



KNX MOVEMENT / PRESENCE DETECTORS
DM KNT XXX



USER MANUAL

INDEX

1 INTRODUCTION.....	3
2 CONFIGURATION.....	4
2.1 General	4
2.2 Movement Sensor	8
2.2.1 Channel 1..6 Configuration	8
2.2.2 Channel 1..6 Sending	11
2.3 Constant Light Control	13
2.4 Twilight Switch	18
2.5 Temperature Sensor	19
2.6 Brightness Sensor	20
3 ETS DATABASE	20
Appendix I: Communication Objects	21

1 INTRODUCTION

The DM KNT XXX detectors are a perfect solution for motion and/or presence detection, featuring high-quality, state-of-the-art PIR technology.

In addition, they incorporate constant light regulation functionality, making them an ideal solution for controlling artificial lighting based on natural light contribution, thus contributing to considerable energy savings.

Models are available for wall or ceiling installation, with special versions for corridors, high ceiling areas, and even outdoor use.

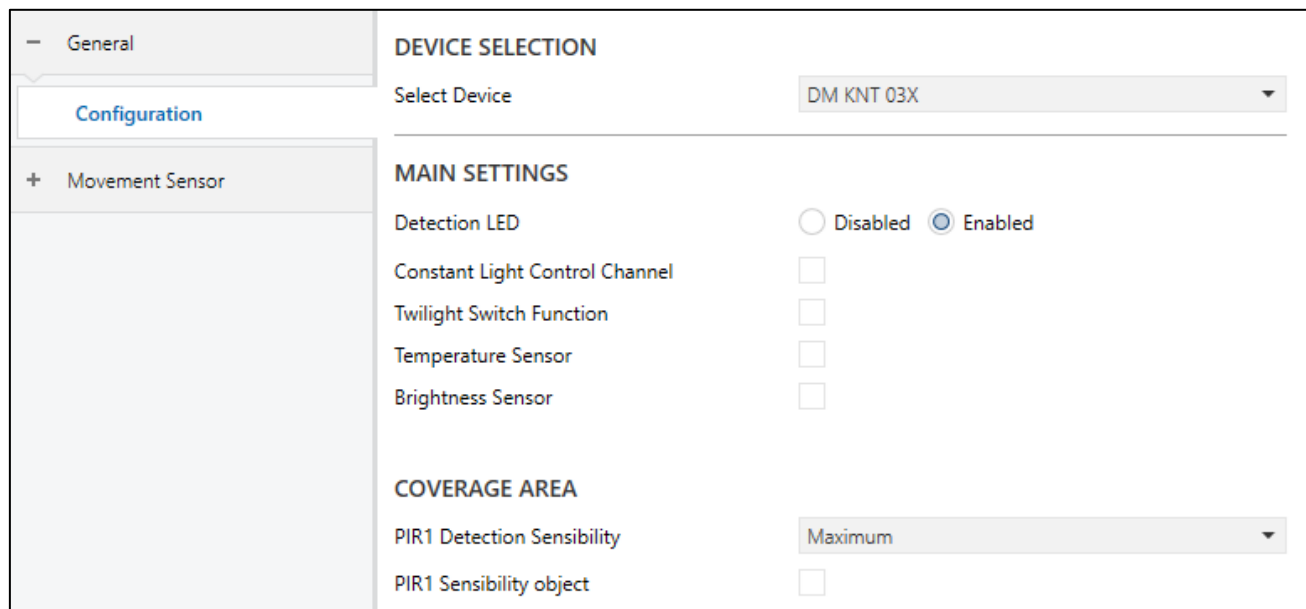
Main Features:

- Up to 3 PIR sensors with adjustable sensitivity and selective coverage.
- 6 Motion/Presence Detection channels + 1 Constant Light Control channel.
- Detection channels allow:
 - Lighting control.
 - HVAC control.
 - Motion monitoring.
- Master/Slave functionality.
- Automatic or Semi-Automatic operating mode.
- Integrated light and temperature sensors.
- Option to disable the detection LED.
- Ability to perform constant light regulation for up to 4 independent groups, using configurable dimming values.
- Configuration and commissioning via ETS®.
- Typical applications: residential areas, bathrooms, schools, offices, hotels, meeting rooms, hospitals, garages, etc

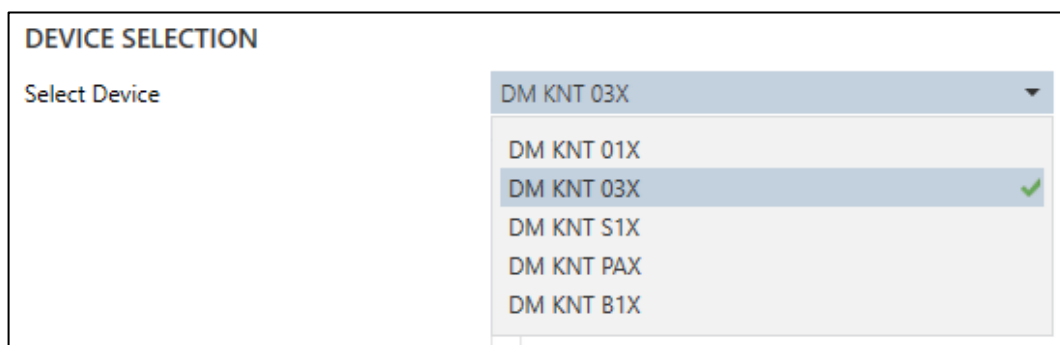
2 CONFIGURATION

2.1 General

Once the corresponding database has been imported into ETS and the device has been added to the project topology, the configuration begins by accessing the device's parameters tab.



First, the detector model to be configured must be selected:



- DM KNT 01X = DM KNT 01B, DM KNT 01N or DM KNT 01P
- DM KNT 03X = DM KNT 03B, DM KNT 03N or DM KNT 03P
- DM KNT S1X = DM KNT S1B, DM KNT S1N or DM KNT S1P
- DM KNT PAX = DM KNT PAB, DM KNT PAN or DM KNT PAP
- DM KNT B1X = DM KNT B1B, DM KNT B1N or DM KNT B1P

Next, the following functions or PIR sensors can be enabled or disabled:

MAIN SETTINGS

Detection LED

☐ Disabled
☒ Enabled

Constant Light Control Channel
☐

Twilight Switch Function
☐

Temperature Sensor
☐

Brightness Sensor
☐

COVERAGE AREA

PIR1 Detection Sensibility

Maximum

PIR1 Sensibility object
☐

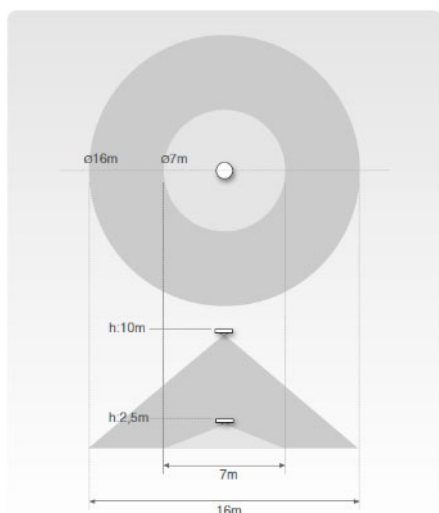
- **Detection LED:** enables or disables the red LED located behind the detector lens, which lights up each time movement is detected.
- **Constant Light Control Channel:** enables the function that regulates lighting based on natural light. See Section 2.3
- **Twilight Switch Function:** enables twilight-based control, allowing lighting to switch on/off based on natural light. See Section 2.4
- **Temperature Sensor:** configures the transmission of measured temperature from the internal sensor. See Section 2.5
- **Brightness Sensor:** configures the transmission of measured brightness from the internal sensor. See Section 2.6

Finally, in this initial menu, the detector's coverage area can be adjusted. Depending on the model, and therefore the number of PIR sensors, the options will differ:

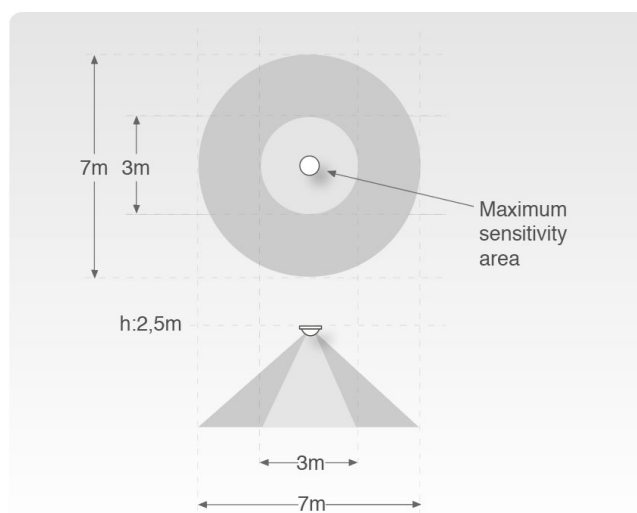
DM KNT 01X & DM KNT 03X (1 PIR Sensor):

COVERAGE AREA	
PIR1 Detection Sensibility	Maximum
PIR1 Sensibility object	<input type="checkbox"/>

DM KNT 01X



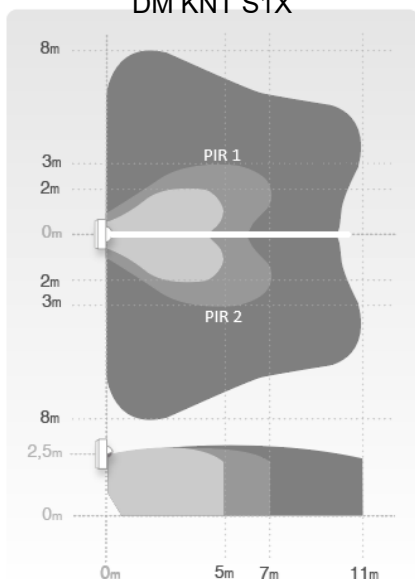
DM KNT 03X



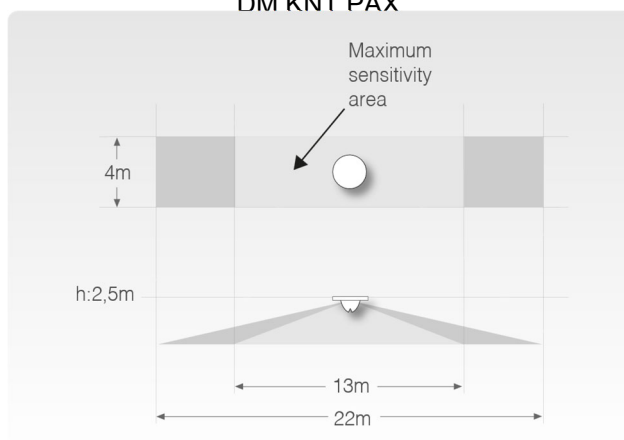
DM KNT S1X & DM KNT PAX (2 PIR Sensors):

COVERAGE AREA	
PIR1 Detection Sensibility	High
PIR1 Sensibility object	<input type="checkbox"/>
PIR2 Detection Sensibility	High
PIR2 Sensibility object	<input type="checkbox"/>

DM KNT S1X

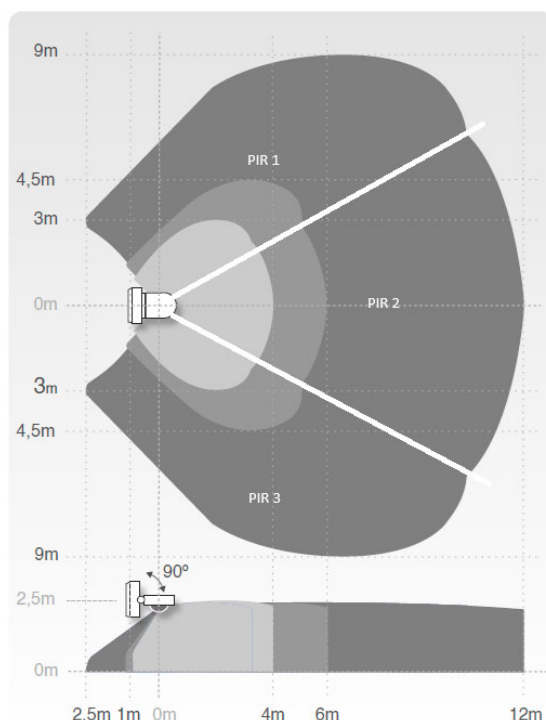


DM KNT PAX



DM KNT B1X (3 PIR Sensor):

COVERAGE AREA	
PIR1 Detection Sensibility	High ▼
PIR1 Sensibility object	<input type="checkbox"/>
PIR2 Detection Sensibility	High ▼
PIR2 Sensibility object	<input type="checkbox"/>
PIR3 Detection Sensibility	High ▼
PIR3 Sensibility object	<input type="checkbox"/>



- **PIR1..3 Detection Sensibility:** allows adjustment of each PIR sensor's sensitivity across 3 or 5 levels, depending on model, or even disabling it.
- **PIR1..3 Sensibility object:** enables the 1-byte (%) object '[GNRL] PIR1..3 Detection Sensibility' to modify sensitivity.

2.2 Movement Sensor

This is the detector's main function and consists essentially of sending the corresponding telegram when movement is detected and certain brightness conditions are met.

This function contains up to 6 independent channels; all linked to the same motion detection event.

When a channel is enabled, its associated parameters are displayed:

CHANNEL 1

Channel Type ☒ Master Detector ☐ Slave Detector

Operation Mode ☒ Automatic ☐ Semi-Automatic

Detection time s

Blind time s

Type

Enable Presence Detection functionality (continuous measurement of brightness) ☐

Brightness for Detection Lux

No-Detection Hysteresis %

Enable Block Channel object ☐

Enable Force function ☐

2.2.1 Channel 1..6 Configuration

- **Channel Type:** Defines whether the channel operates as a Master or Slave detector:
 - **Master Detector:** determines presence based on information received from any Slaves (if present) and its own detection:
 - **Operation Mode:** determines whether both switching ON and OFF are executed by the detector itself (Automatic), or whether switching ON or OFF must be done via an external command (Semi-Automatic). In this case, the externally performed action must be defined using the object '[CH1..6] External Switching'. That is, in Semi-Automatic mode:
 - Action in Semi-Automatic Mode = ON → Even if motion is detected, no action will be taken, since the first activation must be manual via the '[CHX] External Switching' object, either by writing a 1 or a 0.
 - Action in Semi-Automatic Mode = OFF → The first activation will occur at the moment motion is detected, while turning off must be done manually via the '[CHX] External Switching' object. Once turned off through this object, the 'Detection Time' must elapse (resetting with each detection) before motion detection will be acknowledged again and the corresponding action triggered.

- **Detection time:** defines the time that must elapse from the last detection before sending the corresponding 'no detection' telegram. This time resets with every new detection.
- **Blind time:** once the detection time expires, an additional period can be defined during which detections are ignored. In Semi-Automatic mode, this time is not considered.
- **Type:** defines whether the channel is intended for Lighting Control (movement + brightness), HVAC control (movement only), or simple Movement Monitoring.

Type	<div>Lighting control</div> <div>Lighting control ✓</div> <div>HVAC Control</div> <div>Movement Monitoring</div>
------	--

Lighting Control vs Movement Monitoring: The only difference is that Movement Monitoring ignores brightness conditions.

If 'Lighting control' is selected, three extra parameters appear:

- **Enable Presence Detection functionality:** when enabled, the detector continuously measures brightness, and a 'no movement' telegram is sent when no movement is detected OR when measured brightness is above the value set in 'Brightness for Detection', and the detection time has expired. If disabled, the telegram is sent only when movement stops, regardless of brightness.
 - **Brightness for Detection:** sets the brightness level required to enter the 'movement' state. If movement is detected and the brightness value measured by the sensor is below this threshold, the device will switch to the 'movement' state. If movement is detected and the brightness value measured by the sensor is above this threshold, it will remain in the 'no-movement' state.
 - **No-Detection Hysteresis:** applies hysteresis to the brightness threshold to avoid oscillations when lighting conditions fluctuate around the limit.
 - **Delay in Brightness measurement:** when acting as a Presence detector, a delay can be set during which brightness is ignored to prevent cyclic toggling between 'movement' and 'no-movement'.
- **Enable Block Channel object:** activates object '[CHX] Block Channel X', which permanently disables the channel (0). 'Time to Unblock' defines when the channel can be re-enabled.

Enable Block Channel object	<input checked="" type="checkbox"/>
Configuration	<input checked="" type="radio"/> 0 = Unblock, 1 = Block <input type="radio"/> 0 = Block, 1 = Unblock
Time to Unblock	<input type="text" value="0"/> s
Channel state after Bus reset	<div>Last state</div>

- **Enable Force function:** activates object '[CHX] Force' (1-bit or 2-bit) to force ON or OFF according to configuration.

Enable Force function	<input checked="" type="checkbox"/>
"Force" object type	<input checked="" type="radio"/> 1 Bit object <input type="radio"/> 2 Bit object
"Force" object polarity	<input checked="" type="radio"/> 1: Switch-Off <input type="radio"/> 1: Switch-On
"Force" object state after recovering Bus voltage	<input checked="" type="radio"/> Not Force <input type="radio"/> Force

- Slave Detector: There may be several of them, and they are responsible for transmitting the detection status to the Master detector.

CHANNEL 1	
Channel Type	<input type="radio"/> Master Detector <input checked="" type="radio"/> Slave Detector
DETECTION	
Switch	<input checked="" type="checkbox"/>
Send	<input type="radio"/> Off <input checked="" type="radio"/> On

They simply report detection status to the Master by sending 'ON' or 'OFF' via object '[CHX] Send Switch'. The Master only reacts to 'ON' received through '[CHX] External Movement Detection'. 'OFF' telegrams are ignored.

The Slave output object '[CHX] Send Switch' must be linked to the Master input object '[CHX] External Movement Detection'.

2.2.2 Channel 1..6 Sending

After configuring channel type, you must define the type of telegram sent upon detection and upon no detection (after 'Detection Time' expires):

“Lighting Control” type:

<ul style="list-style-type: none"> General Configuration Movement Sensor Configuration <ul style="list-style-type: none"> Channel 1 <ul style="list-style-type: none"> Sending 	SENDING AFTER DETECTION (ON)	
	Switch	<input checked="" type="checkbox"/>
	Send	<input type="radio"/> Off <input checked="" type="radio"/> On
	Scene	<input type="checkbox"/>
	Value	<input type="checkbox"/>
	Time for cyclic transmission (sec)	0
	<i>i</i> 0 value: No cyclic transmission	
	SENDING AFTER NO DETECTION (OFF)	
	Switch	<input checked="" type="checkbox"/>
	Send	<input checked="" type="radio"/> Off <input type="radio"/> On
Scene	<input type="checkbox"/>	
Value	<input type="checkbox"/>	
Time for cyclic transmission (sec)	0	
<i>i</i> 0 value: No cyclic transmission		

“HVAC Control” type:

<ul style="list-style-type: none"> General Configuration Movement Sensor Configuration <ul style="list-style-type: none"> Channel 1 <ul style="list-style-type: none"> Sending 	SENDING AFTER DETECTION (ON)	
	Switch	<input checked="" type="checkbox"/>
	Send	<input type="radio"/> Off <input checked="" type="radio"/> On
	Scene	<input type="checkbox"/>
	Value	<input type="checkbox"/>
	HVAC Mode	<input type="checkbox"/>
	Time for cyclic transmission (sec)	0
	<i>i</i> 0 value: No cyclic transmission	
	SENDING AFTER NO DETECTION (OFF)	
	Switch	<input checked="" type="checkbox"/>
Send	<input checked="" type="radio"/> Off <input type="radio"/> On	
Scene	<input type="checkbox"/>	
Value	<input type="checkbox"/>	
HVAC Mode	<input type="checkbox"/>	
Time for cyclic transmission (sec)	0	
<i>i</i> 0 value: No cyclic transmission		

“Movement Monitoring” type:

General

Configuration

Movement Sensor

Configuration

Channel 1

Sending

SENDING AFTER DETECTION (ON)

Switch

☒

Send

☐ Off ☒ On

Scene

☐

Value

☐

Time for cyclic transmission (sec)

0 value: No cyclic transmission

SENDING AFTER NO DETECTION (OFF)

Switch

☒

Send

☒ Off ☐ On

Scene

☐

Value

☐

Time for cyclic transmission (sec)

0 value: No cyclic transmission

2.3 Constant Light Control

One channel is available for performing constant light regulation based on the amount of natural light. To achieve results as close as possible to the target level, several parameters and configuration options are provided.

<ul style="list-style-type: none"> + General + Movement Sensor - Constant Light Control 	<h3>CONSTANT LIGHT CONTROL</h3> <p>Constant Light Control Only when movement is detected</p> <p>Operation Mode <input checked="" type="radio"/> Automatic <input type="radio"/> Semi-Automatic</p> <p>Detection time 5 s</p> <p>Blind time 0 s</p> <p>Light Sensor source <input type="radio"/> External <input checked="" type="radio"/> Internal</p> <p>Advanced Configuration <input type="checkbox"/></p> <p>Dimming Configuration at Day</p> <p>Lux level at Day 200 Lux</p> <p>Value of Dimming at Day (%) 0 %</p> <p>Dimming Configuration at Night</p> <p>Lux level at Night 30 Lux</p> <p>Value of Dimming at Night (%) 100 %</p> <p>Minimum Dimming value (%) 0 %</p> <p>Time for cyclic transmission (sec) 1 s</p> <p>Constant Light Control objects 1</p> <p>Enable object for Manual Dimming <input type="checkbox"/></p> <p>Enable Block Channel object <input type="checkbox"/></p>
--	--

- **Constant Light Control:** Specifies whether constant regulation is conditioned on motion detection, no detection, or the “Permanent CLC” object:

Constant Light Control	<div> Only when movement is detected </div> <div> Only when movement is detected ✓ </div> <div> Always </div> <div> Depending "Permanent CLC" object </div>
------------------------	---

- **Only when movement is detected:** constant dimming does not begin until motion is detected. The following objects are available:
 - [CLC] External Switching: 1-bit object allowing switching from another sensor (e.g., pushbutton).
 - [CLC] Duration of Detection: defines the delay from the last motion detection before entering 'no detection'. Can be set by parameter or by 2-byte object.

- [CLC] External Movement Detection: expands coverage using Slave detectors linked to this object.
- [CLC] Dimming Value: 1-byte output object defining the lighting output level. Must be linked to the dimming actuator.

The following parameters must be set:

Constant Light Control	Only when movement is detected
Operation Mode	<input checked="" type="radio"/> Automatic <input type="radio"/> Semi-Automatic
Detection time	5 s
Blind time	0 s

- **Operation Mode:** allows specifying whether both switching on and off are performed by the motion detection itself (Automatic), or if switching on or off must be performed by an external command (Semi-Automatic). In the latter case, it must be specified which of the two actions should be performed externally through the '[CHX] External Switching' object. That is, in Semi-Automatic mode:
 - Action in Semi-Automatic Mode = ON → Even if motion is detected, no action will be taken, since the first activation must be manual via the '[CHX] External Switching' object, either by writing a 1 or a 0.
 - Action in Semi-Automatic Mode = OFF → The first activation will occur at the moment motion is detected, while turning off must be done manually via the '[CHX] External Switching' object. Once turned off through this object, the 'Detection Time' must elapse (resetting with each detection) before motion detection will be acknowledged again and the corresponding action triggered.
- **Detection time:** time required after the last detection to send the 'no detection' telegram. Reset on every new detection.
- **Blind time:** additional time during which detections are ignored after detection time expires. In Semi-Automatic mode, this time is not considered.
- **Always:** the constant light control function will start regardless of movement. That is, switching on and off will not be conditioned on the presence or absence of people.
- **Depending “Permanent CLC” object:** the behaviour is similar to the 'Only when movement is detected' mode, with the addition of a 1-bit object '[CLC] Permanent Constant Light Control', which allows permanent motion detection (like the 'Always' mode).
- **Light Sensor source:** Defines whether brightness measurement is performed by the detector's internal sensor or an external sensor.

- **Internal Light Sensor:** in this case, the light sensor built into the detector itself will be used.

Light Sensor source

☐ External
 ☒ Internal

Advanced Configuration

☐

Dimming Configuration at Day

Lux level at Day

200

Lux

Value of Dimming at Day (%)

0

%

Dimming Configuration at Night

Lux level at Night

30

Lux

Value of Dimming at Night (%)

100

%

- **Dimming Configuration at Day:** this configuration needs to be carried out using a lux meter to measure the different values, both on the ceiling next to the sensor and on the work plane, or the lux measurement from the sensor itself can be viewed through the ETS® diagnostics.
 - **Lux level at Day:** this measurement should be taken on the ceiling next to the sensor, with significant natural light, or the lux reading from the sensor itself can be viewed through the ETS® diagnostics.
 - **Value of Dimming at Day:** this corresponds to the dimming value (%) at which we want the luminaires to be set when taking the 'Lux level at Day' measurement on the ceiling.
- **Dimming Configuration at Night:** this configuration needs to be carried out using a lux meter to measure the different values, both on the ceiling next to the sensor and on the work plane.
 - **Lux level at Night:** this measurement should be taken on the ceiling next to the sensor, without any contribution of natural light.
 - **Value of Dimming at Night:** this corresponds to the dimming value (%) at which the luminaires are set when taking the 'Lux level at Night' measurement on the ceiling.
- **Advanced Configuration:** allows enabling a series of input and output objects to configure this function more precisely than the previous method.

Number ^	Name	Object Function	Length	C	R	W	T	U	Data Type	Priority
94	[CLC] Enable Advanced Configuration	0 = Disabled, 1 = Enabled	1 bit	C	-	W	-	-	enable	Low
95	[CLC] Establish Night configuration	0 = Disabled, 1 = Enabled	1 bit	C	-	W	-	-	start/stop	Low
96	[CLC] Establish Day configuration	0 = Disabled, 1 = Enabled	1 bit	C	-	W	-	-	start/stop	Low
139	[CLC] Advanced Configuration Confirmation	0 = No valid configuration, 1 = Valid configuration	1 bit	C	-	-	T	-	enable	Low
140	[CLC] Advanced Configuration Absolute Dimming	1 Byte	1 byte	C	-	W	-	-	percentage (0..100%)	Low

- **[CLC] Enable Advanced Configuration:** allows enabling the advanced configuration of constant light control through the objects detailed below.
- **[CLC] Establish Night configuration:** once the advanced configuration is enabled through the '[CLC] Enable Advanced Configuration' object, the Night point can be set. To do this, there must be no contribution of natural light. The luminaires should be adjusted to achieve the desired level on the work plane using the '[CLC] Advanced Configuration Absolute Dimming' object, and a '1' must be sent through this object.
- **[CLC] Establish Day configuration:** once the advanced configuration is enabled through the '[CLC] Enable Advanced Configuration' object, the Day point can be set. To do this, there must be a significant contribution of natural light. The luminaires should be adjusted to

achieve the desired level on the work plane using the '[CLC] Advanced Configuration Absolute Dimming' object, and a '1' must be sent through this object.

- **[CLC] Advanced Configuration Confirmation:** output object indicating the correct configuration of the Day or Night point.
- **[CLC] Advanced Configuration Absolute Dimming:** allows setting the required brightness level in the luminaires when defining the two points.

- **External Light sensor:** in this case, an external light sensor will be used.

Light Sensor source	<input checked="" type="radio"/> External <input type="radio"/> Internal
Requested Lux level	<input type="text" value="200"/>

- **Requested Lux level:** sets the desired brightness level. This value is the measurement taken by the external sensor itself. It can also be set through the '[CLC] Requested Lux Level' object.
- **Minimum Dimming value:** defines the minimum dimming value of the output object '[CLC] Dimming Value'. If a value higher than 0% is set, the dimming value will never fall below the set value, regardless of the brightness calculations.
- **Time for cyclic transmission:** allows cyclic transmission of the '[CLC] Dimming Value' object.
- **Constant Light Control objects:** allows enabling up to 4 different dimming levels, defined by a dimming (%) set via parameter or object.

Constant Light Control objects	<input type="text" value="4"/>
Constant Light Control 2	<input type="text" value="No attenuation"/>
Constant Light Control 3	<input type="text" value="No attenuation"/>
Constant Light Control 4	<input type="text" value="No attenuation"/>
Time for Enable/Disable Attenuation	<input type="text" value="0"/> min

i 0 value: Permanent attenuation

This allows controlling different rows of luminaires, for example, window and corridor, with a single detector.

Important: In the case of using 2 levels, window and corridor, the detector must be installed on the row farthest from the windows, controlling the farthest row with the '[CLC] Dimming Value' object, and the closest row with the '[CLC] Dimming Value 2' object.

- **Time for Enable/Disable Attenuation:** allows setting a time after which all dimming value output objects will be set to the same level (100%), regardless of the established attenuation. For example, at night, even if the '[CLC] Dimming Value' object is at 100%, a delay time can be set after which the '[CLC] Dimming Value 2' object will also be set to 100%, ignoring the value of the 'Constant Light Control 2' parameter. If set to '0 min', the attenuation will always be maintained. Once the '[CLC] Dimming Value' object drops below 100% and this time elapses, the established attenuation will be applied again.

- **Enable object for Manual Dimming:** allows enabling multiple objects to perform manual control, independent of the detector. If more than one constant light control level has been enabled through the 'Constant Light Control objects' parameter, different objects will be available for each level.

Enable object for Manual Dimming

☒

Manual Dimming timing

0

s

0 value: Without timing

- **Manual Dimming timing:** allows setting a time period during which manual control will remain active. Manual control is activated when a '1' is sent through the 'Enable Manual Control' object, or when one of the manual control objects is written to, and this time is reset with each write. If this parameter is set to '0', manual control must be enabled/disabled via the 'Enable Manual Control' object.

The following objects will be available:

Number ^	Name	Object Function	Length	C	R	W	T	U	Data Type	Priority
106	[CLC] Enable Manual Control	0 = Disable, 1 = Enable	1 bit	C	-	W	-	-	enable	Low
107	[CLC] Manual Control Info	0 = Disabled, 1 = Enabled	1 bit	C	-	-	T	-	enable	Low
108	[CLC] Manual Control Switch 1	0 = Off, 1 = On	1 bit	C	-	W	-	-	switch	Low
109	[CLC] Manual Control Relative Dimming 1	Relative Dimming	4 bit	C	-	W	-	-	dimming control	Low
110	[CLC] Manual Control Absolute Dimming 1	Absolute Dimming	1 byte	C	-	W	-	-	percentage (0..100%)	Low
111	[CLC] Manual Control Switch Info 1	0 = Off, 1 = On	1 bit	C	-	-	T	-	switch	Low

- **[CLC] Enable Manual Control:** allows enabling/disabling manual control. Manual control is activated when a '1' is sent through this object, or when one of the manual control objects is written to. If the 'Manual Dimming timing' parameter is set to '0', manual control must be enabled/disabled through this object.
- **[CLC] Manual Control Info:** Manual control status information.
- **[CLC] Manual Control Switch 1:** Manual switching action.
- **[CLC] Manual Control Relative Dimming 1:** Manual dimming action.
- **[CLC] Manual Control Absolute Dimming 1:** Manual value sending action.
- **[CLC] Manual Control Switch Info 1:** Manual switching status.
- **Enable Block Channel object:** enables the object '[CLC] Block Channel,' which allows locking the Constant Light Control channel. The 'Time to Unblock' determines the amount of time that must pass before the channel can be unlocked again.

Enable Block Channel object

☒

Configuration

☒ 0 = Unblock, 1 = Block
☐ 0 = Block, 1 = Unblock

Time to Unblock

0

s

Channel state after reset

Last state

2.4 Twilight Switch

This function allows the transmission of certain telegrams based on the light level measured by the sensor and whether it exceeds the set thresholds, either above or below.

<div> <div>+</div> General </div> <div> <div>+</div> Movement Sensor </div> <div> <div>-</div> Twilight Switch Function </div>	TWILIGHT SWITCH FUNCTION	
	Higher Lux threshold	<input type="text" value="100"/> Lux
	Lower Lux threshold	<input type="text" value="15"/> Lux
	Enable Block object	<input type="checkbox"/>
<div>Configuration</div>	SENDING AT HIGHER THRESHOLD	
	Switch	<input type="checkbox"/>
	Value	<input type="checkbox"/>
	Scene	<input type="checkbox"/>
	Time for cyclic transmission (min)	<input type="text" value="0"/> min
	<div> <i>i</i> 0 value: No cyclic transmission </div>	
	SENDING AT LOWER THRESHOLD	
	Switch	<input type="checkbox"/>
	Value	<input type="checkbox"/>
	Scene	<input type="checkbox"/>
Time for cyclic transmission (min)	<input type="text" value="0"/> min	
<div> <i>i</i> 0 value: No cyclic transmission </div>		

- **Higher Lux threshold:** sets the upper Lux value (measured by the sensor itself).
- **Higher Lux threshold:** sets the lower Lux value (measured by the sensor itself).
- **Enable Block object:** enables the '[TWL] Block Twilight Switch Function' object, which allows the function to be disabled.

Enable Block object	<input checked="" type="checkbox"/>
Configuration	<input checked="" type="radio"/> 0 = Unblock, 1 = Block <input type="radio"/> 0 = Block, 1 = Unblock
Time to Unblock	<input type="text" value="0"/> s
Twilight Switch Function state after reset	<input type="text" value="Last state"/>

2.5 Temperature Sensor

The detector includes an internal temperature sensor, which can measure the ambient temperature of the room and send the value to the Bus.

<div> <div>+ General</div> <div>+ Movement Sensor</div> <div>- Temperature Sensor</div> </div> <div>Configuration</div>	<div>TEMPERATURE SENSOR</div> <div> Correction sign <div> <input checked="" type="radio"/> Negative <input type="radio"/> Positive </div> </div> <div> Temperature Sensor correction <div>0 °C</div> </div> <div> Temperature variation to send value <div>0 °C</div> </div> <div> <div>i 0 value: No transmission</div> <div> Time for cyclic transmission (min) <div>0 min</div> </div> <div> <div>i 0 value: No cyclic transmission</div> <div> Enable Block object <input type="checkbox"/> </div> </div> </div>
---	--

- **Correction sign:** defines the correction value to be applied to the measurement received from the sensor, allowing deviations to be corrected.
- **Temperature Sensor correction:** defines the correction value to be applied to the measurement received from the sensor, allowing deviations caused by external factors to be corrected.
- **Temperature variation to send value:** sets a threshold so that whenever a measurement exceeds or falls below the last value sent to the bus by more or less than this threshold, the measured temperature value will be sent via the '[TEMP] Temperature Sensor Output' object. A value of '0' disables this transmission.
- **Time for cyclic transmission:** sets how often the measured temperature value is sent to the bus via the '[TEMP] Temperature Sensor Output' object. A value of '0' disables cyclical transmission.
- **Enable Block object:** enables the '[TEMP] Block Temperature Sensor' object, which allows the sensor to be disabled.

2.6 Brightness Sensor

The detector includes an internal light sensor, which can measure the ambient light in the room and send the value to the Bus.

<div> <div>+ General</div> <div>+ Movement Sensor</div> <div>- Brightness Sensor</div> <div>Configuration</div> </div>	BRIGHTNESS SENSOR	
	Correction factor	1
	<div> <i>i</i> Lux = Lux * Factor Correction </div>	
	Lux variation to send value (%)	0 %
		<div> <i>i</i> 0 value: No transmission </div>
	Time for cyclic transmission (min)	0 min
		<div> <i>i</i> 0 value: No cyclic transmission </div>

- **Correction factor:** defines the correction value to be applied to the measurement received from the sensor, allowing deviations to be corrected.
- **Lux variation to send value:** sets a threshold so that whenever a measurement exceeds or falls below the last value sent to the bus by more or less than this %, the measured light value will be sent via the '[LUX] Brightness Sensor Output' object. A value of '0' disables this transmission.
- **Time for cyclic transmission:** sets how often the measured light value is sent to the bus via the '[LUX] Brightness Sensor Output' object. A value of '0' disables cyclical transmission.

3 ETS DATABASE

The ETS database can be downloaded from the DM KNT XXX product website (www.dinuy.com) or from the ETS online catalogue.

Appendix I: Communication Objects

No.	Name	Length	I/O	Range	Object Function	Flags	DPT	Description
30	[GNRL] Detection LED	1 bit	I	0 / 1	0 = Disable, 1 = Enable	C - W - -	[1.003] DPT_Enable	Red detection LED control
31, 32, 141	[GNRL] PIR1..3 Detection Sensibility	1 byte	I	0% .. 100%	100% = High, 33% = Low, 0% = Disabled	C - W - -	[5.001] DPT_Scaling	Detection sensitivity adjustment for each PIR sensor
33, 43, 53, 63, 73, 83	[CH1..6] External Switching	1 bit	I	0 / 1	Switch State	C - W - -	[1.010] DPT_Start	External switching input
34, 44, 54, 64, 74, 84	[CH1..6] Duration of Detection	2 bytes	I	1s .. 65535s	1s – 65535s	C - W - -	[7.005] DPT_TimePeriodSec	Time between the last detection and the sending of 'No Detection'
35, 45, 55, 65, 75, 85	[CH1..6] Block Channel 1..6	1 bit	I	0 / 1	0 = Unblock, 1 = Block	C - W - -	[1.003] DPT_Enable	Channel lock
36, 46, 56, 66, 76, 86	[CH1..6] Force 1 bit	1 bit	I	0 / 1	0 = No Force, 1 = Force to Off	C - W - -	[1.010] DPT_Start	Channel forcing with a 1-bit object
37, 47, 57, 67, 77, 87	[CH1..6] Force 2 bits	2 bits	I	00 .. 11	2 Bits Value	C - W - -	[2.010] DPT_Start_Control	Channel forcing with a 2-bit object: · 00 or 01: No Force · 10: Force to Off · 11: Force to On

No.	Name	Length	I/O	Range	Object Function	Flags	DPT	Description
38, 48, 58, 68, 78, 88	[CH1..6] External Movement Detection	1 bit	I	0 / 1	0 = No Detection, 1 = Detection	C - W - -	[1.010] DPT_Start	Slave inputs
39, 49, 59, 69, 79, 89	[CH1..6] Send Switch	1 bit	O	0 / 1	0 = Off, 1 = On	C - - T -	[1.001] DPT_Switch	Switching transmission for each of the motion/presence detection channels
40, 50, 60, 70, 80, 90	[CH1..6] Send Scene	1 byte	O	0 .. 63	Send Scene number	C - - T -	[18.001] DPT_SceneControl	Scene transmission for each of the motion/presence detection channels
41, 51, 61, 71, 81, 91	[CH1..6] Send Value	1 byte	O	0% .. 100%	0% .. 100%	C - - T -	[5.001] DPT_Scaling	Value transmission for each of the motion/presence detection channels
42, 52, 62, 72, 82, 92	[CH1..6] Send HVAC	1 byte	O	1 = Comfort 2 = Stand-by 3 = Eco 4 = Protection	Select Mode	C - - T -	[20.102] DPT_HVACMode	HVAC Mode transmission for each of the motion/presence detection channels
93	[CLC] External Light Sensor Value	2 bytes	I	0 .. 670760	Lux value	C - W - -	[9.004] DPT_Value_Lux	Light level value measured by an external sensor
94	[CLC] Enable Advanced Configuration	1 bit	I	0 / 1	0 = Disabled, 1 = Enabled	C - W - -	[1.003] DPT_Enable	Enables the advanced configuration process for constant dimming
95	[CLC] Establish Night configuration	1 bit	I	0 / 1	0 = Disabled, 1 = Enabled	C - W - -	[1.010] DPT_Start	Sets the light level to be maintained during the night
96	[CLC] Establish Day configuration	1 bit	I	0 / 1	0 = Disabled, 1 = Enabled	C - W - -	[1.010] DPT_Start	Sets the light level to be maintained during the day

No.	Name	Length	I/O	Range	Object Function	Flags	DPT	Description
97	[CLC] Permanent Constant Light Control	1 bit	I	0 / 1	0 = Disabled, 1 = Enabled	C - W - -	[1.003] DPT_Enable	Permanently enables constant dimming, regardless of motion
98	[CLC] Dimming Value	1 byte	O	0% .. 100%	0% .. 100%	C - - T -	[5.001] DPT_Scaling	Dimming output for the constant light control of the main channel
99, 100, 101	[CLC] Dimming Value 2..4	1 byte	O	0% .. 100%	0% .. 100%	C - - T -	[5.001] DPT_Scaling	Dimming output of the constant dimming for the dimmed channels
102	[CLC] External Switching	1 bit	I	0 / 1	Switch State	C - W - -	[1.010] DPT_Start	External switching input
103	[CLC] Duration of Detection	2 bytes	I	1s .. 65535s	1s .. 65535s	C - W - -	[7.005] DPT_TimePeriodSec	Time between the last detection and the sending of 'No Detection'
104	[CLC] Block Channel	1 bit	I	0 / 1	0 = Unblock, 1 = Block	C - W - -	[1.003] DPT_Enable	Constant dimming channel lock
105	[CLC] External Movement Detection	1 bit	I	0 / 1	0 = No Detection, 1 = Detection	C - W - -	[1.010] DPT_Start	Slave inputs
106	[CLC] Enable Manual Control	1 bit	I	0 / 1	0 = Disable, 1 = Enable	C - W - -	[1.003] DPT_Enable	Enables manual control (switching and dimming) in constant dimming
107	[CLC] Manual Control Info	1 bit	O	0 / 1	0 = Disabled, 1 = Enabled	C - - T -	[1.003] DPT_Enable	Manual control status in constant dimming
108, 114, 120, 126	[CLC] Manual Control Switch 1..4	1 bit	I	0 / 1	1 Bit	C - W - -	[1.001] DPT_Switch	Manual switching in constant dimming for each channel
109, 115, 121, 127	[CLC] Manual Control Relative Dimming 1..4	4 bit	I	0/1: Up/Sown 000 .. 111: Step	4 Bit	C - W - -	[3.007] DPT_Control_Dimming	Manual dimming in constant dimming for each channel
110, 116, 122, 128	[CLC] Manual Control Absolute Dimming 1..4	1 byte	I	0% .. 100%	1 Byte	C - W - -	[5.001] DPT_Scaling	Transmission of manual value in constant dimming for each channel
111, 117, 123, 129	[CLC] Manual Control Switch Info 1..4	1 bit	I	0 / 1	1 Bit	C - W - -	[1.001] DPT_Switch	Manual switching status in constant dimming for each channel
130	[TWL] Block Twilight Switch function	1 bit	I	0 / 1	0 = Unblock, 1 = Block	C - W - -	[1.003] DPT_Enable	Twilight function lock
131	[TWL] Send Switch	1 bit	O	0 / 1	0 = Off, 1 = On	C - - T -	[1.001] DPT_Switch	Switching transmission of the Twilight function

No.	Name	Length	I/O	Range	Object Function	Flags	DPT	Description
132	[TWL] Send Scene	1 byte	O	0 .. 63	Send Scene number	C - - T -	[18.001] DPT_SceneControl	Scene transmission of the Twilight function
133	[TWL] Send Value	1 byte	O	0% .. 100%	0% .. 100%	C - - T -	[5.001] DPT_Scaling	Value transmission of the Twilight function
134	[TEMP] Block Temperature Sensor	1 bit	I	0 / 1	0 = Unblock, 1 = Block	C - W - -	[1.003] DPT_Enable	Disables temperature measurement
135	[TEMP] Temperature Sensor Output	2 bytes	O	-273°C .. 670760°C	Temperature Value	C - - T -	[9.001] DPT_Value_Temp	Temperature value measured by the sensor
137	[BRIGHT] Brightness Sensor Output	2 bytes	O	0 .. 670760 Lux	Lux value	C - - T -	[9.004] DPT_Value_Lux	Lux value measured by the sensor
138	[CLC] Requested Lux level	2 bytes	I	0 .. 670760 Lux	Lux value	C - W - -	[9.004] DPT_Value_Lux	Desired light level for constant dimming (measured by the sensor itself, not at the working plane)
139	[CLC] Advanced Configuration Confirmation	1 bit	O	0 / 1	0 = Not valid configuration, 1 = Valid configuration	C - - T -	[1.003] DPT_Enable	Confirms that the advanced constant dimming configuration process has been completed successfully
140	[CLC] Advanced Configuration Absolute Dimming	1 byte	I	0% .. 100%	1 Byte	C - - T -	[5.001] DPT_Scaling	Allows sending the dimming value desired by the user during the advanced configuration process

**WARNING**

- The device must be installed and commissioned by a licensed electrician.
- Current safety regulations must be observed.
- The device must not be opened.
- When planning and constructing electrical installations, the relevant guidelines, regulations, and standards of the respective country must be taken into account.

**DINUY S.A.**

Auzolan 2
20303, Irún
España

Tel.: +34 943 627 988
Email: knx@dinuy.com
Web: www.dinuy.com