

Installation and configuration instructions



coviva Smartbox
TKP100A

WLAN stick
TKH180

Power supply (replacement
requirement)
TKC110

Contend

Safety instructions4

Design and layout of the device.....4

 Scope of delivery4

 Optional accessories5

Function5

 System information5

 Correct use6

 Product characteristics6

The Project Process7

1 Preparations.....7

 Role concept.....7

 Configure myHager account.....7

 Install coviva mobile-App.....8

 Call up coviva web app.....8

 The first Login (Figure 6)9

2 Installation and commissioning.....10

 Selecting installation location.....10

 Setting up/mounting device10

 Connect device to the LAN using a cable.....11

 Connect device wirelessly to WLAN.....12

3 Configuration13

 Configure access for (mobile) end device13

 Configure separate hotspot via WLAN stick13

 Create a new project14

 Update device software16

 Configure WLAN integration of the device.....17

 Add device to the project.....18

 Add Connected device18

 Comfort device add.....19

 Edit device/remove device.....21

 Combine devices into groups23

 Edit/remove group25

 Create covigram27

 Example 1: Temperature warning28

 Example 2: Outdoor lighting.....30

 Example 3: All OFF31

 Edit/remove covigram34

 Add device to the favourites list36

 Remove device from the favourites list36

 Add user37

 Select **All users**.....37

 Edit/remove user.....38

 Change settings.....39

4 Project handover41

 Hand over project41

Operation	42
Operating concept	42
Carrying out a reset	46
Carry out a network reset.....	46
Carry out a user reset	47
Carrying out an installation reset.....	47
Carry out rest to factory settings	47
RGB LED display.....	48
Remote maintenance	48
Appendix	49
User profiles and rights	49
Further connected devices	50
Technical data	50
Accessories	50

Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country.

Failure to comply with these installation instructions may result in damage to the device, fire or other hazards.

Design and layout of the device

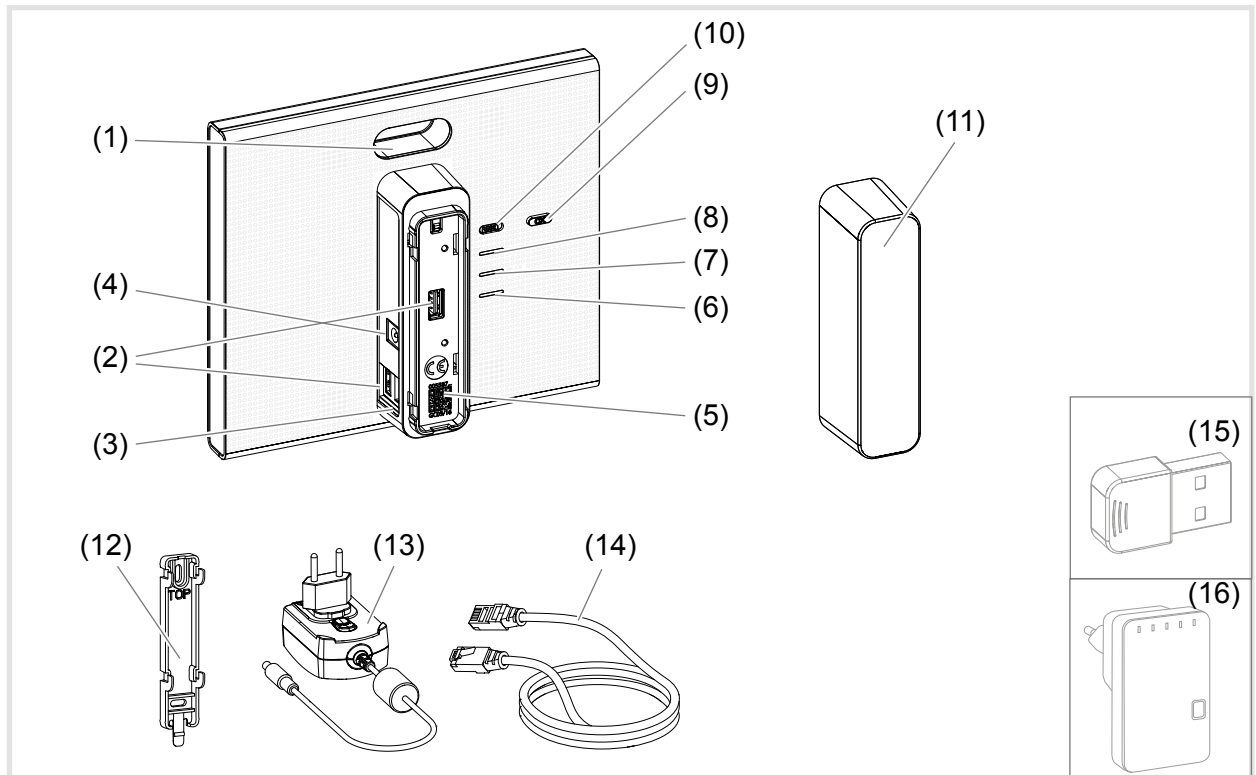


Figure 1: Rear/side view and accessories

- (1) RGB LED display
- (2) USB connection sockets
- (3) RJ45 connection socket (LAN)
- (4) Connection power supply
- (5) QR code with coviva ID
- (6) Operation LED **POWER**
- (7) **WLAN** Display - only active with optional WLAN stick (see *Accessories*)
- (8) Status display **ONLINE**
- (9) Acknowledge button **OK**
- (10) Button **RESET**

Scope of delivery

- coviva Smartbox
- Protective cover (11)
- Adapter plate for wall mounting (12)
- Power supply 230 V~/5 V= (13)
- RJ45 connection cable, Cat 5e (14)

Optional accessories

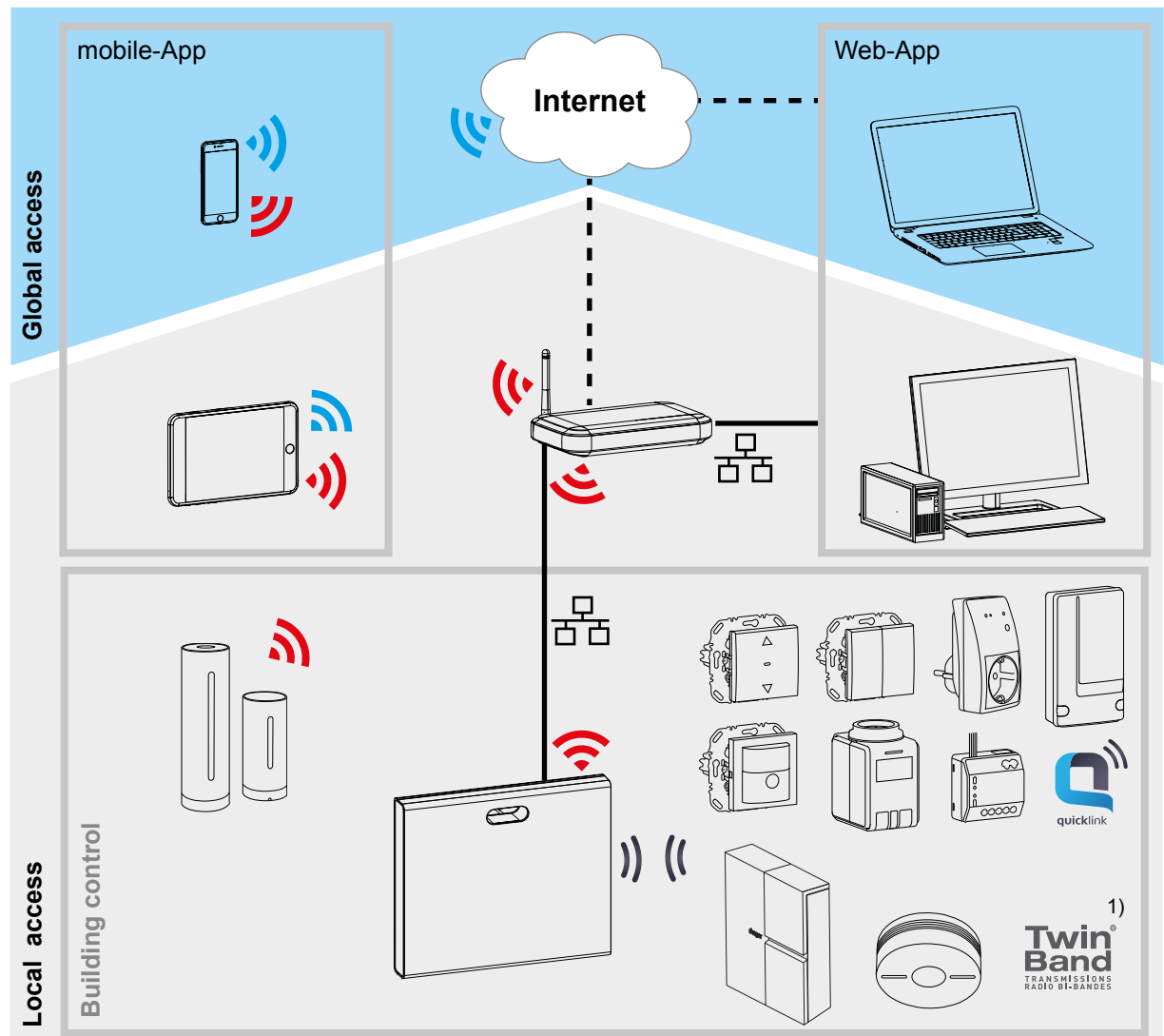
- WLAN stick (15)
- WLAN adapter (16)

Function

System information

The coviva Smartbox forms the interface of wirelessly communicating devices such as KNX radio actuators or Twin Band devices and WLAN as well as IoT applications to the existing IP infrastructure via a network router. Electrical loads and functions of the building control can be interlinked, visualised, monitored and operated on mobile end devices or stationary computers by means of a mobile app or browser-based web app. In this way, location-independent access to the building control - via the home network and via the Internet - can be ensured and at any time.

This solution is especially designed for implementing smart Home functions and comfort in modernised or retrofitted systems.



WLAN/IoT Band

Mobile communications

Radio (KNX radio, Twin-Band)

1) Not available in every country.

Figure 2: Application environment

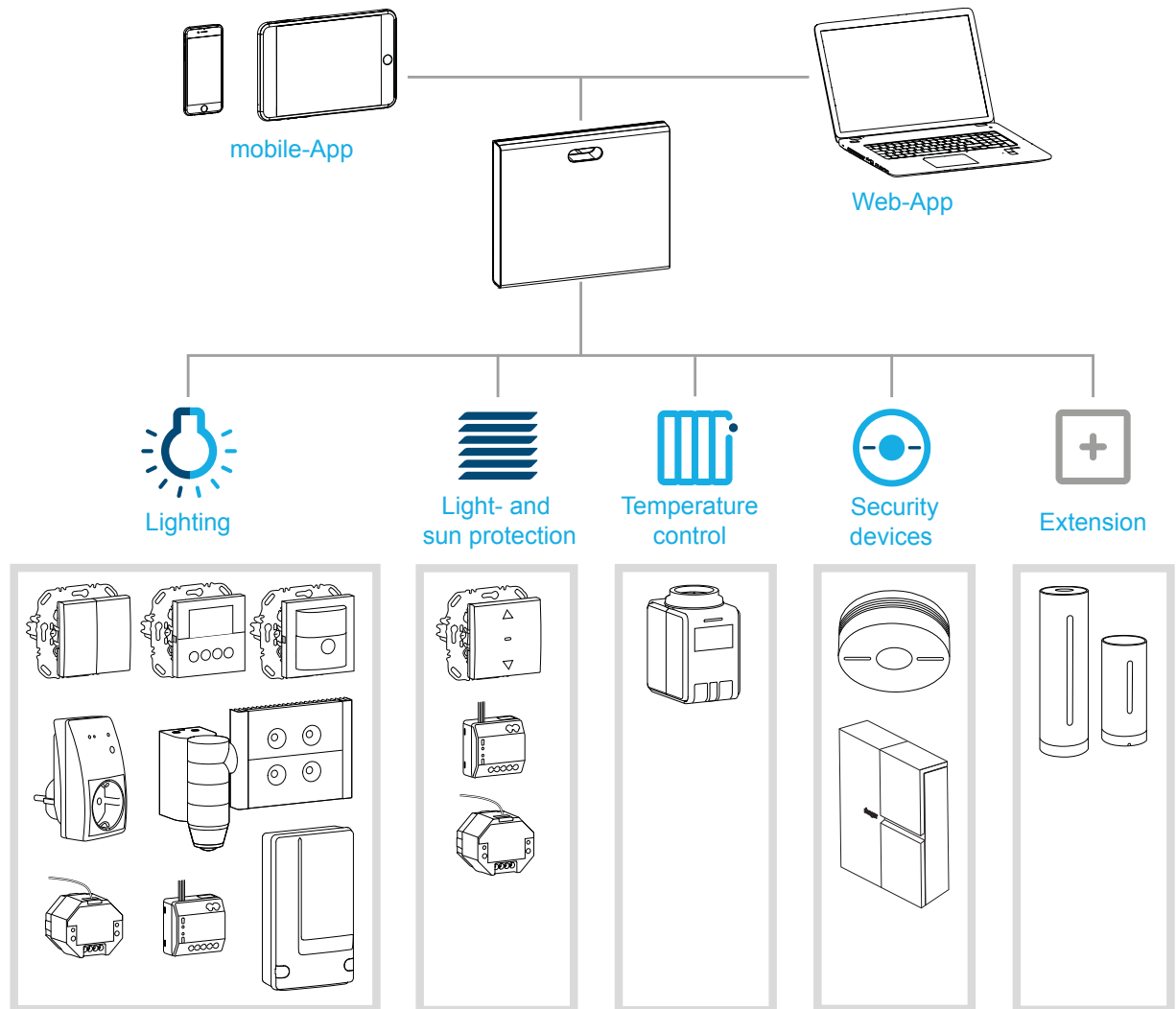


Figure 3: System overview

Correct use

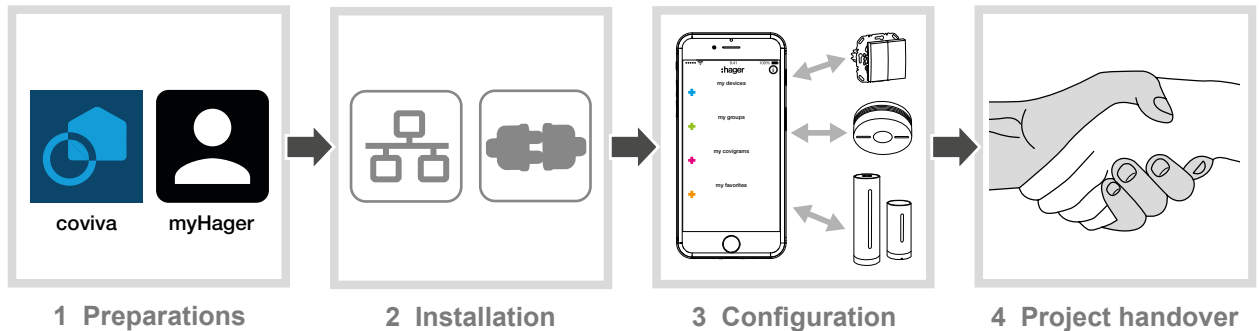
- Interface for wireless communication with receivers/actuators via the IP network
- Operation and visualisation on (mobile) end devices via coviva app
- Connection to the network router by cable or via optional WLAN stick (see *Accessories*)
- The device is only suitable for indoor areas.

Product characteristics

- secure system administration via user profiles with different rights
- control of KNX radio systems and WLAN applications via mobile app for mobile end devices or web app for notebook, PC, ...
- simple creation of scenes (covigrams) via the app
- self-configurable messages after events
- remote access and remote maintenance via integrated Dyn DNS service
- Logic operations
- Updates with notifications available online

The Project Process

Prepare the smartbox in three steps for project handover to the customer:



1 Preparations

Role concept

User profiles with different access rights must be managed in the coviva app.

User profile	Access rights	myHager account	Example
Electrician	during the project - unlimited rights after the handover, if required: - Remote access after release by the administrator	Required	Installation engineer, planner
Administrator	for one user per smartbox: - Configuration rights for adding/removing devices - Administration of all users	Required	Builder
User name	normal rights for adapting and operating the system	not required	Family members, fellow occupants

Table 1: User profiles

i Detailed information on the access rights per user profile can be found in an overview table in the appendix.

Configure myHager account

In order to create a project with the smartbox, a successful registration *Table 1* under hager.com is necessary. Registration only has to be carried out once prior to the first coviva project. The same **my Hager** account has to be used for all further coviva projects.

- Go to the **hager.com** website and click on **register now**.

Or:

- Scan the QR code with an appropriate app, switch to the coviva homepage and select **Registration**.
- Fill out the personal data, agree to the use of personal data and configure account with **Send**.

An e-mail with a confirmation link for activating the **my Hager** account will be sent to you ().

- Click the **Complete registration** button in the e-mail to activate the account.



hager.com/coviva

i Later, you can also view completed coviva projects via the account (*Figure 5*).

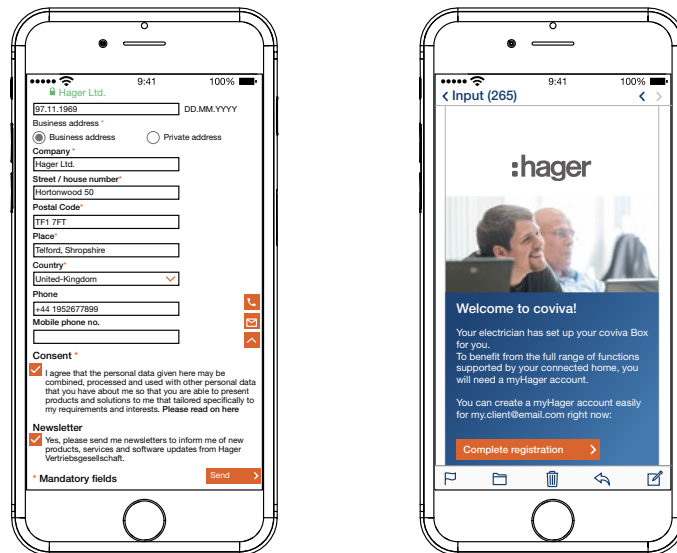


Figure 4: Configure myHager account

Install coviva mobile-App

- Log in to the corresponding app store on the end device and select the coviva app.
- Download and install app.

i The app requires at least version IOS 7.1 or Android 4.1 or higher on the mobile end device.

Call up coviva web app

As an alternative to the mobile app, it is also possible to access the smartbox after project hand over via a web portal from a PC, notebook or mobile end device with a Windows operating system. An HTML5 compatible browser such as Chrome, Safari, Internet Explorer or Firefox is required. The user interface is similar to the coviva mobile app and provides the same functions in a suitable format for larger screens.

- i** The web app can first be used after handing over the project to the customer(Administrator), such as for remote maintenance. It is not suitable for configuration by the electrician.
- Enter the URL customised with the ID: <https://12-stellige coviva ID.koalabox.net/webapp> in the browser.

The web app opens.

The web app can also be called up via the **myHager** account.

- Log into the **myHager** account and select.
- Open the web app via

i The end device and smartbox must be online each time the web app is subsequently used.

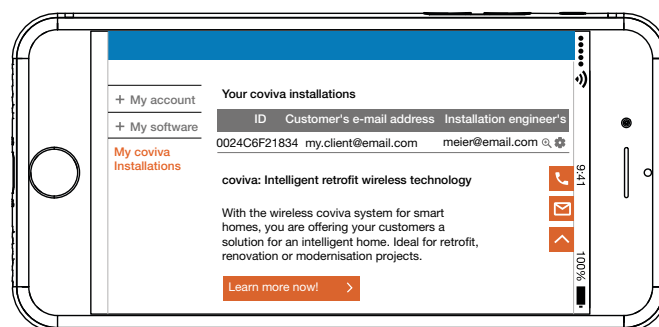


Figure 5: myHager project view

The first Login (Figure 6)

The (mobile) end device is online.

- Open the coviva app
- Switch with to login as an electrician.
- Enter e-mail address and password of the **myHager** account and log in with **Login**.

The access data is validated online against the **myHager** account. A message confirms the successful **Login**.

If the **General Term of Use (GToU)** for the coviva app have not yet been accepted in the **my Hager** account, the corresponding web page must be accessed at this point.

- To do this, press the **myHager GToU** button.
- Accept the GToU via the checkbox and complete the operation via **Save**.
- Afterwards, log in again to the app.

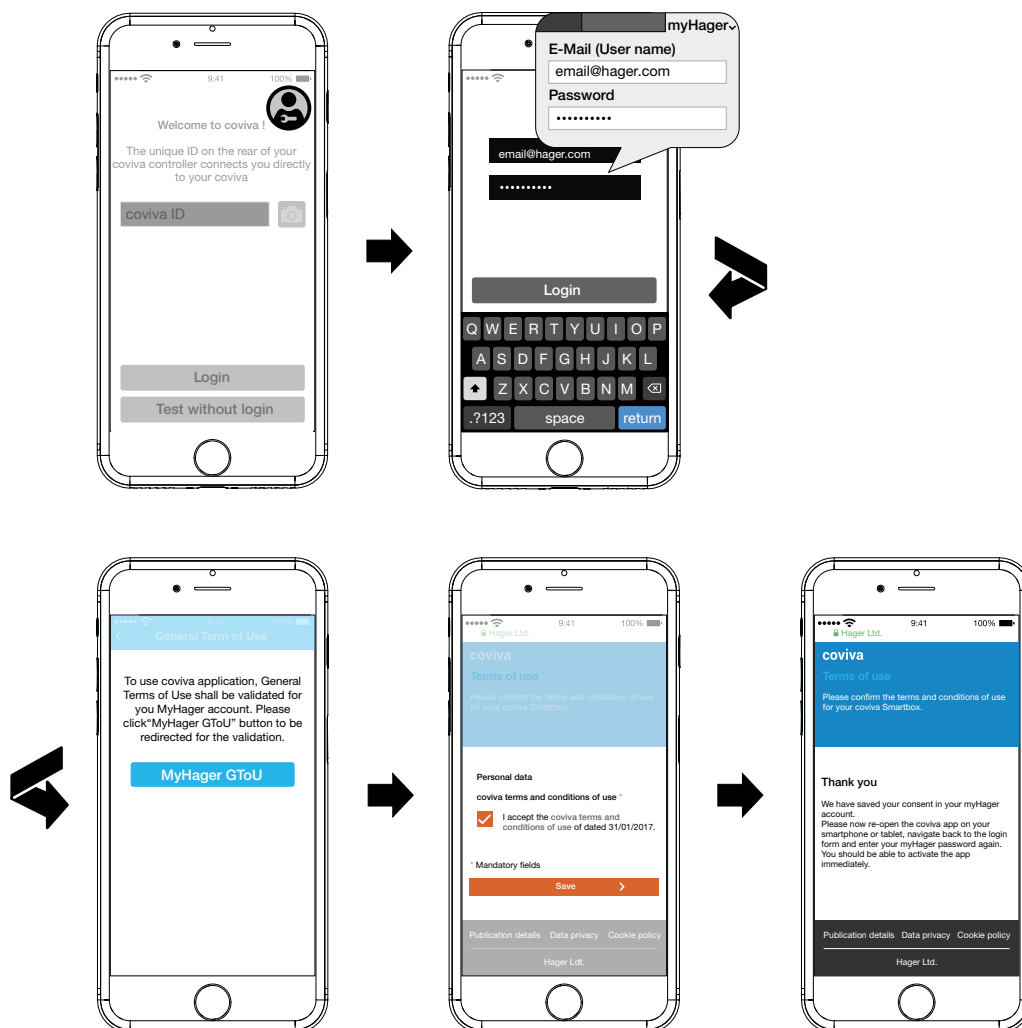


Figure 6: First Login

2 Installation and commissioning



CAUTION!

Excessively high voltages can impair the functionality of the device!

Operation on an unsuitable power supply can damage the device.

Only use the power supply provided for supplying power to the device.

Selecting installation location

The smartbox can basically be set up anywhere in the house or mounted on a wall if a power supply socket outlet and LAN connection (router or FCC socket outlet) are accessible with the cables provided. During integration into the network via the optional WLAN stick (see *Accessories*) make sure that the WLAN connection to the router is stable.

Since the smartbox communicates via radio signals, extreme care must be taken to ensure that:

- the device is positioned as centrally as possible.
- a minimum distance of approx. 1 m is maintained between the smartbox and all receivers.
- there is minimum distance of approx. 0.5 m to electronic devices which emit high frequency signals such as computers, electronic transformers or microwave devices.
- the device is mounted far from metal surfaces, reinforced concrete or heat sources and moisture.
- the material penetration is taken into account (*Table 2*).

The range of the device can be optimised by selecting the best possible mounting location.

Material	Degree of material penetration
Wood, plaster, plasterboard, uncoated glass	approx. 90 %
Brick, press boards	approx. 70 %
Reinforced concrete, underfloor heating	approx. 30 %
Metal, metal grids, aluminium laminates, coated glass	approx. 10 %
Rain, snow	approx. 1 ... 40 %

Table 2: Material penetration

Setting up/mounting device (*Figure 7*)

- Set up the smartbox on a level surface.

i Make sure that the protective back cover (11) is attached to ensure stability.

Or:

- Attach the enclosed adapter plate for wall mounting (12) - vertically on the wall with two screws - not included. Make sure that the **TOP** is aligned upwards.
- Push down the protective back cover (11) and remove it.
- Put the smartbox onto the adapter plate and push downwards until it locks into place in the adapter plate.

i The smartbox can also be set up in a network cabinet with a depth of at least 50 mm. Then, however, the material of the network cabinet with its penetration for radio signals must be taken into account (*Table 2*)

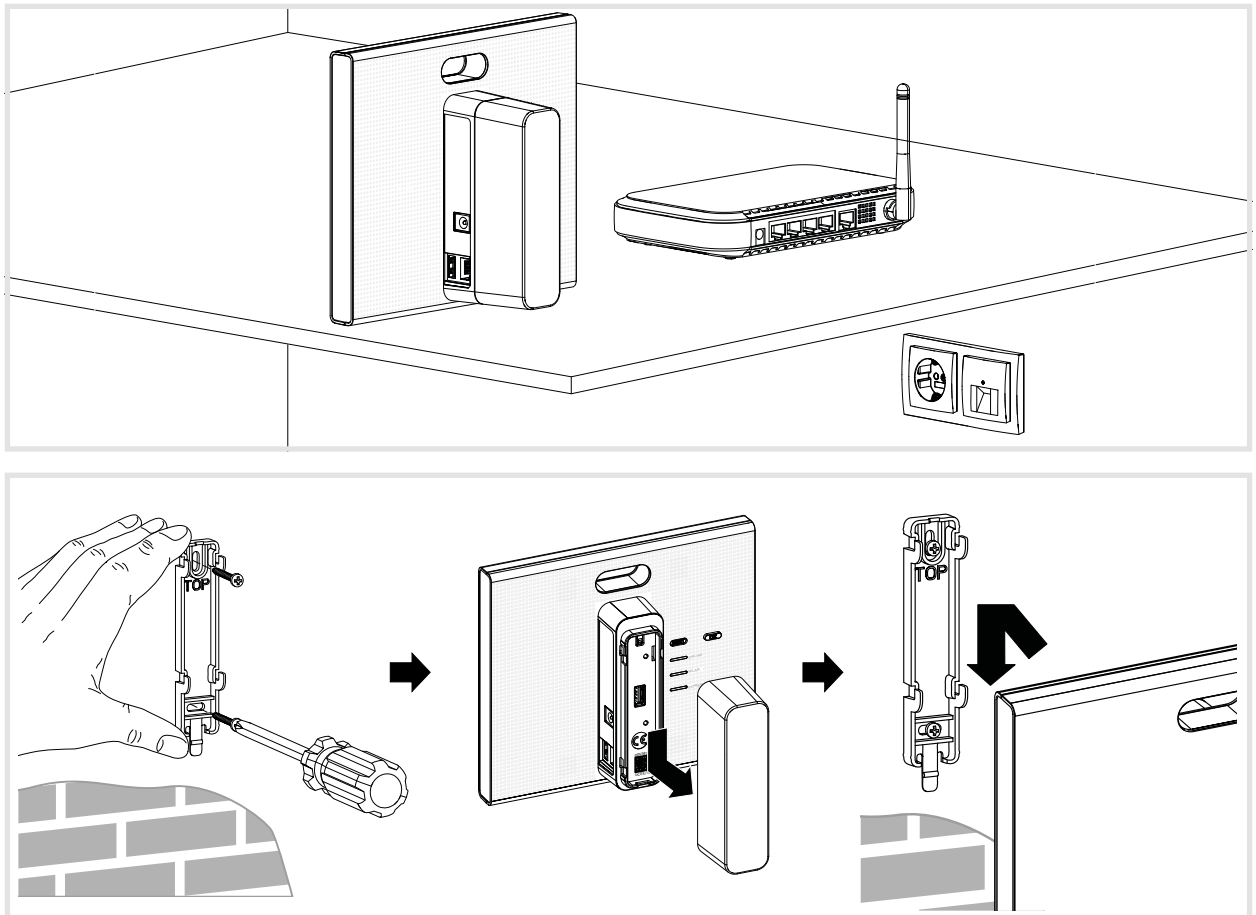


Figure 7: Set up (top), wall mounting (bottom)

Connect device to the LAN using a cable (Figure 8)

The optimum integration of the smartbox in a network is the cabled connection to a router. This generally ensures higher transmission rates, more safety and greater reliability.

- i** The cabled connection is therefore strongly recommended during the project process.
 - Connect the smartbox on the RJ45 connection socket (3) to the LAN/router using the enclosed connection cable. This can take place directly on an RJ45 connection of the router or on an FCC socket outlet within the LAN.
- i** Always used the enclosed connection cable Cat. 5e or a network cable of the same category or higher.
 - Insert enclosed power supply 230 V~/5 V $\overline{\text{---}}$ in the smartbox (4) and connect to a socket outlet.

The operation LED **POWER** (6) lights up. The RGB display (1) flashes white while establishing the Internet connection and then goes out. The **ONLINE** status display (8) lights up white.

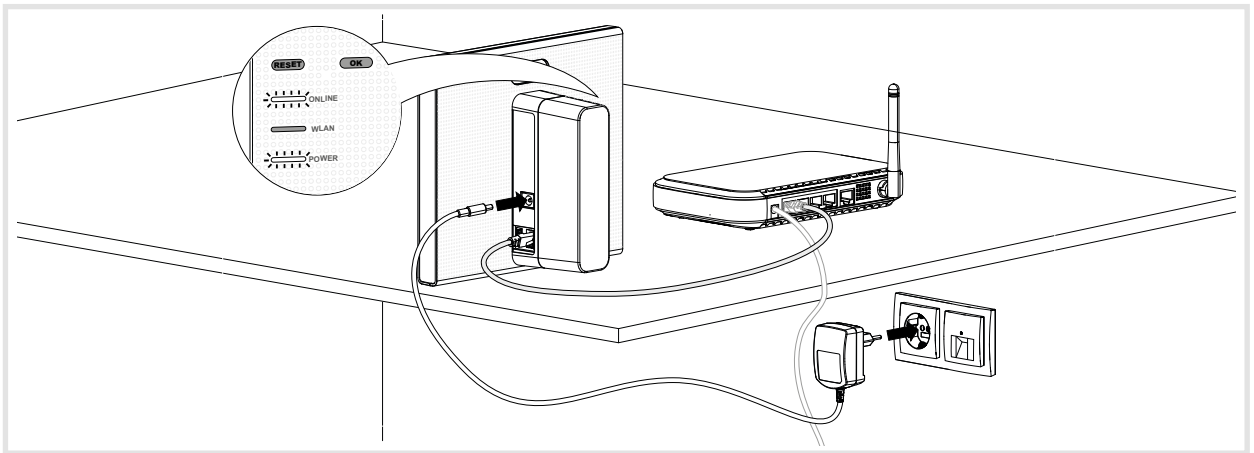


Figure 8: Cabled connection

A connection to the smartbox can now be established with a mobile end device via the WLAN.

- i** The first connection to the smartbox must be established locally at the place of installation and cannot be carried out by remote access.

Connect device wirelessly to WLAN (Figure 14)

Alternatively, the smartbox can also be integrated in the network of the customer by WLAN. The optionally available WLAN stick is required for this (see *Accessories*). This is particularly useful if the router is not set up at a central location or the smartbox is mounted on a wall and no network connection is in the vicinity.

- i** The wireless connection is a good alternative particularly for daily use at the customer's premises once the project has been completed.

A WLAN router is used at the customer's premises.

- i** If there is only a LAN router available, the network can be expanded into a WLAN with the optional WLAN adapter TKH181 (see accessories).
 - Insert the WLAN stick into a USB connection socket WLAN (2) and wait until the **WLAN** display (7) lights up white permanently.
- i** Only use the WLAN stick listed under accessories. WLAN sticks of other manufacturers are not compatible.
 - Configure the WLAN settings (see *Configure WLAN integration of the device*).

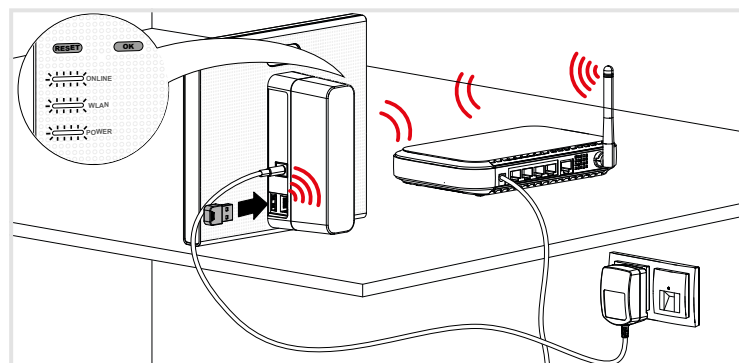


Figure 9: Wireless integration into the network

3 Configuration

The following descriptions are based on the mobile app in the IOS system. The Android app as well as the descriptions in the Web app may vary slightly from this, but the functions, buttons and messages are identical.

Configure access for (mobile) end device

A WLAN router is used at the customer's premises.

i If there is only a LAN router available, the network can be expanded into a WLAN with the optional WLAN adapter TKH181 (see *Accessories*).

Activate WLAN of the end device.

- Log in to the local network of the customer.
- Connect end device to the smartbox (see *Create a new project*).

i The end device and the coviva Smartbox must be connected to the same local network.



Configure separate hotspot via WLAN stick (Figure 10)

Alternatively, configuration is also possible without access to the WLAN of the customer. With the optional WLAN stick (see *Accessories*) a separate network with hotspot can be set up for the configuration by the smartbox (Figure 10).

- Insert the WLAN stick into a USB connection socket WLAN (2) and wait until the **Wifi** display (7) lights up white permanently.
- Select the automatically WLAN network **coviva – 12 digit coviva ID** in the settings of the mobile end device.



The successful connection to the smartbox is displayed in the end device.

i Only use the WLAN stick listed under accessories. WLAN sticks of other manufacturers are not compatible.

i If the coviva WLAN network is not available, select under  and  **Wifi** and activate the **Hotspot mode**.

i A password is not required.

This network can be protected with its own password if required.

- Under  and , **Wifi** and then select **Name**.
- Give the network its own **Name** and enter a **Password** of at least 8 characters.
- Confirm the entry with **Save**.

Once the WLAN network has been changed, this is displayed. The previous WLAN connection is disconnected.

- In the settings of the mobile end device select the WLAN network and enter the new password.

i During both configuration and subsequent continuous operation at the customer's premises, the smartbox can be operated offline with the WLAN stick if the Internet connection drops out or there is no connection available (during work on a construction site), provided the user is logged in. Only applications which require Internet access will be unavailable during this time.

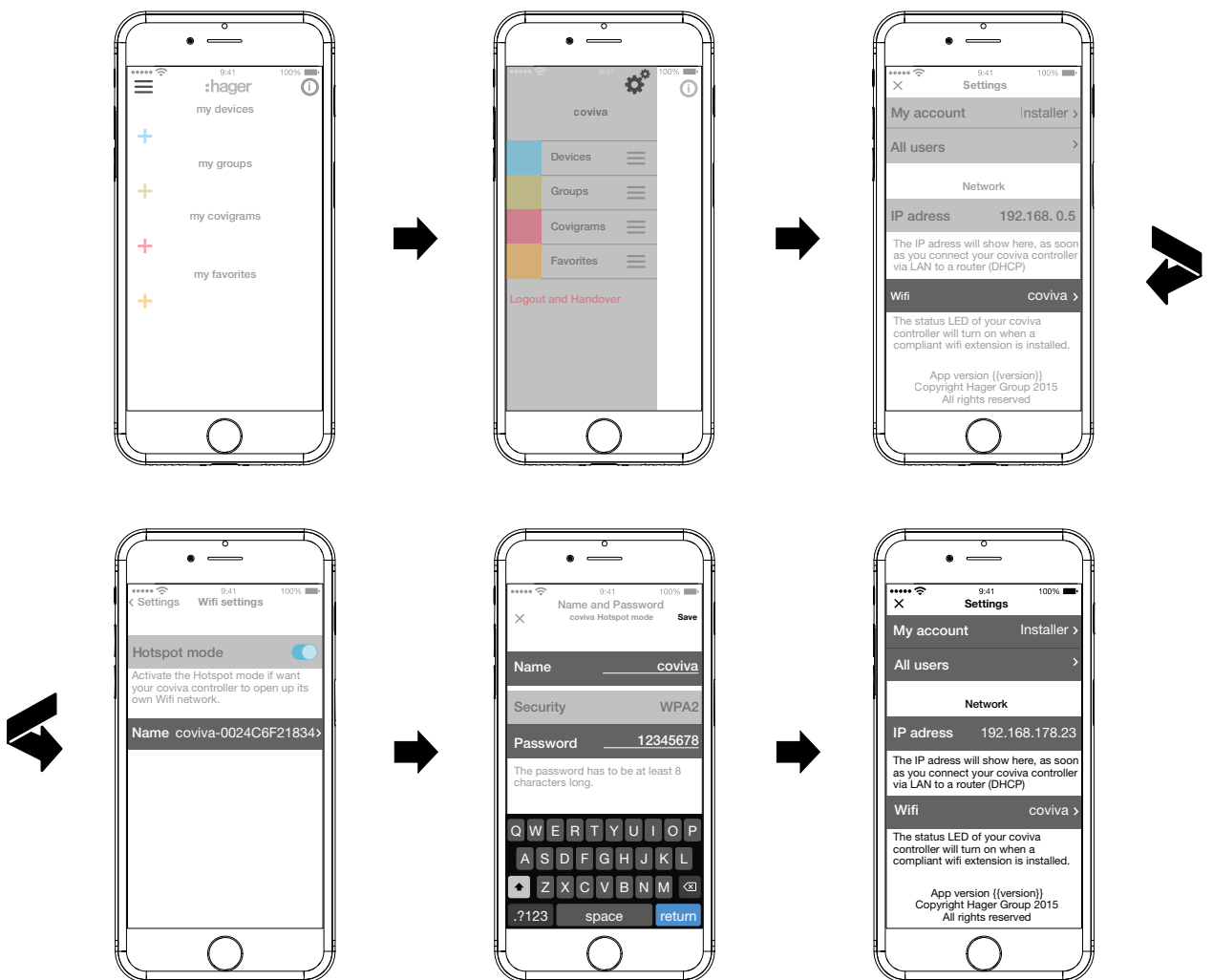
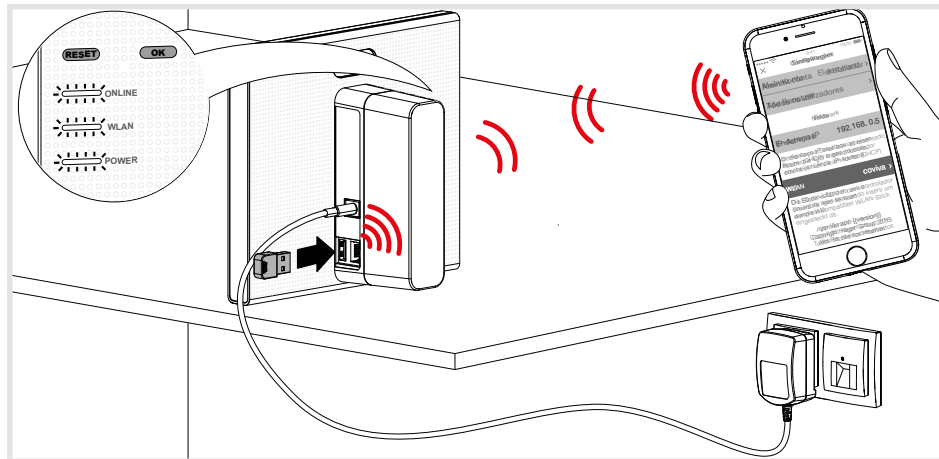


Figure 10: Configure separate hotspot via WLAN

Create a new project (Figure 11)

The (mobile) end device is online.

- Open the coviva app
- Switch with to login as an electrician.
- Enter e-mail address and password of the **myHager** account and log in with **Login** (Figure 11).

The access data is validated online against the **myHager** account. A message confirms the successful **Login**.

- i** If the **General Term of Use (GTou)** for the coviva app have not yet been accepted in the **myHager** account, this must be repeated at this point (see *The first Login*).
- If a previously started project is to be continued, click once again on and select **Installations**.
- i** If several projects have already started, all unfinished projects appear after selecting **Installations**. Select the project to be edited from the corresponding line.
- Select **New installation** to start another new project.
The main menu view opens.
- Push down the protective back cover of the smartbox (11) and remove it.
- Call up the camera of the mobile end device via and hold it in front of the QR-Code (5) at a distance of approx. 10 ... 15 cm until the ID is displayed in the app.

Or:

- Enter the 12-digit coviva ID manually via the keypad of the end device.
- Then finish the creation of the new project with **Connect**.

The coviva app and the smartbox can now communicate with each.

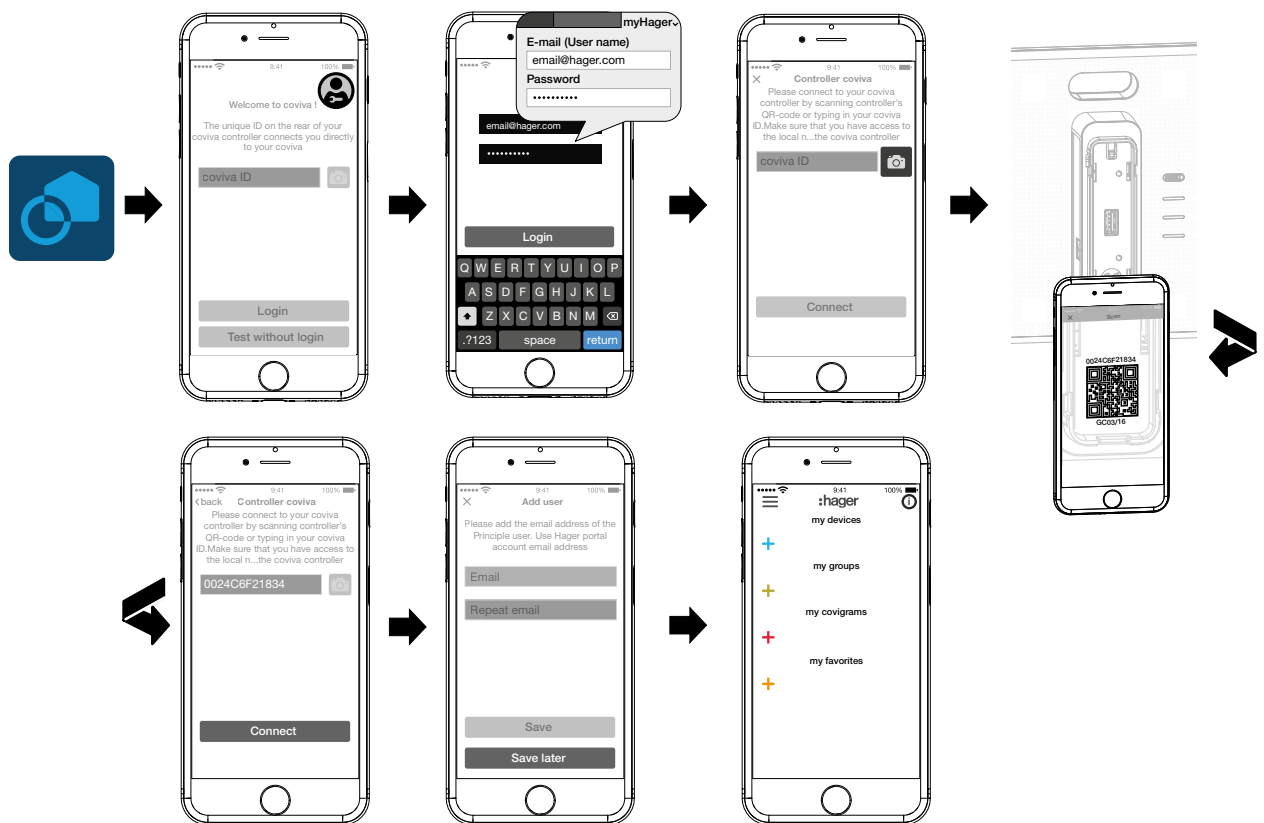


Figure 11: Create a new project

Afterwards, you are requested to enter the e-mail address of the customer (administrator), with which he created his **myHager** account.

- Enter the e-mail address of the customer (administrator).
- To confirm this, enter the e-mail address a second time and finish with **Save**.
The empty main menu for the configuration opens. The configuration can begin.

The e-mail address of the customer (administrator) can also be entered at the end of the configuration during the handover. The request comes automatically during the project handover, if no administrator has yet been created.

- To do this select **Save later**.

i If the e-mail address of the customer (administrator) is entered incorrectly or if this has to be corrected, a user reset can be carried out (see *Carrying out a reset*).

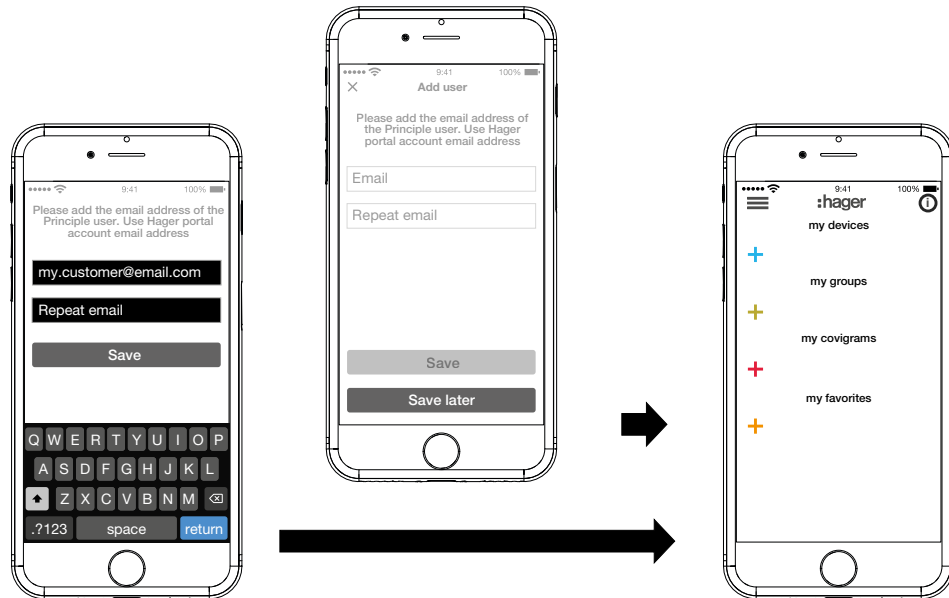


Figure 12: Create customer (Administrator)

Update device software (Figure 13)

If a software update is available for the smartbox, this is displayed via a message.

i We recommend carrying out the update immediately in order to prevent any malfunctions or incompatibilities.

- Start the update with **Install** .

The RGB display (1) of the smartbox flashes during the update. It goes out after successful completion of the update.

i The operation may take a few minutes. If the connection is disconnected during the update, restore the connection with **Retry**.

If the update is to be carried out at a later time,

- first decline the update via **Later** .

i Each time the app is subsequently opened, the update will be offered again.

i Before handing over, the electrician must install any pending updates.

i If no Internet connection is available at this time, the installed software cannot be validated as the most current version. The handover cannot be performed.

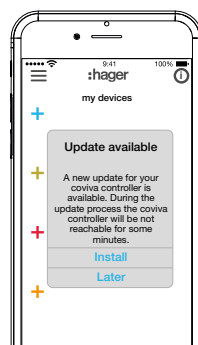


Figure 13: Software Update for the Smartbox

Configure WLAN integration of the device (Figure 14)

The WLAN stick is inserted in the smartbox and the WLAN display (7) lights up white permanently (see *Connect device wirelessly to WLAN*).

- Select **Wifi** under and and deactivate the **Hotspot mode**.
The WLAN networks available within range are displayed.
- Select the WLAN network of the customer and enter the WLAN network key.
- Finish the entry with **Save**.

The app reports the successful saving of the WLAN settings. The WLAN stick has had a new IP address assigned under **Settings**. This is now from the address range of the customer's home network router.

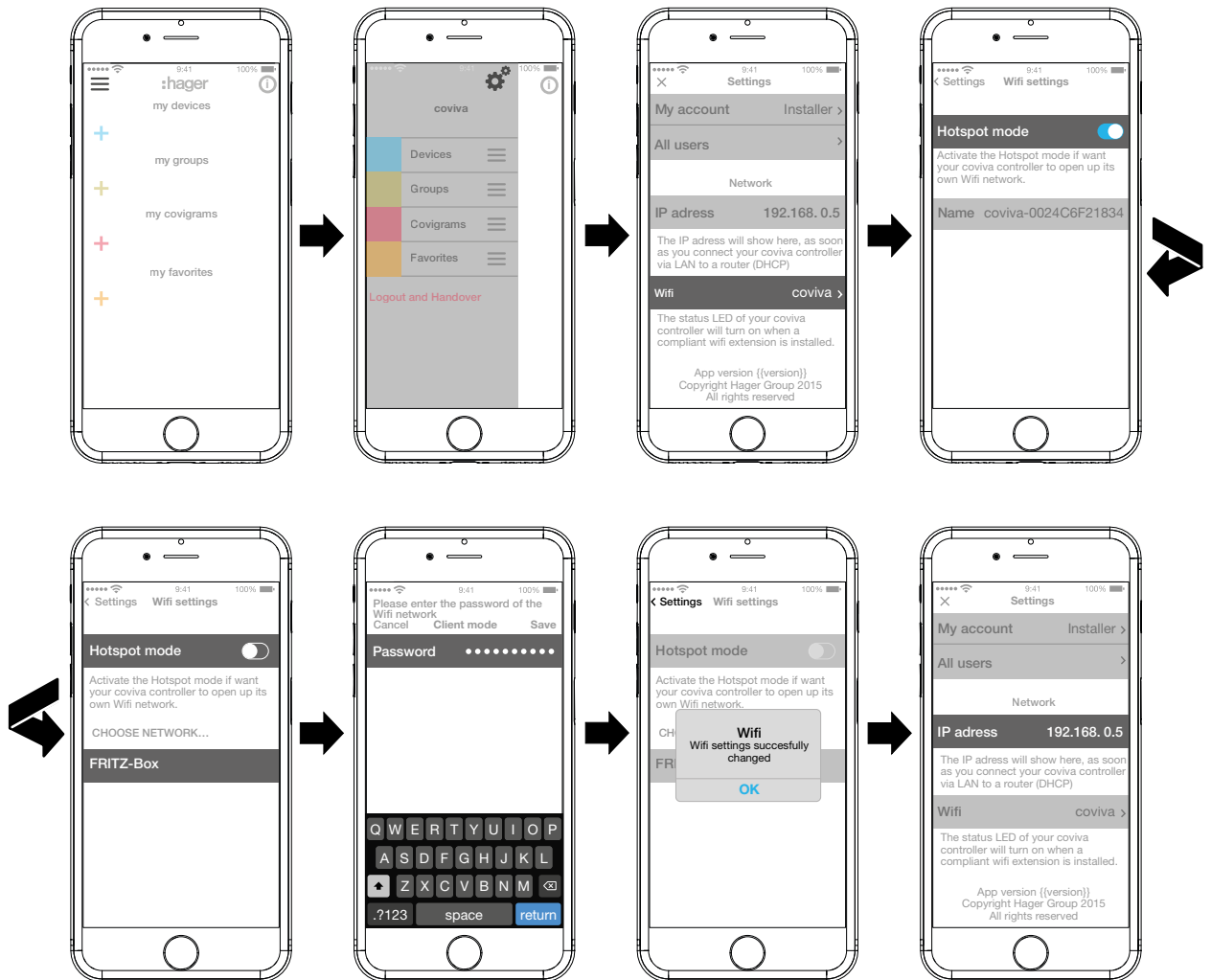


Figure 14: WLAN settings

A connection to the smartbox can now be established with a mobile end device via the WLAN network.

- The first connection to the smartbox must be established locally at the place of installation and cannot be carried out by remote access.


Add device to the project

The device types to be integrated into a project are displayed in *Figure 3* as an overview. The devices are categorised according to their technology. Each device must be integrated individually.

- Press the blue **+** button.

The context menu for selecting the device category for the product to be integrated opens.


You can choose between:

- **Connected device**
- **Security device**
- **Comfort device** (KNX radio actuators/receivers)
-  The list of compatible products is available under **[hager.com/coviva](https://www.hager.com/coviva)**.

As an example, the integration of the weather station (internal module) from Netatmo is described following. All compatible devices from other manufacturers can also be added to the coviva Smartbox as appropriate.

Add Connected device (*Figure 15*)

The weather station (indoor module) has been commissioned and has been registered in the WLAN network of the customer. The customer has created a Netatmo account.

- Select **Connected device** in the context menu.
The view for entering the access data of the Netatmo account opens.
- Enter **E-mail address** and **password** for the Netatmo account of the customer and finish via **Let's go** .
The connection setup of the app via the smartbox to the Netatmo account is displayed in the app. If the connection is successful,  **Netatmo** is displayed.
- Activate the line with the description and change the name for the weather station if required.
- Finish the operation with **Save** or switch to the main menu via **Back**.
The added device is displayed under **my devices** .
- Carry out the operation with each additional, compatible device until all Netatmo devices have been added and uniquely named. As a result, the devices stored in the Netatmo account are displayed for selection, instead of another prompt for the access data.

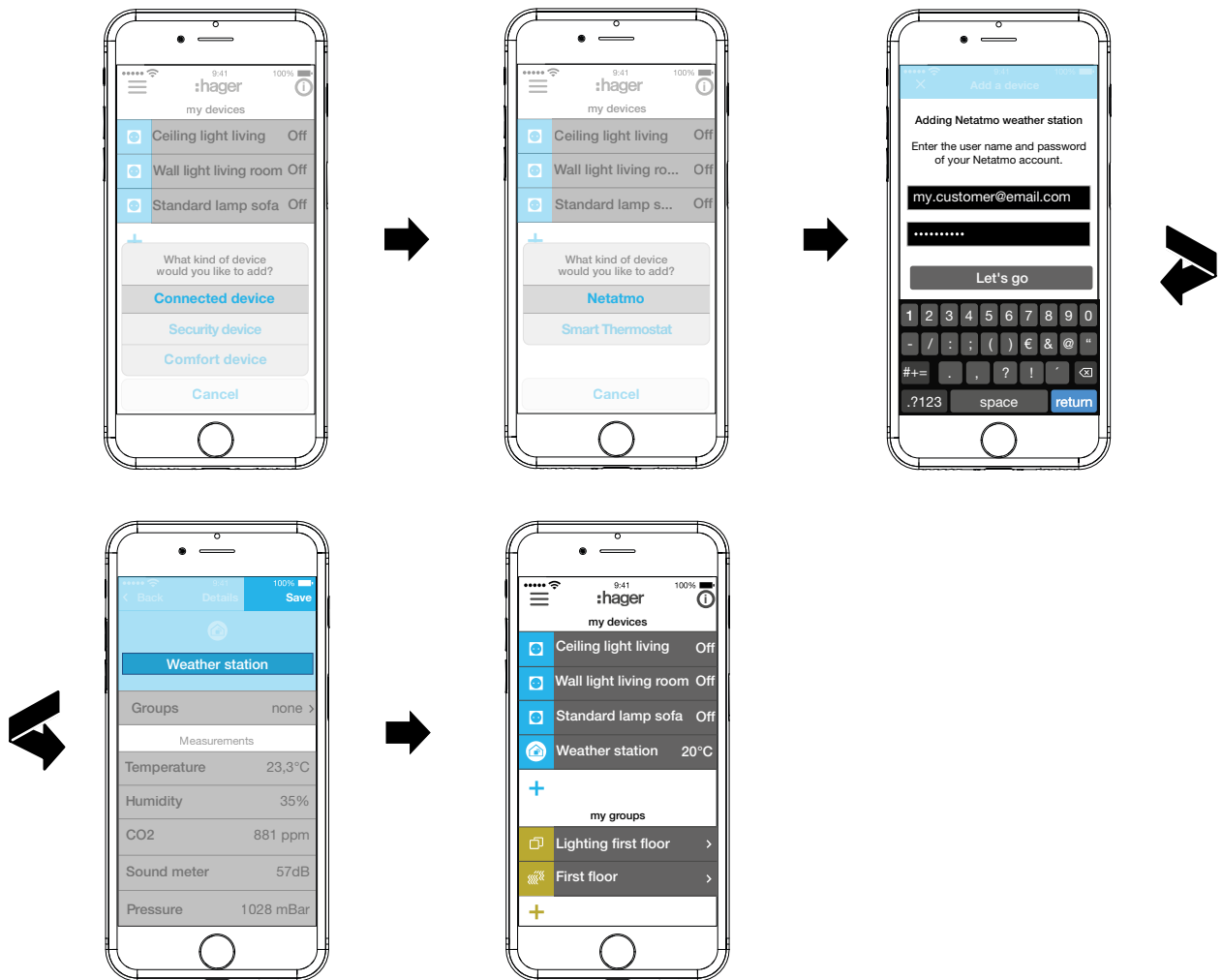


Figure 15: Add Netatmo devices

Comfort device add (Figure 16)

- Select **Comfort device** in the context menu.
 - Switch the app to the configuration mode via **Let's go**.
The app requests that the device to be integrated must be made identifiable.
 - To do this, briefly press the **fct** button on the KNX radio actuator.
The actuator has switched to the configuration mode The connection setup is displayed in the app. If the connection is successful, the order number of the device is displayed with an appropriate symbol.
- If a blind actuator is added, the following must be defined:
- The connected load as blind, roller shutter or awning
 - The operation times and
 - the parameters for slat adjustment, for blinds
- i** The connected load can only be defined as a blind, roller shutter or awning in the teach-in mode with the blind actuator.
- i** If there are difficulties setting up the connection, a clock is displayed and the attempt is cancelled with **Adding process failed** or **Time out**. Then check in the compatibility list whether the device can be integrated into the smartbox.
- If necessary, activate the line with the order number and give the added actuator(channel) a name for the application – e.g. **Ceiling light living**.

- Finish the operation with **Save** or discard via ✕.
The added device is displayed under **my devices** and its function can be tested directly.
- Carry out the operation with each additional actuator(channel) within the KNX radio installation of the customer until all devices have been added and uniquely named.

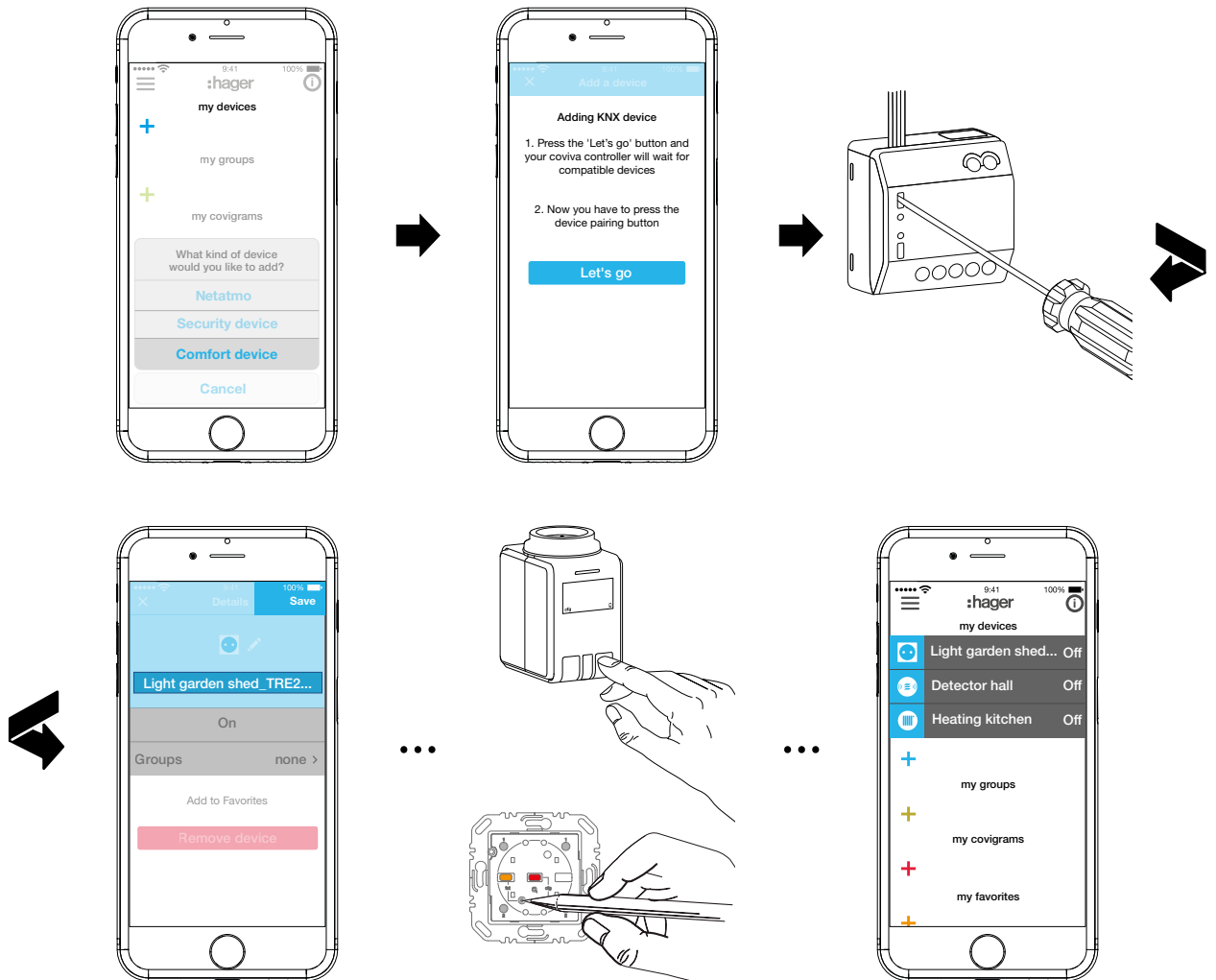


Figure 16: Add Comfort device

Edit device (Figure 17)/remove device (Figure 18)

After adding the devices, they can be edited in the app or removed again at any time.

- Press ⓘ in the top right corner of the main menu.
- ⓘ Hold the button down for longer if using Android devices.

All elements in the main menu are switched to edit mode.

- Select the device to be edited via ⓘ in the device list.

Details about the device, such as the switching state or the **groups** in which it is integrated, are displayed.

- Then implement the following actions as required:
 - Select the symbol for the application when a brush symbol appears next to the load symbol.
 - Change the name of the device by pressing the name line and entering via the displayed keypad.
 - Add device of a **Group** by activating the checkbox.
 - Remove device from a **Group** by deactivating the checkbox.
 - Device **Add to Favorites** or **Remove from Favorites**.
 - Switch to the delete mode via **Remove Device**. Then press **Remove Device** again and press the **fct** button on the device to be removed.

If the device is defective or has already been uninstalled and the fct button can no longer be pressed, wait until the time lapse is displayed. Then confirm the question that appears as to whether you want to execute the deletion process again with Yes.

The device is removed from the installation. The app reports **Remove Device– Successful**. The device is no longer displayed in the main menu. It is also removed from all groups, covigrams and from the favourites list.

- With the exception of **Remove Device**, finally confirm all edit operations with **Save** or discard via **Back**.

The display returns to the main menu and displays the changes.

- Press ⓘ in the top right corner of the main menu to exit the edit mode again.

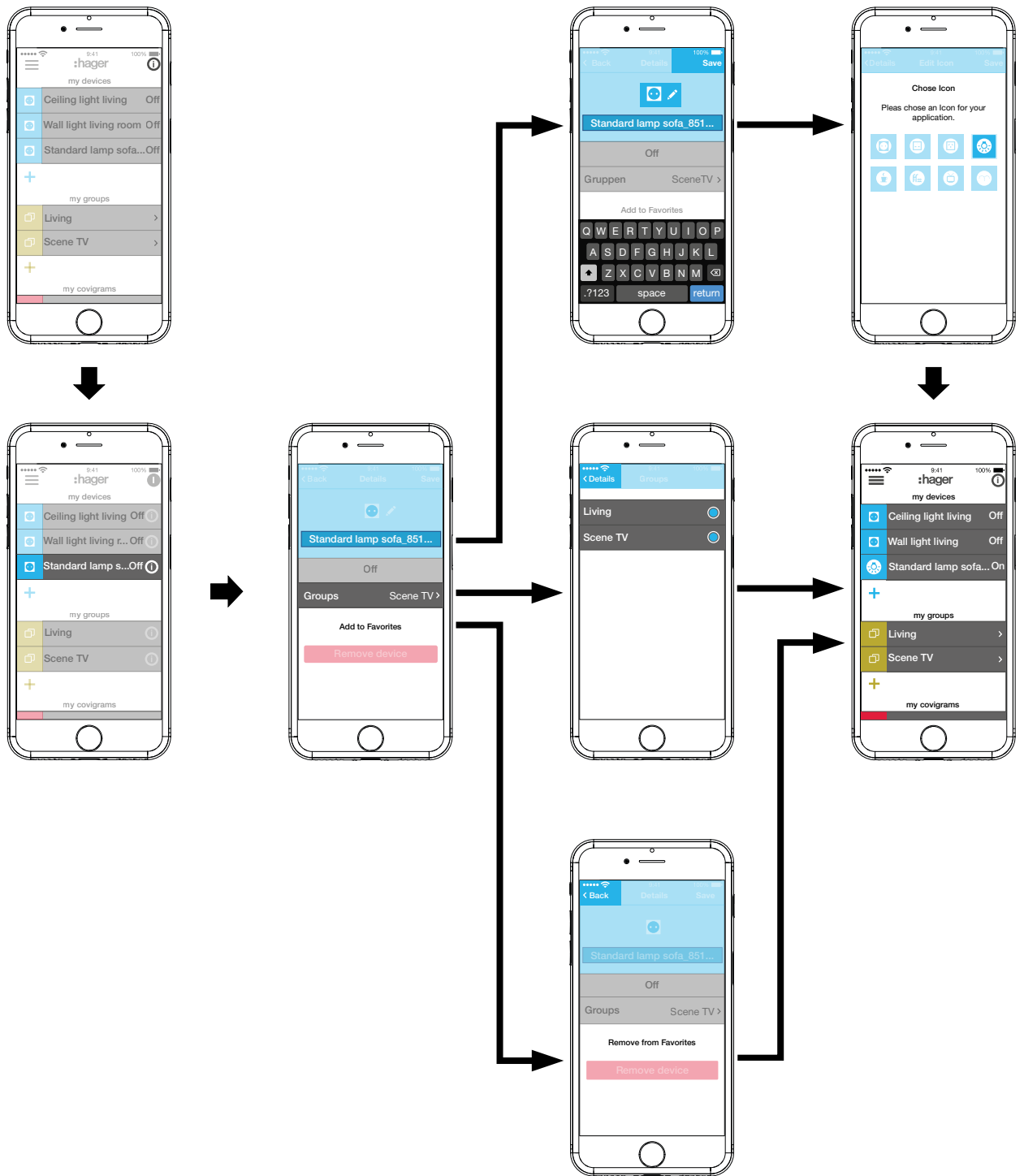


Figure 17: Edit device

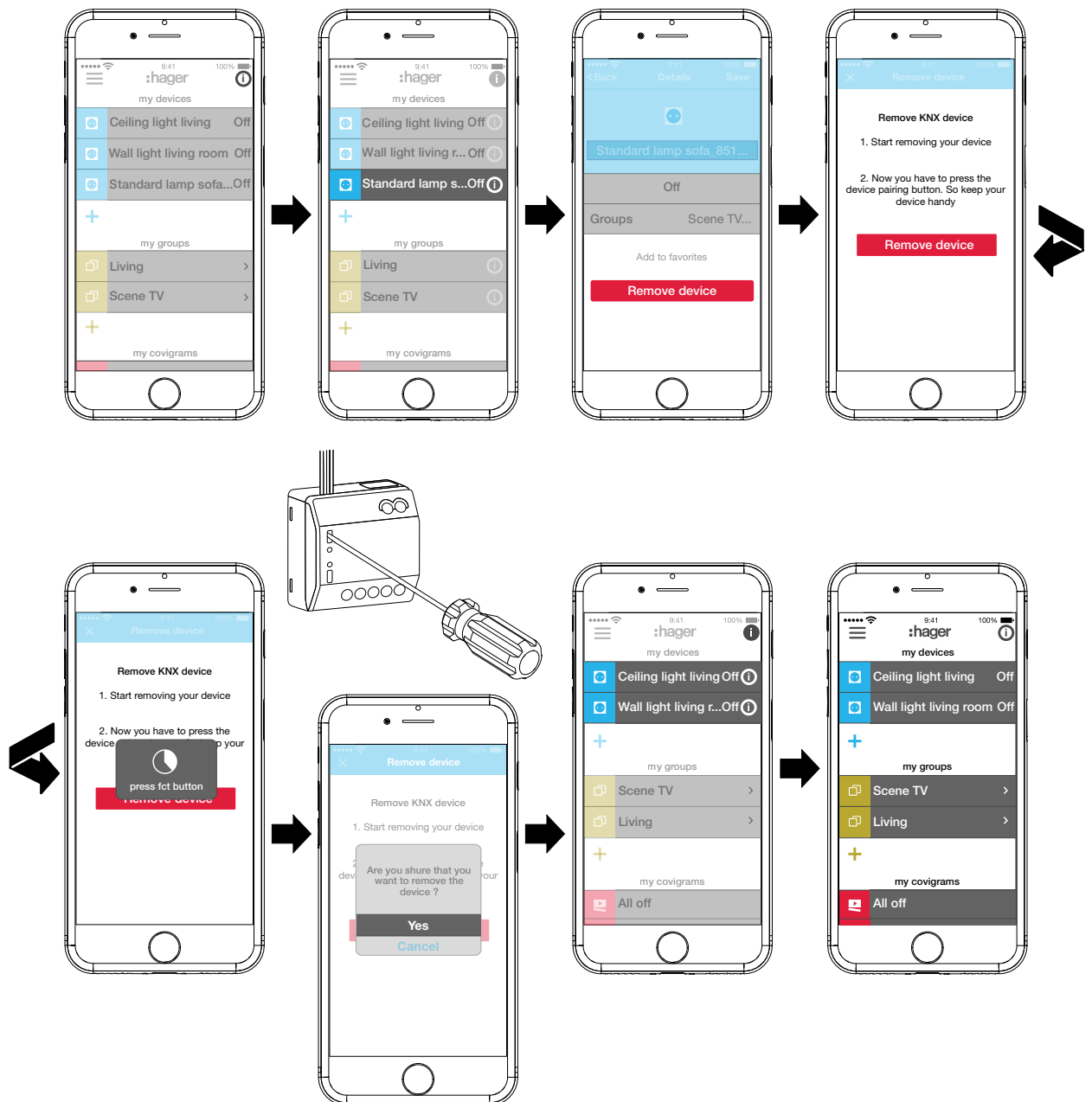


Figure 18: Remove device

Combine devices into groups (Figure 19)

Devices can be combined into groups for easy navigation. In this way, all devices can be grouped, for example, room by room or per floor.

- To do this, press the green **+** button.

A context menu for selecting whether a group or zone should be added if thermostats are installed, is displayed.

- Select **Add group**.

A list with all devices is displayed under a new **Group**. The title line under is activated.

- Give the group a name via the keypad.
- The desired devices are added by activating the relevant checkbox of this group.
- Assign the devices to this group with **Save** or discard via **X**.

The group is displayed in the main menu.

Devices can be added to a group at any time.

- To do this, press ➤ on the group.
The combined devices in the group are displayed.
- Press the blue + button.
All devices not yet added to this group are displayed.
- Select the devices to be added via the checkbox.
- Assign the devices to the group with **Save** or discard via ✕.
- The added devices are displayed in the device list of the group.
- Go back to the main menu via **Back**.

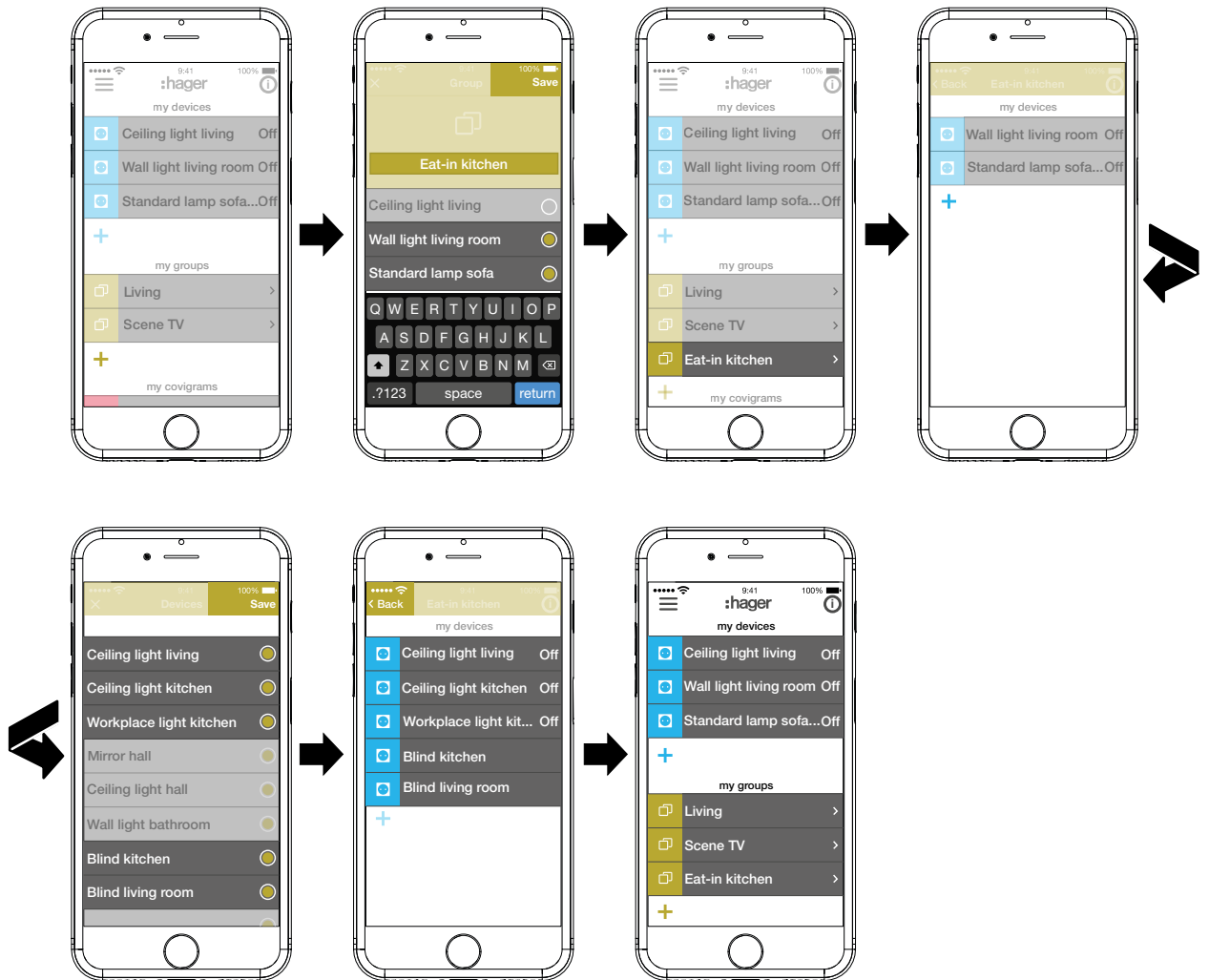


Figure 19: Create group, add group

i The combining of devices for heating control such as thermostats in a zone takes place in the same way as with a group and is initiated by selecting **Add hot water zone**. A zone is also displayed in the main menu under **my groups**.

Edit/remove group (Figure 20)

The groups can be edited in the app or removed again at any time.

- Press ⓘ in the top right corner of the main menu.
All elements in the main menu are switched to edit mode.
- Select the group to be edited via the ⓘ on the corresponding group.
Details about the group, such as the switching state and integrated devices, are displayed.
- Then carry out the following actions as required:
 - Change the name of the group by activating the name line and making an entry via the keypad.
 - **Devices** to this group or remove it from this via the displayed checkboxes.
 - Group from the project **Delete**.
The group is no longer displayed in the main menu.
- With the exception of **Delete**, finally confirm all edit operations with **Save** or discard via **Back**.
The display returns to the main menu and displays the changes.
- Press ⓘ in the top right corner of the main menu to exit the edit mode.

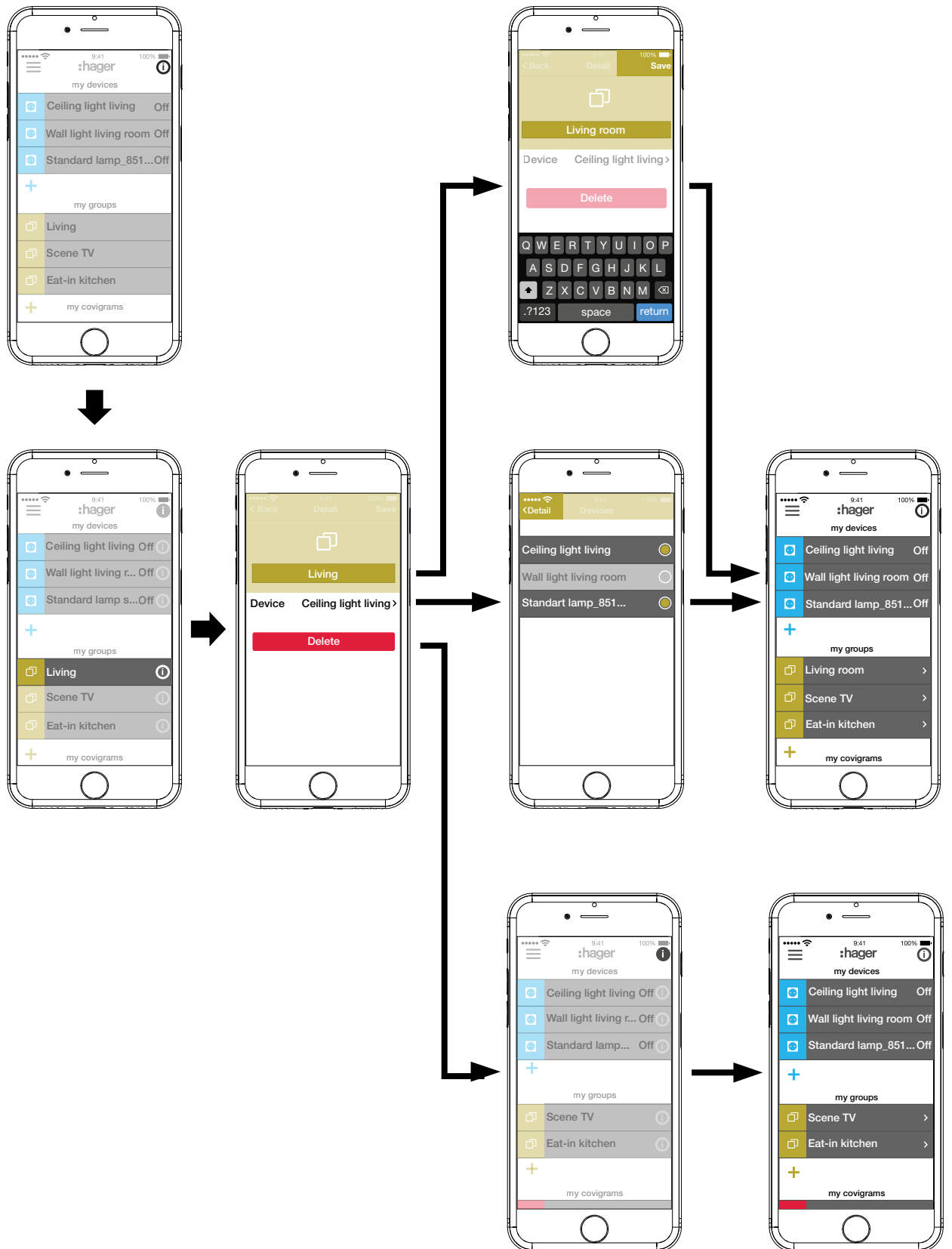


Figure 20: Edit/remove group

Create covigram

Covigrams are ideal for frequent or conditional actions that should be controlled and/or automatically triggered. A covigram defines a scene, in which one/several trigger/s start/s one or more actions.

Triggers and actions are defined via **If Then ...**-logic functions. In the course of this, several triggers are **OR/AND**-linked, while the actions are **AND**-linked.

Basically the following types of triggers can be defined:

– **Time:**

This allows a daily routine to be configured at a specific time or one/several weekday(s) to be selected, when one/several action(s) is/are to be triggered at a specific time.


– **Event:**

This allows a device with a respective switching/operating state to be selected, which then forms the trigger for one/several action(s).

 A group cannot be defined as a triggering event.

– **Celestial:**

Astro function that can be used to define sunrise or sunset actions. These variable times are set by IP localisation via the router's location and can be shifted by +/- 03:59 h.

 By default, the sun's position will trigger the defined action(s) daily. If the sun's position is to trigger actions only on certain days of the week, an additional and-linked time trigger must be added.

– **Play:**

When selecting the manual trigger, one/several action(s) can be started exclusively by an operation in the app. The manual trigger cannot be **AND**-linked with other triggers.


Definable types of actions for the trigger are:


– **Device:**

One or several devices can be selected from all added devices and their switching/operating state, which should be reached after the trigger, can be defined.

– **Push notification:**

An individually created text message can be written for one/several triggers, which appears as a push message for all users in the app when triggered. Timely information can be helpful in order to initiate a countermeasure if required.

 Once the project has been handed over, the electrician does not receive a push message any more.

 In the event that the app is not opened, the push message is additionally output on the end device, if enabled.

– **Partial:**


If a zone is selected as an action, a heating zone can be controlled after triggering, for example, a new temperature setpoint is received or another operating state is switched to.

In this way, many combinations are possible.



As an example, three tasks will be implemented one after another in one covigram each:

Example 1: Temperature warning (Figure 21):

Task: If the room temperature drops below 18 °C in the bedroom or children's room, a message should be sent in order to check this actively and to initiate countermeasures if required.

- To do this, press the red **+** button.
The editing page **Covigramm** opens. The title line under  is activated.
- Give the covigram a name via the keypad and terminate the entry with the **Return** button.

Define trigger

- Press the **+** button under **If**
The page for defining a trigger opens.
- Select the type of trigger, in the example **Event**  (Figure 22).
The button of the trigger type is highlighted in red. All devices of the project are listed with symbolic buttons and their name.
-  The display can be swiped to the left and right.
- Select the device by pressing the symbolic button, in the example **Heating bedroom**.
Possible triggers are displayed.
- Select the trigger by pressing the symbolic button, in the example **Temperature Moves under**.
The button of the trigger is highlighted in red.
- Set the desired minimum temperature using the scroll wheel, in the example **18 °C**.
- Finish the setting of the trigger with **Save** or discard via **X**.
The trigger is displayed under **Covigramm**.
- Add another trigger in the same way if required, which is **OR**-linked, via the **+** button, in the example **OR**-linked in the top row **Heating children's room**.

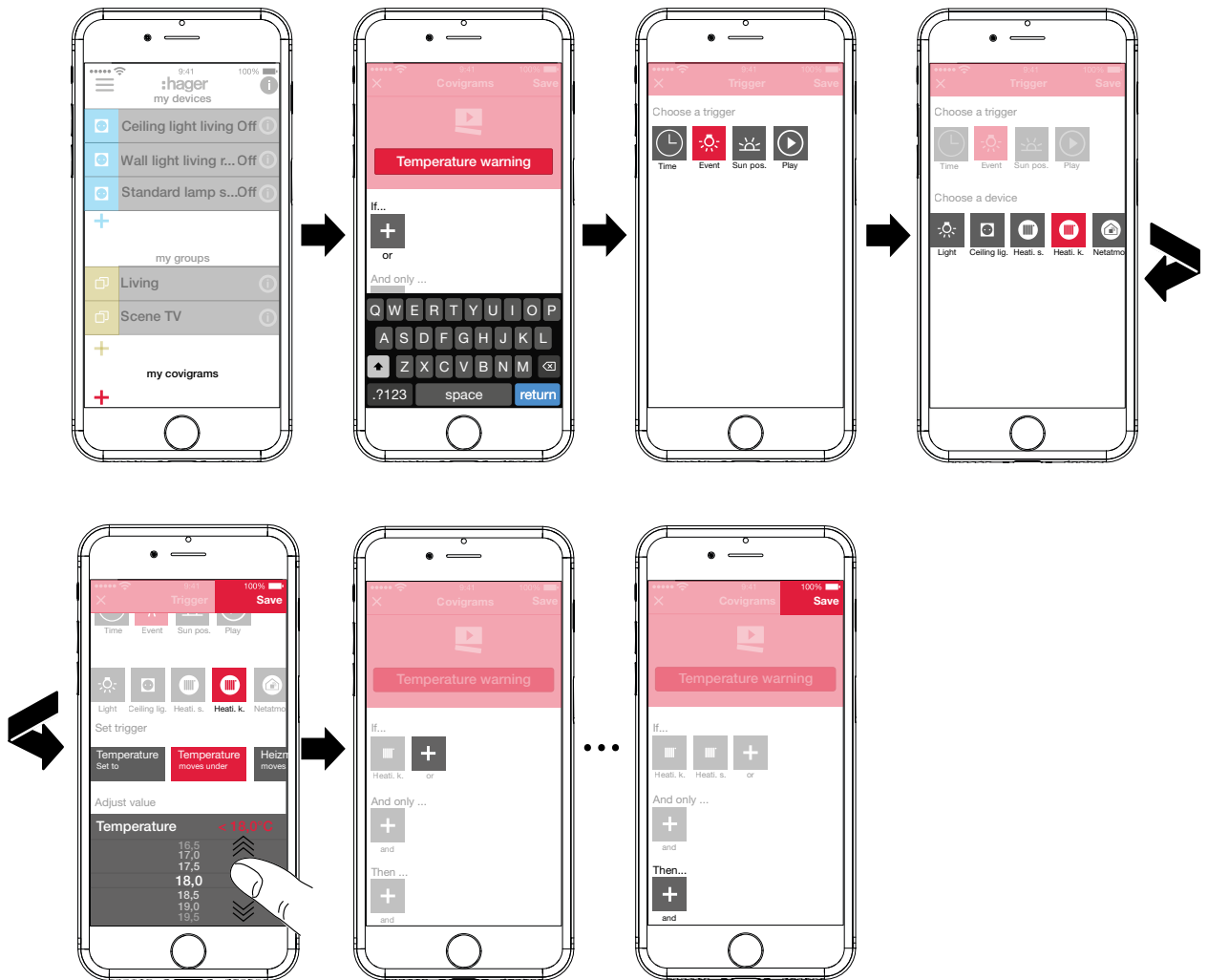



Figure 21: Covigram for example 1: Trigger

Define action

- Press the **+** button under **Then ...** .
The page for defining an action opens.
- Select the type of action, in the example **Push notification**  (Figure 22).
The button of the action type is highlighted in red. Only a possible action is displayed in the example.
- Select the action by pressing the symbolic button, in the example **Notification sent to every user**.
The button of the action is highlighted in red. The keypad and an input field for the message opens.
- Enter a message via the keypad.
- Save the action and message with **Save** or discard via **X**.
The triggers and action are displayed under **Covigramm**.
- Save the covigram again via **Save** or discard via **X**.
The view switches to the main menu. The created covigram is displayed under **my covigrams**.

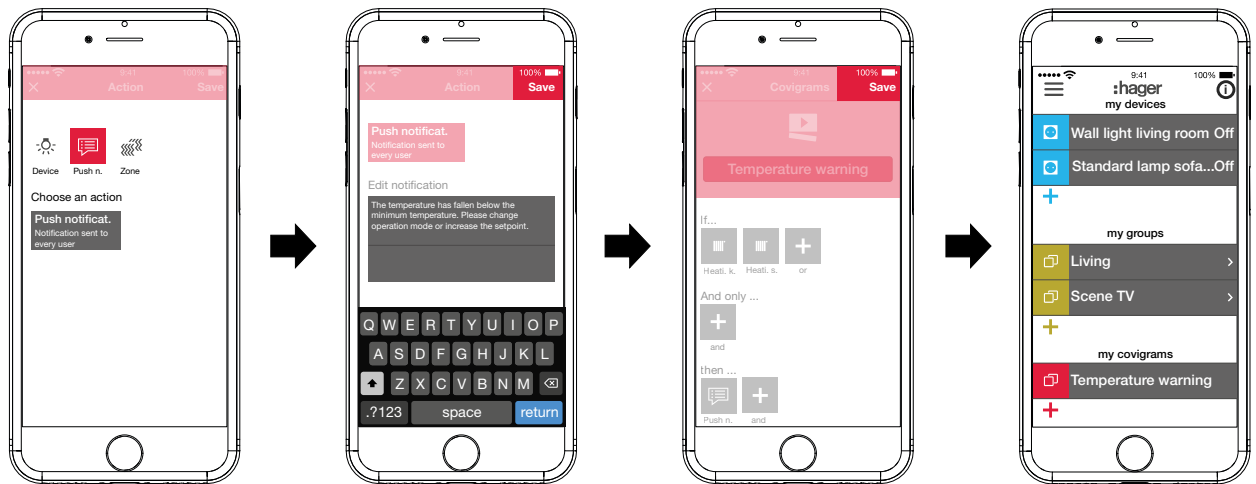


Figure 22: Covigram for example 1: Action

Example 2: Outdoor lighting (Figure 23):

Task: On Saturday and Sunday the outdoor lighting should be switched on earliest at 19:00 and on the other weekdays earliest at 17:00 every evening. In the course of this the outside lighting should only be switched on after sunset. This ensures, for example, that the outdoor area is illuminated at fixed times of arrival, such as after work in the winter months, and that switching does not occur during the summer months, when no lighting is required at the time of arrival.

- To do this, press the red **+** button.

The editing page **Covigramm** opens. The title line under is activated.

- Give the covigram a name via the keypad and terminate the entry with the **Return** button.

Define trigger

- In the file view of the covigram via **+** under **If ...** select the type of trigger, in the example **Time** .

The buttons for triggering **Every day** or **Every weekday** are offered at a specific time.

- Press the **Every weekday** button.
- Select the days **Sa** and **Su**.
- Set the time for the action in the format **hour:min** using the scroll wheels - here **19:00** - and finish with **Save**.
- Add the second trigger for the remaining weekdays in the same way via **+** under **If ...** - for **Mo - Fr** at **17:00** and finish with **Save**.

- In addition, for all weekdays, select the second condition for triggering via **+** under **And only ...**; in the example, sun position with the sun position symbol.

The buttons during the day and during the night are available with constantly adjusting sunrise and sunset times.

- Press the button during the night and confirm with **Save**.

In the detailed view of the covigram under **And only ...** is displayed

Define actions

- Select the types of actions via **+** under **Then ...**, in the example **Device** .

All devices are displayed.

- Select a device - here light **Entry**.
- Upon the occurrence of one of the triggers, select the switching state of the device (switched on/switched off) via the buttons provided - in the example **Lighting entry Switched on** - and finish with **Save**.

- Add the remaining lights in the outdoor area via **+** in the same way as the action being executed simultaneously - light **Pavement**, light **Housewall**, ..., select the switching state **Switched on** and finish with **Save**.

- Complete the covigram with **Save**.

The covigram is displayed in the main menu.

- i** If the outdoor lighting should be switched off again at a specific time in the morning, a separate covigram must be created for this.

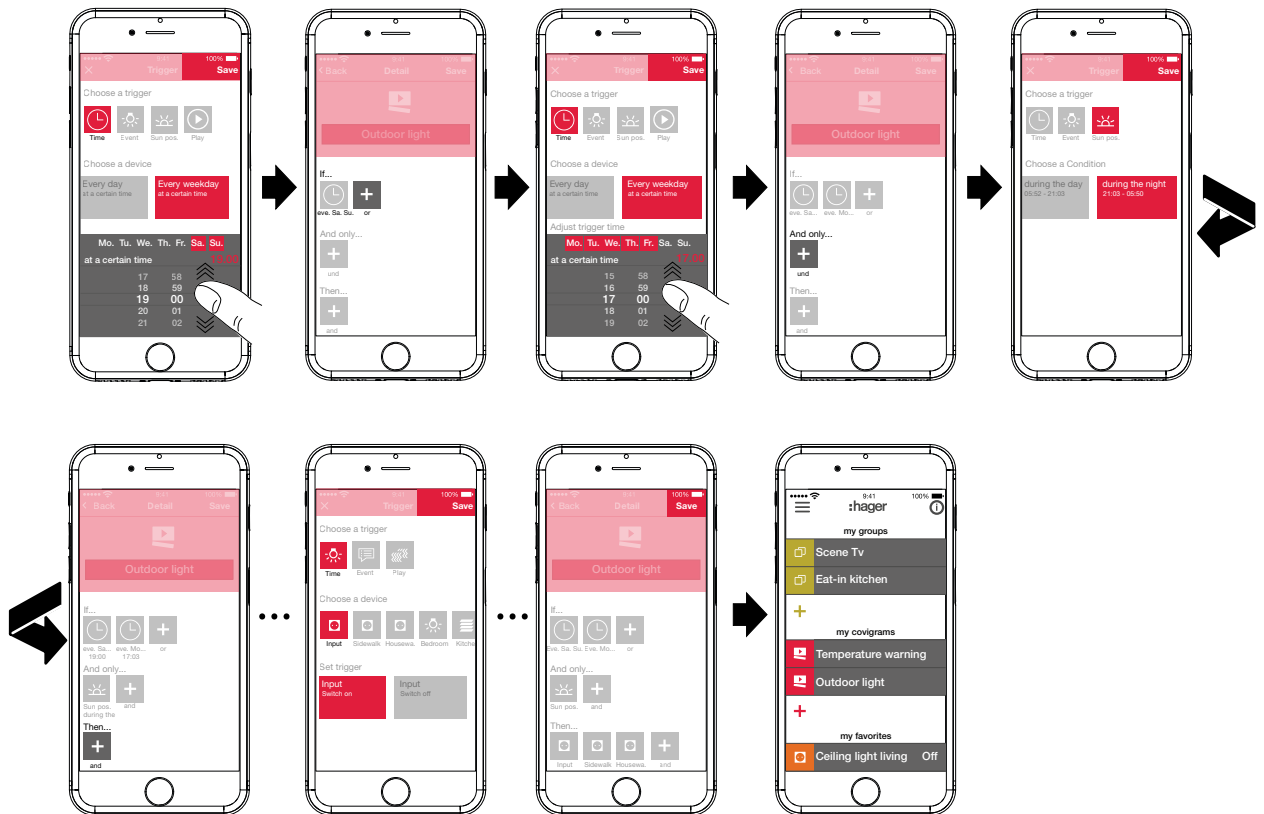




Figure 23: Covigram for example 2

Example 3: All OFF (Figure 24):



The entire lighting in the house should be switched off and all blinds closed by manually pressing a button, for example, when leaving the house or when going to bed.

- To do this, press the red **+** button.
The editing page **Covigramm** opens. The title line under **▶** is activated.
- Give the covigram a name via the keypad and terminate the entry with the **Return** button.


Define trigger

- In the file view of the covigram via **+** under **If ...** select the type of trigger, in the example **Play** .
- The button for **Trigger covigram with Play button** appears.
- Activate button and finish with **Save**.
- In the detailed view of the covigram under  **If ...** is displayed.

Define actions

- Aselect the types of action via **+** under **Then ...**, in the example **Device** .
- All devices are displayed.
- Select a device - here **Ceiling light living**.
- By manually triggering, select the switching state of the device (switched on/switched off) via the buttons provided - in the example **Ceiling light living Switched off** - and finish with **Save**.
- In the detailed view of the covigram under  **Then ...** is displayed.
- Add the remaining lights in the house via **+** under **If ...** in the same way - **Wall light living, Standard lamp, ...** -, select the switching state **Switched off** or when dimming, set the value **0%** einstellenusing the scroll wheel and finish with **Save**.

Now set all blinds in the house to closed.

- Select a device - here **Blind kitchen**.
- The button for ... **Set to certain value** appears.
- Activate button, using the scroll wheel set the value to **100%** (closed) and finish with **Save**.
- In the detailed view of the covigram  under **Then ...** is added.
- Define all other blinds in the house in the same way as action.
- Complete the covigram with **Save**.
- The covigram is displayed in the main menu.

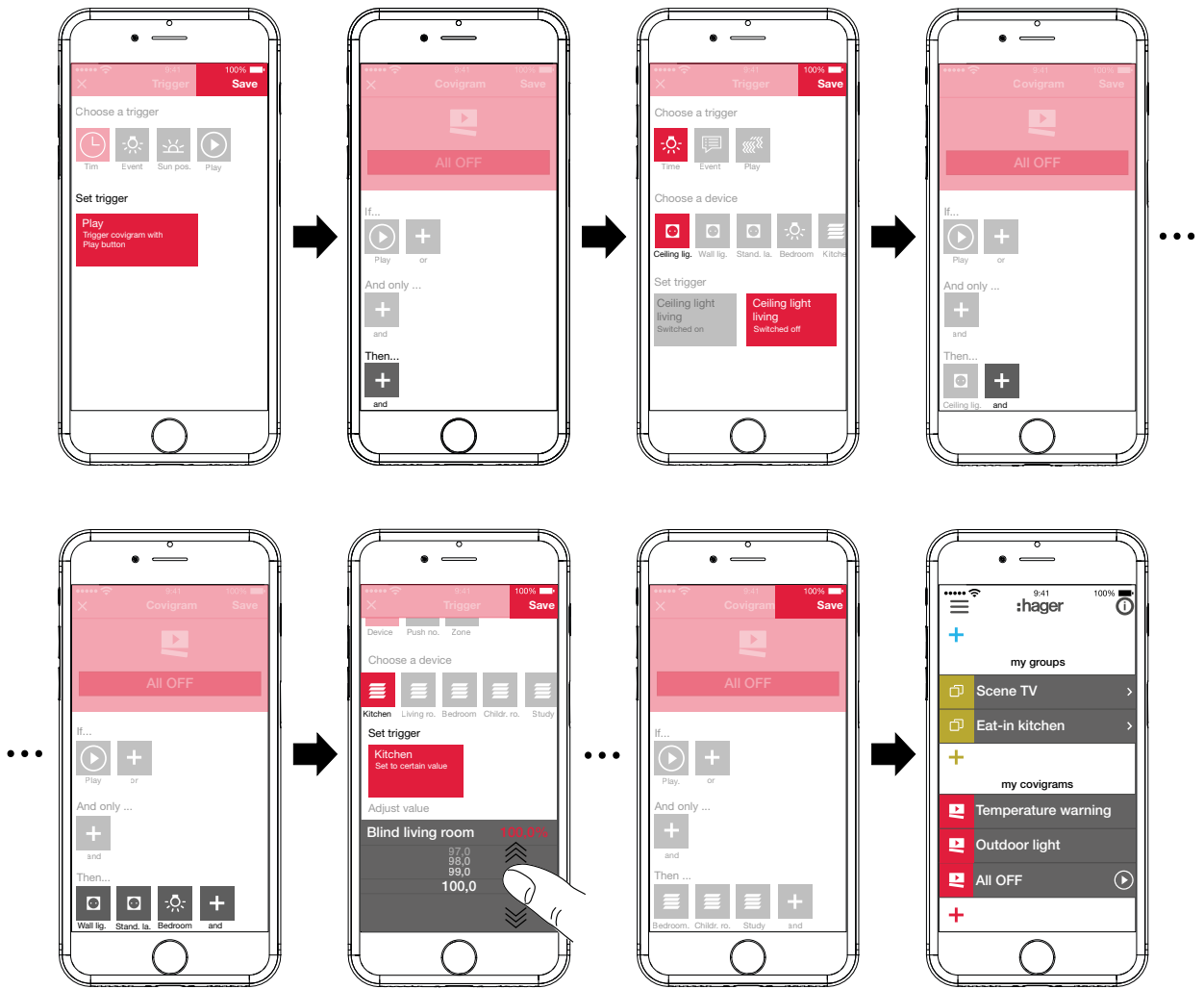


Figure 24: Covigram for example 3

Edit/remove covigram (Figure 25)

- Press **i** in the top right corner of the main menu.
All elements in the main menu are switched to edit mode.
- Select the covigram to be edited via **i** on the corresponding Covigram.
Details about the covigram are displayed.
- Then carry out the following changes as required:
 - Change the name of the covigram by activating the name line and make an entry via the keypad. Finish with the **Return** button.
 - Add further triggers under **If ... (or-linked)** or under **And only ... (and-linked)** via the **+** button.
The page for defining a further trigger opens. Proceed as described above.
 - Add further actions under **Then ...** via the **+** button.
The page for defining a further action opens. Proceed as described above.
 - Remove a covigram from the main menu via the **Delete Covigram** button.
- i** To edit or remove an action or trigger that has already been saved, press and hold the corresponding symbol. Select one of the buttons shown – **Edit** or **Delete** – and proceed as described above.
- With the exception of **Save**, finally confirm all edit operations with **Delete Covigram** or discard via **Back**.
The display returns to the main menu and displays the changes.
- Press **i** in the top right corner of the main menu to exit the edit mode.

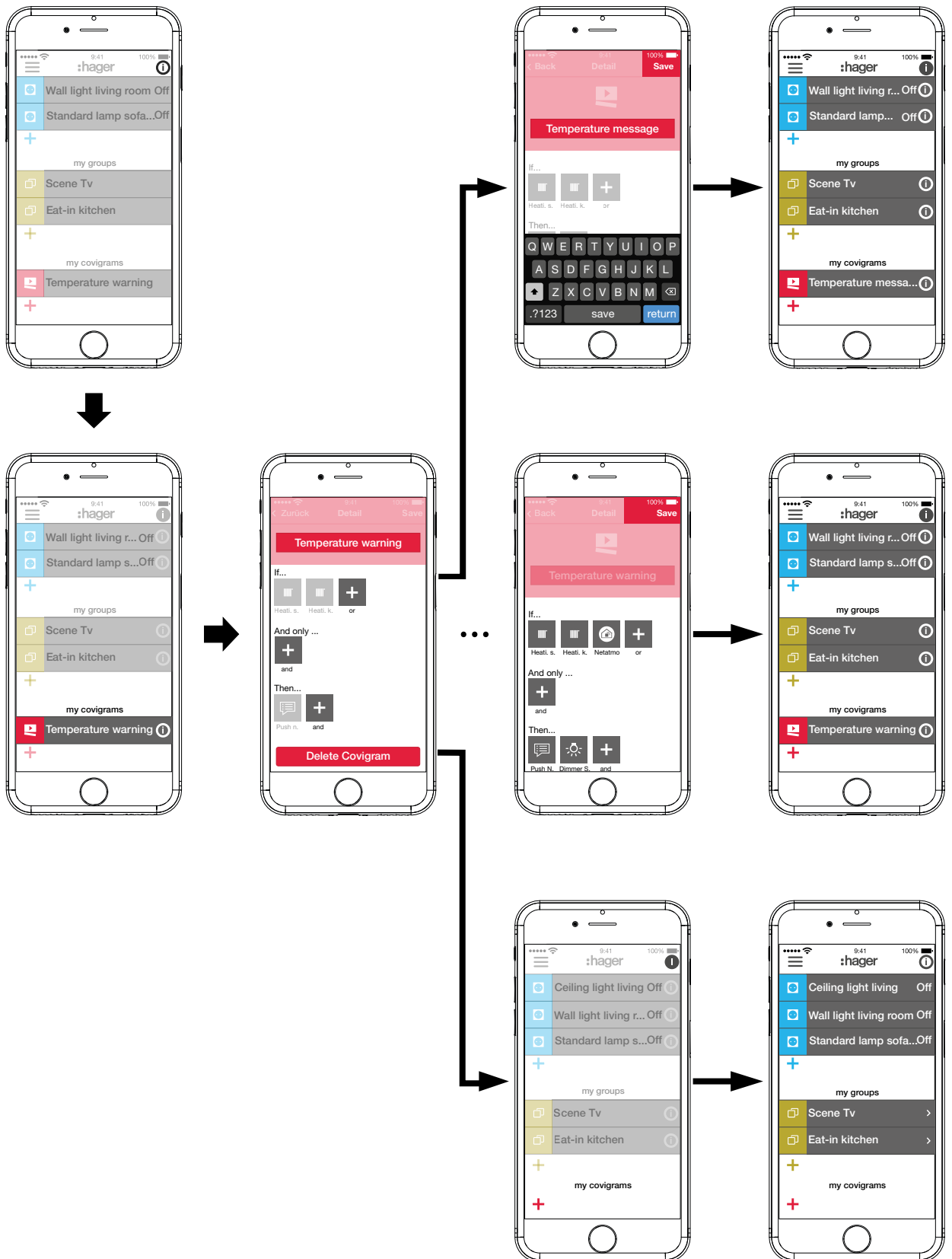


Figure 25: Edit/remove covigram

Add device to the favourites list (Figure 26)

Devices, whose connected loads are frequently operated, can be added for fast access under **my favorites**.

- To do this, press the orange **+** button.
A list with all devices that have not yet been defined as favourite is displayed.
- Add devices to **my favorites** by activating the checkbox.
- If necessary, change the order of the devices in the favourites list to the desired sequence via **≡** and using drag & drop.
- i** The new sequence is also applied to the My devices view. Each user can customise the arrangement as desired.
- Define the devices as favourites with **OK**.
The favourites are displayed in the main menu.

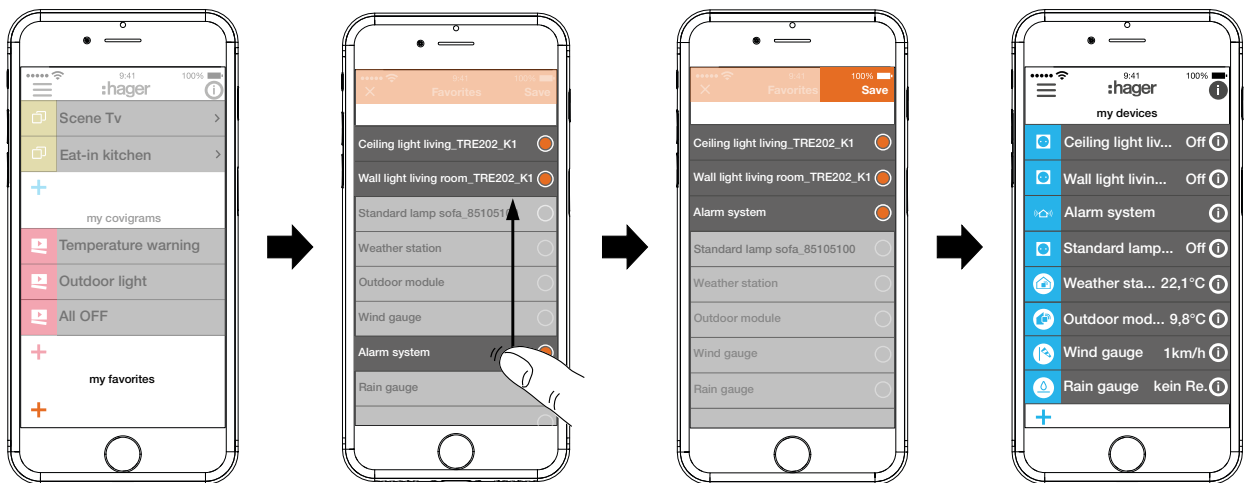


Figure 26: Define favourites

Remove device from the favourites list (Figure 27)

- Press **i** in the top right corner of the main menu.
All elements in the main menu are switched to edit mode.
- Select the device in the favourites list to be removed via **i** on the relevant device.
Details about the device, such as the switching state and the groups in which the device is integrated, are displayed.
- Press the **Remove from Favorites** button.
- With **Save** remove the device from **my favorites** or discard via **Back**.
The removed device is no longer displayed in the main menu under **my favorites**.
- Press **i** in the top right corner of the main menu to exit the edit mode.

Additional devices can be added to or removed from the favourites list in the same way.

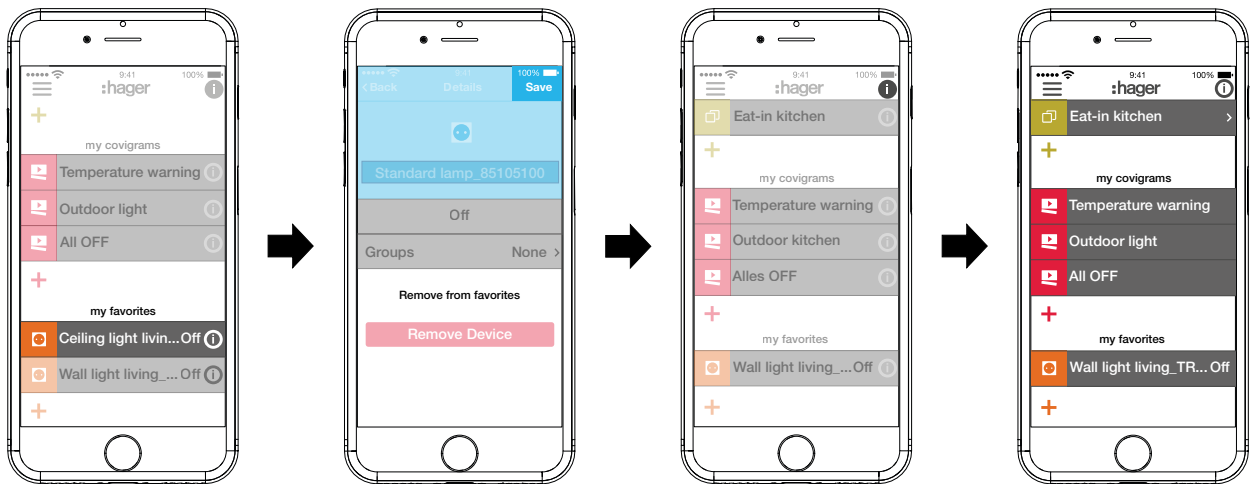




Figure 27: Remove favourites

Add user (Figure 28)

A user profile with corresponding access rights (see *Table 7*) for all tenants can be set up for operating the building control via the coviva app.

- In the main menu press  and call up the settings with .

Select **All users**.

The **Users** view is called up.

- Add a user with the **+** button in the top right corner.
- Assign the level of rights to the user with **Classic** (User) via the checkbox. Confirm with **Save** or discard via **X**.
- Then, the following information can be entered successively:
 - First name and last name
 - E-mail address and telephone number
 - User name and password
- Each entry must be confirmed with **Save** or discarded via **Back**.

The new profile is displayed in the overview of all users.

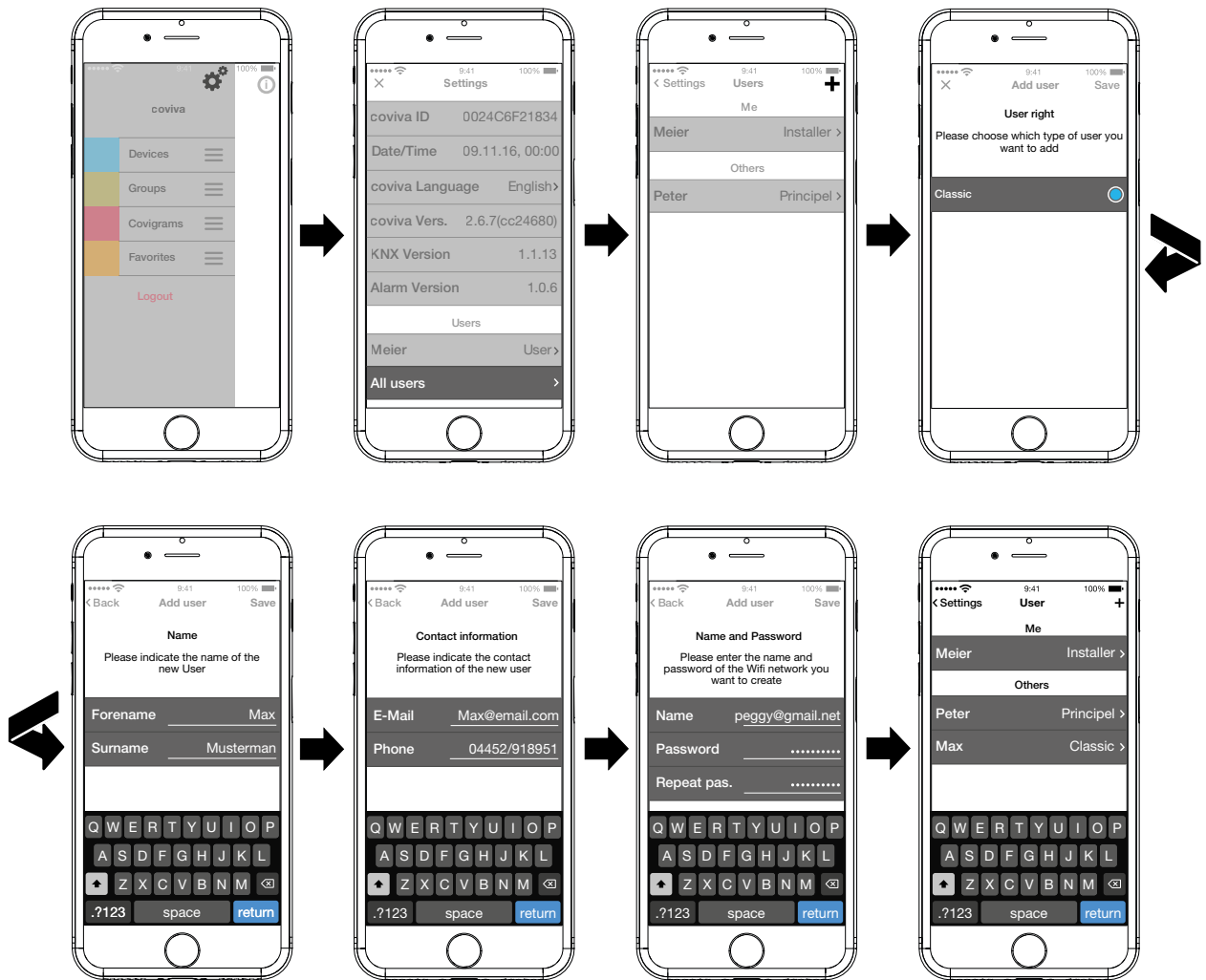


Figure 28: Add user

Edit/remove user

i The user data from the electrician and administrator are always updated with those stored in the myHager account. These profiles cannot be removed or their user data changed via the app.

The settings page has been called up.

- Select all users.
The user view is called up.
- The saved data is displayed via > next to a user.
- Then carry out the following actions as required:
 - Modify entries in the user data and confirm via **Save** or discard via <
 - A new password can be assigned with **Change password**, which must be confirmed with **Save** or discarded via <
 - All rights are withdrawn from this user via the **Delete User** button.

i The user profiles for the electrician and administrator cannot be removed.

Change settings (Figure 29)

Basic changes in the app can be implemented and some information can be viewed under the settings.

- Call up the page for settings under ☰ via ⚙️.
- Possible settings or further information are indicated by > in the right margin of the corresponding line. If such a line is selected, a new page opens with the corresponding setting options (see Table 3).
- Confirm any changes to the settings with **Save**, discard via ✕ or return to the previous page without saving via <.
- Finally, exit the settings via ✕.

Setting	Selection	Information	Format/Detail/Action
coviva Smartbox			
		coviva ID	123456789012
Date/time		Time zone Time period Country	DD.MM.JJJJ, hh:mm CET Summer time Germany
Language ²⁾	> English, Francais, Italiano, Deutsch, Svenska, Nederlands, Espanol, Polski, Portugues, Türkce, ...		
		coviva Version	2.6.7 (cc24680)
		KNX Version	1.1.13
		Alarm Version	1.0.6
User (see also Add user)			
My account		Name	First name Last name
Meier Electrician	>	Contact	E-mail Phone
	>	Profile	E-mail (user name) rights Change password? >
All users	>	I	
	Electrician >	all profile data (see above)	only display, not changeable
	Other		
	Administrator >	all profile data (see above)	only display, not changeable access for electricians for remote maintenance (de) activatable
	unlimited >		all profile data changeable
	Add user +		see Add user
Network (see Configure access for (mobile) end device)			
		IP address	192.168.178.23
WLAN coviva	>	Name	coviva - 123456789012
	Hotspot function activated	Display of all WLAN networks	- Select WLAN network. - Enter WLAN password.
	Hotspot function deactivated		

²⁾ The app generally uses the language set in the relevant end device. This setting only defines the language for emails and push messages.

Table 3: Settings and system information

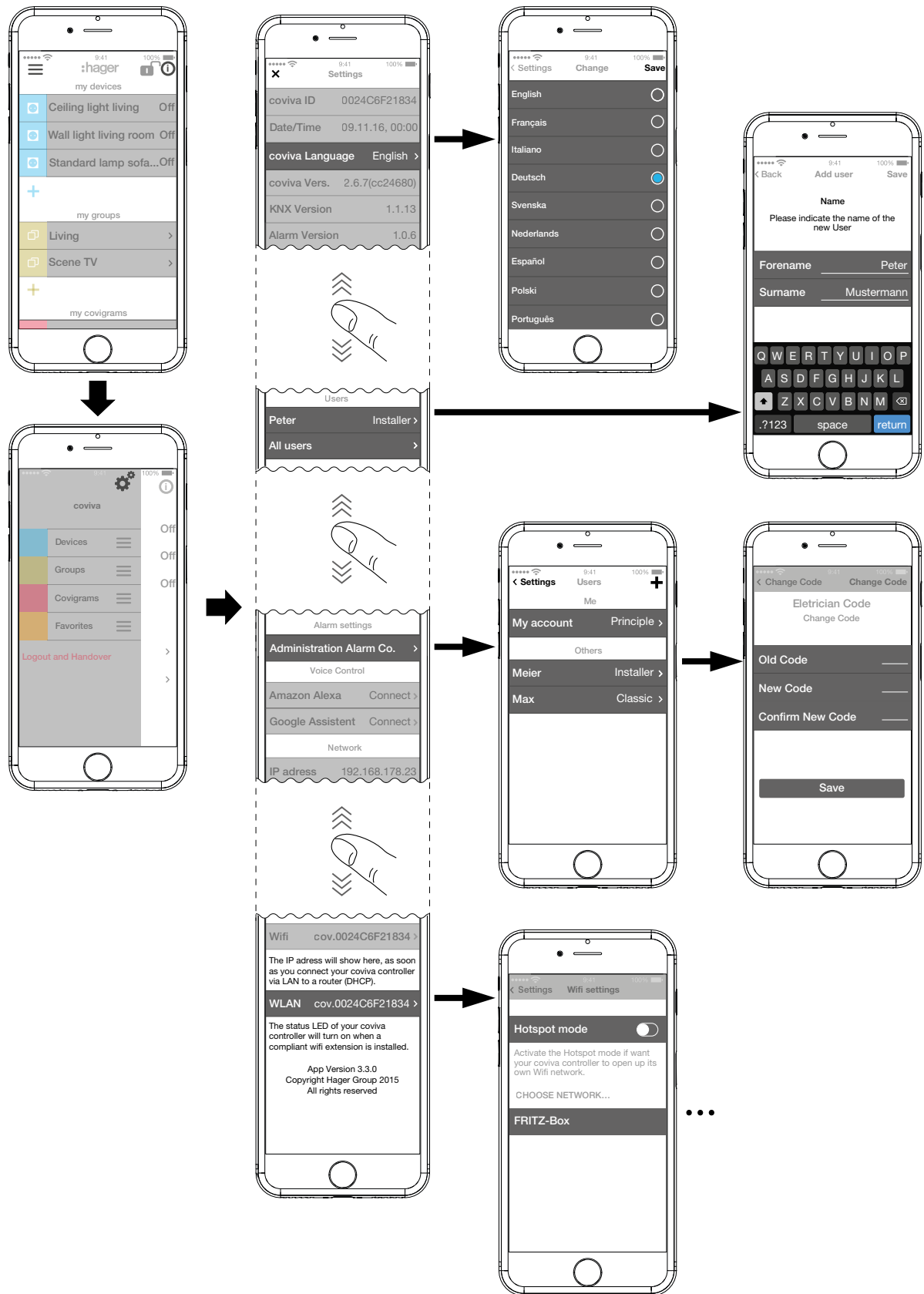


Figure 29: Call up/change settings

4 Project handover

To complete the project process, the project must be handed over to the customer (administrator).

i The project must be handed over to the administrator immediately.

The handover procedure enables an optimum transfer of the unrestricted access rights for the project from the electrician to the administrator without exchanging access data and passwords. This avoids any kind of security risks/gaps.


Only the e-mail address of the administrator is required for the handover. The administrator must have set up his **myHager** account with his e-mail address.

Hand over project (Figure 30)

i If, after opening the app, a push notification indicates that an update is available for the device software, this must be installed before handing over.

i If no Internet connection is available at this time, the software installed on the Smartbox cannot be validated as the most current version. The handover cannot be performed.

The (mobile) end device and the smartbox are online.

- In the main menu press  and start the handover of the project with **Logout and Handover**.

If the administrator has not been created as administrator at the start of the project (Figure 12), a corresponding message appears at this point.


In this case:

Select **Add user**.

- Enter the e-mail address of the administrator, under which his **myHager** account is set up.
- To confirm this, enter the e-mail address a second time and finish with **Save**.

The view switches again to the main menu.

i The e-mail address of the administrator must be different from that of the electrician. This must be taken into account for personal need.

- Press  again in the main menu and select **Logout and Project handover**.

Then:

- Complete the project via the **Transmit data** button.

The administrator receives an e-mail containing information that **Connected Home** can now be used and the access data (e-mail address). The customer can now log in to the coviva app as administrator using the access data defined under **my Hager**.

The electrician retains access to the completed project even after handover to the administrator, unless the administrator deliberately blocks this access. A new project can be created or existing installations can be accessed via the tradesman symbol next to the logout. This displays the currently used account of the electrician at the top in the selection menu.

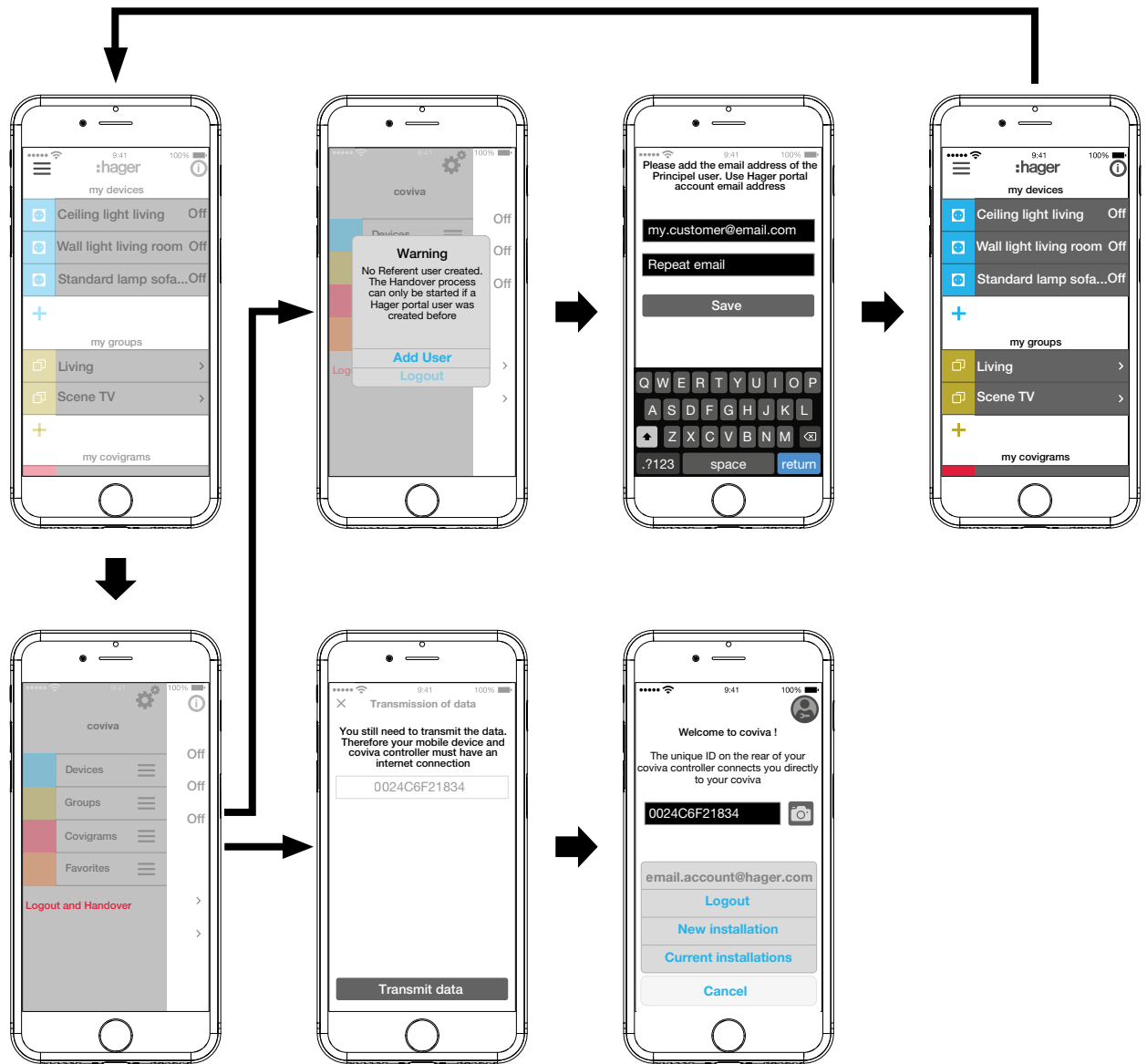


Figure 30: Hand over project

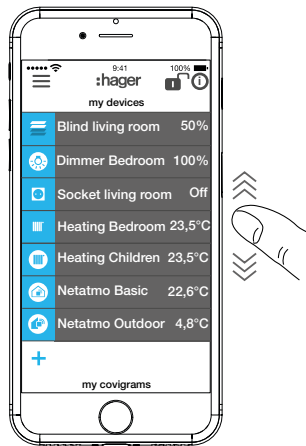
Operation

Operating concept

After logging in to the app (see *The first Login*) the main menu is opened. Distinctions are made between the following categories:

- My devices
- My groups
- My covigrams
- My favourites

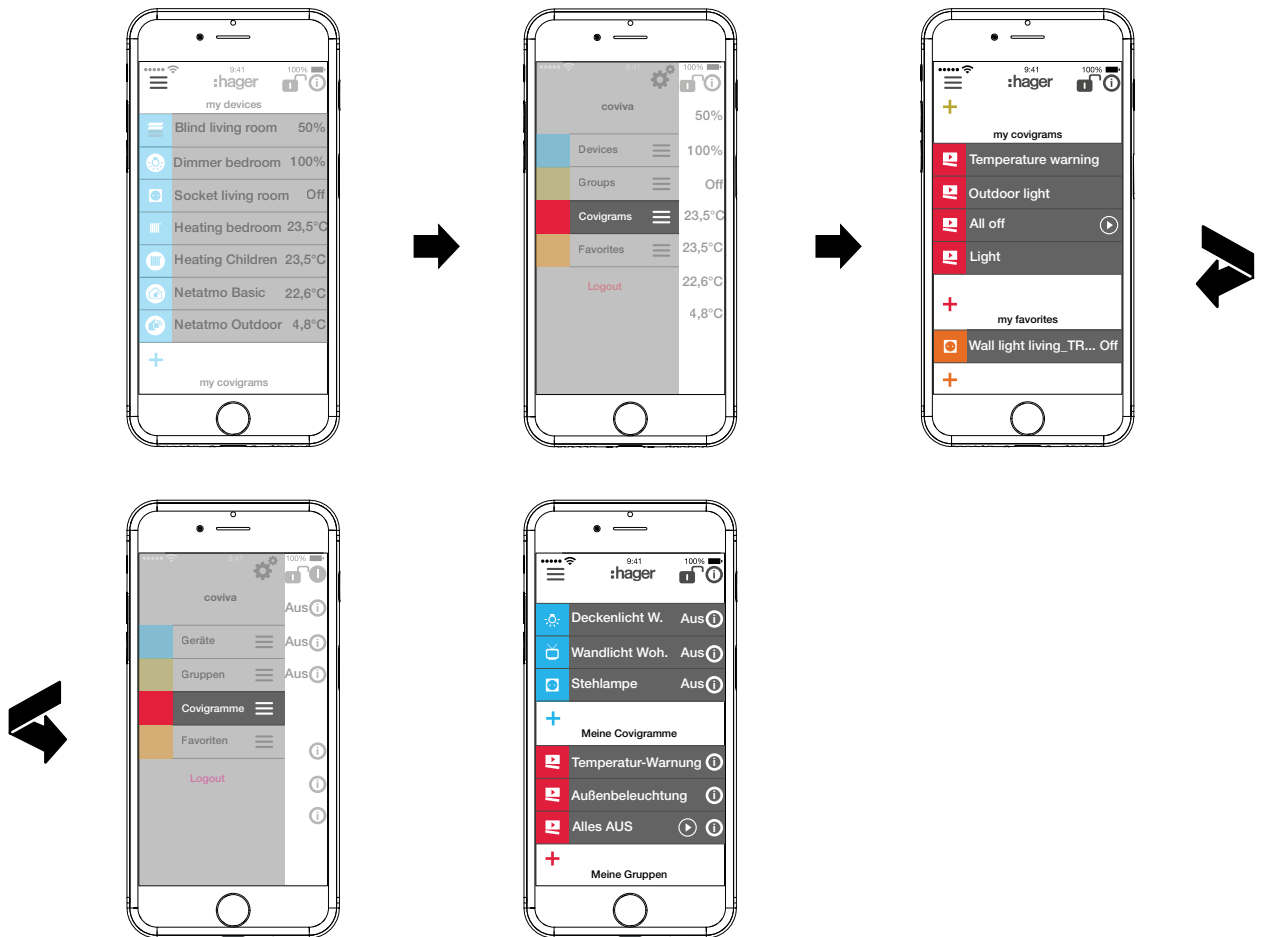
You access these categories in the main menu by swiping (mobile app) or scrolling (web app) up or down.



Alternatively, you can select the desired category directly via ☰.

The sequence of the categories can be changed via ☰ using drag & drop.

i The individual devices in the My devices category can be sorted via the favourites list (see Add device to the favourites list).



Every user can operate all configured applications and retrieve information regardless of the user profile.

The operating concept is intuitive and corresponds to the routines of other app operations. Below is an overview of the basic operating modes and applications in the coviva app (see Table 4).

i Instead of a touch operation or a swipe movement, operation via the web app takes place solely by mouse click or by dragging with the left mouse button pressed down as well as by scrolling.

Display	Operation/display	Applications (as an example)
My devices (Operation): Open/close the display by touch in the corresponding devices line		
	Touch →switch ON/OFF Display of the switching state	Light control: - Switch light - Switch load on socket outlet
	Swipe to the left/to the right →switch ON/OFF, dim LIGHTER/DARKER Display in % (0%: OFF, 100%: max. brightness)	Light control: - Set brightness of a light
	Swipe to the left /to the right →move UP/DOWN Display in % (0 %: moved up, 100 %: moved down) Change slat position (blind) Display in % (0% open, 100 % closed) i A "spinner" is displayed in the symbol field until the end position is reached.	Blind control: - Movement position of a blind/roller shutter - Slat position of a blind
	Swipe to the left /to the right →move IN/OUT Display in % (0 %: retracted, 100 %: extended)	Awning control - Movement position of an awning
	Touch + / - →increase/decrease value Touch on symbol →change operating mode Display of the measured temperature	Heating control: - Adjust setpoint in 0.5°C increments - Select operating mode Comfort, Night Reduction, Frost Protection
My devices (Information): Open the display in setting mode via i on the corresponding devices line		
	Display the measured sensor values with number and measuring unit	Physical sensors: Measured values of a weather station, such as: - Indoor temperature - Relative humidity indoors - CO ₂ content of the indoor air - Volume in the room - Air pressure indoors i With other modules the corresponding data must be read off from outdoor sensors.
i Display and operation of connected devices of other manufacturers see <i>appendix</i> .		
My groups: Selection by touch on > in the corresponding group line		
	All devices of the group are displayed as under My devices and can be operated as described above.	Calling up a device list with a touch, for example: - all lights on the ground floor - all loads in the living/dining/kitchen area

My covigrams: Open/close the display by touch in the corresponding Covigram line		
	Touch → activate/deactivate	Operate several loads simultaneously, event-driven, for example: - Switch on all outdoor lights at twilight. ⓘ If the event has already occurred when activating a covigram, the stored action is not executed. The covigram must be activated before the event occurs.
	Touch → manual triggering of a scene	- Switch OFF all loads when leaving the house.
My favourites: Open/close the display by touch in the corresponding favourites line		
	All devices of the favourites list are displayed as under My devices - but in orange - and can be operated as described above.	Operate the most-used devices grouped in a list each with a touch

Table 4: Operating concept

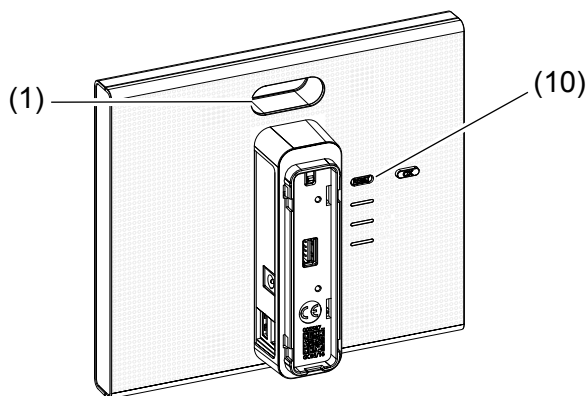
- i The smartbox can be used in the local environment even without an Internet connection provided that no applications have to be controlled, which only function online, such as remote access, notifications or connected devices of other manufacturers.

Carrying out a reset

There are four different reset options in the smartbox. They are triggered directly on the smartbox manually.

Reset Mode	Trigger	Consequences of the reset
Network reset	Loss of the WLAN access key	<ul style="list-style-type: none"> - Resetting of the network settings - Activation of the local access <p>i Other settings, project and user profiles remain unchanged.</p>
User reset	<ul style="list-style-type: none"> - Changing the electrician - Changing the administrator - Acquisition of rights by electrician - new e-mail addresses 	<ul style="list-style-type: none"> - Resetting the project to the state prior to the handover <p>i Other settings, project and user profiles remain unchanged.</p>
Installation reset	complete restart of an installation. e.g. for trainings or presentations	<ul style="list-style-type: none"> - Resetting of the smartbox to the default state - Removal of the entire project, including all settings <p>i The software updates installed on the smartbox and the user profile are retained.</p>
Reset to factory settings	Complete restart of a project	<ul style="list-style-type: none"> - Resetting of the smartbox to the default state - Removal of all settings, user profiles and the entire project - Removal of the software updates installed on the smartbox

Table 5: Reset



Carry out a network reset

- Keep **RESET** button (10) pressed for more than 5 seconds, until the RGB LED display (1) is slowly flashing blue.
- Release **RESET** button (10) briefly and press once again to confirm the selection of the reset mode.

Rapid blue flashing of the RCB LED display (1) confirms the successful reset.

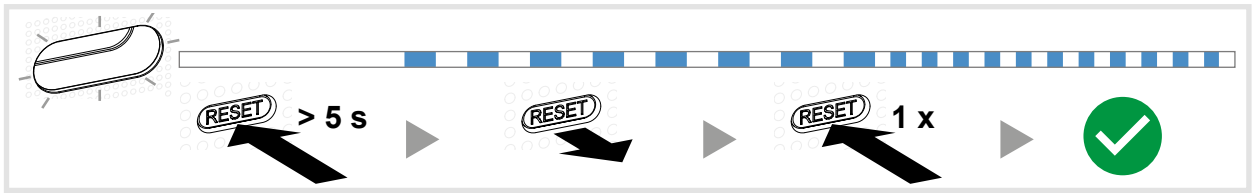


Figure 31: Network reset

Carry out a user reset

- Keep **RESET** button (10) pressed for more than 20 seconds, until the RGB LED display (1) is slowly flashing yellow.
- Release **RESET** button (10) briefly and press once again to confirm the selection of the reset mode.

Rapid yellow flashing of the RCB LED display (1) confirms the successful reset.

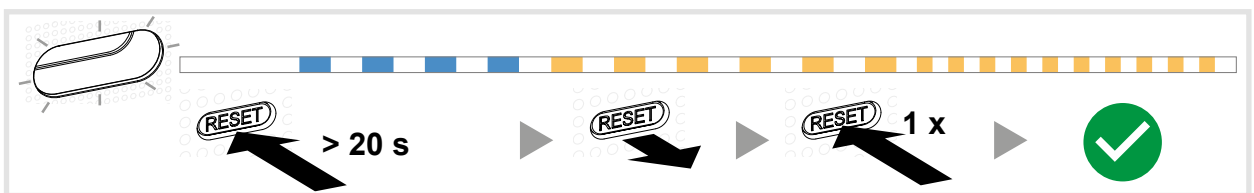


Figure 32: User reset

Carrying out an installation reset

- Keep **RESET** button (10) pressed for more than 30 seconds, until the RGB LED display (1) is slowly flashing purple.
- Release **RESET** button (10) briefly and press once again to confirm the selection of the reset mode.

Rapid purple flashing of the RCB LED display (1) confirms the successful reset.

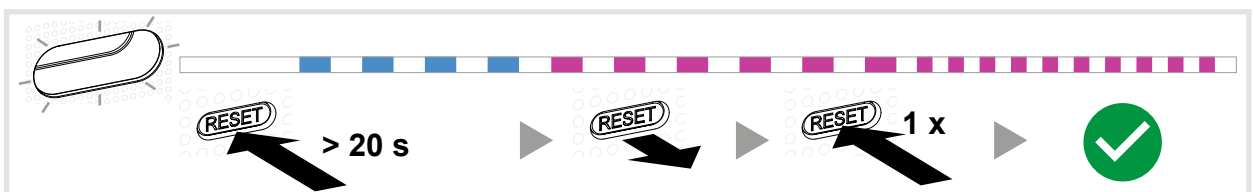


Figure 33: User reset

Carry out reset to factory settings

The device is disconnected from the mains voltage.

- Keep **RESET** button (10) pressed and switch on the smartbox by plugging into the (13) power supply.

The RGB LED display (1) first flashes red approx. 5 times slowly, then flashes red rapidly.

- Release the **RESET** button (10) and wait a few minutes until the RGB LED display (1) no longer flashes.

The reset has been carried out successfully.

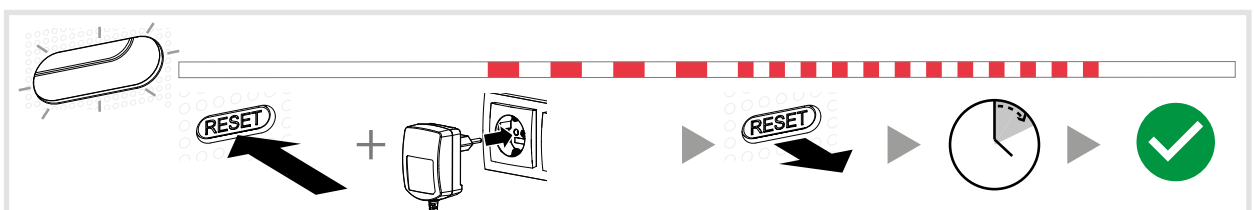


Figure 34: Reset to factory setting

RGB LED display

The smartbox has a display (1) for signalling errors that occur or for displaying the process of operations (see *Table 6*).

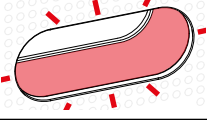
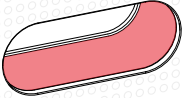
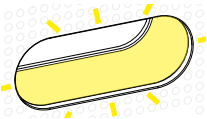
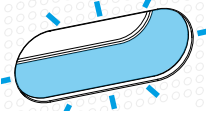
signal		Cause
	Flashing red	Critical warning, such as fire or burglary
	Permanent red light	Hardware or software error
	Flashing yellow	Technical warning, such as low-battery status of a device in the installation
	Flashing blue	Update, a software update is being installed

Table 6: RGB LED display (1)

Remote maintenance

The smartbox allows convenient remote access by the electrician in order to work in the project without having to be onsite with the customer.

With remote access it is possible, for example:

- to check the state of the installation
- to adjust the configuration
- to change settings
- to view event logs
- to add or remove users
- to create or change covigrams

Remote access is first possible after project handover to the customer (administrator). The electrician remains authorised to access the Smartbox even after handing over the project, unless the administrator deliberately deactivates this.

i Remote access is possible either via the mobile app or via the web app (see *Call up coviva web app*).

- Call up user settings for the electrician directly via the lock symbol, opened in the header.

Appendix

User profiles and rights

Rights	User profile		
	Electrician ¹⁾	Administrator	User name
Define administrator	■		
Add user	■	■	
Remove user	■	■	
Create a new project	■		
Add/delete further connected devices	■	■	
Add/remove comfort device	■		
Add/remove safety devices	■		
Create groups	■	■	■
Edit/remove groups	■	■	■
Create covigrams	■	■	■
Edit/remove covigrams	■	■	■
Add to favourites	■	■	■
Remove from favourites	■	■	■
Install update before project handover	■		
Install update after project handover		■	
Hand over project	■		
Accept project		■	
Authorise remote maintenance		■	
Carry out remote maintenance	■		
Change settings	■	■	■
Sort categories	■	■	■
Sort devices	■	■	■

³⁾ These rights apply for the entire project process and during remote maintenance

Table 7: User profiles and rights

Further connected devices

Voice command:

- Amazon: Alexa devices
- Google Assistant: Home devices

Temperature control:

- Tado: Smart Thermostat

IP camera:

- Netatmo: IP security cameras

Technical data

Smartbox TKP100A

Operating voltage 5 V_{DC}
 Power consumption < 3 W

Transmission frequencies/transmission power (duty cycle)
 - 868 ... 870 MHz 25 mW (0,1%)
 - 433 ... 434 MHz 10 mW (10 %)


Receiver category 2

Radio transmission range (free field) > 300 m

Network connection:

- Ethernet LAN min. Cat.5e, shielded
 - WLAN (with optional WLAN stick TKH180) 802.11 b/g/n

USB ports per 5 V_{DC}/max. 250 mA

 Only for connection of Hager devices.
 Do not use for charging!

Protection class II

Degree of protection IP30 / IK04

Operating temperature 0 ... 40 °C

Storage temperature -25 ... 70 °C

Relative humidity (no condensation) 93% at 40 °C

Installation height (above sea level) ≤ 2000 m

Dimensions (W x H x D) 178.5 x 156 x 48.4 mm
 (without protective back cover)

Standards EN 60950-1
 EN 55032
 EN 55024
 EN 300220-1
 EN 300220-2
 EN 301489-3

Power supply TKC110

Operating voltage 230 V~

Frequency 50/60 Hz

Output voltage 5 V_{DC}

Output current max. 3 A

Accessories

WLAN stick TKH180

Replacement requirement

Power supply TKC110

Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

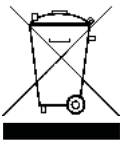
Our products are under guarantee within the scope of the statutory provisions.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

Applicable in all Europe CE and in Switzerland

Hereby, hager Controls, declares that Coviva is in compliance with the essential requirements and other relevant provisions of directive 1999/5/CE (until June 2017) and directive 2014/53/UE (from June 2017).

The CE declaration of conformity can be consulted on the site hagergroup.com



Correct Disposal of This product (Waste Electrical & Electronic Equipment).

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature indicates that it should not be disposed with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this product from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes of disposal.

