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Application description

Presence/motion detector KNX
Electrical/Mechanical characteristics: see product user manual

	Order number	Product designation	Application programme	TP product
	TXD501	Presence/motion detector KNX 360° flush-mounted detection Ø10m - Flush MINI KNX 10M	STXD50x V1.0	
	TXD503	Presence/motion detector KNX 360° flush-mounted detection Ø10m - Flush Medium KNX 20M	STXD50x V1.0	
	TXD505	Motion detector corridor KNX 360° flush-mounted detection 5x30m - Flush Medium KNX Corridor		
	TXC513	Presence/motion detector KNX 360° surface mounted detection Ø20m- Surface Medium KNX 20M	STXC51x V1.0	
	TXC515	Motion detector KNX corridor 360° surface mounted detection 5x30m - Surface Medium KNX Corridor		
	TXC518	Motion detector highbay KNX 360° surface mounted detection height 8m	STXC51x V1.0	

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Application description

Table of contents

1. General

1.1 General information about this application description

This document describes the operation and parameterisation of KNX devices with the aid of the Engineering Tool Software ETS.

The devices are parameterised by the ETS and the required settings for operation are made during the first installation.

1.2 ETS Programming software

The application programmes are compatible with ETS5 or ETS6 and are always available in their latest version on our Internet website.

ETS version	File extension of compatible products	File extension of compatible projects
ETS 5 (v 5.0.6 or higher)	*.knxprod	*.knxproj
ETS 6 (v 6.0.0 or higher)	*.knxprod	*.knxproj

Table 1: ETS Software version

1.2.1 ETS Application designation

Application	Application designation
STXD50X V1.0	Presence/motion detector KNX
STXC51X V1.0	Presence/motion detector KNX

Table 2: ETS Application designations

1.3   Commissioning

The commissioning of the motion detector modules primarily refers to the programming of the physical address and the application data by the ETS Engineering Tool Software.

1.3.1   Physical address

The ETS assigns the physical address. The motion detector module is designed as a monoblock device and thus features an integrated bus coupling unit. Programming mode is activated using the brightness potentiometer in the **address** position; the red programming LED behind the lens lights up permanently as an additional means of notification.

Example:

- ■ Set brightness potentiometer to **adr**.

  The status LED lights up red permanently.
- ■ Load the physical address into the device.
- ■ Label the device with the physical address.
- ■ Load application software into the device.
- ■ After completion of the loading process or to cancel, adjust brightness potentiometer.

  The status LED goes out.
- ℹ To check whether the bus voltage is present, set the brightness potentiometer to **adr** briefly; the red LED lights up. Resetting the potentiometer exits programming mode.
- ℹ If a device in an existing system is to be programmed, only one device can be in programming mode.

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.

1.3.2 Application programme

The application software can be loaded onto the module directly when assigning the physical address, for example. If this has not taken place, it can also be programmed at a later date.

2. Functional and device description

2.1 Device overview

Figure 1: Device overview
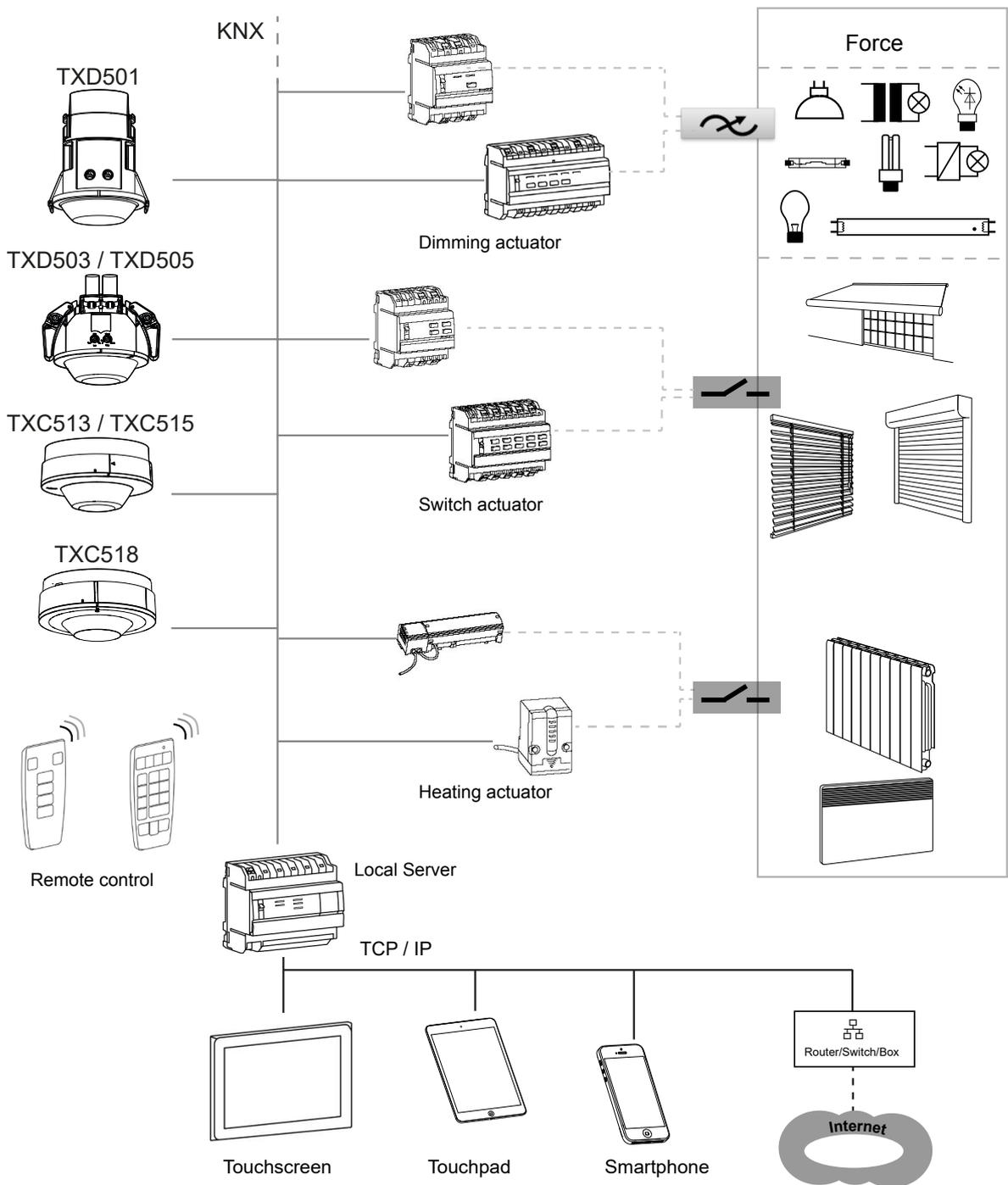
2.2 Range description

TXD501	TXD503	TXD505
Presence/motion detector KNX 360° flush-mounted detection Ø10m	Presence/motion detector KNX 360° flush-mounted detection Ø10m	Motion detector corridor KNX 360° flush-mounted detection 5x30m
Flush MINI KNX 10M	Flush Medium KNX 20M	Flush Medium KNX Corridor
TXC513	**TXC515**	**TXC518**
Presence/motion detector KNX 360° surface mounted detection Ø20m	Motion detector KNX corridor 360° surface mounted detection 5x30m	Motion detector highbay KNX 360° surface mounted detection height 8m
Surface Medium KNX 20M	Surface Medium KNX Corridor	Surface Medium KNX High bay

Table 3: Range description"

2.3 Functional description

The motion detector module works with a passive infrared sensor (PIR) and responds to heat motions caused by persons, animals or objects according to IEC 63180. Motion detectors are primarily used in hallways or staircases as a means of switching functions on and off based on brightness levels and motion.

Based on the set operating mode, the device transmits telegrams for directing the building functions into the KNX bus system. Each has different detection parameters:

– In automatic control mode, the device is able to transfer switching, value transmitter, light scene call-up, or UP/DOWN telegrams to the bus. Two independent automatic control channels are available.

– In signalling mode, the device transfers a signalling telegram – to an alarm central unit, for example – only once a defined, adjustable number of motion pulses has taken place.

Multiple detectors may work together in a main/extension unit configuration (master/slave) if detection needs to be carried out in applications that are larger than the detection field (such as long hallways and staircases).

It is also possible to configure the response brightness and the delay time manually using the potentiometer on the device.

2.4 Functional overview

The application software is used to configure the lighting regulator presence detector. The main functions are the following:

Presence detector

The presence detector with lighting regulation is sensitive to infrared radiation linked to the heat emitted by moving bodies. This makes it possible to detect the presence or absence of people in a room.

2 zone presence detection and lighting regulation channel

The presence detector can control KNX variators or KNX / DALI gateways for purpose of the lighting regulation function.

Lighting regulation is activated according to presence or absence. Several modes are possible:

– Potentiometer settings,

– Regulation linked to the **On / Off** object,

– When the **Potentiometer settings** mode is selected, the detector regulates the level of lighting according to the setpoint value in Lux configured on the product,

– When regulation is active, the detector regulates the lighting level in the room according to a setpoint value in Lux in the presence of persons and according to another setpoint value in the absence of persons. According to the parameter settings, the regulation setpoint 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,

– When the **Régulation linked to the On / Off** object mode is selected, the product switches to permanent regulation when the Datapoint Switch On is received and no longer takes into account the presence or absence of people in the room. The product continues this permanent regulation until the Datapoint switch Off is received.

Lighting regulation of zone 2 is proportional to that of zone 1. A parameter is used to select a proportionality factor. .

Overrun time (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**.

ON or OFF authorisation

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

Scene

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

Infra-red remote control 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 EE807

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

Master / Slave function

This function extends the presence detector's detection area by associating several other detectors.

Surveillance function

In addition to the lighting regulation channel, the detector can also activate an **ON / OFF** object solely linked to presence or absence. Brightness is not taken into account for this function. This function controls the ventilation or heating circuits according to the presence of people in the rooms.

Area linking

The feature is used to control other distant detectors. It is used only by the "Light Regulation" or by the "Generic Lighting" KNX channel and not by the "Generic Motion Detector" KNX channel. In slave mode, the Area linking function is not available.
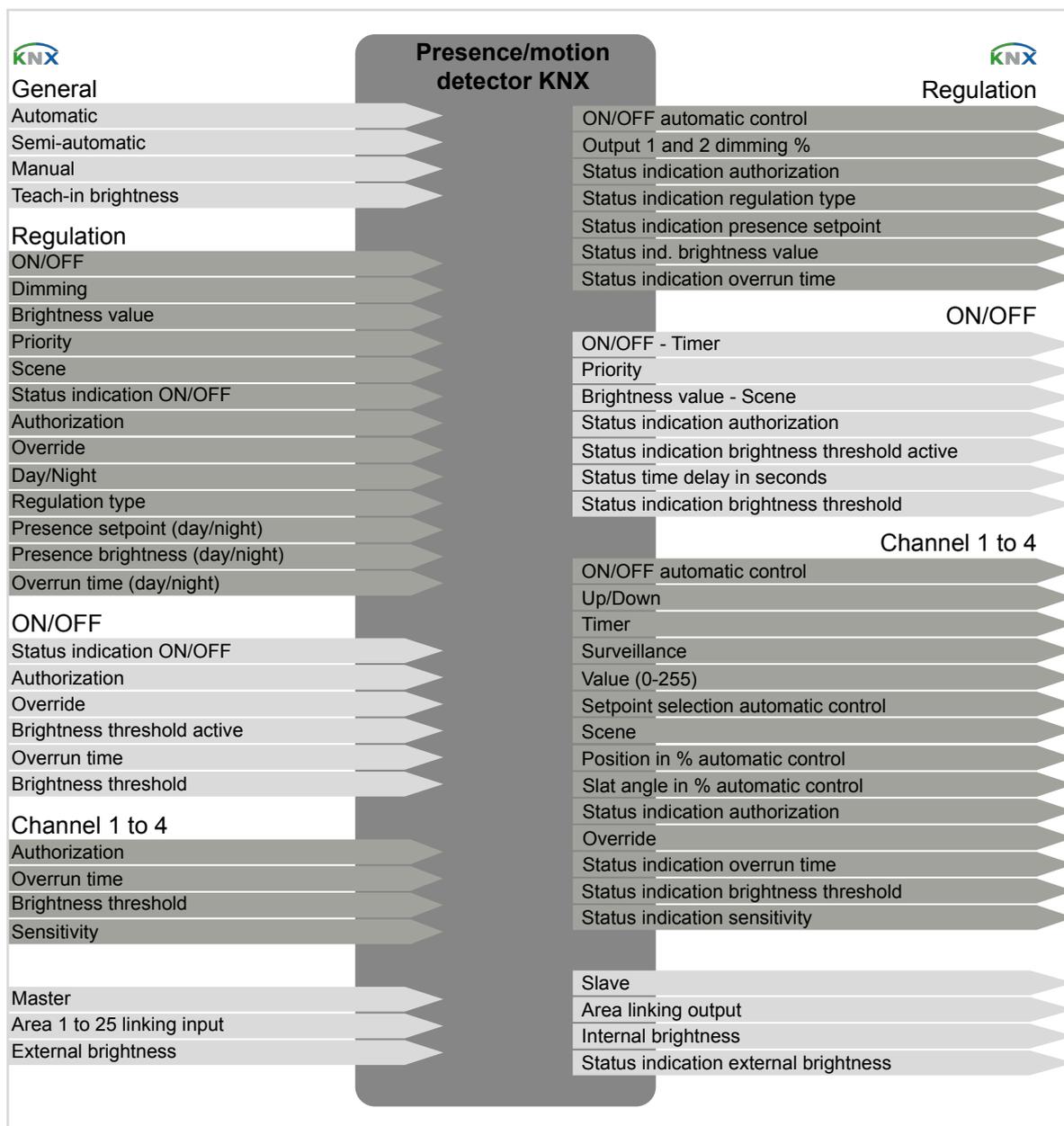
2.5   Communication objects

Figure 2:   Input/output presence/motion detector

3. Parameter

3.1 General

Figure 3: "General" parameters

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

– Detector type: This function extends the detection zone of the presence detector by combining it with one or more other detectors. The ETS parameter is used to select the desired functionality.
  − Master detector: When the master detector receives an **On** object on the **Master** object of one of the slave detectors, it will switch on the light or the regulation according to the brightness. This also operates for the surveillance channels.
  − Slave detector: A Slave detector informs the Master detector of the presence or absence of people in the room. It does not take into account the brightness.
– 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.

Parameters	Description	Value
Detector type	Indicates whether the detector acts as a master or as a slave detector (displayed to the user)	**Master** * Slave
Lighting channel	Indicates whether the detector uses the main application for light regulation or for light On/Off operation: - Regulation: the detector uses the „Light Regulation" KNX channel - On/Off: the detector uses the „Generic Lighting" channel (displayed to the user)	**Regulation*** On/Off

Table 4: "General" Detector type

Communication objects:

No.	Name	Object function	Length	Data type
90	Master	Master	1 bit	1.001 switch
91	Slave	Slave	1 bit	1.001 switch

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* Default value

– Area Linking: The feature is used to control other distant detectors. It is used only by the "Light Regulation" or by the "Generic Lighting" KNX channel and not by the "Generic Motion Detector" KNX channel. In slave mode, the Area linking function is not available.

Parameters	Description	Value
Area linking	Indicates whether the detector uses the area linking feature or not.	**No*** Yes
Number of areas[1]	0: indicates that the area linking feature is not used 1…25: indicates that the area linking feature is used and the indicates the number of areas	**1***… 25

Table 5: "General" Area linking

[1] Only visible if "Area linking" is ticked.

Communication objects:

No.	Name	Object function	Length	Data type
90	Area linking	Area linking output	1 bit	1.001 switch
93 ... 117	Area linking	Area 1 linking input ... Area 25 linking input	1 bit	1.001 switch

The value sent on the „Area Linking" output object is the result (presence/absence) of the „Light Regulation" or by the „Generic Lighting" KNX channel operation.

The value sent on the „Area linking output" object is not related with the actual value of the output level. If the Presence level is equal to 0% and if a presence is detected, the detector sends the value "**ON**" on the „Area linking output" object but nothing visually happens on the dimming output and ON/OFF output (because of the 0% output level)
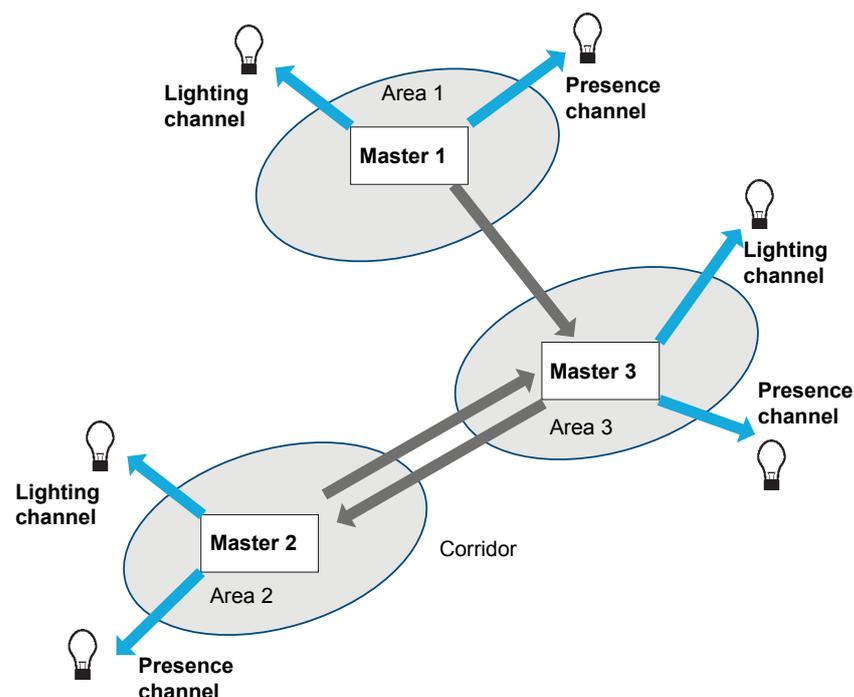
Example:

Figure 4: Area linking example

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* Default value

Master 2:
- − Output of Presence channel of Master 2 is ON if a presence is detected by Master 2
- − Output of Presence channel of Master 2 is OFF if a no presence is detected by Master 2
- − Output of Lighting channel of Master 2 is ON if output of Lighting channel of Master 3 is ON or if a presence is detected by Master 2
- − Output of Lighting channel of Master 2 is OFF if output of Lighting channel of Master 3 is OFF and if there is no presence detected by Master 2 (or presence detected but current brightness is above the setpoint)

Master 3:
- − Output of Presence channel of Master 3 is ON if a presence is detected by Master 3
- − Output of Presence channel of Master 3 is OFF if a no presence is detected by Master 3
- − Output of Lighting channel of Master 3 is ON if output of Lighting channel of Master 1 or 2 is ON or if a presence is detected by Master 3
- − Output of Lighting channel of Master 3 is OFF if output of Lighting channel of Master 1 and 2 are OFF and if there is no presence detected by Master 3 (or presence detected but current brightness is above the setpoint)

Master 1:
- − Output of Presence channel of Master 1 is ON if a presence is detected by Master 1
- − Output of Presence channel of Master 3 is OFF if a no presence is detected by Master

- – Presence channels: The detector has 4 presence channels which are solely controlled according to presence (brightness is not taken into account).

Parameters	Description	Value
Channel 1 … Channel 4	Used to define if the different channels are used or not.	**No*** Yes

Table 6: "General" Channel

- – Setup IR 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 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.

Parameters	Description	Value
Setup IR remote control	The commissioning remote control EE807 can be activated or deactivated.	No **Yes***
ETS settings overwrite IR remote control data[1]	In the case, the IR Remote Controller is used, indicates if the parameters modified by the IR Remote Controller shall be overwritten by the same ETS parameters after a download.	No **Yes***

Table 7: "General" IR remote control

[1] *Only visible if " Setup IR remote control " is ticked.*

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* Default value

3.2 Regulation

The detector implements 3 functional modes:
  − mode 1: regulation active according remote setpoint (auto mode),
  − mode 2: regulation active according to local setpoint,
  − mode 3: regulation inactive.

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

 − Mode 1: regulation active according remote setpoint (auto mode) - Lighting regulation in offices

The installer sets predefined brightness levels (lux) according to standards (for example 500 lux) and the customer can change the brightness level via a KNX button or with the IR remote control (EE808). The detector regulates the Dimming output % to match the presence and absence setpoint.
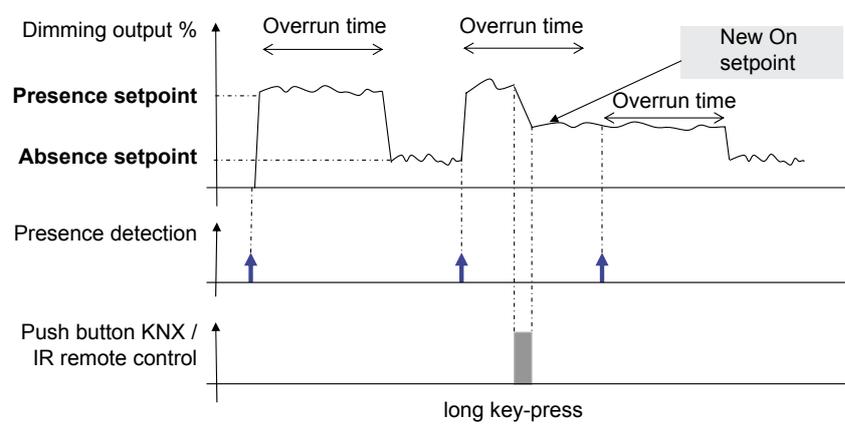
Figure 5: Regulation description: mode 1

 − Mode 2: regulation active according to local setpoint - Lighting regulation in open plan offices

 The installer sets predefined lux levels according to standards (for example 500 lux) ; the customer can temporarily change the output level (in %) via a KNX button or with the IR remote control (EE808). The detector switches back to the installer setting after absence. .
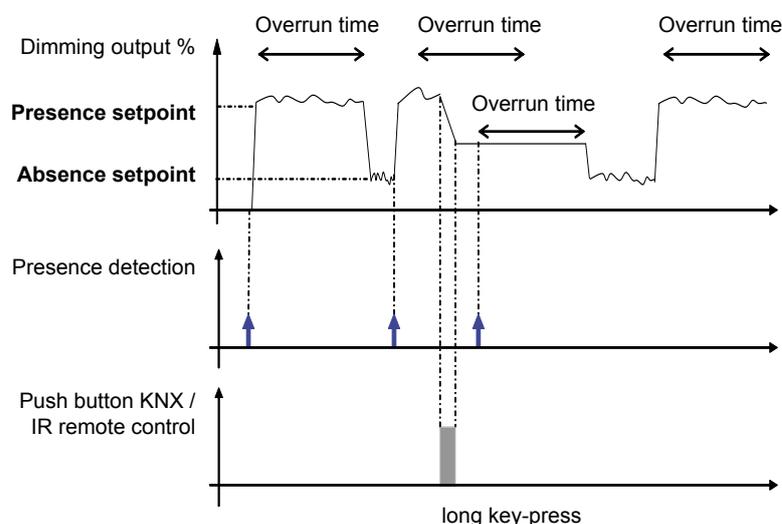
Figure 6: Regulation description: mode 2

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*   Default value

–   Mode 3: regulation inactiveInstallation of detectors in circulation areas

The idea is to set full light (100 % diminig output) in case of presence, a lower value (e.g. 33 % dimming output) in case of absence and to cut-off after a long absence. The customer can modify the ON level (in %) using a KNX button or with the IR remote control (EE808). The **OFF level** is maintained during the **OFF level overrun time** (T OFF) . It is completely cut OFF after this overrun time.
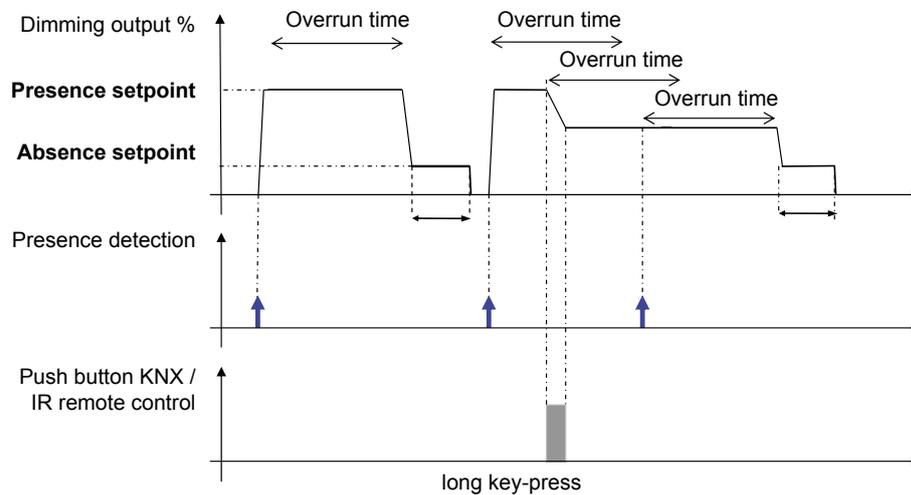
Figure 7: Regulation description: mode 3

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*   Default value

3.2.1 General

Figure 8: "Regulation" General parameters

The regulation type can be defined using the remote control or via ETS commissioning.

Regulation can be active (regulation of the dimming levels of the outputs according to the brightness) or inactive (fixed dimming levels). Regulation can be linked to the ON/OFF object. This allows the product to be switched over to permanent regulation when the ON object is received. The product remains in permanent regulation until the OFF object is received.

Regulation active:

The regulation is active in automatic mode after detection. The **Output 1 dimming %, Output 2 dimming %** and **On / Off output** are controlled during the time delay (set by the potentiometer or via an ETS parameter). The regulation setpoint during occupation is defined by the ON ETS setpoint parameter. At the end of this time delay, the output uses the OFF setpoint (defined via ETS) to regulate the lighting.

The ON setpoint can be modified using a KNX pushbutton (Dimming object) or with the EE808 infrared remote control (press the ON button to increase and OFF to decrease).

The ON/OFF object is used to activate the detector when the detector is authorised. When it receives a 1, the detector regulates around the ON setpoint and launches the lighting timer (overrun time) whereas with a 0 the OFF setpoint will be applied. This command is ignored when a priority is running (Priority setpoint) or if an authorisation is OFF.

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*   Default value

When the detector is activated (authorisation on ON) the Remote control object is used to toggle the detector output status (see override operation parameter for details regarding this mode), the output switches to the ON setpoint when the light is OFF and switches to OFF (0) when the light is already on. During an unauthorised period (when authorisation is OFF), the remote control is used to reverse the status of the output. When switched to 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 setpoint 200 lux). This command is ignored when a priority is running (Priority setpoint) or if an authorisation is OFF.

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

The Info ON/OFF object informs the detector of the controlled remote loading status. If the status is OFF, it switches off detection for a short time (less than 1 s). This avoids incorrect detection (which may be a side-effect of switching off the light) while switching to OFF

Regulation inactive:

In this mode, the light regulation is inhibited. During presence detection, the detector controls its output on a predefined level (ON% level, 100%, by default), which can be modified by a KNX pushbutton or the EE808 IR remote control.

The % dimming output 1, % dimming output 2 and On / Off output are controlled during the time delay (set by the potentiometer or via an ETS parameter). After the time delay, the outputs are maintained at a minimum level (OFF level) for a defined period (15 min when it is defined locally or x min according to the OFF level time delay parameter).

The ON level (%) can be changed via a KNX pushbutton (Dimming object) or with the EE808 infrared remote control.

The ON/OFF object is used to activate the detector when the detector is authorised. When it receives a 1, the detector regulates around the ON setpoint and launches the lighting timer (overrun time) whereas with a 0 the OFF setpoint will be applied. This command is ignored when a priority is running (Priority setpoint) or if an authorisation is OFF.

When the detector is activated (the authorisation os on Used), the Remote control object is used to toggle the detector output (see Overriding the operating parameters for details regarding this mode).

The output switches to (2) % Level when the light is ON and switches to (0) OFF when the light is already ON. During an unauthorised period (when authorisation is OFF), the remote control is used to reverse the status of the output. When switched to 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%). This control is ignored when a priority is running (Priority setpoint) and if the authorisation is OFF.

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

The Info ON/OFF object informs the detector of the controlled remote loading status. If the status is OFF, it switches off detection for a short time (less than 1 s). This avoids incorrect detection (which may be a side-effect of switching off the light) while switching to OFF.

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*　Default value

Potentiometer Setting Regulation Function:

Three modes are available:
- − mode 1: regulation active according remote setpoint (auto mode),
- − mode 2: regulation active according to local setpoint,
- − 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 1, % dimming output 2 and On / Off output are controlled during the time delay (set by the potentiometer or via an ETS parameter). The regulation set-point during occupation is defined locally by the Lux potentiometer. At the end of this time delay, the output uses the OFF setpoint (defined via ETS) to regulate the lighing during absence.

The ON setpoint can only be changed locally with the potentiometer.

A KNX pushbutton can be used to temporarily modify the 2 % dimming outputs 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 2000lux setpoint).

The KNX priority setpoint is used when the Priority object is activated (For example: Priority setpoint 1000 lux).

Parameters	Description	Value
Regulation type at startup	This parameter indicates the type of regulation at startup. - the regulation is inactive: the % output is set to a fixed % level according to the Lux levels parameters. - the regulation is active: the % output is set and dynamically adjusted according to Lux setpoints parameters.	Inactive, **Active***
Regulation type configurable via object	Indicates whether the regulation type configurable via object is used or not.	**No*** Yes
Regulation type polarity[1]	Indicates the polarity of the regulation type object	**0 = inactive, 1 = active*** 0 = active, 1= inactive

Table 8: "Regulation" Regulation type

[1] *Only visible if "Regulation type configurable via object" is ticked.*

ℹ️ The active regulation uses the setpoints. The inactive regulation uses the levels.

Communication objects:

No.	Name	Object function	Length	Data type
18	Regulation	Regulation type	1 bit	1.001 switch

Parameters	Description	Value
Presence setpoint	This parameter indicates how the brightness threshold is set. - the presence setpoint is set only with the Lux potentiometer - the presence setpoint is set to a fixed value and cannot be changed via the Lux potentiometer or the object - the presence setpoint is set only with the object	**Potentiometer settings*,** Fixed parameter[1] Control via object
Regulation type configurable via object	Indicates whether the regulation type configurable via object is used or not.	**No*** Yes
Regulation type polarity[1]	Indicates the polarity of the regulation type object	**0 = inactive, 1 = active*** 0 = active, 1= inactive

Table 9: "Regulation" Presence setpoint

*   Default value

¹ The "Presence setpoint" parameter can be set in the "Regulation" tab or in the "Day" and "Night" tabs in case Day/Night mode is set.

ℹ️ This parameter indicates how the presence setpoint is modified. In all case, the IR remote controller can modify the setpoint (if enabled).

Communication objects:

No.	Name	Object function	Length	Data type
20	Regulation	Presence setpoint	2 bytes	9.004 lux (Lux)
21	Regulation	Presence brightness value	1 byte	5.001 percentage (0..100%)

The overrun time is activated during the switch from Absence (no movement) to Presence (movement) on the regulation channel (see the 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 overrun time can be set by the ETS or via the setting potentiometer on the device or with the installer remote control EE807.

Parameters	Description	Value
Selection overrun time	This parameter indicates how the overrun time is set. The overrun time is the duration between the last presence detection and the pre-warning or absence event. - the overrun time is set only with the Time potentiometer - the overrun time is set to a fixed value and cannot be changed via the Time potentiometer or the object - the overrun time is set only with the object	**Potentiometer settings*,** Fixed parameter Control via object
Overrun time ¹⁾	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 (Overrun time restarts).	00h00m05s to 08h00m00s **(00h15m00s*)**
Overrun time day ¹⁾²⁾	Same functionality as the **overrun time** parameter, but only in day mode	00h00m05s to 08h00m00s **(00h15m00s*)**
Overrun time night ¹⁾²⁾	Same functionality as the **overrun time** parameter, but only in night mode	00h00m05s to 08h00m00s **(00h15m00s*)**

Table 10: "Regulation" Overrun time

¹ Only visible if "Selection overrun time" has been parameterised as the "Control via object".

² Only visible if "Day/Night mode" is ticked

ℹ️ This parameter indicates how the presence duration is modified. In all case, the IR remote controller can modify the duration (if enabled).

Communication objects:

No.	Name	Object function	Length	Data type
22	Regulation	Overrun time	2 bytes	7.005 time (s)
		Overrun time day	2 bytes	7.005 time (s)
25	Regulation	Overrun time night	2 bytes	7.005 time (s)

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* Default value

Parameters	Description	Value
Day/Night mode	Indicates whether the day/night mode is used or not. - the object to switch between the day and night is not available and there is a unique set of Lux setpoints	**No***
	- the object to switch between the day and night is available and there is a set of Lux setpoint for the day mode and a set of Lux setpoints for the night mode	Yes
Day/Night Polarity [1]	Indicates the polarity of the day/night object to switch between the day and night	**0=Day 1=Night*** 0=Night 1=Day

Table 11: "Regulation" Day/Night mode

[1] Only visible if " Day/Night mode " is ticked

Communication objects:

No.	Name	Object function	Length	Data type
17	Regulation	Day/Night	1 bit	1.024 day/night

The detector can control a second zone for which the brightness is defined using the difference between zone 1 and zone 2 parameter which is linked to the brightness measured in zone 1. This ratio can be defined between -50% and +50%.

However, when zone 1 is at 100% e.g. because it is night, the second zone is also at 100% whatever the defined ratio may be.

Parameters	Description	Value
Second output	Indicates whether the second output is used or not.	**No*** Yes
Difference between brightness zone 1 and zone 2 [1]	Indicates the % difference between the additional zone 2 and zone 1	Zone2 = zone1 - 50% Zone2 = zone1 - 45% … **Zone2 = zone1*** … Zone2 = zone1 + 45% Zone2 = zone1+ 50%

Table 12: "Regulation" Second output

[1] Only visible if " Second output " is ticked

Method of determining the Zone 1 / zone 2 brightness difference ratio

In full daylight, with artificial light off and the shutter open, measure the natural brightness in the two zones using a luxmeter. Carry out the following operation: (Brightness zone 2 / brightness zone 1) – 1.

Communication objects:

No.	Name	Object function	Length	Data type
12	Regulation	Output 1 dimming %	1 byte	5.001 percentage (0..100%)
15	Regulation	Output 2 dimming %	1 byte	5.001 percentage (0..100%)

---

* Default value

Parameters	Description	Value
Scenes	Indicates whether the scene is used or not.	**No*** Yes
Scenes memorization by long key press [1]	This parameter authorizes or forbids scene the scene memorisation after a long key press.	**No*** Yes

Table 13: "Regulation" Scenes

[1] Only visible if "Scenes" is ticked

Communication objects:

No.	Name	Object function	Length	Data type
9	Regulation	Scene	1 byte	18.001 scene control

The detector saves the current brightness level in the scene X by long press of the dedicated push button when „Scene memorization by long key press" parameter is enabled.

This parameter is used to determine if the presence setpoint/level modified by the dimming control object is temporary or permanent.

Parameters	Description	Value
Brightness value modification/Presence setpoint	Indicates whether the setpoint modification is temporary or permanent. - the modified setpoint is used as long as the operating mode of the detector does not change - the modified setpoint is saved and replaces the old value.	**Temporary*** Permanent

Table 14: "Regulation" Brightness value

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

Parameters	Description	Value
Authorization	Indicates whether the authorization is used or not. - the authorization feature is not available and the Authorization object is not available - the authorization feature is available and the Authorization object is available	**No*** Yes
Authorization polarity [1]	Indicates the polarity of the authorization object	**0 = authorization OFF, 1= authorization ON*** 0 = authorization ON, 1= authorization OFF
State after ETS download [1]	When the authorization feature is available, indicates the state of the Authorization after the ETS download. - the detector is not authorized after an ETS download - the detector is authorized after an ETS download	 Authorization OFF **Authorization ON***

Table 15: "Regulation" Authorization

[1] Only visible if "Authorization " is ticked

The status after download for the authorization can be defined by the aid of a parameter.

When the detector is only activated when authorization is at ON, during the OFF period the lighting circuit (local and remote) is controlled via a remote control (KNX button or IR remote control).

---

* Default value

Communication objects:

No.	Name	Object function	Length	Data type
13	Regulation	Authorization	1 bit	1.003 enable
14	Regulation	Status indication authorization	1 bit	1.003 enable

The Emission after initialization parameter defines whether the presence detector sends the current status (depending on the defined function ON/OFF, the scene number or the brightness) via the Regulation Channel after power is restored. Sending the status can e. g. be helpful when synchronizing a visualization.

Parameters	Description	Value
Emission after initialization	Indicates whether the values are sent on the output objects at startup of the detector.	Inactive **Active***

<p align="center">Table 16: "Regulation" Emission after initialization</p>

The input status after start-up can be defined via a parameter, the start-up status can be defined as ON or OFF after bus return.

This behavior can be set via ETS parameters or by the aid of the installer remote control EE807.

Parameters	Description	Value
State at bus return	Indicates the initial Presence/Absence state which shall be used at startup of the detector.	**Absence*** Presence

<p align="center">Table 17: "Regulation" State at bus return</p>

In the case of Presence channels (1…4), only presence detection is taken into account. The ambient brightness has no influence.

The detector has 3 operating modes (automatic, semi-automatic and manual) which determine the operating conditions of the regulation.

For further information, see: 3.2.2 Regulation - Regulation Day - Regulation Night

Parameters	Description	Value
Operating mode by object	Allows you to select the operating mode using the dedicated KNX objects.	**No*** Yes

<p align="center">Table 18: "Regulation" Operating mode by object</p>

Communication objects:

No.	Name	Object function	Length	Data type
1	General	Automatic	1 bit	1.017 trigger
2	General	Semi-automatic	1 bit	1.017 trigger
3	General	Manual	1 bit	1.017 trigger

Parameters	Description	Value
Type of electrical light	Indicates the type of load equipment used to control the light in the room. load equipment is of type CFL load equipment is of type LED	CFL **LED***

<p align="center">Table 19: "Regulation" Type of electrical light</p>

---

* Default value

– Levels of reflection of natural and artificial light

Brightness measurement by the detector may be influenced by its environment. To compensate for this, it is possible to adjust this measurement according to two modes which can be selected via the **Reflection coefficients** parameter:

- Simplified: the detector offers two possibilities: **Direct lighting** and **Indirect lighting**. The light reflection levels are set to pre-defined value,
- Expert: the levels of reflection of natural light and artificial light must be adjusted manually.

Parameters	Description	Value
Reflection coefficients	Used to selects the method for setting the light reflection level.	**Simplified*** Expert
Lighting method [1]	Used to selects the method for setting the light reflection level.	**Direct lighting *** Indirect lighting
Natural light reflection coefficient [2]	Defines the level of reflection of natural light.	1…**23***…60
Artificial light reflection coefficient [2]	Defines the level of reflection of artificial light.	1…**45***…60

Table 20: "Regulation" Reflection coefficients

[1] Only visible if " Reflection coefficients " has been parameterised as the " Simplified".

[2] Only visible if " Reflection coefficients " has been parameterised as the " Expert".

– Method for determining the level of reflection of natural light

In full daylight, with the artificial light off.

Using a luxmeter, measure the brightness in zone 1 on the surface under the detector. Then measure the brightness at the ceiling, next to the detector.

Level of reflection of natural light = Surface brightness / Ceiling brightness

– Method of determining the level of reflection of artificial light

With the shutters closed or at night, with the artificial light at 100%.

Using a luxmeter, measure the brightness in zone 1 on the surface under the detector. Then measure the brightness at the ceiling, next to the detector.

Level of reflection of natural light = Surface brightness / Ceiling brightness

When you enter these coefficients, you must multiply the result by 10 and enter the integer value. For example: if the result is 1.5, you must enter the value 15 as the coefficient.

---

* Default value

3.2.2 Regulation - Regulation Day - Regulation Night

The following parameter description is applicable to the regulation, day regulation and night regulation depending on the operating mode.

General		Operating mode	Automatic ▼
General		**Setpoints**	
Regulation		Absence setpoint	OFF ▼
General		Priority setpoint	800 lux ▼
Regulation		**Brightness values**	
+ Luminosity		Brightness value presence	100 %
+ Information		Brightness value absence	0 %
		Brightness value priority	100 %
		Cut-OFF pre-warning	✔
		Duration	01:00 mm:ss

Figure 9: "Regulation" Regulation parameters

The detector can operate in one of the three following sub-modes which specifies how the regulation is started and stopped:

–   Active regulation mode

In **Automatic** Mode, the regulation to the presence Lux setpoint is started with a presence detection event or with a user's command (e.g. KNX push button, IR remote control). The regulation is stopped automatically when no more presence is detected and the overrun time has expired.

In **Semi-automatic** Mode, the regulation to the presence Lux setpoint is not started with a presence detection event but only with a user's command (e.g. KNX push button, IR remote control). The regulation is stopped automatically when no more presence is detected and the overrun time has expired.

In **Manual** Mode, the regulation to the presence Lux setpoint is not started with a presence detection event but only with a user's command (e.g. KNX push button, IR remote control). The regulation is stopped only with a user's command (the overrun time is not used). There is no pre-warning when the „Manual" mode is used

–   Not active regulation mode

In **Automatic** Mode, the output is set to the presence level with a presence detection event. The output is set to the absence level automatically when no more presence is detected and the overrun time has expired.

In **Semi-automatic** Mode, the output is set to the presence level only with a user's command (e.g. KNX push button, IR remote control). The output is set to absence level automatically when no more presence is detected and the overrun time has expired.

---

*   Default value

In **Manual** Mode, the output is set to the presence level only with a user's command (e.g. KNX push button, IR remote control). The output is set to the absence 0% only with a user's command (the overrun time is not used). There is no pre-warning when the „Manual" mode is used

Parameters	Description	Value
Operation mode	This parameter specifies whether the start of the overrun time (start of the regulation) is performed as follows: - start only by presence detection event. - start by the user event - start and stop by user event	**Automatic*** Semi-automatic Manual

Table 21: "Regulation" Operation modes

Parameters	Description	Value
Presence setpoint [1]	This parameter holds the Presence Setpoint in Lux.	OFF…**500***…2000 lux
Absence setpoint	This parameter holds the Absence Setpoint in Lux.	**OFF***…500…2000 lux
Priority setpoint	This parameter holds the Priority Presence Setpoint in Lux when the priority command is triggered.	OFF…**800***…2000 lux

Table 22: "Regulation" setpoint

[1] Only visible if "Presence setpoint" in the "General" tab has been parameterised as the "Control via object" or "Fixed parameter"

🛈 The setpoints are used during an active regulation

Parameters	Description	Value
Brightness value presence	This parameter holds the Presence Brightness in %	0…**100*** %
Brightness value absence	This parameter holds the Absence Brightness in %	**0***…100 %
Brightness value priority	This parameter holds the Priority Presence Brightness in % when the priority command is triggered.	0…**100*** %

Table 23: "Regulation" Brightness value

🛈 The setpoints are used during an active regulation

Parameters	Description	Value
Cut-OFF pre-warning	This parameter specifies whether pre-warning is used or not.	**Yes*** No:
Duration	When the pre-warning is used, the user can select the duration of the pre-warning.	00.01...**01.00***...30.00 mm:ss

Table 24: "Regulation" Cut-OFF pre-warning

The pre-warning is proposed to the user only when the regulation is in „Automatic" and „Semiautomatic". There is no pre-warning when the „Manual" mode is used.

---

* Default value

3.2.3 Scenes

The detector has 32 configurable scenes which contain a regulation setting.

Figure 10: "Regulation" Scenes

The detector starts the overrun time and controls the output according to the value of the scene X .Each presence detection event restarts the timeout.

At the end of the timeout, the detector controls the output according to the absence setpoint.

Parameters	Description	Value
Number of scenes used	This parameter indicates whether the number of scenes is used	0…**8***…32
Scene 1 … Scene 32	Indicates whether the relevant scene (scene 1 to scene 32) is active.	Yes **No***
Setpoint	This parameter indicates the scene setpoint in lux.	**50***…2000 lux (scene 1)
Brightness value	This parameter indicates the scene brightness value in %	**0***…100 % (scene 1)

Table 25: "Regulation" Scenes

Communication objects:

No.	Name	Object function	Length	Data type
9	Regulation	Scene	1 byte	18.001 scene control

---

* Default value

3.3 On/Off

3.3.1 General
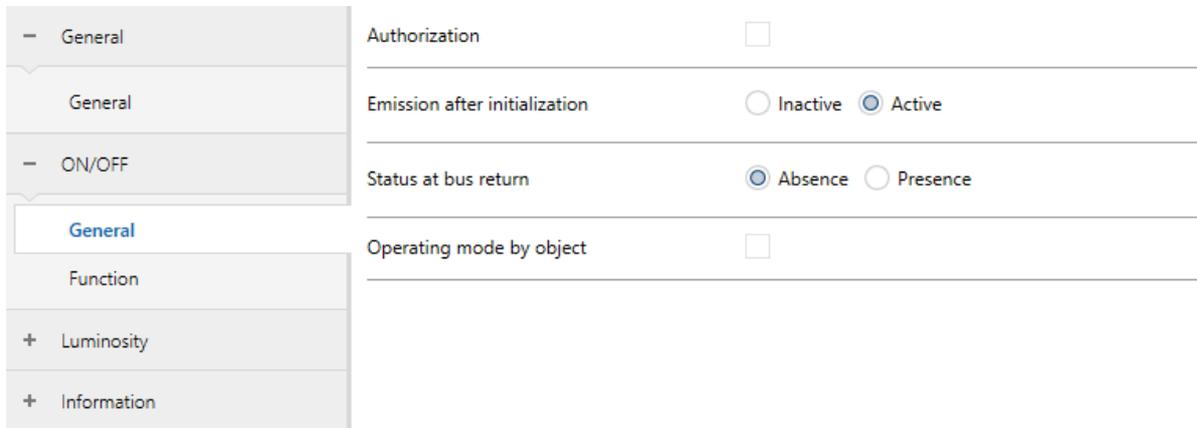
Figure 11: "ON/OFF" General parameters

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

Parameters	Description	Value
Authorization	Indicates whether the authorization is used or not. - the authorization feature is not available and the Authorization object is not available - the authorization feature is available and the Authorization object is available	**No*** Yes
Authorization polarity [1]	Indicates the polarity of the authorization object	**0 = authorization OFF, 1= authorization ON*** 0 = authorization ON, 0= authorization OFF
State after ETS download [1]	When the authorization feature is available, indicates the state of the Authorization after the ETS download. - the detector is not authorized after an ETS download - the detector is authorized after an ETS download	Authorization OFF **Authorization ON***

Table 26: "ON/OFF" Authorization

[1] Only visible if "Authorization" is ticked.

The Emission after initialization parameter defines whether the presence detector sends the current status (depending on the defined function ON/OFF, the scene number or the brightness) via the Regulation Channel after power is restored. Sending the status can e. g. be helpful when synchronizing a visualization.

Parameters	Description	Value
Emission after initialization	Indicates whether the values are sent on the output objects at startup of the detector.	Not active **Active***

Table 27: "ON/OFF" Emission after initialization

The input status after start-up can be defined via a parameter, the start-up status can be defined as **Absence** and **Presence** after bus return.

This behavior can be set via ETS parameters or by the aid of the installer remote control EE807.

---

* Default value

Parameters	Description	Value
State at bus return	Indicates the initial Presence/Absence state which shall be used at startup of the detector.	**Absence*** Presence

Table 28: "ON/OFF" State at bus return

In the case of Presence channels (1…4), only presence detection is taken into account. The ambient brightness has no influence.

The detector has 2 operating modes (automatic, semi-automatic) which determine the operating conditions of the switch (ON/OFF).

Parameters	Description	Value
Operating mode by object	Allows you to select the operating mode using the dedicated KNX objects.	**No*** Yes

Table 29: "ON/OFF" Operating mode by object

Communication objects:

No.	Name	Object function	Length	Data type
1	General	Automatic	1 bit	1.017 trigger
2	General	Semi-automatic	1 bit	1.017 trigger

3.3.2 Function

Figure 12: "ON/OFF" Function

In the „ON/OFF" mode, the detector is configured mainly by the „Function" selected by the user.

Parameters	Description	Value
Function	The available functions are the following:	**Switch*** Timer Priority Brighness level Brighness level presence/absence Scene Scene presence/absence

Table 30: "ON/OFF" Function

---

*   Default value

According to the selected function, the detector transmits one or two events:

– one value for the presence detection event

– one for the absence detection event

Parameters	Description	Value
Selection overrun time	This parameter indicates how the overrun time is set. The overrun time is the duration between the last presence detection and the transmission of the event. - the overrun time is set only with the Time potentiometer. - the overrun time is set to a fixed value and cannot be changed via the Time potentiometer or the object. - the overrun time is set only with the object	**Potentiometer settings*,** Fixed parameter Control via object
Overrun time [1]	Field for selecting the length of the delay time	00h00m05s to 08h00m00s **(00h15m00s*)**

Table 31: "ON/OFF" Overrun time

[1] Only visible if "Selection overrun time" has been parameterised as the "Fixed parameter"

Parameters	Description	Value
Brightness threshold via	This parameter indicates whether the brightness threshold is used or not and if used how the value is set. The brightness threshold is used to check if the events are sent (if actual brightness is below the threshold) or not (if actual brightness is above the threshold) when a presence is detected (can be activated/deactivated with the IR remote controller) - the brightness threshold is not used. The events are always sent when a presence is detected (cannot be activated/deactivated with the IR remote controller) - the brightness threshold is set only with the Lux potentiometer - the brightness threshold is set to a fixed value and cannot be changed via the Lux potentiometer or the object - the brightness threshold is set only with the object	**Brightness measurement inactive*** Potentiometer settings Fixed parameter Control via object
Brightness threshold [1]	This parameter indicates the brightness threshold in lux when it is set to a fixed value.	OFF…**500***…2000 lux

Table 32: "ON/OFF" Brightness threshold

[1] Only visible if "Brightness threshold via" has been parameterised as the "Fixed parameter"

The detector can operate in one of two sub-modes that specify how events are triggered:

In **Automatic** Mode, the presence event is triggered by the first presence detection. It is only transmitted when the first presence detection is triggered in the detector.

If the current ambient brightness is below the "brightness threshold" setting, the detector transmits the presence event. Each presence detection restarts the overrun time. When the overrun time has expired, the detector transmits the absence event.

If the current ambient brightness is higher than the "brightness threshold" setting, the detector does not transmit the presence event and does not start the overrun time.

In **Semi-automatic** Mode, the presence event is triggered by a user action (IR remote control). It is only transmitted by a user action, taking into account the ambient brightness. After the presence event has been transmitted, presence detections are taken into account to extend the overrun time.

---

* Default value

If the current ambient brightness is below the "brightness threshold" setting, the detector transmits the presence event. When the overrun time has expired, the detector transmits the absence event.

If the current ambient brightness is higher than the "brightness threshold" setting, the detector does not transmit the presence event and does not start the lighting delay.

Parameters	Description	Value
Operation mode	This parameter specifies whether the presence event is performed as follows: - start only by presence detection event. - start by the user event	**Automatic*** Semi-automatic

Table 33: "ON/OFF" Operation mode

– **ON/OFF function**

The ON / OFF function sends the **ON / OFF** object.

The status of the controlled output is received on the **Status indication ON/OFF** object which can condition the initial control.

Parameters	Description	Value
Function presence/ absence	This parameter defines the control sent after presence is detected and possibly the control sent at the end of the overrun time.	**ON/- *** OFF/- -/ON -/OFF ON/OFF OFF/ON

Table 34: "ON/OFF" ON/OFF Function

– **Timer**

The Timer function sends the **Timer** object. It allows to send a "Start" command to a remote KNX device for a specified time. The "Stop" value is never transmitted.

Each time a presence is detected, the "Start" command is only re-transmitted if the delay, defined by the " No retransmission within " parameter, has expired since the last detection. This prevents too many transmissions of the "Start" command.

Parameters	Description	Value
No retransmission within	This parameter indicates the delay in seconds between two „start" transmissions.	1…**15***…30 Seconds

Table 35: "ON/OFF" Timer

– **Priority**

The Priority function sends priority-start or priority-stop controls.

The Priority action depends on the type of application controlled: lighting, blinds, heating, etc.

The Priority function emits the **Priority** object.

The status of the controlled output is received on the **Status indication ON/OFF** object.

Parameters	Description	Value
Priority	This parameter selects a priority type. The action depends on the type of application.	**Priority ON/down/ comfort *** Priority OFF/up/night protection

Table 36: "ON/OFF" Priority

---

*   Default value

– **Brighness value - Brighness value presence/absence**

These functions enable commands to be sent to dim the lighting on 1 or 2 levels: a value after presence is detected and possibly another value at the end of the presence overrun time. These functions send the **Brightness value** object..

Parameters	Description	Value
Presence brightness value	This parameter defines the absolute dimming level of the output sent after a presence is detected.	0…**100*** %
Absence brightness value [1]	This parameter defines the absolute dimming level of the output sent after a presence is detected.	**0***…100 %

Table 37: "ON/OFF" Brighness value

[1] Only visible if "Function" has been parameterised as the "Brighness value presence/absence".

– **Scene - Scene presence/absence**

The Scene function is used to send group controls to different types of outputs to create ambiences or scenarios (leave scenario, reading ambience, etc.). These functions send the **Scene** object.

Please note, the product can only activate a scene. To record a scene another input must be used (which you can remove after recording).

Parameters	Description	Value
Scene number presence	Defines the number of the scene sent after a presence is detected.	**Scene1***… Scene32
Scene number absence [1]	Defines the number of the scene sent at the end of the overrun time	Scene1 …**Scene2***… Scene32

Table 38: "ON/OFF" Scene

[1] Only visible if "Function" has been parameterised as the "Scene presence/absence".

---

* Default value

3.4   Channel 1 to 4

The information below describes the process of configuring a motion detection channel.

Figure 13: "Channel 1…4" Function

The description uses the example of channel 1; the other channels are configured in the same way. When motion is detected, the presence command is transmitted to the bus. When motion is no longer detected, the absence command is transmitted to the bus following the switch-off delay (if this has been parameterized). The function parameter (telegram at the start or end of detection) can be used to make individual selections concerning which commands or values are transmitted to the bus in the event of presence and absence.

If motion is detected and the response brightness value is below the set value, the „Telegram for start of presence detection" is transmitted to the bus. When motion is no longer detected, the „Telegram for end of presence detection" is transmitted to the bus following the switch-off delay. The type of command and the values for the start and end of detection can be selected independently for each motion detection channel using the parameters for the selected function.

3.4.1 Recurring function parameters (presence channel)

ℹ️ The parameters described below are visible in all motion detection channels, regardless of which function is selected. The specific parameters for each function are described in dedicated chapters.

Parameters	Description	Value
Function	Activation/deactivation of the channel for automatic control mode, plus function setting.	Not active **On/Off*** Value 1 byte Shutter Up/down Mode selection Timer Scene Shutter position Slat position Shutter/Slat position Surveillance

Table 39: "Channel 1…4" Function

Brightness threshold

To evaluate the brightness threshold, it is possible to choose from the following parameters:

– Set via potentiometer (see also operating instructions): The brightness threshold is specified by setting the potentiometer; i.e. the setting can be changed without ETS.

– Set to a fixed value: The value is set using an input field; the potentiometer setting is not taken into account. Unauthorized persons must not change the setting.

– not used: Motion detection and function execution are independent of brightness.

– Activation via separate object: The brightness threshold value in lux can be specified using the object. It can be made dependent on the time of day or events, for example, as a means of providing intelligent control.

Parameters	Description	Value
Brightness threshold via	Selection of source that is used to determine the brightness threshold for detection. - the brightness threshold is not used. - the brightness threshold is set only with the Lux potentiometer - the brightness threshold is set to a fixed value and cannot be changed via the Lux potentiometer or the object - the brightness threshold is set only with the object	**Inactive*** Potentiometer settings Fixed parameter Control via object
Brightness threshold [1]	This parameter indicates the brightness threshold in lux when it is set to a fixed value.	OFF…**500***…2000 lux

Table 40: "Channel 1…4" Brightness threshold

[1] Only visible if "Brightness threshold via" has been parameterised as the "Fixed parameter"

Communication objects:

No.	Name	Object function	Length	Data type
50, 62, 74, 86	Channel 1…4	Brightness threshold	2 bytes	9.004 lux (Lux)
51, 63, 75, 87	Channel 1…4	Status indication Brightness threshold	2 bytes	9.004 lux (Lux)

---

* Default value

:hager

Parameters	Description	Value
Emission time delay	This parameter indicates the delay before the transmission of the Event.	**0*** … 30 sec.
Selection overrun time	This parameter indicates how the overrun time is set. - the overrun time is set only with the Time potentiometer - the overrun time is set to a fixed value and cannot be changed via the Time potentiometer or the object - the overrun time is set only with the object	Potentiometer settings, **Fixed parameter*** Control via object
Duration [1]	Field for selecting the length of the delay time	00h00m05s to 08h00m00s **(00h15m00s*)**
Extended overrun time	This parameter indicates the additional delay which is added to the „Emission time delay"	**No*** Yes
Overrun time [2]	Field for selecting the length of the Overrun time delay	**00m01s*** ... 15m00s
Lock-up duration after end of detection	Defines the interlock time after a telegram is transmitted at the end of detection.	**No*** Yes
Overrun time [3]	Field for selecting the length of the duration of the lock-up.	**00m01s*** ... 15m00s

Table 41: "Channel 1…4" General parameters

[1] Only visible if " Selection overrun time " has been parameterised as the " Control via object".

[2] Only visible if " Extended overrun time " is ticked

[3] Only visible if " Lock-up duration after end of detection " is ticked.

Communication object:

No.	Name	Object function	Length	Data type
48, 60, 72, 84	Channel 1…4	Overrun time	2 bytes	7.005 time (s)

Parameters	Description	Value
Sensitivity object	Indicates whether the sensitivity configurable via object is used or not.	**No*** Yes
Sensitivity polarity [1]	This parameter indicates the polarity of the sensitivity object	**0=Low sensitivity 1=High sensitivity *** 0=High sensitivity 1=Low sensitivity
Status after ETS download [1]	This parameter indicates the sensibility Low or High after an ETS download	Low **High (1 detection)***
Low sensitivity filter	This parameter indicates the type of sensibility for the presence detection feature. It is valid only when the sensitivity is set to Low.	**3 detections in 10 seconds*** 3 detections in 30 seconds 3 detections in 1 minute 3 detections in 5 minutes"

Table 42: "Channel 1…4" Sensitivity

[1] Only visible if " Extended overrun time " is ticked.

Communication object:

No.	Name	Object function	Length	Data type
52, 64, 76, 88	Channel 1…4	Sensitivity	1 bit	1.001 switch
53, 65, 77, 89	Channel 1…4	Status indication sensitivity	1 bit	1.001 switch

---

* Default value

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

Parameters	Description	Value
Authorization	Indicates whether the authorization is used or not. - the authorization feature is not available and the Authorization object is not available - the authorization feature is available and the Authorization object is available	**No*** Yes
Authorization polarity [1]	Indicates the polarity of the authorization object	**0 = authorization OFF,** **1 = authorization ON*** 0 = authorization ON, 1 = authorization OFF
Status after ETS download [1]	When the authorization feature is available, indicates the state of the Authorization after the ETS download. - the detector is not authorized after an ETS download - the detector is authorized after an ETS download	Authorization OFF **Authorization ON***

Table 43: "Channel 1…4" Authorization

[1] Only visible if "Authorization" is ticked.

Communication object:

No.	Name	Object function	Length	Data type
45, 57, 69, 81	Channel 1…4	Authorization	1 bit	1.003 enable
46, 58, 70, 82	Channel 1…4	Status indication authorization	1 bit	1.003 enable

The Emission after initialization parameter defines whether the presence detector sends the current status (depending on the defined function ON/OFF, the scene number or the brightness) via the Regulation Channel after power is restored. Sending the status can e. g. be helpful when synchronizing a visualization.

Parameters	Description	Value
Emission after initialization	Indicates whether the values are sent on the output objects at startup of the detector.	Not active **Active***

Table 44: "Channel 1…4" Emission after initialization

---

* Default value

3.4.2 "ON/OFF" function (motion detection channel)

Parameter for configuring the behaviour of the „ON/OFF" function in the case of the motion detection channels.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	OFF **ON***
Periodical emission	Defines whether a telegram with the „ON/OFF" function is to be emitted periodically	**No*** Yes
Periodical emission delay [1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a value is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	**OFF*** ON

Table 45: "Channel 1…4" ON/OFF

[1] Only visible if "Periodical emission" is ticked.

Communication object:

No.	Name	Object function	Length	Data type
42, 54, 66, 78	Channel 1…4	ON/OFF automatic control	1 bit	1.001 switch

3.4.3 "Value 1 byte" function (motion detection channel)

Parameter for configuring the „Value 1 byte" function for motion detection channels.

Parameters	Description	Value
Value 1 byte	Selection of value type that is transmitted.	**Value (0-255)*** Percent (0-100%)
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Value(0-255) [1]	Value transmitted in the case of motion detection.	0 ... **255***
Brightness value [2]		0 ... **100 %***
Periodical emission	Defines whether a telegram with the function variable (value, switching value, etc.) is to be emitted periodically	**No*** Yes
Periodical emission delay [3]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a value is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Value(0-255) [4]	Value transmitted in the case of motion detection.	0 ... **255***
Brightness value [5]		0 ... **100 %***

Table 46: "Channel 1…4" Value 1 byte

---

*   Default value

[1] *Only visible if "Telegram at start of presence detection" is ticked and "Value 1 byte" has been parameterised as "Value (0-255)".*

[2] *Only visible if "Telegram at start of presence detection" is ticked and "Value 1 byte" has been parameterised as "Percent (0-100%)".*

[3] *Only visible if "Periodical emission" is ticked.*

[4] *Only visible if "Telegram at end of presence detection" is ticked and "Type of value" has been parameterised as "Value (0-255)".*

[5] *Only visible if "Telegram at end of presence detection" is ticked and "Type of value" has been parameterised as "Percent (0-100 %)".*

Communication objects:

No.	Name	Object function	Length	Data type
43, 55, 67, 79	Channel 1…4	Value (0-255)	1 byte	5.010 counter pulses (0..255)
43, 55, 67, 79	Channel 1…4	Value in %	1 byte	5.001 percentage (0..100%)

3.4.4 "Up/Down" function (motion detection channel)

Parameter for configuring the behaviour of the „Shutter Up/Down" function in the case of the motion detection channels.

Up/down telegrams can be transmitted for blinds/roller shutters in relation to motions that take place. The telegrams for detection/end of detection start the blinds/roller shutters moving up/down; the duration for which they are moved up/down is defined in the actuator.

For most actuators, this duration is set to 2 minutes by default.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	**Up*** Down
Periodical emission	Defines whether a telegram with the "Shutter Up/Down" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a value is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	Up **Down***

Table 47: "Channel 1…4" Up/Down

[1] *Only visible if "Periodical emission" is ticked.*

Communication object:

No.	Name	Object function	Length	Data type
42, 54, 66, 78	Channel 1…4	Up/Down	1 bit	1.008 up/down

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* Default value

3.4.5 "Mode selection" function (motion detection channel)

Parameters for configuring the operating mode change-over functions in the case of the motion detection channels.

The heating operating mode (comfort, night, etc.) can be specified in relation to motions that take place.

ℹ️ Due to the inertia demonstrated by heating systems, we recommend only using this function under certain circumstances.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Current mode	Indicates the value of the event sent on presence detection.	**Auto *** Comfort Standby Night setpoint Frost protection
Periodical emission	Defines whether a telegram with the "Mode selection" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether an current mode is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Current mode	Indicates the value of the event sent on presence detection.	Auto Comfort Standby Night setpoint **Frost protection***

Table 48: "Channel 1…4" Mode selection

[1] Only visible if "Periodical emission" is ticked.

Communication object:

No.	Name	Object function	Length	Data type
43, 55, 67, 79	Channel 1…4	Setpoint Selection automatic control	1 byte	5.001 percentage (0..100%)

3.4.6 "Timer" function (motion detection channel)

Parameters for configuring the timer function in the case of the motion detection channels.

ℹ️ The "Timer" function can only be configured in conjunction with suitable actuators that have the corresponding timer communication object (such as TYM/TXM).

When the function is used in the motion detection channel, a start command is transmitted to the bus via the timer object of the motion detector each time motion is detected. Each time motion is detected after this, another start command is transmitted. When a start command is transmitted to the „Timer" object for the actuator, the corresponding output switches on for the

---

*   Default value

time set in the actuator. The switch-on time and the behavior for retriggering are parameterized in the actuator. Stop commands cannot be triggered by the motion detection channel.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	**Start*** Stop
Periodical emission	Defines whether a telegram with the "Timer" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a value is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	Start **Stop***

Table 49: "Channel 1…4" Timer

[1] Only visible if "Periodical emission" is ticked.

Communication object:

No.	Name	Object function	Length	Data type
42, 54, 66, 78	Channel 1…4	Timer	1 bit	1.010 start/stop

3.4.7 "Scene" function (motion detection channel)

Parameters for configuring the „Scene" function in the case of the motion detection channels.

The motion detector can use the „Scene" function as a scene extension unit. The function is used to call up configured light scenes that are stored in other KNX devices. The device can call up a maximum of 64 scenes. In the case of motion detection and/or at the end of motion detection, the device transmits a value between 0 and 63 (where value 0 corresponds to scene 1 and value 63 corresponds to scene 64) to the bus via the corresponding communication object.

---

* Default value

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Scene number	Indicates the value of the event sent on presence detection.	**Scene1*** … Scene32
Periodical emission	Defines whether a telegram with the "Scene" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a scene number is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Scene number	Indicates the value of the event sent on presence detection.	Scene1 … **Scene2*** ... Scene32

Table 50: "Channel 1…4" Scene

[1] *Only visible if "Periodical emission" is ticked.*

Communication object:

No.	Name	Object function	Length	Data type
43, 55, 67, 79	Channel 1…4	Scene	1 byte	17.001 scene number

3.4.8 "Shutter position" function (motion detection channel)

Parameters for configuring the „Shutter position" functions for motion detection channels.

It is possible to move blinds/roller shutters to freely parameterizable positions in relation to motions that take place.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Position (0-100%)	Value for position that is transmitted in the case of motion detection.	0 ... **100*** %
Periodical emission	Defines whether a telegram with the "Mode selection" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a position telegram is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Position (0-100%)	Value for position that is transmitted at the end of motion detection	**0*** ... 100 %

Table 51: "Channel 1…4" Shutter position

[1] *Only visible if "Periodical emission" is ticked.*

---

* Default value

Communication object:

No.	Name	Object function	Length	Data type
43, 55, 67, 79	Channel 1…4	Shutter position in % automatic control	1 byte	5.001 percentage (0..100%)

3.4.9 "Slat position" function (motion detection channel)

Parameters for configuring the „Slat position" functions for motion detection channels.

It is possible to set the slat angles of blinds to freely parameterizable positions in relation to motions that take place.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Slat angle (0-100%)	Value for position that is transmitted in the case of motion detection.	0 ... **100*** %
Periodical emission	Defines whether a telegram with the "Mode selection" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a position telegram is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Slat angle (0-100%)	Value for position that is transmitted at the end of motion detection	**0*** ... 100 %

Table 52: "Channel 1…4" Slat position

[1] Only visible if "Periodical emission" is ticked.

Communication object:

No.	Name	Object function	Length	Data type
44, 56, 68, 80	Channel 1…4	Slat angle in % automatic control	1 byte	5.001 percentage (0..100%)

3.4.10 "Shutter/Slat position" function (motion detection channel)

Parameters for configuring the „Position/Slat angle (0-100 %)" functions in the case of the motion detection channels.

It is possible to move blinds to freely parameterizable positions and set slat angles in relation to motions that take place.

---

*   Default value

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Position (0-100%)	Value for position that is transmitted in the case of motion detection.	0 ... **100*** %
Slat angle (0-100%)	Value for position that is transmitted in the case of motion detection.	0 ... **100*** %
Periodical emission	Defines whether a telegram with the "Mode selection" function is to be emitted periodically.	**No*** Yes
Periodical emission delay[1]	Selection of time for periodical emission of function variable.	**00h00m05s*** to 08h00m00s
Emission by new detection	Indicates whether the presence event shall be transmitted or not on each validated presence detection event.	**No*** Yes
Telegram by end of presence detection	Defines whether a position telegram is transmitted at the end of motion detection (after delay time and additional delay, if applicable).	**Yes*** No
Position (0-100%)	Value for position that is transmitted at the end of motion detection	**0*** ... 100 %
Slat angle (0-100%)	Value for position that is transmitted at the end of motion detection	**0*** ... 100 %

Table 53: "Channel 1…4" Shutter/Slat position

[1] Only visible if "Periodical emission" is ticked.

Communication objects:

No.	Name	Object function	Length	Data type
44, 56, 68, 80	Channel 1…4	Slat angle in % automatic control	1 byte	5.001 percentage (0..100%)
43, 55, 67, 79	Channel 1…4	Shutter position in % automatic control	1 byte	5.001 percentage (0..100%)

3.4.11 "Surveillance" function (motion detection channel)

Parameter for configuring the behavior of the „Surveillance" function in the case of the motion detection channels.

Parameters	Description	Value
Telegram by start of presence detection	Defines whether a value is transmitted in the case of motion detection.	**Yes*** No
Function	Indicates the value of the event sent on presence detection.	OFF **ON***
Number of detections	Defines how many detections need to be identified in the set monitoring time in order for a telegram to be triggered.	**1*** ... 255

Table 54: "Channel 1…4" Surveillance

Communication object:

No.	Name	Object function	Length	Data type
42, 54, 66, 78	Channel 1…4	Surveillance	1 bit	1.002 boolean

* Default value

3.5 Brightness

The detector can send the level of brightness it measures regularly via the Brightness object
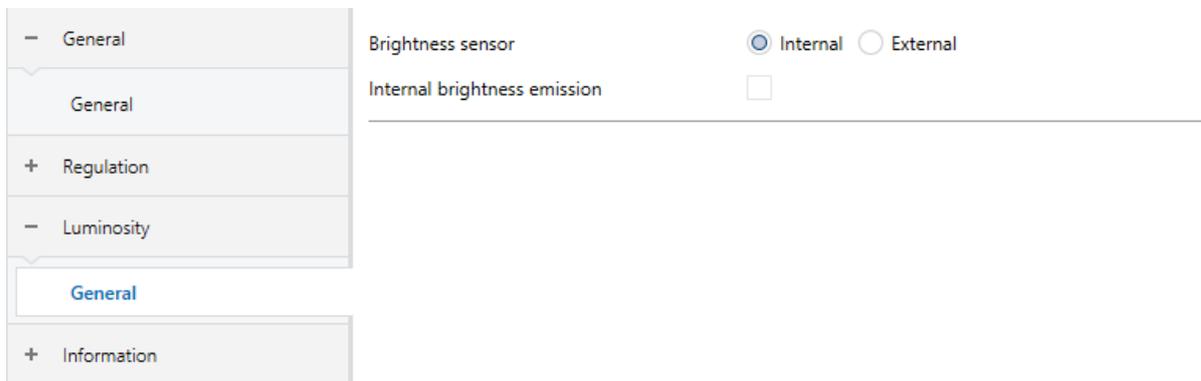
Figure 14: Brightness General parameters

The detector manages different types of brightness:

–   Internal brightness: the brightness as provided by the internal brightness cell
–   External brightness: the brightness transmitted by a distant brightness sensor and received by the detector from the KNX bus
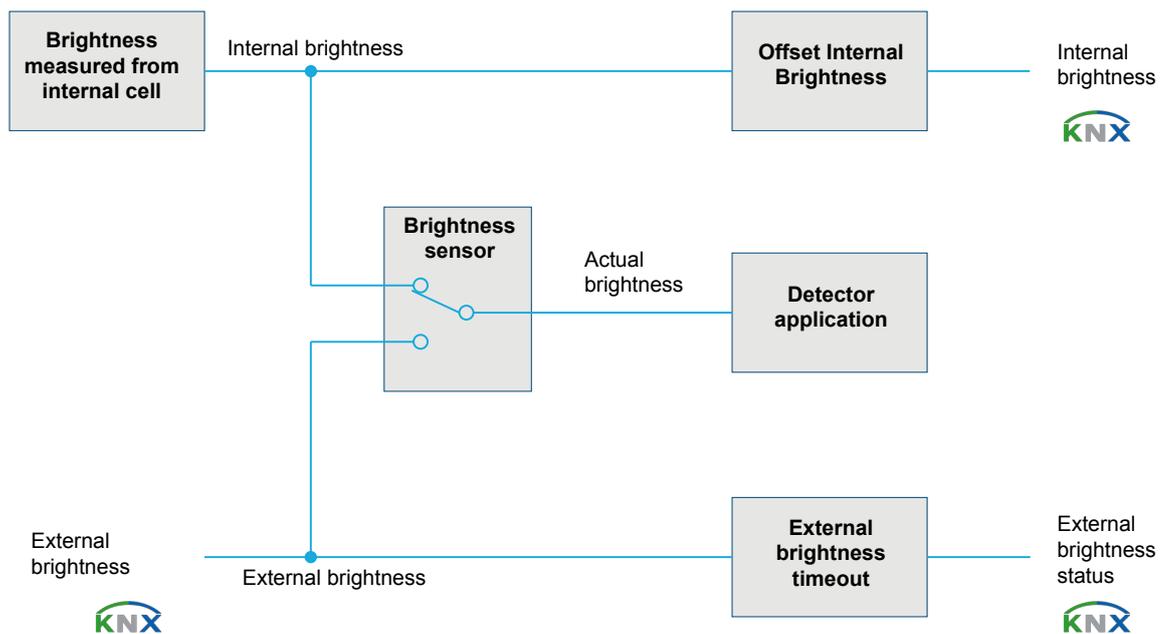
Figure 15: Internal/External brightness

The actual brightness is the value used by the detector's application. The user can choose between internal or external brightness as the source of the actual brightness.

Parameters	Description	Value
Brightness sensor	This parameter specifies the source of the brightness (used by the device for normal operation): the internal brightness is used the external brightness is used	**Internal*** External

Table 55: "Brightness" General parameters

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*   Default value

– Internal brightness

The internal brightness is the value measured by the internal brightness cell.

The user can select an offset which is applied to the internal brightness before transmission on the KNX bus

Parameters	Description	Value
Internal Brightness emission[1]	allows the emission of the internal brightness value and the display of the emission parameters.	**No*** Yes
Offset Internal Brightness [2]	This parameter indicates the brightness offset to add to the internal measured brightness. The result is used for the transmission of the Internal brightness on the bus.	-2000 …**0*** ... 2000 lux
Value emission by variation of [2]	Specifies the variation of brightness which triggers a transmission: - between 1 lux and 2000 lux by step of 1 lux - 0 means no transmission by variation of the brightness	0… **50*** ... 2000 lux
Emission of value every [2]	Specifies the periodic emission of the internal brightness.	00h00m01s… **00h00m30s***…08h00m00s

Table 56: "Brightness" Internal Brightness

[1] Only visible if "Brightness sensor" has been parameterized as "Internal".

[2] Only visible if "Internal Brightness emission" is ticked

Communication object:

No.	Name	Object function	Length	Data type
118	Brightness channel	Internal brightness	2 bytes	9.004 lux (Lux)

– External brightness

Parameters	Description	Value
External brightness timeout [1]	This parameter specifies the timeout for the reception of the external brightness. When the timeout expires, the value 1 is sent on the timeout object.	00h00m01s… **00h00m15s***…08h00m00s

Table 57: "Brightness" External brightness

[1] Only visible if "Brightness sensor" has been parameterized as "External".

Communication objects:

No.	Name	Object function	Length	Data type
120	Brightness channel	External brightness	2 bytes	9.004 lux (Lux)
121	Brightness channel	Status indication external brightness	1 bit	1.001 switch

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* Default value

4.   Communication Objects

	Number	Name	Function of the object	Length	C	R	W	T
	1	General	Automatic	1 Bit	C	R	W	-
	2	General	Semi-automatic	1 Bit	C	R	W	-
	3	General	Manual	1 Bit	C	R	W	-
	4	General	Teach-in brightness	1 Bit	C	R	W	-
	5	Regulation	ON/OFF	1 bit	C	R	W	-
	6	Regulation	Dimming	4 bits	C	R	W	-
	7	Regulation	Brightness value	1 byte	C	R	W	-
	8	Regulation	Priority	2 bits	C	R	W	-
	9	Regulation	Scene	1 byte	C	R	W	-
	10	Regulation	Status indication ON/OFF	1 bit	C	R	W	-
	11	Regulation	ON/OFF automatic control	1 bit	C	R	-	T
	12	Regulation	Output 1 dimming %	1 byte	C	R	-	T
	13	Regulation	Authorization	1 bit	C	R	W	-
	14	Regulation	Status indication authorization	1 bit	C	R	-	T
	15	Regulation	Output 2 dimming %	1 byte	C	R	-	T
	16	Regulation	Override	1 bit	C	R	W	-
	17	Regulation	Day/Night	1 bit	C	R	W	-
	18	Regulation	Regulation type	1 bit	C	R	W	-
	19	Regulation	Status indication regulation type	1 bit	C	R	-	T
	20	Regulation	Presence setpoint	2 bytes	C	R	W	-
			Presence setpoint day	2 bytes	C	R	W	-
	21	Regulation	Presence brightness value	1 byte	C	R	W	-
			Presence brightness value day	1 byte	C	R	W	-
	22	Regulation	Overrun time	2 bytes	C	R	W	-
			Overrun time day	2 bytes	C	R	W	-
	23	Regulation	Presence setpoint night	2 bytes	C	R	W	-
	24	Regulation	Presence brightness value night	1 byte	C	R	W	-
	25	Regulation	Overrun time night	2 bytes	C	R	W	-
	26	Regulation	Status indication presence setpoint	2 bytes	C	R	-	T
	27	Regulation	Status ind. brightness value	1 byte	C	R	-	T
	28	Regulation	Status indication overrun time	2 bytes	C	R	-	T
	29	ON/OFF	Status indication ON/OFF	1 bit	C	R	W	-
	30	ON/OFF	ON/OFF	1 bit	C	R	-	T
			Timer	1 bit	C	R	-	T
	31	ON/OFF	Priority	2 bits	C	R	-	T
	32	ON/OFF	Brightness value	1 byte	C	R	-	T
			Scene	1 byte	C	R	-	T
	33	ON/OFF	Authorization	1 bit	C	R	W	-
	34	ON/OFF	Status indication authorization	1 bit	C	R	-	T
	35	ON/OFF	Override	1 bit	C	R	W	-
	36	ON/OFF	Brightness threshold active	1 bit	C	R	W	-
	37	ON/OFF	Status indication brightness threshold active	1 bit	C	R	-	T
	38	ON/OFF	Overrun time	2 bytes	C	R	W	-
	39	ON/OFF	Status indication overrun time	2 bytes	C	R	-	T

	Number	Name	Function of the object	Length	C	R	W	T
▪⇄	40	ON/OFF	Brightness threshold	2 bytes	C	R	W	-
▪⇄	41	ON/OFF	Status indication brightness threshold	2 bytes	C	R	-	T
▪⇄	42	Channel 1	ON/OFF automatic control	1 bit	C	R	-	T
			Up/Down	1 bit	C	R	-	T
			Timer	1 bit	C	R	-	T
			Surveillance	1 bit	C	R	-	T
▪⇄	43	Channel 1	Value (0-255)	1 byte	C	R	-	T
			Value in %	1 byte	C	R	-	T
			Setpoint selection automatic control	1 byte	C	R	-	T
			Scene	1 byte	C	R	-	T
			Position in % automatic control	1 byte	C	R	-	T
▪⇄	44	Channel 1	Slat angle in % automatic control	1 byte	C	R	-	T
▪⇄	45	Channel 1	Authorization	1 bit	C	R	W	-
▪⇄	46	Channel 1	Status indication authorization	1 bit	C	R	-	T
▪⇄	47	Channel 1	Override	1 bit	C	R	-	T
▪⇄	48	Channel 1	Overrun time	2 bytes	C	R	W	-
▪⇄	49	Channel 1	Status indication overrun time	2 bytes	C	R	-	T
▪⇄	50	Channel 1	Brightness threshold	2 bytes	C	R	W	-
▪⇄	51	Channel 1	Status indication brightness threshold	2 bytes	C	R	-	T
▪⇄	52	Channel 1	Sensitivity	1 bit	C	R	W	-
▪⇄	53	Channel 1	Status indication sensitivity	1 bit	C	R	-	T
▪⇄	54	Channel 2	ON/OFF automatic control	1 bit	C	R	-	T
			Up/Down	1 bit	C	R	-	T
			Timer	1 bit	C	R	-	T
			Surveillance	1 bit	C	R	-	T
▪⇄	55	Channel 2	Value (0-255)	1 byte	C	R	-	T
			Value in %	1 byte	C	R	-	T
			Setpoint selection automatic control	1 byte	C	R	-	T
			Scene	1 byte	C	R	-	T
			Position in % automatic control	1 byte	C	R	-	T
▪⇄	56	Channel 2	Slat angle in % automatic control	1 byte	C	R	-	T
▪⇄	57	Channel 2	Authorization	1 bit	C	R	W	-
▪⇄	58	Channel 2	Status indication authorization	1 bit	C	R	-	T
▪⇄	59	Channel 2	Override	1 bit	C	R	-	T
▪⇄	60	Channel 2	Overrun time	2 bytes	C	R	W	-
▪⇄	61	Channel 2	Status indication overrun time	2 bytes	C	R	-	T
▪⇄	62	Channel 2	Brightness threshold	2 bytes	C	R	W	-
▪⇄	63	Channel 2	Status indication brightness threshold	2 bytes	C	R	-	T
▪⇄	64	Channel 2	Sensitivity	1 bit	C	R	W	-
▪⇄	65	Channel 2	Status indication sensitivity	1 bit	C	R	-	T
▪⇄	66	Channel 3	ON/OFF automatic control	1 bit	C	R	-	T
			Up/Down	1 bit	C	R	-	T
			Timer	1 bit	C	R	-	T
			Surveillance	1 bit	C	R	-	T

	Number	Name	Function of the object	Length	C	R	W	T
	67	Channel 3	Value (0-255)	1 byte	C	R	-	T
			Value in %	1 byte	C	R	-	T
			Setpoint selection automatic control	1 byte	C	R	-	T
			Scene	1 byte	C	R	-	T
			Position in % automatic control	1 byte	C	R	-	T
	68	Channel 3	Slat angle in % automatic control	1 byte	C	R	-	T
	69	Channel 3	Authorization	1 bit	C	R	W	-
	70	Channel 3	Status indication authorization	1 bit	C	R	-	T
	71	Channel 3	Override	1 bit	C	R	-	T
	72	Channel 3	Overrun time	2 bytes	C	R	W	-
	73	Channel 3	Status indication overrun time	2 bytes	C	R	-	T
	74	Channel 3	Brightness threshold	2 bytes	C	R	W	-
	75	Channel 3	Status indication brightness threshold	2 bytes	C	R	-	T
	76	Channel 3	Sensitivity	1 bit	C	R	W	-
	77	Channel 3	Status indication sensitivity	1 bit	C	R	-	T
	78	Channel 4	ON/OFF automatic control	1 bit	C	R	-	T
			Up/Down	1 bit	C	R	-	T
			Timer	1 bit	C	R	-	T
			Surveillance	1 bit	C	R	-	T
	79	Channel 4	Value (0-255)	1 byte	C	R	-	T
			Value in %	1 byte	C	R	-	T
			Setpoint selection automatic control	1 byte	C	R	-	T
			Scene	1 byte	C	R	-	T
			Position in % automatic control	1 byte	C	R	-	T
	80	Channel 4	Slat angle in % automatic control	1 byte	C	R	-	T
	81	Channel 4	Authorization	1 bit	C	R	W	-
	82	Channel 4	Status indication authorization	1 bit	C	R	-	T
	83	Channel 4	Override	1 bit	C	R	-	T
	84	Channel 4	Overrun time	2 bytes	C	R	W	-
	85	Channel 4	Status indication overrun time	2 bytes	C	R	-	T
	86	Channel 4	Brightness threshold	2 bytes	C	R	W	-
	87	Channel 4	Status indication brightness threshold	2 bytes	C	R	-	T
	88	Channel 4	Sensitivity	1 bit	C	R	W	-
	89	Channel 4	Status indication sensitivity	1 bit	C	R	-	T
	90	Master	Master	1 bit	C	R	W	-
	91	Slave	Slave	1 bit	C	R	-	T
	92	Area linking	Area linking output	1 bit	C	R	-	T
	93	Area linking	Area 1 linking input	1 bit	C	R	W	-
	94	Area linking	Area 2 linking input	1 bit	C	R	W	-
	95	Area linking	Area 3 linking input	1 bit	C	R	W	-
	96	Area linking	Area 4 linking input	1 bit	C	R	W	-
	97	Area linking	Area 5 linking input	1 bit	C	R	W	-
	98	Area linking	Area 6 linking input	1 bit	C	R	W	-
	99	Area linking	Area 7 linking input	1 bit	C	R	W	-
	100	Area linking	Area 8 linking input	1 bit	C	R	W	-
	101	Area linking	Area 9 linking input	1 bit	C	R	W	-

	Number	Name	Function of the object	Length	C	R	W	T
∎⇄	102	Area linking	Area 10 linking input	1 bit	C	R	W	-
∎⇄	103	Area linking	Area 11 linking input	1 bit	C	R	W	-
∎⇄	104	Area linking	Area 12 linking input	1 bit	C	R	W	-
∎⇄	105	Area linking	Area 13 linking input	1 bit	C	R	W	-
∎⇄	106	Area linking	Area 14 linking input	1 bit	C	R	W	-
∎⇄	107	Area linking	Area 15 linking input	1 bit	C	R	W	-
∎⇄	108	Area linking	Area 16 linking input	1 bit	C	R	W	-
∎⇄	109	Area linking	Area 17 linking input	1 bit	C	R	W	-
∎⇄	110	Area linking	Area 18 linking input	1 bit	C	R	W	-
∎⇄	111	Area linking	Area 19 linking input	1 bit	C	R	W	-
∎⇄	112	Area linking	Area 20 linking input	1 bit	C	R	W	-
∎⇄	113	Area linking	Area 21 linking input	1 bit	C	R	W	-
∎⇄	114	Area linking	Area 22 linking input	1 bit	C	R	W	-
∎⇄	115	Area linking	Area 23 linking input	1 bit	C	R	W	-
∎⇄	116	Area linking	Area 24 linking input	1 bit	C	R	W	-
∎⇄	117	Area linking	Area 25 linking input	1 bit	C	R	W	-
∎⇄	118	Brightness	Internal brightness	2 bytes	C	R	-	T
∎⇄	120	Brightness	External brightness	2 bytes	C	R	W	-
∎⇄	121	Brightness	Status indication external brightness	1 bit	C	R	-	T

4.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
1	General	Automatic	1 Bit	1.017	DPT_Trigger	C	R	W	-

Activation requirement:	Detector type:	**Master**
	Operating mode by object:	**Active**

Description:

This object is used to activate the automatic mode via the KNX bus.

- If the object receives the value 0 (falling edge), automatic mode is activated.

To deactivate the automatic mode, the user has to activate another mode (Semi-automatic or Manual).

If the mode is active, the presence and the absence are automatically controlled by the detector.

Note: The Automatic mode can also be changed by the IR remote controller

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
2	General	Semi-automatic	1 Bit	1.017	DPT_Trigger	C	R	W	-

Activation requirement:	Detector type:	**Master**
	Operating mode by object:	**Active**

Description:

This object is used to activate the Semi-automatic mode via the KNX bus.

- If the object receives the value 0 (falling edge), Semi-automatic mode is activated.

To deactivate the Semi-automatic mode, the user has to activate another mode (Automatic or Manual).

If the mode is active, the presence is triggered by an external input (Push-Button KNX device) or by the IR remote controller EE808 .The Absence is automatically controlled by the detector.

Note: The Semi-automatic mode can also be changed by the IR remote controller

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
3	General	Manual	1 Bit	1.017	DPT_Trigger	C	R	W	-

Activation requirement:	Detector type:	**Master**
	Operating mode by object:	**Active**
	Lighting channel:	**Regulation**

Description:

This object is used to activate the manual mode via the KNX bus.

- If the object receives the value 0 (falling edge), manual mode is activated.

To deactivate the manual mode, the user has to activate another mode (Automatic or Semi-automatic).

If the mode is active, the presence and the absence is triggered by an external input (Push-Button KNX device) or by the IR remote controller EE808.

Note: The manual mode cannot be changed by the IR remote controller

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
4	General	Teach-in brightness	1 Bit	1.001	DPT_Switch	C	R	W	-

Activation requirement: Detector type: **Master**

Description:

This object is used to control the Teach-in mode via the KNX bus.

0 = Teach-in mode locked-up, 1 = Teach-in mode authorized:
  – If the object receives the value 1, Teach-in mode is activated.
  – If the object receives the value 0, Teach-in mode is deactivated.

If the mode is active, this object is used to start the teach-in operation in the detector.

When the lighting channel is set to **regulation**:
  – If the regulation type is **Active**, nothing happens (the command is discarded)
  – if the regulation type is **Not Active**, the current output level is stored it in the Presence level and will be used as Presence level in the next detection.

When the lighting channel is set to **ON/OFF**, the current average brightness is stored in the brightness threshold and will be used as threshold in the next detection.

For further information, see: 3.2.1   General

4.2   Regulation

No.	Name	Object Function	Size	Format	Type	Flags			
5	Regulation	ON/OFF	1 Bit	1.001	DPT_Switch	C	R	W	-

Activation requirement: Lighting channel: **Regulation**

Description:

This object enables the user to activate the presence setpoint or to switch the output to OFF without modifying the product's working mode.
  – **On input of an ON** (1) command: it will start or restart the product at presence setpoint and resetting the overrun time.
  – **On input of an OFF** (0) command: If the product is on the presence or on the absence setpoint, the reception of an OFF on the object switches immediately the output to OFF and stops the overrun time. However, if a person is detected, the product switches to the presence setpoint.

In manual mode, the reception of an ON on the object does not start the overrun time.

Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags		
6	Regulation	Dimming	4 Bits	3.007	DPT_Control_Dimming	C	R	W	-

Activation requirement: Lighting channel: **Regulation**

Description:

The output is dimmed in accordance with the 4-bit format value that arrives.

Object value:

b3	b2	b1	b0
C	Steps		

Data fields	Description	Code
C	Increase or reduction in brightness	0: Decrease 1: Increase
Steps	Brightness between 0% and 100% divided into steps	0: Stop 1: 100% 2: 50% 3: 25% 4: 12% 5: 6% 6: 3% 7: 1%

This object enables the user to modify the current brightness and changes the value of the presence setpoint.
Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags		
7	Regulation	Brightness value	1 byte	5.001	DPT_Scaling	C	R	W	-

Activation requirement: Lighting channel: **Regulation**

Description:

This object is a KNX input object which enables the user to modify the brightness value in runtime.

The output is dimmed according to the value that arrives in 1-byte format and corresponds in % to the brightness value to be attained.

Object value: 0 to 255: 0 = 0%, 255 = 100%

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
8	Regulation	Priority	2 Bits	2.002	DPT_Bool_Control	C	R	W	-

Activation requirement: Lighting channel: **Regulation**

Description:

This object enables the user to force the product to the priority setpoint or to 0%.

Details on the format of the object are given below.

Telegram received by the priority operation object		Status of the outputs
Bit 0	Bit 1	
0	0	End of the priority
0	1	End of the priority
1	0	Priority OFF
1	1	Priority ON

The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit (Bit 1) activates or deactivates the Priority.

When the detector is in the priority state, the presence detection is used to reset the overrun time in order to know the theoretical state that the detector needs to apply at the end of the priority state. All the values received on the objects are discarded (only the values received on the „Area Linking" objects are taken into account, but have no effect on the output).
  – Priority ON: The detector is set in priority mode and applies the priority setpoint/level.
  – Priority OFF:The detector is set in priority mode and applies 0% and do not control the load anymore.
  – End of priority ON or OFF: The detector (if it was in priority mode) applies the theoretical state.

At the end of the priority:
  – If the overrun time is elapsed, the detector switches to absence setpoint.
  – If the overrun time is not elapsed, the detector switches to the presence setpoint.

 Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
9	Regulation	Scene	1 byte	18.001	DPT_SceneControl	C	R	W	-

Activation requirement: Lighting channel: **Regulation**
                            Scenes: **Yes**

Description:

The detector has 32 configurable scenes which contain a regulation setting. This object enables the user to change the current setting by a recorded setting in the number scene X.

Details on the format of the object are given below.

7	6	5	4	3	2	1	0
Learning	Not used	Scene number					

Bit 7: 0: The scene is called / 1: The scene is saved.

Bit 6: Not used.

Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64)

Note: Scenes 33 to 64 not supported.

Activation Scene number (X):
  – The detector starts the overrun time and controls the output according to the value of the scene X.
  – Each presence detection event restarts the timeout.
  – At the end of the timeout, the detector controls the output according to the absence setpoint.

Learn Scene number (X) (if the „Scene memorization by long key press" parameter is enabled):
  – The detector saves the current brightness level in the scene X and activates the scene number X

Note: If the detector is in the priority state (ON and OFF), the object "Scene" is ignored.

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
10	Regulation	Status indication ON/OFF	1 bit	1.001	DPT_Switch	C	R	W	-

Activation requirement: Lighting channel: **Regulation**

Description:
This object enables the detector to be informed of the state of the controlled distant KNX device.

OFF value received on the object:
– When the detector is in the Presence setpoint, then the detector switches to the Absence state and sends the 0% and Off on the output objects.
– When the detector is in the Presence setpoint, nothing happens.

ON value received on the object:
– Nothing happens

Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
11	Regulation	ON/OFF automatic control	1 bit	1.001	DPT_Switch	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description:
This object enables the user to control a distant KNX device with a ON/OFF value.

To issue an ON command, a telegram with a logical value 1 is issued.

After this command, the dimming value in % can be transmitted via the objects **Output 1 dimming %** and **Output 2 dimming %** as long as this object has the logic value 1.

To issue an OFF command, a telegram with a logical value 0 is issued.

Condition of transmission: on status change

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
12	Regulation	Output 1 dimming %	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description:
This object enables the user to control a distant KNX device with a 1 byte value for the brightness.

The user can select a value between 0 and 100%.

Condition of transmission: on status change

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
13	Regulation	Authorization	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Lighting channel:	**Regulation**
	Scenes:	**Yes**

Description:

This object enables the user to authorize or not the presence detection feature.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
   – If the object receives the value 0, the authorisation is deactivated.
   – If the object receives the value 1, the authorisation is activated.

0 = authorization ON, 1 = authorization OFF
   – If the object receives the value 0, the authorisation is activated.
   – If the object receives the value 1, the authorisation is deactivated.

OFF value received on the object:
   – if the presence timeout is running, the detector transmits the absence on the KNX associated object and the presence timeout is stopped
   – if the Presence timeout is not running, nothing happens
   – The presence detection feature is disabled (presence detection events are ignored).

ON value received on the object:
   – The presence detection feature is re-enabled
   – Nothing happens on the output.

Note: If the authorization is activated, the **State after ETS download** parameter is available to select the authorization state after an ETS download. This state can be changed later with the object.

If the authorization is not activated, then the default value for the **State after ETS download** is **Authorization ON**.

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
14	Regulation	Status indication authorization	1 bit	1.003	DPT_Enable	C	R	-	T

Activation requirement:	Lighting channel:	**Regulation**
	Scenes:	**Yes**

Description:

This object allows the status of the authorization to be sent from the device on the KNX bus.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
   – If the authorisation is deactivated, a telegram is sent with logic value 0.
   – If the authorisation is activated, a telegram is sent with logic value 1.

0 = authorization ON, 1 = authorization OFF
   – If the authorisation is activated, a telegram is sent with logic value 0.
   – If the authorisation is deactivated, a telegram is sent with logic value 1.

Condition of transmission: on status change

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
15	Regulation	Output 2 dimming %	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement:	Lighting channel:	**Regulation**
	Scenes:	**Yes**

Description:

This object enables the user to control a distant KNX device with a 1 byte value for the brightness. The user can select a value between 0 and 100%.

Condition of transmission: on status change

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
16	Regulation	Override	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Lighting channel: **Regulation**

Description:

This object enables the user to toggle between the presence and absence setpoint.

ON value received on the object:
– The detector toggles between the presence setpoint and OFF and starts the overrun time
– Each presence detection restarts the overrun time
– In active regulation, if the brightness is higher than the threshold presence, and the output state is equal to 0%, the reception of the ON value on the object starts the regulation with the presence setpoint and starts the overrun time. The output switches to the value 25% before decrease.

OFF value received on the object:
– The detector switches to the absence setpoint without starting the overrun time.

Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
17	Regulation	Day/Night	1 bit	1.024	DPT_DayNight	C	R	W	-

Activation requirement:	Lighting channel: **Regulation**
	Day/Night mode: **Yes**

Description:

The type of regulation can be configured differently during the day and the night:

This object is used to indicate to the detector whether it is the day or the night.

A set of regulation parameters is used for the day and a different set of regulation parameters is for the night.

ON value: Night mode is active and the set of Night regulation parameters is used

OFF value: Day mode is active and the set of Day regulation parameters is used

Note: The object has the same behavior in active regulation or inactive regulation.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
18	Regulation	Regulation type	1 bit	1.001	DPT_Switch	C	R	W	-

Activation requirement:	Lighting channel:	**Regulation**
	Regulation type configurable via object: **Yes**	

Description:

It enables the user to change the regulation type of the detector in runtime.

Object value: Depends on the **Regulation type polarity** parameter.

0 = inactive, 1 = active
– If the object receives the value 0, the regulation is deactivated.
– If the object receives the value 1, the regulation is activated.

0 = active, 1 = inactive
– If the object receives the value 0, the regulation is activated.
– If the object receives the value 1, the regulation is deactivated.

Inactive regulation type:
– When the detector receives the „Inactive regulation type" value on this object, the regulation switches to the inactive regulation if the current regulation type is active.

Active regulation type:
– When the detector receives the „Active regulation type" value on this object, the regulation switches to the active regulation if the current regulation type is inactive.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
19	Regulation	Status indication regulation type	1 bit	1.001	DPT_Switch	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description:
This object allows the status of the regulation type to be sent from the device on the KNX bus.
Object value: Depends on the **Regulation type polarity** parameter.
0 = inactive, 1 = active – If the regulation is deactivated, a telegram is sent with logic value 0. – If the regulation is activated, a telegram is sent with logic value 1.
0 = active, 1 = inactive – If the regulation is activated, a telegram is sent with logic value 0. – If the regulation is deactivated, a telegram is sent with logic value 1.

Condition of transmission: on status change

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
20	Regulation	Presence setpoint Presence setpoint day [1]	2 bytes	9.004	DPT_Value_Lux	C	R	W	-

Activation requirement: Lighting channel: **Regulation** Presence setpoint: **Control via separate object** [1] Day/Night mode: **Yes**

Description:
This object is available to configure the Presence Setpoint in runtime (in Day mode only or in Day/Night mode)
Object value: 0 to 670433,28 Lux
If the regulation is active and in presence state, the modification is applied at the next presence detection.
The received value is a permanent modification of the parameter.
If the setpoint is set by the Lux potentiometer and if a new value is received on the object, then the setpoint specified by the Lux potentiometer is overridden by the new value received.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
21	Regulation	Presence brightness value Presence brightness value day [1]	1 byte	5.001	DPT_Scaling	C	R	W	-

Activation requirement: Lighting channel: **Regulation** Presence setpoint: **Control via separate object** [1] Day/Night mode: **Yes**

Description:
This object is available to configure the Presence brightness value in runtime (in Day mode only or in Day/Night mode).
Object value: 0 to 255: 0 = 0%, 255 = 100%
If the regulation is active and in presence state, the modification is applied at the next presence detection.
The received value is a permanent modification of the parameter.

For further information, see: 3.2.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
22	Regulation	Overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	W	-
		Overrun time day [1]							

Activation requirement:	Lighting channel:	**Regulation**
	Presence setpoint:	**Control via separate object**
	[1] Day/Night mode:	**Yes**

Description:

This object is available to configure the Overrun time in runtime (in Day mode only or in Day/Night mode)

Object value: 0 to 65535 seconds

Smallest value: 5 seconds

The new value is applied (at the next presence detection) in the regulation if the regulation is in presence state and the overrun time is restarted.

The received value is a permanent modification of the parameter.

The value received on this object replaces the current value contained in the configured Regulation timeout parameter.

For further information, see:　　3.2.1　General

No.	Name	Object Function	Size	Format	Type	Flags			
23	Regulation	Presence setpoint night	2 bytes	9.004	DPT_Value_Lux	C	R	W	-

Activation requirement:	Lighting channel:	**Regulation**
	Presence setpoint:	**Control via separate object**
	Day/Night mode:	**Yes**

Description:

This object is available to configure the Presence Setpoint in runtime in night mode.

For value information, see No. 20

For further information, see:　　3.2.1　General

No.	Name	Object Function	Size	Format	Type	Flags			
24	Regulation	Presence brightness value night	1 byte	5.001	DPT_Scaling	C	R	W	-

Activation requirement:	Lighting channel:	**Regulation**
	Presence setpoint:	**Control via separate object**
	Day/Night mode:	**Yes**

Description:

This object is available to configure the Presence brightness value in runtime in night mode.

For value information, see No. 21

For further information, see:　　3.2.1　General

No.	Name	Object Function	Size	Format	Type	Flags			
25	Regulation	Overrun time night	2 bytes	7.005	DPT_TimePeriodSec	C	R	W	-

Activation requirement:	Lighting channel:	**Regulation**
	Presence setpoint:	**Control via separate object**
	Day/Night mode:	**Yes**

Description:

This object is available to configure the Overrun time in runtime in night mode.

For value information, see No. 22

For further information, see:　　3.2.1　General

No.	Name	Object Function	Size	Format	Type	Flags			
26	Regulation	Status indication presence setpoint	2 bytes	9.004	DPT_Value_Lux	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description: This object allows the status of the presence setpoint to be sent from the device on the KNX bus. Object value: 0 to 670433,28 Lux

Condition of transmission: on status change

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
27	Regulation	Status ind. brightness value	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description: This object allows the status of the brightness value to be sent from the device on the KNX bus Object value: 0 to 255: 0 = 0%, 255 = 100%

Condition of transmission: on status change

For further information, see: 3.2.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
28	Regulation	Status indication overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	-	T

Activation requirement: Lighting channel: **Regulation**

Description: This object allows the status of the overrun time to be sent from the device on the KNX bus. Object value: 0 to 65535 seconds

Condition of transmission: on status change

For further information, see: 3.2.1   General

4.3   ON/OFF

No.	Name	Object Function	Size	Format	Type	Flags			
29	ON/OFF	Status indication ON/OFF	1 Bit	1.001	DPT_Switch	C	R	W	-

Activation requirement: Lighting channel: **ON/OFF**

Description:
This object enables the detector to be informed of the state of the controlled distant KNX device.
OFF value received on the object:
  – If the detector's output has transmitted the presence event, then at the next presence detection event, the detector transmits again the presence event on the related KNX object.
ON value received on the object:
  – Nothing happens
Note: If the product is in Authorization OFF, the object has the same behavior as the description above.

For further information, see: 3.3.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
30	ON/OFF	ON/OFF	1 Bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**
	Function:	**ON/OFF**

Description:

This object enables the ON/OFF control to be issued on the KNX bus.
- – To issue an OFF command, a telegram with a logical value 0 is issued.
- – To issue an ON command, a telegram with a logical value 1 is issued.

Condition of transmission:	on status change

For further information, see: 3.3.2 Function

No.	Name	Object Function	Size	Format	Type	Flags			
30	ON/OFF	Timer	1 Bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**
	Function:	**Timer**

Description:

This object enables the Timer command to be issued on the KNX bus.
- – To issue a Timer command, a telegram with a logical value 1 is issued.

Condition of transmission:	on status change

For further information, see: 3.3.2 Function

No.	Name	Object Function	Size	Format	Type	Flags			
31	ON/OFF	Priority	2 Bits	2.002	DPT_Bool_Control	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**
	Function:	**Priority**

Description:

This object enables the Priority command to be issued on the KNX bus.

Details on the format of the object are given below.

Telegram received by the priority operation object		Status of the outputs
Bit 0	Bit 1	
0	0	End of the priority
0	1	End of the priority
1	0	Priority OFF/up/night setpoint
1	1	Priority ON/down/confort

The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit (Bit 1) activates or deactivates the Priority.

Condition of transmission:	on status change

For further information, see: 3.3.2 Function

No.	Name	Object Function	Size	Format	Type	Flags			
32	ON/OFF	Brightness value	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement:	Lighting channel: **ON/OFF**
	Function: **Brightness value or Brightness value presence/absence**

Description:
This object enables the brightness value to be issued on the KNX bus.
Object value: 0 to 255: 0 = 0%, 255 = 100%

Condition of transmission: on status change

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
32	ON/OFF	Scene	1 byte	178.001	DPT_SceneNumber	C	R	W	-

Activation requirement:	Lighting channel: **ON/OFF**
	Function: **Scene or Scene presence/absence**

Description:

Scene or Scene presence/absence.

Details on the format of the object are given below.

7	6	5	4	3	2	1	0
Learning	Not used	Scene number					

Bit 7: 0: The scene is called / 1: The scene is saved.

Bit 6: Not used.

Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64)

Note: Scenes 33 ro 64 not supported.

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
33	ON/OFF	Authorization	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Lighting channel: **ON/OFF**
	Authorization: **Yes**

Description:

This object enables the user to authorize or not the presence detection feature.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
- If the object receives the value 0, the authorisation is deactivated.
- If the object receives the value 1, the authorisation is activated.

0 = authorization ON, 1 = authorization OFF
- If the object receives the value 0, the authorisation is activated.
- If the object receives the value 1, the authorisation is deactivated.

OFF value received on the object:
- The detector transmits the absence on the KNX associated object and the presence timeout is stopped
- The presence detection feature is disabled (presence detection events are ignored).

ON value received on the object:
- The presence detection feature is re-enabled
- Nothing happens on the output.

Note: If the authorization is activated, the **State after ETS download** parameter is available to select the authorization state after an ETS download. This state can be changed later with the object.

If the authorization is not activated, then the default value for the **State after ETS download** is **Authorization ON**.

For further information, see: 3.3.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
34	ON/OFF	Status indication authorization	1 bit	1.003	DPT_Enable	C	R	-	T

Activation requirement:	Lighting channel: **ON/OFF**
	Scenes: **Yes**

Description:

This object allows the status of the authorization to be sent from the device on the KNX bus.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
- If the authorisation is deactivated, a telegram is sent with logic value 0.
- If the authorisation is activated, a telegram is sent with logic value 1.

0 = authorization ON, 1 = authorization OFF
- If the authorisation is activated, a telegram is sent with logic value 0.
- If the authorisation is deactivated, a telegram is sent with logic value 1.

Condition of transmission:	on status change

For further information, see:	3.3.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
35	ON/OFF	Override	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Lighting channel: **Regulation**

Description:

This object enables the user to toggle between the presence and absence setpoint.

ON value received on the object:
- The detector toggles between the transmission of the presence and the absence event.
- Each time the value ON is received on the object, the Presence timeout is (re)started.
- Each presence detection restarts the Presence timeout.

OFF value received on the object:
- The detector transmits the absence event without starting the Presence timeout.
- The detector is again able to transmit the presence event

For further information, see:	3.3.1 General

No.	Name	Object Function	Size	Format	Type	Flags			
36	ON/OFF	Brightness threshold active	1 bit	1.001	DPT_Switch	C	R	W	-

Activation requirement:	Lighting channel: **ON/OFF**
	Brightness threshold via: **Control via separate object**

Description:

This object is a KNX input object to activate or deactivate the check of the current measured brightness with the configured brightness parameter.

Object value:
- If the object receives the value 1, the current measured brightness is active.
- If the object receives the value 0, the current measured brightness is inactive.

For further information, see:	3.3.2 Function

No.	Name	Object Function	Size	Format	Type	Flags			
37	ON/OFF	Status indication brightness threshold active	1 bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**
	Brightness threshold via:	**Control via separate object**

Description:

This object allows to send the status of the object „ Brightness threshold active" from the device to the KNX bus.

Object value:
- If the object „ Brightness threshold active" is deactivated, a telegram is sent with logic value 0.
- If the object „ Brightness threshold active" is activated, a telegram is sent with logic value 1.

Condition of transmission: on status change

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
38	ON/OFF	Overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	W	-

Activation requirement:	Lighting channel:	**ON/OFF**
	Selection Overrun time:	**Control via separate object**

Description:

This object enables the user to modify the Overrun time in runtime.

Object value: 1 to 65535 seconds

The received value is a permanent modification of the parameter

The new value does not modify the current running Overrun time timer , if the detector is in the presence state.

The new value will be used in the next start/restart of the Overrun time timer.

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
39	ON/OFF	Status indication overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**

Description:

This object allows the status of the overrun time to be sent from the device on the KNX bus.

Object value: 0 to 65535 seconds

Condition of transmission: on status change

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
40	ON/OFF	Brightness threshold	2 bytes	9.004	DPT_Value_Lux	C	R	W	-

Activation requirement:	Lighting channel:	**ON/OFF**
	Brightness threshold via:	**Control via separate object**

Description:

This object is a KNX input object which enables the user to modify the brightness threshold in runtime.

Object value: 0 to 670433,28 Lux

The received value is a permanent modification of the brightness threshold.

The new value will be used by the channel as soon as necessary to trigger the presence event or when the cell is active.

For further information, see: 3.3.2   Function

No.	Name	Object Function	Size	Format	Type	Flags			
41	ON/OFF	Status indication Brightness threshold	2 bytes	9.004	DPT_Value_Lux	C	R	-	T

Activation requirement:	Lighting channel:	**ON/OFF**
	Brightness threshold via:	**Control via separate object**

Description:
This object allows the status of the brightness threshold to be sent from the device on the KNX bus.
Object value: 0 to 670433,28 Lux

Condition of transmission:	on status change

For further information, see:	3.3.2 Function

4.4 Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
42, 54, 66, 78	Channel 1…4	ON/OFF automatic control	1 Bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function	**ON/OFF**

Description:
This object enables the user to control a distant KNX device with a ON/OFF value.
The user can select the presence and the absence event which will be sent.
For presence and absence events, the user can select the event type ON or OFF.

Condition of transmission:	on status change

For further information, see:	3.4 Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
42, 54, 66, 78	Channel 1…4	Up/Down	1 Bit	1.008	DPT_UpDown	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function	**Up/Down**

Description:
This object enables the user to control a distant KNX device with a Up/Down value.
The user can select the presence and the absence event which will be sent.
For presence and absence events, the user can select the event type Up or Down.

Condition of transmission:	on status change

For further information, see:	3.4 Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
42, 54, 66, 78	Channel 1…4	Timer	1 Bit	1.010	DPT_StartStop	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function	**Timer**

Description:
This object enables the user to control a distant KNX device with a Time Start/Stop value.
The user can select the presence and the absence event which will be sent.
For presence and absence events, the user can select the event type Time Start or Time Stop.

Condition of transmission:	on status change

For further information, see:	3.4 Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
42, 54, 66, 78	Channel 1…4	Surveillance	1 Bit	1.002	DPT_Bool	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Surveillance**

Description:

This object enables the user to perform a surveillance of a zone by validating the presence of people. When presence is validated, the event is transmitted on the dedicated object.

For presence event, the user can select the event type ON or OFF.

The user can also specify the alarm monitoring period (in seconds) and the number of detections for the validation of the presence.

Surveillance stop timeout:

Each time the event (presence or absence)1 is transmitted, a surveillance stop timeout timer is started which is 3 x the alarm monitoring period. When the surveillance stop timer has elapsed, the opposite value of event is transmitted on the bus.

Condition of transmission: on status change

For further information, see:

No.	Name	Object Function	Size	Format	Type	Flags			
43, 55, 67, 79	Channel 1…4	Value (0-255)	1 byte	5.010	DPT_Value_1_Ucount	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Value 1 byte**
	Value 1 byte:	**Value (0-255)**

Description:

This object enables the user to control a distant KNX device with a 1 byte value.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select a value between 0 and 255 as event type.

Condition of transmission: on status change

For further information, see:

No.	Name	Object Function	Size	Format	Type	Flags			
43, 55, 67, 79	Channel 1…4	Value in %	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Value 1 byte**
	Value 1 byte:	**Percent (0-100%)**

Description:

This object enables the user to control a distant KNX device with a 1 byte value for the brightness.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select a value between 0 and 100% as event type.

Condition of transmission: on status change

For further information, see:

No.	Name	Object Function	Size	Format	Type	Flags			
43, 55, 67, 79	Channel 1…4	Setpoint selection automatic control	1 byte	20.102	DPT_HAVCMode	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Mode selection**

Description:

This object enables the user to control a distant KNX device with a HVAC mode.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select between one of the following event types:

Heating mode	Value
Auto	0
Comfort	1
Standby	2
Night setpoint	3
Frost protection	4

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
43, 55, 67, 79	Channel 1…4	Scene	1 byte	17.001	DPT_SceneNumber	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Scene**

Description:

This object enables the user to control a distant KNX device with a scene number.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select a scene number between Scene1 and Scene32 as event type

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
43, 55, 67, 79	Channel 1…4	Position in % automatic control	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Shutter position or Position/Slat angle (0-100%)**

Description:

This object enables the user to control a distant KNX device with a 1 byte value for the shutter position.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select a value between 0 and 100% as event type.

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
44, 56, 68, 80	Channel 1…4	Slat angle in % automatic control	1 byte	5.001	DPT_Scaling	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Function:	**Shutter position or Position/Slat angle (0-100%)**

Description:

This object enables the user to control a distant KNX device with a 1 byte value for the slat position.

The user can select the presence and the absence event which will be sent.

For presence and absence events, the user can select a value between 0 and 100% as event type

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
45, 57, 69, 81	Channel 1…4	Authorization	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Channel 1…4:	**Yes**
	Authorization:	**Yes**

Description:

This object enables the user to authorize or not the presence detection feature.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
– If the object receives the value 0, the authorisation is deactivated.
– If the object receives the value 1, the authorisation is activated.

0 = authorization ON, 1 = authorization OFF
– If the object receives the value 0, the authorisation is activated.
– If the object receives the value 1, the authorisation is deactivated.

OFF value received on the object:
– if the presence timeout is running, the detector transmits the absence on the KNX associated object and the presence timeout is stopped
– if the Presence timeout is not running, nothing happens
– The presence detection feature is disabled (presence detection events are ignored).

ON value received on the object:
– The presence detection feature is re-enabled
– Nothing happens on the output.

Note: If the authorization is activated, the **State after ETS download** parameter is available to select the authorization state after an ETS download. This state can be changed later with the object.

If the authorization is not activated, then the default value for the **State after ETS download** is **Authorization ON**.

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
46, 58, 70, 82	Channel 1…4	Status indication authorization	1 bit	1.003	DPT_Enable	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Authorization:	**Yes**

Description:

This object allows the status of the authorization to be sent from the device on the KNX bus.

Object value: Depends on the **Authorization Polarity** parameter.

0 = authorization OFF, 1 = authorization ON
- If the authorisation is deactivated, a telegram is sent with logic value 0.
- If the authorisation is activated, a telegram is sent with logic value 1.

0 = authorization ON, 1 = authorization OFF
- If the authorisation is activated, a telegram is sent with logic value 0.
- If the authorisation is deactivated, a telegram is sent with logic value 1.

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
47, 59, 71, 83	Channel 1…4	Override	1 bit	1.003	DPT_Enable	C	R	W	-

Activation requirement:	Channel 1…4:	**Yes**

Description:

This object enables the user to toggle between the transmission of the presence and absence.

ON value received on the object:

if the Presence timeout is running:
- The detector toggles between the transmission of the presence and the absence event.
- Each time the value ON is received on the object, the Presence timeout is (re)started.
- Each presence detection restarts the Presence timeout.

if the Presence timeout is not running:
- The detector transmits the presence event and the Presence timeout is started.

OFF value received on the object:

if the Presence timeout is running:
- The detector transmits the absence event without starting the Presence timeout.
- The detector is again able to transmit the presence event

if the Presence timeout is not running, nothing happens

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
48, 60, 72, 84	Channel 1…4	Overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	W	-

Activation requirement:	Channel 1…4:	**Yes**
	Selection Overrun time:	**Control via separate object**

Description:

This object enables the user to modify the Overrun time in runtime.

Object value: 1 to 65535 seconds

The received value is a permanent modification of the parameter.

The new value does not modify the current running Overrun time timer , if the detector is in the presence state.

The new value will be used in the next start/restart of the Overrun time timer.

Note: The Overrun time cannot be changed by the IR remote controllers.

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
49, 61, 73, 85	Channel 1…4	Status indication overrun time	2 bytes	7.005	DPT_TimePeriodSec	C	R	-	T

Activation requirement: Channel 1…4:   **Yes**

Description:
This object allows the status of the overrun time to be sent from the device on the KNX bus.
Object value: 0 to 65535 seconds

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
50, 62, 74, 86	Channel 1…4	Brightness threshold	2 bytes	9.004	DPT_Value_Lux	C	R	W	-

Activation requirement: Channel 1…4:   **Yes**
Brightness threshold via: **Control via separate object**

Description:
This object is a KNX input object which enables the user to modify the brightness threshold in runtime.
Object value: 0 to 670433,28 Lux
The received value is a permanent modification of the brightness threshold.
The new value will be used in the next absence to presence evaluation when a person is detected.
Note: The Brightness threshold cannot be changed by the IR remote controllers

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
51, 63, 75, 87	Channel 1…4	Status indication Brightness threshold	2 bytes	9.004	DPT_Value_Lux	C	R	-	T

Activation requirement: Channel 1…4:   **Yes**
Brightness threshold via: **Control via separate object**

Description:
This object allows the status of the brightness threshold to be sent from the device on the KNX bus.
Object value: 0 to 670433,28 Lux

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
52, 64, 76, 88	Channel 1…4	Sensitivity	1 bit	1.001	DPT_Switch	C	R	W	-

Activation requirement:	Channel 1…4:	**Yes**
	Sensitivity object:	**Yes**

Description:

This object is a KNX input object which enables the user to modify the Sensitivity in runtime.

Object value: Depends on the **Sensitivity Polarity** parameter.

0 = low sensitivity, 1 = high sensitivity:
 – If the object receives the value 0, the low sensitivity is activated.
 – If the object receives the value 1, the high sensitivity is activated.

0 = high sensitivity, 1 = low sensitivity:
 – If the object receives the value 0, the high sensitivity is activated.
 – If the object receives the value 1, the low sensitivity is activated.

Low sensitivity description:

The filter time is divided into 3 parts of equal duration. In each third, the detector must see at least 3 physical presence detections to validate the logical presence detection. If the logical presence is validated in all three parts, then the presence is validated. At the end of the filter time, the presence state is validated, the presence event is transmitted to the related KNX object and the overrun time is started.

Each physical detection event restarts the light timeout.

According on the filtering time, the presence event can be transmitted a long time after the first physical detection event.

High sensitivity description:

When the sensitivity parameter is set to High, the filtering time is disabled and each physical presence detection event is equivalent to a logical presence detection event. The first presence detection event validates the presence state, triggering the transmission of the presence event.

For further information, see: 3.4   Channel 1…4

No.	Name	Object Function	Size	Format	Type	Flags			
53, 65, 77, 89	Channel 1…4	Status indication sensitivity	1 bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Channel 1…4:	**Yes**
	Sensitivity object:	**Yes**

Description:

This object is a KNX input object which enables the user to modify the Sensitivity in runtime.

Object value: Depends on the **Sensitivity Polarity** parameter.

0 = low sensitivity, 1 = high sensitivity:
 – If the low sensitivity is activated, a telegram is sent with logic value 0.
 – If the high sensitivity is activated, a telegram is sent with logic value 1.

0 = high sensitivity, 1 = low sensitivity:
 – If the low sensitivity is activated, a telegram is sent with logic value 1.
 – If the high sensitivity is activated, a telegram is sent with logic value 0.

Condition of transmission: on status change

For further information, see: 3.4   Channel 1…4

4.5   Master

No.	Name	Object Function	Size	Format	Type	Flags			
90	Master	Master	1 Bit	1.001	DPT_Switch	C	R	W	-

Activation requirement: Detector type: **Master**

Description:
This object is used to receive presence detection events from slave detectors.
On input of an ON (1) command: slave detection is valid
On input of an OFF(0) command: no detection of the slave.
Master/Slave feature description:
The detection area can be extended by using slave detectors to trigger a master detector. The master takes the slave information as a detection and processes it as an internal detection. The slave detection is used also by the other KNX channels in the detector.
The detector cannot be Master and Slave at the same time.
If the overrun time of the master is running, the reception of slave detections restart the overrun time.
For further information, see: 3.1   General

4.6   Slave

No.	Name	Object Function	Size	Format	Type	Flags			
91	Slave	Slave	1 Bit	1.001	DPT_Switch	C	R	-	T

Activation requirement: Detector type: **Slave**

Description:
This object is used to send the presence detection events to the master detector.
On emission of an ON (1) command: slave detection is valid
On emission of an OFF(0) command: no detection of the slave.
Master/Slave feature description:
The detection area can be extended by using slave detectors to trigger a master detector. The master takes the slave information as a detection and processes it as an internal detection. The slave detection is used also by the other KNX channels in the detector.
In slave mode, the lighting channel is inhibited but the presence channels can be used.
The detector cannot be Master and Slave at the same time.
If the overrun time of the master is running, the reception of slave detections restart the overrun time. A slave can be linked to several masters
For further information, see: 3.1   General

4.7   Area linking

No.	Name	Object Function	Size	Format	Type	Flags			
92	Area linking	Area linking output	1 Bit	1.001	DPT_Switch	C	R	-	T

Activation requirement: Detector type: **Master**   Area linking: **Yes**

Description:
The value sent on the „Area linking output" object is not related with the actual value of the output level. If the Presence level is equal to 0% and if a presence is detected, the detector sends the value "**ON**" on the „Area linking output" object but nothing visually happens on the dimming output and ON/OFF output (because of the 0% output level).
For further information, see: 3.1   General

No.	Name	Object Function	Size	Format	Type	Flags			
93...117	Area linking	Area 1…25 linking input	1 Bit	1.001	DPT_Switch	C	R	W	-

Activation requirement:	Detector type:	**Master**
	Area linking:	**Yes**

Description:
The user can select the number of available area links (between 1 and 25 links).
These objects are used to receive commands from remote detectors that want to control this detector.

For further information, see:	3.1 General

4.8 Brightness channel

No.	Name	Object Function	Size	Format	Type	Flags			
118	Brightness	Internal Brightness	2 bytes	9.004	DPT_Value_Lux	C	R	-	T

Activation requirement:	Brightness sensor:	**Internal**
	Internal Brightness emission:	**Yes**

Description:
The internal brightness is the value measured by the internal brightness cell.
The user can select an offset which is applied to the internal brightness before transmission on the KNX bus.
Object value: 0 to 670433,28 Lux

Condition of transmission:	on status change

For further information, see:	3.5 Brightness

No.	Name	Object Function	Size	Format	Type	Flags			
120	Brightness	External brightness	2 bytes	9.004	DPT_Value_Lux	C	R	W	-

Activation requirement:	Brightness sensor:	**External**

Description:
This object is a KNX input object that allows the use of a brightness value from an external device.
Object value: 0 to 670433,28 Lux

For further information, see:	3.5 Brightness

No.	Name	Object Function	Size	Format	Type	Flags			
121	Brightness	Status indication external brightness	1 bit	1.001	DPT_Switch	C	R	-	T

Activation requirement:	Brightness sensor:	**External**

Description:
This object indicates whether an external brightness value has been received on the „ External Brightness „ object.
Object value:
– If no external value is received by the detector during the delay (External brightness timeout), a telegram is sent with logic value 1.
– If an external value is received by the detector, a telegram is sent with logic value 0.
Note: If the time limit is exceeded, the detector automatically selects the internal brightness for the actual brightness

Condition of transmission:	on status change

For further information, see:	3.5 Brightness

5. Appendix

5.1 ETS software characteristics

Max. number of group addresses	300
Max. number of associations	300
Objects	121

Table 58: ETS software characteristics

5.2 Technical data

5.2.1 Technical data TXD501

KNX medium	TP 1
Configuration mode	S-Mode, E-Controller
Rated voltage KNX	30 V SELV
Current consumption KNX	max. 10 mA
Connection mode KNX	bus connection terminal
Response brightness	approx. 5 ... 2000 lux
Delay time	5 s ... 60 min
Detection angle	360°
Recommended installation height	2,5 m ... 3,5 m
Maximum installation height	4 m
Detection area Ø motion (installation height 2.5 m)	
– transverse motion towards detector	~ 10 m
– approach detector	~ 5 m
Detection area Ø presence (Installation height 2.5 m)	~ 5 m
Degree of protection	IP 41
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-20 … +70 °C
Protection class	II
Impact resistance	IK 04
Operating altitude	< 2000 m
Dimensions TXD501 (Ø x H)	62 x 86.2 mm

5.2.2 Technical data TXD503 – TXC513

KNX medium	TP 1
Configuration mode	S-Mode, E-Controller
Rated voltage KNX	30 V SELV
Current consumption KNX	max. 10 mA
Connection mode KNX	bus connection terminal
Response brightness	approx. 5 ... 2000 lux
Delay time	5 s ... 60 min
Detection angle	360°
Recommended installation height	2,5 m ... 3,5 m
Maximum installation height	4 m
Detection area Ø motion (installation height 2.5 m)	
– transverse motion towards detector	~ 20 m
– Towards detector	~ 10 m
Detection area Ø presence (Installation height 2.5 m)	~ 10 m
Degree of protection	IP 41
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-20 … +70 °C
Protection class	II
Impact resistance	IK 04
Operating altitude	< 2000 m
Dimensions TXD503 (Ø x H)	85 x 75.8 mm
Dimensions TXD513 (Ø x H)	105 x 61.3 mm

5.2.3 Technical data TXD505 – TXC515

KNX medium	TP 1
Configuration mode	S-Mode, E-Controller
Rated voltage KNX	30 V SELV
Current consumption KNX	max. 10 mA
Connection mode KNX	bus connection terminal
Response brightness	approx. 5 ... 2000 lux
Delay time	5 s ... 60 min
Detection angle	360°
Recommended installation height	2,5 m ... 3,5 m
Maximum installation height	4 m
Detection area Ø motion (installation height 3 m)	
– transverse motion towards detector	~ 30 x 5 m
– Towards detector	~ 14 x 5 m
Detection area Ø presence (Installation height 2.5 m)	~ 10 m
Degree of protection	IP 41
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-20 … +70 °C
Protection class	II
Impact resistance	IK 04
Operating altitude	< 2000 m
Dimensions TXD505 (Ø x H)	85 x 75.8 mm
Dimensions TXD515 (Ø x H)	105 x 61.3 mm

5.2.4 Technical data TXC518

KNX medium	TP 1
Configuration mode	S-Mode, E-Controller
Rated voltage KNX	30 V SELV
Current consumption KNX	max. 10 mA
Connection mode KNX	bus connection terminal
Response brightness	approx. 5 ... 2000 lux
Delay time	5 s ... 60 min
Detection angle	360°
Recommended installation height	6 m ... 9 m
Maximum installation height	10 m
Detection area Ø motion (installation height 8 m)	
– transverse motion towards detector	~ 22 x 12 m
– Towards detector	~ 14 x 8 m
Degree of protection	IP 41
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-20 … +70 °C
Protection class	II
Impact resistance	IK 04
Operating altitude	< 2000 m
Dimensions TXD513 (Ø x H)	105 x 66.2 mm

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