PLX22X00

Cubik-VHD

v1.0

Programming manual

ingenium

Bes

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1   General description

The Cubik-VH (Ref. PL221X00) is a hotel room door device. It has two icons which allow to distinguish between "Do Not Disturb" (DND) mode and "Make Up Room" (MUR) mode. It also has a doorbell button and a screen in which, in addition to displaying the room number, messages sent through the KNX bus can be displayed. The room number, the colours of the background, the colours of that number and the colour and time that the text entered through the bus is displayed are configurable from the ETS

In terms of its operation:

- When the "Do Not Disturb" (DND) mode is activated, both the doorbell LED and the "Do Not Disturb" (DND) LED will be lit in red. The "Make Up Room" (MUR) LED will be off.

- When the "Make Up Room" (MUR) is activated, the "Make Up Room" LED will be lit in green. The "Do Not Disturb" (DND) LED will be off. The doorbell LED will be lit in green if the room is occupied and will be off if the room is unoccupied.

- If both "Do Not Disturb" (DND) mode and "Make Up Room" mode are deactivated, both "Do Not Disturb" (DND) LED and "Make Up Room" LED will be off and the doorbell LED will be lit in green if the room is occupied and will be off if the room is unoccupied.

2 Technical information

KNX supply	29Vdc from KNX BUS.
KNX consumption	15 mA del bus KNX Equivalent to 3 BUS devices*
Mounting	Built-in on universal distribution box
Size	129 x 88 x 6 mm
Connection	KNX BUS connection
Environment temperature range	Operation: -10ºC / 55ºC Storage: -30ºC / 60ºC Transportation: -30ºC / 60ºC
Regulation	According to the directives of electromagnetic compatibility and low voltage: EN 50090-2-2 / UNE-EN 61000-6-3:2007 / UNE-EN 61000-6-1:2007 / UNE-EN 61010-1
Inputs	1 touch area
Outputs	2 status indicators

*(1 BUS device=5mA)

3 Programming

3.1 Application program information

Manufacturer: Ingenium

Application: Cubik-VH

Maximum number of communication objects: 7

Maximum number of assignments: 7

Version: v1.0

3.2 Communication objects table

Object	Name | Function	Lenght	DPT	Flags			
0	DND/MUR mode | DND/MUR ('1'/'0')	1 bit	1.001	C		W	
0	DND Mode | Activate/Deactivate ('1'/'0')	1 bit	1.001	C		W	
1	DND/MUR mode | DND/MUR ('1'/'0') status	1 bit	1.001	C	R		T
1	DND Mode | Activate/Deactivate status ('1'/'0')	1 bit	1.001	C	R		T
2	MUR Mode | Activate/Deactivate ('1'/'0')	1 bit	1.001	C		W	
3	MUR Mode | Activate/Deactivate status ('1'/'0')	1 bit	1.001	C	R		T
4	Room status | Occupied/Unoccupied ('1'/'0')	1 bit	1.001	C		W	
5	Room status | Occupied/Unoccupied status ('1'/'0')	1 bit	1001	C	R		T
6	Bell action | Press/Release ('1'/'0')	1 bit	1.001	C			T
7	Text | Line 1	14 bytes	16.000	C		W	
8	Text | Line 2	14 bytes	16.000	C		W	

3.3 Communication objects description

Object	Object 0: DND/MUR mode | DND/MUR ('1'/'0')
Function	1-bit communication object to activate the "Do Not Disturb" mode (DND) or the "Make Up Room" mode (MUR).
Description	Writing through this object it is possible to activate the "Do Not Disturb" mode (DND) (= 1) or the "Make Up Room" mode (MUR) (= 0).
Object	Object 0: DND Mode | Activate/Deactivate ('1'/'0')
Function	1 bit communication object to activate the "Do Not Disturb" (DND) mode
Description	Writing through this communication object you can activate (=1) or deactivate (=0) the "Do not Disturb" (DND) mode
Object	Object 1: DND/MUR mode | DND/MUR ('1'/'0') status

| Function	1 bit communication object to read or notify the mode status: "Do Not Disturb" (DND)/"Make Up Room" (MUR)
Description	Through this object you can read or notify if the device is in "Do Not Disturb" mode (DND) (=1) or in "Make Up Room" mode (MUR) (=0).
Object	**Object 1: DND Mode	Activate/Deactivate status ('1'/'0')**
Function	1 bit communication object to read or notify the status of the "Do Not Disturb" (DND) mode.
Description	Through this object you can read or notify if the "Do Not Disturb" (DND) mode is activated or deactivated. The polarity is the same as in the writing object (1=activated, 0=deactivated)
Object	**Object 2: MUR Mode	Activate/Deactivate ('1'/'0')**
Function	1 bit communication object to activate the "Make Up Room" (MUR) mode
Description	Writing through this communication object you can activate (=1) or deactivate (=0) the "Make Up Room" (MUR) mode.
Object	**Object 3: MUR Mode	Activate/Deactivate status ('1'/'0')**
Function	1 bit communication object to read or notify the status of the "Make Up Room" (MUR) mode.
Description	Through this object you can read or notify if the "Make Up Room" (MUR) mode is activated or deactivated. The polarity is the same as in the writing object (1=activated, 0=deactivated)
Object	**Object 4: Room status	Occupied/Unoccupied ('1'/'0')**
Function	1 bit communication object to change between "Occupied room" and "Unoccupied room"
Description	Writing through this object you can change between "Occupied room"(=1) and "Unoccupied room" (=0).
Object	**Object 5: Room status	Occupied/Unoccupied status ('1'/'0')**
Function	1 bit communication object to read or notify the room status: "Occupied room" or "Unoccupied room"
Description	Through this object you can read or notify if the room is occupied or unoccupied. The polarity is the same as in the writing object (1=Occupied, 0=Unoccupied)
Object	**Object 6: Bell action	Press/Release ('1'/'0')**
Function	1 bit communication object that is activated by pressing the touch area of the device.
Description	The object will send a "1" while the touch area of the device is being pressed and a "0" while the touch area isn´t being pressed.
Object	**Object 7: Text	Line 1**
Function	14 bytes communication object to write a text on the line 1 of the screen
Description	Writing through this object, the written text will appear on line 1 of the screen
Object	**Object 8: Text	Line 2**
Function	14 bytes communication object to write a text on the line 2 of the screen
Description	Writing through this object, the written text will appear on line 2 of the screen

3.4   Parameters

| Name	Number of the room
Values	From 0 to 1000
Description	In this parameter you enter the room number you want to show on the display

4 Installation

The device is installed hanging from the two parallel grooves on its rear.
Two **conical head screws** are used in wall and/or universal mechanism box.
It is **VERY IMPORTANT** that the screws head excels **1mm** from the wall.
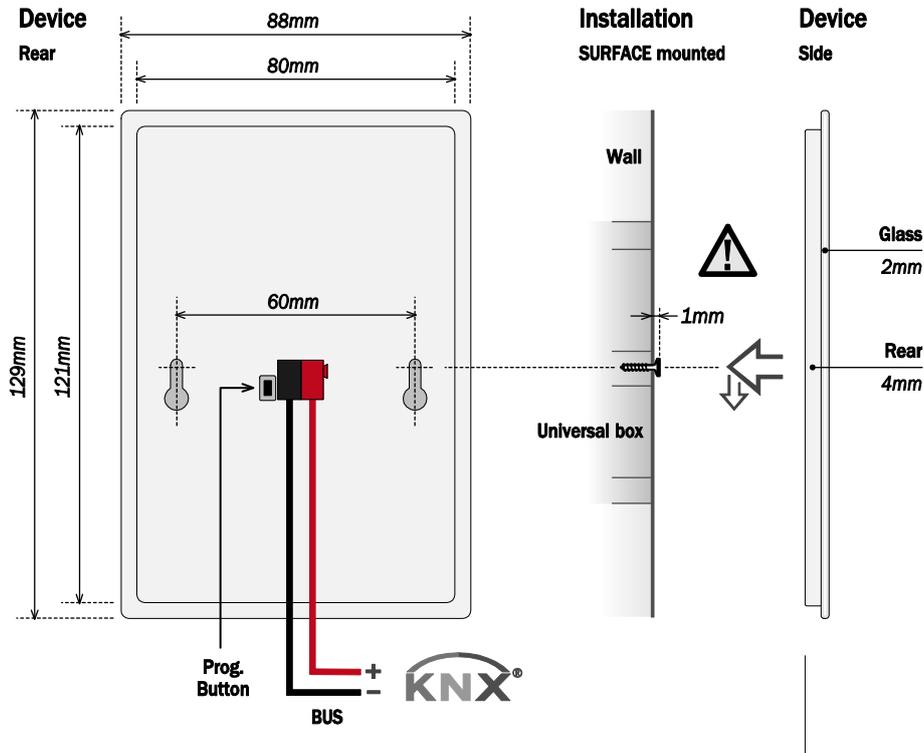
Feed low voltage lines (BUS) in separate ducting to that of power (230V) to ensure there is enough insulation and avoid interferences.

Do not connect the main voltages (230 V) or any other external voltages to any point of the BUS or inputs.
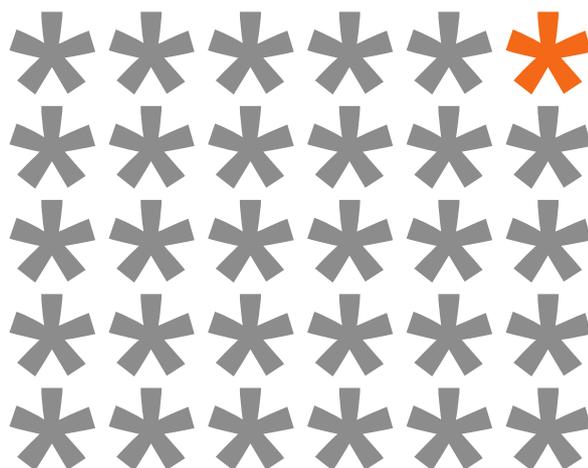
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www.besknx.com

Ingenium, Ingeniería y Domótica S.L.

Parque Tecnológico de Asturias, Parcela 50

33428 Llanera, Asturias, Spain

T (+34) 985 757 195

tec@besknx.com

www.besknx.com

www.ingeniumsl.com