



KNX MOVEMENT / PRESENCE DETECTORS

DM KNT XXX



USER MANUAL

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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.

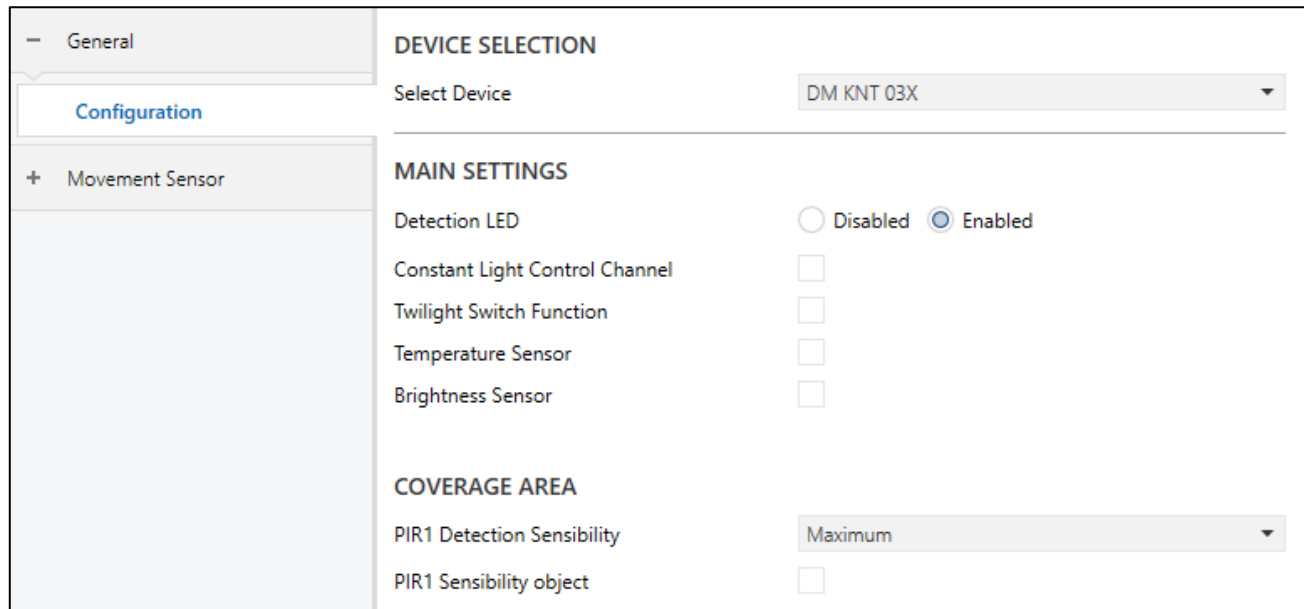
Main Features:

- 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

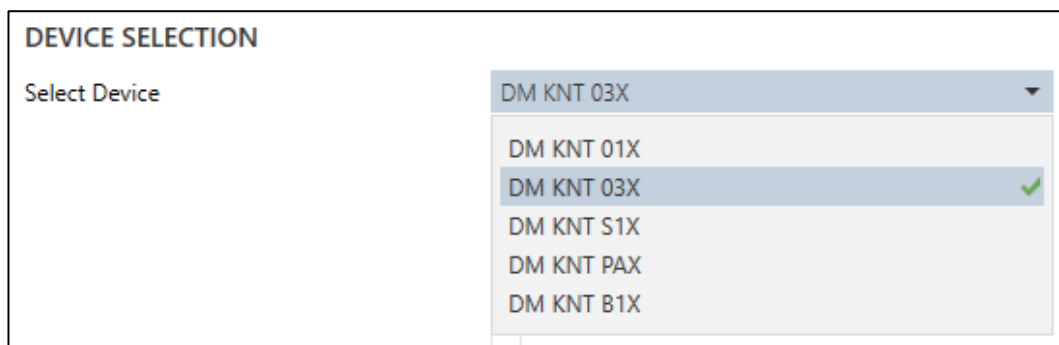
2 CONFIGURATION

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:



- CL JMS / 0W< CL JMS / 0A+CL JMS / 0MnqCL JMS / 0O
- CL JMS / 2W< CL JMS / 2A+CL JMS / 2MnqCL JMS / 2O
- CL JMS R0W< CL JMS R0A+CL JMS R0MnqCL JMS R0O
- CL JMS O@W< CL JMS O@A+CL JMS O@MnqCL JMS O@O
- CL JMS A0W< CL JMS A0A+CL JMS A0MnqCL JMS A0O

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
☐

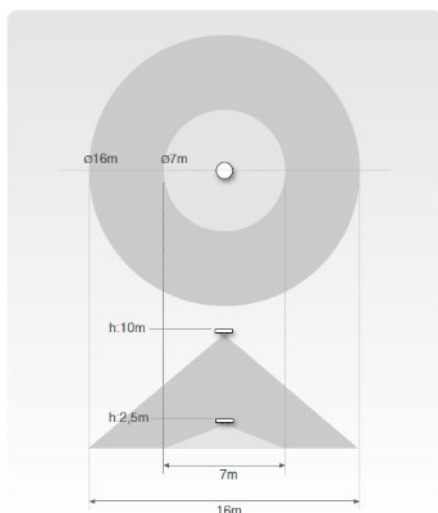
- **Detection LED:** dñi akdr nqchr` akdr sgð qðc KDC knb` sdc adghmc sgð cdsðbsnqkdmr +v ghbg kfi gs t o d` bg sh d l nudl dñsñr cdsðbsdc-
- **Constant Light Control Channel**9dñi akdr sgð d nbsñm sg` sqðf t k sdr kfi gsñf a` r dc nmmi d q k kfi gs Rdd Rdbñmm1-2
- **Twilight Switch Function:** dñi akdr sñ kfi gsa` r dc bnñsqñk` knv hñf kfi gsñf sñ r v hñg nmñe a` r dc nmmi d q kfi gs Rdd Rdbñmm1-3
- **Temperature Sensor:** bnñññ t qðr sgð sq mñ l hñr hñmmñel d` rt qðc sñl odq d qð æñl sgð hññsqñi k r dññ nq Rdd Rdbñmm1-4
- **Brightness Sensor:** bnñññ t qðr sgð sq mñ l hñr hñmmñel d` rt qðc adñf gsñdr r æñl sgð hññsqñi k r dññ nq Rdd Rdbñmm1-5

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:

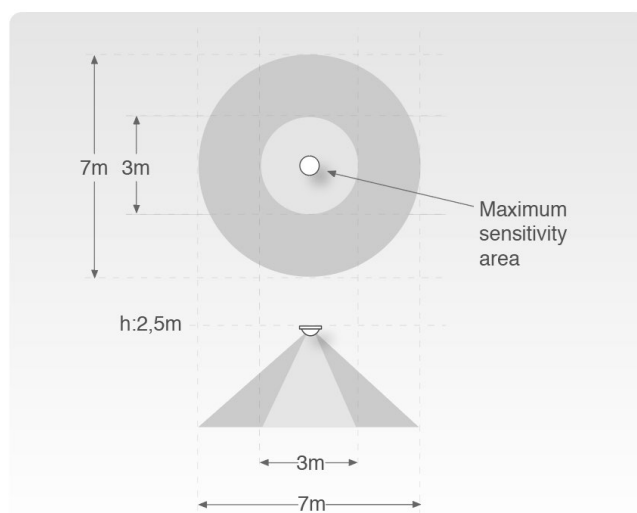
DM KNT 01X & DM KNT 03X (1 PIR Sensor):

COVERAGE AREA	
PIR1 Detection Sensibility	Maximum
PIR1 Sensibility object	☐

DM KNT 01X



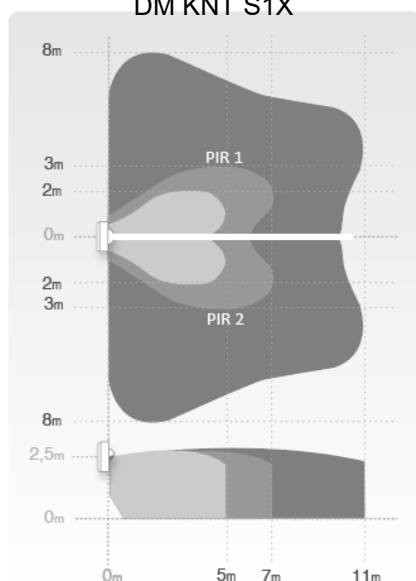
DM KNT 03X



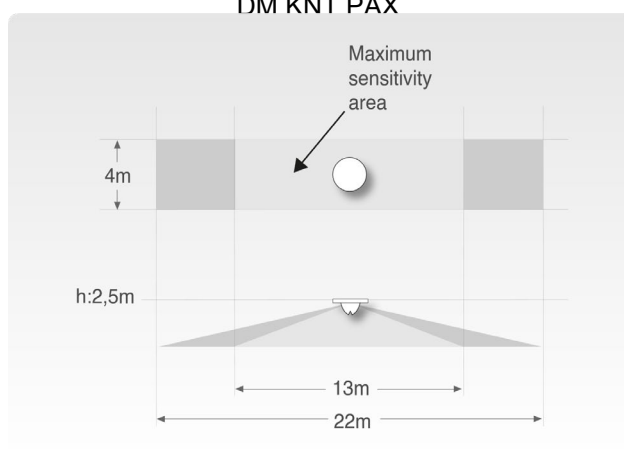
DM KNT S1X & DM KNT PAX (2 PIR Sensors):

COVERAGE AREA	
PIR1 Detection Sensibility	High
PIR1 Sensibility object	☐
PIR2 Detection Sensibility	High
PIR2 Sensibility object	☐

DM KNT S1X

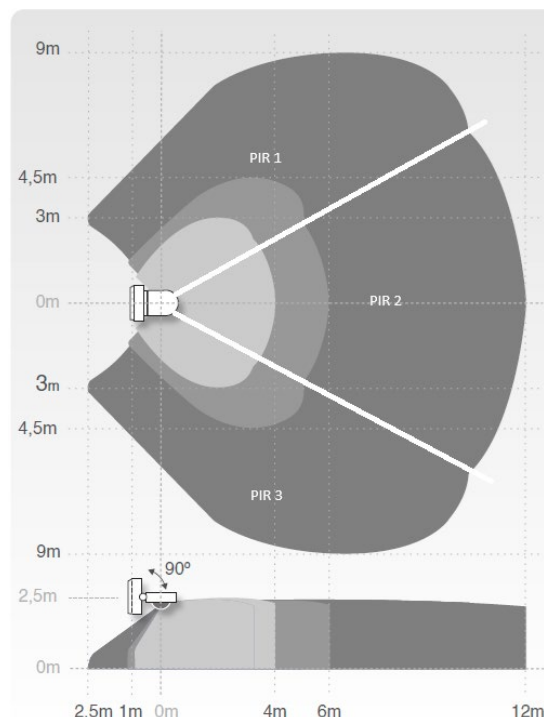


DM KNT PAX



DM KNT B1X (3 PIR Sensor):

COVERAGE AREA	
PIR1 Detection Sensibility	High
PIR1 Sensibility object	☐
PIR2 Detection Sensibility	High
PIR2 Sensibility object	☐
PIR3 Detection Sensibility	High
PIR3 Sensibility object	☐



- **PIR1..3 Detection Sensibility:** `knv r` cit r s dmsned` bg OQ rdm nq+ rdm huls` bqrr 2 nq4 kdukk+cdodmcmf nml ncdk+nqdudmch` akmf is
- **PIR1..3 Sensibility object:** dm akdr sgd 0,axsd '\$ (naidsb 2 MQK OQ0-2 CdsbmmRdm hals&n l nche rdm huls-

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
Lighting control

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**
 - **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	Lighting control Lighting control ✓ HVAC Control Movement Monitoring
------	--

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	☒
Configuration	☒ 0 = Unblock, 1 = Block ☐ 0 = Block, 1 = Unblock
Time to Unblock	0 s
Channel state after Bus reset	Last state

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

Enable Force function	☒
"Force" object type	☒ 1 Bit object ☐ 2 Bit object
"Force" object polarity	☒ 1: Switch-Off ☐ 1: Switch-On
"Force" object state after recovering Bus voltage	☒ Not Force ☐ 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	☐ Master Detector ☒ Slave Detector
DETECTION	
Switch	☒
Send	☐ Off ☒ 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:

- General - Configuration - Movement Sensor - Configuration - Channel 1 Sending	SENDING AFTER DETECTION (ON)	
	Switch	☒
	Send	☐ Off ☒ On
	Scene	☐
	Value	☐
	Time for cyclic transmission (sec)	0
	<i>i</i> 0 value: No cyclic transmission	
	SENDING AFTER NO DETECTION (OFF)	
	Switch	☒
	Send	☒ Off ☐ On
Scene	☐	
Value	☐	
Time for cyclic transmission (sec)	0	
<i>i</i> 0 value: No cyclic transmission		

“HVAC Control” type:

- General - Configuration - Movement Sensor - Configuration - Channel 1 Sending	SENDING AFTER DETECTION (ON)	
	Switch	☒
	Send	☐ Off ☒ On
	Scene	☐
	Value	☐
	HVAC Mode	☐
	Time for cyclic transmission (sec)	0
	<i>i</i> 0 value: No cyclic transmission	
	SENDING AFTER NO DETECTION (OFF)	
	Switch	☒
Send	☒ Off ☐ On	
Scene	☐	
Value	☐	
HVAC Mode	☐	
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.

+ General + Movement Sensor - Constant Light Control	CONSTANT LIGHT CONTROL Constant Light Control Only when movement is detected Operation Mode ☒ Automatic ☐ Semi-Automatic Detection time 5 s Blind time 0 s 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 % Minimum Dimming value (%) 0 % Time for cyclic transmission (sec) 1 s Constant Light Control objects 1 Enable object for Manual Dimming ☐ Enable Block Channel object ☐
--	--

- **Constant Light Control** Rodblek v gdsdqbnm s nsqf t k smmr bnrcshmdc nml nsnmcdsbsmm+nm cdsbsmm+nqsgd =Edq `ndnsBKB||naidbs

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

- **Only when movement is detected** bnmr s nsch l hmf cndr msadf hmt nskl nsnmhr cdsbsdc-Sgd enknv hmf naidbs `qd `u` lk akd9
 - BKB\ Dwdqm kRv hsbghmf 90,alsnaidbs` knv hmf r v hsbghmf enl `mgsdqrdm nq'd-f -+ ot r gat smm(-
 - BKB\ Ct q smmneCdsbsmm9cdmndr sgd cdK x enl sgd K rsl nsnmcdsbsmmadenqpl dmsdqmf &m cdsbsmm&B` mad r dsax o` q l dsdqmqax 1,axsd naidbs

- ZKB\ Dwdqñ kL nudl dmsCdsdbnm9dwo` ncr bnudq f d t r hmf RK ud cdsdbnq kmj dc sn sghr naids-
- ZKB\ Ch I hmf U` k d90,axsd nt sot snaidbscdmfmf sgd kf gshmf nt sot skdudk L t rsad kmj dc sn sgd ch I hmf `bst` snq

The following parameters must be set:

Constant Light Control	Only when movement is detected
Operation Mode	☒ Automatic ☐ 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**sgd bnmr s` msKf gsbnmqk nbsnmv lkr s` qpdf` qpdf r nel nudl dms` Sg` shr+r v lsg hmf nm` ncr nev lkrmsad bnmrclmndc nmsgd oqdr dmbd nq` ar dmbd neodhold-

- **Depending "Permanent CLC" object**sgd adg` ulmt qhr r h lkr qsn sgd & nkr v gdml nudl dms hr cdsdbdc& ncd+v lsg sgd` cclmne` 0,alsnaidsZKB\ Odd` `mdmsBnmr s` msKf gsbnmqk v glbg` knv r odd` `mdmsl nsmcdsdbnm' h d sgd & v` xr & ncd(-

- **Light Sensor source**9Cdendr v gdsgdqdfi gmdrr l d` rt qdl dms hr odqnd dc ax sgd cdsdbnqf hmsdqñ k r dmr nqnq` mdwqdñ kr dmr nq

- **Internal Light Sensor** b' r d+sgd kfi gsr dmr nqat hshmn sgd cdsdbnqls dlev hkad t r dc-

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**9sglr bnnef t q shmmddcr sn ad b` qdpc nt st r hmf ` k wl dsdqsn l d` rt qd sgd chedqnsu` k dr+ansg nmsgd bdhmf mdwsn sgd r dmr nq` nc nmsgd v nq ok md+nq sgd k wl d` rt qdl dmsenl sgd r dmr nqls dleb` mad uldv dc sqnt f g sgd DSRë ch f mnr shbr -
 - **Lux level at Day**9sglr l d` rt qdl dmsrgnt lc ad s` j dmnmsgd bdhmf mdwsn sgd r dmr nq+v hsg r fi mnd` ms m d q kfi gs+nqsgd k wq` chmf enl sgd r dmr nqls dleb` mad uldv dc sqnt f g sgd DSRë ch f mnr shbr -
 - **Value of Dimming at Day**9sglr bnqpr onmr sn sgd ch l hmf u` k d '\$ ( ` sv ghog v d v` nsgd k l hm hpr sn ad r dsv gdms` j hmf sgd kt wkduk` sC` x4 d` rt qdl dmsnmsgd bdhmf -
- **Dimming Configuration at Night**9sglr bnnef t q shmmddcr sn ad b` qdpc nt st r hmf ` k wl dsdqsn l d` rt qd sgd chedqnsu` k dr+ansg nmsgd bdhmf mdwsn sgd r dmr nq` nc nmsgd v nq ok md-
 - **Lux level at Night**9sglr l d` rt qdl dmsrgnt lc ad s` j dmnmsgd bdhmf mdwsn sgd r dmr nq+v hsgnt s` mx bnnsqat shmnem d q kfi gs
 - **Value of Dimming at Night**9sglr bnqpr onmr sn sgd ch l hmf u` k d '\$ ( ` sv ghog sgd k l hm hpr ` qd r dsv gdms` j hmf sgd kt wkduk` sMfi gs4 d` rt qdl dmsnmsgd bdhmf -
- **Advanced Configuration**9` knv r dm akmf ` r dqr nelmt s` nc nt sot snaidbs sn bnnef t qd sglr d nbsnml nq opbhr dk sg` msgd opulmt r l dsgnc-

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**9` knv r dm akmf sgd ` cu` nbdc bnnef t q shmmne bnms` skfi gsbmsnsgnt f g sgd naidbs cds hdc adknv -
- **[CLC] Establish Night configuration**9nmbd sgd ` cu` nbdc bnnef t q shmmh dm akdc sqnt f g sgd BKB\ Dm ald @u` nbdc Bnnef t q shmn+naidbs+sgd Mfi gsonlmsb` mad r ds Sn cn sglr +sgdql l trsad mn bnnsqat shmnem d q kfi gs Sgd k l hm hpr rgnt lc ad ` cit r sdc sn` bghlud sgd cdr hpc kludknmsgd v nq ok md t r hmf sgd BKB\ @u` nbdc Bnnef t q shmn@ar nk sd Ch l hmf +naidbs` nc` p4 trsad r dms sqnt f g sglr naidbs-
- **[CLC] Establish Day configuration**9nmbd sgd ` cu` nbdc bnnef t q shmmh dm akdc sqnt f g sgd BKB\ Dm ald @u` nbdc Bnnef t q shmn+naidbs+sgd C` x onlmsb` mad r ds Sn cn sglr +sgdql l trsad ` r fi mnd` ns bnnsqat shmnem d q kfi gs Sgd k l hm hpr rgnt lc ad ` cit r sdc sn

• bghud sgd cdr hpc kludknmsgd v nq ok nd t r hmf sgd ZKB\ @u` mbdc Bnmf t q` smm @arnk sd Ch I hmf -naidbs` mc` -p4 t rsad rdmsggqt f g sghr naidbs

- **[CLC] Advanced Configuration Confirmation**9nt sot snaidbs hmc b` smf sgd bnqppbs bnmf t q` smmnesgd C` x nq Mfi gsonhms
- **[CLC] Advanced Configuration Absolute Dimming**9` knv r r dsmf sgd qdpt hpc adfi gndr r kludk hmsgd k l hmi hpcr v gdmcdem hmf sgd sv n onhms -

- **External Light sensor**9hmsghr b` rd+` mdwddqni kfi gsr dmr nqv hkad t r dc-

Light Sensor source	☒ External ☐ Internal
Requested Lux level	200

- **Requested Lux level**9r dsr sgd cdr hpc adfi gndr r kludk Sghr u` k d hr sgd l d` rt qpl dms` j dm ax sgd dwddqni kr dmr nq h r dle h b` m` k n ad rdmsggqt f g sgd ZKB\ Qdpt dr sdc Kt wKludk hnaidbs

- **Minimum Dimming value**9cdemdr sgd l hmi t l ch I hmf u` k d nesgd nt sot snaidbs ZKB\ Ch I hmf U` k d -h` u` k d ghfgdqsg` m/ \$ hr rds+sgd ch I hmf u` k d v hkmudq` k adknv sgd rdsu` k d+qpf` qdrr nesgd adfi gndr r b` lbt k smmr -

- **Time for cyclic transmission**9` knv r bxbk b sq mrl hr hmnnesgd ZKB\ Ch I hmf U` k d -naidbs

- **Constant Light Control objects**9` knv r dmi akmf t o sn 3 ch dpm sch I hmf kludk +cdemdc ax` ch I hmf '\$ (rdsu` o` q l dddqnaidbs

Constant Light Control objects	4
Constant Light Control 2	No attenuation
Constant Light Control 3	No attenuation
Constant Light Control 4	No attenuation
Time for Enable/Disable Attenuation	0 min
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**9` knv r r dsmf` sh d` esdqv ghog` kch I hmf u` k d nt sot s naidbs v hkad rdsn sgd r` l d kludk' 0/ / \$ (+qpf` qdrr nesgd dr s` alkgdc` ssnt` smmr Enq dw I old+` srff gs+dudm hsgd ZKB\ Ch I hmf U` k d -naidbs h` s0/ / \$ +` cdK x sh d b` mad rds` esdqv ghog sgd ZKB\ Ch I hmf U` k d 1-naidbsv h` k n ad rdssn 0/ / \$ +fi mndmf sgd u` k d nesgd -Bnmr s` nsKfi gsBnmr snk1-o` q l dddq h r dssn + l hmf+sgd` ssnt` smmv h` kv` xr ad l` hms hmdc-Nrbd sgd ZKB\ Ch I hmf U` k d -naidbscqor adknv 0/ / \$` mc sghr sh d dk or dr+sgd dr s` alkgdc` ssnt` smmv h` kad` ookdc` f` hmf

- **Enable object for Manual Dimming**9` knv r dmi akmf I t kold naidbs sn odqnd I `nt` kbnnsqk-
hmdodmnesgd cddsbng l`l nqd sg` mnmd bnm s` nsKf gsbnnsqkldudkg` r addmdmi akdc sqnt f g sg d
-Bnm s` nsKf gsBnm s` knaidbs -o` q I dsdq` chdqm s naidbs v` hkad `u` k` akd enqd` bg kdudk

Enable object for Manual Dimming ☒

Manual Dimming timing s

i 0 value: Without timing

- **Manual Dimming timing**9` knv r rdsdmf ` sh d oddqnc ct qmf v glog I `nt` kbnnsqkv hkdql `hm
` bshud- L`nt` kbnnsqkhr ` bshu` sdc v gdm` -p`hr r dms sqnt f g sg d -pmi akd L`nt` kBnm s` knaidbs+nq
v gdmnm d nesgd I `nt` kbnnsqknaidbs hr v qsdmsn+` nrc sghr sh d hr qdrds v hsg d` bg v qsd- hsg hr
o` q I dsdq` hr rdsn -f`-l `nt` kbnnsqkl t rsad dmi akdc.chr` akdc uh sg d -pmi akd L`nt` kBnm s` kn-
naidbs

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**9` knv r dmi akmf .chr` akmf I `nt` kbnnsqk L`nt` kbnnsqkhr
` bshu` sdc v gdm` -p`hr r dms sqnt f g sghr naidbs+nqv gdmnm d nesgd I `nt` kbnnsqknaidbs hr
v qsdmsn- hsg d -f`nt` kCh I hmf sh hmf -o` q I dsdq` hr rdsn -f`-l `nt` kbnnsqkl t rsad
dmi akdc.chr` akdc sqnt f g sghr naidbs
- **[CLC] Manual Control Info**9L`nt` kbnnsqkrs s` r hmdq ` smm`
- **[CLC] Manual Control Switch 1**9L`nt` kr v hsg hmf ` bshmm`
- **[CLC] Manual Control Relative Dimming 1**9L`nt` kch I hmf ` bshmm`
- **[CLC] Manual Control Absolute Dimming 1**9L`nt` ku` k d r dnm hmf ` bshmm`
- **[CLC] Manual Control Switch Info 1**9L`nt` kr v hsg hmf rs s` r-
- **Enable Block Channel object**9dmi akdr sg d naidbs 2BKB\ Aknbj Bg` mmdk & v glog ` knv r knbj hmf sg d
Bnm s` nsKf gsBnm s` knbg` mmdk Sgd sh d sn T mknbj & cddq hmdr sg d `I nt mnesht d sg` sl trso` rr
adnqd sg d bg` mmdk` mad t mknbj dc ` f` hm`

Enable Block Channel object ☒

Configuration

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

Time to Unblock s

Channel state after reset

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.

+

 General

+

 Movement Sensor

-

 Twilight Switch Function

Configuration

TWILIGHT SWITCH FUNCTION

Higher Lux threshold

100

Lux

Lower Lux threshold

15

Lux

Enable Block object
☐

SENDING AT HIGHER THRESHOLD

Switch
☐

Value
☐

Scene
☐

Time for cyclic transmission (min)

0

min

i 0 value: No cyclic transmission

SENDING AT LOWER THRESHOLD

Switch
☐

Value
☐

Scene
☐

Time for cyclic transmission (min)

0

min

i 0 value: No cyclic transmission

- **Higher Lux threshold** 9r dš sgd t oodqKt wu` k d 'l d` r t qpc ax sgd r dmr nqlš dle-
- **Higher Lux threshold** 9r dš sgd knv dqKt wu` k d 'l d` r t qpc ax sgd r dmr nqlš dle-
- **Enable Block object** 9dmì akdr sgd 8SV Kì Aknbj Sv kfi gsRv lšog Et mbsmn&naidbs+v glibg ` knv r sgd d mbsmn ad chr` akdc-

Enable Block object
☒

Configuration

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

Time to Unblock

0

s

Twilight Switch Function state after reset

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.

+ General + Movement Sensor - Temperature Sensor	TEMPERATURE SENSOR Correction sign ☒ Negative ☐ Positive Temperature Sensor correction 0 °C Temperature variation to send value 0 °C Configuration <i>0 value: No transmission</i> Time for cyclic transmission (min) 0 min <i>0 value: No cyclic transmission</i> Enable Block object ☐
--	---

- **Correction sign** 9cdmndr sgd bnqplbsnmur k d sn ad `ookkdc sn sgd l d`rt qpl dmsqplbdhdc apl sgd rdmnqt` knv hmf cduh smmr sn ad bnqplbsdc-
- **Temperature Sensor correction** 9cdmndr sgd bnqplbsnmur k d sn ad `ookkdc sn sgd l d`rt qpl dmsqplbdhdc apl sgd rdmnqt` knv hmf cduh smmr b`trdc ax dwsdqri ke bsnq sn ad bnqplbsdc-
- **Temperature variation to send value** 9rds `sgqrgnk r n sg`sv gdmudq` l d`rt qpl dmsdwddcr nq e k adknv sgd k rsu` k d r dmsn sgd at r ax l nq nqkdr r sg`msglr sgqrgnk+sgd l d`rt qpl sdl odq st qd u` k d v k ad r dmsuñ sgd &SDl O Sdl odq st qd RdmnqNt sot snaidbs @u` k d ne&&chr` akdr sgr sq mrl hrr hmr
- **Time for cyclic transmission** 9rds gnv neddmsgd l d`rt qpl sdl odq st qd u` k d h r dmsn sgd at r uh sgd &SDl O Sdl odq st qd RdmnqNt sot snaidbs @u` k d ne&&chr` akdr bxbkto` ksq mrl hrr hmr
- **Enable Block object** 9dmñ akdr sgd &SDl O Aknbj Sdl odq st qd RdmnqNt sot snaidbs+v gllbg `knv r sgd rdmnq sn ad chr` akdc-

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.

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

- **Correction factor** - This parameter allows you to adjust the brightness value sent to the bus. The default value is 1. The formula used is: $Lux = Lux * Factor Correction$.
- **Lux variation to send value** - This parameter allows you to set the percentage of variation in the brightness value sent to the bus. The default value is 0. The formula used is: $Lux = Lux * Factor Correction$.
- **Time for cyclic transmission** - This parameter allows you to set the time interval between two consecutive transmissions of the brightness value to the bus. The default value is 0. The formula used is: $Lux = Lux * Factor Correction$.

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.

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