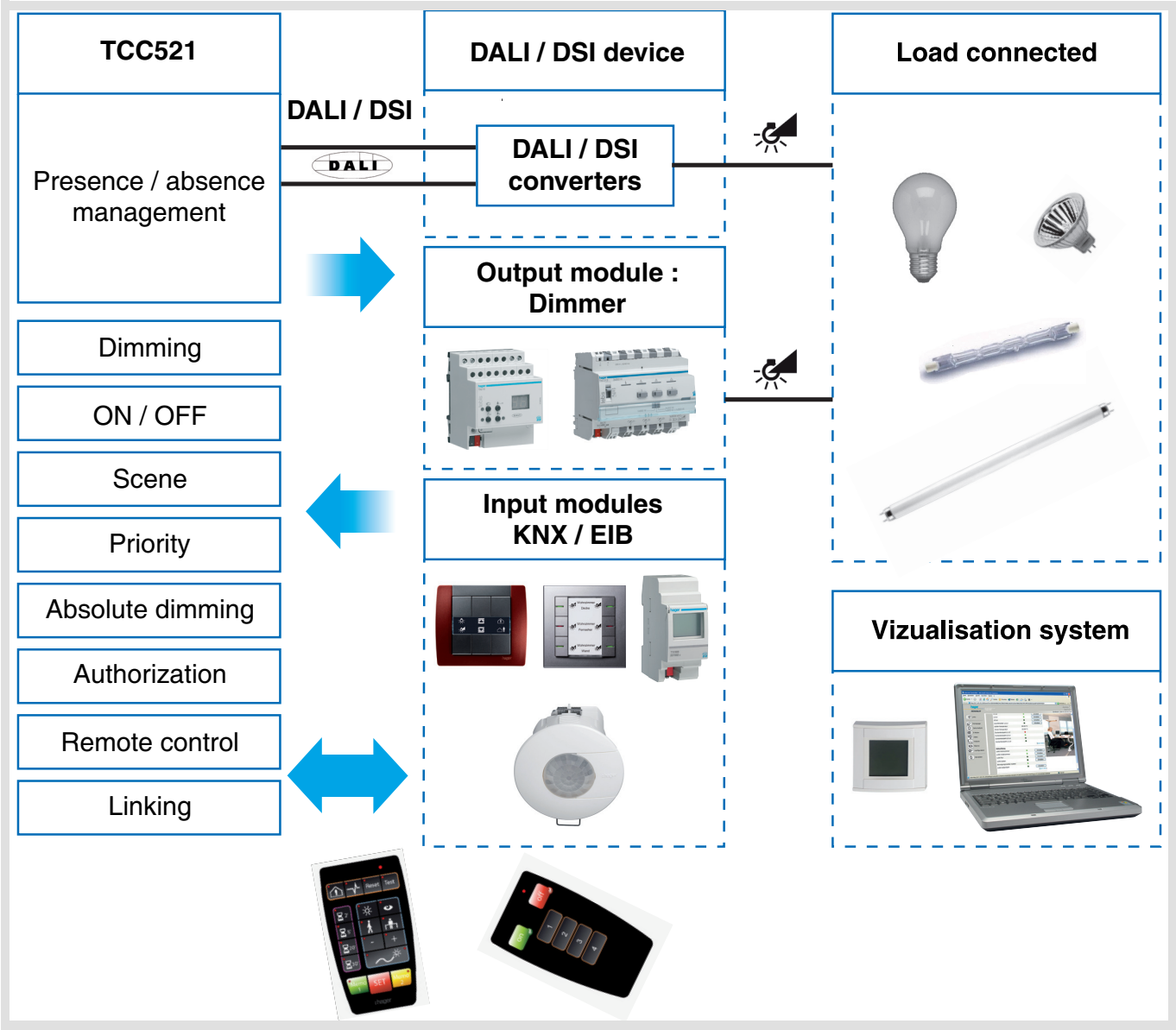
Tebis application software

STCC521 Occupancy sensor light regulation DALI/DSI

	Product reference	Product designation	TP device RF devices
	TCC521	Presence detector with regulation DALI / DSI	
	TKK523P/TKK525P	Presence detector with regulation DALI / DSI for klik.system	



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1. General overview

The STCC521 application software allows configuring the light regulator -channel of our TCC521.

The main functions are the following:

Presence detection and light regulation channel

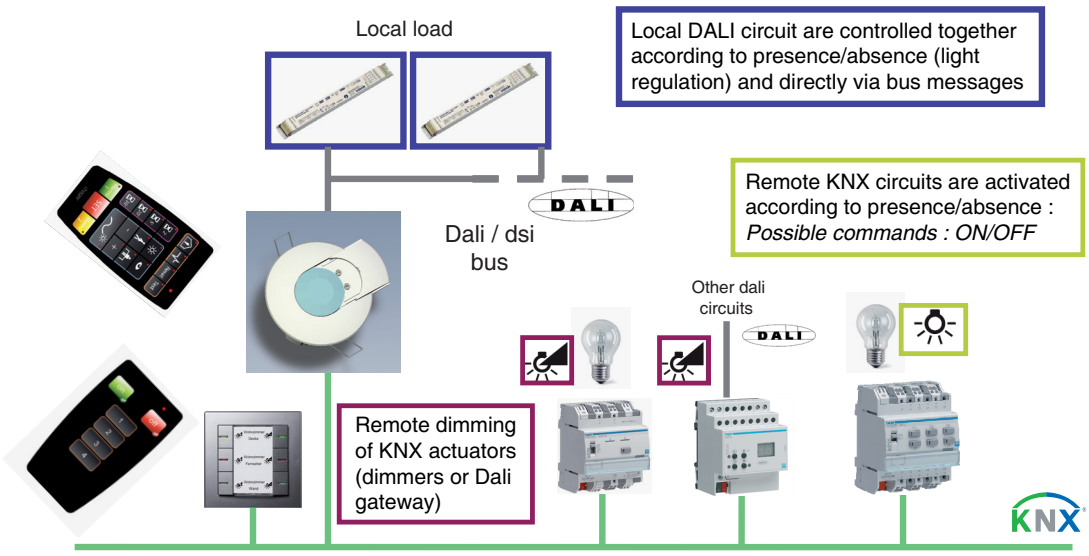
The TCC521 presence detector for light regulation embeds a DALI/DSI interface that will be used to control directly DALI/DSI ballasts. It can also control KNX dimmers and KNX/DALI gateways (TX216) to fulfill the light regulation functionality.

The lighting regulation process is activated according the presence and absence, two regulation modes are possible:
- Active
- Not active

The regulation can be active or inactive:

- When regulation is active, the detector regulates the lighting level in the room according to a set-point value in Lux in the presence of persons and according to another set-point value in the absence of persons. According to the parameter settings, the regulation set-point can be modified via a remote control input.

- When regulation is inactive, the detector sets the dimming level of the dimmer outputs to a configurable set % value in the presence of persons and to another configurable set value in the absence of persons.



Time delay (**Lighting** and **regulation functions**)

This function starts a delay at each presence detection, it extends the presence period accordingly. The absence period starts at the end of the delay if no new detection is made during the delay. The delay value can be set by an **ETS parameter** or on the device via a potentiometer.

Authorization ON or OFF (**Lighting** and **regulation functions**)

This function authorizes or inhibits presence detection (by a clock, for example, at certain periods).

Semi-automatic or Automatic mode, override command (**Lighting** and **regulation functions**)

In **semi-automatic mode**, **switching to presence** and **switching the light** on is performed by an action on the remote input (KNX button), **switching to absence** is then controlled by the detector according to the detected presences and to the setting of the cut-OFF delay.

In **Automatic mode**, a derogation command allows inverting the status of the output to meet the requirements of certain applications (e.g. projection of slides). In case of OFF authorization, the detector behaves as a simple delayed timer when the **Derogation input** is activated.

Scene

The **Scene function** allows defining, for a given scene number, regulation set-points or lighting levels to create ambiences or scenarios (presence scenario, absence scenario).

Infra red remote control EEK002/EE808

The occupancy sensor embeds an infra red receiver. The infra red remote control offers the same functionalities as the KNX push button input (remote control object).

Setup with the installer remote control EEK001/EE807

Some settings (Power up, semi-automatic / automatic, lux levels, lighting delay) are possible with the installer remote control EEK001/EE807. It is possible to activate or deactivate the remote commissioning feature via ETS.

Linking Master / Slave

This function extends the motion detector's detection area by associating several other detectors. 3 linking possibilities are available; the way to work is defined by the aid of an ETS parameter.

Lighting channel (Lighting function)

In addition to the lighting regulation channel, the detector can also activate an actuator connected to the bus, when presence and brightness level is below a defined threshold. The brightness level in that case is the one defined for the **lighting regulation function**. The lighting time delay is common to the light regulation process.

The possible functions are:

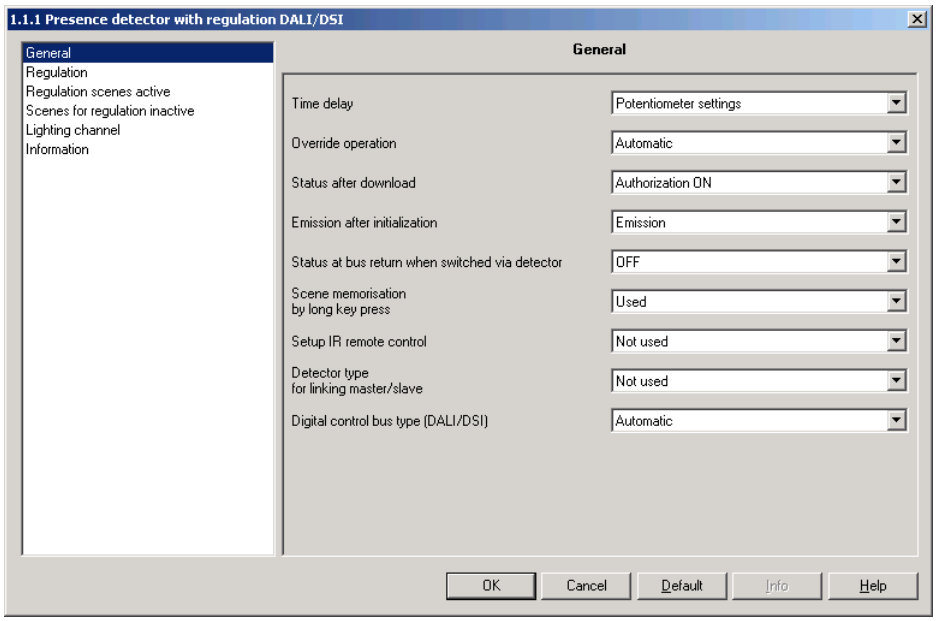
- Switching on when presence and off when absence,
- Timer activation,
- Brightness value (%) when presence,
- Brightness value when presence and absence,
- Scene activation when presence,
- Scene activation when presence and absence.

2. Configuration and General parameters

2.1 General parameters

The general parameters setting screen allows setting the basic operation of the TCC521.

➜ Parameter Setting screen



Screen 1

2.2 Lighting time delay

The Lighting **time delay** is activated while switching from Absence (no movement) to Presence (movement) on the Lighting channel and the Regulation channel (See Regulation function).

The occupancy sensor switches back to Absence mode (no movement) at the end of the delay or if the ambient brightness is high enough. That timer is automatically retriggered after detection. The time delay can be set by the ETS or via the setting potentiometer on the device or with the installer remote control EEK001/EE807.

Designation	Description	Value
Time delay	Allows defining the time during which the output switches to ON upon a valid presence detection (Brightness below the threshold). If a presence is detected before the end of the delay, the timer is triggered again (Time delay restarts)	Potentiometer settings 5 s, 15 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 4 h, 8 h. Default value: Potentiometer settings

2.3 Override operation

The **remote control object** is used to control the **Lighting channel** and **Regulation channel** without taking into account the motion detection or the brightness threshold.

The operating mode (Automatic or Semi-automatic) is selected by an ETS parameter or via the installer remote control EE807.

Semi-automatic - manual switching (with authorization= ON)

To activate the detector, thus switch the light, it is mandatory to use an external push button (KNX button) or IR remote control (EEK002/EE808). This mode permits to harvest the maximum energy savings.

When receiving an ON (**Object remote control**), the detector toggles from **Absence to presence** when in **Absence mode** and to **Absence mode** when in Presence. During presence, the detector uses the ON set-point or Level ON according the regulation mode used (active or not active). When in Absence, the detector switches completely OFF.

With an **OFF** Object remote control the detector switches back into the automatic control mode.

Automatic (When authorization is ON)

In this mode, the light is controlled by motion in the detection area and ambient light levels. If Presence is detected whilst the light levels are below the required lux level, the sensor is activated and keeps the light on whilst there is still occupancy and for the time out period afterwards (Lighting time delay parameter).

Once the sensor has deactivated the lights, it will require new occupancy whilst the ambient light levels are below the required lux. The used mode can be changed via the IR remote control (default mode is presence detection automatic).

The remote control (object or IR remote control EE808/EEK002) is here used to change the lighting output state (Presence or Absence).

The remote control (object or IR remote control EE808) is here used to change the lighting output state (Presence or Absence).

When receiving an **ON** Object remote control allows:

- Switching to Presence when in Absence,
- Switching to Absence when in Presence.

With an **ON** Object remote control, the detector switches back into the Automatic control mode.

■ Use of the remote control when authorisation is OFF

In that case, the remote control object is used to trigger (with **ON Object remote control**) the lighting channel and the local load, the light is switched on during the Lighting time delay.

Designation	Description	Value
Override operation	Allows defining the operation of the Derogation command output by a communicating push button (refer to the Derogation function section).	Automatic, Semi-automatic - Manual switching. Default value: Automatic

User remote control EE808/ EEK002

2.4 Status after download

The **status after download** for the authorization can be defined by the aid of a parameter.
When detector is only activated during when authorization is ON, during the OFF period, the light circuit (local and remote) are control with a remote control (KNX button or IR remote control).

Designation	Description	Value
Status after download	This parameter sets the authorisation status after an ETS download.	Authorization ON, Authorization OFF. Default value: Authorization ON

2.4.1 Emission after initialization

The **emission after initialisation** parameter defines whether the motion detector will send the current status (according to the function set ON/OFF, Scene number or Brightness) via the Lighting channel after power restoration or not. Sending the status can e. g. be helpful when synchronizing a visualization.

Designation	Description	Value
Emission after initialization	This parameter defines whether the current status must be sent or not after a bus failure.	Not used, Emission. Default value: Emission

2.4.2 Status at bus return when switched via detector

The output state after power up can be defined via a parameter, the power up state can be set to ON or to OFF after bus power return. This behaviour can be set via ETS parameters or by the aid of the installer remote control EEK001/EE807.

Designation	Description	Value
Status at bus return when switched via detector	This parameter defines the relay output status after power up when the output is controlled via the detector.	ON, OFF Default value: OFF

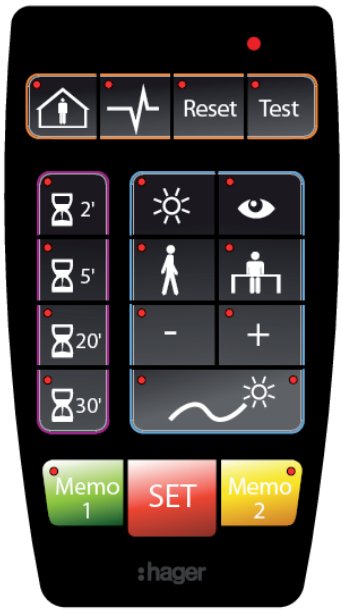
2.4.3 Scene memorisation by long key press

Designation	Description	Value
Scene memorisation by long key press	This parameter authorizes or forbids scene the scene memorisation after a long key press.	Used, Not used Default value: Used

2.4.4 Remote setting the installer remote control

Functional parameters related to the occupancy sensor application can be set via ETS parameters or by the aid of the installer remote control EEK001/EE807.

The use of the remote control can be enabled or disabled. In addition, when the remote control is used, it can be defined if ETS commissioning overwrites the settings.



Installer remote control
EEK001/EE807

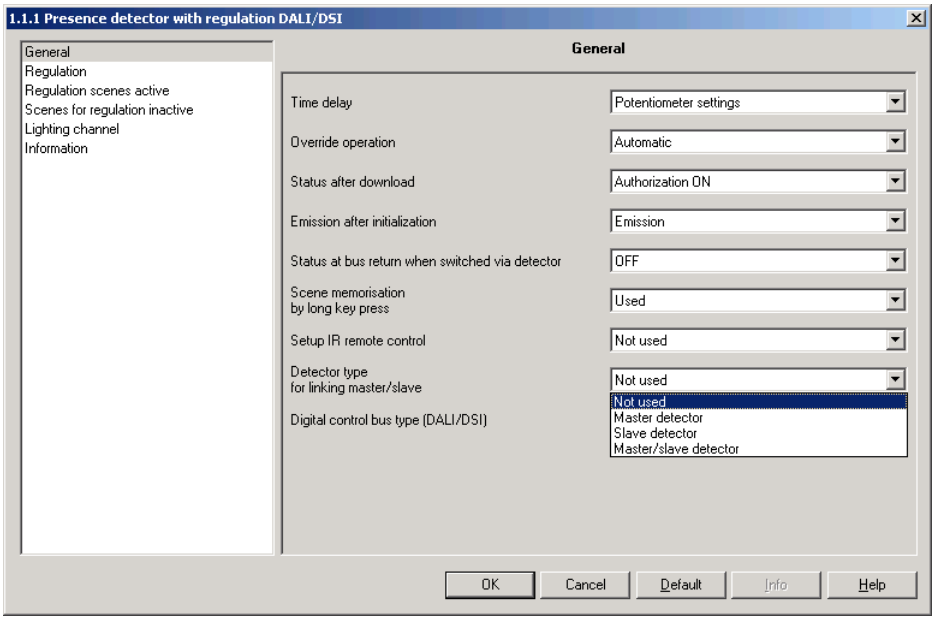
Designation	Description	Value
Setup IR remote control	The commissioning remote control EE807/ EEK001 can be activated or deactivated.	Used, Not used, Default value: Not used
ETS setting overwrite IR remote control data *	This parameter allows overwriting the settings realized by the aid of the infra red remote control EE807/EEK001	Used, Not used, Default value: Used

* This parameter is only visible if the **Setup IR remote control** parameter has following value : Used.

2.4.5 Linking

This function extends the presence detector's detection area by associating several other detectors. 3 linking possibilities are available; the ETS parameter **Detector type for linking master/slave** is used to select the wished functionality.

➜ Parameter Setting screen



Screen 2

■ Master detector

A master detector switches on its lighting channel (local and remote load) as soon as one of the 25 slave detectors indicates (**OU function** between the 25 linking inputs). A master detector is mostly installed in a corridor (or notional corridor); the idea with this feature is to have light in circulation areas when at least one linked area is occupied.

■ Slave detector

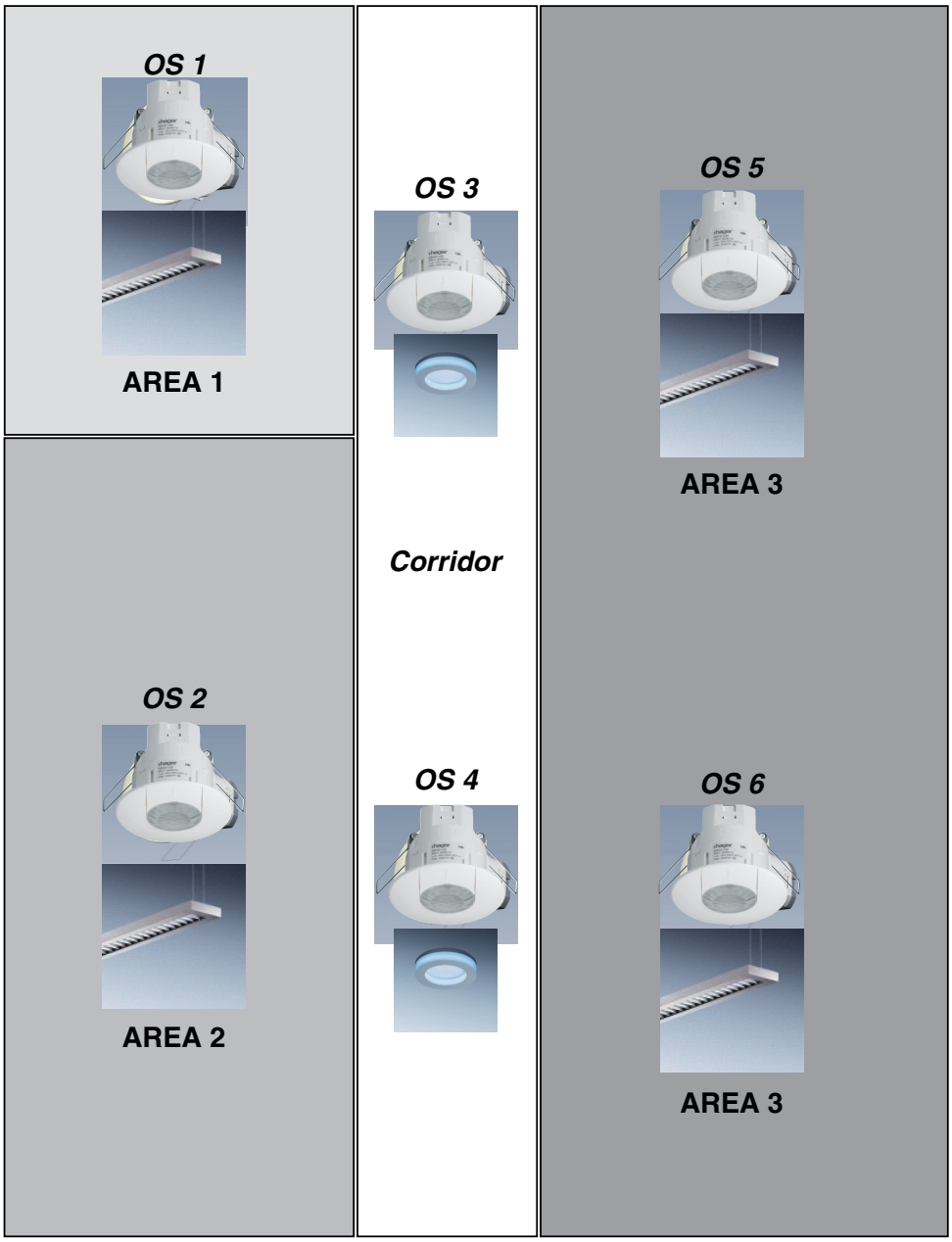
A slave detector informs the master detector that there is light in the slave area, that has per effect to switch on the master detector lighting channel.

■ Master / slave detector

In this case, the detectors are fully linked together. There will be light in the global area when one of the areas is occupied.

Designation	Description	Value
Detector type for linking master / Slave	This parameter defines the working way of the linking master / slave functionality.	Not used, Master detector, Slave detector, Master / slave detector. Default value: Not used

The following examples present an office use case. There are presence detectors in the offices (area 1 to 3) and presence detectors in the corridor. The occupancy sensors OS1, OS2, OS5 and OS6 are defined as slave detectors, whereas OS3 and OS4 installed in the corridor are master detectors. The light in the corridor will be on if there is light (thus occupancy) in one **OR** function of the areas.



2.4.6 Digital control bus type (DALI / DSI)

The detector embeds a digital interface to control digital ballasts, the protocols supported are DALI and DSI.

Designation	Description	Value
Digital control bus type (DALI / DSI)	The used digital interface can be defined via that parameter. Automatic means that the detector defines automatically used bus type.	Automatic, DALI (broadcast), DSI Default value: Automatic

The datapoint "bus status DALI/DSI" indicates the status of the digital bus used. It's used for maintenance purpose.

Bit 7	Bit 6	Bit 5	Bit 3	Bit 2	Bit 1	Bit 0
			Bus state	Detected bus	Parameter **Mode**	

Parameter **Mode**: Value of the parameter **Digital bus mode** bit 0 and bit 1, the used mode is defined with the parameter **Digital control bus type** (DALI/DIS).
00: Automatic bus (DALI/DSI) The detector recognizes automatically the digital bus line (DALI or DSI),
01: Dali bus, the digital bus for lighting control is fixed via parameter, DALI bus is used in this case,
10: DSI bus, the digital bus for lighting control is fixed via parameter, DSI bus is used in this case.

Detected bus: Bit 2
This bit indicates what digital bus for lighting control is detected by the detector. When bit is 1; the bus is a DALI one, when it is 0, the bus is DSI or DALI not detected.

Bus state: Bit 3
0: No DALI bus,
1: Bus present.
This bit indicates if the DALI bus is present or not, it has only to be considered if bit 2 is 1. Otherwise, he has not meaning. It permits to detect the disconnection of the DALI line (bad wiring).

3. Configuration and parameters of the regulation

3.1 Regulation functionalities

The TCC521 implements 3 functional modes:

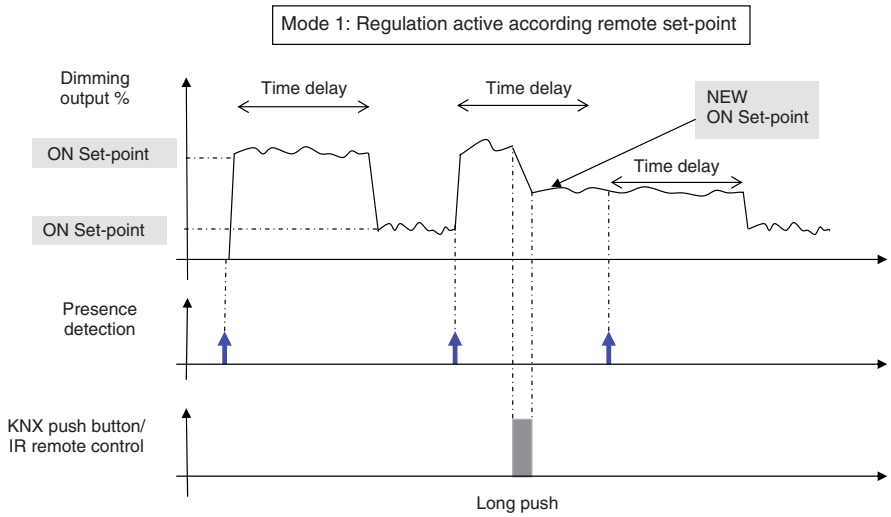
- mode 1: regulation active according remote set-point (auto mode)
- mode 2: regulation active according to local set-point
- mode 3: regulation inactive

The used mode is defined via the ETS commissioning and the TCC521 local settings.

3.1.1 mode 1: regulation active according remote set-point (auto mode)

■ Lighting regulation in offices

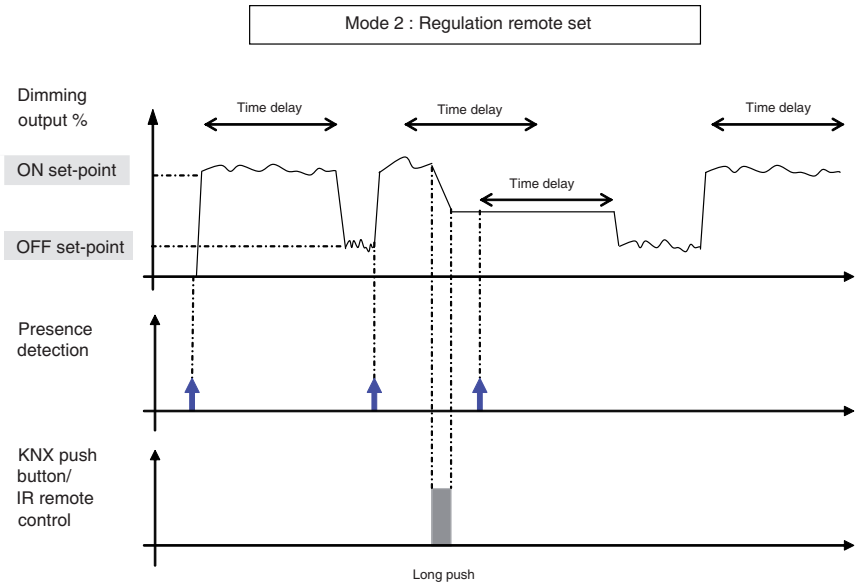
The installer sets predefined brightness levels (lux) according to standards (for example 400 lux) and the customer can change the brightness level via a KNX button or with the IR remote control (EEK002/EE808). The detector regulates around an ON set-point during presence and and OFF set-point during the absence.



3.1.2 mode 2: regulation active according to local set-point

■ Lighting regulation in open plan offices

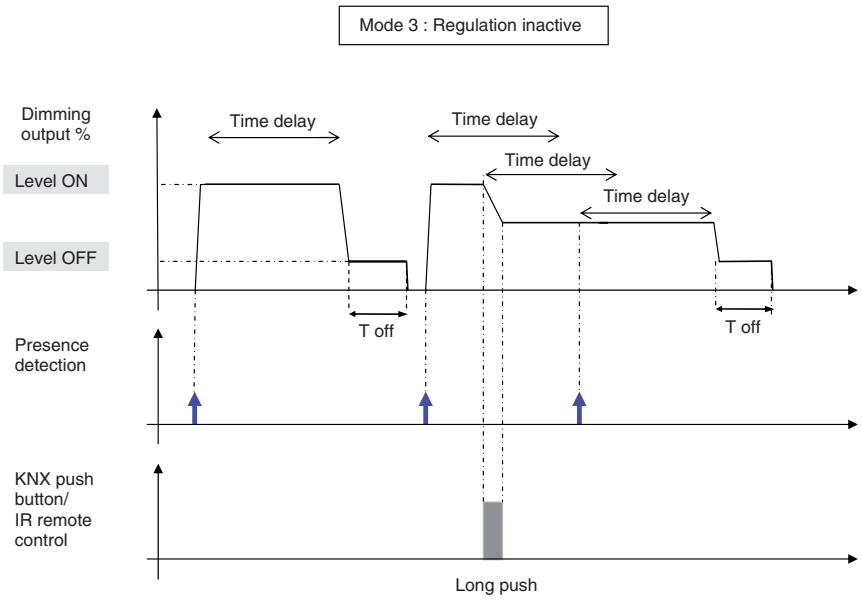
The installer sets predefined lux levels according to standards (for example 400 lux) ; the customer can temporarily change the output level (in %) via a KNX button or with the **IR remote control** (EEK002/EE808). The detector switches back to the installer setting after absence.



3.1.3 mode 3: regulation inactive

■ Installation of detectors in circulation areas (corridors)

The idea is to give full light when there is somebody and 33 % (for example) when there is nobody and cut after a long absence. The customer can change the level ON (in %) via a KNX button or with the IR remote control (EEK002/EE808). The **level OFF** is maintained during the **OFF level time delay** (T OFF), it is completely switched OFF after that delay.



3.2 Detector objects list for the regulation features

The light regulator output is updated according to the regulation process by the aid of the **object Dimming output %** (**1-bit object**).

The **object dimming** is used to modify the set-point (**4 bit object**, like a dimmer control), where the **object Absolute dimming** (1 byte) permits to change the absolute dimming value (when used as in the regulation inactive mode).

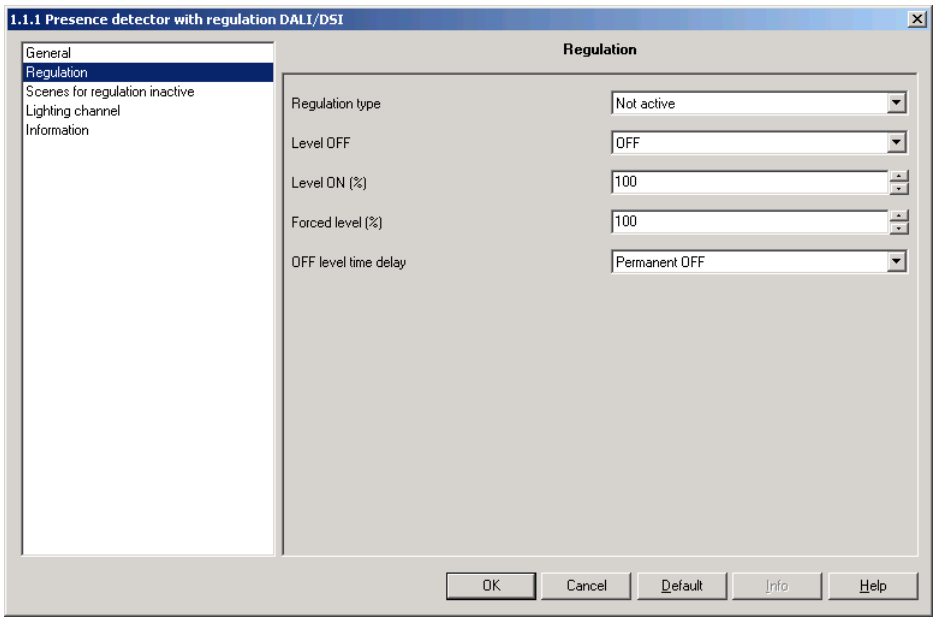
The **priority object** (2 bits) allows forcing the regulator output, whereas the **object scene number** is used to recall pre-defined light scenes.

The **authorization object** is used to enable or deactivate the detector with a one bit object.

The **remote control object** is used to toggle the presence detector mode from presence to absence (and vice versa).

Number	Name	Object Function	Length	C	R	W	T	U	Priority
0	Lighting regulation	Dimming	4 bit	C	R	W	-	U	Low
1	Lighting regulation	ON / OFF	1 bit	C	R	W	-	U	Low
2	Lighting regulation	Priority	2 bit	C	R	W	-	U	Low
3	Lighting regulation	Scene number	1 Byte	C	R	W	-	U	Low
4	Lighting regulation	Info ON / OFF	1 bit	C	R	W	-	U	Low
5	Lighting regulation	Dimming output %	1 Byte	C	R	-	T	U	Low
6	Lighting regulation	Absolute dimming	1 Byte	C	R	W	-	U	Low
8	Lighting channel	ON / OFF	1 bit	C	R	-	T	U	Low
13	Lighting and regulation channel	Authorization	1 bit	C	R	W	-	U	Low
14	Lighting and regulation channel	Remote control	1 bit	C	R	W	-	U	Low
41	Bus Status DALI/DSI	Maintenance	1 Byte	C	R	-	T	U	Low

➜ Parameter Setting screen



Screen 3

3.2.1 Regulation

The regulation type can be defined locally by the aid of the potentiometers or via ETS commissioning.

Three functional modes are available:
- Potentiometer settings (local settings),
- Active,
- Not active.

Regulation can be active (regulation of the dimming levels of the outputs according to the brightness) or inactive (fixed dimming levels). The regulation type and the settings can be defined locally on the device via potentiometers or by ETS.

3.2.1.1 Function regulation active

The regulation is active in automatic mode after detection. The **object dimming output %** and the **DALI output** are controlled during the time delay (set by the potentiometer or via an ETS parameter). The regulation set-point during occupancy is defined by the ETS parameter **ON set-point**. At the end of this time delay, the output uses the **OFF set-point** (defined via ETS) for the lighting regulation.

The **ON set-point** can be changed via a KNX push button (**Object dimming**) or with the infra red remote control EEK002/EE808 (log press button ON to increase and OFF for decrease).

The **ON / OFF object** is used to activate the detector when the detector is authorized. When receiving a 1 the detector regulates around the **ON set-point** and its start the lighting timer (time delay), whereas with a 0 the **OFF set-point** will be applied. That control is ignored when a priority is running (**priority set-point**) or if authorization is OFF.

When the detector is activated (authorization is ON), the **remote control object** is used to toggle the output state of the detector (see **override operation parameter** for mode details), the output passes to **ON set-point** when the light is OFF and turns to OFF (0) when the light is already ON. During unauthorized period (when authorization is OFF), the remote control is used to toggle the output state, when switching ON, the output passes to 100 % during the time delay.

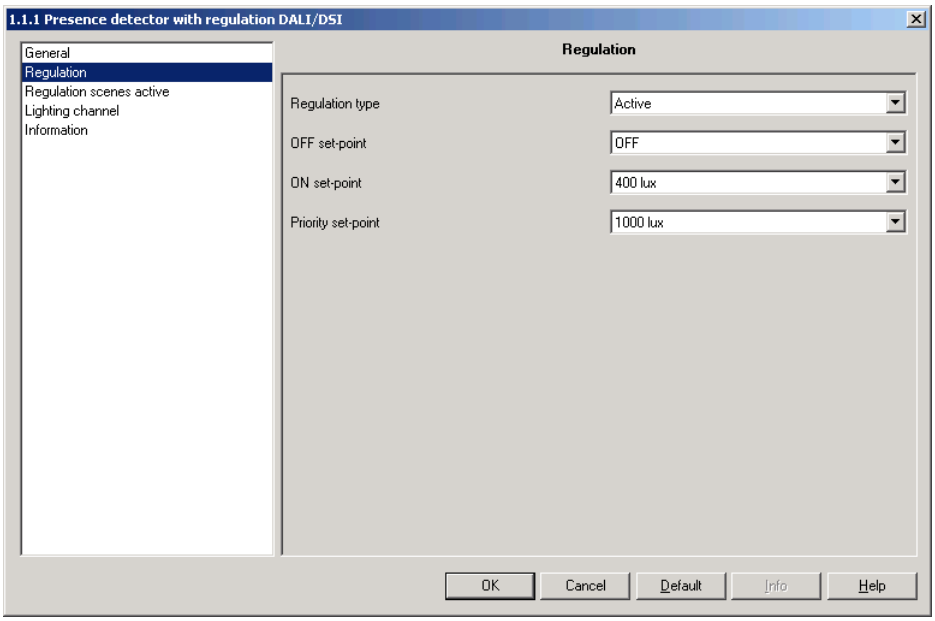
The **authorization object** permits to activate/deactivate the detector; when not authorized, the detector can be used as a time lag switch activated via a KNX push button.

Via a KNX **scene number object** it is also possible to activate the regulation with a specific regulation level (For example: Scene 2 set-point 200 lux). That control is ignored when a priority is running (**priority set-point**) or if authorization is OFF.

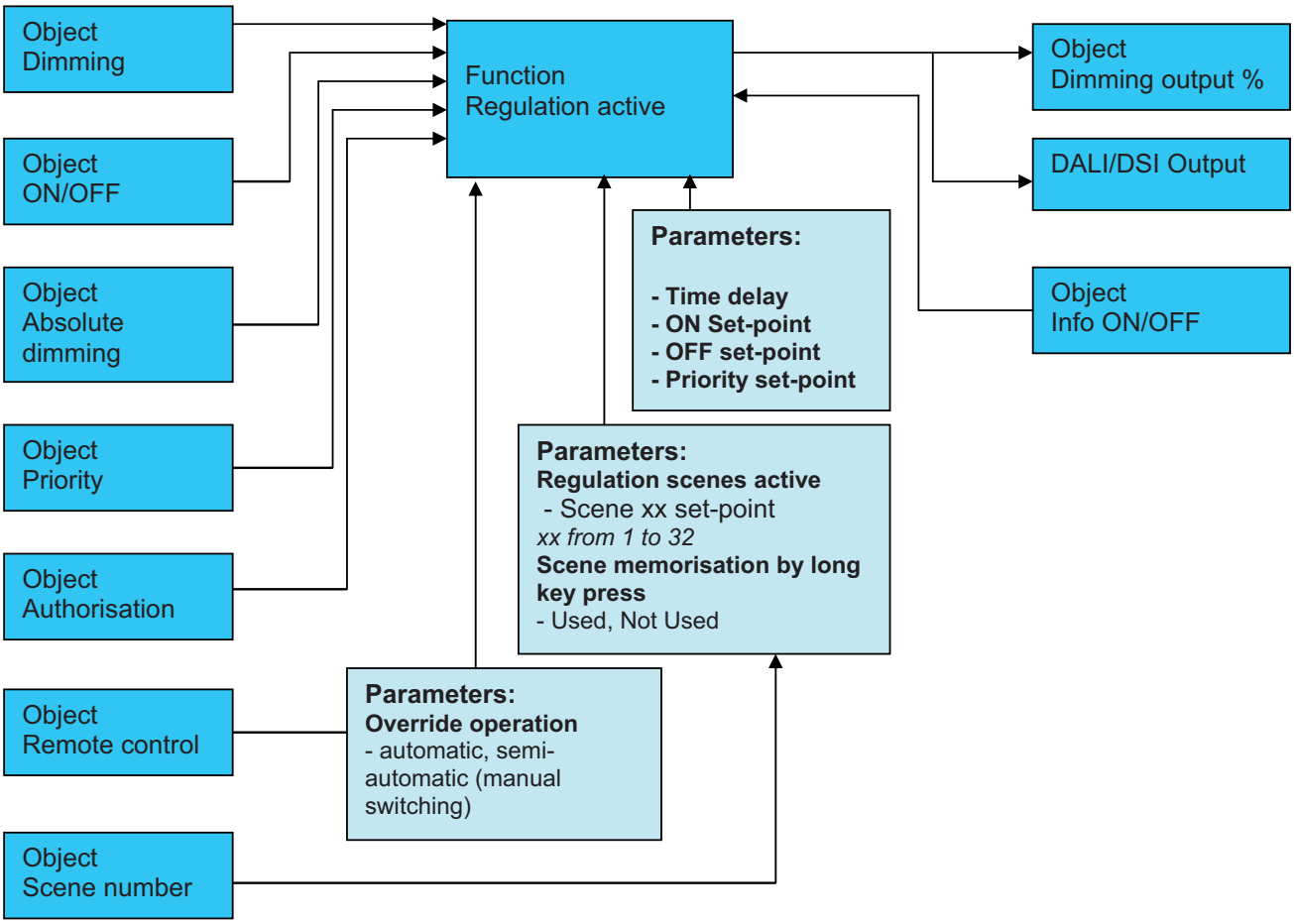
The KNX **priority set-point is** used when the **priority object** is activated (for example: **priority set-point** 1000 lux), the detection is not taken into account during the priority.

The **object info ON / OFF** informs the detector of the state of the controlled remote load. If the status is OFF, it turns off the detection during a short time (less than 1 s). It allows avoiding wrong detection (which can be a side-effect of the light extinction) during the switching OFF.

➜ Parameter Setting screen



Screen 4



Designation	Description	Value
Regulation type	Allows defining whether the **regulation Parameters** are to be set via potentiometers located on the device or by ETS.	Active to select the regulation type active
OFF set-point	Allows setting the regulation set-point for Absence.	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: OFF
ON set-point	Allows setting the set-point for Presence.	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: 400 lux
Priority set-point	Allows to define the set-point used during priority (forced).	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: 1000 lux
Regulation scenes active	Scene xx set-point xx: 1 - 32 That parameter defines the lux level used when a scene xx is called	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: specific to each scene

3.2.1.2 Function regulation inactive (Not active)

In this mode, the light regulation is inhibited. During presence detection, the detector controls its output at a preset level (Level ON %, 100 % by default), which can be modified by a KNX push button or the **IR remote control** EEK002/EE808.

The **object dimming output %** is controlled during the time delay (set by the potentiometer or via an ETS parameter).
At the end of this time delay, the output is set to a minimum level (Level OFF) for a defined duration (15 min when set locally or x min according to parameter **OFF level time delay**).

The **Level ON** (%) can be changed via a KNX push button (**Object dimming**) or with the infra red remote control EEK002/EE808.

The **ON / OFF object** is used to activate the detector when the detector is authorized. When receiving a 1 the detector regulates around the **ON set-point** and its start the lighting timer (time delay), whereas with a 0 the **OFF set-point** will be applied. That control is ignored when a priority is running (**priority set-point**) or if authorization is OFF.

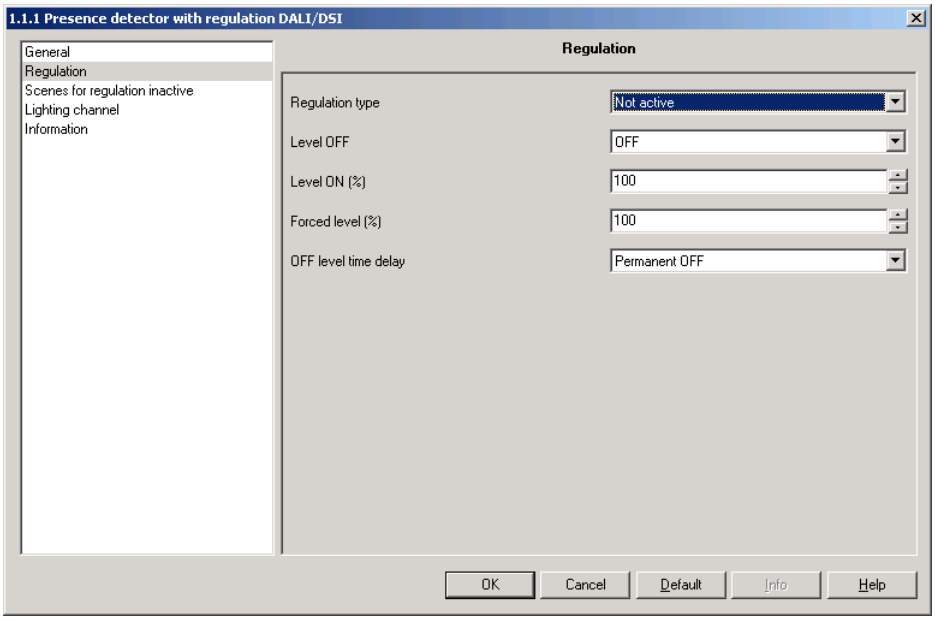
When the detector is activated (authorization is ON), the **remote control object** is used to toggle the output state of the detector (see **override operation parameter** for mode details), the output passes to Level 2 (%) when the light is ON and turns to OFF (0) when the light is already ON. During unauthorized period (when authorization is OFF), the remote control is used to toggle the output state, when switching ON, the output passes to 100 % during the time delay.

The **authorization object** permits to activate/deactivate the detector; when not authorized, the detector can be used as a time lag switch activated via a KNX push button. Via a KNX **scene number object** it is also possible to fix the **object dimming output %** with a specific brightness level (For example: Scene 2 10 %). That control is ignored when a priority is running (**priority set-point**) and if authorization is OFF.

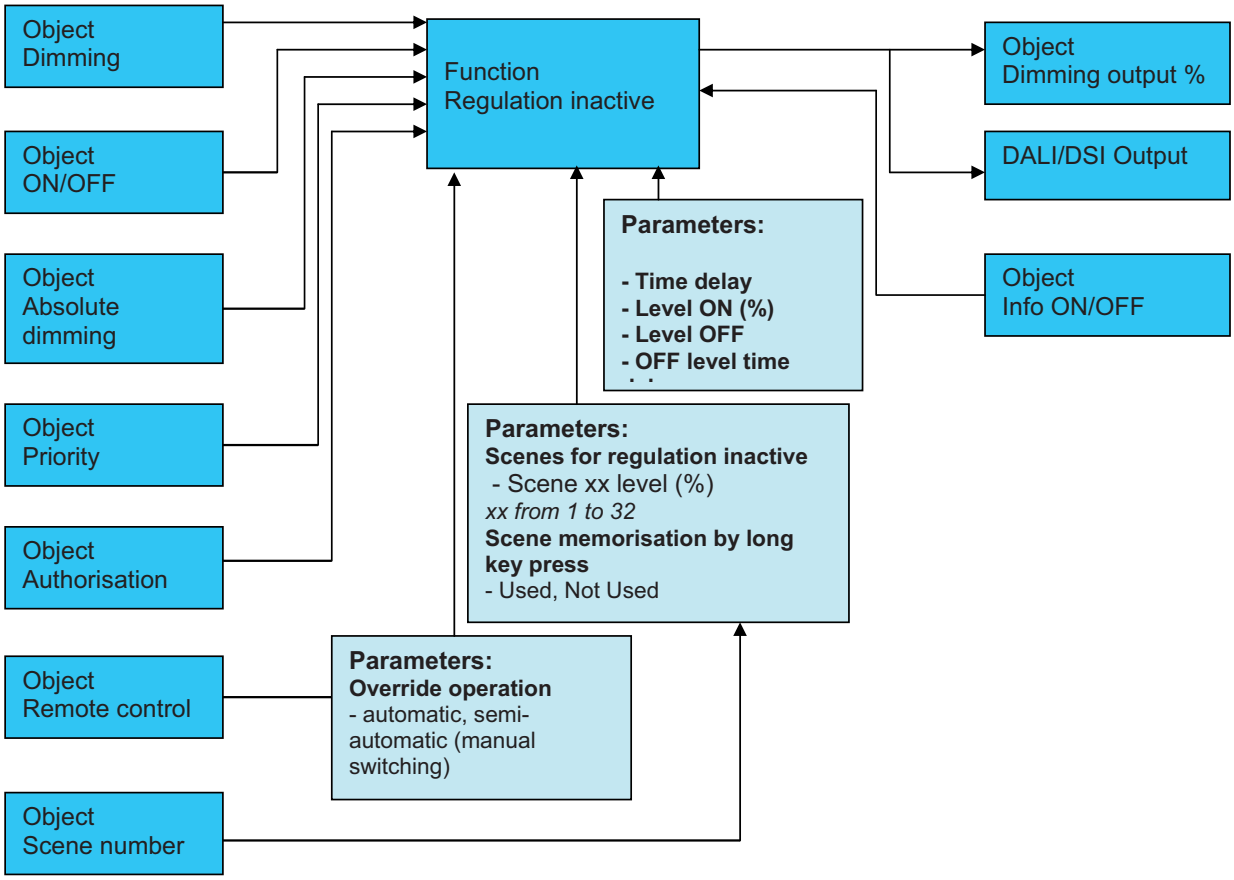
The **forced level %** is used when the **priority object** is activated (For example: Forced level is 100 %).

The **object info ON / OFF** informs the detector of the state of the controlled remote load. If the status is OFF, it turns off the detection during a short time (less than 1 s). It allows avoiding wrong detection (which can be a side-effect of the light extinction) during the switching OFF.

➜ Parameter Setting screen



Screen 5



Designation	Description	Value
Regulation type	Allows defining whether the **regulation Parameters** are to be set via potentiometers located on the device or by ETS.	Not active to select the regulation type inactive.
Level OFF	Allows setting the regulation set-point for Absence.	OFF, 5 %, 10 %, 15 %, 20 %, 25 %, 30 %, 35 %, 40 %, 45 %, 50 %, Default value: OFF
Level ON (%)	Allows setting the set-point for Presence.	0 to 100 step 1 Default value: 100
Forced level (%)	Allows to define the set-point used during priority (forced mode).	0 to 100 step 1 Default value: 100
OFF level time delay	That parameter defines the pre-warning duration. During that duration, the detectors uses the **Level OFF**, the detector switches completely OFF after that duration.	Permanent OFF, 5 min, 10 min, 15 min, 30 min, 45 min, 1 h, 2 h, 3 h, 4 h,
Scenes for regulation inactive	Scene xx set-point xx: 1 - 32 That parameter defines the Level (%) used when a scene xx is called.	0 to 100 step 1 Default value: specific to each scene xx

3.2.1.3 Function regulation type Potentiometer

The regulation type can be defined directly via potentiometer settings.

Three modes are available:
- mode 1: regulation active according remote set-point (auto mode),
- mode 2: regulation active according to local set-point,
- mode 3: regulation inactive.

The mode 1 and mode 3 are offer the same functionalities as the one the product implements when set via ETS.

The mode 2 is only accessible via local settings. The regulation is active with local set point after detection. The **dimming output % (DALI output)** is controlled during the time delay (set by the potentiometer or via an ETS parameter), the regulation set-point during occupancy is defined locally by the potentiometer Lux. At the end of this time delay, the output uses the **OFF set-point** (defined via ETS) for the lighting regulation.

The **ON set-point** can only be changed locally via the potentiometer.

A KNX push button can be used to change temporarily the **dimming output %** via the **dimming** control.

Via a KNX **scene number object** it is also possible to activate the regulation with a specific regulation level (For example: Scene 2 set-point 200 lux).

The **KNX priority set-point** is used when the **priority object** is activated (For example: Priority set-point 1000 lux).

Designation	Description	Value
Regulation type	Allows defining whether the **regulation Parameters** are to be set via potentiometers located on the device or by ETS.	Potentiometer settings are used to define the function regulation mode, regulation may be active or inactive according to the position of the potentiometers (Mode 1, 2 or 3).
OFF set-point	Allows setting the regulation set-point for Absence.	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: OFF
ON set-point	Allows setting the set-point for Presence.	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: 400 lux
Priority set-point	Allows to define the set-point used during priority (forced).	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: 1000 lux
Level OFF	Allows setting the regulation set-point for Absence.	OFF, 5 %, 10 %, 15 %, 20 %, 25 %, 30 %, 35 %, 40 %, 45 %, 50 %, Default value: OFF
Level ON (%)	Allows setting the set-point for Presence.	0 to 100 step 1 Default value: 100
Forced level (%)	Allows to define the set-point used during priority (forced mode).	0 to 100 step 1 Default value: 100
OFF level time delay	That parameter defines the pre-warning duration. During that duration, the detectors uses the **Level OFF**, the detector switches completely OFF after that duration.	Permanent OFF, 5 min, 10 min, 15 min, 30 min, 45 min, 1 h, 2 h, 3 h, 4 h,
Scenes for regulation inactive	Scene xx set-point xx: 1 - 32 That parameter defines the Level (%) used when a scene xx is called.	0 to 100 step 1 Default value: specific to each scene xx
Regulation scenes active	Scene xx set-point xx: 1 - 32 That parameter defines the lux level used when a scene xx is called	OFF, 100 lux, 150 lux, 200 lux, 250 lux, 300 lux, 350 lux, 400 lux, 450 lux, 500 lux, 550 lux, 600 lux, 650 lux, 700 lux, 750 lux, 800 lux, 900 lux, 1000 lux, Default value: specific to each scene xx

4. Configuration and parameters of the lighting channel

4.1 Functions of the Lighting channel

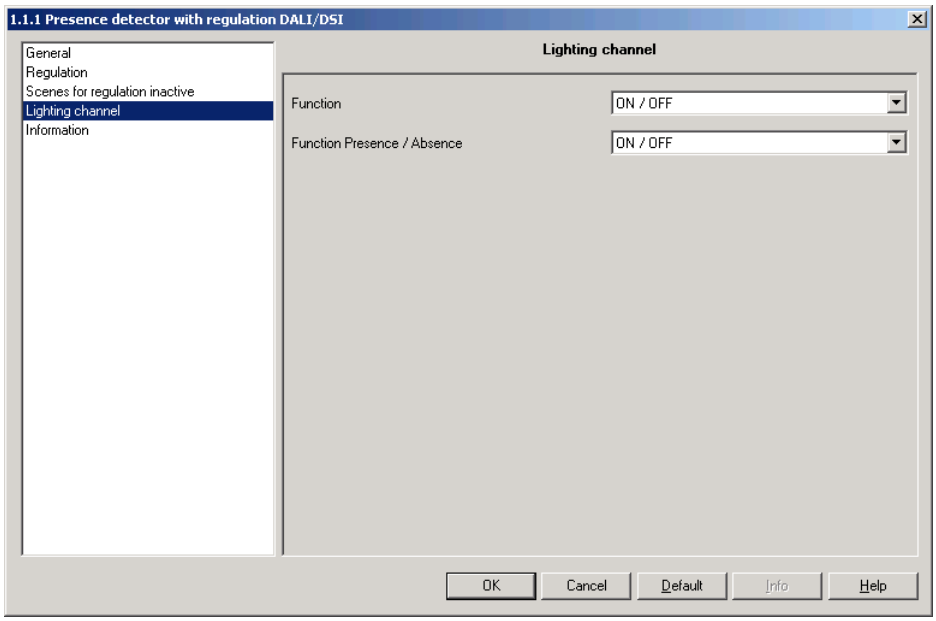
When detecting a motion, the command for Presence is sent on the bus, taking into account the ambient brightness. If there is no more motion detection, the command for Absence is sent on the bus after the switch-OFF delay has elapsed (if it was set).
The Function parameter allows selecting the commands or values that are to be sent on the bus in case of Presence or Absence.

4.1.1 ON / OFF function

The ON / OFF function allows setting a switching output (lighting circuit) to one (ON or OFF) value in case of Presence and to another value in case of Absence, these values being preset in the parameters. The ON / OFF function sends commands on the bus via the **ON / OFF** object.

Description: According to the setting of the parameters, when switching from Absence to Presence, an ON or an OFF command is sent on the bus via the **ON / OFF** object. When the Lighting time delay has elapsed, either no command, or an OFF or ON command is sent on the bus.

➜ Parameter Setting screen



Screen 6

Designation	Description	Value
Function Presence / Absence	This parameter defines the command to be sent upon a Presence or Absence detection. The command for Absence will be sent after the Switch OFF delay has elapsed.	OFF, ON, OFF / ON, ON / OFF. Default value: ON / OFF

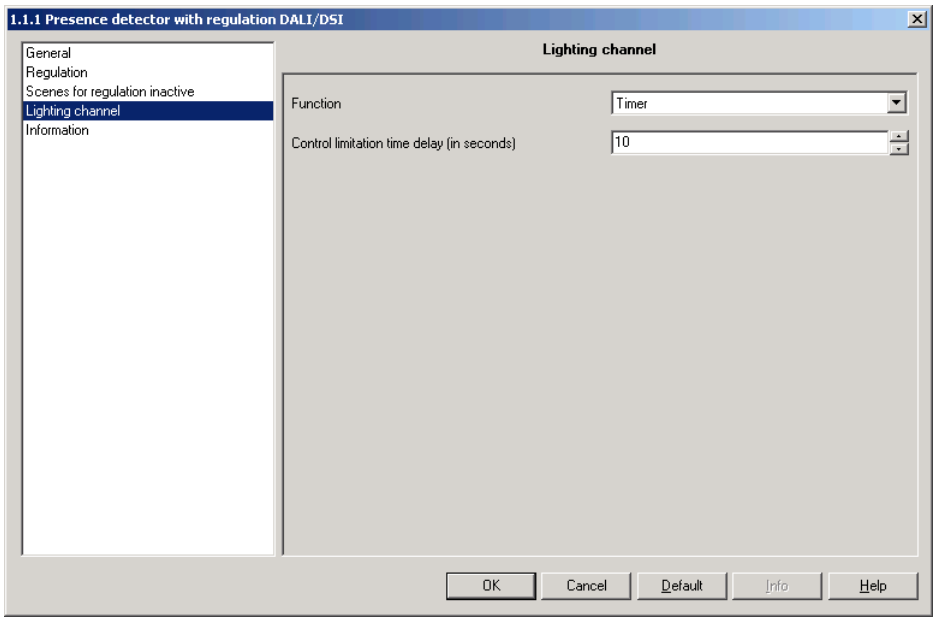
4.1.2 Timer function

The Timer function allows switching ON a switching output (lighting circuit) for a time adjustable in the switching output in case of a Presence.

The Timer function sends commands via the **Timer** object.

Description: Upon Presence detection, the motion detector sends an ON command on the bus via the **Timer** object. Then sending of commands is locked for the time set in the **Control limitation time delay** parameter. This means that, even in the case of Presence detection, no commands will be sent during this delay. When this timer has elapsed, the motion detector will send again an ON command on the bus in the case of Presence detection, and the locking time will start again.

➜ Parameter Setting screen



Screen 7

Designation	Description	Value
Control limitation time delay (in seconds)	This parameter sets the minimum possible time between two telegrams from the **Timing** object.	From 1 to 30 s by steps of 1 s Default value: 10 s

4.1.3 Brightness value and Brightness value Presence / Absence

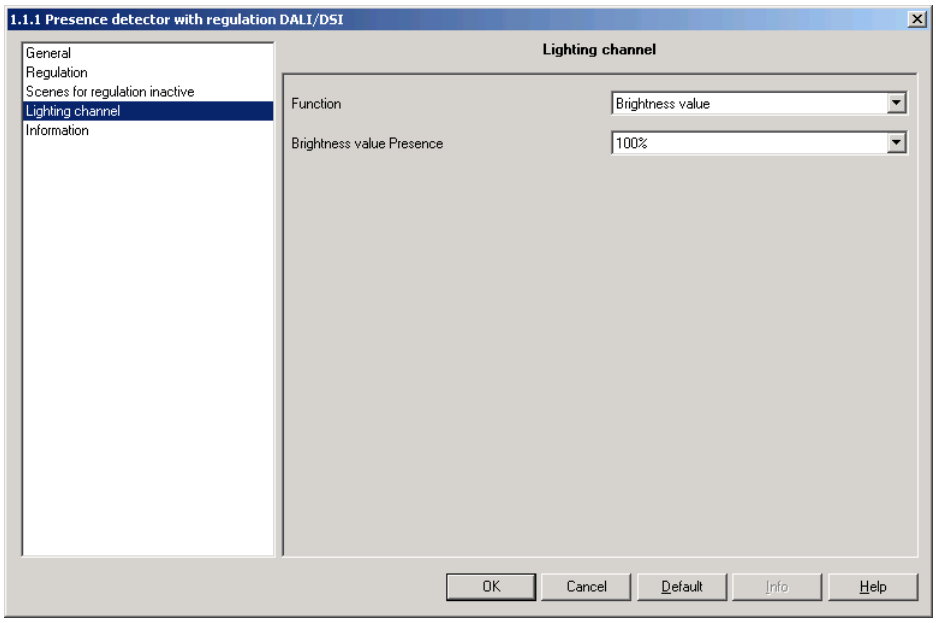
The **Brightness value Presence function** sets a dimming output to a predefined value (%) in the case of a presence.

The **Brightness value Presence/Absence** function sets a dimming output to a value in the case of a presence and to another level value in the case of an absence.

The Brightness value and Brightness value Presence /Absence functions send commands on the bus via the **Brightness value** object.

According to the setting of the parameters, when switching from Absence to Presence, the **Brightness value** (Presence) in % is sent on the bus via the **Brightness value object**. When the **Lighting time delay** has elapsed (or enough daylight), either no command, or the **Brightness value** (Absence) in % is sent on the bus.

➜ Parameter Setting screen



Screen 8

Designation	Description	Value
Brightness value Presence	This parameter defines the illumination value in Presence mode.	0% to 100% in 1% steps Default value: 100%
Brightness value Absence *	This parameter defines the illumination value in Absence mode (after the Switch OFF delay has elapsed).	0% to 100% in 1% steps Default value: 0%

* This parameter is only visible if the **Function** parameter has following value: Brightness value Presence / Absence.

4.1.4 Scene and Scene Presence / Absence functions

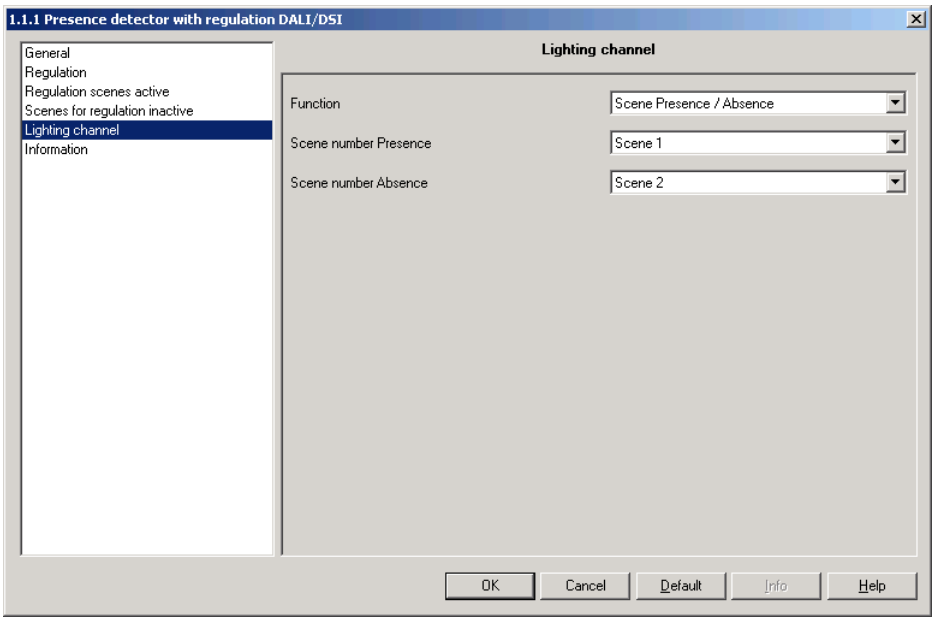
The **Scene function** allows calling a scene in the case of a presence (e. g. various light circuits ON, others dimmed, heating ON).

The Scene Presence / Absence function allows calling one scene in the case of a presence and another scene in the case of an absence.

The Scene Absence and Scene Presence / Absence functions send, in the case of presence and absence, commands via the **Scene** object.

According to the setting, when switching from Absence to Presence, the Scene number (Presence) is sent on the bus via the **Scene** object. When the **Lighting time delay** has elapsed (or enough daylight), either no command, or the Scene number (Absence) is sent on the bus.

➜ Parameter Setting screen



Screen 9

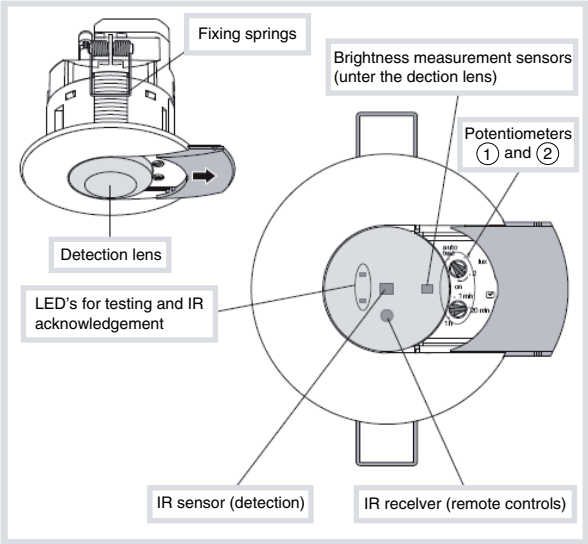
Designation	Description	Value
Scene number Presence	This parameter defines the scene in Presence mode.	Scene 1 to Scene 32 Default value: Scene 1
Scene number Absence *	This parameter defines the scene in Absence mode.	Scene 1 to Scene 32 Default value: Scene 2

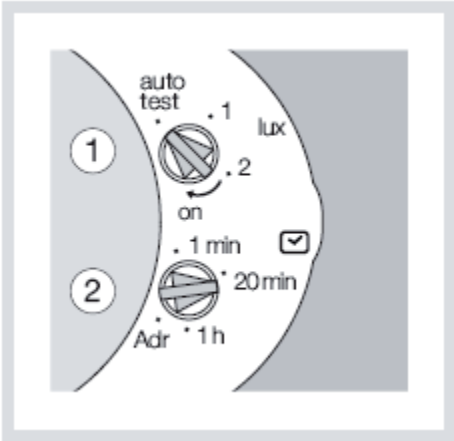
* This parameter is only visible if the **Function** parameter has following value: Scene Presence / Absence.

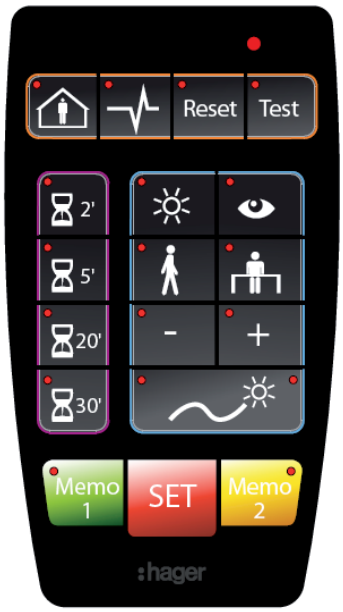
5. Physical addressing

The detector can be passed into the KNX addressing mode via the local potentiometers or by the aid of the remote control EE808.

Move the potentiometer 2 to "Adr" or use **remote control** EE807 (long push > 5 s on the SET key), the red lend behind the lenses is switched-ON to indicate the **addressing mode**.







Installer remote control
EEK001/EE807