PROGRAMMING GUIDE

Detector 360° with 3 zone DALI daylight control and extra functionalities, master or stand-alone

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Consult the online programming guide on www.niko.eu for detailed settings

1. USE

The 360° DALI presence detector is suitable for the control of DALI devices in a maximum of 3 daylight zones. Depending on the incoming daylight, the light intensity of each zone will be adjusted separately. The detector can also control, switch on and off or dim one or two secondary zones (depending on the selected settings).

The detector is designed for indoor applications and has an integrated light sensor. It is suitable for use in offices, schools and public buildings and can be used in both large and small rooms.

Communication on the DALI bus follows the DALI addressable principle. A maximum of 64 DALI devices can be connected to the detector. The detector is equipped with a built-in DALI power supply. Do not use an external DALI power supply and do not switch multiple masters in parallel, as this could harm both the DALI ballasts and the detectors. The device also has an integrated relay for controlling either lighting or ventilation. The detector can also be operated manually with a 230V push button or a 24V push button equipped with the (optional) DALI push-button interface 350-70020.

The DALI masters 350-41780 and 350-41781 are equipped with an integrated EnOcean receiver, enabling wireless control with EnOcean transmitters.

The device detects movement and the presence of persons with the aid of Passive InfraRed technology (PIR).

The 360° detection range can be divided into three sectors, A – B and C, each covering 120°. Sensitivity can be adjusted either simultaneously for all sectors or individually for each sector. The sectors can be isolated completely from one another (see Fig. 3).

You programme the detector and change the settings with the IR remote control 350-41934 (to be bought separately). Users can also control the detector with the (optional) IR remote control 350-41935 (e.g. switch on and off or dim all zones at the same time or each zone separately).

Reference number	350-41750	350-41751	350-41760	350-41761	350-41780	350-41781
Flush-mounting	●		●		●	
Surface-mounting		●		●		●
Normal ceilings (2 to 3.4 m)	●	●				
High ceilings (4 to 8 m)			●	●		
Control with EnOcean buttons					●	●

2. INSTALLATION IN 11 STEPS

The installation is always done in eleven steps:

Step	Description	Section
1	Select the location of the detector	§ 2.1
2	Connect the detector	§ 2.2
3	Address luminaires and divide into zones	§ 2.3
4	Set the operating mode	§ 2.4
5	Set the total number of daylight zones	§ 2.5
6	Set as presence or absence detector	§ 2.6
7	Set the behaviour if there is sufficient light	§ 2.7
8	Set the lux level of the daylight zones	§ 2.8
9	Time settings	§ 2.9
10	Sensitivity of the detector settings	§ 2.10
11	Execute burn in for fluorescent lamps	§ 2.11

In this manual you will find all the settings needed for the first start-up of the detector. For detailed settings, we refer to the manual of this detector on www.niko.eu.

2.1. Select the location of the detector

2.1.1. General placement

The detector responds to movement and heat in relation to the surroundings. Avoid placing the detector close to heat sources such as cookers, radiators, ventilation systems or moving objects. This may cause unintended activation (see Fig. 2). Ensure that there are no obstacles (pipelines, support beams …) between the detector and the persons that must be detected.

2.1.2. Mounting height

The recommended mounting height for the masters 350-41750, 350-41751, 350-41780 and 350-41781 is 2 to 3.4 m. The range depends on the installation height (see Fig. 6).

The recommended mounting height for the masters 350-41760 and 350-41761 is 4 to 8 m. For the range of this detector we refer to Fig. 7.

2.1.3. Range

The detection area can be extended by adding type 350-41752, 350-41753, 350-41762 or 350-41763 slaves to the installation. A maximum of ten slaves can be connected to one master. Always make sure that the maximum power consumption on the DALI bus is not exceeded. In some cases this will entail working will a lower number of slaves (see § 7). To guarantee maximum detection, it best to use a 30% overlap in an installation with multiple detectors (see Fig. 7).

2.2. Connect the detector

2.2.4. General

Connect the detector as shown in the wiring diagram (see Fig. 1). Use the included flush-mounting box to mount the flush-mounting models 350-41750, 350-41760 and 350-41780 in a suspended ceiling (see Fig. 5).
Only power up the detector when all cables have been connected. After connection to the mains voltage, the detector will be ready to operate after approximately 40 sec. (warm-up time) and all connected luminaires will come on.

The detector now functions as an on-off detector for all connected luminaires (broadcast function). The default setting for the switch-off delay is 15 minutes. You can switch all luminaires on and off with the connected 230V push buttons or the IR remote control (350-41934). All 230 V push buttons have the same function. All LEDs (red, blue, yellow, green) will flash alternately to indicate that the detector has not yet been configured with the DALI setup.

After addressing and dividing the luminaires into zones (see § 2.3), the detector works according to the factory settings:

Operating mode	mode 2 (daylight control and relay output for light on and off)
Function	Automatic switch on/off via movement sensor (presence detector)
Total number of zones	2 daylight zones and 2 secondary zones
Lux level daylight zones	300 lux
Time 1 (switch-off delay)	15 min
Time 2 (HVAC)	30 min
Time 3 (cut-off)	60 min
Time 4 (orientation light)	10 min
Min/off	minimum setting when there is sufficient light
Sensitivity	high sensitivity for all zones

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2.2.5. Connect a 230V push button

A maximum of three external 230V push buttons can be directly connected to the detector. Push buttons with DALI push-button interface (see § 2.2.3) can also be connected for control via the DALI bus.

If the detector is set as absence detector (manually on/automatically off, see § 2.5), you are required to connect a push button to be able to switch on the light. If the detector is set as a presence detector (automatically on/automatically off), the connection of a push button is optional, as the lighting is switched on automatically when movement is detected.

At any time the lighting can also be switched on manually with a short push on the push button (0.1 to 2 s). The mode (ON or OFF) is extended at every detection of movement and remains active after the last detection of movement until the switch-off delay has elapsed.

With a long push on the push button (> 2 s) the light can de dimmed up and down. The selected dimming level is maintained as long as movement is detected, but is not saved (the automatic adjustment of the light intensity is not active). As soon as the lighting is connected again, the set lux value will be used and the automatic adjustment of the light intensity becomes active again.

With a very long push on the push button T1 + T2 (> 10 s) you can switch the lighting of the daylight zone on or off during 2h, increased by the switch-off delay. After the long push on the button the lighting in the respective daylight zone will go to the minimum or maximum level, subsequently flash twice and then stay on or off for the following 2h. The red indication LED stays on continuously to indicate that the 2h on/off mode is activated. Push the push button again to leave this mode.
All zones can be manually switched on or off and dimmed up or down with 230V push buttons or push buttons with DALI push-button interface. Each time a manual override is active, the automatic adjustment of the light intensity is switched off. You can switch it on again as follows:

- Press on AUTO on the (optional) remote control (350-41934)
- Switch the light off and on again with the external push button (T1 + T2)
- Wait during the set switch-off delay (Time 1)
- Select lighting scene 15 with the push button programmed for this with the (optional) DALI push-button interface 350-70020.

For your information: If zone 3 is set as daylight zone, push button T3 has no function.

2.2.6. Connect a push button with DALI push-button interface

With the (optional) DALI push-button interface (350-70020) the push buttons can be connected to the DALI bus. With these push buttons you can then either:

- carry out the same function as a push button connected directly to the detector (T1, T2, T3 or T4, see § 2.2.2)
- activate a pre-programmed lighting scene. The detector remains active after selecting the lighting scene for as long as movement is detected and the switch-off delay has not expired (zones 1 to 4).

The function of a push button is determined with the switches on the DALI push-button interface. To do this, refer to the manual of the interface. We give a short overview of the possible programming per push button below:

- group 10 performs the same function as push buttons T1 + T2
- group 11 performs the same function as push button T3
- group 12 performs the same function as push button T4
- lighting scene 15 returns the daylight group to AUTO mode
- lighting scenes 1 to 14 activate a pre-programmed lighting scene.

The settings of the lighting scenes are saved in the DALI luminaires. Remember to reset the lighting scenes after replacing a DALI luminaire.

2.3. Address luminaires and divide into zones

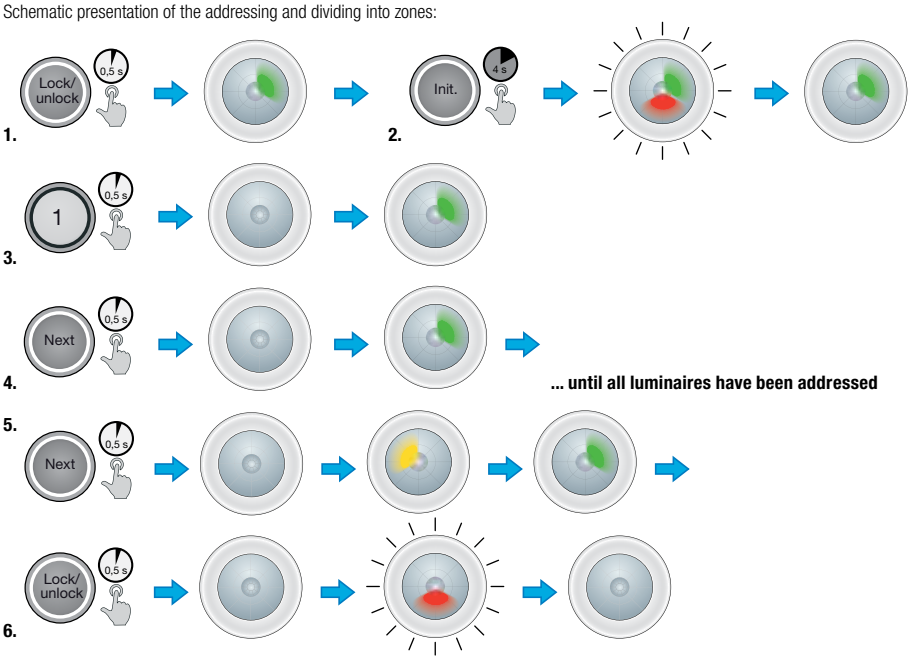
To address and divide the luminaires into zones, use the remote control 350-41934. The daylight zones always function with the same logic:

- zone 1 controls the luminaires closest to the entering daylight (the window)
- zone controls the luminaires in the middle of the room
- zone 3 controls the luminaires furthest away from the entering daylight.

Carry out the following steps to address and divide the luminaires into zones:

1. Briefly push 'Lock/Unlock' to enter the programming mode.
   - LEDs: The green LED switches on.
   - Luminaires: All luminaires switch on as soon as the detector is connected to the mains voltage.
2. Press on 'Init' for 4 s to start the automatic addressing.
   - LEDs: The green and red LEDs flash alternately.
   - Luminaires: All luminaires are turned on. As soon as a luminaire has been addressed, it switches off. When all luminaires are switched off, the addressing has been completed. Then the first luminaire will switch on again.
   - LEDs: The green LED switches on when the addressing has been completed.
3. Indicate into which zone you want to divide the luminaire currently switched on. Press either the button '1', '2', '3' or '4' (in the example we use zone 1).
   - LEDs: Once the division in the zone has been successful, the green LED will flash. If the division has not been successful, the red one will flash.
   - Luminaires: Only the luminaire you are categorizing, is switched on.
4. Press 'Next'.
   - LEDs: The green LED will briefly switch off and then continue to stay on.
   - Luminaires: The luminaire switches off and the next luminaire switches on.
5. Repeat steps 2 and 3 until all luminaires have been assigned to a zone.
   - LEDs: The yellow LED will briefly switch on after the final luminaire has been addressed. After, the green LED will continue to stay on.
6. Leave the programming mode by pressing 'Lock/Unlock'. The lighting is now being calibrated.
   - LEDs: The green LED switches off and the red LED flashes until the calibration has been completed.
   - Luminaires: All luminaires are turned on during 2 minutes. After, each zone is dimmed separately to calibrate the influence of the artificial lighting.

Schematic presentation of the addressing and dividing into zones:



If the rooms are still unfurnished, it is best to carry out the calibration again once the furniture has been placed in their position.
If a luminaire is replaced after the addressing, the new luminaire will automatically adopt the settings of the previous luminaire. If however two luminaires are replaced at the same time, the two luminaires will have to be addressed again (see § 8.37 in the programming guide on our website).

2.4. Set the operating mode

The detector can function according to four pre-programmed modes:

- mode 1: daylight control of up to three zones + relay output for ventilation
- mode 2: daylight control of up to three zones + relay output for extra light circuit (e.g. blackboard lighting)
- mode 3: daylight control of up to three zones+ relay output for making the luminaires voltage-free during long-term inactivity (power saving mode)
- mode 4: daylight control of up to three zones + relay output for ventilation. Compared with mode 1, you can also activate a lowered light level in this mode. For example, you can choose that the light shines less bright at night than during the day.

Press the following buttons to set up the operating mode (for this example we have chosen mode 2):

The green LED flashes after each press on the button to indicate it has received your choice.

2.5. Set as presence or absence detector

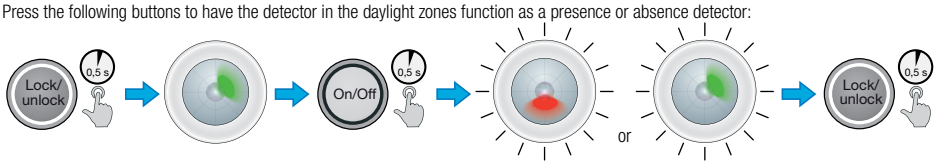
You can set the detector as a presence or absence detector:

- presence detector: the light automatically switches on when entering the room and switches off automatically once everyone has left the room.
- absence detector: when entering the room, the light must be switched on manually. The light will switch off automatically when everyone has left the room.

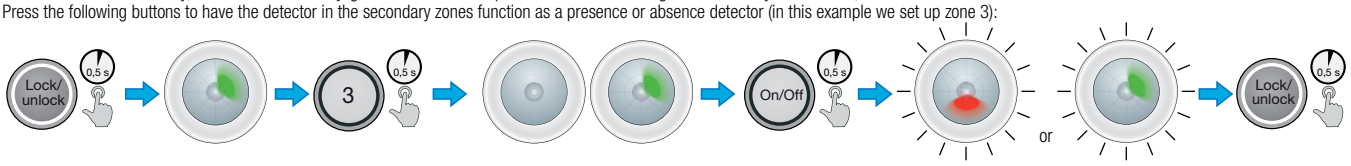
You can set this choice for the following zones:

- the daylight zones
- zone 3 (if it is not daylight-controlled)
- zone 4 (the relay contact – only in mode 2).

Press the following buttons to have the detector in the daylight zones function as a presence or absence detector:



If the red LED flashes briefly, the detector in the daylight zone functions as presence detector. If the green LED briefly switches off, the detector will function as absence detector.
Press the following buttons to have the detector in the secondary zones function as a presence or absence detector (in this example we set up zone 3):



If the red LED flashes, the detector in zone 3 functions as presence detector. If the green LED briefly switches off, the detector will function as absence detector.

2.6. Set the total number of daylight zones

You can choose between setting up 2 or 3 daylight-controlled zones.
Press the following buttons to set the number of daylight zones:

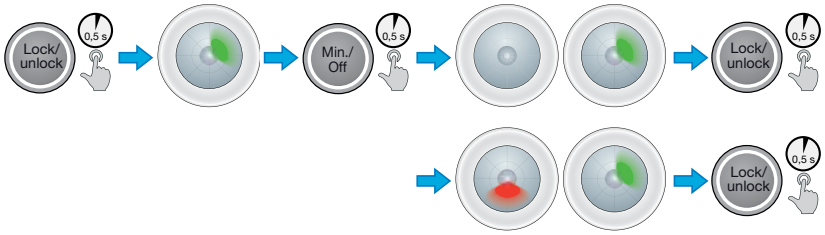
If the green LED switches off briefly twice, 2 daylight zones have been selected. If it switches off briefly three times, 3 daylight zones have been selected.

2.7. Set the behaviour if there is sufficient light

When there is sufficient daylight in the daylight zones, you can determine if the luminaires:

- switch off completely
- or stay on at their minimum setting

Press the following buttons to set the behaviour when there is sufficient light:

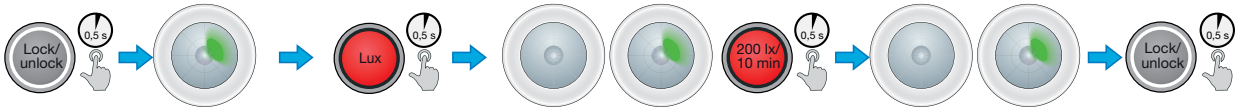


If the red LED flashes briefly, the luminaires in the daylight zones will stay on at their minimum setting. If the green LED flashes briefly, the luminaires will switch off completely.

2.8. Set the lux level of the daylight zones

You can set the lux level of the daylight zones at 100, 200, 300, 400, 600, 800 or 1,000 lux.

Press the following buttons to set the lux level (for this example we have chosen 200 lux):



The green LED flashes to indicate it has received your choice.

2.9. Time settings

You can set 4 times at 5, 10, 15, 30, 45, 60 min of ∞ (infinite). The times have the following function:

- Time 1: the switch-off delay
- Time 2: HVAC
- Time 3: cut-off
- Time 4: orientation lighting

Press the following buttons to set the times (for this example we have chosen 10 minutes):

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The green LED flashes to indicate it has received your choice.

2.10. Set the sensitivity of the detector
Sensitivity of the detector can be adjusted either collectively for all sectors or individually for each sector. A sector can be disconnected completely, if required. The sensitivity can be set at four fixed levels in which "1" is the highest sensitivity and "4" is the lowest sensitivity.

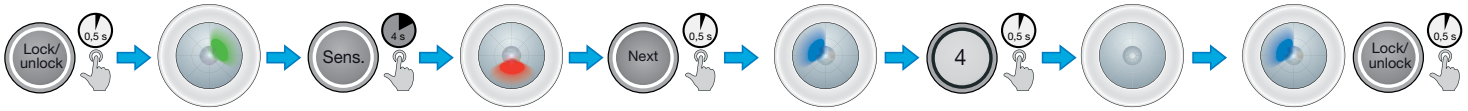
2.10.7. For all sectors collectively

You set the sensitivity for all sectors collectively as follows:

2.10.8. For each sector separately

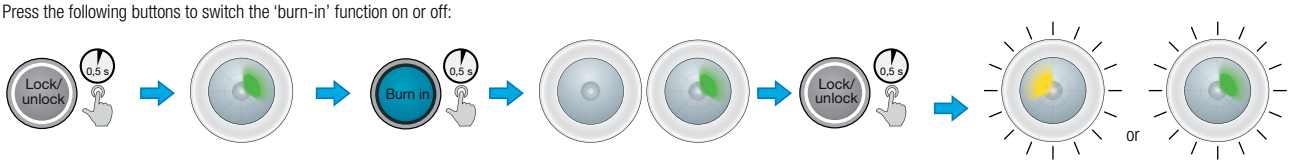
To set the sensitivity individually for each sector, first select the sector and then choose a sensitivity level. Each sector has its own LED colour. Sector A= red LED, sector B = green LED, sector C = blue LED. It is also possible to completely disconnect a sector.

For example, you set the sensitivity of sector C at minimum level as follows:



2.11. Perform burn in for fluorescent lamps
To reduce the early ageing of fluorescent lamps, it is recommended to not dim them during the first 100 burning hours (consult the information of the lamp manufacturer for more information). You can use the 'burn-in' function on the detector for this. The daylight control shall only start to function after this time has been completed.

Press the following buttons to switch the 'burn-in' function on or off:



The yellow LED flashes during 100 hours to indicate the 'burn-in' function is activated. If the green LED flashes briefly twice, the 'burn-in' function is deactivated.

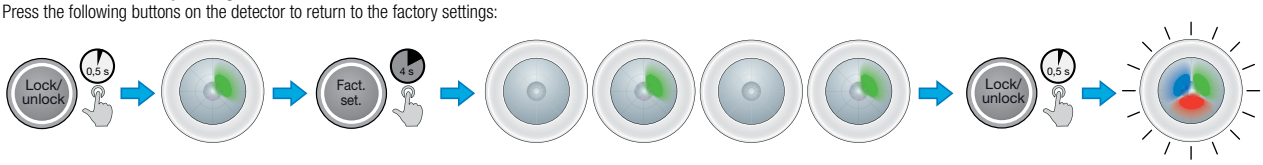
3. ADDITIONAL SETTINGS

3.1. Walking test
A walking test can be carried out to check that the detector is functioning correctly. During this test, the switch-off delay is limited to five seconds.
If you activate the walking test on the master, all slaves connected to the same bus will automatically switch to the walking test.

Press the following buttons to activate the walking test on the master:

After pressing the button "Test On/Off", the LED of the sector in which movement is detected will light up.

3.2. Restore the factory settings
Press the following buttons on the detector to return to the factory settings:



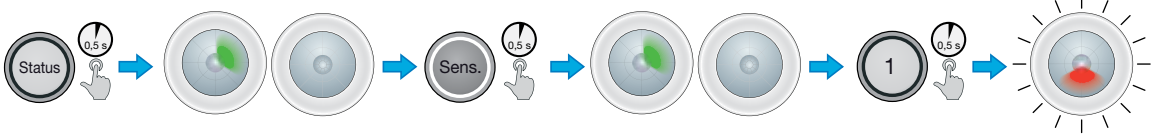
3.3. Check the settings of the detector

With the "Status" button you can check the settings of the detector. It is not necessary to first unlock the detector in order to activate a status readout. This will always be indicated by LED flashes of various colours.

For example, the set sensitivity can be checked by pressing on "Status", followed by "Sens" and then the sector of which you want to check the sensitivity (1 = sector A with red LED, 2 = sector B with green LED, 3 = sector C with blue LED). The detector will indicate sensitivity by a number of LED flashes:

Sensitivity	Maximum	High	Low	Minimum	Off
Number of flashes of the LED	1	2	3	4	5

Press the following buttons to check the sensitivity of sector A for example:



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4. IR REMOTE CONTROL

To programme the detector, the (optional) remote control 350-41934 must be used (see Fig. 9).

The detector must be unlocked for setting all configurations except “Status”, “1”, “2”, “3”, “4”, “On/Off”, “Auto”, “Dim +” and “Dim –”. The detector is automatically locked after five minutes after the last time a button is activated. The detector can also be locked manually. Any changes to settings will be saved. During programming, the green LED briefly switches off to acknowledge the correct receipt of information when a button is pushed on the IR remote control.

5. TECHNICAL DATA

Dimensions surface-mounting models 350-41751, 350-41761 and 350-41781 (see Fig. 4a)	64.1 x 117.3 mm (HxW)
Visible dimensions flush-mounting models 350-41750, 350-41760 and 350-41780 (see Fig. 4b)	46.4 x 100 mm (HxW)
Dimensions including non-visible part flush-mounting models 350-41750, 350-41760 and 350-41780 (see Fig. 4b)	136.4 x 100 mm (HxW)
Power supply voltage	230 Vac ± 10%, 50 Hz
Power consumption	0.45 W
Relay contact	NO 10 A, 250/400 Vac
Maximum load	incandescent lamps (2,300 W)
	230 V halogen lamps (2,300 W)
	all low-voltage halogen lamps (1,200 VA)
	fluorescent lamps (non-compensated) (1,200 VA)
	energy-saving lamps (CLFi) (350 W)
	LED lamps with electronic control gear (500 VA)
	LED lamps 230 V (350 W)
Maximum capacitive load	140 µF
Maximum inrush current	165 A/20 ms or 800A/200 μs
Light sensitivity	100 - 2,000 lux
Switch-off delay	5 mins. - ∞
Mounting height 350-41750, 350-41751, 350-41780 and 350-41781	2 – 3.4 m
Mounting height detectors for heigh ceilings 350-41760 and 350-41761	4 – 8 m
Detection angle	360° (3 x 120°)
Detection range for body movement 350-41760 and 350-41761	circle up to 32 m diameter
Detection range for body movement 350-41750, 350-41751, 350-41780 and 350-41781	circle up to 24 m diameter
Wire input	2 x 2.5 mm²
Protection degree (after mounting)	IP54
Ambient temperature	-5 °C to +50 °C
Integrated EnOcean receiver (only with the 350-41780 and 350-41781)	STM 300
Marking	CE marked in accordance with EN 60669-2-1
Accessories	IR remote control (350-41934)
	IR user remote control (350-41935)

6. LED STATUS

LED	Status	Meaning
All LEDs illuminate red, blue, yellow and green alternately	"Out-of-the-box"	The detector is connected but not yet configured.
The green LED lights up continuously	Door unlocked	The detector is in programming mode and is ready for configuration with the (optional) IR remote control.
All LEDS are off	Locked	The detector is locked and the most recently programmed changes are saved.
The red and green LEDs flash on and off for one second	Addressing	The detector is addressing.
The green LED lights up 1 second	Addressing	All luminaires have been addressed.
The green LED flashes	Addressing	The correct zone has been selected.
The green LED turns off for 1 second and the red LED lights up for one second	Addressing	The wrong zone has been selected.
The red LED is flashing	Calibration	The red LED flashes at one-second intervals to indicate that calibration is underway. Only flashes if the detector is in operating mode.
The red LED flashes upon detection of movement	Walking test sector A	The red LED will flash when activity is detected in sector A.
The green LED flashes upon detection of movement	Walking test sector B	The green LED will flash when activity is detected in sector B.
The blue LED flashes upon detection of movement	Walking test sector C	The blue LED will flash when activity is detected in sector C.
The green LED flashes once	IR remote control (accessory)	Each time the detector receives a correct signal from the (optional) IR remote control, the detector will acknowledge this by briefly switching off the green LED if the detector is being programmed. In operating mode, the green LED will flash once.
The green LED flashes for as long as the button is activated	Dim+ or Dim-	The light is dimmed with the remote control
The red LED lights up continuously	2 h ON/OFF	The daylight group flashes twice upon activation of this mode, after which the red LED lights up as long as the mode is activated
The yellow LED flashes continuously	Burn in	The yellow LED flashes on and off for one second when the function is active.
The yellow and red LEDs flash continuously	Replacing or adding DALI Control Gear	This means more DALI Control Gear have been added or more than one defective DALI control has been replaced.

7. POWER CONSUMPTION

The maximum power consumption of the integrated DALI power supply is 200 mA. This value must not be exceeded. Keep this in mind when adding DALI components.

We give an overview of the maximum power consumption of several common DALI components below:

Component	Maximum power consumption
Luminaire 1	2 mA
Dimmer potentiometer	6 mA
DALI secondary detector (e.g. 350-41752 or 350-41753)	5.5 mA
DALI secondary detector for high ceilings (e.g. 350-41762)	5.5 mA
DALI push-button interface 350-70020	6 mA
DALI module 350-70021 for connecting adjacent zones	14 mA

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Below we give a first example of a calculation of the total power consumption of the installed DALI components in an office:

Number	Component	power consumption	Total power consumption
48	Lighting with 1 DALI luminaire	2 mA	96 mA
4	DALI dimmer potentiometer	6 mA	24 mA
1	DALI push-button interface 350-70020	6 mA	6 mA
Total consumption	126 mA		

The power consumption in this office is 126 mA. This consumption is lower than the maximum DALI power consumption of 200 mA.
Below we give a second example of a calculation of the total power consumption of the installed DALI components in a meeting room:

Number	Component	power consumption	Total power consumption
56	Lighting with 1 DALI luminaire	2 mA	112 mA
4	DALI push-button interface 350-70020	6 mA	24 mA
1	DALI secondary detector 350-41752	5.5 mA	5.5 mA
1	DALI module 350-70021	14 mA	14 mA
Total consumption			155.5 mA

The power consumption in this meeting room is 155.5 mA. This consumption is lower than the maximum DALI power consumption of 200 mA.

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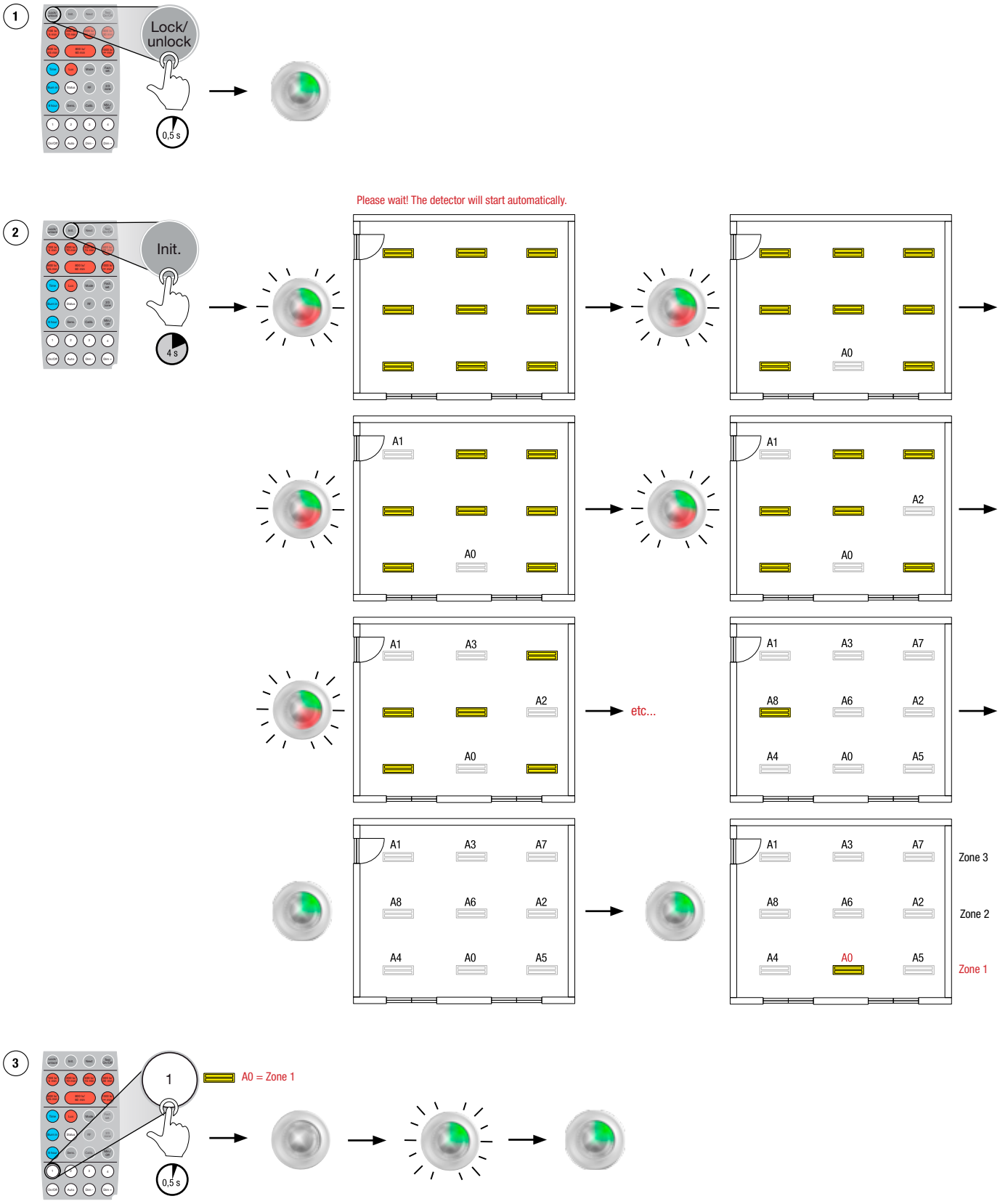
8.1 Initialisation/Zone selection



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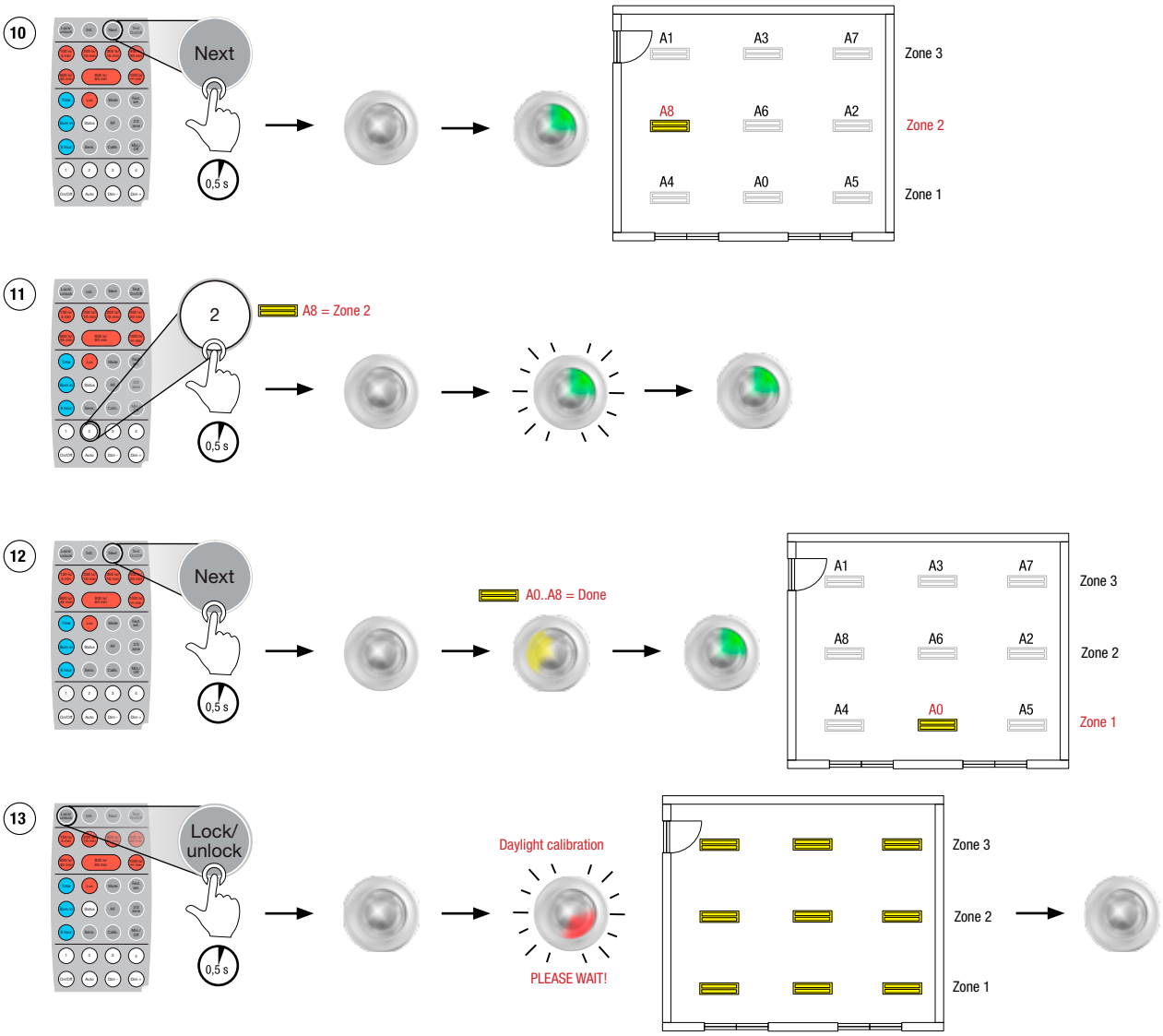
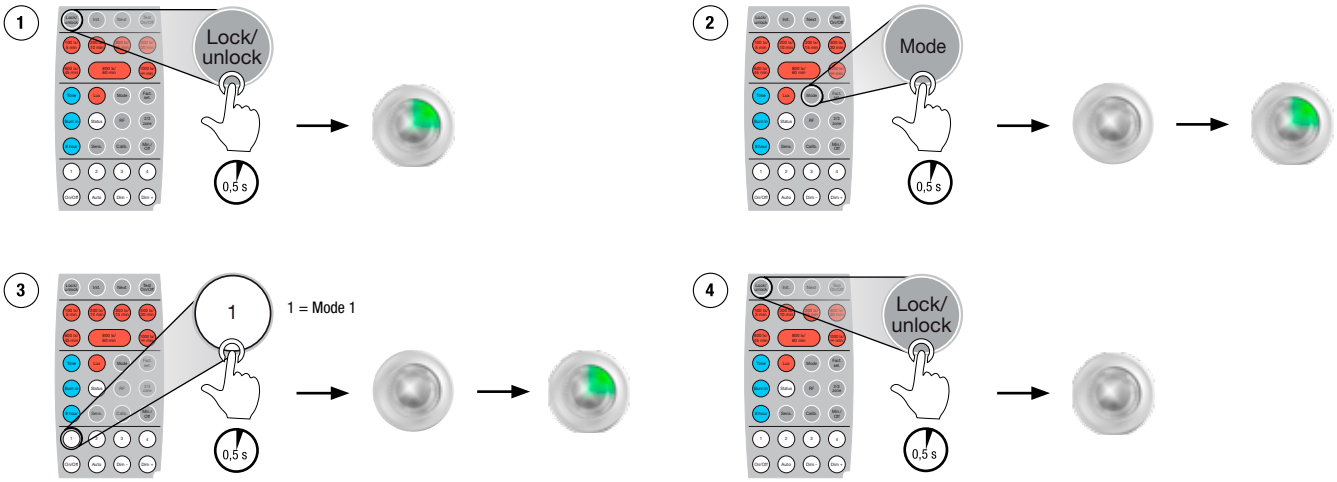
8.1 Initialisation/Zone selection



8.2 Mode 1 - Daylight control with HVAC output



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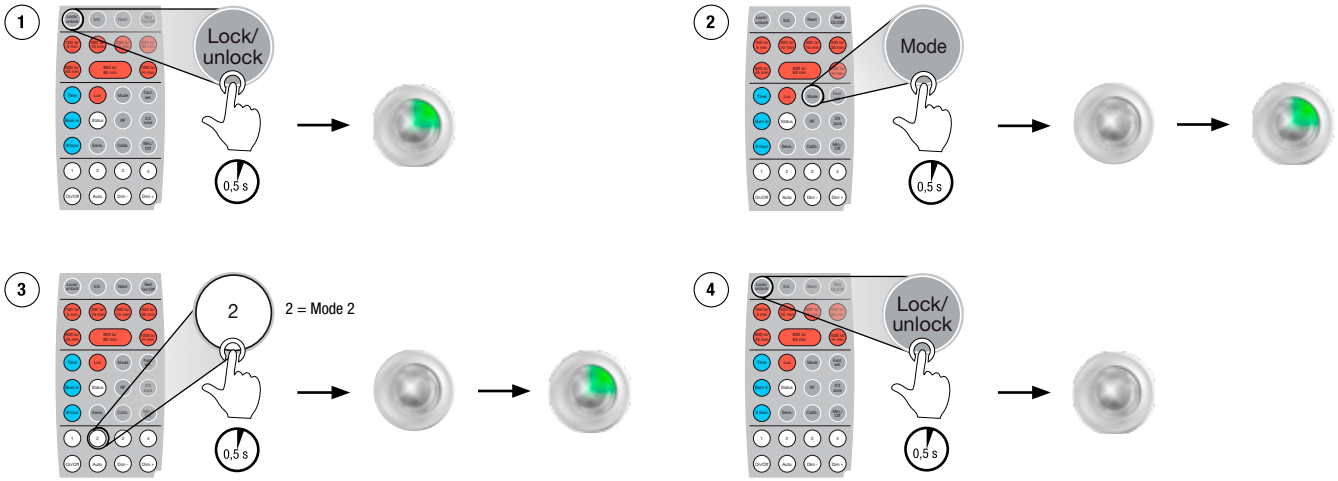
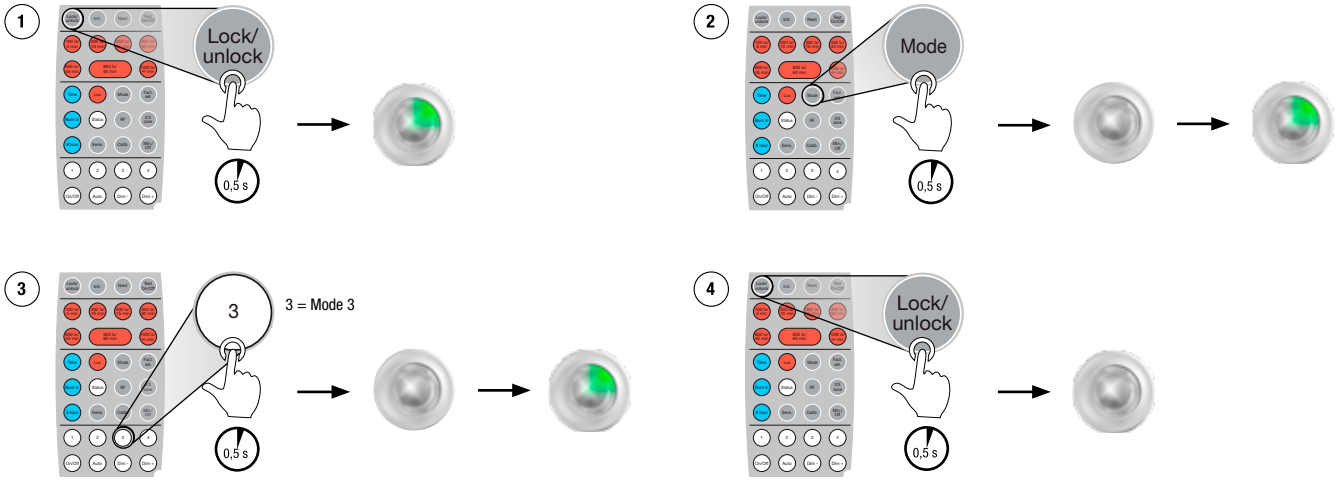
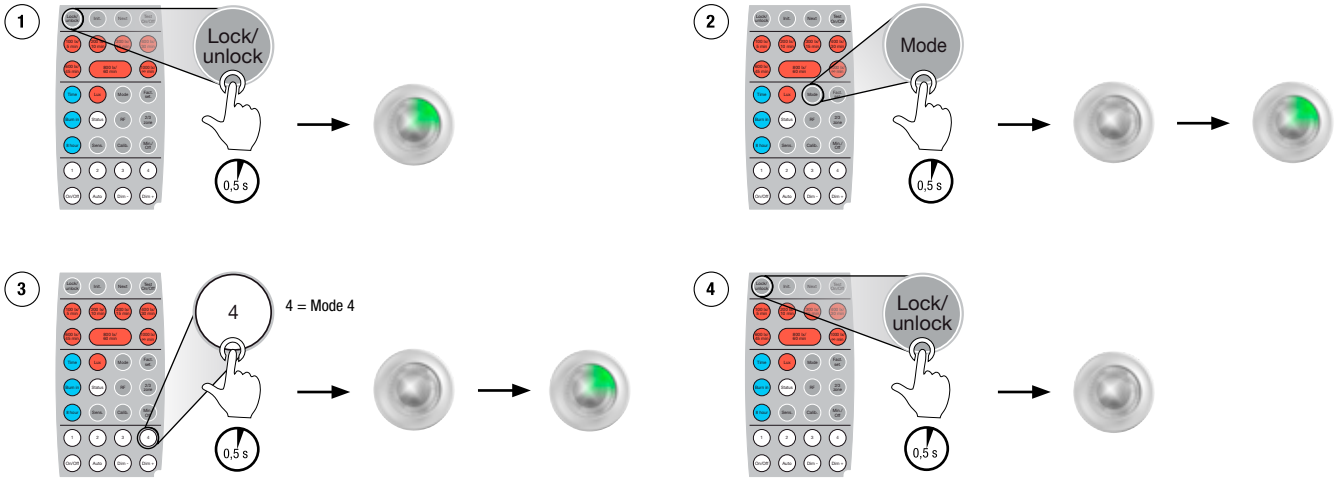
8.3 Mode 2 - Daylight control with relay for extra light circuit (On/Off)



8.4 Mode 3 - Daylight control with relay for switching off luminaires



8.5 Mode 4 - Daylight control with corridor function



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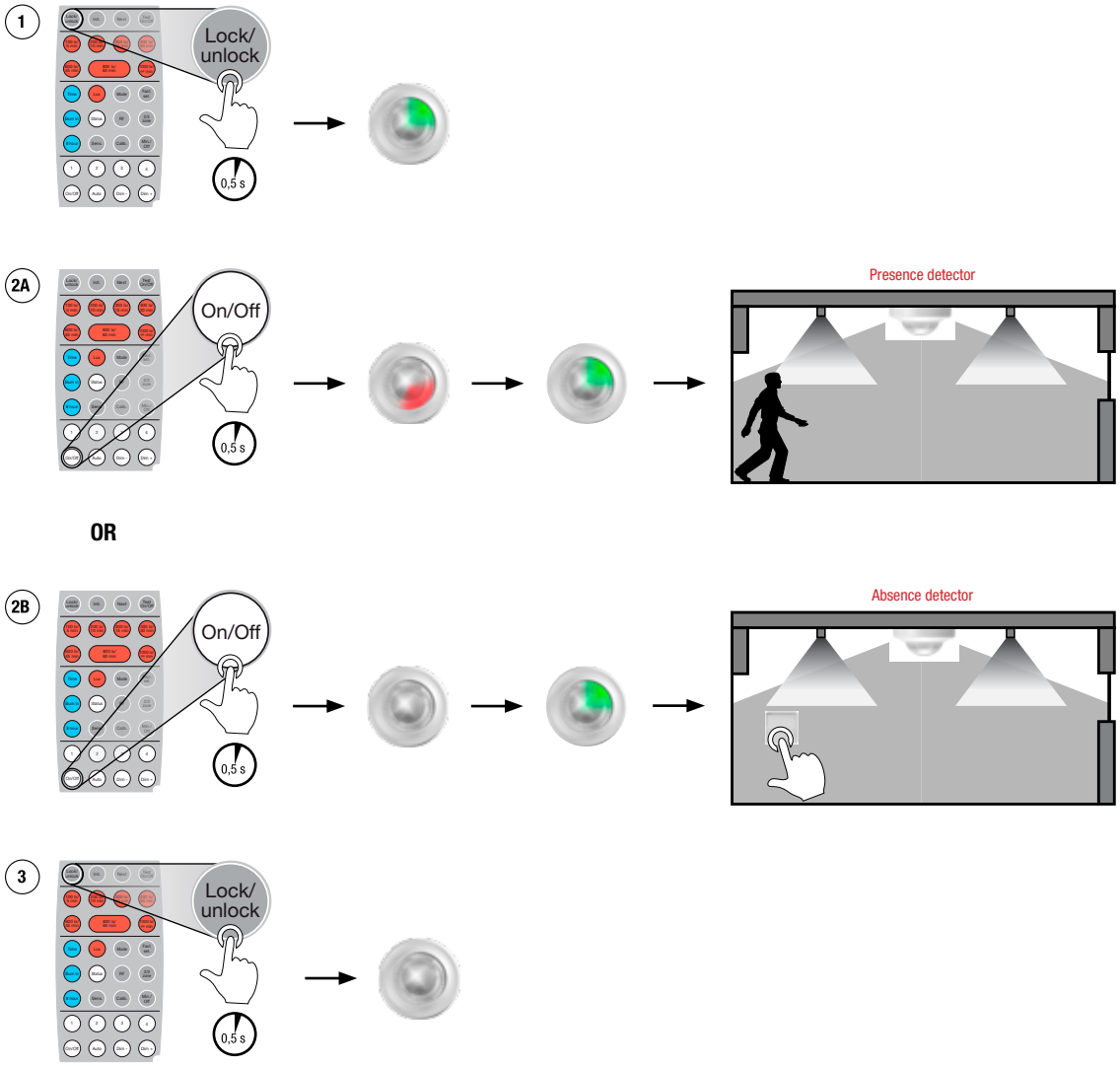
8.6 Choose between operation as presence or absence detector (daylight zones)



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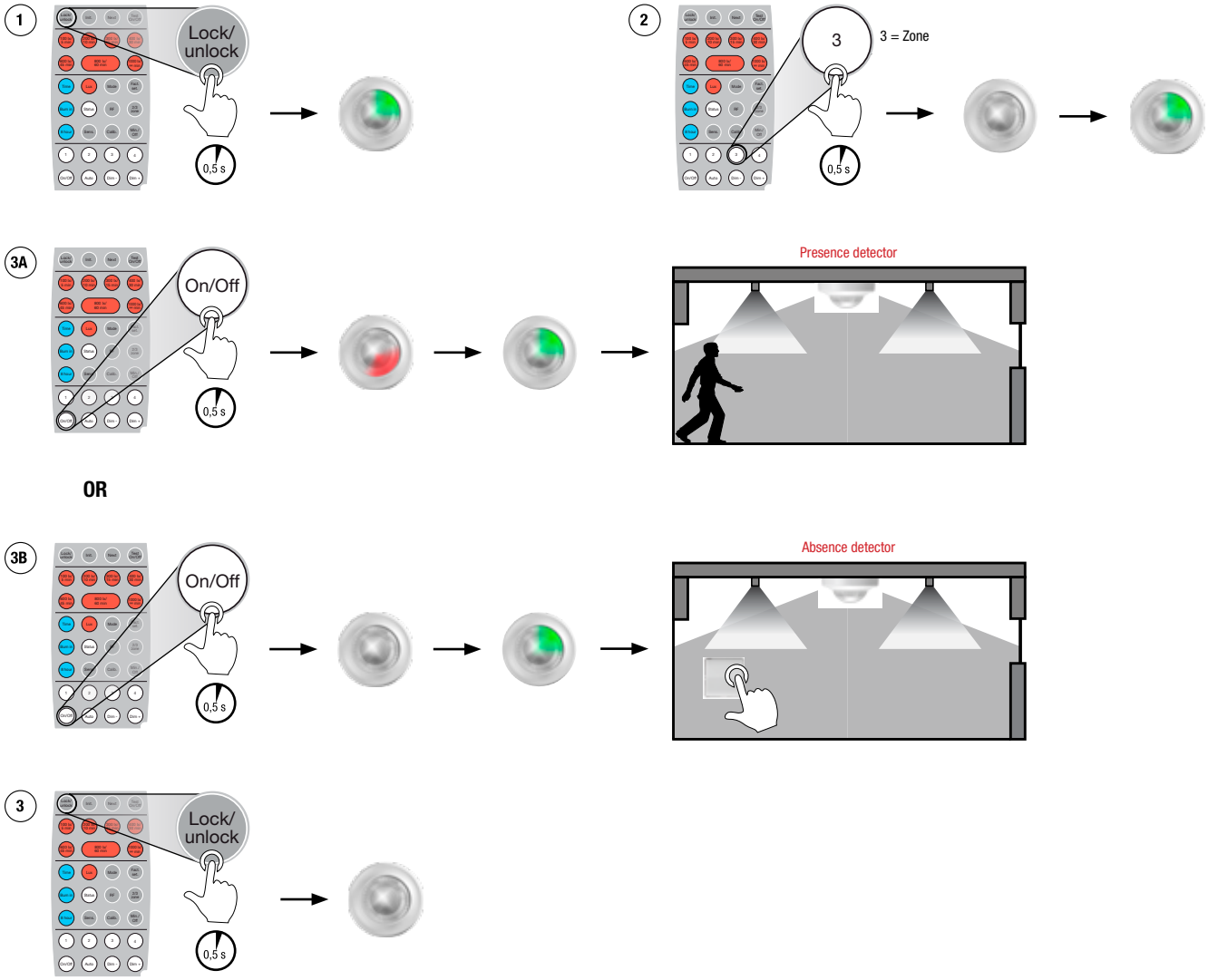
8.7 Choose between operation as presence or absence detector (secondary zone 3)



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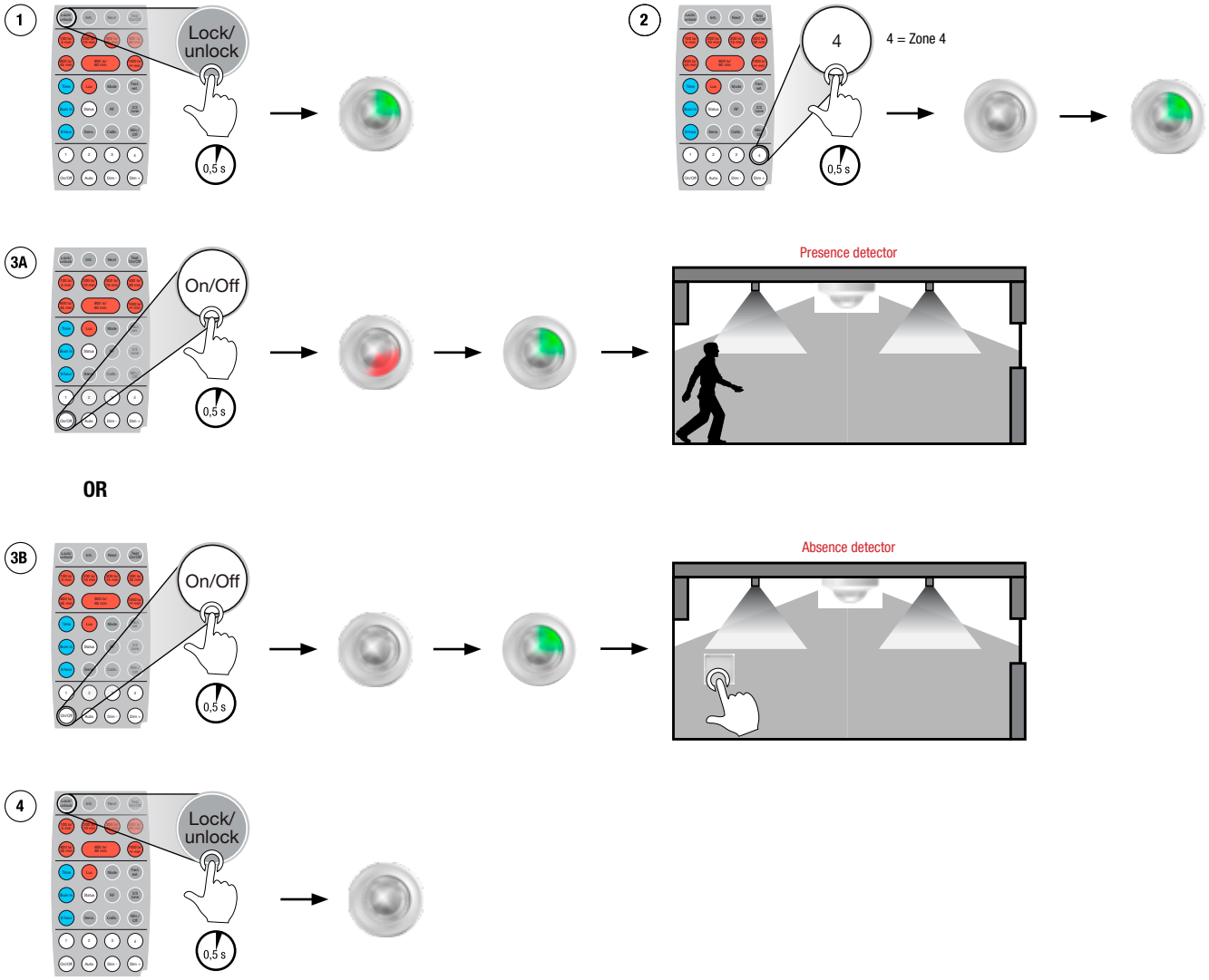
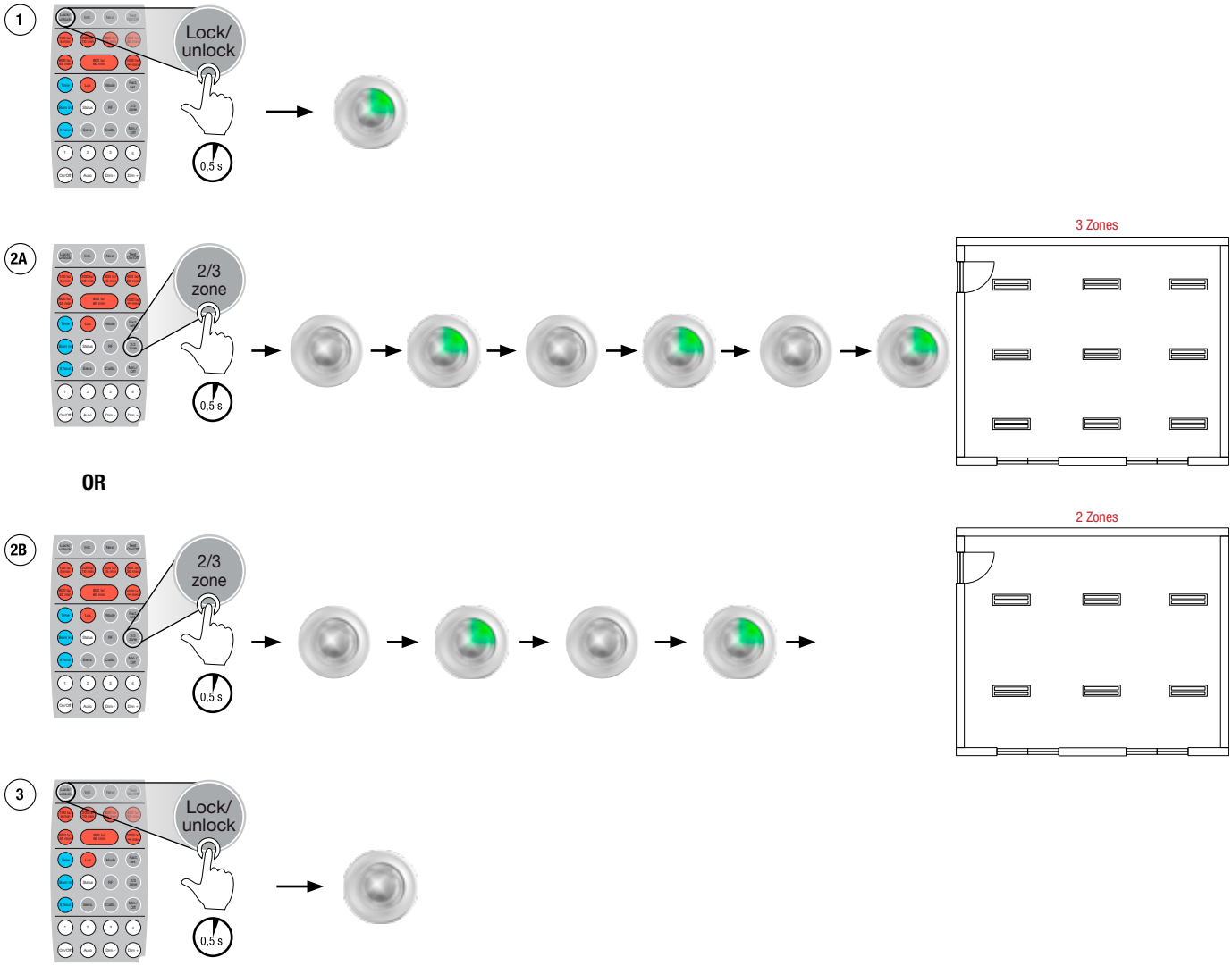
8.8 Choose between operation as presence or absence detector (secondary zone 4)



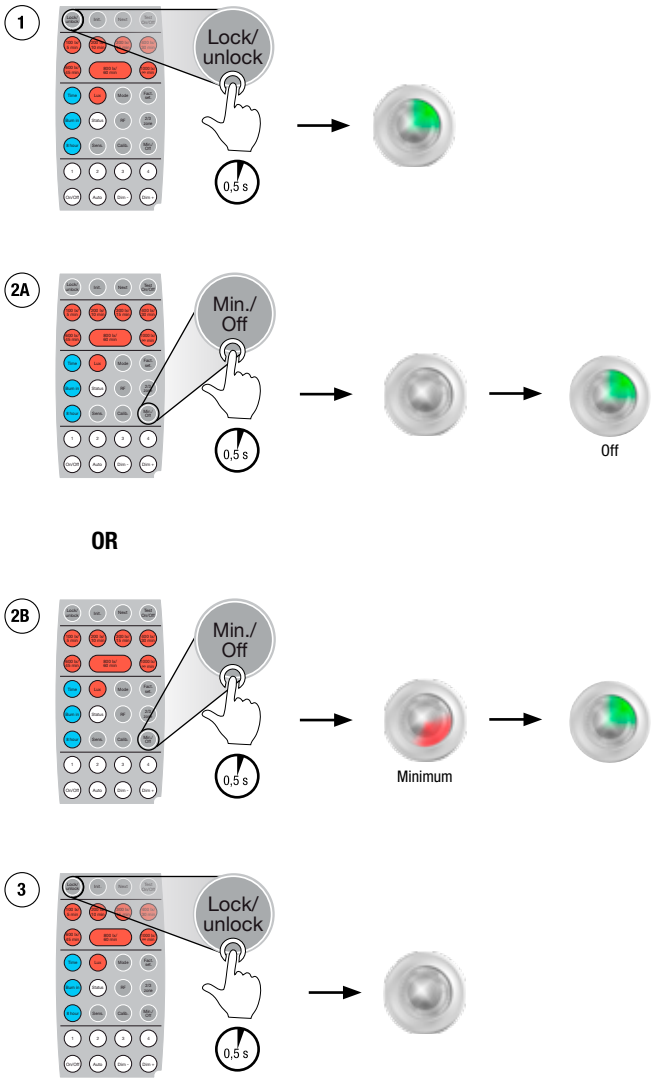
nv **Niko** sa Industriepark West 40, BE-9100 Sint-Niklaas, Belgium — tel. +32 3 778 90 00 — fax +32 3 777 71 20 — e-mail: support@niko.be — www.niko.eu

8.9 Select 2 or 3 daylight zones

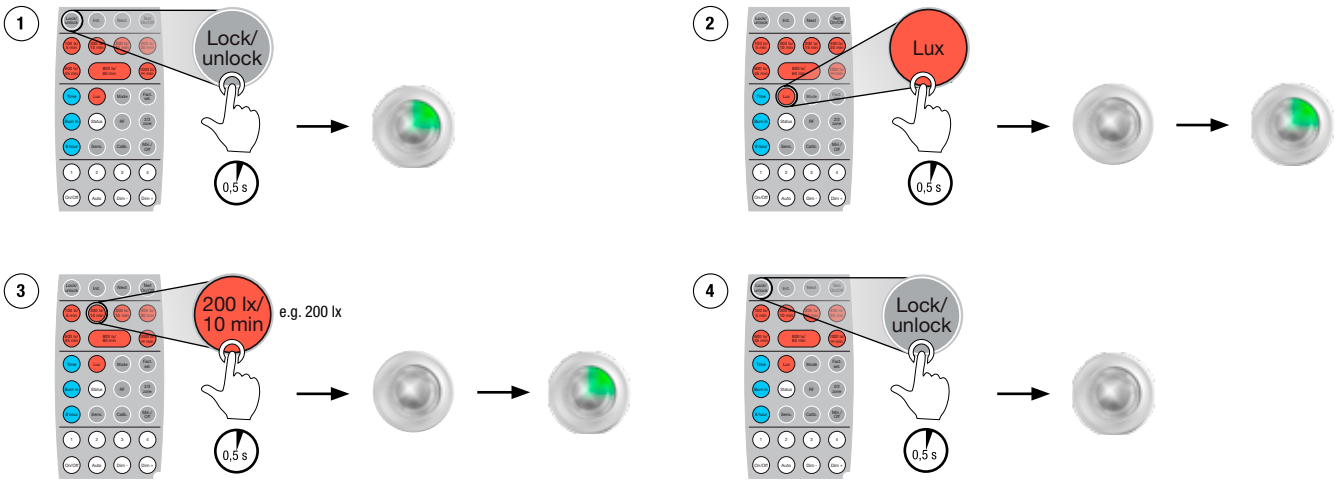


nv **Niko** sa Industriepark West 40, BE-9100 Sint-Niklaas, Belgium — tel. +32 3 778 90 00 — fax +32 3 777 71 20 — e-mail: support@niko.be — www.niko.eu

8.10 Set the behaviour if there is sufficient light

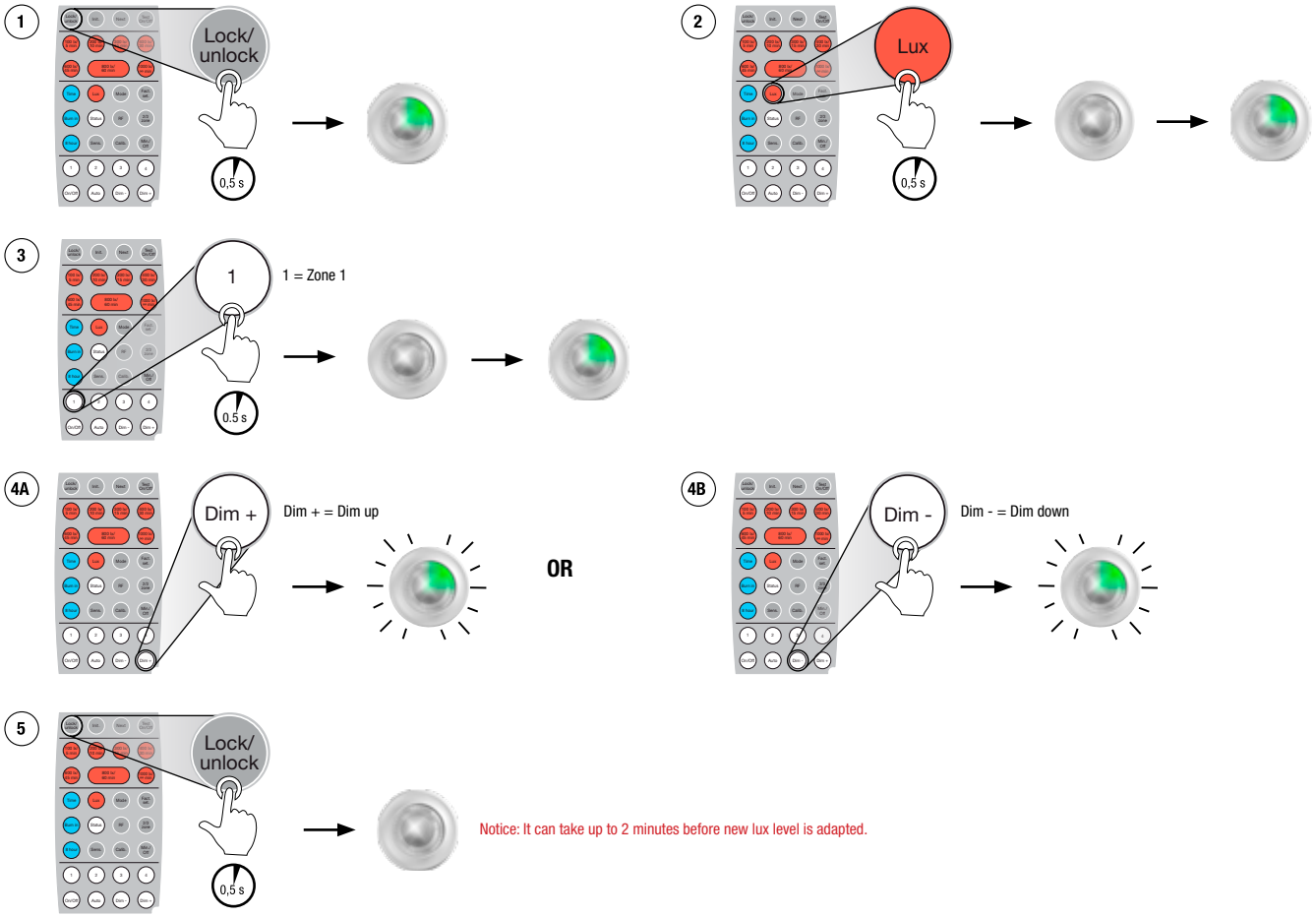


8.11 Required lux level and max output, luminaires (see also step 8.19 "Max lux output, luminaires")



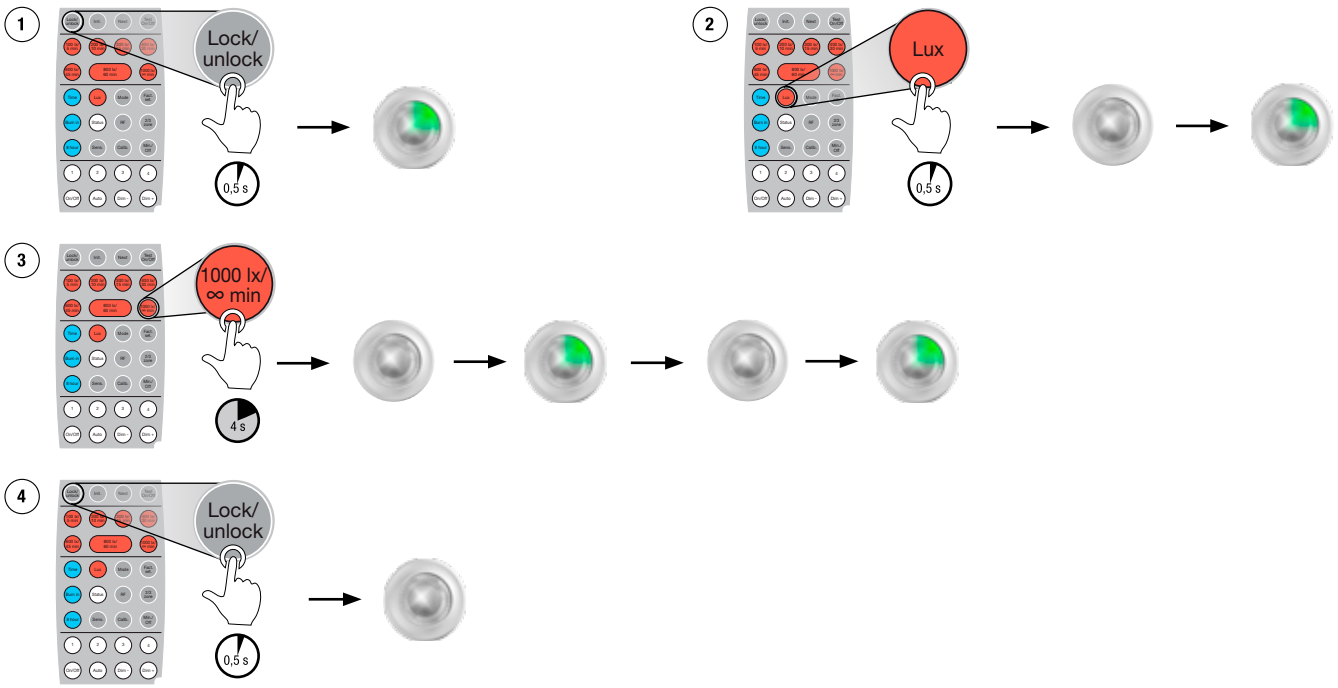
nv **Niko** sa Industriepark West 40, BE-9100 Sint-Niklaas, Belgium — tel. +32 3 778 90 00 — fax +32 3 777 71 20 — e-mail: support@niko.be — www.niko.eu

8.12 Adjust lux level zone 1



Notice: It can take up to 2 minutes before new lux level is adapted.

8.13 Lux level 2,000 lux and max output luminaires



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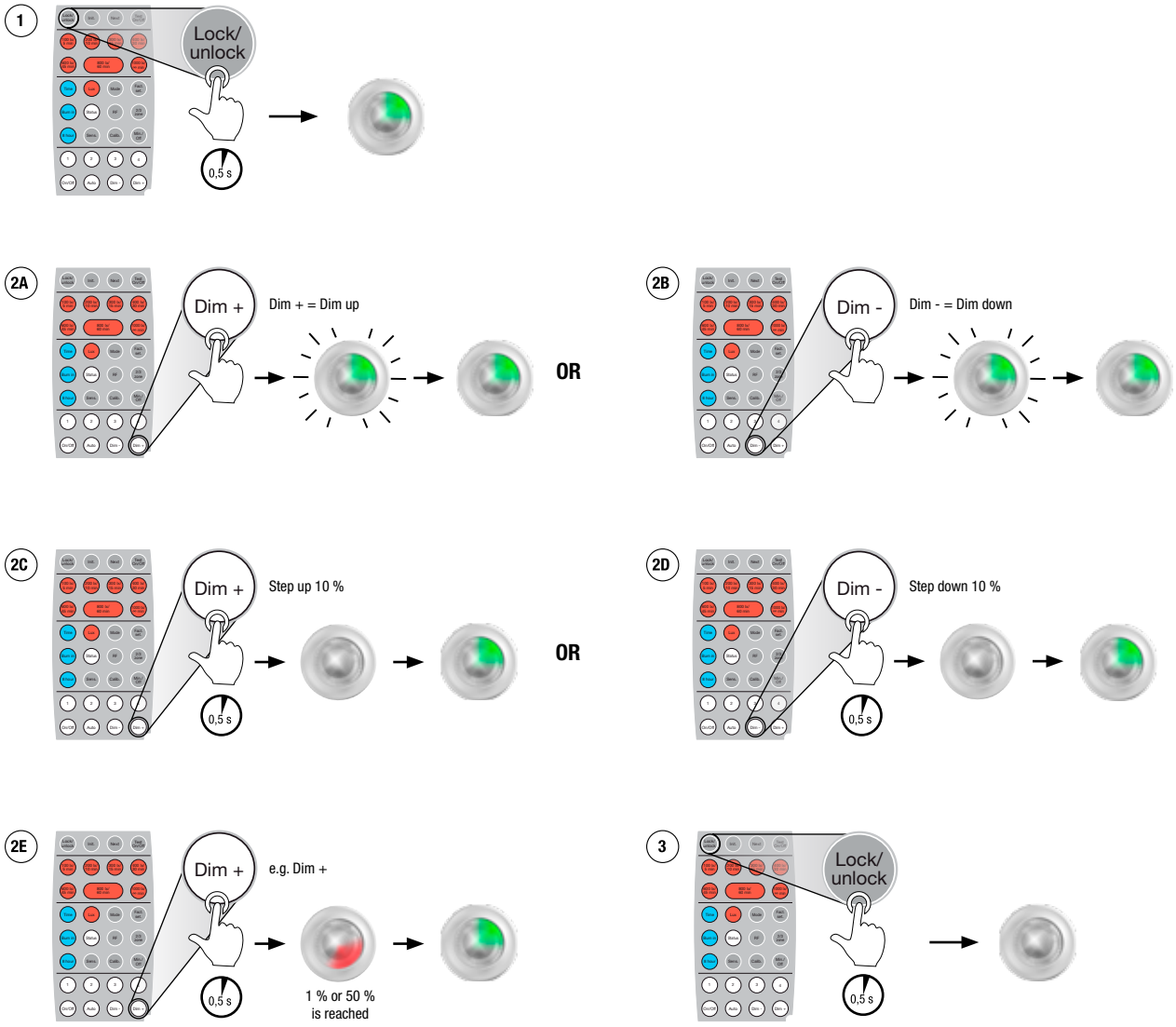
8.14 Adjust minimum level, luminaires



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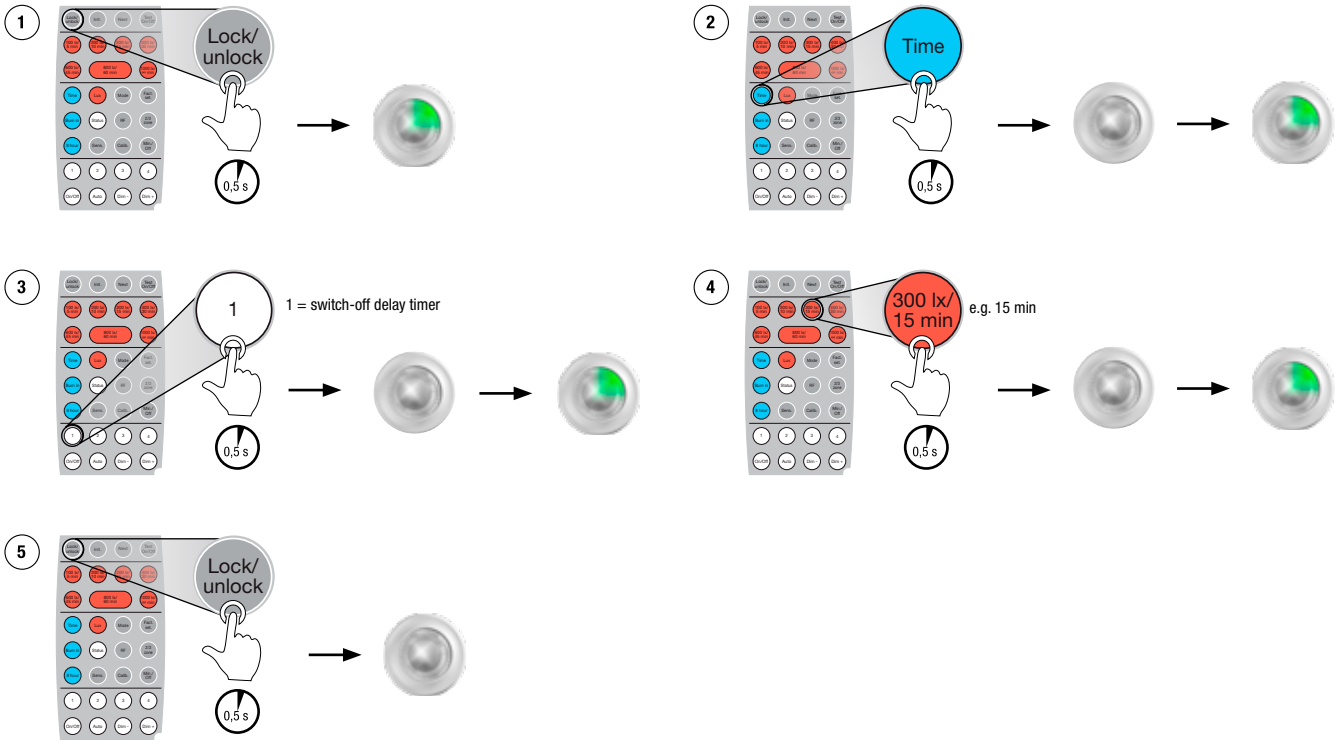
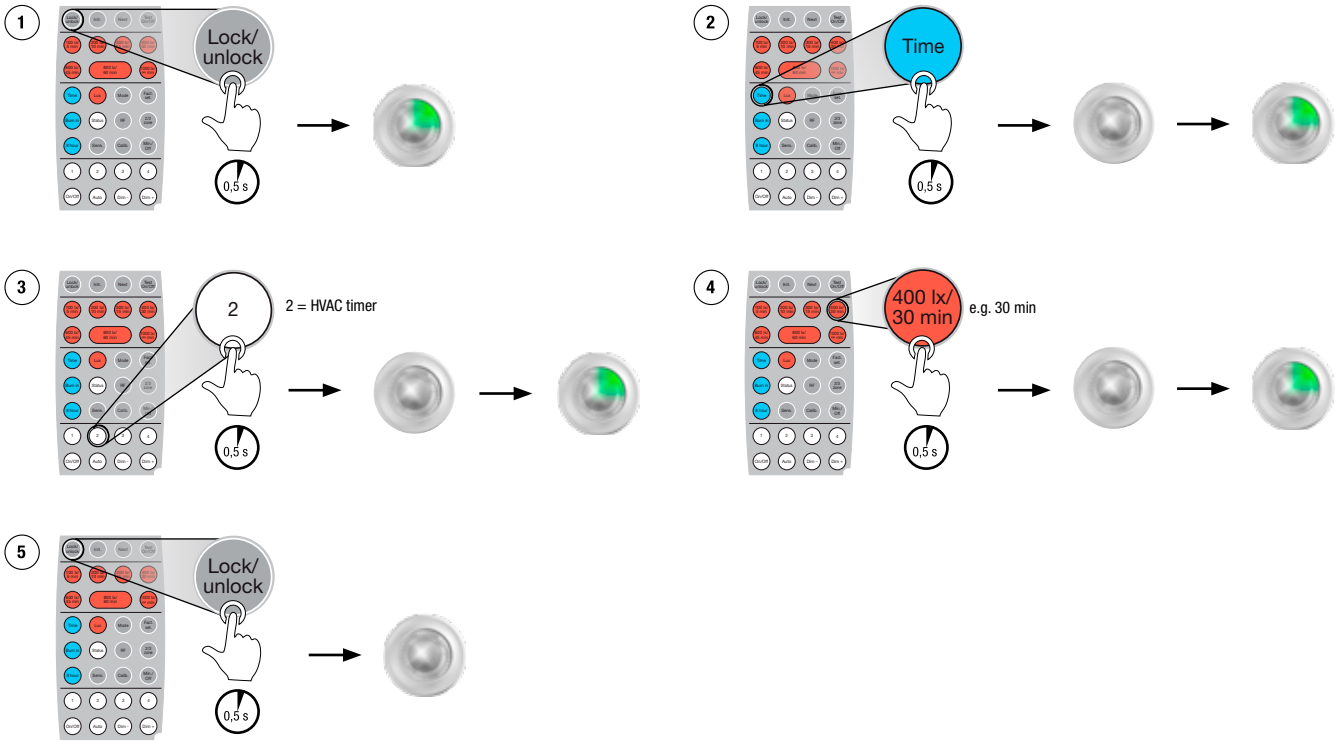
8.15 Time 1 – switch-off delay timer



8.16 Time 2 – HVAC timer



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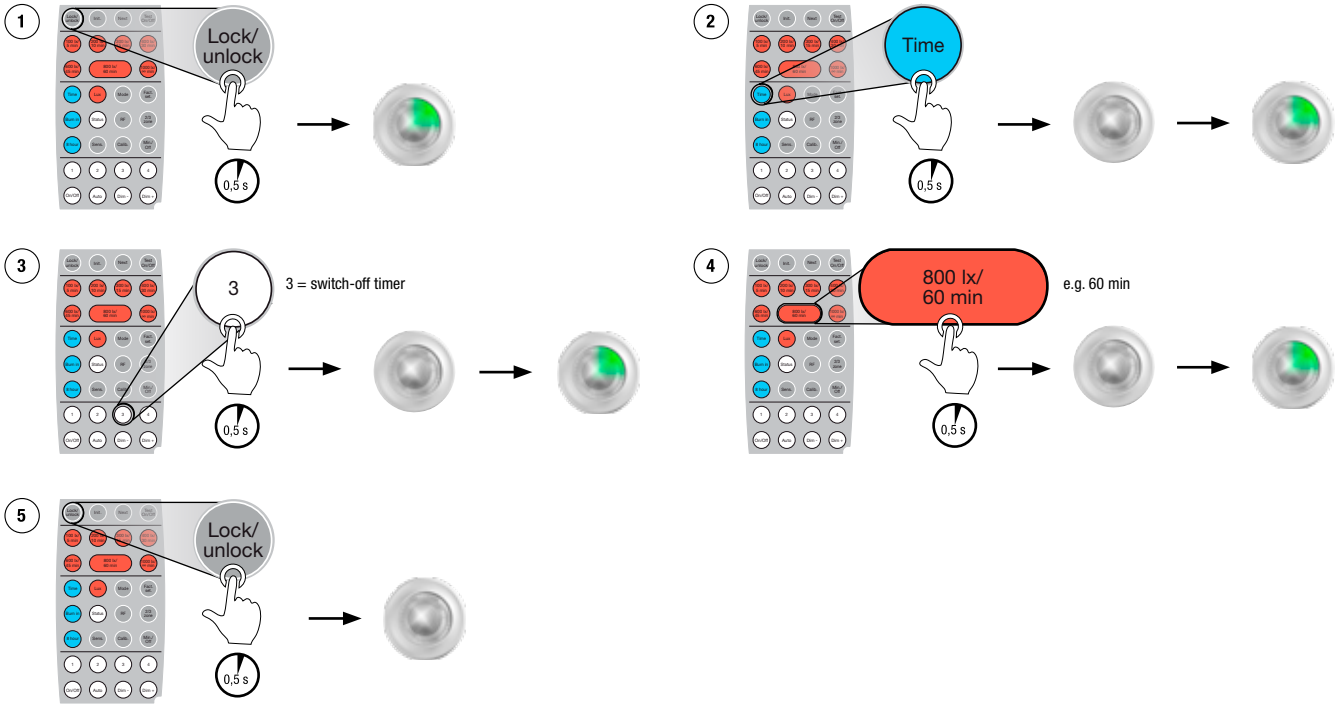
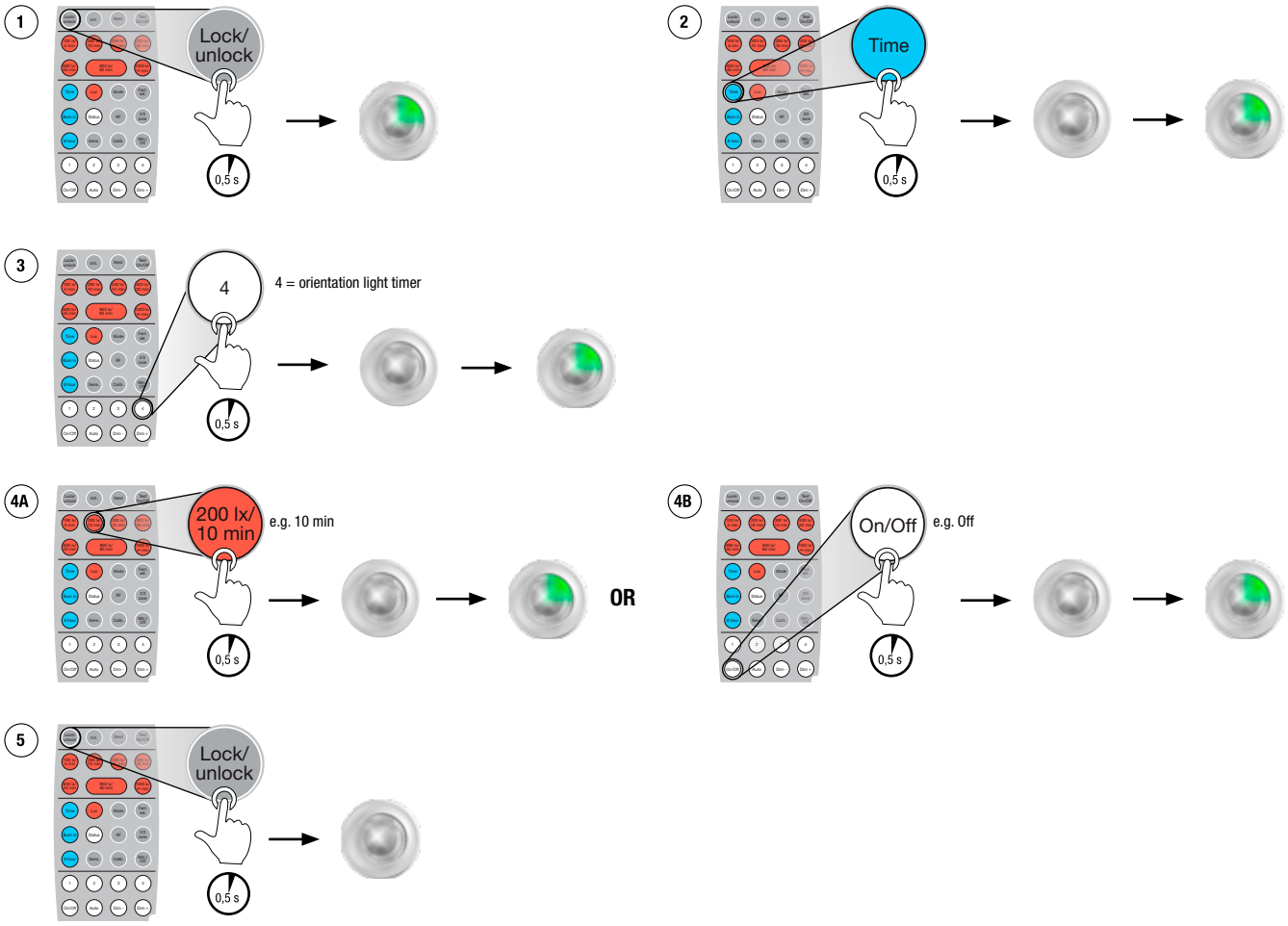
8.17 Time 3 – switch-off timer



8.18 Time 4 – orientation light timer



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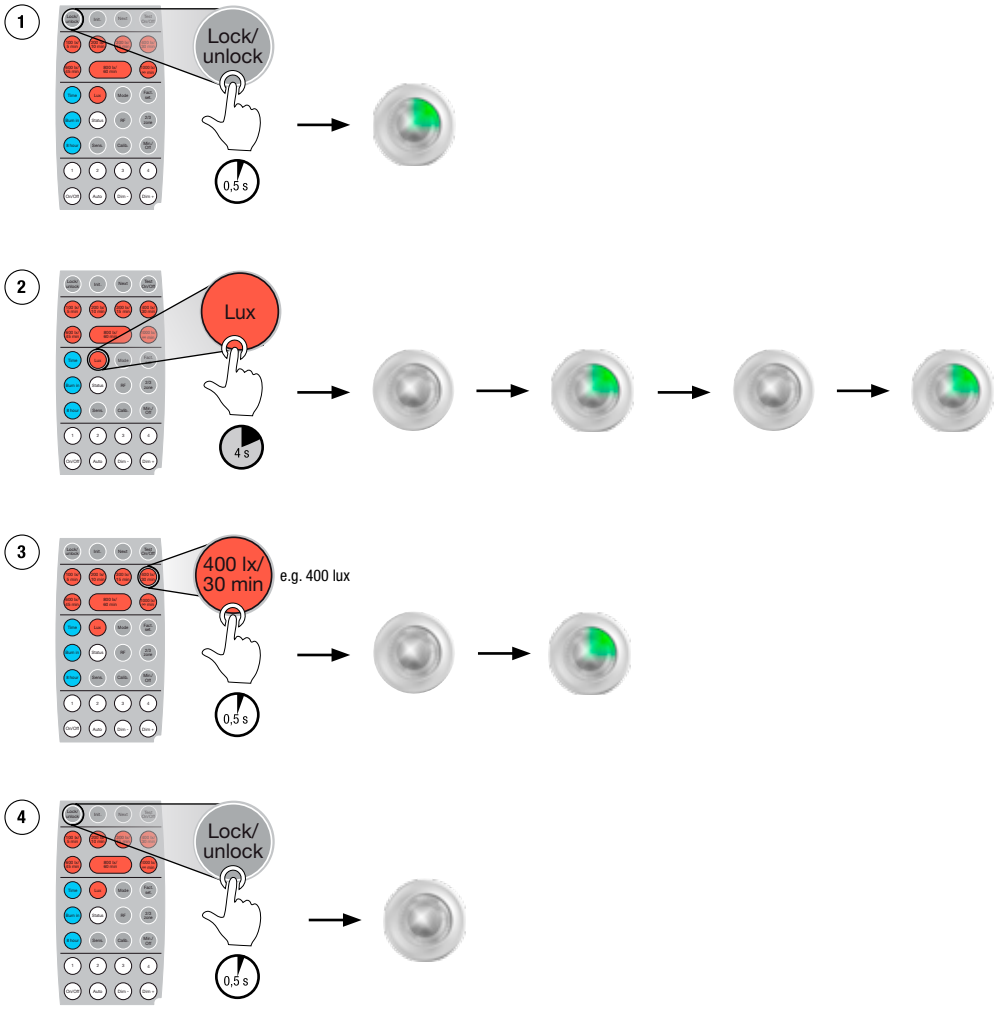
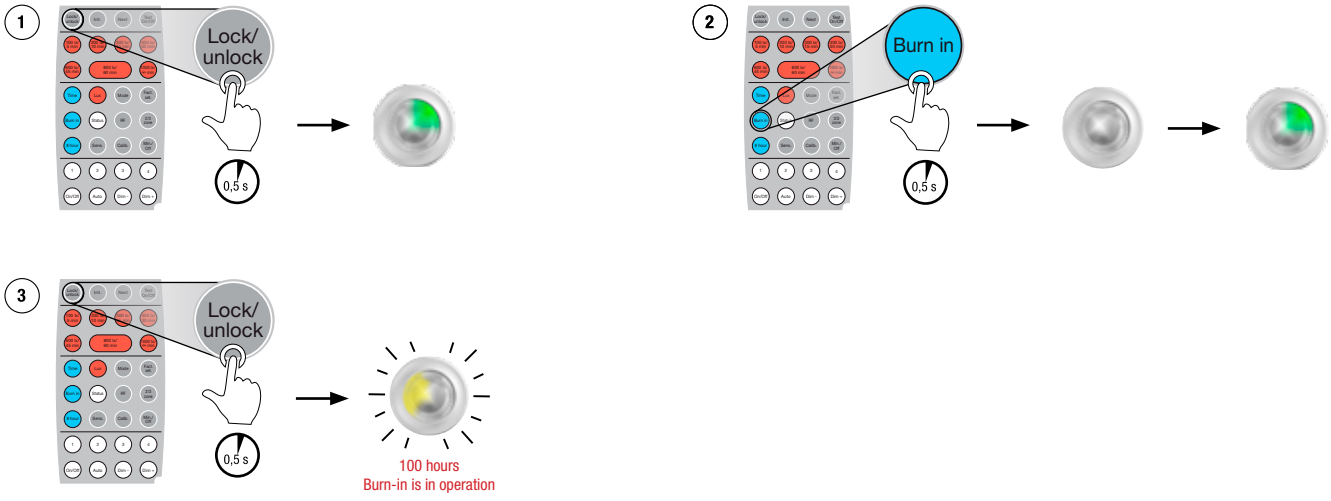
8.19 Max lux output (step 8.11 must be done first)

Only if the luminaries are capable of giving more light than the required light level.



8.20 Enable burn-in



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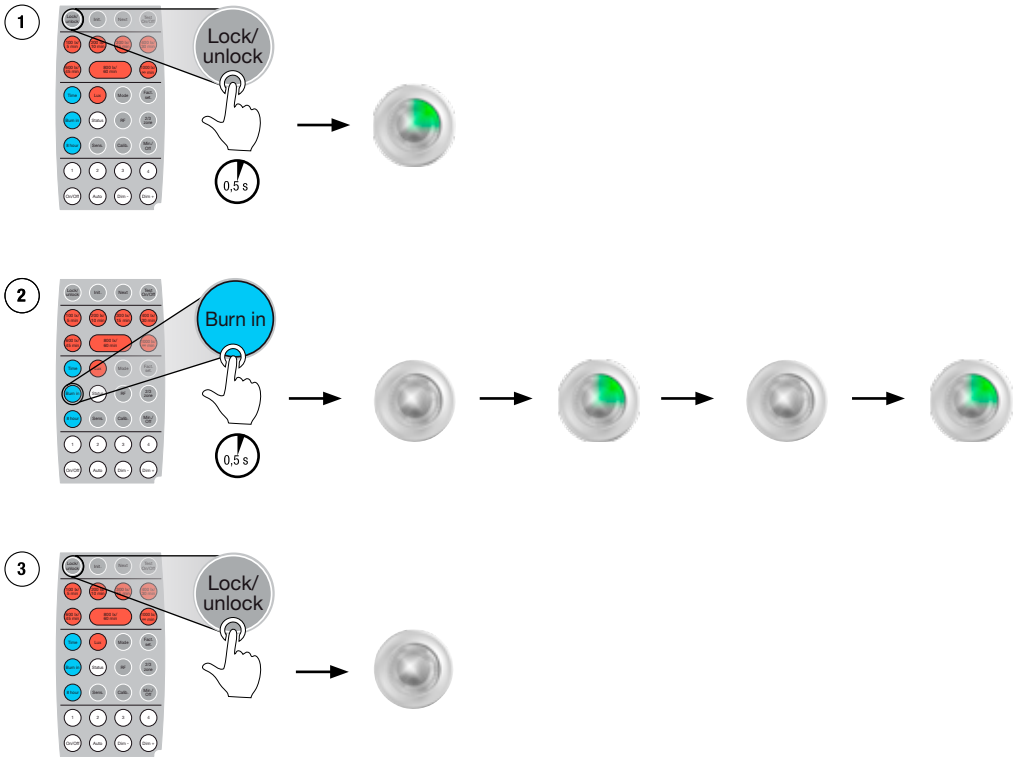
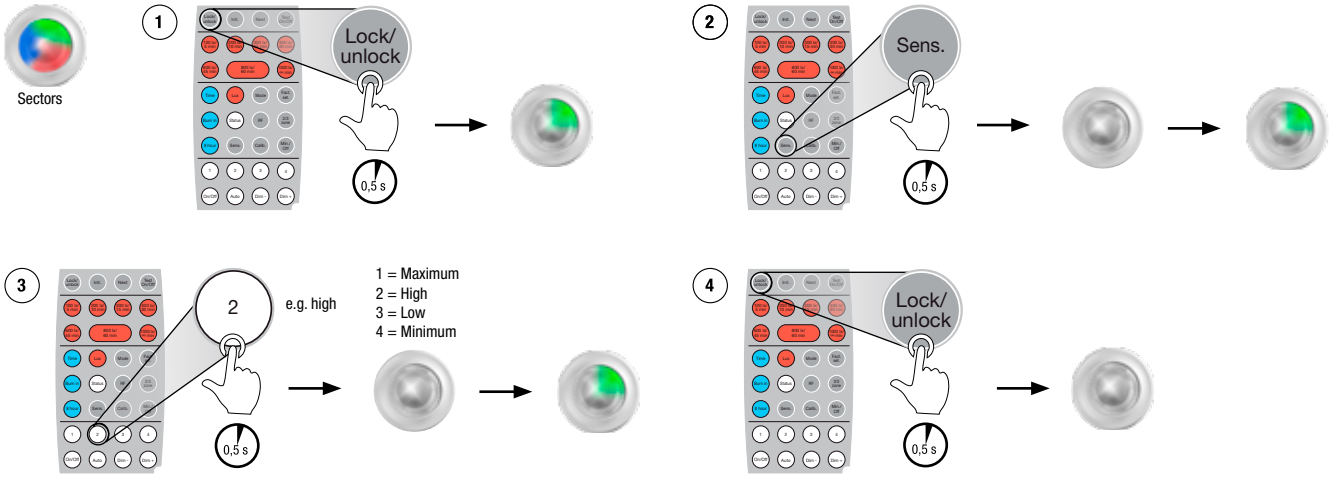
8.21 Disable burn-in



8.22 Select sensitivity (all sectors - A, B and C)



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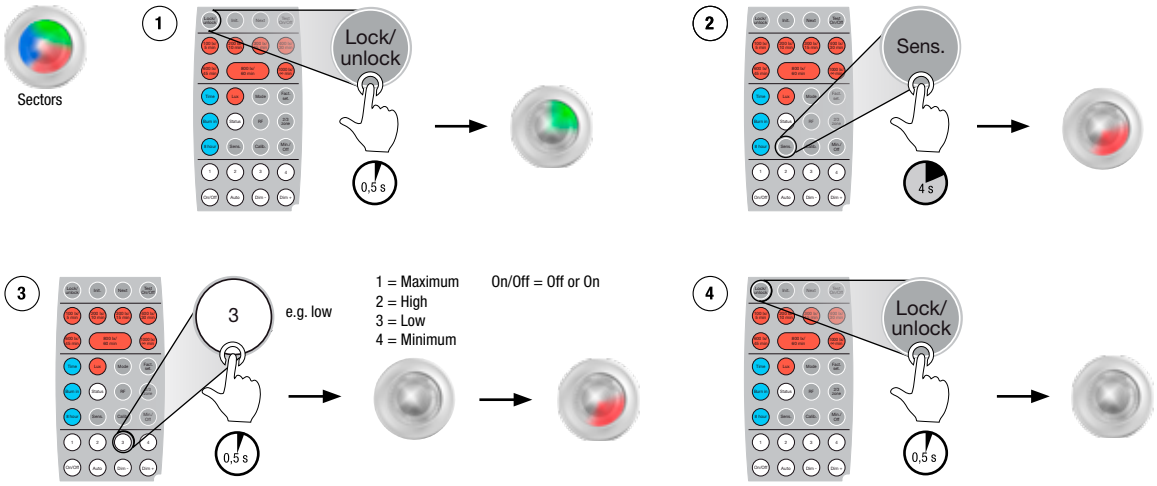
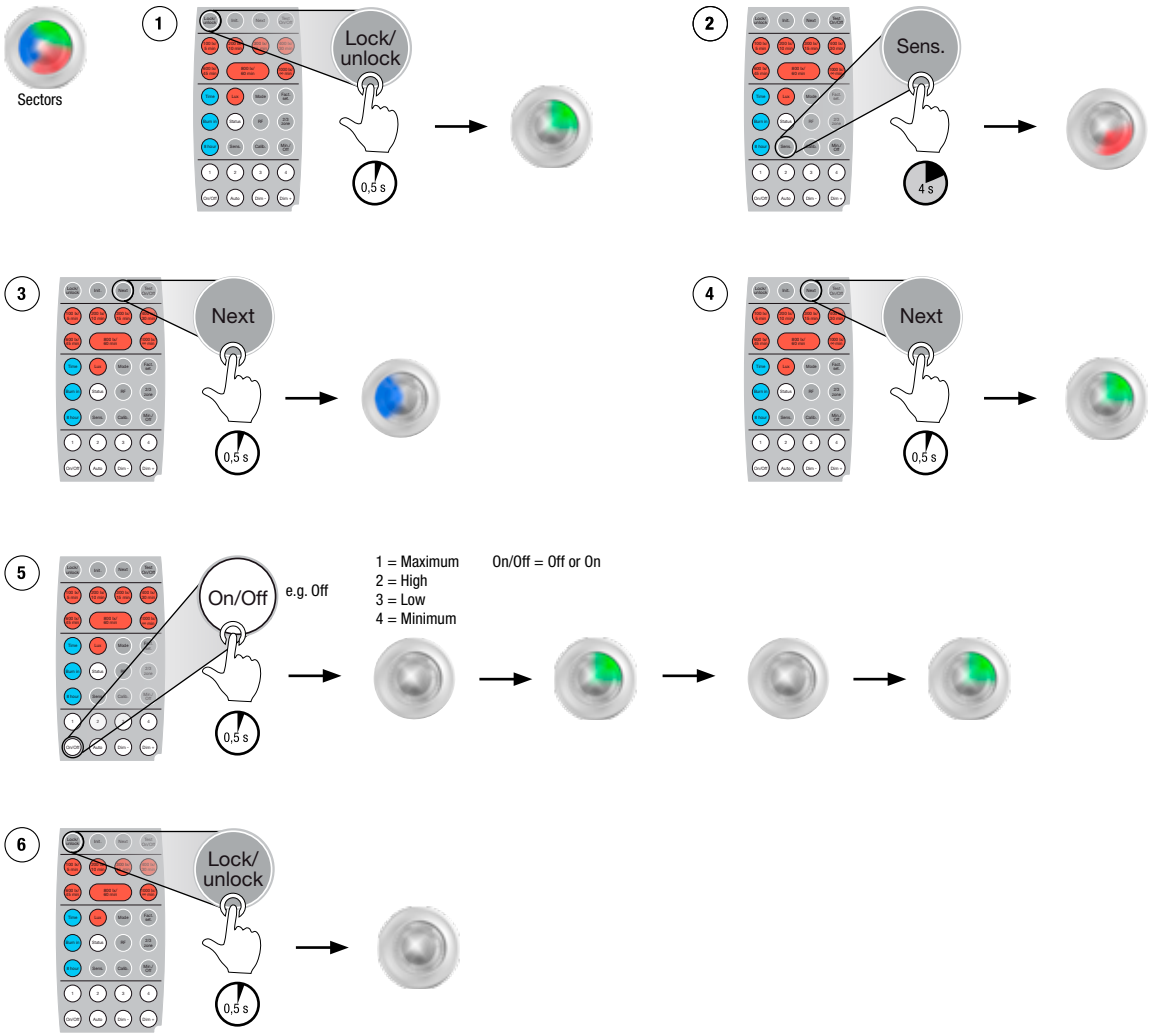
8.23 Select sensitivity in sector A (red)



8.24 Select sensitivity in sector B (green)



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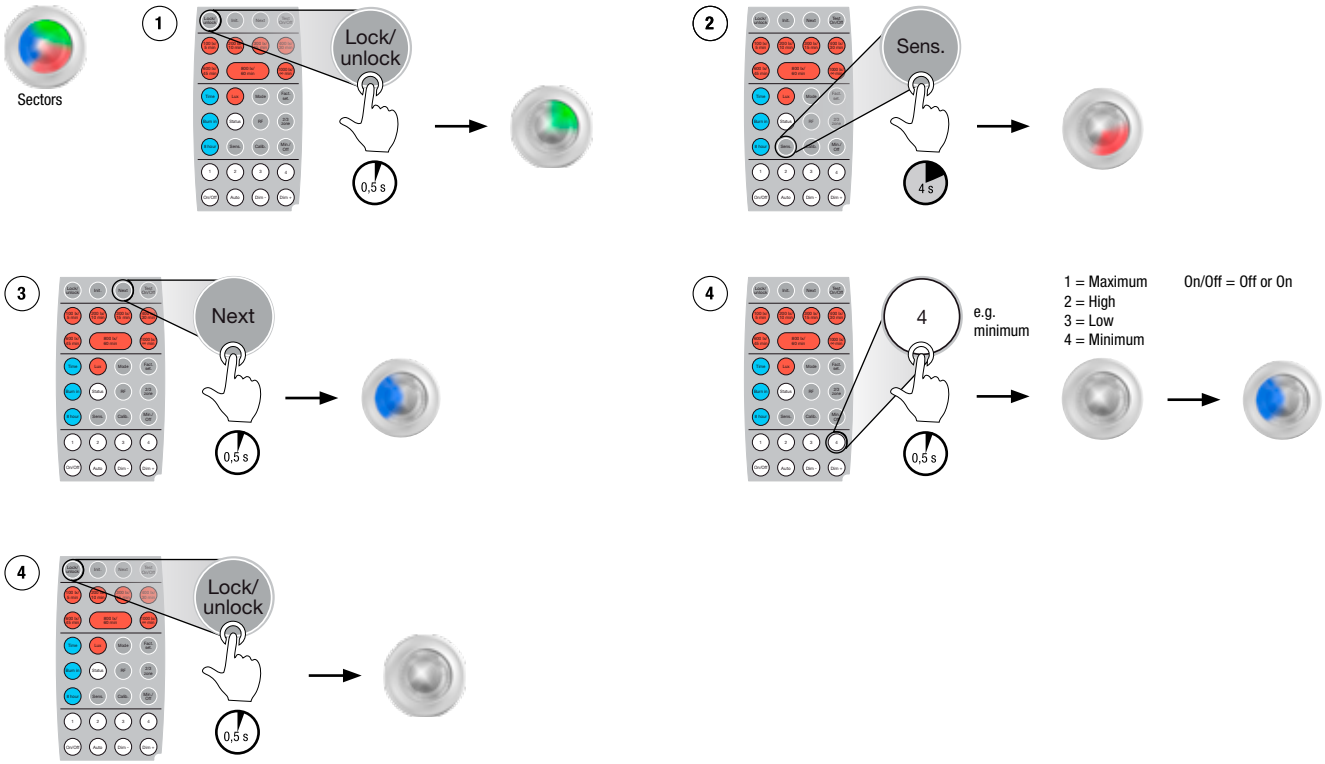
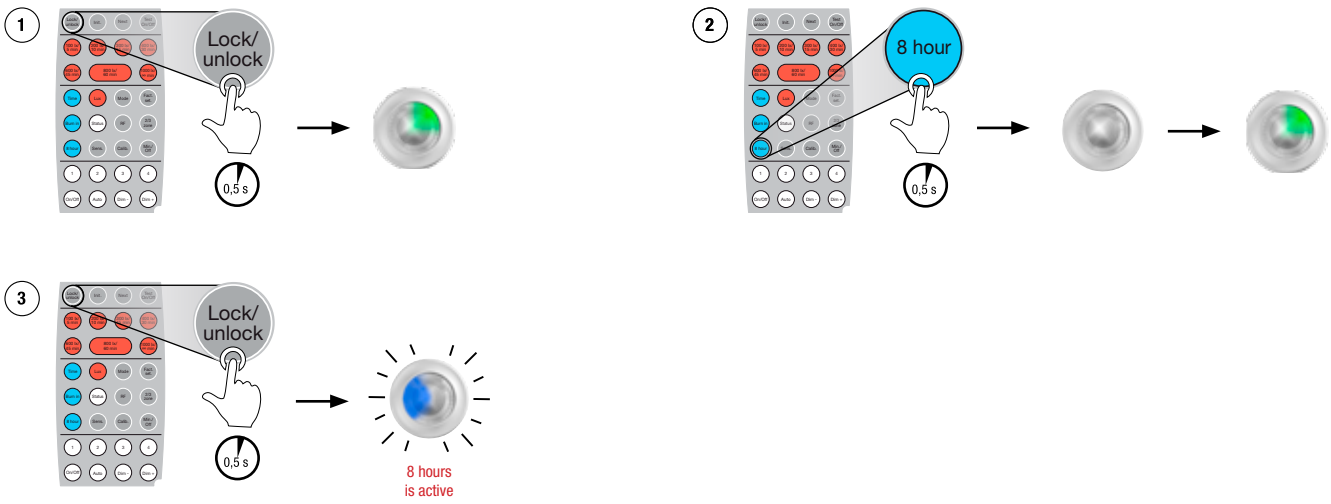
8.25 Select sensitivity in sector C (blue)



8.26 Enable constant HVAC output (8 hours)



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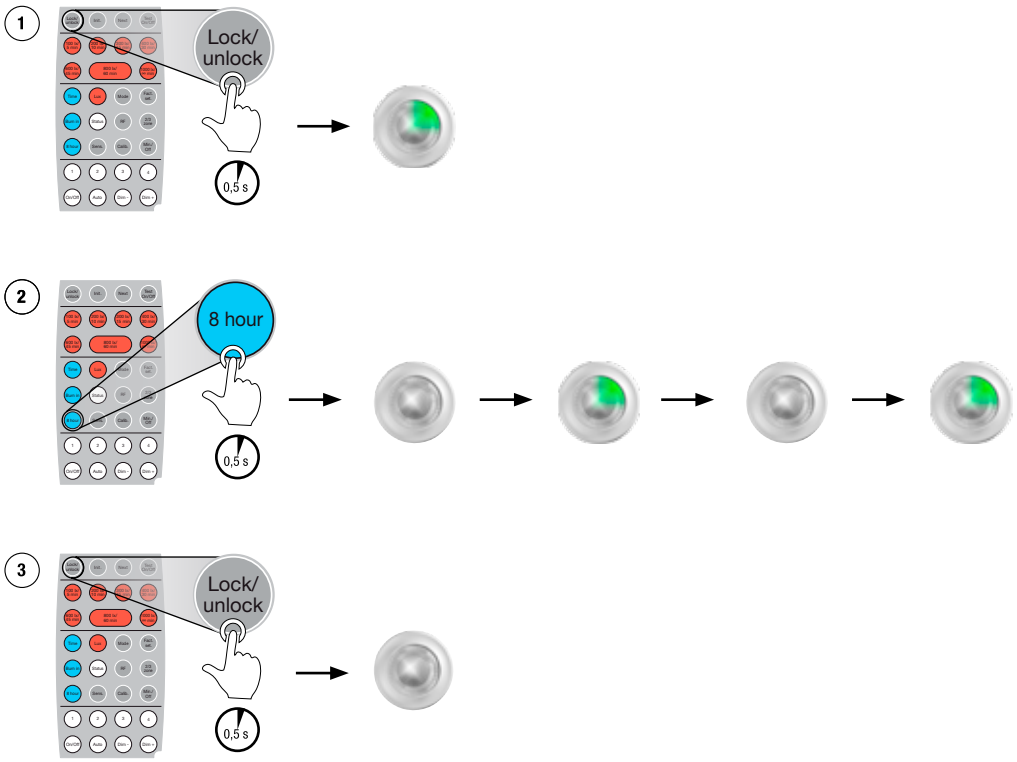
8.27 Disable constant HVAC output



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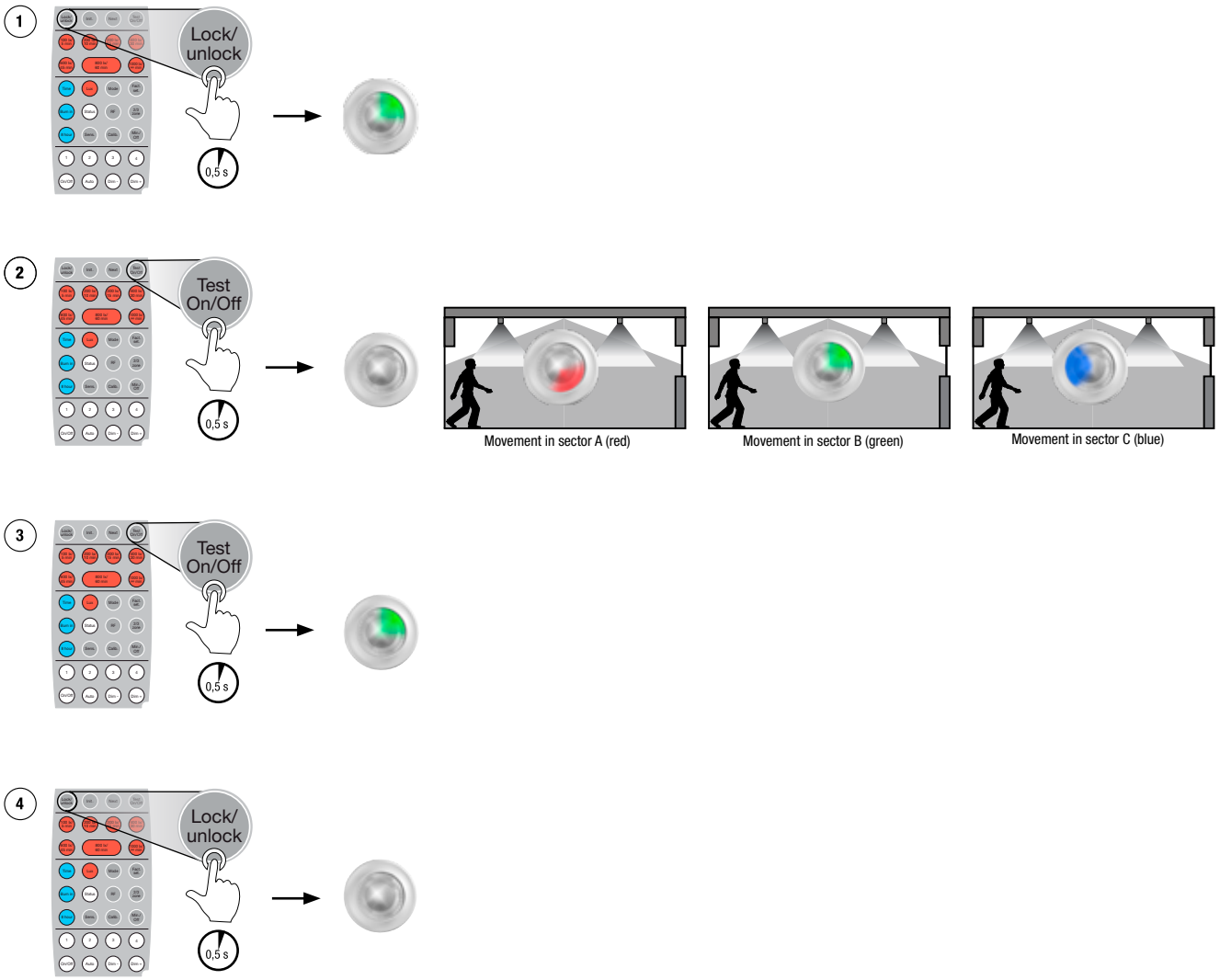
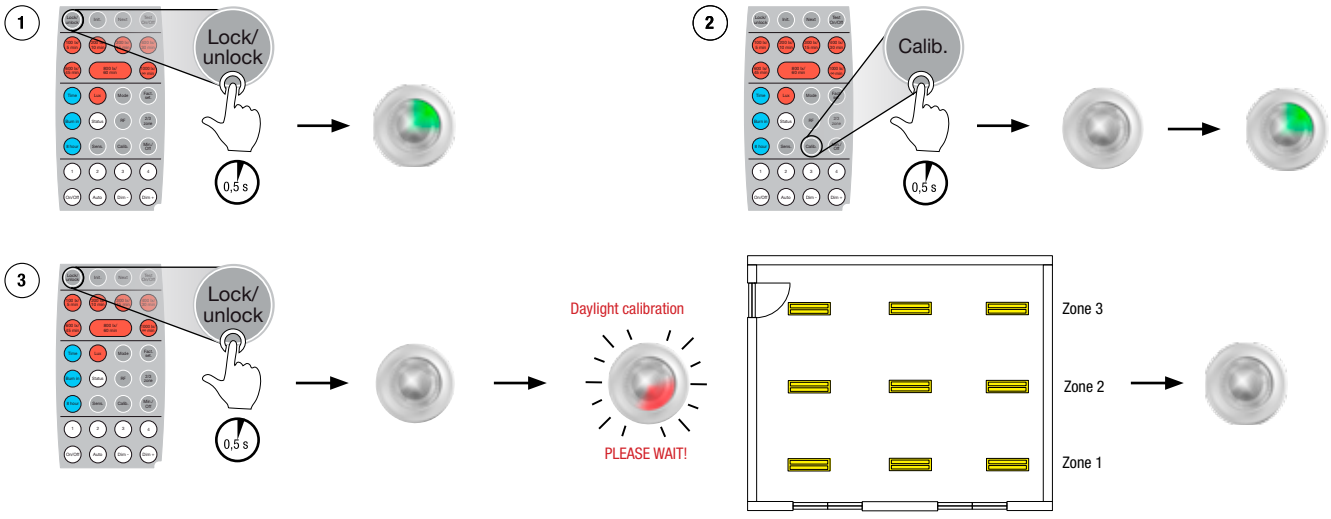
8.28 Walking test



8.29 Programme new daylight calibration



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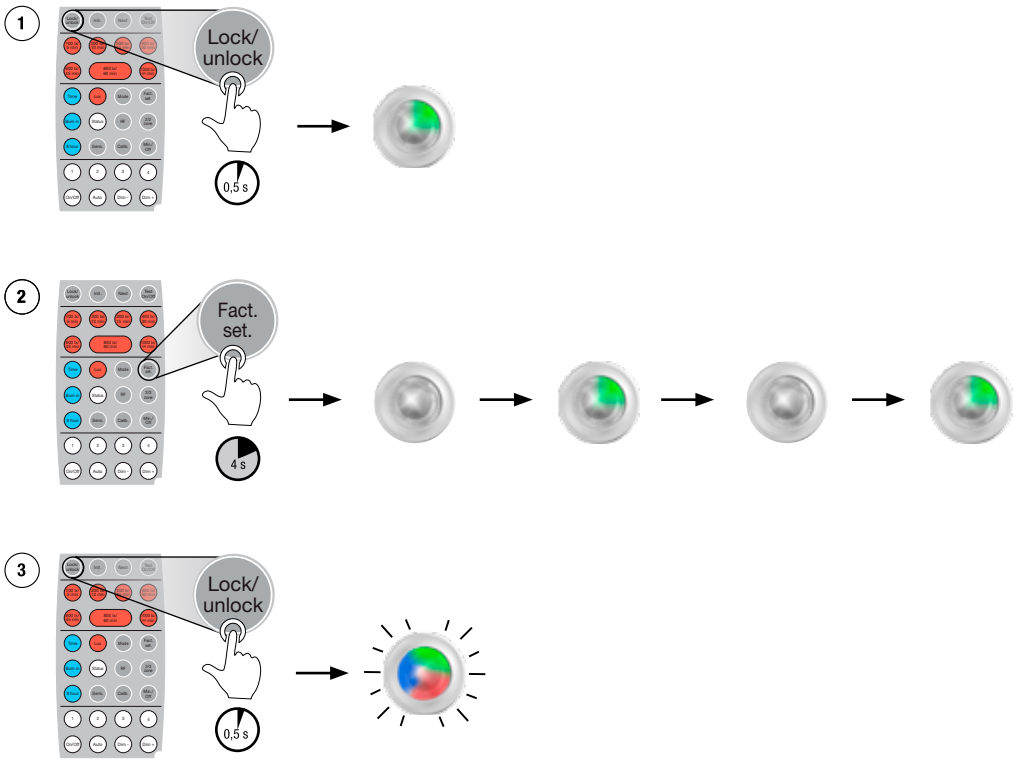
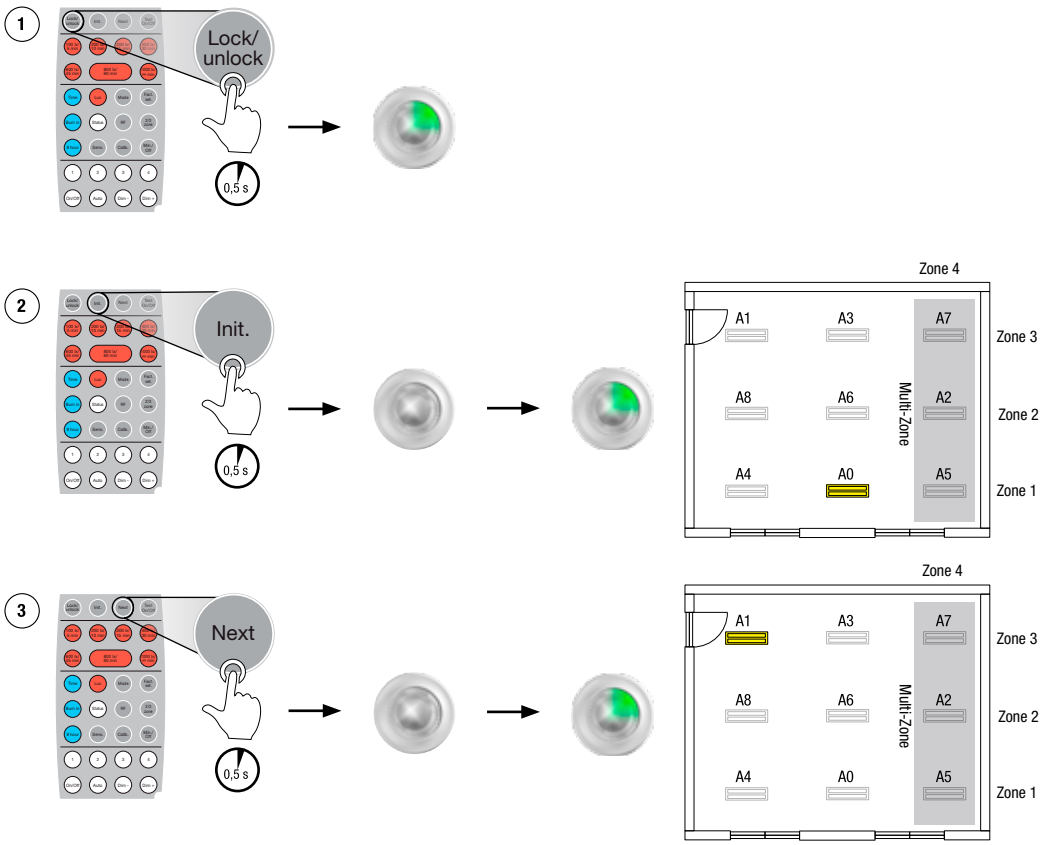
8.30 Reset to factory settings



8.31 Programme multi-zone



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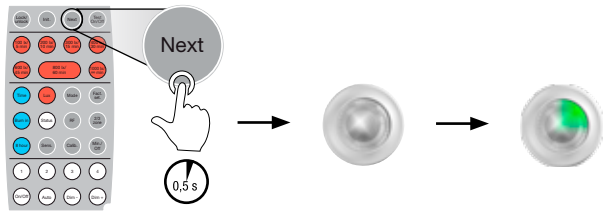
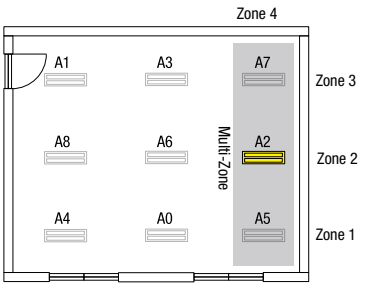
8.31 Programme multi-zone

4





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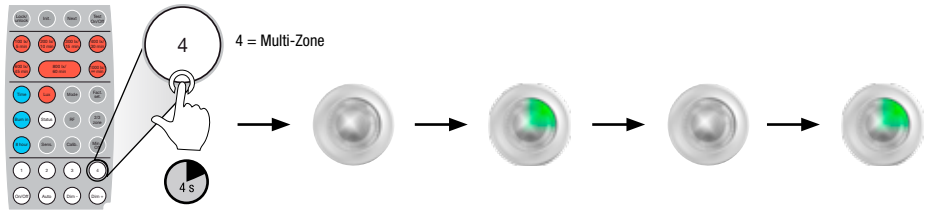

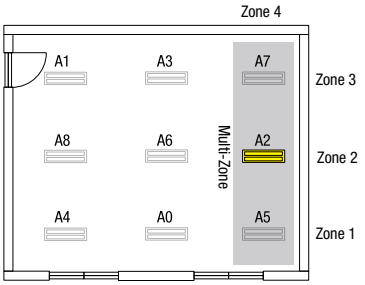

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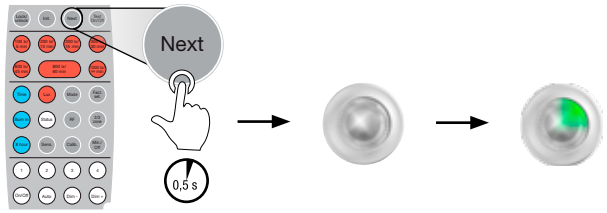

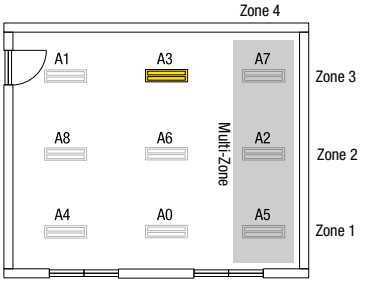

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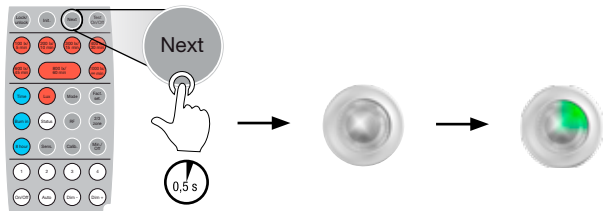

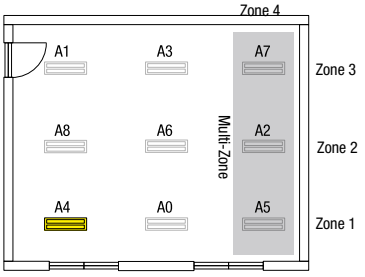

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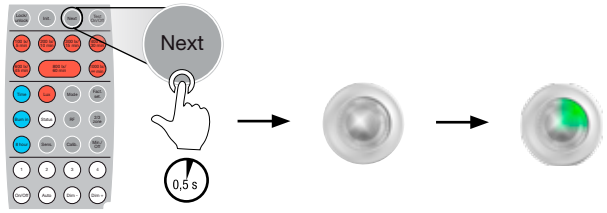

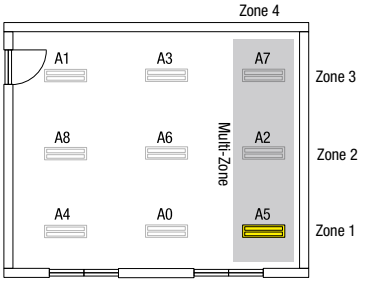

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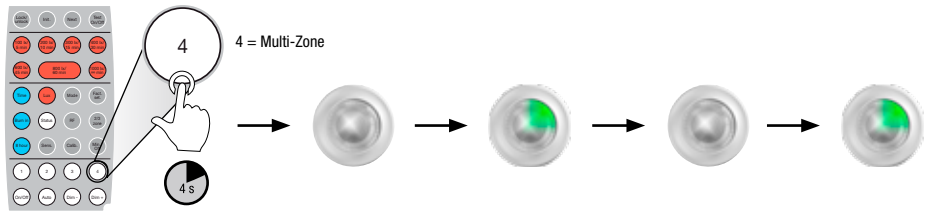

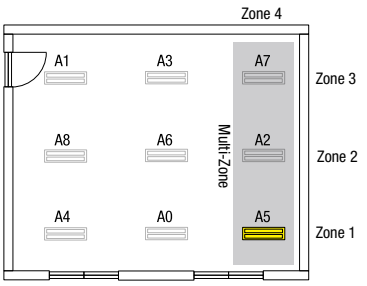

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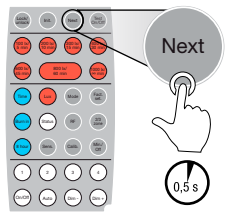
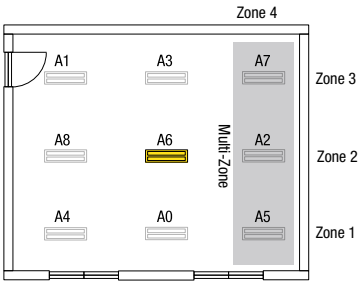
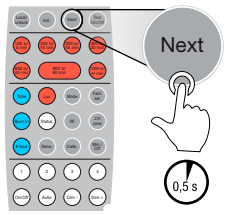
8.32 Programme multi-zone

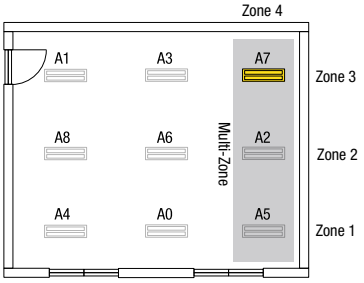
10



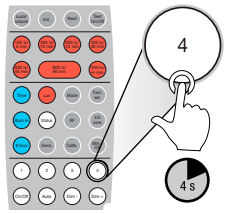


11

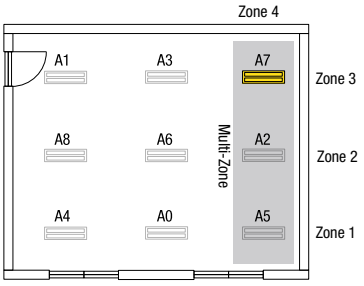




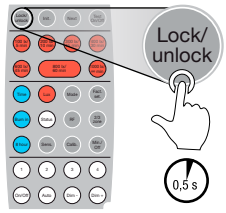
12



4 = Multi-Zone

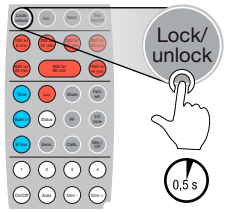


13

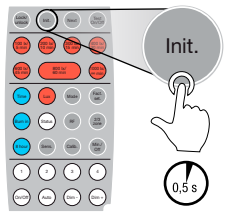


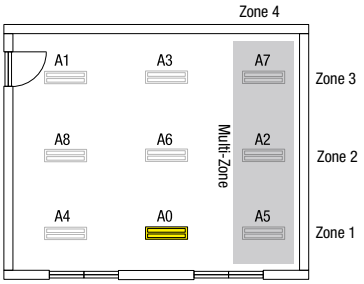
8.33 Remove luminaires from multi-zone

1



2





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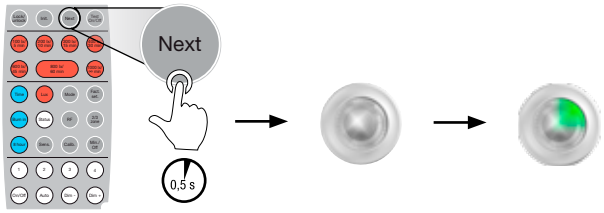
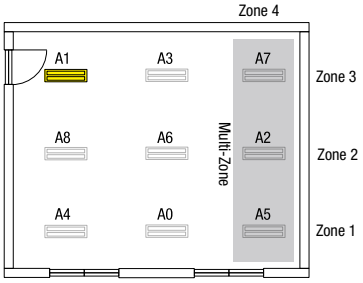
8.32 Remove luminaires from multi-zone

3





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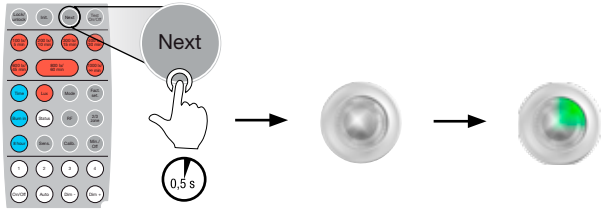

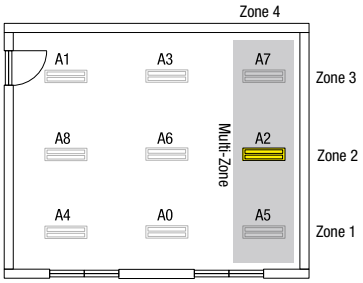

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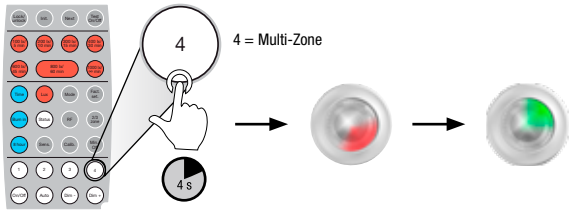

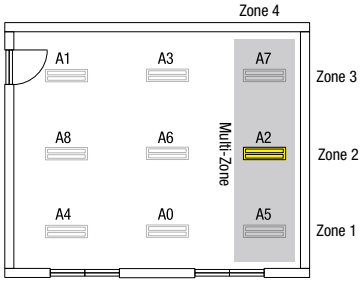

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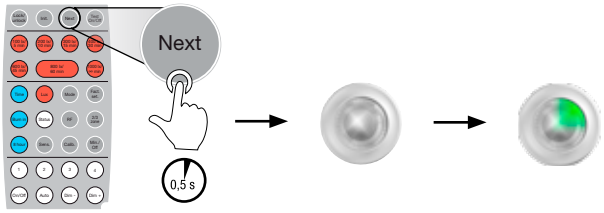

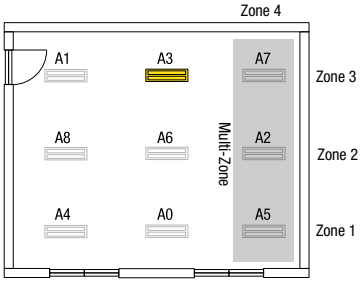

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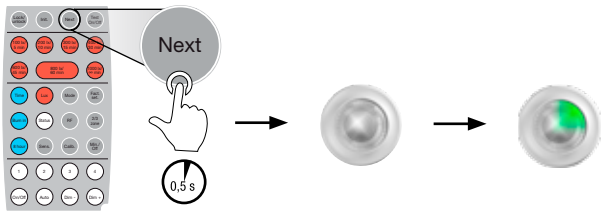

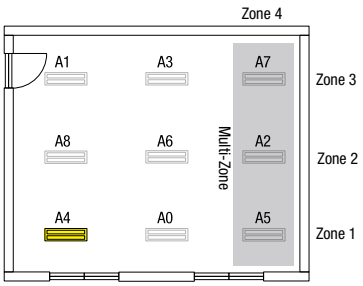

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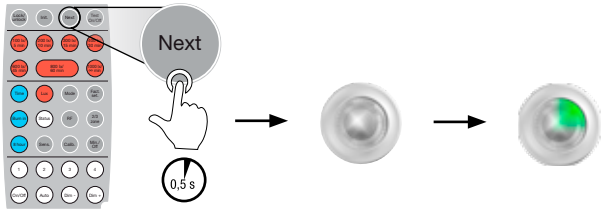

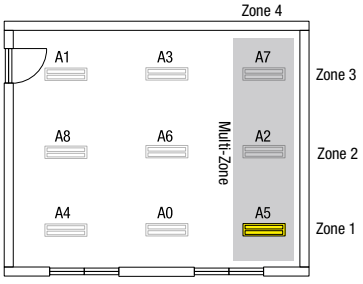

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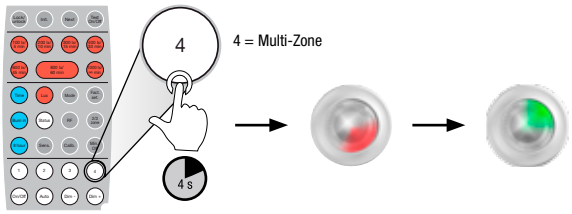
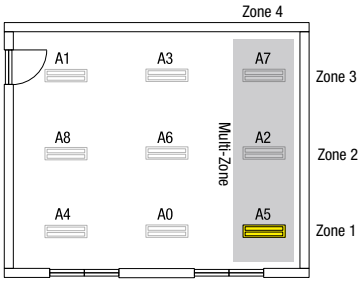
8.33 Remove luminaires from multi-zone

9





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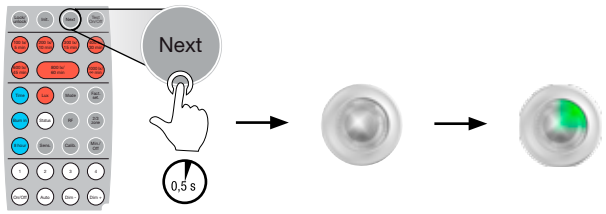

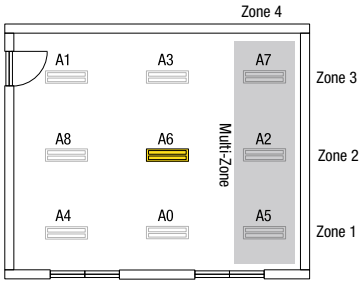

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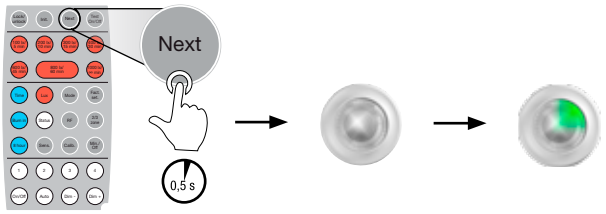

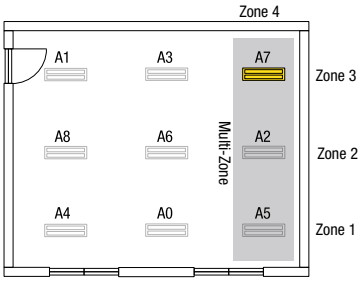

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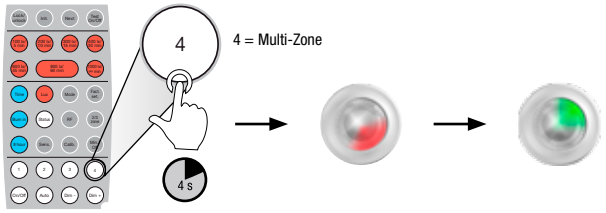

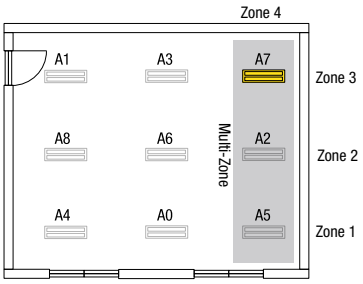

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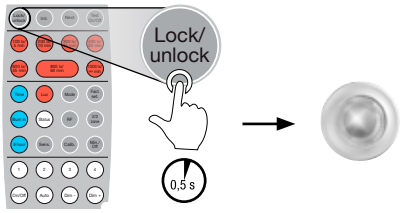
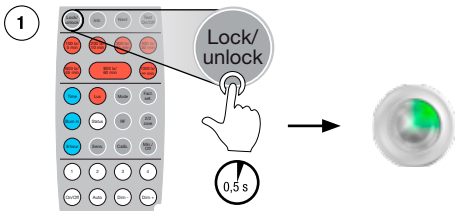
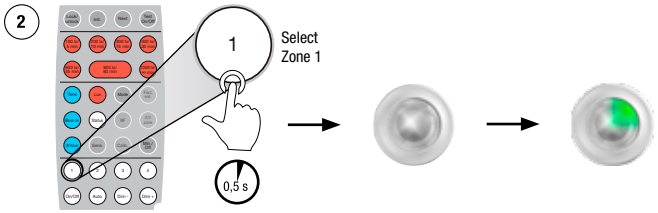
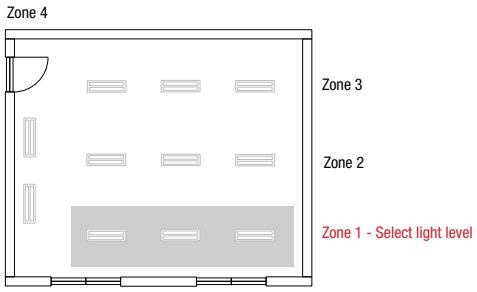
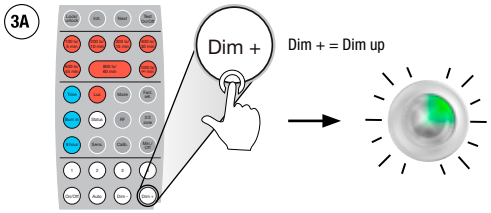


8.34 Programme atmosphere 1









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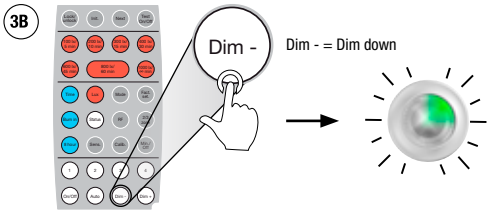

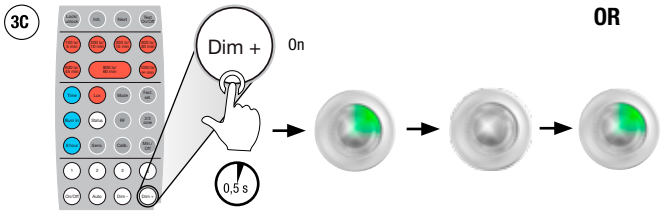

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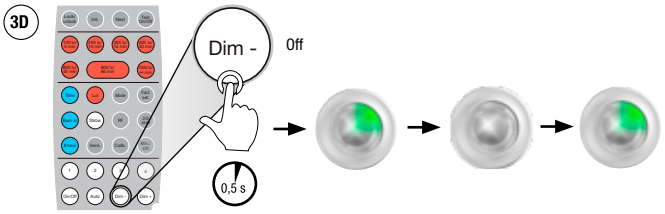

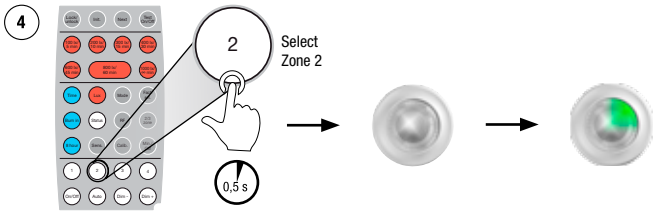

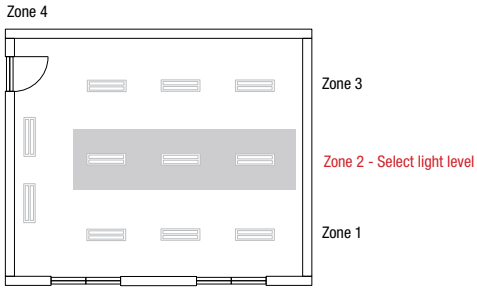

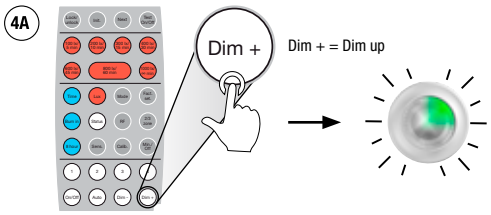

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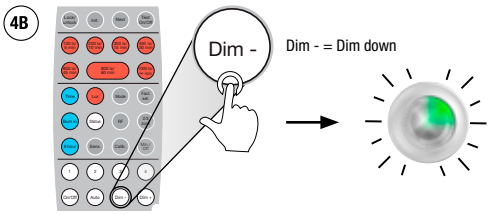

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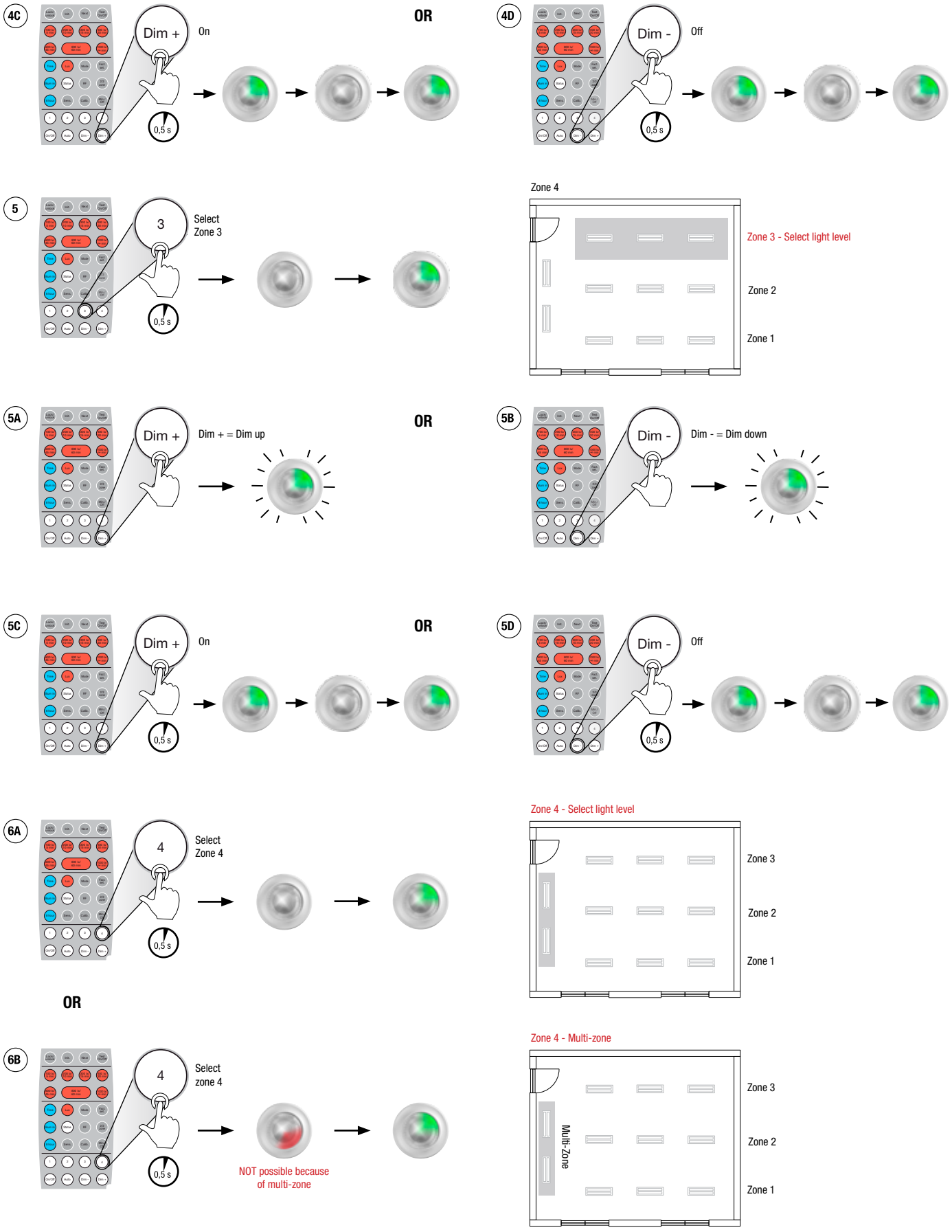
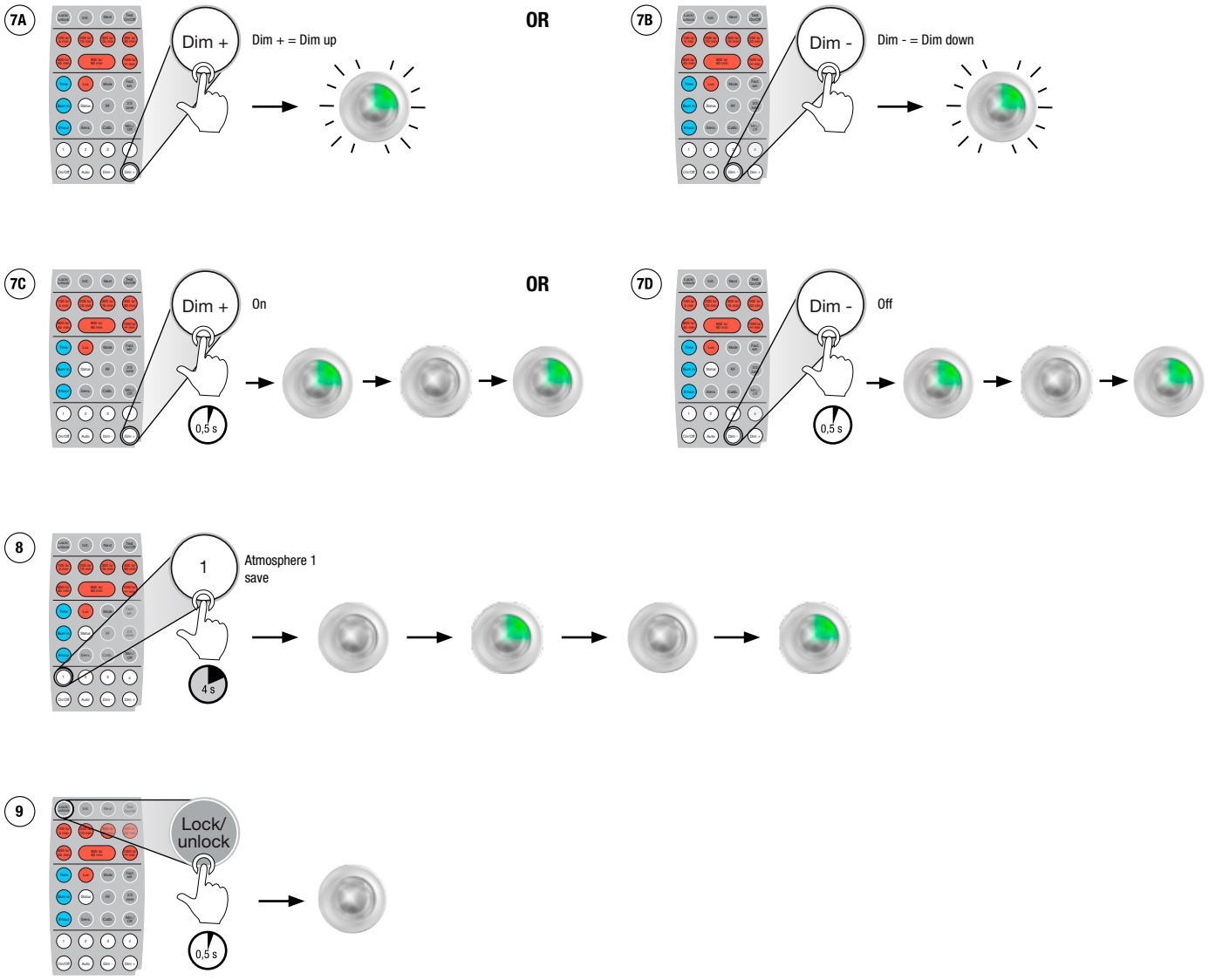
8.33 Programme atmosphere 1



8.34 Programme atmosphere 1



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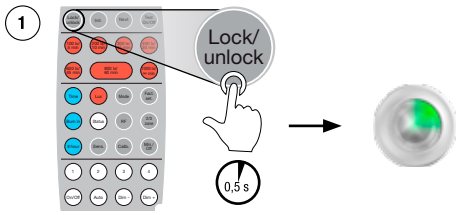
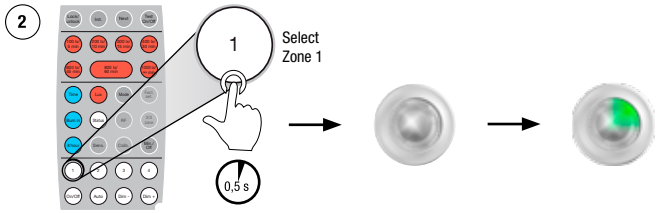
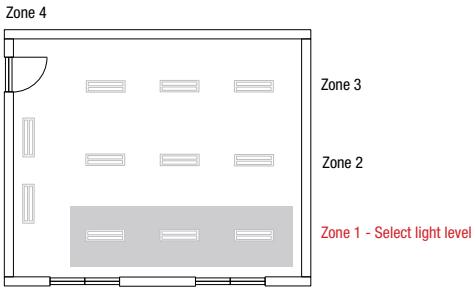
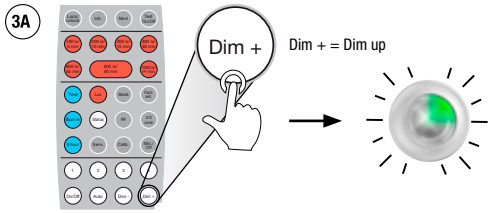
8.35 Programme atmosphere 2









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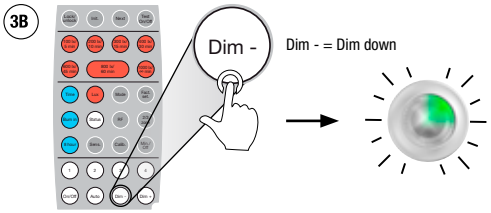

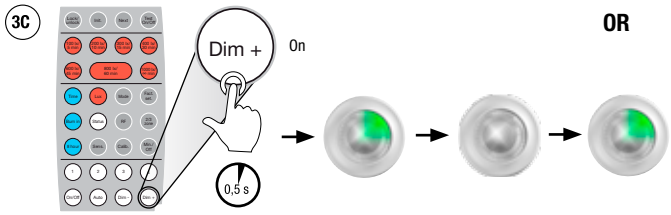

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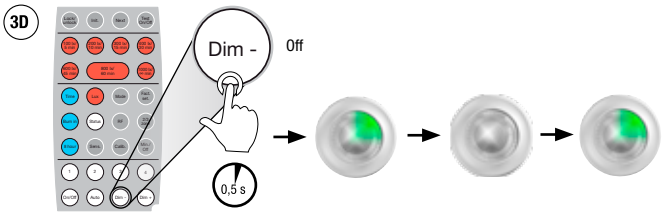

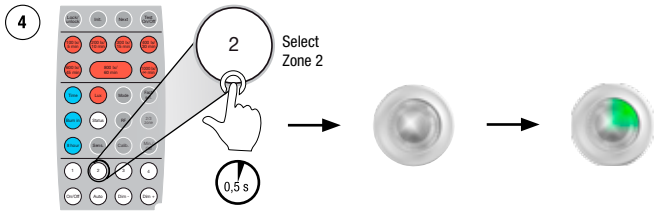

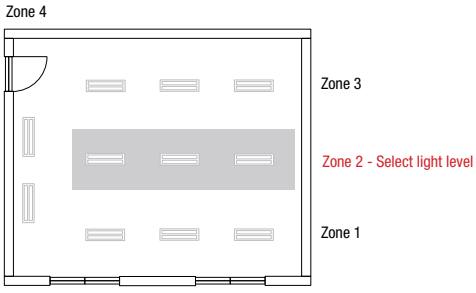

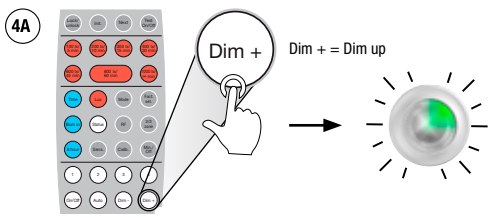

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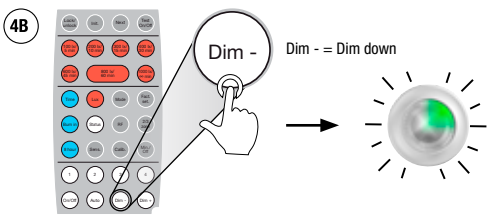
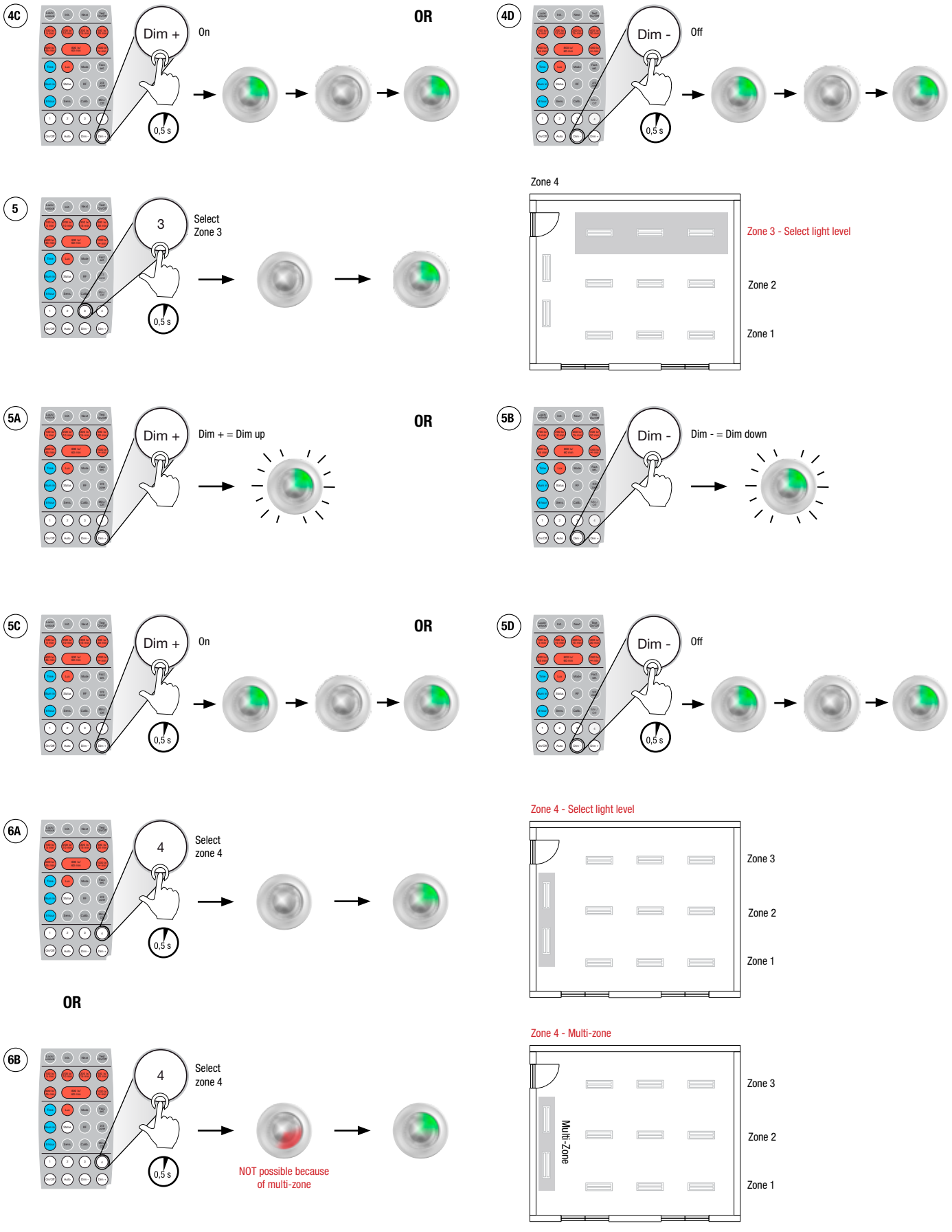


8.34 Programme atmosphere 2



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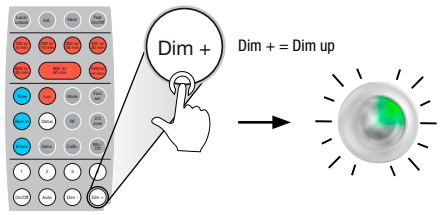
8.35 Programme atmosphere 2

7A



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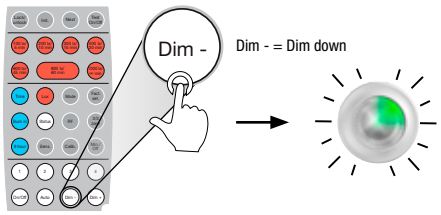

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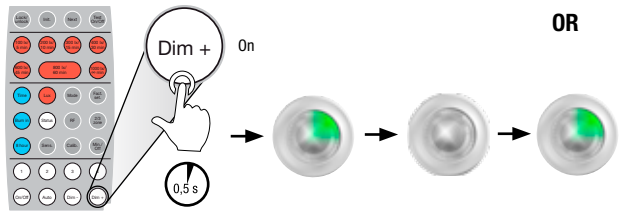

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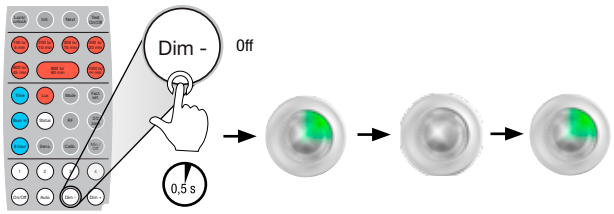

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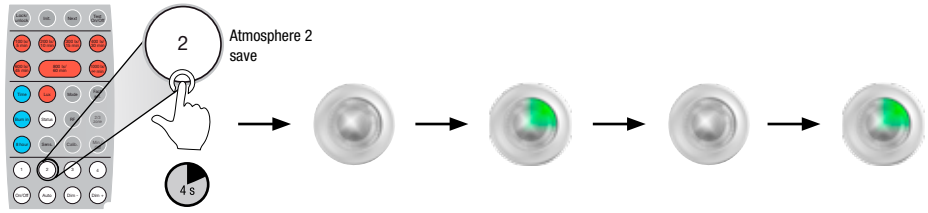

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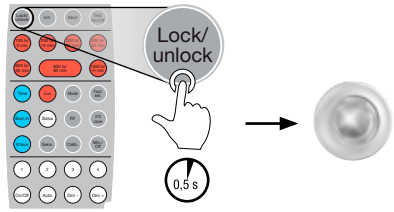

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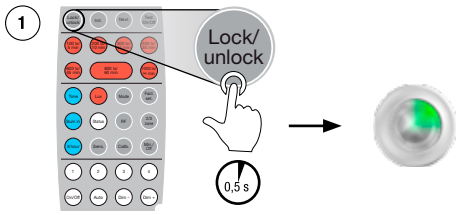
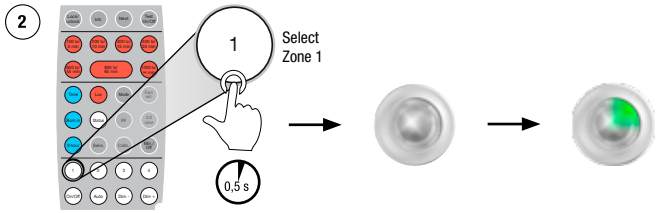
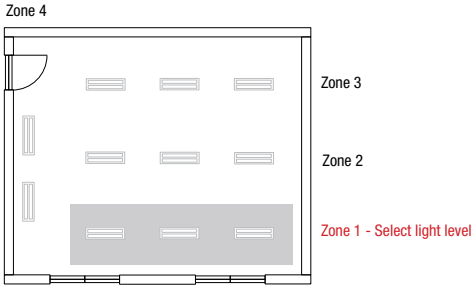
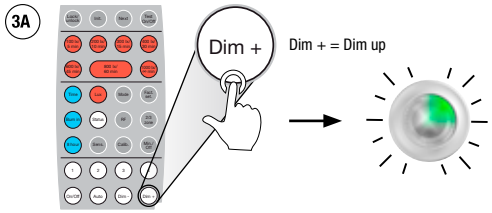
8.36 Programme atmosphere 3









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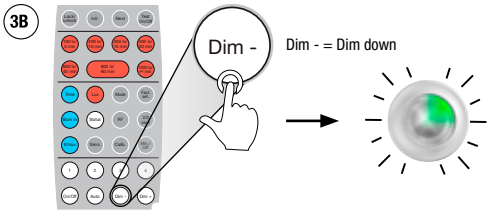
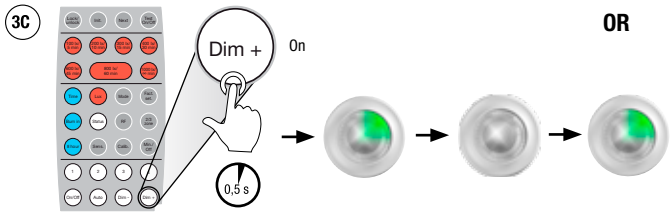
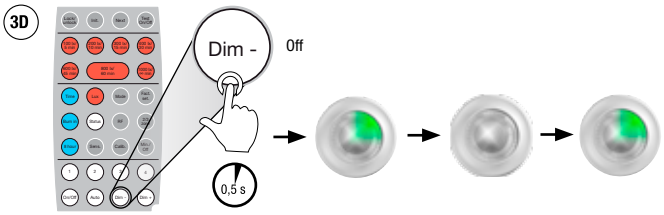
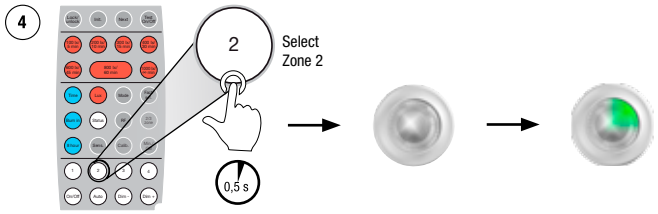
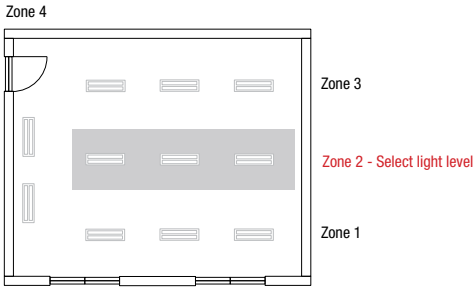


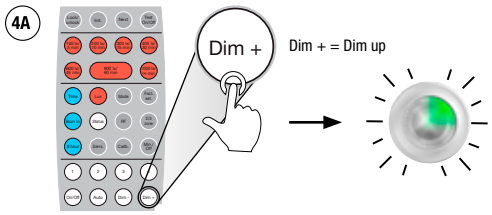


OR









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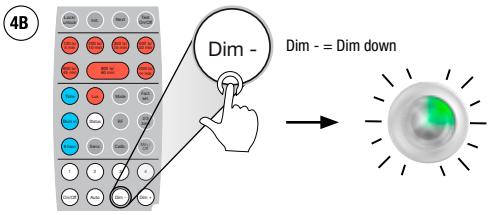

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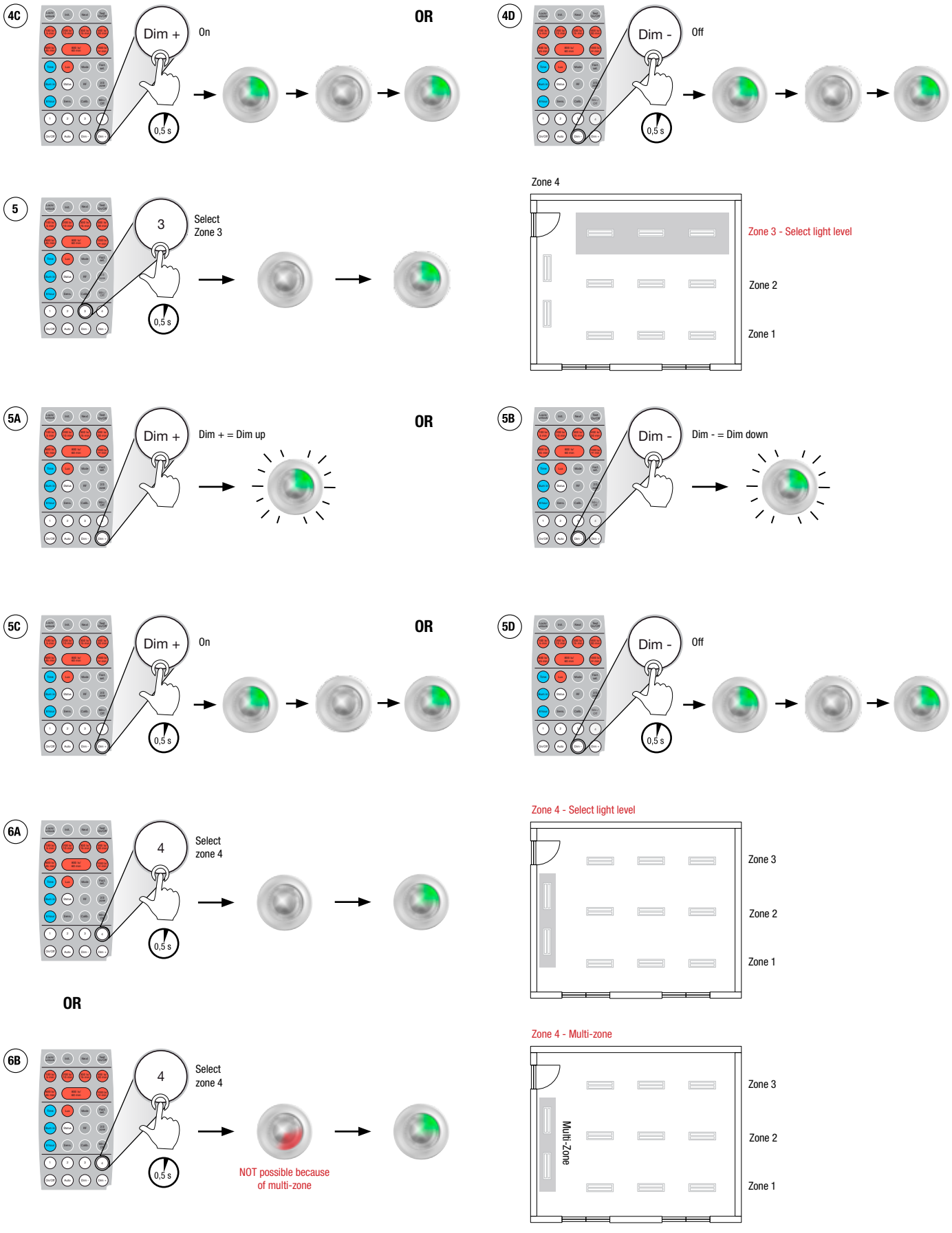
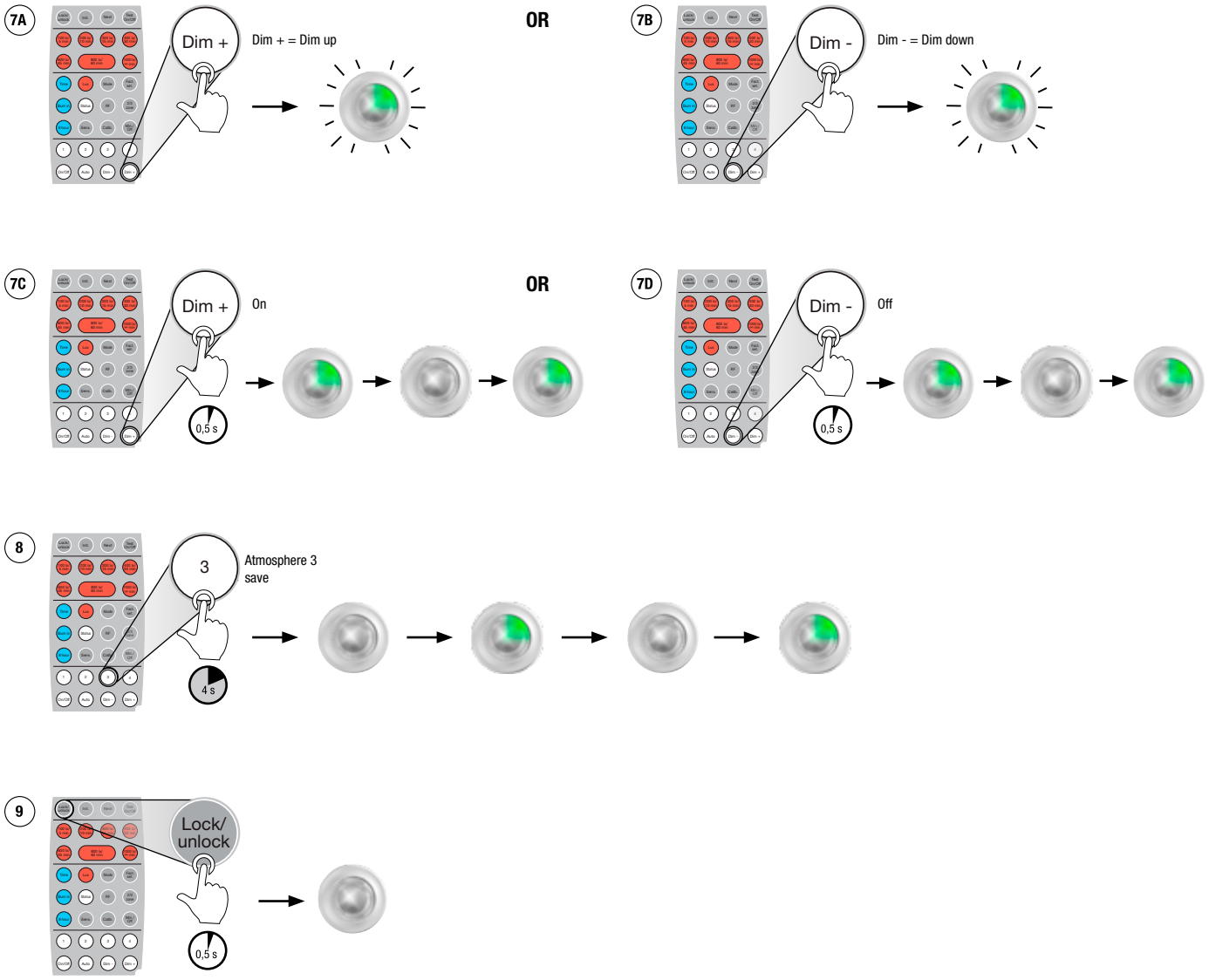
8.35 Programme atmosphere 3



8.36 Programme atmosphere 3



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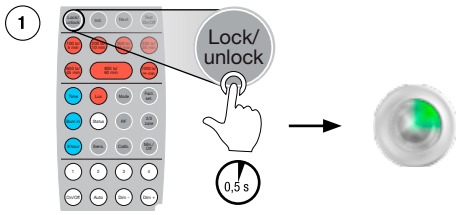
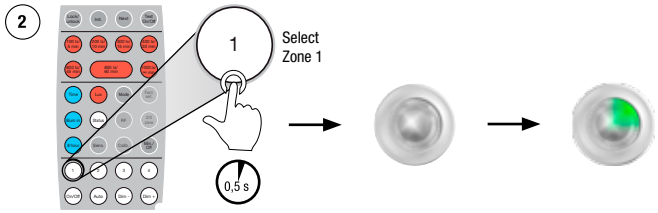
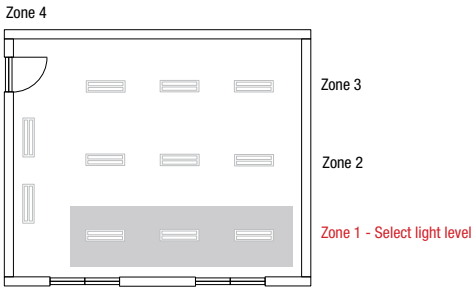
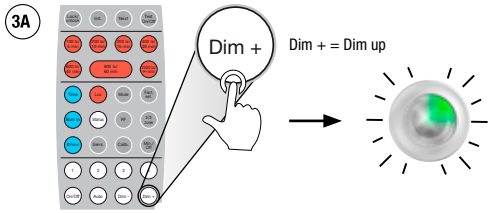
8.37 Programme atmosphere 4









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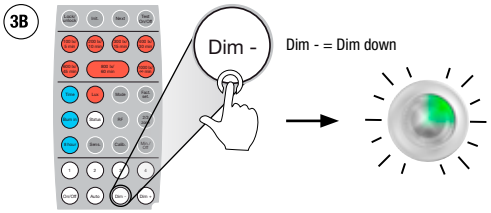

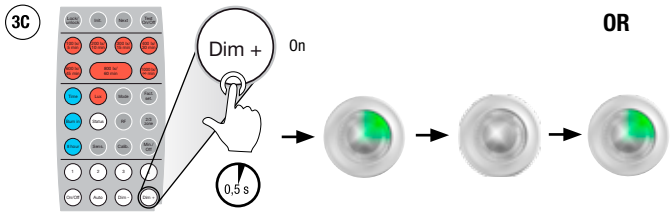

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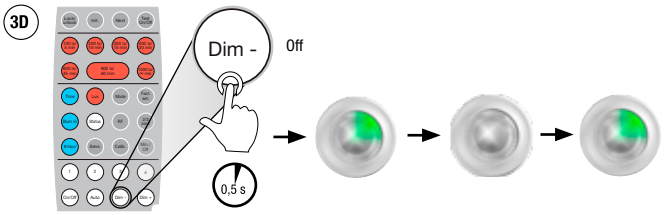

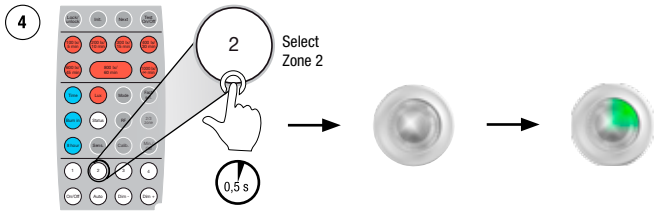

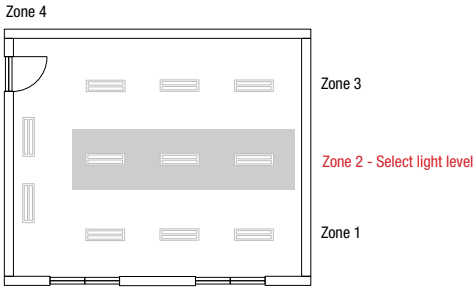

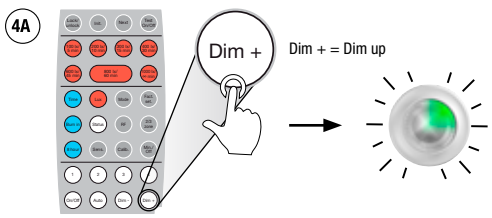

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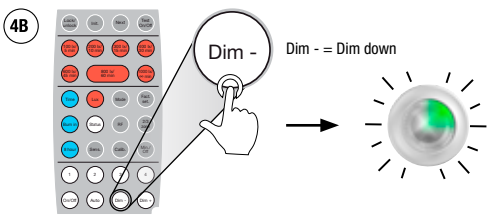
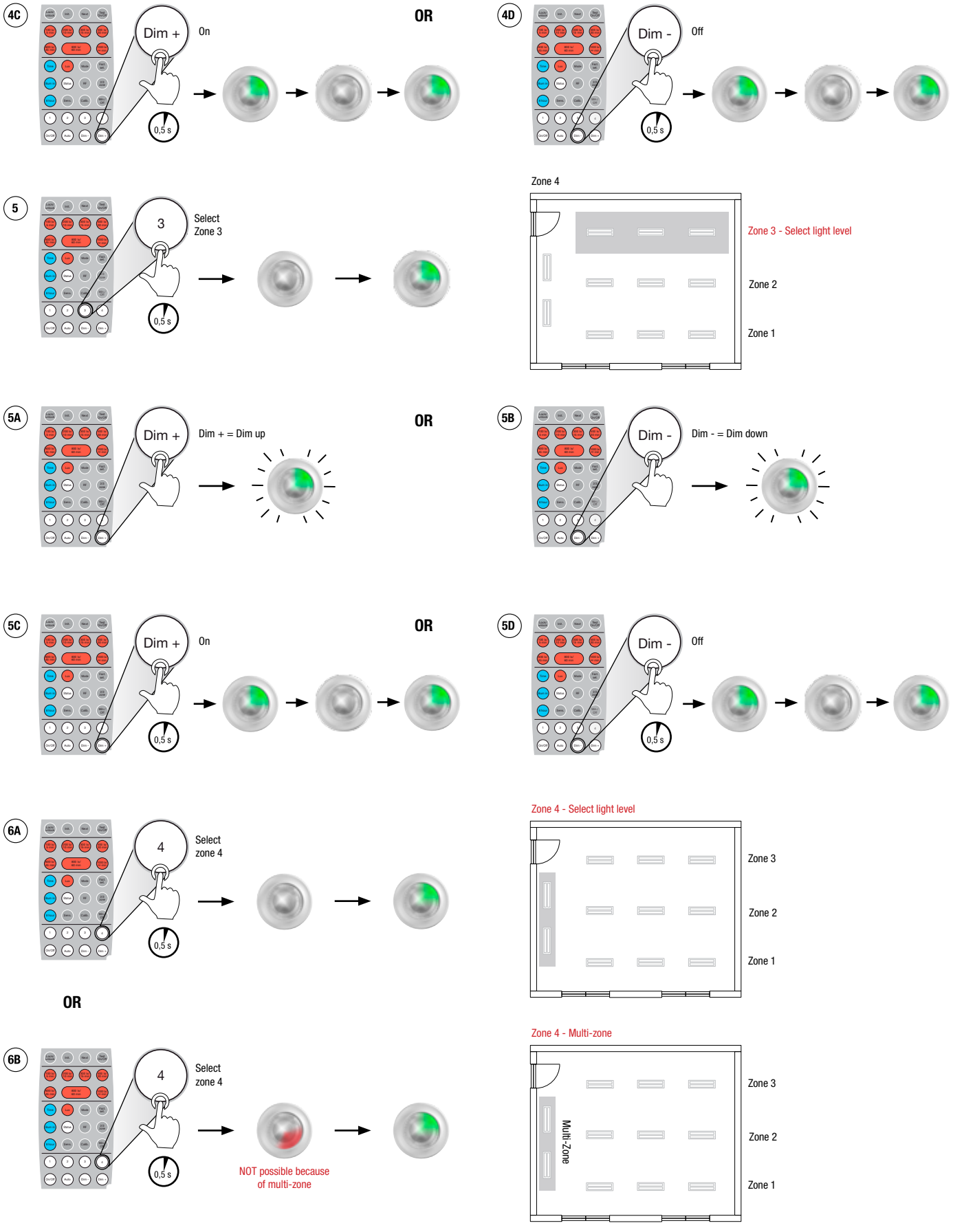


8.36 Programme atmosphere 4



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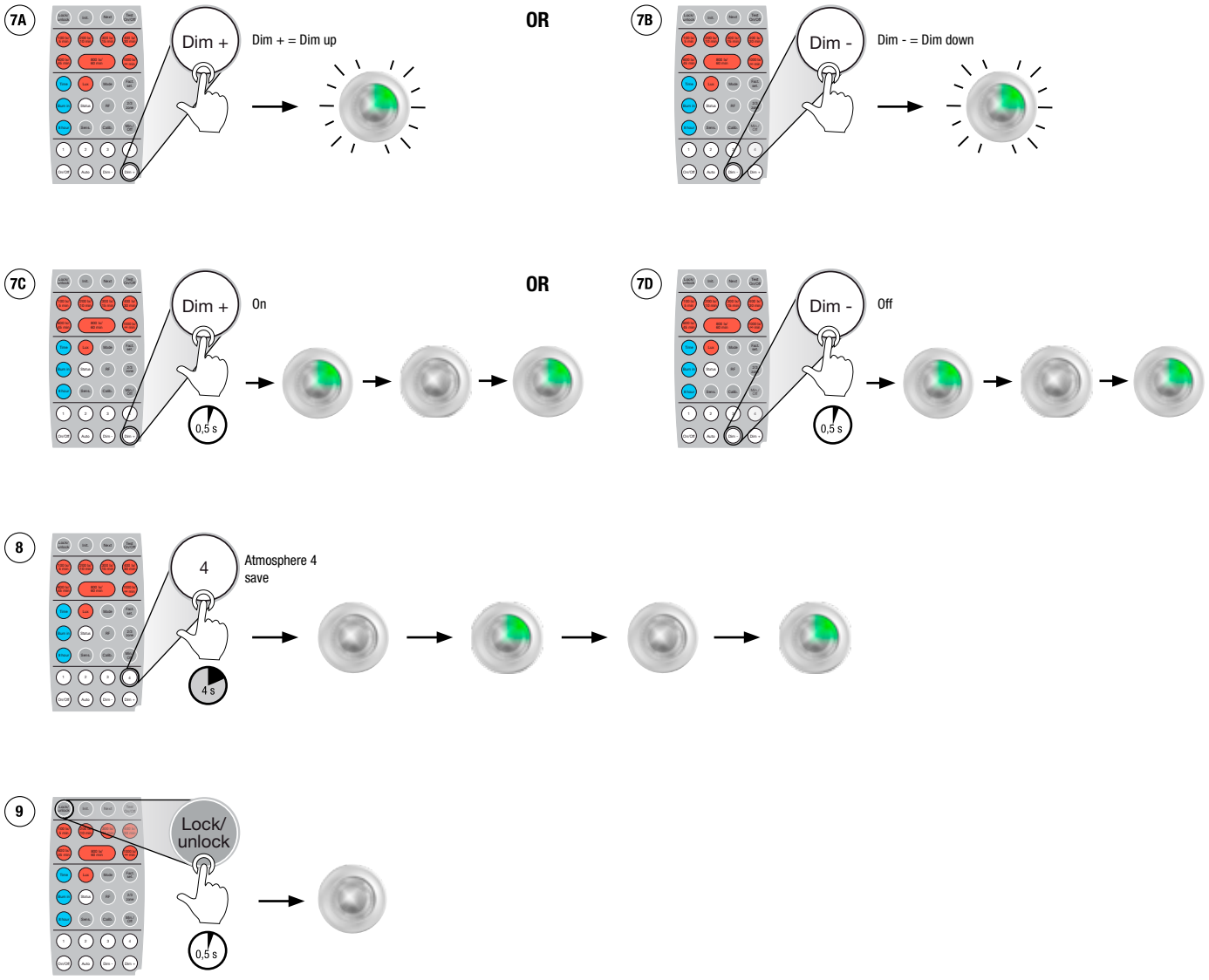
8.37 Programme atmosphere 4



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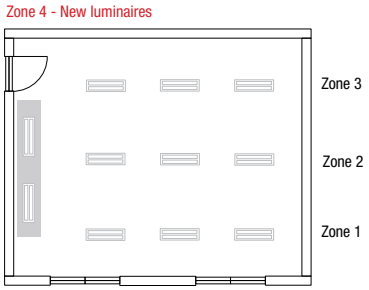
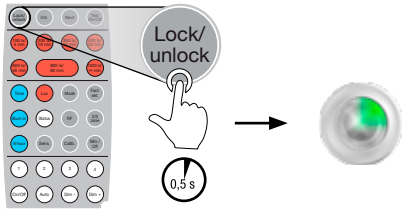
8.38 Add luminaires

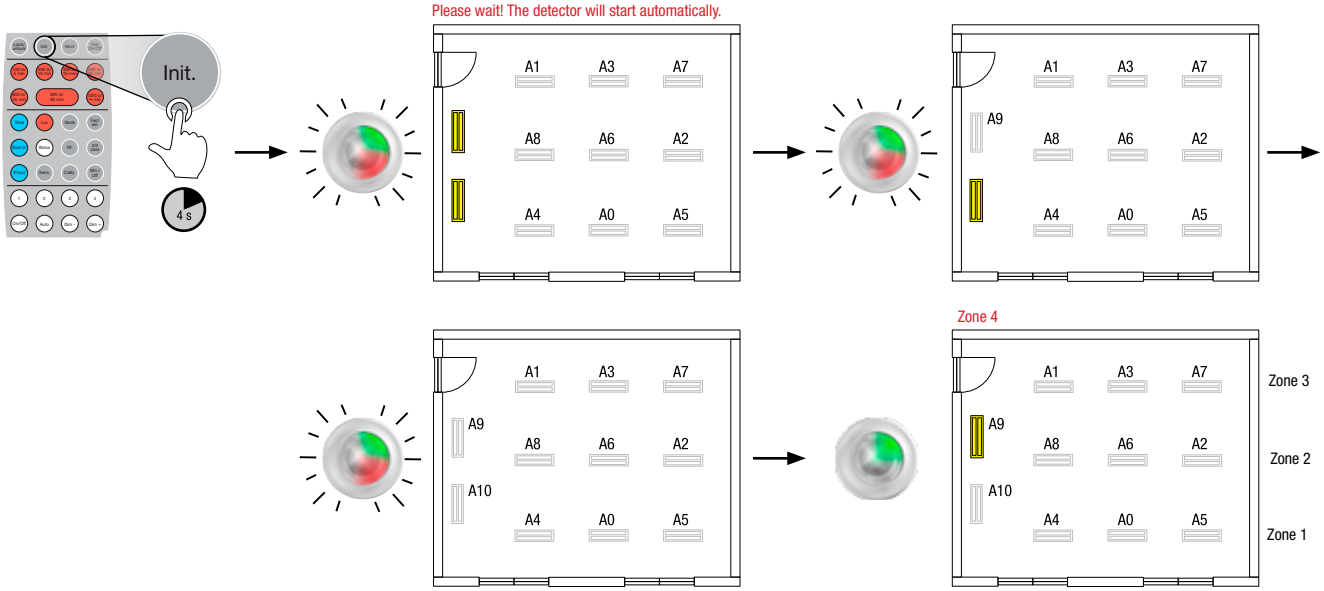
At least one new luminaire was added



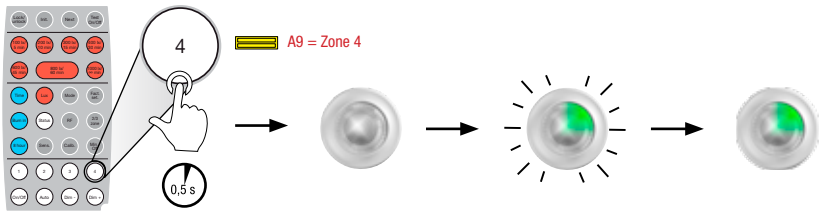
1



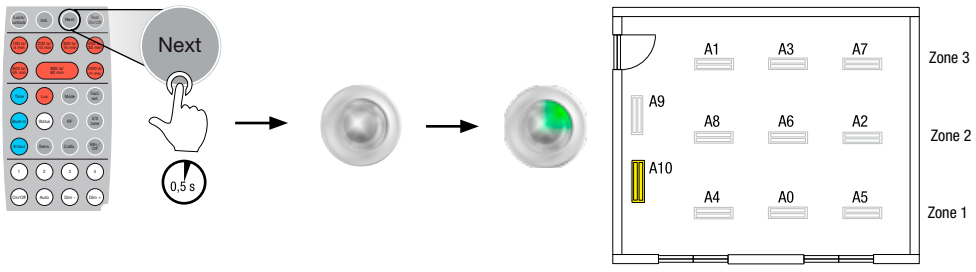
2



3



4



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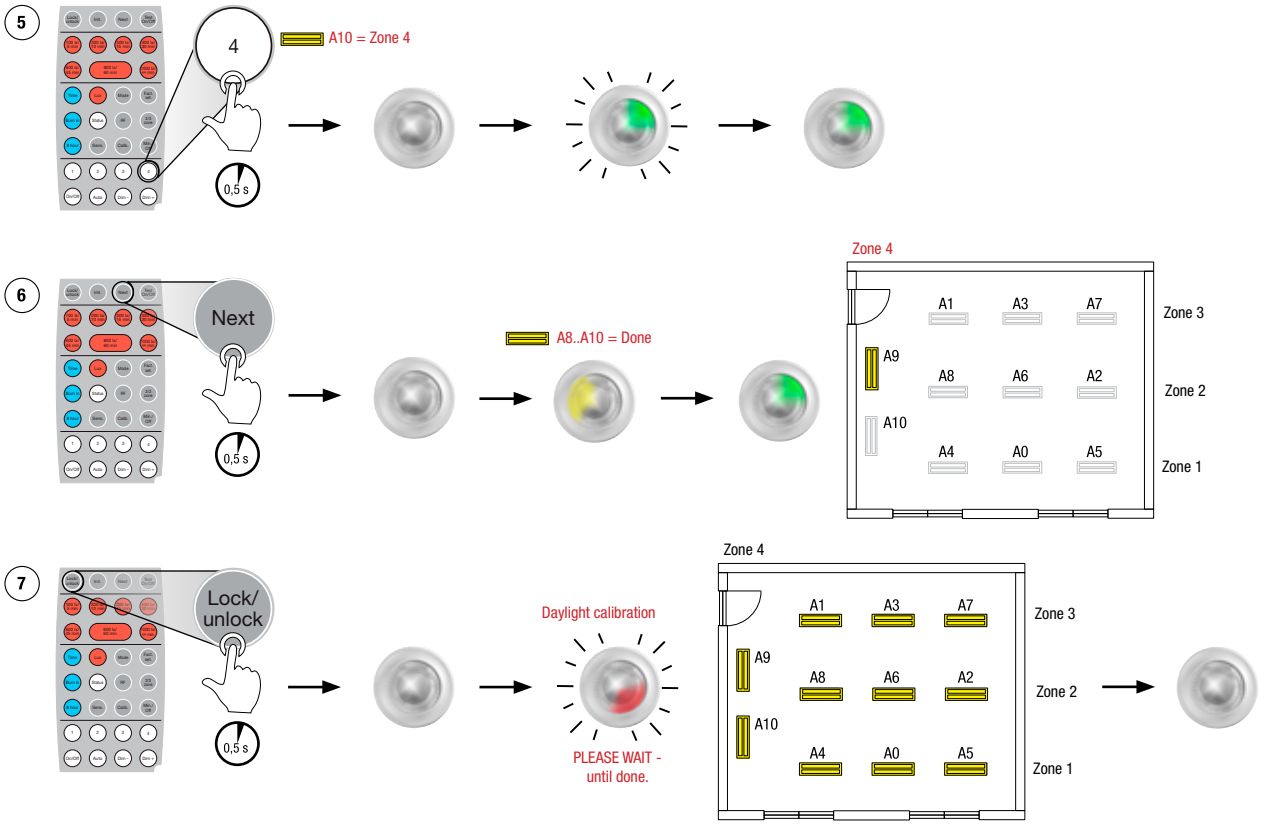
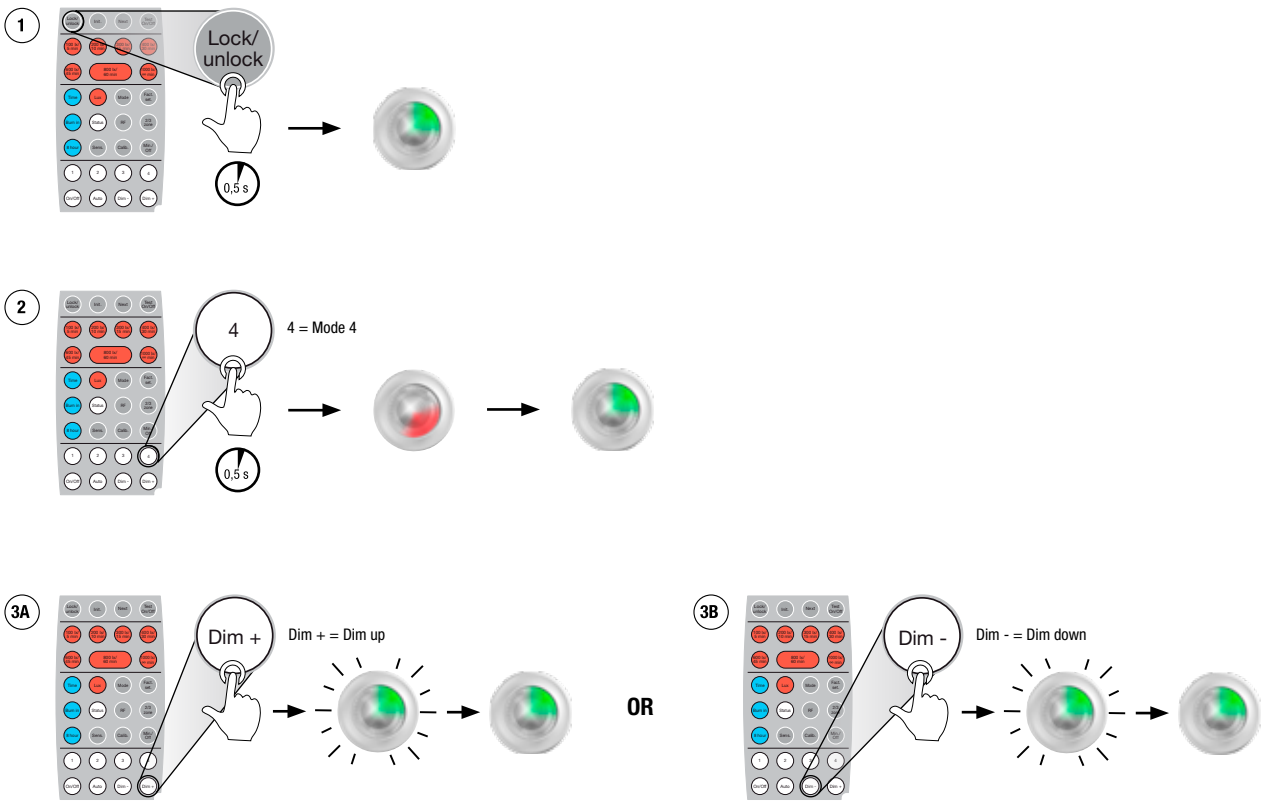
8.37 Add luminaires



8.38 Non presence light level (Mode 4)



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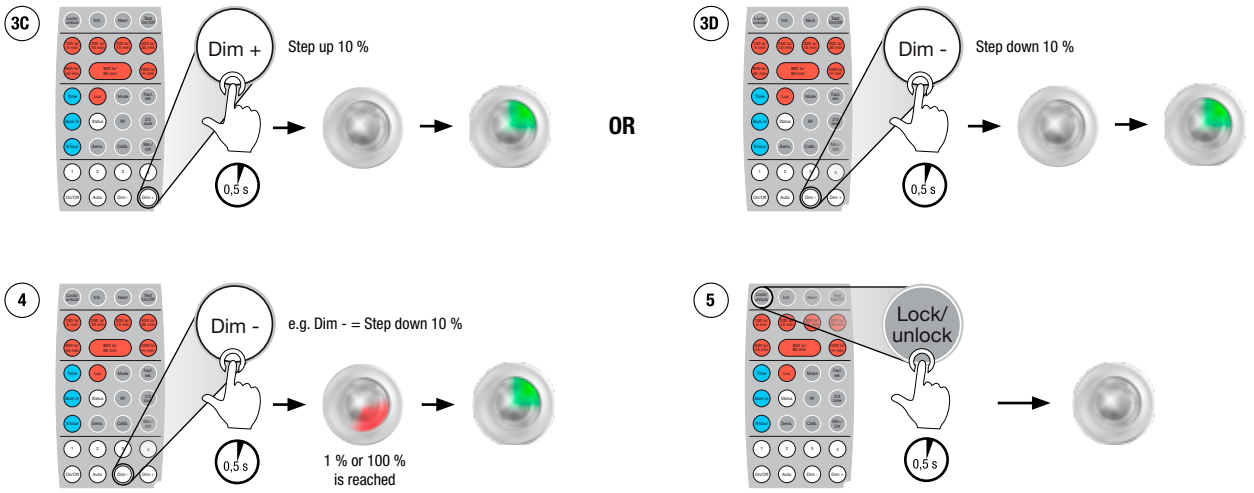
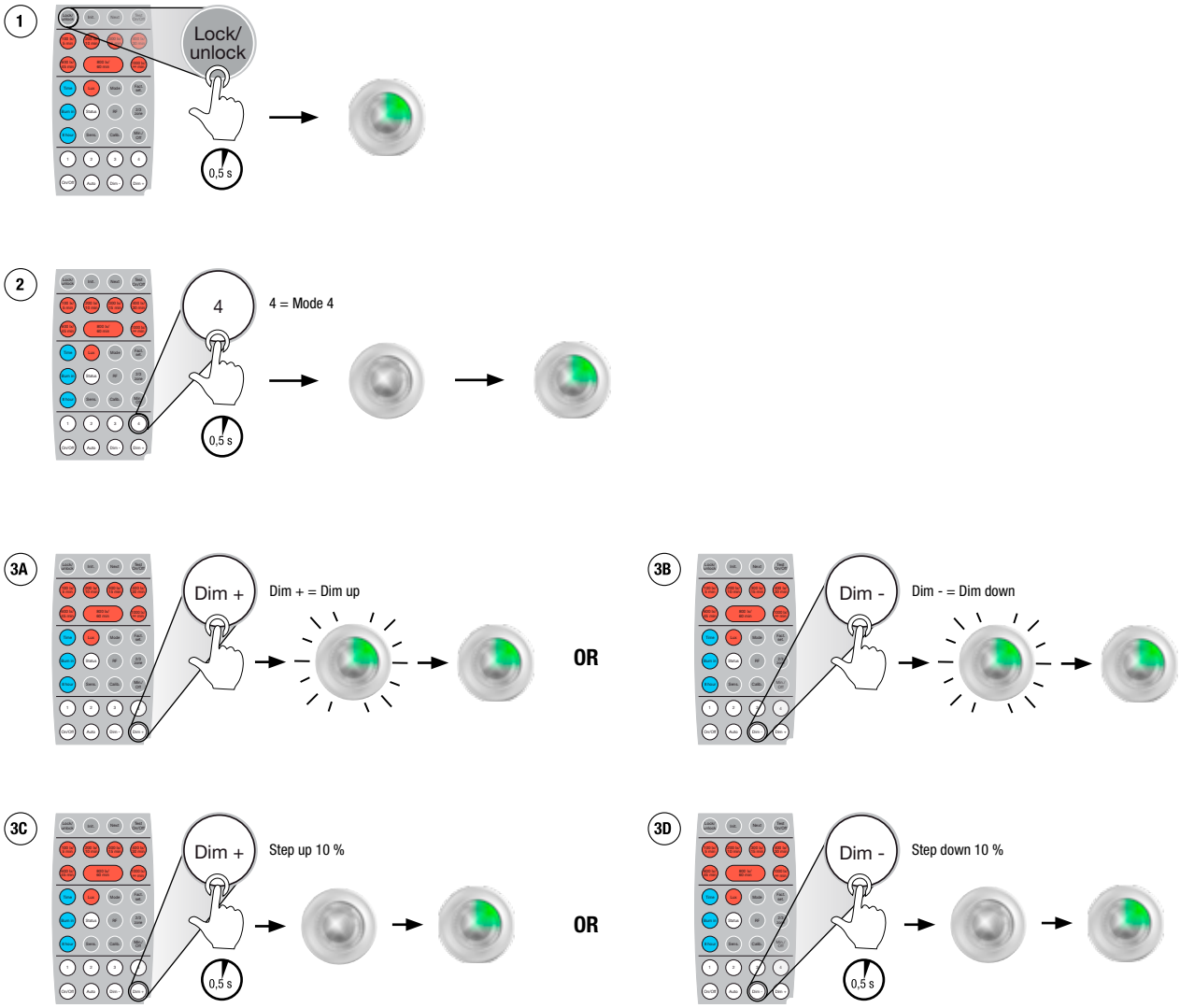
8.38 Non presence light level (Mode 4)

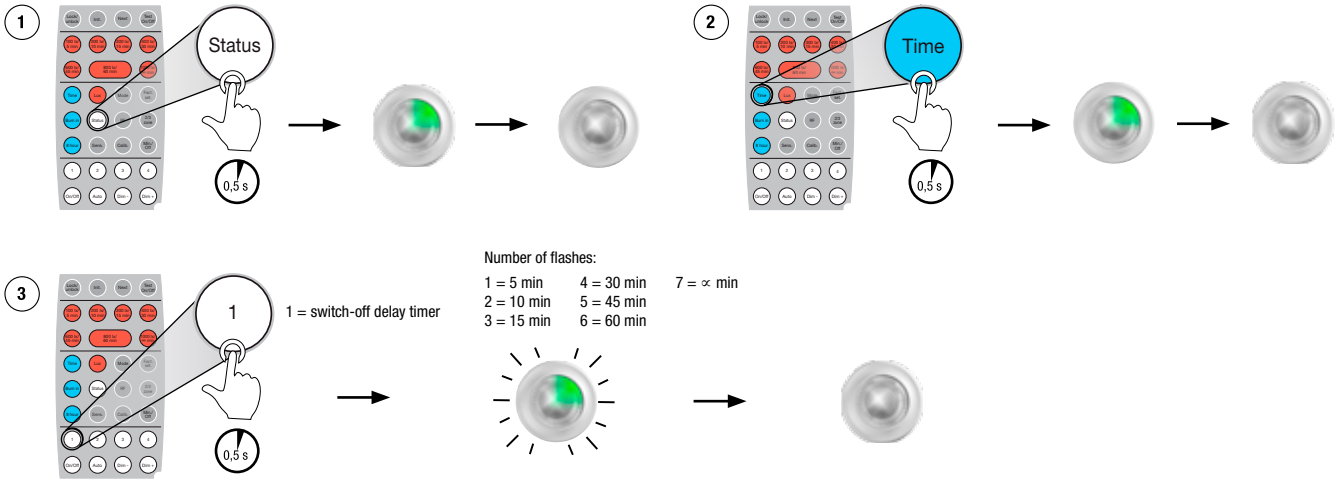


8.39 Presence light level (Mode 4)

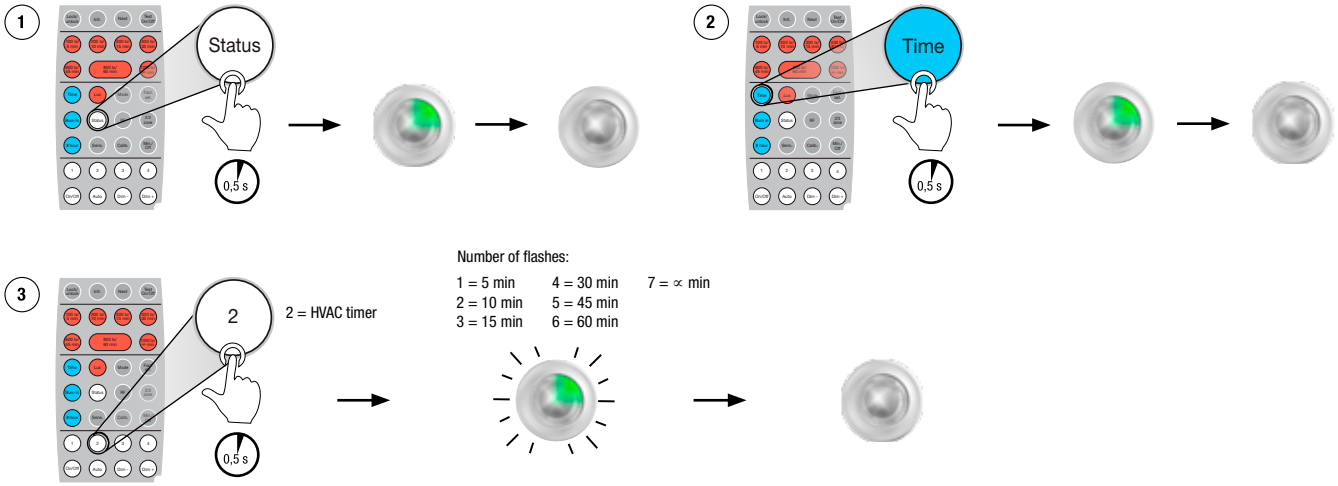


8.39 Presence light level (Mode 4)

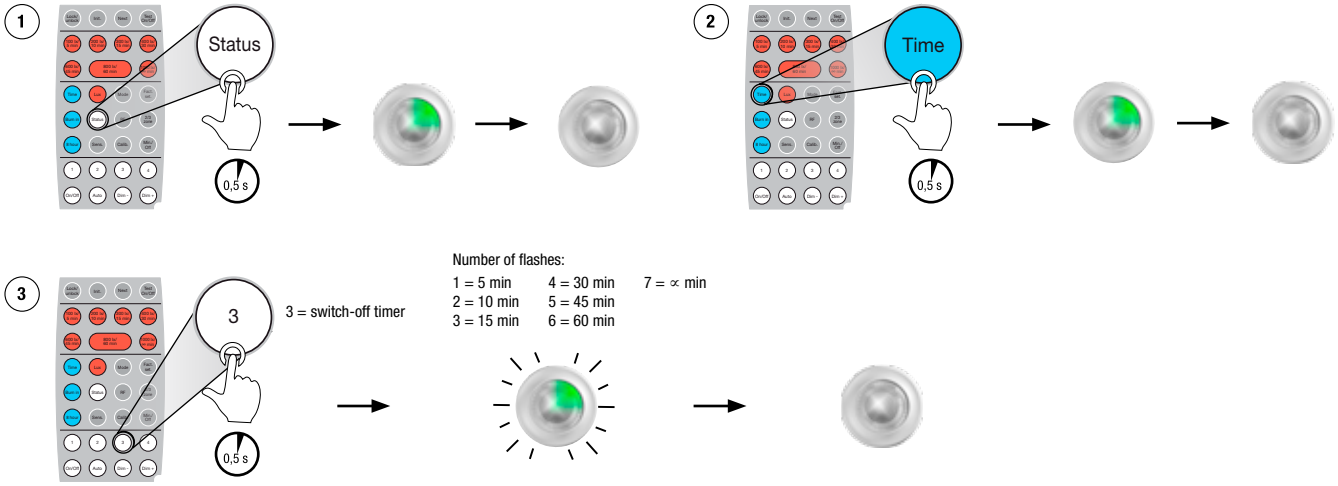
8.40 Status time 1 – switch-off delay timer



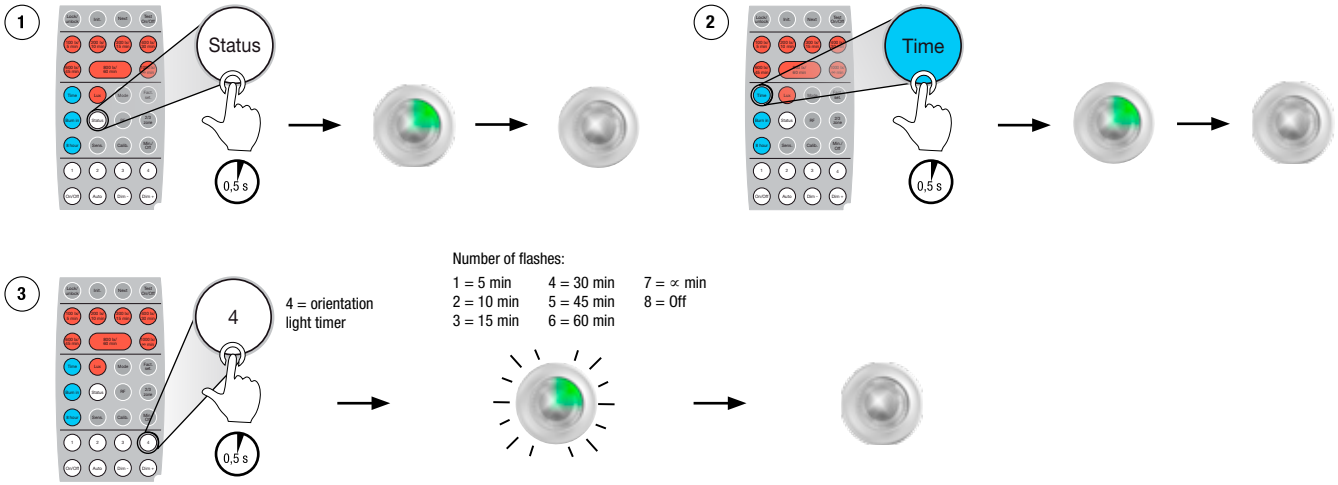
8.41 Status time 2 – HVAC timer



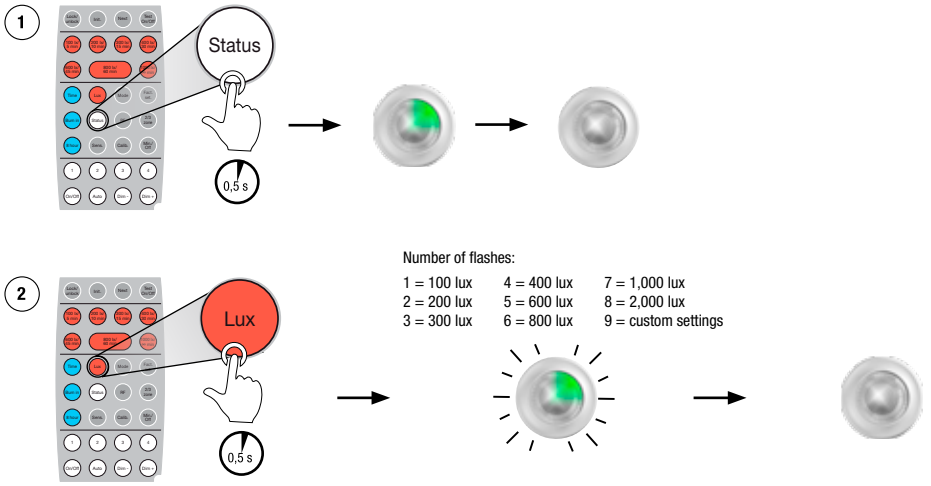
8.42 Status time 3 – switch-off timer



8.43 Status time 4 – orientation light timer



8.44 Status – Lux level



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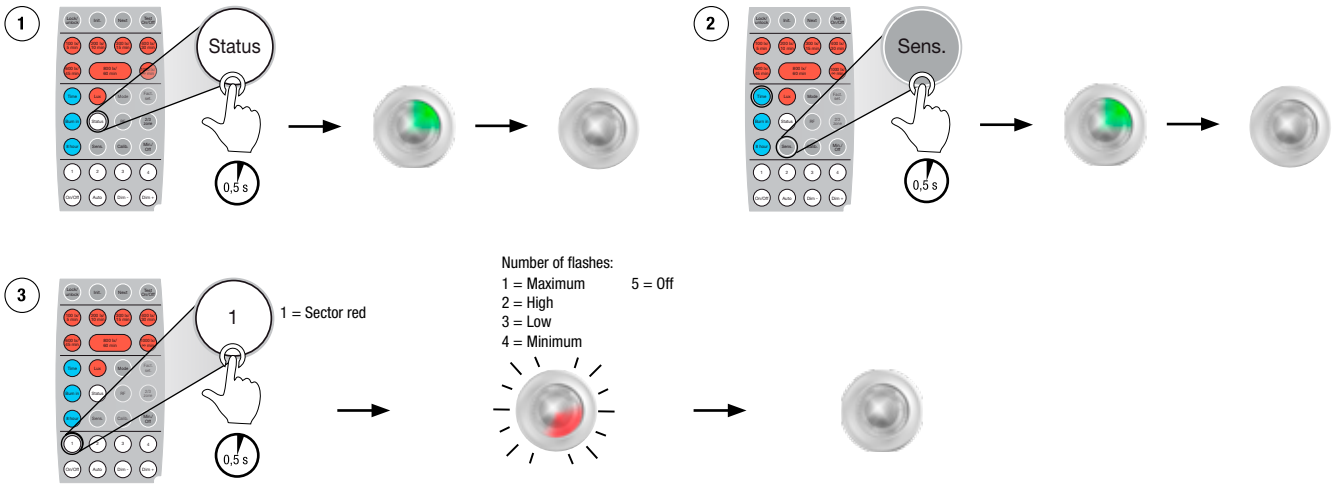
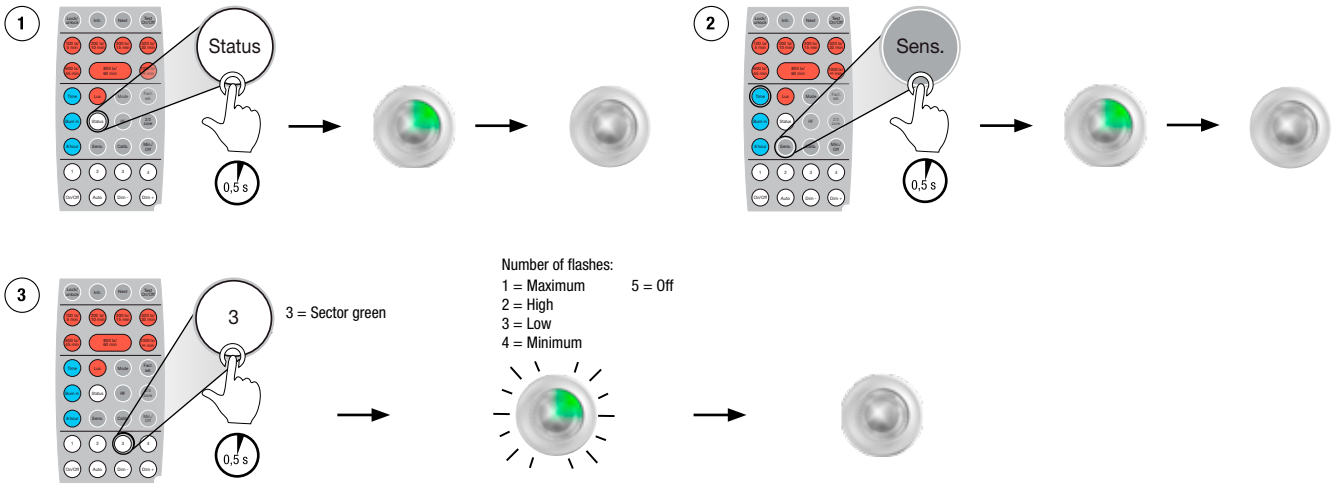
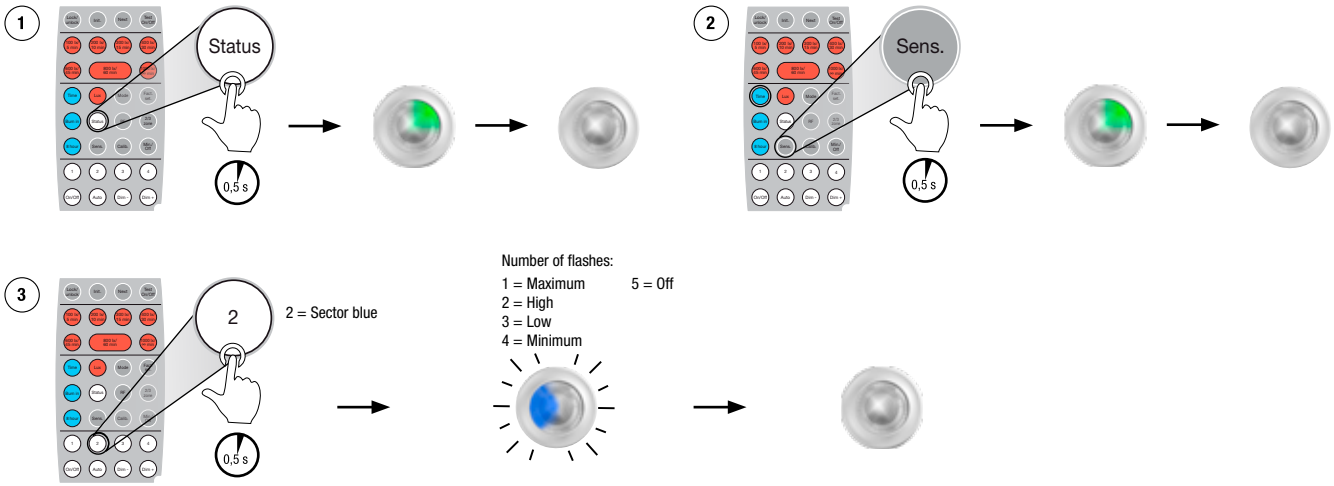
8.45 Status – Sensitivity in sector A (red)



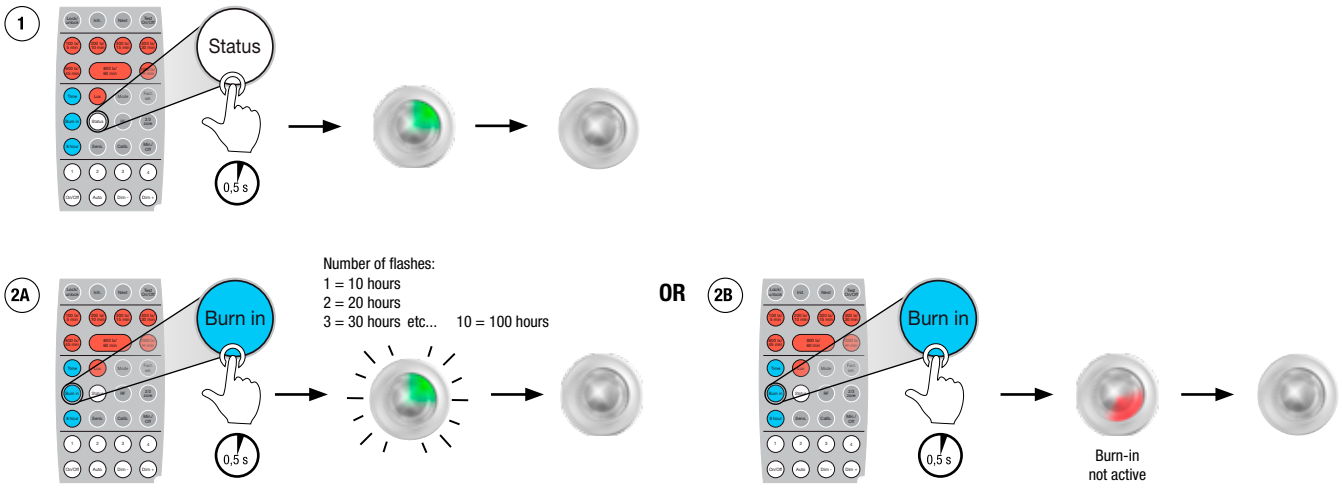
8.46 Status – Sensitivity in sector B (green)



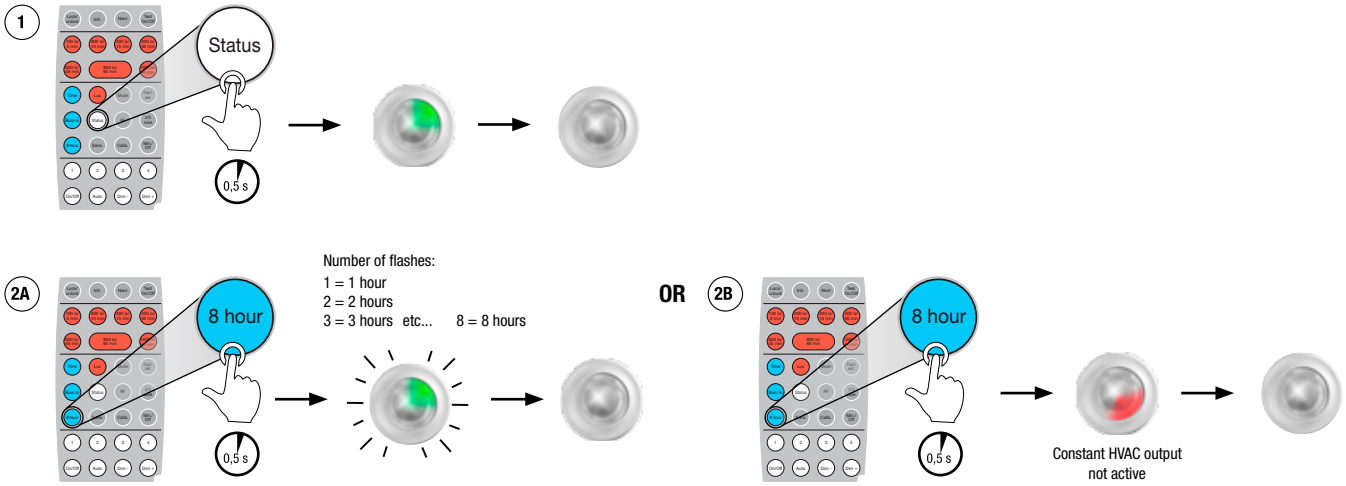
8.47 Status – Sensitivity in sector C (blue)



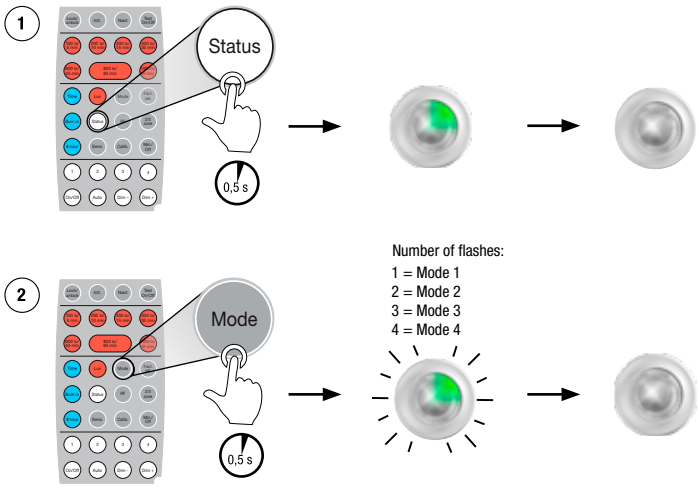
8.48 Status – Burn-in



8.49 Status – Constant HVAC output (8 hours)



8.50 Status - Mode



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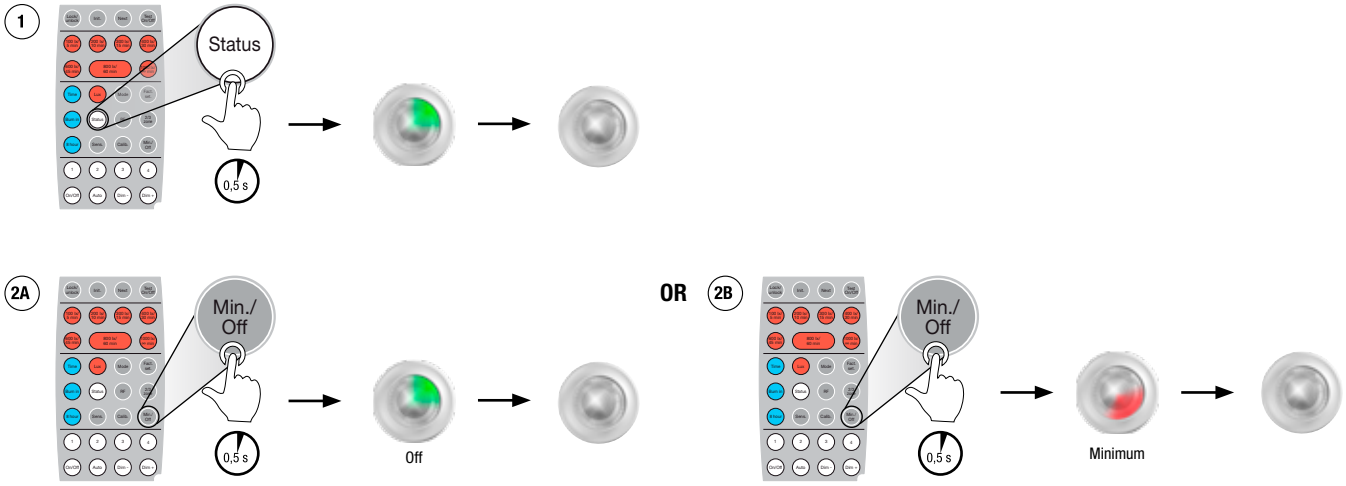
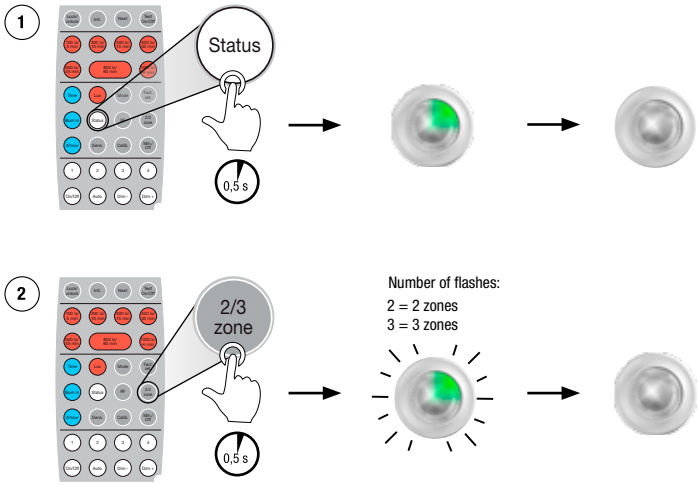
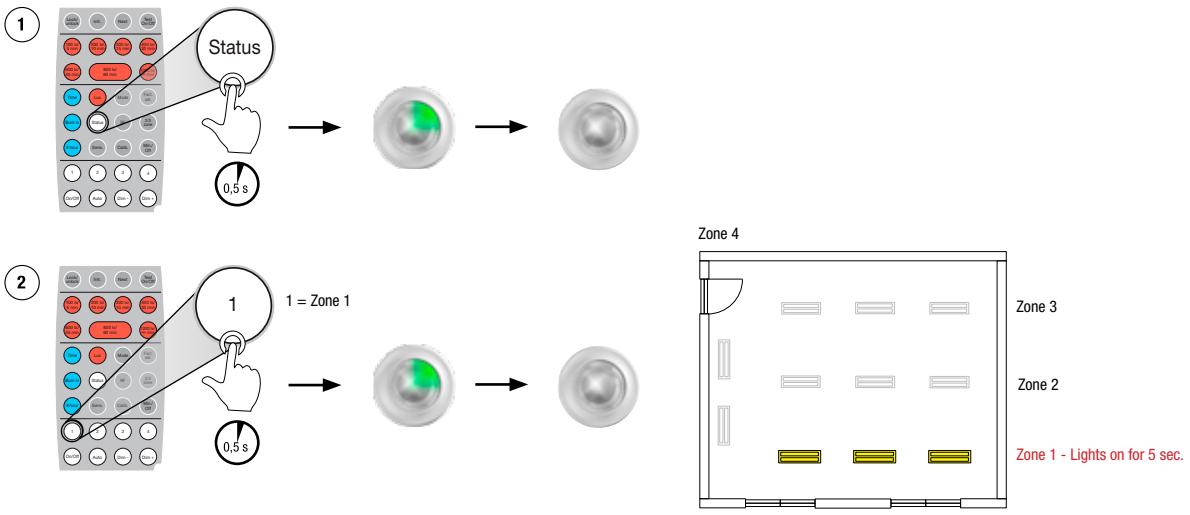
8.51 Status – Sensitivity when there is sufficient light, daylight zones



8.52 Status – 2/3 daylight zones



8.53 Status – zone 1



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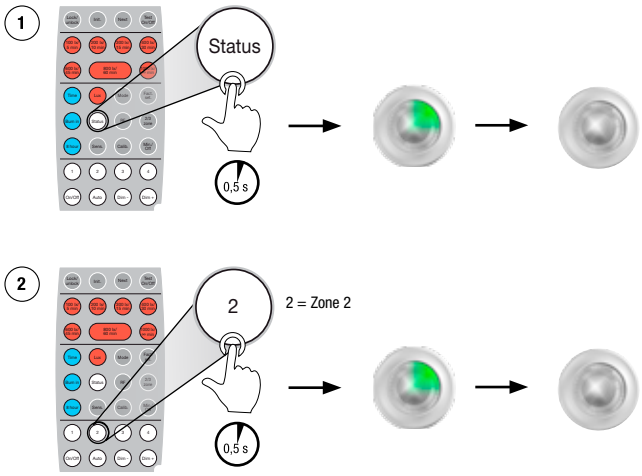
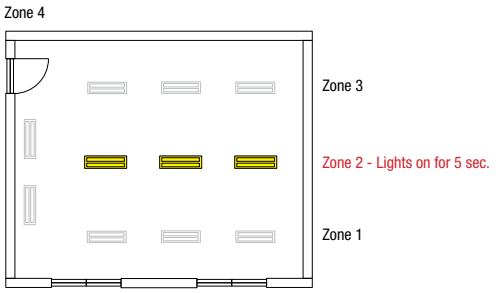
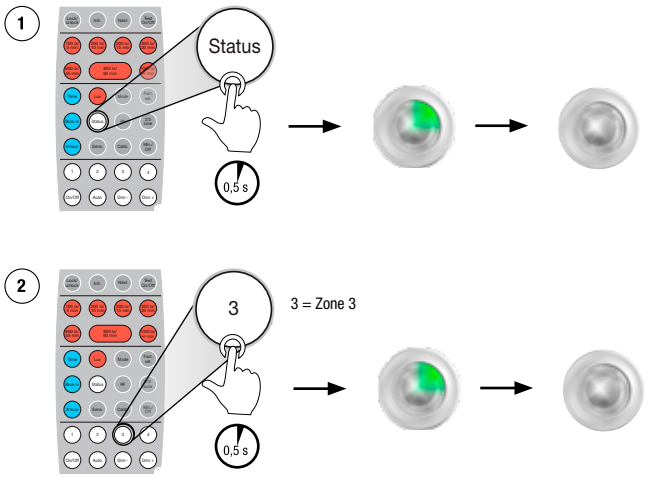
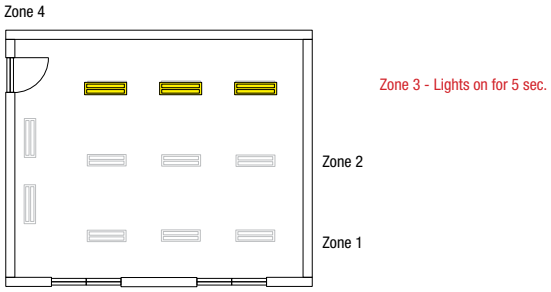
8.54 Status – zone 2



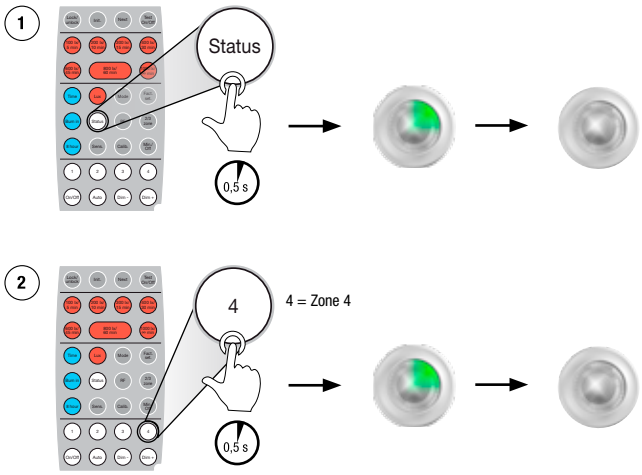


8.55 Status – zone 3

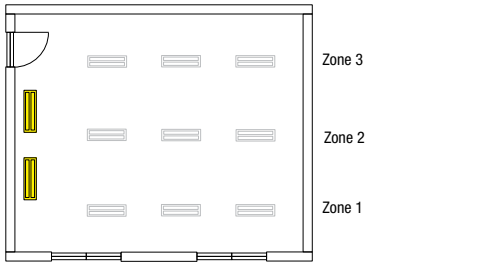




8.56 Status – zone 4



Zone 4 - Lights on 5 sec.



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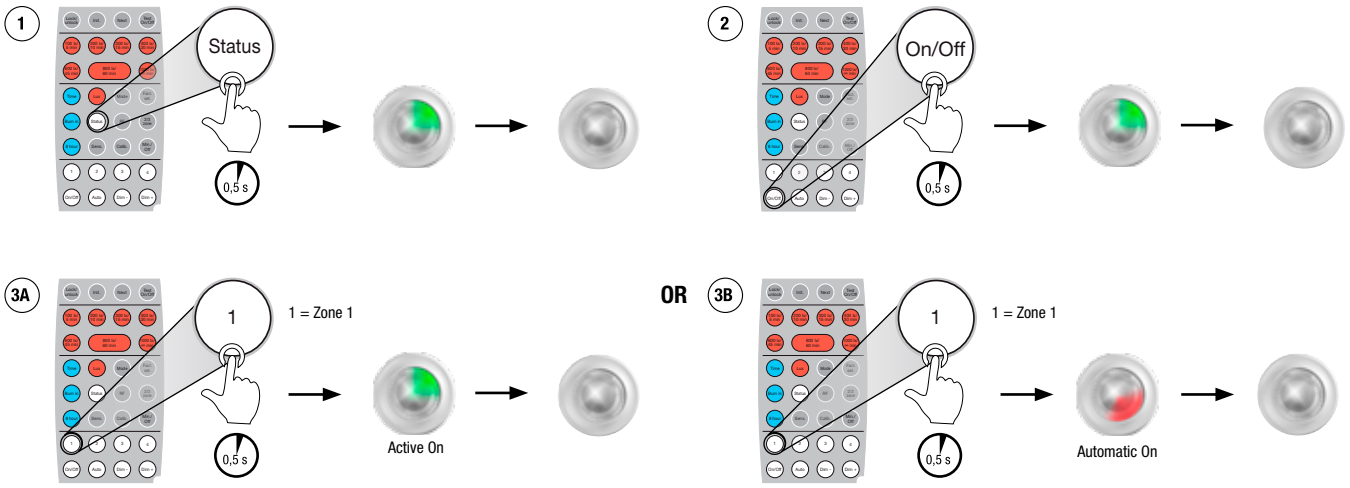
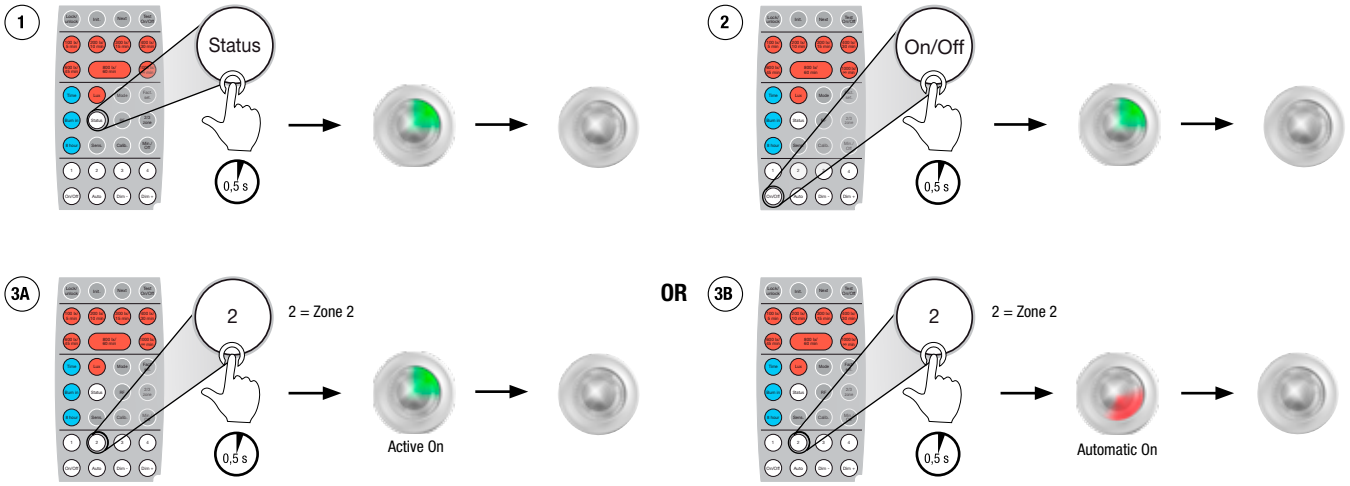
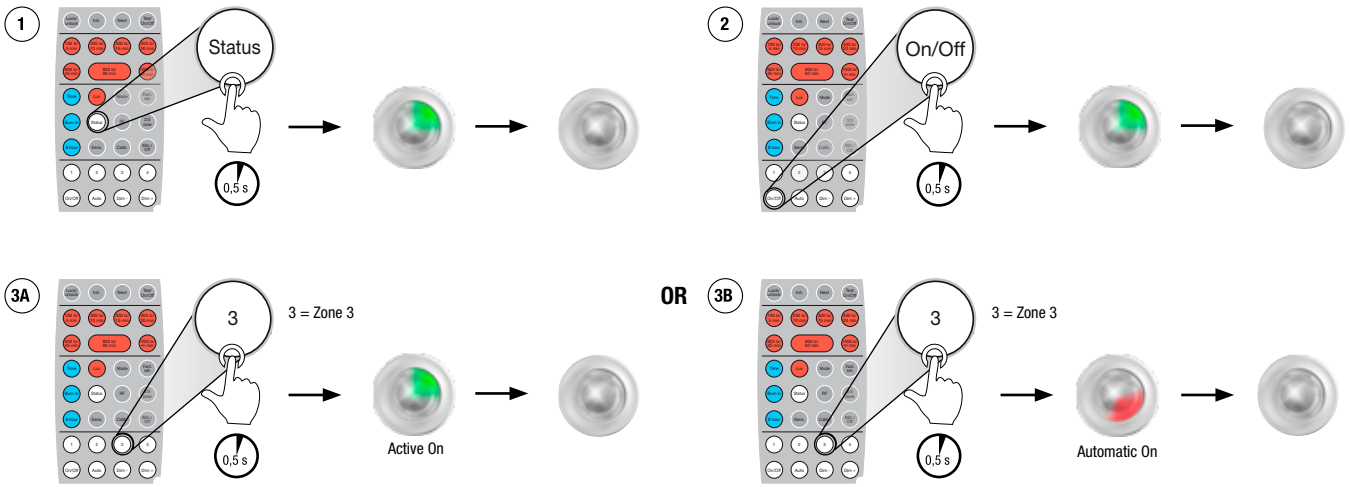
8.57 Status – operation as presence or absence detector (zone 1)



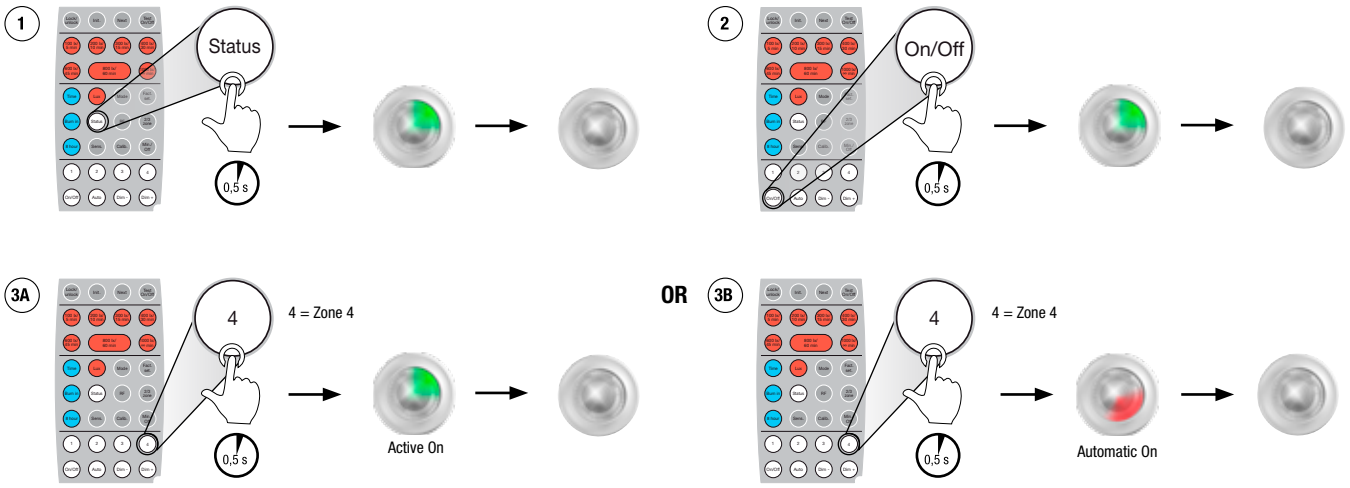
8.58 Status – operation as presence or absence detector (zone 2)



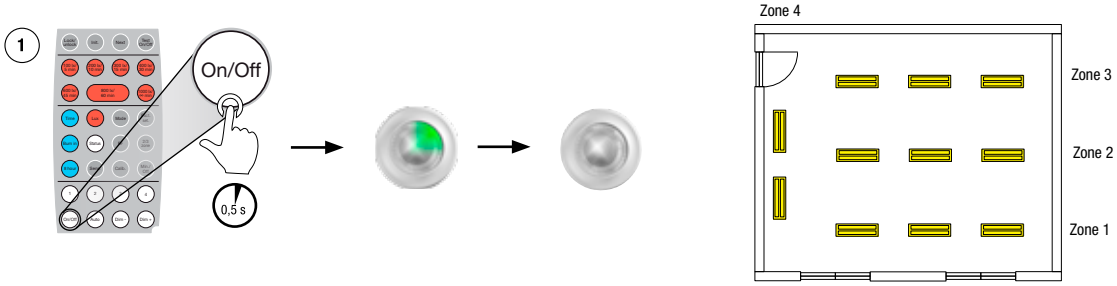
8.59 Status – operation as presence or absence detector (zone 3)



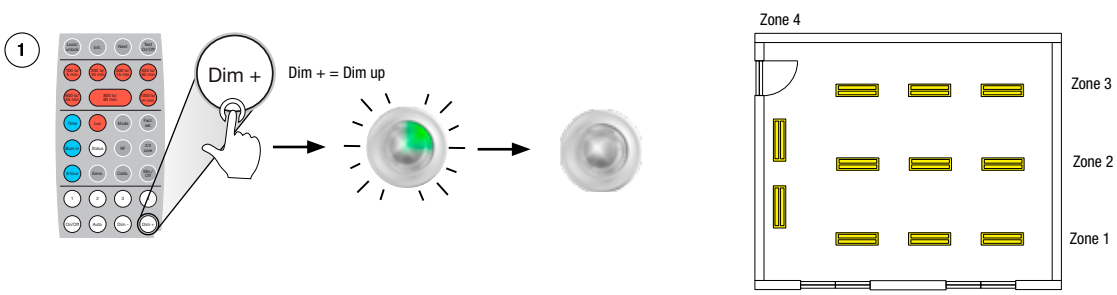
8.60 Status – operation as presence or absence detector (zone 4)



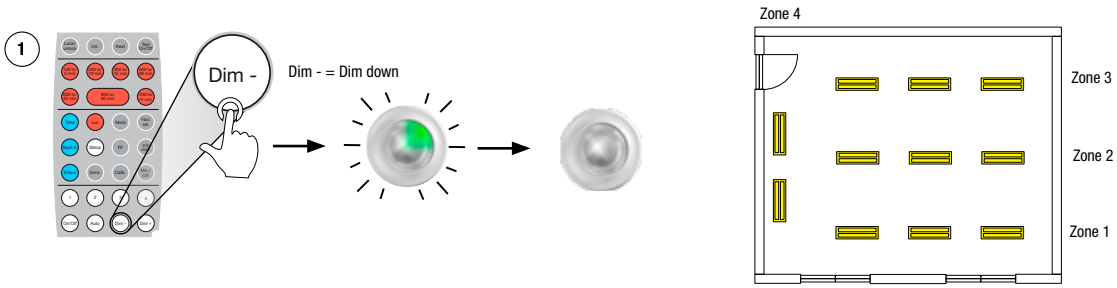
8.61 Operation – On/Off (All zones)



8.62 Operation Dim up (All zones)



8.63 Operation Dim down (All zones)



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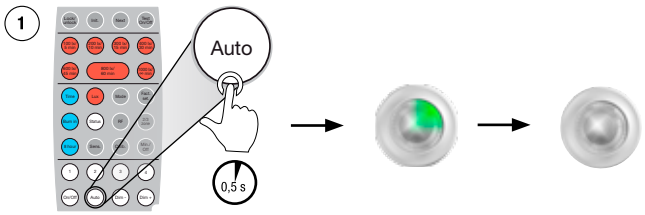
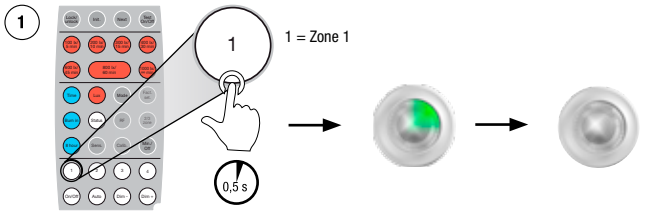
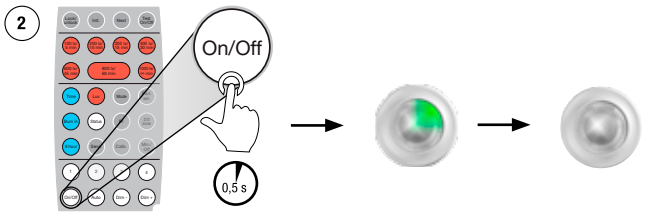
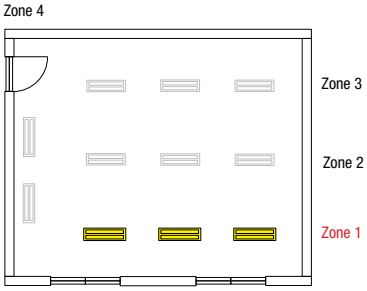
8.64 Operation – Daylight zones for daylight control



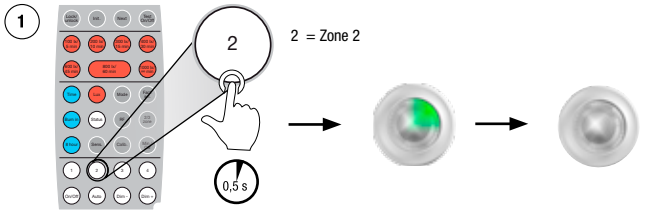
8.65 Operation – Luminaires On/Off (Zone 1)

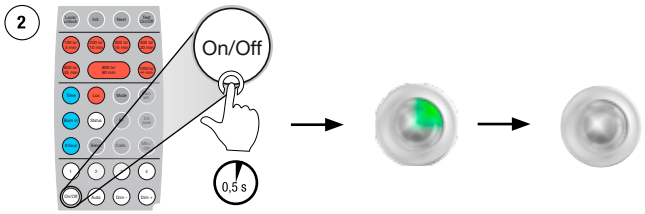


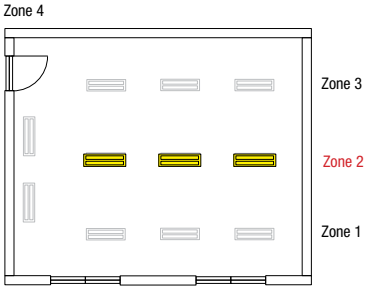




8.66 Operation – Luminaires On/Off (Zone 2)







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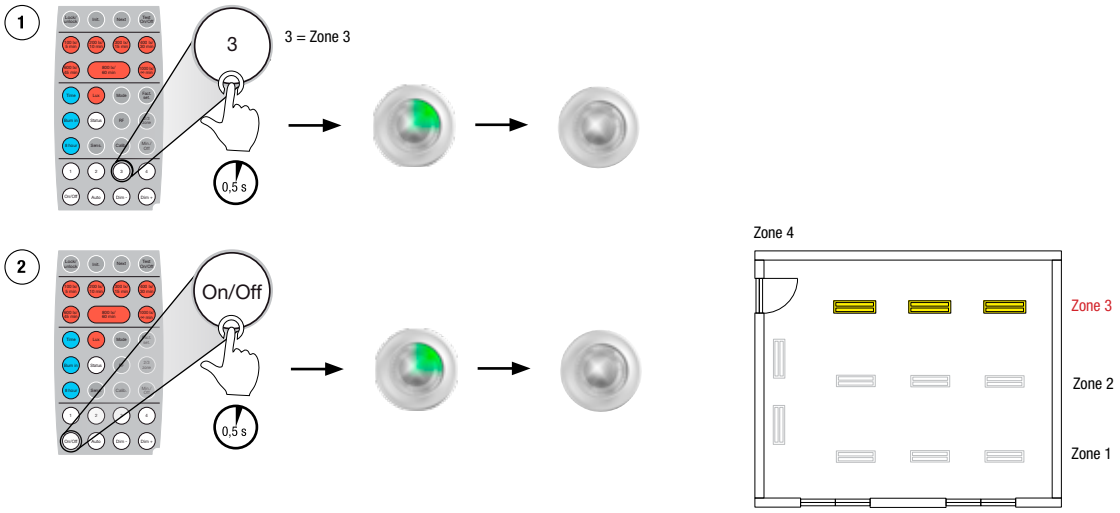
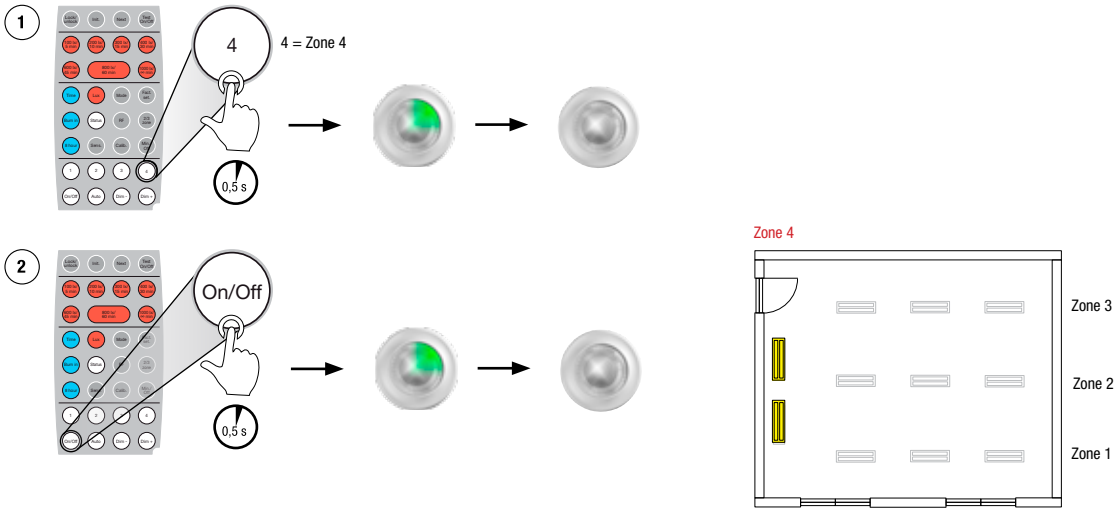
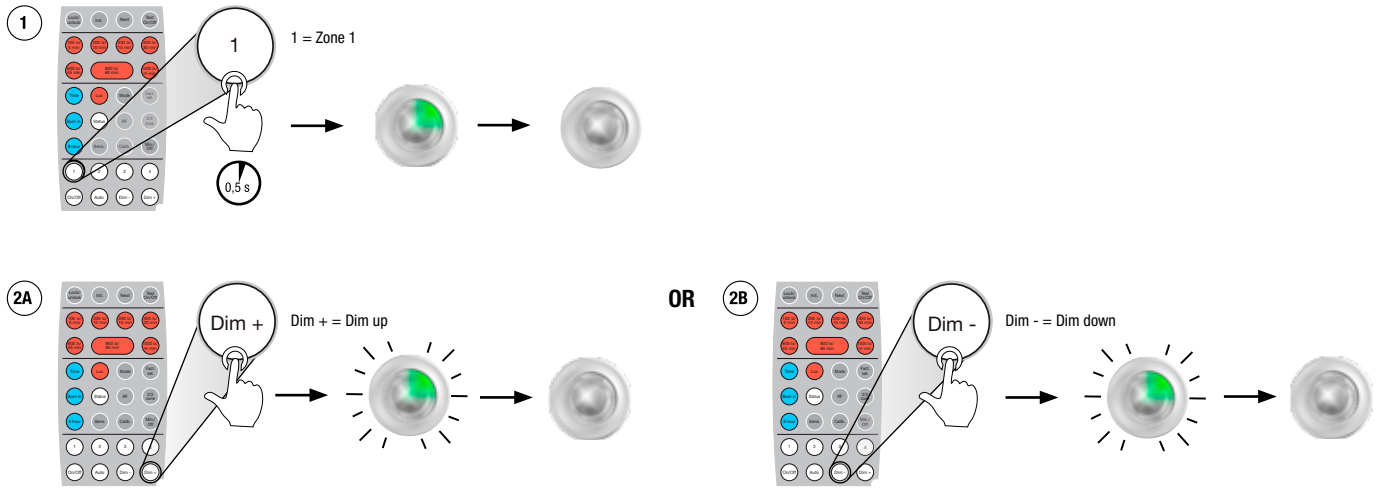
8.67 Operation – Luminaires On/Off (Zone 3)



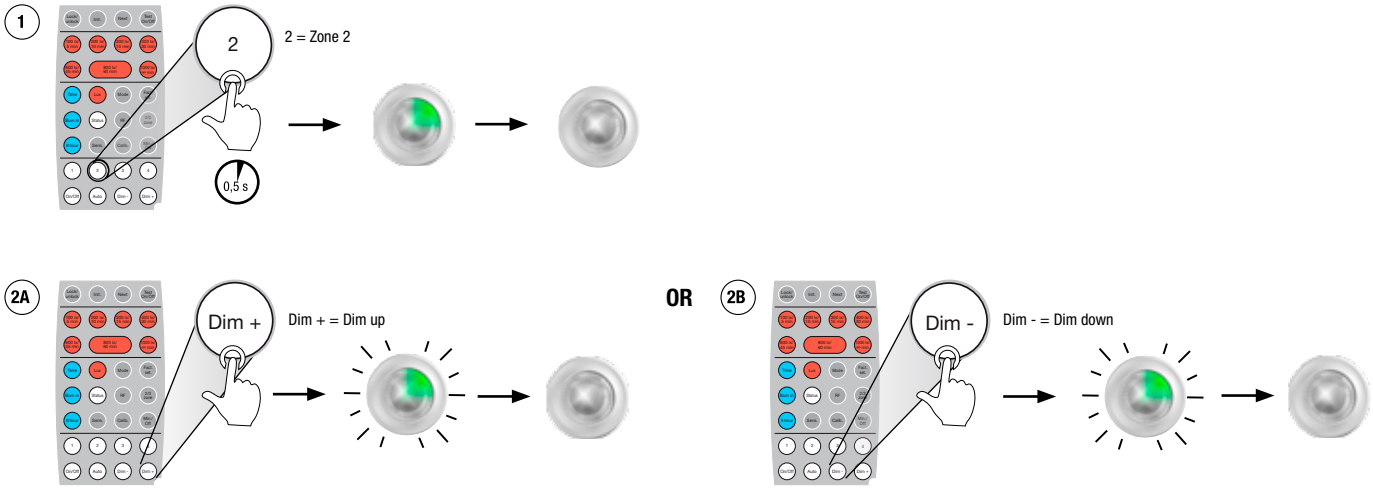
8.68 Operation – Luminaires On/Off (Zone 4)



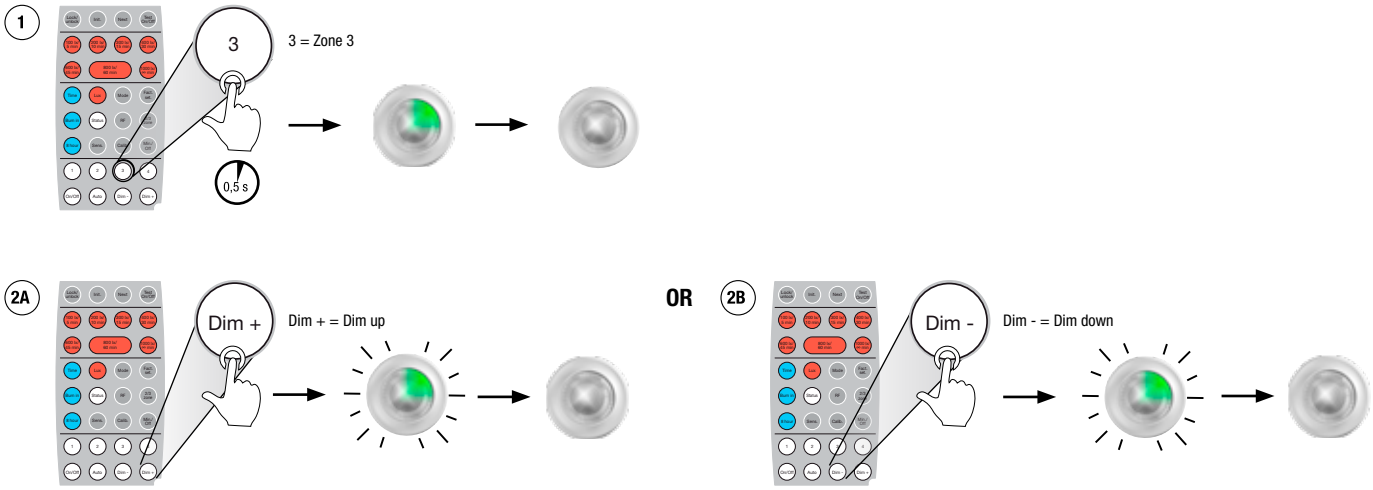
8.69 Operation – Dim up/down luminaires (Zone 1)



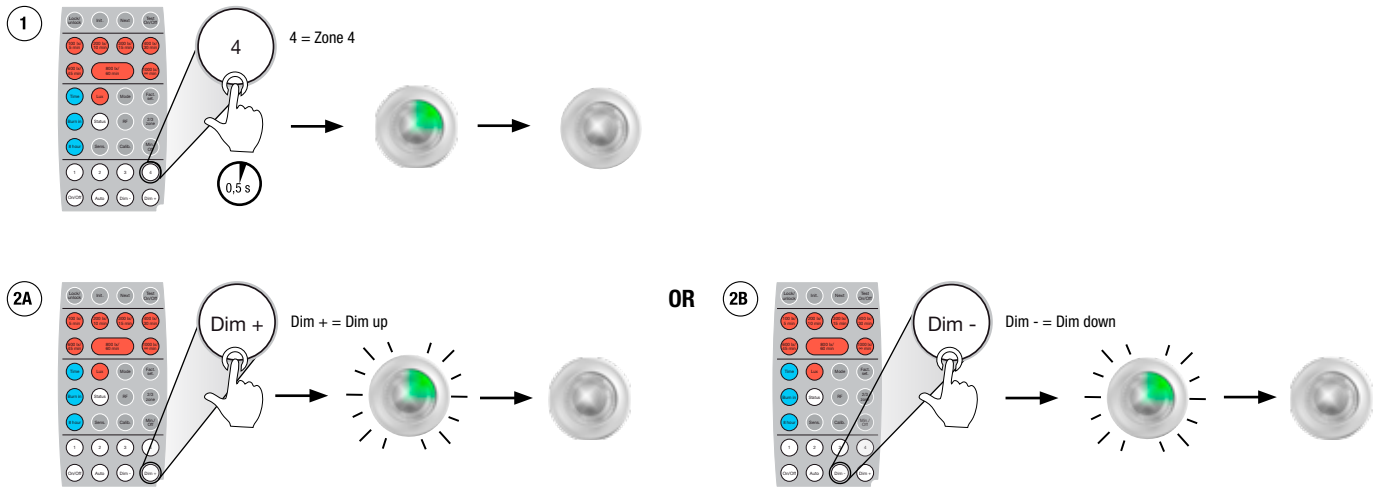
8.70 Operation – Dim up/down luminaires (Zone 2)



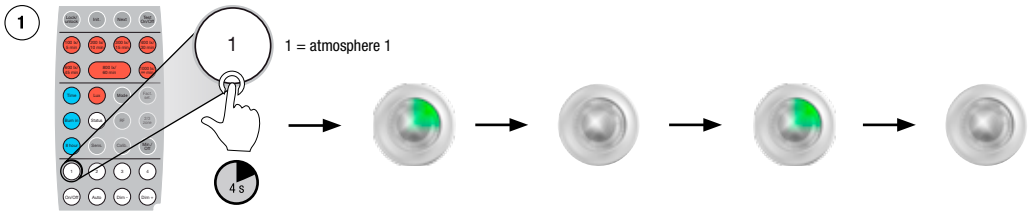
8.71 Operation – Dim up/down luminaires (Zone 3)



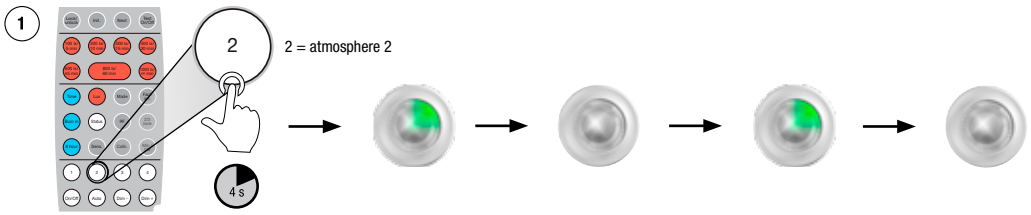
8.72 Operation – Dim up/down luminaires (Zone 4)



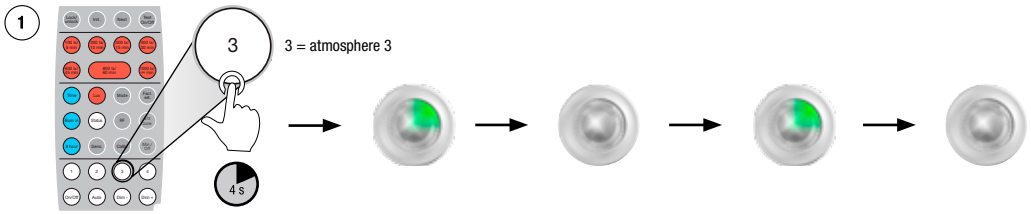
8.73 Operation – atmosphere 1



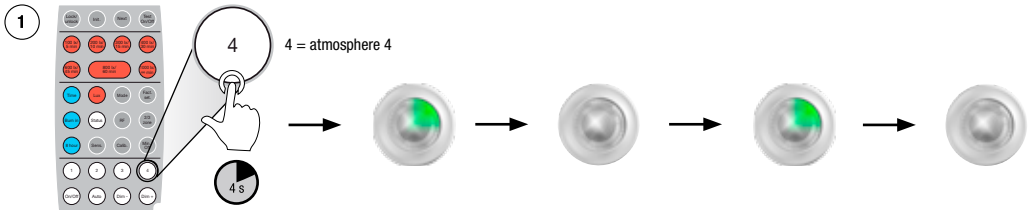
8.74 Operation – atmosphere 2



8.75 Operation – atmosphere 3



8.76 Operation – atmosphere 4



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Warnings regarding installation

The installation of products that will permanently be part of the electrical installation and which include dangerous voltages, should be carried out by a qualified installer and in accordance with the applicable regulations. This user manual must be presented to the user. It should be included in the electrical installation file and it should be passed on to any new owners. Additional copies are available on the Niko website or via Niko customer services.

CE marking

This product complies with all of the relevant European guidelines and regulations. For radio equipment Niko llc declares that the radio equipment in this manual conforms with the 2014/53/EU directive. The full text of the EU declaration of conformity is available at www.niko.eu under the product reference, if applicable.

Environment

This product and/or the batteries provided cannot be disposed of in non-recyclable waste. Take your discarded product to a recognised collection point. Just like producers and importers, you too play an important role in the promotion of sorting, recycling and reuse of discarded electrical and electronic equipment. To finance the rubbish collection and waste treatment, the government levies recycling charges in certain cases (included in the price of this product).

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