

ESYLUX•

www.esylux.com

GB • OPERATING INSTRUCTIONS

Congratulations on your purchase of this high-quality ESYLUX product. To ensure proper operation, please read these user instructions carefully and keep them for future reference.

1 • SAFETY INSTRUCTIONS



CAUTION: work on the 230 V power system must be carried out by authorised personnel only with due regard to the applicable installation regulations. Switch off the power supply before installing the system.

Use this product only as intended (as described in the user instructions). Changes or modifications to the product or painting it will result in loss of warranty. You should check the device for damage immediately after unpacking it. If there is any damage, you should not install the device under any circumstances.

If you suspect that safe operation of the device cannot be guaranteed, you should turn the device off immediately and make sure that it cannot be operated unintentionally.



NOTE: this device must not be disposed of as unsorted household waste. Used devices must be disposed of correctly. Contact your local town council for more information.

2 • DESCRIPTION

The ESYLUX PD-C180i KNX... is a presence detector with a 180° field of detection and integrated bus coupler for wall mounting. Perform the installation in accordance with the enclosed installation instructions. The detector is able to control lighting ("switching" or "constant light control" functions).

For further features, refer to "Description of the applications" in the operating instructions. With a range of up to 8 m in diameter for use in corridors, staircases and passageways with natural lighting.

The PD-C180i KNX... is only intended to be used in a KNX (EIB), TP bus system in conjunction with other KNX components.

If the ESYLUX PD-C180i KNX... detects that persons are present in its field of detection, transmits controlling telegrams for light outputs, depending on ambient brightness, and for HVAC (heating, ventilation and air conditioning) objects activated by the presence of persons.

- Blended light measurement is suitable for FL, PL, halogen and incandescent lamps.

Certified KNX/EIB training centres provide specialist training on how to plan, install, activate, document and use the ETS (Engineering Tool Software) required for parameter setting.

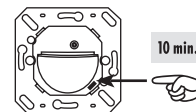
3 • INSTALLATION / ASSEMBLY / CONNECTION



See separate installation instructions..

4 • START-UP

All parameter settings are carried out via the ETS (Engineering Tool Software). Pressing the recessed touch area (bottom right next to the lens) activates the programming mode for the physical address and this is indicated by the **blue LED**. The product database and application description can be downloaded from www.esylux.com.



5 • SWITCH-ON BEHAVIOUR / LED DISPLAY

- **Connect the bus supply**
A warm-up phase of approx. 10 seconds is initiated. The **red LED** and **green LED** slowly flash alternately (f = 1 Hz).
- **LED display after warm-up**
Each time motion is detected this is indicated by 2 x flashes of the **set LED colour**.
- **In the "Master" function, the remote control entries are acknowledged as follows:**
acknowledged 3 x with the **blue LED**.
- **In the "Slave" function, each detection is acknowledged 2 x with the green LED.**



NOTE: When motion is detected, the green LED will only light up if it has been enabled by the ETS (Engineering Tool Software).

6 • TEST MODE

Parameters can be set via the ETS (Engineering Tool Software). Switches to the RUN state after "storing", or 10 minutes after activating test mode.

7 • REMOTE CONTROL

The optional user remote control Mobil-PDi/User (EM10425547) can be used to control the lighting. The Mobil-PDi/User adjusts the value for the period in which persons are present plus the switch-off delay time. Thereafter the values set via the ETS (Engineering Tool Software) will apply.



NOTE: In the "Slave" function, the detector does not respond to the remote control.

The lighting can be controlled as follows via the Mobil-PDi/User:

- switched on or off
- dimmed (only with the "Controlling" feature)
- storing and calling up of 2 scenes
- pressing the "Reset" button resets the KNX presence detector to the values set via ETS (Engineering Tool Software). Stored light scenes 1 + 2 are kept.



For further information, please refer to the remote control Mobil-PDi/User's operating instructions.

Mobil-PDi/User

8 • ESYLUX MANUFACTURER'S GUARANTEE

ESYLUX products are tested in accordance with applicable regulations and manufactured with the utmost care. The guarantor, ESYLUX Deutschland GmbH, Postfach 1840, D-22908 Ahrensburg, Germany (for Germany) or the relevant ESYLUX distributor in your country (visit www.esylux.com for a complete overview) provides a guarantee against manufacturing/material defects in ESYLUX devices for a period of three years from the date of manufacture.

This guarantee is independent of your legal rights with respect to the seller of the device. The guarantee does not apply to natural wear and tear, changes/interference caused by environmental factors or damage in transit, nor to damage caused as a result of failure to follow the user or maintenance instructions and/or as a result of improper installation. Any illuminants or batteries supplied with the device are not covered by the guarantee. The guarantee can only be honoured if the device is sent back with the invoice/receipt, unchanged, packed and with sufficient postage to the guarantor, along with a brief description of the fault, as soon as a defect has been identified.

If the guarantee claim proves justified, the guarantor will, within a reasonable period, either repair the device or replace it. The guarantee does not cover further claims; in particular, the guarantor will not be liable for damages resulting from the device's defectiveness. If the claim is unfounded (e.g. because the guarantee has expired or the fault is not covered by the guarantee), then the guarantor may attempt to repair the device for you for a fee, keeping costs to a minimum.

LIGHT CHANNEL OBJECTS

Object 0: "Input: light channel locking" (length 1 bit)

The light channel's control/dimming outputs are locked with an ON telegram and unlocked with an OFF telegram. Parameters can be used to set the light channel's status after locking and unlocking.

Object 1: "Input: light channel manual ON/OFF" (length 1 bit)**Note: essential in semi-automatic mode.**

If persons are present, manual operation is maintained until the switch-off delay time elapses if "When persons are present" is set in the parameters. If "With deactivated light measurement during off-period" is selected, the light measurement is not active, after this the detector switches to normal operating mode. Manual operation does not influence motion detection.

Object 2: "Input: light channel manual dimming" (length 4 bit)**Function: Constant light control**

Input for KNX touch sensors dim up, dim down, when writing with this object, the light channel is manually overridden and the commands are transmitted to the dimming actuator via object 6.

If persons are present, manual operation is maintained until the switch-off delay time elapses if "When persons are present" is set in the parameters. If "With deactivated light measurement during off-period" is selected, the light measurement is not active, after this the detector switches to normal operating mode. Manual operation does not influence motion detection.

Object 3: "Input: light channel manual dim value" (length 1 byte)**Function: Constant light control**

Input for pre-setting dim values, when writing with this object, the light channel is manually overridden and the values are transmitted to the dim actuator via objects 7 and 8.

If persons are present, manual operation is maintained until the switch-off delay time elapses if "When persons are present" is set in the parameters. If "With deactivated light measurement during off-period" is selected, the light measurement is not active, after this the detector switches to normal operating mode. Manual operation does not influence motion detection.

Object 4: "Output: light channel 1 ON/OFF" (length 1 bit)**Function: Switching****Object 4: "Output: light channel ON/OFF" (length 1 bit)****Function: Constant light control**

If artificial lighting is required (switching threshold 1/set value via parameter) and persons are present, the output sends an ON telegram.

If natural light is sufficient and/or no persons are present, an OFF telegram is sent after the switch-off delay time has elapsed.

Object 5: "Output: light channel 2 ON/OFF" (length 1 bit)**Function: Switching**

If artificial lighting is required (switching threshold 2 as opposed to switching threshold 1 via parameter) and persons are present, the output sends an ON telegram.

If natural light is sufficient and/or no persons are present, an OFF telegram is sent after the switch-off delay time has elapsed.

Object 6: "Output: light channel dimming" (length 4 bit)**Function: Constant light control**

If a touch sensor is manually pressed and held (object 2) telegrams are transmitted to the dim actuator via this object.

Object 7: "Output: light channel dim value 1" (length 1 byte)**Function: Constant light control**

If artificial lighting is required and persons are present, the output sends an ON/value telegram (1 byte).

If natural light is sufficient (controller to minimum) and no persons are present, 0% is sent or the device switches to orientation light once the switch-off delay time has elapsed.

Object 8 "Output: light channel dim value 2" (length 1 byte)**Function: Constant light control**

If artificial lighting is required and persons are present, the output sends an ON/value telegram (1 byte).

If natural light is sufficient (controller to minimum) and no persons are present, 0% is sent or the device switches to orientation light once the switch-off delay time has elapsed.

Optional offset dim value 2 to dim value 1 via parameter.

Object 9: "Input: light channel 1 actuator acknowledgement" (length 1 bit)**Function: Switching****Object 9: "Input: light channel actuator acknowledgement" (length 1 bit)****Function: Constant light control**

An actuator's status object can be processed via this object. If the actuator is not only controlled by the detector, light channel 1 switches to standby mode if the status of the channel and actuator differ.

Object 10: "Input: light channel 2 actuator acknowledgement" (length 1 bit)**Function: Switching**

An actuator's status object can be processed via this object. If the actuator is not only controlled by the detector, light channel 2 changes to standby mode if the status of the channel and actuator differ.

Object 11: "Input: light channel orientation light ON/OFF" (length 1 bit)**Function: Constant light control**

The orientation light function is switched off with an OFF telegram and switched on with an ON telegram.

Object 12: "Input: light channel toggle orientation light" (length 1 bit)**Function: Constant light control**

An ON telegram changes the setting from orientation light value 1 to orientation light value 2, an OFF telegram switches from value 2 to value 1.

LIGHT VALUE OBJECTS

Object 13: "Input: lock light value send" (length 1 bit)

An ON telegram locks the sending, an OFF telegram activates the sending of the internal light value.

Object 14: "Input: external light value" (length 2 byte)

Über dieses Objekt kann für den Istwert der Konstantlichtregelung/-steuerung ein externer Lichtwert zum internen gemischt werden.

Object 15: "Output: internal light value" (length 2 byte)

Internal light value output.

HVAC CHANNEL OBJECTS

Object 16: "Input: lock HVAC channel" (length 1 bit)

The HVAC channel's control output is locked with an ON telegram and unlocked with an OFF telegram. Parameters can be used to set the channel's status after locking and unlocking.

Object 17: "Output: HVAC channel ON/OFF" (length 1 bit)

If persons are detected, depending on the turn-on delay, an ON telegram is sent. If no persons are detected, depending on the switch-off delay time, an OFF telegram is sent.

MOTION OBJECTS

Object 18: "Input: Slave/Master motion" (length 1 bit)

Trigger input for parallel connection of Master/Master or input of Slave.

Object 19: "Input: lock motion detection" (length 1 bit)

Internal motion detection is locked with an ON telegram and unlocked again with an OFF telegram.

Object 20: "Output: motion detection" (length 1 bit)

Internal motion output.

Object 20: "Output: left sensor motion detection" (length 1 bit)

Function: Separate output of motion detection
 Left sensor motion output to motion direction display.

Object 21: "Output: right sensor motion detection" (length 1 bit)

Function: Separate output of motion detection
 Right sensor motion output to motion direction display.

TWILIGHT SWITCH OBJECTS

Object 22: "Input: twilight switch manual ON/OFF" (length 1 bit)

Manual override is maintained until the off-period has elapsed.

TWILIGHT SWITCH OBJECTS

Object 23: "Output: twilight switch ON/OFF" (length 1 bit)

If the threshold value is not reached, after the delay, the twilight switch sends an ON telegram. If the threshold value is exceeded, after the delay, the twilight switch sends an OFF telegram.

PRESENCE SIMULATION OBJECT

Object 24: "Input: presence simulation ON/OFF" (length 1 bit)

Presence simulation is switched on or off.

NIGHTLIGHT OBJECT

Object 25: "Input: nightlight ON/OFF" (length 1 bit)

Nightlight function is switched on or off, motion detection display/locking is maintained.

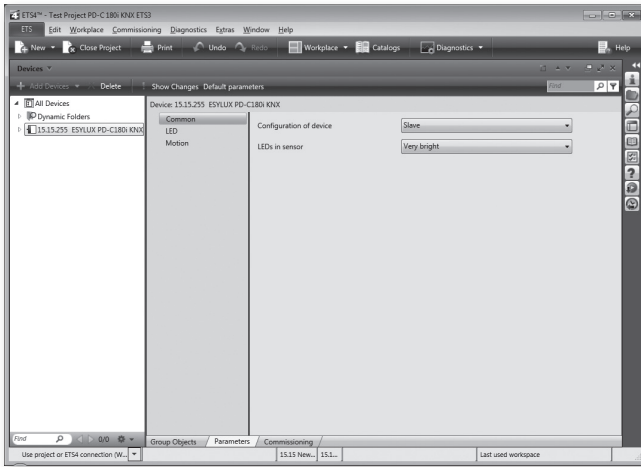
SWITCHING FUNCTION OBJECTS

Number	Name	Length	R	W	T	U	Data Type	Priority
#21 0	Input: Lock light channel	1 bit	C	-	W	-	-	Low
#21 1	Input: Light channel manual ON/OFF	1 bit	C	-	W	-	-	Low
#21 4	Output: Light channel 1 ON/OFF	1 bit	C	R	-	T	-	Low
#21 5	Output: Light channel 2 ON/OFF	1 bit	C	R	-	T	-	Low
#21 9	Input: Light channel 1 actuator feedback	1 bit	C	-	W	-	-	Low
#21 10	Input: Light channel 2 actuator feedback	1 bit	C	-	W	-	-	Low
#21 13	Input: Lock sending light value	1 bit	C	-	W	-	-	Low
#21 14	Input: External light value	2 Byte	C	-	W	-	-	Low
#21 15	Output: Internal light value	2 Byte	C	R	-	T	-	Low
#21 16	Input: Lock presence (HVAC)	1 bit	C	-	W	-	-	Low
#21 17	Output: Presence (HVAC) ON/OFF	1 bit	C	R	-	T	-	Low
#21 18	Input: Slave/master motion	1 bit	C	-	W	-	-	Low
#21 19	Input: Lock motion detection	1 bit	C	-	W	-	-	Low
#21 20	Output: Left sensor motion detection	1 bit	C	R	-	T	-	Low
#21 21	Output: Right sensor motion detection	1 bit	C	R	-	T	-	Low
#21 22	Input: Twilight switch manual ON/OFF	1 bit	C	-	W	-	-	Low
#21 23	Output: Twilight switch ON/OFF	1 bit	C	R	-	T	-	Low
#21 24	Input: Presence simulation ON/OFF	1 bit	C	-	W	-	-	Low
#21 25	Input: Nightlight ON/OFF	1 bit	C	-	W	-	-	Low

CONTROL FUNCTION OBJECTS

Number	Name	Length	R	W	T	U	Data Type	Priority
#21 0	Input: Lock light channel	1 bit	C	-	W	-	-	Low
#21 1	Input: Light channel manual dimming	4 bit	C	-	W	-	-	Low
#21 2	Input: Light channel manual dim value	1 Byte	C	-	W	-	-	Low
#21 4	Output: On/off	1 bit	C	R	-	T	-	Low
#21 6	Output: Light channel dimming	4 bit	C	R	-	T	-	Low
#21 7	Output: Light channel dim value 1	1 Byte	C	R	-	T	-	Low
#21 8	Output: Light channel dim value 2	1 Byte	C	R	-	T	-	Low
#21 9	Input: Light channel actuator feedback	1 bit	C	-	W	-	-	Low
#21 11	Input: Select orientation light	1 bit	C	-	W	-	-	Low
#21 12	Input: Orientation light ON/OFF	1 bit	C	-	W	-	-	Low
#21 13	Input: Lock sending light value	1 bit	C	-	W	-	-	Low
#21 14	Input: External light value	2 Byte	C	-	W	-	-	Low
#21 15	Output: Internal light value	2 Byte	C	R	-	T	-	Low
#21 16	Input: Lock presence (HVAC)	1 bit	C	-	W	-	-	Low
#21 17	Output: Presence (HVAC) ON/OFF	1 bit	C	R	-	T	-	Low
#21 18	Input: Slave/master motion	1 bit	C	-	W	-	-	Low
#21 19	Input: Lock motion detection	1 bit	C	-	W	-	-	Low
#21 20	Output: Left sensor motion detection	1 bit	C	R	-	T	-	Low
#21 21	Output: Right sensor motion detection	1 bit	C	R	-	T	-	Low
#21 22	Input: Twilight switch manual ON/OFF	1 bit	C	-	W	-	-	Low
#21 23	Output: Twilight switch ON/OFF	1 bit	C	R	-	T	-	Low
#21 24	Input: Presence simulation ON/OFF	1 bit	C	-	W	-	-	Low
#21 25	Input: Nightlight ON/OFF	1 bit	C	-	W	-	-	Low

DESCRIPTION OF THE APPLICATION



1. MASTER/SLAVE

The Master detects presence and processes it according to set parameters.

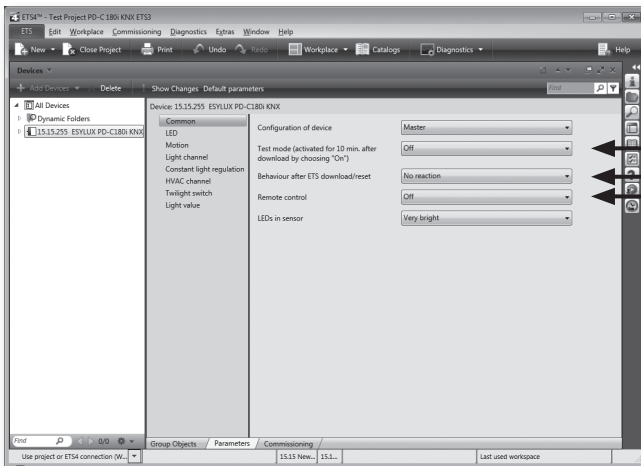
“Lighting ON/OFF” or “Lighting light value higher/lower”

The Slave is used exclusively for extending the field of detection. Presence is transmitted to the Master (object 18) for processing according to the set parameters.

Master/Slave selection

Two Masters can work in parallel to extend the field of detection. Each Master processes the presence (object 18 and 20, if applicable 21) according to its parameters set via the ETS (Engineering Tool Software), and controls the lighting appropriately.

Default setting: Master



2. TEST MODE

(Only for Master device configuration)

During test mode “ON” → light measurement deactivated.

If test mode is enabled, connection with the lighting system is checked.

Depending on the parameter settings, in the event of detection via the motion sensor or microphone, the lighting will be “ON” for 5 seconds followed by a dead time of 5 seconds “OFF”.

The **blue LED** indicates motion detection, the **red/green LED** indicates detection via the microphone whereby the **red LED** indicates a noise well beyond the limit value and the **green LED** a noise just above the limit value.

Test “ON” automatically switches to test “OFF” after 10 minutes or when the parameters are stored.

! NB: During test → Slave input enabled.

3. BEHAVIOUR AFTER ETS DOWNLOAD/DEVICE RESTART

The choices include: “No reaction”, “ON”, “OFF”
 In the process, the following objects are sent:

Switching operating mode:

- Object 4: “Output: light channel 1 ON/OFF”
- Object 5: “Output: light channel 2 ON/OFF”

“Controlling” or “control” operating mode:

- Object 4: “Output: light channel ON/OFF”
- Object 7: “Output: light channel dim value 1”
- Object 8: “Output: light channel dim value 2”

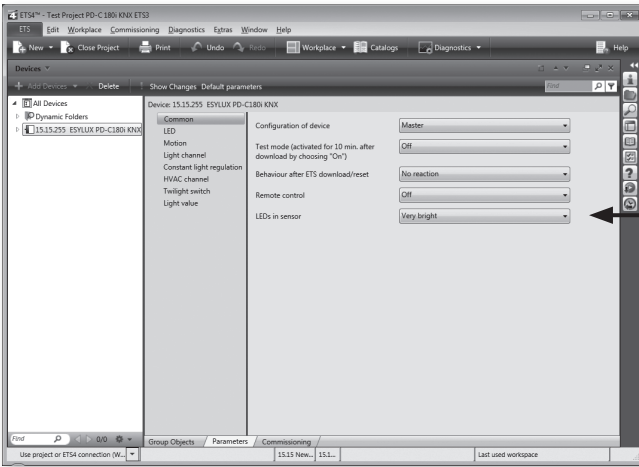
- In addition, object 17: “Output: HVAC channel ON/OFF”

4. REMOTE CONTROL

Operation is deactivated with Mobil-PDi/User or X-REMOTE (iphone).

! Note: Remote control deactivated in test mode.

DESCRIPTION OF THE APPLICATION



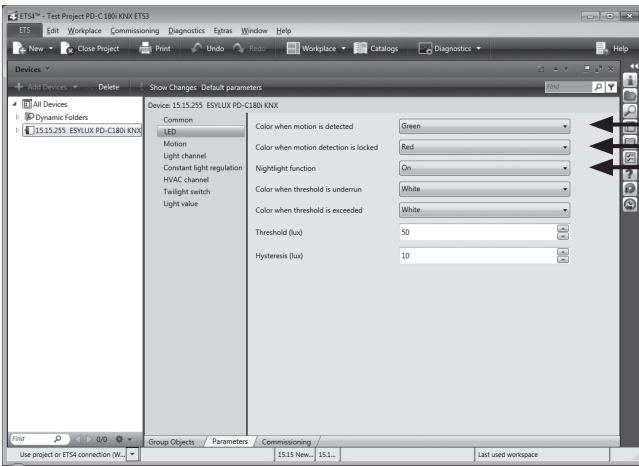
5. LED IN SENSOR

Either LED brightness or "OFF"

If the LED is not switched off, its colour upon motion detection (flashes 2x) and its colour when locking the motion detection can be set via object 19.

5.1. Nightlight function

The LED can be used as a nightlight with this function. If the threshold value is exceeded/not reached, the device immediately switches to one of the set colours. The nightlight can be deactivated via object 25.



6. MOTION DETECTION

If motion is detected, this status is maintained for the set amount of time, the sensors will then be polled several times per second as to whether a new motion has been detected. The sensitivity of each sensor can be set separately. If the separate sensor output is selected, the output shall be via object 20 and 21. With appropriate processing, this can be used e.g. to implement a motion direction display. Motion detection can be locked with object 19 - the LED will display the selected colour for this.

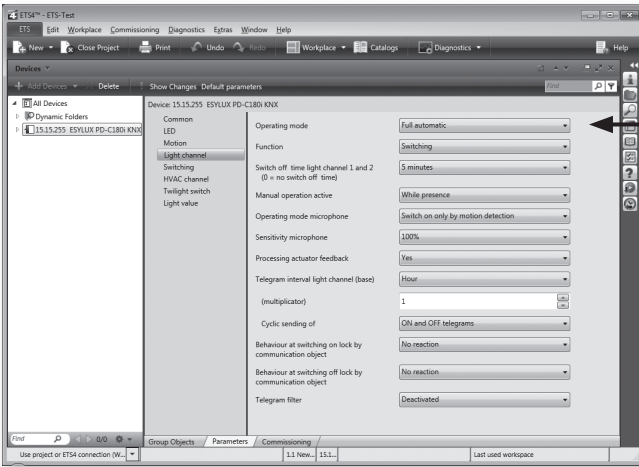
7. PRESENCE SIMULATION

The detector stores any detected movements for 1 week, the channels corresponding to the weekly storage can be switched on or off with an ON telegram via object 24. During this process, normal motion detection remains active.

8. EXTERNAL MASTER/SLAVE

These parameters can be used to set whether the external Master/Slave should only send ON telegrams upon motion detection or whether the external device should send ON telegrams with motion detection and OFF telegrams without motion detection.

DESCRIPTION OF THE APPLICATION



9. LIGHT CHANNEL

9.1 Light channel operating mode

• "Fully automatic" operating mode

Lighting is automatically switched on if the detector detects presence and the ambient lighting level has fallen below the pre-set brightness threshold or set value. The lighting is automatically switched off if no persons are present and once the set switch-off delay time has elapsed. The lighting will also switch off automatically if the pre-set brightness threshold or set value is exceeded, regardless of presence. When persons are present, in order to avoid sudden changes in brightness caused by undesired switching on/off of the lighting, the detector will only be triggered after a time delay. Example: A passing cloud could potentially cause unnecessary switching. Time delay from "light to dark": 30 seconds Time delay from "dark to light": 5 minutes

• Additional manual lighting control in "Fully automatic" mode

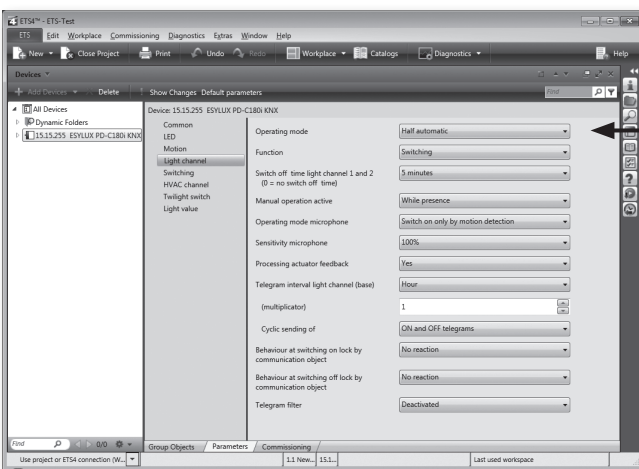
The lighting can be switched on or off manually using infrared remote control (Mobil-PDi/User, refer also to the separate Mobil-PDi/User instructions) or by telegrams, e.g. by pressing external KNX/EIB buttons. If manual operation when persons are present is set, despite high ambient brightness conditions (ambient lighting level is higher than the pre-set light value), the artificial light will remain switched on for as long as the detector continues to detect movement. If no more movement is detected, the lighting is switched off after the set switch-off delay time has elapsed. The lighting can be subsequently switched back on manually at any time. If the artificial light is switched off manually, the lighting will remain switched off for as long as the detector continues to detect movement. If manual operation during off-period is set, during this time the detector behaves in the same way as when set for manual operation when persons are present. The detector then switches to normal operating mode. In this way, the light can be switched on by the user despite the threshold value being exceeded, and then switched off automatically after the set time has elapsed. If no more movement is detected, the detector will revert to the previous automatic mode after the set switch-off delay time has elapsed.

! NB: Applies to all light channel operating modes.

• "Semi-automatic" operating mode

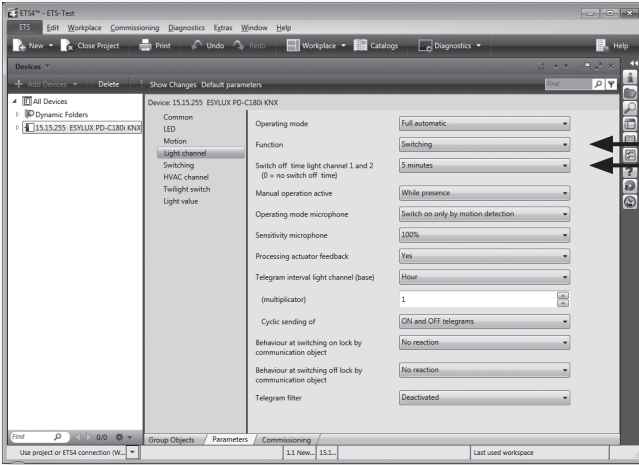
If "semi-automatic" mode has been selected, the lighting must be switched on manually using infrared remote control (Mobil-PDi/User) or by telegrams, e.g. by pressing external KNX/EIB buttons. This means that the detector does not automatically switch "ON" the lighting when persons are present. However, should the natural lighting level increase and the ambient lighting level exceed the pre-set light value, the detector will automatically switch the lighting off 5 minutes after reaching the pre-set light value, regardless of any presence. The lighting can subsequently be switched back on manually at any time. If manual operation during off-period is set, during this time the detector behaves in the same way as when set for manual operation when persons are present. The detector then switches to normal operating mode. In this way, the light can be switched on by the user despite the threshold value being exceeded, and then switched off automatically after the set time has elapsed.

! NB: External ON telegram, e.g. via KNX/EIB button, is essential in "semi-automatic" mode. Applies to all light channel operating modes.



Default setting: Fully automatic

DESCRIPTION OF THE APPLICATION



9.2 Light channel function

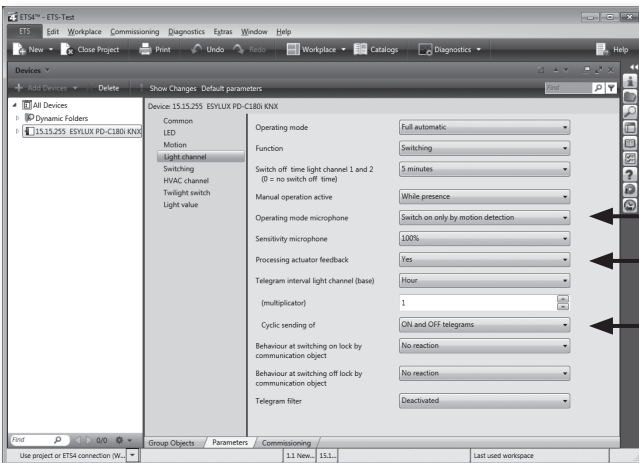
Options:
Switching: ON/OFF to a defined switching threshold.
Controlling: ON/light control to a defined set value/ (OFF) constant light control.
Control: Light control via linear assignment of dim values to light values.

Default setting: Switching

9.3 Switch-off delay time light channel

• **Switch-off delay time channel light**
 Options: 0 seconds, 30 seconds - 30 minutes

Default setting: 5 minutes



9.4 Microphone operating mode

The microphone can be used for presence detection and the following operating modes can be selected:
No microphone: Only motion sensors are active.
Switch on only after motion detection: The light channel is not switched on via the microphone, but sound processing is active if persons are present.
Only switch on via microphone: The light channel is only switched on via the microphone, if persons are present, the motion sensors are also processed. Microphone only, no motion detection.

The microphone's sensitivity can be set in test mode.

9.5 Processing actuator acknowledgement

An actuator's status object can be processed via objects 9 and 10. If the actuator is not only controlled by the detector, the light channel switches to standby mode if the status of the channel and actuator differ.

9.6 Sending in cycles

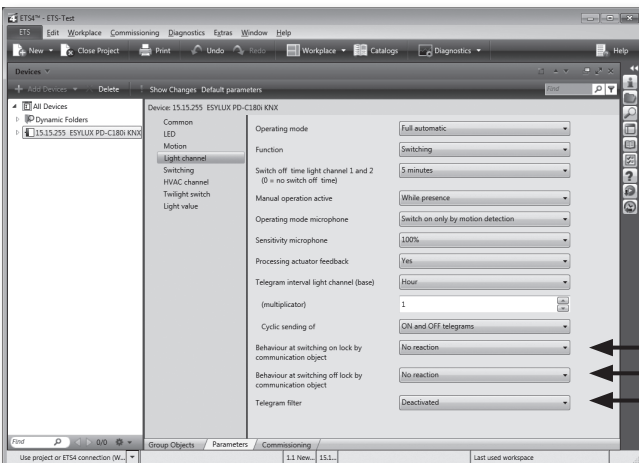
The light channel sends its current status in cycles according to set time intervals. At the same time a setting can be made to define whether it should repeatedly send ON or OFF telegrams in cycles.

9.7 Behaviour during locking and unlocking

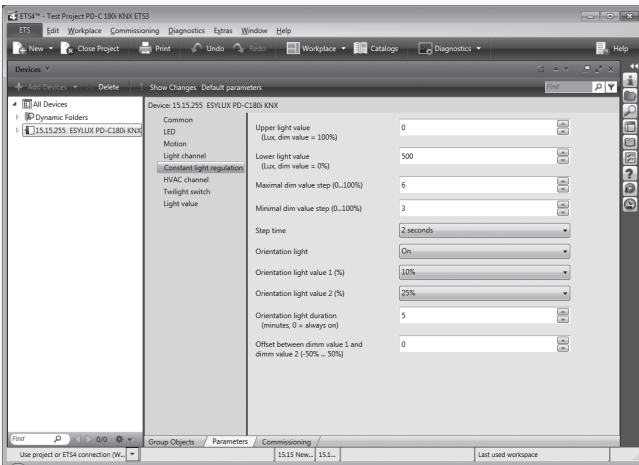
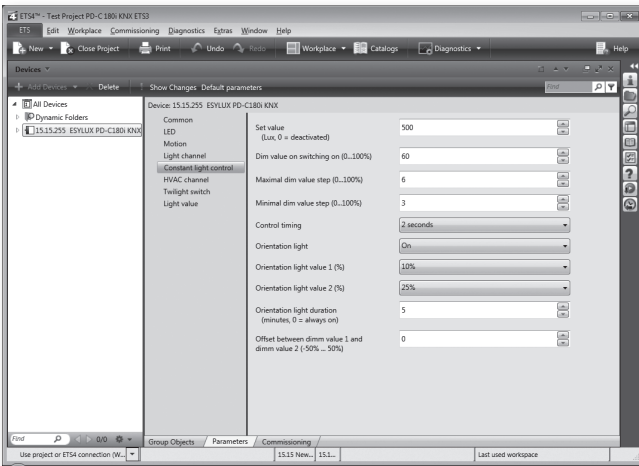
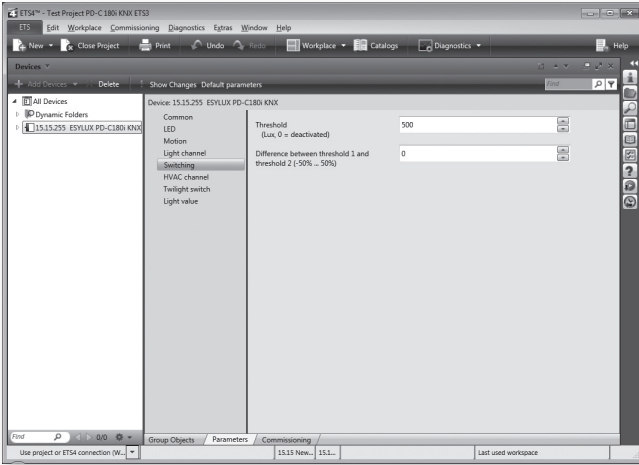
Choice of no reaction, switch light channel off or on.

9.8 Telegram filter

Sending OFF or ON telegrams via the light channel can be disabled here.



DESCRIPTION OF THE APPLICATION



10. LIGHT CHANNEL FUNCTION

10.1 Switching

Options: 0 = disabled
 Choice between 1 - 2000 lux (up/down menu) or as direct input of 0 - 2000 lux
 Default setting: 500 lux
 There is an option of determining an offset between: "switching threshold ON/OFF 1" and "switching threshold ON/OFF 2" -50% to +50%

Default setting: ±0%

10.2 Controlling

• Dim value at start of controlling

Options: 0 = disabled
 Choice between 1 - 2000 lux (up/down menu) or as direct input of 0 - 2000 lux
 Default setting: 500 lux

Control timing: Options: 0.5 seconds - 10 seconds (up/down menu)

! NB: If the control loop exhibits a hunting tendency, the sensor can be adjusted to various illuminants and ballasts using the "control timing" parameter.

Rule of thumb: the slower the lighting responds, the longer the control timing (0.5...10 seconds).

10.3 Control

• Dim value at start of control

Options: 0 = disabled
 Choice between 1 - 2000 lux (up/down menu) or as direct input of 0 - 2000 lux
 Default setting: 500 lux

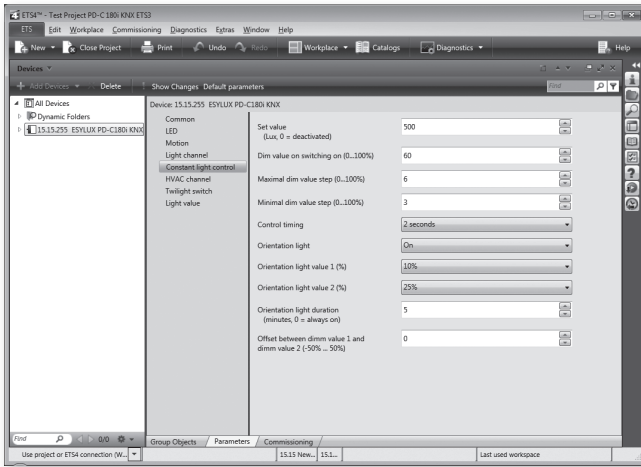
Control timing: Options: 0.5 seconds - 10 seconds (up/down menu)

! NB: If the control loop exhibits a hunting tendency, the sensor can be adjusted to various illuminants and ballasts using the "step time" parameter.

Rule of thumb: the slower the lighting responds, the longer the step time (0.5...10 seconds).

Default setting: 2 seconds

DESCRIPTION OF THE APPLICATION



10.4 Orientation light value

• Orientation light value 1

Options: 0/5 - 50% (up/down menu) in 5% steps



NB: Only active with "Controlling" and "Control".
Orientation light value 1 is active as standard.

Via object 12, an ON telegram changes the setting to orientation light value 2 or an OFF telegram changes the setting to orientation light value 1.
Only active if orientation light has been set to "ON".

Default setting: 10%

• Orientation light value 2

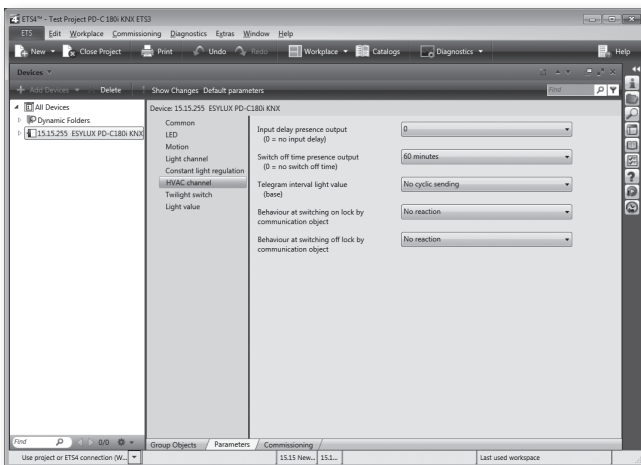
Options: 0/5 - 50% (up/down menu) in 5% steps



NB: Only active for constant light control.
Only active if orientation light has been set to "ON".

Default setting: 25%

The orientation light function is switched off with an OFF telegram via object 11 and switched on with an ON telegram. If the orientation light function is switched off, the detector switches to OFF/0% after persons are present and the switch-off delay time has elapsed.



11. HVAC CHANNEL



NB: The presence output is independent of the set light values.

Option of selecting input delay of 0 minutes or 2 minutes - 30 minutes. Default setting: 0 minutes.

Option of selecting a switch-off delay time of 0 seconds, 10 seconds or 1 minute - 60 minutes. Default setting: 60 minutes.

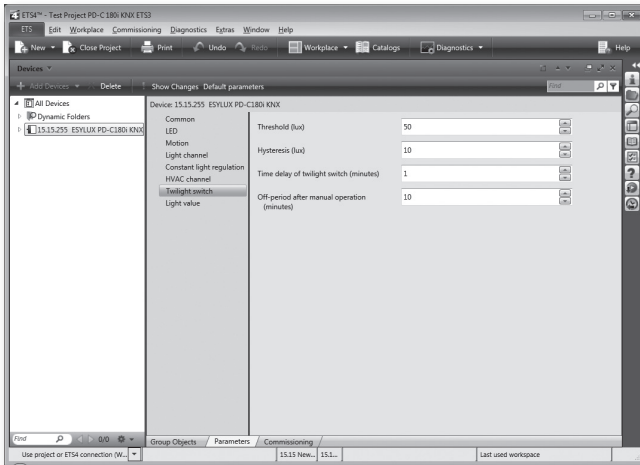
11.1 Sending in cycles

The HVAC channel sends its current status in cycles according to its set time intervals. At the same time a setting can be made as to whether it should repeatedly send ON or OFF telegrams in cycles.

11.2 Behaviour during locking and unlocking

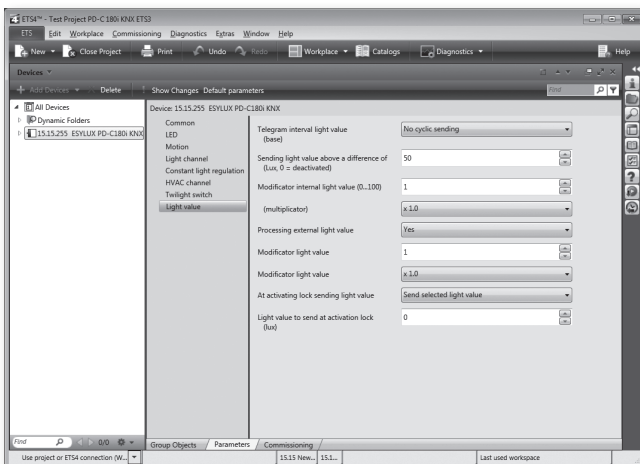
Choice of No reaction, switch light channel off or on.

DESCRIPTION OF THE APPLICATION



12. TWILIGHT SWITCHES

In normal operating mode, the twilight switch sends an ON telegram if the threshold value is continually not reached during switching time, and an OFF telegram if the threshold value is continuously exceeded during switching time plus hysteresis. After manual switching, the twilight switch remains inactive. After the off-period has elapsed, it switches to normal operating mode.



13. LIGHT VALUE

13.1 Internal light value

The internal light value can be transmitted in cycles or at a difference to the last light value sent. The internal light value is calculated from:

$$\text{Light value from sensor} \times \text{modifier} \times \text{multiplier}$$

Sending the internal light value can be locked via object 13, in doing so, the current value or a value set in the parameters can be sent.

13.2 External light value

For the internal light control, an external sensor can also be integrated and weighted via KNX. The control's actual value is then:

$$\text{Internal light value} + \text{external light value} \times \text{modifier} \times \text{multiplier}$$