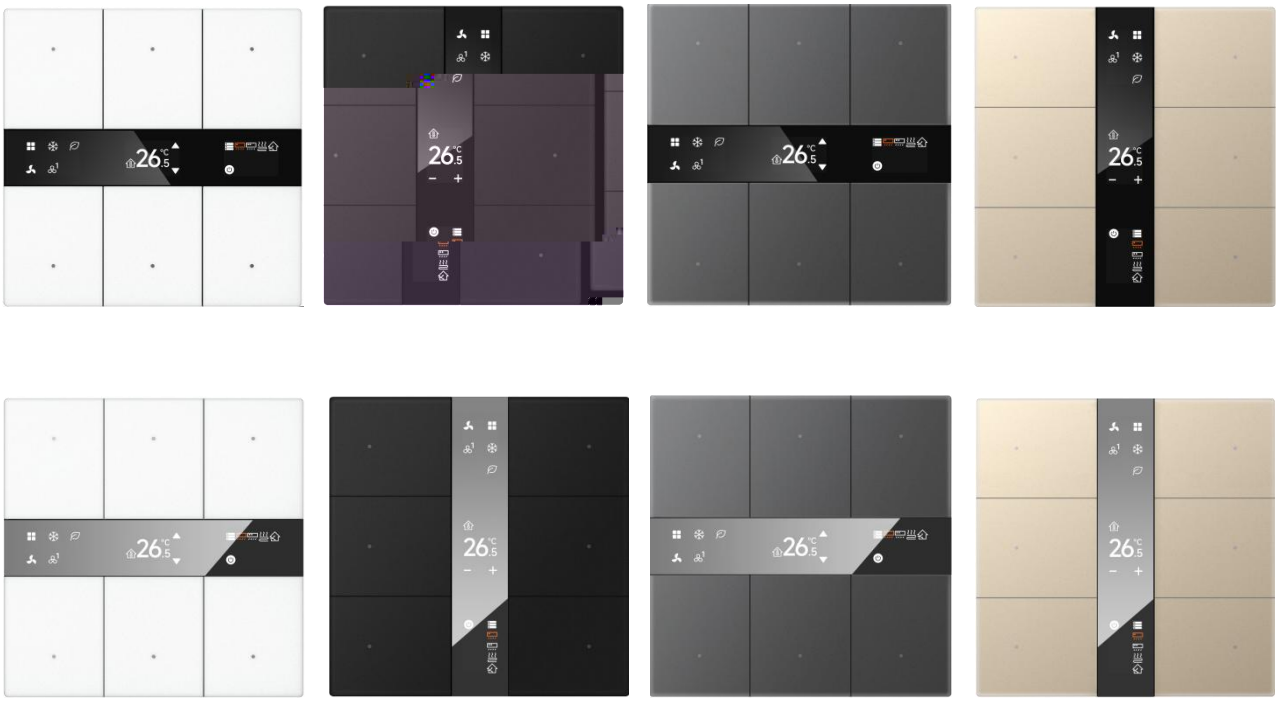
K-BUS



注意事项

落在地上或使之受到强力冲击；

2、不要将设备摔

或具挥发性的试剂擦拭设备；

3、不要使用湿布

S KNX KNX

!

k

S KNX FCU VRF ! ! !

/ / /

k

k

! ! !

/ ! ! RGB ! ! k

S KNX KNX k .knxprod

ETS ETS5.7 k

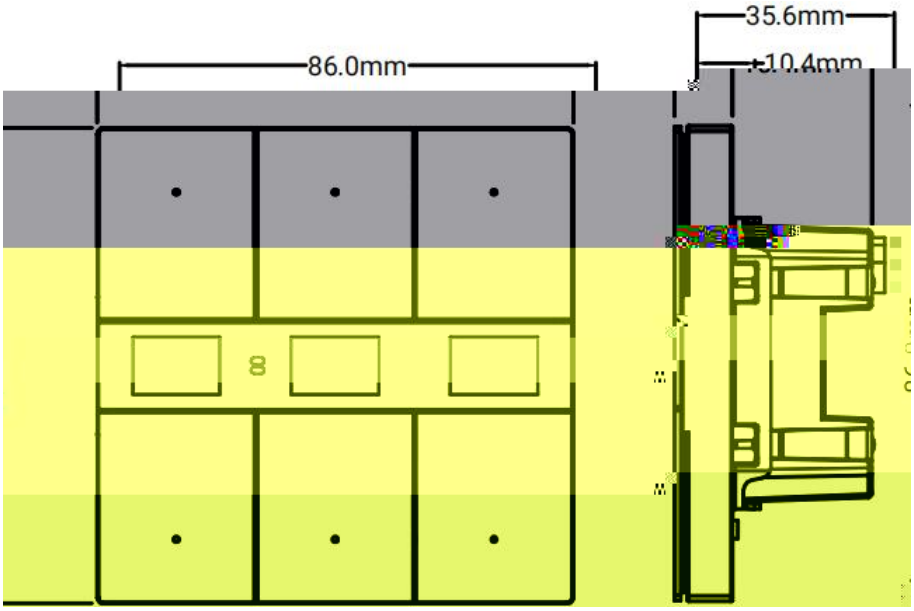
- 0.85 128x80
- ETS
-
- ! RGB
- /
- !
- 8 ! !

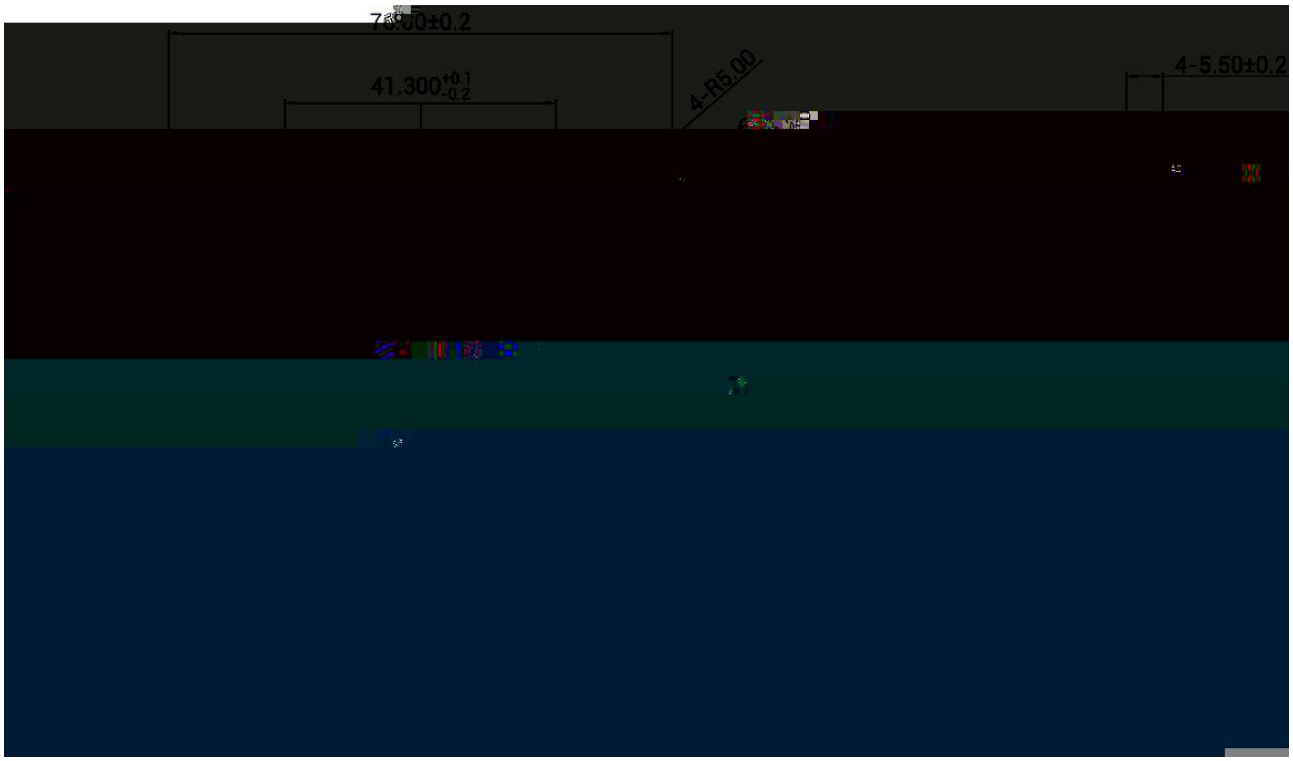
!

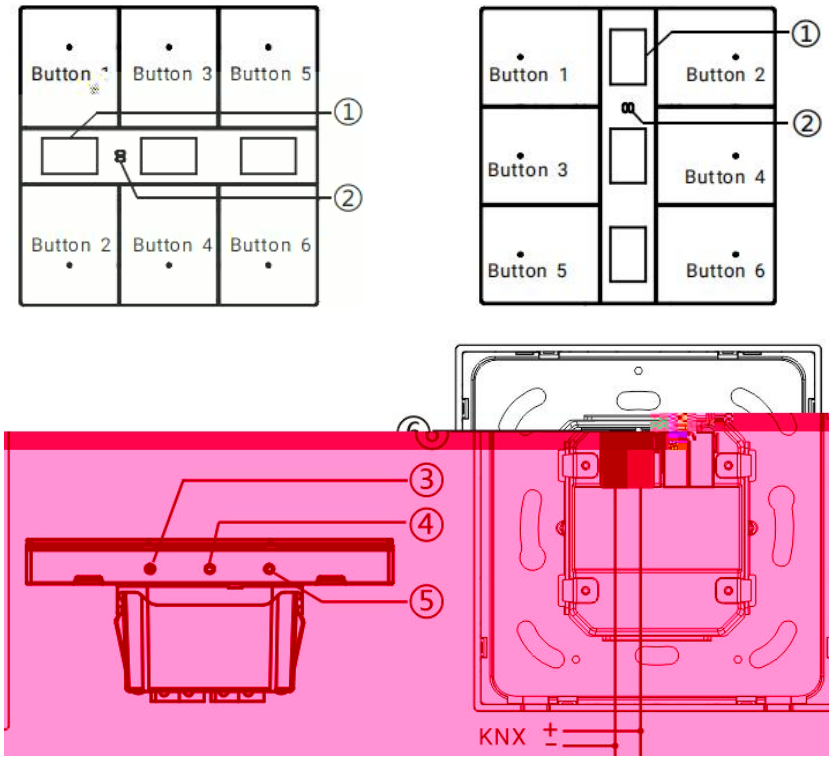
- 8 8
- FCU VRF ! 5
- / / /
- KNX

	21-30V DC, KNX
	<26mA/24V <20mA/30V <0.63W
KNX	(/)
LED	
	– 5 °C ... 45 °C
	– 25 °C ... 55 °C – 25 °C ... 70 °C
	<93%
86 × 86 × 35.6mm	
0.17kg	

80 86


35.6mm
10.4mm
86.0mm


41.300
4-R5.00
4-5.50±0.2

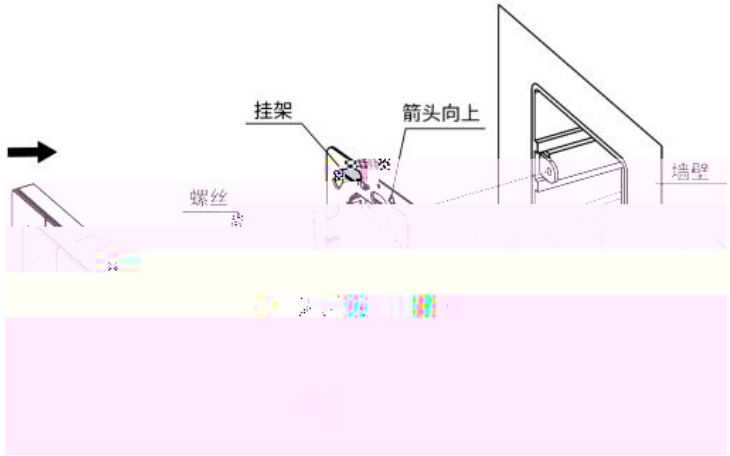


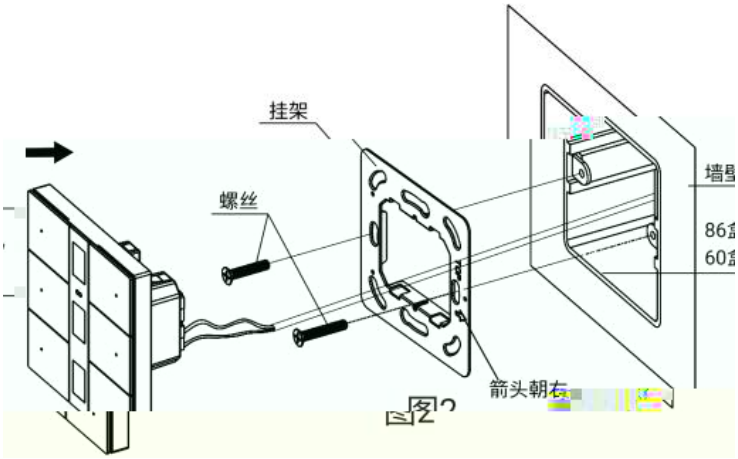
F ϟ

F ϑ

ϒ LED ϑ KNX

k


挂架
箭头向上
螺丝
墙壁


挂架
螺丝
箭头朝右

! KNX ! k

! ! / ! RGB k

k

k

FCU ! / ! ! ! !

! ! 2 PI k

VRF VRF KNX VRF !

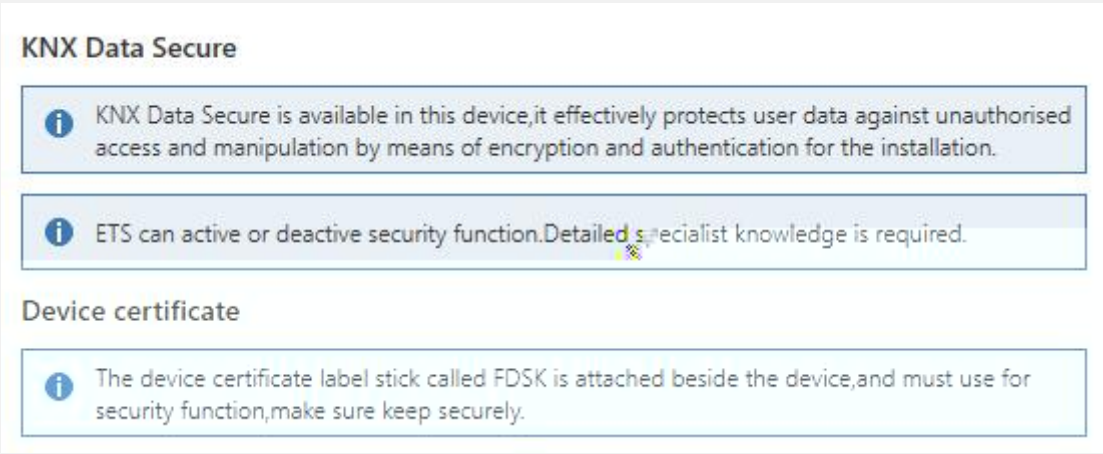
! ! !

PI k

k

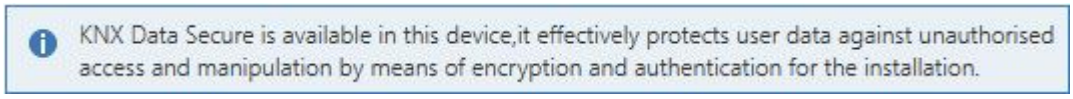
S KNX KNX KNX k

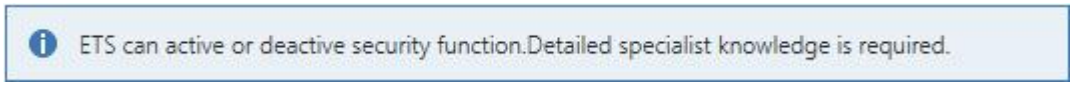
k



5.1 (1) “KNX Secure”

KNX KNX ETS 5.1(1)





KNX

k ETS k k

FDSK k

ETS

❖ KNX k

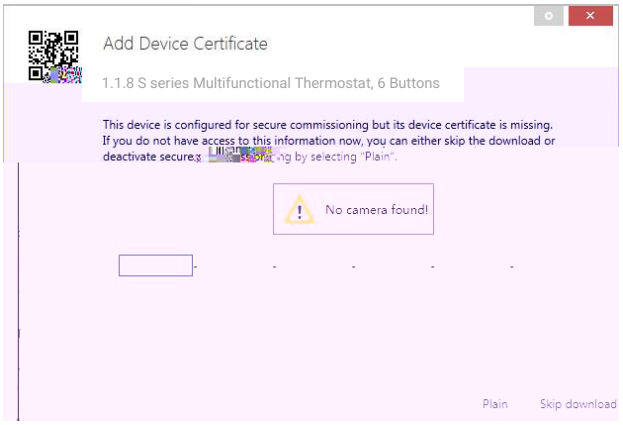
k

❖ KNX k FDSK =

ETS

✧ ETS 5.1 (2) k

QR k

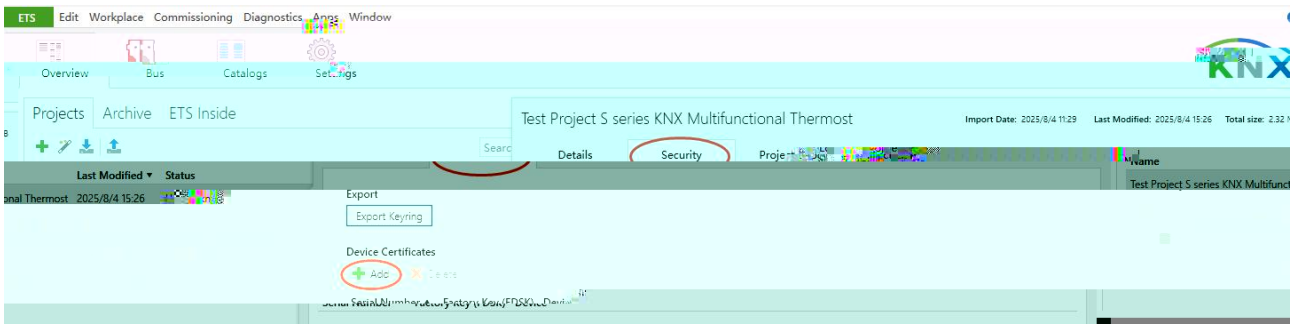


5.1(2) Add Device Certificate

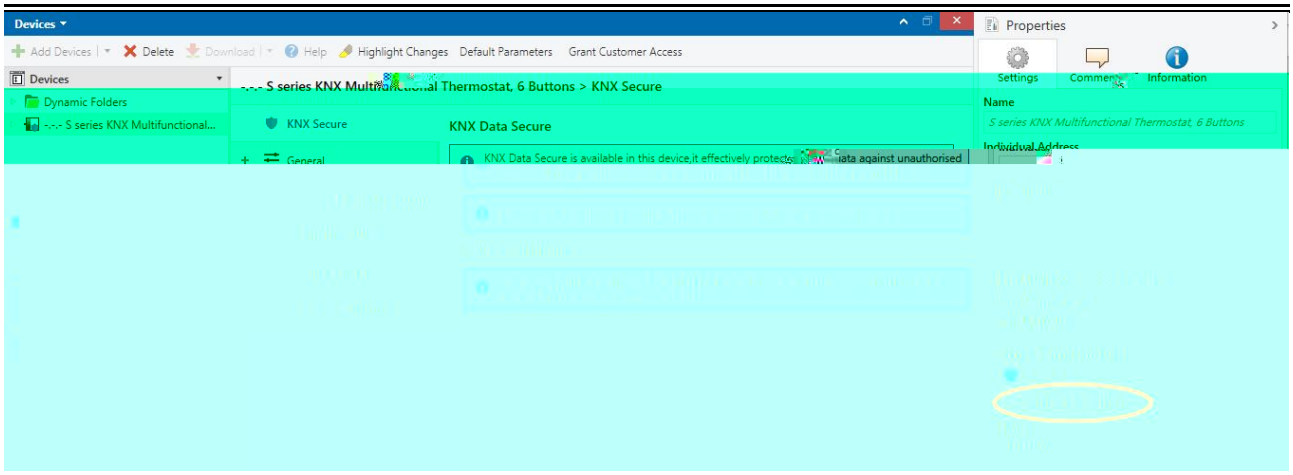
✧ ETS k

“Security” 5.1(3) k

“Add Device Certificate” 5.1(4) k



5.1(3) Add Device Certificate



5.1(4) Add Device Certificate

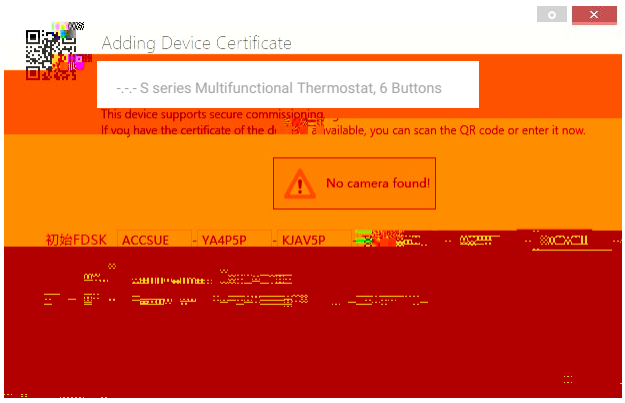
✧ FDSK k

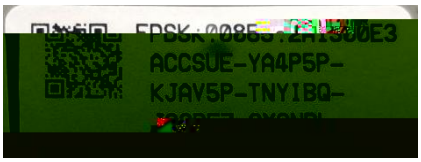
k

FDSK FDSK ETS 5.1(5) k

ETS

FDSK k



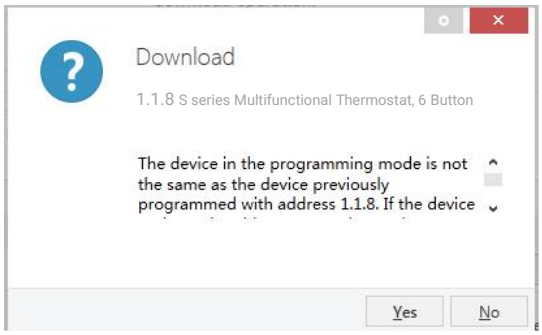


5.1(5)

k

5.1(6) “Yes” “Add Device Certificate” FDSK

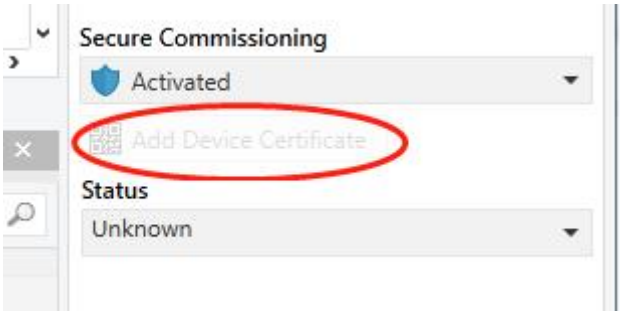
5.1(6) k



5.1(6)

k

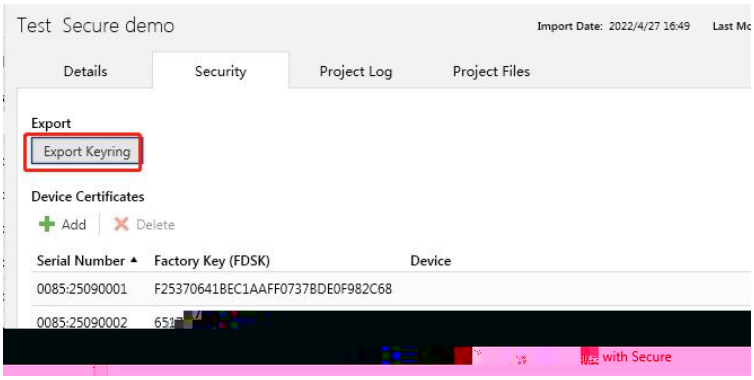
“Add Device Certificate” k



5.1(7)

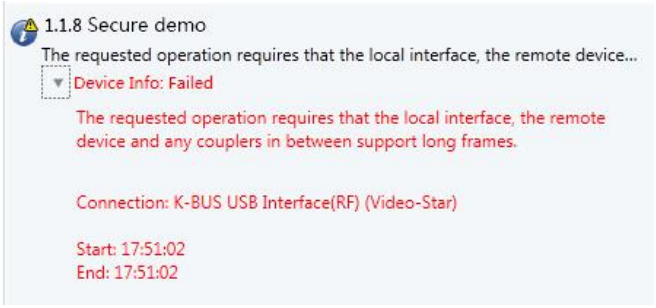
ETS

5.1(8) .knxkeys k

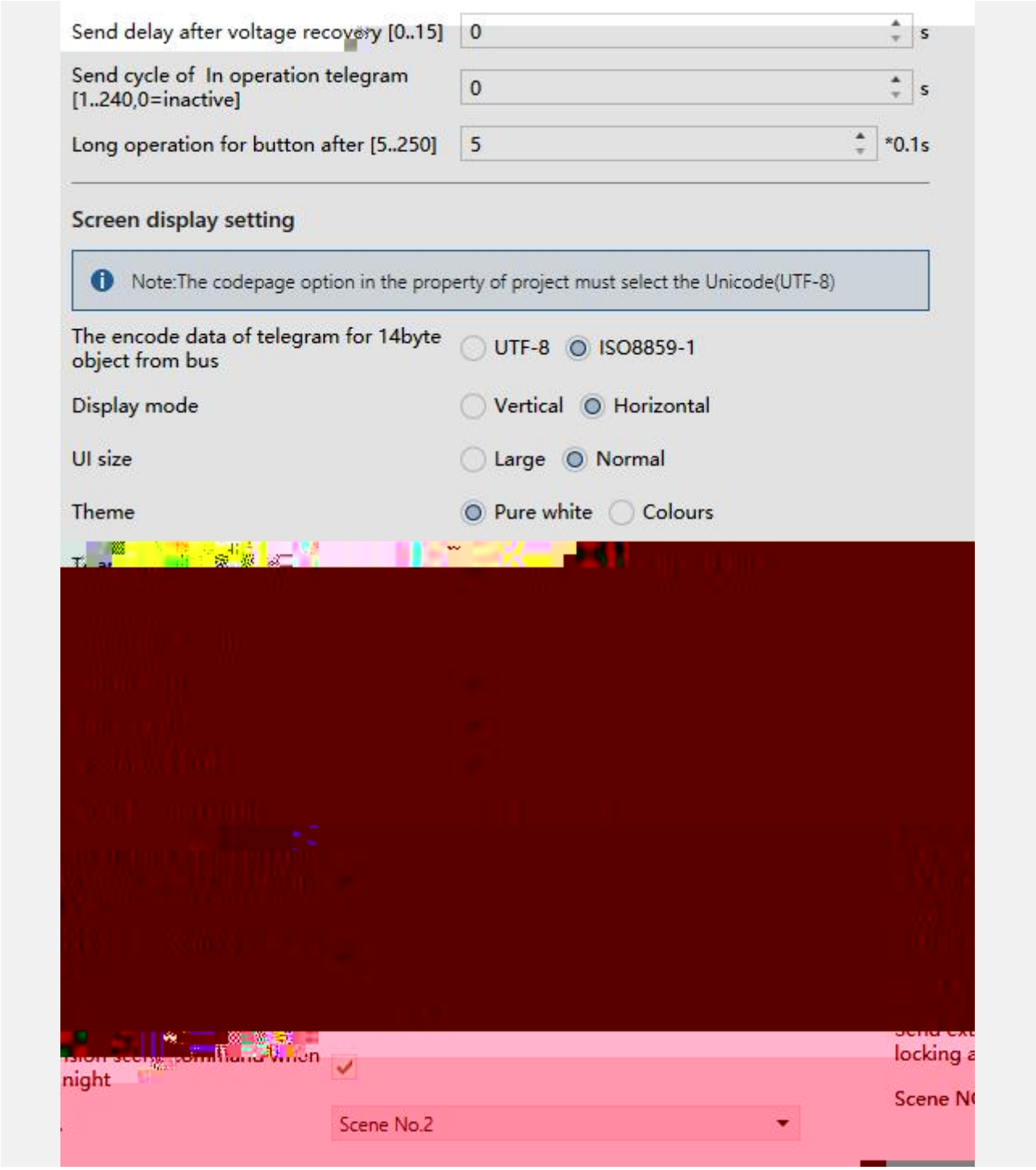

Test Secure demo
Import Date: 2022/4/27 16:49
Last Mo
Details
Security
Project Log
Project Files
Export
Export Keyring
Device Certificates
Add
Delete
Serial Number
Factory Key (FDSK)
Device
0085:25090001
F25370641BEC1AAFF0737BDE0F982C68
0085:25090002
with Secure

5.1(8)

k


1.1.8 Secure demo
The requested operation requires that the local interface, the remote device...
Device Info: Failed
The requested operation requires that the local interface, the remote device and any couplers in between support long frames.
Connection: K-BUS USB Interface(RF) (Video-Star)
Start: 17:51:02
End: 17:51:02

5.1(9)



5.2.1 “General setting”

k

k

k “0” “In

operation” k “0” “In operation” “1”

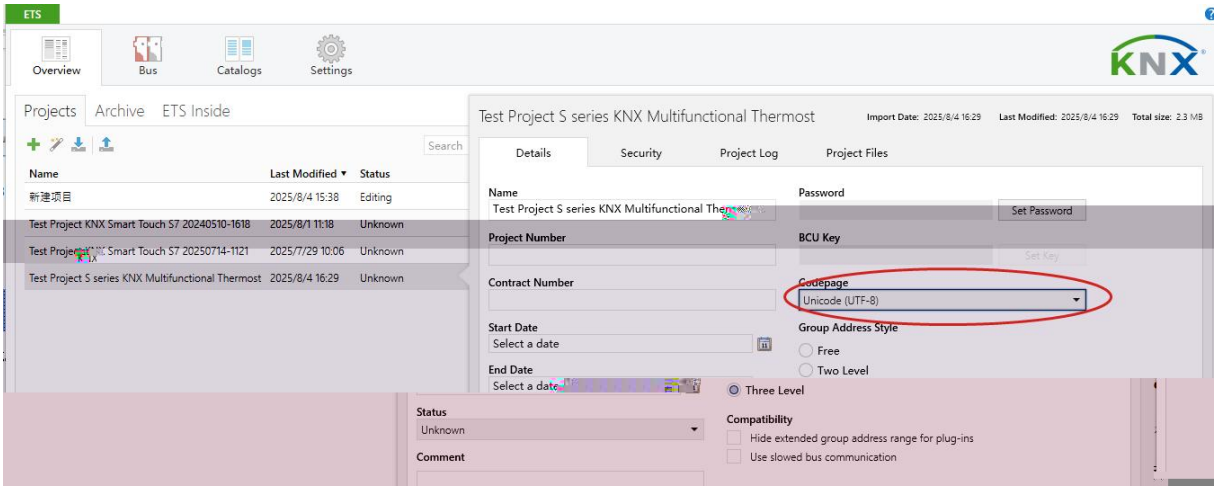
k

k

k

k

UTF-8



14byte k

k

k

k

k

& '

& '

k 5.2.3

k 5.2.4

k 5.2.6

k

k

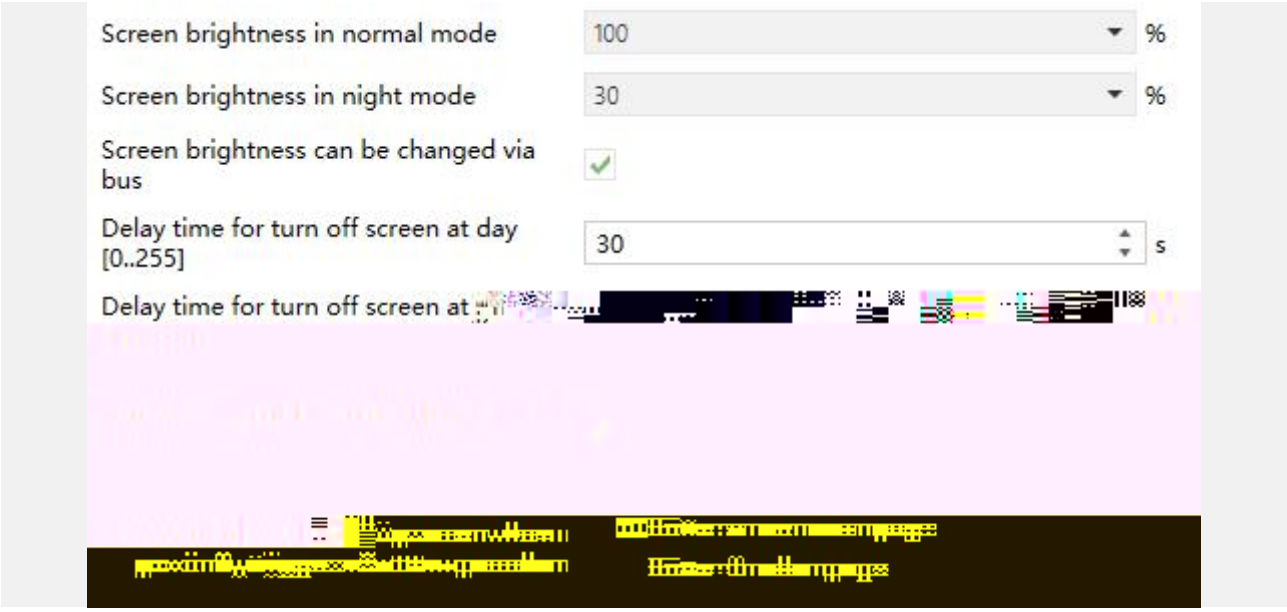
k

k

/ k

k

k 0~63 k



5.2.2 “Brightness setting”

(/) k

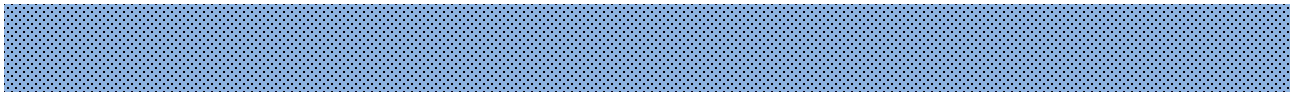
“Screen brightness” k

k (/) k

“Screen brightness” k

“Unchanged”

k

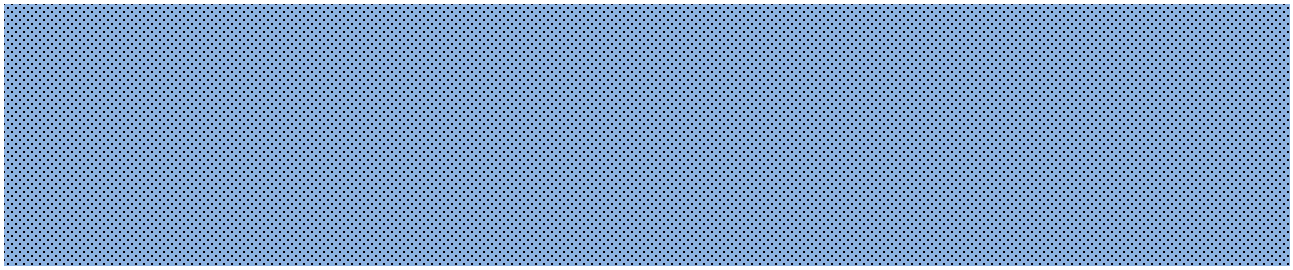


k

“Screen brightness” k

k k

k

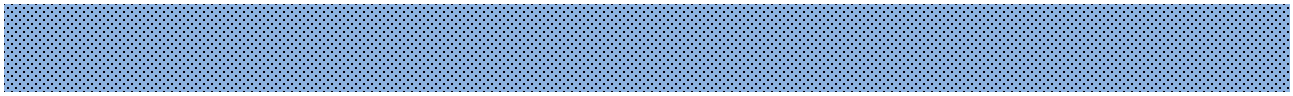


k

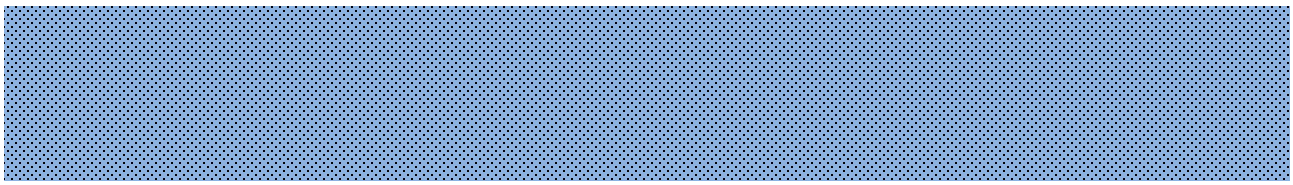
0 1 “Screen on/off” / k

Note: It is only recommend that this option is used for demonstration purpose,screen may be damaged when permanent on for long time

k



k



k / k

k

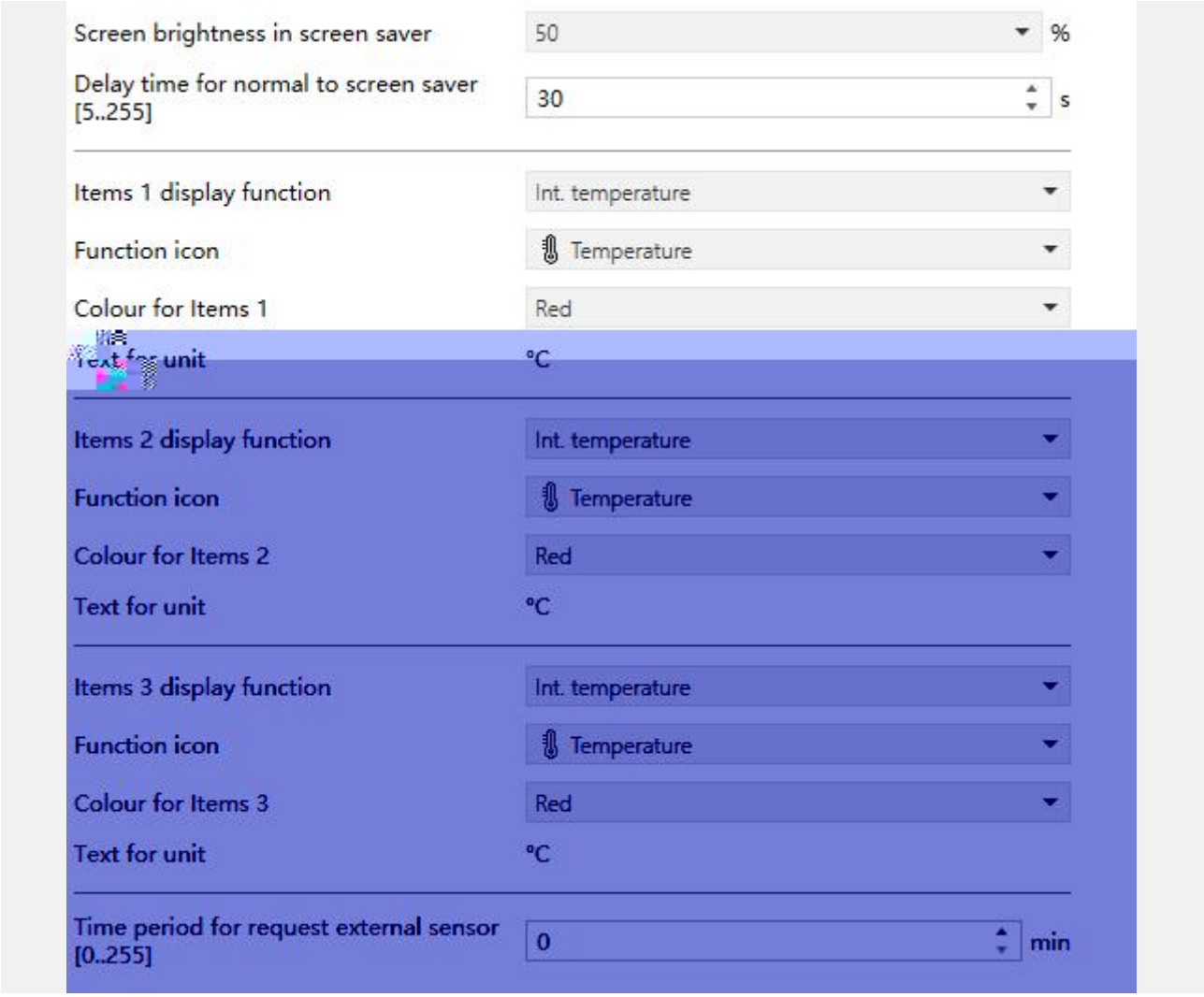
k 0~63 k

0 k k

k 0 k

k

“Enter screen saver page” k



5.2.3 “Screen saver setting”

k

k

3 k

k

k

k

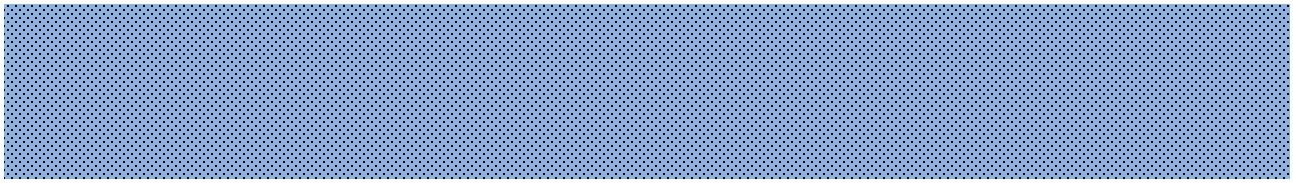
k

k

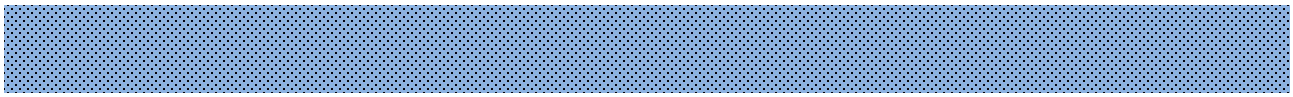
k

7 k

k

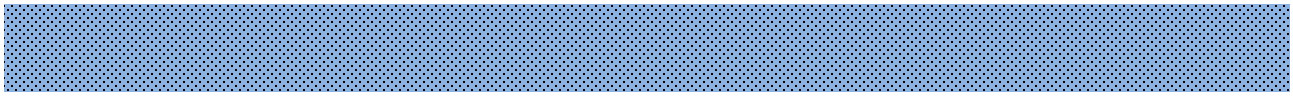


“1bit” k 0 ! 1 k



k “ ” -C/ % “1byte/2byte/4byte”

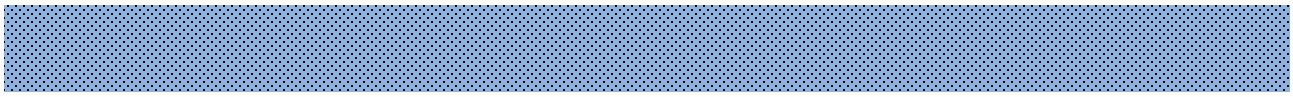
k



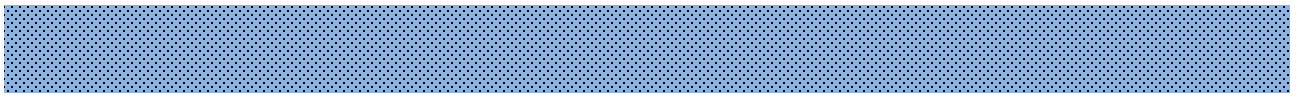
“2byte float value” “4byte float value” k k

!

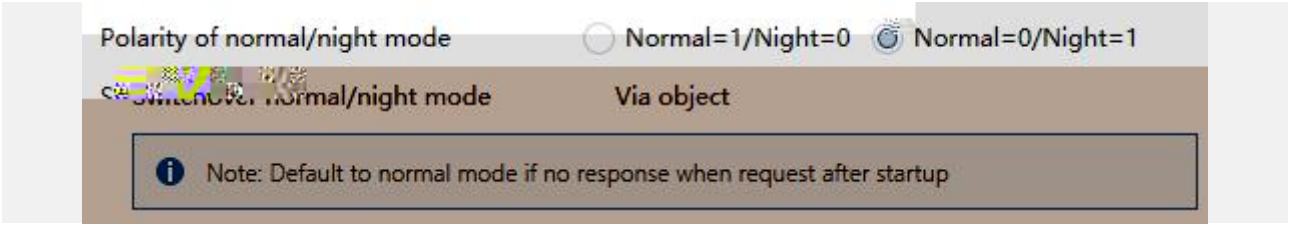
k



“Fixed string” k k



0 k



5.2.4 “Night mode setting”

/ k

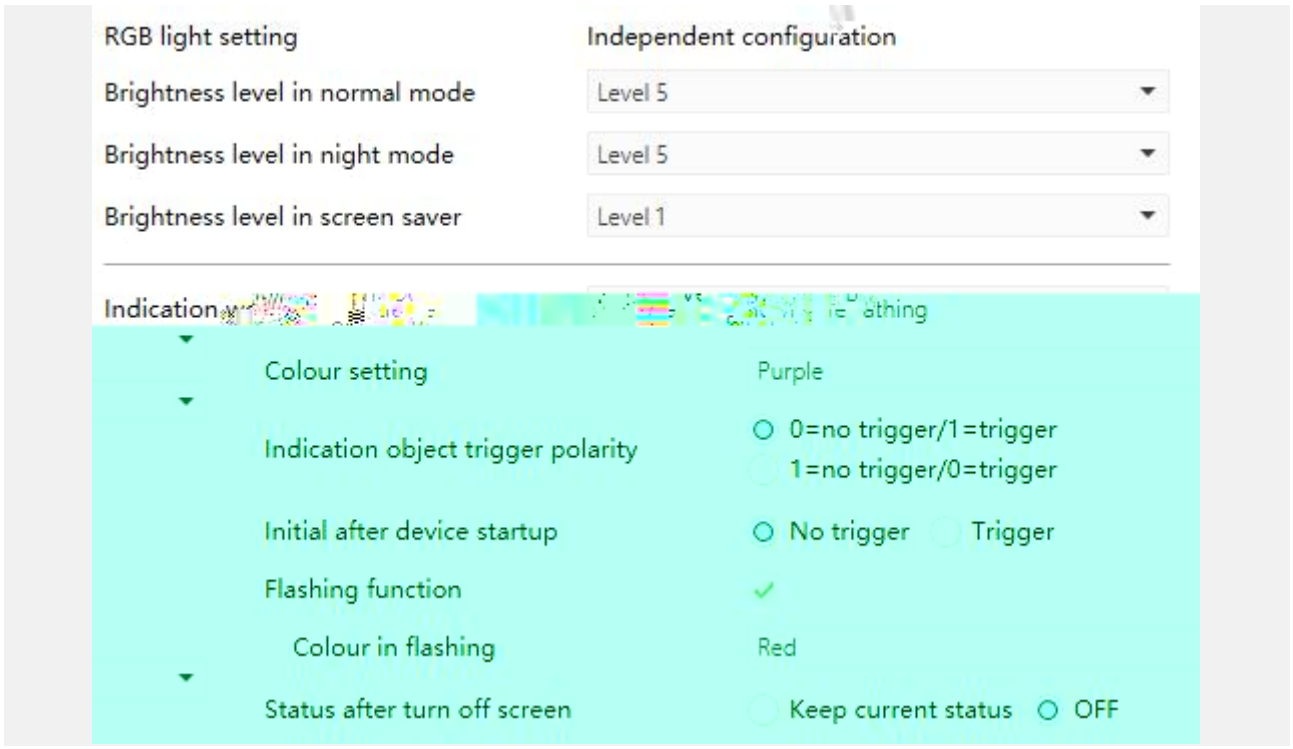
/ “Night mode” k

k

Note: Default to normal mode if no response when request after startup

k !

k



5.2.5 “RGB light setting”

RGB k k

RGB k

RGB k

RGB k

RGB k

Permanent on k

Slowly breathing 2.5s 2.5s k

Colour range cycle / / / / / / / / k

RGB “Colour range cycle” k

k

1bit k

1bit k

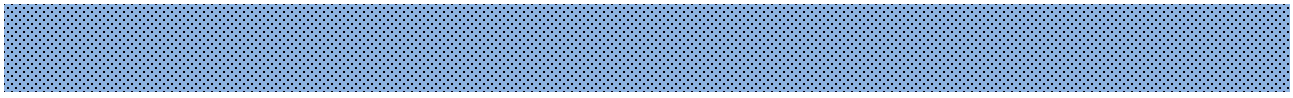
RGB “Permanent on” “Slowly breathing” k RGB

k

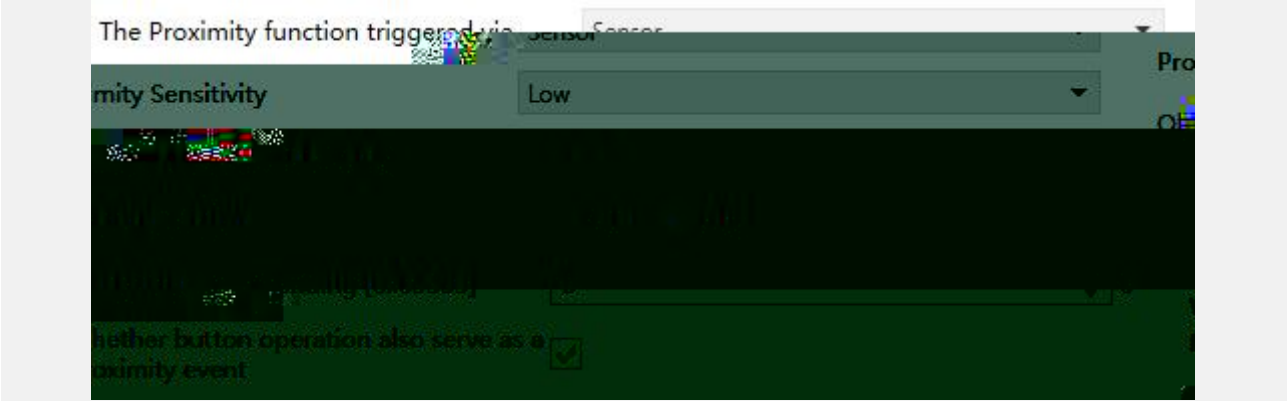
k

k RGB k

k k



RGB k



5.2.6 “Proximity setting”

k

“Sensor or Proximity object” k

k 30cm 70cm 120cm +/-10cm k

k

k

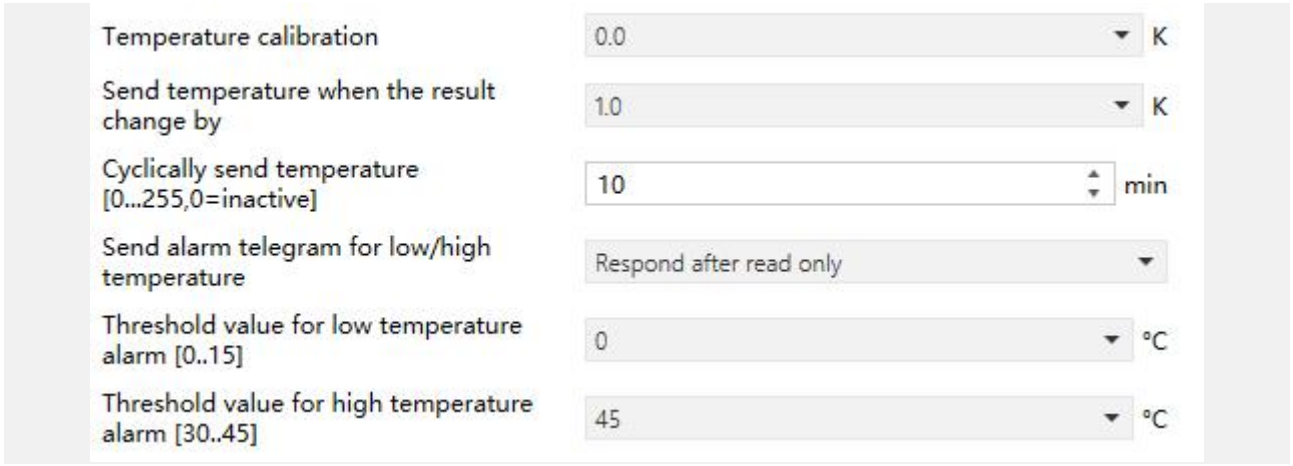
k

k

k

k

k



5.3 “Internal temperature measurement”

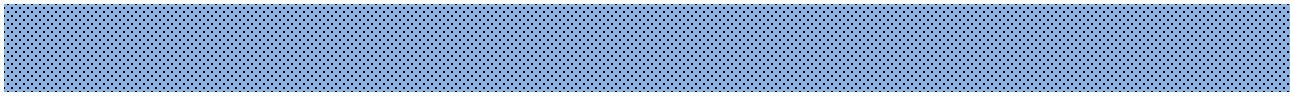
! k

k

k

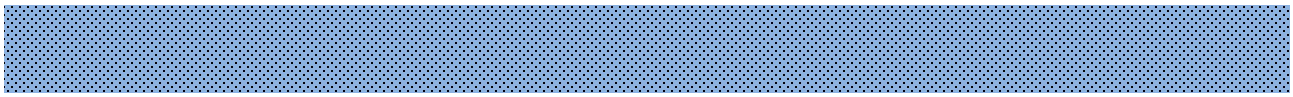
k

k Disable k



k 0 k

k



/ k

No respond k

Respond after read only

“ Low temperature alarm”/“ High temperature alarm” k

Respond after change “ Low temperature alarm”/“ High temperature alarm” k

k k

k k

® k

Function type ◉ Multifunction thermostat ○ Audio control

Room temperature control function 1 as Disable

Room temperature control function 2 as Disable

Floor heating function ☑

Interface preview

Button 1	NA	Button 2	NA
Button 3	short press to increase temperature once, long press to increase temperature continuously at 0.5s intervals	Button 4	short press to decrease temperature once, long press to decrease temperature continuously at 0.5s intervals
Button 5	if enable multiple functions, press to switchover function page	Button 6	press to switch power on/off

Ventilation function ☑

Interface preview

Button 1	short press to switch mode, long press to switch heat recovery status	Button 2	short press to switch auto status, long press to reset filter time
Button 3	short press to increase fan speed level once, long press to increase fan speed level	Button 4	short press to decrease fan speed level once, long press to decrease fan speed

5.4 “Function setting”

k

k

“FCU control” k

Button 1	Short press to switch fan speed, long press to switch auto status	Button 2	If operation mode disable, press to switch heating/cooling mode; if operation mode enable, short press to switch operation mode, long press to switch heating/cooling mode / /
Button 3	Short press to decrease temperature	Button 4	Short press to increase temperature

	once, long press to decrease temperature continuously at 0.5s intervals 0.5s		once, long press to increase temperature continuously at 0.5s intervals 0.5s
Button 5	Press to switch power on/off /	Button 6	If enable multiple functions, press to switchover function page

	switchover function page		/

“VRF control” k

Button 1	Short press to switch fan speed, long press to switch swing status	Button 2	Press to switch mode
Button 3	Short press to decrease temperature once, long press to decrease temperature continuously at 0.5s intervals 0.5s	Button 4	Short press to increase temperature once, long press to increase temperature continuously at 0.5s intervals 0.5s
Button 5	Press to switch power on/off /	Button 6	If enable multiple functions, press to switchover function page

Button 1	Press to switch mode	Button 2	Short press to switch fan speed, long press to switch swing status
Button 3	Short press to increase temperature once, long press to increase temperature continuously at 0.5s intervals 0.5s	Button 4	Short press to decrease temperature once, long press to decrease temperature continuously at 0.5s intervals 0.5s
Button 5	If enable multiple functions, press to switchover function page	Button 6	Press to switch power on/off /

k

k

Button 1	NA	Button 2	NA
Button 3	Short press to decrease temperature once, long press to decrease temperature continuously at 0.5s intervals	Button 4	Short press to increase temperature once, long press to increase temperature continuously at 0.5s intervals

	0.5s		0.5s
Button 5	Press to switch power on/off /	Button 6	If enable multiple functions, press to switchover function page

Button 1	NA	Button 2	NA
Button 3	Short press to increase temperature once, long press to increase temperature continuously at 0.5s intervals 0.5s	Button 4	Short press to decrease temperature once, long press to decrease temperature continuously at 0.5s intervals 0.5s
Button 5	If enable multiple functions, press to switchover function page	Button 6	Press to switch power on/off /

k

k

Button 1	Short press to switch auto status, long press to reset filter time	Button 2	Short press to switch mode, long press to switch heat recovery status
Button 3	Short press to decrease fan speed level once, Long press to decrease fan speed level continuously at 0.5s intervals 0.5s	Button 4	Short press to increase fan speed level once, Long press to increase fan speed level continuously at 0.5s intervals 0.5s
Button 5	Press to switch power on/off /	Button 6	If enable multiple functions, press to switchover function page

Button 1	Short press to switch mode, long press to switch heat recovery status	Button 2	Short press to switch auto status, long press to reset filter time
Button 3	Short press to increase fan speed level once, Long press to increase fan speed level continuously at 0.5s intervals	Button 4	Short press to decrease fan speed level once, Long press to decrease fan speed level continuously at 0.5s intervals

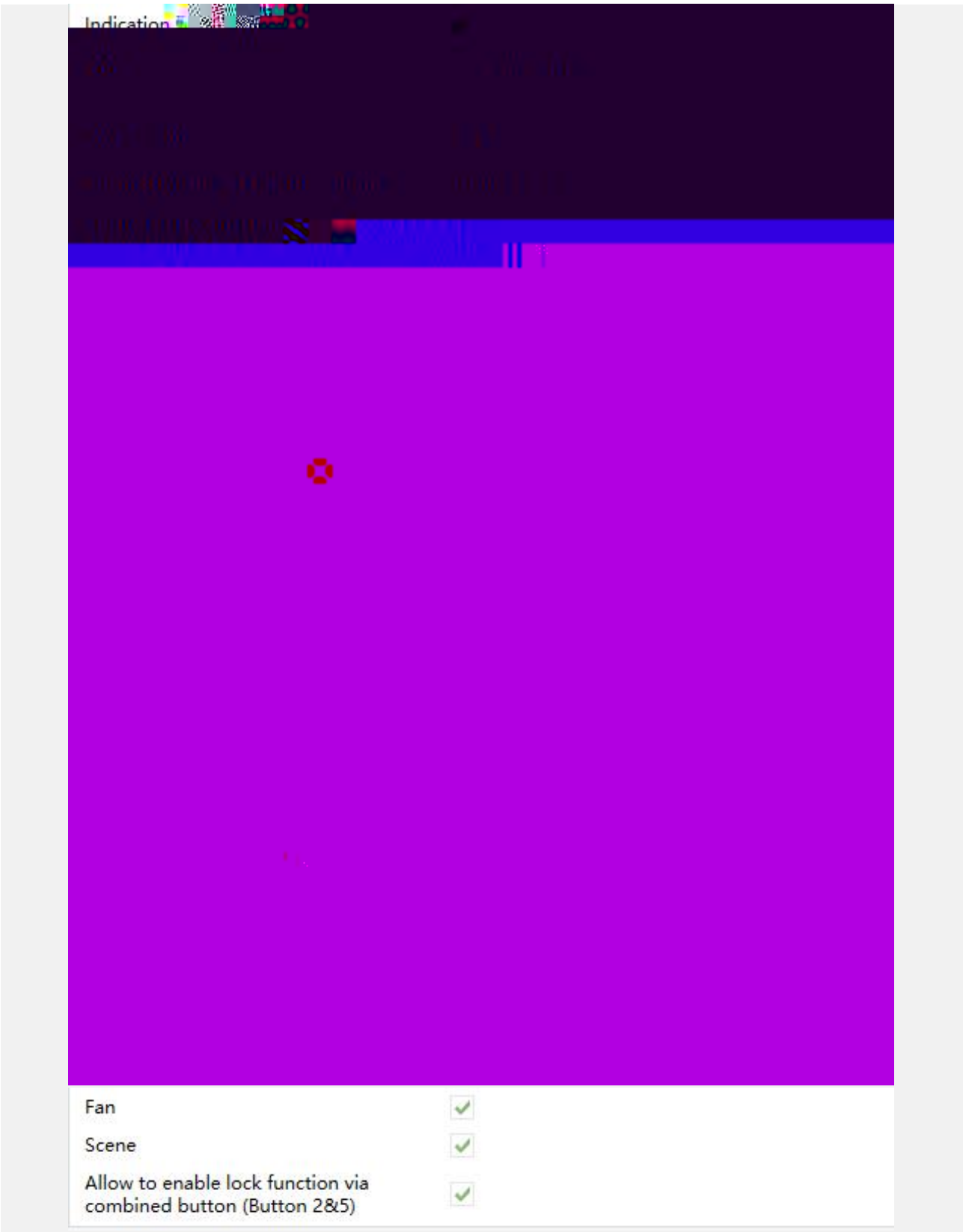
	0.5s		0.5s
Button 5	If enable multiple functions, press to switchover function page	Button 6	Press to switch power on/off /

k

Button 1	Press to switch previous track	Button 2	Short press to switch next track, long press to switch play mode
Button 3	Short press to decrease volume, Long press to decrease volume continuously at 0.5s intervals. 0.5s	Button 4	Short press to increase volume once, Long press to increase volume continuously at 0.5s intervals 0.5s
Button 5	Short press to switch power on/off /	Button 6	Short press to switch play/pause, long press to mute /

Button 1	Press to switch previous track	Button 2	Short press to switch next track, long press to switch play mode
Button 3	Short press to increase volume once, Long press to increase volume continuously at 0.5s intervals 0.5s	Button 4	Short press to decrease volume, Long press to decrease volume continuously at 0.5s intervals. 0.5s
Button 5	Short press to switch play/pause, long press to mute /	Button 6	Short press to switch power on/off /

k



5.4.1 “FCU setting”

FCU k

k

FCU k

Single k

Master FCU k

k

Slave FCU

k

k

“Internal temperature measurement”

5.3 k

“External sensor” “Internal and External sensor combine”

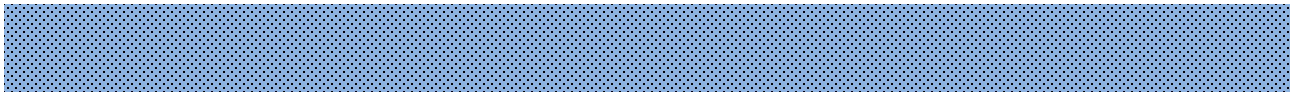
“40% Internal to 60% External” 40% 60%

= ×40% + ×60%

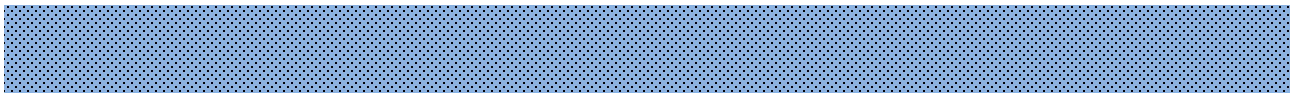
Disable

k

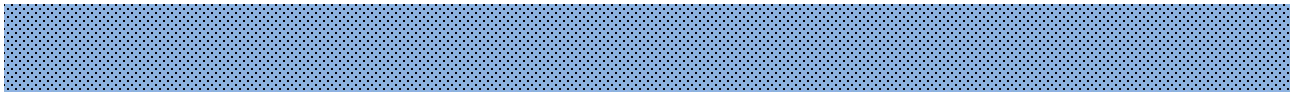
k



k



“Slave” k FCU k



“Slave” k FCU k

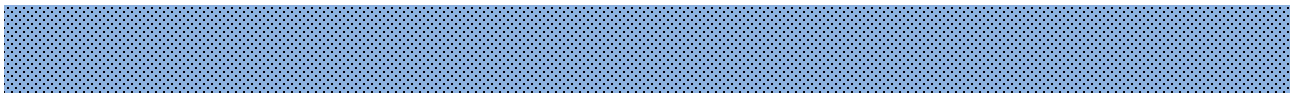
OFF k

ON FCU

k

As before voltage failure FCU

k



k

/ k

“Slave” Only via object k

“Slave” k / k

“Slave” k / k

As before voltage failure k

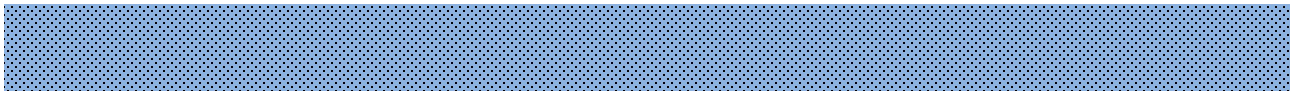
k

“Slave” k k

2 pipes system k

4 pipes system

k



k

! ! 4 1byte

k

“Slave” k FCU k

“Slave” k FCU k

“Slave” k k >0 1bit

“Extended comfort mode” k

1 1

k k

/ k

“Master” k 1bit k 1

! 0 k

k 1bit k

- -

“Slave” k k

k

- -

“Slave” k “Heating and Cooling” “Automatic changeover” k / k

+ k

- k

“Slave” k k k

- -

k

open k

! / k

k

RTC k k k

k /

k

k

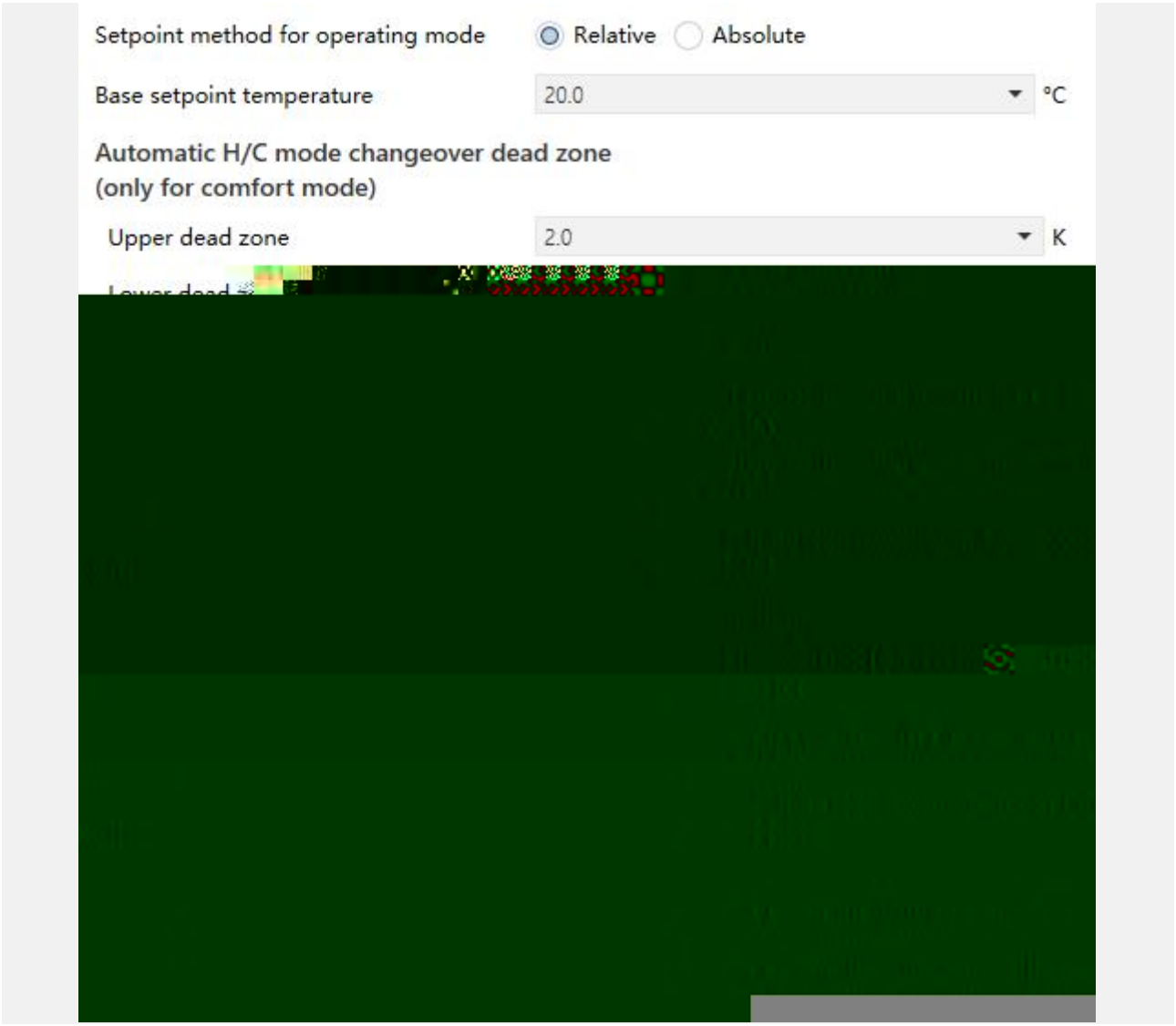
k

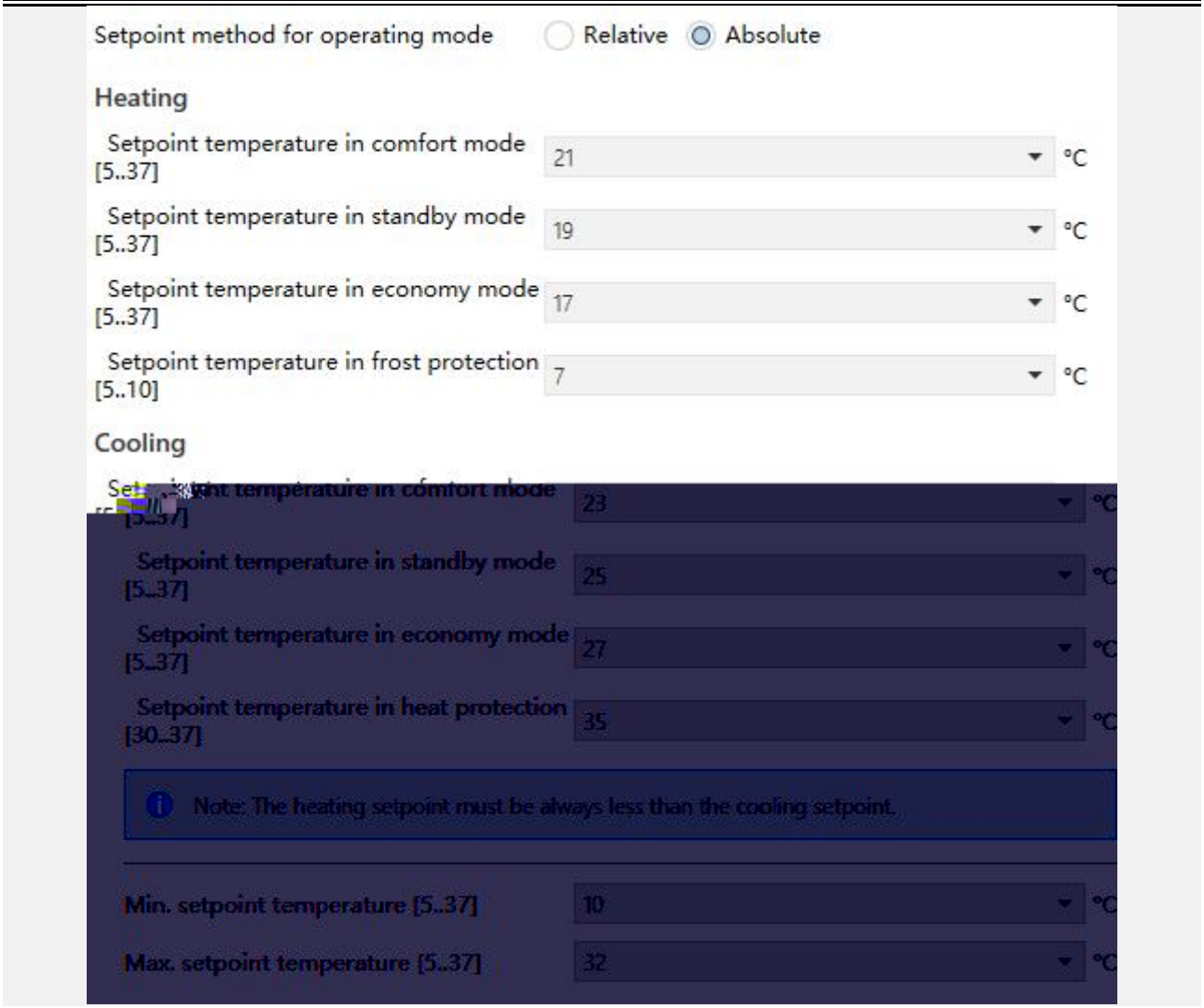
“Slave” k k !

/ k

k button2 5 /

k “long operation for button after [5..250]” k


Setpoint method for operating mode
Relative
Absolute
Base setpoint temperature
20.0
°C
Automatic H/C mode changeover dead zone
(only for comfort mode)
Upper dead zone
2.0
K



5.4.1.1 “Setpoint”

“Slave” k k

k

Relative k

Absolute k

-

k

“Base temperature setpoint, status”

k

k

“Heating and Cooling” “Automatic changeover” k

k

+ k

- k

k

Heating k

Cooling k

k

Heating k

Cooling k

-

k

k

k

k

-

-

!

k

k

k

Note: The k

k

1.

k

2. k

k

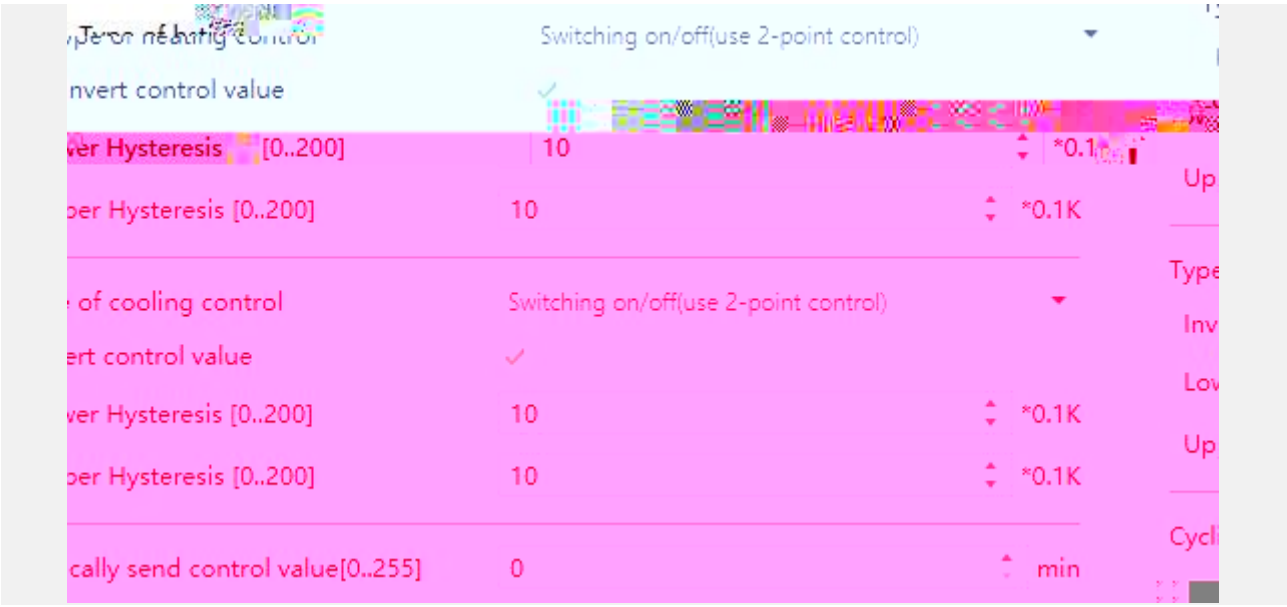
3.

k ETS

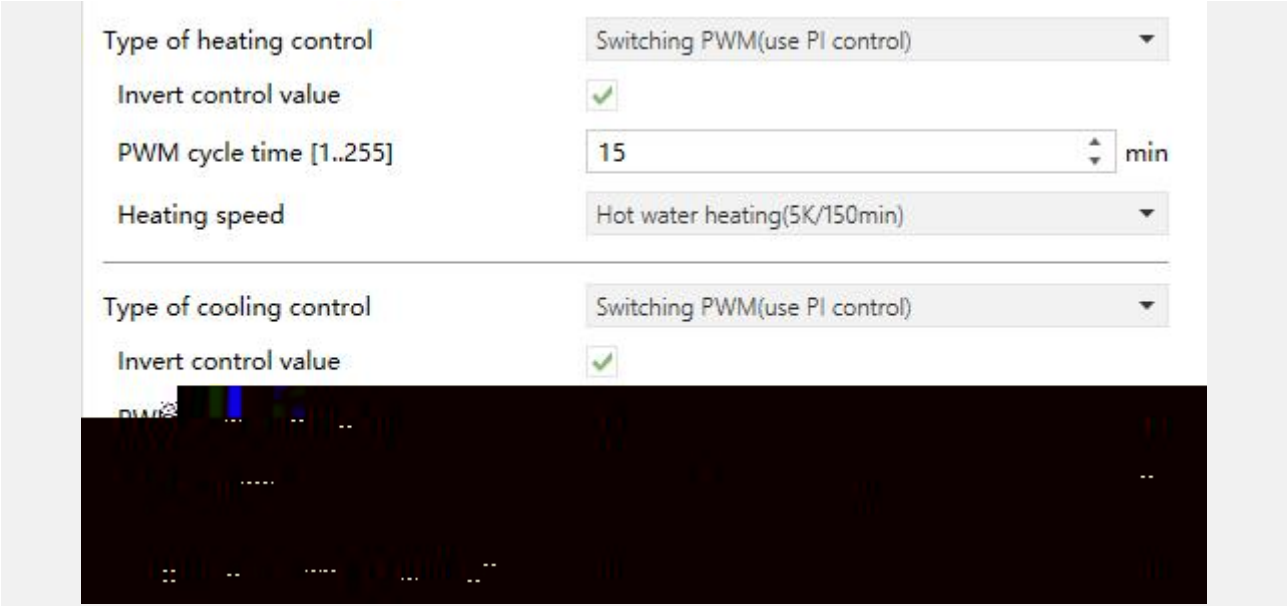
k

k

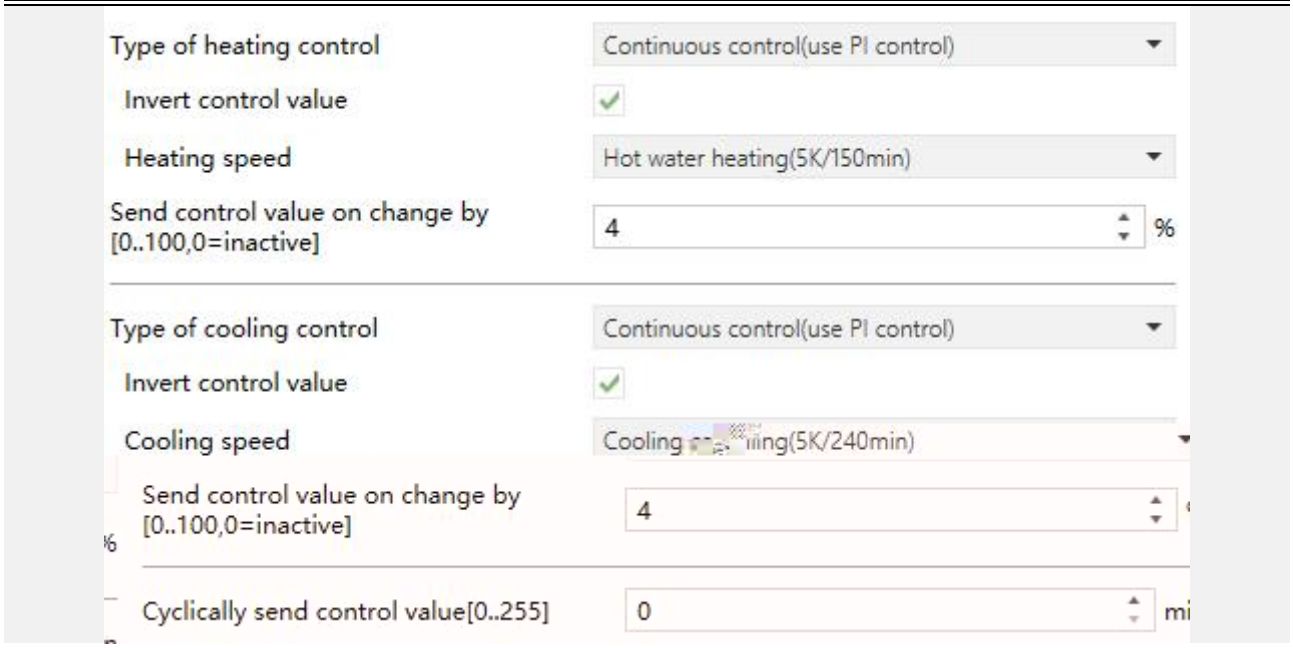
k



"Switching on/off(use 2-point control)"



"Switching PWM(use PI control)"



“Continuous control(use PI control)”

5.4.1.2(1) “Heating/Cooling control”

“Slave” k 2 4 k

/ k

k

k

FCU k

k

1K 2K 22℃ T 24℃

T 21℃ T 21~24℃ k

k

1K 2K 26℃ T 25℃

T 28℃ T 28~25℃ k

1.

2. k

5.4.1.2(2) ( )

“Switching PWM(use PI control)”

10min, 80%

8min 2min /

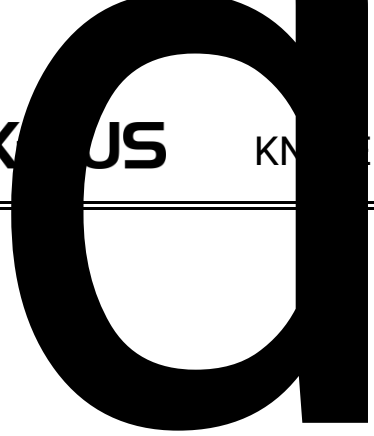
k

“Switching PWM (use PI control)” “Continuous control (use PI control)” PI

“Continuous control” PI (1byte)

“Switching PWM” PI “on/off” k

PI k k



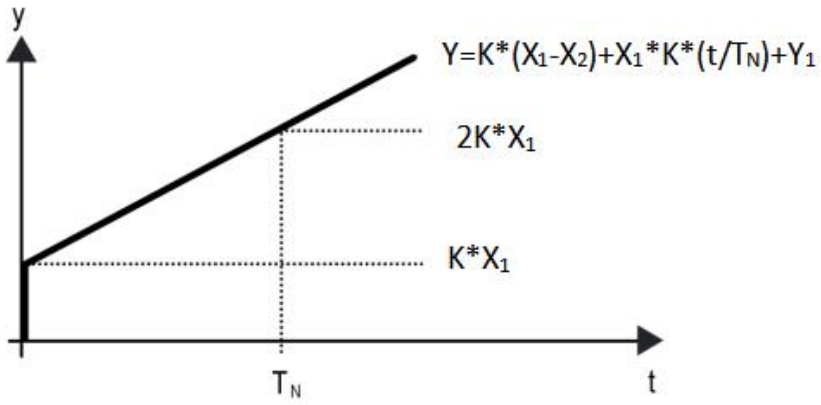
	5K	240min	PWM	15-20mIn
	4K	90min	PWM	10-15min
	4K	90min	Continuous	--

“Heating/Cooling speed” “User defined” P

I k PI

k

k 0 k



5.4.1.2(3) PI

Y

Y1

X1 =

X2 =

T_N

K

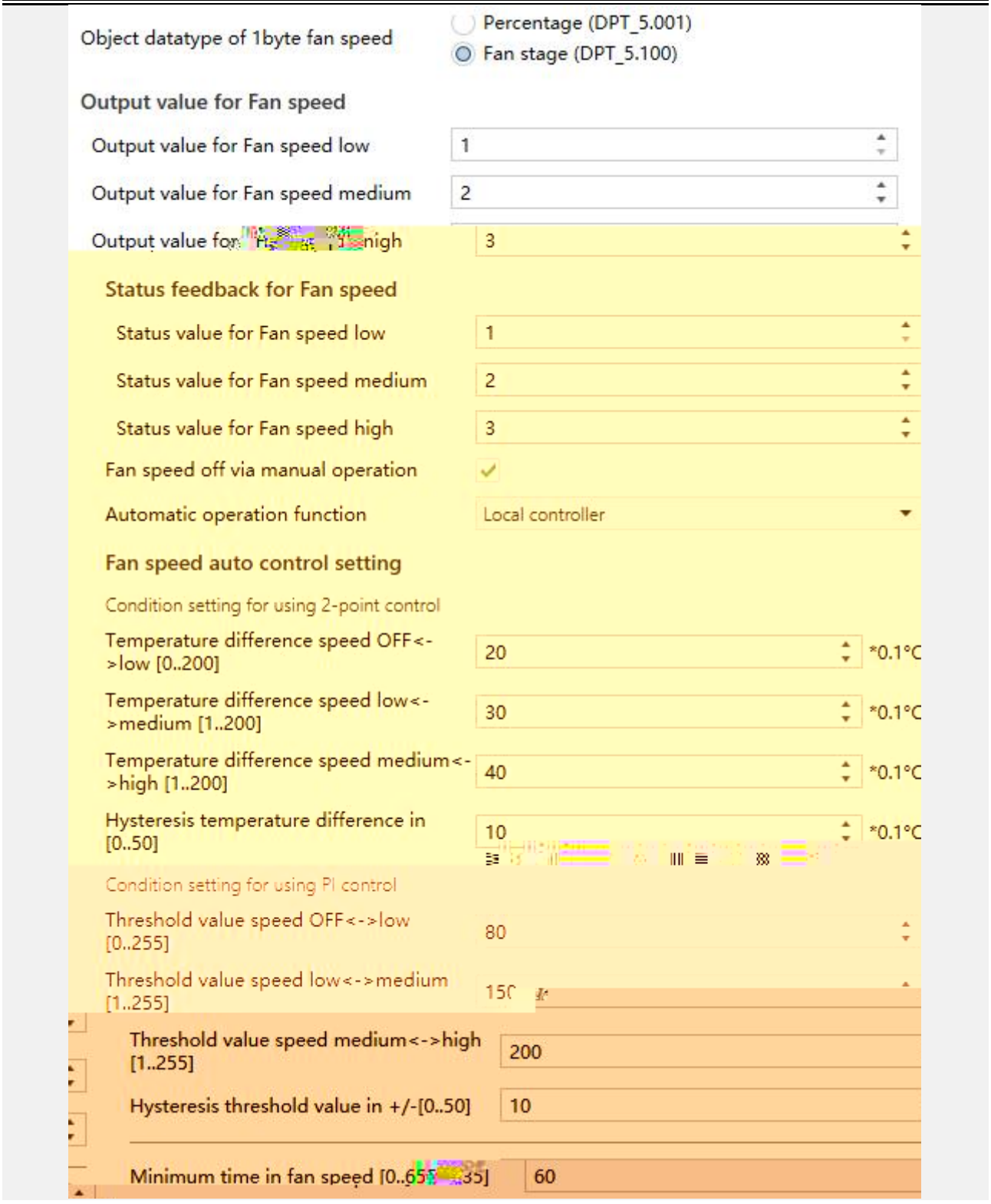
PI Y=K*(X1-X2 +X1*K*t/T_N+Y1

PI Y=K X1-X2 +Y2

K:	
K:	
T_N:	
T_N:	

k

5.4.1.3(1) “Fan_Percentage(DPT_5.001)”



5.4.1.3(2) “Fan_Fan stage(DPT_5.100)”

k

1byte k

k 0 k

k k

Output value for Fan speed low 33 %

k

k power on 0

power on power off k

k

k

“Slave” “Local controller” k

2-point k

-

- k

k

k

k

k

k

k

k

k

k

k

0

0.5℃ 1℃ 1.5℃ +

0.5℃ - 0.5℃~1.5℃

k 0.5℃ ( )1.5℃ k

PI PI

k

k

k

k

k

k

k

k

k

k

k

0

10 50 60 + 40 -

40~60 k 40 (

)60 k

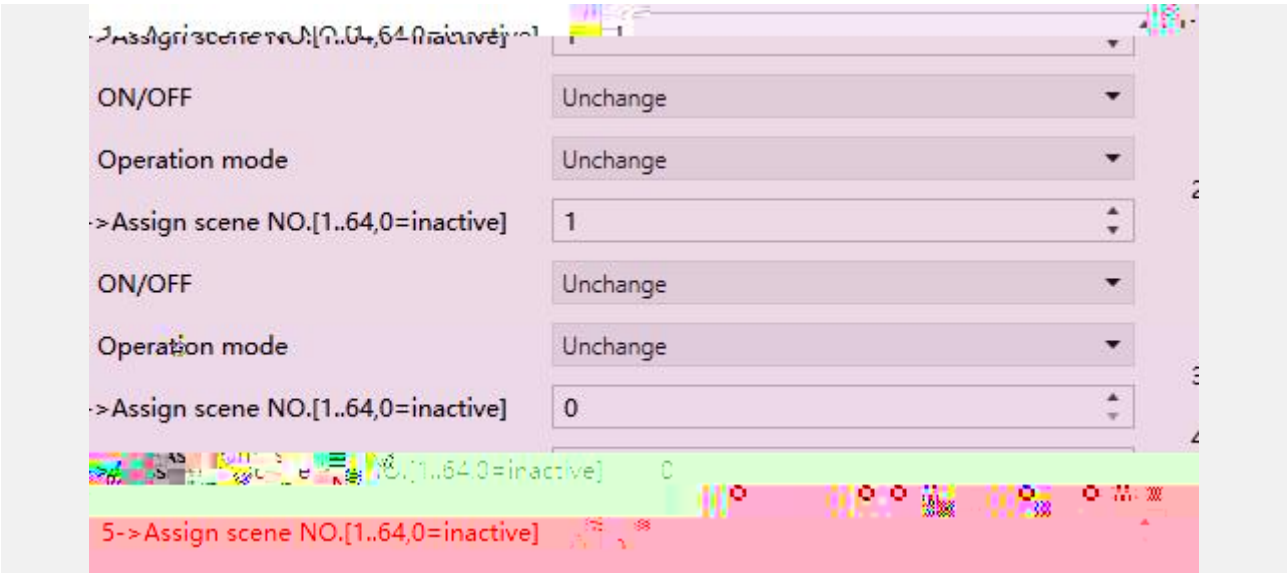
k

k

k

0 k

k



5.4.1.4 “Scene”

“Slave” k k

k 5 k

k

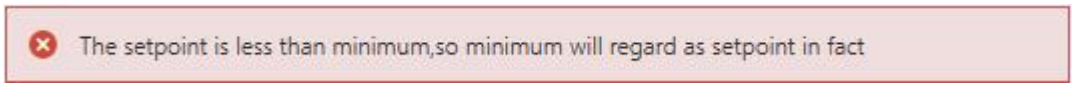
k

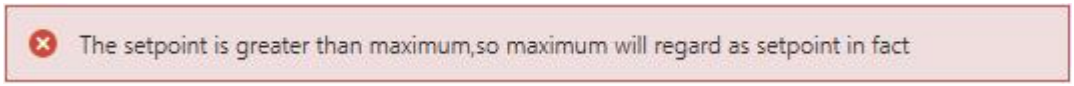
0

k

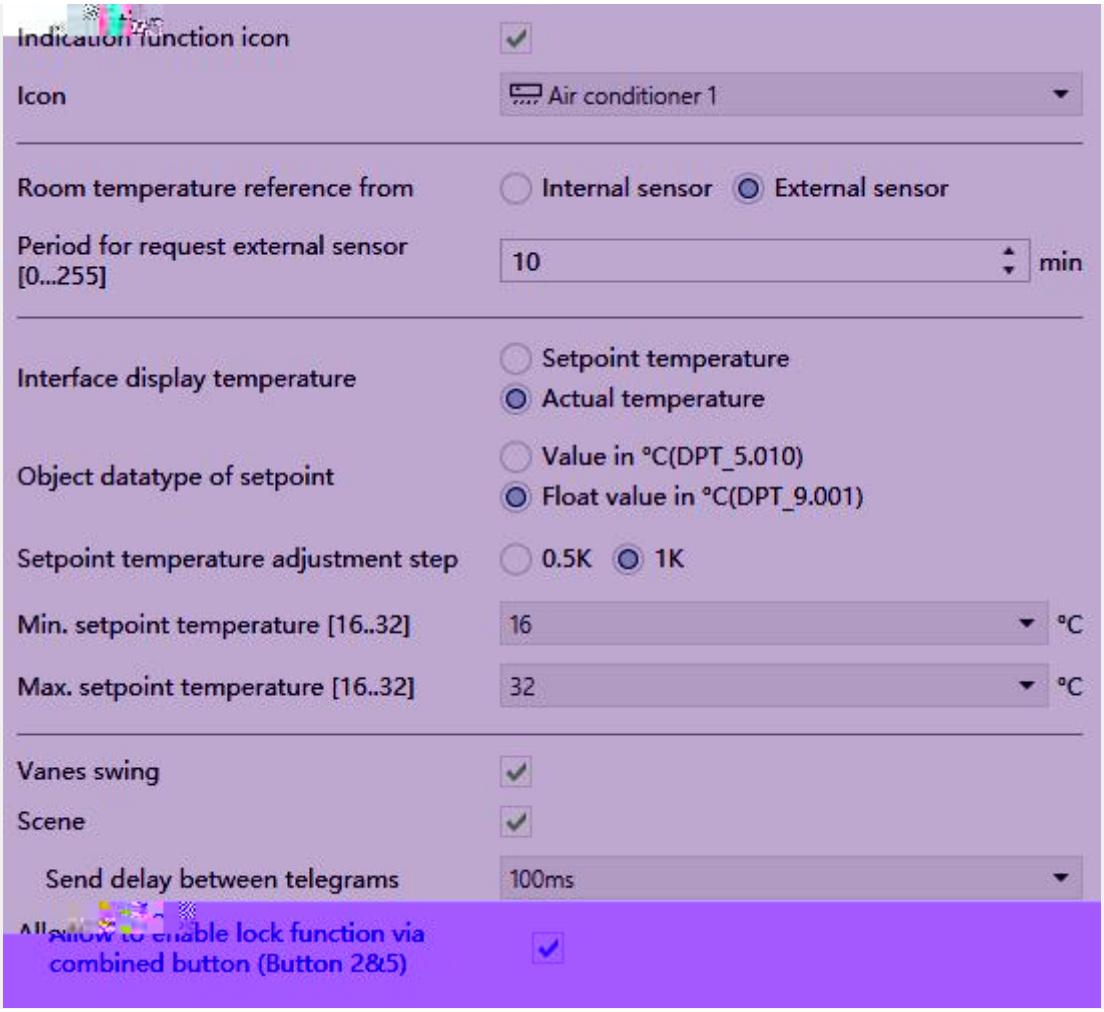
OFF

FCU k k


The setpoint is less than minimum,so minimum will regard as setpoint in fact


The setpoint is greater than maximum,so maximum will regard as setpoint in fact

FCU k k



5.4.2 “VRF setting”

VFR k

k

k

“Internal temperature measurement”

5.3 k

“External sensor” k k

k

k

k

k

“Value in °C (DPT_5.010)”

k k

k

k

k 1bit =1/ =0 k

/ k

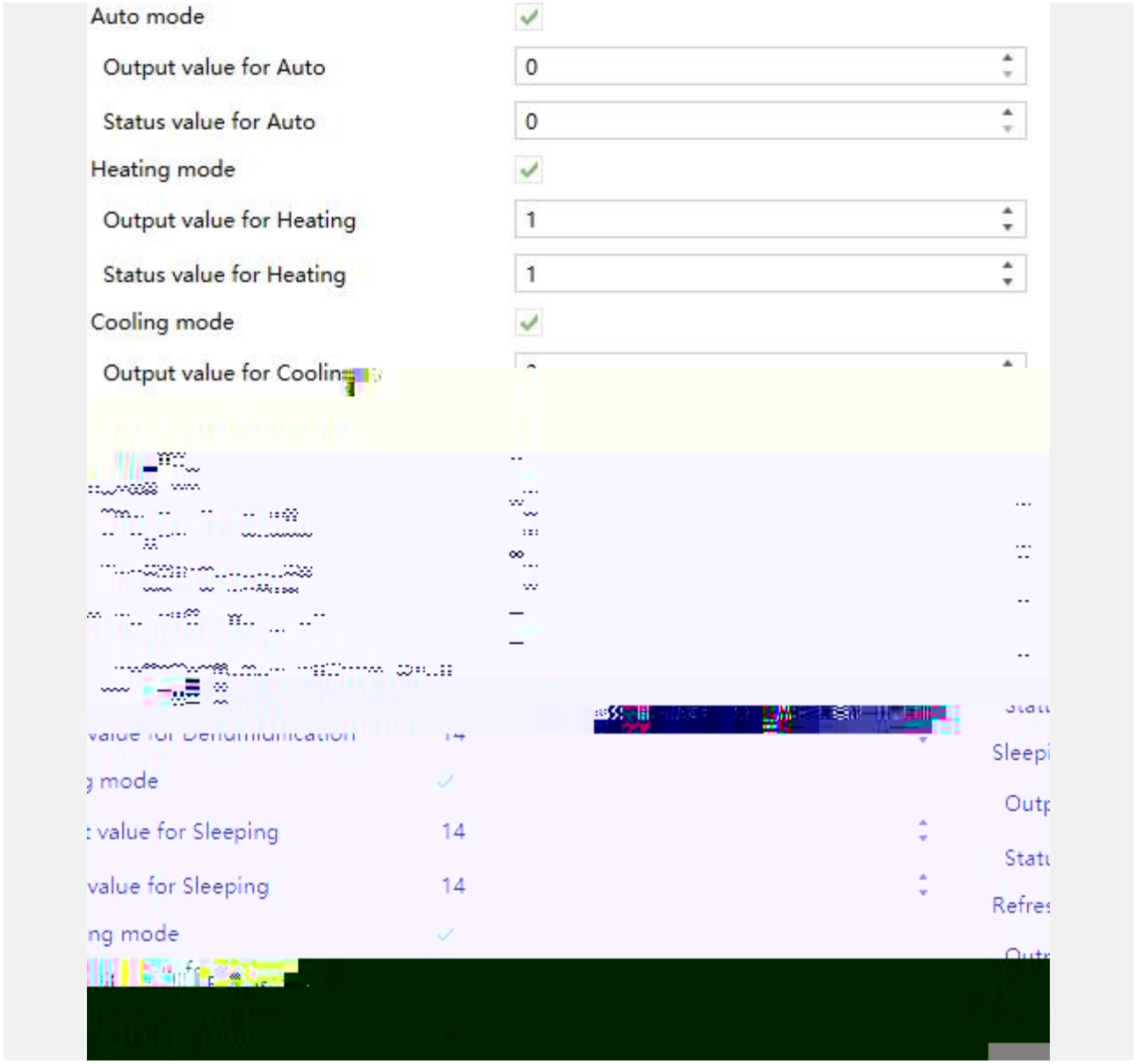
k ! ! !

k

k k

k button2 5 /

k “long operation for button after [5..250]” k

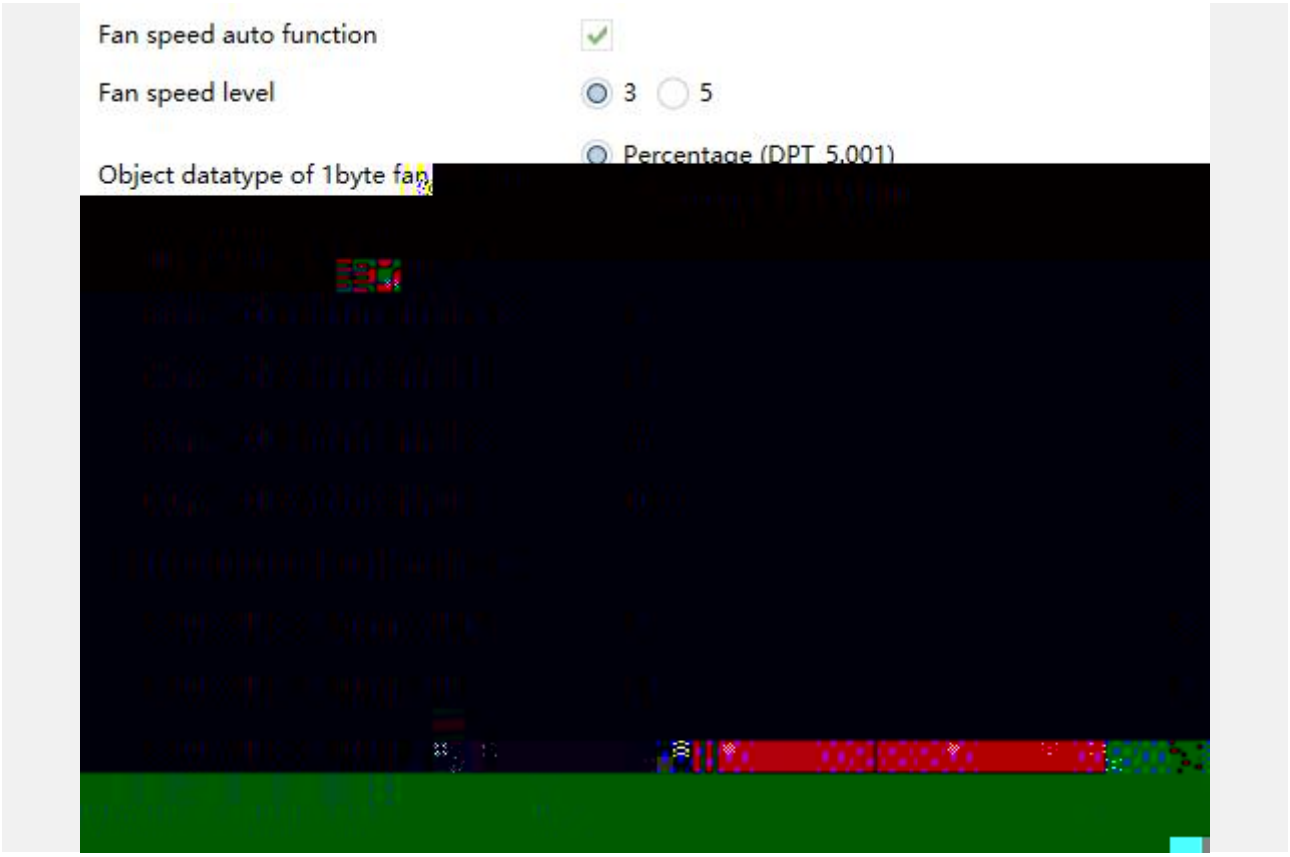

Auto mode
Output value for Auto
0
Status value for Auto
0
Heating mode
Output value for Heating
1
Status value for Heating
1
Cooling mode
Output value for Cooli
mode
value for Sleeping
14
value for Sleeping
14
ng mode

5.4.2.1 “Mode”

k

k

k



5.4.2.2 “Fan”

k

1~3/5

1~3/5

k

3 /1/2/3 k

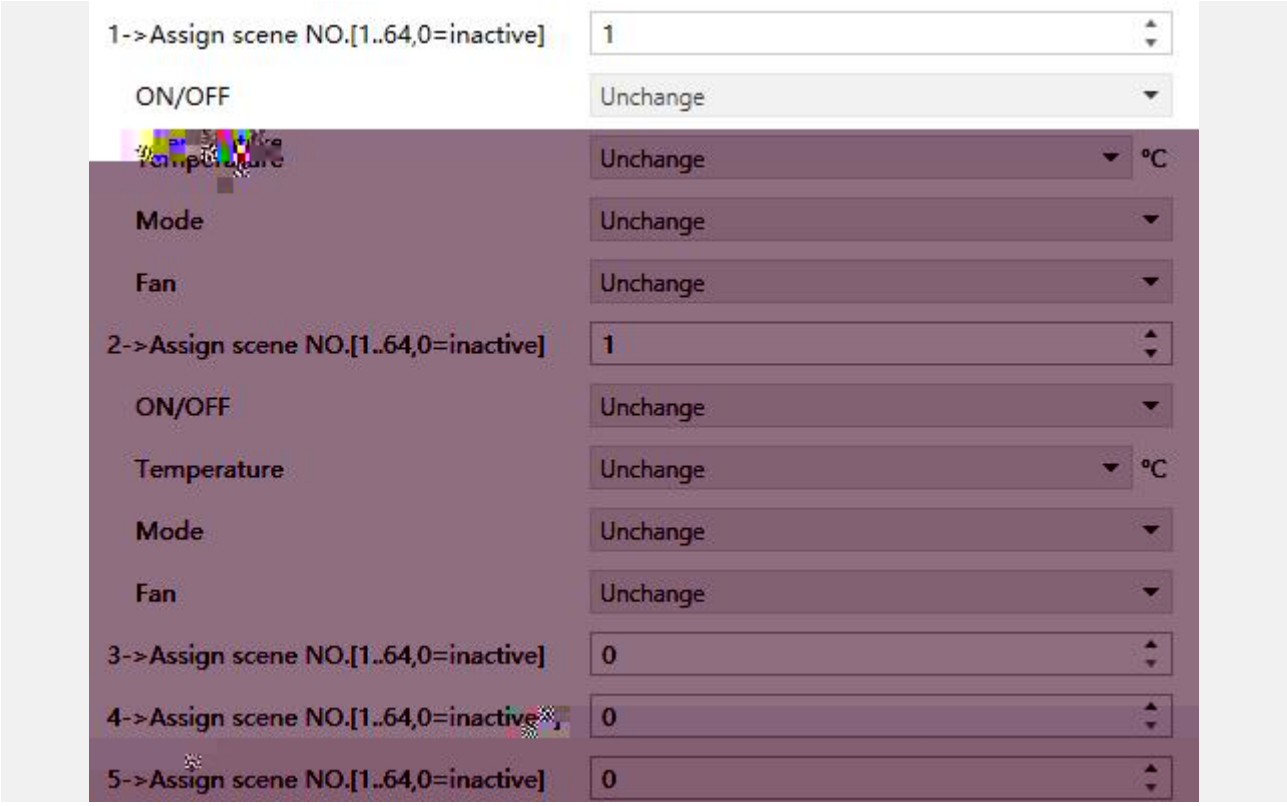
5 /1/2/3/4/5 k

1byte k

k

k

k



5.4.2.3 “Scene”

k

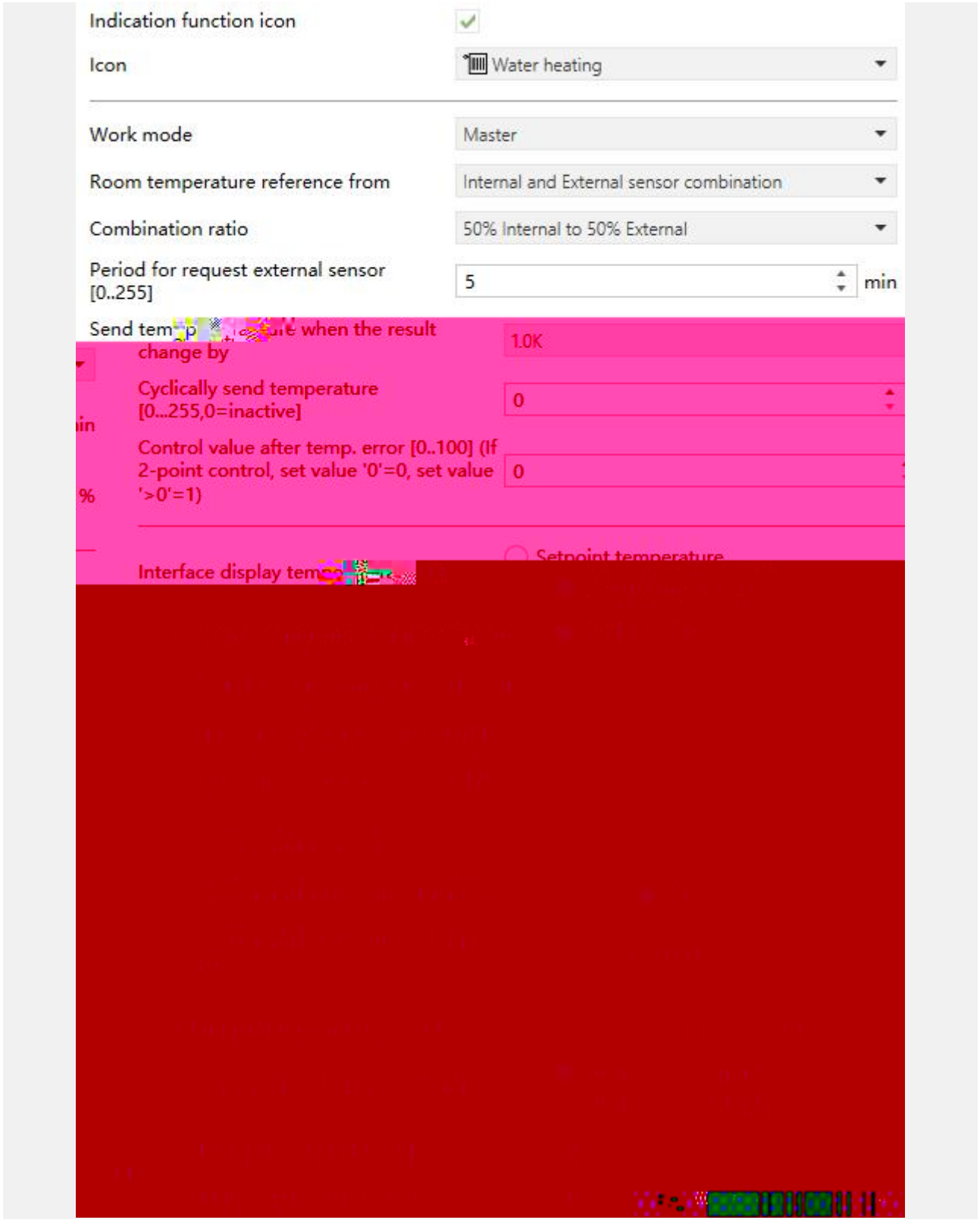
k 5 k

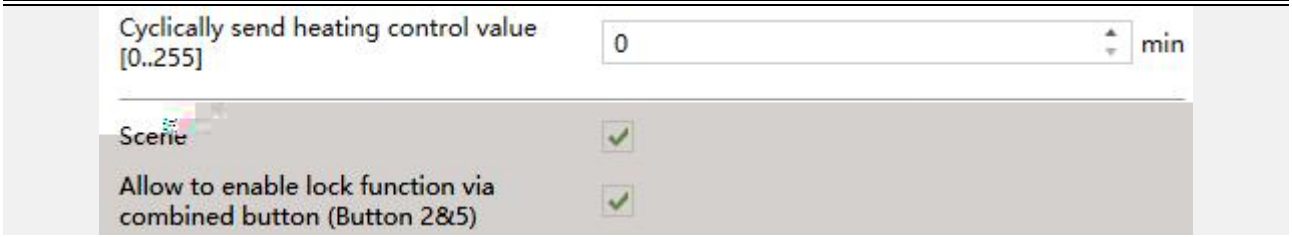
0

k

! ! k

k k


Indication function icon
Icon
Water heating
Work mode
Master
Room temperature reference from
Internal and External sensor combination
Combination ratio
50% Internal to 50% External
Period for request external sensor [0..255]
5
min
1.0K
Cyclically send temperature [0...255,0=inactive]
0
Control value after temp. error [0..100] (If 2-point control, set value '0'=0, set value '>0'=1)
0



5.4.3 “Floor heating setting”

k

k

k

k

Single k

Master

k

Slave

k

k

“Internal temperature measurement”

5.3 k

“External sensor” “Internal and External sensor combination” k

k

k

“40% Internal to 60% External” 40% 60%

= ×40% + ×60%

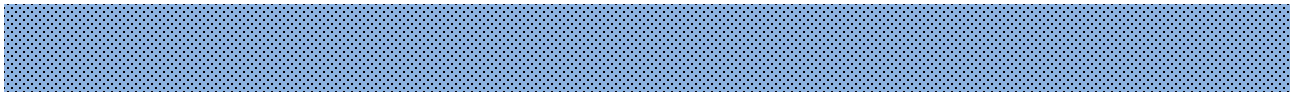
k

k

k Disable k

0 k

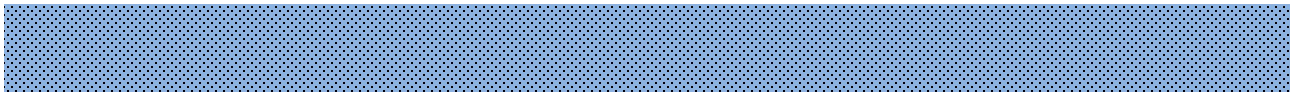
k



“Slave” k k

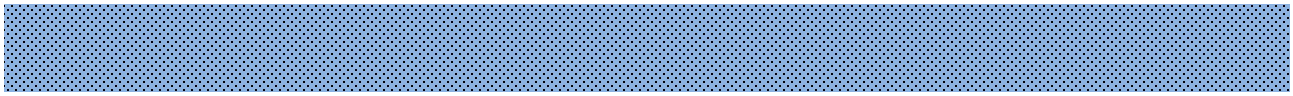
0 0 0

1 k

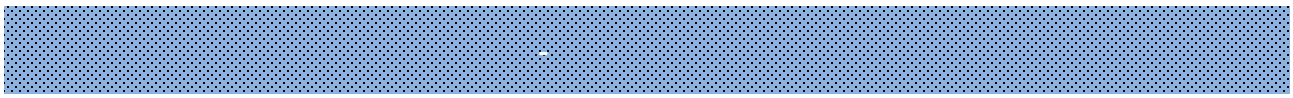


k

k



k



“Slave” k k

k

k k

k

k

k

“Slave” k k

“Slave” k k

OFF k

ON

k

As before voltage failure

k

“Slave” k

k

k

/ k

k

k

1K 2K 16℃ T 18℃

T 15℃ T 15~18℃ k

PWM k

k

k

k

k

“Heating PWM (use PI control)”

10min, 80%

8min 2min /

k

PI k k

“User defined” k PI PI k

k

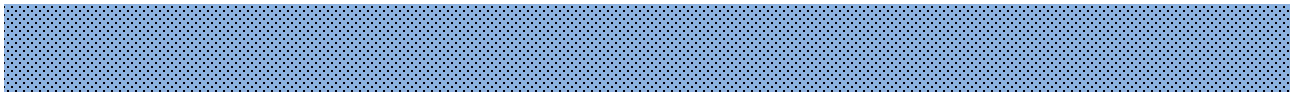
k

k

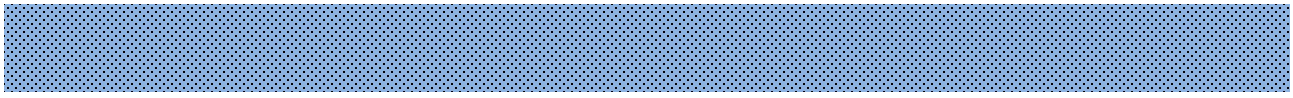
“Continuous control (use PI control)”

k

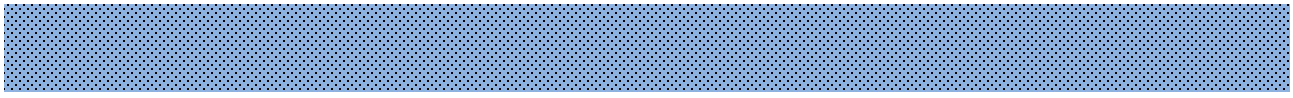
k



k

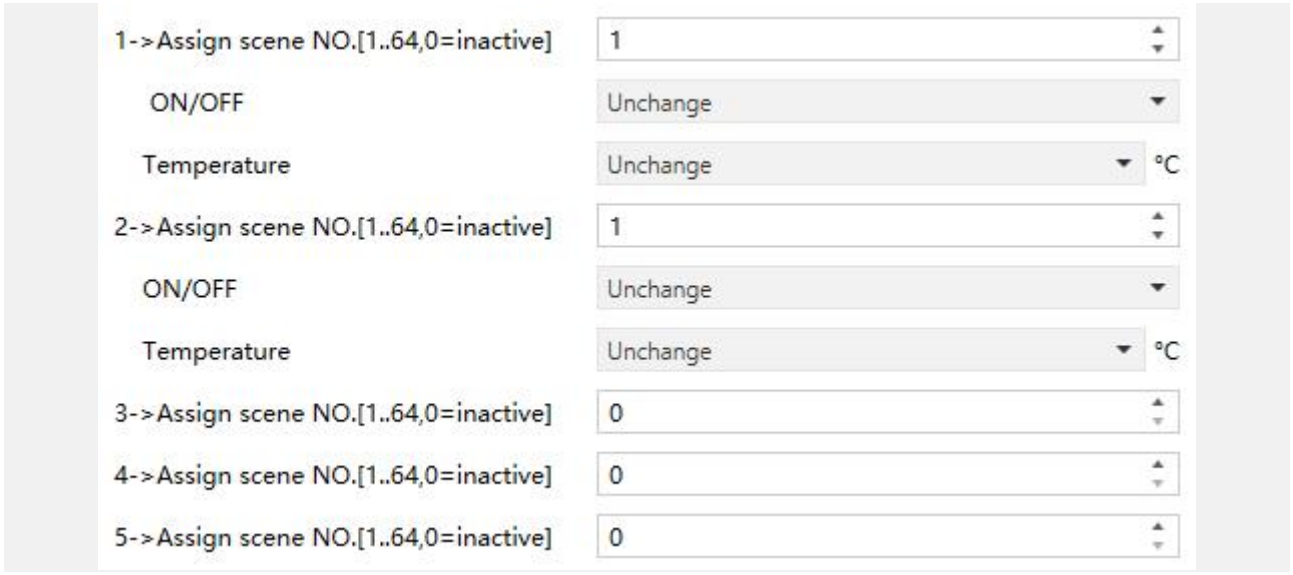


“Slave” k k ! k



k button2 5 /

k “long operation for button after [5..250]” k



5.4.3.1 “Scene”

“Slave” k k

k 5 k

k

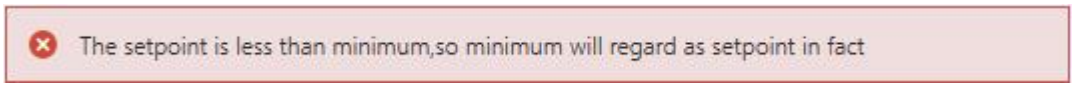
k

0

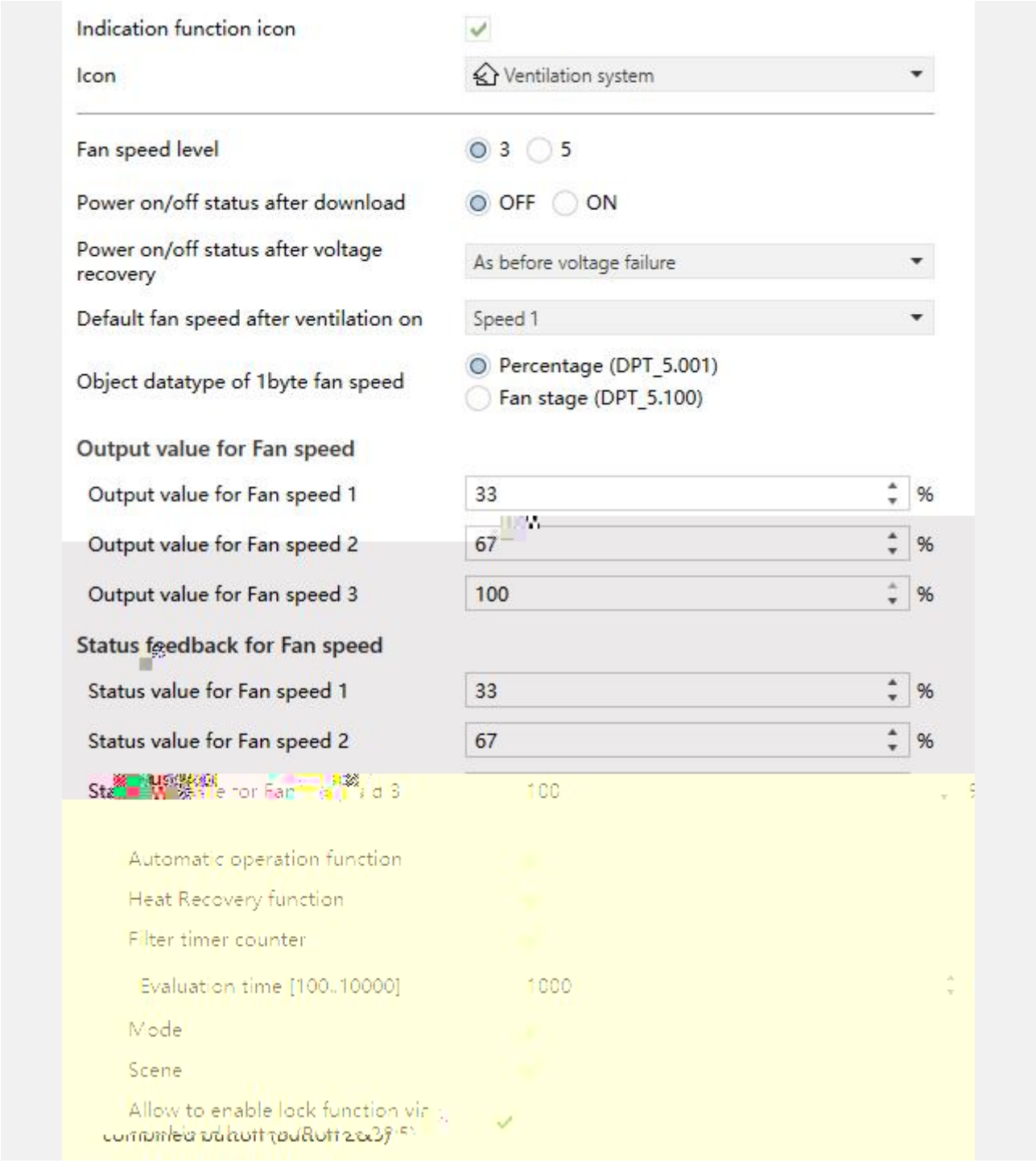
k

OFF

k


The setpoint is less than minimum,so minimum will regard as setpoint in fact

The setpoint is greater than maximum,so maximum will regard as setpoint in fact



5.4.4 “Ventilation setting”

GVS K-BUS KNX/EIB S KNX

k

k

k

“Last status” speed 1 k

1byte k

k 0 k

k k

k PM2.5 CO2 ! VOC

k 1 0 k

“Heat recovery on/off” /

k

k

k k

k

“Filter timer reset”

k

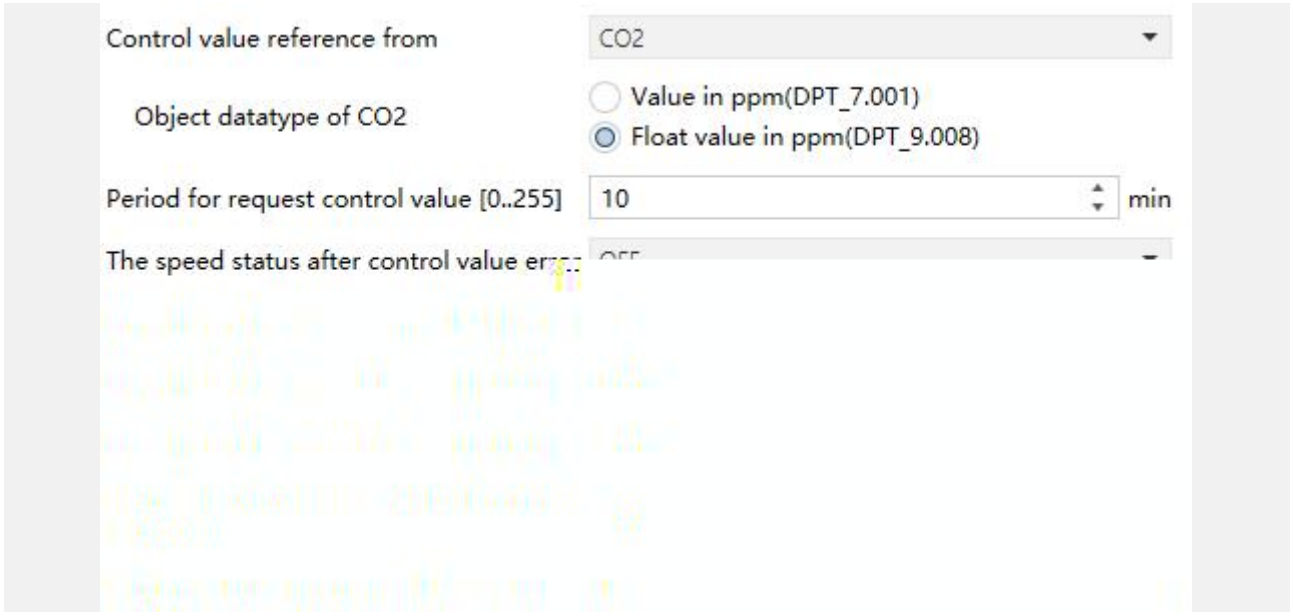
“Filter timer counter”

“Filter timer counter change” k

k k

k button2 5 /

k “long operation for button after [5..250]” k



5.4.4.1 “Fan auto.control”

k

k

CO2 k CO2 k

DPT_7.001 k

DPT_9.008 k

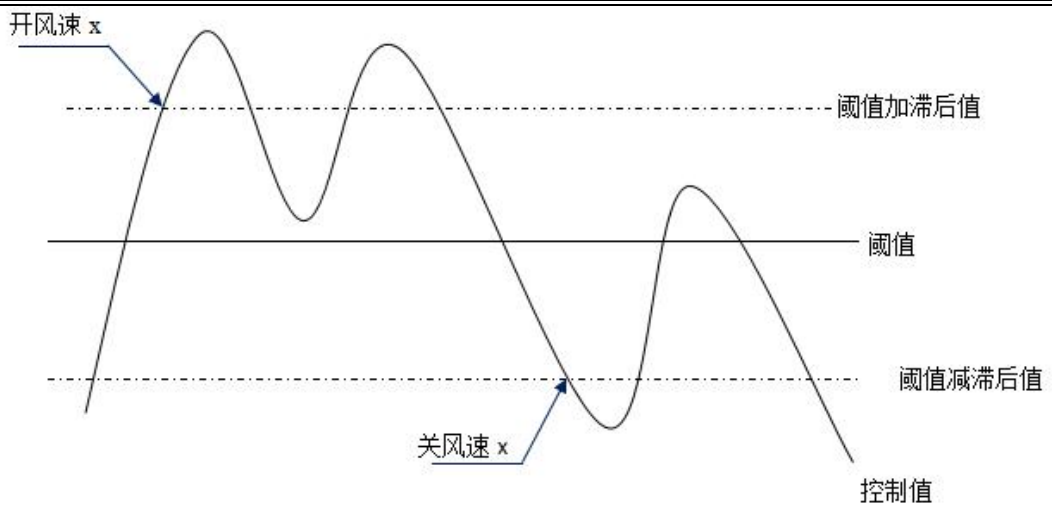
PM2.5 VOC k PM2.5

VOC k

DPT_7.001 k

DPT_9.030

3 k 3



k

≥

k

≥ k

k

k

k

k

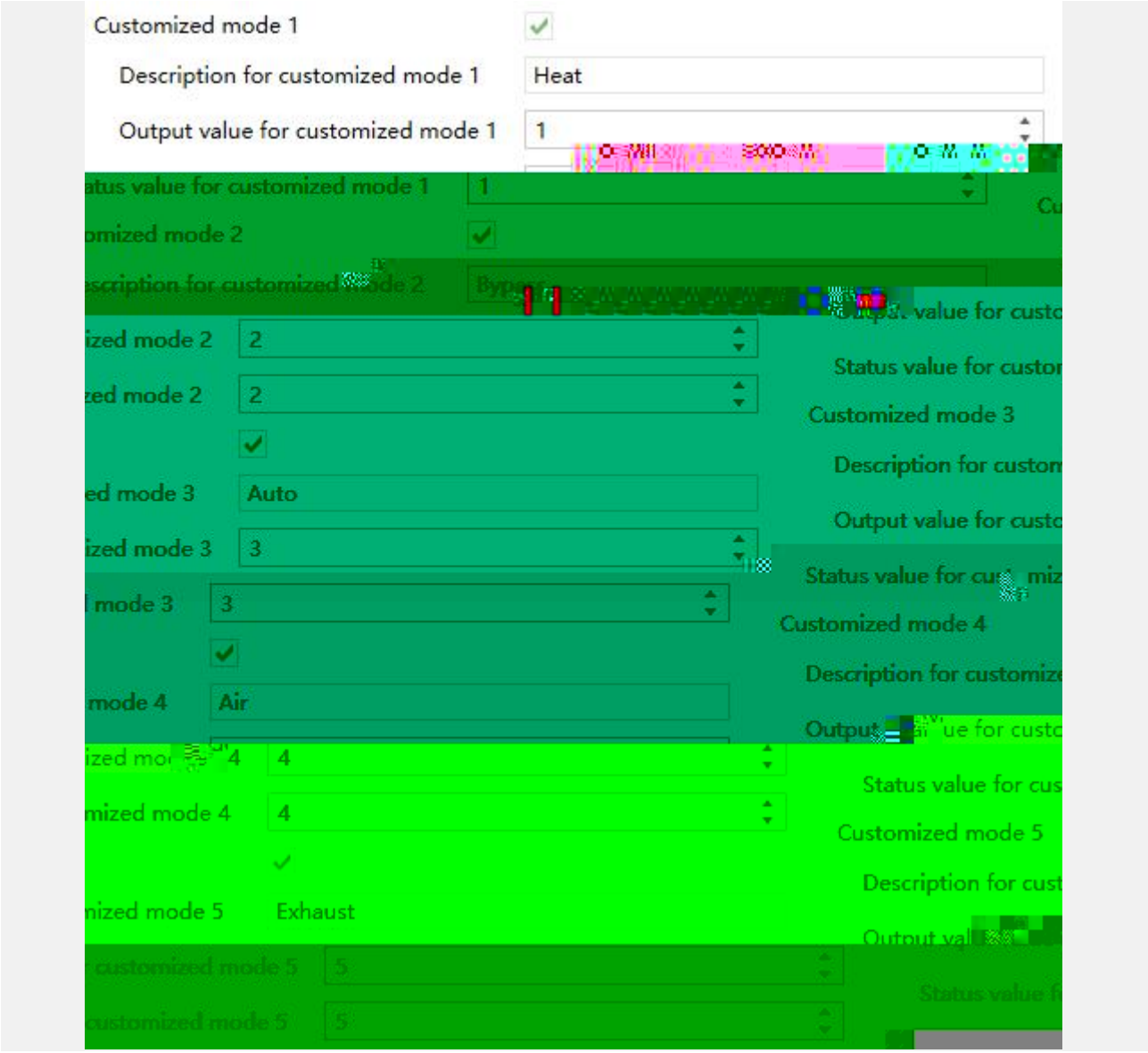
k

k

k

0 k

k



5.4.4.2 “Mode”

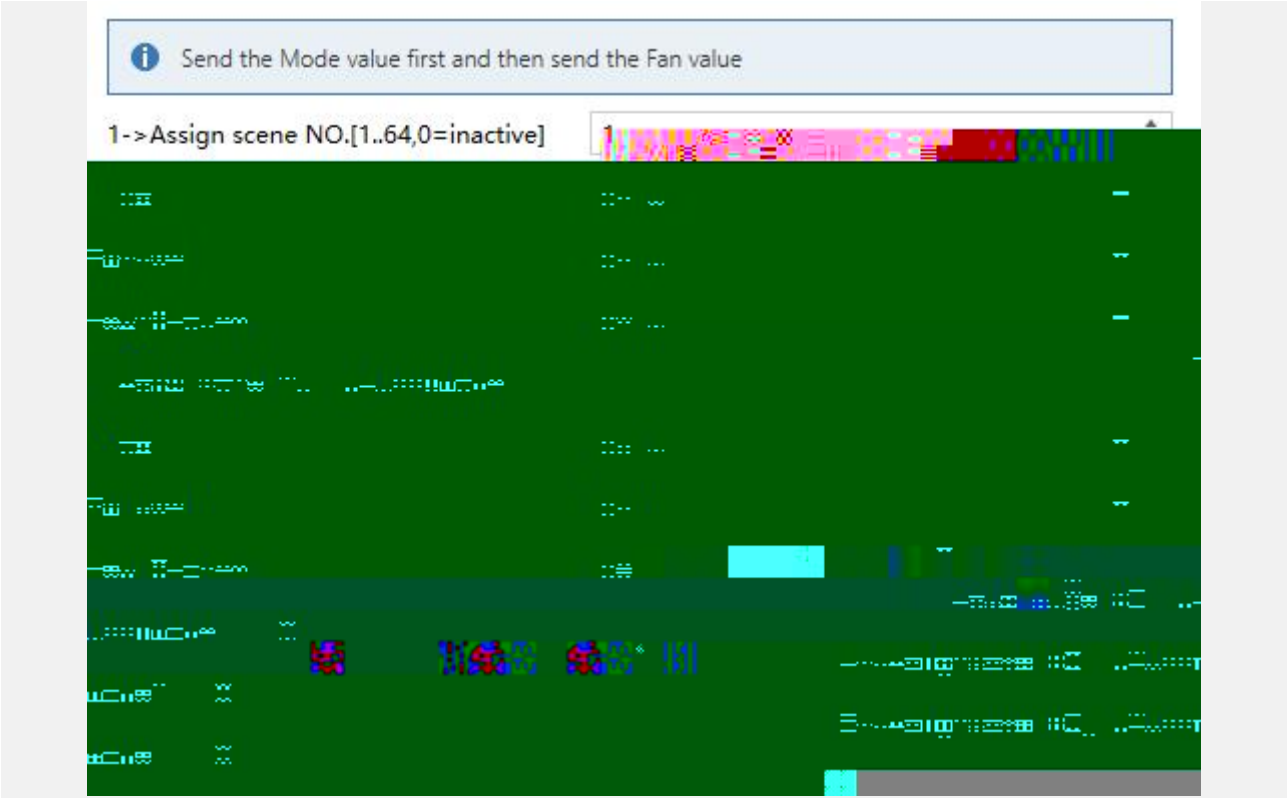
x k

x k

k

x k

x k



5.4.4.3 “Scene”

k

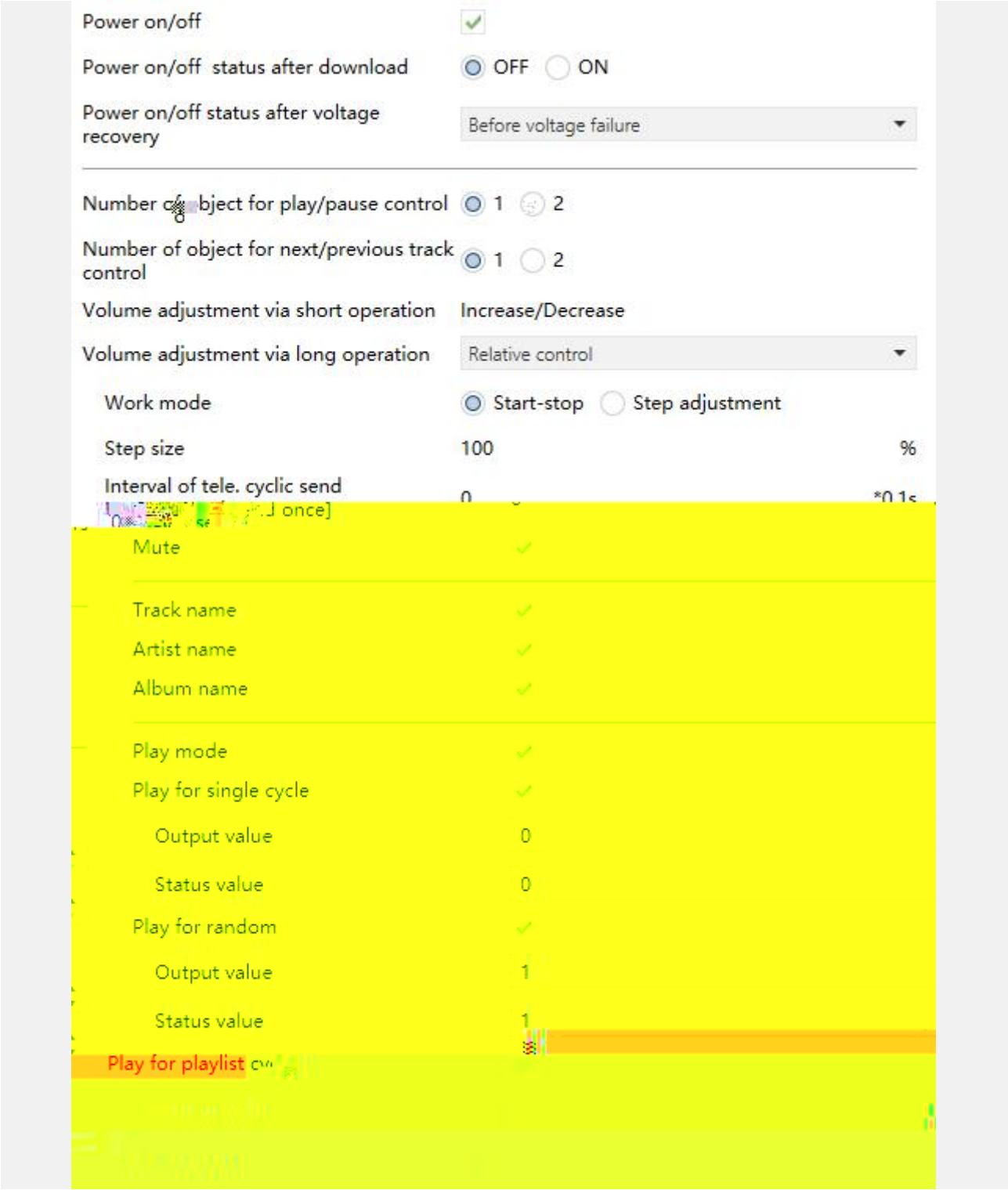
k

k 5 k

x k

x k

k x k


Power on/off
Power on/off status after download
OFF
ON
Power on/off status after voltage recovery
Before voltage failure
Number of object for play/pause control
1
2
Number of object for next/previous track control
1
2
Volume adjustment via short operation
Increase/Decrease
Volume adjustment via long operation
Relative control
Work mode
Start-stop
Step adjustment
Step size
100
%
Interval of tele. cyclic send
0
*0.1s
Mute
Track name
Artist name
Album name
Play mode
Play for single cycle
Output value
0
Status value
0
Play for random
Output value
1
Status value
1
Play for playlist

5.4.5 “Audio”

/ 1 2 k

/ k

k

Disable k

Relative control 4bit

Absolute control k

1bit k

k

k

k

Start-stop 100% 0 k

Step adjustment k

k

“Start-stop”

“Step adjustment”

50% 10 2 k

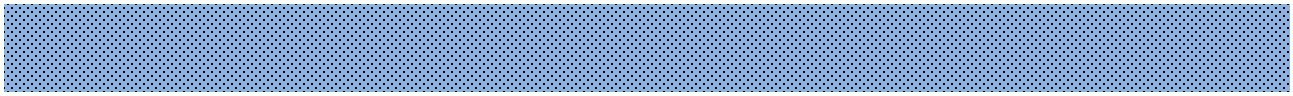
k

k

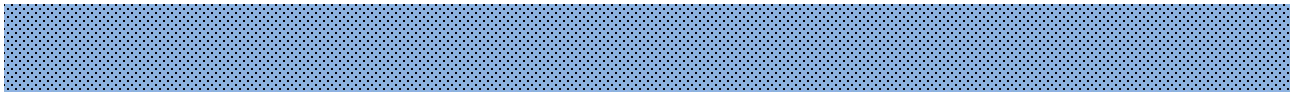
”Disable” k 0

k

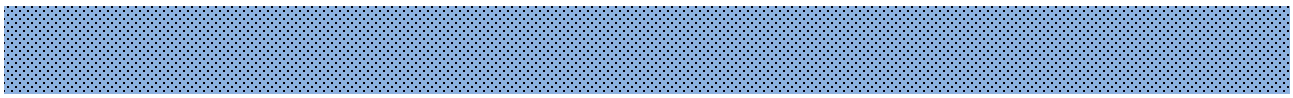
“Start-stop”



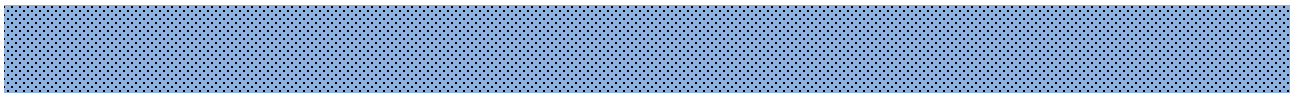
k



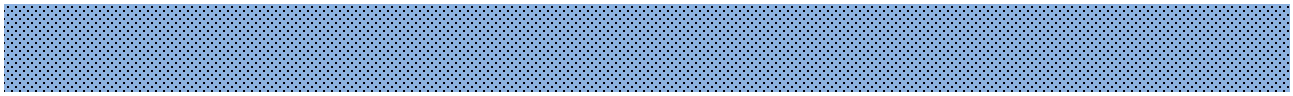
k



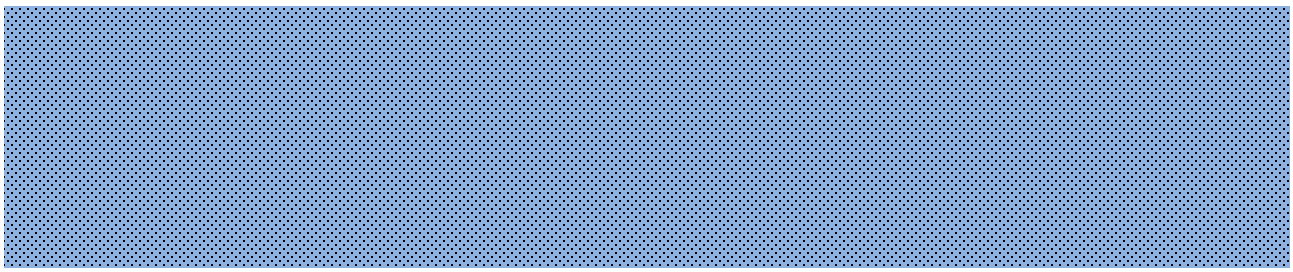
k



k



k

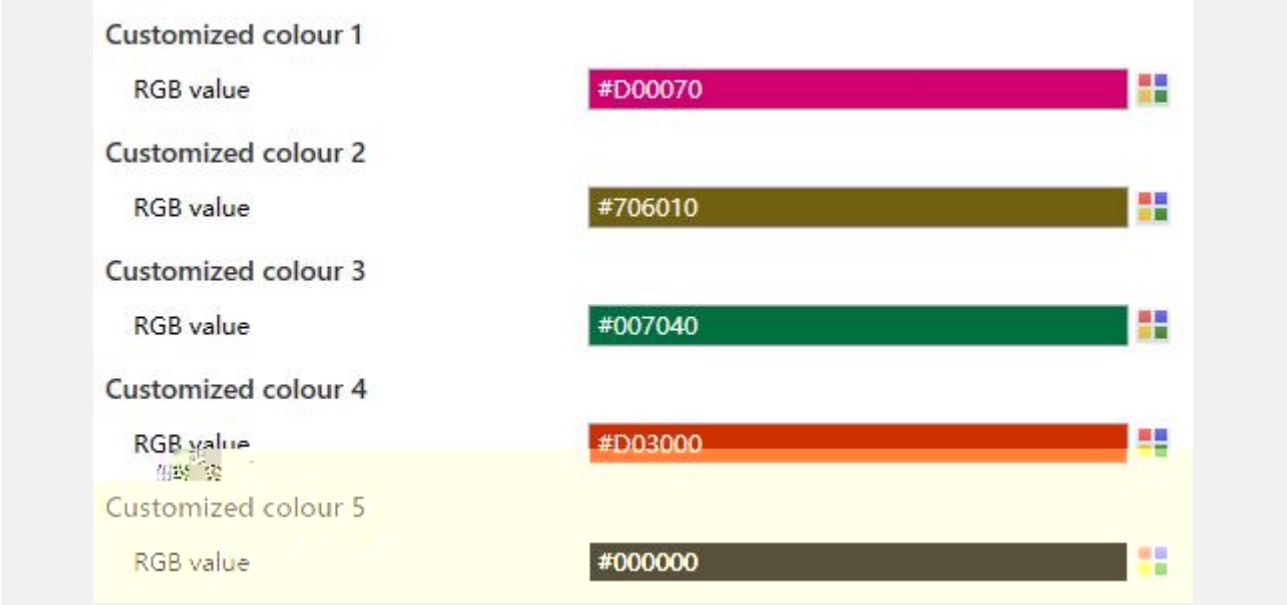


/ / k k

k

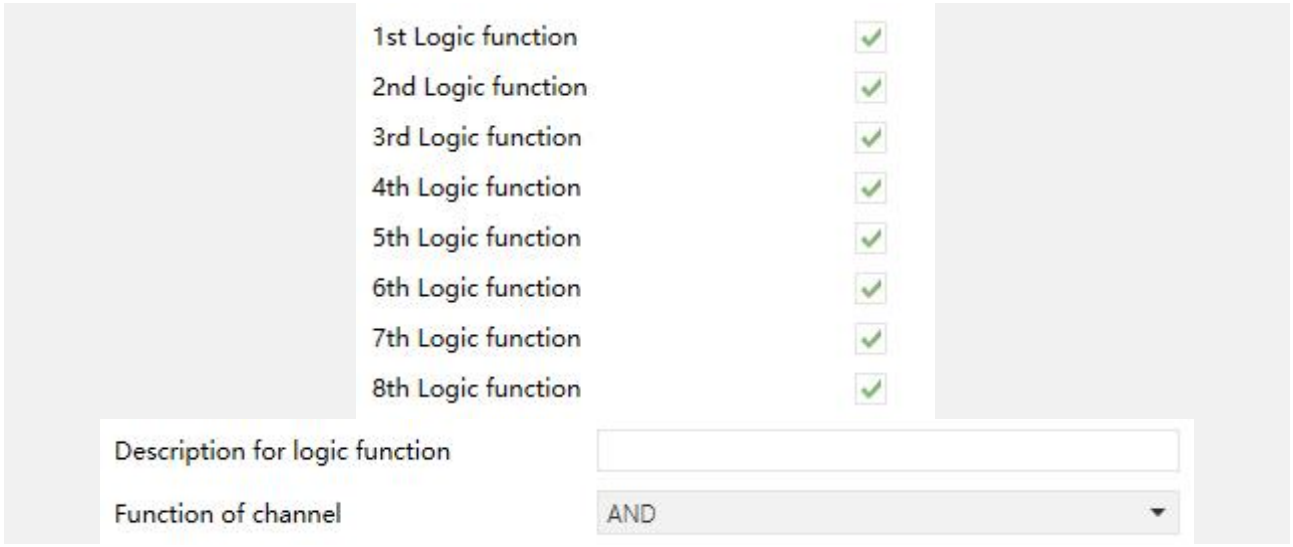
k k

k k



5.4.6 “Customized colour”

LED 5 k



5.5 “Logic function”

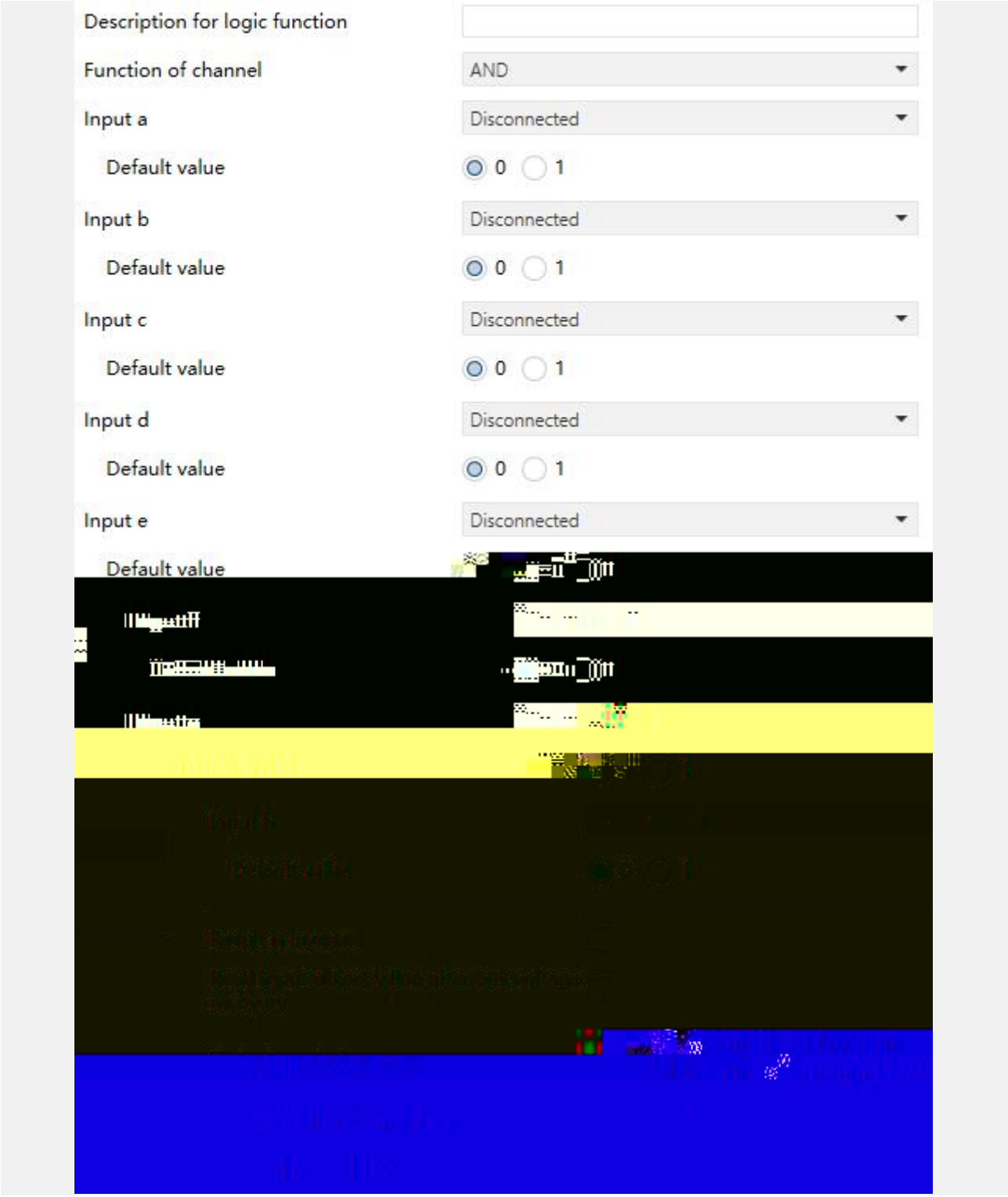
k 8 k

k 30 k

k

AND/OR/XOR

k



5.5.1 “AND/OR/XOR”

input x k

Disconnected k

Normal k

Inverted k k

input x k

k

k

k

k

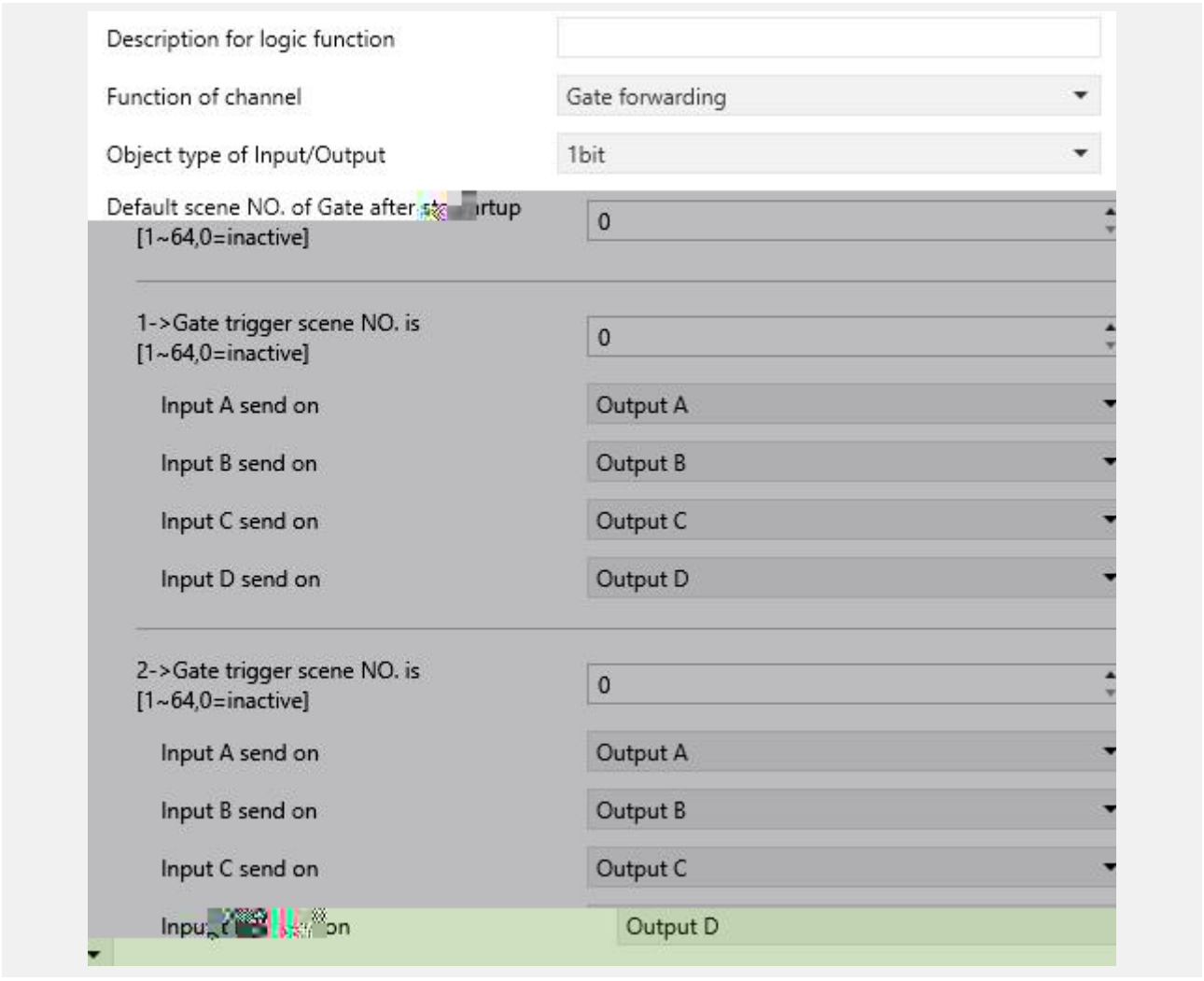
k

Receiving a new telegram k

Every change of output object k

k

k Base x Factor Base “None” k



5.5.2 “Gate forwarding”

/ k

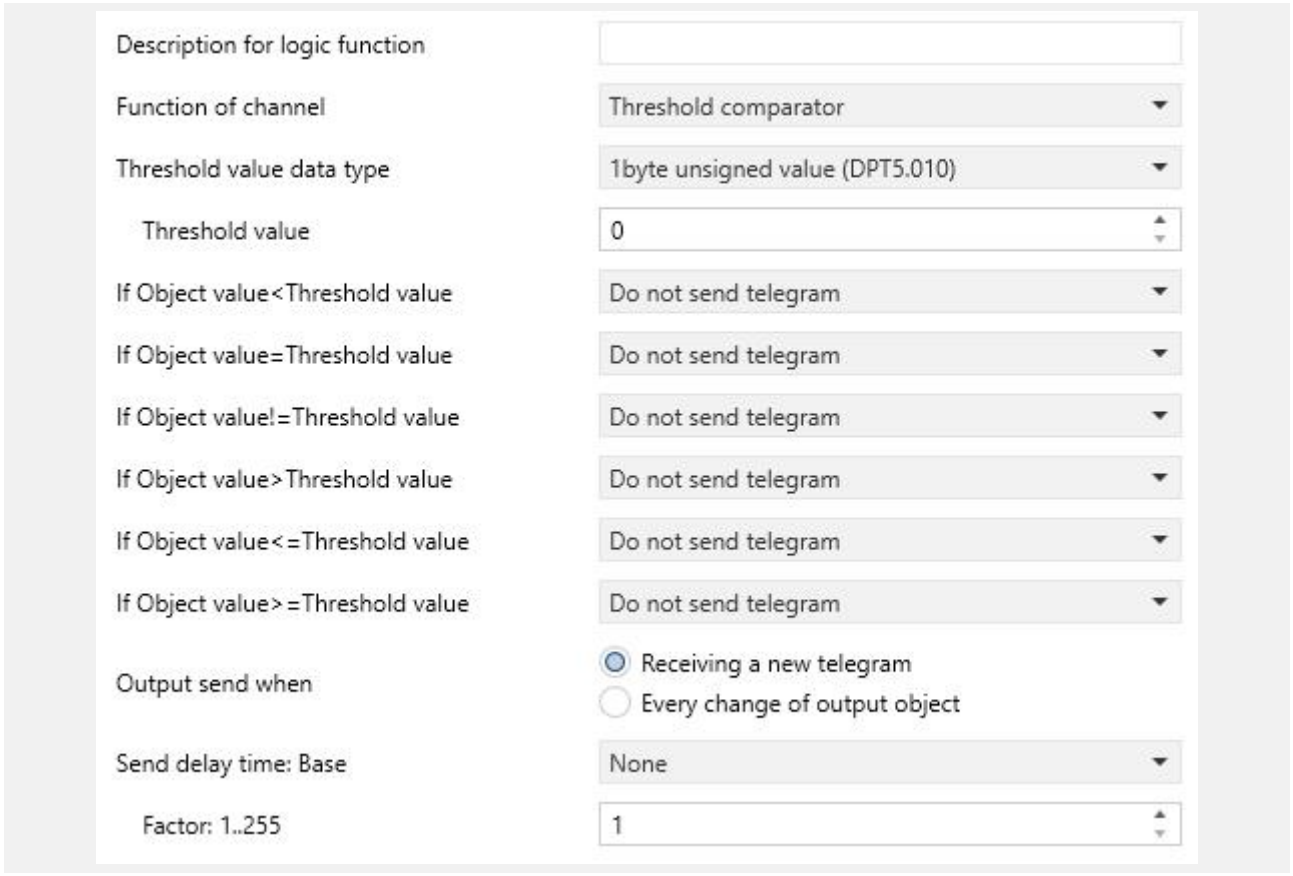
k

k

k 8 k

X (X=A/B/C/D) k

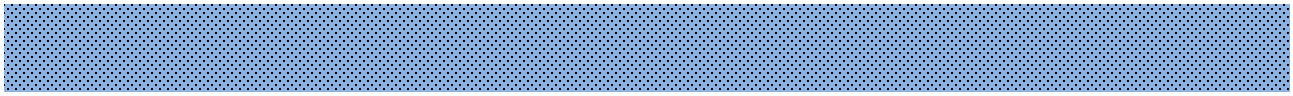
k k



5.5.3 “Threshold comparator”

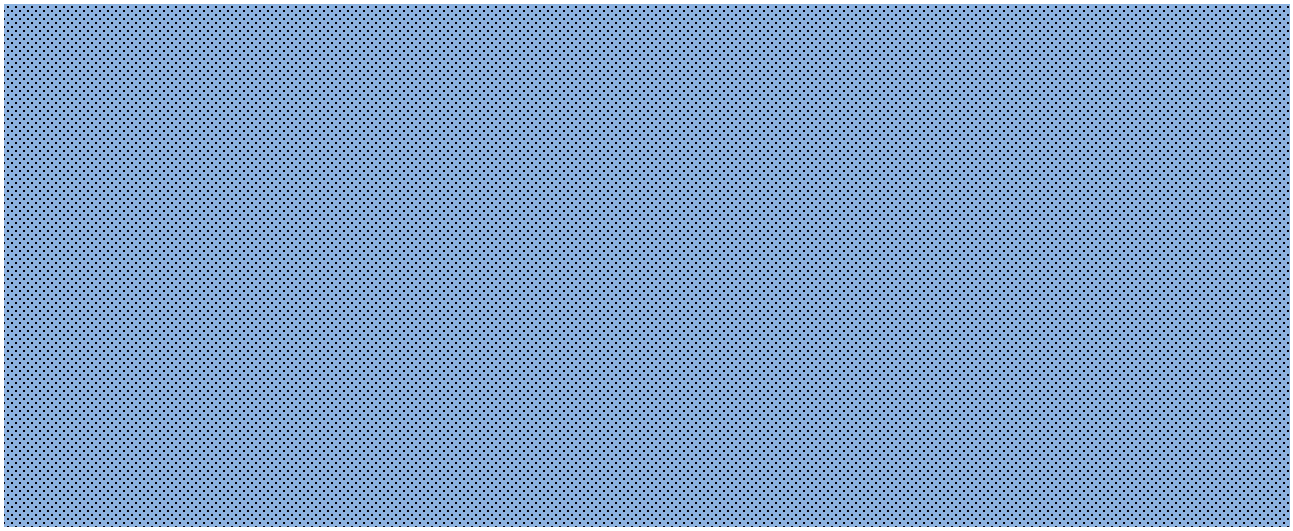
k

k



“2byte float value (DPT9.x)” ¦ “Illuminance value (DPT 9.004)” k

k



! ! ! !

k “2byte float value (DPT9.x)” ¦ “Illuminance value (DPT 9.004)”

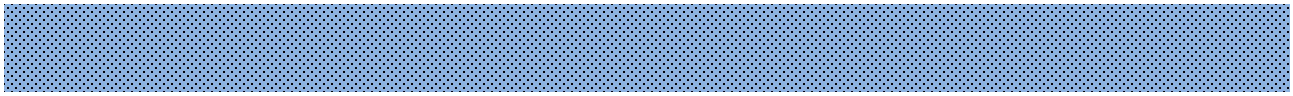
k

Do not send telegram

Send value “0”/“1” 0 1 k

k

k

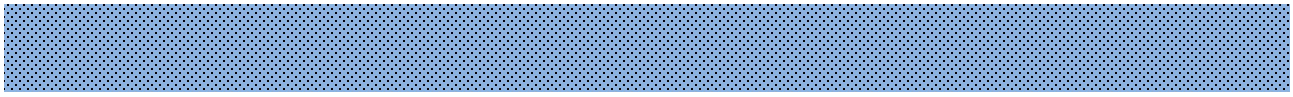


k

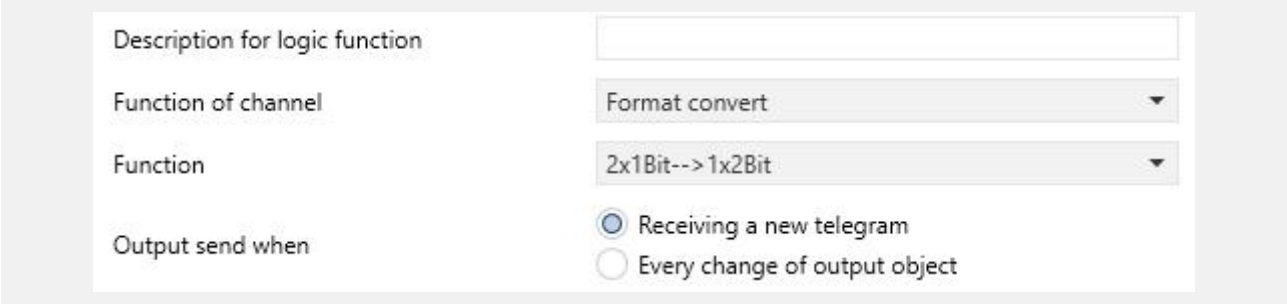
Receiving a new telegram

Every change of output object k

k



k Base x Factor Base “None” k



5.5.4 “Format convert”

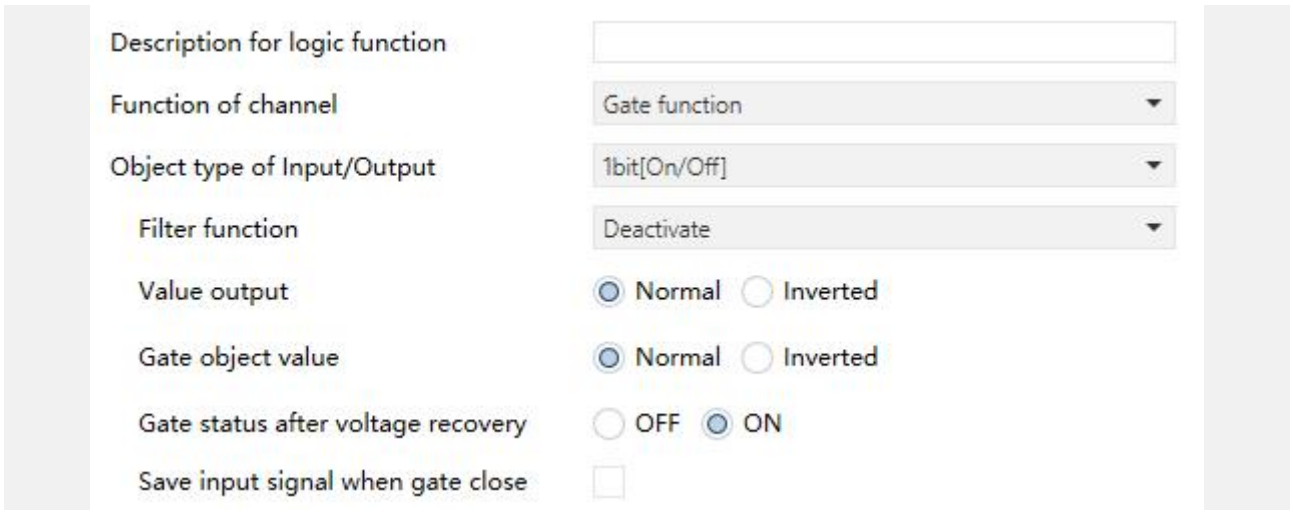
k

k

Receiving a new telegram

Every change of output object k

k



5.5.5 “Gate function”

/ k

“1bit[On/Off]” k On Off

k

Deactivate On Off k

On filter out Off On k

Off filter out On Off k

“1bit[On/Off]” k k

k

k

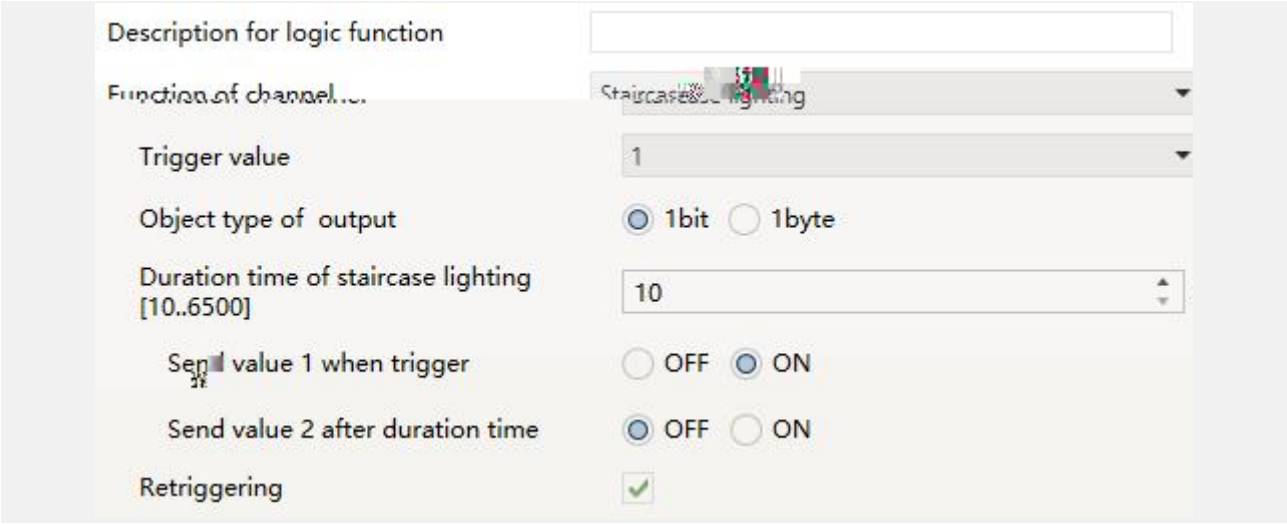
130

5.5.6 “Delay function”

/ k

k

k



5.5.7 “Staircase lighting”

“Trigger value” k

k

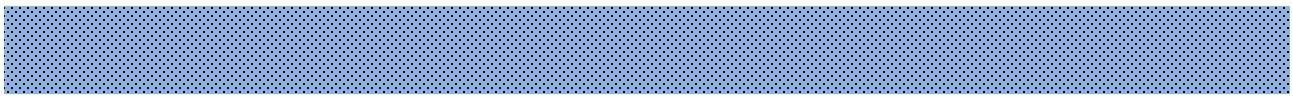
k

k 1 2 k

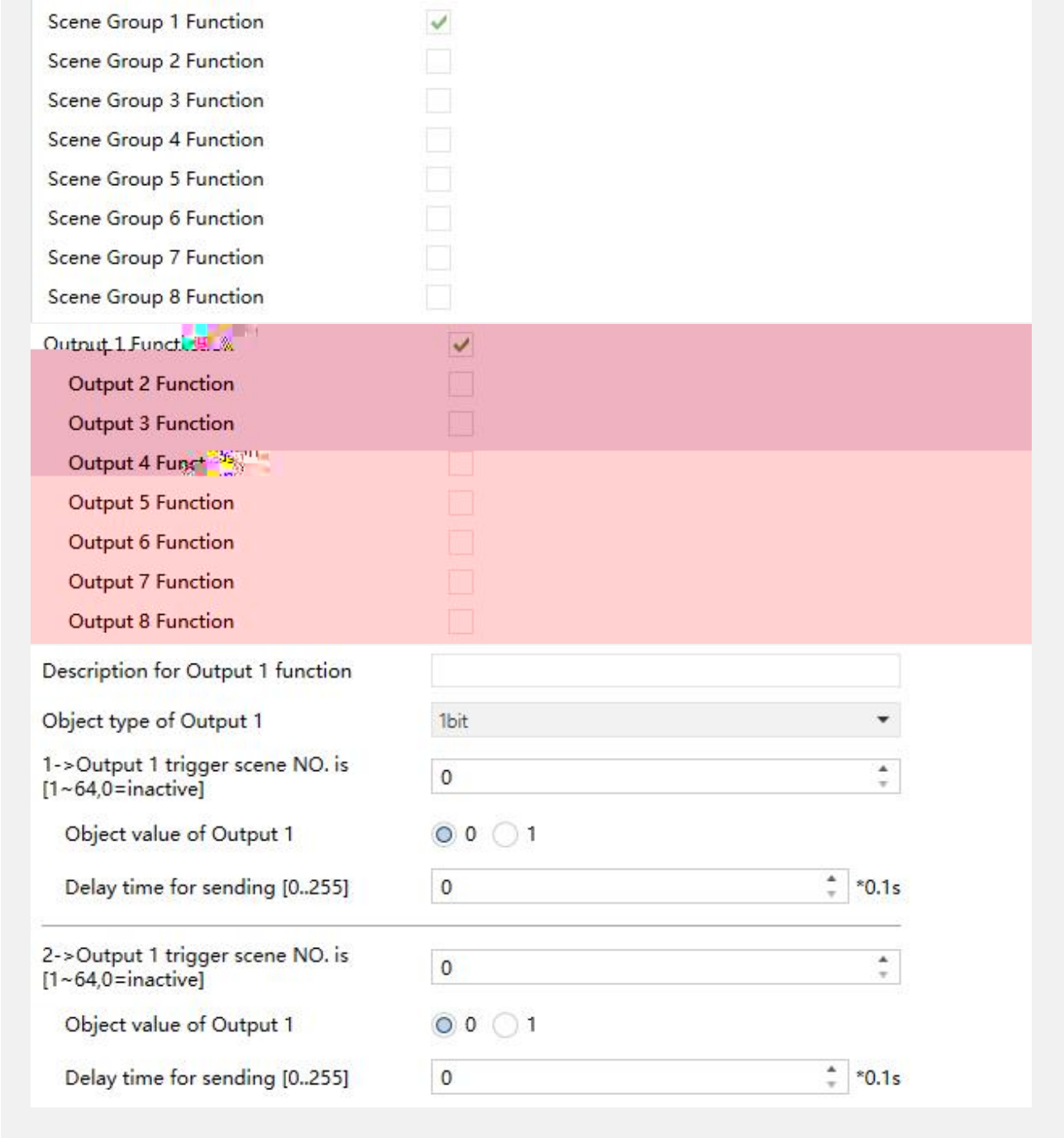
k

1bit

1byte



k



5.6 “Scene Group”

x 8 k

x y 8 k

8 8

x y k 30 k

x y k

1byte 2byte k

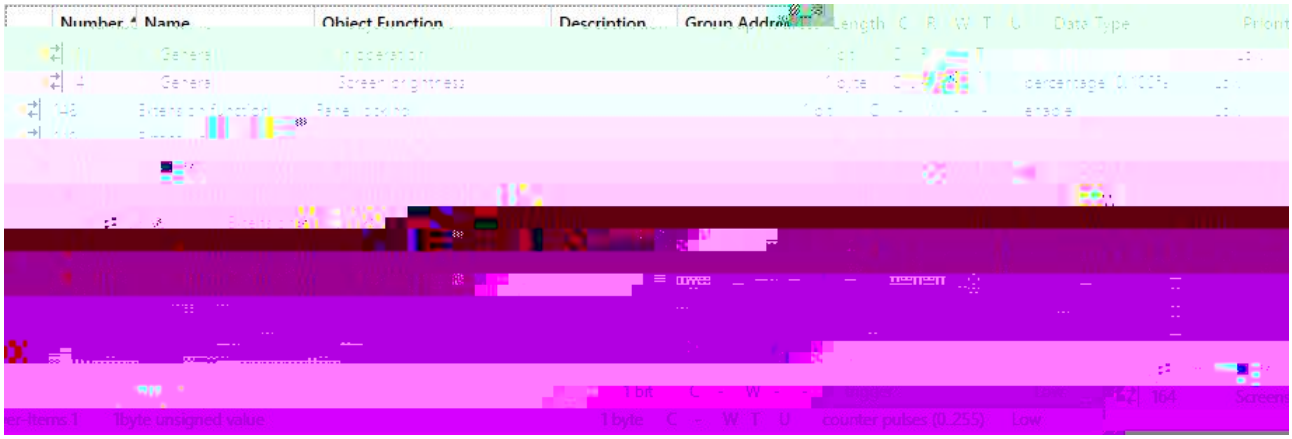
1byte

2byte

x y k 8 k

k

k



6.1 “General”

					DPT
“1” k					
“Screen brightness can be changed via bus” k k k k 10~100% 10% 10% k					

“Panel locking function” k k					
“Delay time for turn off screen” 0 k / k 0 ˚ 1 ˚					
/ k k k					
“Proximity function” k / k					
“The Proximity function triggered via” “sensor” k 1 ˚ 0 ˚					

“Object type of output value”

1byte/2byte 1bit k k

k k

k k

RGB 1bit k

“Indication work mode when active” “Permanent on/Slowly breathing” “Colour setting”

“receive a 3 byte value” k RGB k

3 RGB U8 U8 U8

3_{MSB}	2	1_{LSB}
R	G	B
UUUUUUUU	UUUUUUUU	UUUUUUUU

R: k

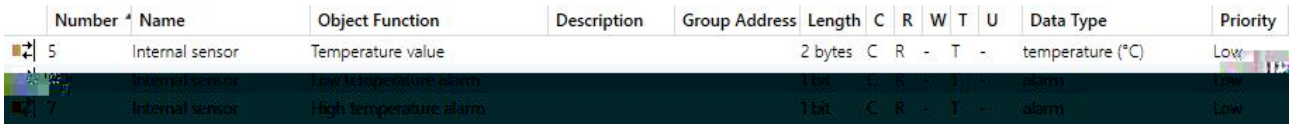
G: k

B: k

“Flashing function” k RGB k

				k	
	k				

6.1 “General”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
5	Internal sensor	Temperature value			2 bytes	C	R	-	T	-	temperature (°C)	Low
6	Internal sensor	Use temperature alarm			1 bit	C	R	-	T	-	alarm	Low
7	Internal sensor	High temperature alarm			1 bit	C	R	-	T	-	alarm	Low

6.2 “Internal sensor”

					DPT
				k	-50~99.8℃
	“Send alarm telegram for low/high temperature”		“No respond”		k k
	“Send alarm telegram for low/high temperature”		“No respond”		k k

6.2 “Internal sensor”

6.3.1 “FCU”

					DPT
/ FCU k 0 ˚ 1 ˚					
“Power on/off function” “Via object only” “Via both button and object” k “Master” “Single” “Power on/off” k “Slave” “Power on/off, status” k 1 ˚ 0 ˚					
“Room temperature reference from” “External sensor” “Internal and External sensor combination” k k					

“Master” k

“Current temperature setpoint” k

k

“Base temperature setpoint”

k

k

“Slave” “Current temperature setpoint, status”

k

“Single” k

“Heating and Cooling” k

“Master” “Single” “Heating/Cooling mode”

/ k

“Slave” “Heating/Cooling mode, status”

/ k

1

0

1byte 172

“Master” “Single” “Operation mode”

k

“Slave” “Operation mode, status”

k

1- 2- 3- 4- k

1bit

173 ˚

174 ˚

175 ˚

176 ˚

“1” k1bit

! 0 k 1bit “1” 0

k

“Single” “Slave” 4 1bit k

k k k

k k

1

0

“Extended comfort mode [0...255, 0=inactive]” 0 k

k

1

0

1 1

k k

/ k

“Slave” k

k k

1

0

“Slave” k

k k

1

0 ˚

“Slave” k

k / k

“Slave” k

“Power on/off function” “Via button only” “Via both button and object”

k

“Master” “Single” “Power on/off, status”

k

“Slave” “Power on/off,” KNX

k

“Room temperature reference from” “Internal and External sensor combination”

k k

“Master”

1- 2- 3- 4- k

1bit

190 ˚

191 ˚

192 ˚

193 ˚

“1” k

“Single” “Slave” 4 1bit k

k 2

4 k

“Slave” k

k

k k

“Master” “Slave” “Single” k

k k

1

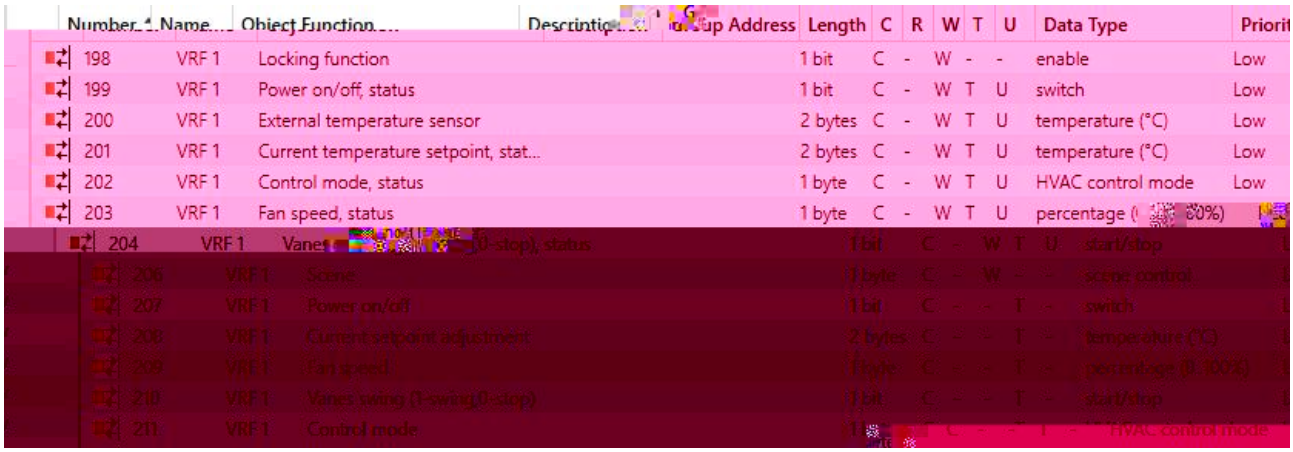
0

“Master” “Slave” “Single” k

6.3.1 “FCU”

! ! !

! ! k

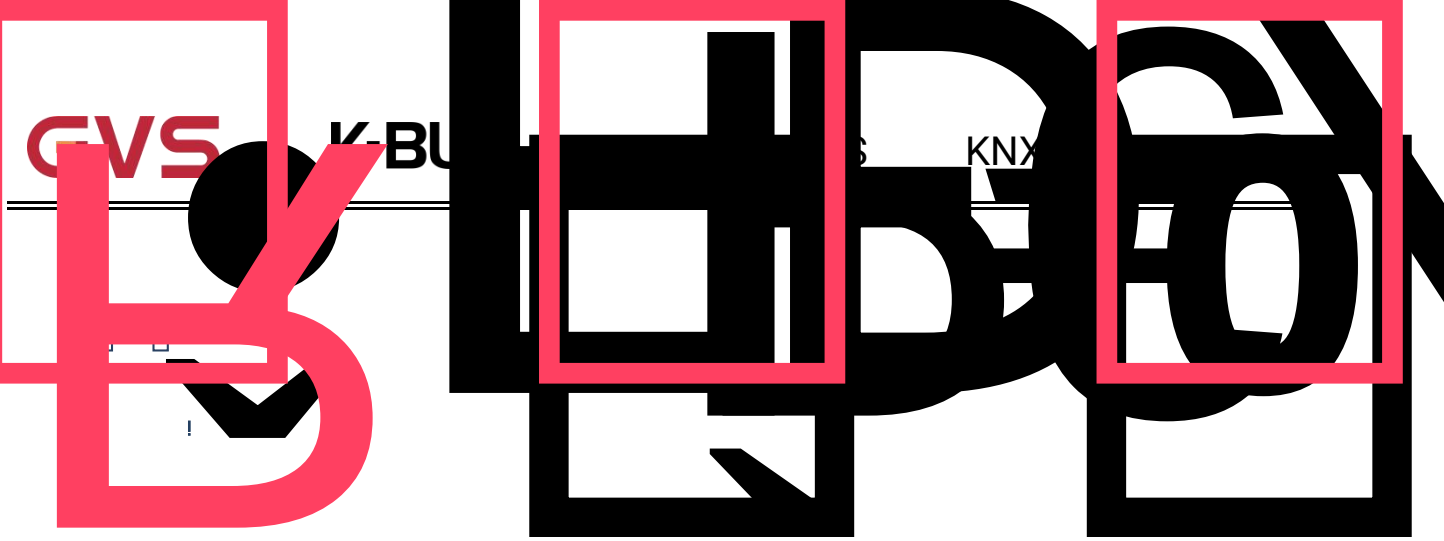


Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
198	VRF 1	Locking function			1 bit	C	-	W	-	-	enable	Low
199	VRF 1	Power on/off, status			1 bit	C	-	W	T	U	switch	Low
200	VRF 1	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
201	VRF 1	Current temperature setpoint, stat...			2 bytes	C	-	W	T	U	temperature (°C)	Low
202	VRF 1	Control mode, status			1 byte	C	-	W	T	U	HVAC control mode	Low
203	VRF 1	Fan speed, status			1 byte	C	-	W	T	U	percentage (0%)	
204	VRF 1	Vanes (0-stop), status			1 bit	C	-	W	T	U	start/stop	
206	VRF 1	Scene			1 byte	C	-	W	-	-	scene control	
207	VRF 1	Power on/off			1 bit	C	-	-	T	-	switch	
208	VRF 1	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	
209	VRF 1	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	
210	VRF 1	Vanes swing (1-swing/0-stop)			1 bit	C	-	-	T	-	start/stop	
211	VRF 1	Control mode			1 byte	C	-	-	T	-	HVAC control mode	

6.3.2 “VRF”

					DPT
/ k 0 ˚ 1 ˚					
k 1 ˚ 0 ˚					
“Room temperature reference from” “External sensor” k k					

k					
k 0- 1- 3- 9- 14- 18- 19- k					
k k					
k k 1 0					
k / k					
KNX k					
k k					



6.3.3 “Floor heating”

“Power on/off, status” C,R,T

“Slave” “Power on/off” C,T KNX

“Power on/off, status” C,W,T,U

1

0

“Room temperature reference from” “External sensor” “Internal and External sensor combination”

“Master” “Current temperature setpoint”

“Slave” “Current temperature setpoint, status”

“Single”

“Slave” /

“Room temperature reference from” “Internal and External sensor combination”

k k

“Master” “Current setpoint adjustment, status”

k

“Slave” “Current setpoint adjustment”

k

“Single” k

k k

1bit

1

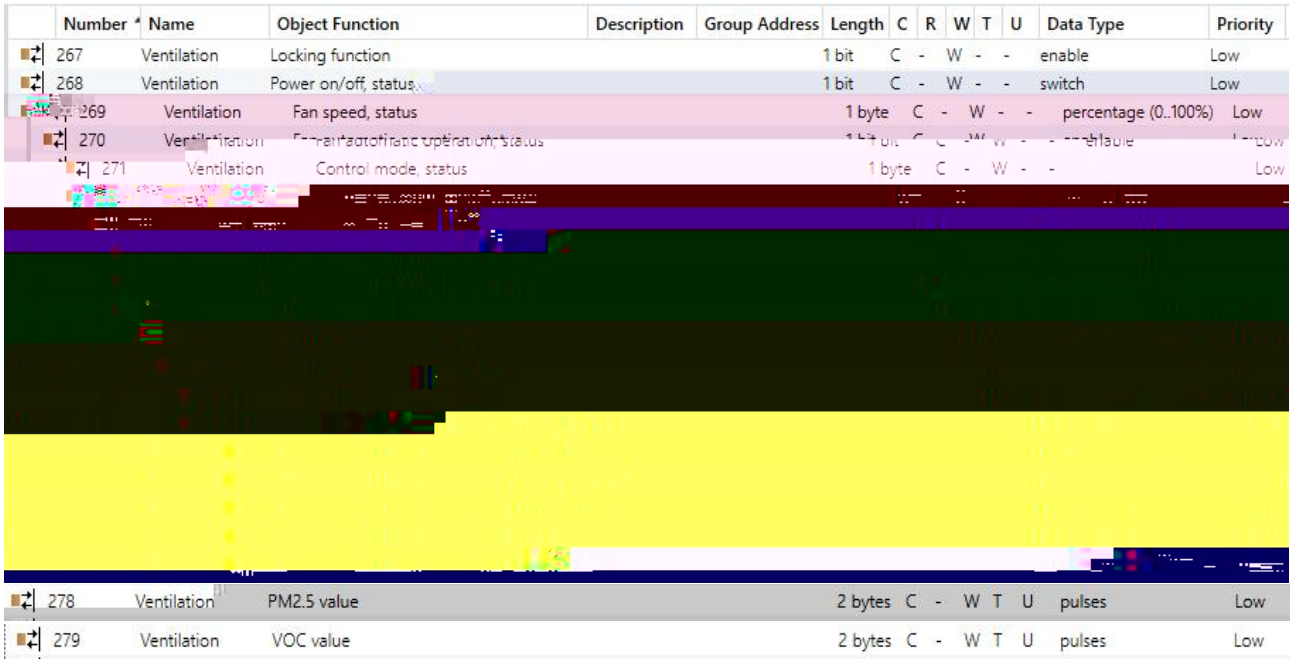
0

1byte 0..100%

“Slave” k

6.3.3 “Floor heating”

k



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
267	Ventilation	Locking function			1 bit	C	-	W	-	-	enable	Low
268	Ventilation	Power on/off, status			1 bit	C	-	W	-	-	switch	Low
269	Ventilation	Fan speed, status			1 byte	C	-	W	-	-	percentage (0..100%)	Low
270	Ventilation					C	-	W	-	-	enable	Low
271	Ventilation	Control mode, status			1 byte	C	-	W	-	-		Low
278	Ventilation	PM2.5 value			2 bytes	C	-	W	T	U	pulses	Low
279	Ventilation	VOC value			2 bytes	C	-	W	T	U	pulses	Low

6.3.4 “Ventilation”

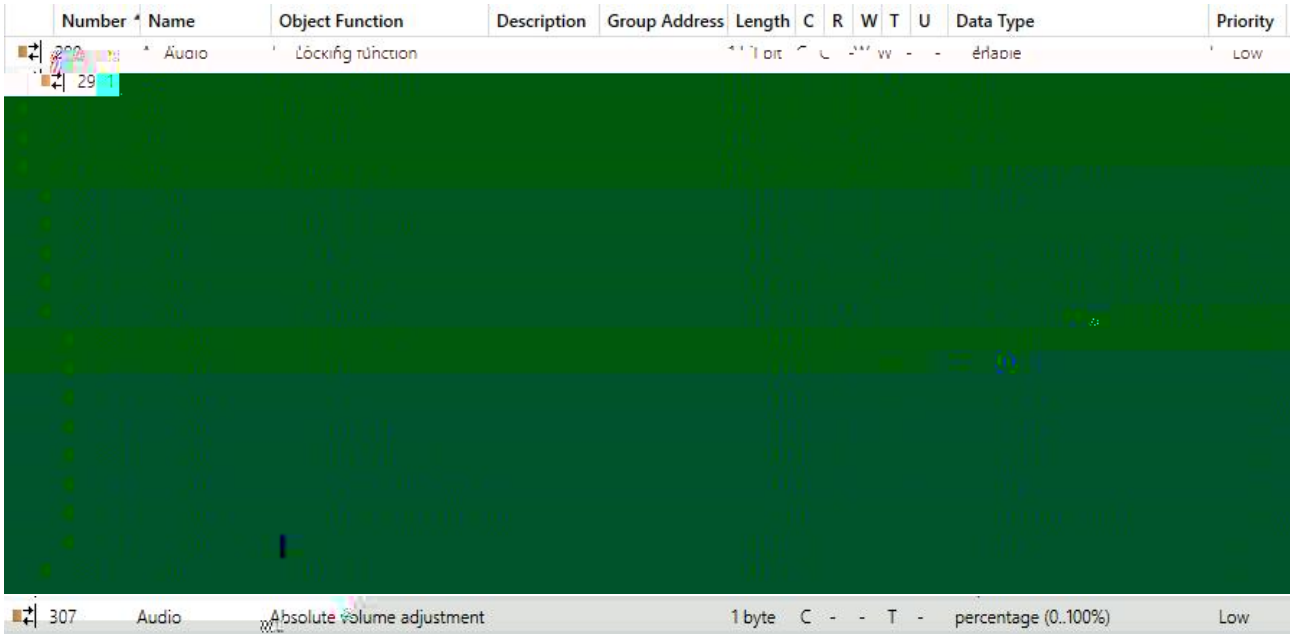
					DPT
/ k 0 ˚ 1 ˚					
k 1 ˚ 0 ˚					
k					k

k k 1 ˚ 0 ˚					
k k					
k k 1 ˚ 0 ˚					
/ k					
k k					
k k 1 ˚					
k / k					

PM2.5/VOC/CO2 k ug/m3 ppm k 0~999ug/m3 0~4000ppm PM2.5 PM2.5 k					
KNX k k					
k k					
k k 1 ˚ 0 ˚					
k k .					
k k					

! ! ! ! ! !

k



6.3.5 “Audio”

					DPT
/ k 0 1					
k k					

/ 1 k /

k

k

\ ł3 ⅄@: „ Kλ„

1 ∇„

„

k k

k k

k / KNX k

1——

0——

/ 1 k / k

1——

0——

k

/ 2 k k

1 0 k

/ 1 k

/ k

1

0

/ 2 k

k 1 0 k

/ 2 k

k 1 0 k

k

1——

0——

k k

k k

0..1 30

1 ˚ 0 ˚					
k					k

6.3.5 “Audio”

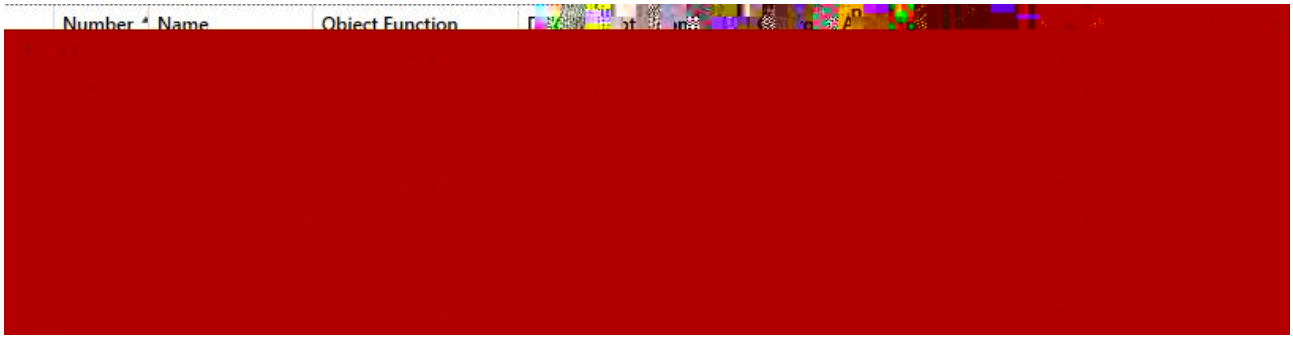
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input a			1 bit	C	-	W	T	U	boolean	Low
12	1st Logic-...	Input b			1 bit	C	-	W	T	U	boolean	Low
13	1st Logic-...	Input c			1 bit	C	-	W	T	U	boolean	Low
14	1st Logic-...	Input d			1 bit	C	-	W	T	U	boolean	Low
15	1st Logic-...	Input e			1 bit	C	-	W	T	U	boolean	Low
16	1st Logic-...	Input f			1 bit	C	-	W	T	U	boolean	Low
17	1st Logic-...	Input g			1 bit	C	-	W	T	U	boolean	Low
18	1st Logic-...	Input h			1 bit	C	-	W	T	U	boolean	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

6.4.1 “AND/OR/XOR”

DPT

/ X

*



6.4.2 “Gate forwarding”

					DPT
k					
Input x k					
k k					

6.4.2 “Gate forwarding”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold valu										

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	2-byte signed value	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input			4 bytes	C	-	W	-	U	counter pulses (unsigned)	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	temperature (°C)	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

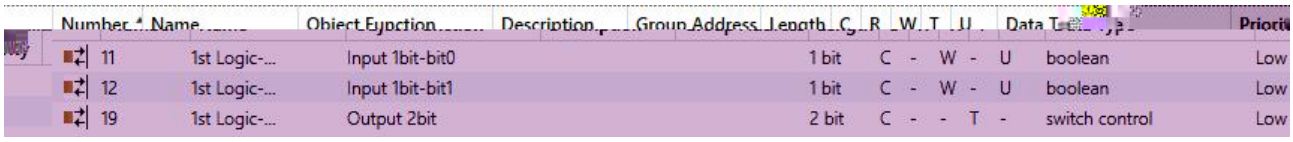
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	humidity (%)	Low
19	1st Logic-...	Logic result			1 bit	C	-	-	T	-	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Threshold value input										

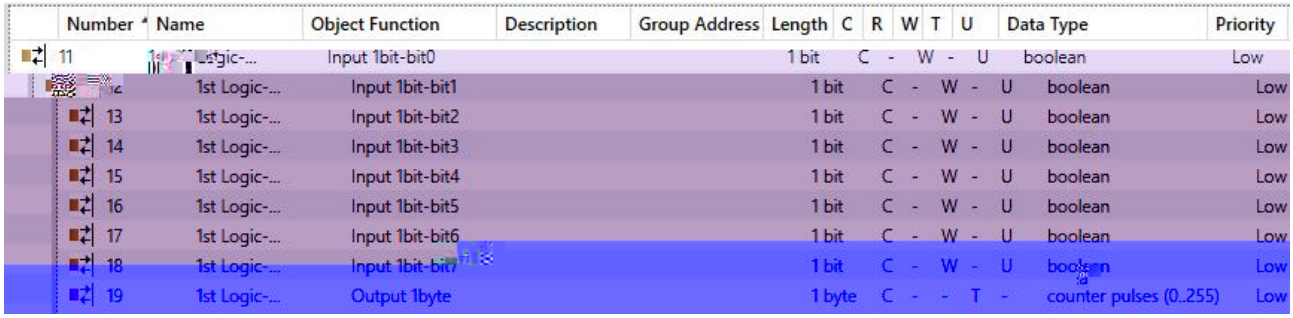
6.4.3 “Threshold comparator”

					DPT
k					
k					k

6.4.3 “Threshold comparator”



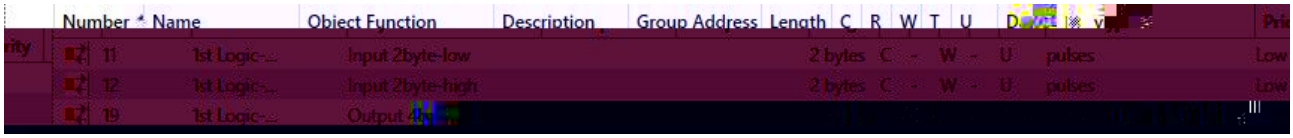
“2x1bit --> 1x2bit” 2 1bit 2bit Input bit1=1, bit0=0--> Output 2bit=2



“8x1bit --> 1x1byte” : 8 1bit 1byte Input bit2=1, bit1=1, bit0=1, 0--> Output 1byte=7

“1x1byte --> 1x2byte” 1byte 2byte Input 1byte=125--> Output 2byte=125,

“2x1byte --> 1x2byte” 2 1byte 2byte Input 1byte-low = 255 ($FF), Input 1byte-high = 100 ($64) --> Output 2byte = 25855 ($64 FF)



“2x2byte --> 1x4byte” 2 2byte 4byte Input 2byte-low = 65530 ($FF FA), Input 2byte-high = 32768 ($80 00)--> Output 2byte = 2147549178 ($80 00 FF FA)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 1byte			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
12	1st Logic-...	Output 1bit-bit0			1 bit	C	-	-	T	-	boolean	Low
13	1st Logic-...	Output 1bit-bit1			1 bit	C	-	-	T	-	boolean	Low
14	1st Logic-...	Output 1bit-bit2			1 bit	C	-	-	T	-	boolean	Low
15	1st Logic-...	Output 1bit-bit3			1 bit	C	-	-	T	-	boolean	Low
16	1st Logic-...	Output 1bit-bit4			1 bit	C	-	-	T	-	boolean	Low
17	1st Logic-...	Output 1bit-bit5			1 bit	C	-	-	T	-	boolean	Low
18	1st Logic-...	Output 1bit-bit6			1 bit	C	-	-	T	-	boolean	Low
19	1st Logic-...	Output 1bit-bit7			1 bit	C	-	-	T	-	boolean	Low

“1x1byte --> 8x1bit” 1 1byte 8 1bit Input 1byte=200 --> Output bit0=0, bit1=0, bit2=0, bit3=1, bit4=0, bit5=0, bit6=1, bit7=1

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 2byte			2 bytes	C	-	W	-	U	pulses	Low
18	1st Logic-...	Output 1byte-low			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
19	1st Logic-...	Output 1byte-high			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

“1x2byte --> 2x1byte” 1 2byte 2 1byte Input 2byte = 55500 ($D8 CC) --> Output 1byte-low = 204 ($CC), Output 1byte-high =216 ($D8)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 4byte			4 bytes	C	-	W	-	U	counter pulses (unsigned)	Low
18	1st Logic-...	Output 2byte-low			2 bytes	C	-	-	T	-	pulses	Low
19	1st Logic-...	Output 2byte-high			2 bytes	C	-	-	T	-	pulses	Low

“1x4byte --> 2x2byte” 1 4byte 2 2byte Input 4byte = 78009500 ($04 A6 54 9C) --> Output 2byte-low = 21660 ($54 9C), Output 2byte-high =1190 ($04 A6)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 3byte			3 bytes	C	-	W	-	U	RGB value 3x(0..255)	Low
17	1st Logic-...	Output 1byte-low			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
18	1st Logic-...	Output 1byte-middle			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
19	1st Logic-...	Output 1byte-high			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

“1x3byte --> 3x1byte” 1 3byte 3 1byte Input 3byte = $78 64 C8--> Output 1byte-low = 200 ($C8) , Output 1byte-middle = 100 ($64) , Output 1byte-high =120 ($78)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 1byte-low			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
12	1st Logic-...	Input 1byte-middle			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
13	1st Logic-...	Input 1byte-high			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
19	1st Logic-...	Output 3byte			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low

“3x1byte --> 1x3byte” 3 1byte 1 3byte Input 1byte-low = 150 ($96), Input 1byte-middle = 100 ($64), Input 1byte-high = 50 ($32)--> Output 3byte = $32 64 96

6.4.4 “Format convert”

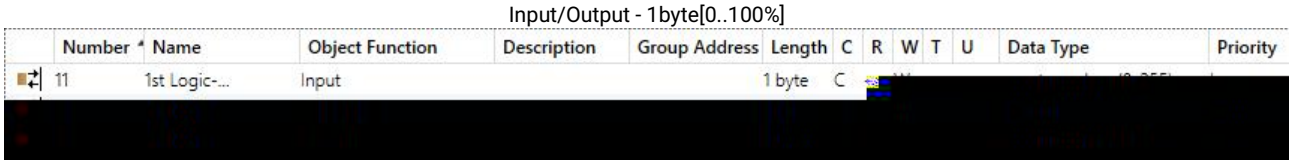
					DPT
k					
k					

6.4.4 “Format convert”

Input/Output - 1bit[On/Off]

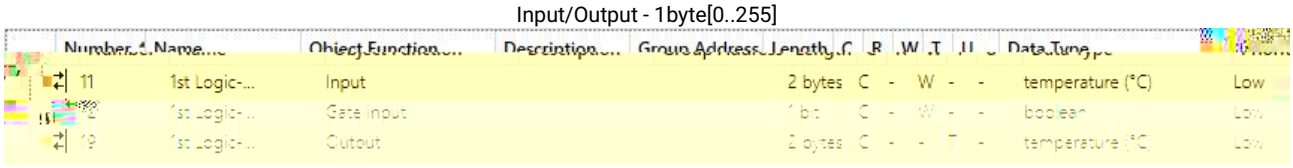
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input			1 byte	C	-	W	-	-	percentage (0..100%)	Low
12	1st Logic-...	Gate input			1 bit	C	-	W	-	-	boolean	Low
19	1st Logic-...	Output			1 byte	C	-	-	T	-	percentage (0..100%)	Low

Input/Output - 1byte[0..100%]



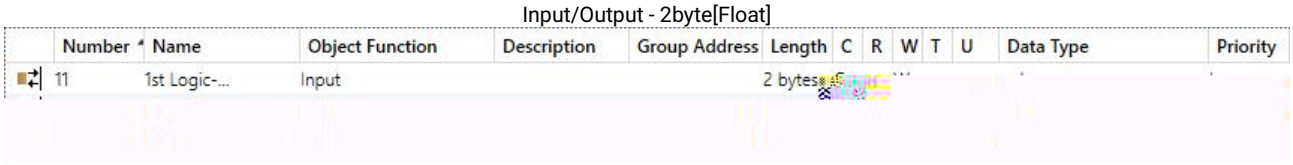
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input			1 byte	C						

Input/Output - 1byte[0..255]



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input			2 bytes	C	-	W	-	-	temperature (°C)	Low
12	1st Logic-...	Gate input			1 bit	C	-	W	-	-	boolean	Low
19	1st Logic-...	Output			2 bytes	C	-	-	T	-	temperature (°C)	Low

Input/Output - 2byte[Float]



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input			2 bytes	C						

Input/Output - 2byte[0..65535]

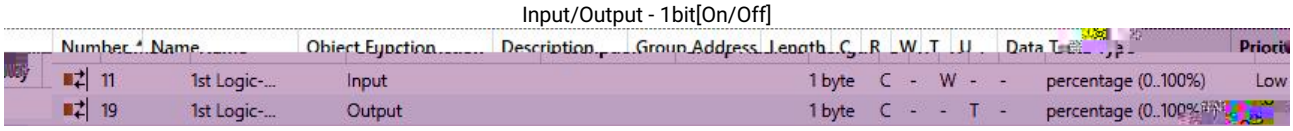
6.4.5 “Gate function”

					DPT
k					
k k					

		k		“Gate input”	k

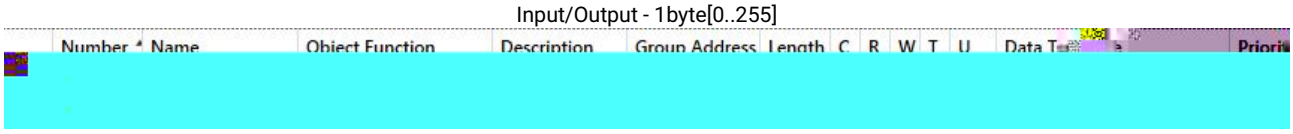
6.4.5 “Gate function”

Input/Output - 1bit[On/Off]



Input/Output - 1byte[0..100%]

Input/Output - 1byte[0..255]



Input/Output - 2byte[Float]

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input			2 bytes	C	-	W	-	-	pulses	Low
19	1st Logic-...	Output			2 bytes	C	-	-	T	-	pulses	Low

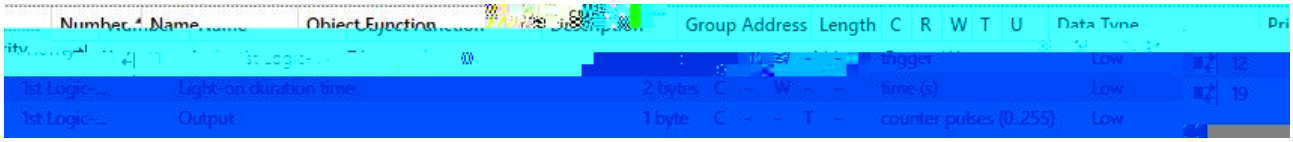
Input/Output - 2byte[0..65535]

6.4.6 “Delay function”

					DPT
k					
					k

6.4.6 “Delay function”

1 bit

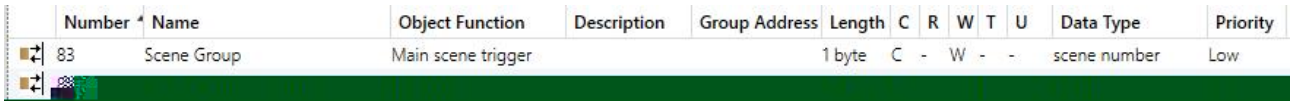


1byte

6.4.7 “Staircase lighting”

					DPT
k					
					k
1		2 k			k

6.4.7 “Staircase lighting”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
83	Scene Group	Main scene trigger			1 byte	C	-	W	-	-	scene number	Low

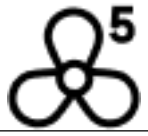
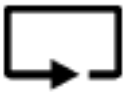
6.5 “Scene Group”

					DPT
					k 0..63
k 8 8 k “Description for Output x function” “1st Scene Group-Output x” k					

6.5 “Scene Group”

ETS	

ETS	

			
			
			PM2.5

	PM10		
	CO2		