

BSMART

TECHNICAL DOCUMENT

MOTION SENSOR, PIR+LUX



BSMS-01

CONTENTS

1. Summary	3
1.1 Functional Overview	3
2. Technical	4
2.1 Technical Parameters	4
2.2 Examination range	4
2.3 Design	5
3. Parameters and communication objects	7
3.1 Parameter setting "Device general"	7
3.1.1 Parameter setting "Sensor"	9
3.1.1.1 Parameter "Security function"	10
3.1.1.2 Parameter "A general"	11
3.1.1.3 Parameter "A Master"	15
3.1.1.4 Parameter "A Slave"	16
3.1.1.5 Parameter "Normal"	17
3.1.1.6 Parameter "Hotel"	19
3.1.1.7 Parameter "Output A"	22
3.1.2 Parameter "Lux function"	26
3.2 Communication object	30
3.2.1 Device general communication object	30
3.2.2 Sensor communication object	31
3.2.3 Security function communication object	31
3.2.4 A general communication object	32
3.2.5 Lux function communication object	43

1. Summary

This manual provides you with technical information about the sense of movement, as well as a detailed functional introduction, and an example of how to use the shift is explained in the actual use example.

1.1 Functional Overview

The function and overview are shown in the following table:

Function	Overview
Equipment running light function	The parameter "Green led function (if active, will flash when working)" selects "Activated" to enable this function. When this function is activated, the device flashes green when the device is working.
Security function	This function is enabled by selecting "Activated" in the parameter "Security function". When no one is detected, the object "Security report" will cyclically issue a security value.
Motion detection function	There are two types of motion detection sensors: infrared sensing and microwave sensing. These sensors are used to detect the presence of people moving, and the sensitivity of the microwave sensor is high/medium/low sensitivity. The combination of infrared and microwave uses: only from infrared, only from microwave, from infrared and microwave, from infrared or microwave, from two infrared.
Illumination function	The source of illumination can be set: internal source or external source; The illuminance function can be used alone or in combination with the sensing function; when illuminance is combined with sensing to detect whether there is a person moving, both of them must meet the requirements of both settings. When the movement is detected, the illuminance also satisfies the setting. The illuminance function at the threshold can be used normally.

2. Technical

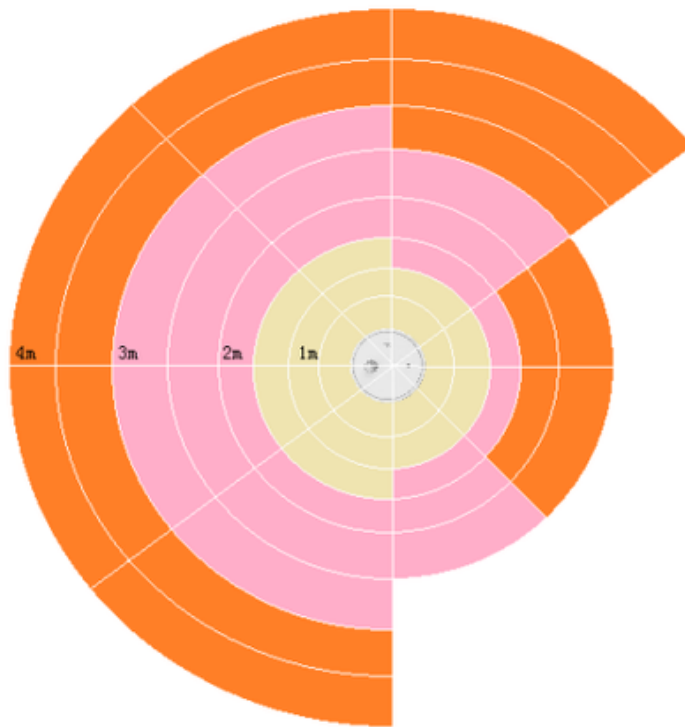
2.1 Technical Parameters

Power supply characteristics	Operating voltage	21-30V DC
	Current consumption	≤20mA
Operation display	Programming button and corresponding LED indicator	
Wiring	1 KNX bus connection terminal	
Protection level	IP20 (IP protection level according to EN60529 standard)	
Ambient temperature	Operating temperature	- 5 ° C ... + 45 ° C
	Storage temperature	- 25 ° C ... + 55 ° C
	Transport temperature	- 25 ° C ... + 70 ° C
Environmental conditions	Humidity	Maximum humidity 93% (excluding condensation)
Shell and color	Flame retardant (V0) PC, white	
Installation method	Ceiling embedded installation	
Dimensions	T/N S03PLM 60×60×47mm (L × W × D)	

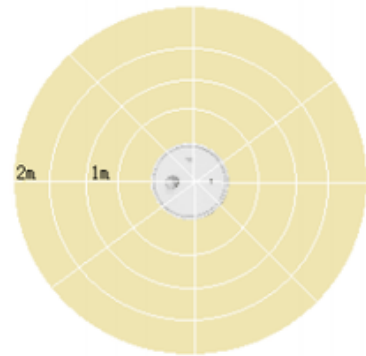
2.2 Examination range


Remarks: The microwave module changes, the detection distance will be different, the following detection distance is for reference only.




Microwave detection range



Infrared detection range



 Infrared detection range

-  When the microwave sensitivity is low, it is possible to detect the range in which a person moves.
-  When the microwave sensitivity is medium, the range in which people can move can be detected.
-  When the microwave sensitivity is high, it is possible to detect the range in which a person moves.

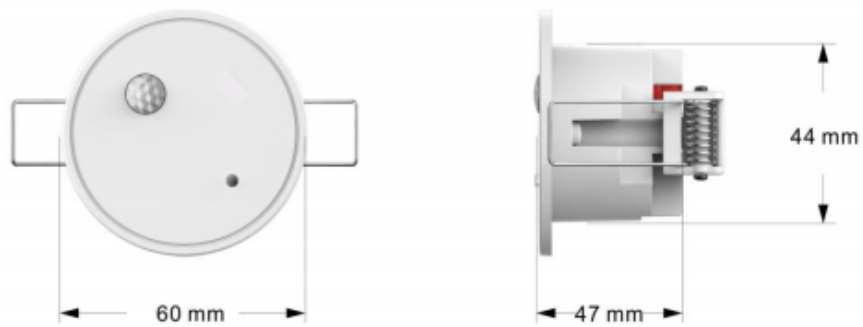
2.3 Design

Design

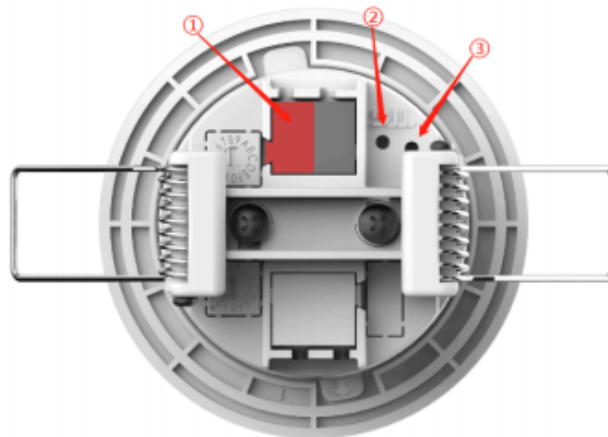


BSMART

Dimensions



Structure diagram



- ① EIB terminal
- ② LED indicator, press the programming button, the physical address is programmed when the LED turns red; the LED is green and flashing to indicate that the device is working properly.
- ③ Programming button

3. Parameters and communication objects

3.1 Parameter setting “Device general”

The “Device General” parameter setting interface is shown in Figure 3.1-1. The parameters set by this parameter setting interface are applied to the output of the entire infrared motion detection panel. The specific description of each parameter is as follows.

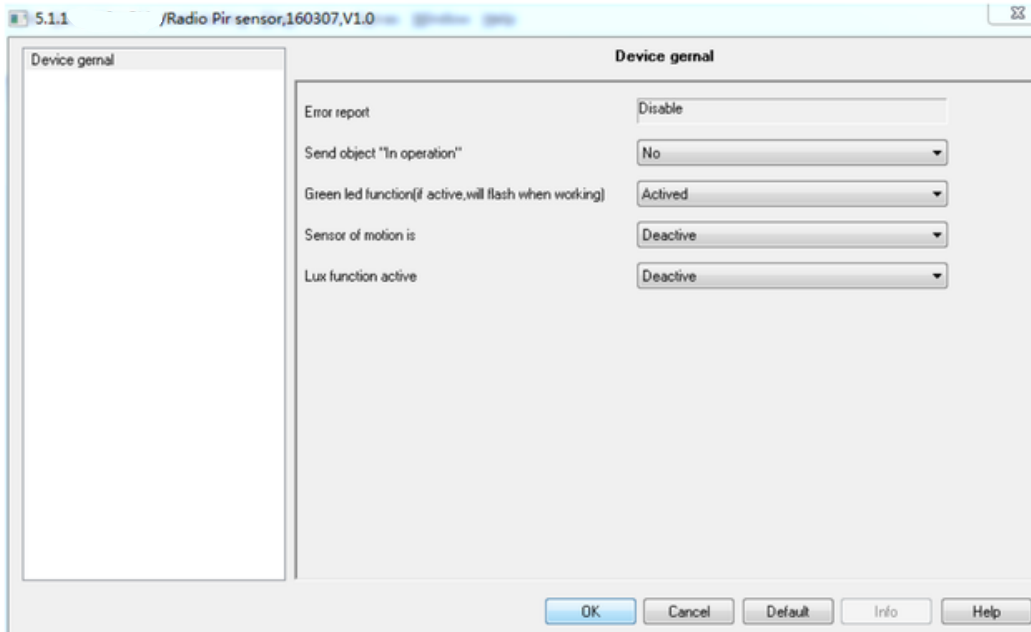


Figure 3.1-1 “Device general” parameter setting interface

Parameter “Error report”

This parameter is set to enable the message that issued the error report.
Fixed option: Disable

Parameter “Send object” In operation” ”

This parameter is set to enable the operation status of the operation to take effect.
Optional: No

Send value” 0” cyclically

Send value”1”cyclically

If “No” is selected, this function is not enabled.

If you select “Send value” 0”cyclically”, it means that the running status is valid and outputs false.

If you select “Send value” 1”cyclically”, it means that the running state is in effect and outputs true. When the **parameter “Send object’ In operation”** selects “Send value” 0/1”cyclically”, the parameter interface appears as shown in Figure 3.1-2.

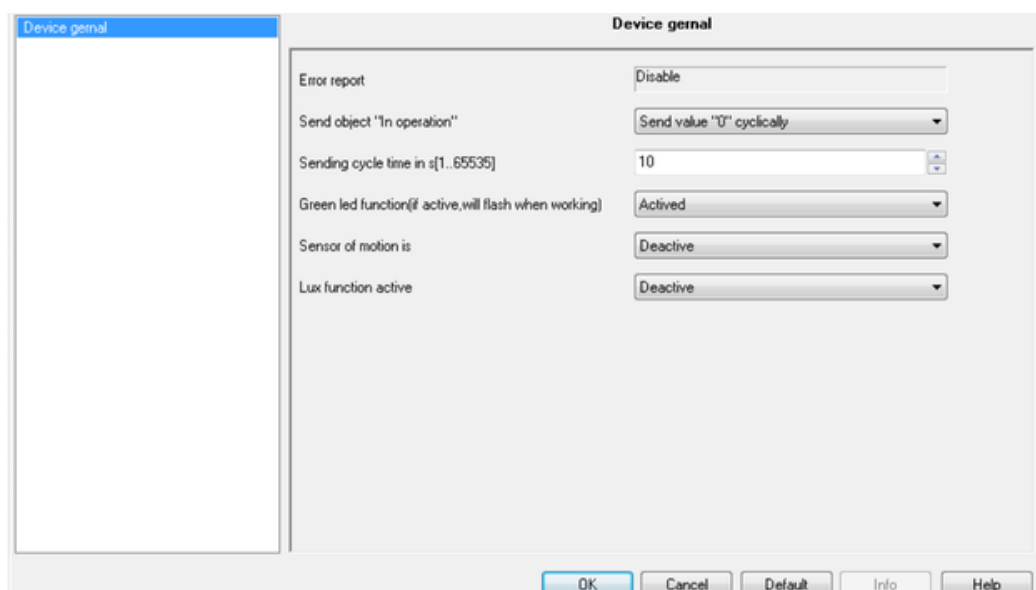


Figure 3.1-2 “Sending cycle time in s” parameter setting interface

Parameter “Sending cycle time in s[1..65535]”

This parameter is set to the time period during which the report is sent.
Optional range [1~65535]; unit: second.

Parameter “Green led function(if active, will flash when working)”

This parameter is set to whether it is enabled to flash green when the device is working.
Optional:

- Activated
- Deactive

Selecting “Deactive” does not enable green light when the device is working.
Select “Activated” to enable a green light when the device is working.

Parameter “Sensor of motion is”

This parameter is set to activate the motion sensing function.
Optional:

- Activated
- Deactive

Select “Deactive” does not activate the motion sensing function
Select “Activated” to activate the motion sensing function; for the parameters, see 3.1.1
Parameter Setting Window “Sensor”

Parameter “Lux function active”

This parameter is set to activate the brightness sensing function.
Optional:

- Activated
- Deactive

Select “Deactive” to disable the brightness sensing function.
Select “Activated” to activate the brightness sensing function; for the parameters, see

3.1.2 Parameter Setting Window “Lux function”

3.1.1 Parameter setting “Sensor”

The following interface is visible when you select “active” in the parameter “Sensor of motion is” in the setting “Device general” (see Figure 3.1-1), as shown in Figure 3.1.1-1.

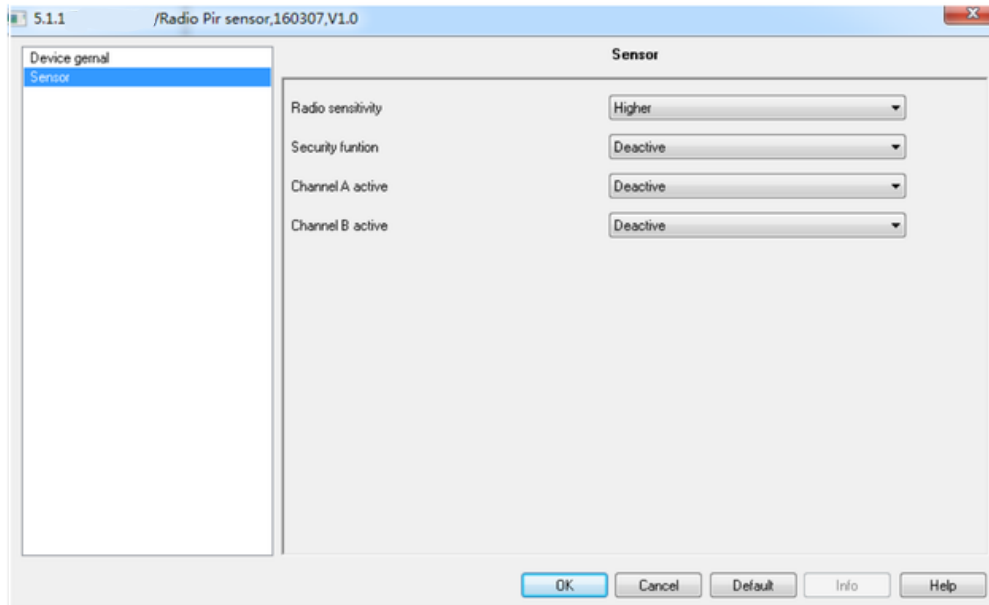


Figure 3.1.1-1 “Sensor” parameter setting interface

Parameter “Radio sensitivity”

This parameter is set to activate the microwave sensitivity function.

Optional:

- Disable
- Higher
- Middle
- Low

Select “Disable” to disable the microwave sensitivity function.

Select Higher/ Middle/ Low to activate the high/medium/low function of microwave sensitivity

Parameter “Security function”

This parameter is set to activate device security

Optional:

- Actived
- Deactive

Select “Deactive” does not activate device security features

Select “Actived” to activate the device security function; see 3.1.1.1 Parameter Settings window “Security function” for parameters.

Parameter “Channel A/B active”

This parameter is set to activate the A/B channel.

Optional:

- Activated
- Deactive

Select “Deactive” to not activate the A/B channel.

Select “Activated” to activate the A/B channel; see 3.1.1.2~3.1.1.7 Parameter Settings window for parameters.

Note: Refer to A for parameter setting and communication object of channel B. Because the program setting procedure of A and B channels is the same, channel A is taken as an example below.

3.1.1.1 Parameter “Security function”

The parameter setting window is displayed when “active” is selected for “Security function”. The parameter interface is as shown in Figure 3.1.1.1-1.

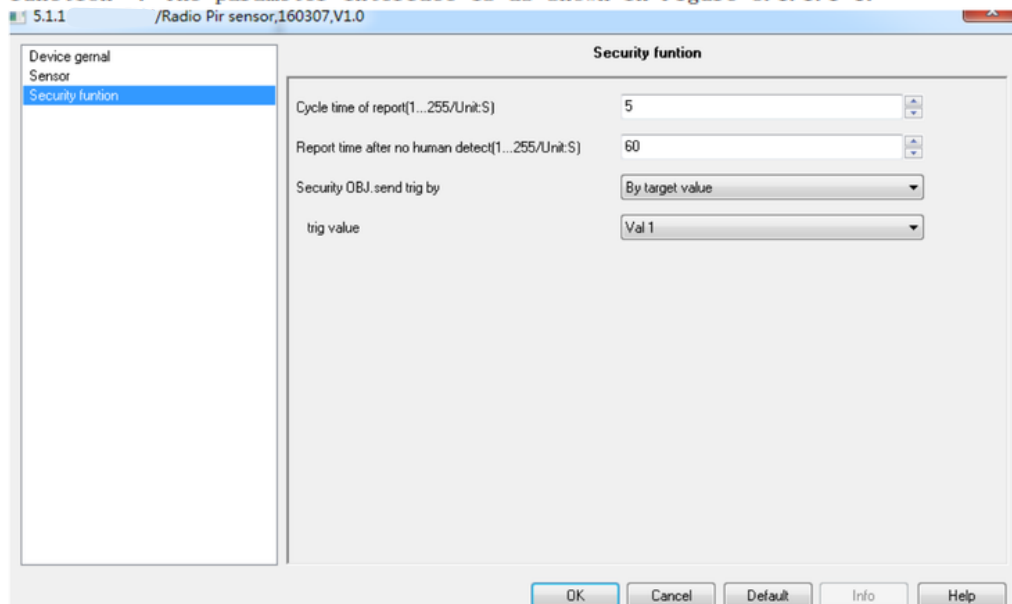


Figure 3.1.1.1-1 “Security function” parameter setting interface

Parameter “Cycle time of report[1-255/Unit:s]”

This parameter is set to the period in which the security report is sent.

Range: [1-255]; unit: second.

Parameter “Report time after no human detect[1-255/Unit:s]”

This parameter is set to the time when the report is sent when no one is detected.

Range: [1-255]; unit: second.

Parameter “Security OBJ.send trig by”

This parameter is set to the condition for sending a secure object value to the bus.

Optional:

By any value

By target value

Select "By any value" to display the security report regardless of the value sent.

Select "By target value" to send the specified value to display the security report;

The parameters are as shown in Figure 3.1.1.1-2 below.

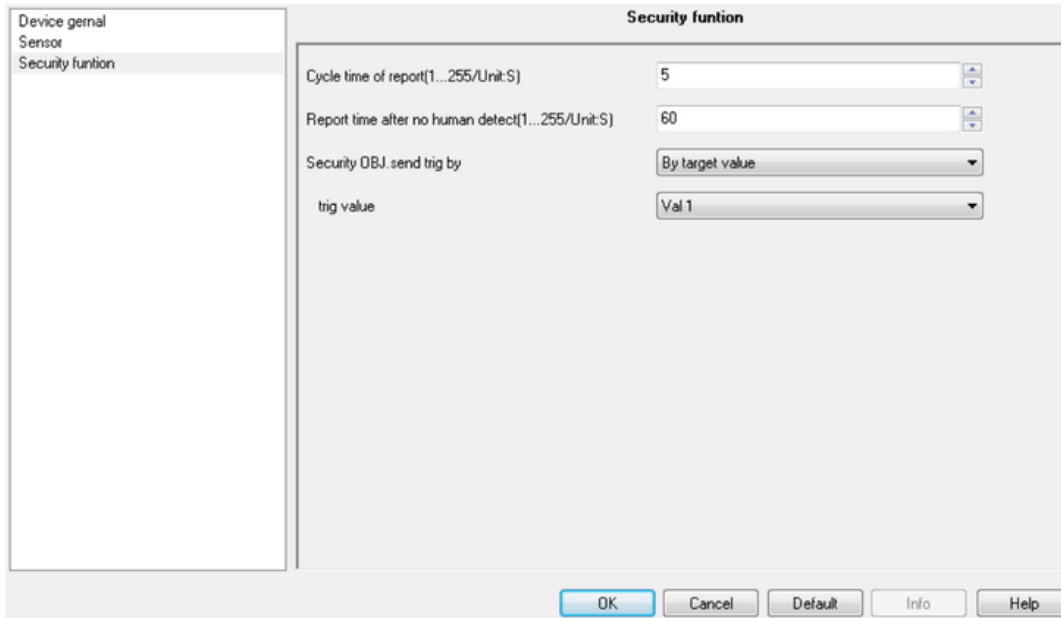


Figure 3.1.1.1-2 "Security function" parameter setting interface

Parameter "trig value"

This parameter is set to the object value sent to the bus.

Optional: Val 0

Val 1

Select "Val 0" and assign the security object "Security report" to the communication object "Security report trig" to output the security report.

Select "Val 1", specify the communication object "Security report trig" and enter 1 communication object "Security report" to output the safety report.

Note: After the communication object "Security report trig" is triggered by 0/1, the security report output by the communication object "Security report" detects true or false by detecting someone or no one.

3.1.1.2 Parameter "A general"

This parameter setting window is displayed when "active" is selected for "Channel A active"; the parameters are as shown in Figure 3.1.1.2-1.

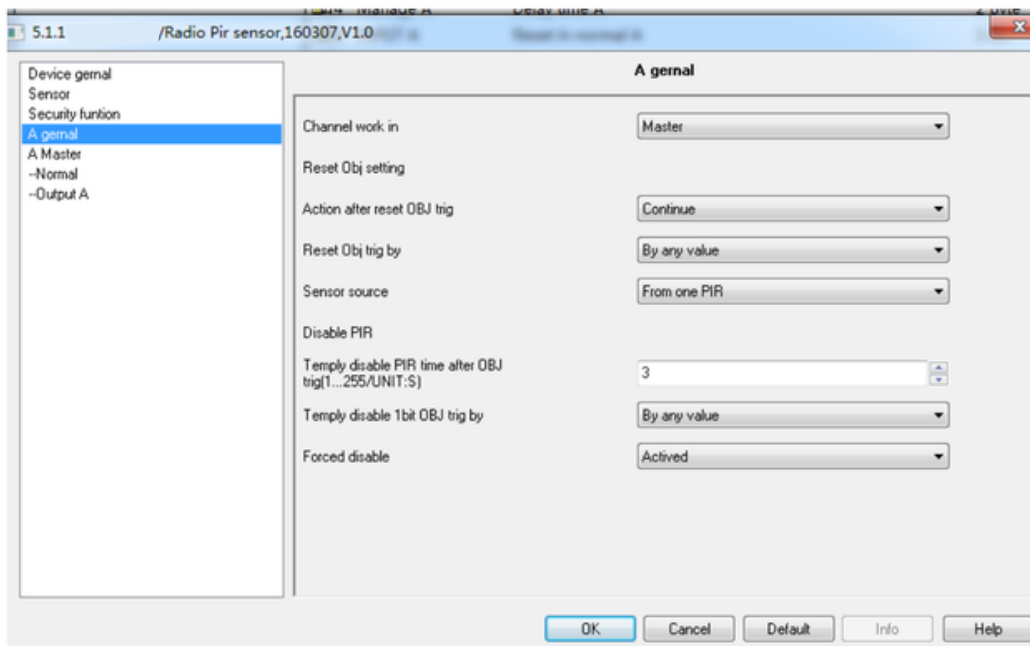


Figure 3.1.1.2-1 “A general” parameter interface

Parameter “Channel work in”

This parameter is set to how the channel works

Optional:

- Master
- Slave

Select the “Master” channel to work in master mode; see 3.1.1.3 Parameter Settings Window “A Master” for parameters.

Select the “Slave” channel to work in slave mode; see 3.1.1.4 Parameter Settings Window “A Slave” for parameters.

Parameter “Reset Obj setting”

This parameter is set to set the object value for resetting the room state.

Parameter “Action after reset OBJ trig”

This parameter is set to the action after sending the reset value.

Optional:

- Continue
- Reset all
- Reset all and no action in delay time

Select Continue to send the value to the bus. The room status does not change.

Select Reset all to send the value of the room status reset to the bus.

Select Reset all and no action in delay time to send the value of the room state reset to the bus but do nothing during the delay time.

The parameters are as shown in Figure 3.1.1.2-2.

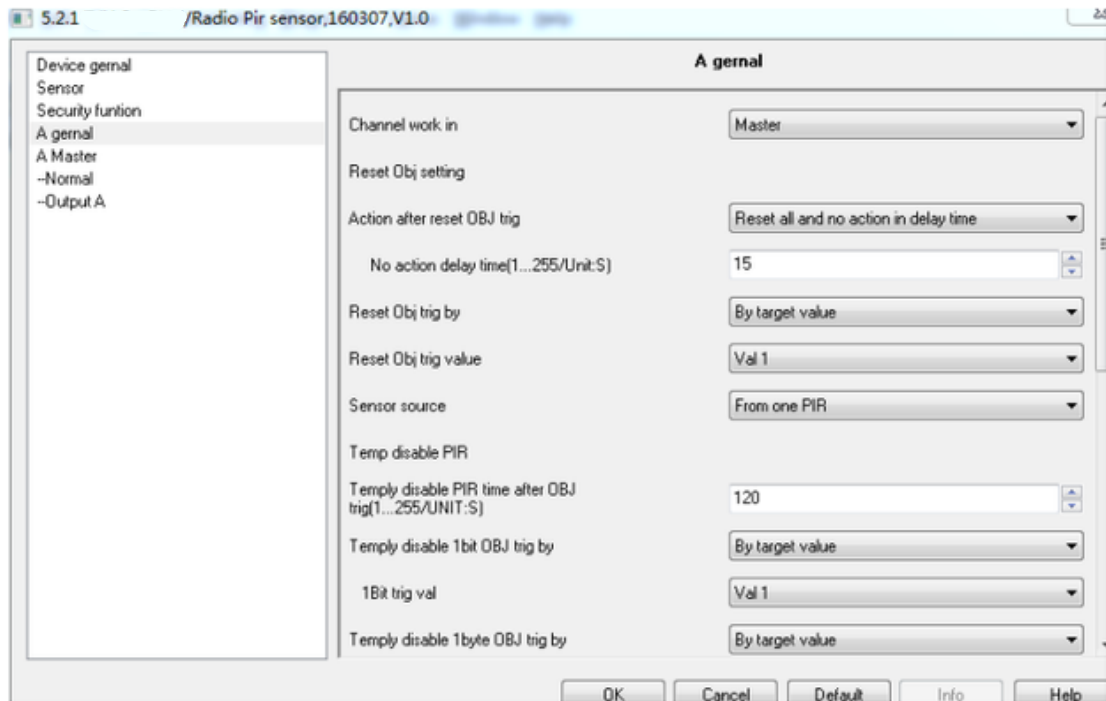


Figure 3.1.1.2-2 "Reset all and no action in delay time" parameter interface

Parameter "No action delay time"

This parameter is set to the state of the room without any action during the delay time.
Value range [1-255/Unit: s]

Parameter "Reset Obj trig by"

This parameter is set to send conditions to the bus to reset the state of the room.
Optional:

By any value

By target value

Select "By any value" to reset the room status regardless of the value sent.

Select "By target value" and you must send the specified value to reset the room status.

The parameters are as shown in Figure 3.1.1.2-3.

This parameter is set to stop infrared detection

The parameters are as shown in 3.1.1.2-4.

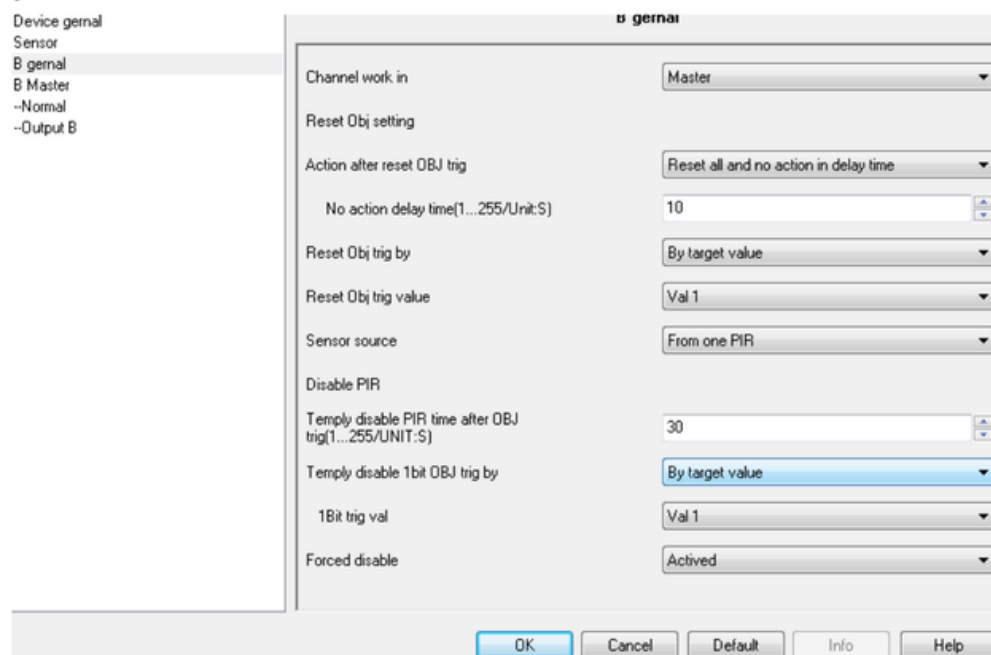


Figure 3.1.1.2-4 “Disable PIR” parameter interface

Parameter “Temply disable PIR time after OBJ trig (1..255/UNIT: S)”

This parameter is set to the time to temporarily stop the infrared detection function.
Range: [1-255]; unit: second

Parameter “Temply disable lbit OBJ trig by”

This parameter is set to the condition that the input of 1-bit data temporarily stops infrared detection.

Optional:

- By any value
- By target value

Select “By any value” to temporarily stop infrared detection regardless of the value sent.
Select “By target value” to send the specified value to temporarily stop infrared detection.

Parameter “1Bit trig val”

This parameter is set to input **1 bit** data to temporarily stop infrared detection.

Optional:

- Val 0
- Val 1

Select Val 0 to temporarily stop infrared detection when the communication object “Temply disable Pir” receives a message of 0.

Select Val 1 to temporarily stop infrared detection when the communication object “Temply

disable Pir” receives a message of 1.

Parameter “Forced disable”

This parameter is set to enable or disable the infrared detection function.

Optional:

Deactive

Activated

Selecting Deactive does not enable forced stop infrared detection.

Select Activated to force stop infrared detection

3.1.1.3 Parameter “A Master”

This parameter is displayed when A general “Channel work in” selects “Master”.

The parameter settings are shown in Figure 3.1.1.3-1.

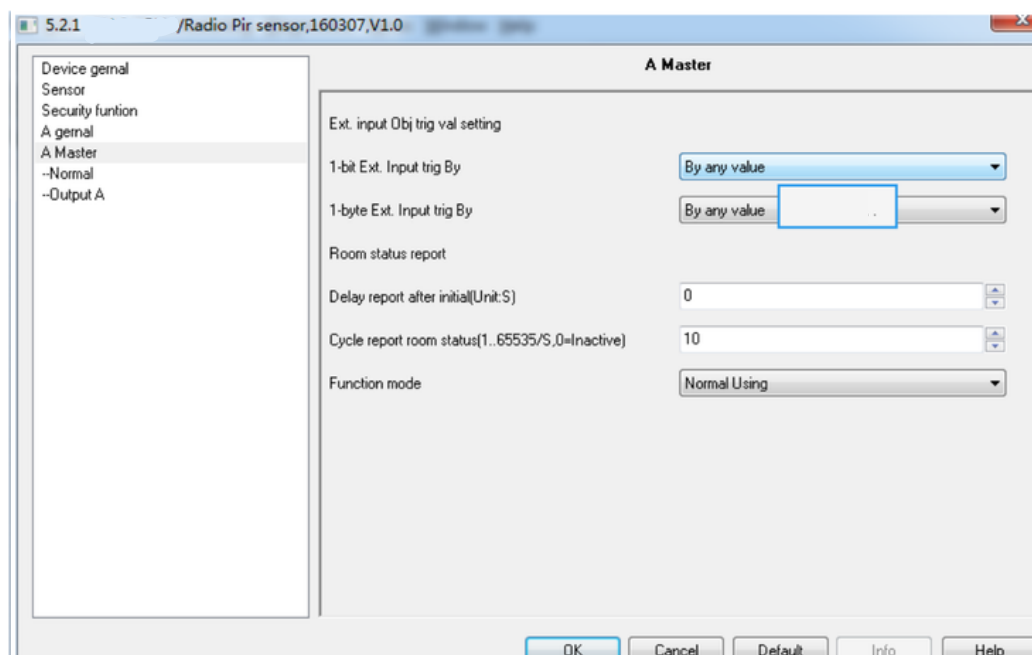


Figure 3.1.1.3-1 “A Master” parameter interface

Parameter “Ext. input Obj trig val setting”

This parameter is set to set the value of the external input trigger movement

Parameter “1-bit Ext. input trig By”

This parameter is set to set the condition for the value sent to the communication object “Ext input A” lbit.

Optional:

By any value

By target value

Select “By any value” to show the room no matter what value is sent.

Select “By target value” must send the specified value to display the room.

Parameter “1-bit Ext. input trig Value”

This parameter is set to **1 bite** input value

Optional:

Val 0

Val 1

Select Val 0 when the communication object "Ext input A" receives a message of 0, the room is displayed.

Select Val 1 to display the room when the communication object "Ext input A" receives a message of 1.

Parameter "1-byte Ext. input trig By"

This parameter is set to set the condition for the value sent to the communication object "Ext input A" lbyte.

Optional:

By any value

By target value

Select "By any value" to show the room no matter what value is sent.

Select "By target value" must send the specified value to display the room.

Parameter "1-byte Ext. input trig Value"

This parameter is set to **1 byte** input value

Value range: [0-255]

Parameter "Room status report"

This parameter is set to the room status report

Parameter "Delay report after initial(Unit:s)"

This parameter is set to display the report delay time when initializing the room status.

Value range [0-255]; unit: second.

Parameter "Cycle report room status(1-65535/s,0=inactive)"

This parameter is set to cycle the period of the room report

Value range [1-65535]; unit: second; "0" is not enabled.

Parameter "Function mode"

This parameter is set to the operating mode of the device.

Optional:

Normal Using

Hotel Using

Select Normal Using to set the operating mode of the device to normal mode; see 3.1.1.5 "Normal" parameter setting window for parameters.

Select Hotel Using to set the operating mode of the device to hotel mode; see 3.1.1.6 "Hotel" parameter setting window for parameters.

3.1.1.4 Parameter "A Slave"

This parameter is set to display when "Slave" is selected in A general "Channel work in". The parameter settings are shown in Figure 3.1.1.4-1.

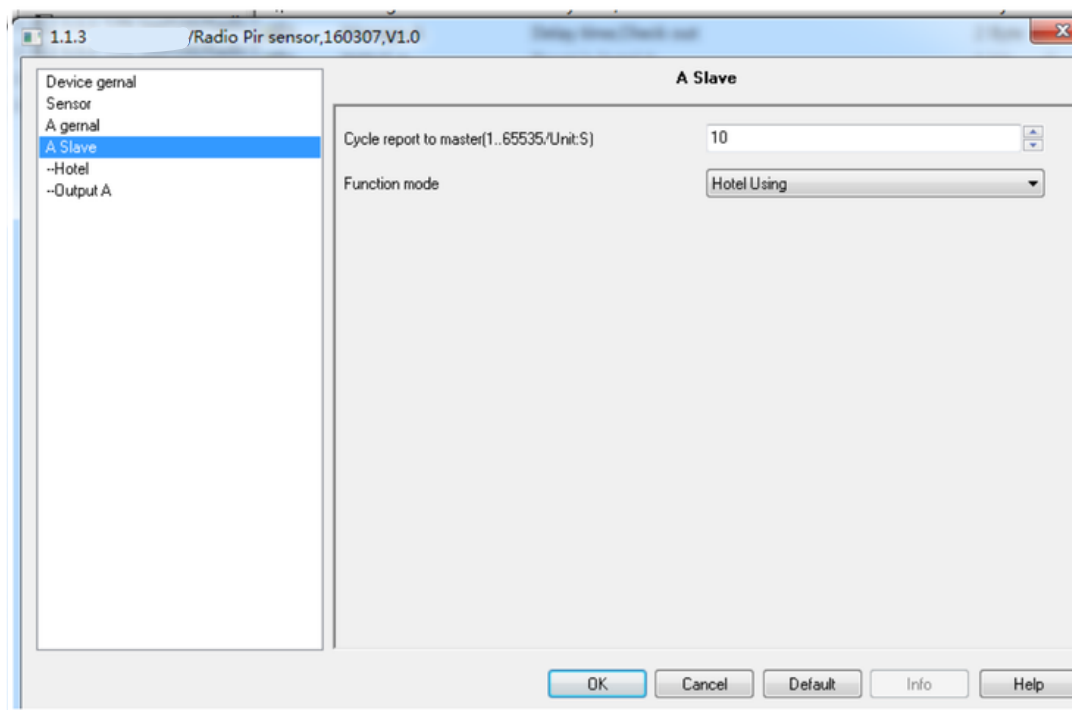


Figure 3.1.1.1.4 "A Slave" parameter interface

Parameter "Cycle report to master(1...65535/Unit:s)"

This parameter is set to the cycle time for sending messages to the host. Value range [1-65535]; unit: second.

Parameter "Function mode"

This parameter is set to the operating mode of the device.

Optional:

Normal Using

Hotel Using

Select Normal Using to set the operating mode of the device to normal mode; see 3.1.1.5 "Normal" parameter setting window for parameters.

Select Hotel Using to set the operating mode of the device to hotel mode; see 3.1.1.6 "Hotel" parameter setting window for parameters.

3.1.1.5 Parameter "Normal"

This parameter is displayed when A Normal/Slave "Function mode" selects "Normal Using". The parameters are as shown in the figure below. 3.1.1.5-1

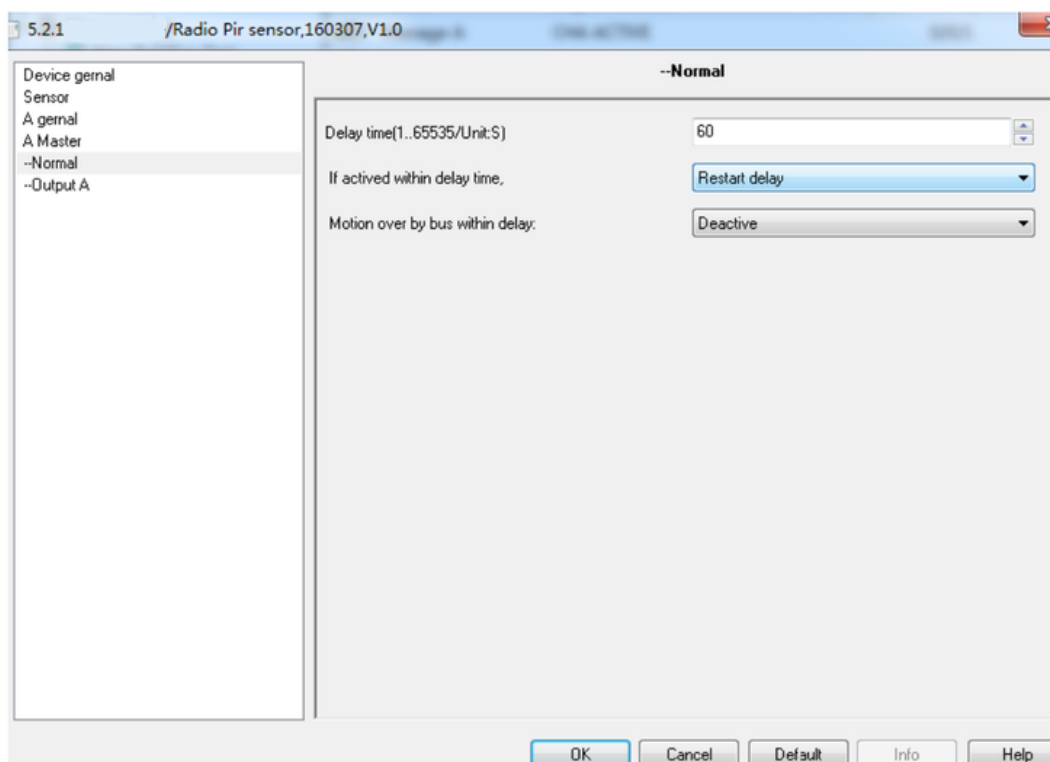


Figure 3.1.1.5-1 parameter interface

Parameter “Delay time[1-65535/Unit:s]”

This parameter is set to detect the delay time of the room state.
Value range: [1-65535]; unit: second.

Parameter “If active within time”

This parameter is set to if the movement is within the time delay
Optional:

- Ignore the activation
- Restart delay

Select Ignore the activation regardless of whether the movement keeps the original delay time within the delay time.

Select Restart delay to start calculating the delay time.

Parameter “Motion over by bus within delay”

This parameter is set to enable the end of the activity within the delay time.
Optional:

- Deactive
- Actived

Selecting Deactive does not enable the activity to end within the delay time.

Select Actived to enable the activity to end within the delay time

The parameters are as follows 3.1.1.5-2

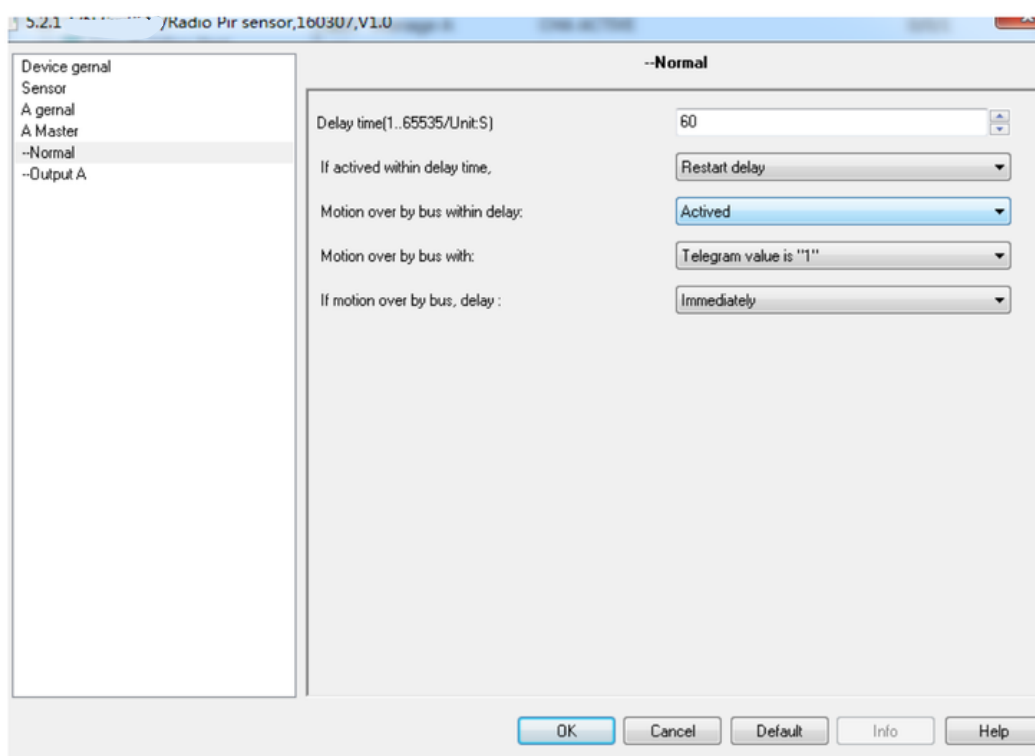


Figure 3.1.1.5-2 parameter interface

Parameter “Motion over by bus with”

This parameter is set to the value that causes the activity to end.

Optional:

Telegram value is ‘0’

Telegram value is ‘1’

Select Telegram value is ‘0’ to end the move when the communication object “CHA over by bus” receives a value of 0

Select Telegram value is ‘1’ when the communication object “CHA over by bus” receives the value of 1 and ends the move.

Parameter “If motion over by bus, delay”

This parameter is set to the value that delays the end of the activity

Optional:

Immediately

5/10/20/40 s

1/2/5 min

Select the Immediately communication object “CHA over by bus” to end the move immediately
 Select 5/10/20/40 s communication object “CHA over by bus” to delay 5/10/20/40 seconds and end the move

Select 1/2/5 min communication object “CHA over by bus” to delay the movement after 1/2/5 minutes

3.1.1.6 Parameter “Hotel”

This parameter is displayed when "Master Using" is selected in A Master/Slave "Function mode".

The parameters are as shown in the figure below. 3.1.1.6-1

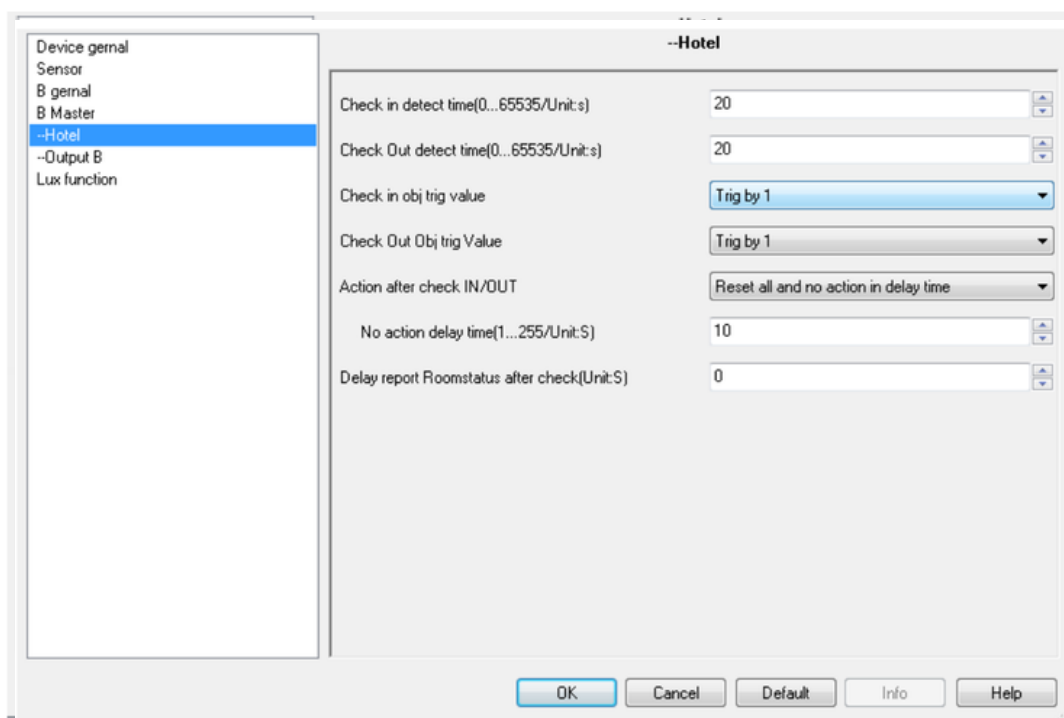


Figure 3.1.1.1.6 Parameter Interface

Parameter "Check in detect time[0-65535/Unit:s]"

This parameter is set to the time when the room status is checked after checking in the room.

Parameter "Check out detect time[0-65535/Unit:s]"

This parameter is set to the time to check the status of the room after check-out.

Parameter "Check in obj trig value"

This parameter is set to send the check-in hotel value to the bus.

Optional:

- Trig by 0
- Trig by 1
- Trig by Both 0, 1

Select Trig by 0 to send a false value to the communication object "Check In A" to indicate that the check-in has been checked in.

Select Trig by 1 to send a true value to the communication object "Check In A" to indicate that the check-in has been checked in.

Select Trig by 0/1 to send a false/true value to the communication object "Check In A" to indicate that the check-in has been checked in.

Parameter "Check out obj trig value"

BSMART

This parameter is set to send the check-out value to the bus.

Optional:

- Trig by 0
- Trig by 1
- Trig by Both 0, 1

Select Trig by 0 to send a false value to the communication object "Check out A" to indicate that the checkout has been checked out.

Select Trig by 1 to send a true value to the communication object "Check out A" to indicate that the checkout has been checked out.

Select Trig by 0/1 to send a false/true value to the communication object "Check out A" to indicate that the checkout has been checked out.

Parameter "Action after check IN/OUT"

This parameter is set to the action after check-in or check-out

Optional:

- Continue
- Reset all
- Reset all and no action in delay time

Selecting Continue does not affect the check-in or check-out status

Select Reset all to reset the check-in or check-out status *(Note: Here's the same function as Continue and Reset all, every time you enter check IN or check OUT, the room status will still be reset)*

Select Reset all and no action in delay time to reset the check-in or check-out room status but do not do anything during the delay time.

The parameters are as shown in Figure 3.1.1.6-2.

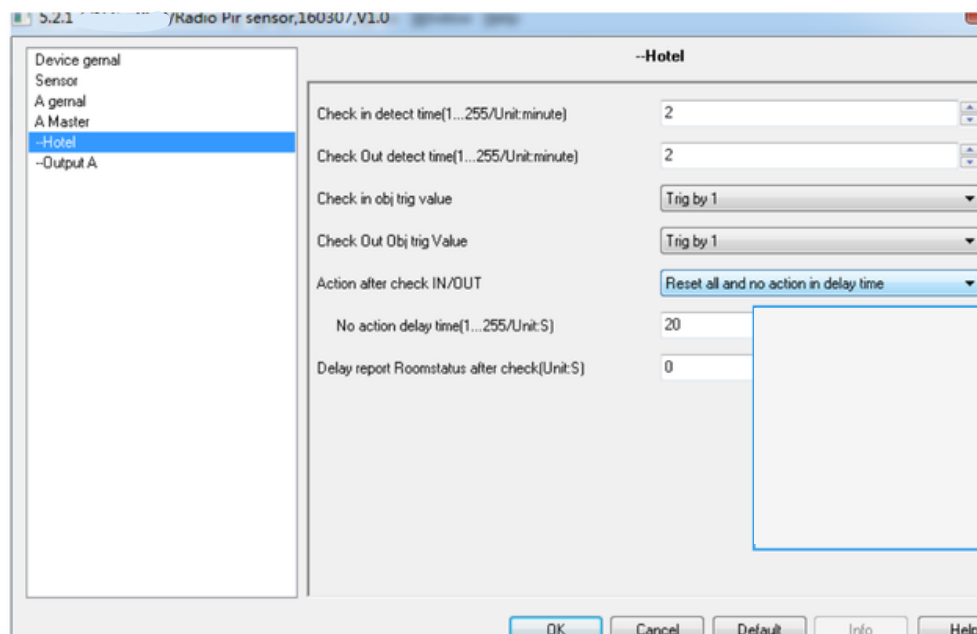


Figure 3.1.1.6-2 Parameter Interface

Parameter “No action delay time(1-255/Unit:s)”

This parameter is set to the time when no action is taken.

Value range [1-255]; unit: second

Parameter “Delay report Roomstatus after check[Unit:s]”

This parameter is set to delay the time of reporting the status of the room after detecting the occupancy.

Value range [1-255]; unit: second

Note: This parameter is only displayed when “Hotel Mode” is selected for “Function mode” of “A Master”.

3.1.1.7 Parameter “Output A”

This parameter is set to the output of channel A.

When the channel is in normal mode, the parameter setting of its output value is as shown in 3.1.1.7-1.

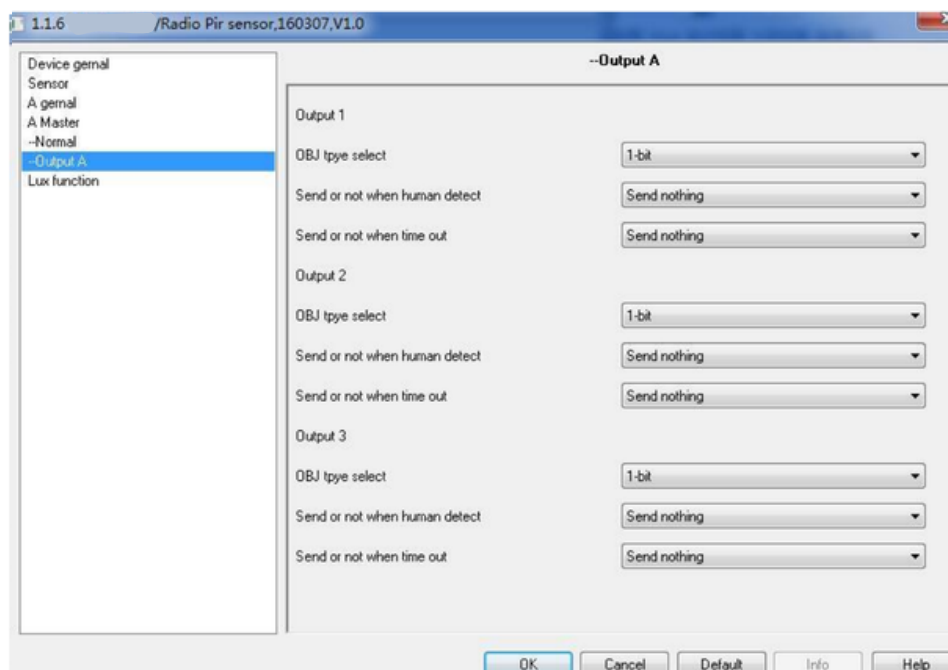


Figure 3.1.1.7-1 Parameter Interface

Note: The normal mode works in the same way as the “Output A parameter setting interface” under “A Master” and “A Slave”.

Parameter “Output 1/2/3”

This parameter sets the output value of “Output 1/2/3”

Parameter “OBJ type select”

This parameter is set to the type of the output parameter

Optional:

- 1-bit
- 4-bit
- 1-byte

Parameter "Send or not when human detect/time out"

This parameter is set to detect whether the output value is output when human detect/time out

Optional:

- Send nothing
- Send value

No value is output when Send nothing is selected

Select Send value to indicate valued output

Note: "Send or not when time out" of "Output A" under "A Slave" has no value.

The parameters are shown in Figure 3.1.1.7-2

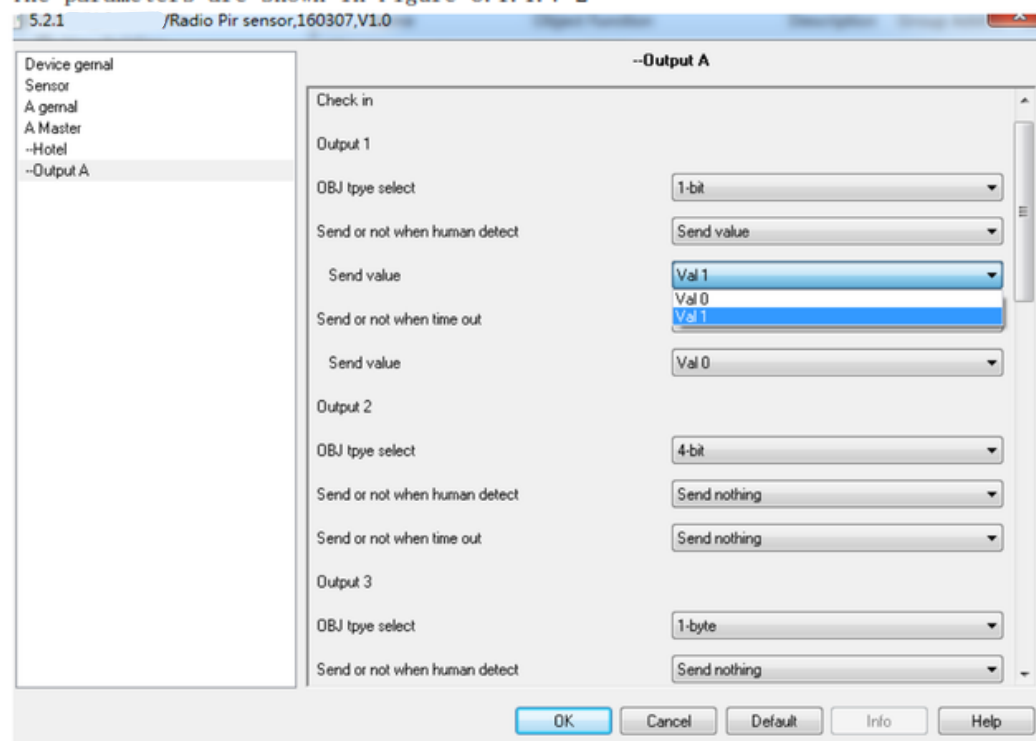


Figure 3.1.1.7-2 parameter interface

Parameter "Send value"

This parameter is set to the value entered

Optional:

- Val 0
- Val 1

Select Val 0 output as false (corresponding value for each data type)

Select the Val 1 output as true (corresponding value for each data type)

Note: When "4bit/1byte" is selected for "OBJ type select", the value of "Send value" is [0-15]/[0-255].

BSMART

When the channel is in hotel mode, the parameter setting of its output value is as shown in 3.1.1.7-3.

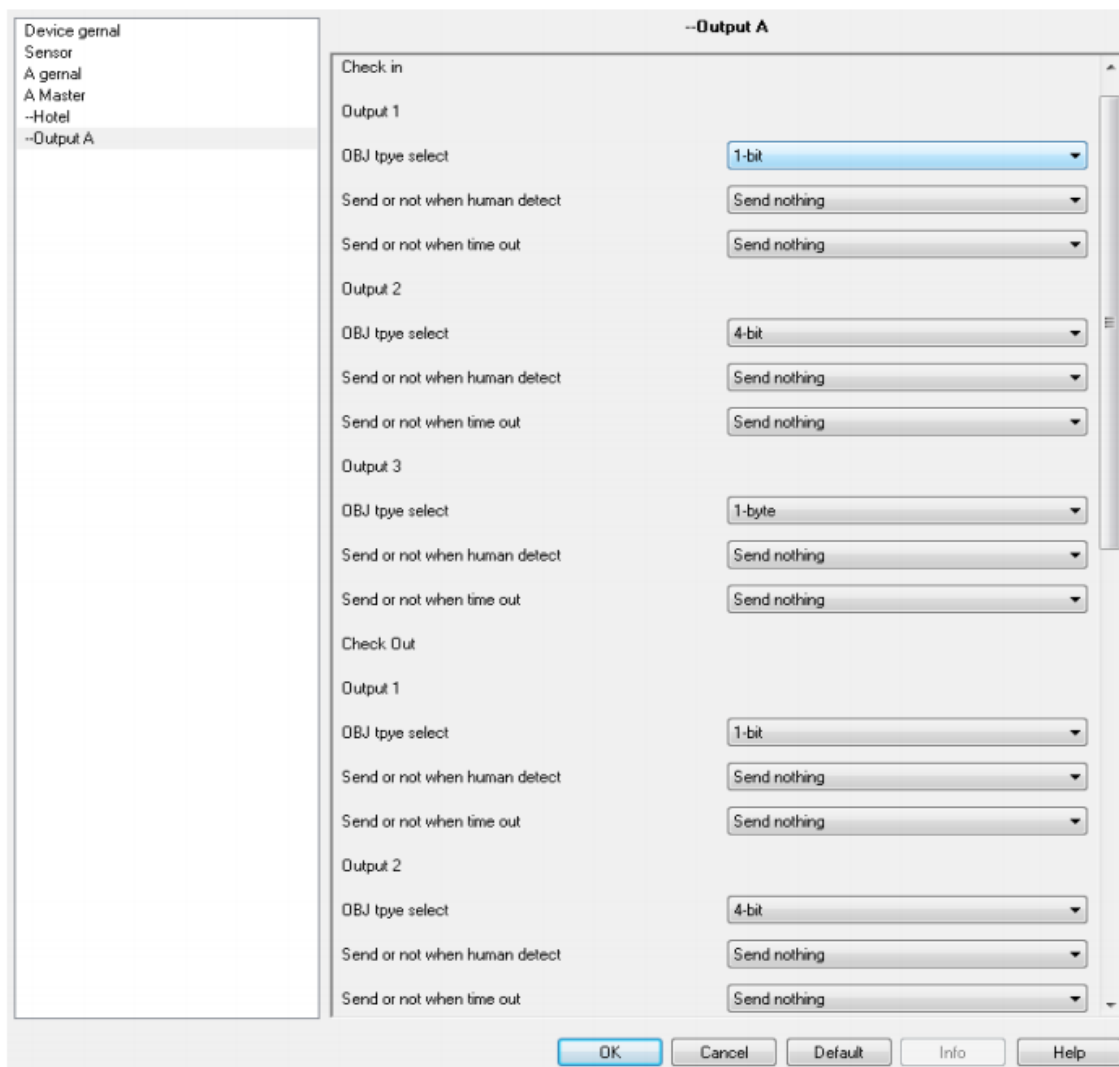


Figure 3.1.1.7-3 “Output A” parameter interface

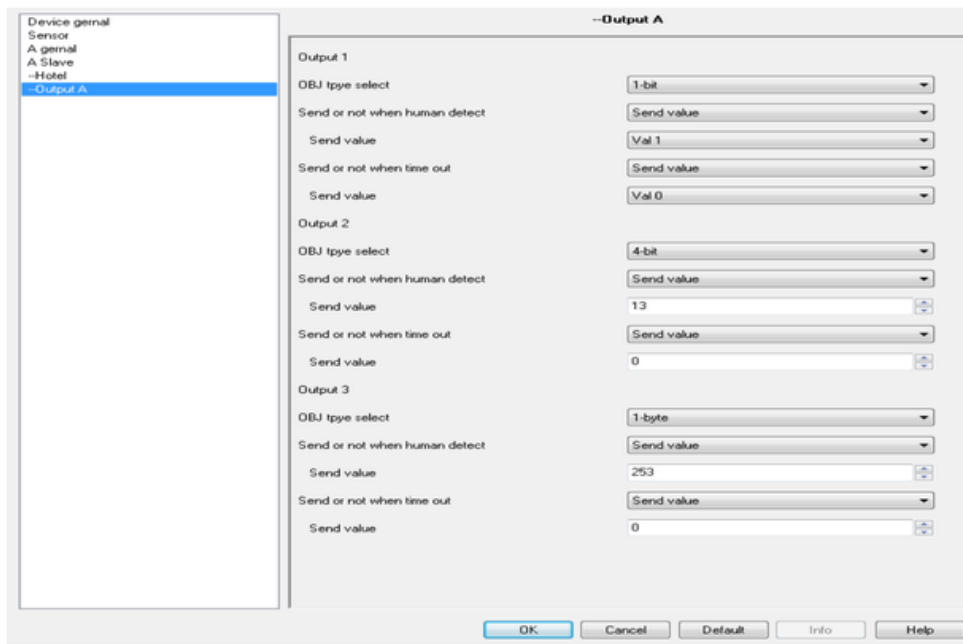


Figure 3.1.1.7-4 “Output A” parameter interface

(Note: “Output A” under “A Slave” does not distinguish “Check in/out”) as shown in Figure 3.1.1.4.7

Check in/out Output parameters for check-in or check-out room status

Output1/2/3 parameter 1/2/3

Parameter “OBJ type select”

This parameter is set to the type of the output parameter

Optional

1-bit

4-bit

1-byte

Parameter “Send or not when human detect/time out”

This parameter is set to detect whether the value is output when **human detect/time out**

Optional:

Send nothing

Send value

No value is output when Send nothing is selected

Select Send value to indicate valued output

Note: The premise of “Send or not when time out” is to trigger the object “Check In/Out A” or “Reset in hotel A”; do not let the person’s value room be sent from the time he detects someone The status is always “true”.

The parameters are shown in Figure 3.1.1.7-5

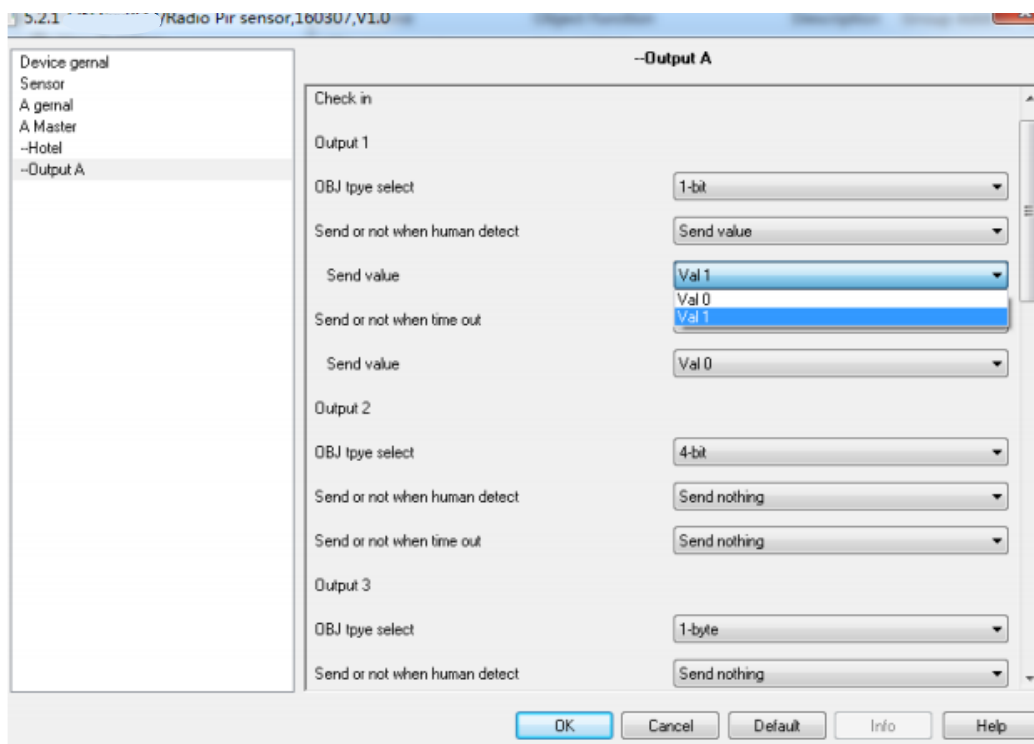


Figure 3.1.1.7-5 Parameter Interface

Parameter "Send value"

This parameter is set to the value entered

Optional:

Val 0

Val 1

Select Val 0 output as false (corresponding value for each data type)

Select the Val 1 output as true (corresponding value for each data type)

Note: When "4bit/1byte" is selected for "OBJ type select", the value of "Send value" is [0-15]/[0-255].

3.1.2 Parameter "Lux function"

This parameter is displayed when Device Active "Lux function active" selects Active.

The parameters are as shown in Figure 3.1.2-1.

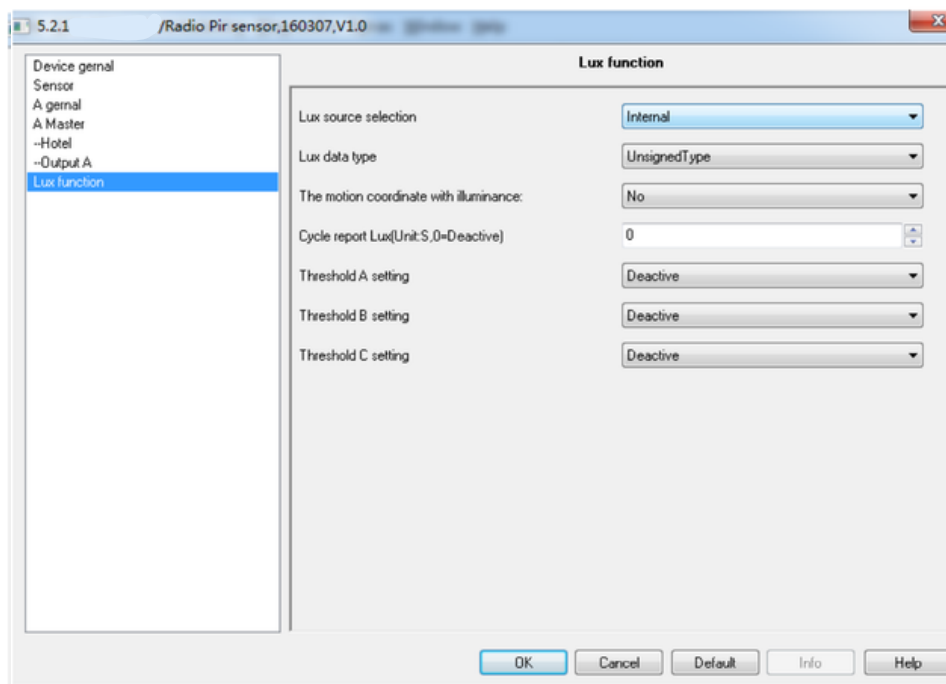


Figure 3.1.2-1 Parameter Interface

Parameter "Lux source selection"

This parameter is set to the brightness selection source

Optional:

Internal

External

Select the internal brightness source inside itself

Select External brightness source external

Parameter "Lux data type"

The parameter is set to the data type of the brightness

Optional:

Unsigned Type

Float Type

Select Unsigned Type brightness data type as unsigned

Select the data type of Float Type brightness as floating point

Parameter "The motion coordinate with illuminance"

This parameter is set to enable the mobile combined brightness function.

Optional:

No

Yes

Select No to disable the mobile coordinated brightness function.

Select Yes to enable the mobile coordinated brightness function.

The parameters are as shown in Figure 3.1.2-2.

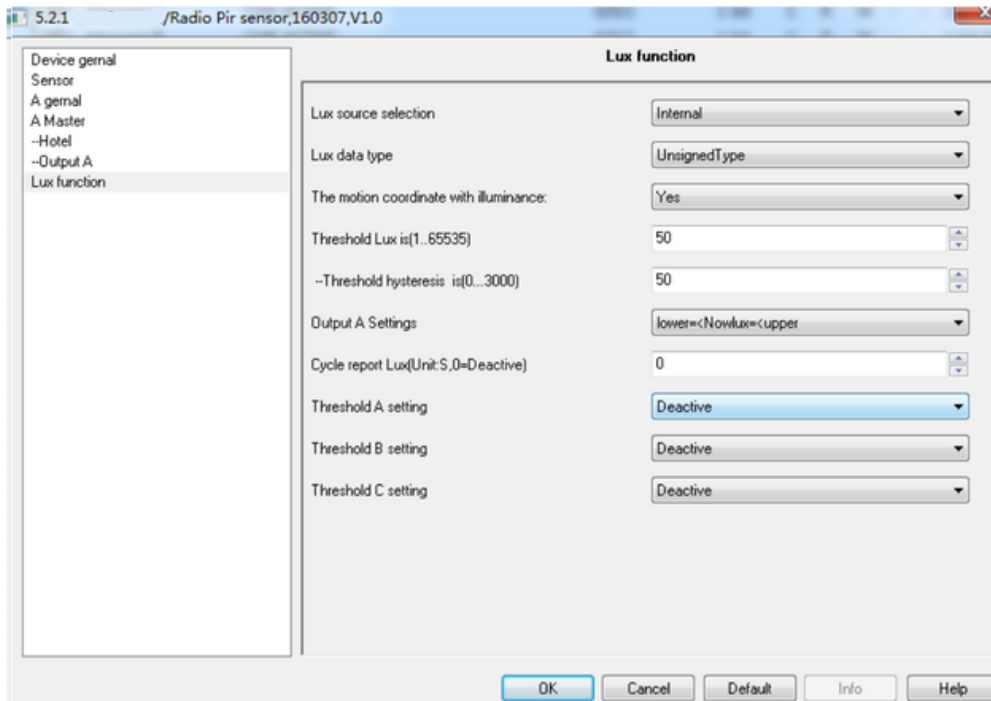


Figure 3.1.2-2 Parameter Interface

Parameter "Threshold Lux is(1-65535)"

This parameter is set to the illumination value
Range: [1-65535]

Parameter "Threshold hysteresis is(0-3000)"

This parameter is set to the hysteresis value of the illuminance
Range: [0-3000]

Parameter "Output A Setting"

This parameter is set to the condition that outputs the value of **Output A**
Optional:

```
Lower=<Nwlux=<upper
<Lower
>Upper
```

The option Lower=<Nwlux=<upper triggers the output Output A when the value of the current illuminance is between the minimum cut value (illumination cut minus the hysteresis value) and the maximum cut value (illumination cut plus hysteresis value). Value

Option <Lower The mobile function triggers the output **Output A** value when the current illuminance value is less than the minimum cut value (illumination cut minus the hysteresis value).

Options>Upper The mobile function triggers the output of **Output A** when the current illuminance value is greater than the maximum cut value (illumination value plus hysteresis

value).

Parameter ” Cycle report Lux(Unit:s,0=Deactive) ”

This parameter is set to report the cycle time of the brightness value
Range: [0-255]; unit: second; 0 does not report.

Parameter ” Threshold A/B/C setting”

This parameter is set to enable setting of the cutting value A/B/C.

Optional:

Deactive

Activated

Select Deactive does not enable setting the cutting value **A/B/C**

Select Activated to enable logging **A/B/C**

The parameters are as shown in Figure 3.1.2-3.

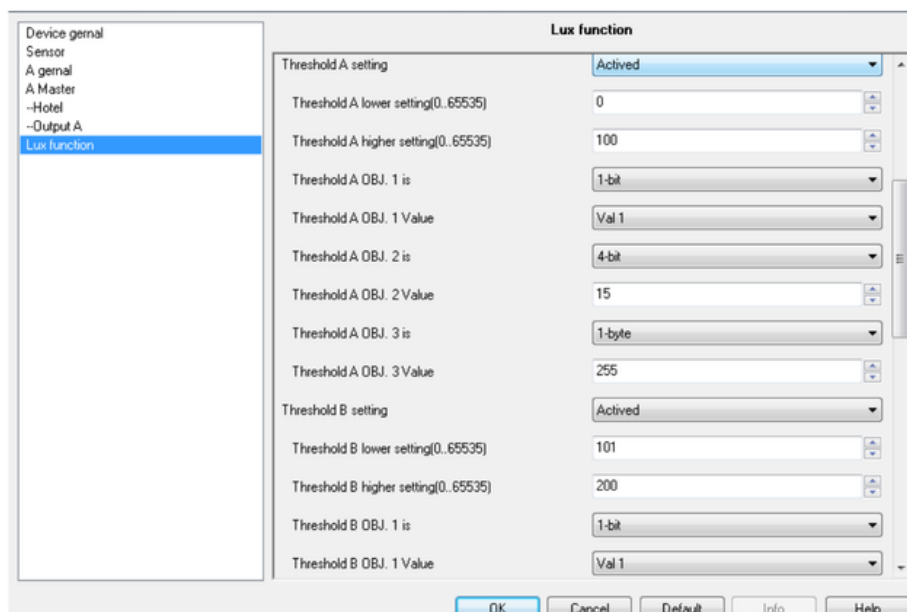


Figure 3.1.2-3 “Threshold A setting” parameter interface

Parameter” Threshold A/B/C lower setting(0-65535) ”

This parameter is set to the lowest threshold value of A/B/C.

Value range **[0-65535]**

Parameter” Threshold A/B/C higher setting(0-65535) ”

This parameter is set to the highest threshold of A/B/C

Value range [0-65535]

Parameter” Threshold A/B/C OBJ.1 is”

This parameter is set to the type of 1/2/3 value sent to the bus by the threshold value A/B/C.

BSMART

Optional:

- 1-bit
- 4-bit
- 1-byte

Select the 1-bit threshold A/B/C to send the 1/2/3 value to the bus as 1-bit

Select 4-bit threshold A/B/C to send 1/2/3 value to the bus type 4-bit

Select 1-byte threshold A/B/C to send 1/2/3 value to the bus type 1-byte

Parameter "Threshold A/B/C OBJ.1 Value"

This parameter is set to the value of 1/2/3 sent to the bus by the threshold A/B/C.

1-bit option

Val 0

Val 1

Select the Val 0 communication object "Output switch OBJ.1" to receive a value of 0.

Select the value received by the Val 1 message "Output switch OBJ.1"

Note: When "4bit/1byte" is selected for "Threshold A/B/C OBJ.1/2/3", the value of "Output switch OBJ.1/2/3" is [0-15]/[0-255].

3.2 Communication object

The communication object is the medium through which the device communicates with other devices on the bus, that is, only communication can communicate with the bus. The role of each communication communication is described in detail below.

Note: The following "C" in the table attribute column means that the communication function of the communication object is enabled, "W" means that the communication object can rewrite the value of other devices, and "R" means that the value of the communication object can be read by other devices. "T" means that the communication object has a transmission function, and "U" means that the value of the communication object can be rewritten by the response message of the bus.

3.2.1 Device general communication object

No.	Function	Communication object name	Data type	Attributes
41	In operate	In operate	1bit	C, T
<p>When the device is operating, the bus sends a 1-bit value. If NO is selected, it means no value output. Select Send value "0" cyclically to indicate that the bus loop sends a false state when the value of 0 is sent to the bus. Select Send value "1" cyclically to send 1 to the bus. The value of the bus loop issues a true state</p>				

3.2.2 Sensor communication object

0	Manage A	CHA ACTIVE	1/2/4	1 bit	C R	W - -	1 bit DPT_Enable
20	Manage B	CHB ACTIVE	1/2/5	1 bit	C R	W - -	1 bit DPT_Enable
43	Manage	Radar sensitivity	1/2/6	1 Byte	C R	W - -	8 bit unsigned value DPT_Scaling

No.	Function	communication object name	Data type	Attributes
0	CHA ACTIVE	Manage A	1 bit	C, R, W
<p>This object is displayed when "Sensor of motion is" selects "Activated". The parameters disable and enable. When the communication object sends disable to the bus, channel A is closed. When the communication object sends enable to the bus, channel A is opened.</p>				
20	CHB ACTIVE	Manage B	1 bit	C, R, W
<p>The object is displayed when "Sensor of motion is" selects "Activated", the parameters disable and enable, channel B is closed when the communication object sends disable to the bus, and channel B is opened when the communication object sends enable to the bus.</p>				
43	Radar sensitivity	Manage	1 byte	C, R, W
<p>This object represents the sensing sensitivity of the radar. When "Sensor source" under "A gernal" selects "From radio" or "PIR AND RADIO" or "PIR OR RADIO", the object is valid. The object is in "Sensor". There are four options under "Radio sensitivity". "Disable" corresponds to the communication object "Radar sensitivity" input value is 0, indicating that radar sensing is not enabled; "low" corresponds to the communication object "Radar sensitivity" input value is 1, indicating that the radar sensitivity is low; "Middle" corresponds The value of the communication object "Radar sensitivity" is 2, indicating that the sensitivity is medium; the value of "Higher" corresponding to the communication object "Radar sensitivity" is 3, indicating that the sensitivity is relatively high, and the radar is within 1 byte of the input value of 3 or more. The sensitivity is not radar sensing. <i>(Note: When inputting values to the bus, the data type of the value must be 1 byte to meet the above description, and the default percentage cannot be used.)</i></p>				

3.2.3 Security function communication object

55	Manage	Security active		1 bit	C R	W - -	1 bit DPT_Enable
56	Security report	Security report		1 bit	C - -	T - -	1 bit DPT_Bool
57	Security report trig	Security report trig		1 bit	C - -	W - -	

No.	Function	communication object name	Data type	Attributes
55	Security active	Manage	1 bit	C, R, W
<p>This object is displayed when "Security function" selects "Activated". The options disable and enable. When the communication object sends disable to the bus, the channel security function is turned off. When the communication object sends enable to the bus, the security</p>				

BSMART

function is turned on.				
56	Security report	Security report	1 bit	C, T
The object is a report on the status of the security function. If a channel like "Security active" is sent to the bus, then the channel is closed and there is no security report. If no one is issued, send the 01 enable channel; if the object is like "Security" Report trig" sends 00 to the bus, the security function is disabled, there is no security report, no one's status is issued, and 01 triggers the security report.				
57	Security report trig	Security report trig	1 bit	C, W
The object is "Security report trig" to the bus to send a 00 to prohibit the report security function has no one's state, send 01 enable report security function has no one's state.				

Note: This version only modifies the description of the 56, 57 object relative to the previous release specification.

3.2.4 A general communication object

(Note: Channel A is the same as channel B, A[0...19], B[20...39])

Relatively speaking, the difference between Master/Slave-normal is that Slave-normal has no objects 1, 2, 3, and 13. Relatively speaking, the difference between Master/Slave-hotel is that Slave-hotel has no objects 1, 2, 3, 13; Slave-hotel does not distinguish between check in and check out, and unified Master-hotel objects 8, 9, 10 and 16, 17 18 is 8, 9, and 10.

Master-normal

1	INPUT A	EXT. movement from slave A	1 bit	C - W - -	1 bit DPT_Bool	Low
2	INPUT A	EXT. input A	1 bit	C - W - -	1 bit DPT_Bool	Low
3	INPUT A	EXT. input A	1 Byte	C - W - -	8 bit unsigned value DPT_Value_1_Ucount	Low
4	Manage A	Delay time A	2 Byte	C R W - -		Low
6	INPUT A	Reset in normal A	1 bit	C - W - -	1 bit DPT_Bool	Low
7	Manage A	Disable radar detection A	1 bit	C R W - -	1 bit DPT_Enable	Low
8	OUTPUT A	Switch 1	1 bit	C - - T -	1 bit DPT_Switch	Low
9	OUTPUT A	Switch 2	1 bit	C - - T -	1 bit DPT_Switch	Low
10	OUTPUT A	Switch 3	1 bit	C - - T -	1 bit DPT_Switch	Low
13	STATUS A	Room status	1 bit	C R - T -	1 bit DPT_Bool	Low
14	Disable Pir A	Temply disable Pir	1 bit	C - W - -	1 bit DPT_Switch	Low
15	Disable Pir A	Forced disable Pir	1 bit	C - W - -	1 bit DPT_Enable	Low
19	Motion over	CHA over by bus	1 bit	C - W - -	1 bit DPT_Bool	Low
8	OUTPUT A	Relative dimming 1	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
9	OUTPUT A	Relative dimming 2	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
10	OUTPUT A	Relative dimming 3	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
8	OUTPUT A	Value 1	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
9	OUTPUT A	Value 2	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
10	OUTPUT A	Value 3	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low

No.	Function	Communication object name	Data type	Attributes
1	EXT. movement from slave A	INPUT A	1 bit	C, W
This object is displayed when "Master" is selected in "Channel work in", which means that the data is obtained from the slave. When the bus receives the message of 01, the room status is true. When the bus receives the message of 00, the room status is false. <i>Note: This object only exists if "Master" is selected in "Channel work in" and does not exist</i>				

BSMART

<i>under "Slave".</i>				
2	EXT. input A	INPUT A	1 bit	C, W
The object causes the room state to change when the communication object "INPUT A" receives the input 1-bit value of the outside world, and can trigger the room status to issue a human value. There are three cases of sending a 00 or 01 or 00/01. The specific trigger condition is determined by the parameter "1-bit Ext.Input trig By".				
3	EXT. input A	INPUT A	1 byte	C, W
The object causes the room state to change when the communication object "INPUT A" receives the input 1-byte value of the outside world, and can trigger the room status. The value of the person can be any value within the range of 0-255 or the specification within the range of 0-255. value. The specific trigger condition is determined by the parameter "1-byte Ext.Input trig By".				
4	Delay time A	Manage A	2 Byte	C, R, W
This object is displayed when "Normal Using" is selected in "Function mode". It can be entered at the time of "Delay time" under the "Normal" parameter interface, indicating the delay time when this state is detected when the room status is detected. Its attribute W indicates that the desired delay time can be written over the bus.				
6	Reset in normal A	INPUT A	1 bit	C, W
This object resets the room status when the value of "By any value" or "By target value" is selected for the parameter "Reset Obj trig by". When the "By any value" is selected, the communication object INPUT A inputs the value of 00/01. Both can reset the room status. When "By target value" is selected, the communication object INPUT A can only input 00 or only input 01 value to reset the room status.				
7	Disable radar detection A	Manage A	1 bit	C, R, W
The object is in stop radar detection, the object parameters are disable and enable, select disable to stop radar detection, select enable to enable radar detection				
8/9/10	Switch 1/2/3	OUTPUT A	1 bit	C, T
The value of 1 bit emitted by the object when detecting the environment state in the standard mode state may be selected with a value of Send value or a value of Send nothing. When Send value is selected, "on" or "off" is issued when someone in the environment is detected. "Nobody will issue "off" or "on" (generally someone chooses a different value from no one, and someone "on" no one "off")				
8/9/10	Relative dimming 1/2/3	OUTPUT A	4 bit	C, T
The 4-bit value emitted by the object when it detects the environmental state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 4-bit value that you set.				
8/9/10	Value 1/2/3	OUTPUT A	1 byte	C, T
The value of 1 byte emitted by the object when it detects the environment state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 1 byte value that you set.				
13	Room status	STATUS A	1 bit	C, R, T

BSMART

The object is the state of the room detected by the motion sensing, and its state is issued with a value of one or no one as the motion is detected or a specified value is sent to the bus.				
14	Temply disable Pir	Disable Pir A	1 bit	C, W
When the object is temporarily stopped for infrared detection, when the communication object Disable Pir A selects "off" and is sent to the bus, the infrared detection function is temporarily disabled. When the communication object Disable Pir A selects "on" to be sent to the bus, it is enabled. Temporarily stop infrared detection. (The time to temporarily stop the test is set by "Temply disable PIR time after OBJ trig[1-255/UNIT:s]")				
15	Forced disable Pir	Disable Pir A	1 bit	C, W
This object is displayed when "Forced disable" selects "Activated", indicating whether the infrared detection is forcibly disabled. Object parameters disable and enable, select disable to disable infrared detection, select enable to enable infrared detection				
19	CHA over by bus	Motion over	1 bit	C, W
This object is displayed when "Activated" is selected in "Motion over by bus within delay". When the parameter "Motion over by bus with" selects "Telegram value is '1'", the communication object Motion over sends 01 to the bus to end the channel A state. (The room status changes from true to false. If it is false, the status is still false.) 00 does not work. When the parameter "Motion over by bus with" selects "Telegram value is '0'", the communication object Motion over sends to the bus. 00 end channel A state (room state changes from true to false, if it is false or the state is still false) 01 does not work.				

Master-hotel

11	INPUT A	EXT. movement from slave A	1 bit	C - W - -	1 bit DPT_Bool	Low
12	INPUT A	EXT. input A	1 bit	C - W - -	1 bit DPT_Bool	Low
13	INPUT A	EXT. input A	1 Byte	C - W - -	8 bit unsigned value DPT_Value_1_Ucount	Low
14	Manage A	Delay time,Check in	2 Byte	C R W - -		Low
15	Manage A	Delay time,Check out	2 Byte	C R W - -		Low
16	INPUT A	Reset in hotel A	1 bit	C - W - -	1 bit DPT_Bool	Low
17	Manage A	Disable radar detection A	1 bit	C R W - -	1 bit DPT_Enable	Low
18	OUTPUT A	Switch 1,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
19	OUTPUT A	Switch 2,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
20	OUTPUT A	Switch 3,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
21	Control A	Check In A	1 bit	C - W - -	1 bit DPT_Bool	Low
22	Control A	Check Out A	1 bit	C - W - -	1 bit DPT_Bool	Low
23	STATUS A	Room status	1 bit	C R - T -	1 bit DPT_Bool	Low
24	Disable Pir A	Temply disable Pir	1 bit	C - W - -	1 bit DPT_Switch	Low
25	Disable Pir A	Forced disable Pir	1 bit	C - W - -	1 bit DPT_Enable	Low
26	OUTPUT A	Switch 1,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
27	OUTPUT A	Switch 2,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
28	OUTPUT A	Switch 3,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
29	OUTPUT A	Relative dimming 1,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
30	OUTPUT A	Relative dimming 2,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
31	OUTPUT A	Relative dimming 3,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
32	OUTPUT A	Relative dimming 1,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
33	OUTPUT A	Relative dimming 2,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
34	OUTPUT A	Relative dimming 3,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
35	OUTPUT A	Value 1,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
36	OUTPUT A	Value 2,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
37	OUTPUT A	Value 3,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
38	OUTPUT A	Value 1,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
39	OUTPUT A	Value 2,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
40	OUTPUT A	Value 3,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low

BSMART

<i>under "Slave".</i>				
2	EXT. input A	INPUT A	1 bit	C, W
The object causes the room state to change when the communication object "INPUT A" receives the input 1-bit value of the outside world, and can trigger the room status to issue a human value. There are three cases of sending a 00 or 01 or 00/01. The specific trigger condition is determined by the parameter "1-bit Ext.Input trig By".				
3	EXT. input A	INPUT A	1 byte	C, W
The object causes the room state to change when the communication object "INPUT A" receives the input 1-byte value of the outside world, and can trigger the room status. The value of the person can be any value within the range of 0-255 or the specification within the range of 0-255. value. The specific trigger condition is determined by the parameter "1-byte Ext.Input trig By".				
4	Delay time A	Manage A	2 Byte	C, R, W
This object is displayed when "Normal Using" is selected in "Function mode". It can be entered at the time of "Delay time" under the "Normal" parameter interface, indicating the delay time when this state is detected when the room status is detected. Its attribute W indicates that the desired delay time can be written over the bus.				
6	Reset in normal A	INPUT A	1 bit	C, W
This object resets the room status when the value of "By any value" or "By target value" is selected for the parameter "Reset Obj trig by". When the "By any value" is selected, the communication object INPUT A inputs the value of 00/01. Both can reset the room status. When "By target value" is selected, the communication object INPUT A can only input 00 or only input 01 value to reset the room status.				
7	Disable radar detection A	Manage A	1 bit	C, R, W
The object is in stop radar detection, the object parameters are disable and enable, select disable to stop radar detection, select enable to enable radar detection				
8/9/10	Switch 1/2/3	OUTPUT A	1 bit	C, T
The value of 1 bit emitted by the object when detecting the environment state in the standard mode state may be selected with a value of Send value or a value of Send nothing. When Send value is selected, "on" or "off" is issued when someone in the environment is detected. "Nobody will issue "off" or "on" (generally someone chooses a different value from no one, and someone "on" no one "off")				
8/9/10	Relative dimming 1/2/3	OUTPUT A	4 bit	C, T
The 4-bit value emitted by the object when it detects the environmental state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 4-bit value that you set.				
8/9/10	Value 1/2/3	OUTPUT A	1 byte	C, T
The value of 1 byte emitted by the object when it detects the environment state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 1 byte value that you set.				
13	Room status	STATUS A	1 bit	C, R, T

BSMART

The object is the state of the room detected by the motion sensing, and its state is issued with a value of one or no one as the motion is detected or a specified value is sent to the bus.				
14	Temply disable Pir	Disable Pir A	1 bit	C, W
When the object is temporarily stopped for infrared detection, when the communication object Disable Pir A selects "off" and is sent to the bus, the infrared detection function is temporarily disabled. When the communication object Disable Pir A selects "on" to be sent to the bus, it is enabled. Temporarily stop infrared detection. (The time to temporarily stop the test is set by "Temply disable PIR time after OBJ trig[1-255/UNIT:s]")				
15	Forced disable Pir	Disable Pir A	1 bit	C, W
This object is displayed when "Forced disable" selects "Activated", indicating whether the infrared detection is forcibly disabled. Object parameters disable and enable, select disable to disable infrared detection, select enable to enable infrared detection				
19	CHA over by bus	Motion over	1 bit	C, W
This object is displayed when "Activated" is selected in "Motion over by bus within delay". When the parameter "Motion over by bus with" selects "Telegram value is '1'", the communication object Motion over sends 01 to the bus to end the channel A state. (The room status changes from true to false. If it is false, the status is still false.) 00 does not work. When the parameter "Motion over by bus with" selects "Telegram value is '0'", the communication object Motion over sends to the bus. 00 end channel A state (room state changes from true to false, if it is false or the state is still false) 01 does not work.				

Master-hotel

1	INPUT A	EXT. movement from slave A	1 bit	C - W - -	1 bit DPT_Bool	Low
2	INPUT A	EXT. input A	1 bit	C - W - -	1 bit DPT_Bool	Low
3	INPUT A	EXT. input A	1 Byte	C - W - -	8 bit unsigned value DPT_Value_1_Ucount	Low
4	Manage A	Delay time,Check in	2 Byte	C R W - -		Low
5	Manage A	Delay time,Check out	2 Byte	C R W - -		Low
6	INPUT A	Reset in hotel A	1 bit	C - W - -	1 bit DPT_Bool	Low
7	Manage A	Disable radar detection A	1 bit	C R W - -	1 bit DPT_Enable	Low
8	OUTPUT A	Switch 1,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
9	OUTPUT A	Switch 2,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
10	OUTPUT A	Switch 3,Check in	1 bit	C - - T -	1 bit DPT_Switch	Low
11	Control A	Check In A	1 bit	C - W - -	1 bit DPT_Bool	Low
12	Control A	Check Out A	1 bit	C - W - -	1 bit DPT_Bool	Low
13	STATUS A	Room status	1 bit	C R - T -	1 bit DPT_Bool	Low
14	Disable Pir A	Temply disable Pir	1 bit	C - W - -	1 bit DPT_Switch	Low
15	Disable Pir A	Forced disable Pir	1 bit	C - W - -	1 bit DPT_Enable	Low
16	OUTPUT A	Switch 1,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
17	OUTPUT A	Switch 2,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
18	OUTPUT A	Switch 3,Check out	1 bit	C - - T -	1 bit DPT_Switch	Low
8	OUTPUT A	Relative dimming 1,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
9	OUTPUT A	Relative dimming 2,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
10	OUTPUT A	Relative dimming 3,Check in	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
16	OUTPUT A	Relative dimming 1,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
17	OUTPUT A	Relative dimming 2,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
18	OUTPUT A	Relative dimming 3,Check out	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
8	OUTPUT A	Value 1,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
9	OUTPUT A	Value 2,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
10	OUTPUT A	Value 3,Check in	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
16	OUTPUT A	Value 1,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
17	OUTPUT A	Value 2,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
18	OUTPUT A	Value 3,Check out	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low

BSMART

No.	Function	Communication object name	Date type	Attributes
1	EXT.movement from slave A	INPUT A	1 bit	C, W
<p>This object is displayed when "Master" is selected in "Channel work in", which means that the data is obtained from the slave. When the bus receives the message of 01, the room status is true. When the bus receives the message of 00, the room status is false.</p> <p><i>Note: This object only exists if "Master" is selected in "Channel work in" and does not exist under "Slave".</i></p>				
2	EXT. input A	INPUT A	1 bit	C, W
<p>The object causes the room state to change when the communication object "INPUT A" receives the input 1-bit value of the outside world, and can trigger the room status to issue a human value. There are three cases of sending a 00 or 01 or 00/01. The specific trigger condition is determined by the parameter "1-bit Ext.Input trig By".</p>				
3	EXT. input A	INPUT A	1 byte	C, W
<p>The object causes the room state to change when the communication object "INPUT A" receives the input 1-byte value of the outside world, and can trigger the room status. The value of the person can be any value within the range of 0-255 or the specification within the range of 0-255. value. The specific trigger condition is determined by the parameter "1-byte Ext.Input trig By".</p>				
4	Delay time, Check in	Manage A	2 byte	C, R, W
<p>The detection time of the object in the hotel mode state to check the status of the checked room</p>				
5	Delay time, Check out	Manage A	2 byte	C, R, W
<p>The detection time of the checked out room status of the object in the hotel mode state</p>				
6	Reset in hotel A	INPUT A	1 bit	C, W
<p>This object is displayed under the Hotel parameter. When the parameter "Reset Obj trig by" selects the value of "By any value" or "By target value" to be sent to the bus, the room status is reset. When "By any value" is selected, the communication object is selected. INPUT A input 00/01 value can reset the room status. When "By target value" is selected, the communication object INPUT A can only input 00 or only input 01 value to reset the room status.</p>				
7	Disable radar detection A	Manage A	1 bit	C, R, W
<p>The object is in stop radar detection, the object parameters are disable and enable, select disable to stop radar detection, select enable to enable radar detection</p>				
8/9/10	Switch 1/2/3 ,Check in	OUTPUT A	1 bit	C, T
<p>The value of 1 bit sent by the object when detecting the state of the room in the hotel</p>				

BSMART

<p>mode check-in state, the value of Send value or the value of Send nothing can be selected, and when the Send value is selected, when the person in the room is detected, "on" or "off"; no one will issue "off" or "on" (generally someone chooses a different value from no one, some people "on" no one "off")</p>				
8/9/10	Relative dimming 1/2/3 ,Check in	OUTPUT A	4 bit	C, T
<p>The value of 4 bits sent when the object detects the state of the room in the hotel mode check-in state, and the specified 4-bit value is set when it detects someone or no one in the room.</p>				
8/9/10	Value 1/2/3 ,Check in	OUTPUT A	1 byte	C, T
<p>The value of 1 byte issued by the object when detecting the state of the room in the hotel mode check-in state, and the specified 1 byte value set when you detect someone or no one in the room.</p>				
11	Control A	Check In A	1 bit	C, W
<p>If the object is enabled to detect the status of the checked-in room, when the parameter "Check in obj trig value" selects "trig by 0", the object is enabled to detect the checked-in room status when sending 00 to the bus; when the parameter "Check in obj Trig value" When "trig by 1" is selected, the object is sent to the bus to enable 01 to check the status of the checked-in room; when the parameter "Check in obj trig value" selects "trig by 0/1", the object sends 00/01 to the bus. Both enable detection of the status of the checked-in room.</p>				
12	Control A	Check Out A	1 bit	C, W
<p>If the object is enabled to detect the status of the registered exit room, when the parameter "Check out obj trig value" selects "trig by 0", the object enables the detection of the registered exit room state when the object sends 00 to the bus; when the parameter "Check out obj Trig value" When "trig by 1" is selected, the object is sent to the bus to enable 01 to detect the registered exit status; when the parameter "Check out obj trig value" selects "trig by 0/1", the object sends 00/01 to the bus. Both can enable the detection of the status of the registered exit room.</p>				
13	Room status	STATUS A	1 bit	C, R, T
<p>The object is the state of the room detected by the motion sensing, and its state is issued with a value of one or no one as the motion is detected or a specified value is sent to the bus.</p>				
14	Temply disable Pir	Disable Pir A	1 bit	C, W
<p>When the object is temporarily stopped for infrared detection, when the communication object Disable Pir A selects "off" and is sent to the bus, the infrared detection function is temporarily disabled. When the communication object Disable Pir A selects "on" to be sent to the bus, it is enabled. Temporarily stop infrared detection. (The time to temporarily stop the test is set by "Temply disable PIR time after OBJ trig[1-255/UNIT:s]")</p>				
15	Forced disable Pir	Disable Pir A	1 bit	C, W

BSMART

This object is displayed when "Forced disable" selects "Activated", indicating whether the infrared detection is forcibly disabled. Object parameters disable and enable, select disable to disable infrared detection, select enable to enable infrared detection				
16	Switch 1, Check out	OUTPUT A	1 bit	C, T
The object is 1 bit value that is sent when the room status is checked in the check-out state of the hotel mode. You can select the value of Send value or the value of Send nothing. When Send value is selected, it will be issued when it detects someone in the room. " or "off"; "off" or "on" when no one is present (generally someone chooses a different value from no one, some people "on" no one "off")				
17	Relative dimming 2, Check out	OUTPUT A	4 bit	C, T
The value of the 4 bit that is sent when the object is detected in the check-out state of the hotel mode, and the specified 4biti value that you set is detected when someone or no one in the room is detected.				
18	Value, Check out	OUTPUT A	1 byte	C, T
The value of 1 byte issued by the object when detecting the state of the room in the check-out state of the hotel mode. When a person or no one in the room is detected, the specified 1 byte value is set.				

Salve-normal

4	Manage A	Delay time A	2 Byte	C R W - -		Low
6	INPUT A	Reset in normal A	1 bit	C - W - -	1 bit DPT_Bool	Low
7	Manage A	Disable radar detection A	1 bit	C R W - -	1 bit DPT_Enable	Low
8	OUTPUT A	Switch 1	1 bit	C - - T -	1 bit DPT_Switch	Low
9	OUTPUT A	Switch 2	1 bit	C - - T -	1 bit DPT_Switch	Low
10	OUTPUT A	Switch 3	1 bit	C - - T -	1 bit DPT_Switch	Low
14	Disable Pir A	Temply disable Pir	1 bit	C - W - -	1 bit DPT_Switch	Low
15	Disable Pir A	Forced disable Pir	1 bit	C - W - -	1 bit DPT_Enable	Low
19	Motion over	CHA over by bus	1 bit	C - W - -	1 bit DPT_Bool	Low
8	OUTPUT A	Relative dimming 1	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
9	OUTPUT A	Relative dimming 2	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
10	OUTPUT A	Relative dimming 3	4 bit	C - - T -	3 bit controlled DPT_Control_Dimming	Low
8	OUTPUT A	Value 1	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
9	OUTPUT A	Value 2	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low
10	OUTPUT A	Value 3	1 Byte	C - - T -	8 bit unsigned value DPT_Value_1_Ucount	Low

No.	Function	Communication object name	Data type	Attributes
4	Delay time A	Manage A	2 Byte	C, R, W
This object is displayed when "Normal Using" is selected in "Function mode". It can be entered at the time of "Delay time" under the "Normal" parameter interface, indicating the delay time when this state is detected when the room status is detected. Its attribute W indicates that the desired delay time can be written over the bus.				
6	Reset in normal A	INPUT A	1 bit	C, W
This object resets the room status when the value of "By any value" or "By target value" is selected for the parameter "Reset Obj trig by". When the "By any value" is selected, the communication object INPUT A inputs the value of 00/01. Both can reset the room status. When "By target value" is selected, the communication object INPUT A can only				

BSMART

input 00 or only input 01 value to reset the room status.				
7	Disable radar detection A	Manage A	1 bit	C, R, W
The object is in stop radar detection, the object parameters are disable and enable, select disable to stop radar detection, select enable to enable radar detection				
8/9/10	Switch 1/2/3	OUTPUT A	1 bit	C, T
The value of 1 bit emitted by the object when detecting the environment state in the standard mode state may be selected with a value of Send value or a value of Send nothing. When Send value is selected, "on" or "off" is issued when someone in the environment is detected. "Nobody will issue "off" or "on" (generally someone chooses a different value from no one, and someone "on" no one "off")				
8/9/10	Relative dimming 1/2/3	OUTPUT A	4 bit	C, T
The 4-bit value emitted by the object when it detects the environmental state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 4-bit value that you set.				
8/9/10	Value 1/2/3	OUTPUT A	1 byte	C, T
The value of 1 byte emitted by the object when it detects the environment state in the standard mode state. When it detects someone or no one in the environment, it sends the specified 1 byte value that you set.				
14	Temply disable Pir	Disable Pir A	1 bit	C, W
When the object is temporarily stopped for infrared detection, when the communication object Disable Pir A selects "off" and is sent to the bus, the infrared detection function is temporarily disabled. When the communication object Disable Pir A selects "on" to be sent to the bus, it is enabled. Temporarily stop infrared detection. (The time to temporarily stop the test is set by "Temply disable PIR time after OBJ trig[1-255/UNIT:s]")				
15	Forced disable Pir	Disable Pir A	1 bit	C, W
This object is displayed when "Forced disable" selects "Activated", indicating whether the infrared detection is forcibly disabled. Object parameters disable and enable, select disable to disable infrared detection, select enable to enable infrared detection				
19	CHA over by bus	Motion over	1 bit	C, W
This object is displayed when "Activated" is selected in "Motion over by bus within delay". When the parameter "Motion over by bus with" selects "Telegram value is '1'", the communication object Motion over sends 01 to the bus to end the channel A state. (The room status changes from true to false. If it is false, the status is still false.) 00 does not work. When the parameter "Motion over by bus with" selects "Telegram value is '0'", the communication object Motion over sends to the bus. 00 end channel A state (room state changes from true to false, if it is false or the state is still false) 01 does not work.				

Slave - hotel

BSMART

4	Manage A	Delay time,Check in	2 Byte	C R W - -	Low
5	Manage A	Delay time,Check out	2 Byte	C R W - -	Low
6	INPUT A	Reset in hotel A	1 bit	C - W - - 1 bit DPT_Bool	Low
7	Manage A	Disable radar detection A	1 bit	C R W - - 1 bit DPT_Enable	Low
8	OUTPUT A	Switch 1	1 bit	C - - T - 1 bit DPT_Switch	Low
9	OUTPUT A	Switch 2	1 bit	C - - T - 1 bit DPT_Switch	Low
10	OUTPUT A	Switch 3	1 bit	C - - T - 1 bit DPT_Switch	Low
11	Control A	Check In A	1 bit	C - W - - 1 bit DPT_Bool	Low
12	Control A	Check Out A	1 bit	C - W - - 1 bit DPT_Bool	Low
14	Disable Pir A	Temply disable Pir	1 bit	C - W - - 1 bit DPT_Switch	Low
15	Disable Pir A	Forced disable Pir	1 bit	C - W - - 1 bit DPT_Enable	Low
8	OUTPUT A	Relative dimming 1	4 bit	C - - T - 3 bit controlled DPT_Control_Dimming	Low
9	OUTPUT A	Relative dimming 2	4 bit	C - - T - 3 bit controlled DPT_Control_Dimming	Low
10	OUTPUT A	Relative dimming 3	4 bit	C - - T - 3 bit controlled DPT_Control_Dimming	Low
8	OUTPUT A	Value 1	1 Byte	C - - T - 8 bit unsigned value DPT_Value_1_Ucount	Low
9	OUTPUT A	Value 2	1 Byte	C - - T - 8 bit unsigned value DPT_Value_1_Ucount	Low
10	OUTPUT A	Value 3	1 Byte	C - - T - 8 bit unsigned value DPT_Value_1_Ucount	Low

No.	Function	Communication object name	Data type	Attributes
4	Delay time,Check in	Manage A	2 byte	C, R, W
The detection time of the object in the hotel mode state to check the status of the checked room				
5	Delay time,Check out	Manage A	2 byte	C, R, W
The detection time of the checked out room status of the object in the hotel mode state				
6	Reset in hotel A	INPUT A	1 bit	C, W
This object is displayed under the Hotel parameter. When the parameter "Reset Obj trig by" selects the value of "By any value" or "By target value" to be sent to the bus, the room status is reset. When "By any value" is selected, the communication object is selected. INPUT A input 00/01 value can reset the room status. When "By target value" is selected, the communication object INPUT A can only input 00 or only input 01 value to reset the room status.				
7	Disable radar detection A	Manage A	1 bit	C, R, W
The object is in stop radar detection, the object parameters are disable and enable, select disable to stop radar detection, select enable to enable radar detection				
8/9/10	Switch 1/2/3	OUTPUT A	1 bit	C, T
The object's 1-bit value is detected when the room status is detected in the hotel mode check-in/check-out state. You can select the value of Send value or the value of Send nothing. When Send value is selected, it will be sent when someone in the room is detected. On" or "off"; "off" or "on" when no one is present (generally someone chooses a different value from no one, some people "on" no one "off")				
8/9/10	Relative dimming 1/2/3	OUTPUT A	4 bit	C, T
The value of the 4 bit that is sent when the object is detected in the hotel mode check-in/check-out state, and the specified 4-bit value is set when it detects someone or no one in the room.				
8/9/10	Value 1/2/3	OUTPUT A	1 byte	C, T

BSMART

The value of 1 byte issued by the object when detecting the state of the room in the hotel mode check-in/check-out state. When a person or no one in the room is detected, the specified 1-byte value is set.				
11	Control A	Check In A	1 bit	C, W
If the object is enabled to detect the status of the checked-in room, when the parameter "Check in obj trig value" selects "trig by 0", the object is enabled to detect the checked-in room status when sending 00 to the bus; when the parameter "Check in obj Trig value" When "trig by 1" is selected, the object is sent to the bus to enable 01 to check the status of the checked-in room; when the parameter "Check in obj trig value" selects "trig by 0/1", the object sends 00/01 to the bus. Both enable detection of the status of the checked-in room.				
12	Control A	Check Out A	1 bit	C, W
If the object is enabled to detect the status of the registered exit room, when the parameter "Check out obj trig value" selects "trig by 0", the object enables the detection of the registered exit room state when the object sends 00 to the bus; when the parameter "Check out obj Trig value" When "trig by 1" is selected, the object is sent to the bus to enable 01 to detect the registered exit status; when the parameter "Check out obj trig value" selects "trig by 0/1", the object sends 00/01 to the bus. Both can enable the detection of the status of the registered exit room.				
14	Temply disable Pir	Disable Pir A	1 bit	C, W
When the object is temporarily stopped for infrared detection, when the communication object Disable Pir A selects "off" and is sent to the bus, the infrared detection function is temporarily disabled. When the communication object Disable Pir A selects "on" to be sent to the bus, it is enabled. Temporarily stop infrared detection. (The time to temporarily stop the test is set by "Temply disable PIR time after OBJ trig[1-255/UNIT:s]")				
15	Forced disable Pir	Disable Pir A	1 bit	C, W
This object is displayed when "Forced disable" selects "Activated", indicating whether the infrared detection is forcibly disabled. Object parameters disable and enable, select disable to disable infrared detection, select enable to enable infrared detection				

3.2.5 Lux function communication object

42	lux source	Lux source select		1 bit	C R W - -	1 bit DPT_Bool
43	Manage	Radar sensitivity	1/5/14	1 Byte	C R W - -	8 bit unsigned value DPT_Scaling
44	Sensor	Lux value,Unsigned		2 Byte	C R - T -	
45	Exit illuminance Input	Exit Lux input,Unsigned		2 Byte	C - W - -	
46	Output A,Lux function	Output switch,OBJ. 1		1 bit	C - - T -	1 bit DPT_Switch
47	Output A,Lux function	Output relative dimming,OBJ.2		4 bit	C - - T -	3 bit controlled DPT_Control_Di...
48	Output A,Lux function	Output value,OBJ.3		1 Byte	C - - T -	8 bit unsigned value DPT_Value,...
49	Output B,Lux function	Output switch,OBJ. 1		1 bit	C - - T -	1 bit DPT_Switch
50	Output B,Lux function	Output relative dimming,OBJ.2		4 bit	C - - T -	3 bit controlled DPT_Control_Di...
51	Output B,Lux function	Output value,OBJ.3		1 Byte	C - - T -	8 bit unsigned value DPT_Value,...
52	Output C,Lux function	Output switch,OBJ. 1		1 bit	C - - T -	1 bit DPT_Switch
53	Output C,Lux function	Output relative dimming,OBJ.2		4 bit	C - - T -	3 bit controlled DPT_Control_Di...
54	Output C,Lux function	Output value,OBJ.3		1 Byte	C - - T -	8 bit unsigned value DPT_Value,...
55	Manage	Security active		1 bit	C R W - -	1 bit DPT_Enable
56	Security report	Security report		1 bit	C - - T -	1 bit DPT_Bool
57	Security report trig	Security report trig		1 bit	C - W - -	
58	Threshold Lux	Lux Threshold set,normal		2 Byte	C - W - -	

No.	Function	Communication object name	Data type	Attributes
42	Lux source select	Lux source	1 bit	C, R, W
The object is a choice of light source, with two parameters "Internal" for light originating from the inside; "External" for light originating from the outside. When the bus receives a message with a logical value of 00, it selects the internal source; when it receives a message with a logical value of 01, it selects the external source.				
44	Lux value ,Unsigned	Sensor	2 byte	C, R, T
The object is the value of the illuminance, and its attribute "T" indicates that the brightness value can be output. <i>(Note: In the case of general brightness, whether it is "Unsigned" data type or "Float" data type, the cutting value setting range is around 0...1024)</i>				
45	Exit Lux input,Unsigned	Eixt illuminance Input	2 byte	C, W
This object indicates that the device's brightness value is from an external input.				
46	Output switch,OBJ. 1	Output A, Lux function	1 bit	C, T
This object represents the output value corresponding to the data type with a value of 1 bit, and the value must be output within the range of the brightness range set by it.				
47	Output relative dimming,OBJ. 2	Output A, Lux function	4 bit	C, T
This object represents the output value corresponding to the data type of 4 bit, and the value must be output within the range of the brightness range set by it.				
48	Output value,OBJ. 3	Output A, Lux function	1 byte	C, T
This object represents the output value corresponding to the data type with a value				

BSMART

of 1 byte. The value must be output within the range of the brightness range it is set to.				
49	Output switch, OBJ. 1	Output function	B, Lux 1 bit	C, T
The object represents the output value corresponding to the data type with the value B of 1 bit, and the value must be output within the range of the brightness range set by it.				
50	Output relative dimming, OBJ. 2	Output function	B, Lux 4 bit	C, T
This object represents the output value corresponding to the data type of 4 bit, and the value must be output within the range of the brightness range set by it.				
51	Output value, OBJ. 3	Output function	B, Lux 1 byte	C, T
This object represents the output value corresponding to the data type with a value of 1 byte, and the value must be output within the range of the brightness cut set.				
52	Output switch, OBJ. 1	Output function	C, Lux 1 bit	C, T
This object represents the output value corresponding to the data type with the cut value C being 1 bit, and the value must be output within the range of the brightness cut value set.				
53	Output relative dimming, OBJ. 2	Output function	C, Lux 4 bit	C, T
This object represents the output value corresponding to the 4 bit data type of the threshold value C, and the value must be output within the brightness range of its setting.				
54	Output value, OBJ. 3	Output function	C, Lux 1 byte	C, T
This object represents the output value corresponding to the data type with a threshold C of 1 byte, and the value must be output within the range of the brightness cut set.				
58	Lux Threshold set, normal	Threshold Lux	2 byte	C, W
This object is the setting of the light cut value, which is valid when "Yes" is selected for the "The motion coordinate with illuminance" parameter under "Lux function". According to the attribute W, the value of "Threshold Lux is" under the Lux function can be changed through the bus.				