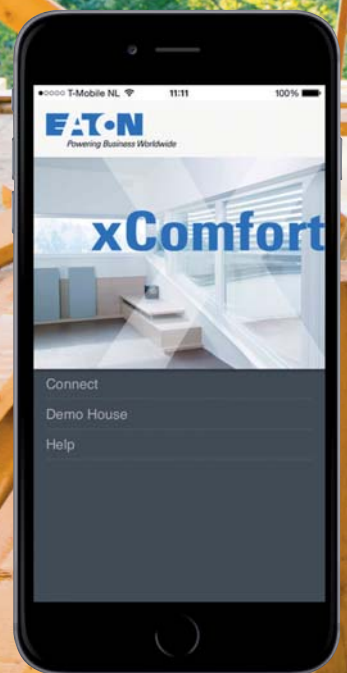


# xComfort

Technical Information



*Powering Business Worldwide*

# RF System - Overview of functions



## Switching Actuator

switches lights, pumps, ventilation and heating systems, saunas, ... any electrical consumer



## Shutter Actuator

for controlling blinds, shutters, mixing valves, etc.



## Smart Dimming Actuator

switches and dims lights and light environments



## Router

redirects information when direct transmission is not possible



## Temperature Input Unit

measures temperature and controls shading and heating



## Smart Home Controller

centrally operating and reporting via smart phones and tablets



## Room-Manager

the operating and display unit - easy to handle and easy to read



## Room Controller

regulates and controls heating and shading



## Binary Input Unit

for integrating conventional switches, window contacts, and signal contacts



## Push-button Unit

for lighting, shading, etc.



## PIR Motion Sensor

controls lights depending on movement and brightness



## Adapter Plug

switches and dims living room fountains, aquaria, etc.



## Remote Control

controls lights, shading and other electrical consumers



## Analogue Actuator

switches and dims lights and light environments



## Analogue Input

receives data from universal sensors for further processing



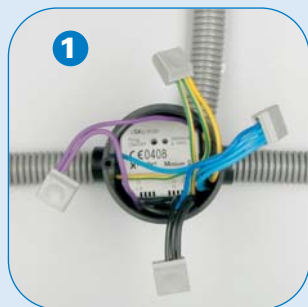
## Sensors

receive different information, with alarm option e.g. smoke alarm, motion detector.

## Setting in "BASIC MODE"

In "Basic Mode" the functions of the devices can be assigned through activating the programming button and the respective push-button. Easy, without any complicated tools, PC or setting of DIP-switches etc.

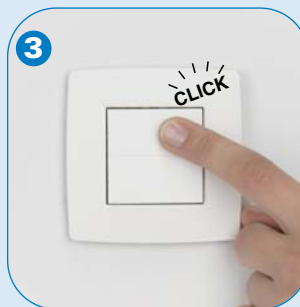
Increasing the range through "Routing" (see Comfort Mode) is not possible in Basic Mode.



1  
Install the actuator in the flush box and connect it



2  
Activate the programming button (the red LED and the connected lamp are switched ON)



3  
Push the corresponding push-button (the red LED and the connected lamps flash twice for confirmation)



4  
Activate the programming button a second time to finish the process (the LED and the connected lamp are switched OFF)

## Setting in "COMFORT MODE"

Comfort Mode offers the opportunity for detailed and comfortable settings (e.g. operating time of shutters, time functions, flash functions, functions with command time, dimmer settings, settings for temperature sensors and much more).

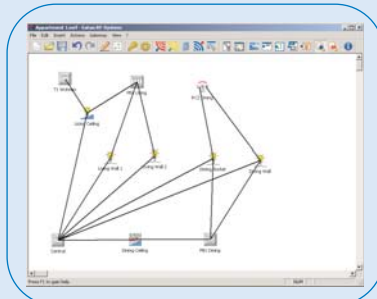
All you need is a notebook/laptop. The free setting-software is easy to understand and clearly structured, so all the user has to do is to deal with the setting jobs as such.

If the system was first programmed in "Basic Mode" and the push-buttons were assigned to certain actuators, the functional connections are depicted as a single "line" when the system is read in. Detailed settings and adjustments can be made at any time ...

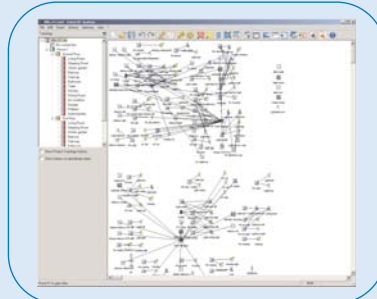
If no functions have been assigned yet, "Comfort Mode" enables you to assign a function by simply "drawing" a line between the actuator(s) and the sensor(s) on the screen.

The devices can also be given names which are (and stay) memorized in the devices.

If one day the range should not be sufficient while taking the system into operation, the notebook/laptop will automatically and in the background calculate the routing (forwarding of data via actuators, for example).



MRF for Residential Buildings



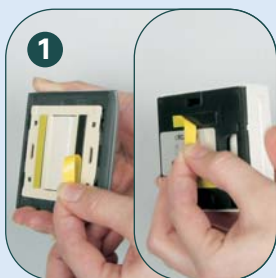
MRF for Light Commercial Buildings

### Enhancements in the MRF

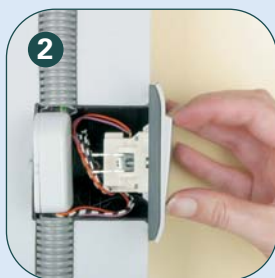
- Modern and revised layout and design
- Code for professionals is generally unlocked
- Cancel and reset function
- Improved and faster reading of system pass words
- Improved reading and loading, shorter response times, re-naming while reading
- Reading of project parts, succession of reading/loading/quality of reception can be selected
- Adding of a background picture (bmp, jpg, gif, ...)
- Adding of project notes
- Adding of notes on each individual device
- Adding of grouping frames
- Enhanced documentation options
- Zoom function for large projects (50%, 100%)
- Enhanced selection mode for Copy/Delete/Shift
- Adding and configuration of virtual devices from a data base
- Easy connection assistant with an additional option for configuration
- Copying of projects and parts of projects
- "Manual" selection of routing
- Project topology for large projects - unambiguous project structure



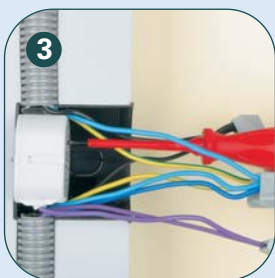
# Funksystem - Installation



1  
Simply stick the switch, temperature control etc. onto the wall



2  
Integration of conventional switches with binary input into the wireless system



3  
Both screw and plug-in terminals can be used



4  
Incorporation of the actuator in the switch or installation box with cover



5  
Installation of an actuator in the switch box with wireless push-button as a combined solution



6  
Installation of the actuator in the light fixture



7  
Installation of the actuator in a splash-proof box



8  
Installation of the actuator in a cable channel box

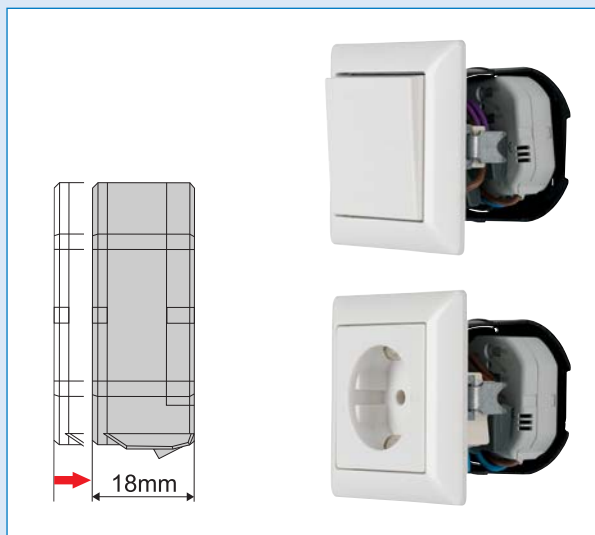


9  
Battery easy to replace, Service life of battery for push-button approx. 10 years



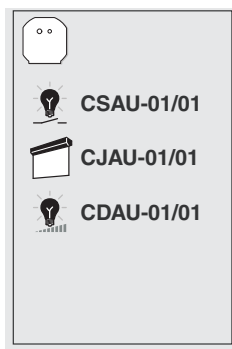
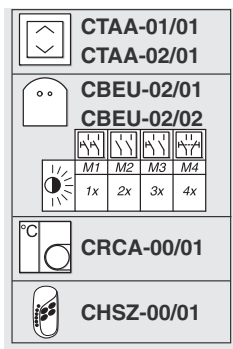
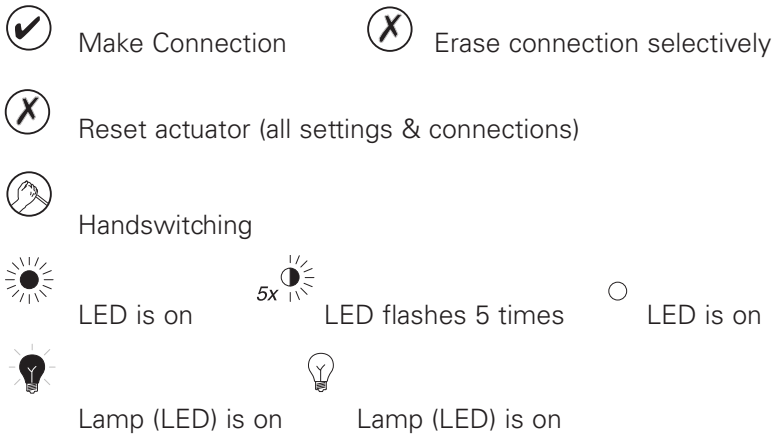
10  
Battery easy to replace - Service life of battery for room temperature control approx. 7 years

## Information about the size of the compact actuator

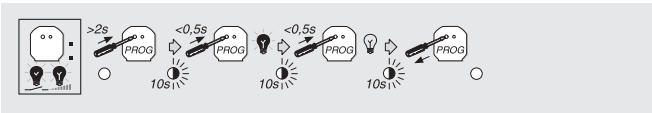


# Basic Mode Card

## Explanation of the symbols:



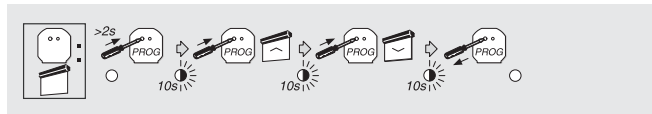
Sensors: Actuators:



## 1. Manual mode:

Manual mode of switching actuator, dimming actuator

1. Press the configuration pushbutton with a screwdriver longer than 2 sec => actuator enters manual mode for 10 sec, the LED flashes fast
2. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => Lamp (LED) is on
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => Lamp (LED) is off

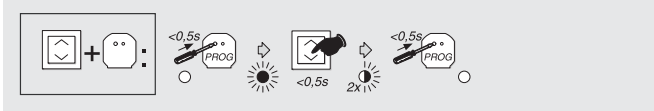


## 4. The actuator leaves automatically the manual mode

Manual mode of the Shutter actuator

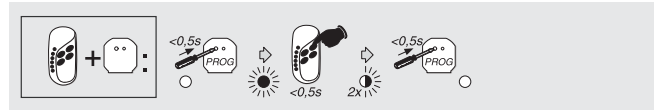
1. Press the configuration pushbutton with a Screwdriver longer than 2 sec => actuator enters the manual mode for 10 sec, the LED flashes fast
2. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => Shutter moves up
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => Shutter moves down
4. After 10 sec the actuator leaves automatically the manual mode

## 2. Make connection



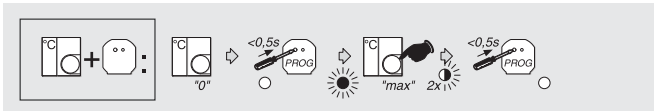
Assign a pushbutton to an actuator

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode  
LED in the actuator is on
2. Press the selected pushbutton shorter than 0,5 sec
3. LED in the actuator flashes twice for confirmation
4. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



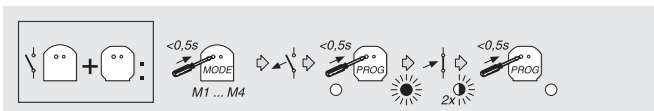
Assign remote control to an actuator

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode, the LED in the actuator is on
2. Press the selected preselection button (1-6) and then the selected pushbutton (left or right rocker) shorter than 0,5 sec
3. The LED in the actuator flashes twice for confirmation
4. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



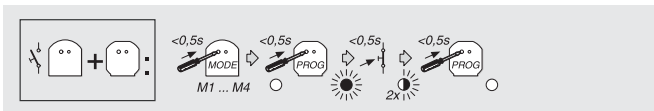
Assign a room thermostat to an actuator

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode, the LED in the actuator is on
2. Turn the control knob to +
3. The LED in the actuator flashes twice for confirmation
4. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



Assign a channel of the binary input in switch mode

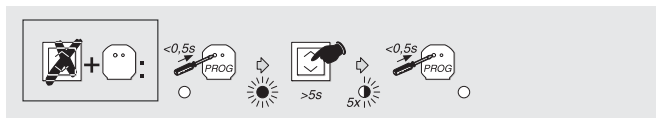
1. Press the configuration button on the binary input (the mains supplied version requires a screwdriver) for selecting the mode, switch mode is Mode 2, LED flashes 2x for Mode 2
2. Open contact of the binary input
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode, the LED in the actuator is on
4. Close contact of the binary input
5. The LED in the actuator flashes twice for confirmation
6. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



Assign a channel of the binary input in push button mode

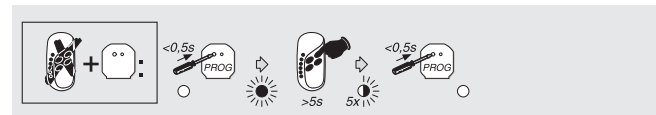
1. Press the configuration button on the binary input (the mains supplied version requires a screwdriver) for selecting the mode, push button mode is Mode 1, LED flashes 1x for Mode 1
2. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode, the LED in the actuator is on
3. Press pushbutton on the contacts of the binary input shorter than 0,5 sec
4. The LED in the actuator flashes twice for confirmation
5. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode

## 3. Delete connections selectively



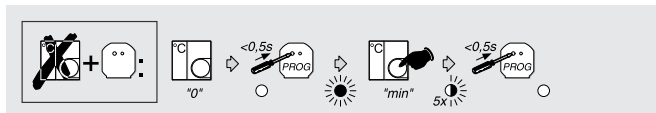
Delete an assigned pushbutton

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator enters teach-in mode, the LED in the actuator is on
2. Press the selected pushbutton until the LED has flashes 5 times
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



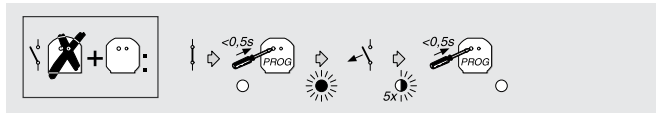
Delete an assigned pushbutton on the remote control

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 => actuator enters teach-in mode, the LED in the actuator is on
2. Press the selected preselection button (1-6) and then the selected pushbutton (left or. right rocker) until the LED has flashed 5 times
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



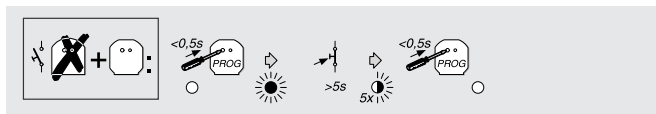
Delete assigned room controller

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 => actuator enters teach-in mode, the LED in the actuator is on
2. Set the control wheel to position "-"
3. Wait until the LED on the actuator has flashed 5 times to indicate that the connection has been deleted
4. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



Delete assigned channel of the binary input in switch mode

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 => actuator enters teach-in mode, the LED in the actuator is on
2. Open contact of the binary input
3. Wait until the LED in the actuator has flashed 5 times
4. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode



Delete assigned channel of the binary input in push button mode

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 => actuator enters teach-in mode, the LED in the actuator is on
2. Press pushbutton on the contact of the binary input until LED has flashed 5 times
3. Press the configuration pushbutton with a screwdriver shorter than 0,5 sec => actuator leaves teach-in mode

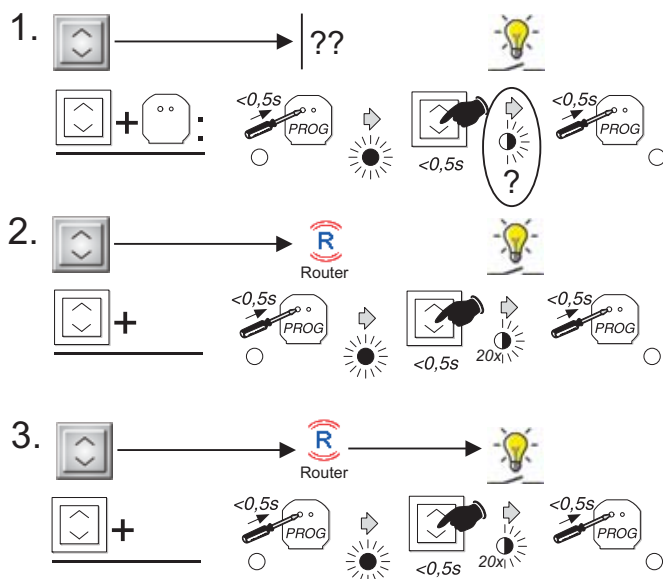


## 4. Reset actuator

Reset actuator

1. Press the configuration pushbutton with a screwdriver shorter than 0,5 => actuator enters teach-in mode, the LED in the actuator is on
2. Press the configuration pushbutton with a screwdriver until LED has flashed 5 times

## Router in Basic-Mode

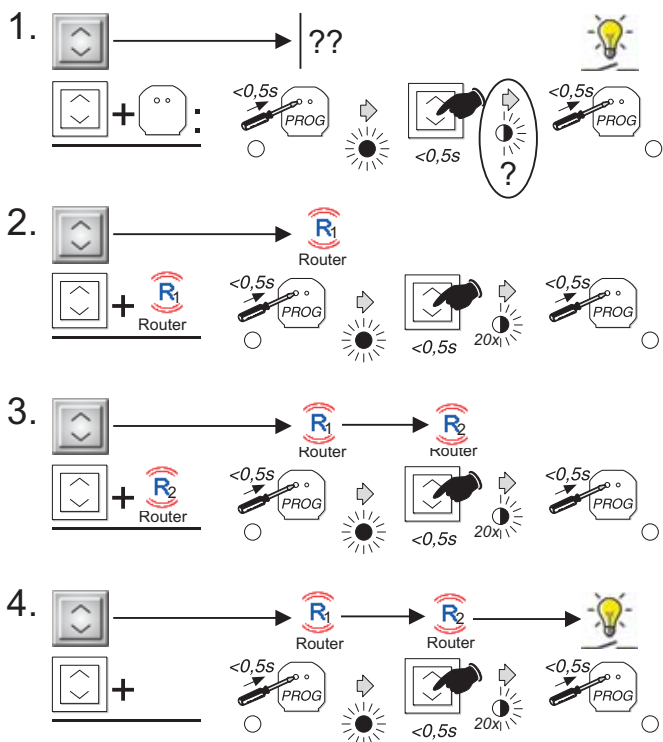
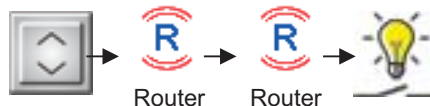


1. No RF connection between a pushbutton and an actuator - One additional Router is necessary
2. Assign the pushbutton to a Router
  - a) Press the programming button of the Router with a screw driver shorter than 0,5 sec Ò the LED of the router light red and the Router is in the programming mode
  - b) Press the pushbutton which should be assigned to the router shorter than 0,5 sec
  - c) The LED of the Router flashes 20 times to visualise the successfully assignment
  - d) Press the programming button of the Router with a screw driver shorter than 0,5 sec Ò the router quit the programming mode

3. Assign the pushbutton to the actuator (the Router must not be in the programming mode)
  - a) Press the programming button of the actuator shorter than 0,5 sec Ò the LED of the actuator light red and the actuator is in the programming mode
  - b) Press the pushbutton which should be assigned to the actuator shorter than 0,5 sec

The information will be sent over the Router to the actuator.

- c) The LED of the actuator flashes 2 times to visualise the successfully assignment
- d) Press the programming button of the actuator with a screw driver shorter than 0,5 sec Ò the router quit the programming mode



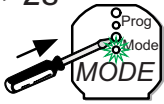
1. No RF connection between a pushbutton and an actuator - Two additional Router are necessary
2. Assign the pushbutton to Router 1
  - a) Press the programming button of the Router with a screw driver shorter than 0,5 sec Ò the LED of the router light red and the Router is in the programming mode
  - b) Press the pushbutton which should be assigned to the Router shorter than 0,5 sec
  - c) The LED of the Router flashes 20 times to visualise the successfully assignment
  - d) Press the programming button of the Router with a screw driver shorter than 0,5 sec Ò the router quit the programming mode
3. Assign the pushbutton to Router 2 - see assignment to Router 1
4. Assign the pushbutton to the actuator (the Router must not be in the programming mode)
  - a) Press the programming button of the actuator shorter than 0,5 sec Ò the LED of the actuator light red and the actuator is in the programming mode
  - b) Press the pushbutton which should be assigned to the actuator shorter than 0,5 sec. The information will be sent over the Routers to the actuator.
  - c) The LED of the actuator flashes 2 times to visualise the successfully assignment
  - d) Press the programming button of the actuator with a screw driver shorter than 0,5 sec Ò the router quit the programming mode



# Compact aktor

## CSAU-01/01-10, CSAU-01/01-10I, CSAU-01/01-10IE

>2s

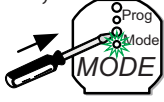


### Identify in MRF

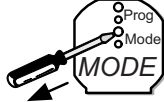
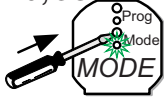
1. Highlight and find this Device in MRF

## CSAU-01/01-10I, CSAU-01/01-10IE

<0,5s



<0,5s



- 1x Mode 1  
2x Mode 2

### Change local input mode

1. Start input selection mode
2. Select input mode by pressing multiple times
3. Input selection mode stops auto-matically after 10 seconds

## CSAU-01/01-10, CSAU-01/01-10I, CSAU-01/01-10IE

>2s



<0,5s



### Manual switching

1. Start manual switching mode
2. Toggle between ON and OFF by pressing multiple times
3. Manual switching mode stops automatically after 10 seconds

## CSAU-01/01-10, CSAU-01/01-10I, CSAU-01/01-10IE

<0,5s



>5s



### Reset Actuator

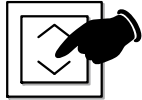
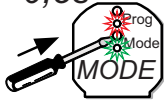
1. Start programming mode
2. Hold until the actor switches 5 times
3. Programming mode stops automatically

## CSAU-01/01-10, CSAU-01/01-10I, CSAU-01/01-10IE

<0,5s



<0,5s



<0,5s



### Assign a Sensor in Basic Mode

1. Start programming mode
2. Select Function Mode by pressing multiple times
3. Activate the sensor. The actor switches 2 times for verification
4. Stop programming Mode

- |    |          |                        |
|----|----------|------------------------|
| 1x | /        | ON/OFF                 |
| 2x | ↔        | Toggle function        |
| 3x | →        | Push button function   |
| 4x | 60s      | Staircase              |
| 5x | 45s  15s | Staircase with warning |

## CSAU-01/01-10, CSAU-01/01-10I, CSAU-01/01-10IE

<0,5s



<0,5s



### Remove a Sensor in Basic Mode

1. Set the used sensor(s) in the correct starting position and/or mode
2. Start programming mode
3. Activate the sensor until the actor switches 5 times for verification
4. Stop programming Mode

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