# System M and System D - Connected Thermostat 16 A, ZB

# Device user guide

Information about features and functionality of the device.

04/2024

# **merten**<sup>m</sup>





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# **Safety Information**

## **Important Information**

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

## **AADANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

## **AWARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result** in death or serious injury.

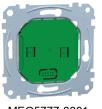
# **ACAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

# **NOTICE**

NOTICE is used to address practices not related to physical injury.

# System M and System D - Connected Thermostat 16 A, ZB



MEG5777-0001 Connected Thermostat Insert



MEG5779-0xxx System M Connected Thermostat Module



MEG5779-60xx System D Connected Thermostat Module

# For your safety

## **AADANGER**

## HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks.
- · Connecting several electrical devices.
- · Laying electric cables.
- · Safety standards, local wiring rules and regulations.

Failure to follow these instructions will result in death or serious injury.

# **AADANGER**

## **RISK OF FATAL INJURY FROM ELECTRIC SHOCK**

The output may carry electric current even when the load is switched off.

 Disconnect the device from the supply by means of the fuse in the incoming circuit before working on the device.

Failure to follow these instructions will result in death or serious injury.

# **AADANGER**

#### **RISK OF FATAL INJURY FROM ELECTRIC SHOCK**

The device is not a Safety Extra Low Voltage (SELV) device. The sensor lines are on mains (AC 230 V) line.

Only use sensors with double insulated cables.

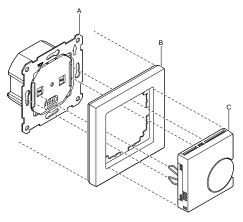
Failure to follow these instructions will result in death or serious injury.

## About the device

The Connected Thermostat Insert 16 A (hereinafter referred to as **Thermostat**) is mainly used for electric underfloor heating or electric radiators, but could also be used to control mains powered motorized valves or circulating pumps for water based heating.

#### The thermostat consists of:

- A. Connected Thermostat Insert 16 A (MEG5777-0001)
- B. Frame
- C. Connected Thermostat Module, ZB (MEG5779-0xxx, MEG5779-60xx)



#### NOTE:

- The insert works with several floor sensor types. Refer floor sensor setting, page 23.
- The room air temperature sensor is included with the Connected Thermostat Module, ZB.

The thermostat is composed of three components: inserts, frame, and ZB module, and each must be ordered separately.

#### Thermostat features:

- Measure & control the room temperature
- Dot-matrix displays (current room and set temperature)
- Device lock
- Valve Protection
- Heating changeover
- · Universal input setback/presence (external)
- · Volt-free or live control, normally open or normally closed.
- · Smart schedule through a Wiser app

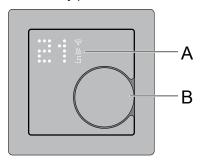
# **Operating elements**

- A. Dot-matrix display

  - → Heating demand LED ( )

**TIP:** All LED indications are explained in the LED behavior chapter.

B. Rotary push-button



# Installing the device

- Refer to the Connected Thermostat Insert 16 A installation instruction supplied with this product.
- Refer to the Connected Thermostat Module, ZB installation instruction supplied with this product.

## Selecting the installation site:

In order for the thermostat to be operated, the internal temperature sensor must be protected as far as possible against external influences and temperature fluctuations. This helps to guarantee reliable detection of the room temperature. The following should therefore be taken into account when considering the installation site:

- Minimum installation height: 1.5 m above the floor.
- Do not install too close to windows, doors or ventilation openings.
- · Do not install above heaters or other heat sources.
- Do not cover or install behind curtains.
- Avoid direct sunlight and light from lamps.
- Do not install in power strips above or next to components that produce heat, such as dimmers or electronic switches.
- Mounting on the cavity wall requires proper sealing of the conduit box or installation tube, to prevent airflow from affecting temperature sensor performance.

# **Device presetting**

You can preset the thermostat on the first power-on or immediately after a factory reset. The thermostat will require the selection of a preset to pre-configure settings depending on what the thermostat is directly controlling, which allows the thermostat to function correctly for the intended use case. Preset selection is a manual process and all preset uses a PI control algorithm which provides highly stable results.

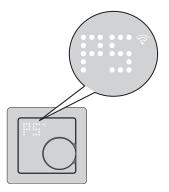
You can choose one preset configuration:

Preset	Configuration	Control type / Set point range	Cycle time* (min)
P1	Heat Pump/Oil Boiler (Room sensor)	Room Control 4°C ~ 30°C	20
P2	Hydronic Radiator/Gas Boiler (Room sensor)		10
P3	Hydronic Underfloor (Room sensor)		10
P4	Electrical Radiator (Room sensor)		10
P5	Electrical Underfloor (Room sensor - without floor limit sensor)		10
P6	Electrical Underfloor (Room sensor - with floor limit sensor)		10

\*Cycle time: This setting determines the length of each on/off cycle of the output relay. The percentage of time within that cycle time that the relay is on is varied based on demand. A longer cycle time may be more appropriate for slow heating surfaces, such as a concrete floor. A short cycle time is more appropriate for faster heating surfaces, such as an electric panel heater.

#### Initial preset configuration (by default)

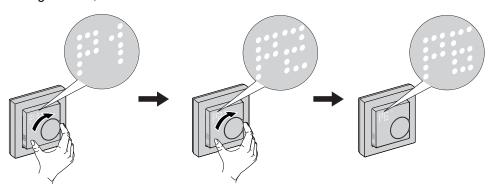
When the thermostat is first powered on or immediately after a factory reset, by default "**P5**" flashes on the matrix LED's indicate Preset 5 is selected.



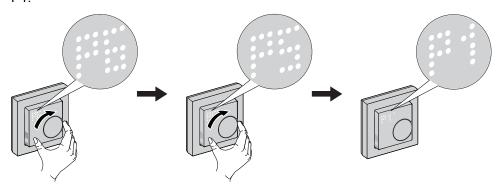
#### Modifying the preset value

When the rotary push-button is turned **clockwise**, it increases the preset value by 1 and rotating rotary push-button **anti-clockwise**, it decreases the preset value by 1.

**For example**, when the rotary push-button is turned clockwise, preset P1 becomes P2, continue rotating the rotary push-button clockwise, and the preset changes to P3, P4...P6.



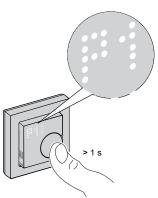
Similarly, when the rotary push-button is turned anti-clockwise, preset P6 changes to P5; if the rotary push-button is continue rotating anti-clockwise, preset P4, P3... P1



#### Confirming the preset

Select the preset that meets your needs by turning the rotary push-button, and then hold the rotary push-button for > 1 s to confirm the selection.

For example, P1 is confirmed.



Cycle Time : 20 minsValve Protection : Off

**NOTE:** If the preset value of P6 is set and the thermostat is connected with an external floor sensor then you need to set the sensor type. Refer manual sensor settings, page 10.

# Manual sensor settings

A thermostat with a preset value of **P6** can be connected with an external floor sensor to increase the user's experience in regulating the temperature.

**NOTE:** Once the preset is chosen, press rotary push-button for 1 second to confirm. Then the device continues to the sensor setting in the below sequence. For more info on preset, refer device presetting, page 7

# Selecting floor sensor type

After preset, you will enter floor sensor selection menu where you can manually select the sensor type connected to the thermostat after setting the preset; this allows the thermostat to convert and display the temperature accurately.

To select the floor sensor type:

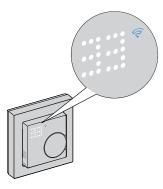
- Once you enter the selection menu, "10" will be displayed on the thermostat dot matrix. On the device turn rotary push-button clockwise and anticlockwise to switch between the sensor types.
   Following are the available sensor type:
  - 10 kOhm
  - 12 kOhm
  - 15 kOhm
  - 33 kOhm
  - 47 kOhm

**TIP:** When the rotary push-button is turned **clockwise**, sensor type 10 becomes 12. Continue rotating the rotary push-button clockwise, the type changes to 15, 33, and 47.

When the rotary push-button is turned **anti-clockwise**, sensor type 47 becomes 33. Continue rotating the rotary push-button anti-clockwise, the type changes to 15, 12, and 10.

2. Select the sensor type which is installed and then press the rotary pushbutton for > 1 s to confirm the selection.

The thermostat dot-matrix display the sensor type and  $\widehat{\varsigma}$  LED flashes blue.



# **Setting temperature calibration**

After selecting the floor sensor type, you must set the calibration value (offset value) of the sensor in order to minimize any variation in temperature measurement.

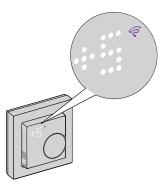
To set temperature calibration:

 Turn the rotary push-button clockwise or anti-clockwise on the device to set the calibration value.

**NOTE:** The temperature calibration ranges from **-9°C** to **+9°C** and can be adjusted in 0.5°C increments.

2. Set the calibration value, press the rotary push-button for > 1 s to confirm the selection.

The thermostat dot-matrix display calibration value and C LED flashes purple.



# Setting maximum guard temperature

After setting temperature calibration, you must set the maximum guard temperature. It is upper limit of the floor sensor.

Minimum guard temperature can only be set through Wiser Home app.

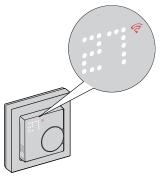
To set maximum guard temperature:

1. Turn the rotary push-button **clockwise** or **anti-clockwise** on the device to set the maximum limit.

NOTE: The temperature limit ranges from 11°C to 40°C.

2. Set the value, press the rotary push-button for > 1 s to confirm the selection.

The thermostat dot-matrix display calibration value and 🛜 LED flashes red.



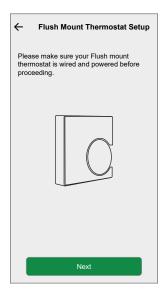
#### **IMPORTANT:**

- You can also perform a factory reset to remove all settings and configure the thermostat newly. Refer resetting the device, page 46.
- It is possible to modify or update sensor settings without resetting the thermostat with the Wiser Home app. Refer floor sensor setting, page 23.

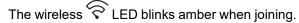
# Pairing the device

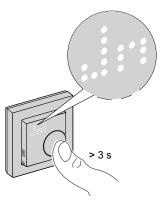
Using the Wiser Home app, you can pair your thermostat with the **Wiser Hub** to access and control the thermostat.

- 1. On the Home page, tap .
- 2. Tap Devices > >Climate tab.
- 3. Tap > Next.
  The next screen shows the thermostat joining process.



4. Press and hold the thermostat rotary push-button (> 3 s) until **Jn** appears on the device.

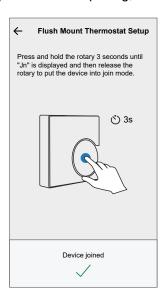




5. Wait for a few seconds until the wireless C LED on the thermostat turns green.

**NOTE:** The wireless C LED on the thermostat turns red if it is unable to connect. For more information, refer to Troubleshooting, page 51.

Upon successful pairing, the app displays the device joining status.



6. Assign a room to the thermostat and tap **Submit**.

**NOTE:** If the thermostat's preset is set to P3 (Hydronic Underfloor) and it is connected to a Wiser Underfloor Heating (UFH) actuator, then assign a room and tap **Next** to configure UFH. Refer configuring UFH actuator, page 14 to completed the setup.

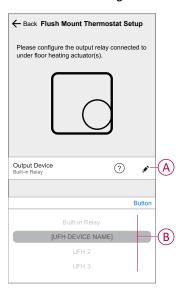
# **Configuring UFH actuator**

When thermostat's preset is set to P3 (Hydronic Underfloor) and it is connected with Wiser under floor heating (UFH) actuator, pairing process continues to configure UFH system. Thermostat will use UFH to control room temperature.

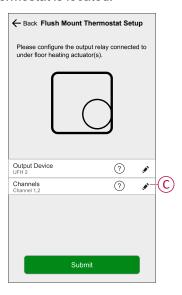
NOTE: Refer, pairing the device, page 12.

- Assign a room to the thermostat once it has been paired and then tap Next to configure UFH.
- 2. Tap **Output Device** (A) for slide up menu and select the UFH (B) from the list which is connected to the thermostat.

**NOTE: Built-in relay** is selected by default as the output device, there are no other settings for it.



3. Tap on **Channels** (C) and select the channel which controls the room where thermostat is located.



4. Tap Submit

Thermostat is now listed under room tab.

**IMPORTANT:** If cooling input is enabled in UFH make sure in **Room Setting > Excluded From Cooling** toggle switch is On. This can be useful if there are areas in a building that do not require cooling, such as storage rooms or unoccupied spaces. Refer UFH Cooling input.



# Configuring the device

# Renaming the device

Using the Wiser Home app, you can rename the thermostat.

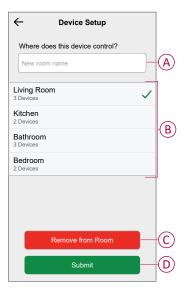
- 1. On the Home page, tap .
- 2. Tap **Devices > Device Name** (A) and enter new name.



# **Setting the device location**

You can change the device location using Wiser Home app (such as bedroom, living room, dining room etc.).

- 1. On the Home page, tap 🕏.
- 2. Tap **Devices**, select the device from the list for which you wish to change the location.
- 3. Tap **Location** to open setup page.
- 4. On setup page, you can enter **New room name** (A) or select an existing room from the list (B).



**TIP:** If the device is already assigned, you can remove it from the existing room. Tap **Remove from Room** (C).

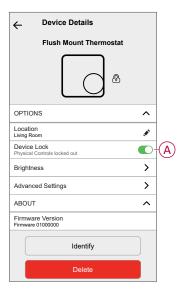
5. Once changes are done, tap **Submit** (D).

# Locking user interface

Using the Wiser Home app, you can lock the thermostat controls (nothing will happen when the thermostat rotary push-button is turned clockwise or anti-clockwise). This will prevent children from changing the temperatures in your room by playing with it.

- 1. On the Home page, tap .
- 2. Tap **Devices** > **Device Lock** (A) to lock or unlock the thermostat control.

**TIP:** When the thermostat lock is active, a will appear next to the thermostat.



# Setting the display brightness

Using the Wiser Home app, you can set the thermostat display brightness such as active (brightness during interaction) and inactive (brightness after 60 seconds of inactivity).

To set the thermostat display brightness:

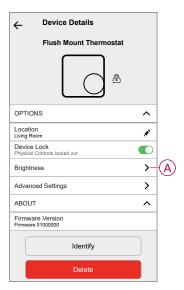
- 1. On the Home page, tap 🕏.
- 2. Tap **Devices** > **Brightness** (A) to set the active and inactive brightness using the sliding bar (B).

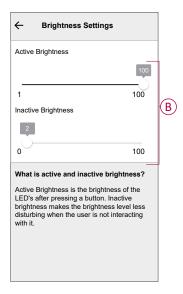
#### NOTE:

- Default active screen brightness is 100%. Range from 1%~100%, and the setting accuracy is 1%.
- Default inactive screen brightness is 0% range is 0%~100%, the setting accuracy is 1%, and it must be <= active brightness.</li>

#### For example:

**Allowed**: Both active and inactive brightness can be set to 50%. **Not allowed**: Inactive brightness set to 60 % and active brightness set to 50 %.



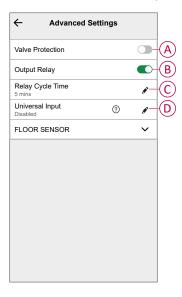


# Advanced device settings

The Wiser Home app offers advanced settings for the thermostat. These settings include toggle switches that let you enable or disable valve protection, output relay, set cycle time and universal input, rated power value and floor sensor setting.

**NOTE:** Making changes to advanced settings can severely impact your system, so be sure to understand its impact before applying any changes to the advanced settings.

- 1. On the Home page, tap .
- 2. Tap Devices > > Advanced Settings.
- 3. Read the caution and tap **OK** for **Advance setting** page.



## **Valve Protection**

Hydronic underfloor heating and boiler connections require valves and protection, while electric underfloor heating does not use valves. This feature can only be used in hydronic applications.

The valve protection can be enabled or disabled by tapping the toggle switch (A) on the valve protection setting.

**NOTE:** Activate output every two weeks to prevent valve calcification. It only supports Enable/Disable feature.

# **Output Relay**

Output relay can be enabled or disabled by tapping the toggle switch (B) which turn off/on the relay, if used as a temperature measurement device.

## **Relay Cycle Time**

In advanced settings, you can choose relay cycle time. This setting determines the length of each on/off cycle of the output relay. The percentage of time within that cycle time that the relay is on is varied based on demand. A longer cycle time may be more appropriate for slow heating surfaces, such as a concrete floor. A short cycle time is more appropriate for faster heating surfaces, such as an electric panel heater.

For example, 20 mins = three cycle per hour.

**NOTE:** A relay cycle time can be viewed only when the output relay is on.

Tap Relay Cycle Time (C) and select a cycle time:

- 5 mins
- 10 mins
- 20 mins
- 30 mins

## **Universal Input**

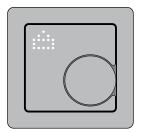
Universal Input can provide a setback of 2° C when input is controlled by a setback timer or a room proximity sensor. In advanced settings, you can choose Universal Input.

Tap Universal Input and choose any:

- Disabled Any change of state on the input is ignored on room occupancies.
- Presence Detect Input presence indicates that the room is occupied.
- Setback Indicates thermostat should follow unoccupied setpoint.

When the universal input is configured for presence detection and detects room occupancy, the thermostat adheres to the user-set setpoint. Upon detecting the room as unoccupied, the thermostat maintains the same setpoint for the next occupancy time which is set in room settings. If there is no change in occupancy status during this period, the thermostat reverts to the unoccupied setpoint. Refer room settings, page 24 for more information on occupancy duration.

When presence detect or setback has been activated, thermostat dot matrix display shows away mode as below indicating input detection.



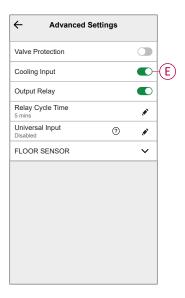
**Example for heating mode**: If the user sets the thermostat's setpoint to 23° C Celsius and the inputs detect room occupancy, the thermostat will adhere to the 23° C setpoint. However, if the room becomes unoccupied, the thermostat will maintain the 23° C setting for the next 10 mins before transitioning to the unoccupied setpoint of 21° C, which is 2° C lower than the user's initial setting.

**Example for cooling mode**: If the user sets the thermostat's setpoint to 18° C Celsius and the inputs detect room occupancy, the thermostat will adhere to the 18° C setpoint. However, if the room becomes unoccupied, the thermostat will maintain the 18° C setting for the next 10 mins before transitioning to the unoccupied setpoint of 20° C, which is 2° C higher than the user's initial setting.

When presence detect or setback has been activated, thermostat dot matrix display shows away mode as below indicating input detection.

# **Cooling Input**

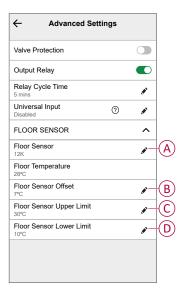
When thermostat's preset is set to P3 (Hydronic Underfloor), you can enable **Cooling Input** (E) for cooling switchover detection.



If thermostat is connected with external floor sensor, refer floor sensors settings, page 23 to apply required changes.

# Floor sensors settings

Wiser Home app allows you to update the floor sensor settings that were set during initial configuration.



## Floor sensor

To select the floor sensor:

- 1. Tap Floor Sensor (A) for slide up menu.
- 2. Select the sensor type (kOhm) form the following list.
  - · 10K
  - 12K
  - 15K
  - 33K
  - 47K
  - Not fitted

**NOTE:** Select correct floor sensor type which is installed and then you can set offset and temperature limit.

## Floor sensor offset

To set the offset temperature:

- 1. Tap Floor Sensor Offset (B) for a slide-up menu.
- 2. Drag the sliding bar to set the offset temperature.

**NOTE:** The offset temperature ranges from -9°C to +9°C and can be adjusted in 0.1°C increments.

3. Tap Save.

## Floor sensor limit

To set the upper and lower temperature limit:

 On setting page, tap Floor Sensor Upper Limit (C) to set upper temperature limit of the floor sensor and then tap Save.

**NOTE:** The temperature ranges form 5°C to 19°C and maximum guard temperature should be higher than minimum guard temperature.

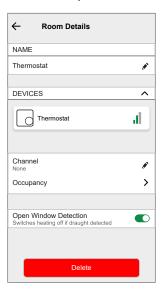
 Tap Floor Sensor Lower Limit (D) to set lower temperature limit of the floor sensor and then tap Save.

**NOTE:** The temperature ranges form 21°C to 40°C and minimum guard temperature should be lower than maximum guard temperature.

# **Room setting**

You can set channel, occupancy and window detection in the room settings.

- 1. On the Home page select the thermostat for which you want to change room setting.
- 2. On control panel of thermostat, tap **Room setting** to open room details.

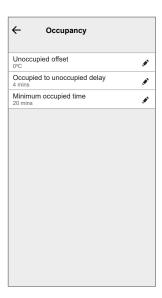


# Channel settings

If the thermostat and under floor heating device are in same room you can change channel which is assigned to same room as thermostat by tapping on **Channel** in room details and select the channel.

# **Occupancy**

You can change the occupancy settings according to user requirement by tapping **Occupancy** in room details.



- **Unoccupied Offset**: You set the setpoint when room is unoccupied. This helps to save energy by allowing the temperature to drift from the normal setpoint to a less comfortable but more energy-efficient level when the space is not in use.
- Occupied to Unoccupied Delay: You can set the time delay between a room being occupied and then transitioning to an unoccupied state. his delay ensures that the system doesn't immediately switch to an unoccupied mode when a room becomes vacant, preventing unnecessary fluctuations and providing a grace period in case the room becomes occupied again shortly after being unoccupied. This delay helps to optimize energy efficiency and maintain comfort within the building.
- Minimum Occupied Time: You can set the minimum duration for which the thermostat detects occupancy before it takes certain actions, such as adjusting temperature settings to unoccupied setpoint. This feature helps prevent the system from reacting to short-term movements or presence, ensuring that it responds to sustained occupancy, thereby optimizing energy usage and maintaining comfort effectively.

# Open window detection

Windows open detection in a thermostat is a feature that utilizes sensors to detect when windows or doors are open in the vicinity. When an open window or door is detected, the thermostat can adjust the heating system to conserve energy. This helps improve energy efficiency and can contribute to cost savings by ensuring that the system operates more intelligently in response to changes in the indoor environment.

Switch the toggle to enable open window detection.

# Identifying the device

Using the Wiser Home app, you can identify the thermostat from the other available devices in the room.

1. On the Home page, tap

# 

**NOTE:** The thermostat LEDs on the dot-matrix display flash white while the wireless connectivity LED flashes green at the same until you tap **Ok**.



# Using the device

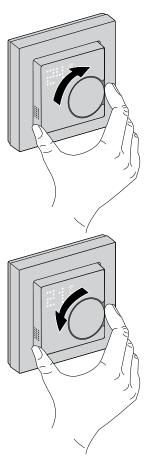
# Setting the room temperature manually

The room temperature can be increased/decreased manually by rotating the rotary push-button of the thermostat.

Prerequisite: Select the Preset, page 7.

## Rotate the thermostat rotary push-button:

- In the "clockwise" direction to increase the temperature.
- In the "anti-clockwise" direction to decrease the temperature.



# Setting the room temperature using the app

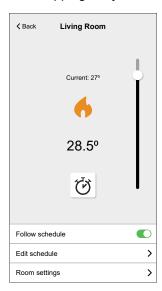
Using the Wiser Home app, you can adjust the room temperature for heating.

- 1. On the Home screen, tap All or room tab.
- 2. To select a thermostat, tap
- 3. Use the slider control and set the room temperature for heating.

#### NOTE:

- The indicates that the room temperature is below the desired temperature (set point), so the heating is on.
- The indicates that the room temperature is above the desired temperature (set point), so the heating is off.

**TIP:** Tapping  $\begin{tabular}{c} \begin{tabular}{c} \begin{tabular}{$ 



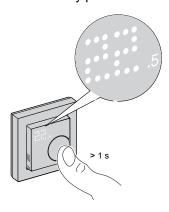
# Setting boost mode manually

You can enable and disable boost mode manually.

When enabled the temperature increases by  $2^{\circ}$  Č for temperature control modes and by +2 over the setpoint.

#### To enable boost mode:

1. Press rotary push-button once to enter boost menu.



+1 flashes on thermostat matrix.

**NOTE:** The thermostat will exit boost mode if there is no interaction within 5 seconds after pressing rotary push-button.

2. Press rotary push-button to navigate between the boost hours from +1 to +3

**NOTE:** When you press rotary push-button on the device, the boost mode selection cycle through  $+1 \rightarrow +2 \rightarrow +3 \rightarrow -$  (boost cancel) and again back to +1.

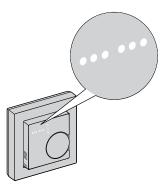
After selecting the boost hours, thermostat will save and exit boost mode if there is no interaction within 5 s.

## For example:

If current setpoint is 12° C and you enable boost mode by selecting +3. The boost mode will set the setpoint temperature to 14° C for next 3 hour. After 3 hour setpoint will return to 12° C.

#### To disable boost mode:

- Press rotary push-button once.
   +1 flashes on thermostat matrix.
- 2. Turn rotary push-button **clockwise** button for thermostat to display  **–** (boost cancel).



After selecting the boost cancel, thermostat will save and exit boost mode if there is no interaction within 5 s.

# **Creating a Schedule/Event**

The device can be fully controlled and triggered by a schedule. Once the schedule is set, your system will follow the active schedule. You can create or modify the schedules at any time.

To create the schedule/event:

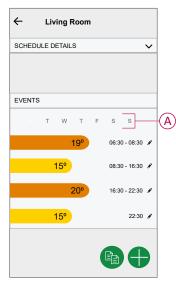
- 1. On the Home page, tap
- 2. Tap on the **Schedules** tab > 🕕.
- 3. On the **New Schedule** page, enter the **Schedule name**, select **Type**, and select room.
- 4. Tap Create.

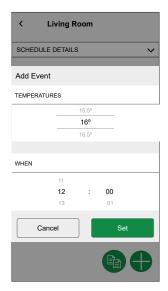


- 5. Select any day (A) and tap for add event:
  - Select temperature (for example 16 °C).
  - Set time (for example 12:00).

NOTE: A maximum of 8 events can be created per day.

You can tap to copy the schedule from one day to other days or copy the entire schedule to a new schedule or to an existing one.





6. Tap Set.

## **Editing Schedule/Event**

To edit the schedule:

- 1. On the Home page, tap ===.
- 2. Tap **Schedules** tab and select the Schedule that you want to modify.
- 3. Tap **SCHEDULE DETAILS** to do any of the following:
  - To rename the device
  - To change the device location
  - To delete Schedule
- 4. To edit the **EVENTS**, select a day, and tap to change the time and temperature.



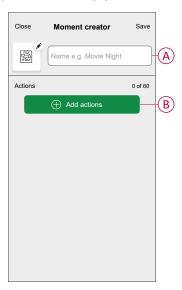
# **Creating a moment**

Moment allows you to group multiple actions that are usually performed together. By using the Wiser Home app, you can create moments based on your needs. To create a moment:

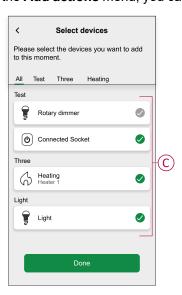
- 1. On the **Home** page, tap
- 2. Go to **Moments** > to create a moment.
- 3. Enter the name of the moment (A).

**TIP:** You can choose the cover image that best represents your moment by tapping .

4. Tap Add actions (B) to select the list of devices.

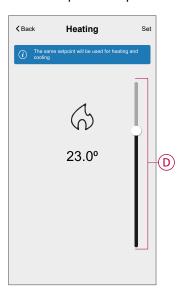


5. In the Add actions menu, you can select the devices (C).



6. Once all the device are selected, tap Done.

- 7. On the **Moment creator** page, tap the device to set the condition. For example, select heating.
  - Set the required temperature using sliding bar (D).



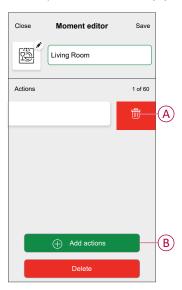
When the desired condition is set, tap Set.

8. Once all conditions are set, tap **Save**.

Once the moment is saved, it is visible on the **Moments** tab. You can tap on the moment to enable it.

## **Editing a moment**

- 2. Go to **Moments**, locate the moment you want to edit and tap .
- 3. On the Moment editor page, you can perform following changes:
  - Change the icon
  - · Rename the moment.
  - Tap each action to change the settings.
    - To remove an action, slide the action to the left and then tap (A) to delete it.
    - $_{\circ}$   $\,$  Tap  $\oplus$  Add actions (B) to add new action.

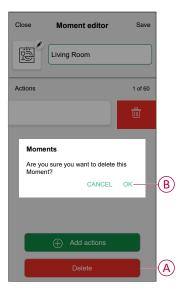


4. Tap Save, to save the changes.

# **Deleting a moment**

- 1. On the **Home** page, tap  $\stackrel{\square}{=}$ .
- 2. Go to **Moments**, locate the moment you want to delete and tap .

3. On the Moment editor page, tap **Delete** (A) and then tap **Ok** (B).



# **Creating an automation**

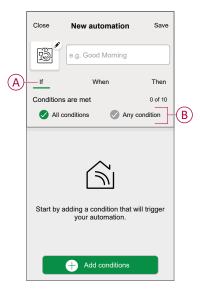
An automation allows you to group multiple actions that are usually done together, triggered automatically or at scheduled times. By using the Wiser app, you can create automations based on your needs.

To create an automation:

- 1. On the **Home** page, tap
- 2. Go to **Automation** > to create an automation.

NOTE: Max. 10 automations can be added.

- 3. Tap If (A) and select any of the following conditions (B):
  - All conditions: This triggers an action only when all conditions are met.
  - Any condition: This triggers an action when at least one condition is met.

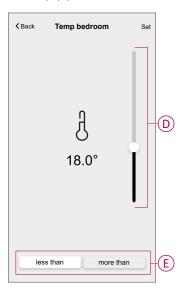


- 4. Tap **Add conditions** and select any of the following (C):
  - **Device status change**: Select a device to enable automation.
  - Away Mode: Enable/Disable away mode to trigger an action.

**TIP:** Away mode can also be used as a trigger to turn off the lights, dimmer or closing the shutter etc. For more information refer to Away mode.



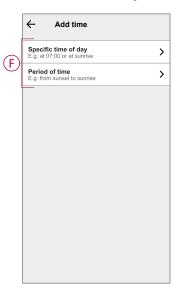
5. Tap **Device status change** > **Temperature/Humidity Sensor** > **Temperature**, Set the temperature using sliding bar (D) and select the condition (E) (less than / more than), then tap **Set**.



#### NOTE:

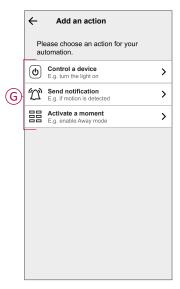
- Max. 10 conditions can be added.
- To remove an added condition, swipe left and tap

- 6. To set a specific time for your automation, tap **When > Add time** and select any of the following (F):
  - Specific time of the day: Sunrise, Sunset, Custom.
  - Period of time: Daytime, Night time, Custom.

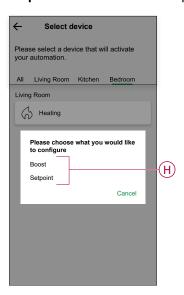


#### NOTE:

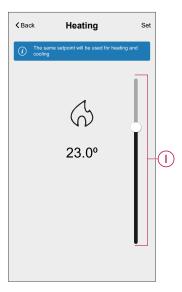
- · Max. 10 entries can be added
- 7. To add an action, tap **Then** > **Add an action** and select any of the following (G):
  - Control a device: Select a devices that you want to trigger.
  - Send notification: Turn on the notification for the automation.
  - Activate a moment: Select the moment that you want to trigger.



- 8. Tap Control a device > Heating and select any of the following (H):
  - **Boost**: Set the duration to increase the temperature by 2° C.
  - **Setpoint**: Set the desired temperature.



9. Tap **Setpoint**, set the required temperature using vertical sliding bar (I), then tap **Set**.

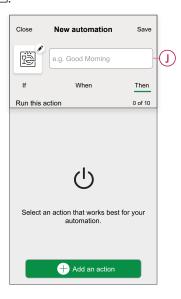


### NOTE:

- Max. 10 actions can be added.
- To remove an action, swipe it left on the action and then tap

10. Enter the automation name (J).

You can choose the cover image that represents your automation by tapping



### 11. Tap **Save**.

Once the automation is saved, it is visible on the **Automation** tab.

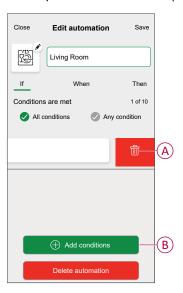
Using the (K) you can enable and disable the automation.



# **Editing an automation**

- 1. On the **Home** page, tap \( \frac{1}{2} \).
- 2. Go to Automation, tap the automation you want to edit.
- 3. On the **Edit automation** page, you can perform following changes:
  - Change the icon 🕮.
  - · Rename the automation.
  - Tap each condition to change the settings.
    - To remove a condition, slide the condition towards left and then tap

      (A) to delete it.
    - $\circ$  Tap  $\oplus$  **Add conditions** (B) to add new condition.

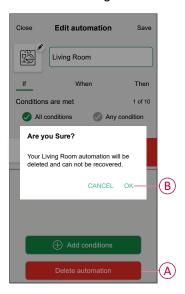


4. Tap Save, to save the changes.

# **Deleting an automation**

- 1. On the **Home** page, tap ===.
- 2. Go to Automation, tap the automation you want to delete.

3. On the **Edit automation** page, tap **Delete automation** (A) and read the confirmation message and then tap **OK** (B).

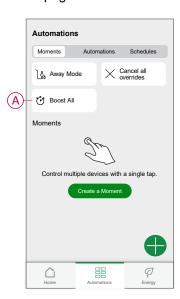


### **Built in Automation**

There are three built in Automation such as Boost All, Cancel all overrides and Away mode.

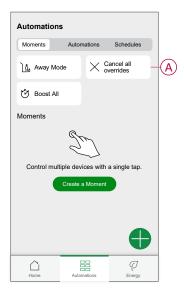
### **Boost All**

You can apply a boost of +2 °C for 1 hour to every room in the system. It won't affect hot water in any way. As this is a "one-time action", you can find Boost All (A) in the "Automation" menu by clicking the "Automation" tab at the bottom of the Home page.



### Cancel all overrides

The Cancel all overrides (A) will put all the heating back under 'system control' meaning that if you've selected Boost All or even if you've boosted or manually overridden a room setpoint individually, this will cancel the override and put all the rooms back to their scheduled set points. You can find it in the "Automation" menu by tapping the "Automation" tab at the bottom of the Home page.



### **Away Mode**

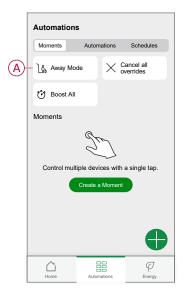
When Away Mode (A) is activated, all rooms will be set to the Away temperature (default 16 °C). It will show a checkmark in the "Automation" page when active. You can find it in the "Automation" menu by tapping the "Automation" tab at the bottom of the Home page.

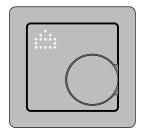
When Away mode is active, only rooms that have set point temperatures higher than the Away mode temperature will be affected. For example, if a given room is set to 5 °C, Away mode will not force it to the Away temperature.

While Away Mode overrides Boost and rooms that are and aren't following a schedule, it is still possible to manually change the set-point temperature and boost individual rooms after activating Away Mode. It is also possible to boost or manually turn the hot water ON.

All rooms and hot water will display their Away mode values. The hot water will be turned OFF if you have activated this option on the Away Mode screen.

**NOTE:** The current temperature will not be displayed when away mode is activated.





### Voice control

Using Amazon Alexa® or Google Home, you can control the thermostat with your voice.

### **Google Home**

Google Home is a brand of smart speakers that works like Alexa. You can use Google Assistant to request information or perform an action using a variety of commands."

#### **Common Wiser commands for Google Home:**

- Inquiry: "OK, Google, is the hot water on?"
- · Hot Water Command: "OK, Google, turn on/off the hot water.
- Room Temperature: "OK, Google, how warm is (room name)?"
- · Set Temperature: "OK, Google, set (room name) to XX degrees."
- Increase Temperature: "OK, Google, increase the setpoint by XX degrees."
- Set Temperature: "OK, Google, set (room name) to XX degree."

### Changes made with Google Home

All changes are made using a voice command related to the thermostat, valid for one hour or until the next scheduled event. The user cannot change this action. This also applies to boosts initiated from the radiator thermostat.

### Amazon Alexa™

Amazon Alexa™ (Alexa) is an intelligent personal assistant developed by Amazon™, and is capable of voice interaction.

#### **Common Wiser commands for Alexa**

- · Discover Devices: "Alexa, discover devices"
- Reduce Temperature: "Alexa, decrease the temperature upstairs by 4 degrees"
- Increase Temperature: "Alexa, increase the temperature upstairs by 3 degrees"
- Set Temperature: "Alexa, set the upstairs to 20 degrees"
- · Get Temperature: "Alexa, what is the upstairs temperature?
- Get the Set Point: "Alexa, what is the upstairs set to?"

# Removing the device

Using the Wiser Home app, you can remove the thermostat from the Wiser system.

To remove the thermostat from the Wiser system:

- 1. On the Home page, tap 🐯.
- 2. Tap Devices > Delete (A).



3. Read the confirmation message and tap **Ok** to remove the thermostat from the Wiser system.

**NOTE:** By removing the thermostat, you will reset the thermostat. If you still have a problem with the reset, then refer to resetting the device, page 46.

# Resetting the device

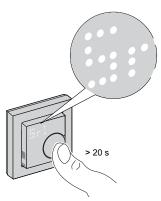
You can manually reset the thermostat to factory settings or soft reset.

#### Soft reset

Press and hold the rotary push-button > 20 s.

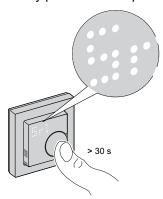
The thermostat displays "Sr", indicating soft reset, and it is selected when the button is released.

The 'Sr' will flash to confirm the soft rest.



#### NOTE:

- In case you keep pressing rotary button for 25 s then the thermostat will reset to the factory default.
- To cancel the soft reset keep press and hold the rotary push-button for > 30 s. This reverts the thermostat's UI back to its previous state before the rotary push-button is pressed, with no change in a functional state



#### A soft reset will:

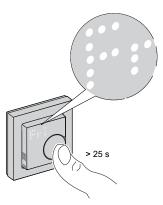
- Delete all Zigbee connection details.
- Delete all cloud and account details maintained by the device to allow reregistration.
- Revert to the default setpoint in manual control.
- Maintain all Factory settings e.g. MAC address.
- Maintain the installer configuration of the device to ensure proper functioning until and after rejoining/re-registration.

#### **Factory reset**

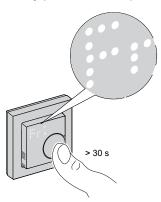
Press and hold the rotary push-button > 25 s.

The thermostat displays "Fr", indicating factory reset, and it is selected when the button is released.

The 'Fr' will flash to confirm the factory reset.



**NOTE:** To cancel the factory reset keep pressing the rotary push-button for > 30 s. This reverts the thermostat's UI back to its previous state before the rotary push-button is pressed, with no change in a functional state.



**NOTE:** When the rotary push-button is released, the "**Fr**" flashes on the matrix display, and the thermostat resets to factory defaults and after 5 s it returns to Preset.

#### Resetting to the factory state will:

- Delete all Zigbee connection details..
- · Delete all configuration data.
- · Delete all schedules information.
- · Revert to the default setpoint in manual control.
- · Maintain all Factory settings e.g. MAC address.

# **LED Indications**

### Pairing the device

Status	User Interaction	Description
Pairing in progress	>3s	The thermostat matrix display flashes "Jn" to indicate joining is initiated when the thermostat rotary push-button is pressed and held for > 3 s.
Successful joining network		The thermostat matrix display flashes a green LED when the thermostat successfully joins a network.
Fails to join the network	•••	The thermostat matrix display flashes a red LED when the thermostat fails to join the network.

### Presetting the device

Status	User Interaction	Description	
Enter preset selection		The thermostat matrix display flashes "P1" when the thermostat is first powered on or after a factory reset to indicate preset "P1" is selected.	
Modify preset selection		P6 when the thermostat rotary push-button is turned.  Note: When the thermostat rotary push-button is turned clockwise, the preset increases by one; similarly, the preset decreases by one when the rotary push-button turned anti-clockwise.  For more information, refer to the section Presetting the device.	

# Setting a sensor type

Status	User Interaction	Description
Floor sensor type selection		The thermostat matrix display the floor sensor type and CLED flashes blue.
Floor sensor offset temperature		The thermostat matrix display calibration value and CLED flashes purple.
Floor sensor upper limit		The thermostat matrix display maximum temperature limit and C LED flashes red.

# Resetting the device

Status	User Interaction	Description
Soft reset	> 20 s	A solid "Sr" LED is displayed on the thermostat matrix display until the user releases the rotary push-button, then "Sr" flashes. For more information, refer to the section Resetting the device, page 46.
Factory reset	>25 s	A solid "Fr" LED is displayed on the thermostat matrix display until the user releases the rotary push-button, then "Fr" flashes. For more information, refer to the section Resetting the device, page 46.

# Showing demand - temperature control modes

Status	User Interaction	Description
Heating demand		The matrix display a solid red LED to indicate the thermostat is heating when the setpoint is higher than the current room temperature.  NOTE: Heating input has been activated.

### Away mode

Status	User Interaction	Description	
Away mode is set in Wiser Home app.		A dot-matrix display glows, indicates that the thermostat is in away mode. Refer Away mode, page 43.	

### Temperature display

Status	User Interaction	Description
Temperature below minimum display value OR Temperature reading error.		Note: The thermostat matrix displays temperature limits -9 °C to 99 °C.  The thermostat matrix display flashes "" When the temperature is below -9 degrees.  OR  The thermostat matrix display flashes "" when the thermostat cannot determine the temperature due to an error.
Temperature above maximum display value		Note: The thermostat matrix displays temperature limits -9 °C to 99 °C.  The thermostat matrix display flashes "+ +" when the temperature is above 99 degrees.

### Identifying the device

User action	Status
Tap identify button in the app.	The dot-matrix display flash white along with green ED when identify command is received from the app.

# **Troubleshooting**

Symptom	Possible cause	Solution  Make sure there is proper sealing of the conduit box or installation tube, to prevent airflow from affecting sensor performance.  Turn the thermostat On and Off.  Move the Wiser Hub closer to the thermostat.  Use Wiser Smart plug to increase the range.  Rejoin the thermostat in the app.  Turn on the devices' power (Thermostat/ Wiser Hub/Wi-Fi® network).	
Thermostat temperature measurement is not accurate.	Check the installation location for possible air flow in conduit box or installation tube.		
The thermostat has gone offline.	The thermostat is not On. The thermostat is no longer in signal range of the Hub.		
Unable to join to the Wiser Hub (blinking red LED)	Poor signal between the Wiser Hub and thermostat.  The devices have no power (Thermostat/ Wiser Hub/Wi-Fi® network).		
Status	User Interaction	Description	
Unable to set the room temperature by the app.	Wiser Hub signal is weak or not connected to the Wi-Fi® network.	Check for a Wi-Fi® signal.	
Find and Bind		When the user press and holds the rotary push-button for >8s, "Fb" LED is displayed on the thermostat matrix display. It is a Zigbee function, can be ignored.	

# **Technical Data**

### **Connected Thermostat Insert 16 A**

Nominal voltage:	AC 230 V ~, 50 Hz
Nominal power:	16 A
Connecting terminals:	Screw terminals for max. 2.5 mm², 0.5 Nm
Neutral conductor:	Required
Ambient temperature:	0 to 40 °C
Relative humidity:	max. 90% non-condensing
Temperature accuracy:	max. ±0.5 °C (accross the range of 4 to 30 °C)
Floor sensor types:	10, 12, 15, 33, 47 (Thermistor resistance values in kOhm. Nominal value at 25 °C)
Protection Class:	II
Working voltage:	230 V
Over-voltage category:	III
Rated impulse voltage:	4 kV
Pollution degree:	2
CTI rating of insulation components:	min. 175 V
Material group:	Illa (based on CTI value)
Disconnection type:	1.B

# **Connected Thermostat Module, ZB**

Standby:	max 0.4 W
Ambient operating temperature:	0 to 45°C
Relative humidity:	max. 90% non-condensing
Display:	7x5 dot matrix, 3 additional LEDs
Temperature measurement resolution:	max. 0.1 °C
Operating frequency:	2.405 GHz to 2.48 GHz
Max. radio-frequency power transmitted:	< 10 mW
Communication protocol:	Zigbee 3.0 certified

# **Compliance**

# **Compliance information for Green Premium products**

Find and download comprehensive information about Green Premium products, including RoHS compliance and REACH declarations as well as Product Environmental Profile (PEP) and End-of-Life instructions (EOLI).

https://checkaproduct.se.com/



# **General information about Green Premium products**

Click the link below to read about Schneider Electric's Green Premium product strategy.

https://www.schneider-electric.com/en/work/support/green-premium/



# **EU Declaration of Conformity**

Hereby, Schneider Electric Industries, declares that this product is in compliance with the essential requirements and other relevant provisions of RADIO DIRECTIVE 2014/53/EU. Declaration of conformity can be downloaded on se. com/docs.

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DUG\_Connected Thermostat 16 A, ZB\_WH-01