the Madoka Remote Controller



Ventilation rate

(Selection missing if unit is not a VAM).



Entering the ventilation rate will display the VAM units current fan speed.

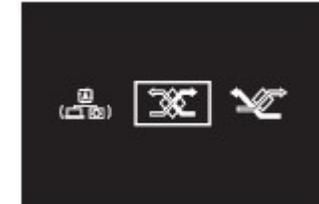
Pressing the '+' or '-' will allow you to cycle through the available options.

Pressing 'O' will confirm the change and return you to the home screen.

Using the Madoka Remote Controller



Ventilation mode
(Selection missing if unit is not a VAM).



Entering the ventilation mode will display the VAM units current mode of operation.

Pressing the '+' or '-' will allow you to cycle through the available options.

Pressing 'O' will confirm the change and return you to the home screen.

Icon	Ventilation mode
	Energy Reclaim Ventilation. The outdoor air is supplied to the room after passing through a heat exchanger.
	Bypass. The outdoor air is supplied to the room without passing through a heat exchanger.
	Auto. To ventilate the room in the most efficient way, the heat reclaim ventilation unit automatically switches between "Bypass" and "Energy Reclaim Ventilation" mode (based on internal calculations).

Using the Madoka Remote Controller



Bluetooth menu



Entering the menu displays whether Bluetooth is currently enabled or not, and shows if a device (App) is currently connected.

Pressing the '+' will allow you to toggle the Bluetooth on and off.

Pressing 'O' will return you to the home screen.

Icon	Bluetooth function
	Bluetooth currently active and transmitting.
	Bluetooth currently not transmitting.
	Pressing the '+' below this icon will toggle Bluetooth on and off.

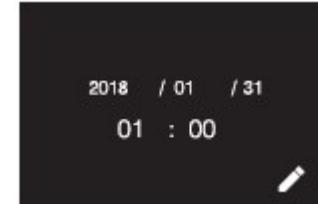
N.B.

The 6 digit code is the Bluetooth identifier and will be seen when accessing the controller from the App.

Using the Madoka Remote Controller



Time & date menu



Entering the menu displays the current time and date.

Pressing the '+' (below the edit icon) will make the current settings editable.

Pressing the '+' or '-' will change the value for the highlighted field.

Pressing 'O' will step onto the next field.

Once 'O' is pressed after the minutes have been adjusted, you return to the home screen.

The format is Year / Month / Day on the top line. Then Hour / Minute on the lower line.

Using the Madoka Remote Controller

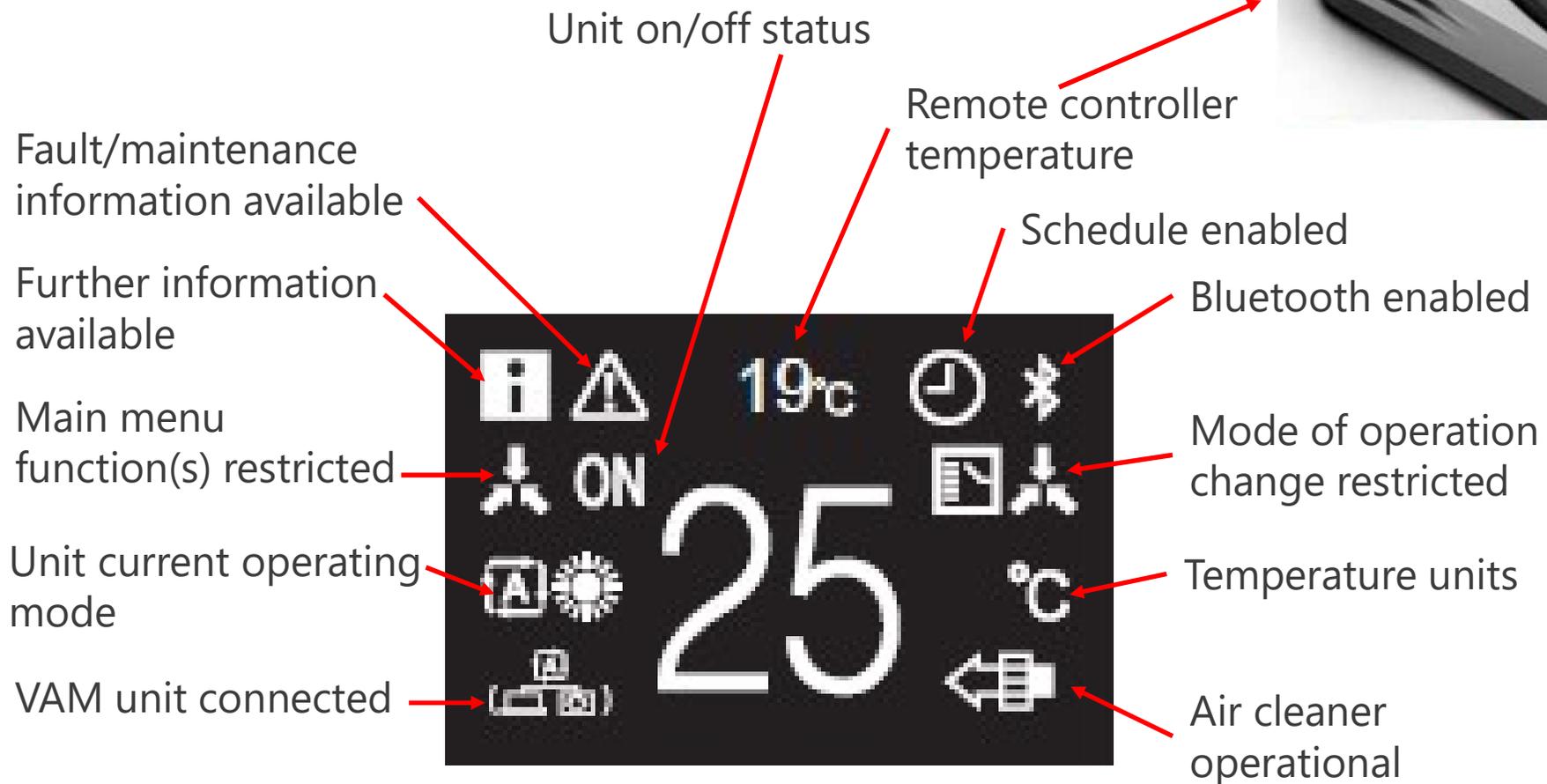


Set point menu

Entering the menu returns you to the home screen – as this is where the unit set point is adjusted.

Using the Madoka Remote Controller

Home screen icons.



Using the Madoka Remote Controller

Information screen.

Should the further information icon or the fault/maintenance icons appear, then it is possible to obtain more information or reset the condition from the information screen.

To access the information screen, with the screen illuminated, press and hold the 'O' button for 5 seconds.

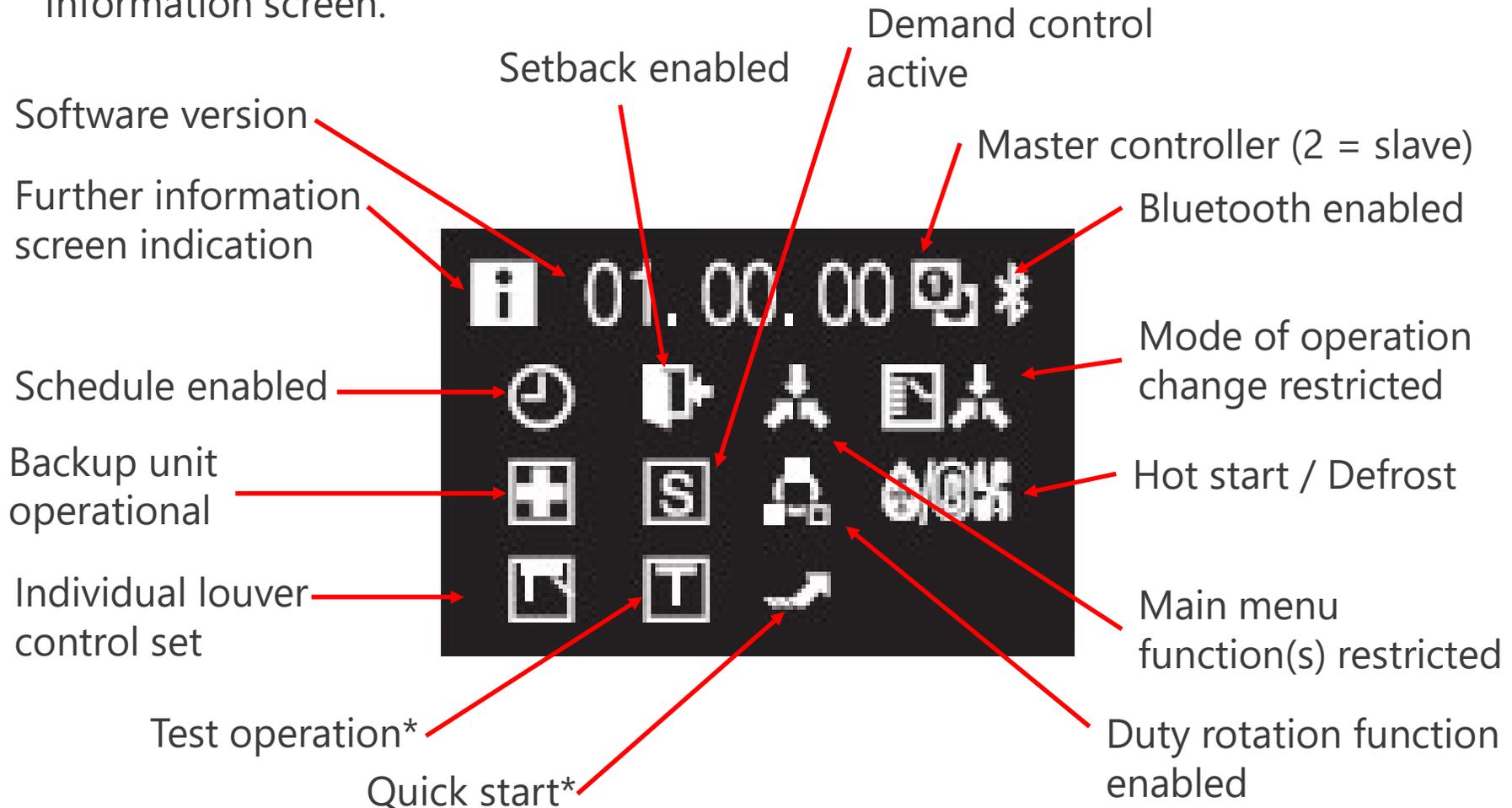
This screen will permit access to further information / fault codes.

To access the reset screen for fault codes or filter inspection reset, press and hold the 'O' button for another 5 seconds.

You will be auto timed out of this menu, back to the home screen, 5 seconds after the last button press.

Using the Madoka Remote Controller

Information screen.

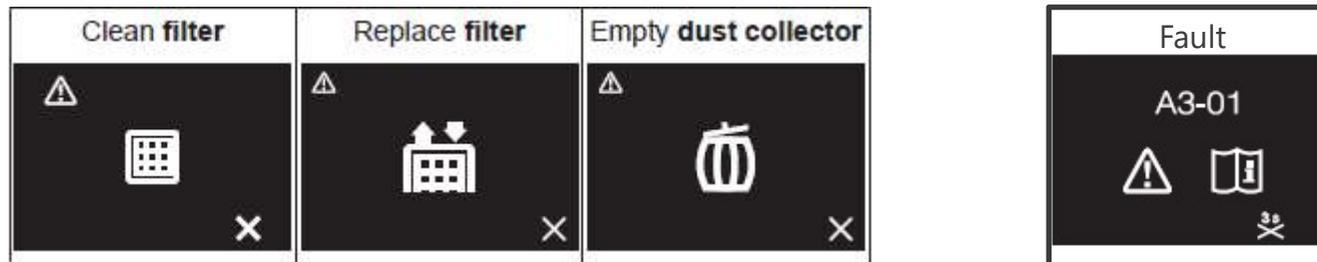


* = SkyAir only

Using the Madoka Remote Controller

Information screen - Advanced.

Upon pressing and holding the 'O' for a second 5 seconds you enter the advanced information screen where filter signs and faults can be reset.



To reset a filter alarm, press the '+' below the X icon.

To reset a fault press and hold the '+' below the X3s icon for 3 seconds.

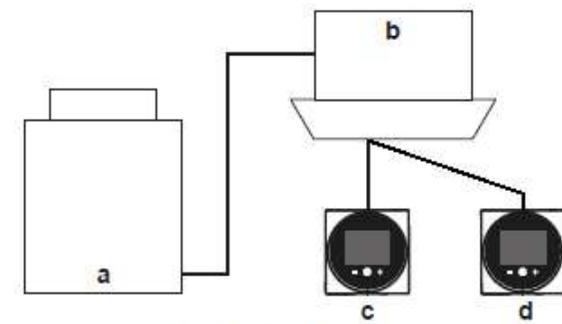
Using the Madoka Remote Controller

Information screen - Advanced.

There is a special procedure that occurs when 2 master control devices (remote controllers, RTDs, etc) are connected on the same P1/P2 cable.

A fault code of U5 or U8 will appear. It then be necessary to set one controller as a slave.

To achieve this, when viewing the fault code, you will see a 1 in a circle. To set the controller to a slave, press and hold '-' until the number changes to a 2 and the fault code disappears. The controller will then reboot.



N.B.

You will only be able to make setting changes on a master controller.

Using the Madoka Remote Controller

Installer menu.

To access the Installer menu, it is necessary to first enter the information screen.

So, with the screen illuminated, press and hold the 'O' button for 5 seconds.

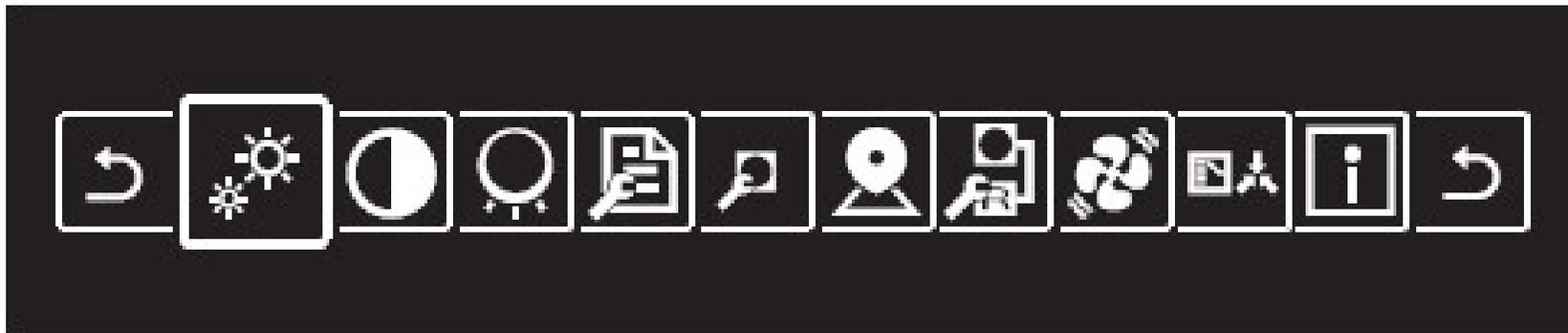
This will enter you into the information screen.

Then press and hold the 'O' and '-' buttons simultaneously for 5 seconds.

This will enter you into the Installer menu.

Use the '+' & '-' to scroll along and 'O' to enter the setting (current selection shown in bold white box).

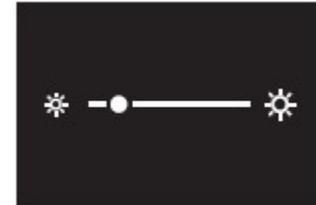
You will **NOT** be auto timed out of this menu or any sub-menu.



Using the Madoka Remote Controller



Screen brightness.



Entering the screen brightness menu will display the current brightness level of the main screen.

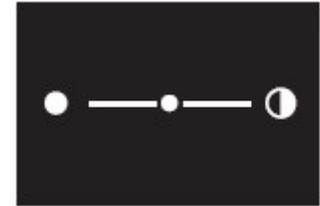
Pressing the '+' or '-' will allow you to adjust the brightness.

Pressing 'O' will confirm the change and return you to the installer menu screen.

Using the Madoka Remote Controller



Screen contrast.



Entering the screen contrast menu will display the current contrast level of the main screen.

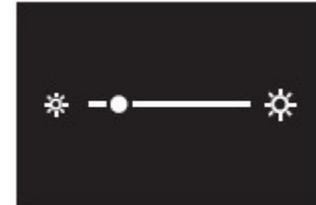
Pressing the '+' or '-' will allow you to adjust the contrast.

Pressing 'O' will confirm the change and return you to the installer menu screen.

Using the Madoka Remote Controller



Status indicator brightness.

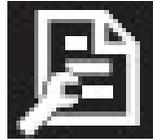


Entering the status indicator brightness menu will illuminate the status indicator.

Pressing the '+' or '-' will allow you to adjust the brightness.

Pressing 'O' will confirm the change and return you to the installer menu screen.

Using the Madoka Remote Controller

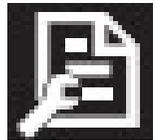


Indoor unit field settings.

Entering the indoor unit field setting menu will allow you to view and adjust the field settings in the connected indoor unit(s).

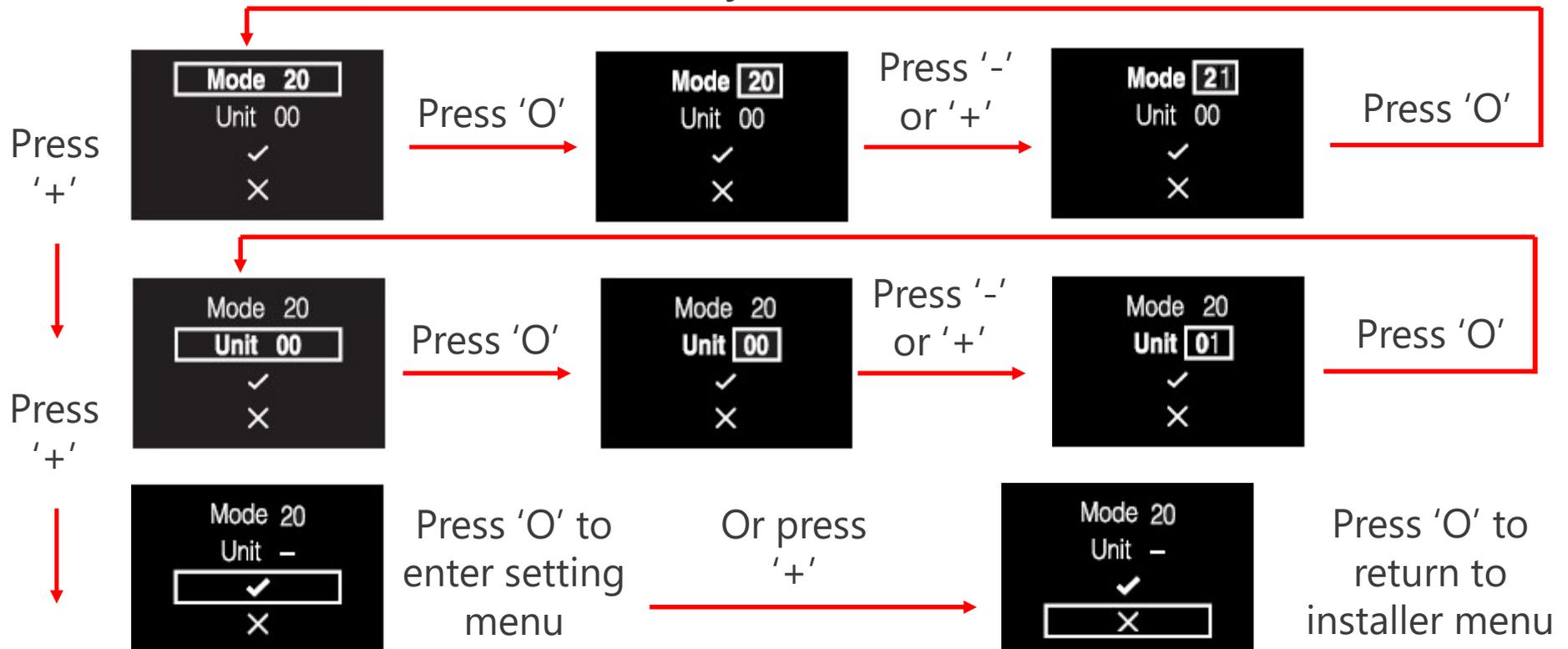
N.B. Remember that indoor unit field settings reside in the indoor unit PCB. Therefore any changes made will remain with the indoor unit, even if the Madoka controller is subsequently removed or moved to another indoor unit(s).

Using the Madoka Remote Controller

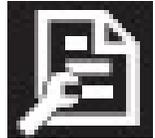


Indoor unit field settings.

When you first enter the menu you will be presented with the option to choose the mode (main code) and unit to view/adjust.

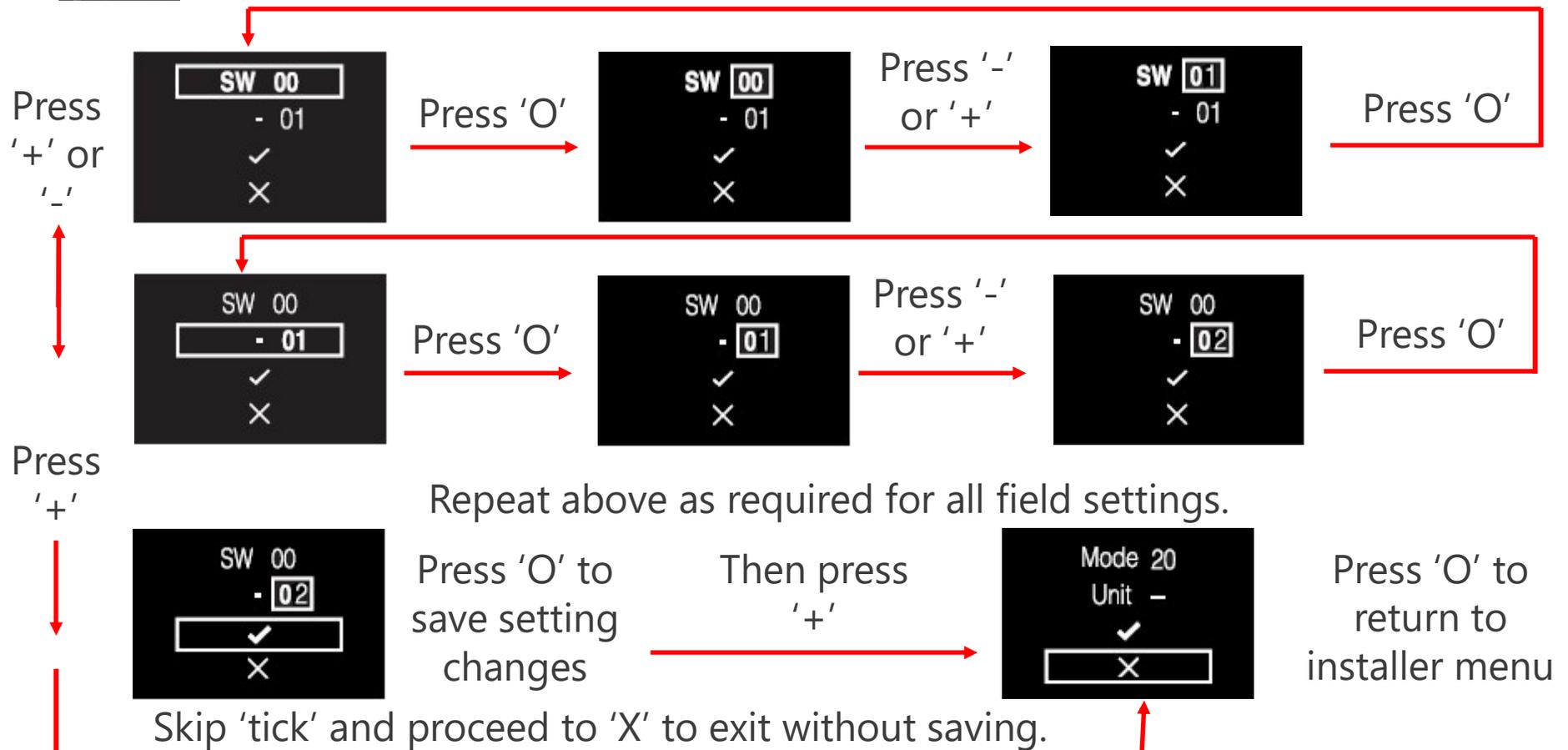


Using the Madoka Remote Controller



Indoor unit field settings.

The setting code is indicated by 'SW' and the value is below it.



Using the Madoka Remote Controller



Remote controller settings.

Entering the remote controller setting menu will allow you to view and adjust the field settings associated with the remote controller.

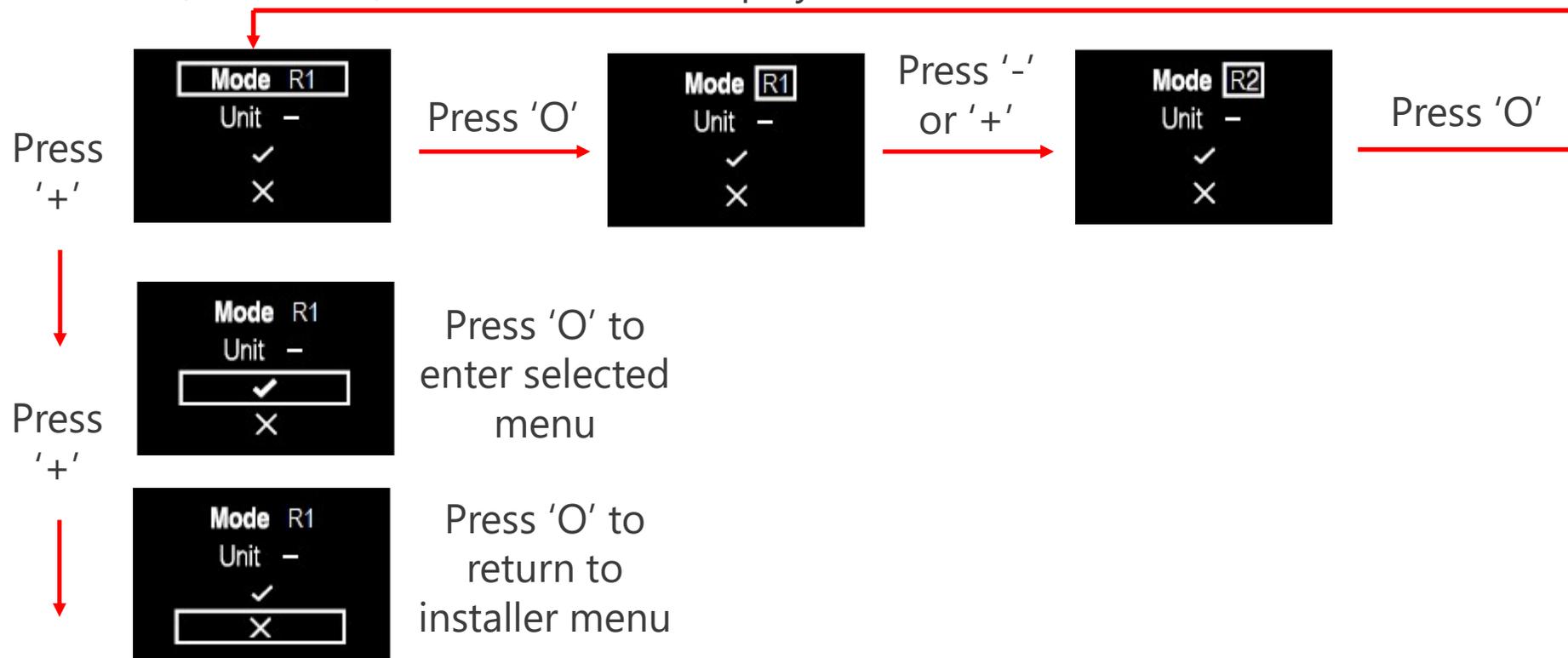
N.B. Remember that remote controller settings reside in the remote controller PCB. Therefore any changes made will remain with the remote controller, even if the Madoka controller is subsequently moved to another indoor unit(s).

Using the Madoka Remote Controller



Remote controller settings.

When you first enter the menu you will be presented with the option to choose the mode (main code). The unit icon is displayed but cannot be selected.

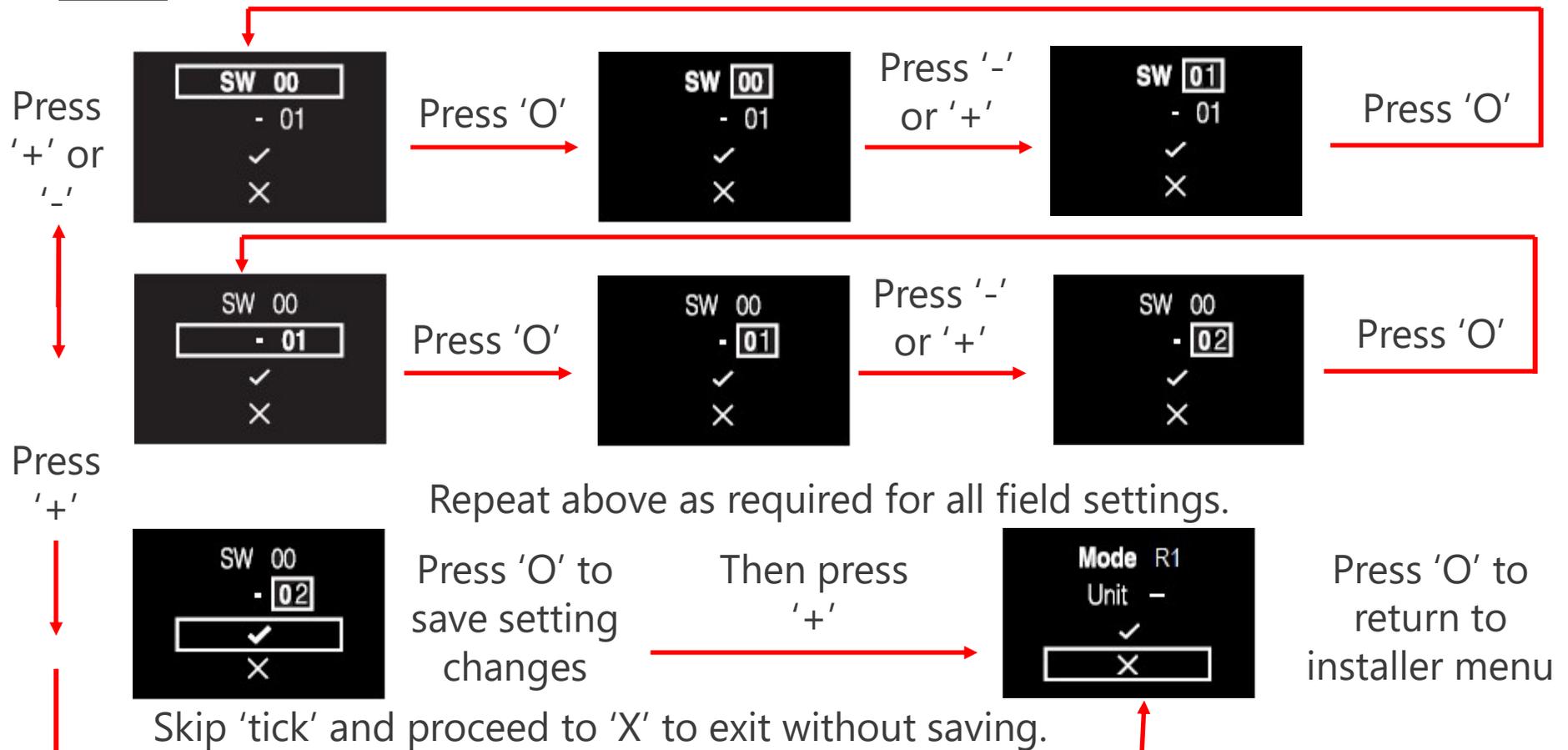


Using the Madoka Remote Controller



Remote controller settings.

The setting code is indicated by 'SW' and the value is below it.



Using the Madoka Remote Controller



Remote controller settings.

The available remote controller settings are:

Mode	SW	SW description	Value	Default value
R1	3	Controller thermistor adjustment (Cooling)	0: -3.0°C, 1: -2.5°C, 2: -2.0°C, 3: -1.5°C, 4: -1.0°C, 5: -0.5°C, 6: ±0°C, 7: +0.5°C, 8: +1.0°C, 9: +1.5°C, 10: +2.0°C, 11: +2.5°C, 12: +3.0°C	6
	4	Controller thermistor adjustment (Heating)	0: -3.0°C, 1: -2.5°C, 2: -2.0°C, 3: -1.5°C, 4: -1.0°C, 5: -0.5°C, 6: ±0°C, 7: +0.5°C, 8: +1.0°C, 9: +1.5°C, 10: +2.0°C, 11: +2.5°C, 12: +3.0°C	6
	5	Controller thermistor adjustment (Auto)	0: -3.0°C, 1: -2.5°C, 2: -2.0°C, 3: -1.5°C, 4: -1.0°C, 5: -0.5°C, 6: ±0°C, 7: +0.5°C, 8: +1.0°C, 9: +1.5°C, 10: +2.0°C, 11: +2.5°C, 12: +3.0°C	6
	6	Controller thermistor adjustment (Fan only)	0: -3.0°C, 1: -2.5°C, 2: -2.0°C, 3: -1.5°C, 4: -1.0°C, 5: -0.5°C, 6: ±0°C, 7: +0.5°C, 8: +1.0°C, 9: +1.5°C, 10: +2.0°C, 11: +2.5°C, 12: +3.0°C	6

Using the Madoka Remote Controller



Remote controller settings.

The available remote controller settings are:

Mode	SW	SW description	Value	Default value
	7	Home screen	0: Detailed 1: Standard	1
	8	Backlight no-operation timer	0: 5 seconds 1: 10 seconds 2: 20 seconds	0
	9	Status indicator faintness	0: 0% (OFF), 1: 1%, 2: 2%, 3: 3%, 4: 5%, 5: 7%, 6: 9%, 7: 11%, 8: 13%, 9: 15%, 10: 17%, 11: 20%	9
	10	Backlight faintness	0: 0% (OFF), 1: 1%, 2: 2%, 3: 3%, 4: 4%, 5: 5%,	5
	11	Status indicator mode	0: Normal 1: Hotel setting 1 2: Hotel setting 2	2
	12	Bluetooth menu available	0: Hidden (& Bluetooth disabled) 1: Available	1
	13	Bluetooth Low Energy advertising	0: Always advertising 1: Enable manually	0
R2	1	Touch button indicator (on screen)	0: None 1: Small 2: Medium 3: Large	1

Using the Madoka Remote Controller



Remote controller settings.

The below table gives further details on the status light behaviour, as defined in setting R1, SW11.

Operation state	Status indicator behaviour		
	0 (Normal)	1 (Hotel setting 1)	2 (Hotel setting 2)
Operation ON	ON	ON	ON (when the backlight goes into faint state, the status indicator turns OFF)
Operation OFF	OFF	OFF	OFF
Error	Blinking	(no change)	(no change)
Warning	ON	ON	ON (when the backlight goes into faint state, the status indicator turns OFF)
Setting of status indicator intensity	ON	ON	ON
Pairing with indoor unit	Blinking	Blinking	Blinking

Using the Madoka Remote Controller



Addressing.

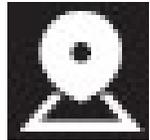
This menu is absent if the connected unit is not VRV or connected to a centralised device.

In this menu you can set the DIII-Net group address by group or by unit, and set the indoor and outdoor Airnet address.

Refer to The Intelligent Touch Manager training course for the use of DIII-Net addresses.

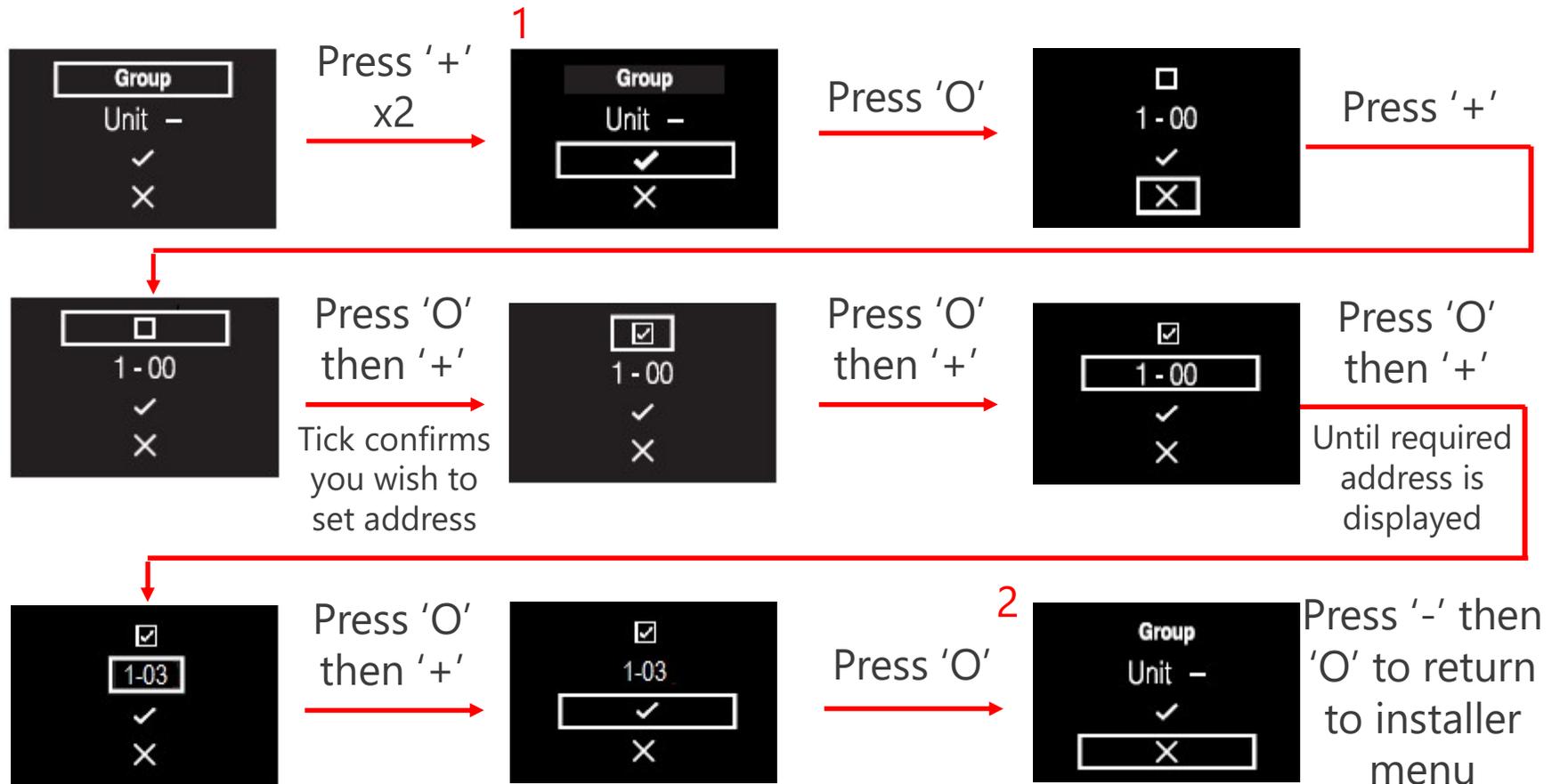
Refer to the VRV4 training and the Service checker training courses for the use of Airnet addresses.

Using the Madoka Remote Controller

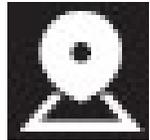


Addressing.

DIII-Net addressing by group.

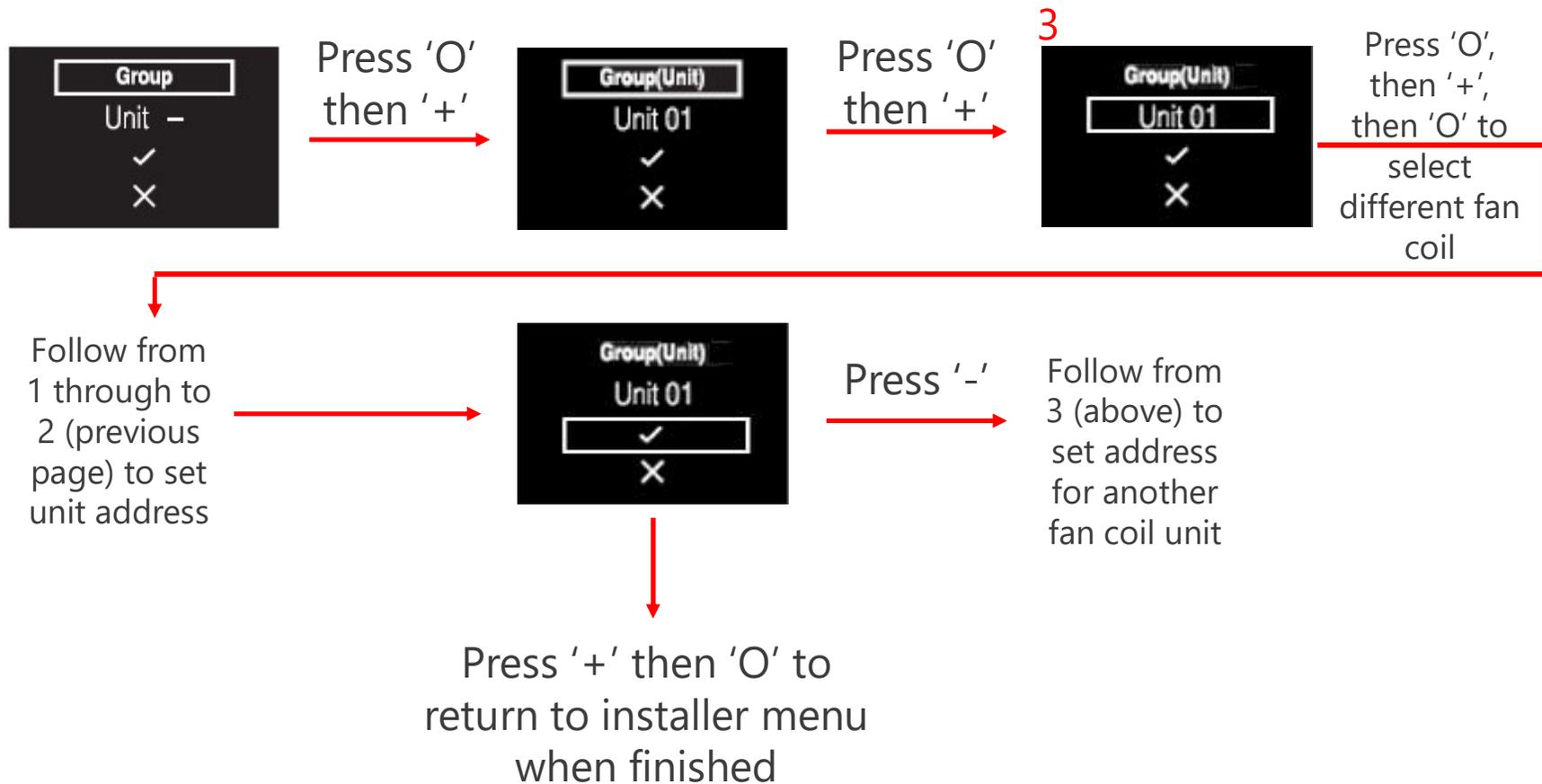


Using the Madoka Remote Controller

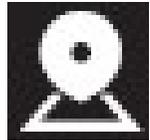


Addressing.

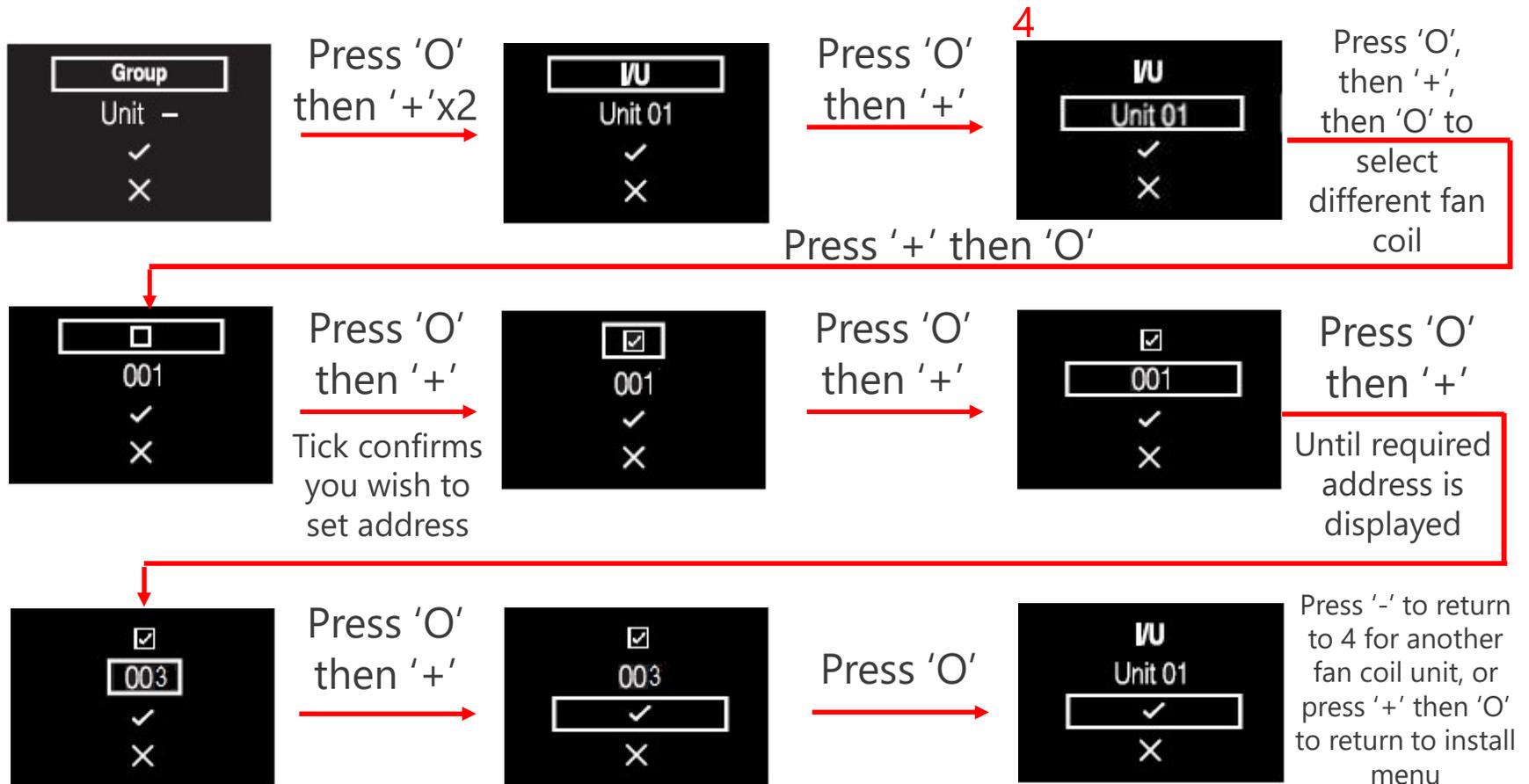
DIII-Net addressing by unit.



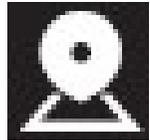
Using the Madoka Remote Controller



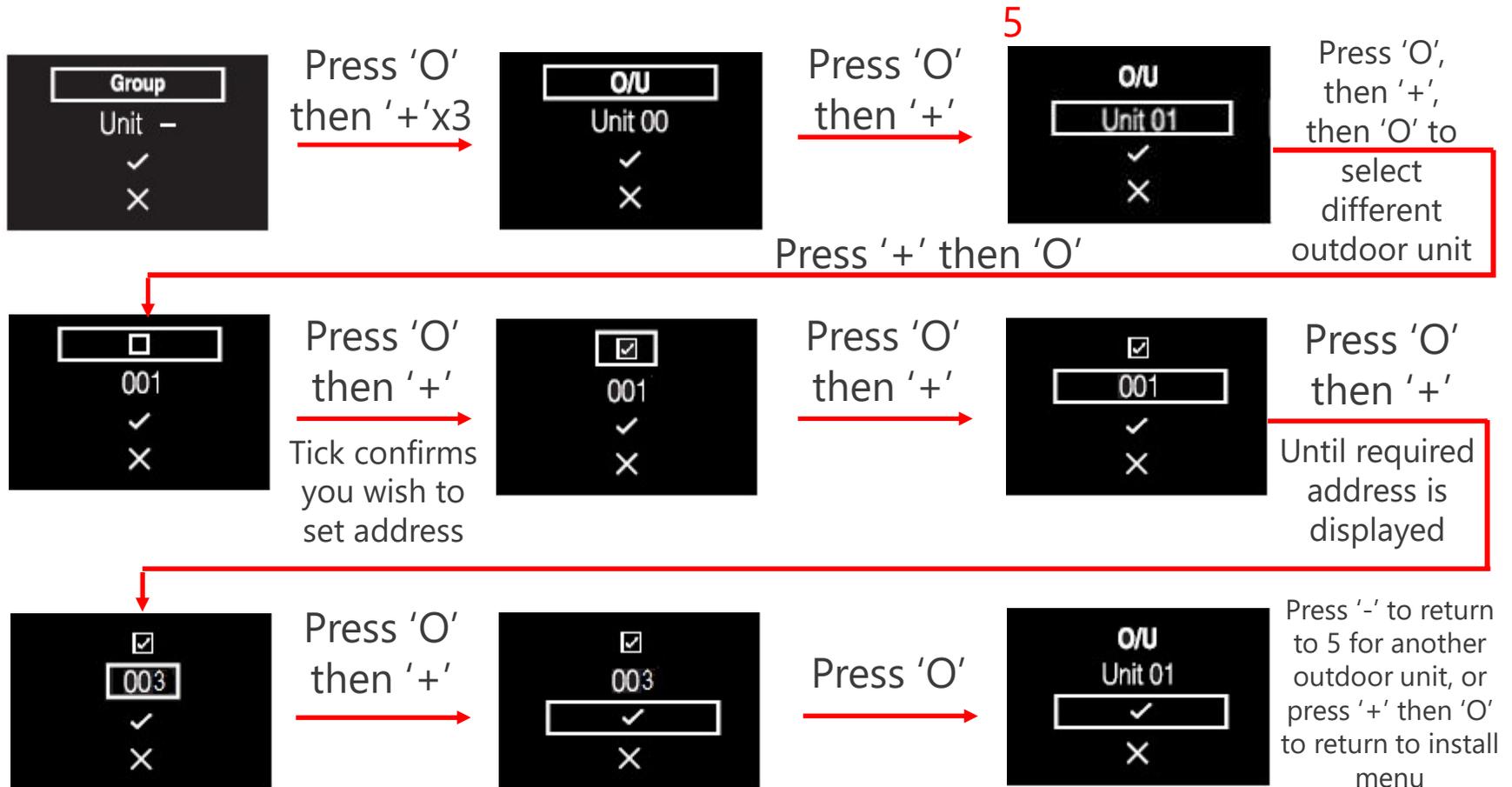
Addressing.
Indoor Airnet addressing.



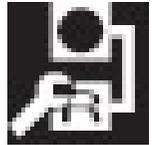
Using the Madoka Remote Controller



Addressing.
Outdoor Aernet addressing.



Using the Madoka Remote Controller



External input.

This menu is absent if a BRP7A51 external input card is not connected to the indoor unit.

When you enter this menu, the Parameters field is already selected. Use the '+' or '-' to scroll through the required parameters and 'O' to select the required parameter.

Then use the '+' to step onto the Value field.

Press 'O' to enter then '+' or '-' to adjust the value and then 'O' to confirm.

Use '-' to step back onto parameters and 'O' to enter.

Repeat for all required parameters.

Once finished use '+' to step onto the tick, then 'O' to save, then '+' to step onto 'X' and the 'O' to exit.

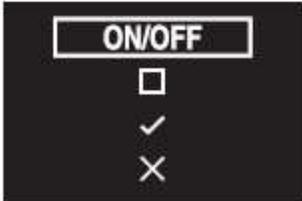
Alternatively, to exit without saving just move onto the 'X' (without confirming the tick) and press 'O'.

Using the Madoka Remote Controller



External input.

This menu is absent if a BRP7A51 external input card is not connected to the indoor unit.

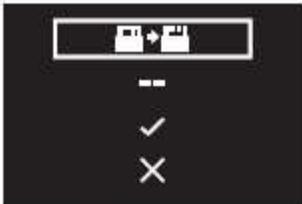
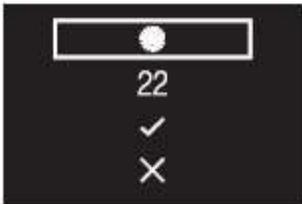
Parameter	Description	Possible values	Default value
B2 Delay Timer 	Timer that starts as soon as the key card is removed. The unit continues normal operation until the timer expires.	0-10 minutes	"1 min"
B2 Reset Timer 	Timer that starts as soon as the Delay Timer expires. When this timer expires, the previous state (i.e. regular setpoint) changes to the " Default Reset Setting " state.	0-20 hours	"20 hours"
Reset ON/OFF 	" Default Reset Setting " on/off state	"ON", "OFF", "--"	"OFF"

Using the Madoka Remote Controller



External input.

This menu is absent if a BRP7A51 external input card is not connected to the indoor unit.

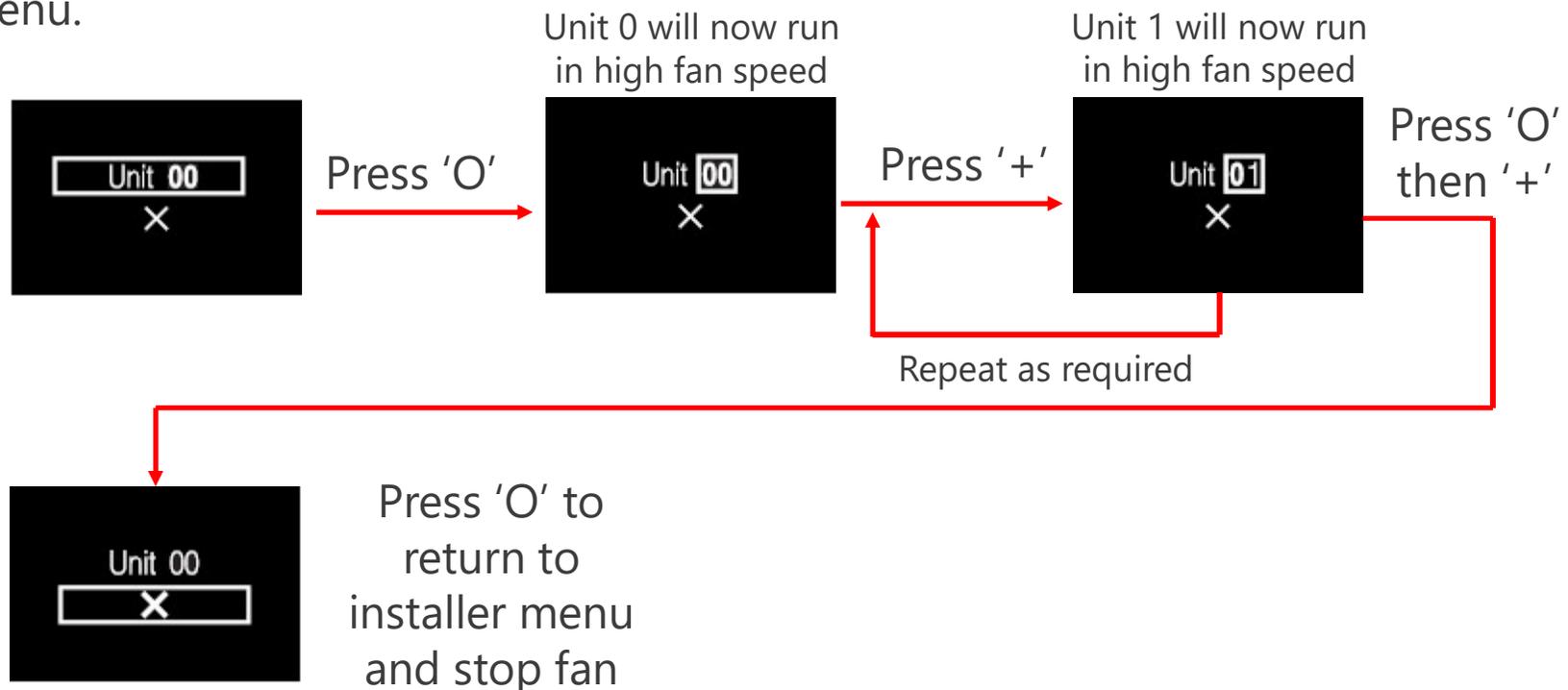
Parameter	Description	Possible values	Default value
Reset Mode 	"Default Reset Setting" operation mode	Auto, Cooling, Heating, Fan only, --	"--"
Reset Cool SP 	"Default Reset Setting" cooling setpoint	See indoor unit's setpoint range and setpoint range limitation, "--"	"22°C"
Reset Heat SP 	"Default Reset Setting" heating setpoint	See indoor unit's setpoint range and setpoint range limitation, "--"	"22°C"

Using the Madoka Remote Controller

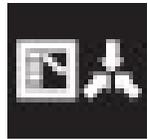


Force fan on.

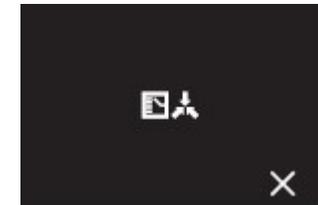
This is used to individually identify fan coil units when multiple units are connected to a single remote controller. N.B. Ensure the units are stopped before employing this menu.



Using the Madoka Remote Controller



Switch heat/cool master.

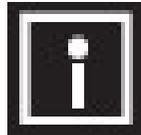


This menu will have a cross through it, and be inaccessible, unless you are on the heat/cool master of a heat pump VRV system or heat/cool master of a BS box with more than one fan coil unit on a heat recovery VRV system.

Upon entering the menu you will be presented with option to 'deallocate' the heat/cool master by pressing '+', located below the 'X' icon. You will then be returned to the installer menu.

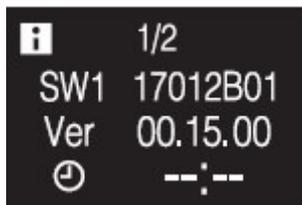
To allocate the new heat/cool master, proceed to the required fan coil unit and select an operation mode from the user menu.

Using the Madoka Remote Controller

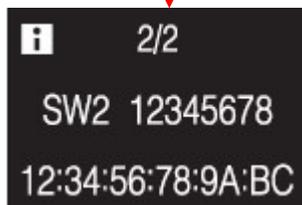


Information.

When you enter this menu you will be presented with page 1 of 2. Press '+' to move to second page. Press 'O' to return to installer menu.

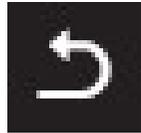


Press '+'



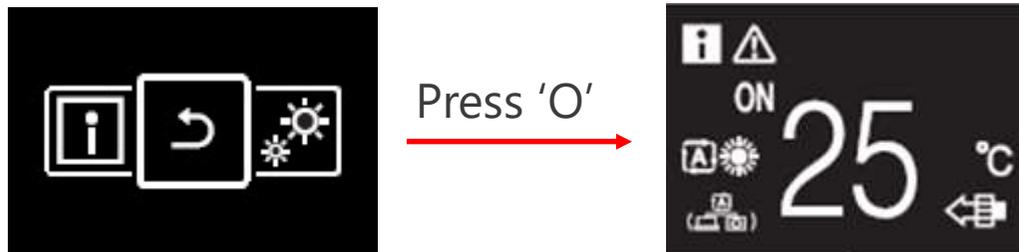
Information	Description
SW1	Controller software ID
Ver	Controller software version
	Time
SW2	UE878 software ID
---:---:---	UE878 MAC address

Using the Madoka Remote Controller



Return.

Pressing 'O' when on the above icon will leave the installer menu and return you back to the home screen.



Using the Madoka Assistant.

The Madoka Assistant (App) is available for both Android & iOS devices.

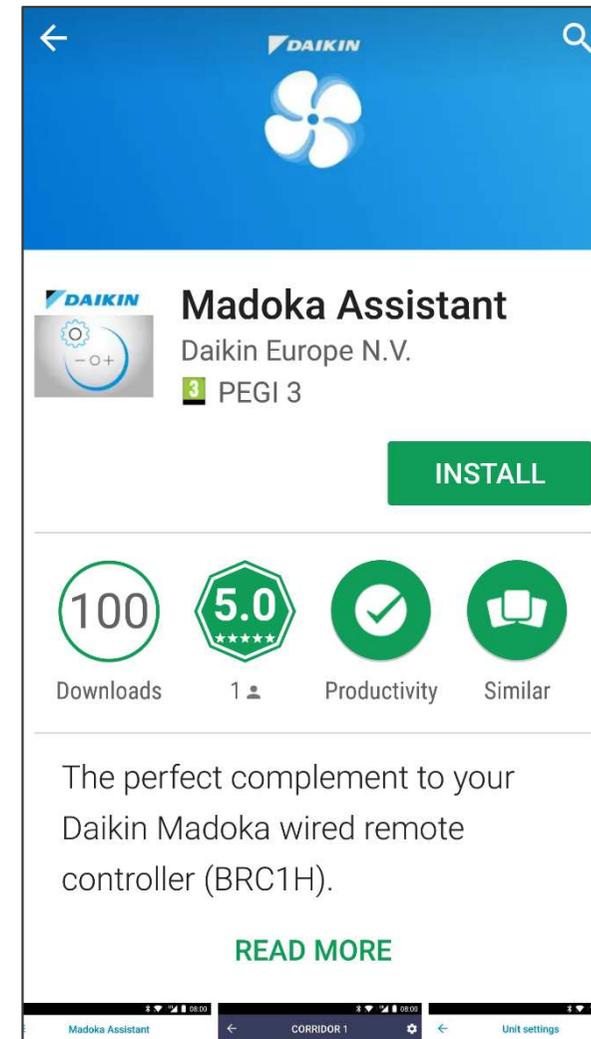
Operating system	Version	Typical models
iOS	9.3.5 or higher.	iPhone 5 and later iPad 2 and later All iPad minis iPod Touch 5th generation and later
Android	5.0 or higher. Bluetooth Low Energy 4.2 or higher	

Using the Madoka Assistant.

Browse your relevant App store (iTunes or Play Store) and search using the key words - "Daikin Madoka" or "Madoka Assistant".

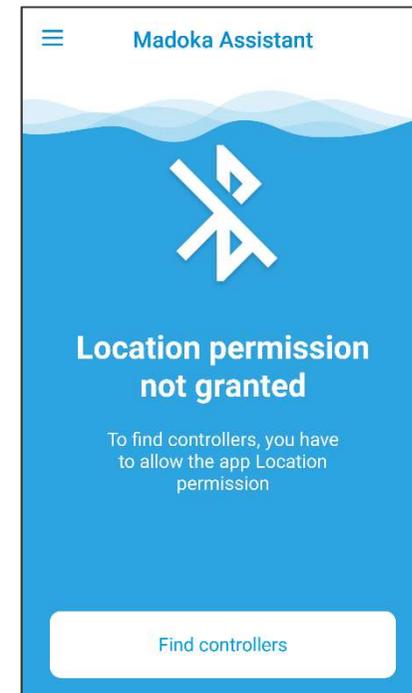
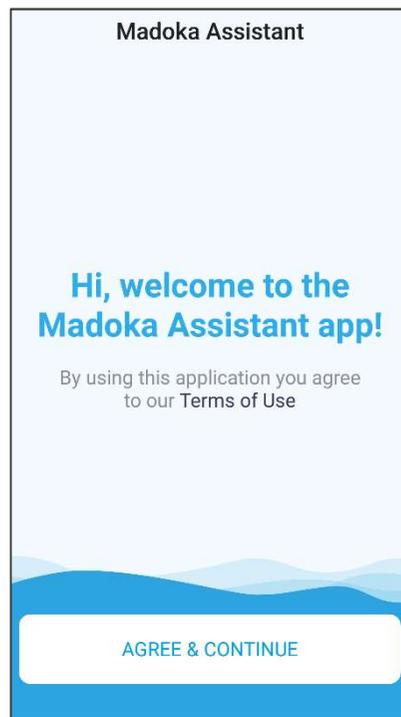
Install the App and then, when within range* of a Madoka controller, open the App.

*Bluetooth Low Energy 5 has an unobstructed range of up to 1.6kms!
However within buildings the range drops to typically 8 to 10 metres.



Using the Madoka Assistant.

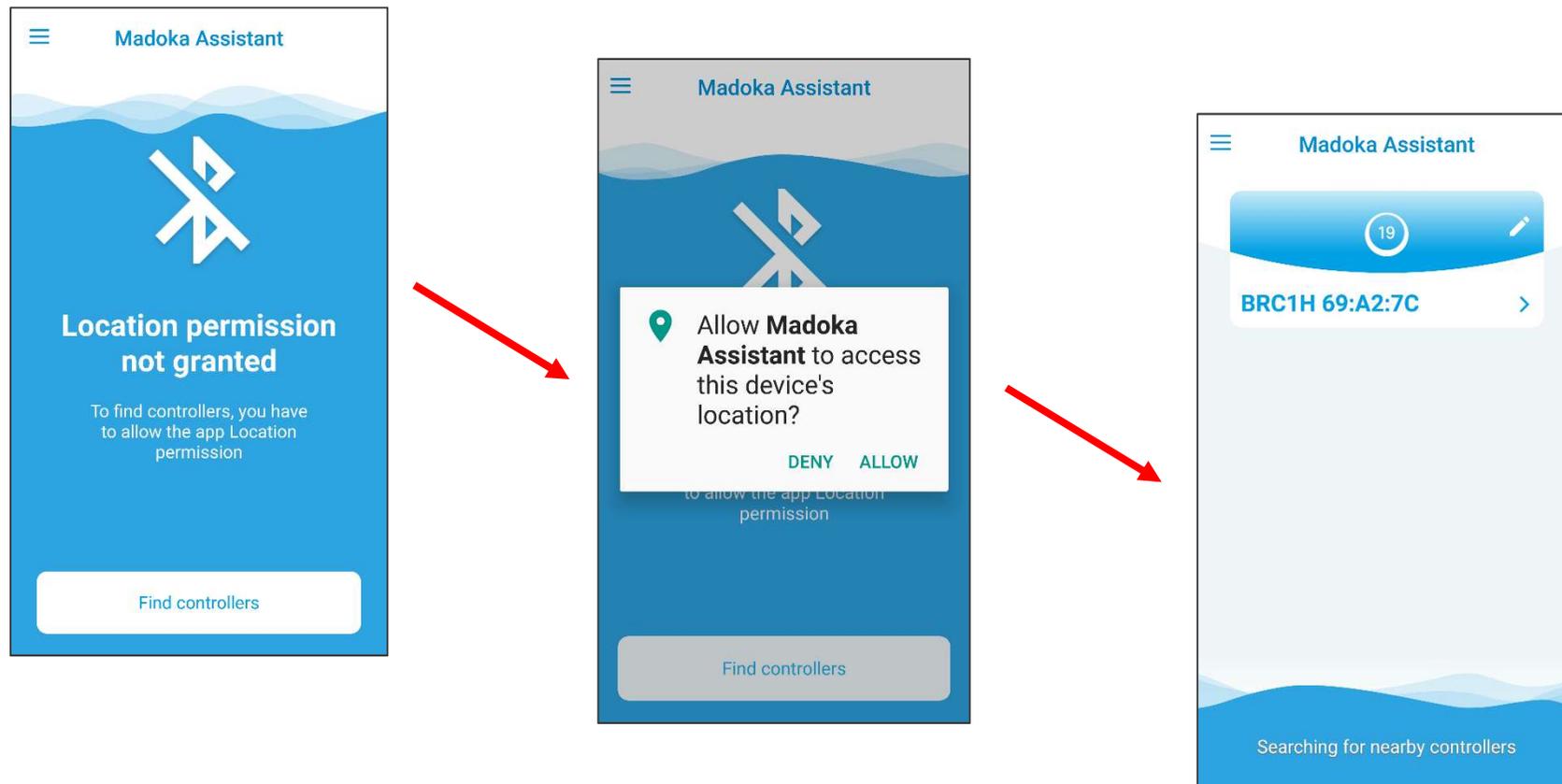
The first time the App is opened it will require you to agree to the 'Terms of Use'.



Using the Madoka Assistant.

The App will then ask for permission to access your 'Location' so that it has access to the phones' Bluetooth connection.

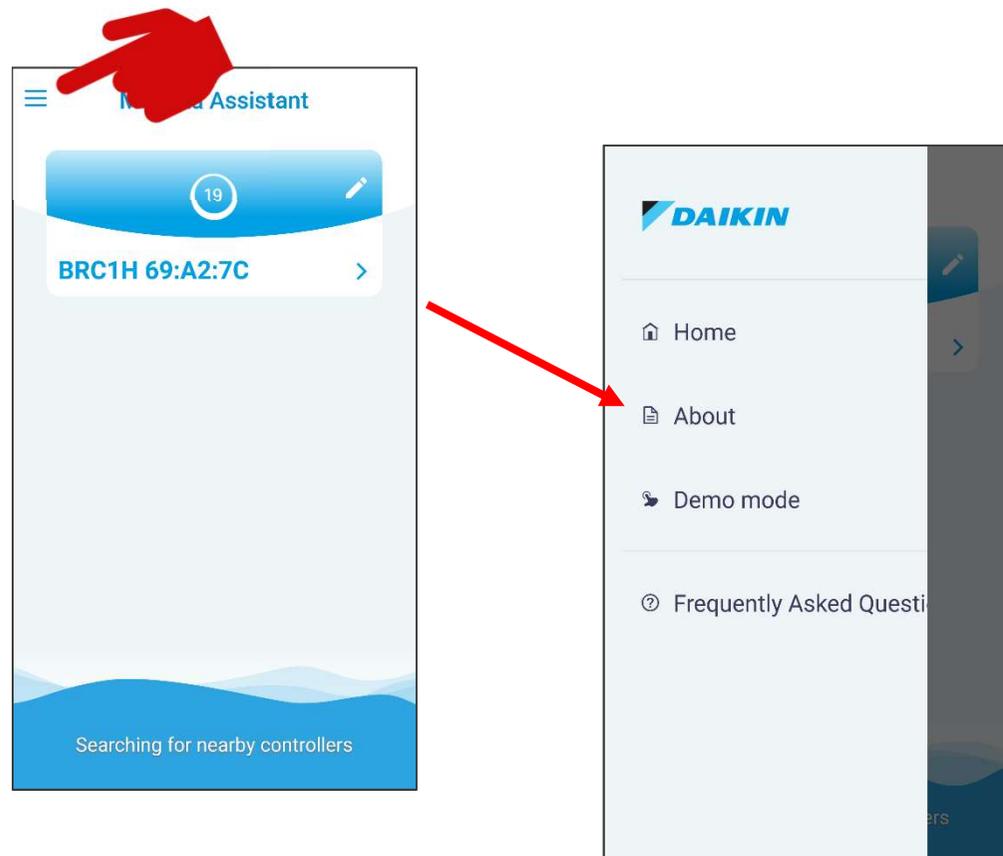
After which a list of controllers in range will be displayed.



Using the Madoka Assistant.

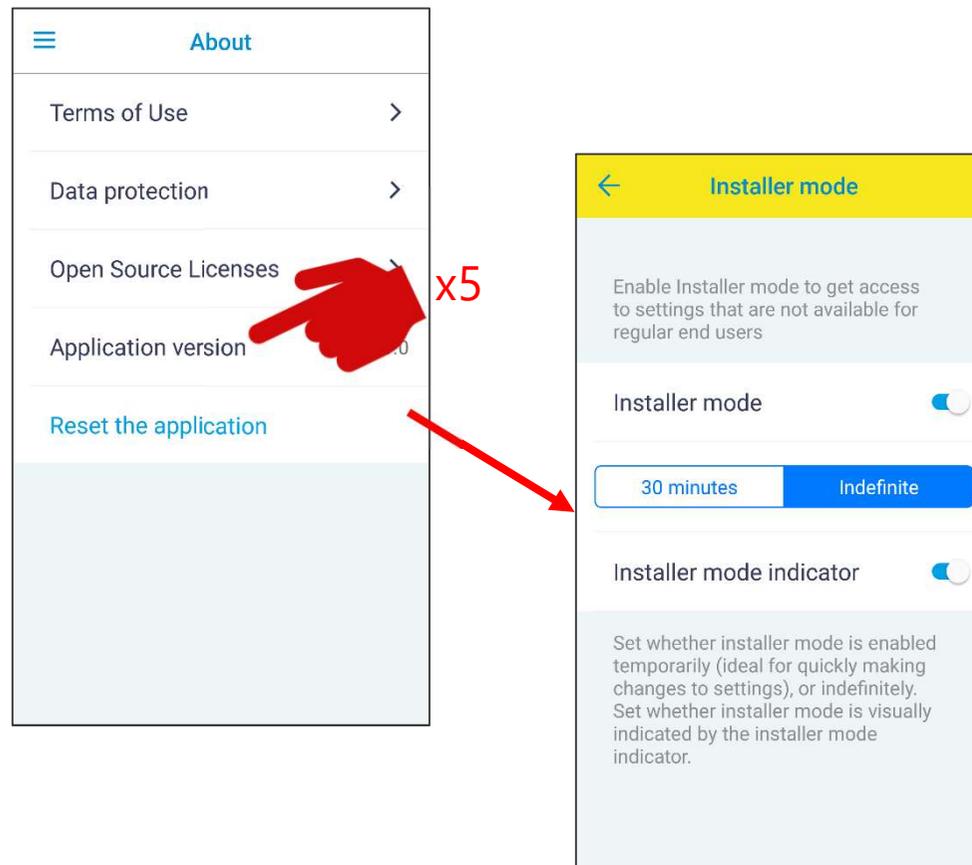
The first time the App is run, it will be necessary to 'login' as an "Installer" so that all features are available from the App.

1. Press the 3 horizontal lines in the top right of the screen.
2. Next select "About".



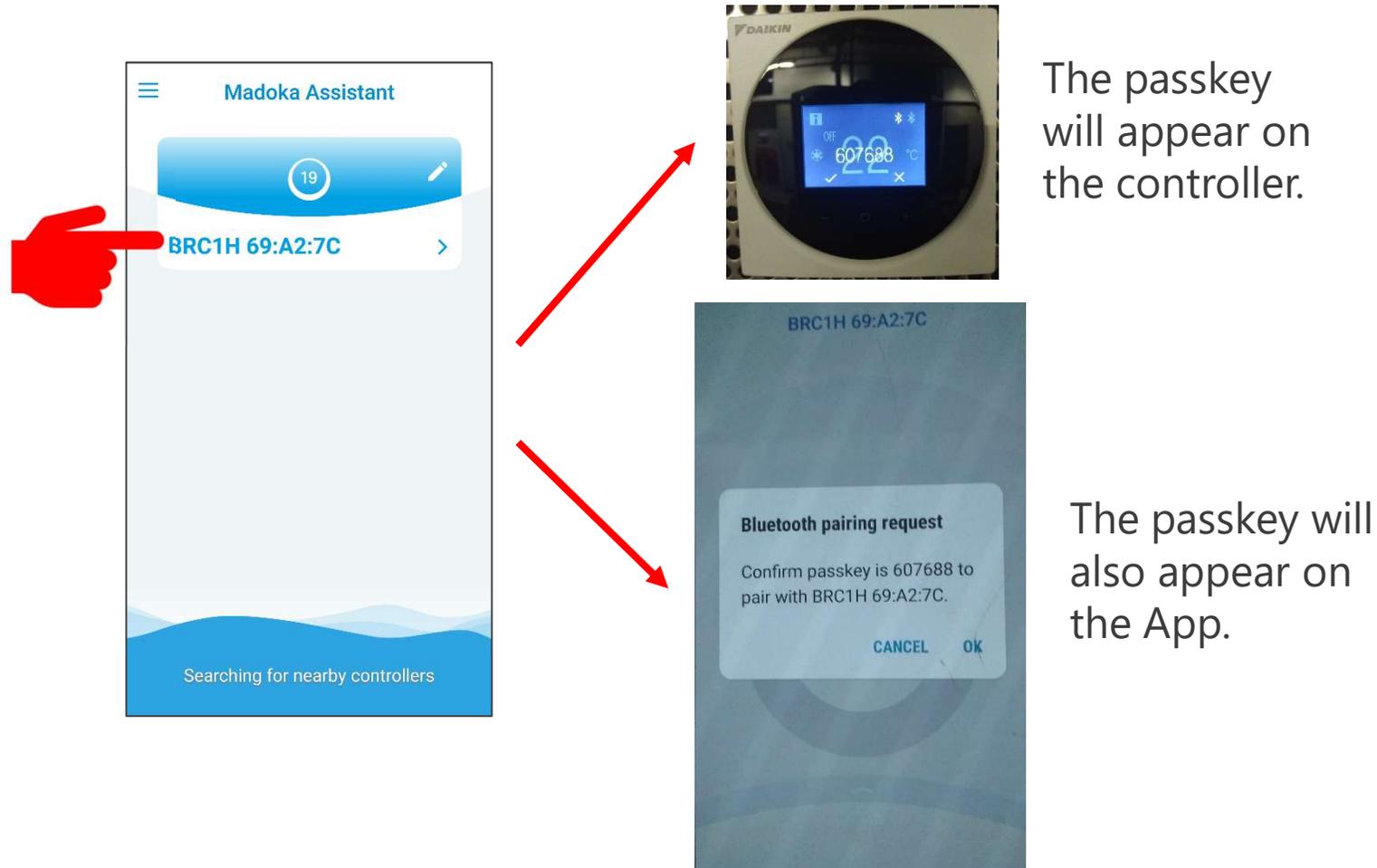
Using the Madoka Assistant.

3. Quick tap 5 times on "Application version".
4. The Installer mode is now activated. – It can be set to auto time out after 30 minutes if required, and the yellow status bar can be hidden if required.
5. Press the arrow in the top right to return to the previous screen.
6. Press the 3 horizontal lines in the top right of the screen and select "Home".



Using the Madoka Assistant.

When you first select a controller, you will be asked to 'pair' to it.

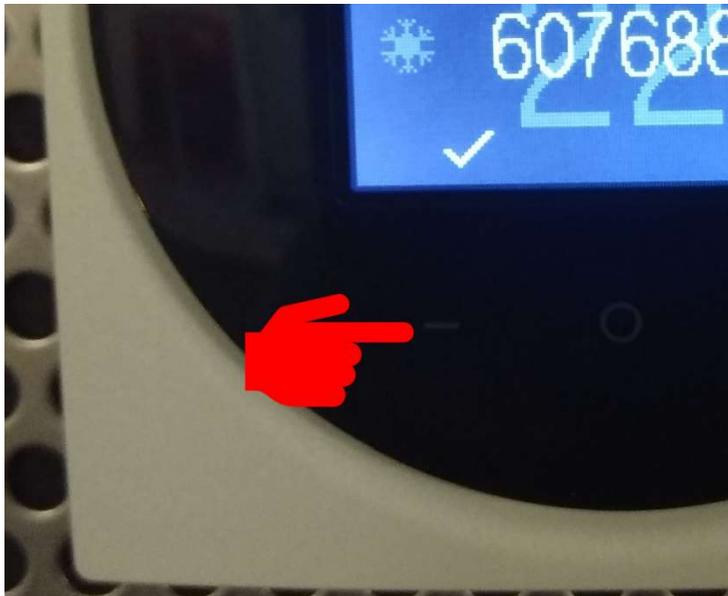


The passkey will appear on the controller.

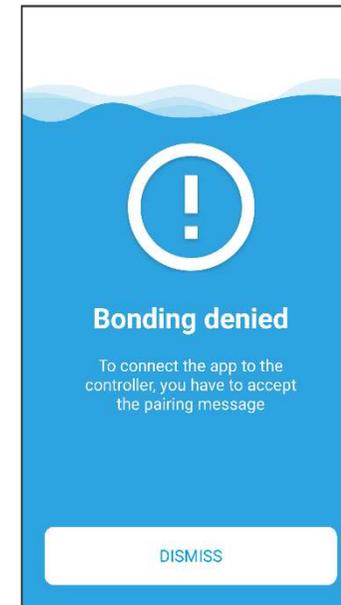
The passkey will also appear on the App.

Using the Madoka Assistant.

It is essential that you confirm the passkey on the controller before you confirm the passkey on the App, else the pairing will time out after about 3 seconds.



Confirm the controller passkey by pressing the '-' button, located below the tick icon.

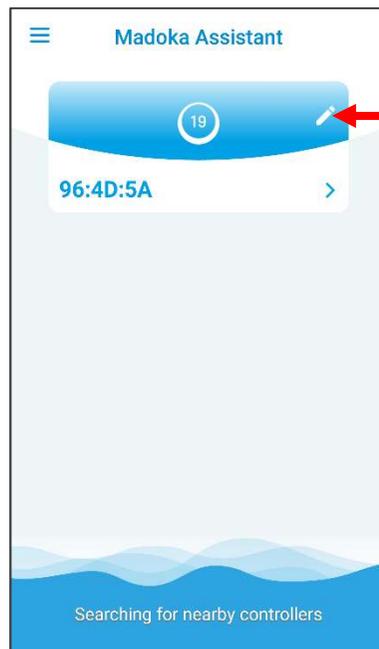


If the code is not confirmed, or times out, the above message will appear. Press 'Dismiss' and start the pairing process again.

Using the Madoka Assistant.

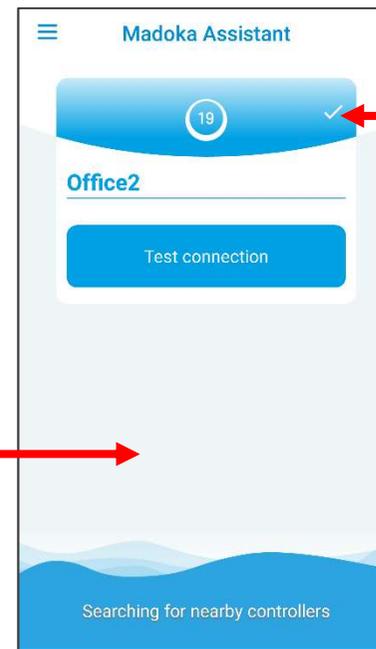
Once paired, you have the option to rename this controller.

This name will remain with the controller and be seen when anyone tries to connect to it with the App.



Click pen icon to edit controller name.

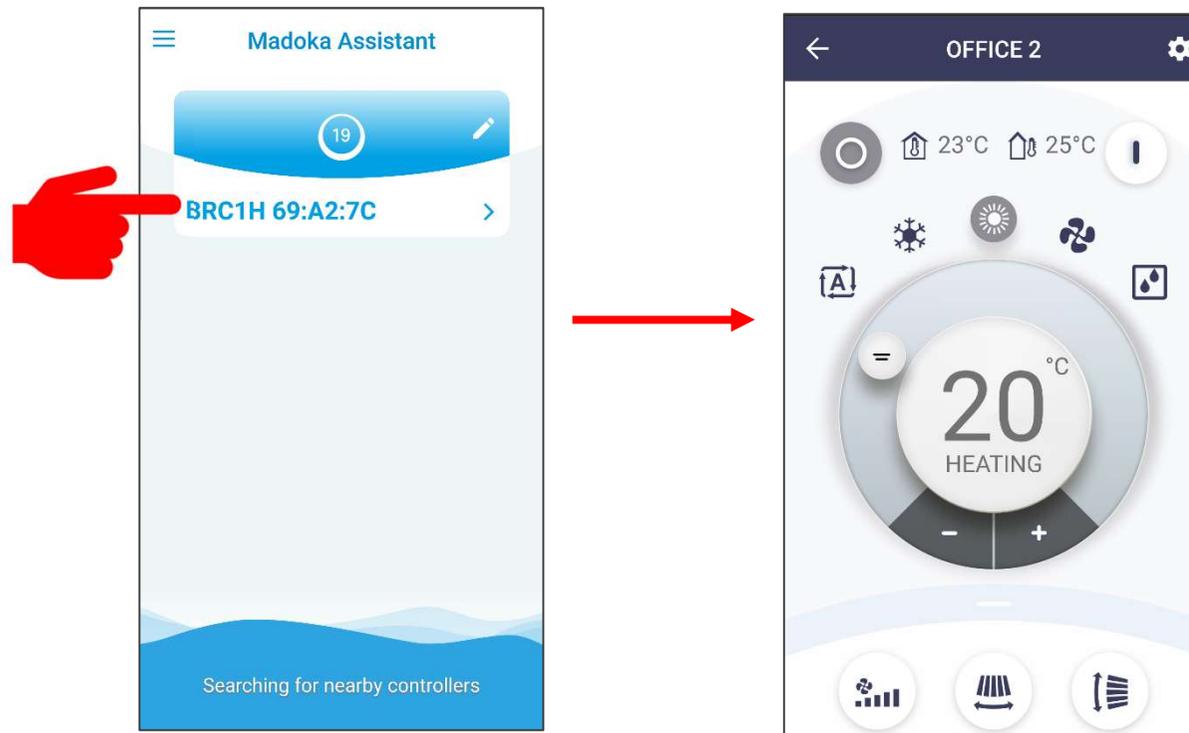
Keypad will appear here.



Click the tick icon to save the controller name.

Using the Madoka Assistant.

Once paired, clicking on the controller will open the controller interface screen.



Using the Madoka Assistant.

From this screen, basic control functions and statuses are available.

The screenshot shows the Madoka Assistant app interface for 'OFFICE 2'. At the top, there is a back arrow, the room name 'OFFICE 2', and a gear icon for settings. Below this, a yellow warning banner reads 'Filter inspection required'. The main display area shows a large circular temperature control dial set to 20°C in HEATING mode. To the left of the dial is a slider for set point adjustment, and to the right are minus and plus buttons for set point decrease and increase. Above the dial are icons for outdoor air temperature (SkyAir only), fan speed control, and mode change. Below the dial are icons for horizontal and vertical louver control. At the very bottom, there are three icons for louver control, which are filtered based on the unit type.

Annotations with red arrows point to the following features:

- Remote controller sensor temperature
- Stop unit
- Outdoor air temperature (SkyAir only)
- Set point adjustment (slide)
- Set point decrease
- Fan speed control*
- Horizontal louver control*
- Warnings & faults
- Advanced settings*
- Start unit
- Mode change: Auto, Cool, Heat, Fan only, Dry
- Current mode & set point*
- Set point increase
- Vertical louver control*

Louver icons filtered based on unit type

* See following slides for more details

Using the Madoka Assistant.

When you start the fan coil unit, the display changes colour to show the current operating mode and set point (if applicable).



Stopped



Heating /
Auto heat



Cooling /
Auto cool



Fan only

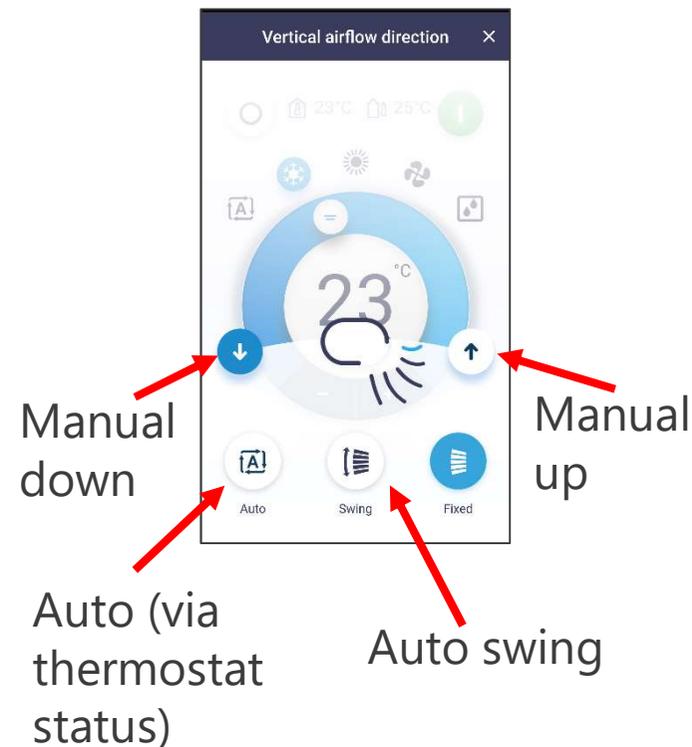
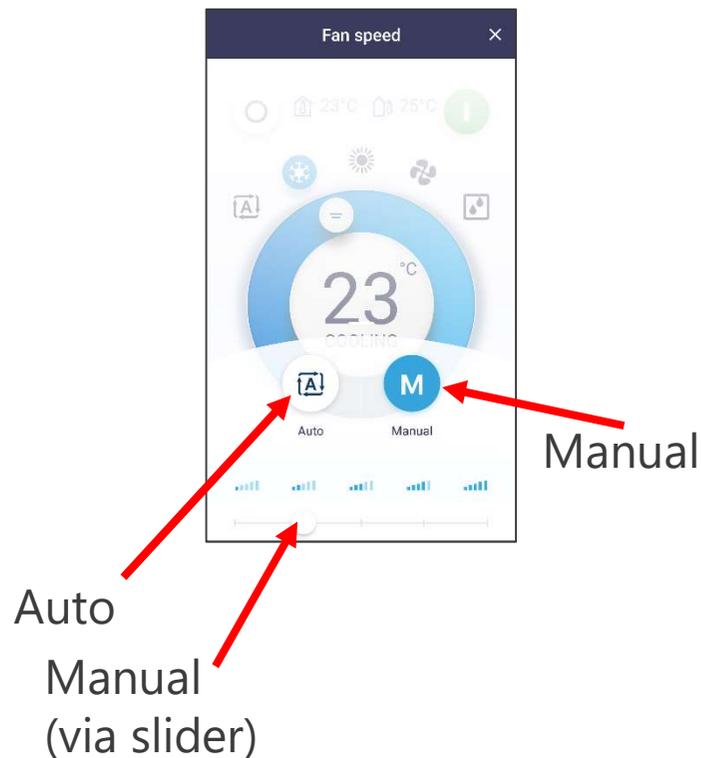


Dry

Using the Madoka Assistant.

When selecting fan speed, one of louver icons or VAM unit mode, the bottom of the display pops up.

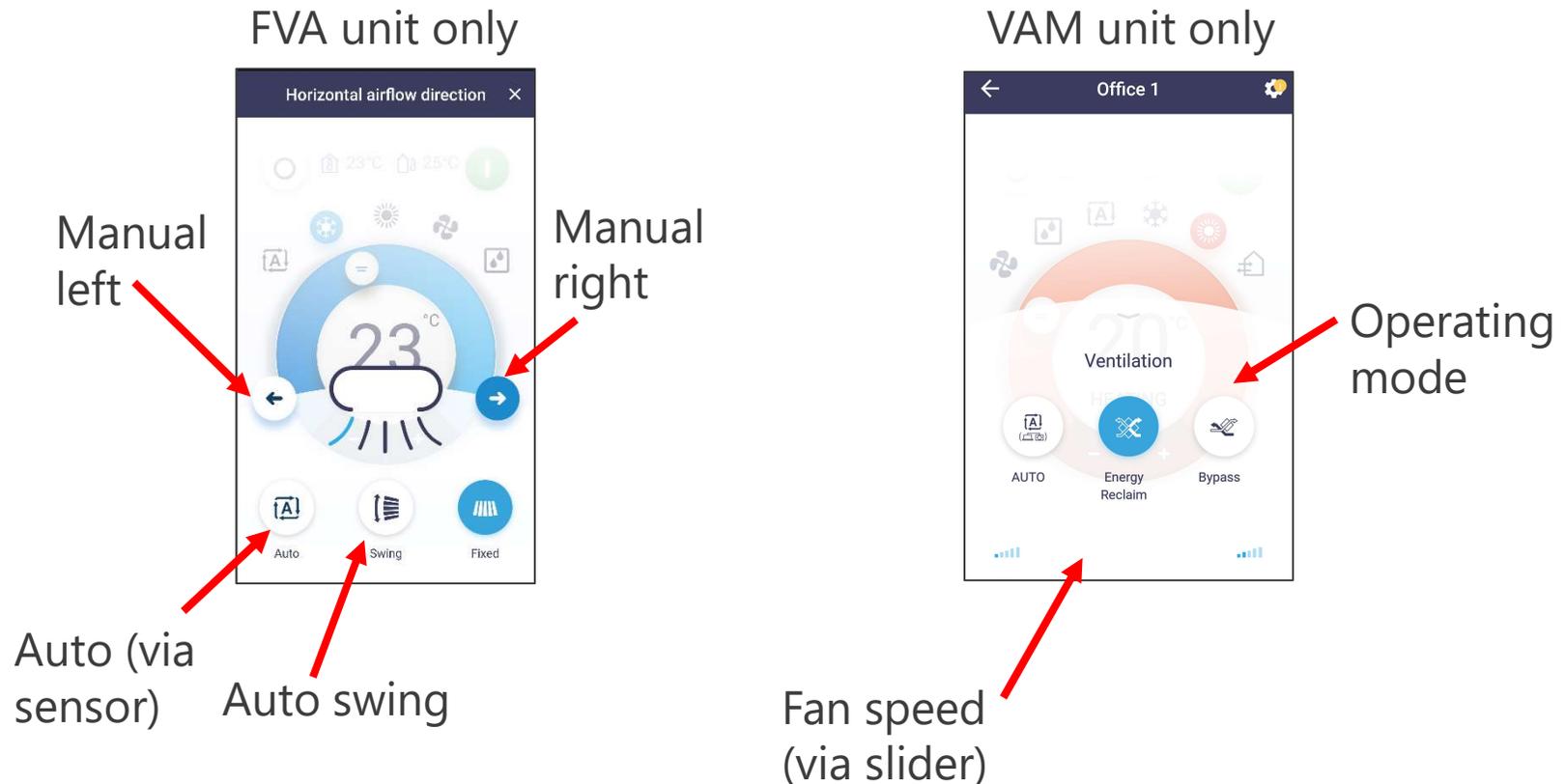
Once finished, click on any part of the original screen to close the pop up.



Using the Madoka Assistant.

When selecting fan speed, one of louver icons or VAM unit mode, the bottom of the display pops up.

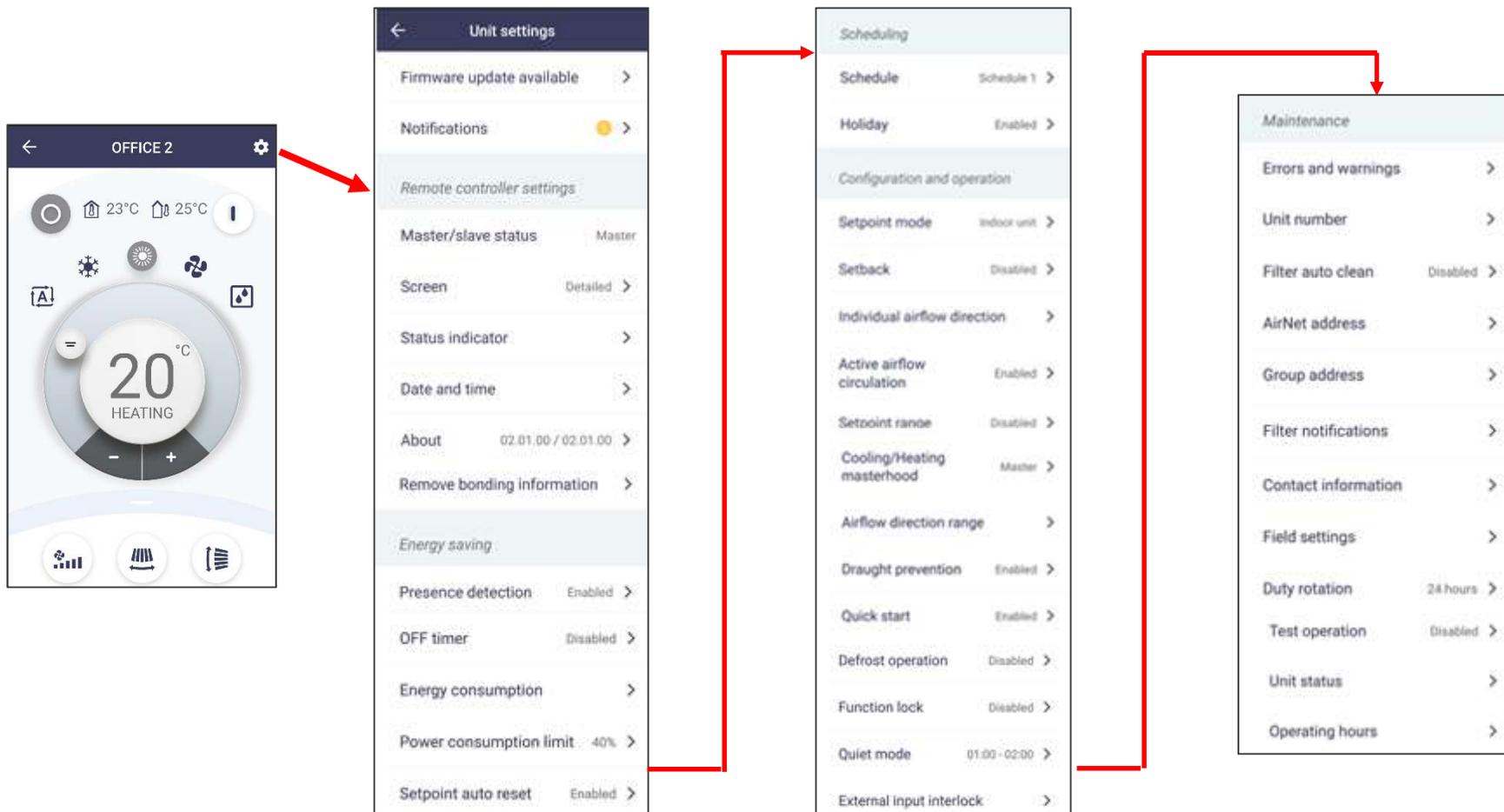
Once finished, click on any part of the original screen to close the pop up.



Using the Madoka Assistant.

To access the Advanced settings menu press the cog icon.

The screen will change to show a list of available settings.



Using the Madoka Assistant.

Firmware update.

This is used to update the Bluetooth interface (Communications module) and Remote controller – should there be a required update.

The screenshot shows the 'Firmware update' screen in the Madoka Assistant app. It is divided into two sections: 'COMMUNICATION MODULE Firmware update' and 'REMOTE CONTROLLER Firmware update'. Each section displays the current version, the new version, and an 'Update firmware' button. Red arrows point from text labels to these elements.

Section	Item	Value
COMMUNICATION MODULE Firmware update	Current version	5.17
	New version	5.8
	Update firmware	
REMOTE CONTROLLER Firmware update	Current version	02.01.00
	New version	02.01.1
	Update firmware	

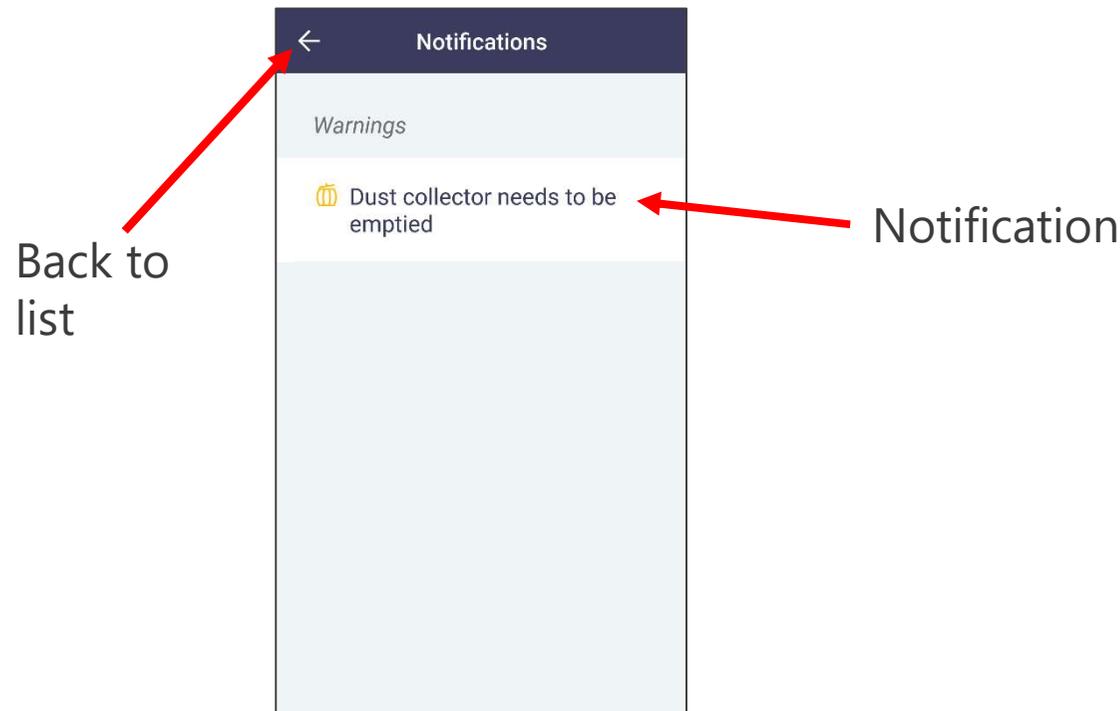
Annotations:

- Back to list (points to the back arrow)
- Current Bluetooth version (points to 5.17)
- Available Bluetooth version (points to 5.8)
- Press to update Bluetooth version (points to Update firmware)
- Current remote controller version (points to 02.01.00)
- Available remote controller version (points to 02.01.1)
- Press to update remote controller version (points to Update firmware)

Using the Madoka Assistant.

Notification.

This screen shows any actions that are needed – typically filter inspection or dust collect box to be emptied (self cleaning unit).



Using the Madoka Assistant.

Remove bonding information.

This is used to unpair your device from the controller.

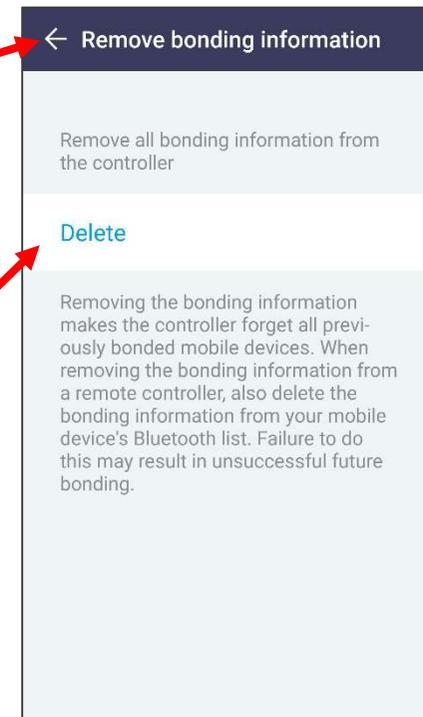
Un-pairing your device from the controller will mean you will need to re-pair your device to the controller next time you wish to access it.

However it will prevent your device from pairing with the controller whenever you pass within range – and hence reduce the drain on your devices' battery.

It also means that other people will be able to pair with the controller (as the Madoka can only remember the last 10 paired devices).

Back to list

Unpair controller from device



Using the Madoka Assistant.

Setpoint auto reset.

The screenshot shows the 'Setpoint auto reset' screen in a mobile app. At the top left is a back arrow icon. Below it is the title 'Setpoint auto reset'. The main content area has a light blue background and contains the following elements: a descriptive text 'Set a timer for the system to automatically reset the temperature setpoint', a sub-header 'Cooling and heating setpoint', a toggle switch for 'Setpoint auto reset' (currently turned on), a temperature slider with a blue bar and a white knob set to 25°C, with minimum and maximum values of 16°C and 32°C respectively, and a 'Timer' dropdown menu currently set to '30 minutes'. Red arrows point from text annotations to these specific UI elements.

Back to list

Default setpoint to return to after timed period away from this.

25°C

16°C 32°C

Timer 30 minutes

Enable/disable Setpoint auto reset function.

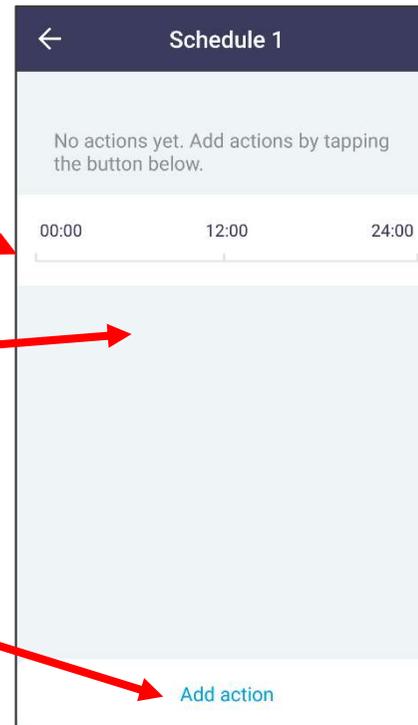
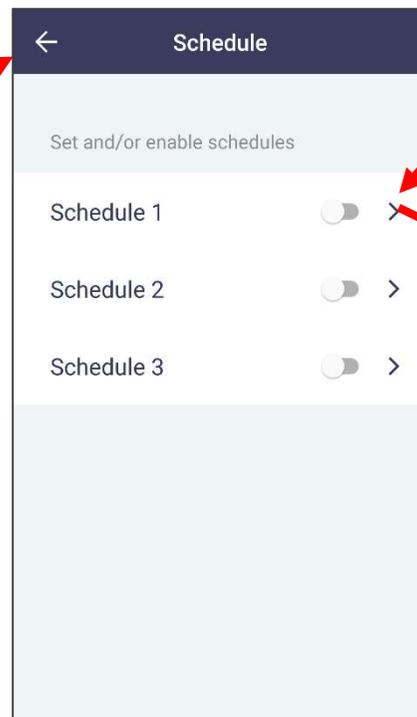
Period that the setpoint is allowed to be away from default before being reset (30/60/90/120 minutes).

Using the Madoka Assistant.

Schedule.

3 schedules can be set.
Press the arrow to edit
the required schedule

Back to list



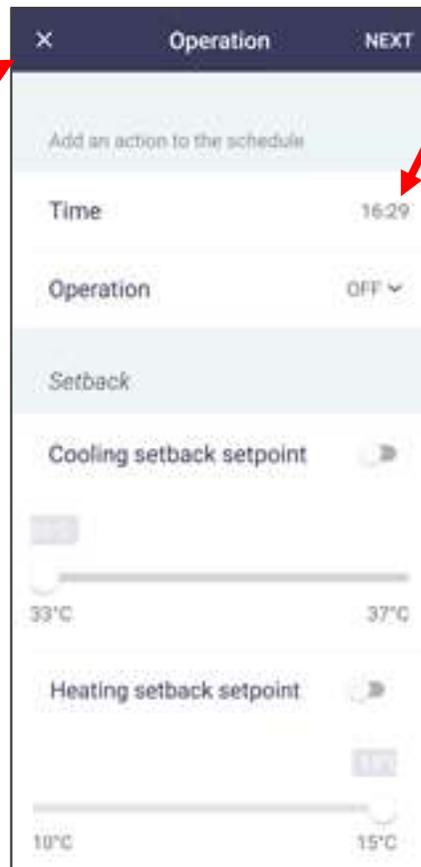
Current
settings

Add new
instruction

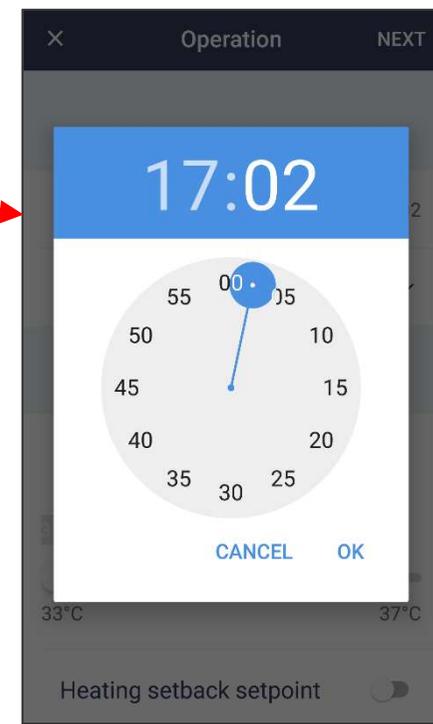
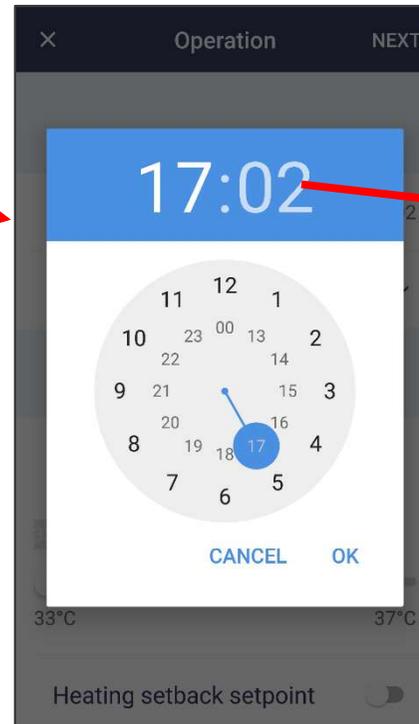
Using the Madoka Assistant.

Schedule - Time.

Exit without saving



Press to change time of action



Select the required hour and then display will change to minutes. Then select the required minutes and press 'OK'.

Using the Madoka Assistant.

Schedule – Off command.

Exit without saving

Select required action (on/off)

For an 'Off' action you can also activate cooling and/or heating setback along with an associated temperature

Once action selected, then press 'Done'

Using the Madoka Assistant.

Schedule – On command.

The screenshot shows the 'Operation' screen of the Madoka Assistant. The screen has a dark blue header with a close button (X), the title 'Operation', and a 'NEXT' button. Below the header, there is a section titled 'Add an action to the schedule'. Underneath, there are three rows: 'Time' set to 16:30, 'Operation' set to ON with a dropdown arrow, and 'Setpoint' which is currently disabled. Below the 'Setpoint' section, there is a 'Cooling and Heating range' toggle switch, which is currently turned off. Below the toggle, there is a temperature slider ranging from 16°C to 32°C, with a current value of 16°C. Red arrows point from text annotations to these specific elements: 'Exit without saving' points to the close button, 'Select required action (on/off)' points to the 'Operation' dropdown, 'For an 'On' action you can also activate a setpoint' points to the 'Cooling and Heating range' toggle and the temperature slider.

Exit without saving

Select required action (on/off)

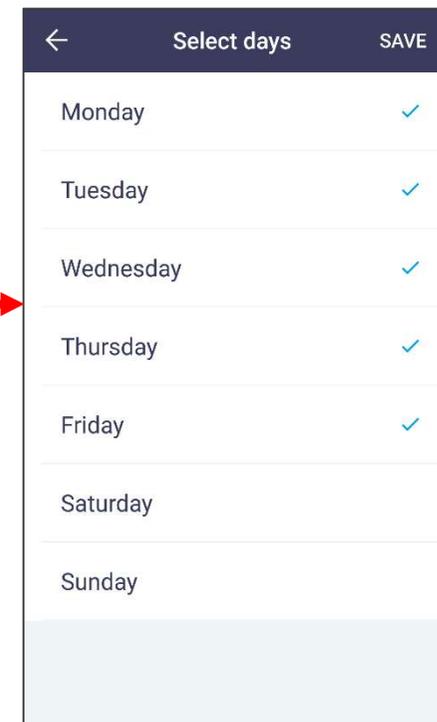
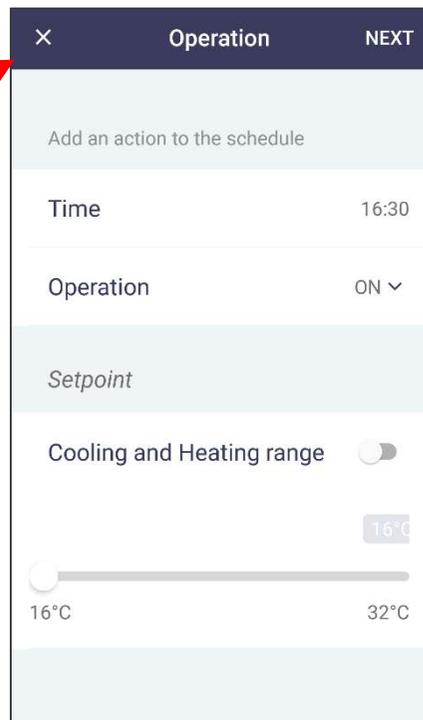
For an 'On' action you can also activate a setpoint

Using the Madoka Assistant.

Schedule – Days.

Once On/Off settings have been set, then press 'Next'

Exit without saving



Click on the required day(s) then press 'Save'

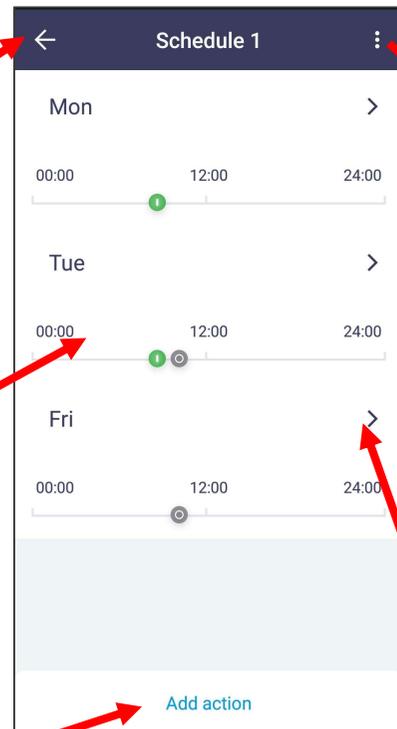
Using the Madoka Assistant.

Schedule.

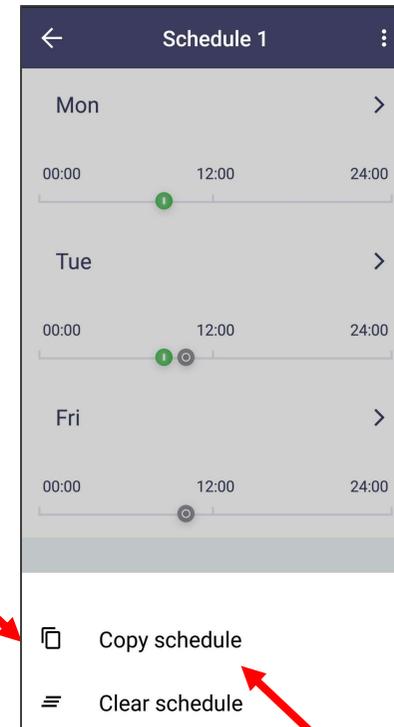
Return to main schedule screen

Added setting will appear here

Add more actions if required



Press arrow to edit instruction



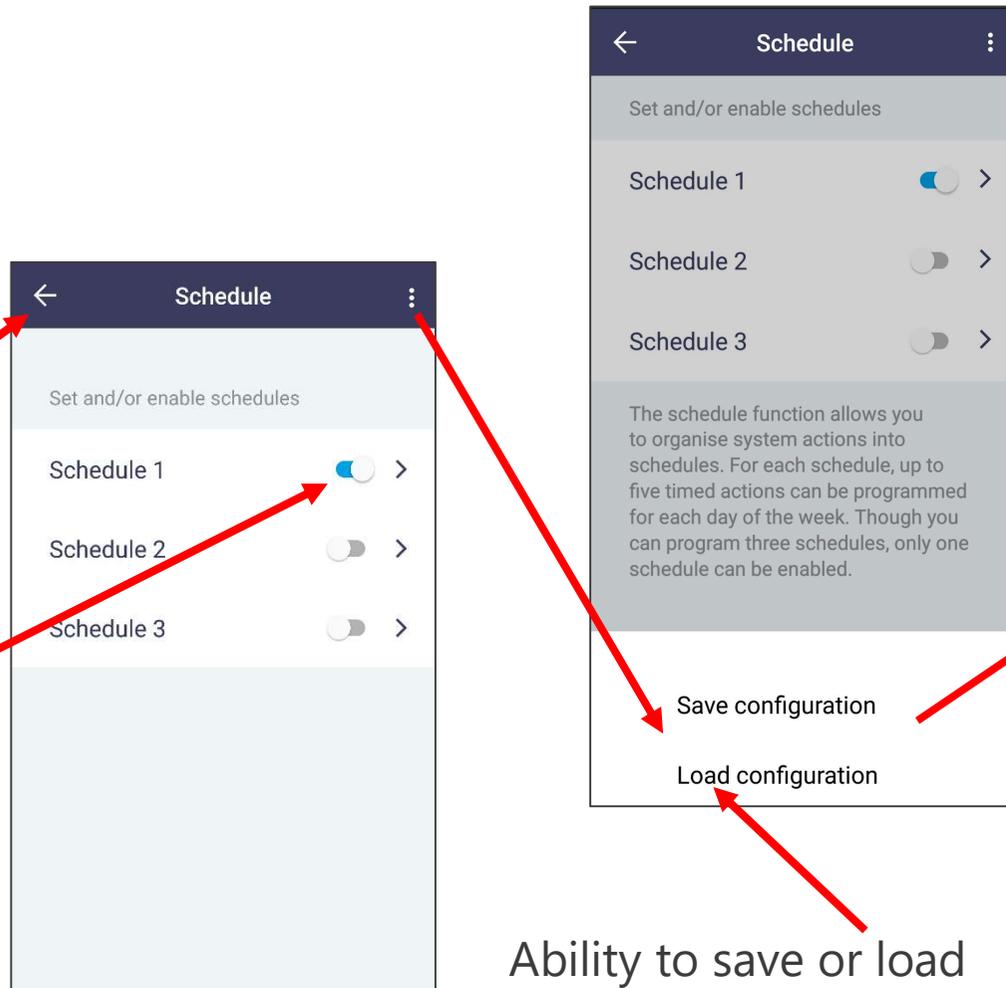
Ability to copy schedule to another schedule, or to delete all instructions

Using the Madoka Assistant.

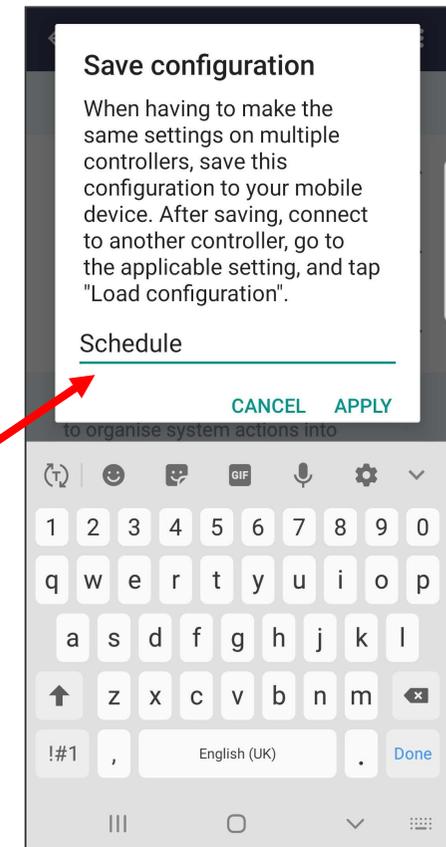
Schedule.

Back to list

Ensure schedule is enabled



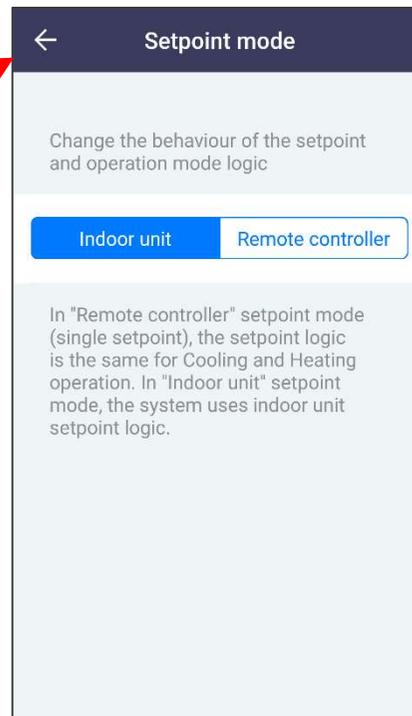
Ability to save or load all schedules to a file



Using the Madoka Assistant.

Setpoint mode.

Back to list



Switch between indoor unit & remote controller automatic heat/cool changeover modes. – see following slides.

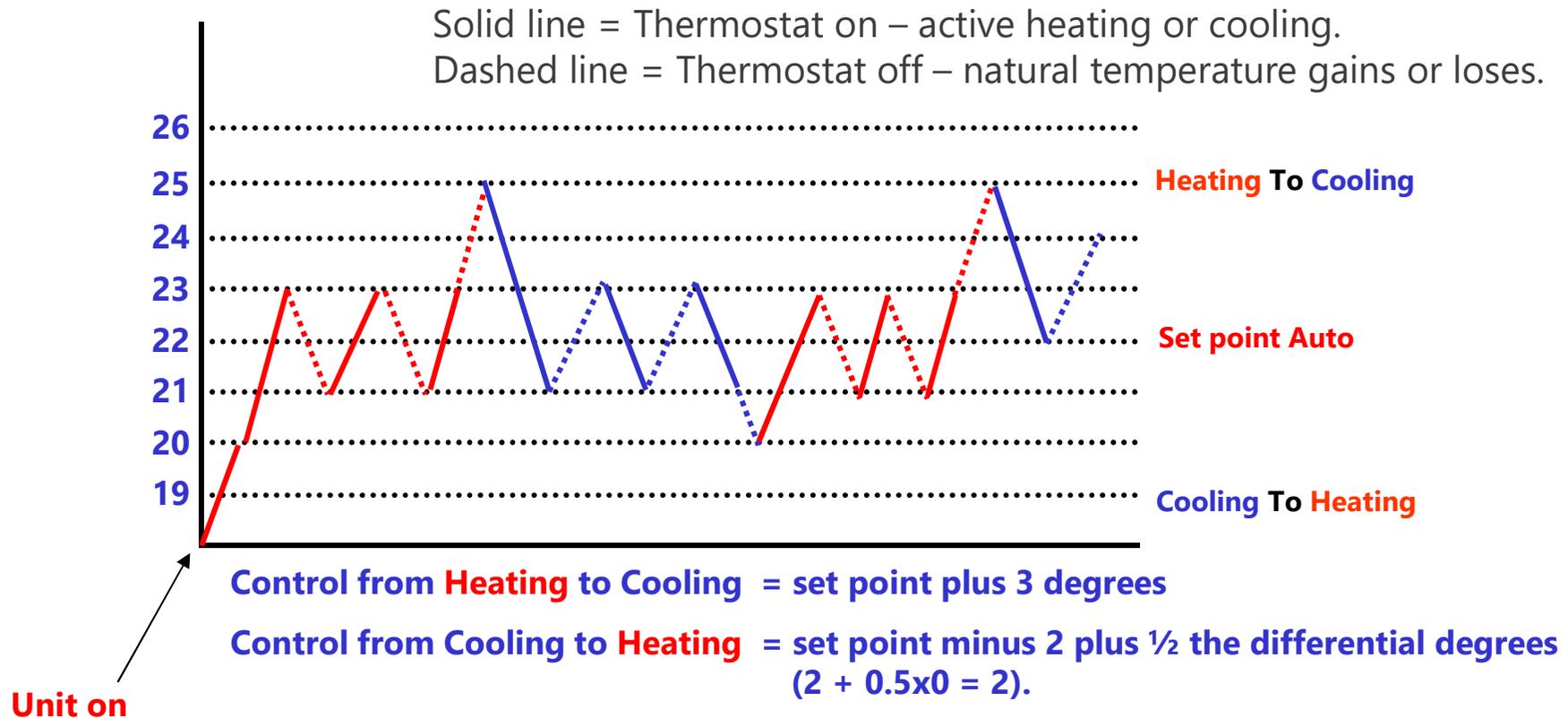
N.B.
When connected to a centralised controller, then only indoor unit setpoint mode is possible.

Using the Madoka Assistant.

Setpoint mode.

Indoor unit automatic heat/cool changeover - 0°C Diff (field setting 22, 4-01).

Changeover thermistor based on 20, 2-0x setting.

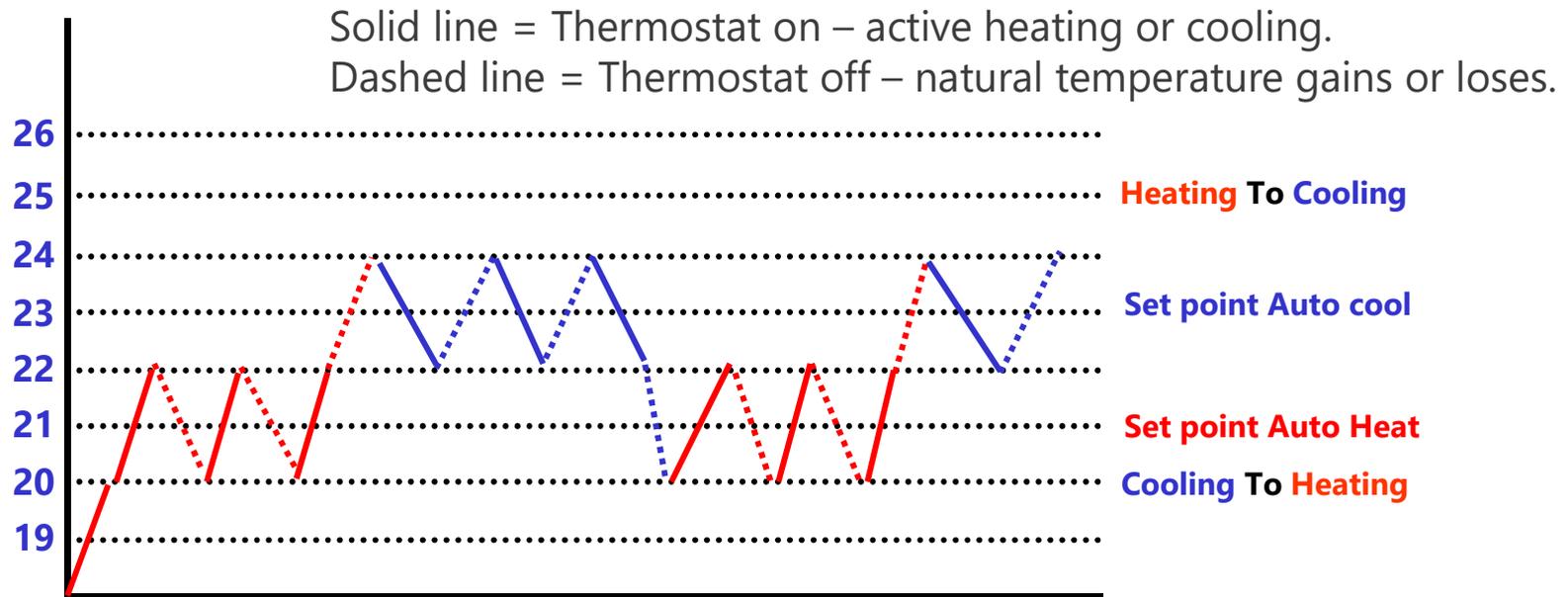


Using the Madoka Assistant.

Setpoint mode.

Indoor unit automatic heat/cool changeover - 2°C Diff (field setting 22, 4-03).

Changeover thermistor based on 20, 2-0x setting.



Control from **Heating** to **Cooling** = set point plus 3 degrees

Control from **Cooling** to **Heating** = set point minus 2 plus ½ the differential degrees
 (2 + 0.5x2 = 3).

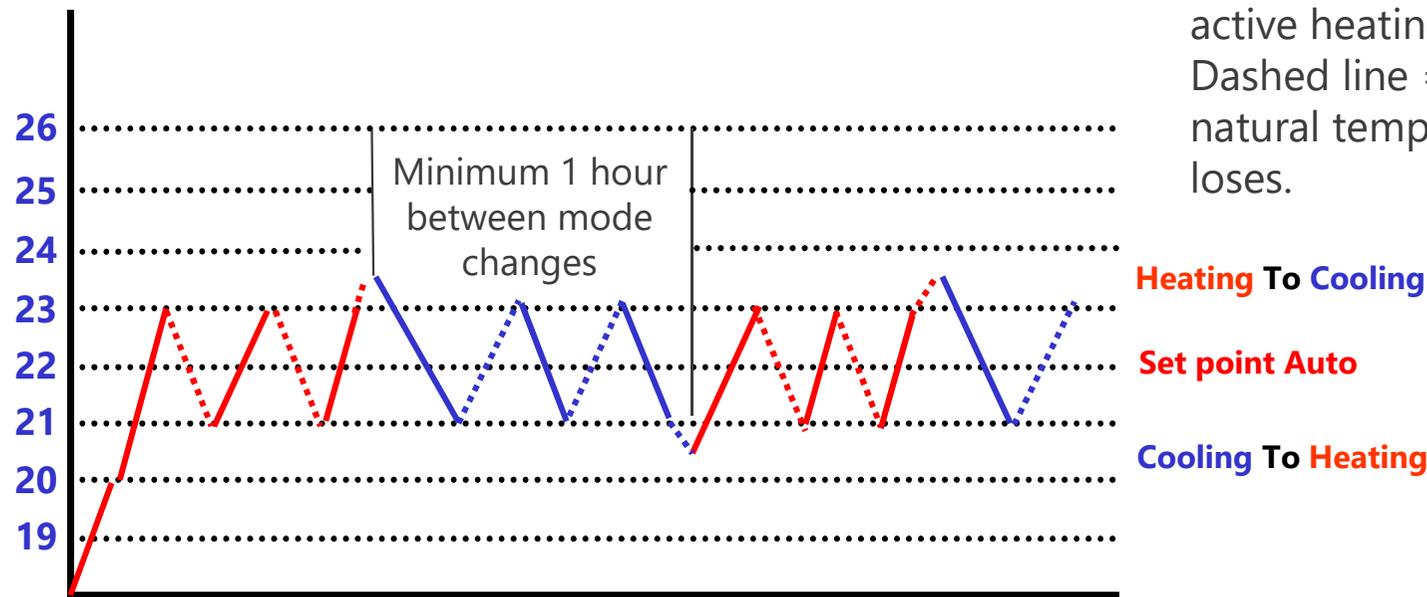
Unit on

Using the Madoka Assistant.

Setpoint mode.

Remote controller automatic heat/cool changeover.

Solid line = Thermostat on – active heating or cooling.
 Dashed line = Thermostat off – natural temperature gains or losses.



Unit on

Control from **Heating** to **Cooling** = set point plus thermostat off plus 0.5 deg C.

Control from **Cooling** to **Heating** = set point minus thermostat off less 0.5 deg C.

N.B.

Changeover only ever based on remote controller sensor (no option to change to return air sensor). In addition there is a 1 hour guard timer to prevent too frequent changeover.

Using the Madoka Assistant.

Setback.

Ability to save or load configuration to a file

Back to list

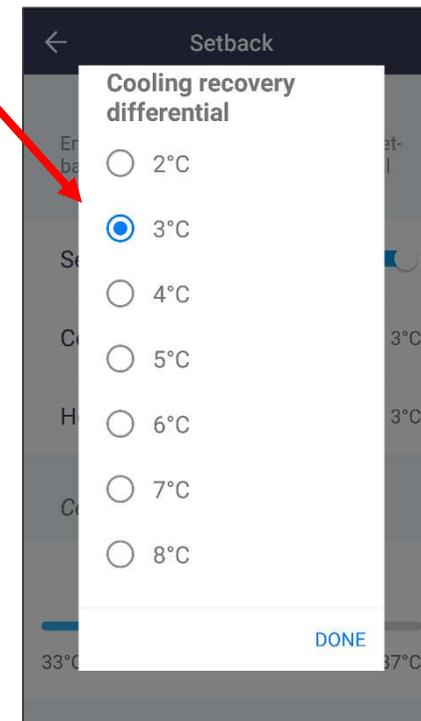
Save configuration

Load configuration

Enable/disable setback.

Temperature to which the space must rise when the unit is stopped, before the unit will automatically start in cooling and bring the room down by the cooling recovery differential

Temperature to which the space must drop when the unit is stopped, before the unit will automatically start in heating and raise the room by the heating recovery differential

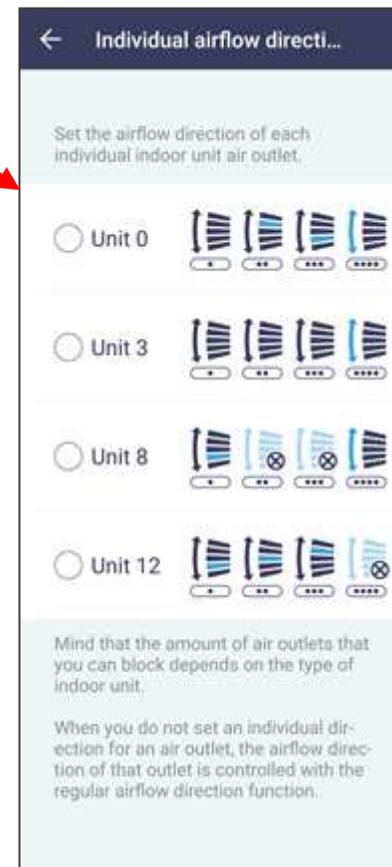


Using the Madoka Assistant.

Individual airflow direction.

This will only be available if you have a fan coil unit capable of individual louver position control.

Back to list



Using the Madoka Assistant.

Individual airflow direction.

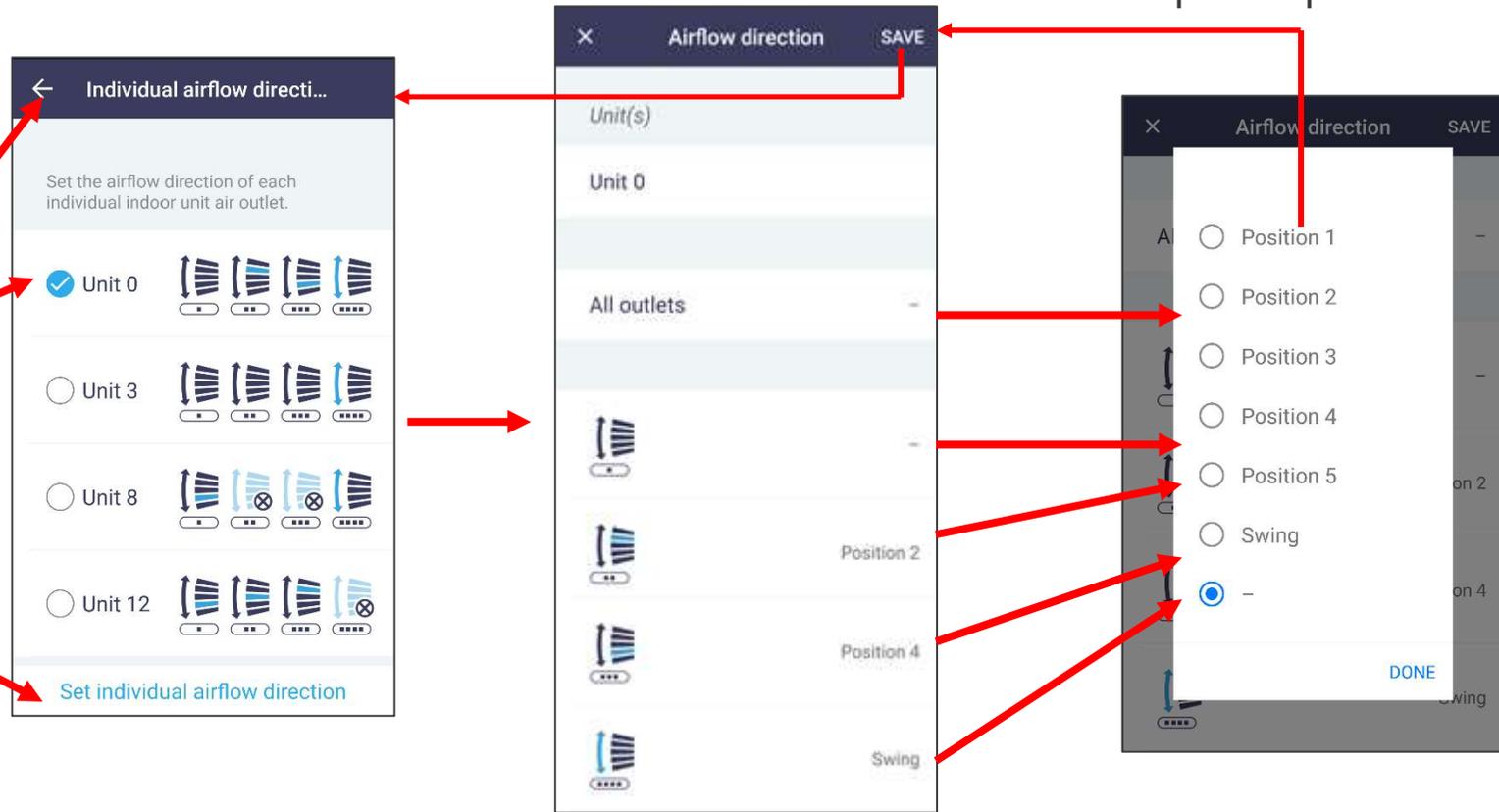
This will only be available if you have a fan coil unit capable of individual louver position control.

Press save after adjusting all required positions

Back to list

Select unit to adjust louvers on.

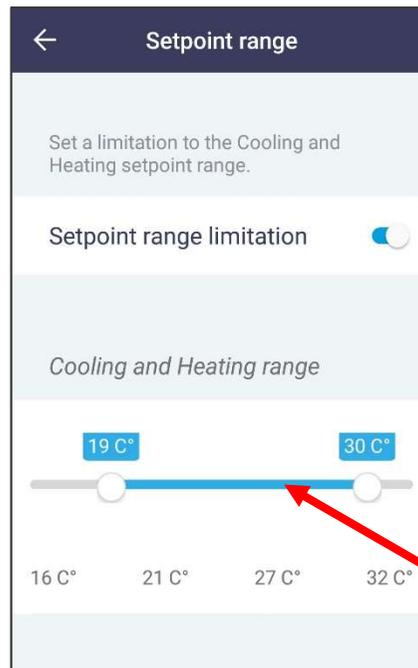
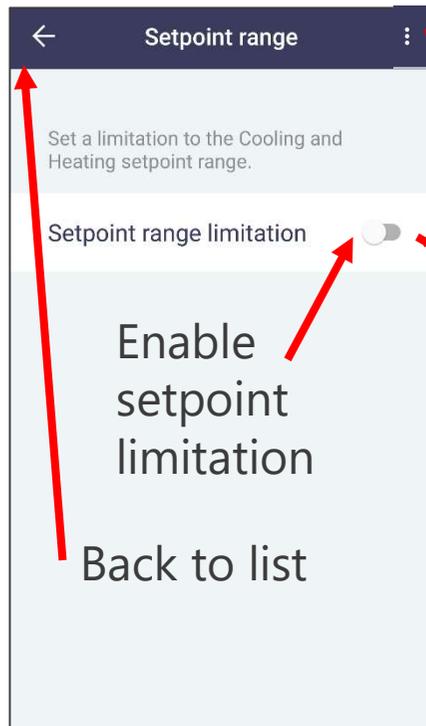
Then press "Set individual airflow direction"



Using the Madoka Assistant.

Setpoint range.

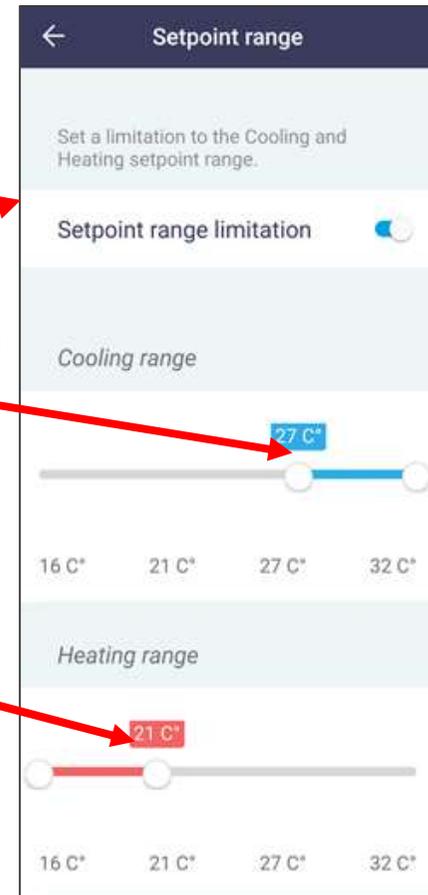
Save configuration
Load configuration



Remote controller Setpoint mode

Minimum cooling setpoint

Maximum heating setpoint



Indoor unit Setpoint mode

Common setpoint range

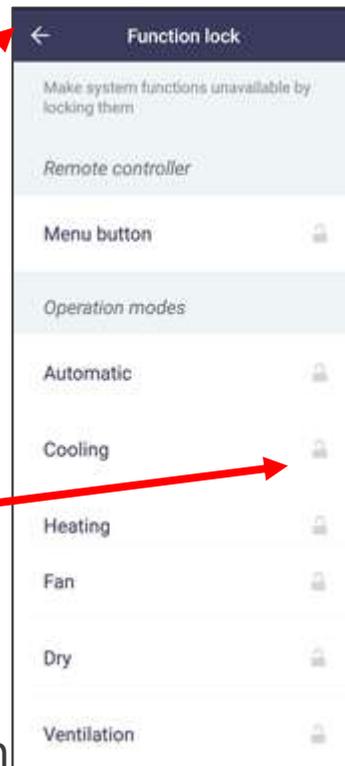
N.B.
Setpoint limitations only apply to heating and cooling modes – not to automatic mode.

Using the Madoka Assistant.

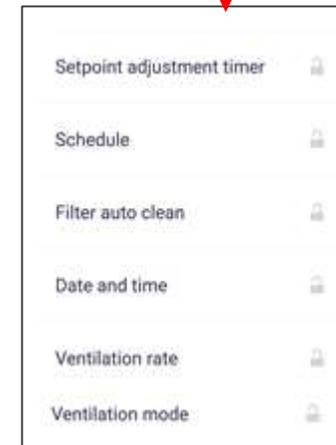
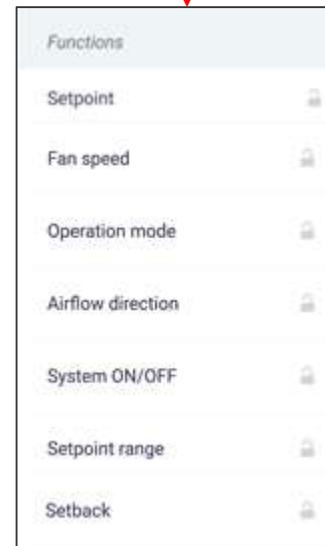
Function lock.

Disables buttons and functions on both the remote controller and App.

Back to list



Pressing the padlock (such that it turns blue) will lock / disable the associated function



Using the Madoka Assistant.

Errors and warnings.

The image shows two screenshots from the Madoka Assistant app. The left screenshot is titled "Errors and warnings" and contains a back arrow, a message "Consult the error history and disable error and warning notifications.", an "Error history" link with a right arrow, two toggle switches for "Display errors" and "Display warnings", and a note at the bottom: "When you disable error and warning notifications, they automatically get enabled again after 48 hours." The right screenshot is titled "Error history" and shows a list of faults: "A1-01 Remote Controller" with a timestamp "01:00, 12 DEC 2017" and "A2-10 Unit 0" with "TIME NOT SET".

Back to list

When Display errors or warnings is turned off, then it will automatically be re-enabled after 48 hours. However during that period errors or warnings will not be displayed

Last 10 faults detected by remote controller. (Time & date stamped)

Using the Madoka Assistant.

Group address. – **Installer mode only.**

This menu is only available if the indoor unit is connected to a centralised controller.

Back to list

Group address (set to released if individual group addressing employed)

Individual unit group address

Press to set group address

Press to set individual unit group address

Address range 1-00 to 4-15

Unit	Group Address
Group	Released
Unit 0	16-15
Unit 3	Released
Unit 8	13-1
Unit 12	1-15

Unit 0	Address
<input type="radio"/>	1-0
<input type="radio"/>	1-1
<input type="radio"/>	1-2
<input type="radio"/>	1-3
<input type="radio"/>	1-4
<input type="radio"/>	1-5
<input type="radio"/>	1-6

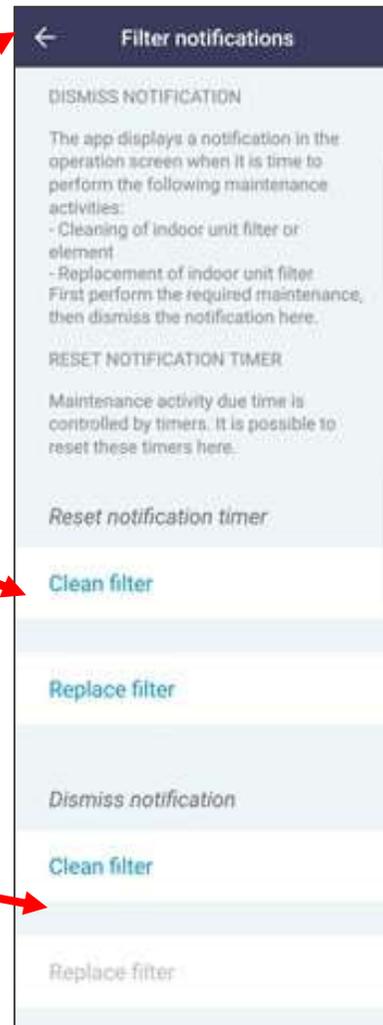
Using the Madoka Assistant.

Filter notifications.

Back to list

Reset run timer back to zero – filter indication & replace filter

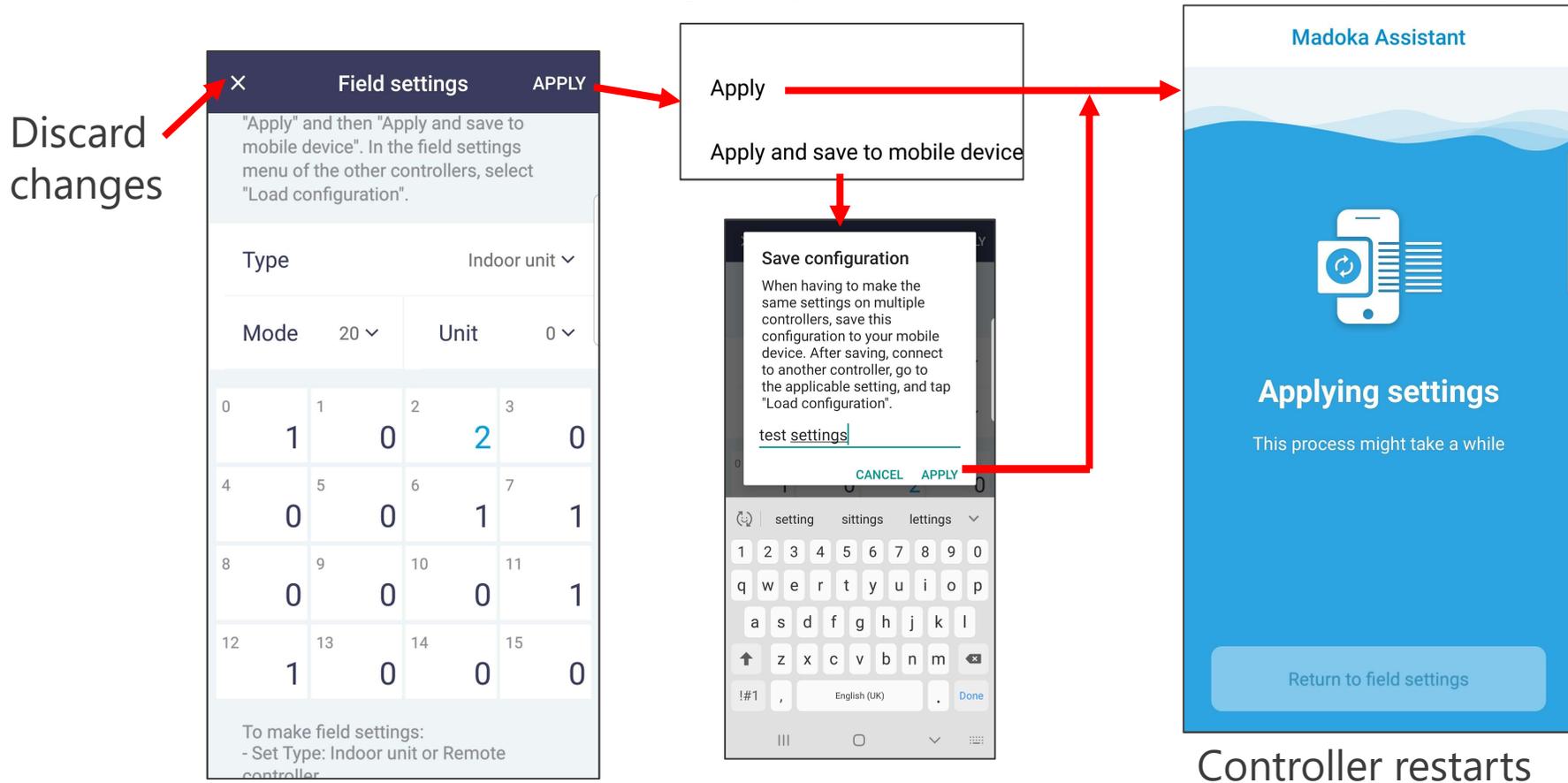
Reset indication symbol – filter indication & replace filter



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

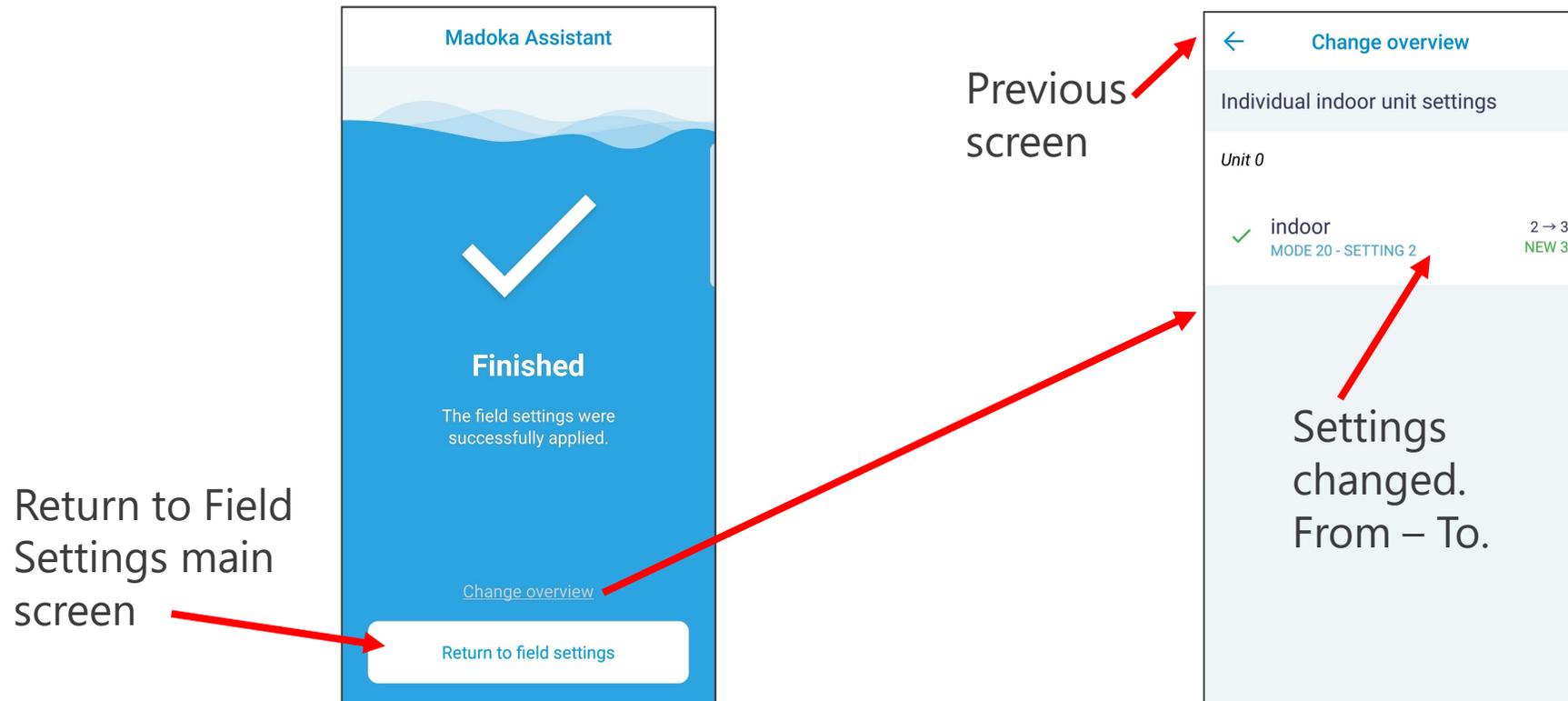
This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

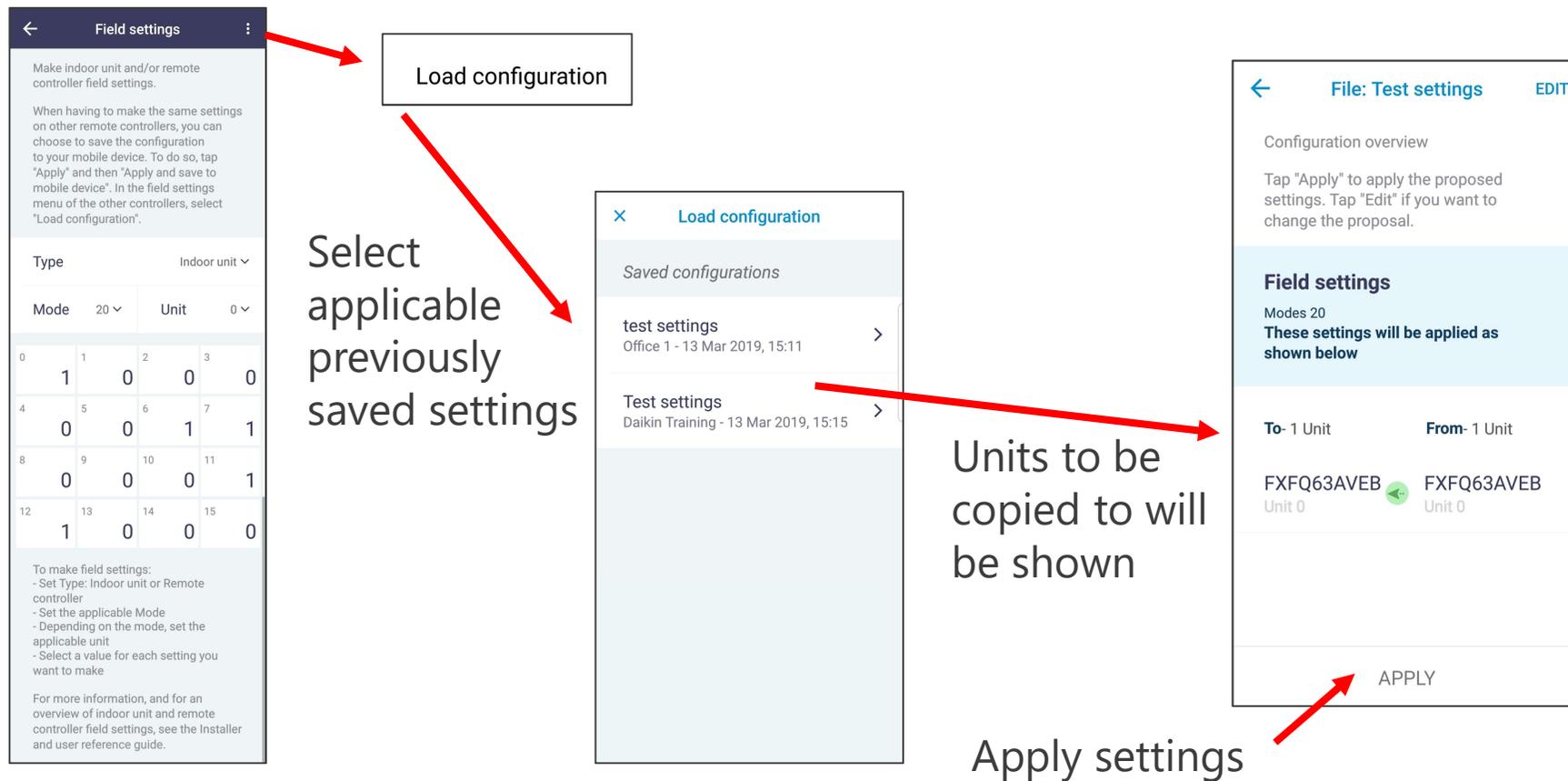
This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

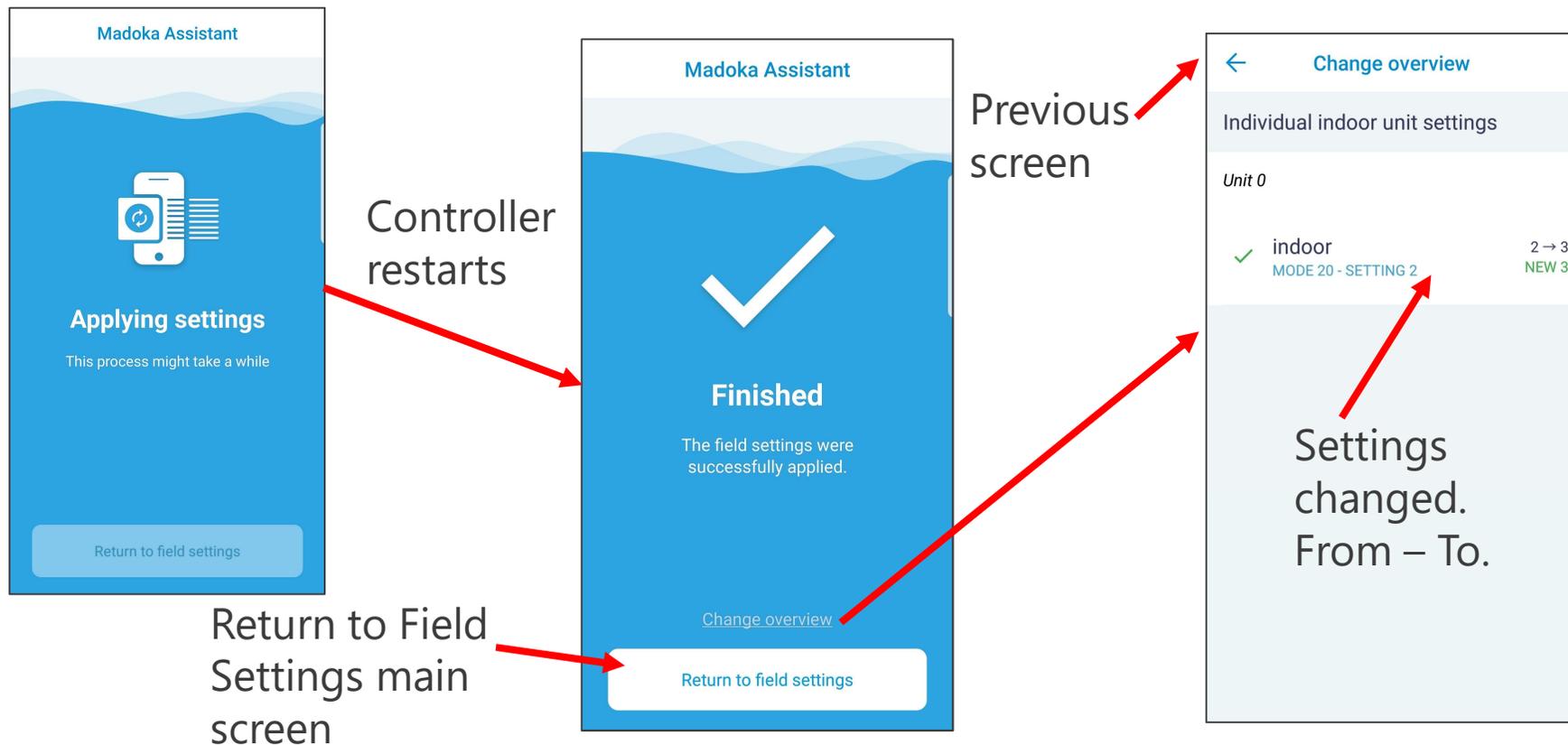
To apply previously saved settings to a new unit/controller.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Unit status.

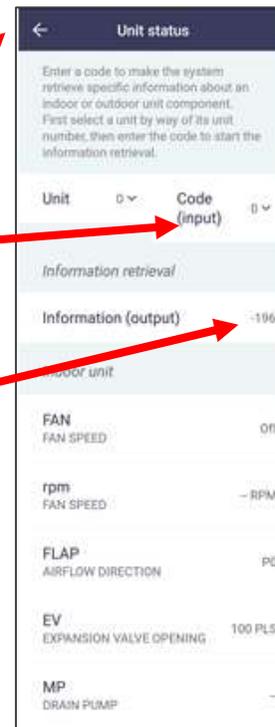
This menu is used to see the fan coil unit status & thermistor values.

Outdoor status & thermistor values are available for SkyAir systems only.

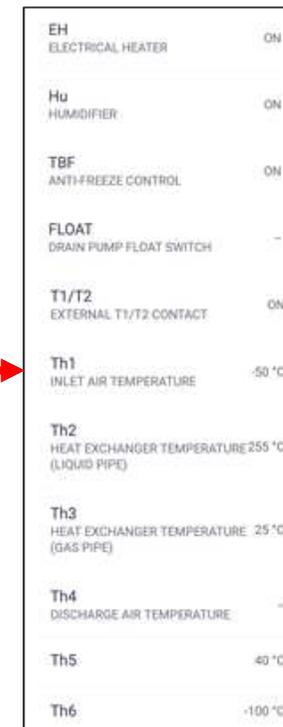
Select thermistor

Code	Thermistor
0	Remote controller
1	Return air
2	Liquid pipe
3	Gas pipe (VRV only)

Back to list



Temperature value



Using the Madoka Assistant.

Unit status.

This menu is used to see the fan coil unit status & thermistor values.

Outdoor status & thermistor values are available for SkyAir systems only.



Outdoor unit	
FANstep FAN SPEED	100
COMP COMPRESSOR SPEED	999 RPM
EV1 EXPANSION VALVE OPENING	100 PLS
SV1 SOLENOID VALVE	—
Pe DISCHARGE PIPE PRESSURE	1.3 MPa
Pc SUCTION PIPE PRESSURE	99.99 MPa
Th1 OUTDOOR AIR TEMPERATURE	-50 °C
Th2 HEAT EXCHANGER TEMPERATURE	—
Th3 DISCHARGE PIPE TEMPERATURE	255 °C



Any Questions



Thank you
for your attention



your comfort. our world.

Appendix

All Madoka Assistant functions

Using the Madoka Assistant.

Firmware update.

This is used to update the Bluetooth interface (Communications module) and Remote controller – should there be a required update.

The screenshot shows the 'Firmware update' screen in the Madoka Assistant app. It is divided into two sections: 'COMMUNICATION MODULE Firmware update' and 'REMOTE CONTROLLER Firmware update'. Each section displays the current version, the new version, and an 'Update firmware' button. Red arrows point from text labels to these elements.

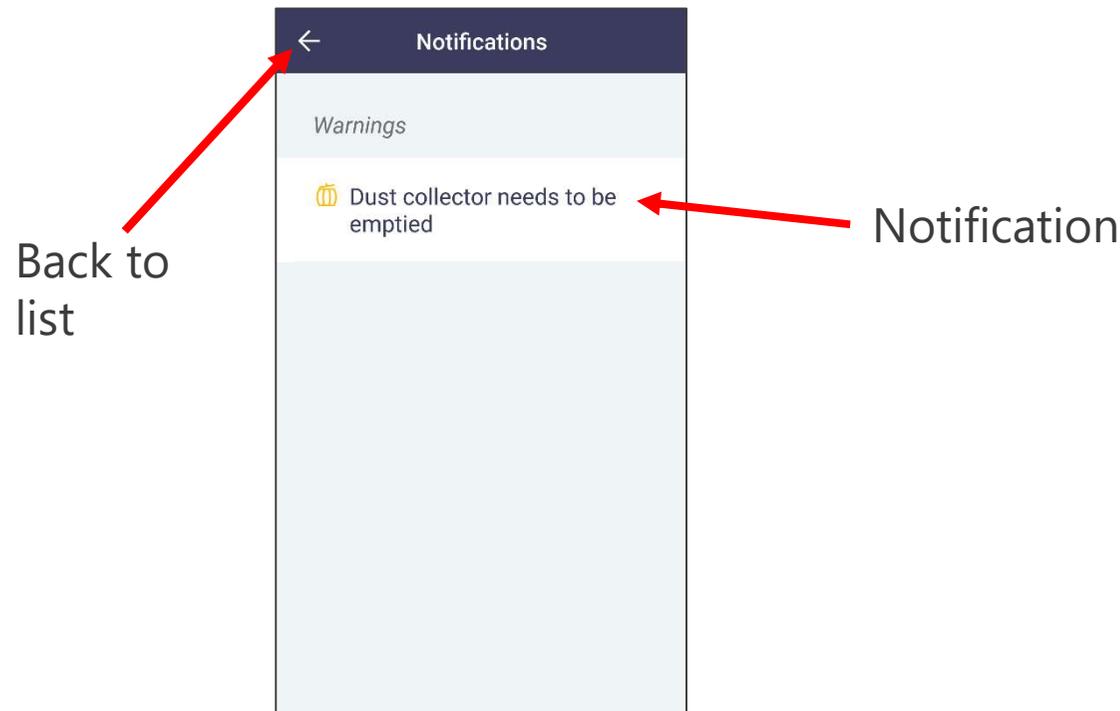
Section	Item	Value	Action
COMMUNICATION MODULE Firmware update	Current version	5.17	Current Bluetooth version
	New version	5.8	Available Bluetooth version
	Update firmware		Press to update Bluetooth version
REMOTE CONTROLLER Firmware update	Current version	02.01.00	Current remote controller version
	New version	02.01.1	Available remote controller version
	Update firmware		Press to update remote controller version

Back to list

Using the Madoka Assistant.

Notification.

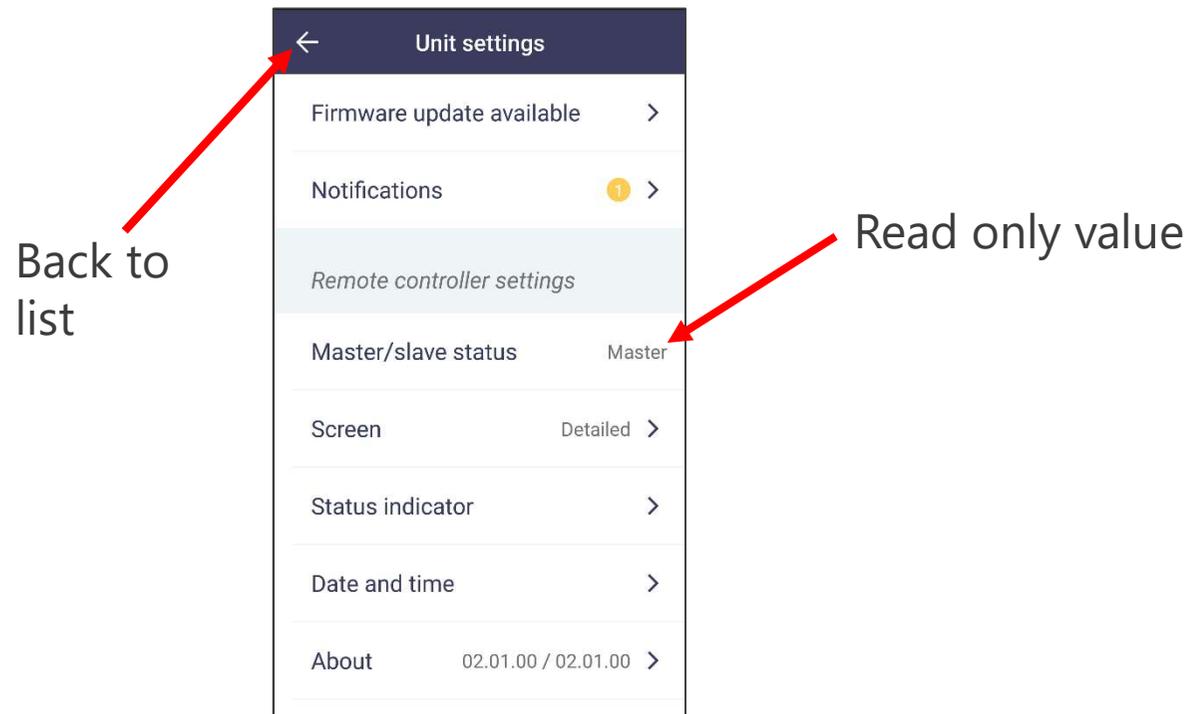
This screen shows any actions that are needed – typically filter inspection or dust collect box to be emptied (self cleaning unit).



Using the Madoka Assistant.

Master/slave status.

This is a read only status shown on the advanced list.



Using the Madoka Assistant.

Screen.

Permits switching of controller home screen between standard and detailed.

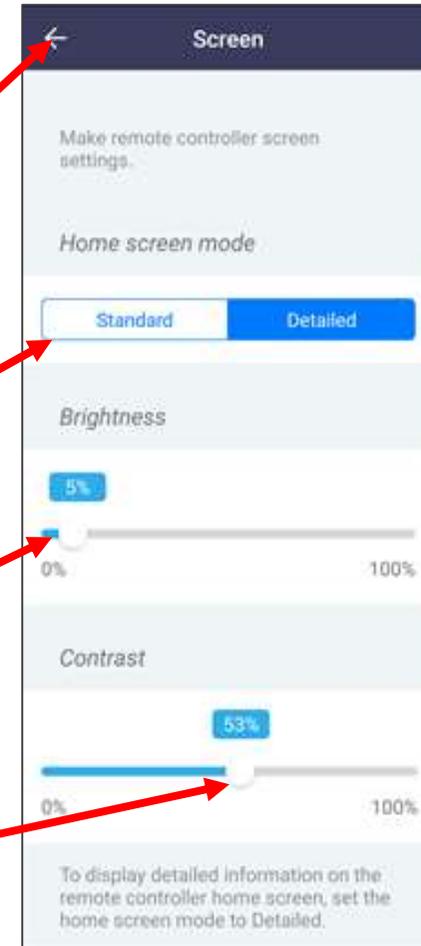
Also adjustment of brightness and contrast.

Back to list

Switch between standard & detailed controller home screen

Controller screen brightness (slider)

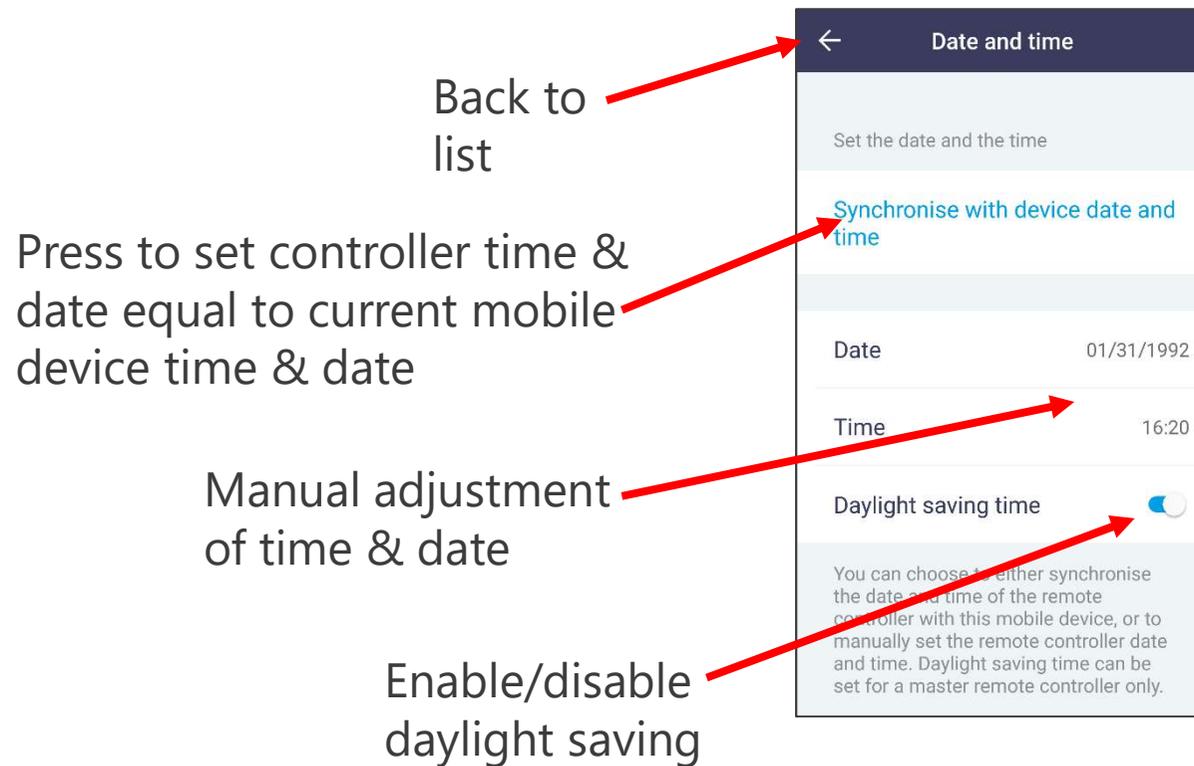
Controller screen contrast (slider)



Using the Madoka Assistant.

Date and time.

Adjustment of controller time and date.



The screenshot shows a mobile application interface for 'Date and time' settings. It includes a back arrow, a title bar, a subtitle 'Set the date and the time', a link to 'Synchronise with device date and time', fields for 'Date' (01/31/1992) and 'Time' (16:20), a 'Daylight saving time' toggle switch, and a descriptive paragraph at the bottom. Red arrows point from text annotations to these specific elements.

Back to list

Press to set controller time & date equal to current mobile device time & date

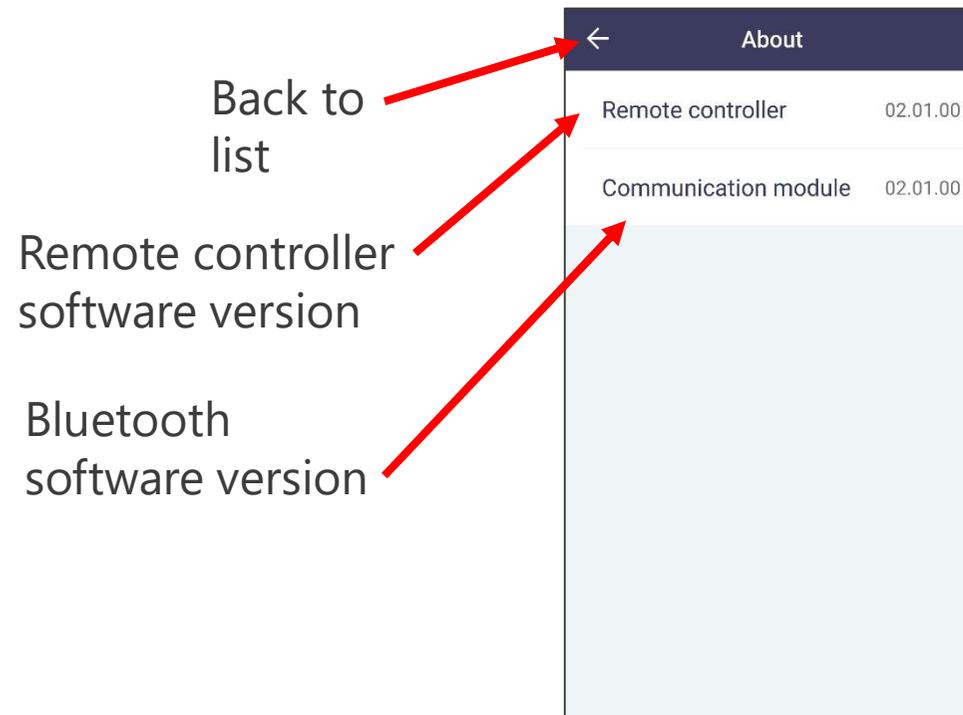
Manual adjustment of time & date

Enable/disable daylight saving

Using the Madoka Assistant.

About.

Current Bluetooth & controller software version (read only).



Using the Madoka Assistant.

Remove bonding information.

This is used to unpair your device from the controller.

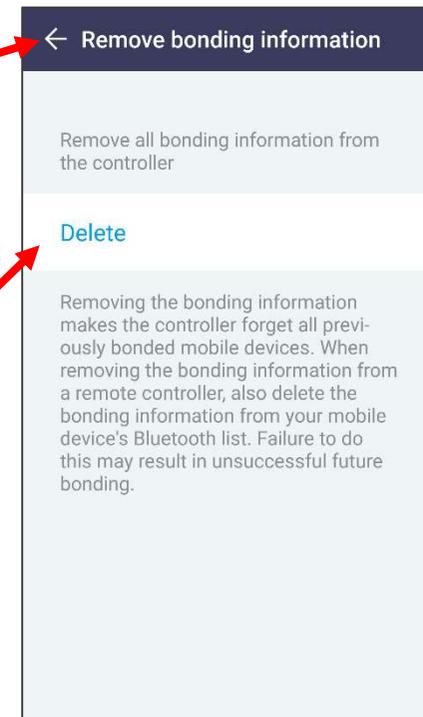
Un-pairing your device from the controller will mean you will need to re-pair your device to the controller next time you wish to access it.

However it will prevent your device from pairing with the controller whenever you pass within range – and hence reduce the drain on your devices' battery.

It also means that other people will be able to pair with the controller (as the Madoka can only remember the last 10 paired devices).

Back to list

Unpair controller from device



Using the Madoka Assistant.

Presence detector.

This will only be available if you have a Daikin presence sensor accessory fitted to your fan coil unit.

The Daikin presence sensor has 3 functions:

1. Temperature de-stratification – adjusts louver position to de-stratify the room temperature. Settings are carried out via indoor unit field settings.
2. Setpoint adjustment – Reduces the unit set point after a time delay if no movement is detected.
3. Auto off – Stops unit after a time delay if no movement is detected.



Using the Madoka Assistant.

Presence detector.

Back to list

Setpoint adjustment settings

Decrease the heating set point by A after B minutes of no movement, and ever B minutes thereafter unit C set point is met.

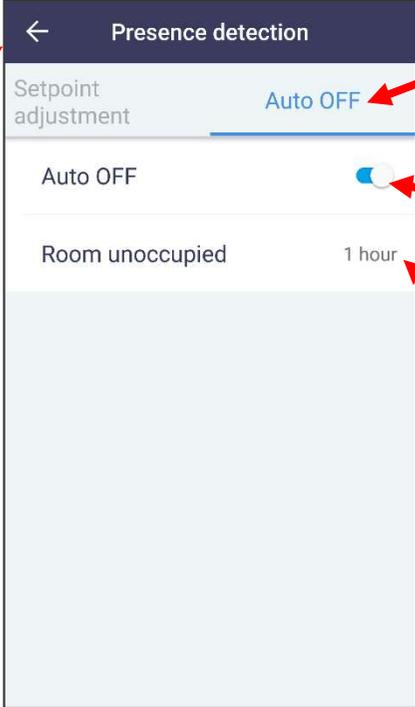
Auto off settings

Enable/disable setpoint adjustment

Increase the cooling set point by X after Y minutes of no movement, and ever Y minutes thereafter unit Z set point is met.

Using the Madoka Assistant.

Presence detector.



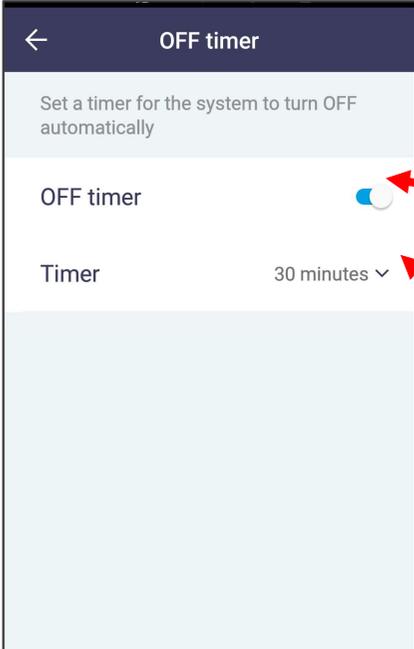
The screenshot shows the 'Presence detection' settings screen. At the top left is a back arrow. The title is 'Presence detection'. Below the title are three main sections: 'Setpoint adjustment' with a sub-option 'Auto OFF', 'Auto OFF' with a toggle switch, and 'Room unoccupied' with a time setting of '1 hour'. Red arrows point from text labels to these specific elements.

Annotations:

- Back to list (points to the back arrow)
- Setpoint adjustment settings (points to the 'Setpoint adjustment' section)
- Auto off settings (points to the 'Auto OFF' sub-option)
- Enable/disable Auto off function (points to the toggle switch)
- Switch unit off after this period of no movement. (points to the '1 hour' setting)

Using the Madoka Assistant.

Off timer.



Back to list

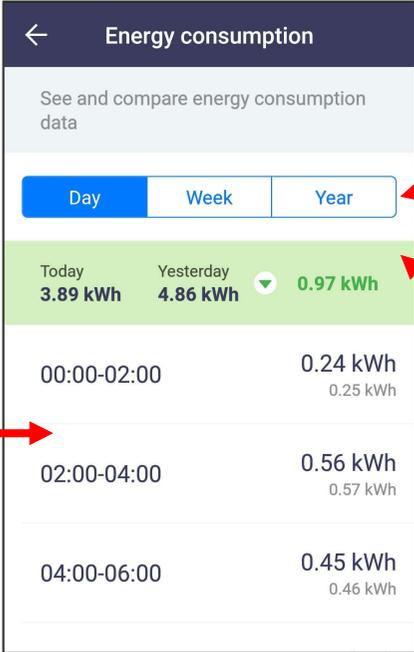
Enable/disable Auto off function

Switch unit off after this period following unit start.

The screenshot shows a mobile application interface for the 'OFF timer' settings. At the top, there is a dark blue header with a back arrow and the text 'OFF timer'. Below the header, a light blue box contains the instruction 'Set a timer for the system to turn OFF automatically'. The main content area has a white background and contains two settings: 'OFF timer' with a toggle switch that is currently turned on (blue), and 'Timer' with a dropdown menu showing '30 minutes'. Three red arrows point from text annotations to these elements: 'Back to list' points to the back arrow, 'Enable/disable Auto off function' points to the toggle switch, and 'Switch unit off after this period following unit start.' points to the '30 minutes' dropdown.

Using the Madoka Assistant.

Energy consumption (R32 SkyAir only).



Back to list

Select report period

Summary of this period vs last period.

Breakdown of period by sub-periods.
 Day → 2 hour period.
 Week → Day.
 Year → Month.
 (Scroll down for rest of the breakdown).

Energy consumption		
See and compare energy consumption data		
Day Week Year		
Today	Yesterday	
3.89 kWh	4.86 kWh	0.97 kWh
00:00-02:00		0.24 kWh 0.25 kWh
02:00-04:00		0.56 kWh 0.57 kWh
04:00-06:00		0.45 kWh 0.46 kWh

Using the Madoka Assistant.

Power consumption limit (R32 SkyAir only).

Back to list

Select maximum operating level – 70% or 40%.

Period during which system operation is restricted.

Enable/disable timed power limiting function.

Ability to save or load configuration to a file

Using the Madoka Assistant.

Setpoint auto reset.

The screenshot shows a mobile application interface for 'Setpoint auto reset'. At the top, there is a back arrow and the title 'Setpoint auto reset'. Below the title, there is a descriptive text: 'Set a timer for the system to automatically reset the temperature setpoint'. Underneath, it says 'Cooling and heating setpoint'. The main control area includes a toggle switch for 'Setpoint auto reset', which is currently turned on. Below the toggle is a temperature slider ranging from 16°C to 32°C, with a current value of 25°C. At the bottom, there is a 'Timer' dropdown menu set to '30 minutes'. Red arrows point from text annotations to these specific UI elements.

Back to list

Default setpoint to return to after timed period away from this.

Enable/disable Setpoint auto reset function.

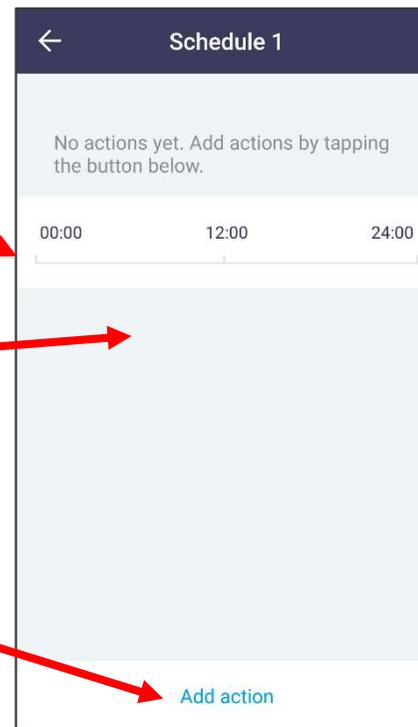
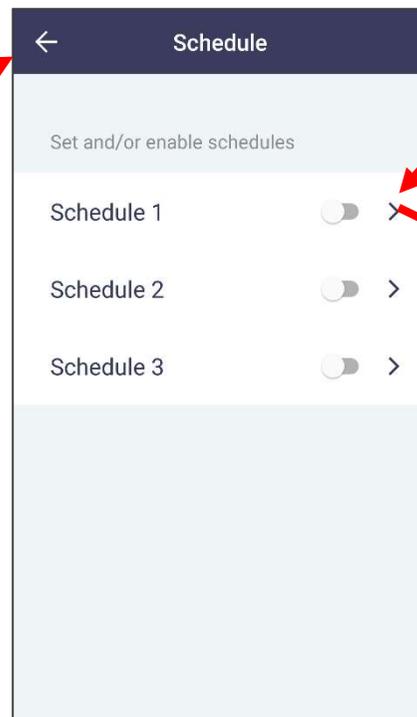
Period that the setpoint is allowed to be away from default before being reset (30/60/90/120 minutes).

Using the Madoka Assistant.

Schedule.

3 schedules can be set.
Press the arrow to edit
the required schedule

Back to list



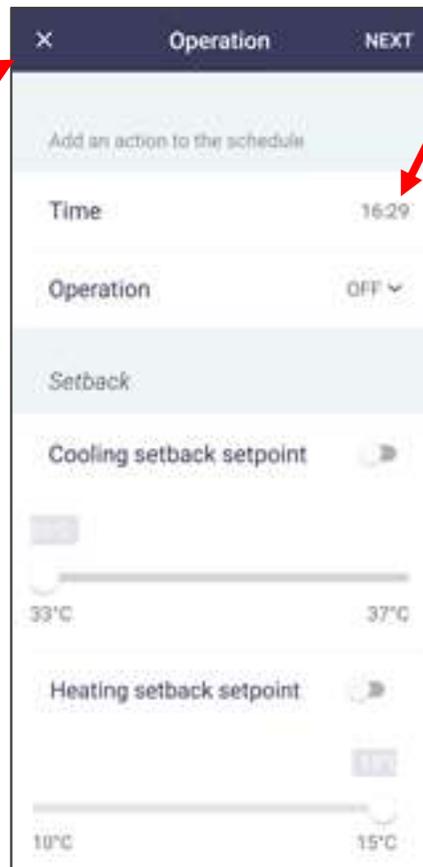
Current
settings

Add new
instruction

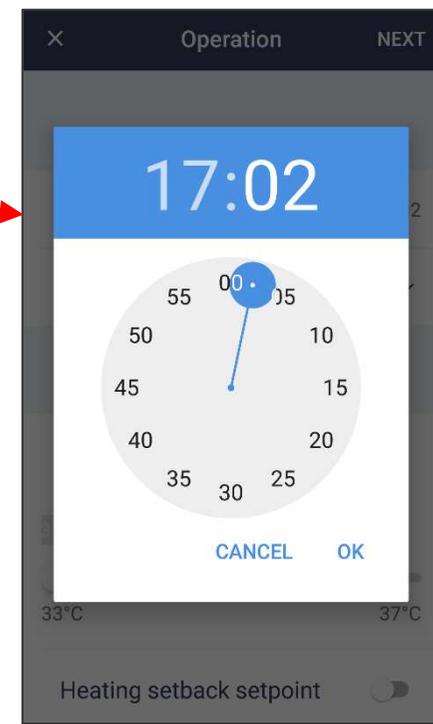
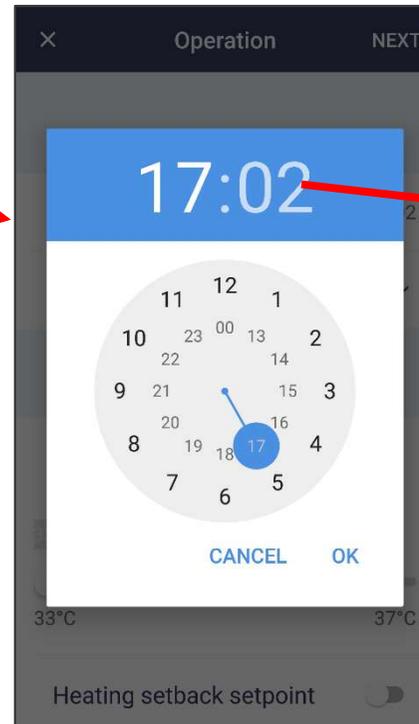
Using the Madoka Assistant.

Schedule - Time.

Exit without saving



Press to change time of action



Select the required hour and then display will change to minutes. Then select the required minutes and press 'OK'.

Using the Madoka Assistant.

Schedule – Off command.

Exit without saving

Select required action (on/off)

For an 'Off' action you can also activate cooling and/or heating setback along with an associated temperature

Once action selected, then press 'Done'

Using the Madoka Assistant.

Schedule – On command.

The screenshot shows the 'Operation' screen in the Madoka Assistant app. The screen has a dark blue header with a close button (X), the title 'Operation', and a 'NEXT' button. Below the header, there is a section titled 'Add an action to the schedule'. Underneath, the 'Time' is set to 16:30. The 'Operation' is set to 'ON' with a dropdown arrow. Below this is a 'Setpoint' section with a 'Cooling and Heating range' toggle switch that is currently turned off. A temperature slider is visible below the toggle, with a current value of 16°C and a range from 16°C to 32°C. Red arrows point from text annotations to these specific elements: 'Exit without saving' points to the close button, 'Select required action (on/off)' points to the 'ON' dropdown, 'For an 'On' action you can also activate a setpoint' points to the 'Cooling and Heating range' toggle, and another arrow points to the temperature slider.

Exit without saving

Select required action (on/off)

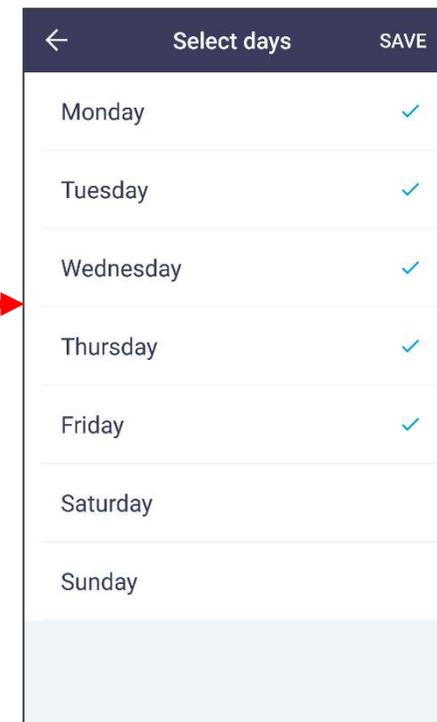
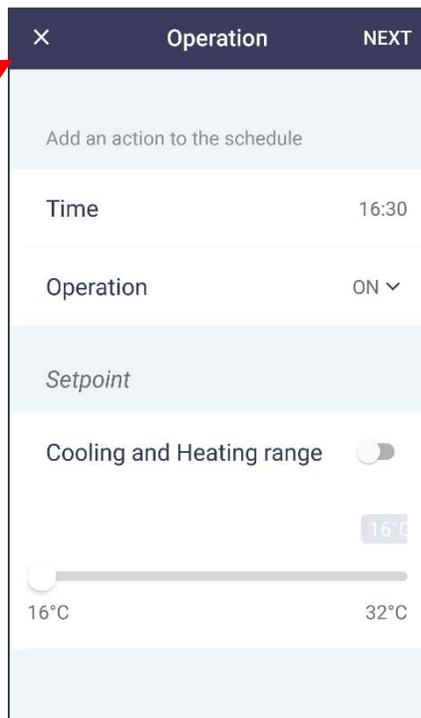
For an 'On' action you can also activate a setpoint

Using the Madoka Assistant.

Schedule – Days.

Once On/Off settings have been set, then press 'Next'

Exit without saving

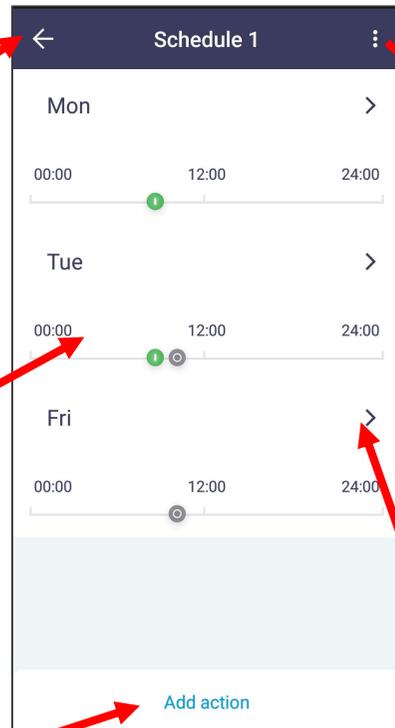


Click on the required day(s) then press 'Save'

Using the Madoka Assistant.

Schedule.

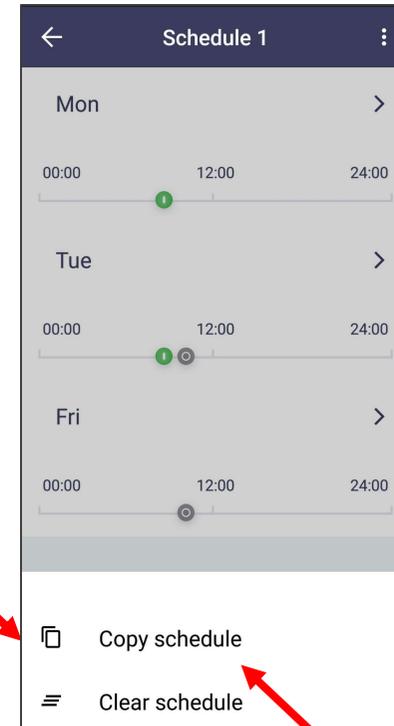
Return to main schedule screen



Adding setting will appear here

Add more actions if required

Press arrow to edit instruction



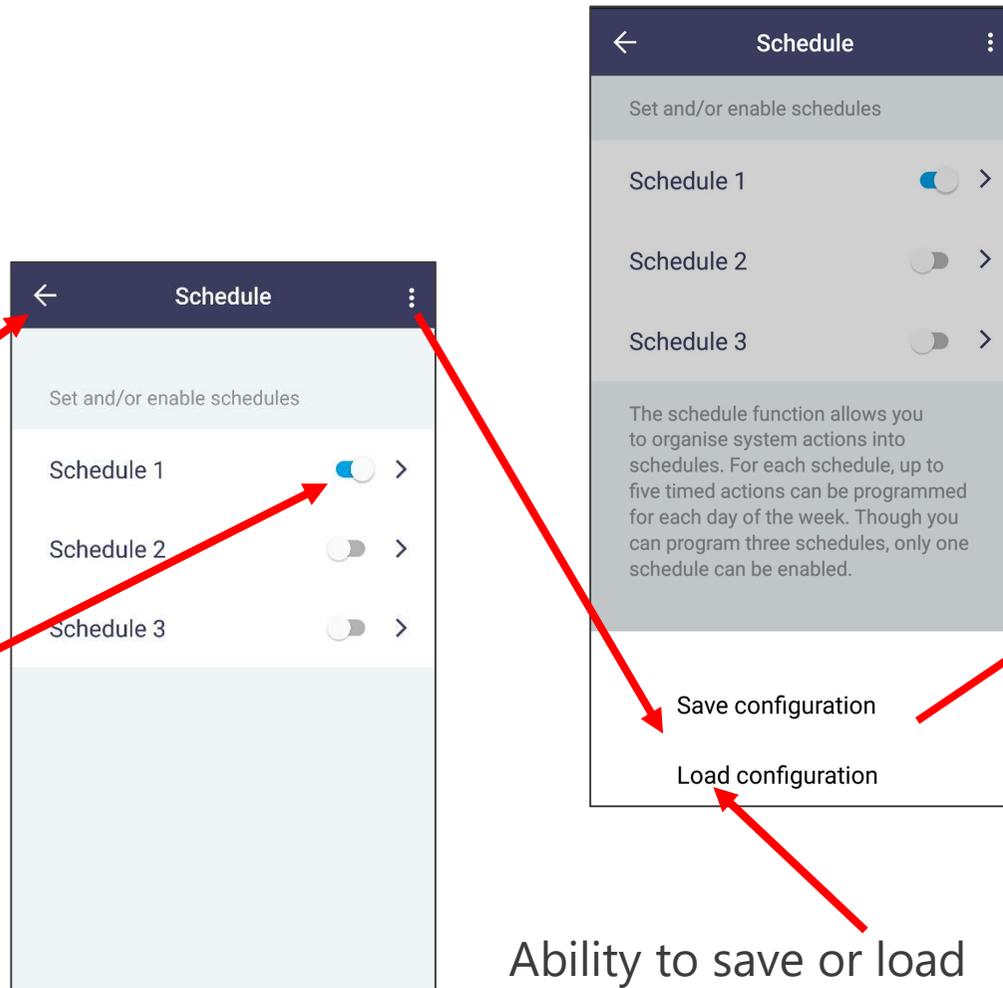
Ability to copy schedule to another schedule, or to delete all instructions

Using the Madoka Assistant.

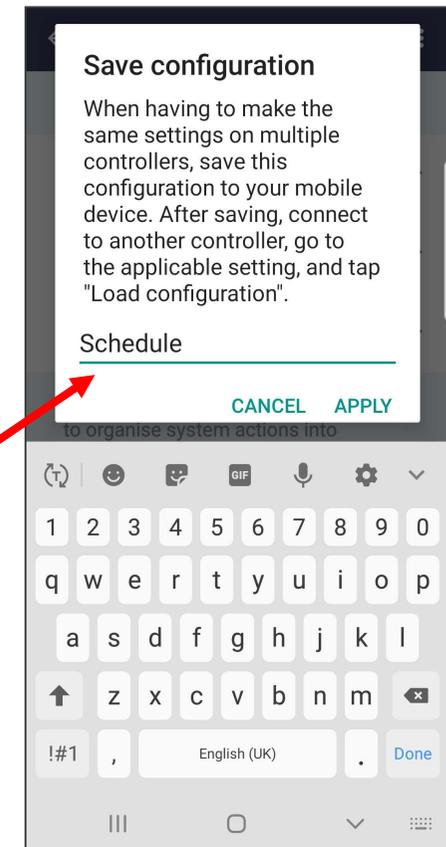
Schedule.

Back to list

Ensure schedule is enabled



Ability to save or load all schedules to a file

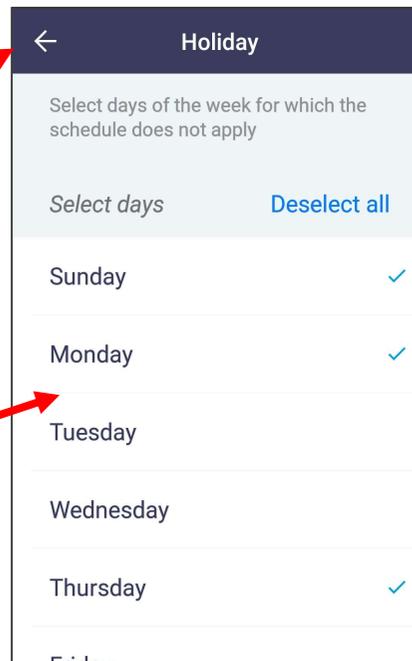


Using the Madoka Assistant.

Holiday.

Back to list

Click on appropriate day to select or deselect it from the holiday period (scroll down for more days)

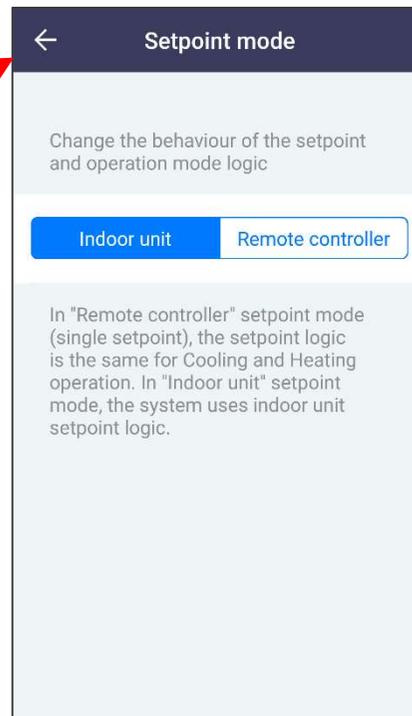


Select or Deselect all days in one go.

Using the Madoka Assistant.

Setpoint mode.

Back to list



Switch between indoor unit & remote controller automatic heat/cool changeover modes. – see following slides.

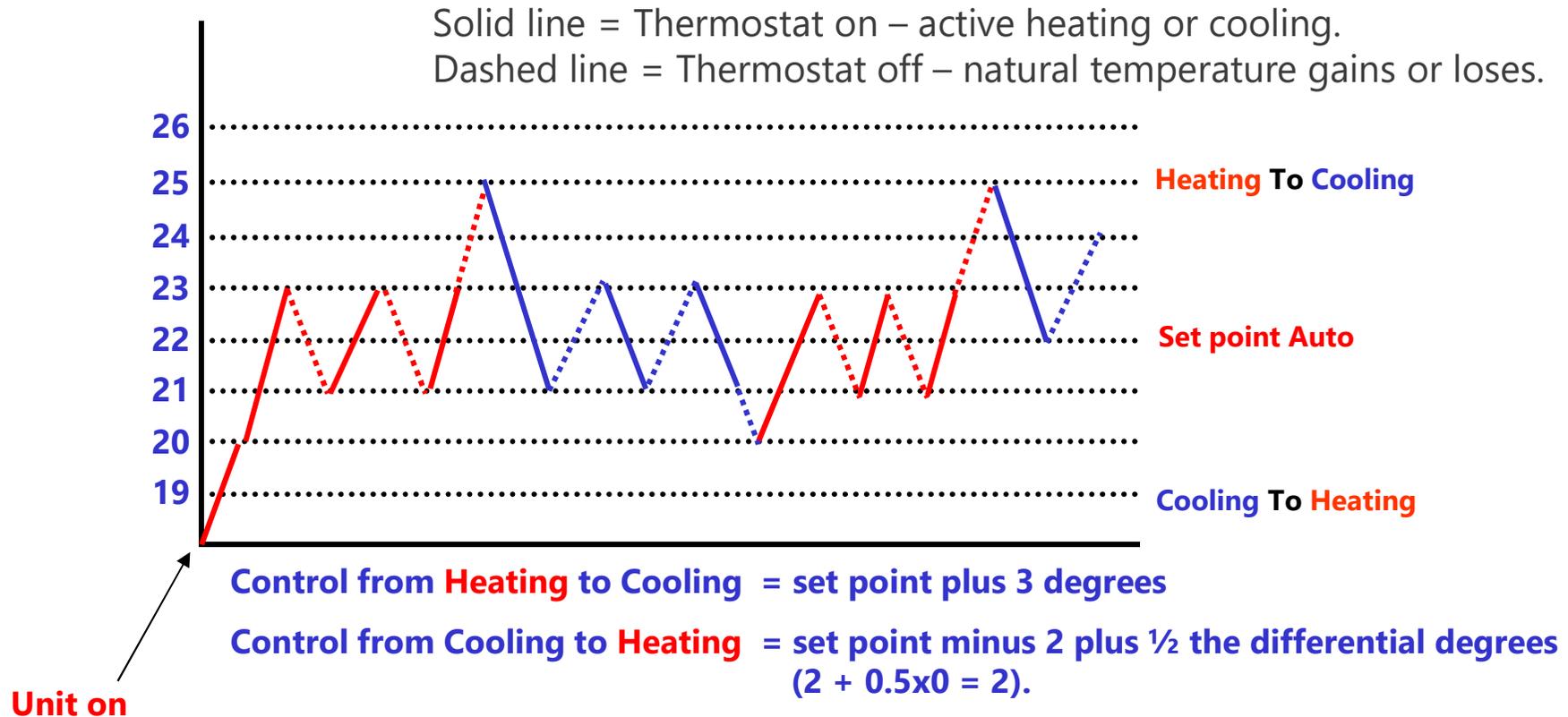
N.B.
When connected to a centralised controller, then only indoor unit setpoint mode is possible.

Using the Madoka Assistant.

Setpoint mode.

Indoor unit automatic heat/cool changeover - 0°C Diff (field setting 22, 4-01).

Changeover thermistor based on 20, 2-0x setting.

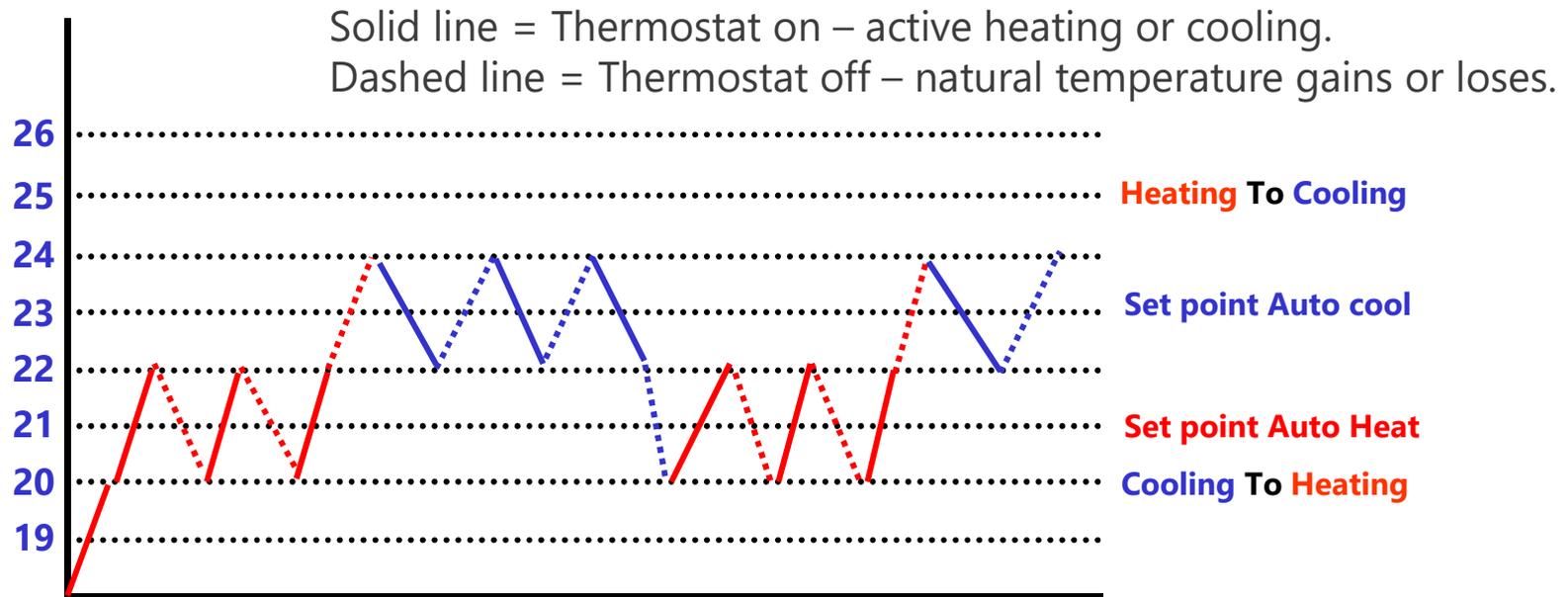


Using the Madoka Assistant.

Setpoint mode.

Indoor unit automatic heat/cool changeover - 2°C Diff (field setting 22, 4-03).

Changeover thermistor based on 20, 2-0x setting.



Control from Heating to Cooling = set point plus 3 degrees

Control from Cooling to Heating = set point minus 2 plus ½ the differential degrees
(2 + 0.5x2 = 3).

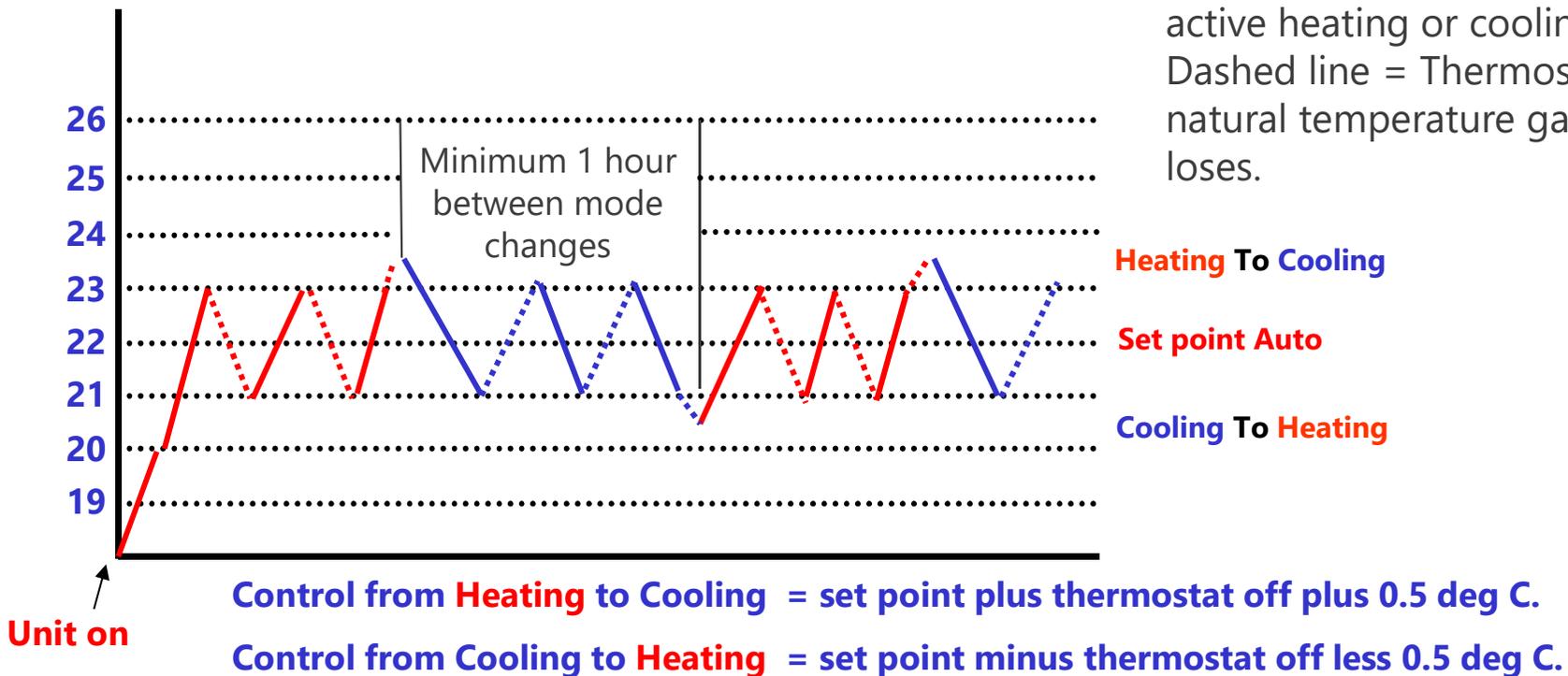
Unit on

Using the Madoka Assistant.

Setpoint mode.

Remote controller automatic heat/cool changeover.

Solid line = Thermostat on – active heating or cooling.
 Dashed line = Thermostat off – natural temperature gains or losses.



N.B.

Changeover only ever based on remote controller sensor (no option to change to return air sensor). In addition there is a 1 hour guard timer to prevent too frequent changeover.

Using the Madoka Assistant.

Setback.

Ability to save or load configuration to a file

Back to list

Save configuration
Load configuration

Enable/disable setback.

Temperature to which the space must rise when the unit is stopped, before the unit will automatically start in cooling and bring the room down by the cooling recovery differential

Temperature to which the space must drop when the unit is stopped, before the unit will automatically start in heating and raise the room by the heating recovery differential

Setback

Enable/disable Setback and set the setback setpoint and recovery differential for Cooling and Heating operation.

Setback

Cooling recovery differential 3°C

Heating recovery differential 3°C

Cooling setback setpoint

35°C

33°C 37°C

Heating setback setpoint

10°C 15°C

Setback is a function that keeps the room temperature in a specific range when the system is turned off. To achieve this, the system temporarily runs in Heating or Cooling operation mode, according to the setback setpoint and recovery differential.

Setback

Cooling recovery differential

2°C

3°C

4°C

5°C

6°C

7°C

8°C

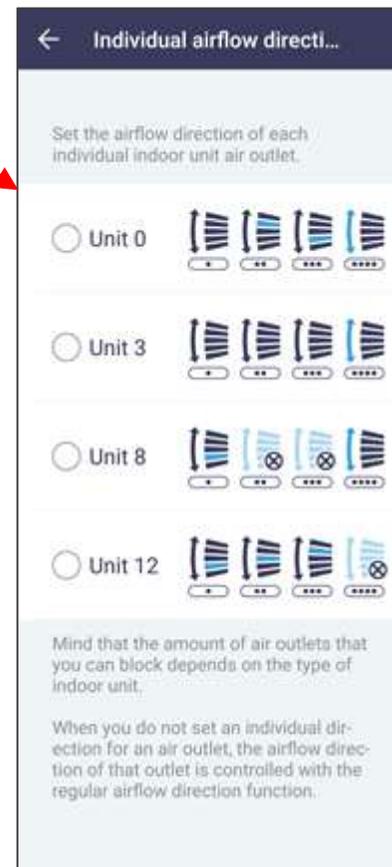
DONE

Using the Madoka Assistant.

Individual airflow direction.

This will only be available if you have a fan coil unit capable of individual louver position control.

Back to list



Using the Madoka Assistant.

Individual airflow direction.

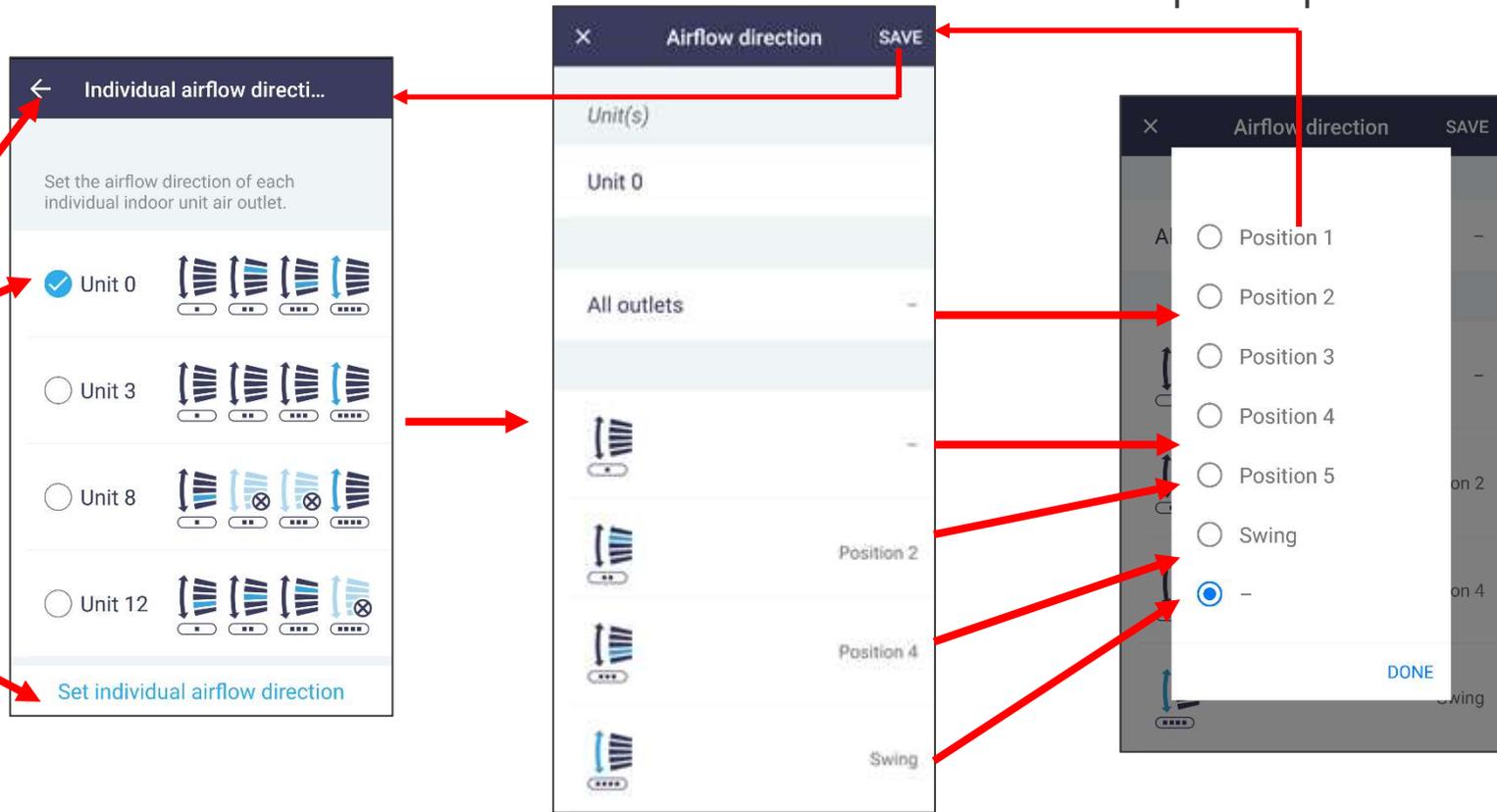
This will only be available if you have a fan coil unit capable of individual louver position control.

Press save after adjusting all required positions

Back to list

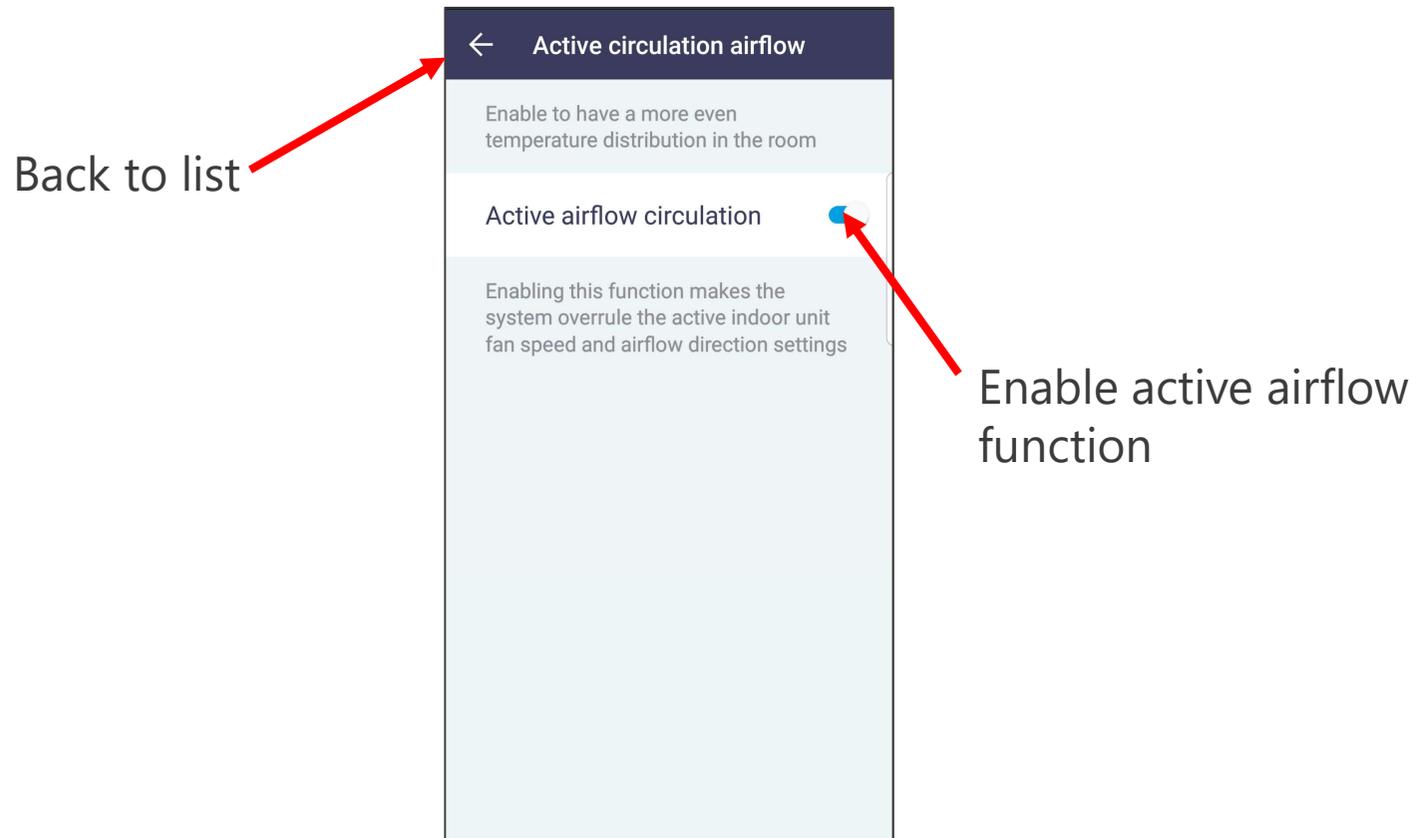
Select unit to adjust louvers on.

Then press "Set individual airflow direction"



Using the Madoka Assistant.

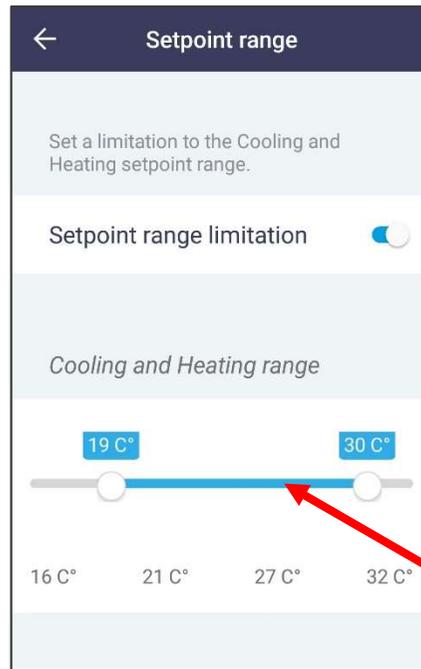
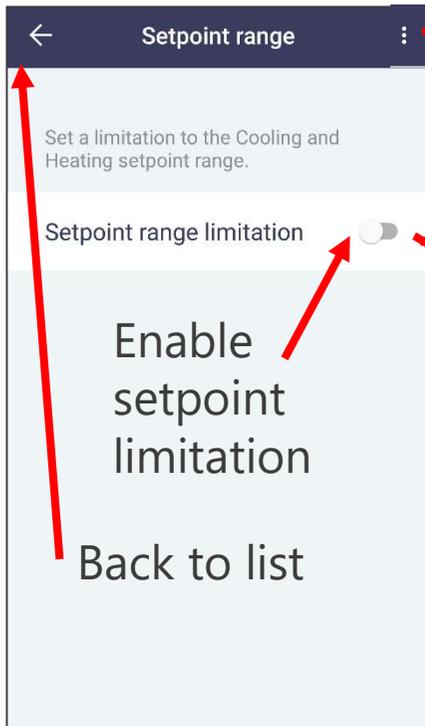
Activate airflow circulation (B series Roundflow cassette only).



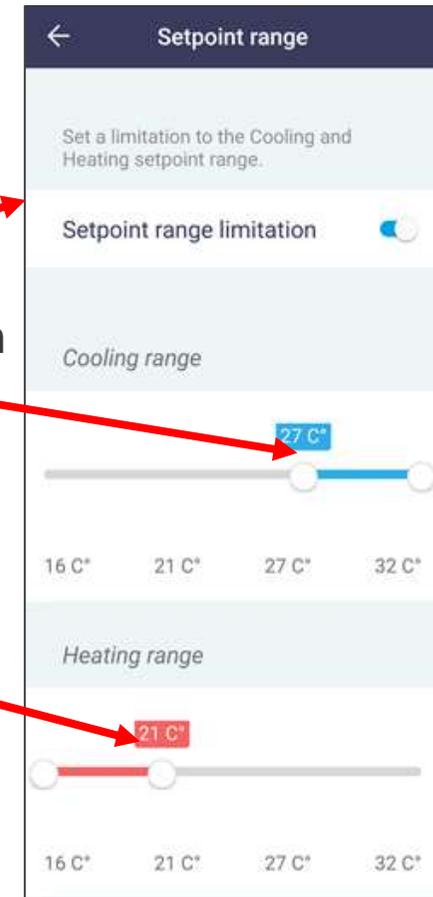
Using the Madoka Assistant.

Setpoint range.

Save configuration
Load configuration



Remote controller Setpoint mode



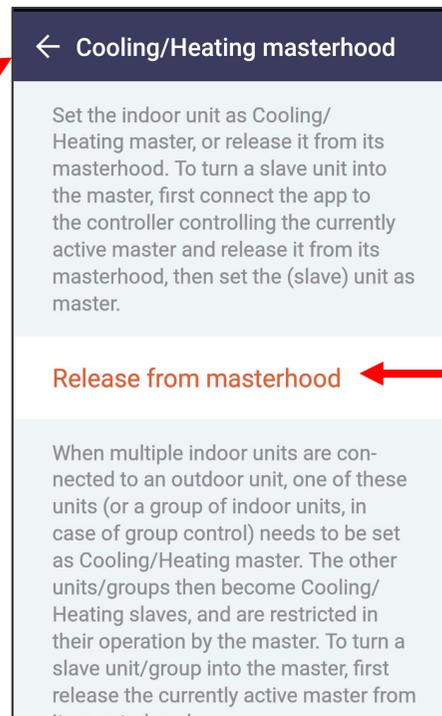
Indoor unit Setpoint mode

N.B.
Setpoint limitations only apply to heating and cooling modes – not to automatic mode.

Using the Madoka Assistant.

Cooling/Heating masterhood.

Back to list



Unlock or set unit as heat/cool master.

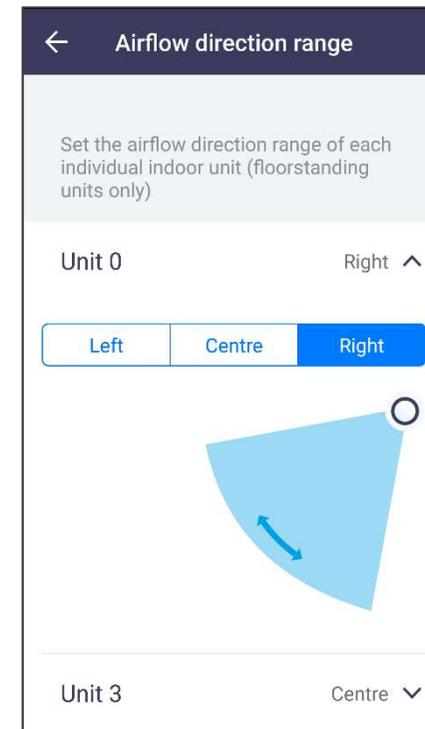
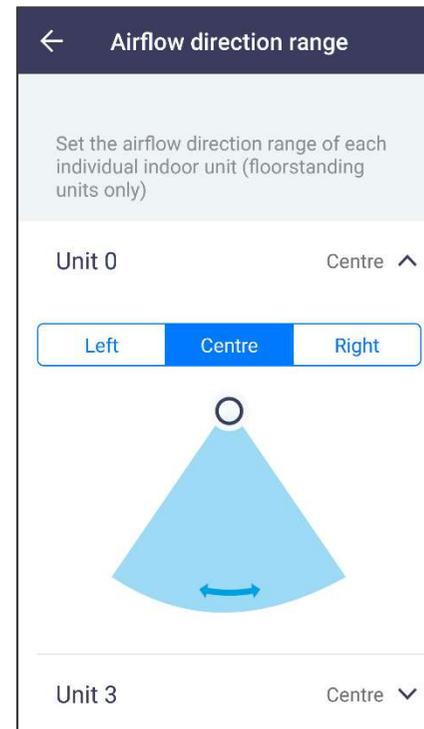
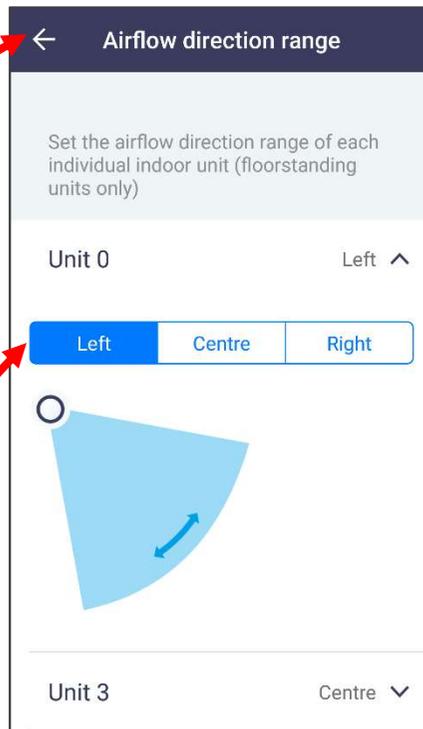
Using the Madoka Assistant.

Airflow direction range.

FVA unit only.

Back to list

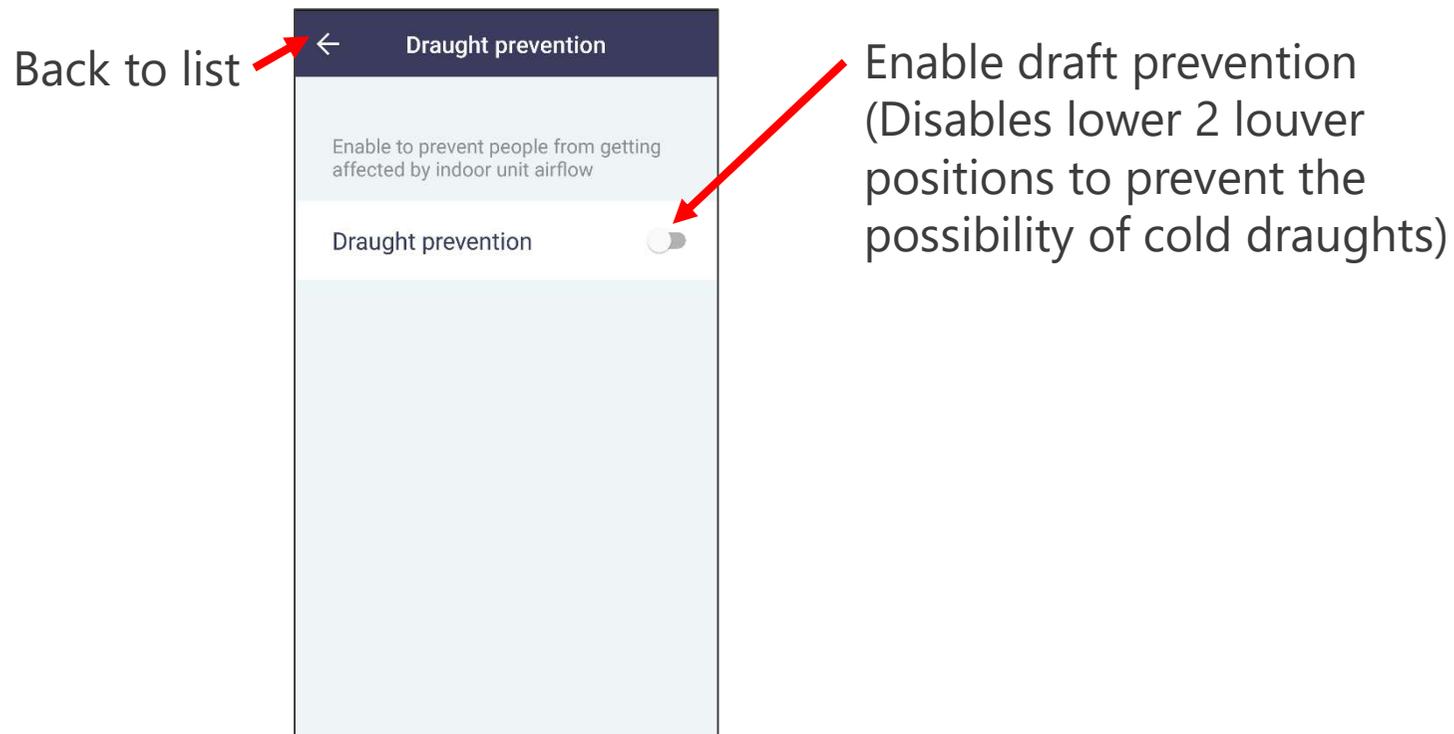
Horizontal louver position



Using the Madoka Assistant.

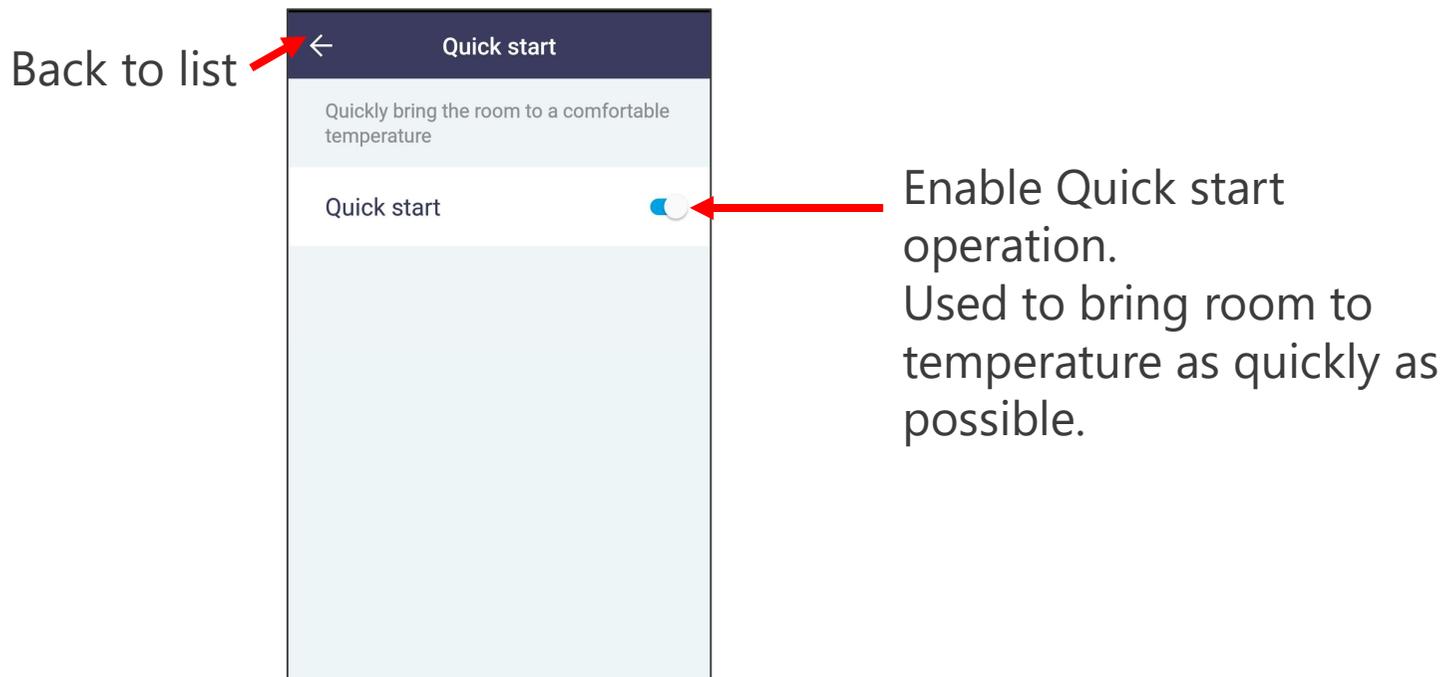
Draft prevention.

Louver units only.



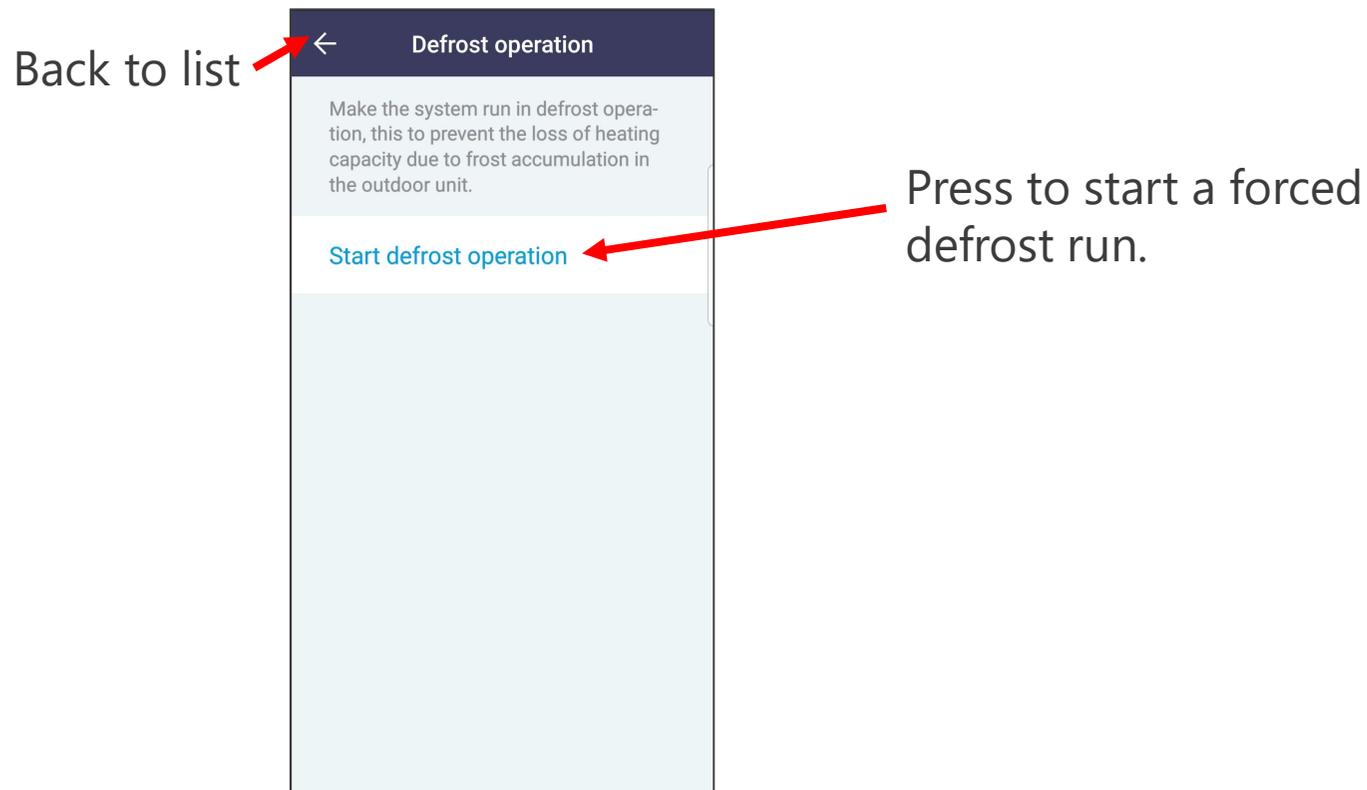
Using the Madoka Assistant.

Quick start (SkyAir only).



Using the Madoka Assistant.

Defrost operation (SkyAir only).

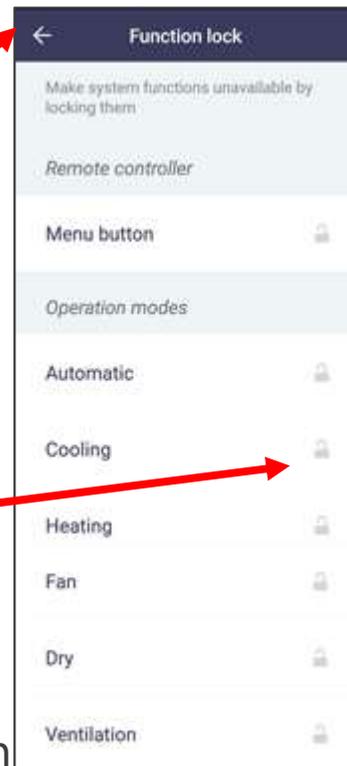


Using the Madoka Assistant.

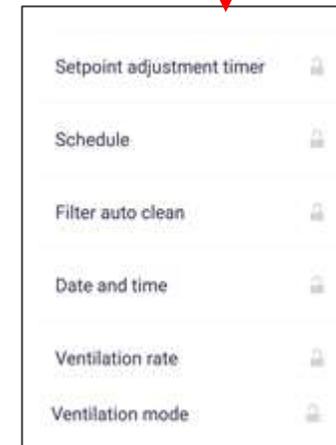
Function lock.

Disables buttons and functions on both the remote controller and App.

Back to list

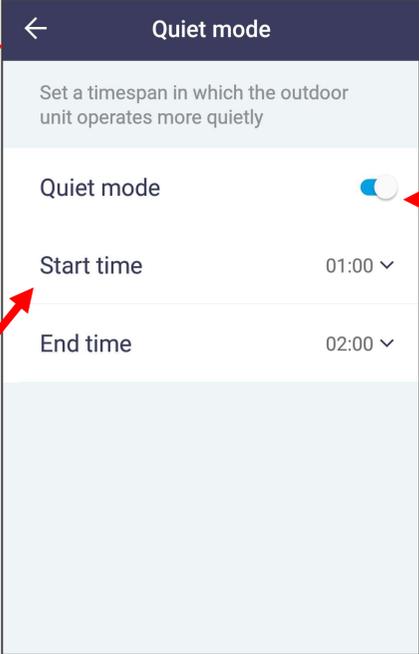


Pressing the padlock (such that it turns blue) will lock / disable the associated function



Using the Madoka Assistant.

Quiet mode (R32 SkyAir only).



Back to list

Period during which system operation is restricted.

Enable/disable timed quiet mode.

Quiet mode

Start time 01:00

End time 02:00

Set a timespan in which the outdoor unit operates more quietly

01:00

02:00

01:00

02:00

01:00

02:00

Using the Madoka Assistant.

External input interlock (only if BRP7A51 card fitted).

The screenshot shows the 'External input interlock' settings screen. The title bar at the top left has a back arrow and the text 'External input interlock'. Below the title bar, there is a description: 'Integrate key card and window contact logic into the system'. The settings are as follows:

Delay timer	4 min
Reset timer	h
Action	Turn ON
Operation mode	Cooling

Below these settings is a section for 'Cooling and heating setpoint' with a slider set to 17°C.

Annotations with red arrows point to the following elements:

- 'Back to list' points to the back arrow in the title bar.
- 'Run on delay after key card removed.' points to the '4 min' value in the Delay timer setting.
- 'Actions to be sent after 'Reset timer' has elapsed.' points to the 'Turn ON' value in the Action setting and the 'Cooling' value in the Operation mode setting.
- 'Period following key card removal before subsequent actions sent.' points to the 'h' value in the Reset timer setting.

Using the Madoka Assistant.

Errors and warnings.

Back to list

When Display errors or warnings is turned off, then it will automatically be re-enabled after 48 hours. However during that period errors or warnings will not be displayed

Display errors

Display warnings

When you disable error and warning notifications, they automatically get enabled again after 48 hours.

← Errors and warnings

Consult the error history and disable error and warning notifications.

Error history >

← Error history

A1-01 Remote Controller
01:00, 12 DEC 2017

A2-10 Unit 0
TIME NOT SET

Last 10 faults detected by remote controller. (Time & date stamped)

Using the Madoka Assistant.

Unit number.

This menu allows you to swap the pre-generated unit group addresses. You can also force individual units to run in fan only – to identify them.

Back to list

Select the first unit address to be swapped

Select the second unit address to be swapped

Press to swap addresses

The image shows two screenshots of the 'Unit number' configuration screen. The left screenshot shows a list of units with unit 0 selected. The right screenshot shows unit 0 selected and unit 3 selected, with a swap icon in the top right corner.

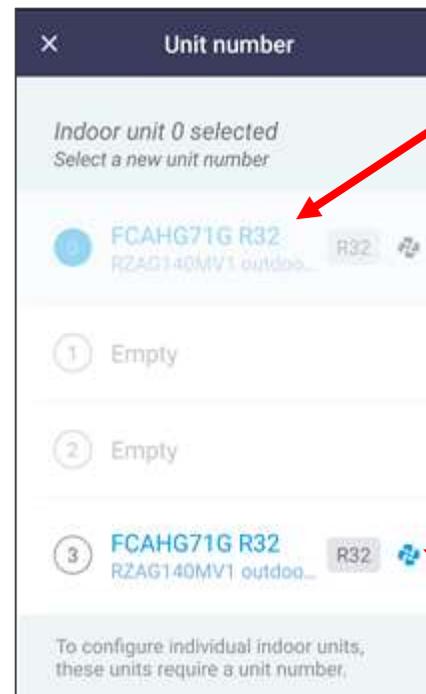
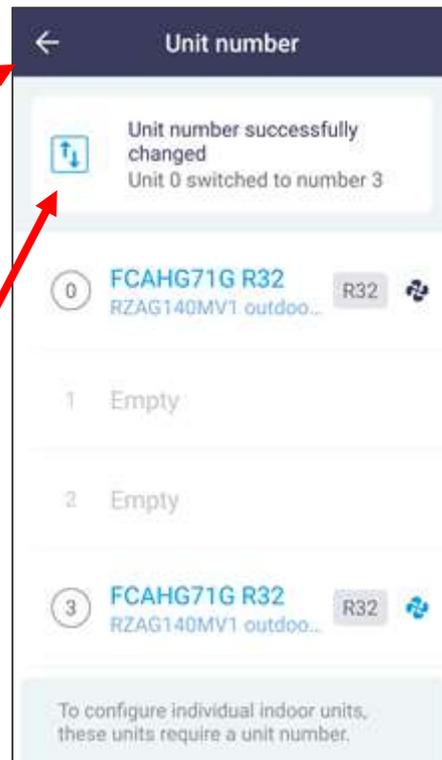
Using the Madoka Assistant.

Unit number.

This menu allows you to swap the pre-generated unit group addresses. You can also force individual units to run in fan only – to identify them.

Back to list

Confirmation of address swap



Indoor unit & Outdoor unit model numbers, and R32 indication are unit dependant

Press to force indoor fan to run (Ensure the units are stopped before employing)

Using the Madoka Assistant.

Filter auto clean.

This menu is only available if the connected indoor unit has a filter self cleaning module.

Back to list

Enable/disable self cleaning function

Set self cleaning period window

Start self cleaning test operation

Dismiss dustbox notification

Test filter auto clean

Reset collection box full indication (self-cleaning cassette only)

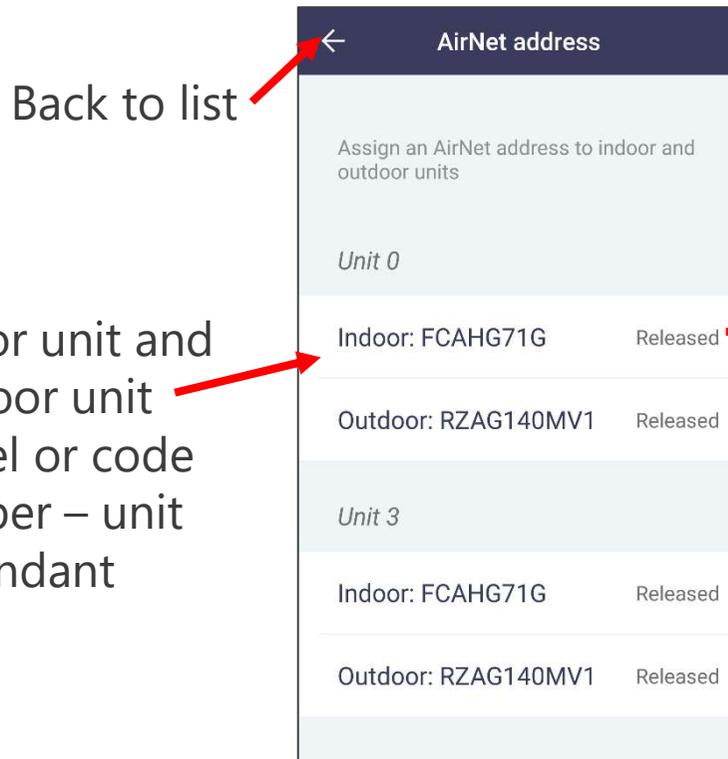
Filter auto clean can only be enabled/disabled with the app in installer mode.

To test filter auto clean, the function needs to be enabled. Mind that performing a test will turn off the system.

Using the Madoka Assistant.

Airnet address. – **Installer mode only.**

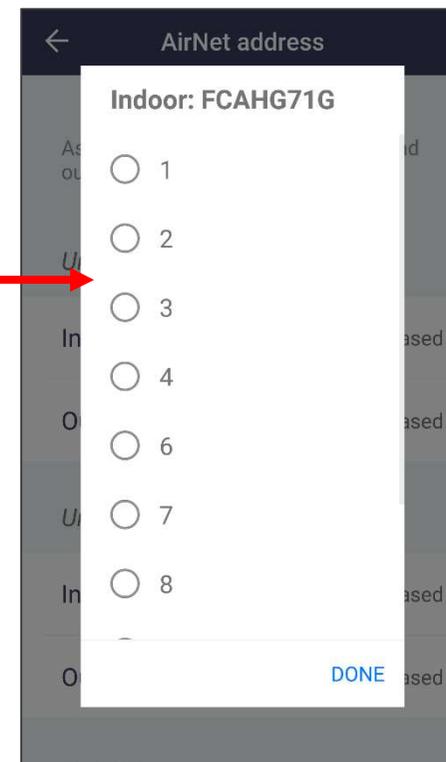
This menu is only available if the connected indoor unit or associated outdoor unit is part of a VRV system.



Press to set Airnet address

Indoor unit 1-128
Outdoor unit 1-63

Released = not set



Using the Madoka Assistant.

Group address. – **Installer mode only.**

This menu is only available if the indoor unit is connected to a centralised controller.

Back to list

Group address (set to released if individual group addressing employed)

Individual unit group address

Press to set group address

Press to set individual unit group address

Address range 1-00 to 4-15

Unit	Group Address
Group	Released
Unit 0	16-15
Unit 3	Released
Unit 8	13-1
Unit 12	1-15

Unit 0	Address Range
<input type="radio"/>	1-0
<input type="radio"/>	1-1
<input type="radio"/>	1-2
<input type="radio"/>	1-3
<input type="radio"/>	1-4
<input type="radio"/>	1-5
<input type="radio"/>	1-6

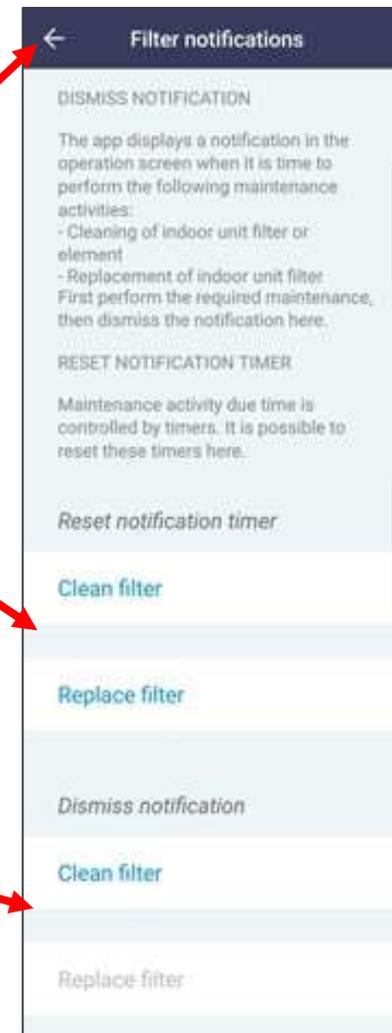
Using the Madoka Assistant.

Contact information.

Back to list

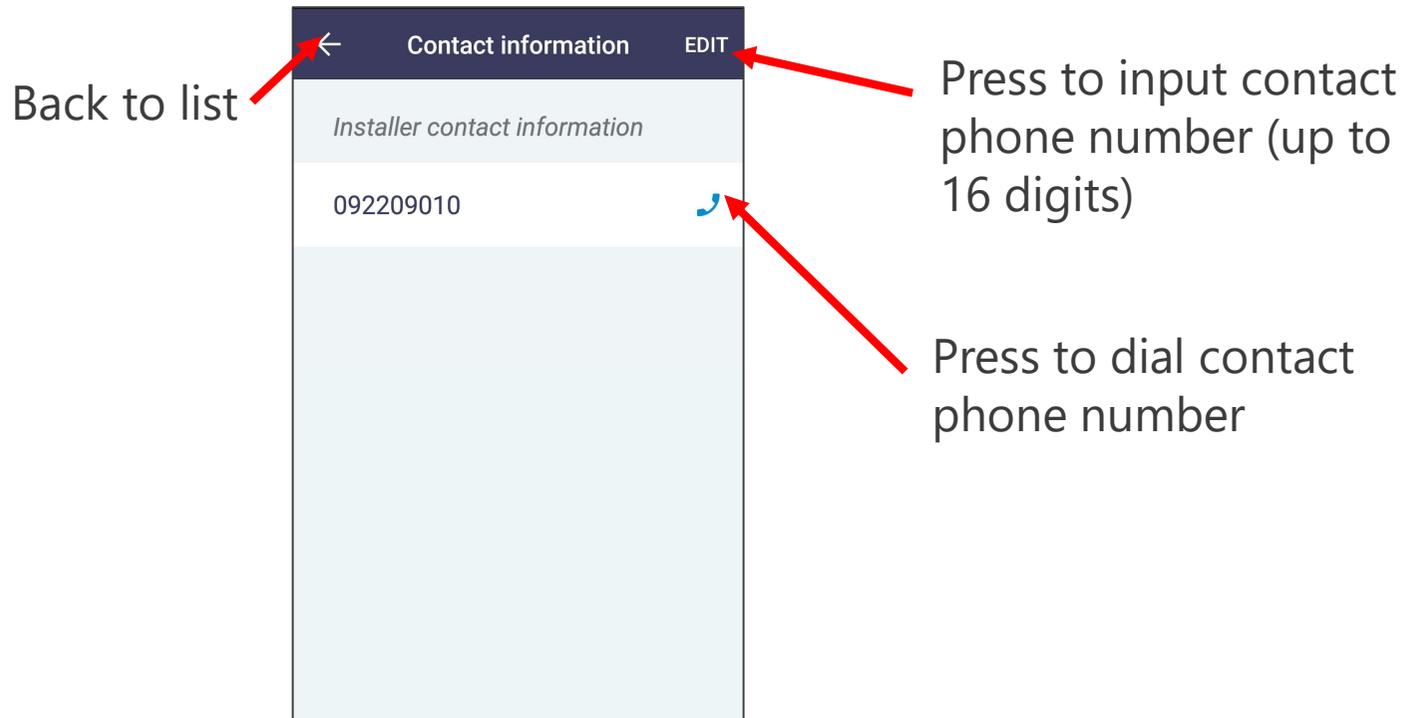
Reset filter dirty timer or filter replacement timer (possible even prior to timer elapsing / symbol appearing).

Reset filter dirty symbol or filter replacement symbol once timer has elapsed / symbol has appeared.



Using the Madoka Assistant.

Contact information.



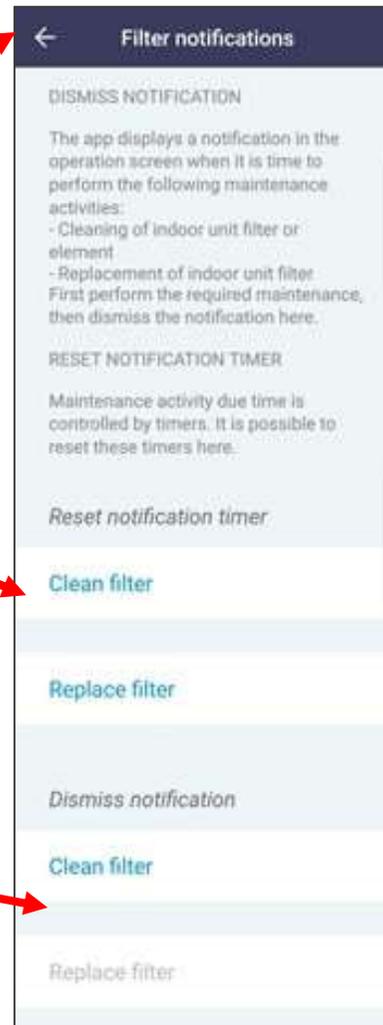
Using the Madoka Assistant.

Filter notifications.

Back to list

Reset run timer back to zero – filter indication & replace filter

Reset indication symbol – filter indication & replace filter



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

This menu is indoor unit field settings only – not remote controller settings.

Back to list (points to the back arrow)

Mode number (points to the Mode dropdown menu)

Switch (SW) (points to the grid of switches)

Current setting (This will be a * if in a group mode – mode 10 to 19) (points to the selected value in the grid)

Unit number (Not available if in a group mode – mode 10 to 19) (points to the Unit dropdown menu)

Selecting current value will give available options (points to the list of options below the grid)

Switch between field settings & remote controller settings (points to the Type radio buttons)

Field settings (Title of the menu)

Type (Section header for radio buttons)

- Indoor unit
- Remote controller

Mode (Dropdown menu)

Unit (Dropdown menu)

0, **1**, **0**, **0**, **0**, **1**, **0**, **0**, **0**, **0**, **1**, **0**, **0**, **0**, **0** (Grid of switches)

0, **1**, **0**, **2**, **3**, **0** (Row of numbers)

4, **5**, **6**, **7**, **1**, **1** (Row of numbers)

8, **9**, **10**, **11**, **0**, **1** (Row of numbers)

12, **13**, **14**, **15**, **0** (Row of numbers)

0, **1**, **0**, **0**, **0** (Row of numbers)

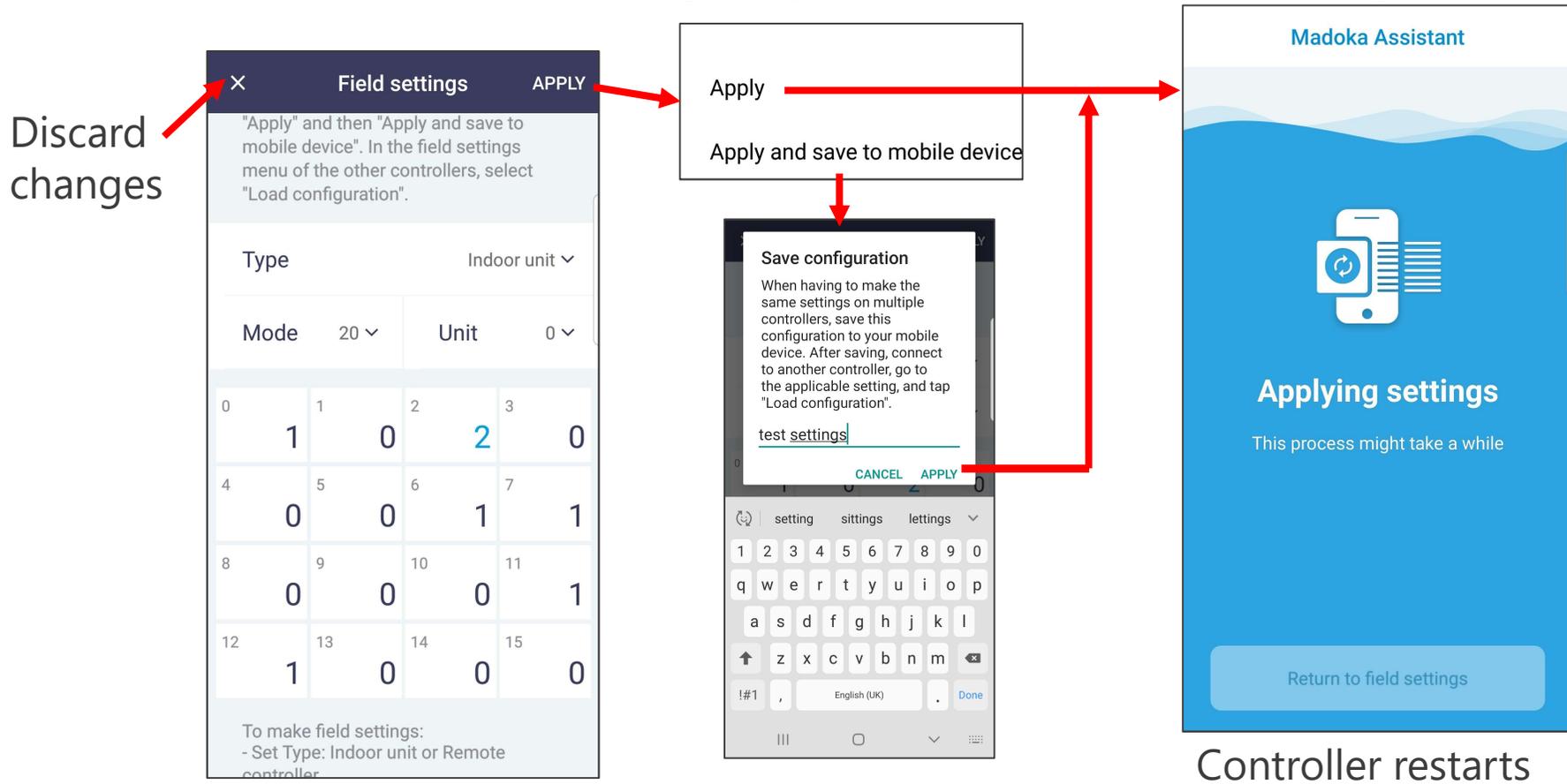
0, **1**, **0**, **2** (List of options)

DONE (Button)

Using the Madoka Assistant.

Field settings. – **Installer mode only.**

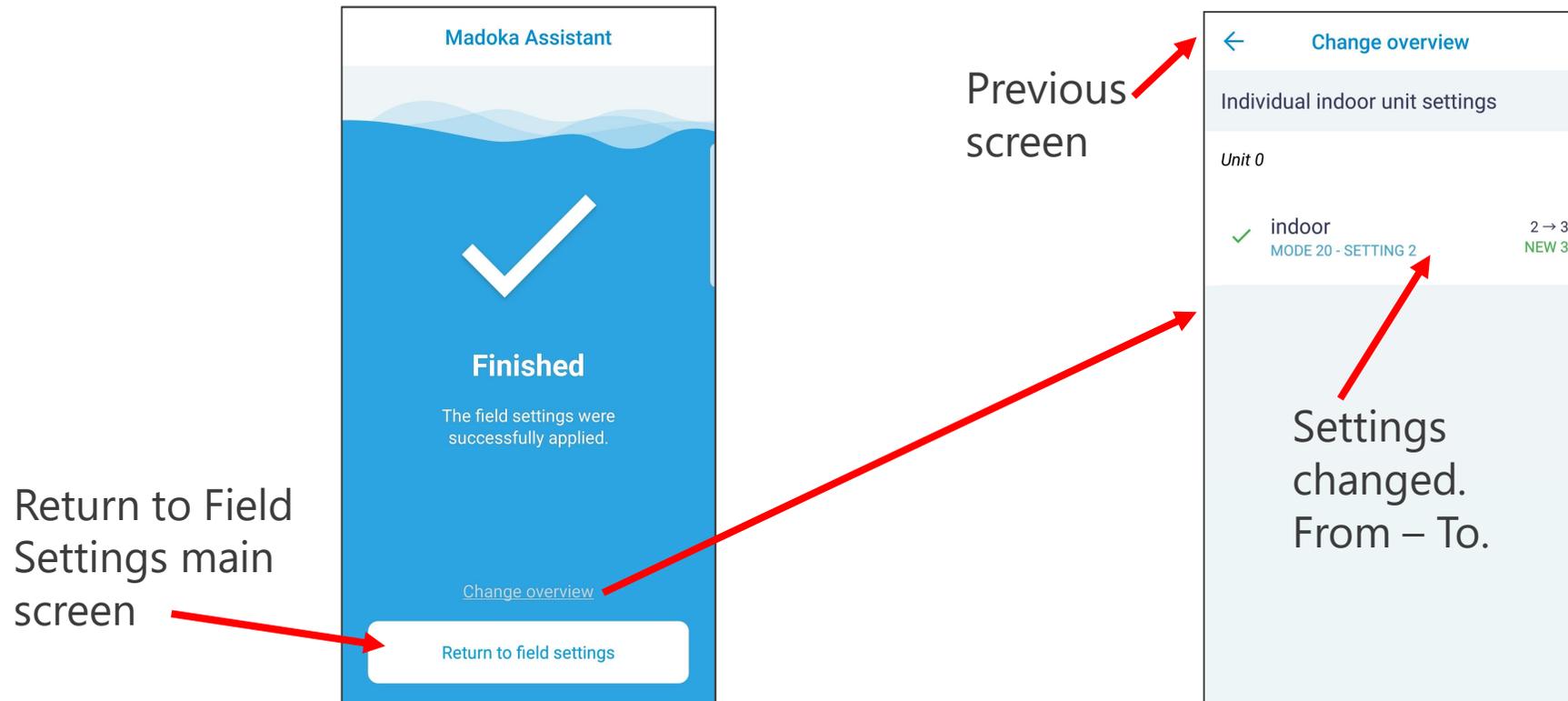
This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

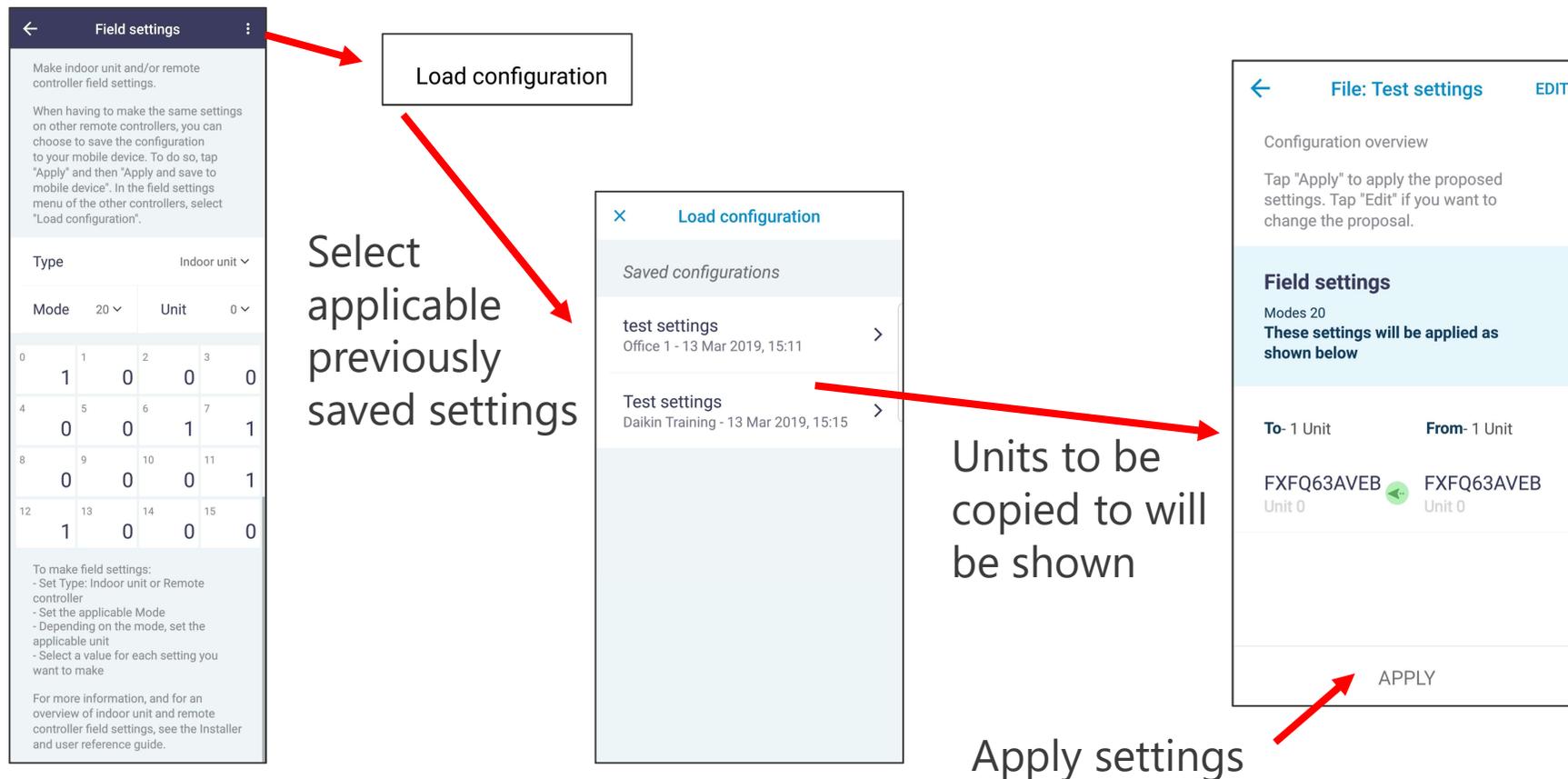
This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

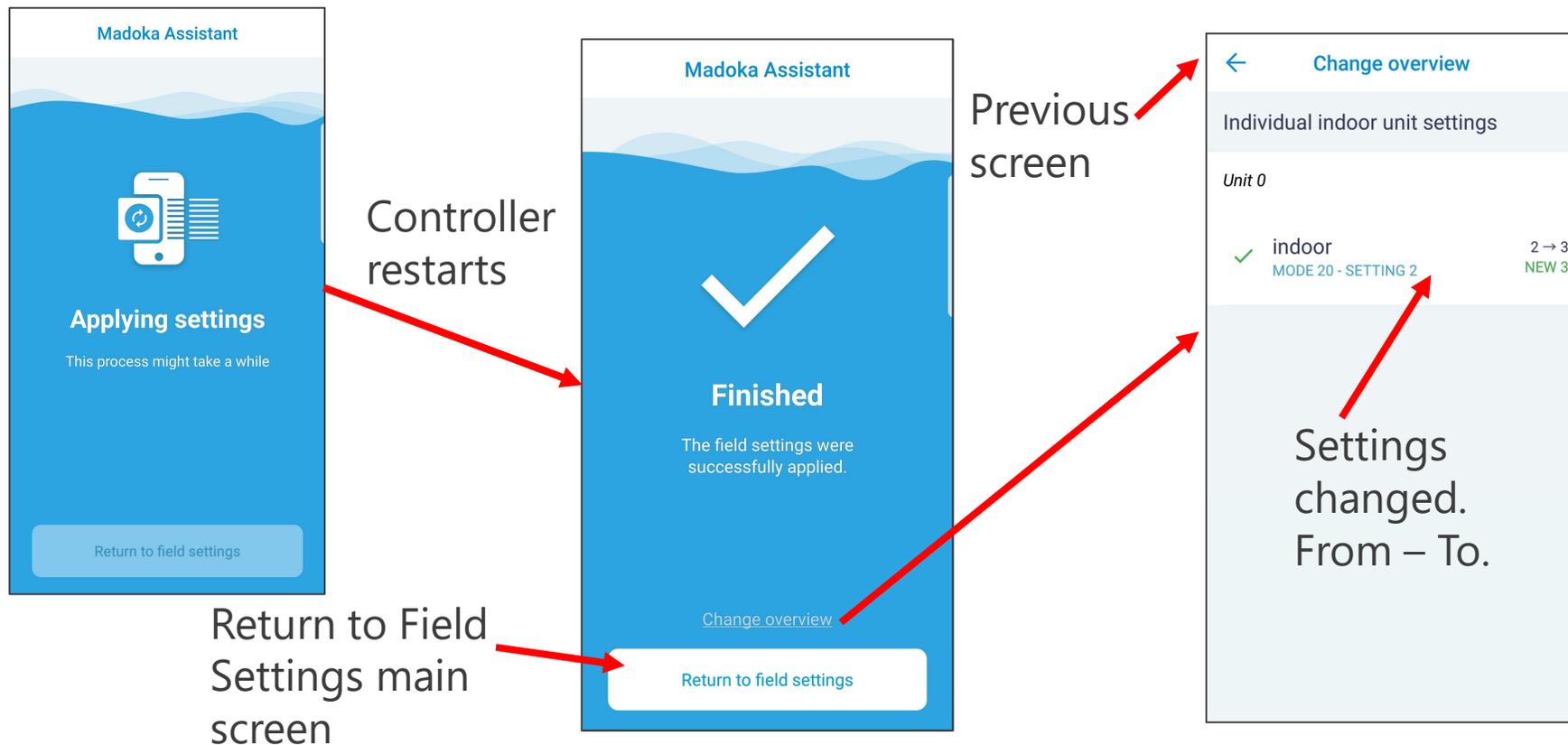
To apply previously saved settings to a new unit/controller.



Using the Madoka Assistant.

Field settings. – **Installer mode only.**

This menu is indoor unit field settings only – not remote controller settings.



Using the Madoka Assistant.

Duty rotation.

This menu is only available if at least 2 compatible systems (RZA systems) are connected to the same controller.

Back to list

Enable/disable the duty rotation function

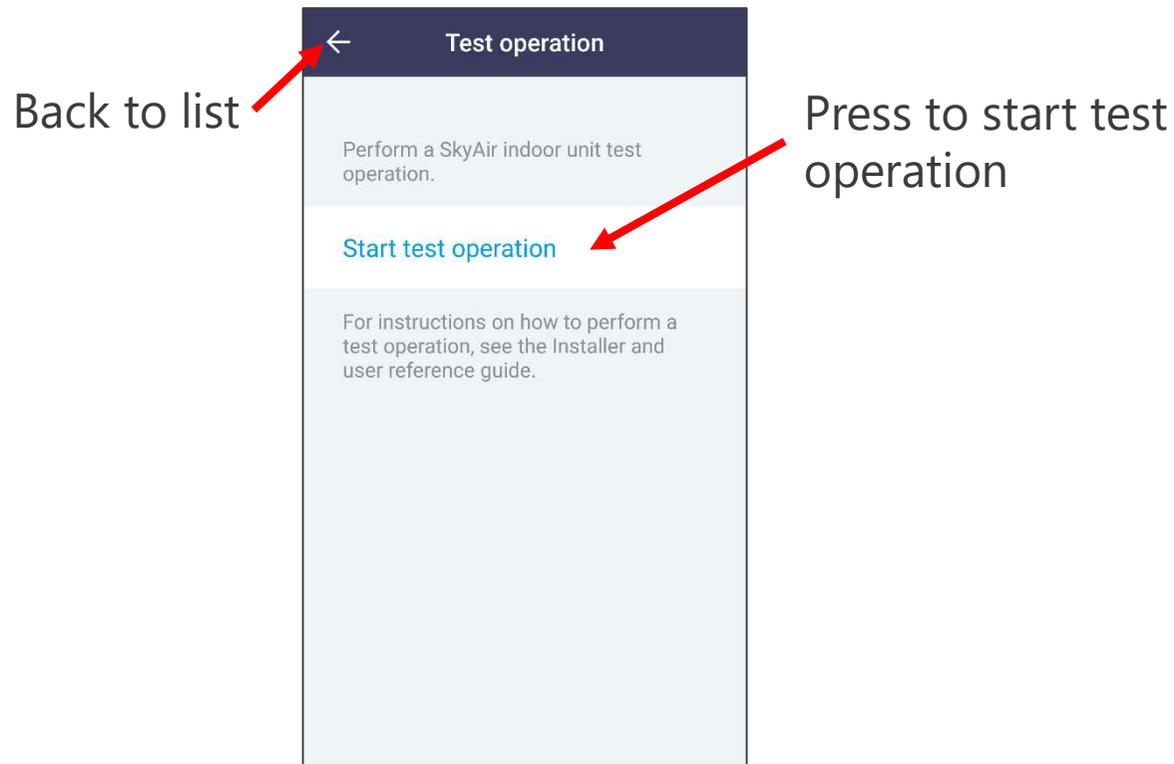
Adjust the duty rotation period

Select required period then press 'Done'

Using the Madoka Assistant.

Test operation.

This menu is only for SkyAir systems and performs a test cooling run.



Using the Madoka Assistant.

Unit status.

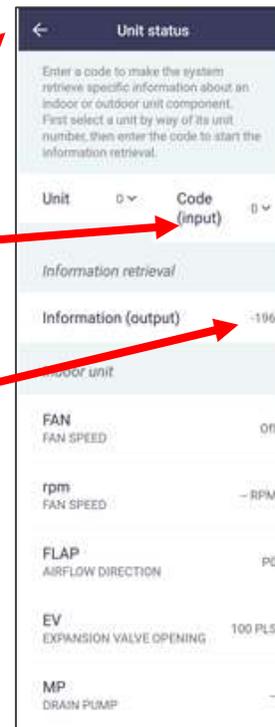
This menu is used to see the fan coil unit status & thermistor values.

Outdoor status & thermistor values are available for SkyAir systems only.

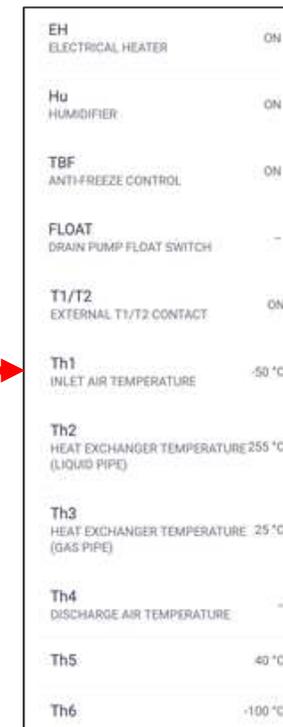
Select thermistor

Code	Thermistor
0	Remote controller
1	Return air
2	Liquid pipe
3	Gas pipe (VRV only)

Back to list



Temperature value



Using the Madoka Assistant.

Unit status.

This menu is used to see the fan coil unit status & thermistor values.

Outdoor status & thermistor values are available for SkyAir systems only.



Outdoor unit	
FANstep FAN SPEED	100
COMP COMPRESSOR SPEED	999 RPM
EV1 EXPANSION VALVE OPENING	100 PLS
SV1 SOLENOID VALVE	-
Pe DISCHARGE PIPE PRESSURE	1.3 MPa
Pc SUCTION PIPE PRESSURE	99.99 MPa
Th1 OUTDOOR AIR TEMPERATURE	-50 °C
Th2 HEAT EXCHANGER TEMPERATURE	-
Th3 DISCHARGE PIPE TEMPERATURE	255 °C

Using the Madoka Assistant.

Operating hours. – **Installer mode only.**

This menu is used to see the unit run time, the fan run time, the compressor run time and how long power has been applied to the system.

Outdoor data is only available for SkyAir systems.

Back to list

FCU running

Indoor fan running

Unit powered

Operating hours	
Monitor indoor and outdoor unit operating hours	
Unit	0 v
Indoor unit	
Operation	h
Fan	h
Power	h
Outdoor unit	
Operation	500 h
Fan 1	600 h
Fan 2	700 h
Compressor 1	- h
Compressor 2	900 h

Condenser running

Outdoor fan(s) running

Compressor(s) running