

# ***VOLTCRAFT***

© App Instruction Manual

## **SEM6000 Bluetooth Energy Consumption Meter**

Item No. 1558906



# Contents

---

Symbols.....	3
Trademarks .....	3
Core functions .....	4
Indicator lights on Smart device .....	5
Installation .....	5
Deinstallation.....	6
Connect via Bluetooth .....	6
One-to-many device setup .....	7
App landing page .....	8
App settings.....	9
Adding a device.....	9
Removing a device .....	10
Device settings .....	11
Device security .....	13
Metering.....	15
Record backups .....	17
Control – Safety.....	18
Control – Timer.....	19
Control – Schedule .....	21
Control - Overpower reminders .....	25
Control - Overpower protection .....	26
Firmware updates.....	28
Device reset.....	28

# Symbols

---

The following instructional symbols are used in this instruction manual.



The symbol with an exclamation mark in a triangle indicates important instructions contained in this instruction manual that must be followed.



This symbol indicates that special advice and notes on operation are provided.


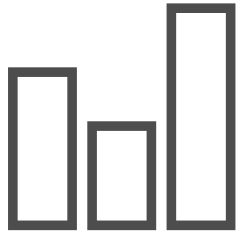

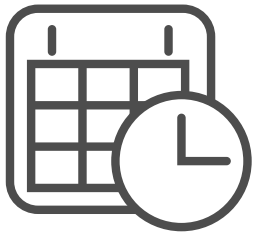
# Trademarks

---

- All company names and product names are trademarks of their respective owners. All rights reserved.
- Bluetooth is a registered trademark of Bluetooth SIG, Inc. worldwide.

# Core functions


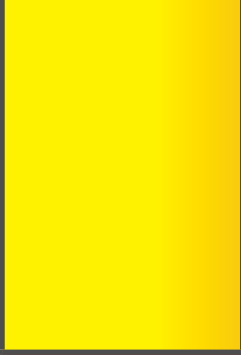


---

	Real-time metering of power consumption of connected load.
	Recording, retrieval and display of power consumption statistics: <ul style="list-style-type: none"><li>■ kWh</li><li>■ Cost</li></ul>
	Turn the smart device on or off via timer.
	Controlling on and off times by schedule rules.

# Indicator lights on Smart device

---

Observe the indicator lights during set up and use of your smart device.

Colour		Indication
Looping		Connecting to mobile device
Greenish		Low power consumption
Yellow to orange		Medium power consumption
Redish		High power consumption
Red - flashing		Overpower protection or overpower reminders triggered
No colour		<ul style="list-style-type: none"><li>■ Device turned off, or</li><li>■ Night mode is activated</li></ul>

## Installation

---

Apps are available for Android and iOS mobile devices from the respective app stores.

Download the app **Voltcraft SEM6000** onto your mobile device.

Make sure your mobile device satisfies the minimum requirements as outlined on the app page.



# Deinstallation

---

If you de-install the app from your mobile device, all settings are lost and linked smart devices will no longer be associated with your mobile device.

# Connect via Bluetooth

---

## Bluetooth connection

- In order to control the smart device, enable Bluetooth on your mobile device running the app.
- You can disable Bluetooth when you no longer need to control or retrieve data from the smart device.
- Real-time data rely on an active Bluetooth connection to your smart device.

## Reconnecting

When you turn off Bluetooth on your mobile device or head outside the transmission range the connection to the smart device is lost.

Do the following to reconnect:

1. Close the app.
2. If Bluetooth is on, turn it off.
3. Turn Bluetooth on.
4. Restart the app.
5. Your mobile device reconnects to the smart device. **Note:** this may take a few seconds.

# One-to-many device setup

---

The app allows you to add multiple smart devices and control them all from within the app. Other users can follow the same steps and add the same devices you added.

## Restrictions

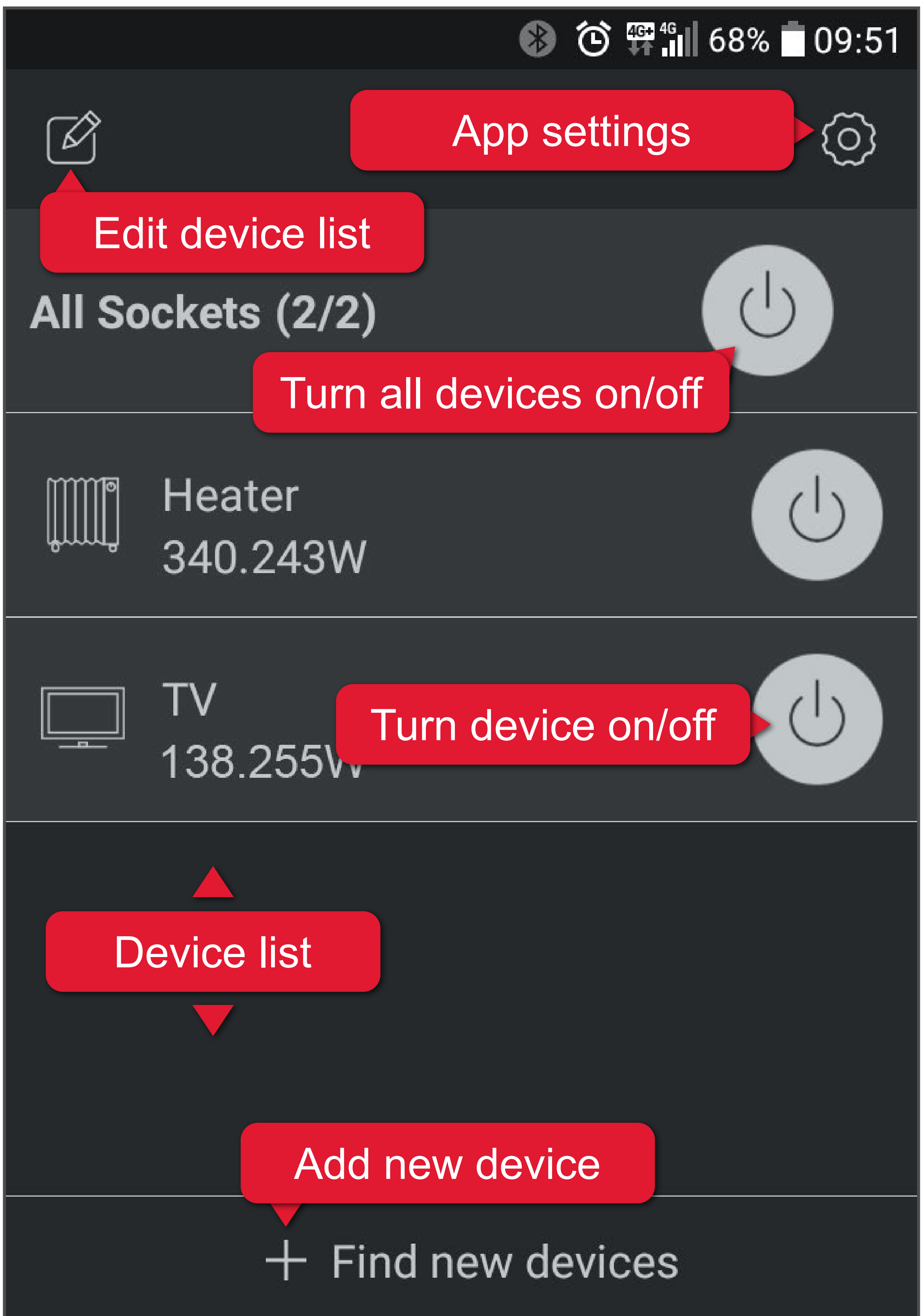
- A smart device can only be controlled by one user at any point in time.
- As soon as a connection between Smart device and mobile device is established, other users have no access to the device for as long as the connection exists.





## Security

You are strongly advised to secure your smart devices. Refer to chapter [Device security](#) for details.

# App landing page

---



- When you open the app for the first time, the Device list is blank.
- Touch a smart device from the Device list to access the core functions:    



# App settings

---

Press  to open the app settings:

<b>Language</b>	Select app language
<b>About</b>	Check for available app software updates.
<b>Manual</b>	Download app operating instructions.

# Adding a device

---



During set-up make sure to keep the mobile device running the app and the smart device within a distance of **1 m.**

1. Connect the smart device to the power supply and turn it on.
2. Activate Bluetooth on your mobile device.
3. Open the app.
4. On the landing page, touch **+ Find new devices.** When you see the radar screen, the app scans for new available devices.
5. The new device is added to the device list.
6. Add more devices (max. 10) as desired.
  - If you wish to add a device that is protected by password, you will be asked for the password before you can connect to it. Refer to chapter [Device security](#) for more information.




# Removing a device

---



Removing a device from the device list removes all its settings and records.

## Option 1

1. Go to the landing page.
2. Touch  followed by  (device selection) to remove the device.
3. Confirm the confirmation dialogue to remove it.
4. Touch  again to lock the Device list.

## Option 2 (Android only)

1. Go to the landing page.
2. Touch and hold the device you want to remove.
3. Select **Delete** to remove it.
4. Confirm the confirmation dialogue to remove it.

## Option 3 (iOS only)

1. Go to the landing page.
2. Swipe the device you want to delete left.
3. Touch **Delete**.
4. Confirm the confirmation dialogue to remove it.

# Device settings


---

## Device status

- If there is no connection between smart device and mobile device, the smart device appears greyed out on the app landing page.
- Before you can adjust settings, the smart device must connect to your mobile device.

## Settings

From the landing page you have access to the devices' settings. Choose either way to access an individual device's settings:

- Touch  followed by a touch on the device.
- (Android only) Touch and hold the device until you see a pop-up. Select **Settings**.

<b>Icon</b> Select an icon for the connected consumer.
<b>Name</b> Give your device a name.
<b>Firmware version</b> Check for firmware updates. See chapter <a href="#">Firmware updates</a> for details.
<b>Change your password</b> See chapter <a href="#">Device security</a> for details.

## Night mode

Activate Night mode to turn off the indicator light. Disable the mode to turn the indicator light back on.

## Over Power Protection

See [Control - Overpower reminders](#)

See [Control - Overpower protection](#)

## Tariff

Ordinary Period:

Select currency and enter price.

Valley Period:

If your power supply company offers different rates during valley periods, activate Valley Period.

Enter price and time period.

## Random Timer

See chapter [Control – Timer](#) for details.

## Factory Settings Reset

Partial or full reset of smart device. See chapter [Device reset](#) for details.

# Device security

---



We strongly suggest you change the password, so that you remain in full control of your smart device.

## Default password

The default password is 0000.

## Why change the default password?

If you operate the smart device with its default password, a second unauthorized user can add the same smart device to their mobile device and control it.

## Set a new password

Password requirements:

- combination of integer values
  - max. 4 digits
1. Open the smart device's settings.
  2. Touch **Change password**.
  3. Set a new password.
  4. Save your settings with **Save**.

Smart devices protected by password other than the default password are displayed with a lock in the Device list until you provide the password to access them.





## Forgotten password

In case you have forgotten the set password, touch **Forgot your password?** to reset the current password to **0000**.

# Metering

## Real-time wattage

The image shows a mobile application interface for monitoring a heater. At the top, the status bar displays Bluetooth, alarm, 4G+ signal, 68% battery, and the time 09:52. The app header includes a menu icon and a heater icon with the label "Heater". A red callout bubble points to the menu icon with the text "Back to home". The main display features a large circular gauge for "Wattage" with a needle pointing to 341.200 W. Below the gauge, it shows "Current 1.612 A" and "PowerFactor 0.984". A secondary gauge at the bottom of the main display shows "0" and "4000". Below the main display, there are four data cards: "Voltage 215 VAC", "Frequency 50 Hz", "Total Energy Used 0.718 kWh", and "Total CO<sub>2</sub> Emission 0.382 kg". A large grey button labeled "ON" is positioned below these cards, with a red callout bubble pointing to it that says "Turn on/off". The bottom navigation bar contains four icons: "Power" (a red gauge), "Energy" (a bar chart), "Timer" (a clock), and "Schedule" (a calendar).

Back to home

Heater

266  
Wattage  
341.200 W

Current 1.612 A | PowerFactor 0.984

0 | 4000

Voltage 215 VAC | Frequency 50 Hz

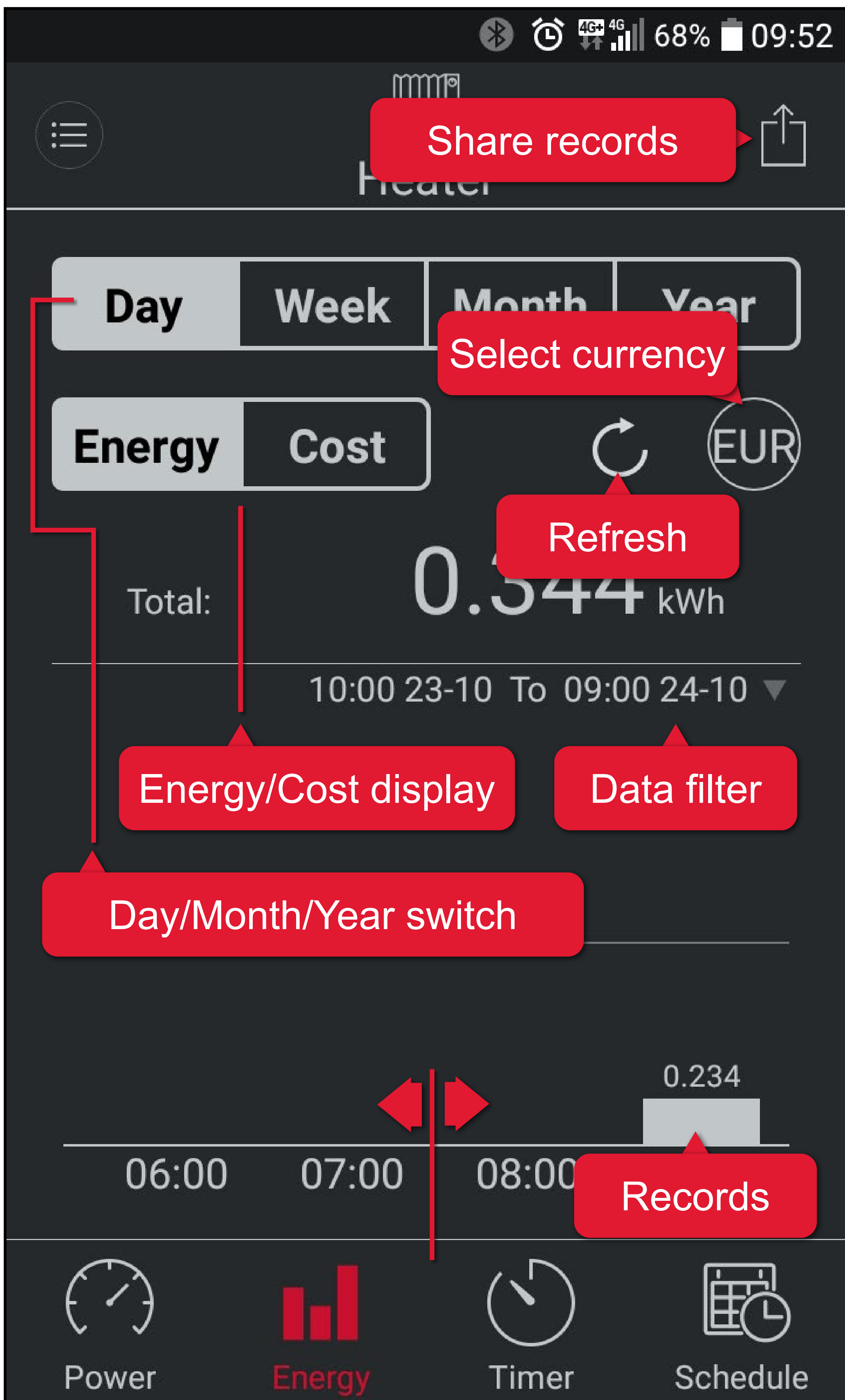
Total Energy Used 0.718 kWh | Total CO<sub>2</sub> Emission 0.382 kg

ON

Turn on/off

Power Energy Timer Schedule



# Energy consumption



## Record backups

---

If you wish to export energy consumption records for backup or other purposes do the following:

1. Tap on a smart device in the Device list.
2. Navigate to the  tab.
3. Decide if you want to export the power consumption or cost history. Activate the corresponding tab.
4. Touch  and decide how to share or where to save the exported records. Records are exported in the CSV format.  
Under iOS you can only share via email.



To open and view CSV files, use a spreadsheet editing (e.g. Microsoft Excel), or other suitable application.

## Control – Safety

---



Remind yourself of the possible dangers the device you intend to connect can pose to your environment.



Read the instruction manual that came with the product you are going to connect to the smart device to find out if it is suitable to be operated without attendance.

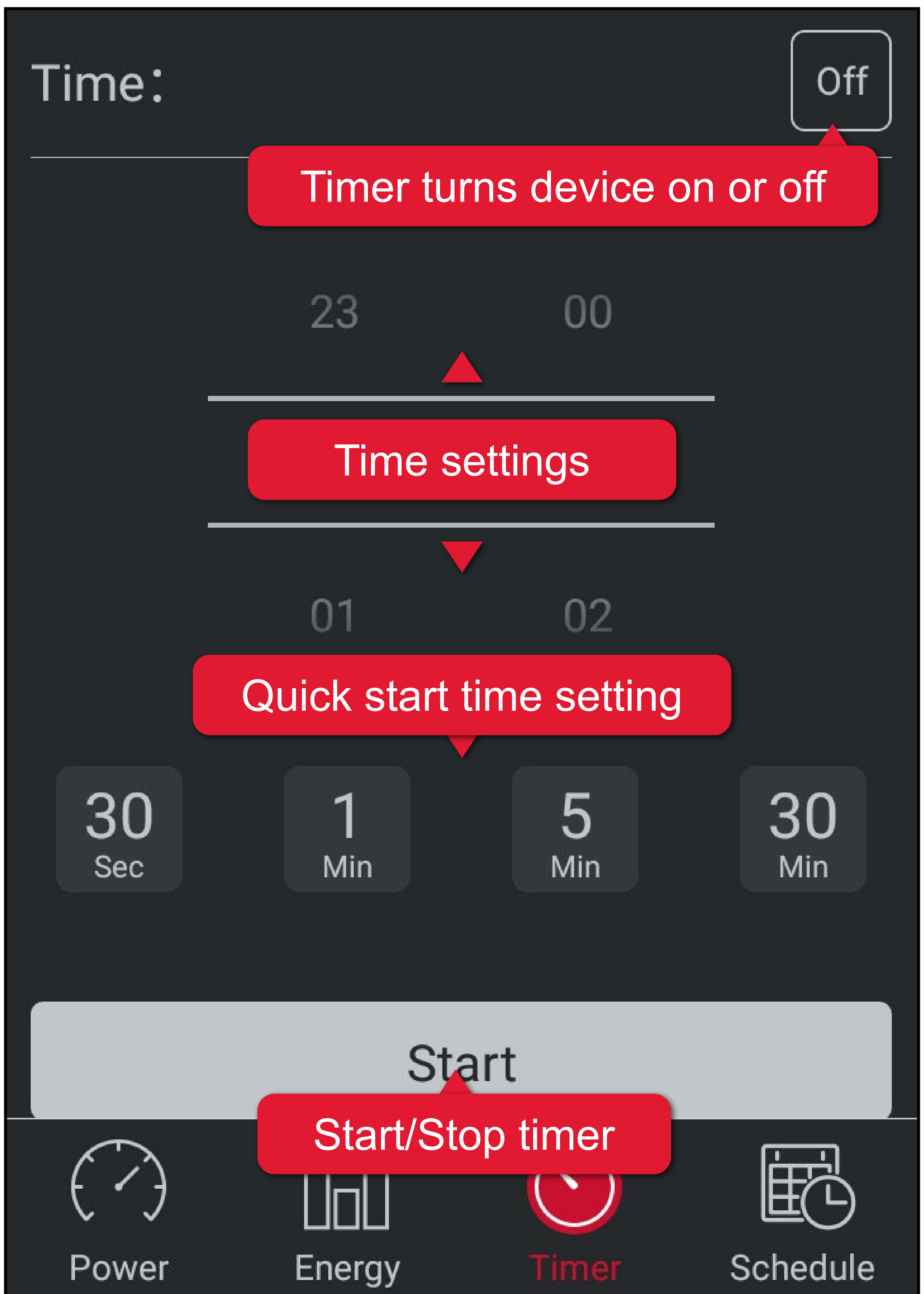
If it is not, then do not use it in conjunction with timer and schedules, unless supervised.

- A heater can cause fire if left unattended!
- A kettle that contains no water may cause fire!
- A coffee maker may overheat if not turned off on time and cause fire!



# Control – Timer

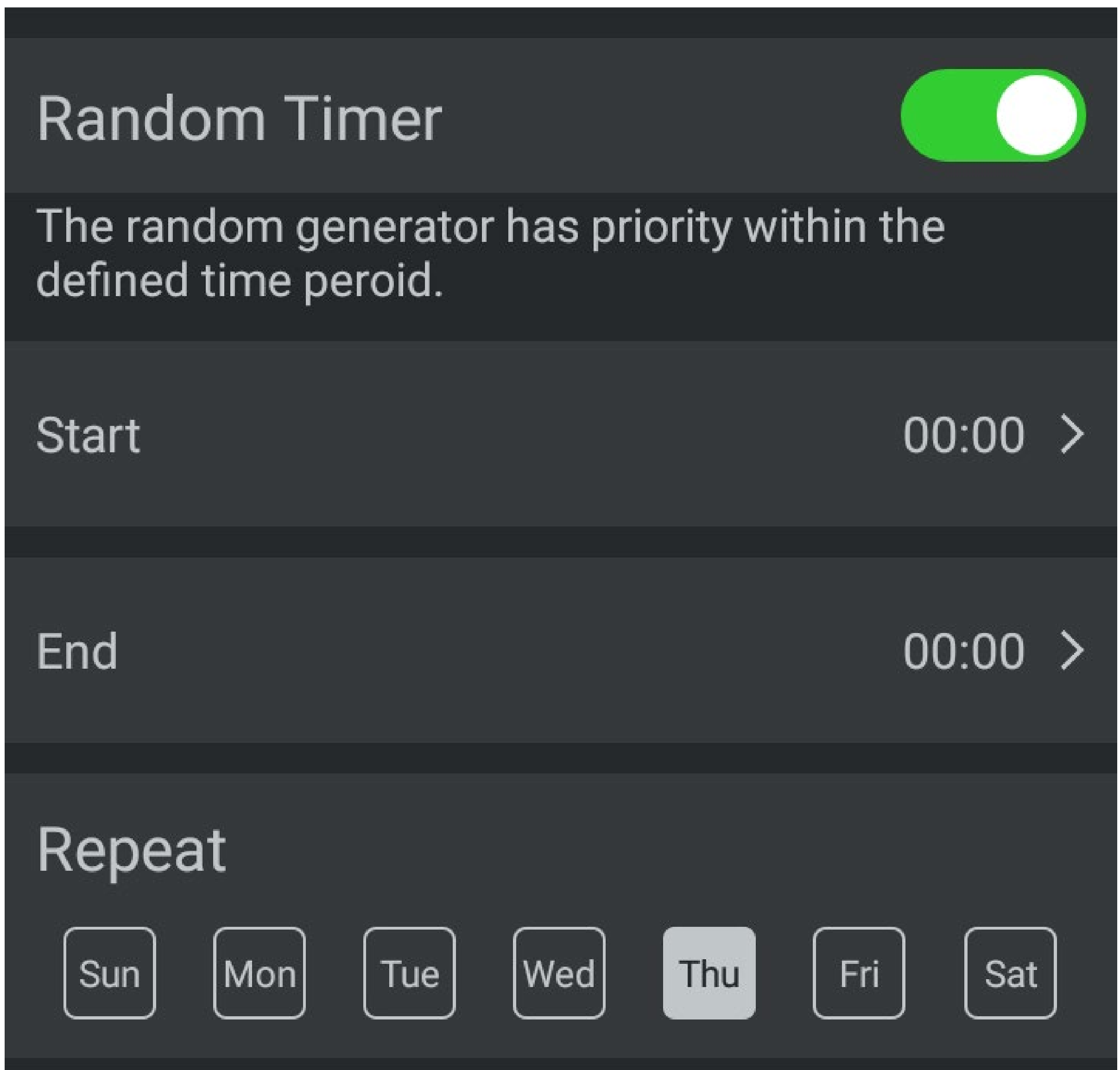
## User-defined timer



## Random timer

After activating the random timer, the smart device turns on and off at random times.

This function takes precedence over the smart device's current status.



Set the random timer:

1. Go to the device's settings.
  2. Activate **Random Timer**.
  3. Enter start and end period.
  4. Determine the repeat pattern.
  5. Save settings with **Save**.
- To halt the random timer deactivate it.

# Control – Schedule

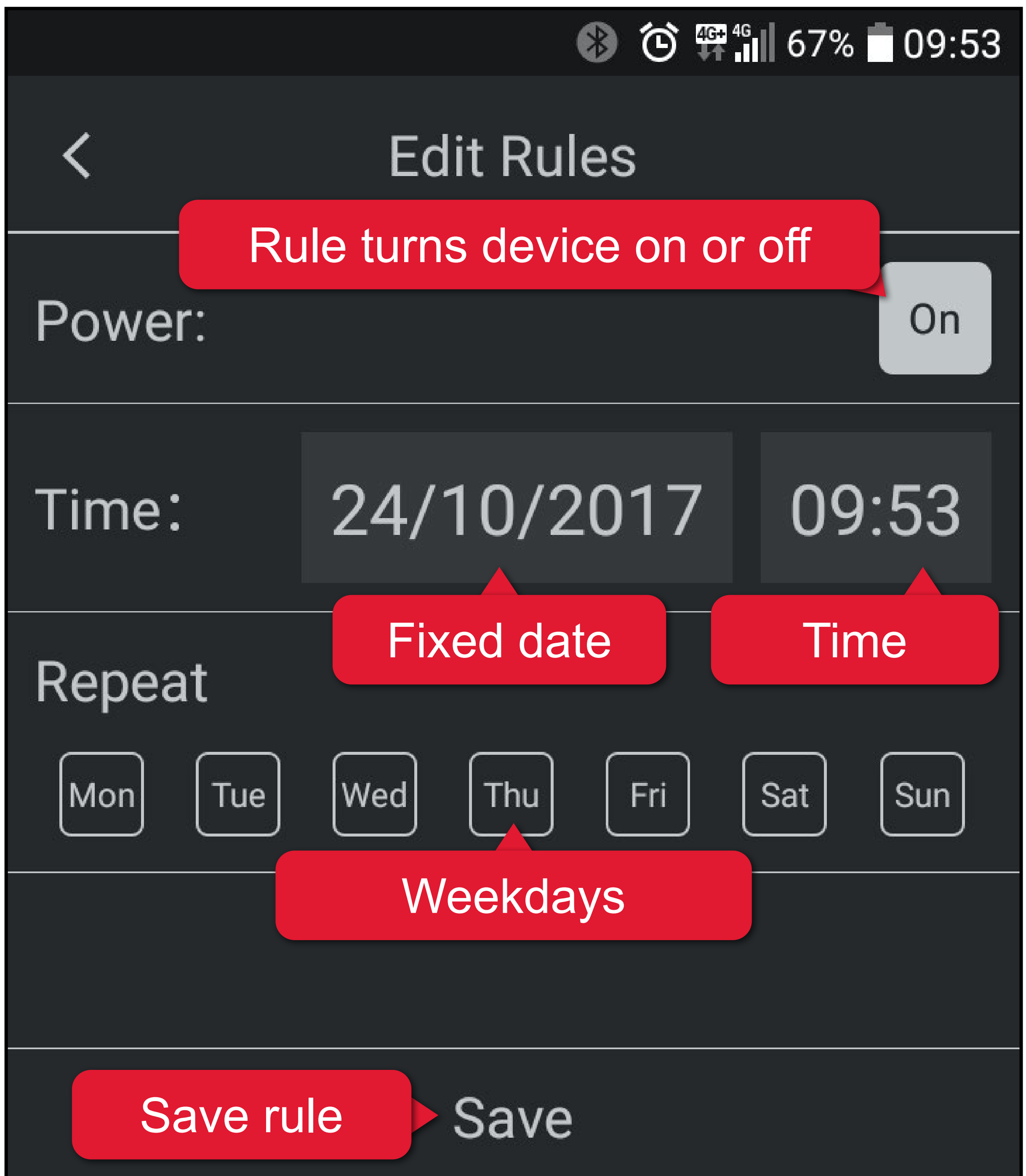
## Control panel

The screenshot displays the 'Control panel' for a heater. At the top, there's a status bar with Bluetooth, alarm, 4G+ signal, 67% battery, and the time 09:52. Below the status bar, a menu icon is on the left, and a red callout bubble says 'Add new schedule rule' next to a plus sign. The heater icon and the word 'Heater' are centered. Five schedule rules are listed:

- 1** Off 05:00 28/10/2017 (Toggle: Off) - A red callout bubble says 'Rule disabled'.
- 2** Off 06:00 (Mon Tue Wed Thu F) (Toggle: On) - A red callout bubble says 'Rule enabled'.
- 3** Off 09:00 (Mon Tue Wed Thu Fri Sat Sun) (Toggle: On)
- 4** On 22:00 (Mon Tue Wed Thu Fri Sat Sun) (Toggle: On)
- 5** On 23:45 (Mon Tue Wed Thu Fri Sat Sun) (Toggle: On)

At the bottom, a navigation bar has four icons: a speedometer for 'Power', a bar chart for 'Energy', a clock for 'Timer', and a calendar with a clock for 'Schedule'.

## Schedule rules



1. Press **+** to start creating a new rule.
2. Decide if the new rule shall turn the smart device on or off.
3. Set on which weekdays the rule is active.
  - If you want the smart device to be controlled on a specific date, deselect all weekdays and set a fixed date instead.
4. Set the time at which the rule takes effect.
5. Save your rule with **Save**.

6. If needed, add more rules (max. 12).
7. Return to the Control panel and enable and disable rules as required.

## Schedule – Example 1

A schedule is required that turns a connected light on at 18:00 and off at 09:00 the following morning. Schedule shall be active every day.

We need 2 schedules:

<b>Schedule 1</b>	
Repeat	Mon, Tue, Wed, Thu, Fri, Sat, Sun
Time	18:00
On/Off	Set to <b>On</b>
<b>Schedule 2</b>	
Repeat	Mon, Tue, Wed, Thu, Fri, Sat, Sun
Time	09:00
On/Off	Set to <b>Off</b>



## Schedule – Example 2

A schedule is required that turns a connected and suitable coffee maker on at 06:00 every morning, excluding the weekend.

We need 1 schedule:

<b>Schedule 1</b>	
Repeat	Mon, Tue, Wed, Thu, Fri
Time	06:00
On/Off	Set to <b>On</b>



For the above example, you must ensure that the coffee maker is not left unattended and is turned off manually if required.

# Control - Overpower reminders

---

With the overpower reminder function you can set a maximum power value and if that value is exceeded the indicator light on the device flashes red and you will receive a push notification on your smartphone that is connected to the device.

If the overpower reminder function is triggered, the indicator light keeps flashing regardless of the currently drawn power. You can reset the indicator light.

## Activating overpower reminder function

1. Open the device settings.
2. Tap **Over Power Indication**.
3. Set the maximum power value the connected consumer is allowed to draw.
4. (If activated) deactivate **Over Power Protection** with the slider.

The overpower reminder function is activated.

## Resetting the indicator light

1. Push the button on the device to switch it off. --OR-- Switch the device off via the mobile app.
2. Push the button on the device to switch it on.

The indicator light is reset.

## Deactivating overpower reminder function

1. Open the device settings.
2. Tap **Over Power Indication**.
3. Enter the value 4000.

The overpower reminder function is deactivated.

## Control - Overpower protection

---

With the overpower protection function you can set a maximum power value and if that value is exceeded the indicator light on the device flashes red and power to the connected consumer is cut off.

If the overpower protection function is triggered, you must reset the function before you can use the device again.

## Activating overpower protection function

1. Open the device settings.
2. Tap **Over Power Indication**.
3. Set the maximum power value the connected consumer is allowed to draw.
4. Activate **Over Power Protection** with the slider.

The overpower protection function is activated.

## **Resetting overpower protection function**

1. Push the button on the device to switch it off. --OR-- Switch the device off via the mobile app.
2. Push the button on the device to switch it on.

The overpower protection function is reset and the device ready for use.

## **Deactivating overpower protection function**

1. Open the device settings.
2. Deactivate **Over Power Protection** with the slider.

The overpower protection function is deactivated.

## Firmware updates

---

The firmware of your smart device is updated via the app. **Update** indicates an available firmware update in the device's settings under **Firmware Version**.

### Updating firmware

1. Connect your mobile device to the internet.
2. Connect to the smart device you want to update.
3. Open the device's settings.
4. Touch the **Update** button.
5. The firmware of the smart device updates.
6. Once you see **Current**, the update procedure is complete.

## Device reset

---



Deleted settings cannot be restored.  
Think before you reset!

There are two reset options:

- Clear power consumption history
  - Reset all settings
1. Open the device's settings.
  2. Touch **Factory Settings Reset**.
  3. Select the desired reset option. Touch outside the pop-up window to cancel the procedure, else confirm to reset.

This is a publication by Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau ([www.conrad.com](http://www.conrad.com)).

All rights including translation reserved. Reproduction by any method, e.g. photocopy, microfilming, or the capture in electronic data processing systems require the prior written approval by the editor. Reprinting, also in part, is prohibited. This publication represents the technical status at the time of printing.

Copyright 2022 by Conrad Electronic SE.

\*1558906\_P696\_V3\_1222\_02\_jh\_m\_app\_en\_1080x1920px\_(2)