

KNX-RF ACTUATORS:

1-CHANNEL SWITCH – MI K5X 001

LED RLC LAMPS DIMMER – RE K5X LE1

LED STRIPS DIMMER – RE K5X LE2

DALI DIMMER – RE K5X DA1

1/10V_{DC} DIMMER – RE K5X 010

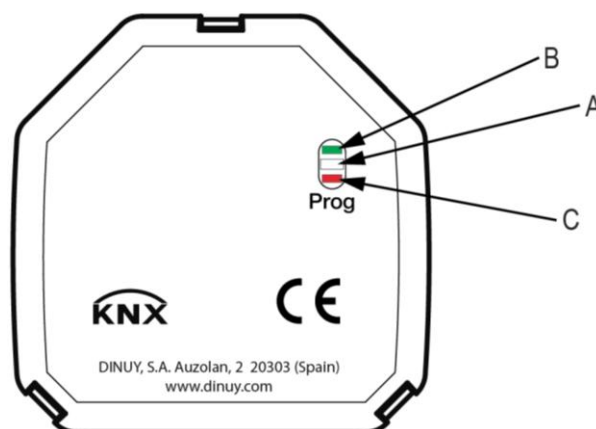


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General Description

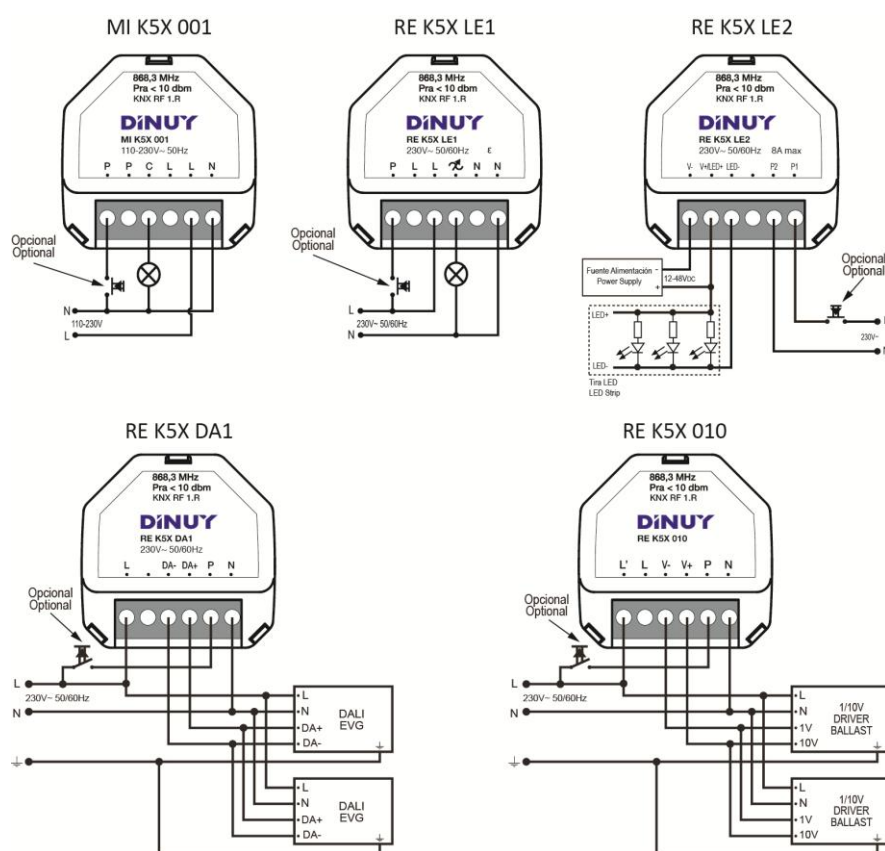
- This User Manual comprises the following KNX-RF System-Mode devices:
 - MI K5X 001: 1-channel Switching Actuator
 - Flush-mounting installation within junction box
 - Up to 16A $\cos\phi=1$ switching capacity
 - Functions: Switch and Staircase Lighting Timer
 - RE K5X LE1: 1-channel Dimming Actuator for LED RLC lamps
 - Flush-mounting installation within junction box
 - Type of dimming: leading or trailing edge
 - Functions: Switch/Dimmer and Staircase Lighting Timer
 - RE K5X LE2: 1-channel Dimming Actuator for LED Strips
 - Flush-mounting installation within junction box
 - Type of load: 12...48V_{DC} LED Strips
 - Type of dimming: PWM
 - Functions: Switch/Dimmer and Staircase Lighting Timer
 - RE K5X DALI: 1-channel Dimming Actuator for DALI Drivers or Ballasts
 - Flush-mounting installation within junction box
 - Maximum number of ECGs: up to 64 Drivers or Ballasts
 - Functions: Switch/Dimmer and Staircase Lighting Timer
 - RE K5X 010: 1-channel Dimming Actuator for 1/10V_{DC} Drivers or Ballasts
 - Flush-mounting installation within junction box
 - Maximum load (without auxiliary relay): 5A $\cos\phi=1$
 - Functions: Switch/Dimmer and Staircase Lighting Timer
- Perfect solution when retrofitting conventional installations, without the need of installing KNX bus cables.
- For connection to the KNX Bus a KNX to KNX RF S-Mode media coupler is required.
- Integrated KNX-RF signal repeater (optional) to extend the distance between devices.
- Connection of (optional) external push button configurable via ETS.
- Integrated programming key (A), as well as status LEDs (B and C).



Technical Specifications

Reference	MI K5X 001	RE K5X LE1	RE K5X LE2	RE K5X DA1	RE K5X 010
Power Supply	110-230V~ 50Hz	230V~ 50/60Hz	12 ... 48V _{dc}	230V~ 50/60Hz	230V~ 50/60Hz
Maximum Load	16A cosφ=1	250W (LED trailing edge)	8A	64 DALI ECGs	5A
KNX Medium			KNX RF 1.R		
Radio-Frequency			868,3MHz		
Transmission Power			< 10dBm		
Range (max.)			In free field: 100m / Indoors: 30m		
Number of Outputs			1		
Application Software			ETS5		
Commissioning Mode			System-mode		
Dimensions			46 x 46 x 30mm		
Operation Temperature			-10°C ... +45°C		
Degree of Protection			IP20		
According to the Standard			EN60669-2-1		
Compatible with			ISO/IEC 14543-3		

Wiring Diagrams



For further information about the installation of the devices, you can take a look to the "Mounting Instructions" of the devices.

Starting Up

- The programming and commissioning must be done with ETS5 or higher.
- To download the product application go to: www.dinuy.com.
- After wiring de Actuator follow these steps:
(Info: The first time the actuator is connected to the mains, as well as after a hard-reset, the red and green LED will flash quickly).
 1. Connect the Interface KNX / KNX-RF (CO K5X 001 or CO K5X 002).
 2. Set device in operation by reconnecting supply voltage).
 3. The red LED (C) turns on.
 4. Press the programming button (A) briefly. The green LED (B) turns on.
 5. Load the physical address and the application software to device.
 6. After successful download the green LED (B) turns off.

Project Development and Programming

1 – Dimmer Parameters

▪ Functional Parameters

- Dimmer Type:

Dimmer Type	<div>Switch/Timer</div> <div> <div>Phase-cut LED Dimmer</div> <div>1-10V Dimmer</div> <div>DALI Dimmer</div> <div>PWM LED Strip Dimmer</div> <div>Switch/Timer</div> </div>
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Defines the Actuator which is going to be configured:

- Switch/Timer: MI K5X 001
- Phase-cut LED Dimmer: RE K5X LE1
- PWM LED Strip Dimmer: RE K5X LE2
- DALI Dimmer: RE K5X DA1
- 1-10V Dimmer: RE K5X 010

The choice of one device or another, will determine the parameters that can be configured later:

MI K5X 001

Dimmer Type	Switch/Timer
Action after Power Supply fault	<input checked="" type="radio"/> OFF <input type="radio"/> ON
Contact polarity?	<input checked="" type="radio"/> Switch-On when Object is 1 <input type="radio"/> Switch-On when Object is 0

- **Action after Power Supply fault:** It sets the behavior after a fault on the Bus.

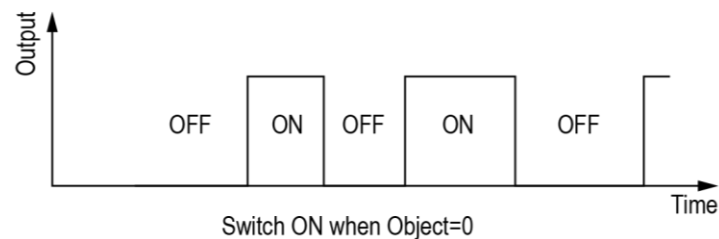
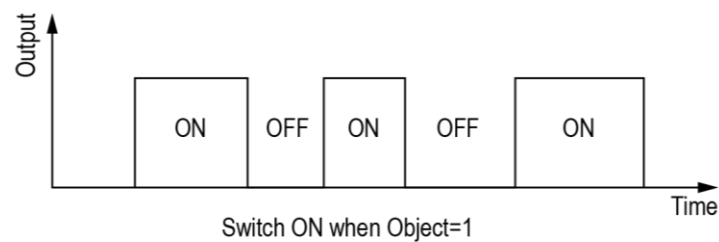
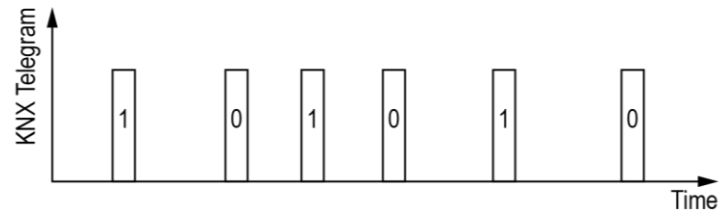
Action after Power Supply fault	<input checked="" type="radio"/> OFF <input type="radio"/> ON
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- **Contact polarity:** indicates whether the actuator must be activated when it receives a 1 or a 0 in object "Number 1 - Switch On-Off Input".

Contact polarity?

☒
Switch-On when Object is 1

☐
Switch-On when Object is 0

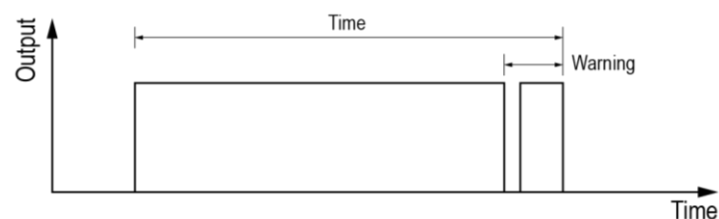


Additional Parameters

- **Staircase Lighting Timer:** it allows adjusting the timing and the pre-warning time of the Staircase Lighting Timer function (optional). This timing is activated through the object "Number 6 - Timed Start-Stop Input". Each time a "1" is received on that object, the time is reset and the timing starts again.

Staircase Time Delay (Sec)

Staircase Pre-warning (Sec)



- **Scene Management:** it allows managing up to 5 different scenes.

Number of Scenes	<div> All Scenes </div> <div> All Scenes </div> <div> One Scene </div> <div> Two Scenes </div> <div> Three Scenes </div> <div> Four Scenes </div> <div> Five Scenes </div>
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Each of the scenes can be configured with ON or OFF:

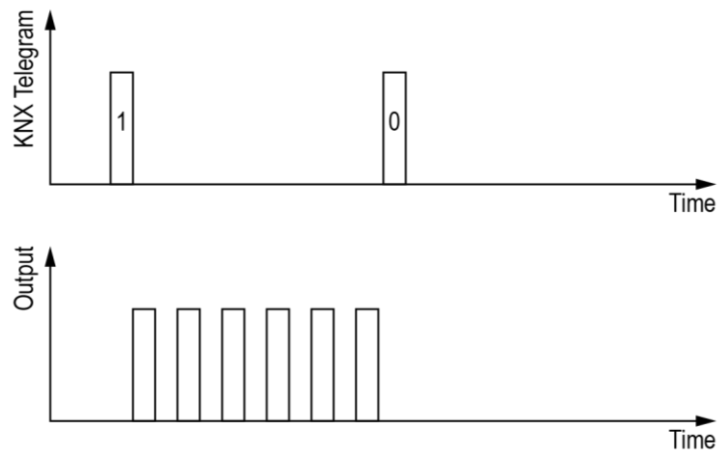
Number of Scenes	Five Scenes
Scene Number 1	Scene 1
Default state Scene 1	<input checked="" type="radio"/> OFF <input type="radio"/> ON
Scene Number 2	Scene 2
Default state Scene 2	<input checked="" type="radio"/> OFF <input type="radio"/> ON
Scene Number 3	Scene 3
Default state Scene 3	<input checked="" type="radio"/> OFF <input type="radio"/> ON
Scene Number 4	Scene 4
Default state Scene 4	<input checked="" type="radio"/> OFF <input type="radio"/> ON
Scene Number 5	Scene 5
Default state Scene 5	<input checked="" type="radio"/> OFF <input type="radio"/> ON

The desired Scene can be activated through object "Number 4 – Scene Numbered Input".

▪ Sequential Work

It allows performing a Sequence (Intermittent) with a pre-established ON and OFF time. This function can be activated through object "Number 15 - Sequential Operation".

ON Time (Sec)	1
OFF Time (Sec)	1



2 – Auxiliary Pushbutton

▪ Parameters

- Auxiliary Pushbutton function:

Auxiliary Pushbutton function	<div>Not assigned</div> <div>Not assigned ✓</div> <div>Switch</div> <div>Switch Dimmer</div> <div>Control Scene</div> <div>Fixed Value/Forced</div>
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This Actuator can be controlled locally through a wired pushbutton.

It is possible to assign different functions, each of which will activate different objects:

· Switch:

Auxiliary Pushbutton function	Switch
Debounce Time	20 mSec.
Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	Off

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Distinction between Short/Long action: allows to distinguish between a long and a short pulse, being able to assign different actions according to this.
 - If NO distinguishes between Short / Long action:

Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	None

· If YES distinguishes between Short / Long action:

Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Number of objects for Short/Long operation	<input type="radio"/> 1 <input checked="" type="radio"/> 2
Long action after	0,4 Sec.
Long action	Off
Short action	Toggle Switch

In this case, it is possible to select whether to act on a single object (Number 11 – Switch On-Off Output Short operation) or on 2 different objects (Number 11 - Switch On-Off Output Short operation and Number 12 - Switch On-Off Output Long operation).

· Switch Dimmer:

Auxiliary Pushbutton function	Switch Dimmer
Debounce Time	20 mSec.
Dimming Functionality?	<input checked="" type="radio"/> Dimming and Switching <input type="radio"/> Only Dimming
Long action after	0,4 Sec.
Action after Short operation	Toggle Switch
Action after Long operation	Toggle Dim

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Dimming Functionality: allows selecting the working mode: Switch/Dimmer or Dimmer. In any of the 2 cases, the object “Number 12 – Dimming Up-Down Output” could be used for the control of another dimming actuator.
- Action after operation: defines the action to be performed after a short / long press on the auxiliary button.

· Scene Management:

Auxiliary Pushbutton function	Control Scene
Debounce Time	20 mSec.
Scene Number	Scene 2
Action after Short operation	<input type="radio"/> Recall <input checked="" type="radio"/> Ignore
Action after Long operation	<input type="radio"/> Save Scene <input checked="" type="radio"/> Ignore

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Scene Number: determines the scene number that will be managed with the auxiliary switch. The object "Number 11 - Scene Numbered Output" is enabled.
- Action after operation: sets the calling or saving the scene by a short or long press.

· Fixed Value/Forzed:

Auxiliary Pushbutton function	Fixed Value/Forced
Debounce Time	20 mSec.
Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Value type after Short operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1
Value type after Long operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Value type after Short/Long operation: allows selecting the type of value that will be sent by object "Number 11 and 12 – Value output".
- Bit (Byte) Value: the value that will be sent after a short / long press is set.

3 – RF Parameters

▪ Parameters

- **Enable RF Retransmitter mode:**

Enable RF Retransmitter mode?	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
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It enables the retransmission of RF telegrams in order to extend the distance between transmitters and receivers. It is only recommended to enable this function if there are really coverage problems, otherwise, it is not recommended to activate it, in order not to saturate the wireless network.

RE K5X LE1

Dimmer Type	Phase-cut LED Dimmer
Dimming Mode	<input type="radio"/> Leading-edge Dimming <input checked="" type="radio"/> Trailing-edge Dimming
Ripple filter state	<input type="radio"/> Filter No Active <input checked="" type="radio"/> Filter Active
Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3
Dimming Value Fade Time (x 0,1 Sec)	10
Maximum Brightness (%)	90
Minimum Brightness (%)	3
Switch-On Mode	Switch-On at last turn-off brightness
OFF value (0-100%)	0

- **Dimming Mode:** type of dimming to be applied to the lamp/driver. Must be indicated in the characteristics of the lamp/driver. If not, check it with the manufacturer of the lamp/driver.

Dimming Mode	<input type="radio"/> Leading-edge Dimming <input checked="" type="radio"/> Trailing-edge Dimming
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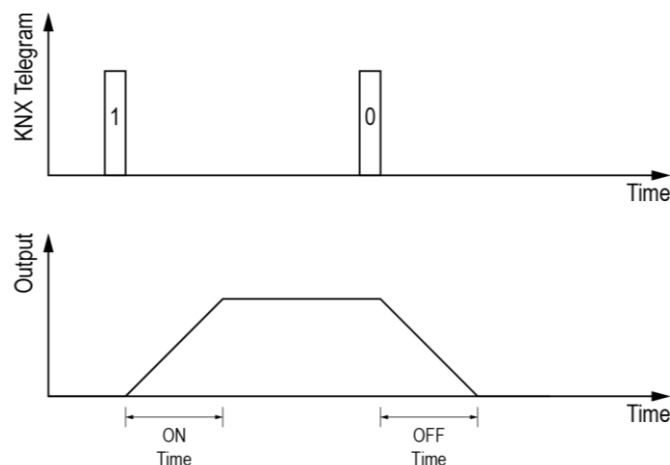
Note: a wrong selection of the Dimming Mode, can cause the breakage of the dimmer or the lamps.

- **Ripple filter state:** ripple is an effect on the supply voltage that can affect the correct operation of the dimmer. Through this parameter, it is possible to activate or deactivate this filter.

Ripple filter state	<input type="radio"/> Filter No Active <input checked="" type="radio"/> Filter Active
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- **Soft Turn-On/Off Time:** it allows soft switching on / off, in a fixed time.

Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3



- **Dimming Value Fade Time:** fade time when receiving a dimming value.

Dimming Value Fade Time (x 0,1 Sec)

10

- **Maximum/Minimum Brightness:** % of minimum and maximum dimming level. The adjustment of the minimum level allows avoiding unwanted flickering or the switch-off of the lamps at low dimming levels.

Maximum Brightness (%)

90

Minimum Brightness (%)

3

- **Switch-On Mode:** the level at which the lamps will be switched on after receiving an ON telegram.

Switch-On Mode

Switch-On at last turn-off brightness

Switch-On at last turn-off brightness

Switch-On at maximum brightness

Switch-On at this % brightness

- **OFF value:** % of dimming level when receiving an OFF telegram. Normally, this value must be "0".

OFF value (0-100%)

0

Additional Parameters

Staircase Time Delay (Sec)

40

Staircase Pre-warning (Sec)

2

Number of Scenes

All Scenes

Dimming Speed (from 0% to 100% x 0,1Sec)

1

Action after Power Supply fault

OFF

Dimming Curve (1-5)

Curve 2

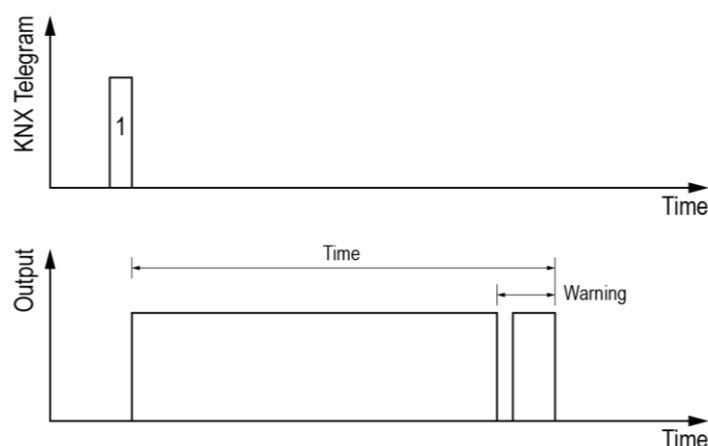
- **Staircase Timer Function:** it allows adjusting the timing and the pre-warning time of the Staircase Lighting Timer function (optional). This timing is activated through the object "Number 6 - Timed Start-Stop Input". Each time a "1" is received on that object, the time is reset and the timing starts again.

Staircase Time Delay (Sec)

40

Staircase Pre-warning (Sec)

2



- **Scene Management:** it allows managing up to 5 different scenes.

Number of Scenes	<div> All Scenes </div> <div> All Scenes ✓ One Scene Two Scenes Three Scenes Four Scenes Five Scenes </div>
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Each of the scenes can be configured with a fixed dimming value:

Number of Scenes	Five Scenes
Scene Number 1	Scene 1
Default Brightness (%) Scene 1	3
Scene Number 2	Scene 2
Default Brightness (%) Scene 2	3
Scene Number 3	Scene 3
Default Brightness (%) Scene 3	3
Scene Number 4	Scene 4
Default Brightness (%) Scene 4	3
Scene Number 5	Scene 5
Default Brightness (%) Scene 5	3

The desired Scene can be activated through the object "Number 4 – Scene Numbered Input".

- **Dimming Speed:** maximum fade time from 0% to 100% and vice versa. If, for example, it starts at 50% and is regulated up to 100%, the real time will be half of that established in this parameter.

Dimming Speed (from 0% to 100% x 0,1Sec)	1
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- **Action after Power Supply fault:** sets the behavior after a failure in the Bus.

Action after Power Supply fault	<div>OFF</div> <div> OFF ✓ ON at Maximum brightness Switch-On at this % brightness </div>
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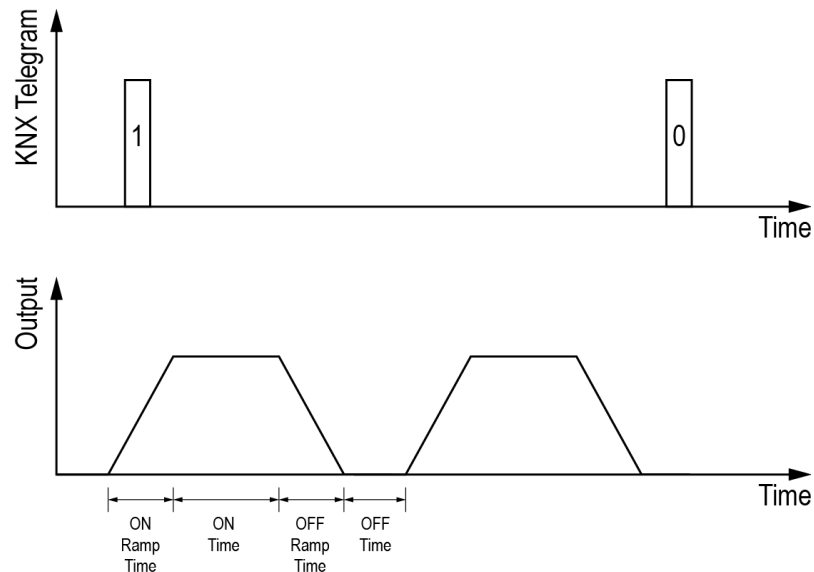
- **Dimming Curve:** this parameter is disabled, it has no assigned function.

Dimming Curve (1-5)	Curve 2
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Sequential work

It allows performing a Sequence (Intermittent) with a pre-established ON and OFF time. This function can be activated through object "Number 15 - Sequential Operation".

Switch-On Ramp Time (Sec)	1
ON Time (Sec)	1
Switch-Off Ramp Time (Sec)	1
OFF Time (Sec)	1



2 - Auxiliary Pushbutton

Parameters

- Auxiliary Pushbutton Function:

Auxiliary Pushbutton function	<div>Not assigned</div> <div>Not assigned ✓</div> <div>Switch</div> <div>Switch Dimmer</div> <div>Control Scene</div> <div>Fixed Value/Forced</div>
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This Actuator can be controlled locally through a wired pushbutton.

It is possible to assign different functions, each of which will activate different objects:

· Switch:

Auxiliary Pushbutton function	Switch
Debounce Time	20 mSec.
Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	Off

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Distinction between Short/Long action: allows to distinguish between a long and a short pulse, being able to assign different actions according to this.

· If NO distinguishes between Short / Long action:

Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	None

· If YES distinguishes between Short / Long action:

Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Number of objects for Short/Long operation	<input type="radio"/> 1 <input checked="" type="radio"/> 2
Long action after	0,4 Sec.
Long action	Off
Short action	Toggle Switch

In this case, it is possible to select whether to act on a single object (Number 11 – Switch On-Off Output Short operation) or on 2 different objects (Number 11 - Switch On-Off Output Short operation and Number 12 - Switch On-Off Output Long operation).

· Switch Dimmer:

Auxiliary Pushbutton function	Switch Dimmer
Debounce Time	20 mSec.
Dimming Functionality?	<input checked="" type="radio"/> Dimming and Switching <input type="radio"/> Only Dimming
Long action after	0,4 Sec.
Action after Short operation	Toggle Switch
Action after Long operation	Toggle Dim

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Dimming Functionality: allows selecting the working mode: Switch/Dimmer or Dimmer. In any of the 2 cases, the object "Number 12 – Dimming Up-Down Output" could be used for the control of another dimming actuator.

- Action after operation: defines the action to be performed after a short / long press on the auxiliary button.

· Scene Management:

Auxiliary Pushbutton function	Control Scene
Debounce Time	20 mSec.
Scene Number	Scene 2
Action after Short operation	<input type="radio"/> Recall <input checked="" type="radio"/> Ignore
Action after Long operation	<input type="radio"/> Save Scene <input checked="" type="radio"/> Ignore

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Scene Number: determines the scene number that will be managed with the auxiliary switch. The object "Number 11 - Scene Numbered Output" is enabled.
- Action after operation: sets the calling or saving the scene by a short or long press.

· Fixed Value/Forced:

Auxiliary Pushbutton function	Fixed Value/Forced
Debounce Time	20 mSec.
Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Value type after Short operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1
Value type after Long operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Value type after Short/Long operation: allows selecting the type of value that will be sent by object "Number 11 and 12 – Value output".
- Bit (Byte) Value: the value that will be sent after a short / long press is set.

3 – RF Parameters

▪ Parameters

- Enable RF Retransmitter mode:

Enable RF Retransmitter mode?	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
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It enables the retransmission of RF telegrams in order to extend the distance between transmitters and receivers. It is only recommended to enable this function if there are really coverage problems, otherwise, it is not recommended to activate it, in order not to saturate the wireless network.

RE K5X LE2

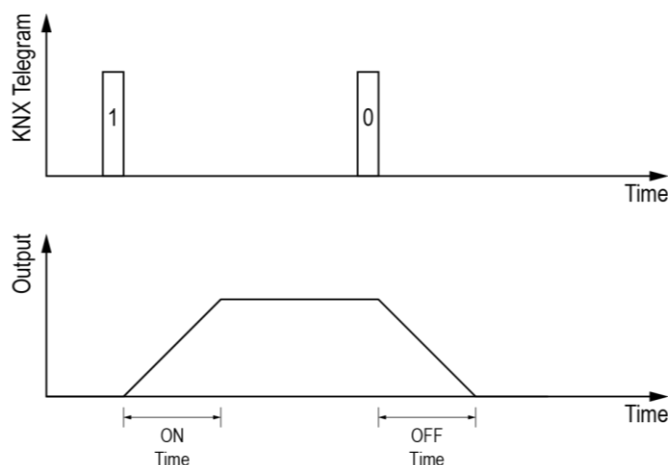
Dimmer Type	PWM LED Strip Dimmer
PWM Frequency	400 Hz
Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3
Dimming Value Fade Time (x 0,1 Sec)	10
Maximum Brightness (%)	90
Minimum Brightness (%)	3
Switch-On Mode	Switch-On at last turn-off brightness
OFF value (0-100%)	0

- **PWM Frequency:** can be chosen between different values and determines the speed with which the dimmer output voltage will be regulated towards the LED strip.

PWM Frequency	400 Hz
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- **Soft Turn-On/Off Time:** It allows switching on/off in a fixed time.

Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3



- **Dimming Value Fade Time:** fade time when receiving a dimming value.

Dimming Value Fade Time (x 0,1 Sec)	10
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- **Maximum/Minimum Brightness:** % of minimum and maximum dimming level. The adjustment of the minimum level allows avoiding unwanted flickering or the switch-off of the lamps at low dimming levels.

Maximum Brightness (%)	90
Minimum Brightness (%)	3

- **Switch-On Mode:** the level at which the lamps will be switched on after receiving an ON telegram.

Switch-On Mode	Switch-On at last turn-off brightness Switch-On at last turn-off brightness ✓ Switch-On at maximum brightness Switch-On at this % brightness
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- **OFF value:** % of dimming level when receiving an OFF telegram. Normally, this value must be "0".

OFF value (0-100%)	0
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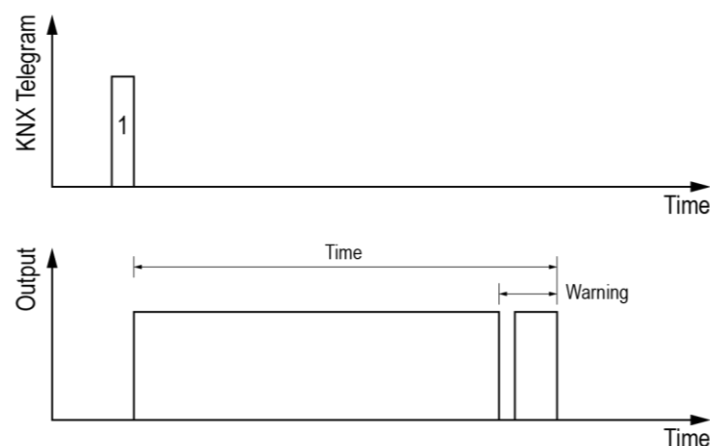
▪ Additional Parameters

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2
Number of Scenes	All Scenes
Dimming Speed (from 0% to 100% x 0,1Sec)	1
Action after Power Supply fault	OFF
Dimming Curve (1-5)	Curve 2

- **Staircase Timer Function:** it allows adjusting the timing and the pre-warning time of the Staircase Lighting Timer function (optional). This timing is activated through the object "Number 6 - Timed Start-Stop Input".

Each time a "1" is received on that object, the time is reset and the timing starts again.

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2



- **Scene Management:** it allows managing up to 5 different scenes.

Number of Scenes	<div> <div>All Scenes</div> <div> <div>All Scenes</div> <div>One Scene</div> <div>Two Scenes</div> <div>Three Scenes</div> <div>Four Scenes</div> <div>Five Scenes</div> </div> </div>
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Each of the scenes can be configured with a fixed dimming value:

Number of Scenes	Five Scenes
Scene Number 1	Scene 1
Default Brightness (%) Scene 1	3
Scene Number 2	Scene 2
Default Brightness (%) Scene 2	3
Scene Number 3	Scene 3
Default Brightness (%) Scene 3	3
Scene Number 4	Scene 4
Default Brightness (%) Scene 4	3
Scene Number 5	Scene 5
Default Brightness (%) Scene 5	3

The desired Scene can be activated through the object "Number 4 – Scene Numbered Input".

- **Dimming Speed:** maximum fade time from 0% to 100% and vice versa. If, for example, it starts at 50% and is regulated up to 100%, the real time will be half of that established in this parameter.

Dimming Speed (from 0% to 100% x 0,1Sec)	1
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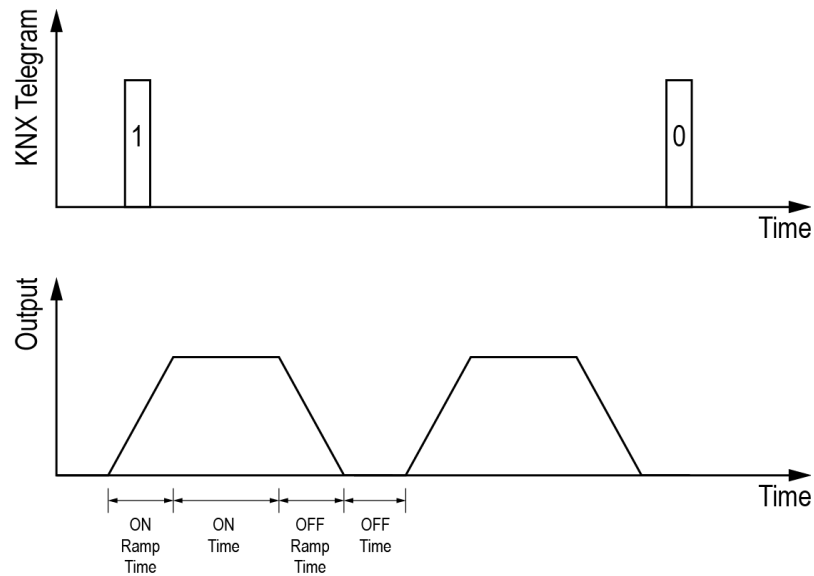
- **Action after Power Supply fault:** sets the behavior after a failure in the Bus.

Action after Power Supply fault	<div> <div>OFF</div> <div> <div>OFF</div> <div>ON at Maximum brightness</div> <div>Switch-On at this % brightness</div> </div> </div>
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▪ Sequential work

It allows performing a Sequence (Intermittent) with a pre-established ON and OFF time. This function can be activated through object "Number 15 - Sequential Operation".

Switch-On Ramp Time (Sec)	1
ON Time (Sec)	1
Switch-Off Ramp Time (Sec)	1
OFF Time (Sec)	1



2 – Auxiliary Pushbutton

Parameters

- Auxiliary Pushbutton Function:

Auxiliary Pushbutton function	<div>Not assigned</div> <div>Not assigned ✓</div> <div>Switch</div> <div>Switch Dimmer</div> <div>Control Scene</div> <div>Fixed Value/Forced</div>
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This Actuator can be controlled locally through a wired pushbutton.

It is possible to assign different functions, each of which will activate different objects:

· Switch:

Auxiliary Pushbutton function	Switch
Debounce Time	20 mSec.
Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	Off

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Distinction between Short/Long action: allows to distinguish between a long and a short pulse, being able to assign different actions according to this.

· If NO distinguishes between Short / Long action:

Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	None

· If YES distinguishes between Short / Long action:

Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Number of objects for Short/Long operation	<input type="radio"/> 1 <input checked="" type="radio"/> 2
Long action after	0,4 Sec.
Long action	Off
Short action	Toggle Switch

In this case, it is possible to select whether to act on a single object (Number 11 – Switch On-Off Output Short operation) or on 2 different objects (Number 11 - Switch On-Off Output Short operation and Number 12 - Switch On-Off Output Long operation).

· Switch Dimmer:

Auxiliary Pushbutton function	Switch Dimmer
Debounce Time	20 mSec.
Dimming Functionality?	<input checked="" type="radio"/> Dimming and Switching <input type="radio"/> Only Dimming
Long action after	0,4 Sec.
Action after Short operation	Toggle Switch
Action after Long operation	Toggle Dim

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Dimming Functionality: allows selecting the working mode: Switch/Dimmer or Dimmer. In any of the 2 cases, the object “Number 12 – Dimming Up-Down Output” could be used for the control of another dimming actuator.
- Action after operation: defines the action to be performed after a short / long press on the auxiliary button.

· Scene Management:

Auxiliary Pushbutton function	Control Scene
Debounce Time	20 mSec.
Scene Number	Scene 2
Action after Short operation	<input type="radio"/> Recall <input checked="" type="radio"/> Ignore
Action after Long operation	<input type="radio"/> Save Scene <input checked="" type="radio"/> Ignore

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Scene Number: determines the scene number that will be managed with the auxiliary switch. The object "Number 11 - Scene Numbered Output" is enabled.
- Action after operation: sets the calling or saving the scene by a short or long press.

· Fixed Value/Forced:

Auxiliary Pushbutton function	Fixed Value/Forced
Debounce Time	20 mSec.
Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Value type after Short operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1
Value type after Long operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Value type after Short/Long operation: allows selecting the type of value that will be sent by object "Number 11 and 12 – Value output".
- Bit (Byte) Value: the value that will be sent after a short / long press is set.

3 – RF Parameters

▪ Parameters

- **Enable RF Retransmitter mode:**

Enable RF Retransmitter mode?	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
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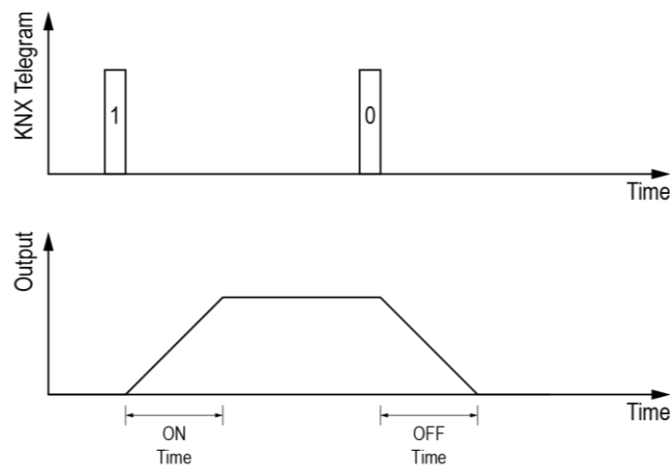
It enables the retransmission of RF telegrams in order to extend the distance between transmitters and receivers. It is only recommended to enable this function if there are really coverage problems, otherwise, it is not recommended to activate it, in order not to saturate the wireless network.

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Dimmer Type	<input type="text" value="DALI Dimmer"/>
Soft Turn-On Time (Sec)	<input type="text" value="0,7"/>
Soft Turn-Off Time (Sec)	<input type="text" value="0,7"/>
Dimming Value Fade Time (x Sec)	<input type="text" value="0,7"/>
Maximum Brightness (%)	<input type="text" value="90"/>
Minimum Brightness (%)	<input type="text" value="3"/>
Switch-On Mode	<input type="text" value="Switch-On at last turn-off brightness"/>
OFF value (0-100%)	<input type="text" value="0"/>

- **Soft Turn-On/Off Time:** It allows switching on/off in a fixed time.

Soft Turn-On Time (Sec)	<input type="text" value="0,7"/>
Soft Turn-Off Time (Sec)	<input type="text" value="0,7"/>



- **Dimming Value Fade Time:** fade time when receiving a dimming value.

Dimming Value Fade Time (x Sec)	<input type="text" value="0,7"/>
----------------------------------	----------------------------------

- **Maximum/Minimum Brightness:** % of minimum and maximum dimming level. The adjustment of the minimum level allows avoiding unwanted flickering or the switch-off of the lamps at low dimming levels.

Maximum Brightness (%)	<input type="text" value="90"/>
Minimum Brightness (%)	<input type="text" value="3"/>

- **Switch-On Mode:** the level at which the lamps will be switched on after receiving an ON telegram.

Switch-On Mode	<input type="text" value="Switch-On at last turn-off brightness"/> <ul style="list-style-type: none"> Switch-On at last turn-off brightness ✓ Switch-On at maximum brightness Switch-On at this % brightness
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- **OFF value:** % of dimming level when receiving an OFF telegram. Normally, this value must be "0".

OFF value (0-100%)

0

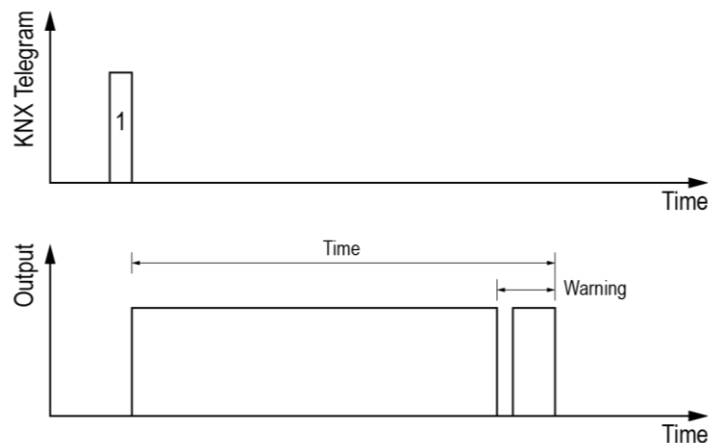
Additional Parameters

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2
Number of Scenes	All Scenes
Dimming Speed (from 0% to 100%) x 0,1Sec	2
Action after Power Supply fault	OFF

- **Staircase Timer Function:** it allows adjusting the timing and the pre-warning time of the Staircase Lighting Timer function (optional). This timing is activated through the object "Number 6 - Timed Start-Stop Input".

Each time a "1" is received on that object, the time is reset and the timing starts again.

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2



- **Scene Management:** it allows managing up to 5 different scenes.

Number of Scenes	All Scenes
	All Scenes ✓
	One Scene
	Two Scenes
	Three Scenes
	Four Scenes
	Five Scenes

Each of the scenes can be configured with a fixed dimming value:

Number of Scenes	Five Scenes
Scene Number 1	Scene 1
Default Brightness (%) Scene 1	3
Scene Number 2	Scene 2
Default Brightness (%) Scene 2	3
Scene Number 3	Scene 3
Default Brightness (%) Scene 3	3
Scene Number 4	Scene 4
Default Brightness (%) Scene 4	3
Scene Number 5	Scene 5
Default Brightness (%) Scene 5	3

The desired Scene can be activated through the object "Number 4 – Scene Numbered Input".

- **Dimming Speed:** maximum fade time from 0% to 100% and vice versa. If, for example, it starts at 50% and is regulated up to 100%, the real time will be half of that established in this parameter.

Dimming Speed (from 0% to 100% x 0,1Sec)	1
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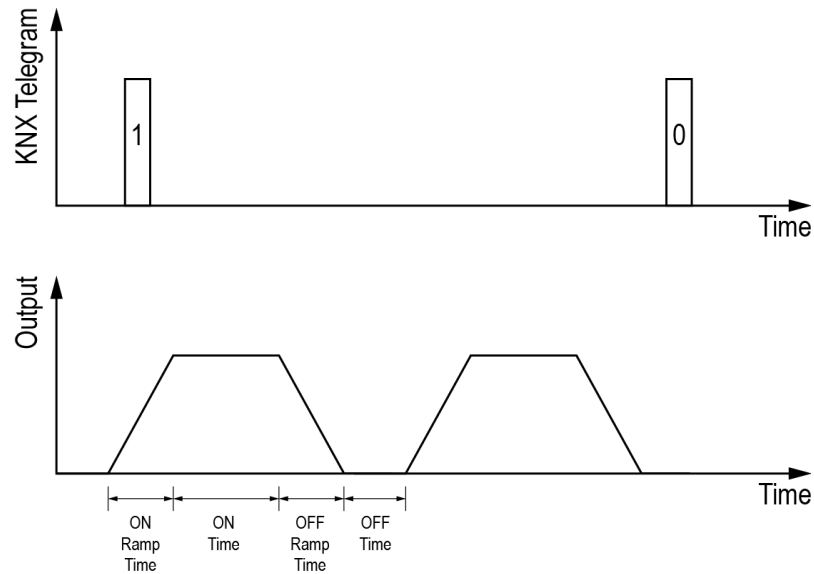
- **Action after Power Supply fault:** sets the behavior after a failure in the Bus.

Action after Power Supply fault	<div>OFF</div> <div>OFF ✓</div> <div>ON at Maximum brightness</div> <div>Switch-On at this % brightness</div>
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▪ Sequential work

It allows performing a Sequence (Intermittent) with a pre-established ON and OFF time. This function can be activated through object "Number 15 - Sequential Operation".

Switch-On Ramp Time (Sec)	1
ON Time (Sec)	1
Switch-Off Ramp Time (Sec)	1
OFF Time (Sec)	1



2 – Auxiliary Pushbutton

Parameters

- Auxiliary Pushbutton Function:

Auxiliary Pushbutton function	Not assigned
	Not assigned ✓
	Switch
	Switch Dimmer
	Control Scene
	Fixed Value/Forced

This Actuator can be controlled locally through a wired pushbutton.

It is possible to assign different functions, each of which will activate different objects:

· Switch:

Auxiliary Pushbutton function	Switch
Debounce Time	20 mSec.
Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	Off

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Distinction between Short/Long action: allows to distinguish between a long and a short pulse, being able to assign different actions according to this.
 - If NO distinguishes between Short / Long action:

Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	None

· If YES distinguishes between Short / Long action:

Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Number of objects for Short/Long operation	<input type="radio"/> 1 <input checked="" type="radio"/> 2
Long action after	0,4 Sec.
Long action	Off
Short action	Toggle Switch

In this case, it is possible to select whether to act on a single object (Number 11 – Switch On-Off Output Short operation) or on 2 different objects (Number 11 - Switch On-Off Output Short operation and Number 12 - Switch On-Off Output Long operation).

· Switch Dimmer:

Auxiliary Pushbutton function	Switch Dimmer
Debounce Time	20 mSec.
Dimming Functionality?	<input checked="" type="radio"/> Dimming and Switching <input type="radio"/> Only Dimming
Long action after	0,4 Sec.
Action after Short operation	Toggle Switch
Action after Long operation	Toggle Dim

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Dimming Functionality: allows selecting the working mode: Switch/Dimmer or Dimmer. In any of the 2 cases, the object "Number 12 – Dimming Up-Down Output" could be used for the control of another dimming actuator.
- Action after operation: defines the action to be performed after a short / long press on the auxiliary button.

· Scene Management:

Auxiliary Pushbutton function	Control Scene
Debounce Time	20 mSec.
Scene Number	Scene 2
Action after Short operation	<input type="radio"/> Recall <input checked="" type="radio"/> Ignore
Action after Long operation	<input type="radio"/> Save Scene <input checked="" type="radio"/> Ignore

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.

- Scene Number: determines the scene number that will be managed with the auxiliary switch. The object "Number 11 - Scene Numbered Output" is enabled.
- Action after operation: sets the calling or saving the scene by a short or long press.

· Fixed Value/Forced:

Auxiliary Pushbutton function	Fixed Value/Forced
Debounce Time	20 mSec.
Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Value type after Short operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1
Value type after Long operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Value type after Short/Long operation: allows selecting the type of value that will be sent by object "Number 11 and 12 – Value output".
- Bit (Byte) Value: the value that will be sent after a short / long press is set.

3 – RF Parameters

▪ Parameters

- **Enable RF Retransmitter mode:**

Enable RF Retransmitter mode?	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
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It enables the retransmission of RF telegrams in order to extend the distance between transmitters and receivers. It is only recommended to enable this function if there are really coverage problems, otherwise, it is not recommended to activate it, in order not to saturate the wireless network.

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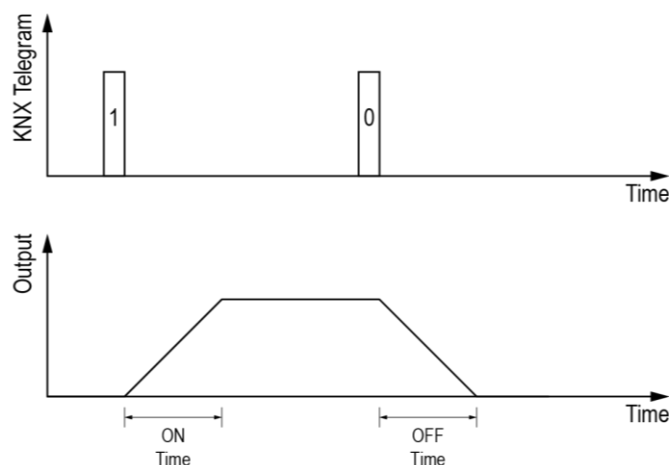
Dimmer Type	1-10V Dimmer
Min Switch Off Voltage	1.2 Volt
Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3
Dimming Value Fade Time (x 0,1 Sec)	10
Maximum Brightness (%)	90
Minimum Brightness (%)	3
Switch-On Mode	Switch-On at last turn-off brightness
OFF value (0-100%)	0

- **Minimum Switch Off Voltage:** determines the minimum dimming voltage at which the relay L' of the actuator is opened and disconnects the power supply of the luminaires.

Min Switch Off Voltage	1.2 Volt
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- **Soft Turn-On/Off Time:** It allows switching on/off in a fixed time.

Soft Turn-On Time (x 0,1 Sec)	3
Soft Turn-Off Time (x 0,1 Sec)	3



- **Dimming Value Fade Time:** fade time when receiving a dimming value.

Dimming Value Fade Time (x 0,1 Sec)	10
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- **Maximum/Minimum Brightness:** % of minimum and maximum dimming level. The adjustment of the minimum level allows avoiding unwanted flickering or the switch-off of the lamps at low dimming levels.

Maximum Brightness (%)	90
Minimum Brightness (%)	3

- **Switch-On Mode:** the level at which the lamps will be switched on after receiving an ON telegram.

Switch-On Mode	<div>Switch-On at last turn-off brightness</div> <div>Switch-On at last turn-off brightness ✓</div> <div>Switch-On at maximum brightness</div> <div>Switch-On at this % brightness</div>
----------------	--

- **OFF value:** % of dimming level when receiving an OFF telegram. Normally, this value must be "0".

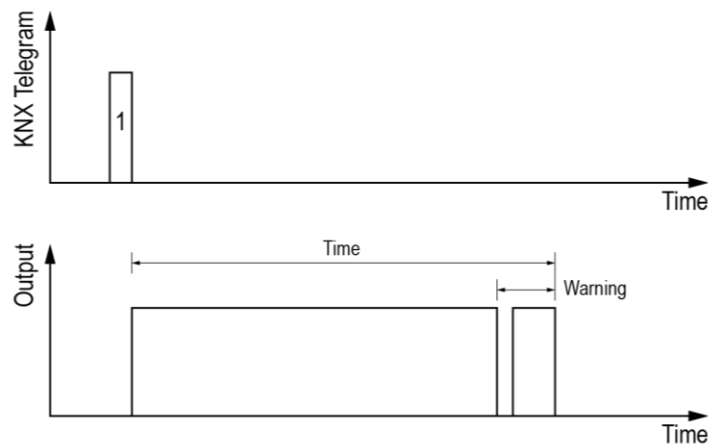
OFF value (0-100%)	0
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▪ Additional Parameters

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2
Number of Scenes	All Scenes
Dimming Speed (from 0% to 100%) x 0,1Sec	2
Action after Power Supply fault	OFF

- **Staircase Timer Function:** it allows adjusting the timing and the pre-warning time of the Staircase Lighting Timer function (optional). This timing is activated through the object "Number 6 - Timed Start-Stop Input". Each time a "1" is received on that object, the time is reset and the timing starts again.

Staircase Time Delay (Sec)	40
Staircase Pre-warning (Sec)	2



- **Scene Management:** it allows managing up to 5 different scenes.

Number of Scenes	<div> All Scenes </div> <div> All Scenes ✓ One Scene Two Scenes Three Scenes Four Scenes Five Scenes </div>
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Each of the scenes can be configured with a fixed dimming value:

Number of Scenes	Five Scenes
Scene Number 1	Scene 1
Default Brightness (%) Scene 1	3
Scene Number 2	Scene 2
Default Brightness (%) Scene 2	3
Scene Number 3	Scene 3
Default Brightness (%) Scene 3	3
Scene Number 4	Scene 4
Default Brightness (%) Scene 4	3
Scene Number 5	Scene 5
Default Brightness (%) Scene 5	3

The desired Scene can be activated through the object "Number 4 – Scene Numbered Input".

- **Dimming Speed:** maximum fade time from 0% to 100% and vice versa. If, for example, it starts at 50% and is regulated up to 100%, the real time will be half of that established in this parameter.

Dimming Speed (from 0% to 100% x 0,1Sec)	1
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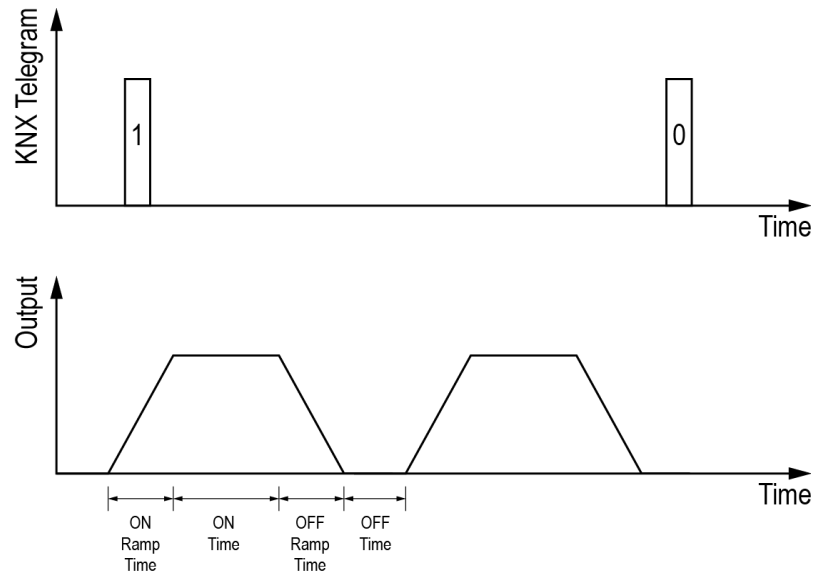
- **Action after Power Supply fault:** sets the behavior after a failure in the Bus.

Action after Power Supply fault	<div>OFF</div> <div>OFF ✓</div> <div>ON at Maximum brightness</div> <div>Switch-On at this % brightness</div>
---------------------------------	---

▪ Sequential work

It allows performing a Sequence (Intermittent) with a pre-established ON and OFF time. This function can be activated through object "Number 15 - Sequential Operation".

Switch-On Ramp Time (Sec)	1
ON Time (Sec)	1
Switch-Off Ramp Time (Sec)	1
OFF Time (Sec)	1



2 – Auxiliary Pushbutton

Parameters

- Auxiliary Pushbutton Function:

Auxiliary Pushbutton function	Not assigned
	Not assigned ✓
	Switch
	Switch Dimmer
	Control Scene
	Fixed Value/Forced

This Actuator can be controlled locally through a wired pushbutton.

It is possible to assign different functions, each of which will activate different objects:

· Switch:

Auxiliary Pushbutton function	Switch
Debounce Time	20 mSec.
Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	Off

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Distinction between Short/Long action: allows to distinguish between a long and a short pulse, being able to assign different actions according to this.
 - If NO distinguishes between Short / Long action:

Distinction between Short/Long action	<input checked="" type="radio"/> NO <input type="radio"/> YES
Action after Closing the contact	Off
Action after Opening the contact	None

· If YES distinguishes between Short / Long action:

Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Number of objects for Short/Long operation	<input type="radio"/> 1 <input checked="" type="radio"/> 2
Long action after	0,4 Sec.
Long action	Off
Short action	Toggle Switch

In this case, it is possible to select whether to act on a single object (Number 11 – Switch On-Off Output Short operation) or on 2 different objects (Number 11 - Switch On-Off Output Short operation and Number 12 - Switch On-Off Output Long operation).

· Switch Dimmer:

Auxiliary Pushbutton function	Switch Dimmer
Debounce Time	20 mSec.
Dimming Functionality?	<input checked="" type="radio"/> Dimming and Switching <input type="radio"/> Only Dimming
Long action after	0,4 Sec.
Action after Short operation	Toggle Switch
Action after Long operation	Toggle Dim

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Dimming Functionality: allows selecting the working mode: Switch/Dimmer or Dimmer. In any of the 2 cases, the object "Number 12 – Dimming Up-Down Output" could be used for the control of another dimming actuator.
- Action after operation: defines the action to be performed after a short / long press on the auxiliary button.

· Scene Management:

Auxiliary Pushbutton function	Control Scene
Debounce Time	20 mSec.
Scene Number	Scene 2
Action after Short operation	<input type="radio"/> Recall <input checked="" type="radio"/> Ignore
Action after Long operation	<input type="radio"/> Save Scene <input checked="" type="radio"/> Ignore

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.

- Scene Number: determines the scene number that will be managed with the auxiliary switch. The object "Number 11 - Scene Numbered Output" is enabled.
- Action after operation: sets the calling or saving the scene by a short or long press.

· Fixed Value/Forced:

Auxiliary Pushbutton function	Fixed Value/Forced
Debounce Time	20 mSec.
Distinction between Short/Long action	<input type="radio"/> NO <input checked="" type="radio"/> YES
Value type after Short operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1
Value type after Long operation	1 bit
Bit value	<input type="radio"/> 0 <input checked="" type="radio"/> 1

- Debounce Time: adjusts the bounce suppression time when there is a switch. Prevents multiple unwanted actions, caused by bouncing when closing a contact.
- Value type after Short/Long operation: allows selecting the type of value that will be sent by object "Number 11 and 12 – Value output".
- Bit (Byte) Value: the value that will be sent after a short / long press is set.

3 – RF Parameters

▪ Parameters

- **Enable RF Retransmitter mode:**

Enable RF Retransmitter mode?	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
-------------------------------	---

It enables the retransmission of RF telegrams in order to extend the distance between transmitters and receivers.

It is only recommended to enable this function if there are really coverage problems, otherwise, it is not recommended to activate it, in order not to saturate the wireless network.

Communication Objects

MI K5X 001

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Switch On-Off Input	Switch			1 bit	C	-	W	-	-	1-bit, switch	Low
4	Scene Numbered Input	Scene Numbered			1 byte	C	-	W	-	-	scene number, scene number	Low
5	Forced Input	Forced			2 bit	C	-	W	-	-	1-bit controlled, switch control	Low
6	Timed Start-Stop Input	Timed Start-Stop			1 bit	C	-	W	-	-	1-bit, switch	Low
9	Info Switch On-Off Output	Info Switch On-Off			1 bit	C	-	-	T	-	1-bit, switch	Low
11	Switch On-Off Output Short operation	Switch			1 bit	C	R	W	T	U	switch	Low
12	Switch On-Off Output Long operation	Switch			1 bit	C	R	W	T	U	switch	Low
15	Sequential operation	Sequential Switch On-Off Input			1 bit	C	R	W	T	U	switch	Low
16	Sequential work Info	Sequential Info Switch On-Off Output			1 bit	C	R	W	T	U	switch	Low

RE K5X LE1

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Switch On-Off Input	Switch			1 bit	C	-	W	-	-	1-bit, switch	Low
2	Dimming Up-Down Input	Relative Set Value control			4 bit	C	-	W	-	-	3-bit controlled, dimming control	Low
3	Absolute Set value control Input	Dimming Value			1 byte	C	-	W	-	-	8-bit unsigned value, percentage (0..100%)	Low
4	Scene Numbered Input	Scene Numbered			1 byte	C	-	W	-	-	scene number, scene number	Low
5	Forced Input	Forced			2 bit	C	-	W	-	-	1-bit controlled, switch control	Low
6	Timed Start-Stop Input	Timed Start-Stop			1 bit	C	-	W	-	-	1-bit, switch	Low
7	Dimmer Block Input	Dimmer Block			1 bit	C	-	W	-	-	1-bit, boolean	Low
8	Dimming Speed (from 1% to 100%)	Dimming Speed			2 bytes	C	-	W	-	-	2-byte unsigned value, time (100 ms)	Low
9	Info Switch On-Off Output	Info Switch On-Off			1 bit	C	-	-	T	-	1-bit, switch	Low
10	Info Actual Dimming Value Output	Info Dimming Value			1 byte	C	-	-	T	-	8-bit unsigned value, percentage (0..100%)	Low
11	Switch On-Off Output Short operation	Switch			1 bit	C	R	W	T	U	switch	Low
12	Dimming Up-Down Output	Relative Set Value control Output			4 bit	C	R	W	T	U	dimming control	Low
15	Sequential operation	Sequential Switch On-Off Input			1 bit	C	R	W	T	U	switch	Low
16	Sequential work Info	Sequential Info Switch On-Off Output			1 bit	C	R	W	T	U	switch	Low

RE K5X LE2

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Switch On-Off Input	Switch			1 bit	C	-	W	-	-	1-bit, switch	Low
2	Dimming Up-Down Input	Relative Set Value control			4 bit	C	-	W	-	-	3-bit controlled, dimming control	Low
3	Absolute Set value control Input	Dimming Value			1 byte	C	-	W	-	-	8-bit unsigned value, percentage (0..100%)	Low
4	Scene Numbered Input	Scene Numbered			1 byte	C	-	W	-	-	scene number, scene number	Low
5	Forced Input	Forced			2 bit	C	-	W	-	-	1-bit controlled, switch control	Low
6	Timed Start-Stop Input	Timed Start-Stop			1 bit	C	-	W	-	-	1-bit, switch	Low
7	Dimmer Block Input	Dimmer Block			1 bit	C	-	W	-	-	1-bit, boolean	Low
8	Dimming Speed (from 1% to 100%)	Dimming Speed			2 bytes	C	-	W	-	-	2-byte unsigned value, time (100 ms)	Low
9	Info Switch On-Off Output	Info Switch On-Off			1 bit	C	-	-	T	-	1-bit, switch	Low
10	Info Actual Dimming Value Output	Info Dimming Value			1 byte	C	-	-	T	-	8-bit unsigned value, percentage (0..100%)	Low
11	Switch On-Off Output Short operation	Switch			1 bit	C	R	W	T	U	switch	Low
12	Dimming Up-Down Output	Relative Set Value control Output			4 bit	C	R	W	T	U	dimming control	Low
15	Sequential operation	Sequential Switch On-Off Input			1 bit	C	R	W	T	U	switch	Low
16	Sequential work Info	Sequential Info Switch On-Off Output			1 bit	C	R	W	T	U	switch	Low

RE K5X DA1

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Switch On-Off Input	Switch			1 bit	C	-	W	-	-	1-bit, switch	Low
2	Dimming Up-Down Input	Relative Set Value control			4 bit	C	-	W	-	-	3-bit controlled, dimming control	Low
3	Absolute Set value control Input	Dimming Value			1 byte	C	-	W	-	-	8-bit unsigned value, percentage (0..100%)	Low
4	Scene Numbered Input	Scene Numbered			1 byte	C	-	W	-	-	scene number, scene number	Low
5	Forced Input	Forced			2 bit	C	-	W	-	-	1-bit controlled, switch control	Low
6	Timed Start-Stop Input	Timed Start-Stop			1 bit	C	-	W	-	-	1-bit, switch	Low
7	Dimmer Block Input	Dimmer Block			1 bit	C	-	W	-	-	1-bit, boolean	Low
8	Dimming Speed (from 1% to 100%)	Dimming Speed			2 bytes	C	-	W	-	-	2-byte unsigned value, time (100 ms)	Low
9	Info Switch On-Off Output	Info Switch On-Off			1 bit	C	-	-	T	-	1-bit, switch	Low
10	Info Actual Dimming Value Output	Info Dimming Value			1 byte	C	-	-	T	-	8-bit unsigned value, percentage (0..100%)	Low
11	Switch On-Off Output Short operation	Switch			1 bit	C	R	W	T	U	switch	Low
12	Dimming Up-Down Output	Relative Set Value control Output			4 bit	C	R	W	T	U	dimming control	Low
14	Re-address DALI lamps	Re-address DALI lamps			1 bit	C	-	W	T	-	start/stop	Low
15	Sequential operation	Sequential Switch On-Off Input			1 bit	C	R	W	T	U	switch	Low
16	Sequential work Info	Sequential Info Switch On-Off Output			1 bit	C	R	W	T	U	switch	Low

RE K5X 010

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Switch On-Off Input	Switch			1 bit	C	-	W	-	-	1-bit, switch	Low
2	Dimming Up-Down Input	Relative Set Value control			4 bit	C	-	W	-	-	3-bit controlled, dimming control	Low
3	Absolute Set value control Input	Dimming Value			1 byte	C	-	W	-	-	8-bit unsigned value, percentage (0..100%)	Low
4	Scene Numbered Input	Scene Numbered			1 byte	C	-	W	-	-	scene number, scene number	Low
5	Forced Input	Forced			2 bit	C	-	W	-	-	1-bit controlled, switch control	Low
6	Timed Start-Stop Input	Timed Start-Stop			1 bit	C	-	W	-	-	1-bit, switch	Low
7	Dimmer Block Input	Dimmer Block			1 bit	C	-	W	-	-	1-bit, boolean	Low
8	Dimming Speed (from 1% to 100%)	Dimming Speed			2 bytes	C	-	W	-	-	2-byte unsigned value, time (100 ms)	Low
9	Info Switch On-Off Output	Info Switch On-Off			1 bit	C	-	-	T	-	1-bit, switch	Low
10	Info Actual Dimming Value Output	Info Dimming Value			1 byte	C	-	-	T	-	8-bit unsigned value, percentage (0..100%)	Low
11	Switch On-Off Output Short operation	Switch			1 bit	C	R	W	T	U	switch	Low
12	Dimming Up-Down Output	Relative Set Value control Output			4 bit	C	R	W	T	U	dimming control	Low
15	Sequential operation	Sequential Switch On-Off Input			1 bit	C	R	W	T	U	switch	Low
16	Sequential work Info	Sequential Info Switch On-Off Output			1 bit	C	R	W	T	U	switch	Low