

# User Manual

frogblueProject Version 1.5.1

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Kaiserslautern, 21 January 2020

Made in Germany



Table of contents

1	About this manual .....	6
1.1	Who is the manual for? .....	6
1.2	Typographical conventions.....	6
1.3	Abbreviations .....	6
2	frogblue – Introduction and overview.....	7
2.1	Revolutionary simplicity – the functional principle .....	9
2.2	frogblue software – an overview.....	10
3	Safety: frogblue devices .....	11
3.1	Notes and symbols used .....	11
3.2	Intended use.....	12
3.3	Improper use.....	12
3.4	Safety instructions.....	13
4	Security: frogblueProject app – passwords .....	14
5	Notes on environmental protection.....	15
6	General wiring instructions .....	16
6.1	VDE – Tested and certified.....	17
6.2	Installation information.....	18
6.2.1	Flush-mounted boxes .....	19
6.3	Wiring examples.....	21
6.3.1	frogIn3-AC in 2-unit flush-mounted box .....	21
6.3.2	frogDim1-3 in 2-unit flush-mounted box .....	22
6.3.3	frogDim1-3 with connected lamp.....	23
6.3.4	frogDim2-2 with two connected lamps .....	24
6.3.5	Bedroom scenario .....	25
6.3.6	Bathroom scenario .....	26
6.4	Range of Frogs .....	27
7	Installing and updating the frogblueProject app.....	28
7.1	Installing the frogblueProject app in Windows .....	30
7.2	Updating the frogblueProject app .....	31
7.3	Updating frogware .....	32
7.3.1	Updating frogware for Frogs .....	32
7.3.2	Updating frogware for frogKeys and frogContact5-BAT.....	35
7.3.3	Updating the frogware for frogDisplay.....	35
8	frogblueProject – Overview of icons and colour codes .....	39
8.1	Title bar.....	40
8.2	Device list.....	41
8.3	Display area .....	42

8.4	Configuration area.....	43
8.4.1	Inputs.....	43
8.4.2	Outputs.....	45
9	Quick guides .....	48
9.1	Adding a Frog to a project and assigning it to a room .....	49
9.2	Alternate, cross and central on/off switching.....	56
9.2.1	Alternate switching in the living room .....	56
9.2.2	Cross-switching for living room, dining area and kitchen.....	61
9.2.3	Central On/Off.....	70
9.3	Time control for child's bedroom with dimming.....	75
9.4	Door control.....	81
10	Configuring frogblue projects .....	86
10.1	Managing projects .....	86
10.1.1	Creating a project .....	87
10.1.2	Editing a project.....	89
10.1.3	Open a project.....	90
10.1.4	Exporting a project.....	91
10.1.5	Importing a project.....	93
10.1.6	Finding a project .....	94
10.1.7	Deleting projects.....	96
10.1.8	Changing the project password .....	97
10.1.9	Changing the device key.....	98
10.2	Adding devices to a project.....	100
10.2.1	Adding unconnected devices.....	104
10.2.2	Replacing Frogs.....	104
10.3	Configuring Frogs.....	105
10.3.1	Assigning Frogs to a room .....	106
10.3.2	Configuring inputs.....	108
10.3.3	Configuring outputs .....	111
10.3.4	Copying and exchanging configurations for inputs and outputs .....	114
10.3.5	Adding buttons and assigning inputs .....	116
10.4	Extended configurations.....	118
10.4.1	Define several messages.....	118
10.4.2	Extended configurations for inputs and outputs .....	120
10.4.3	Configuring the range.....	136
10.5	Managing Frogs .....	137
10.5.1	Advanced settings .....	138
10.5.2	Master/slave configuration .....	141

- 10.5.3 Status ..... 142
- 10.5.4 User view ..... 143
- 10.5.5 Temperature view ..... 143
- 10.5.6 Power measurement..... 143
- 10.6 Loading a device configuration onto a device..... 144
- 10.7 Configuring frogKeys..... 145
  - 10.7.1 Configure directions..... 146
- 10.8 Configuring frogLinks ..... 150
  - 10.8.1 Configure usable messages..... 150
  - 10.8.2 Configuring the operating mode..... 152
  - 10.8.3 Command reference ASCII ..... 154
  - 10.8.4 Command reference JSON..... 157
- 10.9 Configuring frogDisplays ..... 159
  - 10.9.1 Loading a project on the frogDisplay..... 159
- 10.10 Creating and managing macros ..... 160
  - 10.10.1 Creating macros ..... 161
  - 10.10.2 Assigning macros to inputs and outputs ..... 167
- 10.11 Creating and managing system signals ..... 168
  - 10.11.1 Creating system signals ..... 168
- 10.12 Creating and managing system groups..... 171
  - 10.12.1 Creating system groups..... 171
  - 10.12.2 Assigning inputs and outputs to system groups..... 173
- 10.13 Message center ..... 175
- 10.14 Device manager ..... 178
  - 10.14.1 Resetting a Frog ..... 180
- 10.15 Creating a backup..... 181
- 11 Keyword index ..... 183

# 1 About this manual

Read this manual carefully and follow the instructions provided.

This will prevent personal injury and damage to property and ensure reliable operation as well as the long service life of the equipment.

Keep the manual in a safe place.

If you pass on devices for others to use, include this manual.

frogblue AG accepts no liability for damage caused by non-observance of this manual.

If you require further information or have questions about the devices, please contact frogblue AG or visit us on the internet at → [frogblue.com](https://frogblue.com).

This manual describes how to set up and configure smart home applications quickly and easily with frogblue. You will learn:

- how to plan a smart home application with Frogs,
- how to install Frogs,
- how to configure and manage a frogblue system with the Frogs app.

## 1.1 Who is the manual for?

This manual is intended for electricians and anyone who wishes to plan, configure and manage smart home applications.

Installation, commissioning and maintenance of the devices may only be carried out by trained electricians with appropriate qualifications.

## 1.2 Typographical conventions

The following typographical conventions are used in this manual:

Example	Meaning
Command	A command or code is shown in <i>Courier</i> .
Screen text	Text that is visible in the user interface is marked in <b>bold</b> .
<i>Reference</i>	References are marked in <i>italics</i> .

## 1.3 Abbreviations

Abbreviation	Meaning
Bluetooth LE	Bluetooth Low Energy
KNX	Fieldbus for building automation
MAC address	Media Access Control Address
VPN	Virtual Private Network
WLAN	Wireless Local Area Network

## 2 frogblue – Introduction and overview

### Decentralised Bluetooth network with automatic configuration

frogblue devices are connected to the mains and use wireless Bluetooth technology to transmit switching commands and data. You therefore do not require any special cables, IT infrastructure or Internet. Communication with smartphones and tablets takes place directly via Bluetooth without additional devices. frogblue guarantees the highest possible data security based on double encryption of the data, because in addition to the Bluetooth encryption the frogblue data is also coded a second time (128-bit rollover).

The frogblue system is fail-safe, as the decentralised intelligence means a central unit for function control and communication is not necessary. If two units are outside the Bluetooth range, any frogblue devices in between will forward messages. For users and installers, this happens automatically and without programming. The switching commands or data information automatically find their way in the frogblue network.

If the frogblue devices are controlled remotely via the **frogblueProject** app; this is realised by means of a secured VPN connection via the Internet to an in-house frogblue display (via WLAN connection). The double encryption and the VPN connection and frogblue messages guarantee a very high level of data security.

### Configuration via naming of messages

The connection between switching inputs and switching outputs (e.g. between a photoelectric proximity switch and a lamp) is made by naming messages assigned to the inputs or outputs in the **frogblueProject** app. If the message for the switching input as well as for the switching output has the same name (for example “Kitchen light”), this establishes the connection between the two devices and their inputs or outputs. If another output with the same name (here “kitchen light”) is on an additional device, both outputs will be virtually connected to each other and will switch synchronously.

The same applies to other inputs with the same name, so that multi-way switching is easy to realise with multiple light sensors. Switching inputs and outputs can be allocated as desired. The linking and message transmission to the switch take place automatically without further configuration.

### Typing and space-based switching operations

By typing inputs and outputs and the space-based configuration of the devices, it is possible to minimise the effort involved in configuration. To do this, the individual frogblue devices are allocated to a room (e.g. “Living room”), and their inputs and outputs are typed, which means an output may be marked as a light or roller shutter control or an input may be marked as a light sensor. Accordingly, these devices are automatically linked by way of the typing switching command “light on in the living room” without further configuration and without name assignment of the inputs and outputs. It does not matter how many devices or inputs and outputs there are in a room.

Such a typing switching command “light on in living room” can be put on any switching input of frogblue devices in order to switch on the light in that room or start the shadowing from another location, without knowing the number of devices and switching outputs in that room.

### Parameterisation of switching signals

All switching outputs can be parameterised individually and very specifically. So, amongst other things, the duty cycle, soft starts, dimming characteristics, delayed switching on and off and much more can be configured. The switching inputs can also be parameterised so that a different duty cycle or brightness of the lamp can be realised depending on the switch, for example

## Overlay of switching signals

Inputs and outputs can have multiple names and as such trigger different switching operations or actions. A light sensor can therefore switch on the living and dining room lights simultaneously and send different messages with different parameters depending on the button touch (short, long, double-click etc.). The overlay of messages to the outputs can allow convenient scenery control or the signalling of incidents, such as the kitchen light blinking when the doorbell rings.

## System-wide functions through macros

For the simple configuration of central commands, such as central switching of multiple lamps, macros can be defined and assigned to the devices. If, for example, the central input (central control command for light) on all switches be converted from “double-click” to a “triple click”, this only needs to be changed in one place, which is the macro. These macro functions ensure a clear configuration and significantly reduce the configuration effort.

## Time control

All frogblue units have time functions for switching. Lamps or roller shutters can be controlled decentrally by the devices themselves by way of a weekly schedule. This means that a central unit is not necessary. The time in the individual frogblue modules is synchronised via the Bluetooth network with special frogblue devices with battery-buffered clocks or GPS time receivers. The frogblue display can as an option be supplied with the current time via its WLAN interface from a time server on the Internet.

This automatic time synchronisation via the Bluetooth network ensures that even after a power failure in all devices, the current time is again available within seconds. Of course, this time synchronisation via the frogblue network is encrypted in addition to the Bluetooth and therefore offers the highest possible security against manipulators.

## Logic module decentralised in all devices

In every frogblue device, input and output signals of other frogblue devices can be linked system-wide. So, for example, a lamp can be switched on in addition to the normal operation by overlay for as long as a door is open (once a door contact signals this to a frogblue input module). The logic linking of multiple signals, including together with time conditions or a weekly schedule, is possible and is done decentrally in the frogblue devices.

The typing of input signals with attributes, such as window contact, brightness sensor or frost monitor, allows fast implementation of sophisticated logic and control functions. With these functions for example, a children’s room lamp can be limited to 30% of the maximum rating or an alarm can only be triggered by open doors on weekends.

## Data backup of all data in one file

The entire project configuration of all data, therefore both the configuration data of all frogblue units and the settings on the **frogblueProject** app, such as passwords and project data, are stored in a single system backup. This system backup can be secured in every single frogblue unit and also sent by email. This means that all data of a frogblue installation are stored in only one file.

A system function signals the end user via the display, and if applicable the **frogblueProject** app, that they are in possession of all the necessary configuration data for their frogblue system. This ensures that the system configuration is available for maintenance by third parties at any time, even if the electrician cannot be reached. The end user also needs the associated project password of course.

## Platform-independent on Android, iOS and Windows

The frogblue software runs on Android, iOS and Windows. The end user app (**frogblueHome**) is identical to the app on the frogDisplay, i.e. the end user only needs to be familiar with one control panel, regardless of whether they are using the display on site or the smartphone app.

## 2.1 Revolutionary simplicity – the functional principle

This is what you are accustomed to: after the electrician has connected a lamp, the lamp goes on as soon as the button is pressed.

However, this does not allow automatic controls.

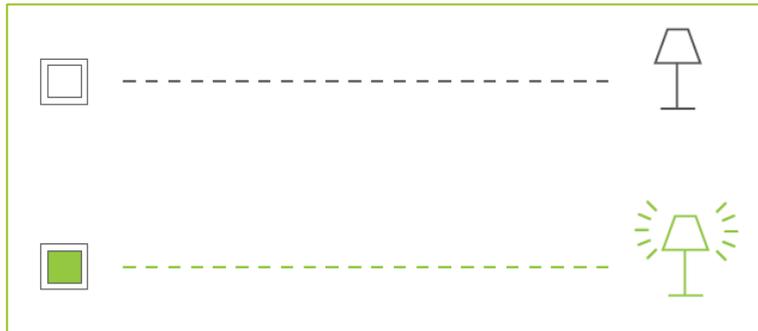


Figure: A connected lamp is switched on when a switch is actuated.

A Frog is connected to the circuit (in a flush-mounted box) to enable controls such as time control or central control.

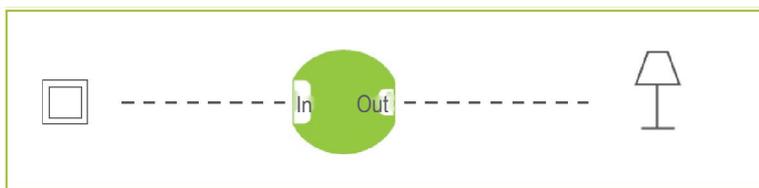


Figure: A Frog is connected to a circuit.

The button is connected to the input **In**, the lamp to the output **Out**.

A text message is assigned to the input **In** via the **frogblueProject** app, for example **LightOn**.

This is sent when the button is pressed.

If the output **Out** knows the text message **LightOn** (also assigned there via the **frogblueProject** app), the lamp is switched on when the switch is pressed.

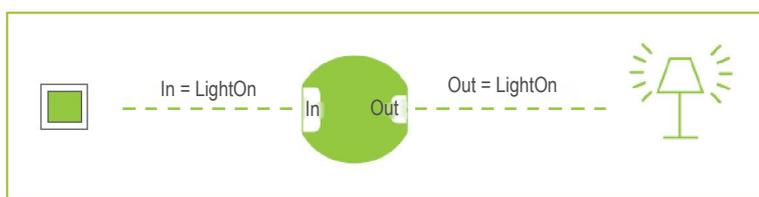


Figure: The Frog switches through when the text message in the input and output match.

If the **Out** output has been configured for another text message, for example for the text message **Lights**, the lamp remains off even if the switch is pressed.

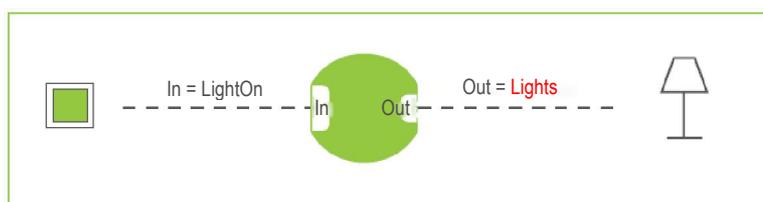


Figure: The Frog does not switch through if the text message in the input and output do not match.

If several Frogs are present in a building, all those frogs at whose output the text message **LightOn** has been configured will switch through.

The Frogs receive the message **LightOn** via Bluetooth, this is they are not wired to each other. The message functions like a virtual cable that can be adapted at any time.

If different scenes are to be set up, several messages can be entered both at the output and at the input, for example to make the lamps light up differently.

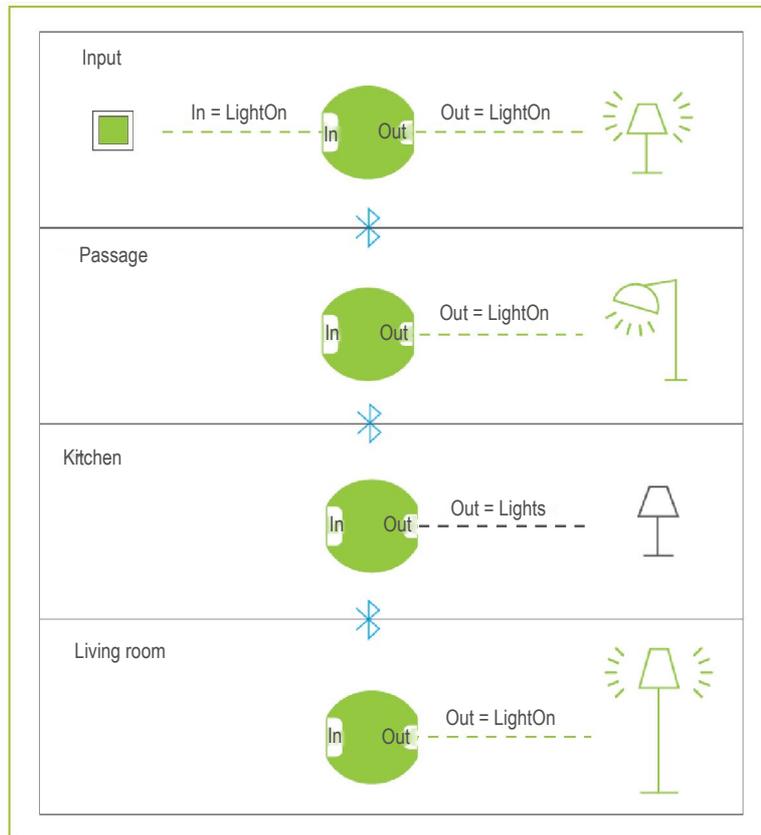


Figure: All Frogs that recognize the text message **LightOn** switch through.

In addition to activating switches, the sending of messages can also be controlled via logic functions.

## 2.2 frogblue software – an overview

The following frogblue software is available for controlling and configuring a frogblue system:



With the **frogblueProject** you can plan, configure and control a frogblue system. This app provides you with all the features you need to create and manage both simple and sophisticated smart home applications. You will find detailed information on how to use the **frogblueProject** app in this manual.



With the **frogblueHome** app you can easily control the frogblue units for a project set up and configured with the **frogblueProject** app. You will find detailed information on how to use the **frogblueProject** app in the → *frogblueHome user manual*.

**frogware:** The software (firmware) in the Frogs and frogKeys, which contains the system configuration and controls the frogblue system. The **frogware** is downloaded along with the **frogblueProject** app and must be updated in the Frogs and frogKeys afterwards. Information on updating the **frogware** can be found in this manual in section → *Updating frogware, page 32*.

### 3 Safety: frogblue devices

The devices are built according to the currently valid rules of technology and are safe to operate. They are tested and leave the factory in a technically safe condition.

Nevertheless, there are residual risks. Read and follow the safety instructions to avoid hazards.

frogblue AG accepts no liability for damage caused by non-observance of safety instructions.

#### 3.1 Notes and symbols used

The following information points out special dangers when handling the devices or provides useful indications:



##### **Danger**

Danger to life/serious damage to health

The respective warning symbol in conjunction with the signal word **Danger** indicates an imminent danger that may lead to death or serious (irreversible) injury.



##### **Warning**

Severe damage to health

The respective warning symbol in conjunction with the signal word **Warning** indicates an impending danger which can lead to death or serious (irreversible) injury.



##### **Caution**

Damage to health

The respective warning symbol in conjunction with the signal word **Caution** indicates a danger that can lead to minor (reversible) injuries.



##### **Attention**

Damage to property

This symbol in conjunction with the signal word **Attention** indicates a situation which may result in damage to the product itself or to objects in its vicinity.



**This symbol warns of electrical voltage.**

##### **Note**

The signal word **Note** indicates useful tips and recommendations for efficient handling of the product.

### 3.2 Intended use

The devices are Bluetooth receivers and transmitters designed for flush-mounting. The devices form part of the frogblue system.

The devices are intended for the following:

- operation according to the technical data listed,
- installation in dry interiors and suitable flush-mounted boxes,
- use with the connection options available on the devices.

Intended use also includes compliance with all information in this manual.

### 3.3 Improper use

Any use which is not mentioned under → *Intended use* is considered to be contrary to the intended use and can lead to personal injury and damage to property.

frogblue AG is not liable for damages caused by improper use of the devices. The risk is borne solely by the user or operator.

The devices are not intended for the following:

- Unauthorised structural changes
- Repairs
- Outdoor use without appropriate protective housing

### 3.4 Safety instructions

**Danger – Electrical voltage!**

Electrical voltage! Danger of death and fire due to electrical voltage of 100 ... 240 V.

Direct or indirect contact with live parts results in a dangerous body current. Electrical shock, burns or death can result.

Work on the 100 V... 240 V mains must only be carried out by qualified electricians.

Switch off the mains voltage before mounting or dismounting.

Never use the devices with damaged connection cables.

Do not open any firmly screwed or glued covers on the housing of the devices.

Only use the devices if they are in perfect technical condition.

Do not make any changes or repairs to the equipment, its components or accessories.

Keep the units away from water and humid environments.

**Attention! - Equipment damage due to external impact!**

Moisture and soiling of the devices can lead to the destruction of the devices.

Protect the equipment from moisture, dirt and damage during transport, storage and operation.

**Attention! - Fire hazard!**

When operating with inductive transformers, protect each transformer on the primary side according to the manufacturer's instructions. Only use safety transformers according to EN 61558-2-6210-4 (VDE 0570 part 2-6:2010-04).

**Attention!**

Do not connect luminaires with integrated dimmers.

## 4 Security: frogblueProject app – passwords

All device configurations of the frogblue devices are saved in the **frogblueProject** app in a project configuration with the help of a project file.

The project is protected by two passwords :

- project password
- device key

### Project password

The project password protects the project file on the tablet or laptop. A project file can only be imported to another device if the correct project password is entered.

The project password is assigned by you when you create a project with the **frogblueProject** app.

#### **Keep the project password in a safe place.**

You need the project password to restore a project or to transfer a project to another device.

### Device key

The device key secures communication with the frogblue devices, i.e. accessing the Frogs with a tablet. Only with the device key can you change the device configuration.

The device key is assigned automatically when you create a project on the **frogblueProject** app and is identical to the project password.

#### **Keep the device key in a safe place!**

Only with a device key can you access to a Frog via Bluetooth.

### Changing the project password and device key

You can change both the project password and the device key at a later stage. If the device key is changed, all frogblue devices must be updated.

### Project password and device key have been lost

If the project password and the device key are no longer available, any frogblue device can be reset using the reset key. The Reset Key is always printed on the housing of the device and is only valid for that device.

## 5 Notes on environmental protection



This symbol indicates that this product must not be disposed of with normal household waste in accordance with local laws.

Please take your old electrical equipment to a designated collection point.



Batteries and rechargeable batteries must not be disposed of with household waste, but you are legally obliged to return used batteries and rechargeable batteries.

Used batteries can contain harmful substances which, if not stored or disposed of properly, can harm the environment or your health. However, batteries also contain important raw materials such as iron, zinc, manganese or nickel, which can be recycled. Please return the batteries free of charge after use in your immediate vicinity (e.g. in shops or municipal collection points).

### Handling batteries

Keep batteries away from children!

Remove batteries if they have gone flat or if the unit has not been used for an extended period of time.

If a battery has leaked, remove all batteries and ensure that skin and clothing do not come into contact with the liquid.

Battery fluid is corrosive and may be toxic. If this happens, rinse the affected area thoroughly under running water. Use a slightly moistened paper towel to clean the unit. Only use batteries of the correct size and type.

The declarations of conformity according to CE marking for the products can be found below:

→ <https://www.frogblue.com/de-de/support/downloads/>

## 6 General wiring instructions

Installation, commissioning and maintenance of the devices may only be carried out by trained electricians with appropriate qualifications.

The electrician must have read and understood the manual and follow the instructions.

The electrician must comply with the national regulations applicable in their country regarding the installation, functional testing, repair and maintenance of electrical products.

The electrician must be familiar with and correctly apply the “Five Safety Rules” (DIN VDE 0105, EN 50110):

1. Unlock
2. Secure against restarting
3. Determine the absence of voltage
4. Grounding and short-circuiting
5. Cover or barrier adjacent live parts.

**In this chapter you will find information on:**

### VDE certifications

Information on VDE certifications.

→ *VDE – Tested and certified, page 17.*

### Installation information

Frogs are connected in flush-mounted boxes. We recommend deep, ideally larger-sized flush-mounted boxes for new construction or renovation projects. Detailed information on the installation of a Frog can also be found in the enclosed operating instructions for the respective Frog.

→ *Installation information, page 18*

### Wiring examples

Typical Frogs wiring examples in flush-mounted boxes are presented here.

→ *Wiring examples, page 21.*

### Range of Frogs

The typical free field range for Frogs is about 30 metres. Inside a building, the range is up to 10 metres, depending on the structure of the building. In the case of influencing factors or greater distances, you can simply connect a Frog as a repeater in between.

→ *Range of Frogs, page 27.*

## 6.1 VDE – Tested and certified

The technical conformity of the product with the requirements of the harmonisation regulations is demonstrated by the technical documentation and compliance with the following standards:

DIN EN 60669-1 (VDE 0632 Part 1):2009-10; EN 60669-1:1999 + A1:2002 + A2:2008

IEC 60669-1:1998 + IEC 60669-1:1998/AMD1:1999 + IEC 60669-1:1998/AMD2:2006

Switches for household and similar fixed electrical installations – Part 1: General requirements

DIN EN 60669-2-1 (VDE 0632-2-1):2010-03; EN 60669-2-1:2004 + A1:2009

IEC 60669-2-1:2002 + IEC 60669-2-1:2002/AMD1:2008

Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic switches

DIN EN 60669-2-1/A12 (VDE 0632-2-1/A12) 2010-09; EN60669-2-1:2004/A12:2010

Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic switches

DIN EN 60669-2-5 (VDE 0632-2-5):2017-05; EN 60669-2-5:2016

IEC 60669-2-5:2013

Switches for household and similar fixed electrical installations – Part 2 -5: Particular requirements – Switches and similar accessories for use in home and building electronic systems (ESHG)

DIN EN 50428 (VDE 0632-400):2010-02; EN 50428:2005 + A1:2007 + A2:2009

Switches for household and similar fixed electrical installations – Collateral standard – Switches and similar accessories for use in home and building electronic systems (ESHG)

### Note

Updates and additional information can be found on the website at → [frogblue.com](https://frogblue.com).

### Note

frogblue cannot guarantee that all LED lamps will work correctly due to the large number of manufacturers and lamp types.

In particular, if non-dimmable lamps are connected to a dimmer, the lamps may not switch off completely.

## 6.2 Installation information

Frog are simply connected to the household power supply. Further cables or other wiring between the Frogs is not required.

We recommend using the Frogs with rigid conductors.

### Note

When planning, make sure that there is sufficient space for frogs *and* normal wiring. Choose sufficiently large flush-mounted boxes or provide sufficient space for the Frogs and the wiring.

If there is not enough space for Frogs and wiring, the following measures are recommended:

- ✓ Installation of Frogs behind a cavity wall.
- ✓ Provision of a second multiple-unit flush-mounted box. For example, an unused chamber of a multiple-unit flush-mounted box can be used as a socket.
- ✓ Use of larger flush-mounted boxes with an additional side connection space. Use the → *flush-mounted boxes for new construction or renovation projects*, as presented in the next section.
- ✓ Install the Frog behind a lamp or behind a suspended ceiling.

### Reset key

On each Frog, a reset key is printed between the QR code and the frogblue frog on the front. Make a note of the reset keys of all frogs before installing them and keep the reset keys in a safe place. You can use a reset key to reset a Frog if necessary. For information on resetting Frogs, see section → *Resetting a Frog, page 180*.

### 6.2.1 Flush-mounted boxes

**Note**

When selecting the flush-mounted box, make sure that there is sufficient space for the Frog *and* the normal wiring.

**Boxes for flush mounting**

→ *f-tronic GmbH: Flush-mounted box, solid, 2-unit,  
Type: UP20*



→ *f-tronic GmbH: Flush-mounted box, solid, 3-unit,  
Type: UP30*



→ *f-tronic GmbH: Flush-mounted box, solid, 4-unit,  
Type: UP40*



### Boxes for mounting in hollow walls

For installation in hollow walls, we recommend the following combinations of two, three or four boxes, since they offer more space for the Frog and the wiring:

---

→ *f-tronic GmbH: Hollow wall box, solid, 2-unit,  
Type: HW20*



---

→ *f-tronic GmbH: Hollow wall box, solid, 3-unit,  
Type: HW30*



---

→ *f-tronic GmbH: Hollow wall box, solid, 4-unit,  
Type: HW40*



### Flush-mounted boxes for new construction or renovation projects

For new construction or renovation projects, we recommend the following larger-sized flush-mounted boxes for more convenient installation of Frogs:

→ *KAISER GmbH & Co. KG: Electronic box ECON@ Flex*



→ *KAISER GmbH & Co. KG: Electronic box*



### 6.3 Wiring examples

The following examples show how a Frog and the wiring are distributed in the corresponding flush-mounted box. It is often advisable to use larger flush-mounted boxes than the wiring logic would require. This guarantees you greater flexibility so that the frogblue system can be expanded even after the planning phase has been completed.

#### 6.3.1 frogIn3-AC in 2-unit flush-mounted box

The following circuit diagram shows the wiring of a frogIn3-AC is located in a 2-unit flush-mounted box.

In the lower chamber of the 2-unit flush-mounted box, the voltage is connected through.

The frogIn3-AC is located in the chamber of the 2-unit flush-mounted box.

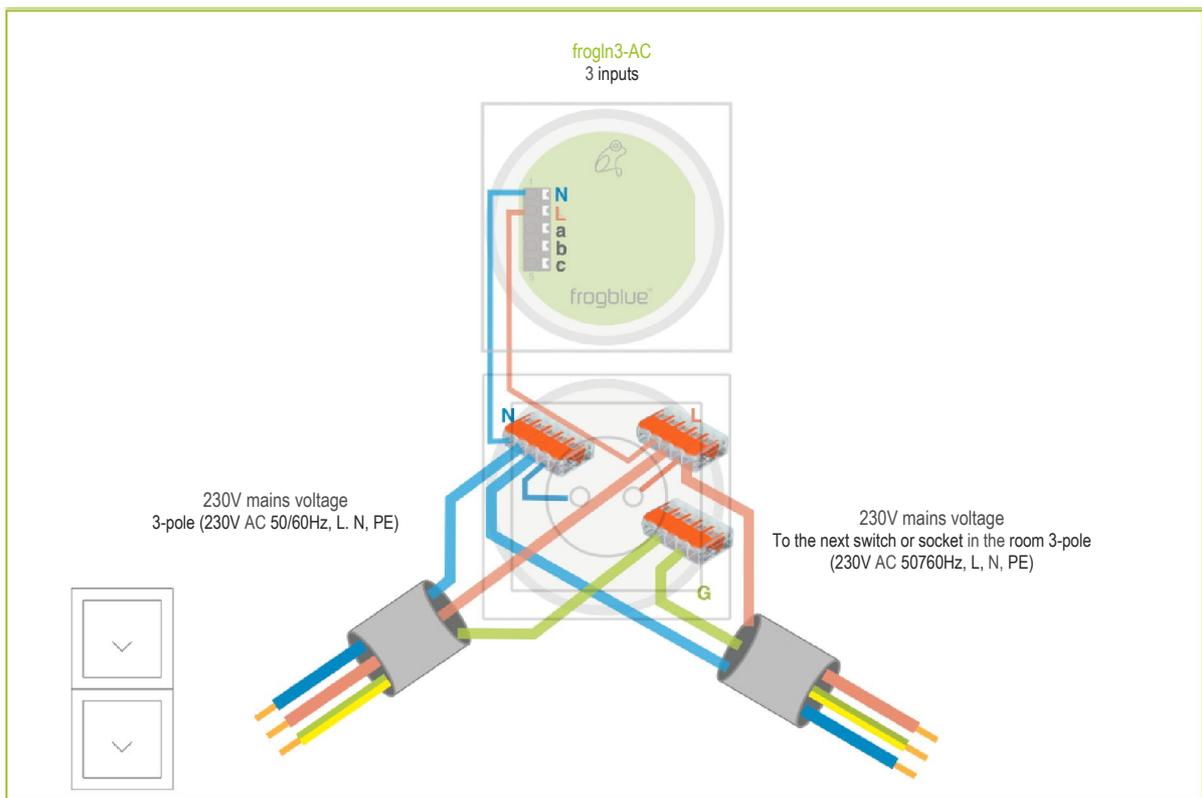


Figure: Wiring of a frogIn3-AC in a 2-unit flush-mounted box.

The following is suitable as a 2-unit flush-mounted box: → *f-tronic GmbH: Flush-mounted box, solid, 2-unit, Type: UP20.*



Figure: f-tronic GmbH: Flush-mounted box solid, 2-unit, type: UP20.

### 6.3.2 frogDim1-3 in 2-unit flush-mounted box

The following circuit diagram shows the wiring of a frogDim1 -3 in a 2-unit flush-mounted box.

In the lower chamber of the 2-unit flush-mounted box, the voltage is connected through.

The frogDim1 -3 is located in the upper chamber of the 2-unit flush-mounted box.

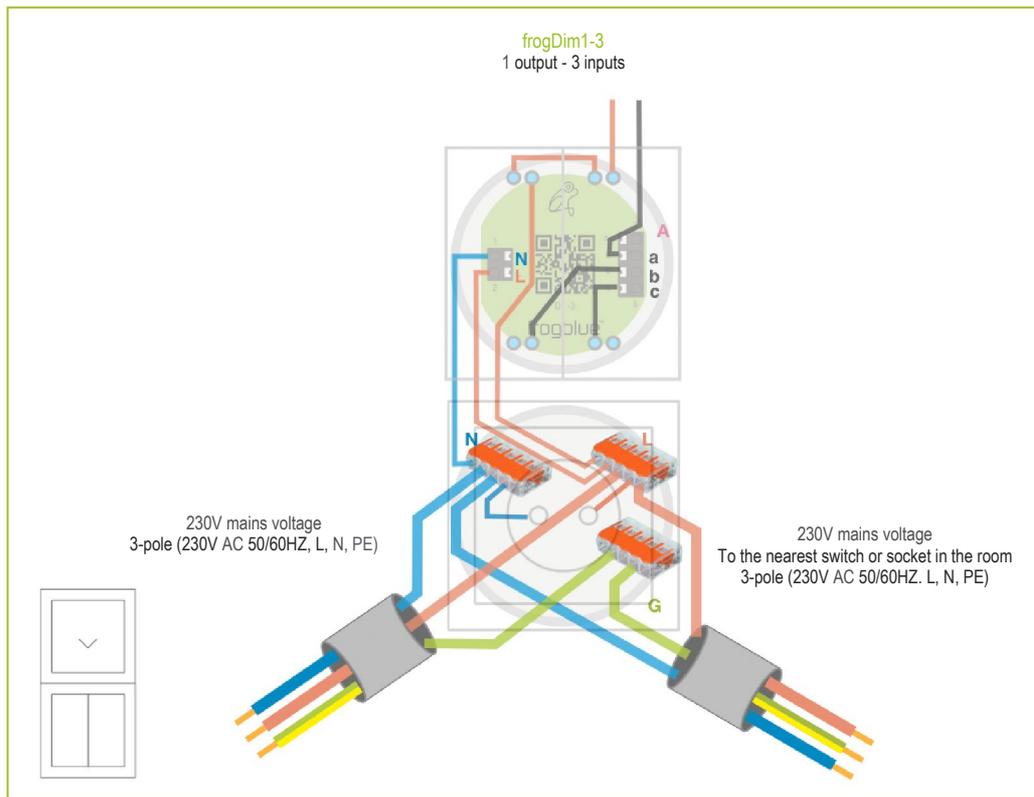


Figure: Wiring of a frogDim1 -3 in a 2-unit flush-mounted box.

The following is suitable as a 2-unit flush-mounted box: → *f-tronic GmbH: Flush-mounted box, solid, 2-unit, Type: UP20.*



Figure: Flush-mounted box solid, 2-unit, type: UP20.

Also a 3-unit flush-mounted box such as the → *f-tronic GmbH: Flush-mounted box solid, 3-unit, type: UP30* could be used to ensure that there is sufficient space for the Frog and the wiring as soon as the connections of the frogDim1-3 are to be wired.

6.3.3 frogDim1-3 with connected lamp

The following circuit diagram shows the wiring of a frogDim1 -3 in a 3-unit flush-mounted box.

In the lower chamber of the 3-unit flush-mounted box, the voltage is connected through.

The frogDim1 -3 is located in the middle chamber of the 3-unit flush-mounted box.

The wiring to the branch circuit is located in the upper chamber of the 3-unit flush-mounted box.

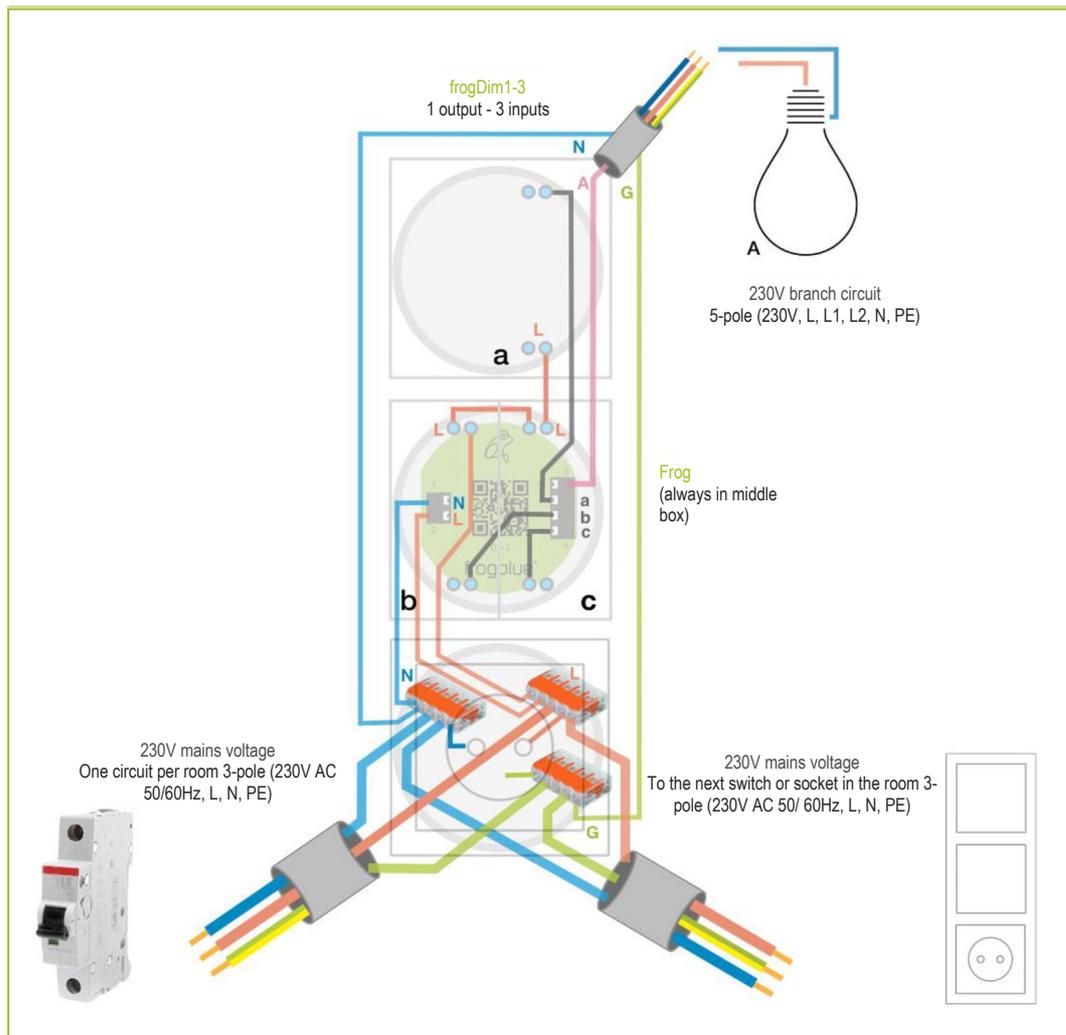


Figure: Wiring of a frogDim1 -3 in a 3-unit flush-mounted box.

The following is suitable as a 3-unit flush-mounted box: → *f-tronic GmbH: Flush-mounted box, solid, 3-unit, Type: UP30.*



Figure: Flush-mounted box solid, 3-unit, type: UP30.

6.3.4 frogDim2-2 with two connected lamps

The following circuit diagram shows the wiring of a frogDim2 -2 in a 3-unit flush-mounted box.

In the lower chamber of the 3-unit flush-mounted box, the voltage is connected through.

The frogDim2 -2 is located in the middle chamber of the 3-unit flush-mounted box.

The wiring to the branch circuit is located in the upper chamber of the 3-unit flush-mounted box.

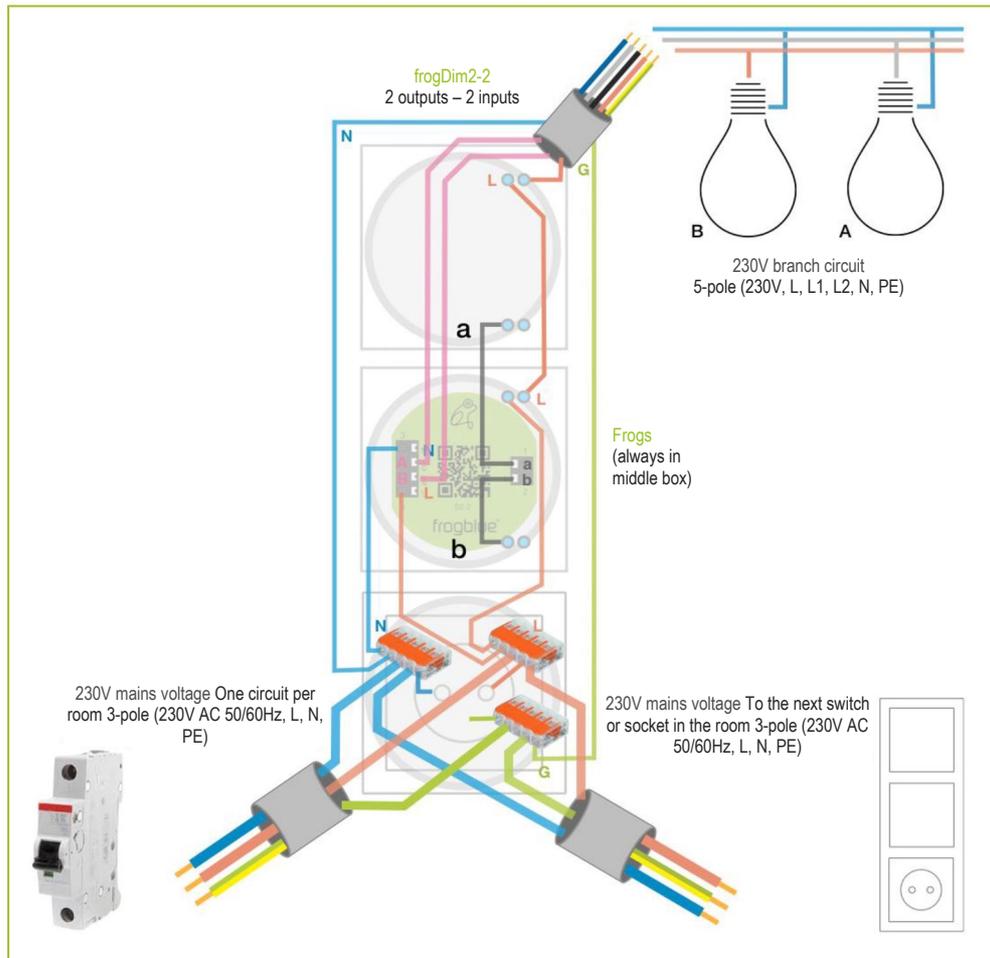


Figure: Wiring of a frogDim2 -2 in a 3-unit flush-mounted box.

In addition to the 3-unit flush-mounted box such as the → *f-tronic GmbH: Flush-mounted box solid, 3-unit, type: UP30*, a 4-unit flush-mounted box such as the → *f-tronic GmbH: Flush-mounted box solid, 4-unit, type: UP40* would also be suitable so as to ensure that there is sufficient space for the Frog and the cabling.



Figure: Flush-mounted box solid, 4-unit, type: UP40.

### 6.3.5 Bedroom scenario

The following diagram shows how different electronic devices in a bedroom can be controlled with Frogs.

When planning, make sure that there is sufficient space for the Frogs and for the wiring by means of deeper flush-mounted boxes or flush-mounted boxes with an additional lateral connection space.

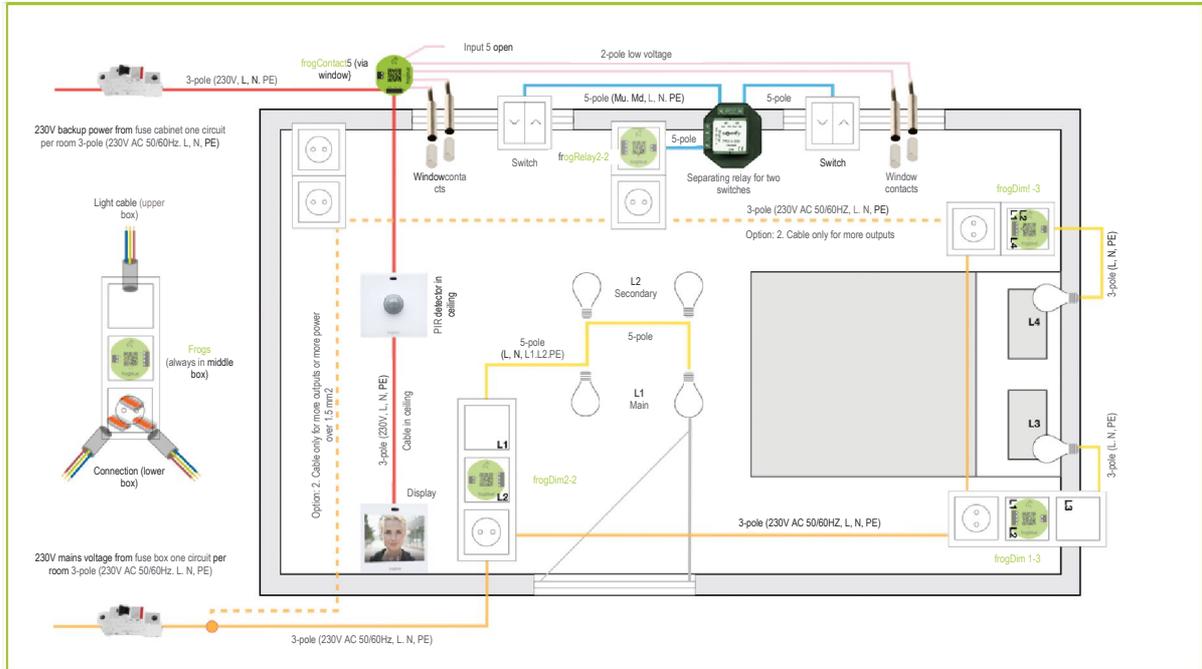


Figure: Wiring for one bedroom to control several lamps and electronic devices.

The following circuits are shown:

- **yellow/orange:** Basic circuit.
- **blue:** Window circuit.
- **red:** Emergency power, can be connected to the yellow/orange circuit (optional).

If the basic circuit fails, the emergency power supplies the display so that the frogblue system can still be operated. In addition, the frogContact5 and the frogMotion remain supplied with power, so the functions of the motion detector and alarm system remain guaranteed.

6.3.6 Bathroom scenario

The following diagram shows how different electronic devices in a bathroom can be controlled with Frogs.

When planning, make sure that there is sufficient space for the Frogs and for the wiring by means of deeper flush-mounted boxes or flush-mounted boxes with an additional lateral connection space.

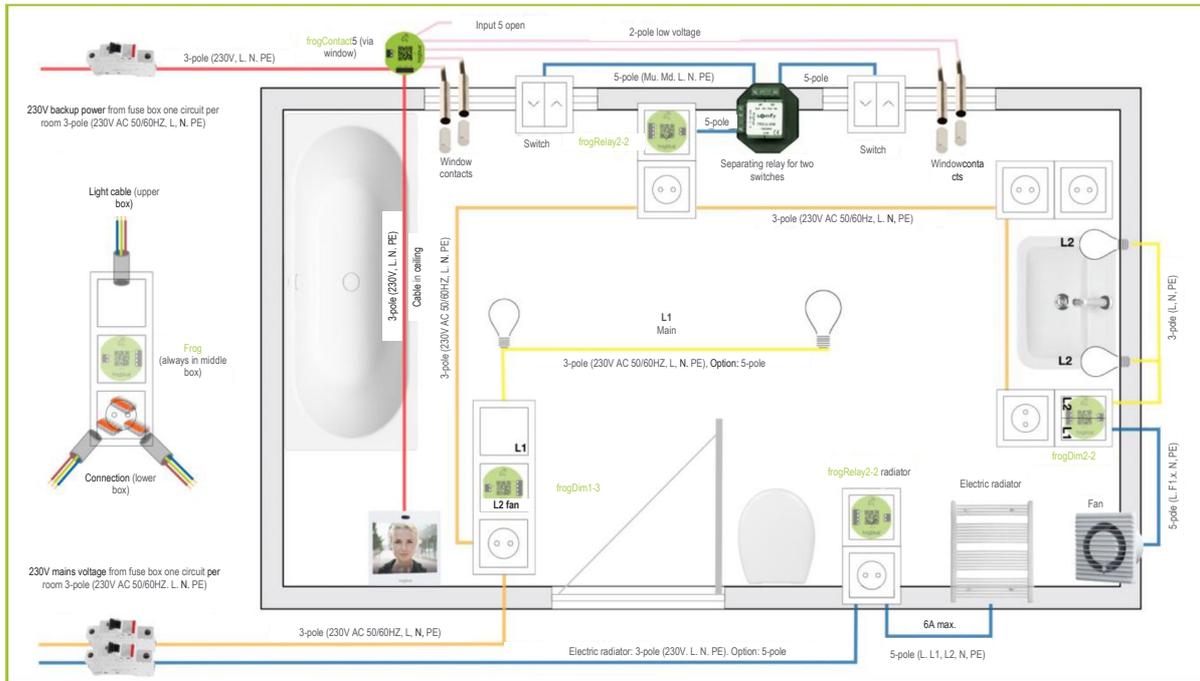


Figure: Wiring for a bathroom to control several lamps and electronic devices.

The following circuits are shown:

- **yellow/orange:** Basic circuit.
- **blue:** Window and heating circuit.
- **red:** Emergency power, can be connected to the yellow/orange circuit (optional).

If the basic circuit fails, the emergency power supplies the display so that the frogblue system can still be operated. In addition, the frogContact5 remains supplied with power, so the function of the alarm system remains guaranteed.

## 6.4 Range of Frogs

The Frogs communicate with each other via Bluetooth. The typical free field range for Frogs is about 30 metres.

The range essentially depends on which building materials have been used and which sources of interference are present. Typical sources of interference for Bluetooth are microwaves, LCD displays or wireless loudspeakers. In particular, devices operating within a bandwidth between 2.4 GHz and 5 GHz are often responsible for a disturbed Bluetooth connection.

In order to ensure a secure Bluetooth connection between the Frogs, the recommendation is to measure the Bluetooth field strength via the tablet and, if necessary, connect a Frog as a repeater in between. The field strength is displayed in the **frogblueProject** app.



Figure: An additional Frog is connected between the living room, bedroom and children's bedroom (diagram).

A Frog which is used as repeater may only be connected to the power in the flush-mounted box and added to the project via the **frogblueProject** app. The inputs and outputs do not have to be configured or connected.

Any Frog can be used as a repeater.

### Note

Messages are automatically forwarded or redirected if the range is insufficient.

## 7 Installing and updating the frogblueProject app

You can install and use the **frogblueProject** app on the operating systems iOS, Android and Windows (full version) .

You can download the **frogblueProject** app from the Google Play Store and the Apple App Store.

You can download the Windows version of **frogblueProject** from the frogblue website.

→ [frogblue.com](http://frogblue.com).

### Note

The Android and iOS versions of the **frogblueProject** app run exclusively on tablets.  
The Android and iOS versions of the **frogblueProject** app can be found in the Google Play Store and in the Apple App Store via tablet only.

### Note

If a new version of the **frogware** is available, the latest version of the **frogware** is automatically downloaded along with the **frogblue Project** app.

**Android:** Is stored in the internal memory in the **Documents** folder.

**iOS:** stored in the internal memory.

**Windows:** stored in the **/User/Username/Documents/frogblue** folder.

For information on updating the **frogware** of Frogs and frogKeys, see the section

→ *Updating frogware, page 32.*



Search the Google Play Store for **frogblueProject**.

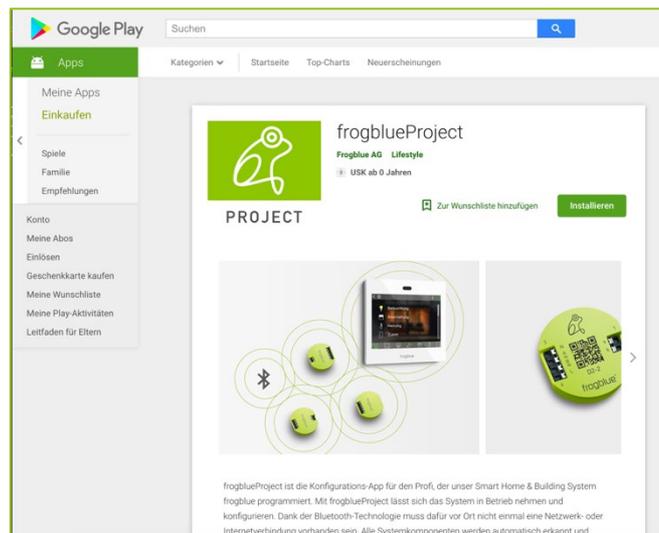


Figure: **frogblueProject** app in the Google Play Store.

In the Google Play Store, tap **Install** to install the **frogblueProject** app.



Search the Apple App Store for **frogblueProject**.

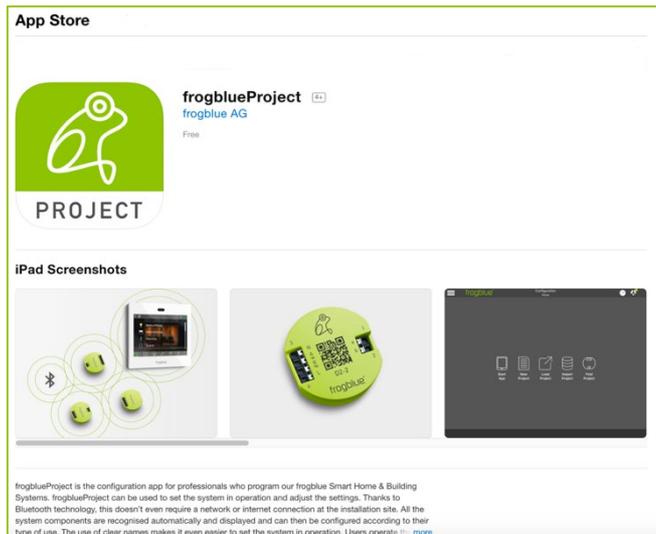


Figure: **frogblueProject** app in the Apple App Store.

In the Apple App Store, tap **Install** to install the **frogblueProject** app.

### Start frogblueProject

#### Note

Make sure Bluetooth (version 4.2 or higher) is enabled on your tablet.

Android: **Settings** - > **Connections** -> **Bluetooth**

iOS: **Settings** - > **Bluetooth**

To start the **frogblueProject** app, tap the following button on your tablet after the installation 

When starting the **frogblueProject** app, allow access to the location of the device. This is required by Bluetooth.

The **Start screen** is displayed.

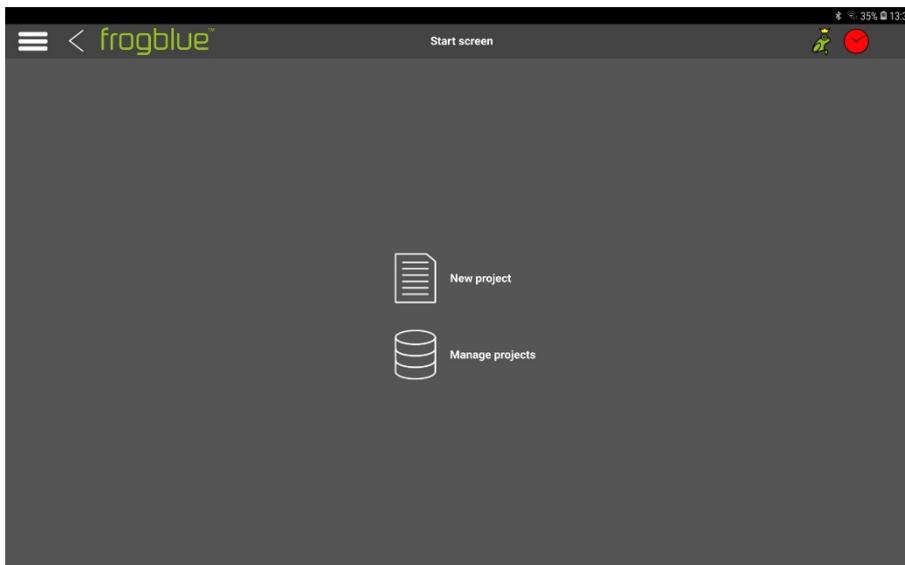


Figure: Start screen of the **frogblueProject** app.

## 7.1 Installing the frogblueProject app in Windows

The **frogblueProject** app can be used on Windows 7/8/10 64bit. A USB2.0 interface and a frogLink are required.

For information on frogLinks, see section → *Configuring frogLinks, page 150*.

1. Download the **frogblueProject** app from the frogblue website → *frogblue.com*
2. Unzip the zip file.
3. Double-click the unzipped .exe file.
4. Follow the installation instructions on the screen.

During installation, a dialog box for installing device software is displayed.



Figure: Dialog box for installing the device software.

5. Click **Install**.

The **frogblueProject** app is installed.

During installation, the **frogware** is stored in the folder **User/Username/Documents/frogblue**.

To be able to use the **frogblueProject** app in Windows, you need a frogLink for which editing mode **frogblue mode** is configured. A frogLink is a Bluetooth LE USB stick for the configuration and control of the frogblue components with Windows computers.

For information on how to configure a frogLink, see section → *Configuring frogLinks, page 150*.

## 7.2 Updating the frogblueProject app

New versions of the **frogblueProject** app are available for download in the Google Play Store or Apple App Store.

A new version of the **frogware** App can also be made available with a new version of the **frogblueProject** app. When the **frogblueProject** app is downloaded, the **frogware** is automatically downloaded along with it.



### Attention!

While the **frogblueProject** app can be updated automatically, the **frogware** has to be updated manually on the Frogs. On this point, see the next section → *Updating frogware, page 32*.

If the **frogware** is not updated, new functions provided by the updated **frogblueProject** app cannot be used.



Depending on the settings in the Google Play Store the **frogblueProject** app will be updated automatically.

### How to check on an Android device whether apps are updated automatically:

1. Open the **Play Store** app.
2. Tap the **Menu** icon, then tap **Settings**.
3. Tap **Automatic app updates**
4. Check the option **Do not update app automatically**.



Depending on the settings in the Apple App Store, the **frogblueProject** app will be updated automatically.

### How to check on an iOS device whether apps are updated automatically:

1. Open the Apple App Store.
2. Tap **App Store** and then **Preferences**.
3. Check the **Automatic Updates** option.

## 7.3 Updating frogware

In the **Device manager** you can update the **frogware** on the following devices:

- Frogs, see → *Updating frogware for Frogs on page 32.*
- frogKeys, see → *Updating frogware for frogKeys and frogContact5-BAT on page 35.*

For information on updating the **frogware** of frogDisplays, see section → *Updating the frogware for frogDisplay on page 35.*

If the **frogblueProject** app is updated from the Google Play Store or the Apple App Store, the latest version of the **frogware** (for Frogs and frogKeys) for Android devices is stored in the **Documents** folder. For iOS devices the **frogware** is stored in the internal memory.

### 7.3.1 Updating frogware for Frogs

For devices you can update the **frogware** of all frogs, such as frogDim1-3, frogDim2-2 frogEntry2-3 or frogContact5-BAT.

1. Tap **Menu** ☰
2. Tap **Device manager**.

The **Device manager** screen is displayed.



Figure: **Device manager** screen.

3. In the **Device manager**, tap the Frogs for which you wish to perform the **frogware** update.



Figure: **Device manager** screen with two selected Frogs.

By activating **All** you can select all Frogs and frogKeys at the same time.

4. Tap **frogware**

The **frogware upload** dialog box is displayed.

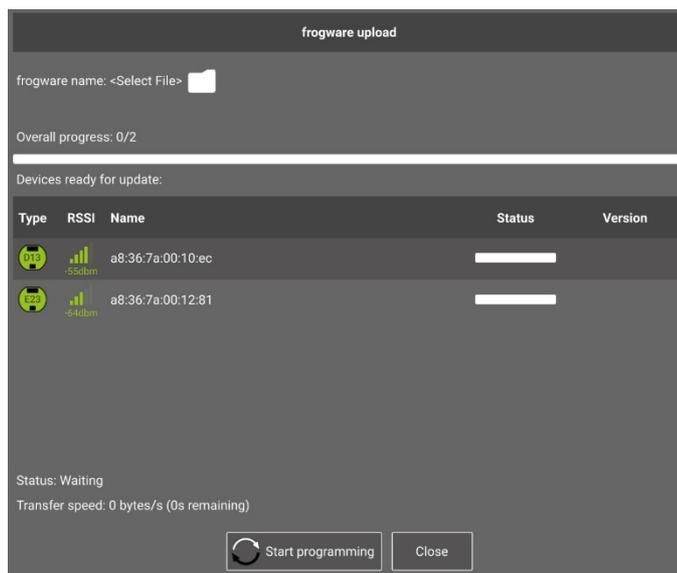


Figure: **frogware upload** dialog box.

5. Tap **frogware name: <Select File>**.

The **Select frogware** dialog box is displayed.

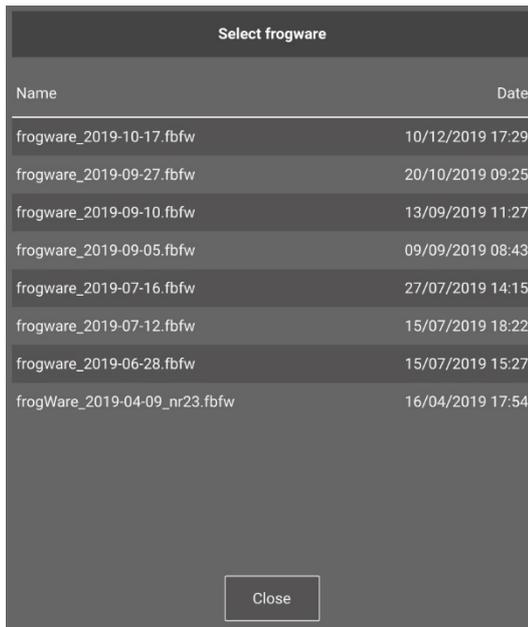


Figure: **Select frogware** dialog box.

6. Tap the **frogware** you wish to use for the update.

The selected **frogware** is displayed in the **frogware upload** dialog box.

7. Tap **Start programming** 

The **frogware** is installed.

In the **frogware** upload dialog box you can see the progress of the upload and the installation.

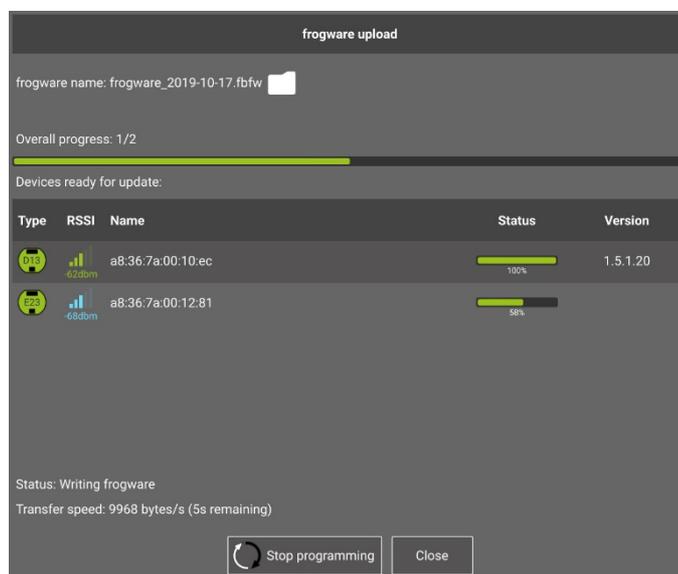


Figure: The **frogware** is successfully updated on the Frogs.

After finishing the update, check to make sure all Frogs have been updated. If necessary, repeat the upload of the **frogware**.

After a successful update, tap **Close** to close the **frogware upload** dialog box.

### 7.3.2 Updating frogware for frogKeys and frogContact5-BAT

The **frogware** for a frogKey and a frogContact5-BAT is updated in the same way as the **frogware** for a Frog.

#### Note

To ensure the longest possible battery life the frogKey and the frogContact5-BAT use energy saving functions. For this reason, the frogKey and the frogContact5-BAT must be set to configuration mode to update the **frogware**.

1. To activate the configuration mode for the frogKey for 60 seconds, click the frogKey four times quickly, holding the last click until the middle LED flashes.

The frogKey flashes green when it is assigned to a project.



Figure: Green flashing frogKey is assigned to a project.

1. To activate the configuration mode for the frogContact5-BAT for 60 seconds, click a button connected to the frogContact5-BAT **with three short clicks and one long click** (within 2 seconds).
2. Update the **frogware** in the same way as for a Frog.  
For information on updating the **frogware** of a Frog, see → section *Updating frogware for Frogs, page 32*.

### 7.3.3 Updating the frogware for frogDisplay

The frogDisplay requires a different **frogware** from Frogs and frogKeys.

You can download the **frogware** for the frogDisplay from the frogblue website → [frogblue.com](http://frogblue.com)

For information on how to configure the frogDisplay, see chapter → *Configuring frogDisplay, page 159*.

The **frogware** for the frogDisplay is transferred via a WLAN to the frogDisplay.

The first step you have to carry out is to configure the WLAN on the frogDisplay. Only then does the actual update of the **frogware** for the frogDisplay take place.

1. Connect the frogDisplay to the power circuit.

The frogDisplay starts and then displays the start page.

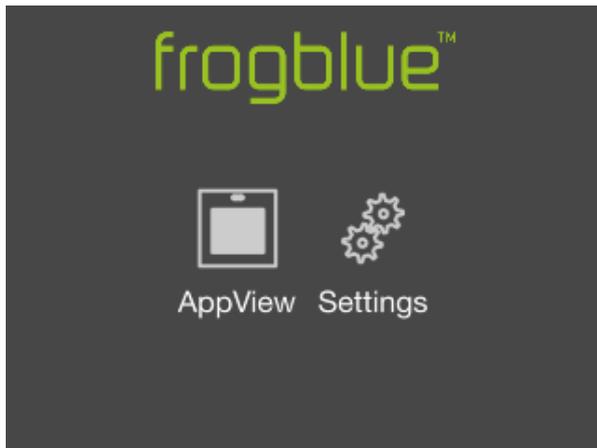


Figure: Start page of the frogDisplay.

2. Tap **Settings**.

#### Note

Tap **Language** to change the language of the frogDisplay user interface.

3. Tap **WLAN**.
4. Activate the slider for WLAN.  
All wireless LANs within range are displayed.
5. Tap the WLAN you wish to use.
6. Tap **Password** to enter the password of the wireless LAN.
7. Enter the password for the wireless LAN.
8. Tap **OK**.
9. Tap **Connect**.

If the connection is successful, the WLAN name will turn green.

Via the configured WLAN the frogware can now be transferred to the frogDisplay.  
In the next step, the IP address must be determined which is to be used to access the frogDisplay.

1. In the **Settings**, tap **WLAN**.
2. Tap the settings of the active wireless LAN.
3. Tap **IPv4 address**.

The **IPv4 address** screen displays the IP address.

4. Make a note of the IP address, for example 192.168.2.116.

Using the set IP address, you can access the frogDisplay via a browser.  
You can then go on to upload and update the frogware of the frogDisplay.

1. Start a browser on a PC which can be accessed in the same wireless LAN.
2. Enter the IP address of the frogDisplay in the address line of the browser.

A dialog box for entering a user name and a password is displayed.

### Note

The first time you update the frogware for the frogDisplay, the access data is as follows:

Username: **frogblue**

Password: **greenfrog**

For further updates, the access data is as follows:

Username: **frogblue**

Password: *<Project password>*

The project password is the same as the password of the project uploaded to the frogDisplay.

Information on uploading a project to a frogDisplay can be found in the section

→ *Loading a project on the frogDisplay, page 159.*

3. Enter the user name and password.

A warning regarding the security of the certificate is displayed.

4. Ignore the warning for the certificate and load the website.
5. Re-enter the user name and password.

The **Overview** page appears.

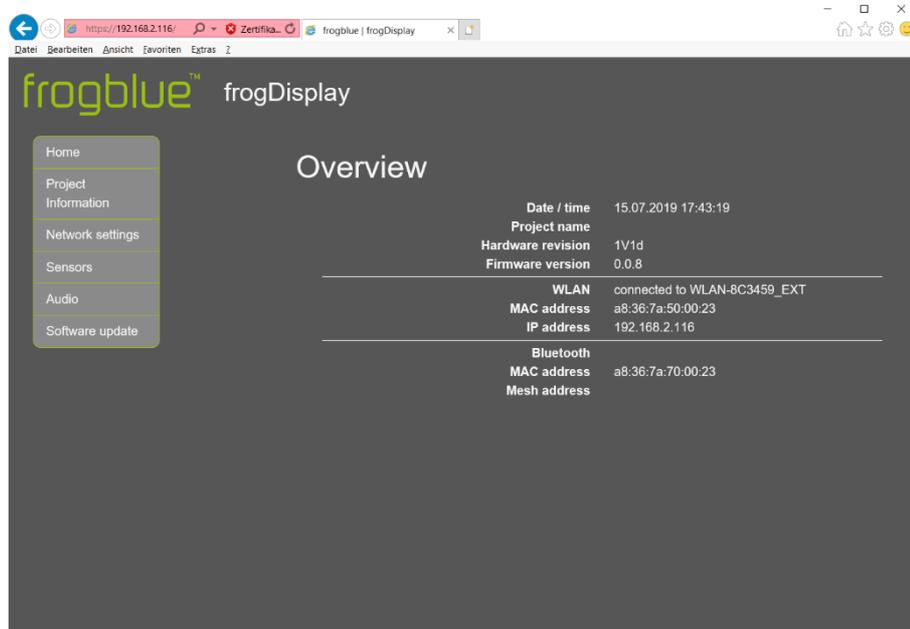


Figure: **Overview** page.

6. Click **Software update**.

The **Software update** page appears.

7. Click **Browse ...**

A dialog box for selecting a file is displayed.

8. Select the **frogware** for the frogDisplay.

You can recognise the frogware for the frogDisplay by the file extension **.frogos**.

9. Click **Upload**.

The frogware is loaded onto the frogDisplay and updated there.  
Then the frogDisplay must be restarted.

10. Click **Reboot**.

The frogDisplay will be restarted. The start page is displayed again in the frogDisplay.

Now you can configure and operate the frogDisplay.

## 8 frogblueProject – Overview of icons and colour codes

This chapter provides an overview of the functions of the icons and the colour codes used for the configuration screen.

The devices of the frogblue system are configured in the configuration screen.

In addition to the **title bar**, the screen is divided into three areas from left to right:

- **Device list:** This lists all devices such as Frogs or frogKeys that have been added to the project.
- **Display area:** Here an overview is provided of a selected device. In the display area the configuration of the device can be saved, and switches can be configured.
- **Configuration area:** Here the inputs and outputs of the device can be configured.



Figure: Configuration screen.

In the following sections, the icons are introduced along with the colours and colour codes for the individual areas.

## 8.1 Title bar

	<b>Menu</b>	Access to all functions.
	<b>Backup status</b>	Display the current backup status.
	<b>Time server configuration</b>	Configuration of the Time Frog.
	<b>Creating a backup</b>	Save the configuration in a Frog or file. → <i>page 181</i>

### Colours and colour codes in the title bar

	<b>Time server configuration</b>	white	Status OK.
		red flashing	At least one Frog has the wrong time.
		blue flashing	The Time Frog just sent a message.
		white flashing	An error has occurred.
	<b>Backup status</b>	red	No project backup was saved, or the configuration of a Frog was changed, and no project backup was saved in the frogs.
		Green	The project backup matches the configuration of the Frogs. The system is up to date.
		with crown	Project password and device key match the last project backup.
		without crown	Project password and device key do not match the last project backup.

## 8.2 Device list

	<b>Search for inputs</b>	Displays the nearest Frog where an input signal is registered.	
	<b>Show room</b>	Displays the room of the currently selected Frog.	
	<b>Search for Frogs/rooms</b>	Search for Frogs or rooms using a keyword.	
	<b>Add Frog</b>	Add Frogs and rooms to a project.	→ <i>page 100</i>
	<b>Edit</b>	Edit mode for adding rooms.	→ <i>page 106</i>
	<b>Sort Frogs</b>	Sorting of frogs according to different criteria.	
	<b>Select Frog</b>	Selection of a Frog to display the details in the display area and configuration area.	→ <i>page 105</i>

### Colours and colour codes in the device list

	<b>Frogs</b>	Green	Standard
		Frog with clock symbol	Time Frog
		blue	Master
		white	Slave
		orange	Slave with old configuration.
	<b>Signal strength</b>	green	Within direct range the tablet.
		orange	In mesh range
		red	Unavailable.
		blue	Connected
		white	Connection is being established.

## 8.3 Display area

	<b>Time Frog</b>	Frog with clock (displayed on the bottom right of the Frog.)	
	<b>Room detection</b>	Activating room detection.	→ <i>page 143</i>
	<b>Back up configuration</b>	Load configuration onto Frog.	→ <i>page 144</i>
<b>Connection</b>		Establishing a fast Bluetooth connection to a Frog.	→ <i>page 49</i>
	<b>Frog view</b>	View of the configuration of a Frog (standard view).	→ <i>page 137</i>
	<b>Advanced device settings</b>	Definition of power limits for outputs, input debounce time, dimming curves and lamp failure detection.	→ <i>page 137</i>
	<b>Master/slave configuration</b>	Configuration of master and slave frogs.	→ <i>page 141</i>
	<b>Status</b>	Display of how inputs and outputs are assigned	→ <i>page 142</i>
	<b>User view</b>	View to add buttons and switches to a Frog.	→ <i>page 116</i>
	<b>Monitor temperature</b>	Monitoring the temperature in housing of the Frog.	→ <i>page 143</i>
	<b>Power measurement</b>	Measuring power consumption at the outputs.	→ <i>page 143</i>

## 8.4 Configuration area

In the configuration area you can configure the inputs and outputs.

### 8.4.1 Inputs

In a, In b,...	Inputs	Inputs of a Frog, frogKey etc.	→ page 108
	<b>Macro</b>	Assigning a macro to an input.	→ page 167
	<b>System group</b>	Assigning a system group to an input.	→ page 173
	<b>Function</b>	A selection of the following functions for an input:	→ page 109
		<b>Button – light</b>	A button.
		<b>Button – dim</b>	A button for a dimmable lamp.
		<b>Button – on</b>	A button for a lamp which switches on at click.
		<b>Button – off</b>	A button for a lamp which switches off at click.
		<b>Switch</b>	A simple switch.
		<b>Button – shutter – up</b>	A switch for raising a roller shutter.
		<b>Button – shutter – down</b>	A switch for lowering a roller shutter.
		<b>Button – bell</b>	A switch for a doorbell.
		<b>Button – door</b>	A switch to open a door.
		<b>Motion</b>	Option to query a motion sensor.
		<b>Status</b>	Option to query a contact.

Predefined status: **Status night, Status alarm, Status frost, Status window tilted, Status window open, Status window closed, Status door open, Status door locked.**

=	Action	A selection of the following actions for an input:	→ page 110
=	<b>Inactive</b>	The input is not assigned.	
	<b>Status</b>	A status message is sent whenever there is a change in status. If there is no change, the status is repeated cyclically.	
	<b>Rising</b>	Short input signal in the case of an ascending edge. A change of 0 to 1.	
	<b>Falling</b>	Short input signal in the case of a descending edge. A change of 1 to 0.	
	<b>Edge</b>	Short input signal in the case of an ascending and falling edge.	
	<b>Click</b>	A short input signal < 250 ms (the value can be changed in the settings).	
	<b>Double click</b>	Two input signals in short succession.	
	<b>Triple click</b>	Three input signals in short succession.	
	<b>Level</b>	Levels 0 and 1 are available. The signal is triggered when for longer than 250 ms (default) level 1 is present, i.e. the switch is closed. A level dead time increases this 250 ms by the dead time.	
	<b>Long</b>	The signal is triggered when the level (set dead time) has elapsed and the button is released (long dead time).	
	<b>Click level</b>	The signal is triggered if, after a click, the signal is present for longer than 250 ms or if the button is held down again after a click.	
	<b>Click long</b>	The signal is triggered when the button is held again after a click and then released.	
	<b>Double click level</b>	The signal is triggered if the signal is present for longer than 250ms after a double click, or if the button is held down again after a double click.	
	<b>Double-click long</b>	The signal is triggered when the button is held again after a double click and then released.	

<b>Enter message</b>		Entry field to define messages.	→ <i>page 109</i>
	<b>Add messages</b>	Add further messages to an input.	→ <i>page 118</i>
	<b>Send message</b>	Send message immediately.	→ <i>page 109</i>
	<b>Range</b>	Range of the message in the frogblue system.	→ <i>page 136</i>
	<b>Gate/Time editor</b>	Gate/Time editor to define logic functions.	→ <i>page 122</i>
	<b>Minimal on</b>	Minimal on time. Time adjustable from 1/10s to 63h.	→ <i>page 124</i>
	<b>Dim</b>	Values for dimming; up/down activate/deactivate; brightness pre-settings; dimming speed.	→ <i>page 125</i>
	<b>Input matrix</b>	Logical linking of inputs.	→ <i>page 126</i>
	<b>Dead time</b>	Dead time for <b>Level</b> and <b>Long</b> actions.	→ <i>page 127</i>
	<b>Rolling messages</b>	Sending the next message with the same action.	→ <i>page 127</i>
	<b>Shutter</b>	Setting the shading position and slat position for roller shutters.	→ <i>page 132</i>
	<b>Status</b>	Definition of a status.	→ <i>page 128</i>

### 8.4.2 Outputs

<b>Out A, Out B</b>	<b>Outputs</b>	Outputs of a Frog.	→ <i>page 111</i>
	<b>Macro</b>	Assigning a macro to an output.	→ <i>page 167</i>
	<b>System group</b>	Assigning a system group to an output.	→ <i>page 173</i>
	<b>Function</b>	A selection of the following connections for an input:	→ <i>page 112</i>
	<b>Light</b>	A switchable light.	
	<b>Dimmable light</b>	A dimmable light.	
	<b>Status light</b>	Shows the state for a status (does not respond to <b>TYPE:Light</b> ).	
	<b>Shutter up</b>	Raise a shading, e.g. a roller shutter	
	<b>Shutter down</b>	Lower a shading, e.g. a roller shutter.	
	<b>Bell</b>	A simple doorbell.	
	<b>Door mediator (on)</b>	Connection specifically for the manufacturer “Mediator”.	
	<b>Door mediator (Open)</b>	Open door for “Mediator”.	

	<b>Door DC (Open)</b>	For a door opener with 12 V DC power supply.
	<b>Door AC (Open)</b>	For a door opener with 12 V AC power supply.
	<b>Action</b>	A selection of the following actions for an input: → <i>page 113</i>
	<b>Toggle</b>	Switch on and off.
	<b>Dim</b>	Dimming from minimum 20% to maximum 100% (default).
	<b>Dim up</b>	Dimmer increase only.
	<b>Dim down</b>	Dimmer decrease only.
	<b>Time</b>	The output is switched at the set time.
	<b>On</b>	Without Gate: The output is on at the set brightness level. With Gate: The output is on when the gate is TRUE. If the gate is FALSE, the output goes off.
	<b>Off</b>	Without Gate: The output is off at the set brightness value. With Gate: The output is off if the gate is TRUE. If the gate is FALSE, the output goes off.
	<b>On-Transparency</b>	Without Gate: The output is on at the set brightness level. With Gate: The output is on when the gate is TRUE. If the gate is FALSE, the output is assigned the state by the incoming messages.
	<b>Off-Transparency</b>	Without Gate: The output is off at the set brightness value. With Gate: The output is off if the gate is TRUE. If the gate is FALSE, the output is assigned the state by the incoming messages.

	<b>Enter message</b>	Entry field to define messages.	→ <i>page 112</i>
	<b>Add messages</b>	Add further messages to an output.	→ <i>page 118</i>
	<b>Other messages</b>	Displays additional entries for a message.	→ <i>page 118</i>
	<b>Detailed view</b>	Displays all configurations of a message.	→ <i>page 112</i>
	<b>Delete message</b>	Delete message and its configuration	
	<b>Send message</b>	Send message immediately.	→ <i>page 112</i>
	<b>Range</b>	Range of the message in the frogblue system.	→ <i>page 136</i>
	<b>Minimal on</b>	Time when the output connected to the input is to be switched off.	→ <i>page 124</i>
	<b>Gate/Time editor</b>	Gate/Time editor to define logic functions	→ <i>page 122</i>
	<b>Dim</b>	Values for dimming.	→ <i>page 125</i>
	<b>Soft-Functions</b>	Duration of dimming.	→ <i>page 131</i>
	<b>Shutter</b>	Setting the travel time and reversal time for roller shutters.	→ <i>page 132</i>

## 9 Quick guides

This chapter contains quick guides to the following topics:

- Add a Frog to a project and assign it to a room.
- Cross, alternate and central on/off for living room, kitchen and dining area.
- Time control for child's bedrooms with dimming.
- Door control with an additional optical signal.

The first two quick guides build on each other.

Here you will get to know the configuration tables which will help you carry out configurations for larger projects.

## 9.1 Adding a Frog to a project and assigning it to a room

The following example shows how you can add a frogDim1-3 to a project and assign it to a room. You also assign a name to the Frog.

The result of the individual steps is summarised in a configuration table.

The device configuration carried out is the first step for the realisation of an alternate and cross-switching as is presented in the quick guide in the next section.

→ *Alternate, cross and central on/off switching, page 56.*

- ✓ A project has already been created or loaded and the Frog is supplied with power.  
For information on how to create projects, see section → *Managing projects, page 86.*

1. Start the **frogblueProject** app and open a new project.

The **Configuration** screen appears.

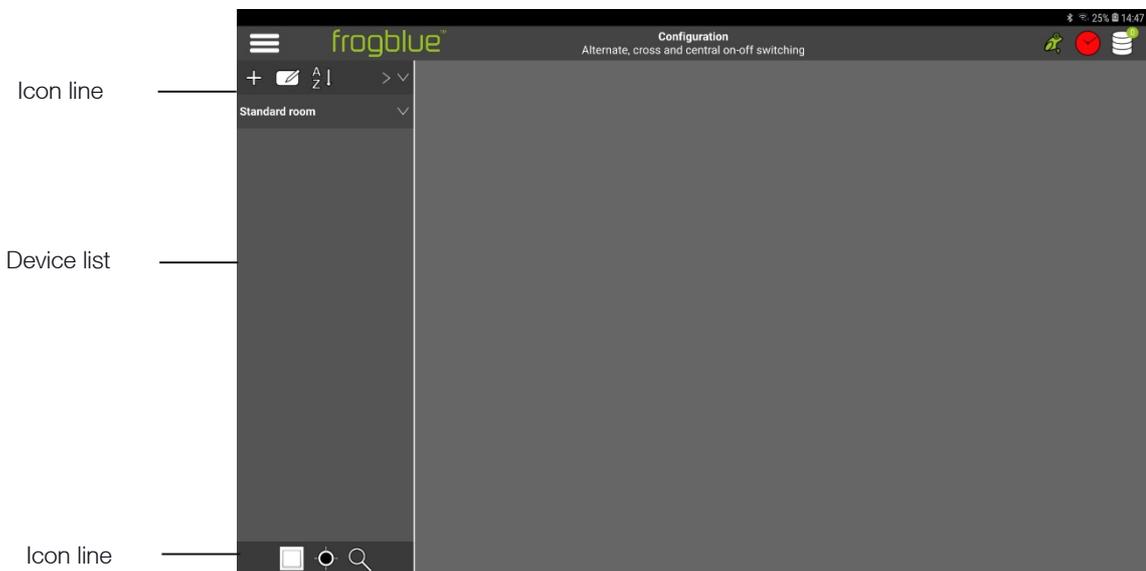


Figure: **Configuration** screen of the **frogblueProject** app with the device list and the two icon lines.

2. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

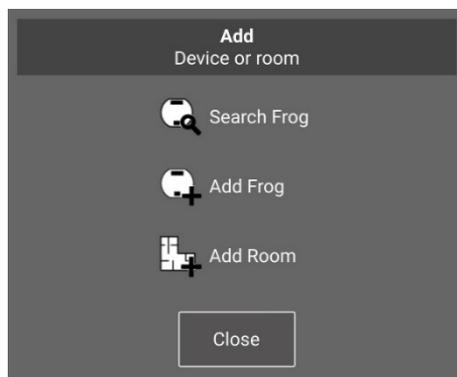


Figure: **Add** dialog box.

3. Tap **Search Frog** 

The **Devices** dialog box is displayed.

All Frogs that are still configured with the factory settings and to which a Bluetooth connection exists are displayed.

You can use the **Filter** to select which devices are to be displayed:

**New Devices:** Displays all frogs that are not assigned to a project or that are still configured with factory settings.

**Other Devices:** Displays all Frogs already assigned to other projects.

**All Devices:** Shows all accessible devices.

In this example, the connected frogDim1-3 is displayed.

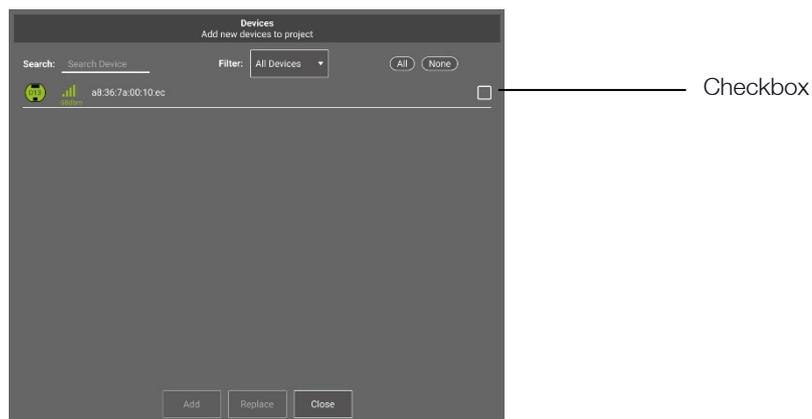


Figure: The **Devices** dialog box shows a connected frogDim1-3.

4. Tap the checkbox for the frogDim1-3.

The activated checkbox gets a check mark.

5. Tap **Add**.
6. Tap **Close**.

The added Frog is displayed in the device list.



Figure: The added Frog is displayed in the device list.

7. Tap the Frog icon in the device list to configure the Frog.

The display area and the configuration area are displayed.

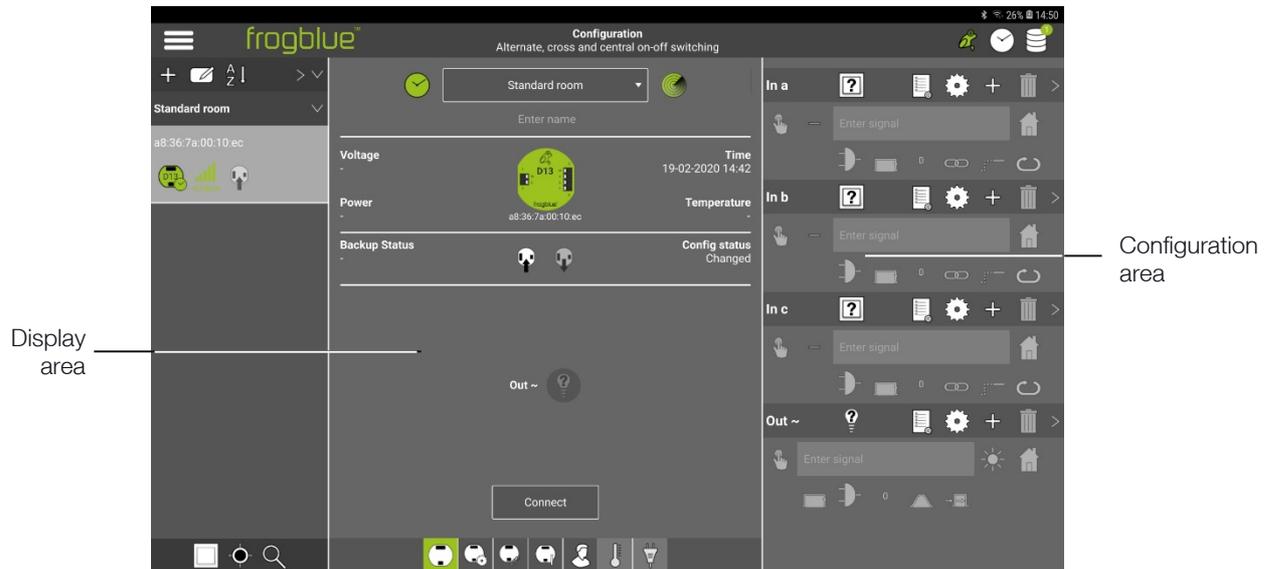


Figure: Display area and configuration area.

Next, the Frog is assigned to a room.

8. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

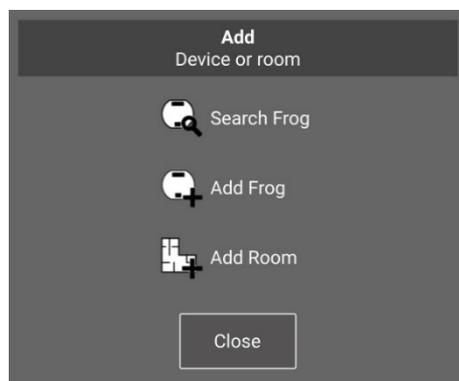


Figure: **Add** dialog box.

9. Tap **Add Room** 

A **New Room** entry is displayed in the device list.



Figure: The **New room** label is displayed in the device list.

10. Tap **Edit**  in the icon line
11. Tap the **New Room** entry.

The keyboard appears.

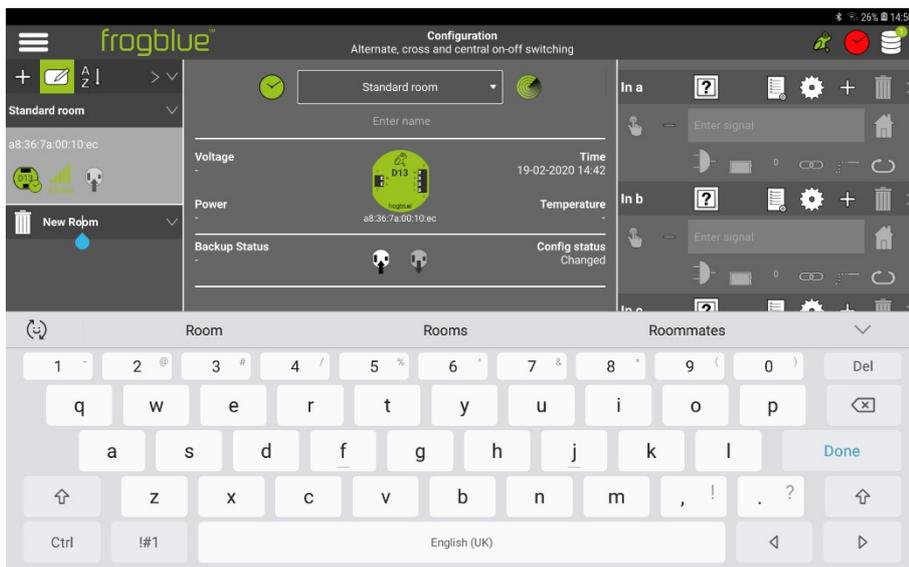


Figure: A keyboard appears to enter a name for a room.

You can assign a new name to the room by replacing the text **New Room**.

12. Use the keyboard to enter a name, such as **Living room**.

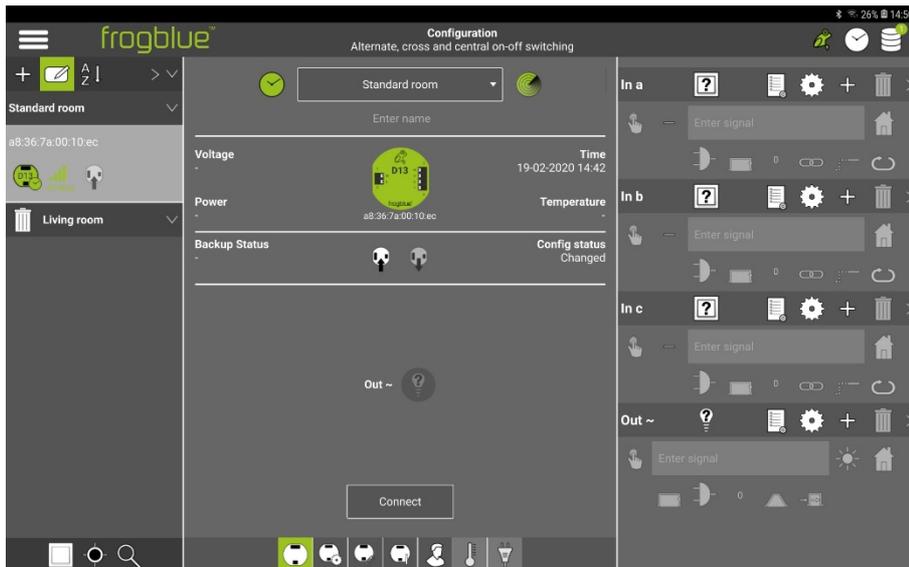


Figure: The Frog and the label **Living room** in the device list.

The Frog and **Living room** entry appear in the device list.

13. Tap **Edit**  in the icon line to exit the Edit mode.

Next, the Frog is assigned to the room **Living room**.

14. In the display area, tap **Standard room** in the selection list.

The entries in the selection list are displayed.



Figure: Selection list to select the room in the display area.

15. Tap **Living room** in the selection list.

The Frog is assigned to the room **Living room**.

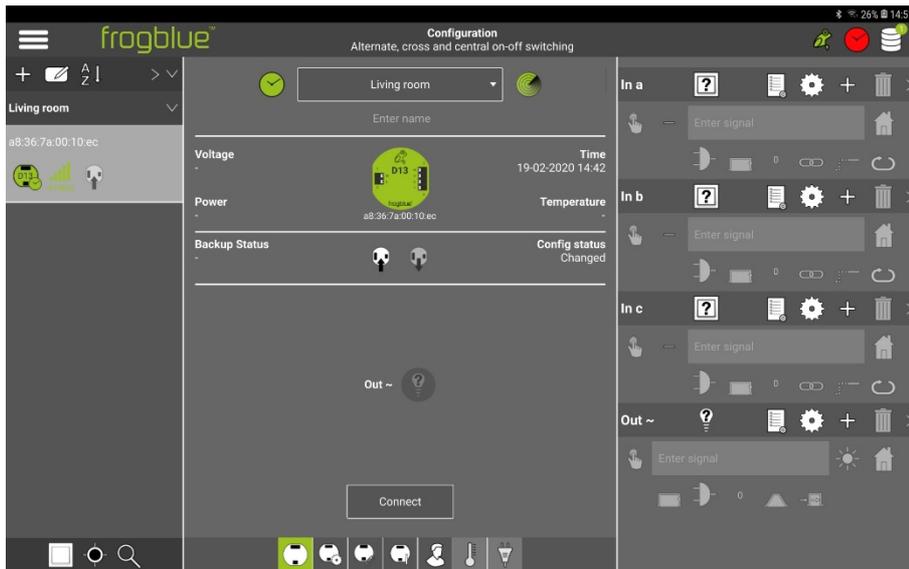


Figure: The Frog is assigned to the room **Living room**.

Next a name is assigned to the Frog.

16. Tap the **Enter name** field in the display area.

The keyboard appears.

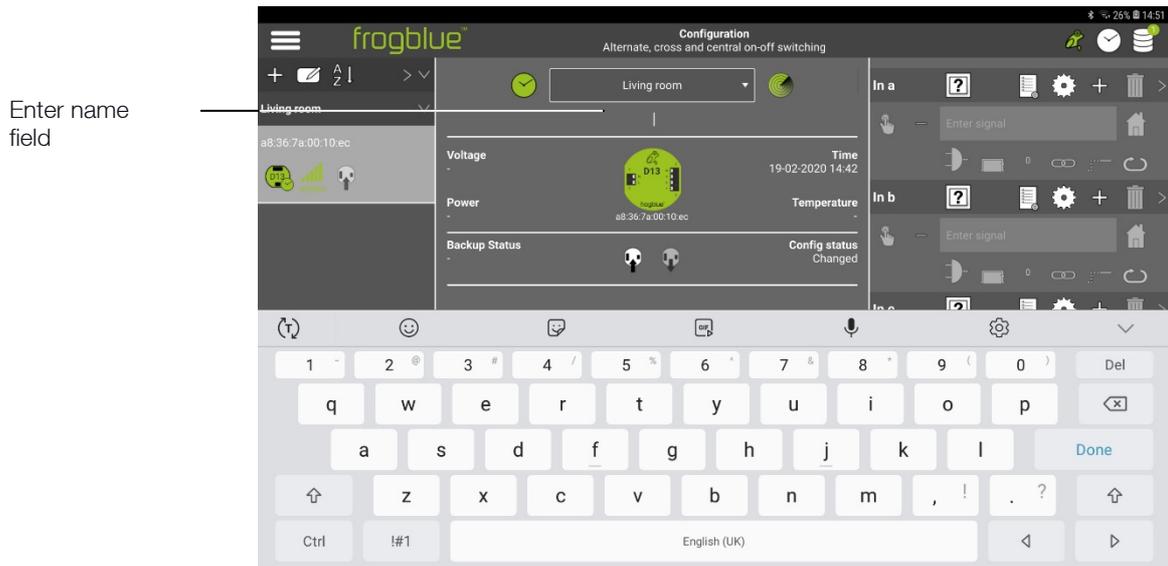


Figure: Keyboard shown for entering a name in the **Enter name** field.

17. Use the keyboard to enter the name for the Frog, for example **Living room**.



Figure: A frogDim1-3 with the name **Living room** is assigned to the room **Living room**.

The result of the device configuration is summarised in a configuration table :

#### frogDim1-3

Name	Living room
Assigned room	Living room

The device configuration is now complete. The configuration is automatically saved in the **frogblueProject** app.

In order for the configuration to take effect on the Frog, it must be loaded onto the Frog.

1. In the Frog view, tap **Connect** in the display area.

A fast Bluetooth connection is established to the Frog.

Once a Bluetooth connection is established, the button is renamed **Disconnect**.

2. Tap **Save configuration** 

The changes are loaded into the corresponding Frog and saved.

## 9.2 Alternate, cross and central on/off switching

The following configurations are presented in this section:

- Alternate switching in the living room and dining area
- Cross-switching for living room, dining area and kitchen
- Central on/off

### 9.2.1 Alternate switching in the living room

For alternate switching in the living room, two frogDim1-3 are configured. One Frog is in the entrance of the living room, the other in the passage to the kitchen.

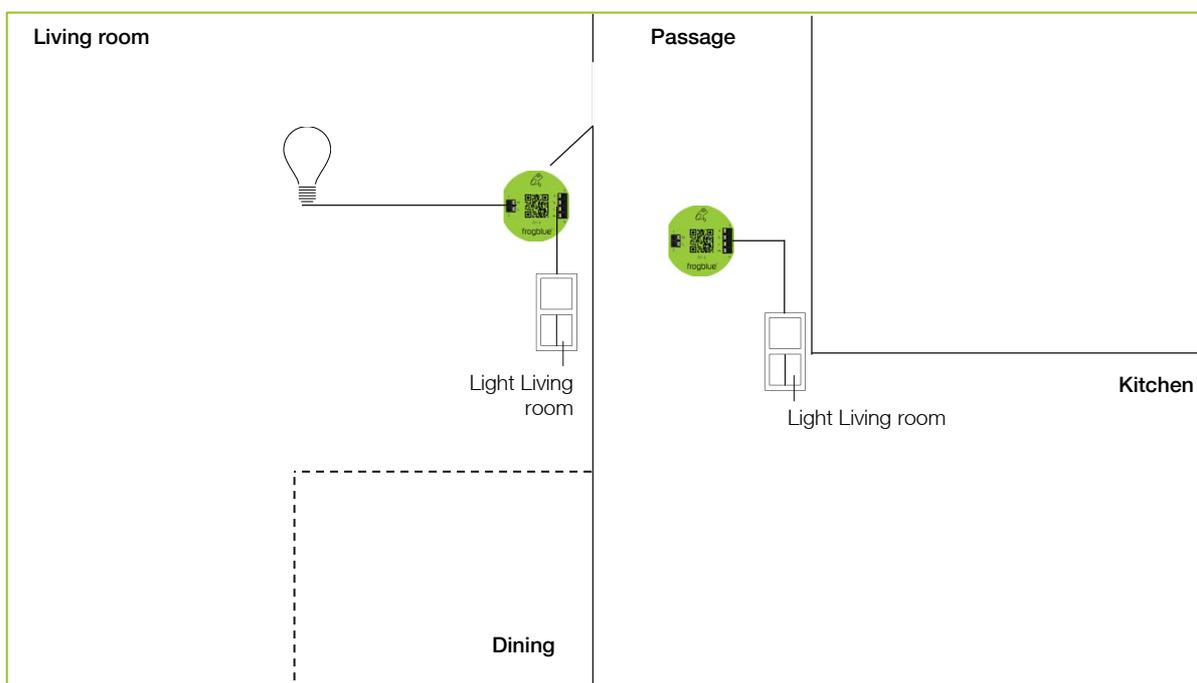


Figure: One frogDim1-3 in the living room, one frogDim1-3 in the passage to the kitchen.

The following device configurations have already been carried out:

#### frogDim1-3

Name	Living room
Assigned room	Living room

#### frogDim1-3

Name	Passage
Assigned room	Living room

Information on adding frogs and assigning frogs to rooms can be found in the quick guide → *Adding a Frog to a project and assigning it to a room, page 49.*

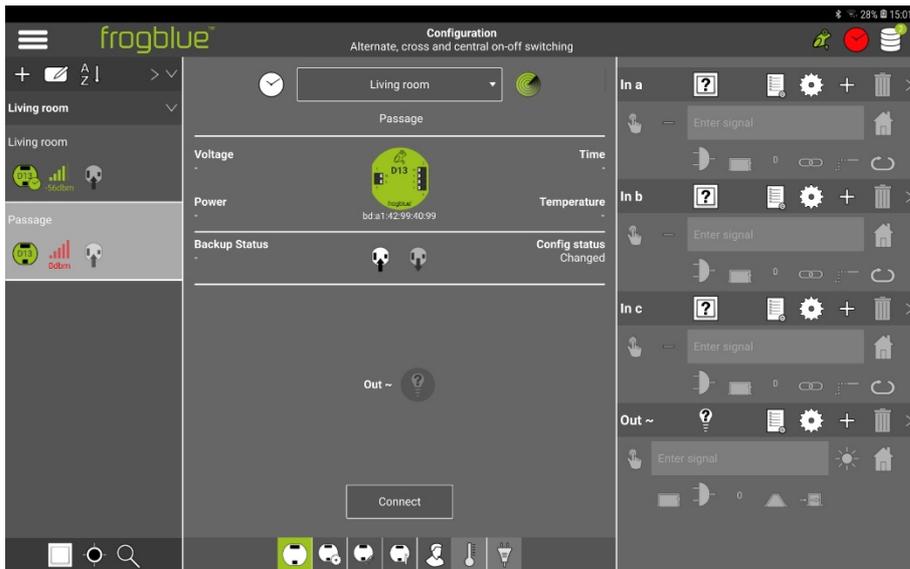


Figure: Two frogDim1-3 in the device list.

First the input **In a** in the Frog **Living room** is connected to the output **Out ~** via the message **Light Living Room**.

1. Tap  in the input **In a**.

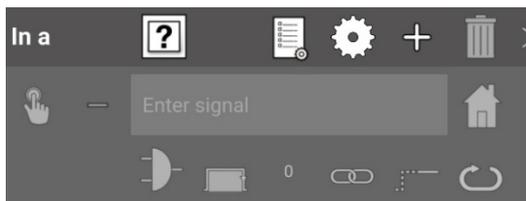


Figure: Input **In a**.

A selection of buttons and functions is displayed.

2. Tap **Button - dim** 

The selected button is displayed in the input **In a**.



Figure: Input **In a** with the button **Button - dim**.

The action **Click**  is automatically selected.

Next, a connection is configured for the **Out ~** output.

3. Tap  in the output **Out ~**.

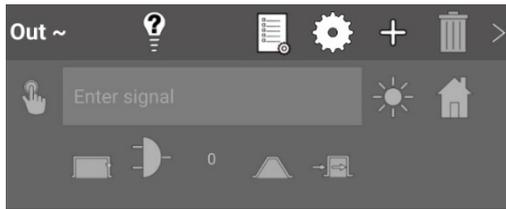


Figure: Output **Out ~**.

A selection of connections and consumers is displayed.

4. Tap **Dimmable light** .



Figure: Output **Out ~** with the connection **Dimmable light**.

The action **Toggle**  is automatically selected.

Now the input **In a** and the output **Out ~** are connected via the message **Light Living Room**.

5. For the **In a** input in **Enter signal**, enter the name **Light Living Room**.



Figure: Input **In a** with the message **Light Living Room**.

6. Also enter the name for the output **Out ~** in **Enter signal** **Light Living Room** on.



Figure: Output **Out ~** with the message **Light Living Room**.

**Note**

You can enter previously defined messages in the **Enter signal** input field more quickly using the autocomplete function.  
 For example, if you enter **Lic**, the message **Light Living Room** will be suggested.

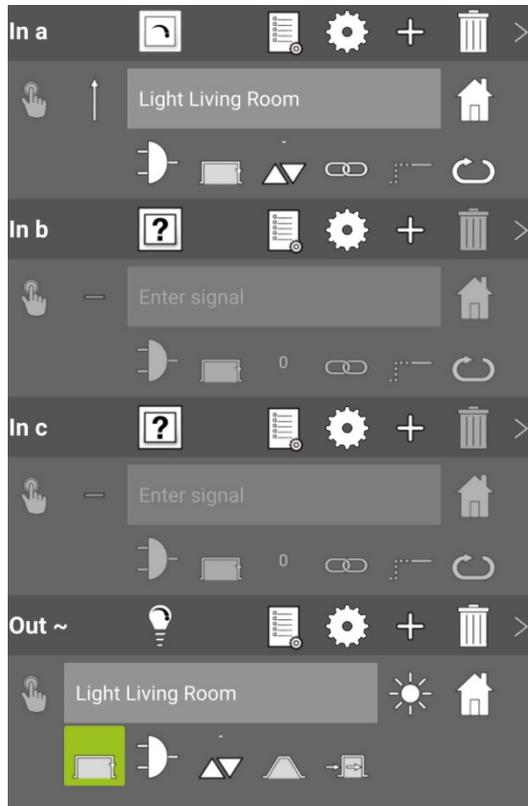


Figure: The message **Light Living Room** for the input **In a** and the output **Out ~**.

The following configuration has now been carried out for the Frog **Living Room** (marked grey in the following table):

<b>frogDim1-3</b>	
Name	Living room
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Living Room
Action	Toggle

7. Load the configuration onto the Frog **Living room**.



Figure: The message **Light Living Room** for the input **In a** and the output **Out ~**.

In order realise alternate switching, the input of the Frog **Passage** is assigned to the same message **Light Living Room** as was previously defined in input **In a** of the Frog **Living room**.

1. To do this, configure the following settings for the Frog **Passage** (marked grey in the following table):

**frogDim1-3**

Name	Passage
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click

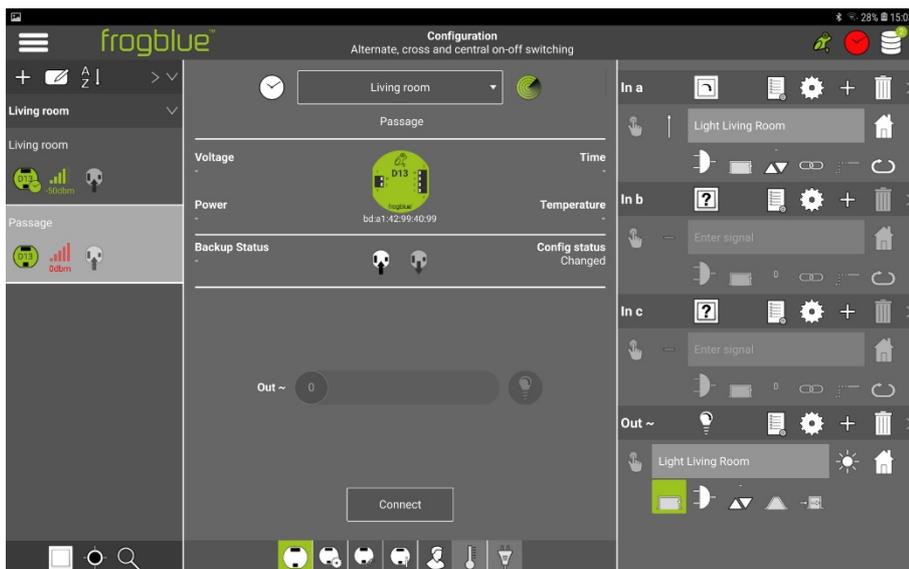


Figure: The message **Light Living Room** in the input **In a** for the Frog **Passage**.

2. Load the configuration onto the Frog **Passage**.

9.2.2 Cross-switching for living room, dining area and kitchen

First, lighting in a dining area is added to the alternative switching. The dining area is in the living room.

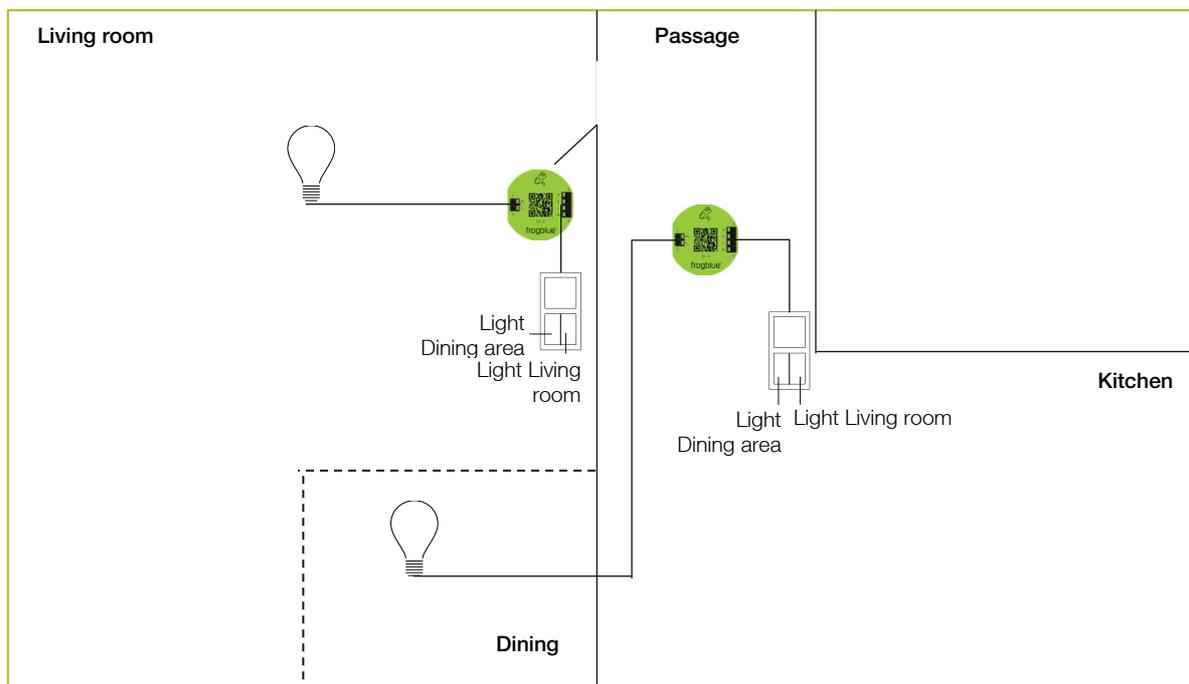


Figure: Additional lighting in the dining area.

The first step is to configure the input **In b** and the output **Out ~** for the Frog **Passage**. To connect the input **In b** with the output **Out ~**, the message **Light Dining Table** is defined.

1. To do this, configure the following settings for the Frog **Passage** (marked grey in the following table):

<b>frogDim1-3</b>	
Name	Passage
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Dining Table
Action	Toggle



Figure: Input **In b** and output **Out ~** with the message **Light Dining Room** for the Frog **Passage**.

To realise alternative switching, the input **In b** of the Frog **Living room** is connected to the input **In b** of the Frog **Passage** via the message **Light Dining Table**.

2. To do this, configure the following settings for the Frog **Living room** (marked grey in the following table):

**frogDim1-3**

Name	Living room
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Living Room
Action	Toggle



Figure: The configured input **In b** for the Frog **Living room**.

3. Load the device configurations onto the Frog **Living room** and onto the Frog **Passage**.

In the next step, additional lighting – the kitchen lighting – is integrated in addition to the existing alternate switching. For this purpose, another frogDim1-3 is added to the project, which is located in the kitchen.

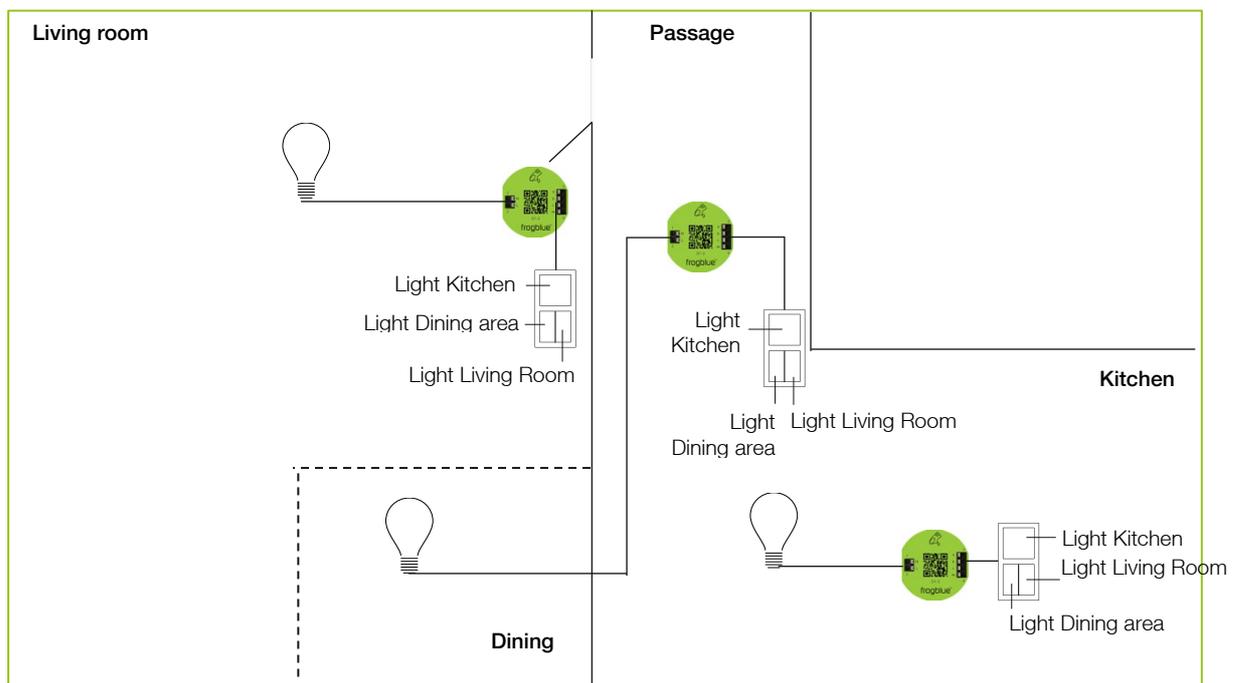


Figure: Alternate switching for the living room, the dining area and the kitchen.

The following device configuration has already been carried out:

**frogDim1-3**

Name	Kitchen
Assigned room	Kitchen

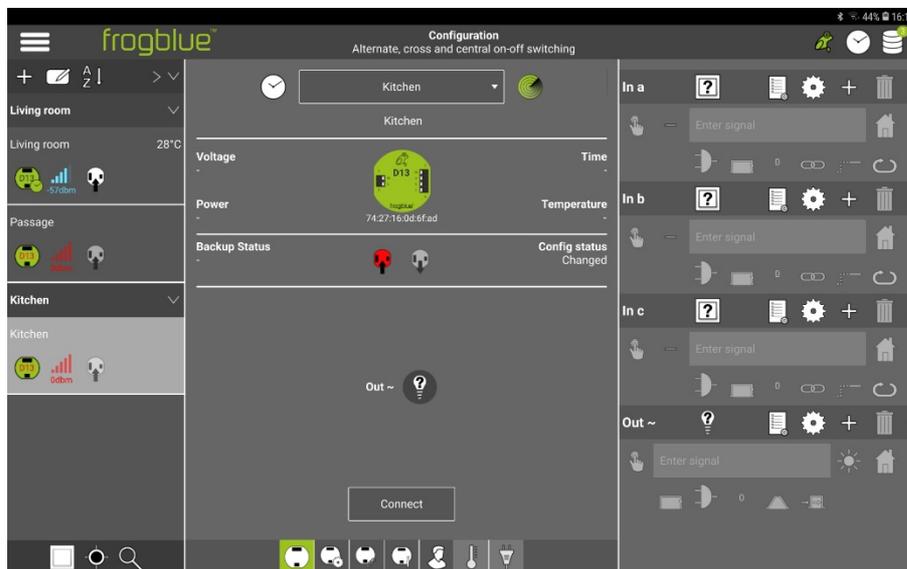


Figure: Another Frog **Kitchen** was added to the project.

To be able to integrate the kitchen lighting into the existing alternative switching **Light Living Room** and **Light Dining Table**, the corresponding inputs and outputs are connected to the message **Light Kitchen**.

1. To do this, configure the following settings for the Frog **Kitchen** (marked grey in the following table):

**frogDim1-3**

Name	Input
Assigned room	Kitchen
<b>In a</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Kitchen
Action	Toggle

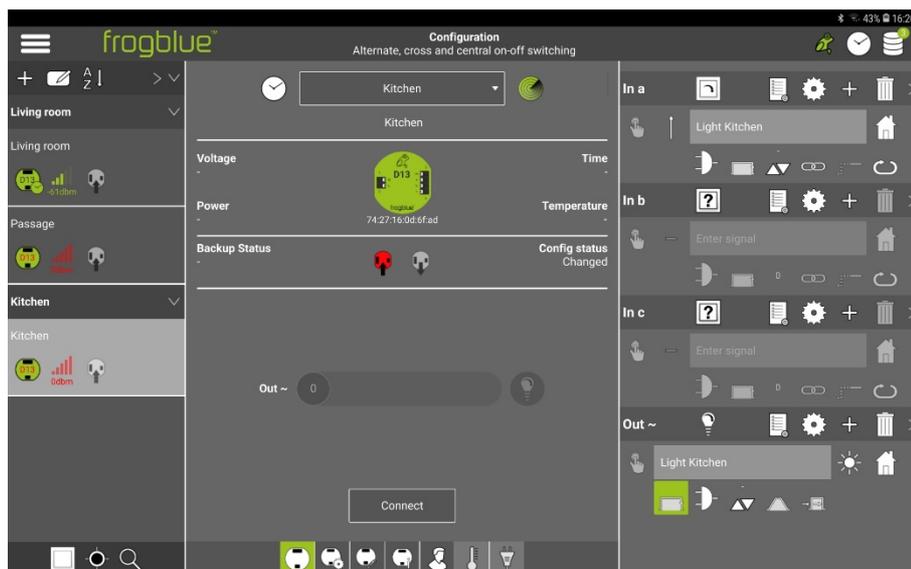


Figure: The message **Light Kitchen** for the input **In a** and the output **Out ~**.

To convert the button in the kitchen into the cross-switching, the input **In b** is connected to the output **Out ~** of the Frog **Living room** with the message **Light Dining Table**. In addition, the input **In c** is connected to the output **Out ~** of the Frog **Living room** via the message **Light Living Room**.

2. To do this, configure the following settings for the Frog **Kitchen** (marked grey in the following table):

**frogDim1-3**

Name	Kitchen
Assigned room	Kitchen
<b>In a</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Kitchen
Action	Toggle

The Frog **Kitchen** is now switched as follows:

- **In a** switches **Out ~ (Light Kitchen)** in the kitchen.
- **In b** switches **Out ~ (Light Dining Table)** in the dining area.
- **In c** switches **Out ~ (Light Living Room)** in the living room.

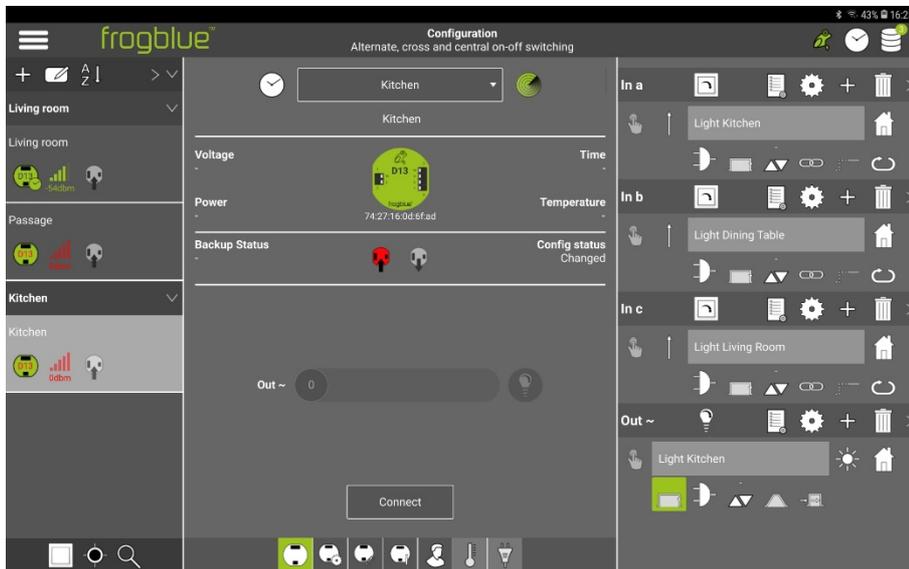


Figure: The messages of the inputs **In a**, **In b** and **In c** for the Frog **Kitchen**.

The next step is to connect the unused inputs **In c** of the Frogs **Living room** and **Passage** to the output **Out ~** of the Frog **Kitchen** via messages.

3. To do this, configure the following settings for the Frog **Living room** (marked grey in the following table):

**frogDim1-3**

Name	Living room
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Living Room
Action	Toggle



Figure: The configured inputs of the Frog **Living room**.

Now the input **In c** is configured for the Frog **Passage**.

- To do this, configure the following settings for the Frog **Passage** (marked grey in the following table):

**frogDim1-3**

Name	Passage
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click

**Out ~**

Power connection	Dimmable light
Message	Light Dining Table
Action	Toggle

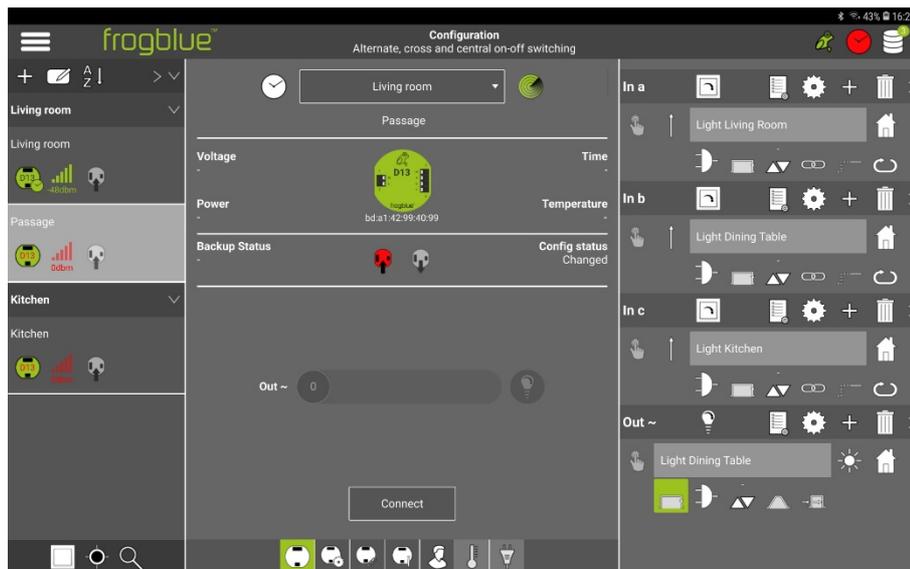


Figure: The configured inputs of the Frog **Passage**.

This completes the configuration of the cross-switching.

5. Load the configuration onto the Frogs **Living room**, **Passage** and **Kitchen**.

The following device configurations have been carried out:

**frogDim1-3**

Name	Living room
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Living Room
Action	Toggle

**frogDim1-3**

Name	Passage
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button Dimming
Message	Light Kitchen
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Dining Table
Action	Toggle

**frogDim1-3**

Name	Kitchen
Assigned room	Kitchen
<b>In a</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Light dimming
Message	Light Living Room
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Kitchen
Action	Toggle

### 9.2.3 Central On/Off

Double-click to switch on the lighting in the living room, dining area and kitchen. The lighting in the living room, dining area and kitchen can be switched off again by means of a triple click.

Central control across several Frogs is implemented via system groups, which are activated in the inputs and outputs of the Frogs. System groups are made up of individual system signals. Some system signals and system groups are already predefined in the **frogblueProject** app, such as the system group **Central**.

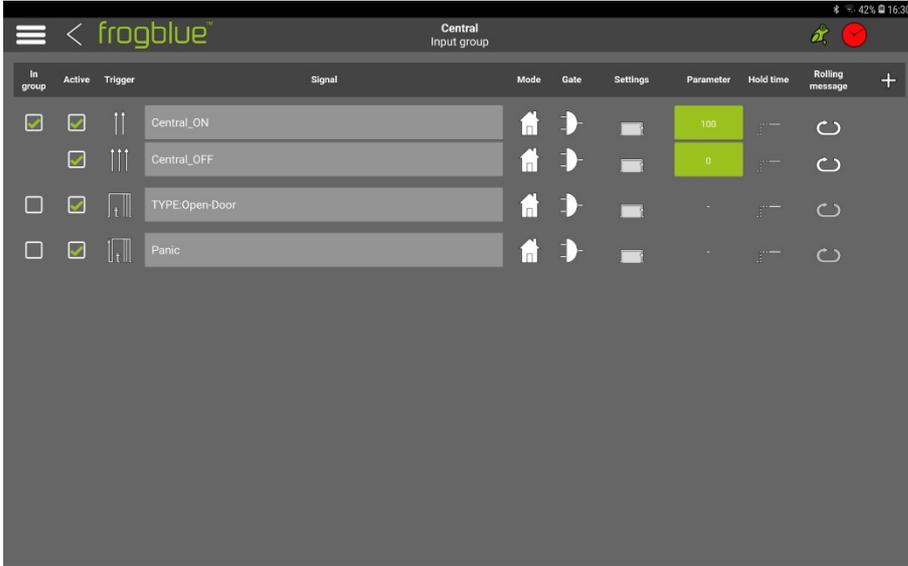


Figure: System signals of the system group **Central**.

The system signal **Central\_ON** is triggered by a double click and the system signal **Central\_OFF** by a triple click.

The system group **Central** must therefore only be activated in the inputs and outputs of all Frogs in order to implement a central on/off.

For information on system groups, see section → *Creating and managing system groups, page 171*.



Figure: The configured Frog **Living room** in cross-switching.

For the Frogs **Living Room**, **Passage** and **Kitchen**, for the input **In a** and for the output **Out ~** the system group **Central** is activated.

1. Tap the Frog **Living Room** in the device list to configure it.
2. In the **In a** input, tap **System group** 

A selection of the available system groups is displayed.



Figure: For the input **In a**, the system group **Central** is available for selection, among others.

3. Tap the system group **Central**.
4. Tap the screen.

The system group **Central** is enabled for input **In a**.



Figure: Activated system group for the input **In a**.

For the output **Out ~**, the system group **Central** also must be activated.

In **Out ~** tap **System group** 

A selection of the available system groups is displayed.

5. Tap the system group **Central**.
6. Tap the screen.

The system group is enabled for the output **Out ~**.



Figure: Activated system group for input **In a** and output **Out ~**.

The following configuration has now been carried out for the Frog **Living Room** (marked grey in the following table):

frogDim1-3	
Name	Living room
Assigned room	Living room
<b>In a</b>	
Button	Button - dim
Message	Light Living Room
Action	Click
	<b>System group</b>
	Central: - Central_ON, action: Double click - Central_OFF, action: Triple click
<b>In b</b>	
Button	Button - dim
Message	Light Dining Table
Action	Click
<b>In c</b>	
Button	Button - dim
Message	Light Kitchen
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Dining Table
Action	Switch over
	<b>System group</b>
	Central: - Central_ON, action; On with brightness 100 - Central_OFF, action: Off with brightness 0

- Also activate the system group **Central** in the inputs **In a** and outputs **Out ~** of the Frogs **Passage** and **Kitchen**.
- Load the configuration onto the Frogs **Living Room**, **Passage** and **Kitchen**.

In this way the following device configurations have been performed for the Frogs **Passage** and **Kitchen** (marked grey in the table):

<b>frogDim1-3</b>		
Name	Passage	
Assigned room	Living room	
<b>In a</b>		
Button	Button - dim	
Message	Light Living Room	
Action	Click	
	<b>System group</b>	Central: - Central_ON, action: Double click - Central_OFF, action: Triple click
<b>In b</b>		
Button	Button - dim	
Message	Light Dining Table	
Action	Click	
<b>In c</b>		
Button	Button - dim	
Message	Light Kitchen	
Action	Click	
<b>Out ~</b>		
Power connection	Dimmable light	
Message	Light Living Room	
Action	Toggle	
	<b>System group</b>	Central: - Central_ON, action: On with brightness 100 - Central_OFF, action: Off with brightness 0
<b>frogDim1-3</b>		
Name	Kitchen	
Assigned room	Kitchen	
<b>In a</b>		
Button	Button- dim	
Message	Light Kitchen	
Action	Click	
	<b>System group</b>	Central: - Central_ON, action: Double click - Central_OFF, action: Triple click
<b>In b</b>		
Button	Button - dim	
Message	Light Dining Table	
Action	Click	
<b>In c</b>		
Button	Button - dim	
Message	Light Living Room	
Action	Click	
<b>Out ~</b>		

Power connection

Dimmable light

Message

Light Kitchen

Action

Toggle

**System group**

Central:

- Central\_ON, action: On with brightness 100
- Central\_OFF, action: Off with brightness 0

### 9.3 Time control for child's bedroom with dimming

This quick guide shows you how to configure a level for the brightness of a lamp in a child's bedroom depending on the time of day. At night, the lamp should automatically switch to 20% brightness. A frogDim2-2 is used to implement the time control.

Information on adding frogs and assigning frogs to rooms can be found in the quick guide → *Adding a Frog to a project and assigning it to a room, page 49.*

For information on configuring messages, refer to the quick guide.  
→ *Alternate, cross and central on/off switching, page 56.*

The following device configuration has already been carried out:

<b>frogDim2-2</b>	
Name	Lamp
Assigned room	Child's bedroom
<b>In a</b>	
Button	Button - dim
Message	Light child's bedroom
Action	Click
<b>Out A</b>	
Power connection	Dimmable light
Message	Light child's bedroom
Action	Toggle

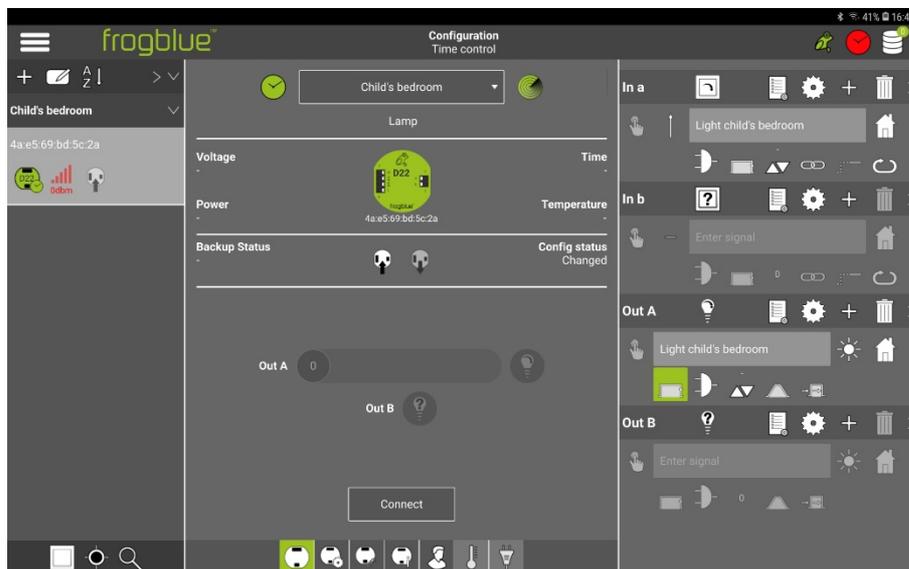


Figure: A configured frogDim2-2.

The configuration is carried out for output **Out A**, to which the lamp to be dimmed is connected.

1. In the **Out A** output, tap **Gate/Time editor**. 

The **Gate/Time editor** dialog box is displayed.

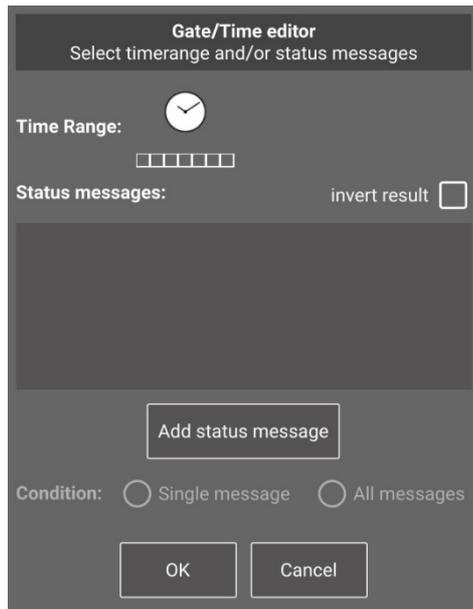


Figure: **Gate/Time editor** dialog box.

2. Tap **Time Range** 

Add the **Add week profile** dialog box appears

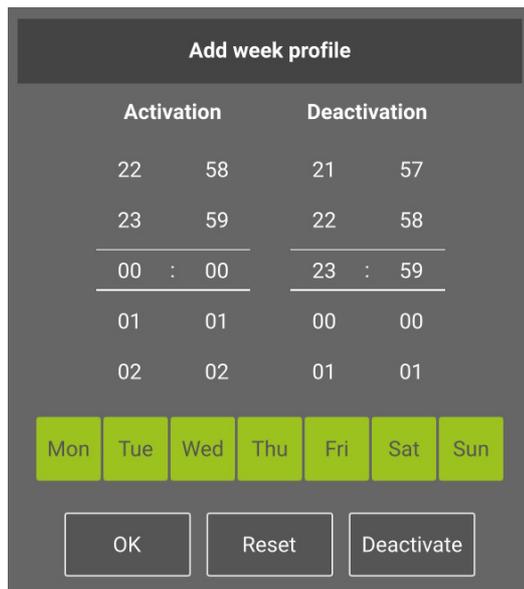


Figure: **Add week profile** dialog box

3. Set a start time in **Activation**, for example **06:30** hrs.
4. Set an end time in **Deactivation**, for example **20:30** hrs.

This configures the time switch for the day, i.e. the day starts at **06:30** and ends at **20:30**.

5. Tap **OK**.

The **Gate/Time Editor** dialog box with activated time range is displayed.

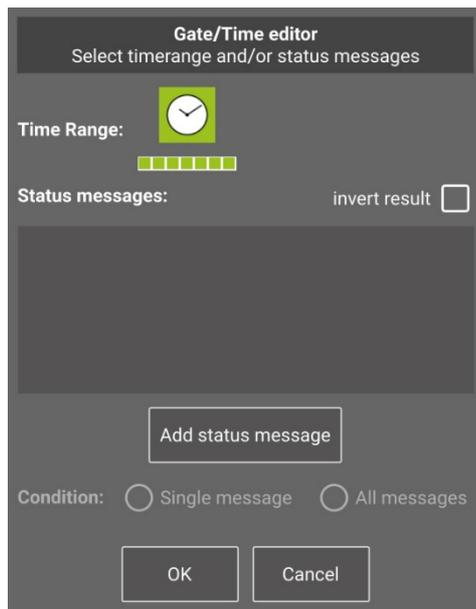


Figure: **Gate/Time Editor** dialog box with activated time range.

6. Tap **OK**.

The next step is to set the time switch for the night, this is the night starts at 20:30 hrs and ends at 06:30 hrs.

In order to be set the time switch for the night, a second message is configured for output **Out A**.

1. In the output **Out A** tap **Add messages** , in order to add a message.



Figure: A downwards-pointing arrow is displayed in output **Out A**.

2. Tap .

Another **Enter signal** input field is shown.

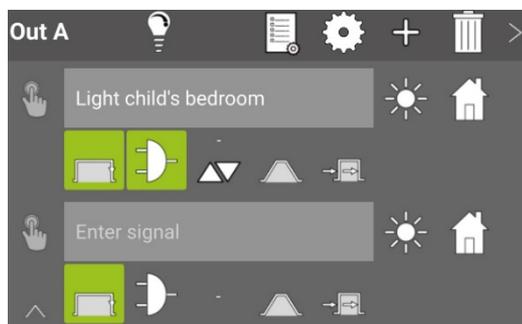


Figure: Another message can be entered for output **Out A**.

3. Tap the second **Enter signal** input field and select the message **Light Child's bedroom** off.

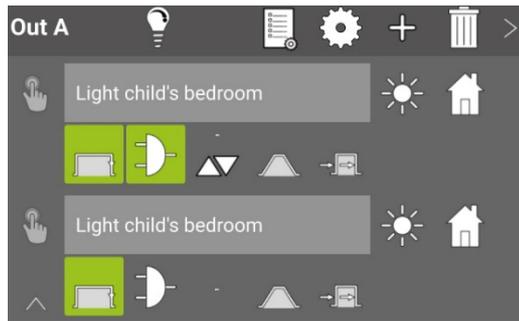


Figure: The second message **Light Child's bedroom** for output **Out A**.

4. For the second message, tap the **Gate/Time editor** 
5. Activate **invert result**.

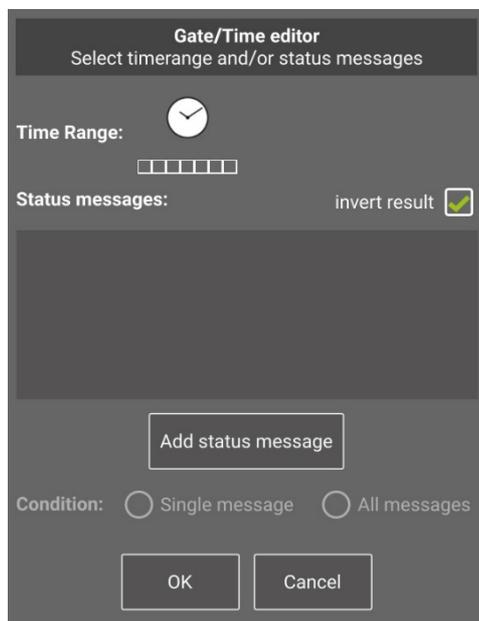


Figure: Activated **invert result** in the **Gate/Time Editor**.

6. Tap **Time Range** 

The **Add week profile** dialog box is displayed.

The same times are set as for the first message for the purpose of **Activation** and **Deactivation**.

Since the gate is inverted, the time from 20:30 to 06:30 is active and not from 06:30 to 20:30 as for the first message.

7. For **Activation**, set the time to **06:30**.
8. For **Deactivation**, set the time to **20:30**.
9. Tap **OK**.

The **Gate/Time editor** dialog box with activated time range is displayed.

10. Tap **OK**.

The time switch for the night is now configured.

The next step is to set the brightness values for dimming.  
During the day to 80% and at night to 20%.

1. In output **Out A**, tap **Dim**  in the functions in the first message.

The **Dim** dialog box is displayed.

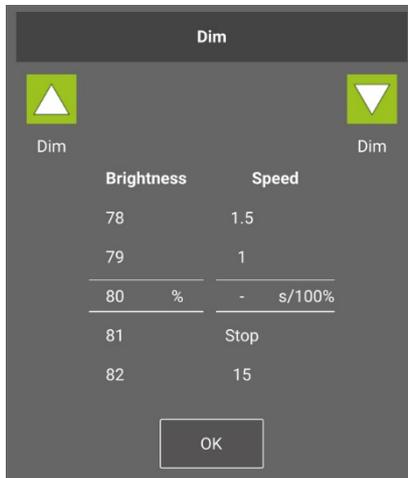


Figure: **Dim** dialog box with the set level of **80%**.

2. Set the **Brightness** to **80%**.
3. Tap **OK**.
4. In output **Out A**, tap the dash (parameter) in the second message.

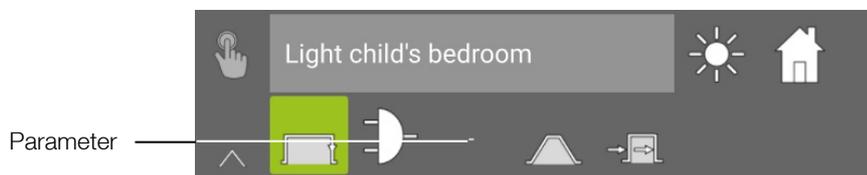


Figure: Dash (parameter).

The **Parameter** dialog box is displayed.

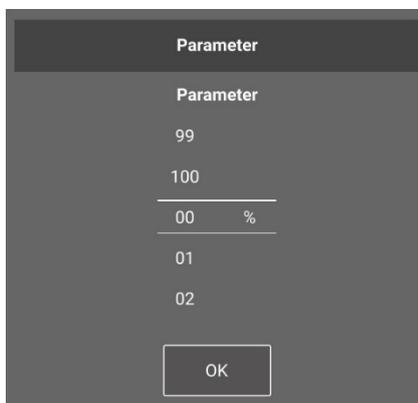


Figure: **Parameter** dialog box with the set level of **20%**.

5. Set the **Parameter** to **20%**.
6. Tap **OK**.

The value for dimming is now set for both the first and the second message.



Figure: Dimming values for the first and second message.

7. Load the configuration onto the Frog **Lamp**.

The complete configuration for the Frog **Lamp** is summarised in the following configuration table:

<b>frogDim2-2</b>		
Name	Lamp	
Assigned room	Child's bedroom	
<b>In a</b>		
Button	Button dimming	
Message	Light child's bedroom	
Action	Click	
<b>Out A</b>		
Power connection	Dimmable light	
1st message	Light child's bedroom	
Action	Toggle	
	<b>Gate/Time editor</b>	Timer function Activation: 6:30 Timer function Deactivation: 20:30
	<b>Brightness</b>	Parameter 80%
2nd message	Light child's bedroom	
Action	Toggle	
	<b>Gate/Time editor</b>	Invert gate result: on Timer function Activation: 6:30 Timer function Deactivation: 20:30
	<b>Brightness</b>	Parameter 20%

## 9.4 Door control

In the following example a door control for a Mediator (DC voltage) is configured with a frogEntry2-3 and a frogDim1-3.

In addition, the configuration is presented of how the light in the entrance is switched on when the door is opened.

The following device configurations have already been carried out:

### frogEntry2-3

Name	Entrance Door
Assigned room	Input

### frogDim1-3

Name	Light Entrance
Assigned room	Input

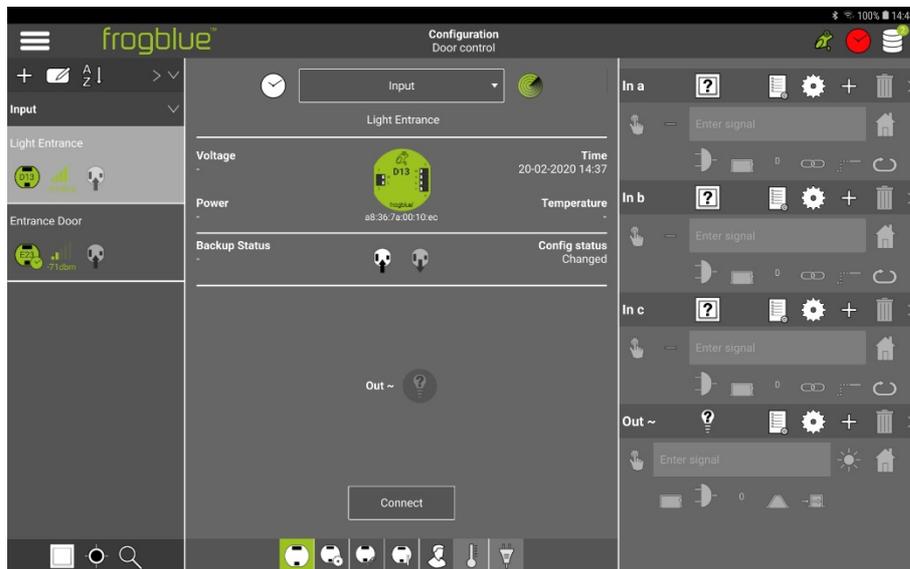


Figure: A frogEntry2-3 and a frogDim1-3.

In the first step, the inputs of the frogEntry2-3 are configured.

For the input **In r** a button for a bell is selected and for the input **In l** a door button is selected.

In input **In c** a status is queried.

Output **Out O** is assigned the connection **Door Mediator (Open)** and output **Out P** is assigned the connection **Door mediator (on)**.

### Mediator and e-opener

You can use a Mediator or an e-opener.

An e-opener opens on impulse and only requires the output **Out P** with 12 V / 1.3 A.

A Mediator requires continuous voltage and opens on impulse. Both outputs (**Out P** and **Out O**) are required.

1. To do this, configure the following settings for the Frog **Entrance Door** (marked grey in the following table):

**frogEntry2-3**

Name	Entrance Door
Assigned room	Input
<b>In r</b>	
Button	Button - bell
<b>In l</b>	
Button	Button - door
<b>In c</b>	
Button	Status
<b>Out P</b>	
Power connection	Door mediator (on)
<b>Out O</b>	
Power connection	Door mediator (Open)

Next, messages are defined for the inputs and output **Out P**. The input **In l** and the output **Out P** are connected via the message **Door opener input**. Output **Out P** receives the message **Door opener input**.

2. For this purpose, configure the following settings for the Frog Entrance door (marked grey in the following table):

**frogEntry2-3**

Name	Entrance Door
Assigned room	Input
<b>In r</b>	
Button	Button - bell
Message	Doorbell Entrance
<b>In l</b>	
Button	Button - door
Message	Door opener Entrance
<b>In c</b>	
Button	Status
Message	Door contact Entrance
<b>Out O</b>	
Power connection	Door mediator (on)
Action	On
<b>Out P</b>	
Power connection	Door mediator (Open)
Message	Door opener Entrance



Figure: The messages for the inputs of the Frog **Entrance Door**.

For the input **In c** for which a status has been defined, the input **In c** is automatically set to **open** in the **Input matrix**.

- To do this, configure the following settings for the Frog **Entrance Door** (marked grey in the following table):

<b>frogEntry2-3</b>	
Name	Entrance Door
Assigned room	Input
<b>In r</b>	
Button	Button - bell
Message	Doorbell Entrance
<b>In l</b>	
Button	Button - door
Message	Door opener Entrance
<b>In c</b>	
Button	Status
Message	Door contact Entrance
<b>Input matrix</b> Input In c: Open	
<b>Out O</b>	
Power connection	Door mediator (on)
Action	On
<b>Out P</b>	
Power connection	Door mediator (open)
Message	Door opener Entrance

Now the inputs and outputs of the frogEntry2-3 are completely configured.

- Load the device configuration on the Frog **Door Entrance**.

Next, the frogDim1-3 is configured. The light in the corridor is to be switched on automatically as soon as the door opens.

**frogDim1-3**

Name	Light Entrance
Assigned room	Input



Figure: The frogDim1-3.

For the input **In a** and the output **Out ~** the message **Light Corridor** is defined first.

1. To do this, configure the following settings for the Frog **Light input** (marked grey in the following table):

**frogDim1-3**

Name	Light Entrance
Assigned room	Input
<b>In a</b>	
Button	Button - dim
Message	Light Corridor
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
Message	Light Corridor
Action	Toggle

In order to ensure the additional function "light on when door is opened" can be integrated into the **Out ~** output, a further message is defined for the **Out ~** output. The switching on of the light is controlled via the action **On** and the **Gate/Time editor**.

- To do this, configure the following settings for the Frog **Light input** (marked grey in the following table):

**frogDim1-3**

Name	Light Entrance
Assigned room	Input
<b>In a</b>	
Button	Button - dim
Message	Light Corridor
Action	Click
<b>Out ~</b>	
Power connection	Dimmable light
1. Add	Light Corridor
Action	Toggle
2nd message	
Action	On-Transparency
	<b>Gate/Time editor</b>
	Selected message: Door contact Entrance

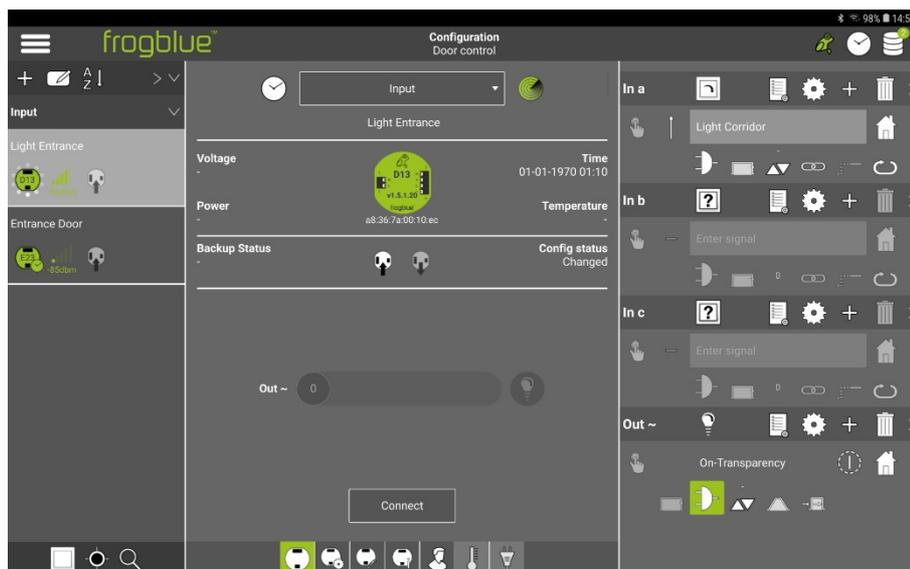


Figure: The configuration for the Frog **Light Entrance**.

The configuration for the Frog **Light Entrance** is now complete.

- Load the configurations onto the Frog **Light Entrance**.

## 10 Configuring frogblue projects

You can use the **frogblueProject** app to configure and manage all connected Frogs, frogKeys, frogDisplays etc. as well as buttons and controllers for a smart home application, i.e. for a frogblue project. For this purpose, ensure that all Frogs, buttons and switches are properly connected and wired.

### 10.1 Managing projects

In the **Project management** screen, you can:

- ✓ create new projects and find projects,
- ✓ load projects and edit existing projects,
- ✓ import and export projects,
- ✓ delete projects that are no longer required.

Each project is protected by a project password

1. Tap **Menu** 

#### Note

When you create the first project, this is no other project has been previously created in the **frogblueProject** app, tap **New project** on the **Start screen**.

2. Tap **Project management**.

The **Project management** screen for managing projects is displayed.

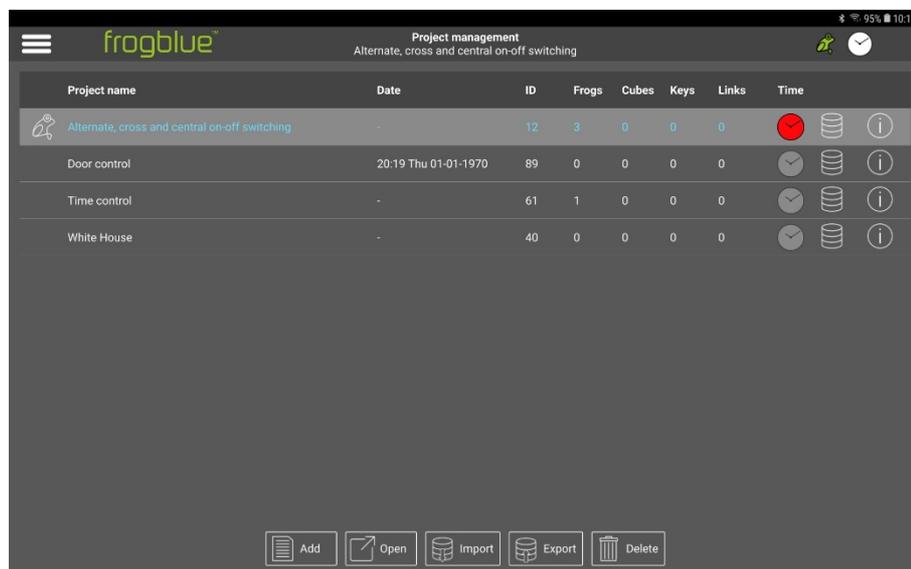


Figure: **Project management** screen for managing projects.

#### Project colours

**Blue:** Data is being received from the project.

**White:** No data is being received from the project.

### 10.1.1 Creating a project

The first step in setting up a frogblue system is to create a project.

You can create as many projects as you wish. You can use different projects to try out different configurations, for example.

#### Note

You assign a project password to each project. You need the project password to restore a project or to transfer a project to another device.

**Keep the project password in a safe place!**

#### Project password and device key

When you create a new project and therefore assign a project password to the project, a device key identical to the project password is automatically assigned.

The project password can be shared with third parties, e.g. a technician who has configured the project. Once the project configuration is complete, you should change the device key so as to protect the device configuration in the Frogs from unauthorised access.

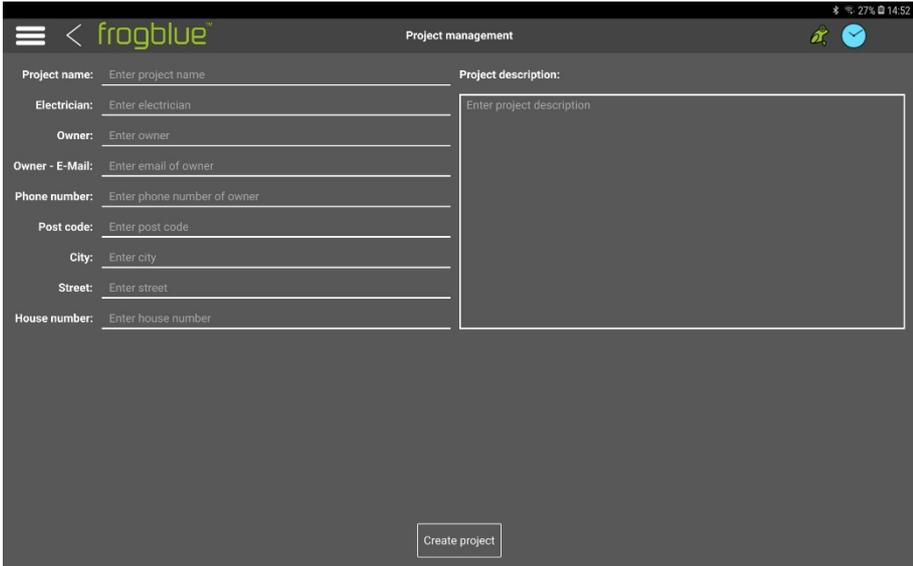
After changing the device key, you can still configure the **frogblueProject** app on the tablet. However, the device configuration is always carried out using the device key.

For information on changing the project password, see section → *Changing the project password, page 97*.

For information on changing the device key, see section → *Changing the device key, page 98*.

1. In the **Project management** screen, tap **Add**.

The **Project management** screen is displayed.



The screenshot shows the 'Project management' screen in the frogblue app. The screen has a dark background with white text and input fields. At the top, there is a hamburger menu icon, a back arrow, the 'frogblue' logo, and the title 'Project management'. On the right side of the top bar, there are icons for a frog and a blue circle with a white checkmark. The main content area is divided into two columns. The left column contains several input fields with labels: 'Project name:', 'Electrician:', 'Owner:', 'Owner - E-Mail:', 'Phone number:', 'Post code:', 'City:', 'Street:', and 'House number:'. Each label is followed by a text input field with a placeholder text. The right column contains a larger text input field with the label 'Project description:' and a placeholder text 'Enter project description'. At the bottom center of the screen, there is a button labeled 'Create project'.

Figure: **Project management** screen for creating a new project.

2. Enter a project name in the **Project name** input field.

You can enter additional optional details relating to the project in the input fields **Electrician**, **Owner**, **Owner-E-mail**, **Phone number**, **Post code**, **City**, **Street** and **House number**.

3. Tap **Create project**.

The **Set project password** dialog box is displayed.

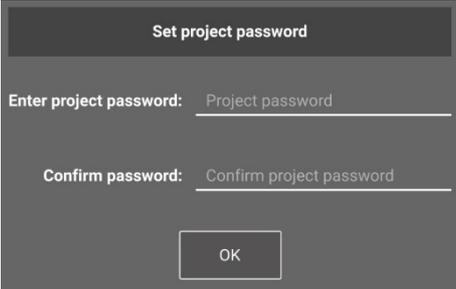


Figure: **Set project password** dialog box for creating a project password.

4. In **Enter project password**, enter a project password with at least eight characters.

Keep the project password in a safe place!

5. Confirm the project password in **Confirm password**.
6. Tap **OK**.
7. Tap **Create project**.

The project is created, and the **Configuration** screen is displayed.

The next step involved in setting up a frogblue system is to add Frogs and other devices to a project.

For information on adding Frogs to a project, see section → *Adding devices to a project*, page 100.

### 10.1.2 Editing a project

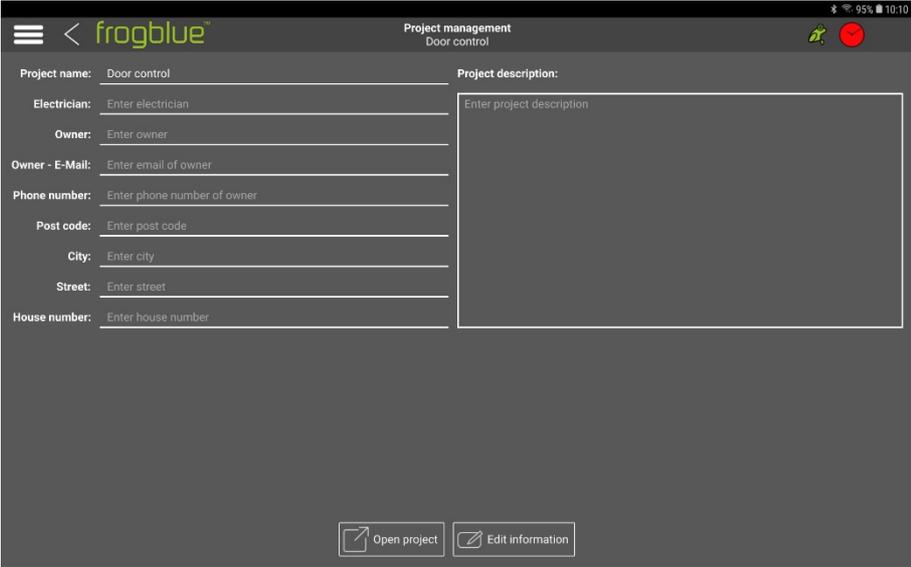
You can change the project information relating to an existing project.

1. In the **Project management** screen, tap the project you wish to edit.

The project is marked.

2. Tap **Information for the selected project** ⓘ

The **Project management** screen is displayed.



The screenshot shows the 'Project management' screen for a project named 'Door control'. The screen is divided into two main sections. The left section contains a list of input fields for project details: Project name (Door control), Electrician (Enter electrician), Owner (Enter owner), Owner - E-Mail (Enter email of owner), Phone number (Enter phone number of owner), Post code (Enter post code), City (Enter city), Street (Enter street), and House number (Enter house number). The right section is a large text area for 'Project description' with the placeholder text 'Enter project description'. At the bottom of the screen, there are two buttons: 'Open project' and 'Edit information'.

Figure: **Project management** screen to change project details.

3. Tap **Edit information**.

The button **Edit information** is highlighted in green and the editing mode is activated.

4. Change the project details as you wish.

5. Then tap **Edit information**.

The changes are automatically saved in the **frogblueProject** app.

To go back to the previous menu, tap **Back** < on the right of the **Menu** ☰.

### 10.1.3 Open a project

#### Note

The most recently opened project is shown on the start page and can be opened directly from there.

You can change to a different project by opening a previously created project. The current and active project is marked with a Frog.

1. In the **Project management** screen, tap the project you wish to open.

The project is marked.

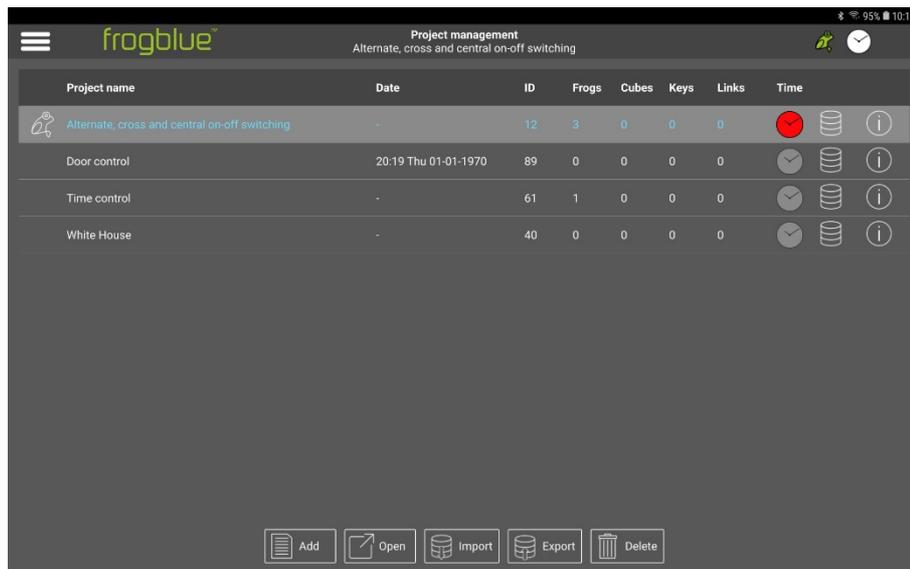


Figure: Selected project on the **Project management** screen.

2. Tap **Open**.

The **Open project** dialog box is displayed.

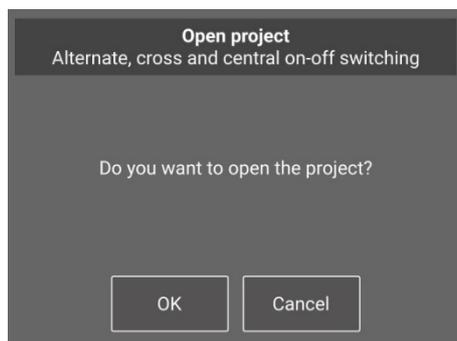


Figure: **Open project** dialog box.

3. Tap **OK**.

The **Configuration** screen appears.

#### 10.1.4 Exporting a project

You can export the data of a project to create a backup, for example, or to load the data onto a different tablet.

You can import the exported project file into the **frogblueHome** app to be able to control the frogblue system from there.

#### Note

For the export, a **Documents** folder is automatically created in the internal memory of the Android tablet to which the file is exported.

In the case of iOS devices, the exported files are stored in an existing directory in the internal memory.

Assign a project password to the exported file.

1. In the **Project management** screen, tap the project you wish to export.

The project is marked.

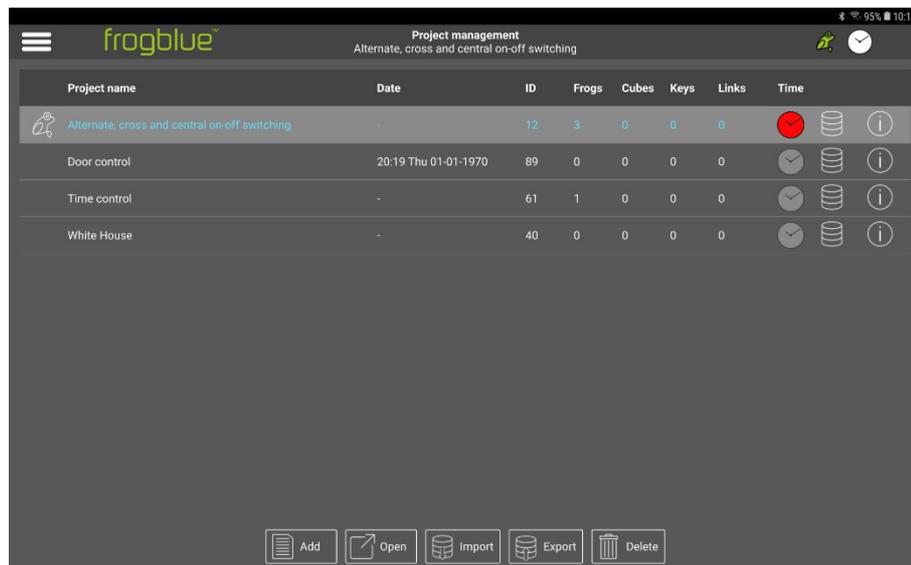
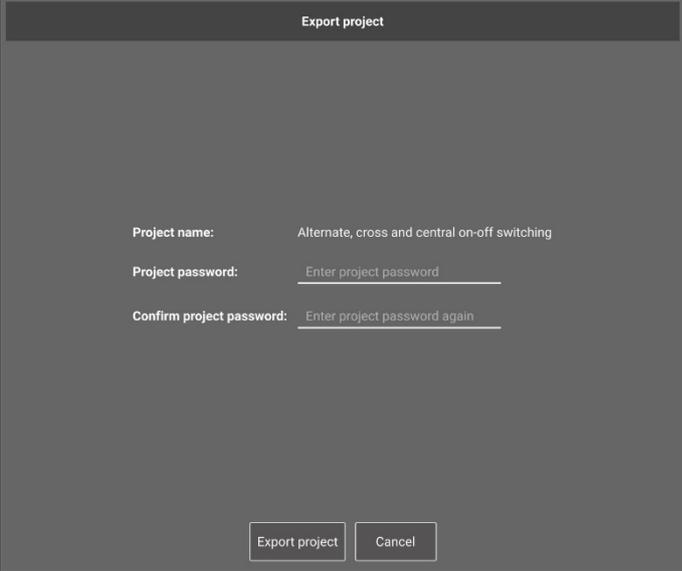


Figure: Selected project on the **Project management** screen.

2. Tap **Export**.

The **Export project** dialog box is displayed.

The name of the selected project is displayed.



The screenshot shows a dialog box titled "Export project". It has a dark grey background. At the top, there is a title bar with the text "Export project". Below the title bar, there are three input fields. The first is labeled "Project name:" and contains the text "Alternate, cross and central on-off switching". The second is labeled "Project password:" and has a placeholder text "Enter project password". The third is labeled "Confirm project password:" and has a placeholder text "Enter project password again". At the bottom of the dialog, there are two buttons: "Export project" and "Cancel".

Figure: **Export project** dialog box for exporting the current project.

3. Enter the **Project password** for the project.

Here you can assign a new project password, for example if you wish to share the project with third parties.

4. Enter the project password again in **Confirm project password**.
5. Tap **Export project**.

The data of the project is stored encrypted in the **Documents** folder for Android devices and in internal memory for iOS devices.

You can import the exported project file into the **frogblueHome** app.  
For information on the **frogblueHome** app, see the → *frogblueHome User Manual*.

### 10.1.5 Importing a project

You can import projects you have created on other tablets with the **frogblueProject** app and have exported there. In order to import a project, you require the project password of that project.

1. Save the data of the project to be imported in the **Documents** folder.
2. In the **Project management** screen, tap **Import**.

The **Import project** dialog box is displayed.

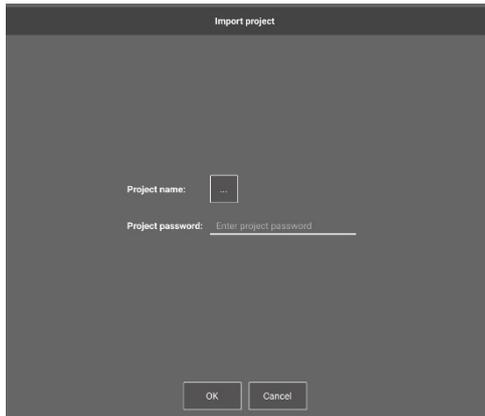


Figure: **Import project** dialog box for importing the current project.

3. Tap **Select project**  next to **Project name**.

The **Select project** dialog box is displayed.

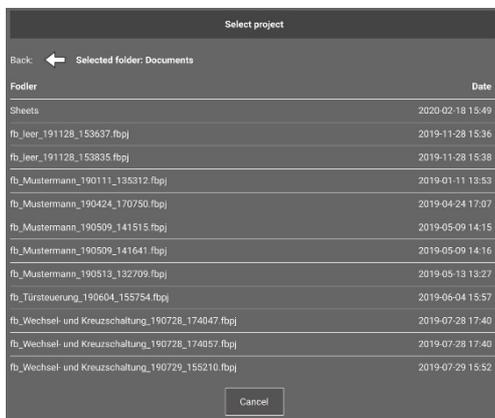


Figure: **Select project** dialog box for selecting the current project.

4. Tap the desired project.

The selected project is shown in the **Import project** dialog box in the **Project name** field.

5. Under **Project password**, enter the password of the project to be imported.
6. Tap **OK**.

The data is imported, and the project is displayed in the **Project management** screen.

### 10.1.6 Finding a project

If a project already exists but is not yet known to the **frogblueProject** app, you can import this project via a project backup from a Frog or another device and open it. For this you need the device key of the corresponding device.

You can recognise projects which are not yet known to the **frogblueProject** app by looking out for the entry **Unknown-x** in the **Project management** screen.

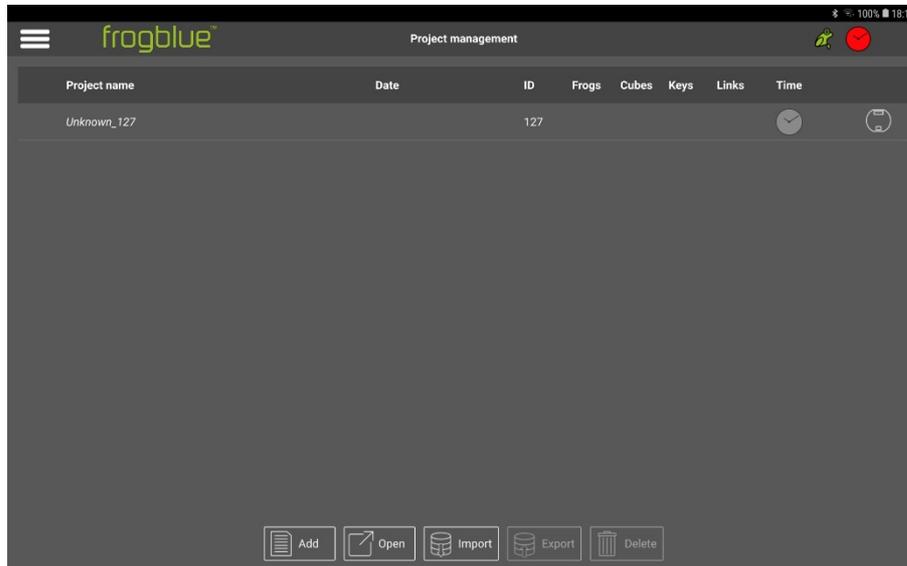


Figure: **Unknown\_x** shows an unknown project.

**Show devices**  shows all devices contained in the unknown project to which a Bluetooth connection exists.

1. In the **Project management** screen, tap the entry **Unknown\_x**  
The entry is highlighted in grey.
2. Tap **Open**.
3. The **Find project backup** dialog box is displayed.

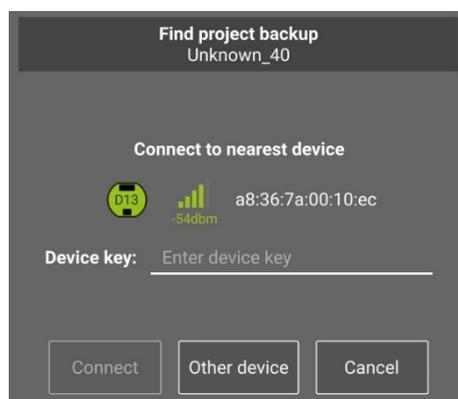


Figure: **Find project backup**.

The nearest device with a project backup is displayed.

Via **Other device** you can change the device and download the project backup from this device.

4. Enter the **device key** of the displayed device.

5. Tap **Connect**.

A Bluetooth connection is established, and the project backup is downloaded to the tablet. After the project backup is downloaded, you can load the project.



Figure: A downloaded project can be loaded.

6. Tap **Load project**.

A dialog box for entering the project password is displayed.

7. Enter the **project password** and tap **OK**.

The project opens.

### 10.1.7 Deleting projects

You can delete a project which you no longer require. In doing so, all project data is deleted. Active projects cannot be deleted.

1. In the **Project management** screen, tap the project you wish to delete.

The project is marked.

2. Tap **Delete**.

The **Delete project** dialog box is displayed.

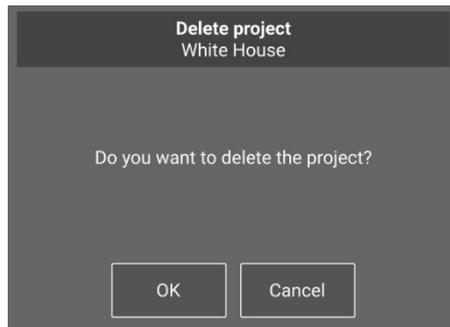


Figure: **Delete project** dialog box.

3. Tap **OK**.

The project is deleted along with all the configuration data.

### 10.1.8 Changing the project password

The project password assigned when creating a project can be changed at a later stage.

For information on the project password, see chapter → *Security: frogblueProject app – passwords*, page 14 and section → *Creating a project*, page 87.

For information on changing the device key, see section → *Changing the device key*, page 98

1. Tap **Menu** ☰

2. Tap **Change project password**.

The **Change project password** screen is displayed.



Figure: **Change project password** screen.

3. In **New project password**, enter a new project password with at least eight characters.

4. Confirm the new project password in **Confirm project password**.

5. Tap **Change project password**.

The new project password is saved and must be entered the next time the project is opened.

### 10.1.9 Changing the device key

In order to be able to save a backup or configuration in a Frog, a device key is required to enable access to the Frog.

When you create a new project and assign a project password to a project, the device key is set to be identical to the project password. Since the project password and the device key are identical, you can backup the project or upload a configuration to a Frog with the project password data.

The project password can be shared with third parties, e.g. a technician who has configured the project. Once the project configuration is complete, you should change the device key so as to protect the configuration in the Frogs from unauthorised access. Once the device key has been changed, the project password can still be used to configure the **frogblueProject** app on the tablet, but the configuration can only be uploaded onto the devices with the altered device key.

For further information on the project password and the device key, see chapter → *Security: frogblueProject app – passwords, page 14.*

For information on changing a project password, see section → *Changing the project password, page 97.*

1. Tap **Menu** 
2. Tap **Change device key**.

The **Change device keys** screen is displayed.

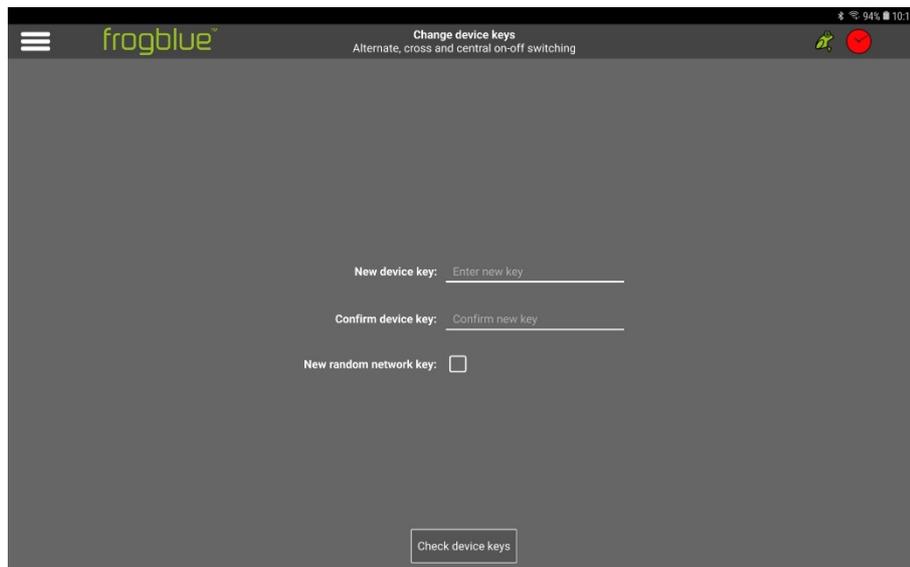


Figure: **Change device key** screen.

3. In **New device key**, enter a device key with at least eight characters.
4. Confirm the device key in **Confirm device key**.

#### Note

Enable **New random network key** to encrypt the Bluetooth network communication with a new key. This ensures, among other things, that no external commands can be sent to the Bluetooth network after a device has been replaced (or if the device key is no longer available).

5. Tap **Check device keys**.

The **Upload key** dialog box is displayed.

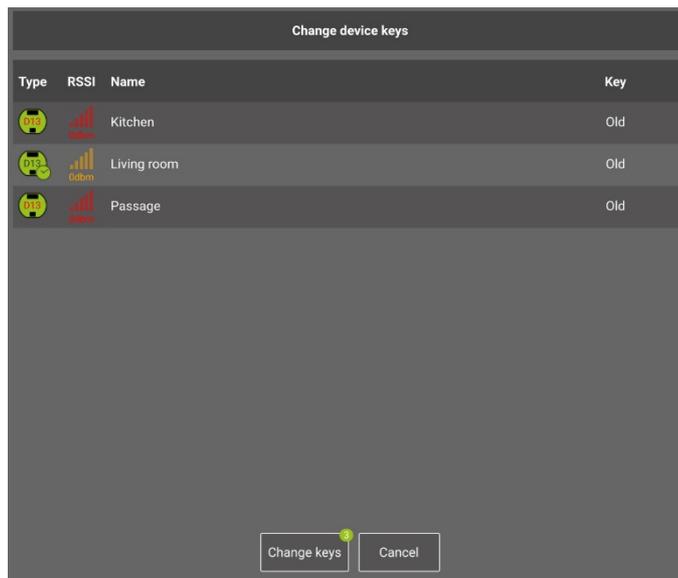


Figure: **Change device keys** dialog box.

### Note

The altered device key must be transferred to all devices in the frogblue system.

6. Tap **Change keys**.

The new device key is uploaded to all devices in the frogblue system.

## 10.2 Adding devices to a project

In order to configure and manage Frogs, frogKeys, switches and controllers, you must first add them to a project.

You can add the following devices to a project:

- Frogs
- frogKey
- frogLink
- frogDisplay
- frogContact5-BAT

### Notes on frogKey and frogContact5-BAT

In order to ensure the longest possible battery life, the frogKey and the frogContact5-BAT use energy-saving functions. For this reason, the frogKey and the frogContact5-BAT have to be set to configuration mode for configuration purposes. Only then you can add a frogKey and a frogContact5-BAT to a project.

1. To activate the configuration mode for the frogKey for 60 seconds, click **four times quickly, holding the last click**.

The frogKey flashes red because it has not been assigned to a project yet.



Figure: A flashing frogKey indicates the activated configuration mode.

1. To activate the configuration mode for the frogContact5-BAT for 60 seconds, click a button connected to the frogContact5-BAT **with three short clicks and one long click** (within 2 seconds).

- ✓ The devices are properly wired or powered.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16*.
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86*.

1. Tap **Menu** 
2. Tap **Configuration**.

The **Configuration** screen appears.

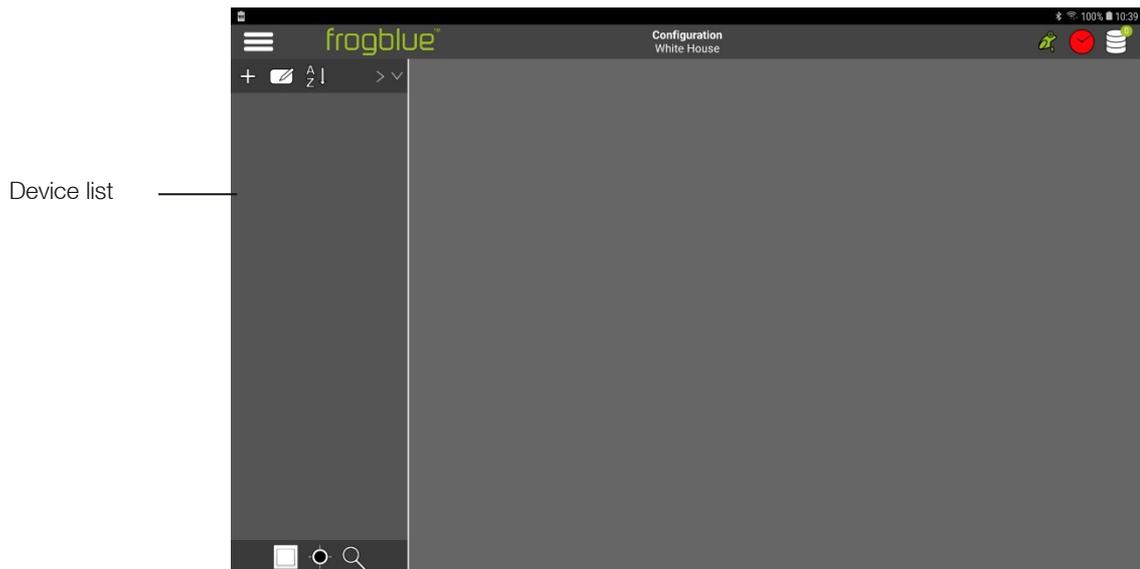


Figure: Configuration screen with the device list.

3. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

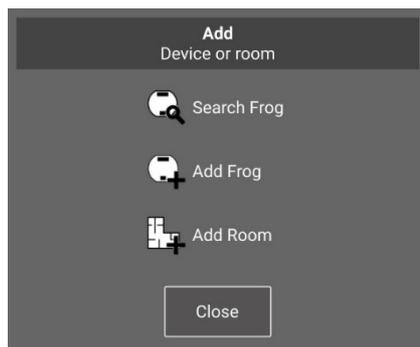


Figure: Add dialog box.

4. Tap **Search Frog** 

The **Devices** dialog box is displayed.

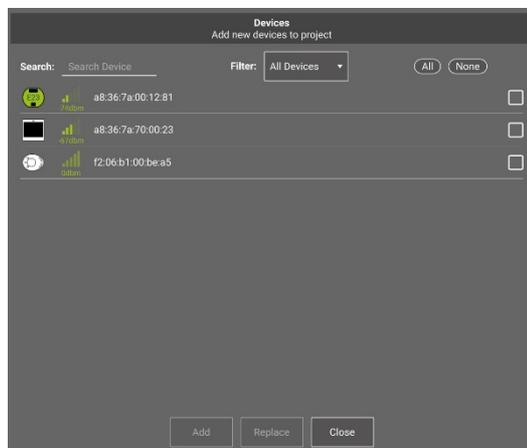


Figure: Frogs can be added to a project via the **Devices** dialog box.

The following options are available in the **Devices** dialog box:

**Search:** Enables the user to search for devices based on MAC addresses. When searching for a full MAC address, enter the colon as well. Usually, however, it is sufficient to enter the last two digits.

**Filter:** The following options are available to choose from:

**New Devices:** Displays all devices that are not assigned to a project or that are still configured with factory settings.

**Other Devices:** Displays all devices already assigned to other projects.

**All Devices:** Shows all accessible devices.

**All/None:** Allows selection of all visible devices found and filtered based on the **Search** text.

5. Tap the checkboxes of the devices you wish to add to the project.
6. Tap **Add**.
7. Tap **Close**.

The selected devices are displayed in the device list.



Figure: Added devices (frogKey, frogDisplay and Frogs) in the device list.

### Note

With  you can sort the Frogs shown in the device list:

-  Sort from A to Z.
-  Sort from Z to A.
-  From minimum to maximum Bluetooth field strength.
-  From maximum to minimum Bluetooth field strength.
-  Sort Frog types.

For more information on the icons in the device list, see section → *Device list*, page 41.

8. Tap a device in the device list.

The **Configuration** screen appears.

For information on the icons in the **Configuration** screen, see chapter

→ *frogblueProject – Overview of icons and colour codes, page 39.*



Figure: The display area in the **Configuration** screen.

#### Note

By default, all device configurations are automatically stored in the tablet's system memory. Projects can be loaded from this area.

If the tablet is defective, this project data is no longer available.

If the device configuration is to be activated in a Frog, the configuration must be uploaded to the Frog in question. You can do this in the display area of the **Configuration** screen and using the Device Manager.

When you perform a data backup or wish to share the project file, you should save the project configuration externally.

For information on exporting a project, see the section → *Exporting a project, page 91.*

9. Tap **Connect** to establish a fast Bluetooth connection between the tablet and the Frog.

A Bluetooth connection to the Frog is established.

10. Tap **Save configuration** 

The device configuration is uploaded to the corresponding Frog.

### 10.2.1 Adding unconnected devices

You can also add devices to a project that are not yet connected. This way you can plan a frogblue system, for example.

1. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

2. Tap **Add Frog**.

The **Add device** dialog box is displayed.

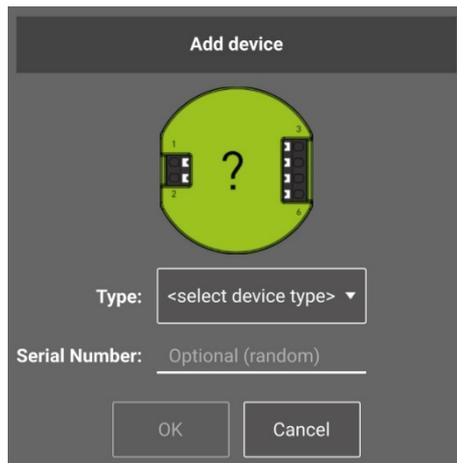


Figure: **Add device** dialog box.

3. Select the **Type** of device you wish to add to the project.
4. Tap **OK**.

The selected device is displayed in the device list and can now be configured.

### 10.2.2 Replacing Frogs

You can replace Frogs in a project.

1. In the device list, tap the Frog you wish to replace.

2. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

3. Tap **Search Frog** 

The **Devices** dialog box is displayed.

4. Select a Frog to replace the existing Frog in the project.
5. Tap **Replace**.

The replaced Frog is displayed in the device list.

## 10.3 Configuring Frogs

You can use the **frogblueProject** app to configure devices such as Frogs, frogKeys, frogDisplays etc. as well as buttons and switches. All devices connected to the mains must be properly correctly in order to enable correct configuration.

- ✓ The devices, switches and controllers are properly wired.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16*.
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86*.

Carry out the following steps to configure the input of a Frog in a project:

- Assign Frogs to rooms
- Configuring inputs
- Configuring outputs
- Configure buttons and switches
- Assigning inputs to buttons and switches

An overview of all configured Frogs can be found in the **Device manager**.

For information on the **Device manager** see the section → *Device manager, page 178*.

### 10.3.1 Assigning Frogs to a room

You can assign Frogs in a project to rooms. This allows you to type the inputs and outputs, i.e. to limit them to certain rooms. This significantly minimises the configuration effort involved.

- ✓ The Frogs, switches and controllers are properly wired.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16*.
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86*.
- ✓ Frogs have been added to a project.  
For information on adding Frogs to a project, see section → *Adding devices to a project, page 100*.

1. In the device list, tap **Add Frog** 

The **Add** dialog box appears.

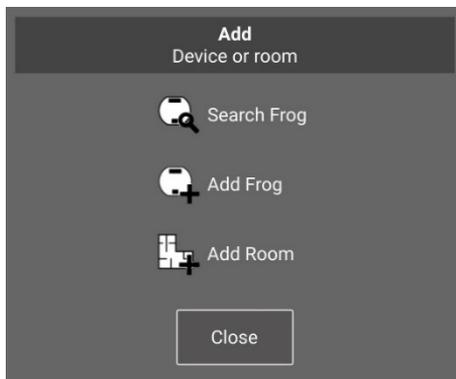


Figure: **Add** dialog box.

2. Tap **Add Room** 

A **New Room** entry is displayed in the device list.

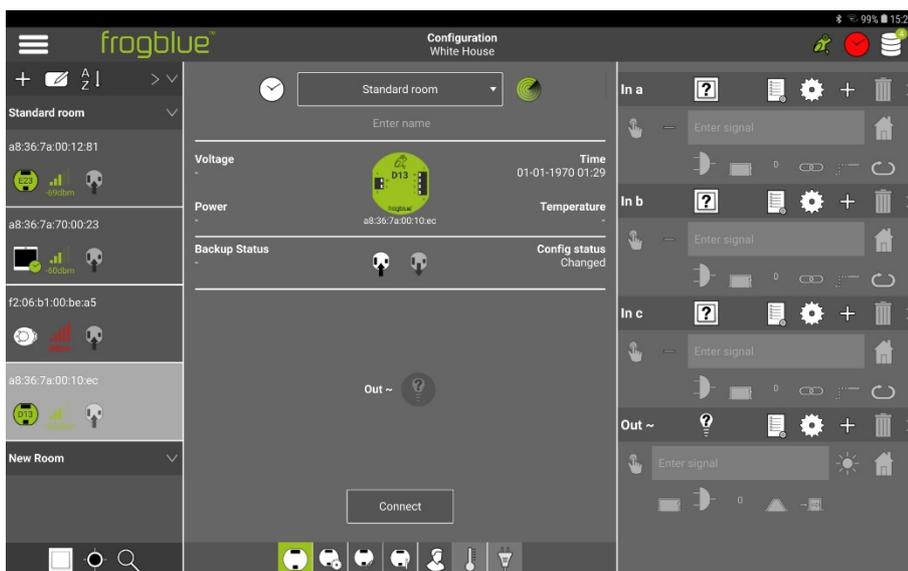


Figure: The **New Room** label is displayed below the list of frogs.

3. Tap **Edit** 

The **Edit**  icon is highlighted in green and the edit mode is activated.

4. Tap the **New Room** entry and enter a new name by overwriting the **New Room** entry.
5. Tap **Edit** 

The edit mode is terminated.

6. In the display area, tap **Standard room** in the selection list.

The available rooms are displayed in a selection list.



Figure: The newly created room **Living room** is displayed in the selection list.

7. In the selection list, tap the room that you wish to assign to the Frog.

The Frog is assigned to the selected room.



Figure: A Frog is assigned to the room **Living room**.

In the next step, the inputs are configured for the Frogs.

### 10.3.2 Configuring inputs

The connection between the switching inputs and the switching outputs of the Frogs is made by sending messages.

#### Example

On the input side, enter the message **LightOn**, which is to be sent when a button is pressed, for example. All Frogs for which you have entered the message **LightOn** at the output will then switch this output. An assignment via IDs or addresses is therefore not necessary.



Figure: The Frog switches through when the text message in the input and output match.

- ✓ The Frogs, switches and controllers are properly wired.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16.*
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86.*
- ✓ Adding a Frog to a project and assigning it to a room.  
For information on adding Frogs to a project, see section → *Adding devices to a project, page 100.*

Carry out the following steps to configure the input of a Frog:

- Select a function.
- Define a message.
- Select an action.

To configure the inputs of a Frog, tap a Frog in the device list.

The input of a Frog is configured in the configuration area.

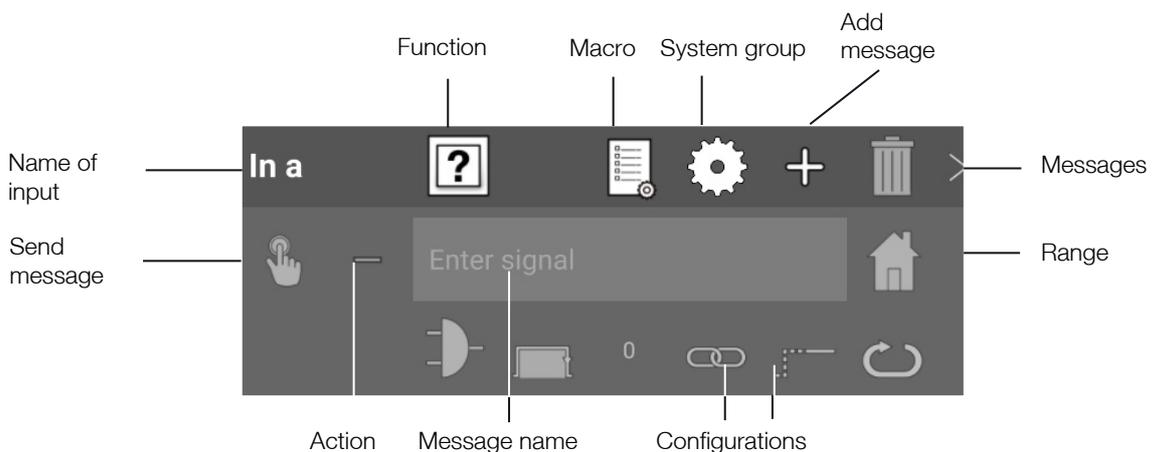


Figure: Configuration of an input **In a**.

For information on the extended configuration of inputs, see section → *Extended configurations for inputs and outputs, page 120.*

### 10.3.2.1 Selecting functions and defining messages

You can use the selected function to specify the type of the input. The type of an input can be different buttons or a status that is queried at the input.

1. Tap 

A selection of buttons and functions is displayed.

For information on possible buttons and functions see section → *Inputs, page 43*.

2. Tap the desired button.

For an input to connect to an output, the same message must be assigned to the input and the output.

3. Tap **Enter signal**.

Predefined standard messages are displayed in a selection list.

You will recognise standard messages by the **TYPE:** that appears in front of them, for example **TYPE:Light**.

#### TYPE messages and text messages

If a **TYPE:Message** is entered at an input, this messages switches all outputs of the same type.

The message **TYPE: Light** switches all outputs at which a lighting device has been defined.

**NOTE:** *No TYPE:* message may be entered at the output!

**TYPE:** messages are mainly suitable for operating several identical devices in a single room. If three roller shutters are installed in a living room with one frogRelay2-2 each, for example, it is possible to select the **TYPE:** messages **TYPE:Shutter – up** and **TYPE:Shutter – down** at the outputs, for example, without having to create special text messages.

#### Note

You can enter previously defined messages in the **Enter signal** input field using the autocomplete function. For example, if you enter **Lic**, the message **Light Child's Bedroom** will be suggested.



Figure: A selected button.

#### Note

In order to be able to configure the frogblue system according to your wishes, it is recommended that you define your own messages. This gives you full control over every input and output of all devices in the frogblue system.

4. Enter a unique name for the message.

The entered message is displayed.

### Colours of messages

The entered messages are displayed in the input in different colours:

**Red:** The message only occurs once in the frogblue system. This might be an indication that a typo crept into your entry.

**Yellow:** The message is a status message.

**White:** The message is a normal message. The message occurs at least twice, either at two inputs or at one input and one output.

**Blue:** A message occurs at least twice, but only at outputs.

You can define up to nine messages for an input.

For information on creating other messages → *Define several messages, page 118*.

The settings are automatically saved in the **frogblueProject** app.

#### 10.3.2.2 Selecting an action

You can use an action to specify how a button or switch must be pressed in order for a message to be triggered. When you select a button, the action (**Click**) ↑ is selected by default.

1. Tap ↑ next to **Enter signal**

A selection of actions is displayed.

For information on potential actions, see section → *Inputs, page 43*.

2. Tap the desired action.

The selected action is displayed.

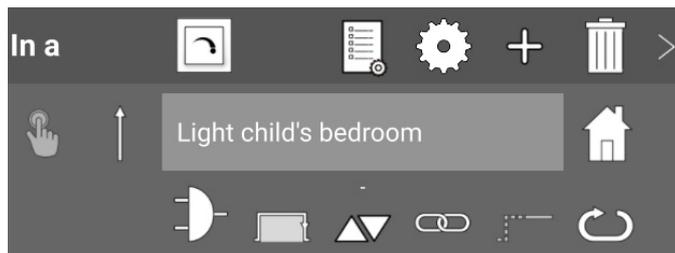


Figure: A click has been selected as an action.

The settings are automatically saved in the **frogblueProject** app.

This is the easiest way to configure an input.

With the advanced settings, you can configure additional functions such as logic functions and time functions.

For information on extended configuration, see section → *Extended configurations for inputs and outputs, page 120*

The next step involves defining an output with the same message so that a Frog can be switched through.

### 10.3.3 Configuring outputs

The connection between the switching inputs and the switching outputs of Frogs is made by sending messages. If the sent message of the input is the same as the message assigned to an output, the Frog is switched through.

- ✓ The Frogs, switches and controllers are properly wired.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16.*
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86.*
- ✓ Adding a Frog to a project and assigning it to a room.  
For information on adding Frogs to a project, see section → *Adding devices to a project, page 100.*
- ✓ The inputs of the Frogs are configured.  
Information on the configuration of the inputs can be found in section → *Configuring inputs, page 108.*

Carry out the following steps to configure the outputs of a Frog:

- Select a connection.
- Select a message.
- Select an action.

To configure the inputs of a Frog, tap a Frog in the device list.

The output of a Frog is configured in the configuration area.

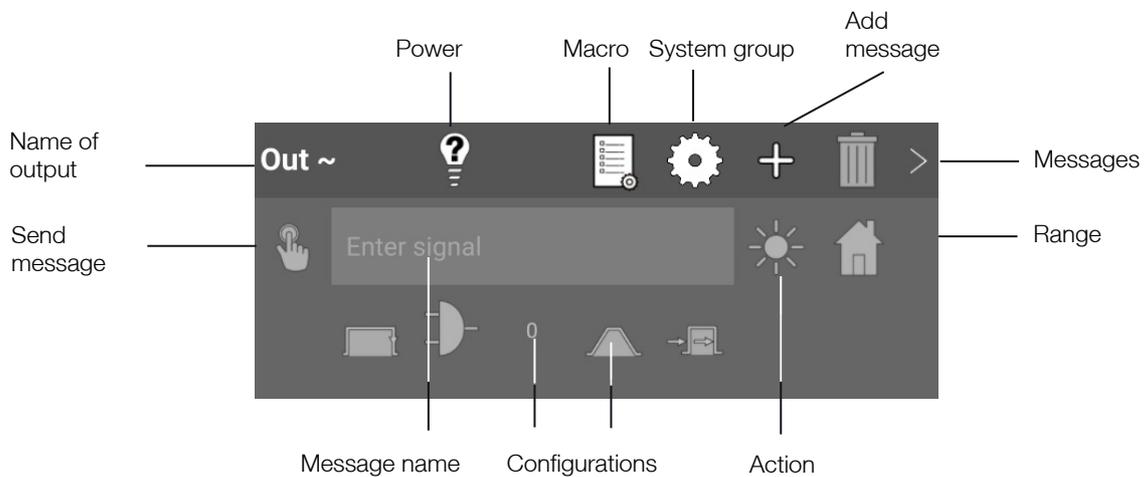


Figure: Configuration of an output **Out ~**.

For information on extended configuration of outputs, see section → *Extended configurations for inputs and outputs, page 120.*

### 10.3.3.1 Selecting connections and messages

With the selected connection you determine the type of the output . Typical connections are lamps, doors, bells and venetian blinds.

1. Tap 

A selection of connections and consumers is displayed.

For information on potential consumers, see section → *Outputs, page 45*.

Depending on the selected consumer, the corresponding messages are automatically prepared. For a dimmable light, for example, three messages are created: Switch on, dim and switch to a specific level.

Tap  to display the messages.

2. Tap the desired connection.

The selected port is displayed.

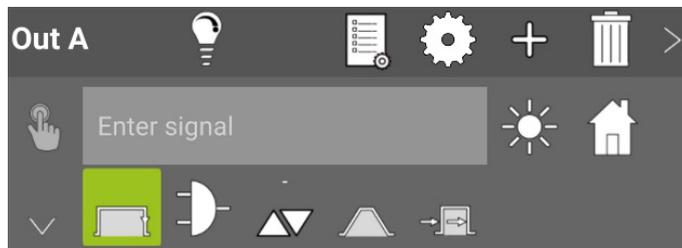


Figure: The selected connection **Dimmable light** in output **Out A**.

3. Tap **Enter signal**.

Standard messages and the messages you have defined are displayed in a selection list. Standard messages can be identified by a **TYPE:** appearing before the message, such as **TYPE:Light**.

#### Note

You can enter previously defined messages in the **Enter message** input field more quickly using the autocomplete function. For example, if you enter **Lic**, the message **Light Child's Bedroom** will be suggested.

4. Tap the desired message.

The selected message is displayed.

Only if the message of an input matches the message of an output is the Frog switched through.

The settings are automatically saved in the **frogblueProject** app.

#### Note

Tap **Send message** , if you wish to send the message immediately, for example for test purposes. Note that the set range influences the possible outcome of the message.

The next step involves selecting an action for the selected connection.

### 10.3.3.2 Selecting an action

With an action you can determine how a connection should behave in relation to a message.

1. Tap **Toggle** 

A selection of functions is displayed.

For information on potential actions, see section → *Outputs, page 45*.

#### Override on and off with a gate (Overlay)

If the action **On** is used without a gate, the output is permanently switched on. In this way, further messages will be ignored.

If you temporarily select the action **On** for an output, the output switches on without losing the other configurations of the output.

The action **On** is best used in conjunction with a gate. For example, if a night light is to remain all the time except during the day, the lamp will be on as long as the status **Night** is true.

The action **On-Transparency** has the same function. In addition, messages continue to be processed here in the background. If the gate is not true, the last message is processed.

If the action **Off-Transparency** is used with gate, the output is switched off as soon as the gate is **TRUE**. Other messages continue to be processed in the background, so the status after the last message after termination of the gate applies.

With this configuration, for example, the terrace light, which is activated by movement for 10 minutes, can be reactivated via buttons.

If the action **On-Transparency** is used with gate, the output is switched on as soon as the gate is **TRUE**. Other messages continue to be processed in the background, so the status after the last message after termination of the gate applies.

With this configuration, for example, the light can be switched on when the door is opened or a staircase switch (switch off after 5 minutes) is overridden.

2. Tap the desired action.

The selected action is displayed.

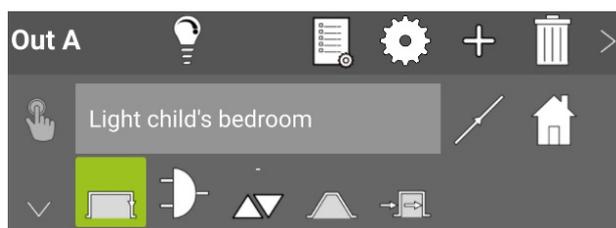


Figure: **Dim up** has been selected as an action.

The settings are automatically saved in the **frogblueProject** app.

This completes the basic configuration for a Frog.  
The configured Frog is now functional in the frogblue system.

#### Example

To find out how to configure the messages for alternate and cross-switching, see the quick guide → *Alternate, cross and central on/off switching, page 56*.

Advanced configurations allow you to configure logic functions for the Frogs.  
For information on other configuration options, see section → *Extended configurations, page 118*.

### 10.3.4 Copying and exchanging configurations for inputs and outputs

Once you have fully configured an output and require this configuration for another input in the same Frog, you can copy the configuration of the input.

You can also exchange the configuration of one input with that of another input in the same Frog.

Accordingly, you can copy or exchange the configuration of an output in a Frog.

The following describes how to exchange or copy the configuration of an input.

1. Tap the name of an input, for example **In a**, for approximately one second and keep the input pressed down.

The entire first line of the input is highlighted in dark.

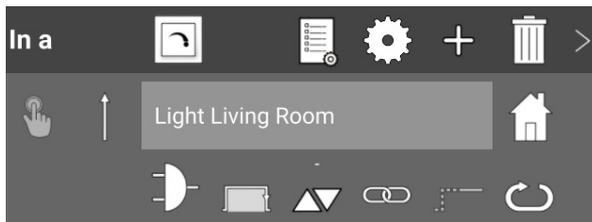


Figure: Input **In a** is highlighted in dark.

2. Drag the marked input to the input you wish to replace, for example to input **In c**.

The input **In c** to be replaced is highlighted in light green.



Figure: Input **In c** is marked light green and can be replaced.

3. Release the input **In a** in the input **In c**.

The **Copy or swap configuration** dialog box is displayed.

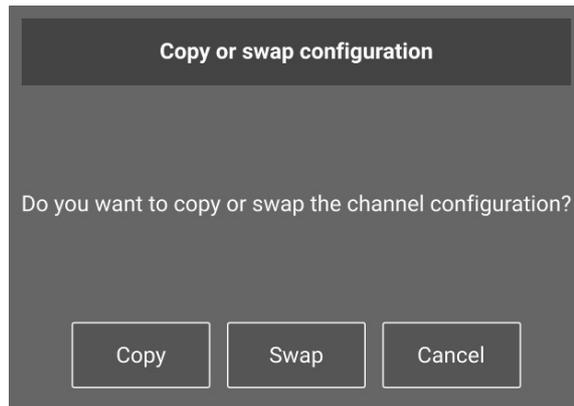


Figure: **Copy and swap configuration** dialog box.

4. Tap **Copy** if you wish to copy the configuration of the **In a** input to input **In c**.  
An existing configuration in input **In c** is overwritten.
4. Tap **Swap** if you wish to exchange the configuration of input **In a** with that of input **In c**.  
The configuration of input **In a** is written to input **In c**, and the configuration of input **In c** is written to input **In a**.

### 10.3.5 Adding buttons and assigning inputs

Depending on the Frog, you can add buttons and switches. This allows you to operate the buttons and switches directly in the **frogblueProject** app.

#### Note

If you wish to use the **frogblueHome** app, you should add buttons and switches to be able to use the app more conveniently.

The number of buttons to select depends on how many inputs a Frog has.

1. In the device list shown in **Configuration screen**, tap the Frog to which you wish to add buttons and controllers.

The selected Frog is highlighted in grey in the device list, and the display area and configuration area are displayed.

2. Tap **user view**  on in the display area.



Figure: The user view in the display area with a selection of configurable buttons.

3. Tap the button you wish to add and drag it to the center of the display area.

Tap  to display all switches configured in the system so far.

The button is displayed in the display area.

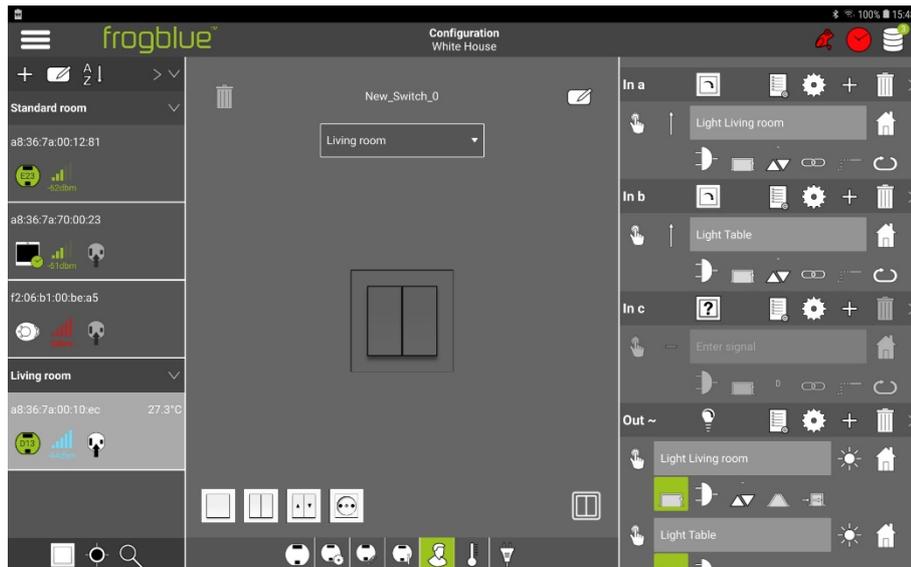


Figure: A selected button in the display area.

### Deleting a button

Tap **Edit**  and drag the button into the rubbish bin.

4. Tap **In a** and drag the heading to the display area on the button to which you wish to assign the input.

The selected button turns white and the input heading is displayed on the button.

5. Repeat the first step for all inputs to which you wish to assign a button.

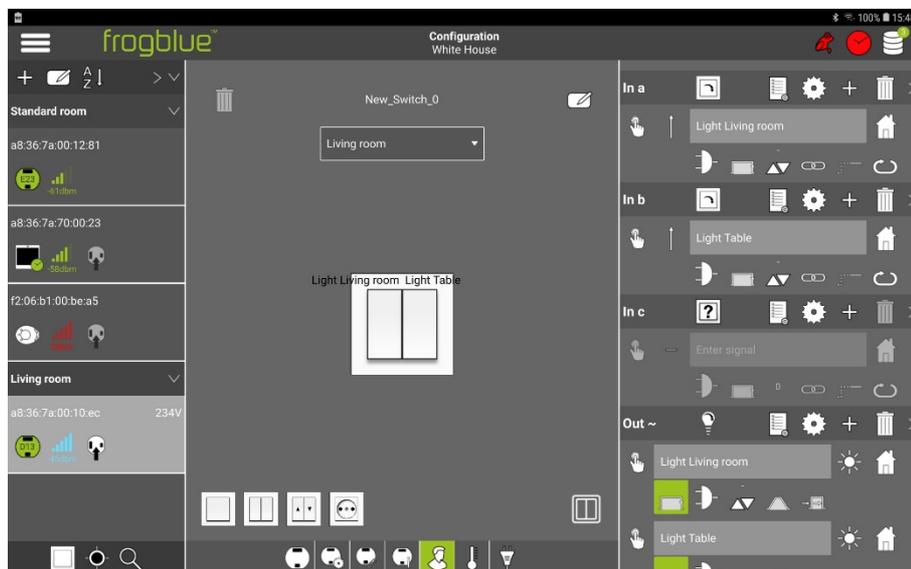


Figure: Two buttons are assigned to two inputs.

The buttons are now assigned to the inputs.

## 10.4 Extended configurations

This section provides information on advanced Frogs configuration options.

### Define several messages

Several messages can be defined for the input as well as for the output of a Frog. For example, buttons can be assigned several times.

→ *Define several messages, page 118.*

### Extended configurations for inputs and outputs

You can configure numerous logic functions for the inputs and outputs.

→ *Extended configurations for inputs and outputs, page 120.*

### Configure range

For each input and output, you can determine the range within which components in the frogblue system the messages are sent.

→ *Configuring the range, page 136.*

#### 10.4.1 Define several messages

For one input, you can define up to nine messages and for an output you can define up to 13 messages. This enables you to implement logic functions, for example, or to assign a button several times.

#### Example

Frogs	Messages Output In a	Action	Message Output Out A
Frog A	Light on	Click	Light on
	All light on	Double click	
Frog B			All light on
Frog C			All light on
Frog D			All light on

For Frog A, the two messages **Light on** and **All light on** are defined for the input **In a**.

A simple click on the button of Frog A triggers the message **Light on**.

A double click on the button of Frog A triggers the message **All light on**.

Since the message **All light on** is assigned to output **Out A** of Frogs B, C and D, a double click activates the Outputs of Frogs B, C and D.

The following describes how you can define another message for an input. In the same way you can define further messages for outputs.

1. In the input for which you wish to define another message, tap **Add messages** 

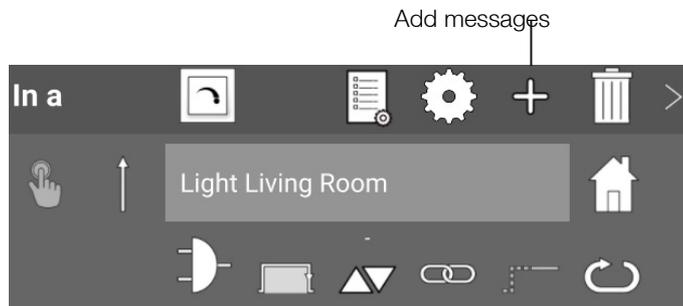


Figure: Adding a new message.

An arrow pointing downwards is displayed.

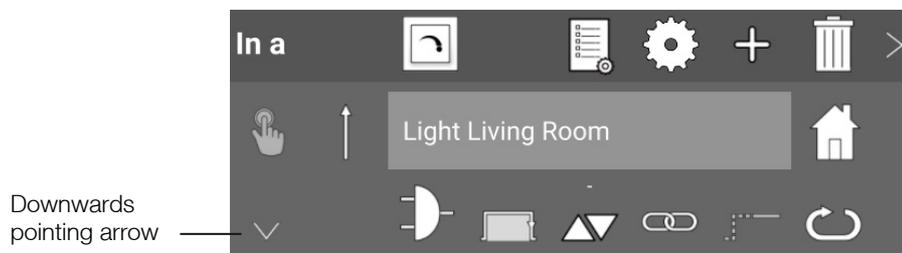


Figure: Downwards-pointing arrow.

2. Tap .

A new input field for defining another message appears.



Figure: Additional input field for defining another message.

3. Enter the new message in the **Enter signal** input field.
4. Tap **Action** .
5. Select an action.

You can make further settings for each new message.  
For information on the configuration of additional settings, see the sections  
→ *Configuring inputs*, page 108 and → *Configuring outputs*, page 111.

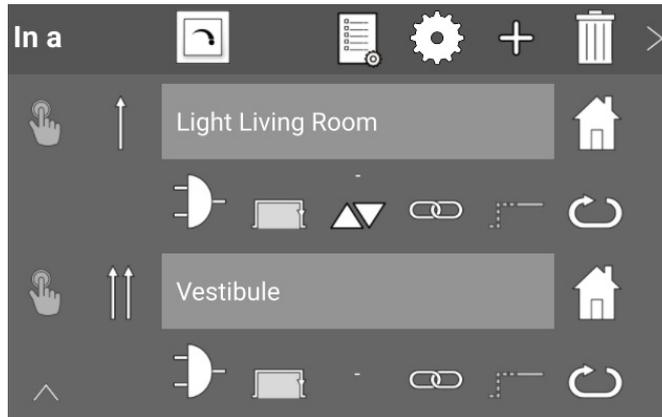


Figure: Two messages with two different actions for one switch.

The settings are automatically saved in the **frogblueProject** app.

#### Note

When messages are sent, they are processed in order from top to bottom. The first message is also called the main message.

#### 10.4.2 Extended configurations for inputs and outputs

For inputs and outputs you can configure additional functions, such as logic functions or time functions.

#### Note

If certain settings are required for several Frogs, we recommend defining the settings in a macro and then assigning the macro to several Frogs.  
For information on creating macros, see section → *Creating and managing macros*, page 160.

#### Inputs

The following functions are available for inputs:

-  **Gate/Time editor**  
Dialog box to define logic functions.
-  **Switch off after**  
Time adjustable from 1/10 s to 63 h.
-  **Dim**  
Up/down activate/deactivate; brightness pre-settings; dimming speed.
-  **Input matrix**  
Link local inputs with each other logically.
-  **Dead time**  
Debouncing of an input signal. The input does not react to a status change at the input within the set time.

**Rolling messages**

Send multiple messages in succession.

**Shutter**

Set the shading position and the slat position for roller shutters.

**Note**

If you have selected the function **Status** as the type for the input, you can also use the settings for the **Status** .

**Outputs**

The following functions are available for outputs:

**Settings**

Extended output settings.

**Gate/Time editor**

Dialog box to define logic functions.

**Dim**

Up/down activate/deactivate; brightness pre-settings; dimming speed.

**Soft functions**

Slowly switch outputs on and off (for dimmable outputs).

**Delay function**

Debouncing of an input signal. The input does not react to a status change at the input within the set time.

**Shutter**

Set the travel time and reversal time for roller shutters.

**Note**

The set parameters at the output overwrite the set parameters at the input, except in the settings for **Switch off after** or if the parameter at the input is equal to is equal to 0.

The functions are described in detail in the following sections.

1. Tap the function for which you wish to make further settings.

**Note**

If settings have already been made for the function, tap the function for about two seconds to edit it. The corresponding dialog box then opens for processing purposes.

2. Configure the desired setting.

All settings are automatically saved in the **frogblueProject** app.

### 10.4.2.1 Gate/Time editor

In the **Gate/Time editor** you can implement logic functions for inputs and outputs. By using status messages, it is possible to permit or prevent the sending of the actual message.

#### Example

With the **Gate/Time editor** functions such as *Button only available in darkness* can be implemented. For this purpose, a message **Dark** is saved in the Gate/Time Editor. The gate only is only usable when the input receives the status message **Dark**.

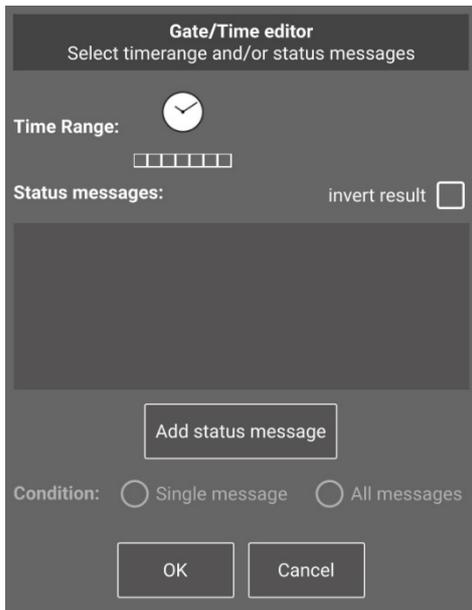


Figure: **Gate/Time editor** dialog box.

Tap **Add status messages** to display all status messages in the frogblue system in the **Message center**.

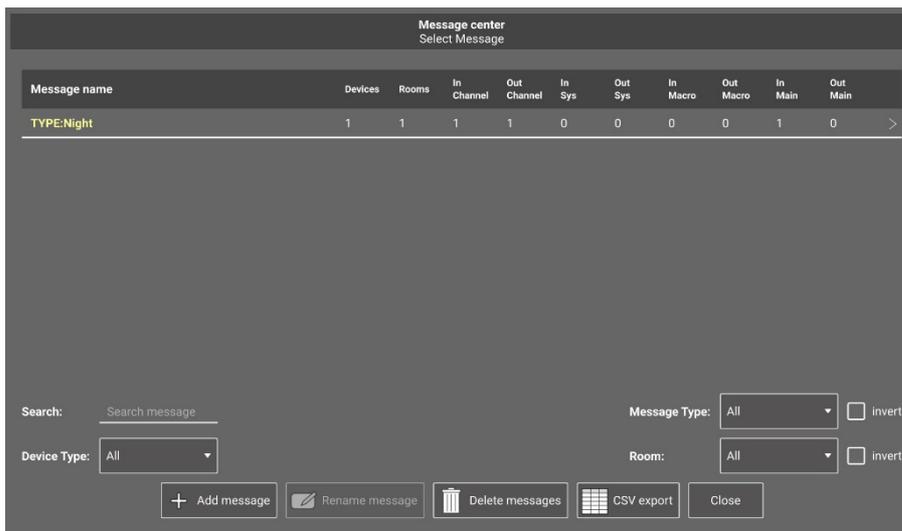


Figure: The **Message center** displays the status messages used.

For information on the message center, see the section → *Message center, page 175*.

Tap the status message for which you wish to define a logic function. The selected status message is displayed in the **Gate/Time editor**.

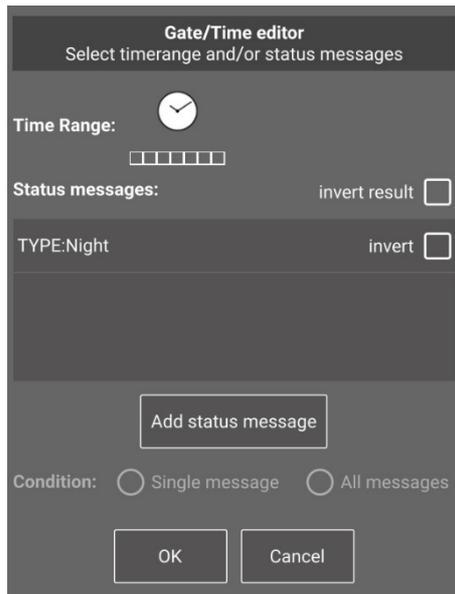


Figure: **Gate/Time editor** with selected status message.

### Note

To delete a selected status message, tap the name of the status message and swipe it to the left.



Then tap the rubbish bin to remove the status message from the **Gate/Time editor**.

The following options are available to choose from:

**All messages:** A logical AND gate. If the option **Single message** is not activated, a logical OR gate is used.

**invert:** The determined result is inverted. This defines a logical NOT.

You can also trigger a time control with the **Gate/Time editor** ⌚.

The Frog sends the selected message exclusively within the set time period. A dialog box for defining a time range is displayed.

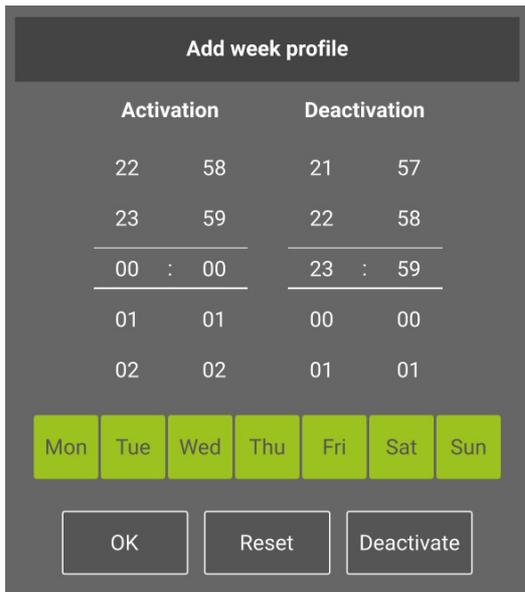


Figure: Time control in the **Gate/Time Editor**.

Here you can select weekdays and set a start time (**Activation**) and an end time (**Deactivation**).

#### 10.4.2.2 Minimal on

In them **Minimal on**  dialog box you can define for inputs when the output connected to the input is to be switched off.

The settings for the input overwrite the settings in the assigned output.

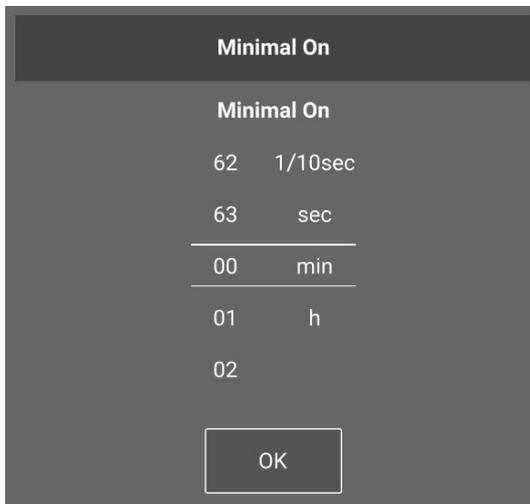


Figure: **Minimal on** dialog box.

### 10.4.2.3 Dim

In the **Dim**  dialog box you can set the dimming parameters for inputs and outputs. The settings of the assigned output overwrite the settings for the input.

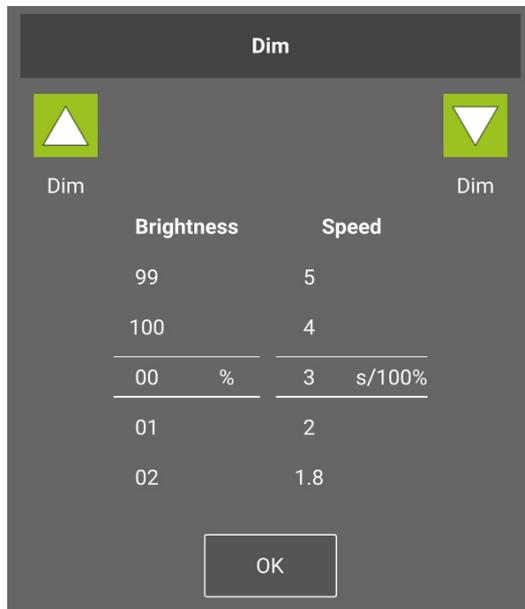


Figure: **Dim** dialog box.

The following options are available to choose from:

**Arrow icons:** Here you can define the dimming direction (up and/or down) for the input.

**Brightness:** Here you can specify which dimming level is to be set when the device is switched on. If the option is switched off, the last brightness value used is used.

**Speed:** Determines the speed of the dimming.

## 10.4.2.4 Input matrix

In the **Input matrix**  dialog box you can link several local inputs of a Frog to each other logically. The own input is always closed, unless a status has been defined. Then the state of the own input can also be defined.



Figure: **Input matrix** dialog box.

**Note**

If you have selected a **Status** as the action, the corresponding setting is automatically configured in the **Input matrix**.



Figure: The settings in the **input matrix** if a status has been set for Input **In a**.

A message is only sent if the logical combination of the input with other inputs of the same device is logically TRUE.

For example, it is possible to implement the function that the door contact only locks the door if the door contact and the bolt contact are closed.

#### 10.4.2.5 Dead time

In the **Dead time**  dialog box you can define for an input how long a button has to be pressed before a message is sent.

The dead time is only available for the actions **Level** and **Long**.

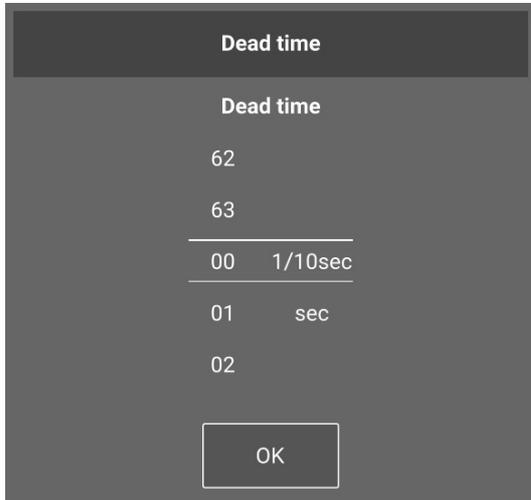


Figure: **Dead time** dialog box.

#### Example of Level and Long

Several messages are configured with **Level** 1 s, **Level** 2 s, **Level** 3 s.

When a switch is pressed, only one message is sent after 1 s, after 2 s and after 3 s.

Several messages are configured with **Long** 1 s, **Long** 2 s, **Long** 3 s.

If the switch is pressed for 1 s and then released, message 1 is sent.

If the switch is pressed for 2 seconds and then released, only message 2 is transmitted.

If the switch is pressed for 3 seconds and then released, only message 3 is transmitted.

#### 10.4.2.6 Rolling Message

By activating **Rolling Message**  the messages defined for the input are sent one after the other each time the action is activated. To do this, several messages must be defined for one input. Rolling messages are only valid for the same action.

For information on creating several messages, see section → *Define several messages, page 118*.

#### Example

The following four messages are defined:

Message 1 – Click – Light 10%

Message 2 – Click – Light 100%

Message 3 – Click – Light 0%

Message 4 - Double click - Light 40%

With one click the messages are always sent in the following order: Message 1, message 2, message 3. Message 4 is only triggered by a double click.

If you double-click at any time, the light will always be set to 40%.

If the double-click occurs after message 2, the light is set to 40%. Another click sets the light to 0% (message 3).

#### 10.4.2.7 Status

If **Status**  is selected as the action, you can configure it using the **Status** dialog box.

A status message is sent every time a status is changed. If there is no change, the status is repeated cyclically.

If you have selected a **Status** as the action, the corresponding settings are automatically configured in the **Input matrix**.

For information on the **Input matrix**, see section → *Input matrix, page 126*.



Hold time	Status	Cycle
61		2
62	False	3
00 sec	True	4 min
01		5
02		6

OK

Figure: **Status** dialog box.

The following options are available to choose from:

**Hold time:** This time defines for how long no new status is sent.

**Status:** Here you can set whether a closed switch is **TRUE** or **FALSE**.

**Cycle:** This time defines how often the status is repeated.

### 10.4.2.8 Settings

In the **Settings** dialog box, you can set actions for an output that depend on defined times.

In the left-hand area, you define the action for how the output is to respond when a message arrives if no time is running for the output. The following settings are possible:

- No action is to be performed.
- Switch over: The output is switched to a different state, for example from light on to light off.
- On/off: The output is switched on or off. For example, if there are several lamps in the room, you can switch all lamps off at once by selecting Off. All lamps will then be switched off, regardless of their current status.

In the right-hand area, the actions are defined when a time is set.



Figure: **Settings** dialog box.

#### Set time when the output is to be switched off

You can set a timer by activating **Time**.

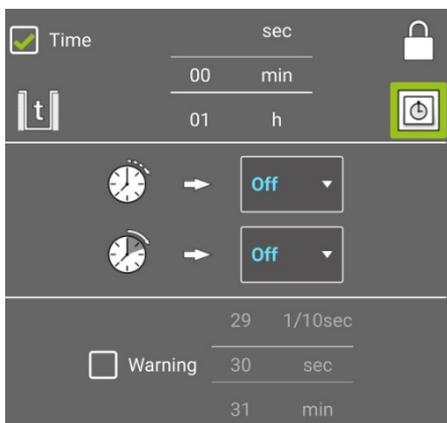


Figure: Time settings.



Only this message may change the output status.



You can use activation to specify that a set time at the input overwrites the switch-off time at the output. If, for example, two minutes are set for the input and one minute for the output, the two minutes set for the input apply.



Switches off the output off for the set time.



With this selection you can define what is to happen if a message arrives while a timer is running in the output.



With this selection you can define what is to happen after the set time. With **Off** the output is switched off and with **On** the output remains switched on.  
With **-** nothing happens.

### Note

You can activate a switch-off pre-warning.

For a dimmable output you set the time for the output in which the output reduces the brightness in four steps to indicate that the output is about to be switched off.

For a non-dimmable output, the lamp flashes briefly every 3 seconds.

### Setting the flashing time

By activating the **Blink period** you can define the period of time for flashing.

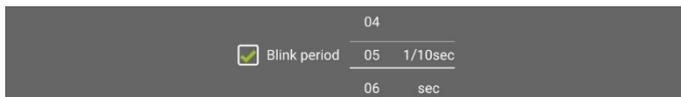


Figure: **Blink period**.

The time determines how long the output is switched on or off within the flashing period, i.e. the flashing speed is defined here.

### Note

As soon as flashing is activated, the defined action (for example. **switch over**) is ignored and only the flashing is carried out.

### Defining edges for the gate

If you have defined a status message in the **Gate/Time editor**, you can define how the output is to respond in the event of a status change in the **Settings** dialog box.



Figure: Output response in the event of a status change.

## 10.4.2.9 Soft-Function

For an output, you can use **Soft-Function**  dialog box to define how long the dimming is to last until the desired brightness value is reached.



The Soft-Function dialog box is a dark grey window with a title bar that says "Soft-Function". It contains two columns of input fields. The first column is labeled "Soft on" and the second is labeled "Soft off". Each column has five rows of input fields. The first row has a single field with the value "62". The second row has two fields: the first with "63" and the second with "1/10sec". The third row has two fields: the first with "00" and the second with "sec". The fourth row has two fields: the first with "01" and the second with "min". The fifth row has two fields: the first with "02" and the second with "h". At the bottom center of the dialog is an "OK" button.

Figure: **Soft-Function** dialog box.

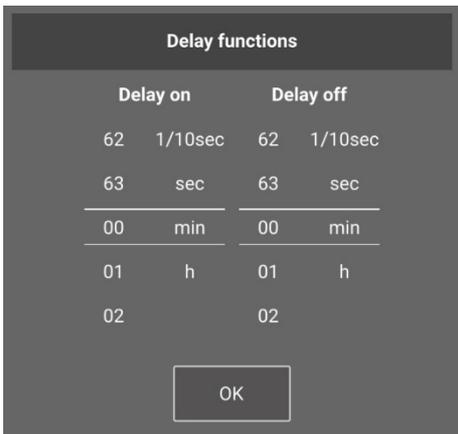
The following options are available to choose from:

**Soft on:** This time determines how long dimming from 0% brightness to the desired brightness value takes.

**Soft off:** This time determines how long dimming from the current brightness to 0% brightness value takes.

## 10.4.2.10 Delay functions

In the **Delay functions**  dialog box for an output, you can set for an output how long the system is to wait after receiving the message until the output is switched on or off.



The Delay functions dialog box is a dark grey window with a title bar that says "Delay functions". It contains two columns of input fields. The first column is labeled "Delay on" and the second is labeled "Delay off". Each column has five rows of input fields. The first row has two fields: the first with "62" and the second with "1/10sec". The second row has two fields: the first with "63" and the second with "sec". The third row has two fields: the first with "00" and the second with "min". The fourth row has two fields: the first with "01" and the second with "h". The fifth row has two fields: the first with "02" and the second with "02". At the bottom center of the dialog is an "OK" button.

Figure: **Delay functions** dialog box.

The following options are available to choose from:

**Delay on:** With this value you can ensure that the lamps are only switched on gradually over a long period of time, for example. It is also possible to configure the system so that a fan in the bathroom is switched on automatically if a lamp has already been switched on for five minutes.

**Delay off:** With this value you can ensure that the corridor light is only switched off after a certain time after you have left the house, for example.

## 10.4.2.11 Shutter

**Shutter**  allows you to make the following configurations for roller shutters and blinds:

- Shutter position
- Slat position
- Closing time
- Reversal time

In the input you configure the **shading position** and the **slat position**.  
In the output you configure the **Closing time** and the **reversal time**.

First configure the output by specifying the **Closing time** or by determining this via a measurement.  
Then configure the input.

**Note**

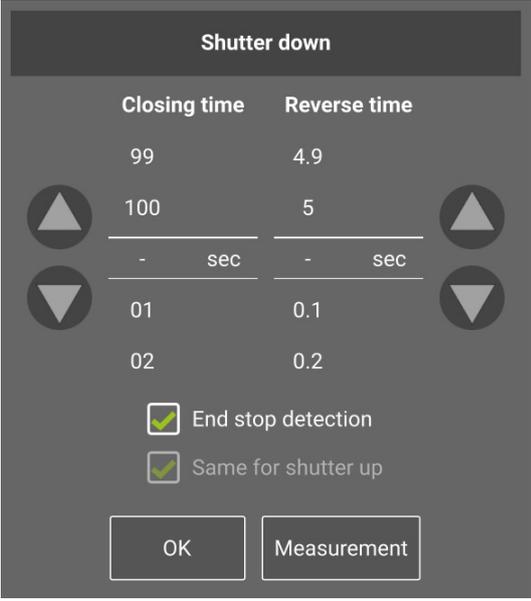
 indicates that no **Closing time** has yet been defined in the output. This means that possible settings in the input may not be effective.

**Measuring and setting the closing time and the reversal time**

In order to be able to measure the closing and reversal time, the roller shutter or blind must be properly connected to a frogRelay2-2.

1. In the output for which the function **Shutter down** is defined, tap **Shutter** .

The **Shading down** dialog box is displayed.



Closing time	Reverse time
99	4.9
100	5
- sec	- sec
01	0.1
02	0.2

End stop detection  
 Same for shutter up

OK Measurement

Figure: **Shutter down** dialog box.

In the **Shutter down** dialog box, you can set the **Closing time** and the **Reverse time** or determine them from a measurement.

The **Closing time** down is equal to the **Closing time** up.

The **Reverse time** is the time it takes for the roller shutter to change direction after stopping.

If you know the **Closing time** and the **Reverse time** of your roller shutter or your blind, you can set this directly in **Closing time** down and in **Reverse time**.

If you do not know the **Closing time** and **Reverse time**, you can determine them by measuring.

2. Tap **Measurement**.

The **Time measurement** dialog box is displayed.

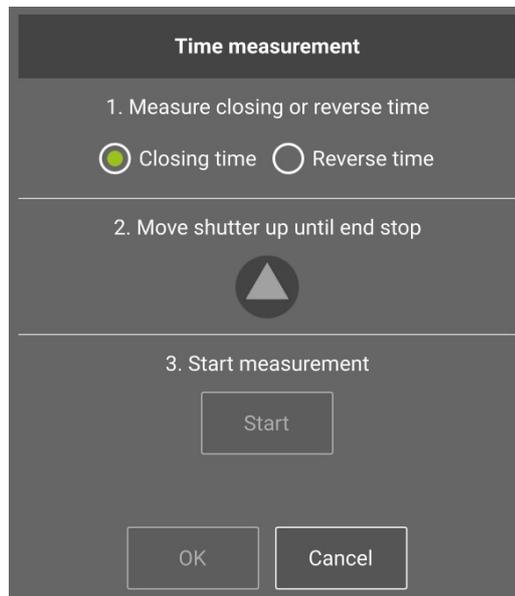


Figure: **Time measurement** dialog box.

3. Select whether you wish to measure the **Closing time** down or the **Reverse time**.
4. Tap **Start**.

The Shutter **configuration** dialog box is displayed.

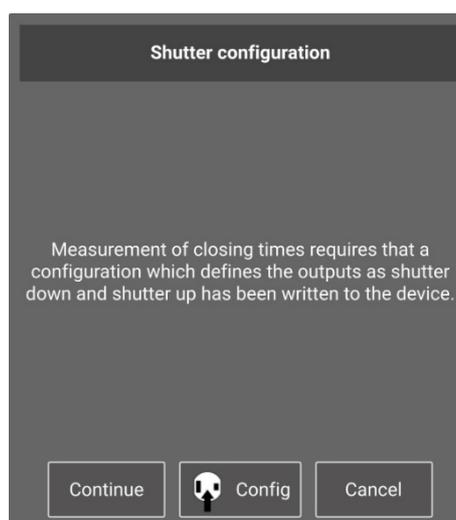


Figure: **Shutter configuration** dialog box.

The configuration is initially written to the frogRelay2-2.

5. Tap **Config** 

The configuration is written to the frogRelay2-2.

6. Tap **Next**.

The **Time measurement** dialog box is displayed again.

7. Tap **Start**.

The measurement is performed, and the result of the measurement is displayed.

8. Tap **OK**.

The measured value is automatically entered in the **Shutter down** dialog box.

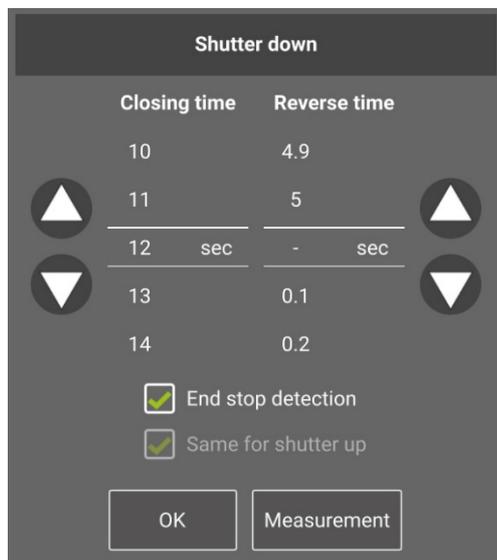


Figure: **Shutter down** dialog box with the measured value.

9. Tap **OK**.

The measured value is displayed in both outputs.

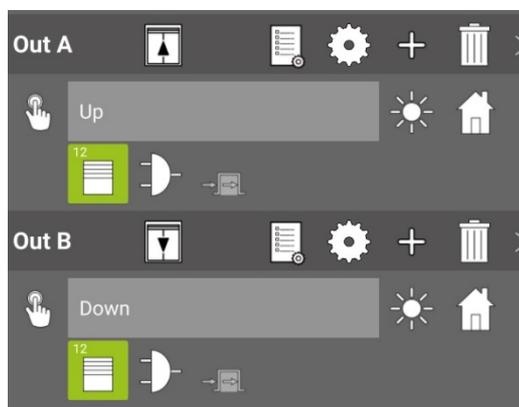


Figure: The measured value of **Closing time** is shown in **Shutter**.

In the next step you can configure the input.

## Setting the shutter position and slat position in the input

You set the **Shutter position**, i.e. how far down the roller shutter should be, and the **Slats position**, this is how far the slats of the roller shutter should be open, in the input.

1. Tap **Shutter**  in an input.

The **Shutter** dialog box is displayed.

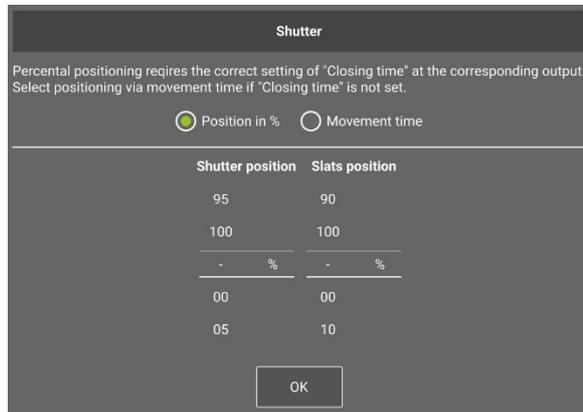


Figure: **Shutter** dialog box.

In the Shading dialog box, you can enter the **Shutter position** and the **Slats position** as a percentage, provided that the **Closing time** down has been configured in the output.

In **Closing time**, you can specify a travel time if this has not been configured in the output. If a travel time has been configured in the output in addition to a configured travel time in the input, the travel time in the output is used.

2. Enter the settings for the **Shutter position** and the **Slats position** and tap **OK**.

The settings are displayed in the input.



Figure: Settings for the **Shutter** in an input.

### 10.4.3 Configuring the range

You can establish a range for the messages defined for the input and output. The range defines to which components in the frogblue system the messages are sent. This makes it very easy to create large installations with little configuration effort.

1. Tap **Range** 

The following options are available to choose from:



**In-house:** Messages are distributed throughout the project. All Frogs that listen to the same message will respond.



**In-room:** Messages are only forwarded in the room. Only Frogs in the same room respond.



**In-frog:** Messages are only sent within the Frog. Only outputs in the same Frog can react to the message.

#### Example

In a garden, several lamps are installed, each with a motion detector and a Frog. Each motion detector is connected to the input of a Frog. Each lamp is connected to the output of a Frog. If a movement is detected, the message **Light on** is sent. If the **In-room** option is activated for the message, all Frogs switch on the lamps in the garden.

In addition, a **Flashing** message is sent, but with the option **In-frog**.

Now only the lamp flashes to which the triggering motion detector is connected.

## 10.5 Managing Frogs

For the Frogs listed in the device list, you can make configurations, save these or display detailed information.

1. In the device list, tap the Frog you wish to configure.

The Frog view is displayed in the display area.



Figure: The Frog view in the display area.

If you establish a Bluetooth connection to the selected Frog, you receive the current data of the Frog and can upload the configuration to the Frogs.

2. Tap **Connect**.

A Bluetooth connection is established with the Frog.

When the Bluetooth connection is established, you can upload the current configuration to the corresponding Frog.

3. Tap **Save configuration** 

The following functions and views are available in the icon line in the Frog view:

-  Advanced settings
-  Master/slave configuration
-  Status
-  User view
-  Monitor temperature
-  Power measurement

### 10.5.1 Advanced settings

Tip **Out**, to define for the outputs an **Upper power limit** and a **Lower power limit**. The selected message is sent as soon as the upper power limit is exceeded, or the lower power limit is not reached, and the output is not switched off.

In addition, you can also set a time limit for an output here:

- adjust the dimming curve, see section → *Dim Editor, page 139*,
- start a power measurement for one or more lamps, see section → *Defective bulb detection, page 140*.

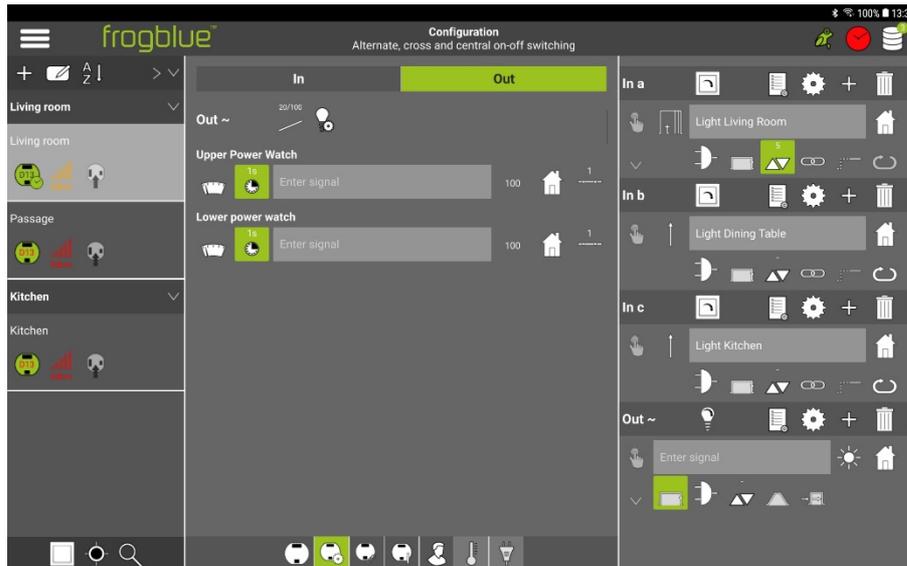


Figure: Definition of power limits for a Frog.

Tap **Power** , to define the power level in the **Power** dialog box.

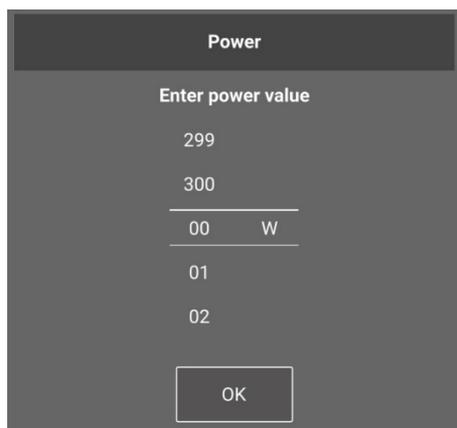


Figure: **Power** dialog box.

Tap **Range**  to define the range of the message. For information on the range of messages, see section → *Configuring the range, page 136*.

Tap **In** to define a debouncing time for the input. The debounce time is the minimum time a signal must be present for a click to be detected. If the input is switched without a key being pressed, this time must be increased.

10.5.1.1 Dim Editor

You can use the **Dim Editor** to adjust the dimming curve for an output.

**Note**

The **Dim Editor** is only available for the action **Dimmable light**  .

Tap **Dim Editor** in the display area. 



Figure: **Dim Editor**.

**Dim Curve**

With the **Dim Curve** you can adapt the dimming response to different light sources. If, for example, a light source very quickly changes the perceptible brightness in the lower range (approximately 10% - 50%) of a linear curve, but then shows barely perceptible changes in the high range, this can be corrected with an exponential curve. If necessary, the curve in the graph can also be adjusted manually.

The following options are available to choose from:

- Linear**  **curve** (default setting)
-  **Exponential curve**
-  **Logarithmic curve**

**Note**

Only switching and dimming is possible for all reverse phase control and phase control-approved light sources.

### Min. dimvalue, max. dimvalue

Here you can select the lowest and highest dimming level (in per cent, starting from 100%). The setting of a high dimming level is recommended, for example, if an output (lamp) is generally to be limited to a reduced brightness.

### Overshoot threshold, Overshoot time

Some light sources require a higher inrush current to be switched on than that provided in **min. dimvalue**. For example, a light source can be dimmed down to 10%, but not started at 10%.

With the **Overshoot time** value, you can determine which dimming level a light source is to be started at. Use the **Overshoot time** to set the duration of how long the higher dimming level is to be used.

### Example

A lamp (mostly LED) can be dimmed down to 10%. If the lamp is switched on at 10%, there is no response, however, i.e. the lamp remains dark.

In this case the **Overshoot threshold** value is set to 20%, while the value **Overshoot time** is set to 80 ms.

When the lamp is switched on again, the dimming level is set to 20% for 80 ms, which makes the lamp go on. After this, the dimming level is reduced to 10%.

#### 10.5.1.2 Defective bulb detection

Here you can set up a defective bulb detection for an output to which one or more lamps are connected.

1. In the display area, tap 

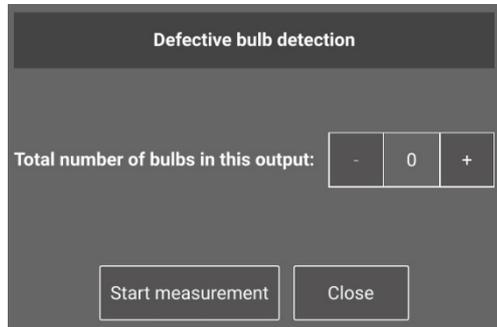


Figure: **Defective bulb detection** dialog box.

The following option is available to select:

**Start measurement:** Here you can start a power measurement with different dimming levels. If a lamp in the output circuit fails, this is detected by the reduced power output and indicated by an orange frame in the output.

## 10.5.2 Master/slave configuration

In the view for the **Master/slave configuration** you can assign slaves to a Frog which has been defined as the master. The slaves take on the configuration for the inputs and outputs from the master.

1. In the device list, tap the Frog that is to serve as the master.



Figure: **Master/slave configuration.**

2. Drag the Frog that is to serve as slave from the device list into the display area.

You can define any number of Frogs as slaves.

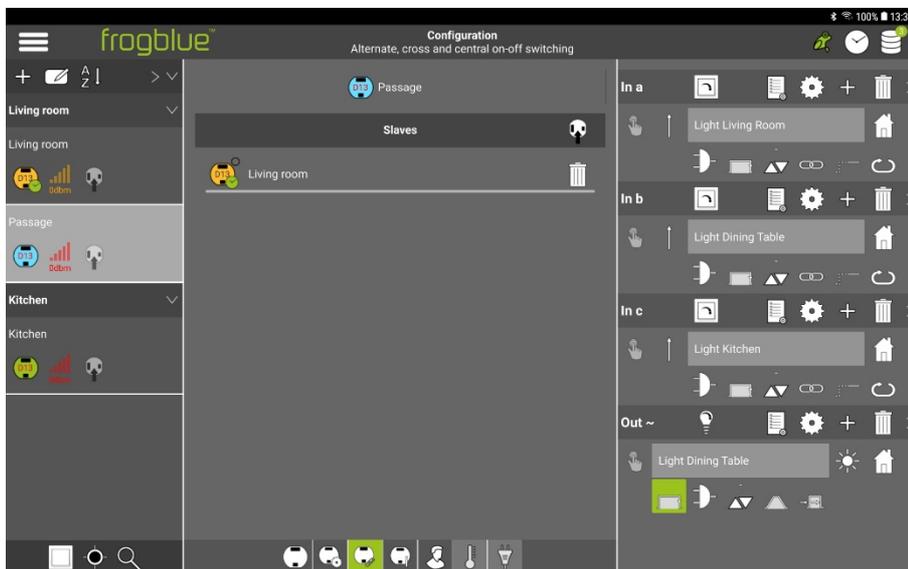


Figure: The Frog selected as a slave in the display area.

The master is marked blue and the slave is displayed in the display area.

A white slave then shows that the configuration is correct.

An orange slave indicates that the configuration does not correspond to that in the **frogblueProject** app. Here the configuration must be changed accordingly.

If you now tap a Frog in the device list that has been assigned to a master as a slave, this dependency is displayed in the display area. The configuration of the slave is then only possible via the master.

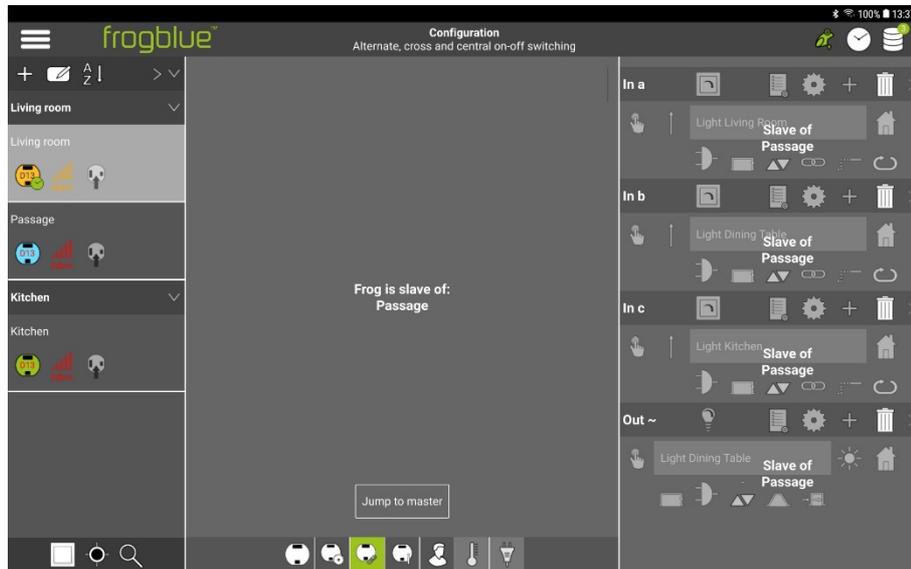


Figure: A Frog that has been defined as slave can only be configured via the master.

### 10.5.3 Status

The status view shows whether the inputs and outputs are open or closed. In addition, the gates and their assignment are displayed, if any have been defined.

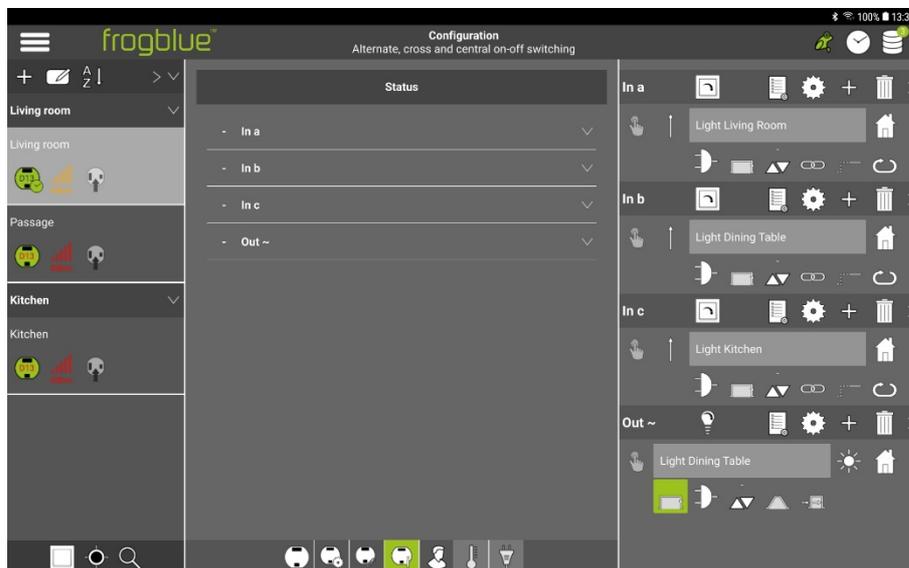


Figure: Status view for a Frog.

### 10.5.4 User view

In the User view you can add buttons and switches to a Frog and assign these to the inputs of the Frog.

Information on assigning buttons and switches to inputs can be found in the section

→ *Adding buttons and assigning inputs, page 116*



Figure: User view of a Frog.

### 10.5.5 Temperature view

In the temperature view, you can check the development of the temperature in the Frog's housing. From a temperature of 75 °C, the Frog switches off electronically for safety reasons.

### 10.5.6 Power measurement

In the Power measurement view, the consumption at the outputs is recorded. The last 100 hours, days, weeks or months can be displayed.

## 10.6 Loading a device configuration onto a device

Only when a device configuration has been loaded to a Frog will it take effect in the Frog. You can load the device configuration of a Frog after the Frog has been configured, or you can load it onto all devices if the device configurations of all Frogs have been changed.

All data of the device configurations are automatically saved in the **frogblueProject** app. The configuration can then only be opened via the **frogblueProject** app. If the device configurations are to be passed on, the device configuration must be exported to a file, the project configuration .

### Loading a device configuration onto a Frog

For a device configuration to take effect in the Frog, it must be loaded onto a Frog.

1. In the Frog view, tap **Connect** in the display area.

A fast Bluetooth connection is established to the Frog.

Once a Bluetooth connection is established, the button is renamed **Disconnect**.

2. Tap **Save configuration** 

The device configuration is loaded onto the corresponding Frog and saved there.

### Loading a device configuration on all devices

If you have made changes whose configuration has to be saved, the icon **Save configuration**  is displayed in the upper title bar with a number.

1. Tap **Save configuration** 

The **Configuration** dialog box is displayed.



Figure: **Configuration** dialog box.

All devices that are in the project are listed.

2. Tap **All** to select all devices.
3. Tap **Config** 

The device configuration is loaded onto all devices.

## 10.7 Configuring frogKeys

A frogKey is a transponder for operating the frogblue system by means of a position sensor.

The position sensor distinguishes three directions in the room for which you can configure actions and functions:

- Upwards
- In the middle
- Downwards

You can also program a frogKey in such a way that the actions are executed depending on the location of the frogKey. The following options are available to choose from:



**In-house:** Messages are distributed throughout the project. All Frogs that listen to the same message will respond.



**In-room:** Messages are sent to the room where the frogKey is located. If the frogKey is not in one of the configured ones, the message is sent to the nearest room.



**In-frog:** Messages are sent to the corresponding Frog. Only outputs in the same Frog can react to the message.

### Note

The frogKey is assigned to the **Standard room**. Since the frogKey can be used for different rooms, assignment to a room is not necessary.

### Example

A single click for the **upward** direction:

- opens the front door when the frogKey is clicked in front of the front door,
- switches on the living room light when the frogKey is clicked in the living room,
- raises the roller shutter when the frogKey is clicked in the child's bedroom.

### Note on the frogKey

For the purpose of room detection the frogKey can remember up to 100 Frogs.

If more Frogs are installed in a project, room detection should be switched off for individual Frogs.

This is possible in the display area via **Room detection** .

### Colour codes for the frogKey

1x red flash	No frogblue devices within range.
5x red flashing	frogblue devices within range, but in a different project from that of the frogKey.
1x green	Single message sent.
1x blue	Message sent based on room detection.
5x blue flashing	frogblue devices belonging to the project within range, but none found in the correct room.
2x red slow flashing	frogKey is not provisioned.
Green or red flashing	Configuration mode.
Green on permanently	Connected.

#### 10.7.1 Configure directions

For a frogKey you can configure actions and functions for three directions in the room:

-  Upwards
-  In the middle
-  Downwards

Additionally, the following gestures can be configured for each directional message:

- Move down
- Move up

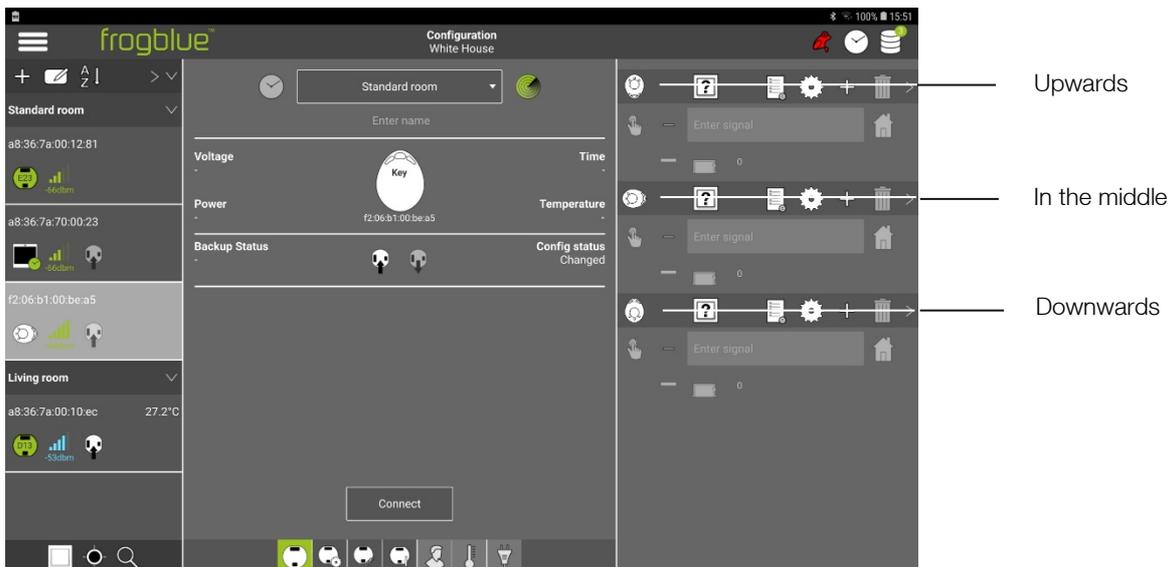


Figure: The three directions to configure for a frogKey.

By setting the range, the messages can be sent depending on the location.



Figure: frogKey sends the predefined message as a broadcast.

### Example

The Frogs **Garage**, **Front door** and **Side entrance** are configured.

If the Frog **Garage** is closest, the message **Open door** is sent to this Frog (first message in the following figure). If the Frog **E2-3 front door** is closest, the message **Open door** is sent to this Frog (second message in the following figure).

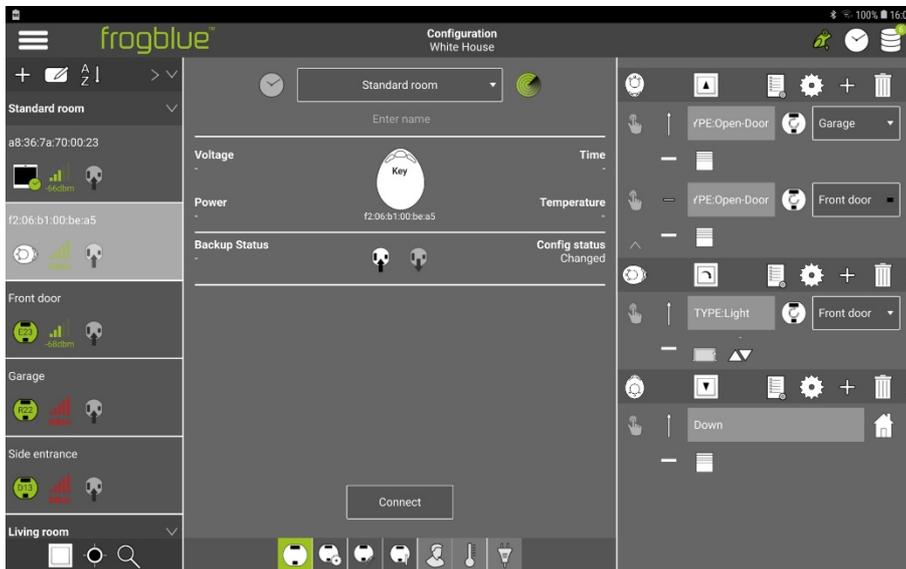


Figure: Defined Frogs.

**Example**

**Room:** The message will be sent inside the room where the frogKey is located.

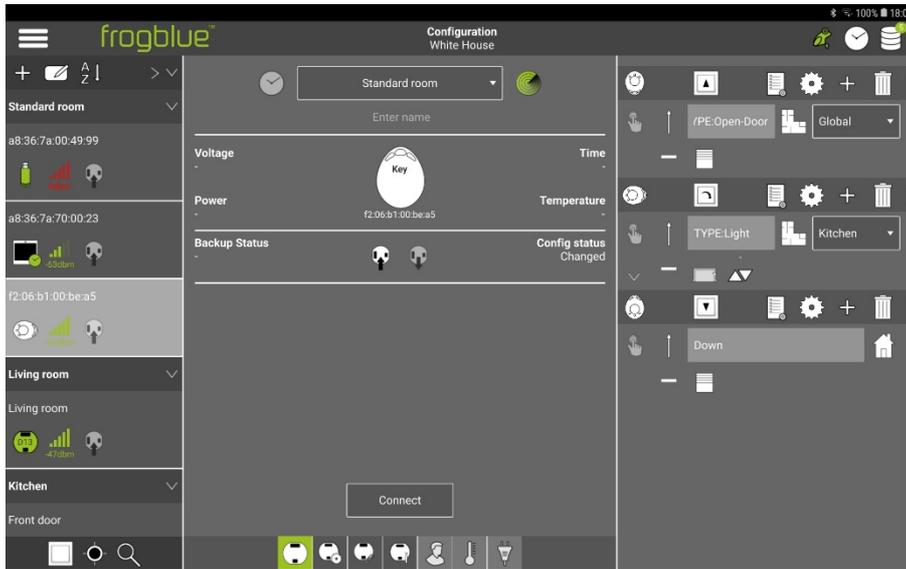


Figure: Message in the room.

The following example shows how the direction **Upwards** can be configured. An action is defined for each of two rooms (living room and child’s bedroom). After the frogKey has been configured, the device configuration must be loaded onto the frogKey.

1. Tap for the direction **Upwards** and select **Button – light**.

Next, select a message to be activated in the first room.

2. Select a message.
3. Tap **Range**
4. Choose **In-room**
5. Select a room.

This defines an action in a room for the direction **Upwards**.

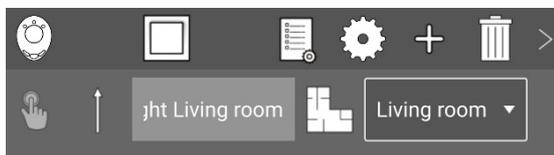


Figure: Direction **Upwards** with the message **Light Living room** in the **Living room**.

**Note**

Tap **Gesture**  to configure one gesture for the message.



Figure: Gestures.

Next, an action is defined for another room for the direction **Upwards**.

6. Tap **Add messages** 
7. Select an action, a name and the range for the second message.

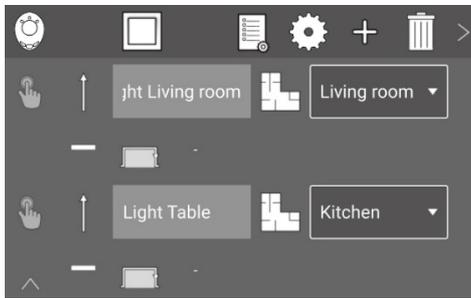


Figure: Direction **Upwards** with two messages for two rooms.

You can make the same configuration for other directions in the same way as for the **Upwards** direction.

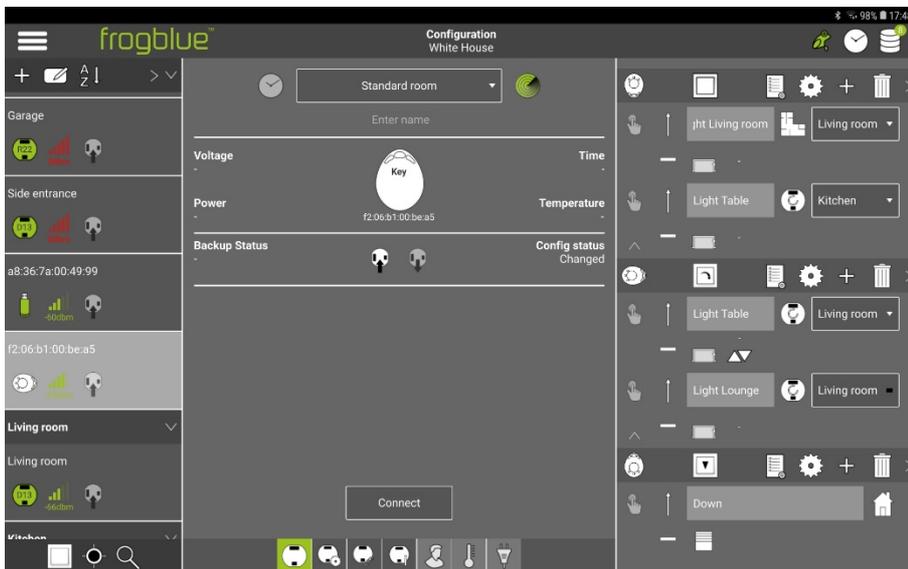


Figure: Configured frogKey for several directions and rooms.

After the configuration has been completed, it must be saved on the frogKey.

8. Click on the frogKey **four times quickly and then hold the last click until the middle LED flashes** so to activate the configuration mode for 60 seconds.
9. Tap **Save configuration** 

The configuration is transferred to the frogKey and saved.

With the direction **Upwards** you can switch on the ceiling lamp in the living room and the dining table lamp in the kitchen.

With the direction **In the middle** you can illuminate the sofa corner in the living room and the play corner in the child's bedroom.

## 10.8 Configuring frogLinks

A frogLink is a Bluetooth LE USB stick which can be connected to different devices via a USB interface. Communication with the frogblue components is established via the serial FTDI interface.

In order to use a frogLink to configure Frogs, the frogLink must use the frogblue mode **frogblue mode**, → *Configuring the operating mode, page 152*.

To communicate with a project, the frogLink must be added to a project and the usable messages have to be configured there.

### 10.8.1 Configure usable messages

In the configuration area you can assign the usable messages to the frogLink.



Figure: A frogLink in the device list.

1. Tap **Add messages** .

The **Message center** dialog box is displayed.

**Message center**  
Select Message

Message name	Devices	Rooms	In Channel	Out Channel	In Sys	Out Sys	In Macro	Out Macro	In Main	Out Main	
TYPE:Light	0	0	0	0	0	0	0	0	2	0	>
TYPE:Light-Dim	0	0	0	0	0	0	0	0	2	0	>
TYPE:Light-Value	0	0	0	0	0	0	0	0	2	0	>
TYPE:Shutter-Up	0	0	0	0	0	0	0	0	1	0	>
TYPE:Shutter-Up-Long	0	0	0	0	0	0	0	0	2	0	>
TYPE:Shutter-Down	0	0	0	0	0	0	0	0	1	0	>
TYPE:Shutter-Down-Long	0	0	0	0	0	0	0	0	2	0	>
TYPE:Ring	0	0	0	0	0	0	0	0	1	0	>
TYPE:Open-Door	0	0	0	0	1	0	0	0	1	0	>

Search:  Message Type:   Invert

Device Type:  Room:   Invert

Figure: **Message center** dialog box

2. Tap to select the messages that are to be usable for the frogLink.
3. Tap  to close the **Message center** dialog box.

The selected messages are displayed in the configuration area.



Figure: Usable messages for the frogLink in the configuration area.

4. Load the configuration onto the frogLink.

## 10.8.2 Configuring the operating mode

A frogLink offers two different operating modes:

**frogblue mode:** Use of the frogLink as a Bluetooth communication interface for configuration and operation with a Windows computer.

**Text mode:** Use as a serial text gateway (ASCII or JSON) for frogblue integration from and into other systems.

A frogLink is supplied as standard in **Text mode**. In the **frogblueProject** app you can change the mode to the **frogblue mode** so the frogLink can be used with a Windows computer.

✓ **frogblueProject** app is installed on a Windows computer.  
Information on the installation of the **frogblueProject** app in Windows can be found in section → *Installing the frogblueProject app in Windows, page 30.*

✓ The frogLink is connected to a USB socket of the Windows computer.

1. Start the **frogblueProject** app for Windows.

The start page is displayed

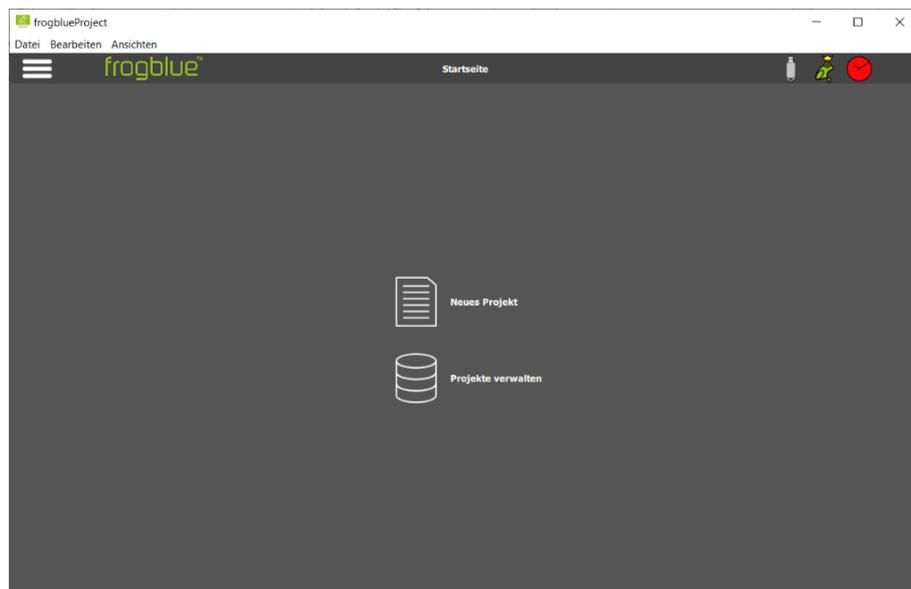


Figure: Homepage of the **frogblueProject** app for Windows.

2. Click **Menu** 
3. Click **frogLink Manager** 

The connected frogLink is displayed in the **frogLink Manager**.

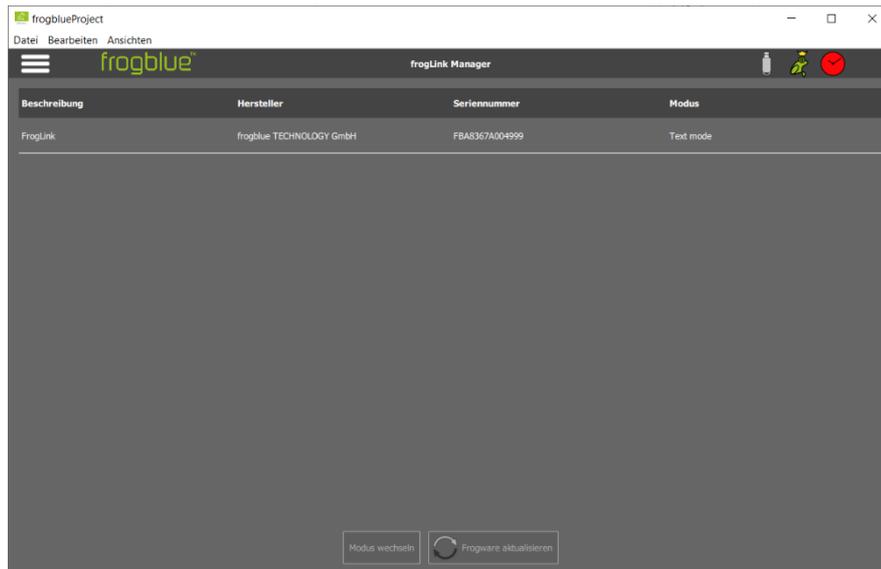


Figure: **frogLink Manager** with a frogLink.

4. Click the entry for the frogLink.

The line is marked, and the **Change mode** button activated.

5. Click **Change mode**.

A dialog box is displayed.

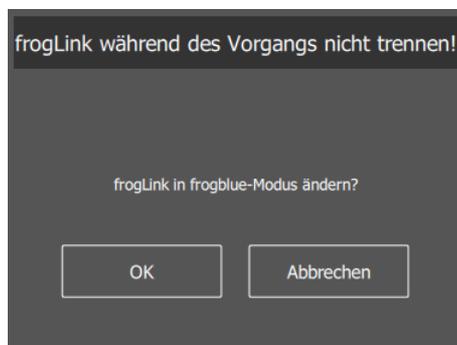


Figure: Dialog box for changing the mode.

6. Click **OK** to change the mode.

The **frogLink detected in frogblue mode!** dialog box is displayed.

7. Click **Next**.

The frogLink is activated.

8. Remove the frogLink from the USB socket and plug it in again.

The frogLink is now ready for operation in **frogblue mode** and can be used with a Windows computer.

### 10.8.3 Command reference ASCII

Queries are also sent with a dollar symbol "\$" in front.

#### 10.8.3.1 For information on available rooms, messages etc.

\$help	List of available commands.
\$project	Retrieve project information- <b>Input:</b> \$project <b>Return:</b> \$ project=HomeJohnSmith frogLinkName=Camera2 frogLinkRoom=Corridor frogLinkBuilding= SW-Version=1.4.0.0 config=13.05.2019 13:47:52 address=A8:36:7A:00:1D:C2 netID=190 \$
\$messages	List of available control messages. <b>Input:</b> \$messages <b>Return:</b> \$ CeilingLight LampsMirror OpenMainDoor Ring \$
\$rooms	List of available rooms. <b>Input:</b> \$rooms <b>Return:</b> \$ Livingroom Kitchen Bedroom Bath \$

---

\$types List of available control types.

---

**Input:**

\$types

**Return:**

\$

Light

ShutterUp

ShutterDown

Room

\$

Can be combined with *room* in order to create a list of the available types in the respective room:

---

**Input:**

\$types

**Return:**

\$

Light

ShutterUp

ShutterDown

OpenDoor

\$

### 10.8.3.2 Sending control messages

Control messages are sent by simple use of the plain-text name of the control message or type.

#### Example

---

CeilingLight Switches over all outputs which respond to *CeilingLight* (toggle).

---

**Input:**

CeilingLight

**Return:**

CeilingLight(255,0,0)

---

Light

---

Switches over all outputs which respond the type *Light* (toggle).

---

**Input:**

gLight

**Return:**

Light(255,0,0)

### 10.8.3.3 Optional parameters for control messages

Parameters can be optionally added to control messages.

CeilingLight(bright=50)	Switches over all outputs which respond to <i>CeilingLight</i> (toggle). When switched on, dimmable outputs are set to 50% brightness.
	<b>Input:</b> CeilingLight(bright=50) <b>Return:</b> CeilingLight(50,0,0)
CeilingLight(ON)	Switches on all outputs which respond to <i>CeilingLight</i> .
CeilingLight(OFF)	Switches off all outputs which respond to <i>CeilingLight</i> .
CeilingLight(ON,bright=50)	Switches all outputs on with a dimming level of 50% which response to <i>CeilingLight</i> .
CeilingLight(time=5s)	Switches over all outputs which respond to <i>CeilingLight</i> (toggle). When the output is switched on, the output is automatically switched off after five seconds (has to be enabled at output).
	<b>Input:</b> CeilingLight(time=5s) <b>Return:</b> CeilingLight(255,0,5s)
CeilingLight(room=Kitchen)	Switches over all outputs in the room <i>Kitchen</i> that respond to <i>CeilingLight</i> .

Parameters can be combined at will:

CeilingLight(room=Kitchen,ON,bright=60%,time=10m)	Switches on all outputs in the room <i>Kitchen</i> with a dimming level of 60% for 10 minutes.
---	--

### 10.8.3.4 Reception of control messages

Messages triggered by the frogblue system can also be received and further processed. The format of the received messages is the same as the return format when sending.

#### Example

In the frogblue system, a button is pressed which switches the *CeilingLight* to a dimming level of 70% for 20 seconds.

**Return:**  
CeilingLight(70,0,20s)

---

### 10.8.3.5 Query about output state (optional)

An output state of a device can be specifically queried.

#### Example

\$status(type=bright,target=device address,output=X)

---

**Input:**  
\$status(type=bright,target=0012,output=A)  
**Return:**  
\$status(source=0012,output=A,value=30%)

---

## 10.8.4 Command reference JSON

### 10.8.4.1 For information on available rooms, messages etc.

{"cmd":"help"} List of available commands.

---

{"cmd":"project"} Retrieve project information-

---

**Input:**  
{"cmd":"project"}  
**Return:**  
{"project":"HomeJohnSmith","frogLinkName":"Camera2","frogLinkRoom":"Corridor","frogLinkBuilding":"","SWVersion":"1.4.0.0","config":"13.05.2019 13:47:52","address":"A8:36:7A:00:1D:C2","netID":"190"}

---

{"cmd":"messages"} List of available control messages.

---

**Input:**  
{"cmd":"messages"}  
**Return:**  
{"messages":["CeilingLight","LampsMirror","OpenMainDoor","Ring"]}

---

`{"cmd":"rooms"}` List of available rooms.

---

**Input:**  
`{"cmd":"rooms"}`

**Return:**  
`{"rooms":["Livingroom","Kitchen","Bedroom","Bath"]}`

---

`{"cmd":"types"}` List of available control types.

---

**Input:**  
`{"cmd":"types"}`

**Return:**  
`{"types":["Light","ShutterUp","ShutterDown","OpenDoor"]}`

Can be combined with `room` in order to create a list of the available types in the respective room:

---

**Input:**  
`{"cmd":"types","room":"Livingroom"}`

**Return:**  
`{"types":["Light"]}`

---

#### 10.8.4.2 Sending control messages

##### Example

```
{"Msg":"Ceilinglight","on":true,"bright":50}
```

Switches on all outputs that respond to the message **Ceilinglight** and sets the brightness to 50%.

## 10.9 Configuring frogDisplays

The frogDisplay is a universal operating interface for controlling all frogblue units. The frogDisplay is operated and configured via the **frogblueHome** app.

### frogblueHome app manual

Detailed information on the operation and configuration of the **frogblueHome** app as well as the frogDisplay can be found in the → *frogblueHome User Manual*.

#### 10.9.1 Loading a project on the frogDisplay

In order to control the frogblue units of a project with the frogDisplay, a project must first be loaded onto the frogDisplay.



Figure: frogDisplay in the **configuration** screen.

1. Tap **Connect**.
2. Tap **Save configuration** 

The configuration is transferred to the frogDisplay.

The **new configuration is received on the frogDisplay!** dialog box is displayed.

Now the project has been transferred to the frogDisplay.

## 10.10 Creating and managing macros

You can use macros to define settings for inputs and outputs centrally and assign them to several Frogs. If for example you define the settings for an output in a macro, you can activate this macro in the output of any Frog, thereby ensuring that all outputs have the same settings.

A major advantage of a Macro is that you do not have to reconfigure every single Frog when you make changes. If changes are made to a macro, you can load the configuration onto every Frog that uses the macro by writing the configuration to all devices.

### Note

Macros override the settings of a single Frog. If a Frog receives several messages, the settings of the macro are prioritised.

You can define macros for inputs and outputs:

- **Input macros:** Macros for inputs.
- **Output macros:** Macros for outputs.

**Input macros** can only be assigned to inputs. **Output macros** can only be assigned to outputs.

- ✓ Frogs have been added to the project and configured.  
For information on how to configure Frogs, see section → *Configuring Frogs, page 105*.
- ✓ The Frogs, switches and buttons are properly wired.  
For information on installing Frogs, see chapter → *General wiring instructions, page 16*.
- ✓ A project was created or opened.  
For information on how to create projects, see section → *Managing projects, page 86*.

### 10.10.1 Creating macros

The creation of **Input macros** and **Output macros** differs only in the configuration of the macros. Identical steps are required from the creation of a macro through to the actual configuration.

1. Tap **Menu** 
2. Tap **Macro editor**.

The **Macro editor** screen appears.

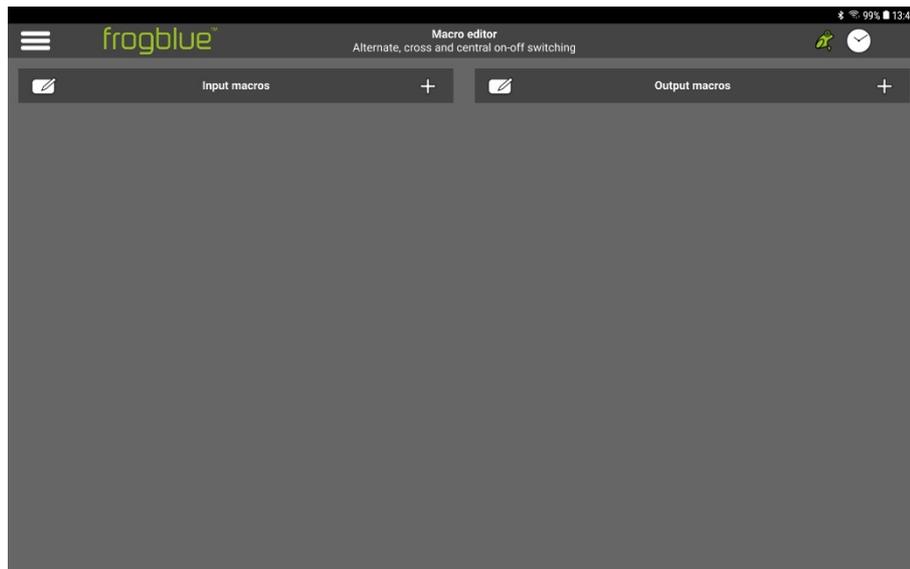


Figure: **Macro editor** screen.

Here you can create an **Input macro** or an **Output macro**.

3. Tap the **Input macro** plus symbol  if you wish to create an **Input macro**.

The **Add input macro** is displayed.

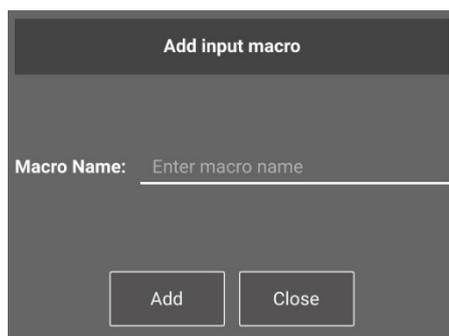


Figure: **Add input macro** dialog box.

— or —

3. Tap the **Output macro** plus symbol  if you wish to create an **Output macro**.

The **Add output macro** is displayed.

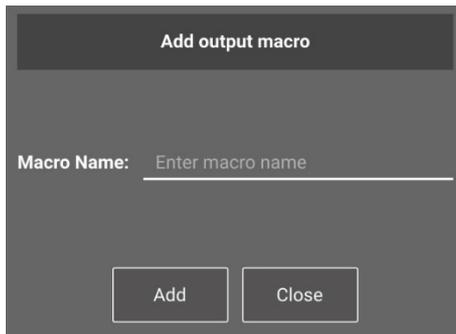


Figure: **Add output macro** dialog box.

4. Tap the **Macro Name** input field and enter a name for the macro.
5. Tap **Add**.
6. Tap **Close**.

The name of the macro you created appears in the **Macro editor**.

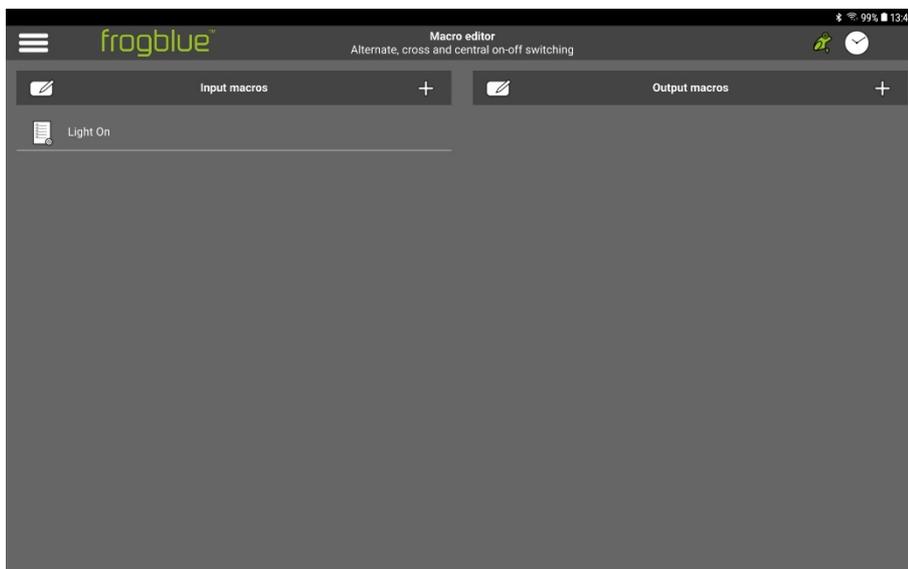


Figure: Newly created **Input macro Light On** in the **Macro editor**.

Now you can configure the macro.

#### Note

If you wish to change the name of a macro, tap **Edit**   
You can also delete a macro.

### 10.10.1.1 Configuring input macros

The options for configuring an **Input macro** are the same as the options for configuring inputs. For information on configuring inputs, see section → *Configuring inputs, page 108*.

1. Tap the name of the **Input macro** that you wish to configure.

The screen for configuring the **Input macro** is displayed.

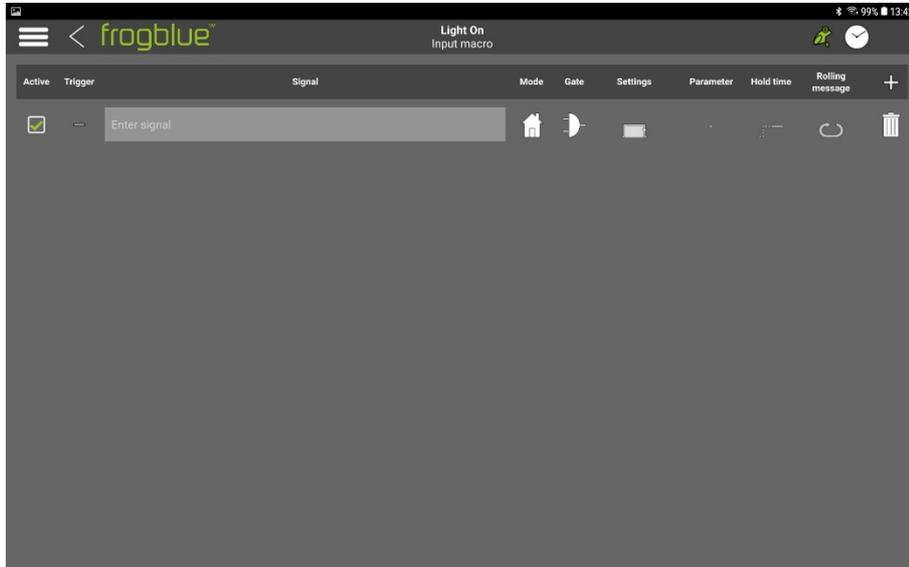


Figure: Screen for configuring an **Input macro**.

The following options are available for configuring a message:

#### **Active**

Here you can specify whether the message is active for the **Input macro** or not.

#### **Trigger**

Here you can select an action that triggers the message.

For information on potential actions, see section → *Selecting an action, page 110*.

#### **Signal**

Tap the **Enter signal** input field to select a message or create a new message.

For information on creating messages, see section → *Selecting functions and defining message, page 109*.

#### **Mode**

Here you can set the range of the message.

For information on the range of messages, see section → *Configuring the range, page 136*.

#### **Gate**

You can use the **Gate/Time editor** to define logic functions for macros. For information on the **Gate/Time editor**, see section → *Gate/Time editor, page 122*.

#### **Settings**

Here you can set when the output connected to the input is to be switched off.

For information on setting the switch-off time, see section →, *Minimal on page 124*.

#### **Parameter**

Here you can set the brightness and the dimming speed.

**Hold time**

Here you can set how long a button has to be kept press down before a message is sent. The dead time can only be set for certain actions. For information on the **dead time**, see section → *Dead time, page 127*.

**Rolling message**

If several messages are defined for the input, you can activate **Rolling messages** to determine that the defined messages are sent successively every time the action is triggered. For information on rolling messages, see section → *Rolling Message, page 127*.

Tap **Add message**  to configure another message for the **Input macro**.

2. Configure the **Input macro**.

The settings are saved automatically.

### 10.10.1.2 Configuring output macros

The options for configuring an **Output macro** are the same as the options for configuring outputs. For information configuration of outputs, see section → *Configuring outputs, page 113*.

1. Tap the name of the **Output macro** that you wish to configure.

The screen for configuring the **Output macro** is displayed.

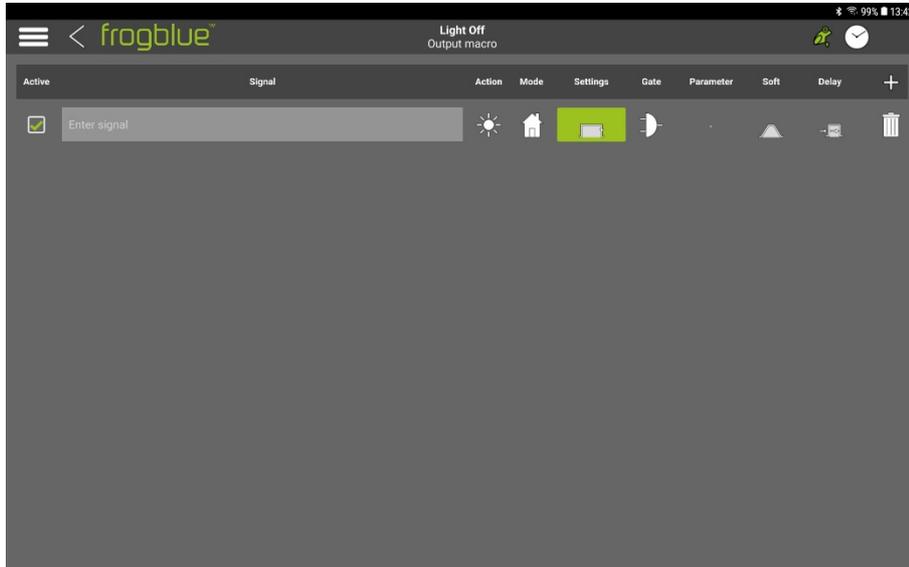


Figure: Screen for configuring an **Output macro**.

The following options are available to you for configuring a message:

#### Active

Here you can specify whether the message is active for the **Output macro** or not.

#### Signal

Tap **Enter signal** to select a message or create a new message.

For information on creating messages, see section → *Selecting connections and message, page 112*.

#### Action

Here you can select an action that triggers the message.

For information on potential actions, see section → *Selecting an action, page 45*.

#### Mode

Here you can set the range of the message.

For information on the range of messages, see section → *Configuring the range, page 136*.

#### Settings

In the **Settings** dialog box you can define actions dependent on specified times.

For information on the **settings**, see section → *Settings, page 129*.

#### Gate

You can use the **Gate/Time editor** to define logic functions for macros. For information on the **Gate/Time editor**, see section → *Gate/Time editor, page 122*.

#### Parameter

Here you can set the brightness and the dimming speed.

**Soft**

In the **Soft Functions** dialog box, you can set the time until a device is switched on or off.  
For information on the **soft function**, see section → *Soft-Function, page 131*.

**Shading reverse time**

You can set the time after which the direction CLOSE is changed to the direction OPEN in the **Shading function** dialog box.

For information on **Shading reverse time**, see section → *Shutter, page 132*.

**Delay**

In the **Delay functions** dialog box, you can set a time delay until the port is activated or deactivated.

For information on **delay functions**, see section → *Delay functions, page 131*.

Tap **Add message**  to configure another message for the **Output macro**.

2. Configure the **Output macro**.

The settings are automatically saved in the **frogblueProject** app.

### 10.10.2 Assigning macros to inputs and outputs

You can assign **Input macros** to one or more inputs of any number of Frogs. You can assign **Output macros** to one or more outputs of any number of Frogs.

You can assign several macros to one input or output.

The macros are assigned to the inputs and outputs of the selected Frog in the **Configuration** screen.

1. Tap **Macro** 

A list of available macros is displayed.



Figure: For the input **In a**, the **Input macro Light On** is available for selection.

2. Tap the macro you wish to assign to the input or output.
3. Tap the screen.

The macro is activated for the input or output.



Figure: An Input macro is activated for the input **In a**.

4. Upload the device configuration to all Frogs for which a macro has been activated.

## 10.11 Creating and managing system signals

One or more system signals are combined into a system group, by means of which all Frogs configured in the frogblue system can be controlled simultaneously. In this way, a system signal can only be used in connection with a system group. In a system group, a system signal is identified by the message name.

For information on system groups, see chapter → *Creating and managing system groups, page 170*.

You can define system signals for inputs and outputs:

- **Input signal:** System signals for inputs.
- **Output signal:** System signals for outputs.

**Input signals** can only be assigned to inputs. **Output signals** can only be assigned to outputs.

Some typical system signals are already defined in the **frogblueProject** app and can be activated.

### 10.11.1 Creating system signals

The creation of **Input signals** and **Output signals** differs only in the configuration of the system signals. Identical steps are required from the creation of a system signal through to the actual configuration.

1. Tap **Menu** ☰
2. Tap **System signals**.

The **System signals** screen appears.

Typical and frequently used system signals, such as **Central**, **Open door** and **Panic**, are already provided as standard in the **frogblueProject** app.

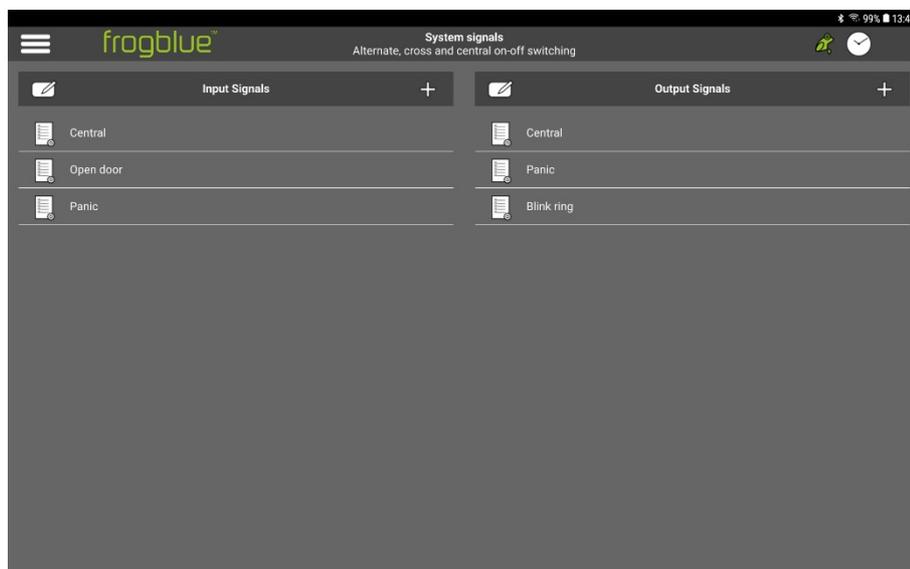


Figure: **System signals** screen.

Here you can create an **Input signal** or an **Output signal**.

3. Tap the **Input signal** plus symbol  $\oplus$  if you wish to create an **input signal**.

The **Add input macro** is displayed.

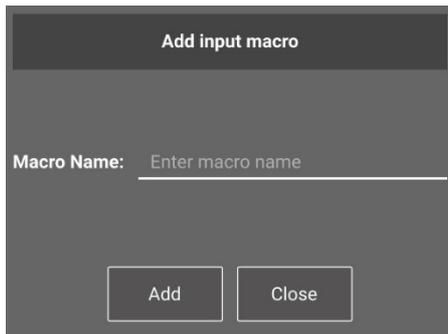


Figure: **Add input macro** dialog box.

— or —

3. Tap the **Output signal** plus symbol  $\oplus$  if you wish to create an **Output signal**.

The **Add output macro** is displayed.

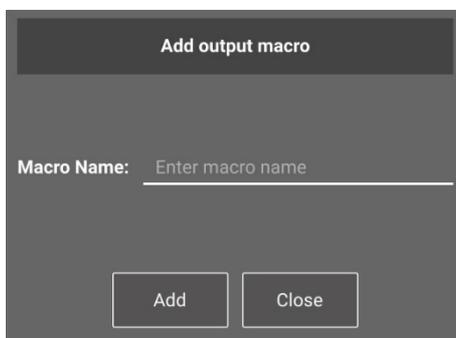


Figure: **Add output macro** dialog box.

4. Tap the **Macro name** input field and enter a name for the system signal.
5. Tap **Add**.
6. Tap **Close**.

The name of the newly created system signal appears in the **System signals** screen.

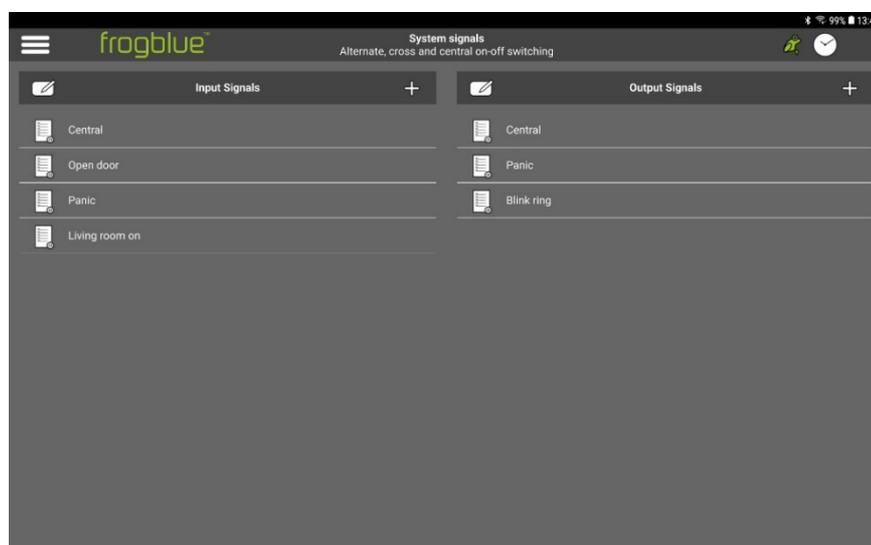


Figure: Newly created **Input signal** in the **System signals** screen.

Now you can configure the system signal.

**Note**

Tap **Edit**  if you wish to change the name of a system signal. You can also delete a system signal.

#### 10.11.1.1 Configuring an input signal

An **input signal** is configured like an **input macro**.

For information on how to configure an input macro, see section → *Configuring input macros, page 163*.

#### 10.11.1.2 Configuring an output signal

An **output signal** is configured in the same way as an **output macro**.

For information on configuring an output macro, see section → *Configuring output macros, page 165*.

## 10.12 Creating and managing system groups

System groups enable you to implement central switch operations, such as central switching on and off for all devices. A system group consists of one or more system signals.

You can define system groups for inputs and outputs:

- **Input groups:** System groups for inputs.
- **Output groups:** System groups for outputs.

**Input groups** can only be assigned to inputs. **Output groups** can only be assigned to outputs.

Some typical system signals belonging a system group are already defined in the **frogblueProject** app and can be activated.

### 10.12.1 Creating system groups

The creation of **Input groups** and **Output groups** differs only in the configuration of the system signals. Identical steps are required from the creation of a system group through to the actual configuration.

1. Tap **Menu** ☰
2. Tap **System groups**.

The **System groups** screen appears.

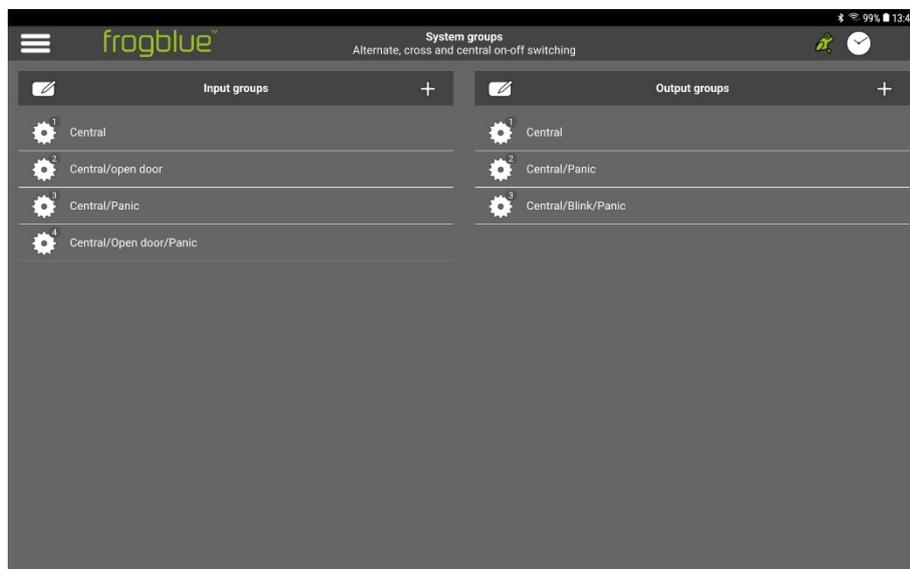


Figure: **System groups** screen.

Here you can create **Input group** or an **Output group**.

3. Tap the **Input groups** plus symbol  $\oplus$  if you wish to create an **Input group**.

The **Add input group** dialog box is displayed.

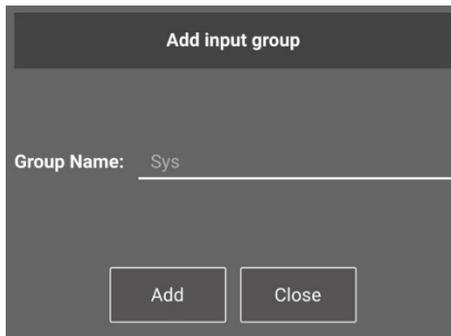


Figure: **Add input group** dialog box.

— or —

4. Tap the **Output groups** plus symbol  if you wish to create an **Output group**.

The **Add output group** dialog box is displayed.

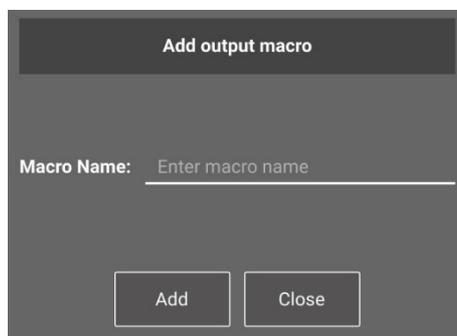


Figure: **Add output group** dialog box.

5. Tap the **Group name** input field and enter a name for the system group.
6. Tap **Add**.
7. Tap **Close**.

The system group name appears in the **System groups** screen.

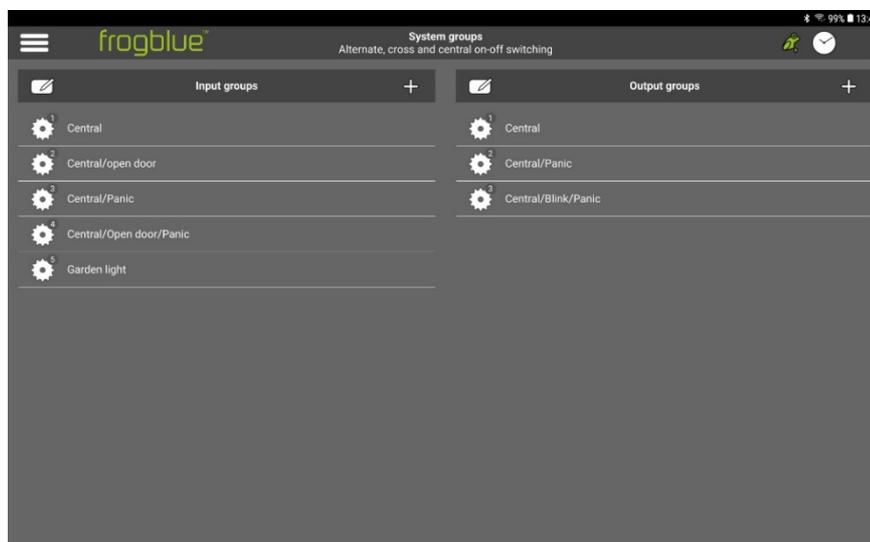


Figure: Newly created **Input group** in the **System groups** screen.

Now you can configure the system group.

### Note

Tap **Edit**  if you wish to change the name of a system group. You can also delete a system group.

#### 10.12.1.1 Configuring an input group

An **input group** is configured in the same way as an **input macro**.

For information on how to configure an input macro, see section → *Configuring input macros, page 163*.

#### 10.12.1.2 Configuring an output signal

An **output group** is configured in the same way as an **output macro**.

For information on configuring an output macro, see section → *Configuring output macros, page 165*.

#### 10.12.2 Assigning inputs and outputs to system groups

You can activate **Input groups** to an input or assign them to several inputs of any number of Frogs. You can activate **Output groups** to an output or assign them to several outputs of any number of Frogs.

Only one system group can be assigned to an input or output.

The system groups are activated in the configuration area of the **configuration screen** in the inputs and outputs.

1. Tap **System group** 

A selection of the available system groups is displayed.

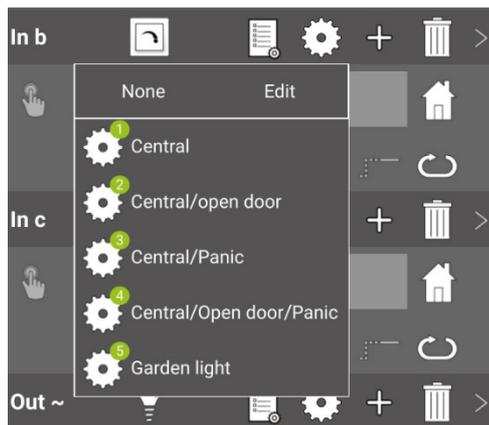


Figure: For the input **In b**, for example, the system group **Garden light** is available for selection.

2. Tap the system group that you want to activate in the input or output.
3. Tap the screen.

The system group is activated for the selected input or output.

**Note**

A maximum of one system group can be activated for each input and output.



Figure: A system group is activated for **In b** (identified by **1**).

The system group is activated for the selected input or output.

### 10.13 Message center

In the **Message center** you have an overview of all messages used in the frogblue system. In addition, the following functions are available:

- ✓ add new messages,
- ✓ rename messages,
- ✓ delete unused messages,
- ✓ export messages to a CSV file.

1. Tap **Menu** ☰
2. Tap **Message center**.

The **Message center** screen appears.

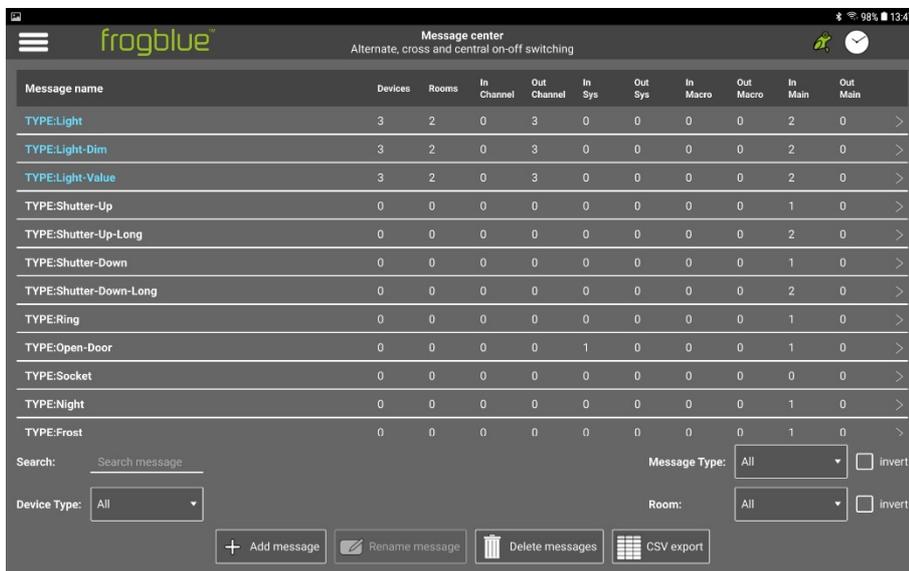


Figure: **Message center** screen.

You can search and filter messages in the **Message center** using the following options:

**Search:** Here you can search for messages.

**Device Type:** You can filter according to Frog types here.

**Message Type:** You can filter according to message types here.

**Room:** Here you can filter for messages that refer to a room.

**Note**

If you tap the right arrow for a message, the room in which the message is used is displayed.



Figure: The message **Light Living Room** is used in the rooms **Living room**, **Passage** and **Kitchen**.

## Adding a new message

In the **Message center** you can add messages which can later be assigned to the inputs and outputs of Frogs.

1. Tap **Add message**.

The **Message** dialog box appears.

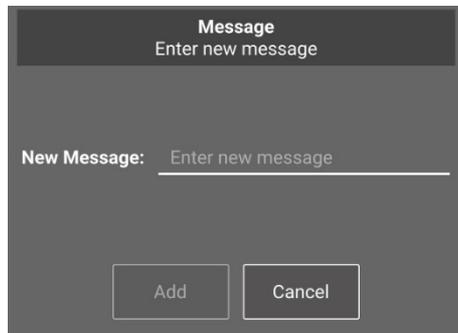


Figure: **Message** dialog to create a new message.

2. Type the name of a message in **Enter new message**.
3. Tap **Add**.

The message is created and displayed in the **Message center**.

## Renaming a message

In the **Message center** you can rename messages. If the message is already assigned to inputs and outputs, it is automatically renamed there.

1. In the **Message center**, tap the message you wish to rename.

The message is then highlighted.

2. Tap **Rename message**.

The **Rename message** dialog box appears.

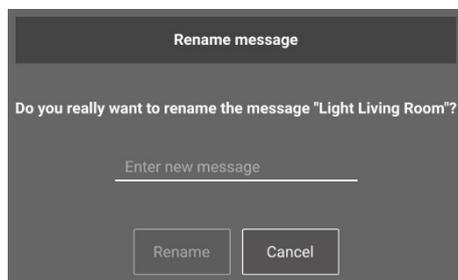


Figure: **Rename message** dialog box for renaming a new message.

3. Type the name of the new message in **Enter new message**.
4. Tap **Rename**.

The renamed message appears in the **Message center**.

## Deleting unused messages

In the **Message center** you can delete all messages that are not used or no longer used in the frogblue system.

1. Tap **Delete messages**.

The **Delete messages** dialog box is displayed.

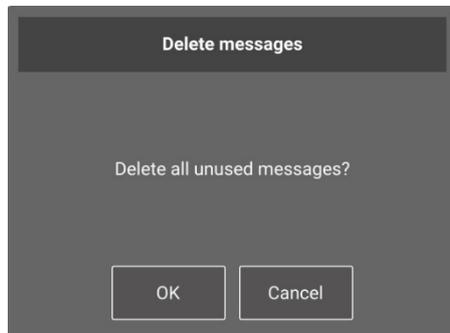


Figure: **Delete messages** dialog box for deleting unused messages.

2. Tap **OK**.

All unused messages are deleted.

The messages predefined by the frogblue system are not deleted.

## Exporting messages

You can export the messages listed in Message center into a CSV file.

1. Tap **CSV export**.

The CSV file is stored in the **Documents/sheets** folder. The file name contains the name of the project as well as the **message** label and a date stamp, for example:  
fb\_Mustermann\_Messages\_190509\_145516.csv.

## 10.14 Device manager

In the **Device manager** you will find an overview of all Frogs, frogKeys, frogDisplays etc. that have been added to the current project.

1. Tap **Menu** 
2. Tap **Device manager**.

The **Device manager** screen is displayed.

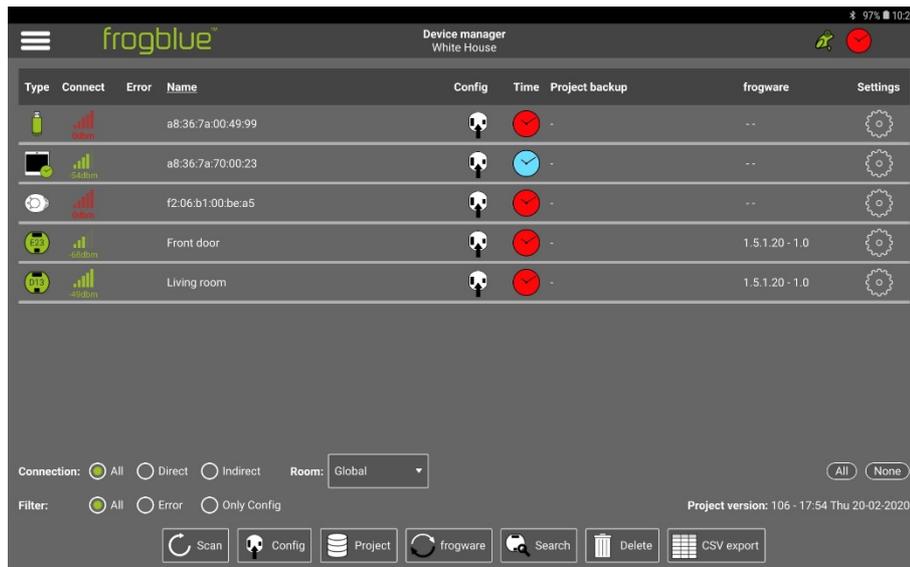


Figure: **Device manager** screen.

The following functions are available in the **Device manager**:

- 
**Scan**  
 Check the status and accessibility of all devices such as Frogs, frogKeys, frogLinks etc.
- 
**Config**  
 Upload the device configuration on the selected Frog.  
 For information on uploading device configurations, see section  
 → *Loading a device configuration onto a device*, page 144
- 
**Project**  
 Create a project backup for the current project in a file or in a selected Frog.  
 For information on creating a backup, see section  
 → *Creating a backup*, page 181.
- 
**frogware**  
 Update the **frogware** for Frogs and frogKeys.  
 For information on updating the **frogware**, see section  
*Updating frogware*, page 32 and in section → *Updating frogware*, page 35.
- 
**Search**  
 The **Devices** dialog box is displayed that you can use to add devices to the current project.  
 For information on the **devices** dialog box, see section  
 → *Adding devices to a project*, page 100.



**Delete**

Devices (Frogs, frogKey, frogDisplay etc.) can be removed from a project.

**Note**

For safety reasons, we recommend resetting devices to their factory settings before deleting them. For this reason, you can also reset devices in the **Delete** dialog box.



**CSV export**

Export the device list into a CSV file. The Frog type, name, room, network, MAC address and **frogware** version are saved in the CSV file. The CSV file is placed in the **Documents/sheets** folder.

If you select a Frog, frogKey or frogLink by tapping on it, a green number in the buttons shows you which actions are possible for the selected device.



Figure: Green figures indicate possible actions for a Frog, frogKey or frogDisplay.

**Note**

When you tap the name of a Frog, the room is shown to which the Frog is assigned.

Under **Frog expert settings** you can also individually configure the forwarding of messages, reset the configuration of the Frog and restart the Frog.

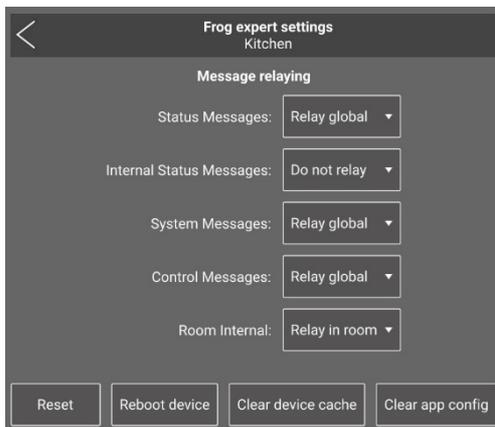


Figure: **Frog expert settings** dialog box.

### 10.14.1 Resetting a Frog

Resetting a Frog might be necessary if you forget the project password.

In order to reset a Frog, you require the device key and the Frog reset key.

For information on the device key, see section → *Changing the device key, page 98*.

For information on the reset key, see section → *Installation information, page 18*.

#### Note

The reset key is only accepted within a period of three minutes after the Frog has been reconnected to the power supply. As such, a Frog cannot be reset until after the fuse has been switched off and on again, for example.

1. In the Device manager for the Frog you wish to reset, tap **Frog expert settings** 

The **Frog expert settings** dialog box is displayed.

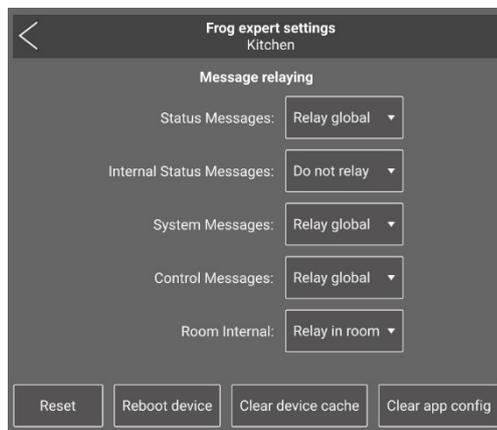


Figure: **Frog expert settings** dialog box.

2. Tap **Reset**.

The **Default settings** dialog box is displayed.

3. Tap **OK**.

The Frog is reset to the factory default settings.

## 10.15 Creating a backup

You can save the configurations and project data in a file or on a device to create a project backup. A project backup contains all the information and configurations for a project.

If you wish to save the entire configuration externally, you can export the project. For information on exporting projects, see section → *Exporting a project, page 91*.

When using multiple Frogs, the project backup is saved to the selected Frogs one after the other.

1. Tap **Save configuration** 

The **Configuration** dialog box is displayed.

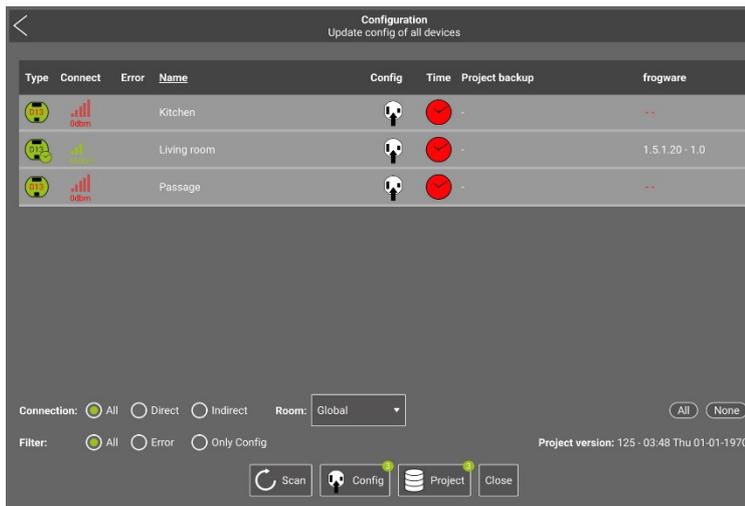


Figure: **Configuration** dialog box.

All Frogs are listed which are assigned to the project.

2. Tap **Project**.

The **Project backup** dialog box is displayed.

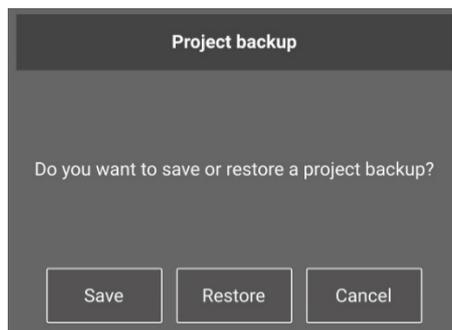


Figure: **Project backup** dialog box.

3. Tap **Save**.

The **Save project backup** dialog box is displayed.

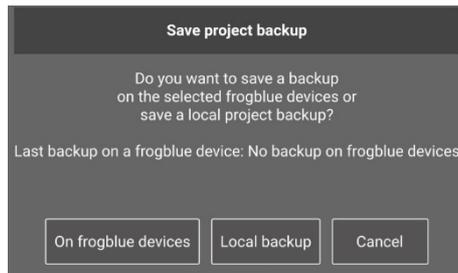


Figure: **Save project backup** dialog box.

4. Tap **Local backup** if you wish to save the entire set of configuration data in a file.

The project backup is stored locally in the project.

— or —

4. Tap **On frogblue devices** if you wish to save the entire set of configuration data on the devices.

In this case, however, you can only access the project backup if you have access to the device.

The project backup is uploaded to the devices.

## 11 Keyword index

## A

alternate switching 56  
 Android  
   access to location of device 29  
   Documents folder 28

## B

backup 144, 181  
   local 182  
   on devices 182  
 Bluetooth  
   Android 29  
   iOS 29  
 button  
   assign input 116  
   delete (user view) 117

## C

Closing time 132  
 configuration  
   copy 114  
   exchange 114  
 configuration area 39  
 configuration table 49  
 cross-switching 65

## D

Dead time 127  
*debouncing time* 138  
   Input 138  
 defective bulb detection 140  
 Delay functions 131  
 device configuration  
   load on all devices 144  
   load onto Frog 144  
 device key 14, 98  
   change 98  
   lost, forgotten 14  
 device list 39, 49  
   icon line 49  
 Device manager 178  
   add devices 178  
   CSV export of device list 179  
   Frog expert settings 179  
   frogware update 32  
   remove devices from project 179  
   reset configuration of Frog 179  
   search 178  
 devices *see Frogs, frogKey, frogDisplay*  
 Dim Editor 139  
 dimming curve 139  
 display area 39  
   Master/slave configuration 141  
   power limits 138  
   power measurement 143  
   temperature view 143

  user view 143  
 door control  
   e-opener 81  
   Mediator 81

## F

firmware *see* frogware  
 flush-mounted box  
   Flush-mounted installation 19  
   hollow walls 20  
   renovation projects 20  
 Frog  
   add button 116  
   add to project 100  
   as repeater 27  
   assign name 54  
   assign rooms 106  
   configuration table 55  
   configure input 108  
   configure output 111  
   delete from project 179  
   installation instructions 18  
   Master/slave configuration 141  
   power measurement 143  
   range (Bluetooth) 27  
   replace, in project 104  
   reset key 18  
   reset to factory settings 180  
   save configuration 103, 137  
   signal strength 41  
   sort 102  
   status view 142  
   temperature view 143  
   typing 106  
   user view 116  
 frogblue mode 152  
 frogblueProject  
   Android 28  
   install 28  
   iOS 28  
   Start screen 29  
   system requirements 28  
   update 31  
   Windows 28  
 frogContact5-BAT 100  
   configuration mode 100  
   update frogware 35  
 frogDisplay  
   configure 159  
   project 159  
   update frogware 35  
 frogKey  
   Colour codes 146  
   configuration mode 100  
   configure 145  
   configure directions 146  
   gestures 146  
   position sensor 145  
   room detection 145  
   update frogware 35

frogLink  
   assign messages 150  
   change mode 152  
   command reference 154  
   configure 150  
   frogblue mode 152  
   Text mode 152  
   use with PC 152  
 frogware  
   frogDisplay 35

**G**

Gate/Time editor 122  
   activate edges 130  
   AND gate 123  
   delete message 123  
   NOT gate 123  
   OR gate 123  
   time control 123

**I**

input  
   actions 110  
   assign button 116  
   configure 120  
   configure range 136  
   copy configuration 114  
   debouncing time 138  
   define message 110  
   defining several messages 118  
   dimming 125  
   dimming speed 125  
   exchange configuration 114  
   Gate/Time editor 122  
   Input matrix 126  
   Minimal on 47  
   Mininal on 124  
   Rolling messages 127  
   Shutter 132  
   status 128  
 Input matrix 126  
 Input signal 168  
 install Android  
   frogblueProject 28  
 installation  
   from Apple App Store 29  
   from Google Play Store 28  
   Windows 30  
 iOS  
   install frogblueProject 28

**M**

macro  
   assign input 167  
   assign output 167  
   create 161  
   definition 160  
   delete 162  
   input macro 163  
   output macro 165  
 Master/slave configuration 141  
 menu 49  
 message

autocomplete 59, 109, 112  
 colours 110  
 configure, for alternate switching 56  
 configure, for cross-switching 61  
 define for input 110  
 define for output 112  
 main message 120  
 predefined (TYPE) 109  
 send immediately 112  
 status See status  
 TYPE:message 109  
 Message center 122, 175  
   add new message 176  
   delete unused messages 177  
   export messages (CSV file) 177  
   rename message 176

**O**

Off-Transparency 113  
 On-Transparency 113  
 output  
   actions 113  
   blink period 130  
   connections 112  
   copy configuration 114  
   define message 112  
   defining several messages 118  
   Delay functions 131  
   exchange configuration 114  
   Shutter 132  
   Soft-Functions 131  
   venetian blind function 166  
 Output signal 168  
 overlay 113

**P**

password *see* project password, *see* device key  
 project  
   change 90  
   change project password 97  
   create 87  
   delete 96  
   edit 89  
   export 91  
   find 94  
   import 93  
   load 90  
 project backup 181  
 project configuration 144  
 project password 14, 88  
   change 97  
   lost, forgotten 14

**R**

reset key 14  
 reset rey 18  
 Reverse time 132  
 Rolling messages 127  
 room detection 145

**S**

safety instructions 13

Shutter 132  
Soft-Functions 131  
Start screen 29  
status message 122, 128  
system group  
  activate in input 173  
  activate in output 173  
  Central on/off 70  
  create 171  
  definition 171  
  delete. 173  
system signal  
  create 168  
  definition 168  
  delete. 170

**T**

Text mode 152  
title bar 39  
TYPE:messages 109

**U**

user view 116

**W**

Windows  
  USB2.0 interface 30  
Windows (full version)  
  install frogblueProject 28