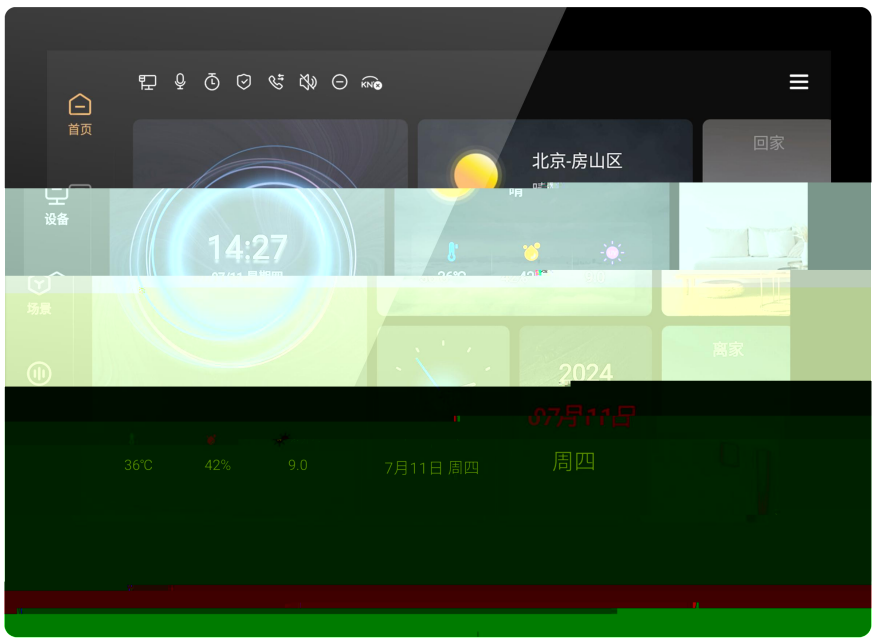
K-BUS® KNX Z10

KNX Smart Touch Z10_V1.0

A-IS10(□)



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KNX Z10 10.1 KNX □ 1280*800 k KNX

□ SIP □ k

! ! ! ! ! □ (RGB ! RGBW ! RGBCW) ! !

! ! □ k □ □ !

□ k □ ! ! □

k □ □ ! □SIP

! ! ! □ ! ! ! !

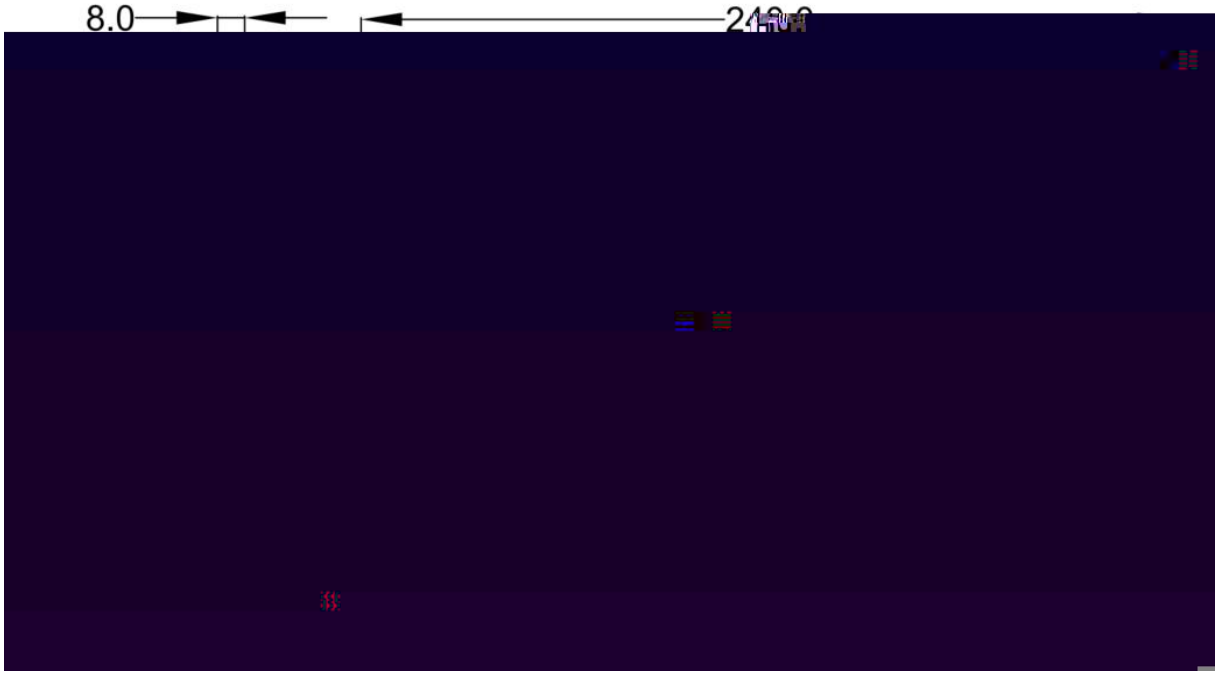
! k

KNX Z10 KNX □ 24-30V DC k

.knxproj ETS□ ETS5.7 □ k

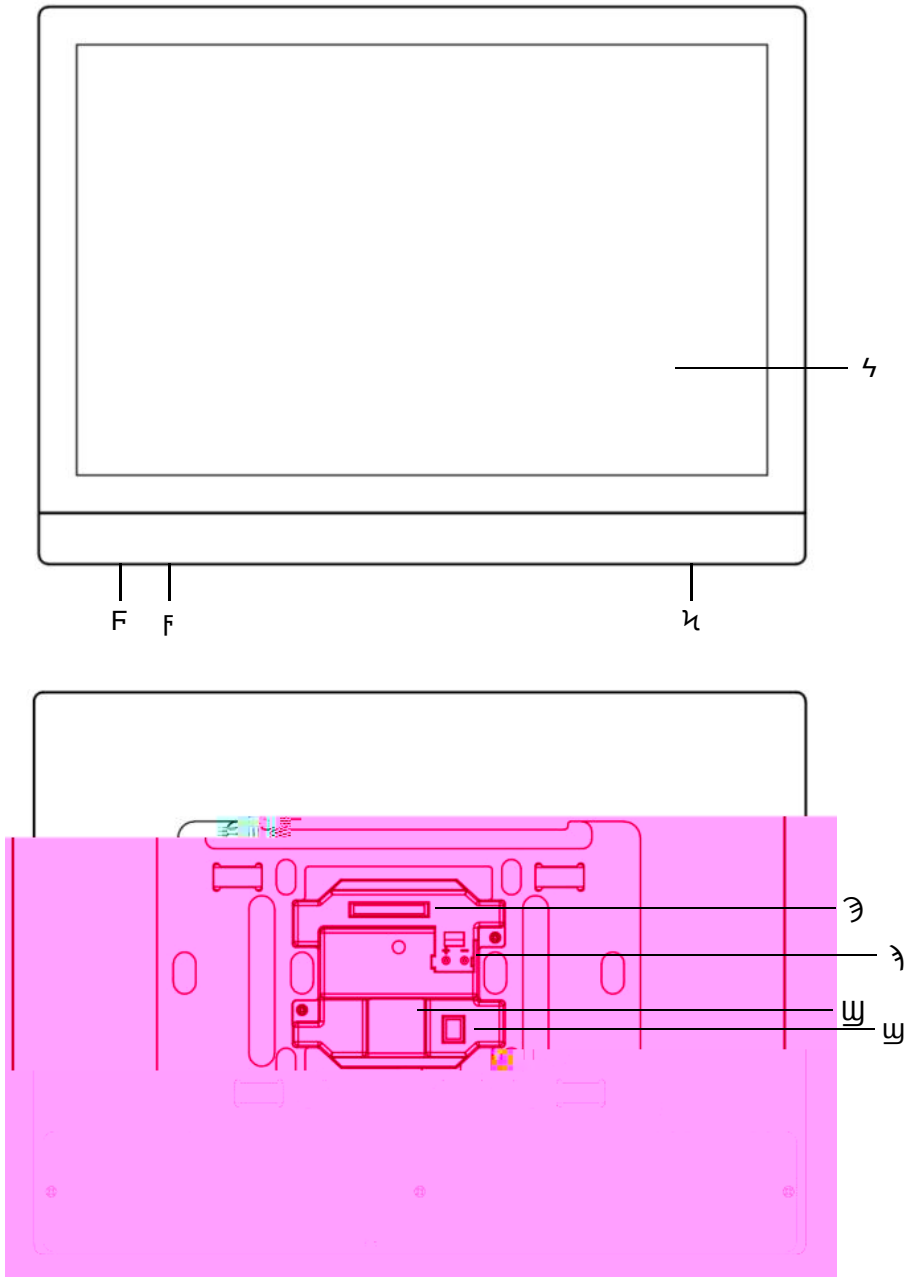
	21-30V DC□ KNX
	<3.8mA/24V□<3.4mA/30V
	<0.1W
	24-30V DC
	<330mA/24V□<270mA/30V
	<12W
KNX	(/□)
	(/□)
RJ45	
	-40-80℃
	– 5 °C ... + 45 °C
	–25 °C ... + 55 °C
	– 25 °C ... + 70 °C
	<93%□
86	

3.1



3.1 KNX Z10

3.2

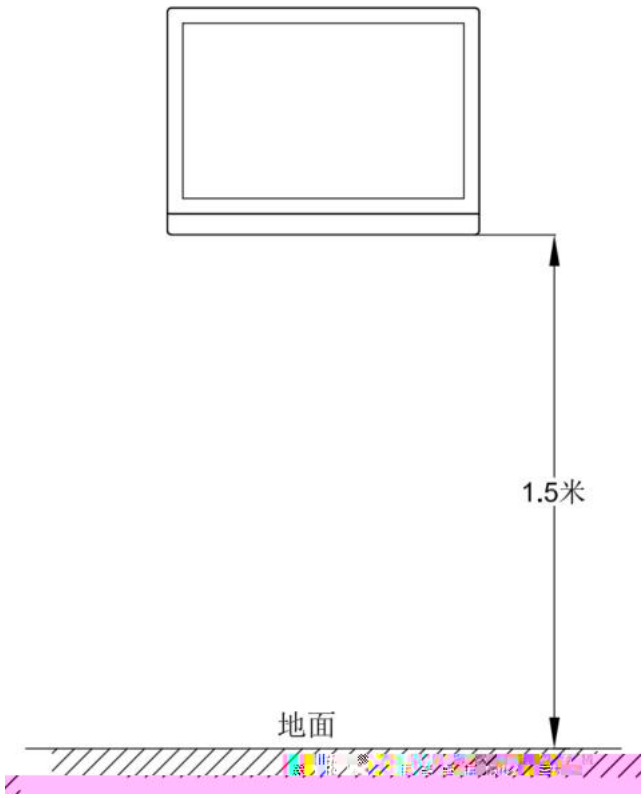


3.1 KNX Z10

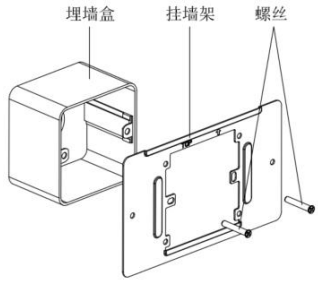
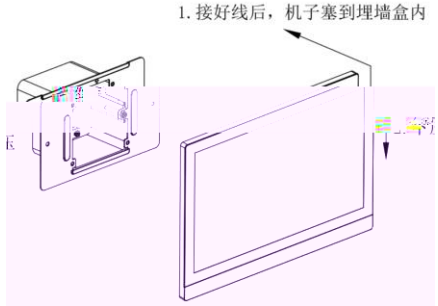
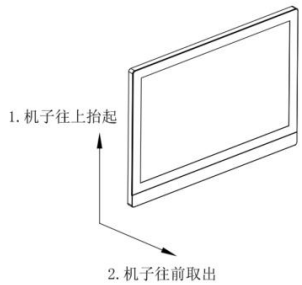
F 485

F KNX

3.3



1.5

	2 86 60
	
	1. 2.

KNX Touch/Intercom/1.0	**3042**	**4500**	**4500**	**2045**

! ! ! / ! ! k

UI k

k

UI 120 / k

! ! ! ! ! (RGB ! RGBW ! RGBCW) !

! ! ! ! k

k

! +

+ k

RGB

RGB !RGBW RGBCW 3 LED kRGBCW RGB

! □ k

! ! k k

! ! □ ! □ k

□ k

/ □ □ □ □ 4 □ !

! □ □ k

□ k PI k

□

□ □ / □ □ □ k

PM2.5 ¦ VOC ¦ CO2 k

□ / □ / □ / □ □ □ □

□ k

! ! □ □ □ k

! ! PM2.5 ¦ PM10 ¦ CO2 ¦ VOC ¦ AQI ¦ □

k

k

□ k

□HCL□

□ k

□ 16 k □

□ k □ k

□ 8 □ k 8

k

8 □ 8 1 k

! ! ! ! ! ! ! k

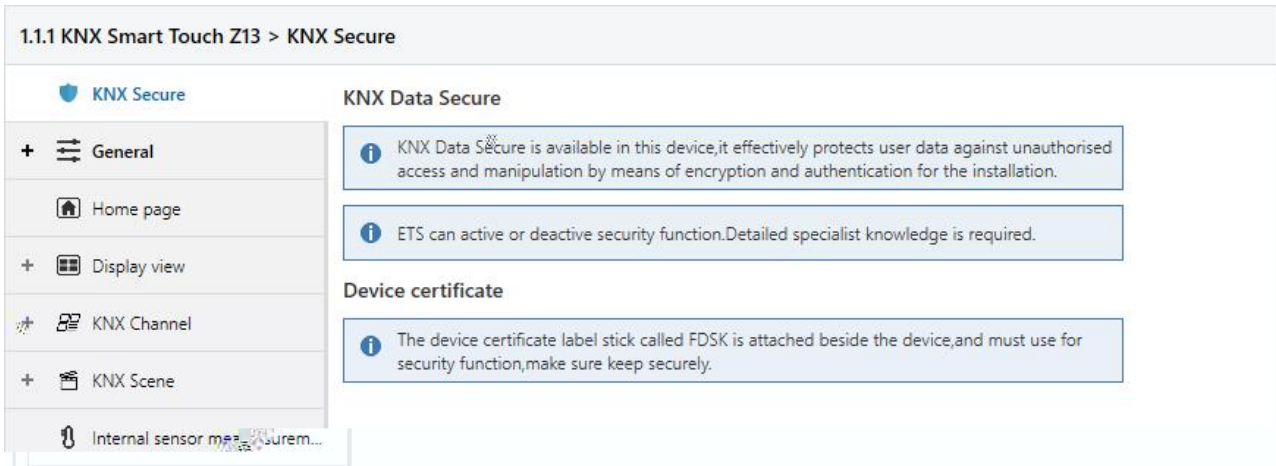
UI □ □ □ ! □SIP !

! ! k

ETS

5.1 KNX

KNX Z10 KNX KNX k □ k



5.1 (1) “KNX Secure”

KNX KNX ETS □ 5.1(1) □

KNX Data Secure is available in this device,it effectively protects user data against unauthorised access and manipulation by means of encryption and authentication for the installation.

ETS can active or deactive security function.Detailed specialist knowledge is required.

KNX □ □

k ETS k k

The device certificate label stick called FDSK is attached beside the device,and must use for security function,make sure keep securely.

FDSK □ □ k

ETS □ □ □ □

❖ KNX k

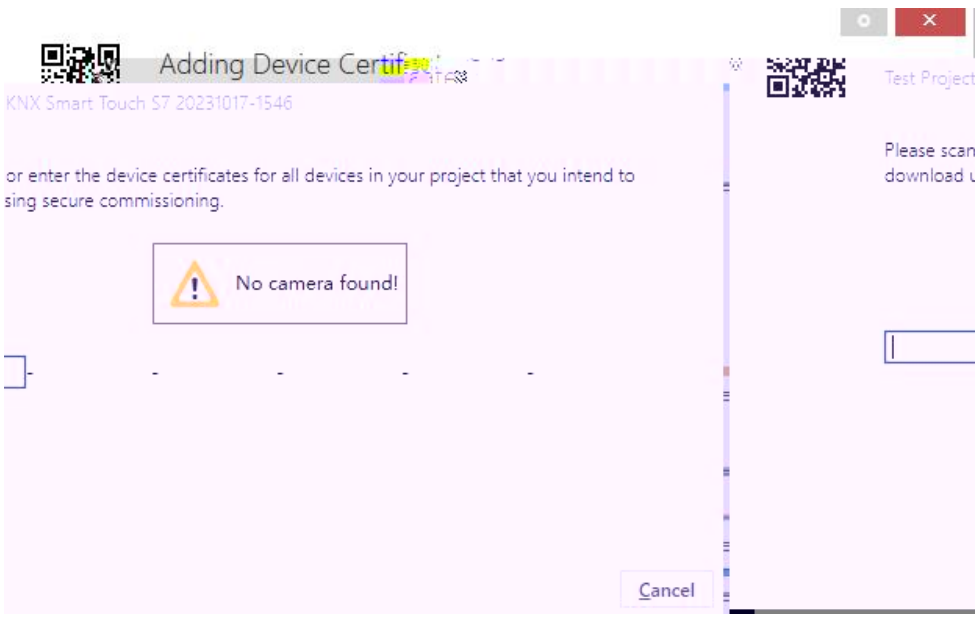
KNX

❖ KNX k FDSK =

ETS

✧ ETS 5.1 (2) k

QR k

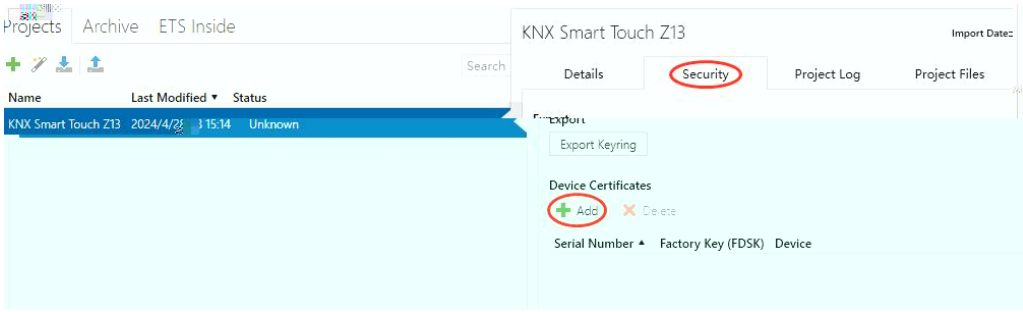


5.1(2) Add Device Certificate

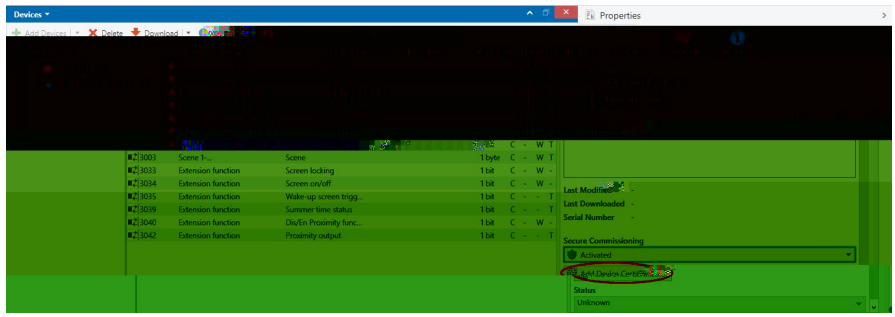
✧ ETS k

“Security” 5.1(3) k

□ □ “Add Device Certificate”□ 5.1(4) k



5.1(3) Add Device Certificate



5.1(4) Add Device Certificate

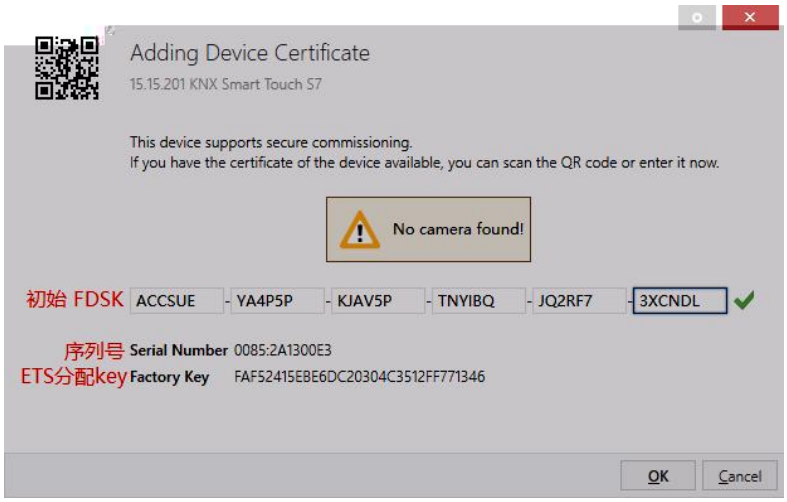
✧ □ FDSK k

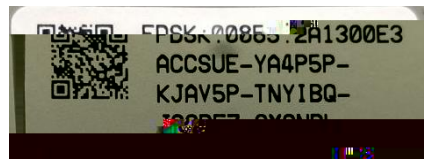
FDSK□ **KNX** k

FDSK □ FDSK □ETS □ 5.1(5) k

□ □ ETS □ □□

FDSK k





5.1(5)

□

□ k □

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

□ □ □ □

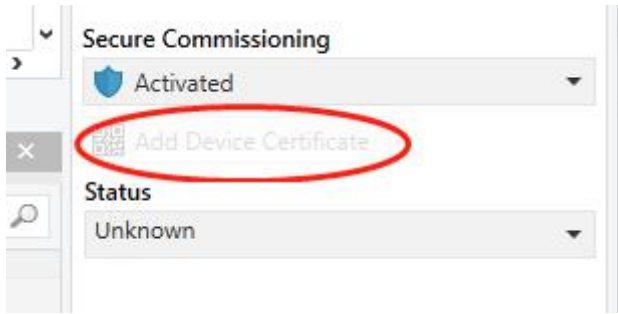
□ 5.1(6) □□ k

5.1(6)

□ □ □

□ **FDSK** k

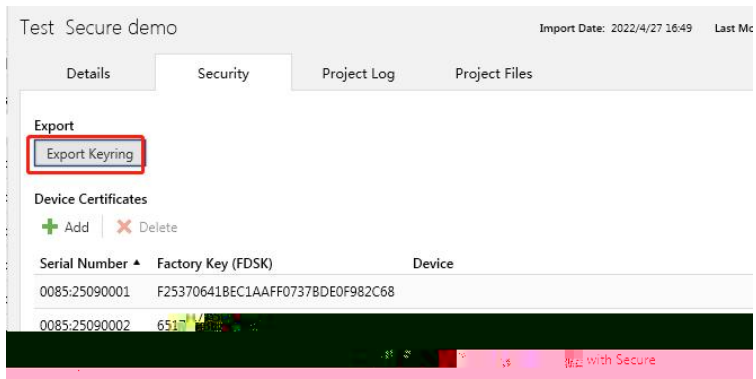
□ “Add Device Certificate” □ k



5.1(7)

ETS □

□ 5.1(8) □ .knxkeys k



5.1(8)

□ **KNX USB □ □ □, ETS**

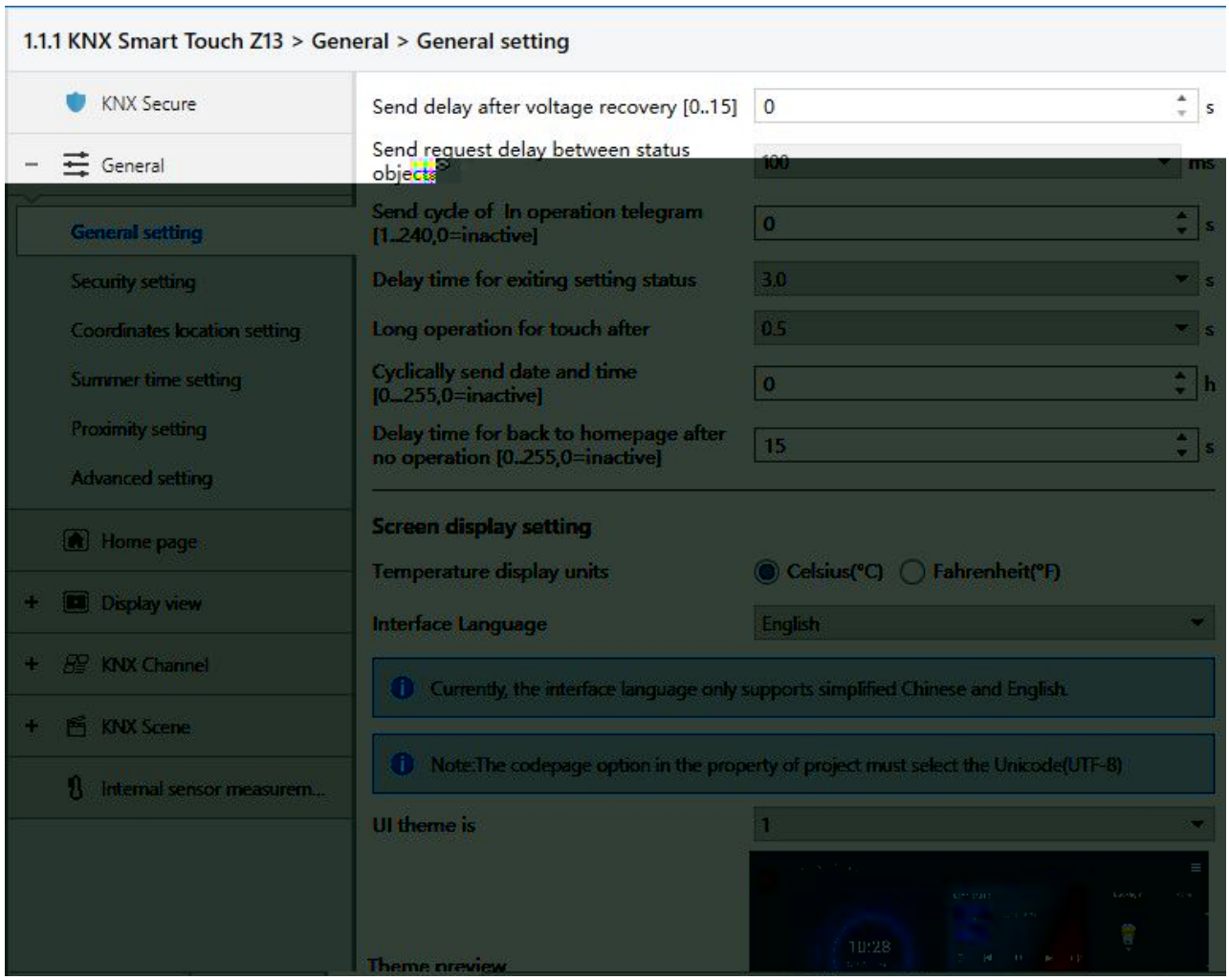
k

5.2 □General□

5.2.1 “General setting”

“General setting” 5.2.1 □ □ !

! ! ! k



5.2.1 “General setting”

"Send delay after voltage recovery [0..15]"

□ k □ □ **0..15**

□ k

"Send request delay between status objects"

k □ □

50ms

100ms

200ms

"Send cycle of In operation telegram [1..240,0=inactive]s"

k "0" □ "In operation" k "0" □ "In operation" "1"

k □ □ **0...240 □ 0=**

□ k

"Delay time for exiting setting status"

□ ! ! k

□ □ UI k □ □

1.0s

2.0s

3.0s

4.0s

5.0s

"Long operation for touch after"

k □ □

0.5s

1.0s

2.0s

3.0s

"Cyclically send date and time [0...255,0=inactive]h"

□0 k □□**0...255**

"Delay time for back to homepage after no operation[0..255,0=inactive]s"

□ □ □ □

□□0 k □□**0...255**

Screen display setting

"Temperature display units"

k □□

Celsius(°C)

Fahrenheit(°F)

"Interface Language"

k □□

Chinese(Simplified) **( )** **Spanish**

Chinese(Traditional) **( )** **Russian**

English **Greek**

German **Polish**

French **Turkish**

□

警告：请务必确保工程属性里的编码页选项为UTF-8，否则中文显示将会异常

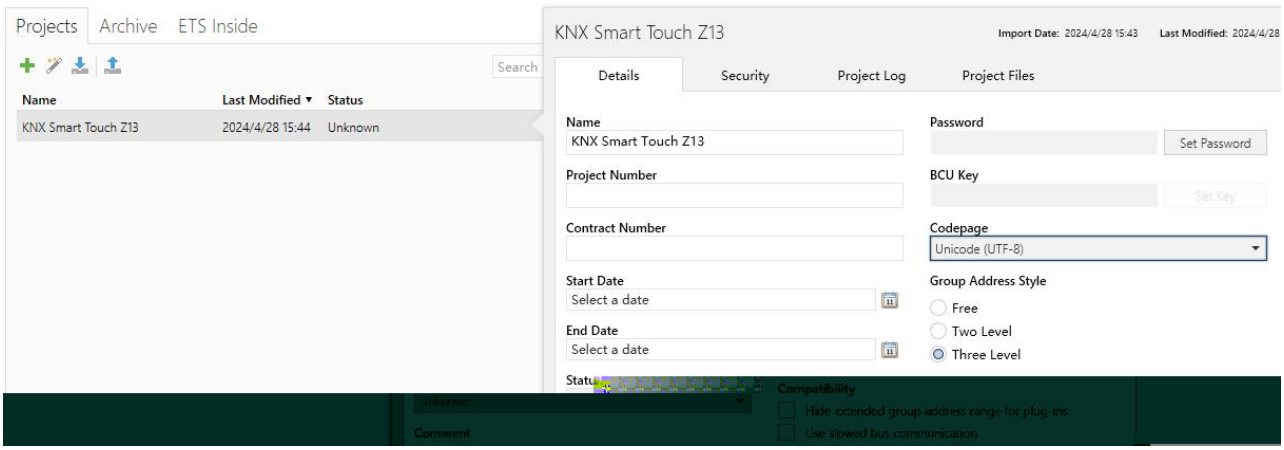
□

Note:The codepage option in the property of project must select the Unicode(UTF-8)

□ □

Currently, the interface language only supports simplified Chinese and English.

UTF-8 □



"UI theme is"

□ □ □ □ k □ □ k k

□ □

1

2

3

"Date display format"

□ k □ □

yyyy/mm/dd

dd/mm/yyyy

Brightness setting

"Screen brightness can be changed via bus"

k

□ "Screen backlight brightness" k

Extension function

"Night mode"

□ k 5.2.3 k

"Proximity function"

□ k 5.2.5 k

"Intercom function"

□ □ k

"Extension Sub Panel function(If the device supports)"

□ □ k □

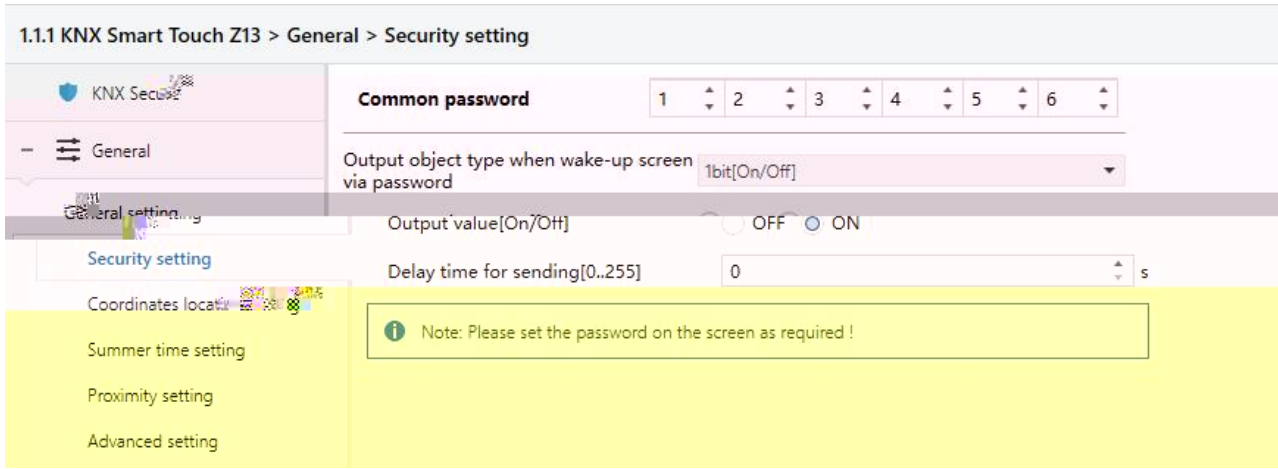
& LED k k 5.2.7

k

5.2.2 “Security setting”

“Security setting” 5.2.2 □

k



5.2.2 “Security setting”

”Common password”

, k

”Output object type when wake-up screen via password”

□ k □ □

No reaction

1bit[On/Off]

1byte[scene control]

1byte[0..255]

1byte[0..100%]

□ □ □ k

□ **”No reaction”** □

- **“ Output value[On/Off] ”**
- **“ Output scene NO.[1..64]”**
- **“ Output value[0..255]”**
- **“ Output value[0..100%] ”**

□ k

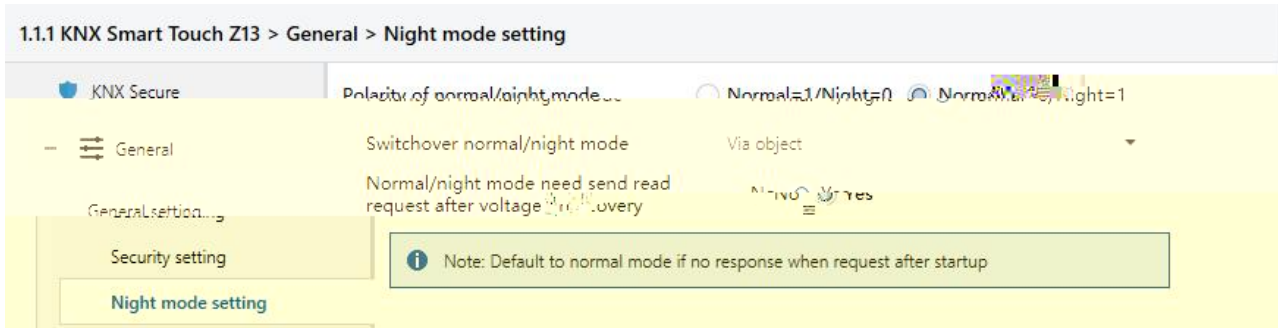
□ □ **OFF/ON / Scene No.1..Scene No.64 / 0..255 / 0..100%**

- **“ Delay time for sending[0...255]”**

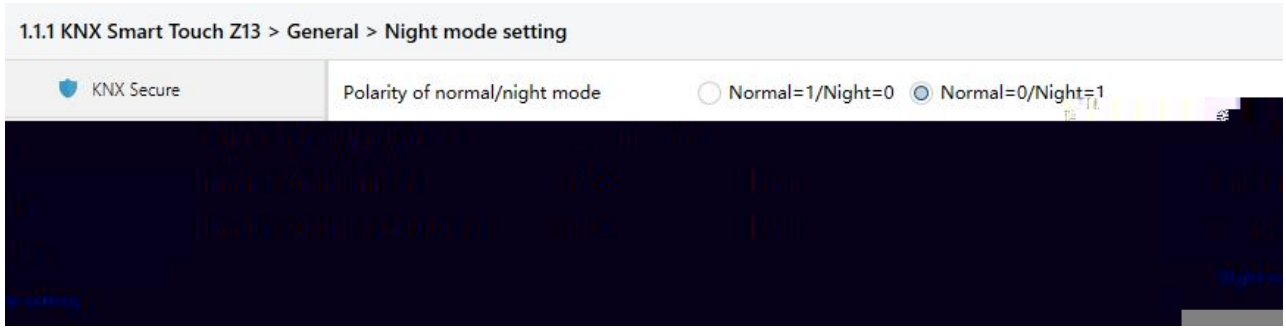
k □ □ **0...255**

5.2.3 “Night mode setting”

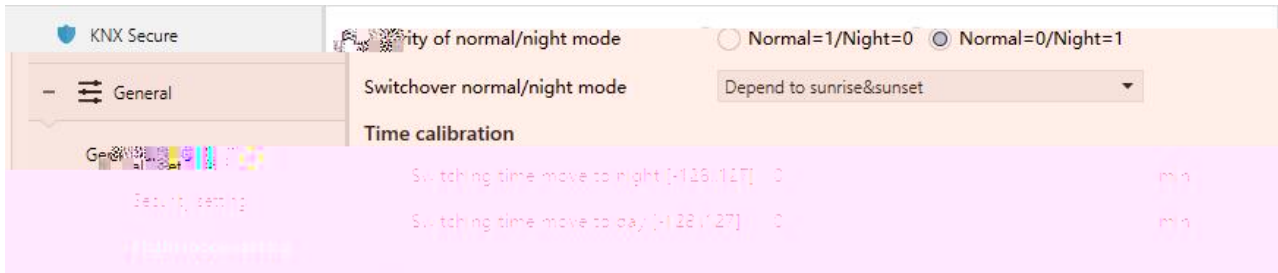
“Night setting” 5.2.3 □



Via object



Depend to certain time



Depend to sunrise&sunset

5.2.3 “Night modey setting”

“Polarity of normal/night mode”

□ □/ k □□

Normal=1/Night=0

Normal=0/Night=1

“Switchover normal/night mode”

/ □ “Night mode” k □□

Via object

Depend to certain time

Depend to sunrise&sunset

Via object □ k □ k

Depend to certain time □ / k 18 □ 30 □

6 □ 30 k

Depend to sunrise&sunset □ / k □

□ 116°20' ! 39°56' k

"Via object" □ □ **k**

"Normal/night mode need send read request after voltage recovery"

□ Night mode □ □ k □ LED

( )/ k □ □

No

Yes

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

□ □ □ **k** **! LED** ! □ □

k

"Depend to certain time" □ □ **k**

"Time for switch to night at"

"Time for switch to normal (day) at"

/ □ k □ □ **00:00...23:59**

"Depend to sunrise&sunset" □ □ k

Time calibration

"Switching time move to night [-128..127]min"

□ k □

k □ □ **-128..127**

"Switching time move to day [-128..127]min"

□ k □

k □ □ **-128..127**

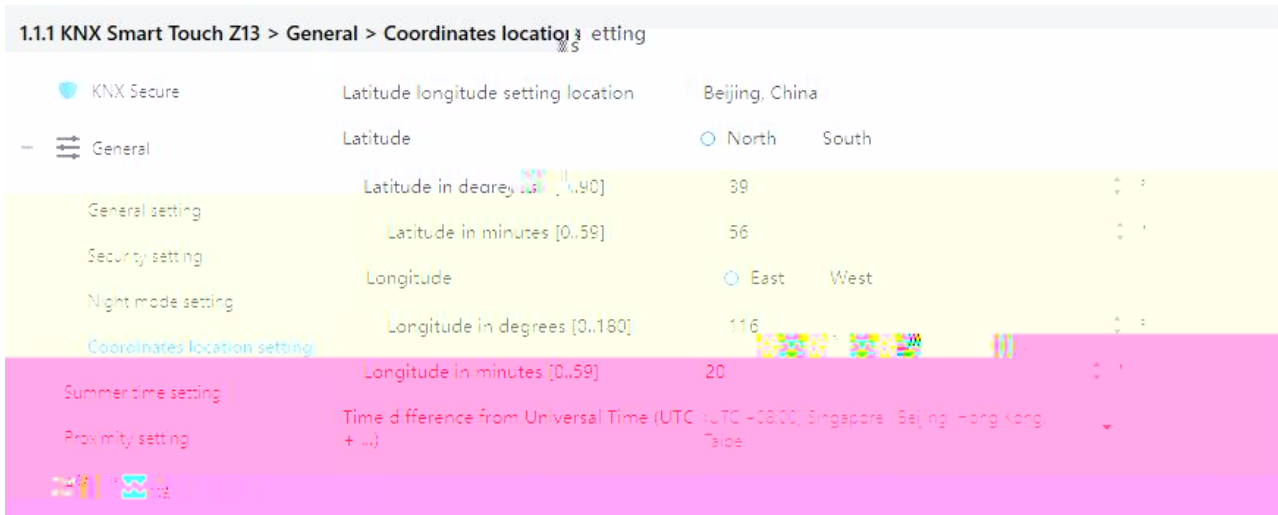
□ -10min □ 10min □ 10min □

10min k

5.2.4 “Coordinates location setting”

“Coordinates location setting” 5.2.4 □ /

k



5.2.4 “Coordinates location setting”

“Latitude longitude setting location”

□ “Beijing,China” k

“Latitude”

□ k □ □

South

North

- **“ Latitude in degrees [0..90]”**
- **“ Latitude in minutes [0..59]”**

k 39-56 k

"Latitude"

□ k □ □

East

West

" Longitude in degrees [0..180]"

" Longitude in minutes [0..59]"

k 116-20 k

" Time difference from Universal Time (UTC + ...)"

k □ □

(UTC -12□00) International Date Line West

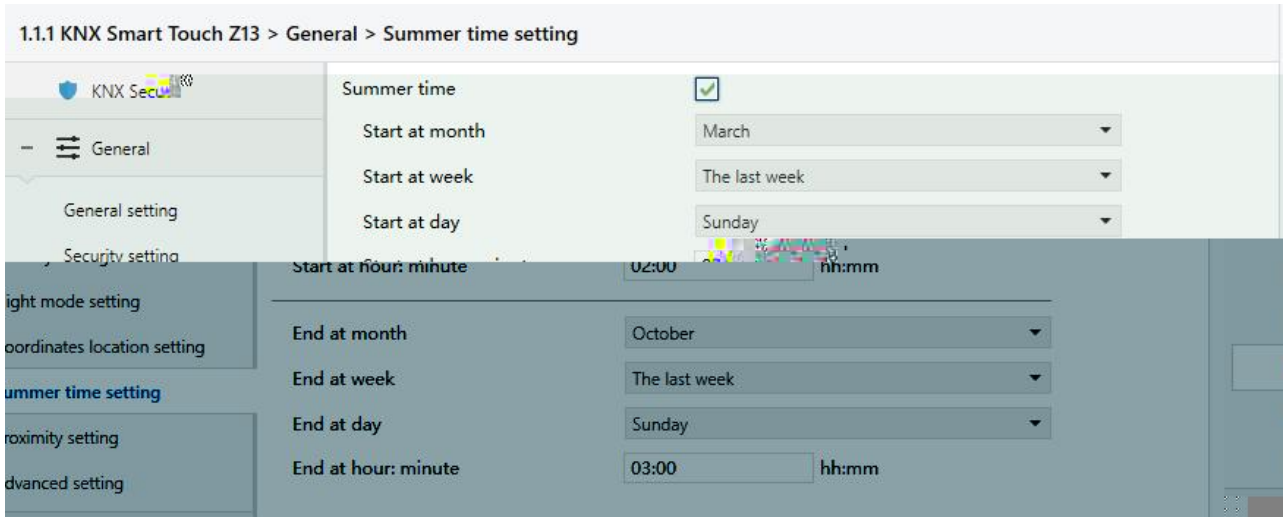
(UTC -11□00) Samoa

.....

(UTC +11□00) Magadan, Salomon Islands, New Caledonia □ □ □

(UTC +12□00) Aukland, Wellington, Fiji □ □ □

5.2.5 ”Summer time setting”



5.2.5 ”Summer time setting”

” Summer time”

k □ □

Disable

Enable

”Summer time” □ □ / k

• • **“ Start at month”**

• • **“ End at month”**

k □ □

January

February

...

December

- **“Start at week”**
- **“End at week”**

k □ □

The first week

The second week

...

The last week

- **“Start at day”**
- **“End at day”**

k □ □

Monday

Tuesday

...

Sunday

- **“Start at hour:minute”**
- **“End at hour:minute”**

□ k □ □ **00:00-23:59**

□ 3 02h:00min 11

02h:00min □ □ □ □ □

03h:00min □ □ □ □ 02h:00min k

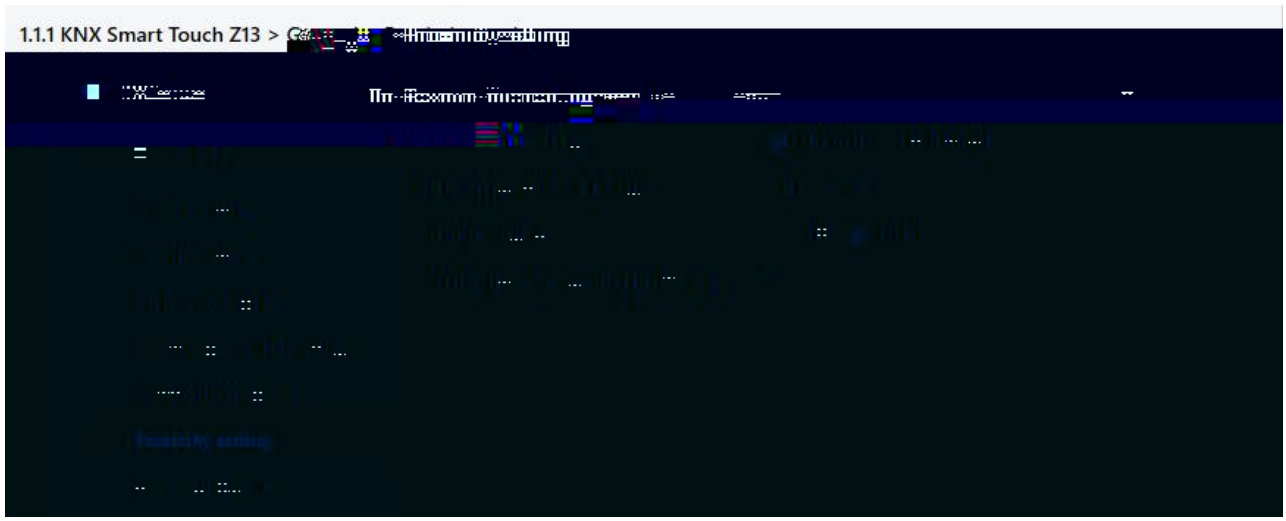
□ k ! □

□ k □ k

5.2.6 “Proximity setting”

“Proximity setting” 5.2.6 k □

□ k



5.2.6 “Proximity setting”

“The Proximity function triggered via ”

k □ □

Sensor

Proximity object

Sensor or Proximity object

“Sensor or Proximity object” □ □ k

“Sensor” “Sensor or Proximity object” k

“Proximity Sensitivity ”

k 30cm □ 60cm

□ □

Normal

Enhanced

“Object type of output value ”

□ k □ □

1bit[On/Off]

1byte [scene control]

1byte[0..255]

1byte[0..100%]

• • **“Output value[On/Off]”**

• • **“Output scene NO.[1..64”**

• • **“Output value[0..255]”**

• • **“Output value[0..100%]”**

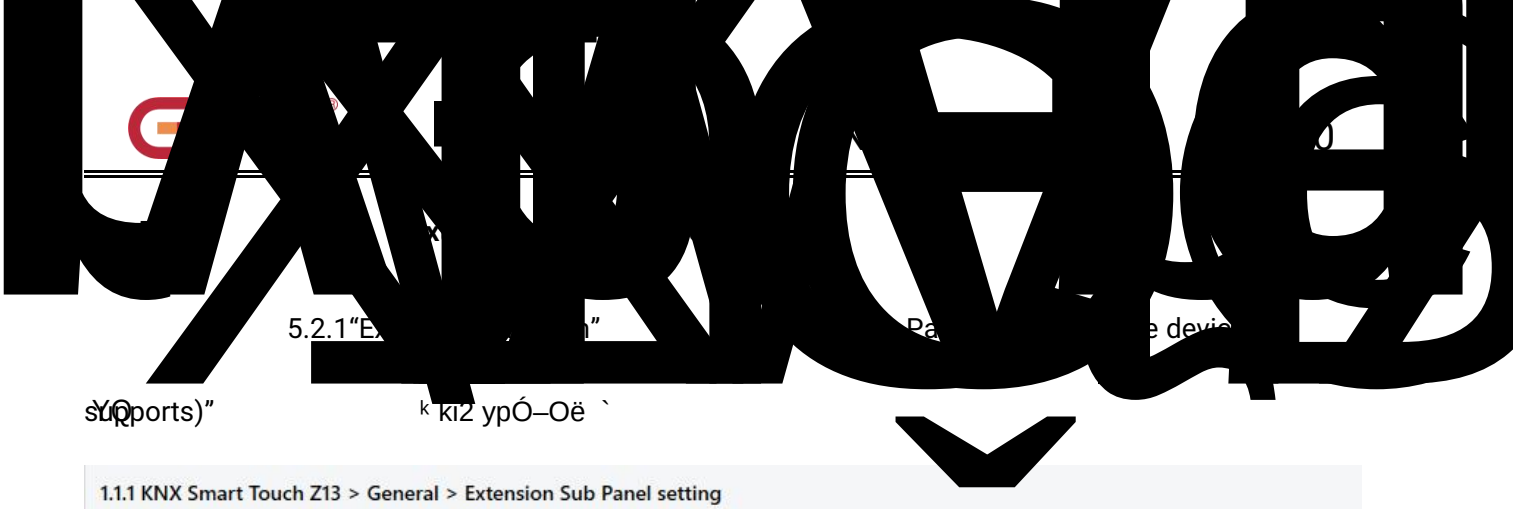
□

k

• • **“Delay time for sending[0..65535]”**

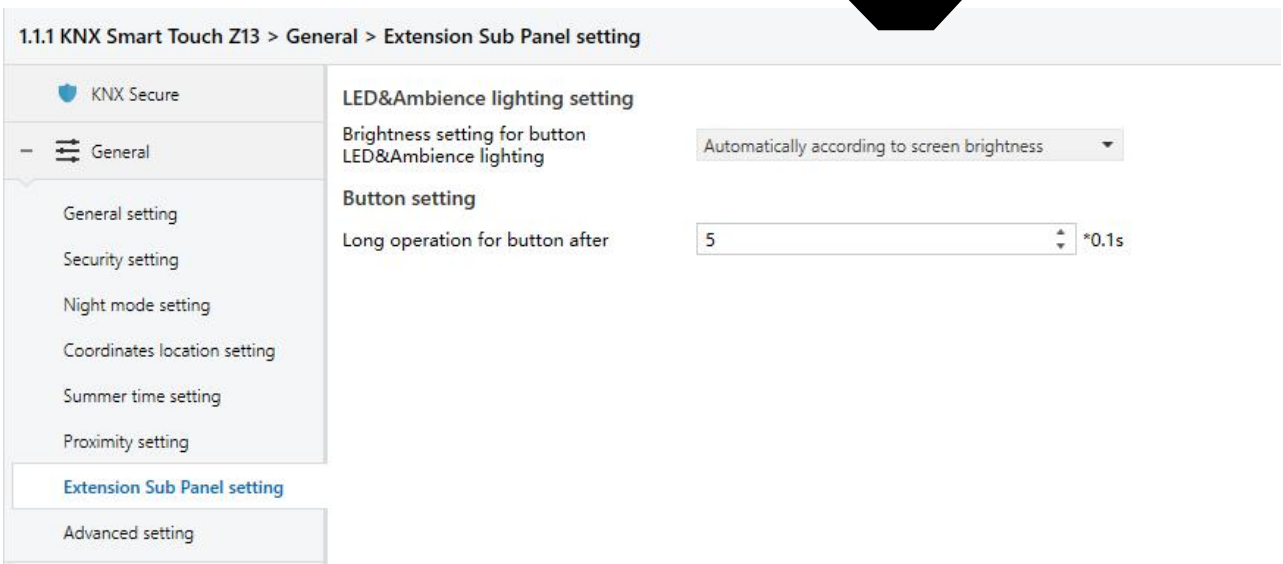
k □ □ **0..65535**

□ □ □ □ k



5.2.1“E n” Pa e devi

supports)” k kI2 ypÓ–Oë `



5.2.7“Extension Sub Panel setting”

LED&Ambience lighting setting LED

"According to parameter" □ k

• • **"LED brightness in normal mode"**

LED k □ □

0...100%

• • **"LED brightness in night mode"**

□ LED k □ □

0...100%

• • **"Ambience lighting brightness in normal mode"**

k □ □

0...100%

• • **"Ambience lighting brightness in night mode"**

□ k □ □

0...100%

• • **"LED brightness in standby mode"**

LED k □ □

0...50%

• • **"Ambience lighting brightness in standby mode"**

k □ □

0...50%

Button setting

"Long operation for button after "

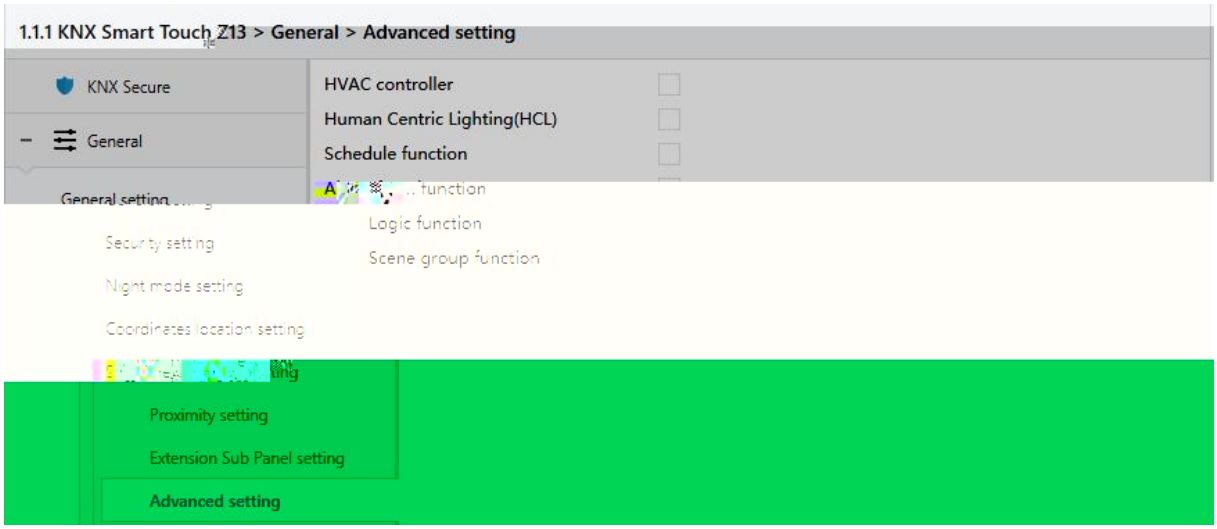
k

5.2.8 “Advanced setting”

“Advanced setting” 5.2.8 k HVAC ! !

! ! ! k

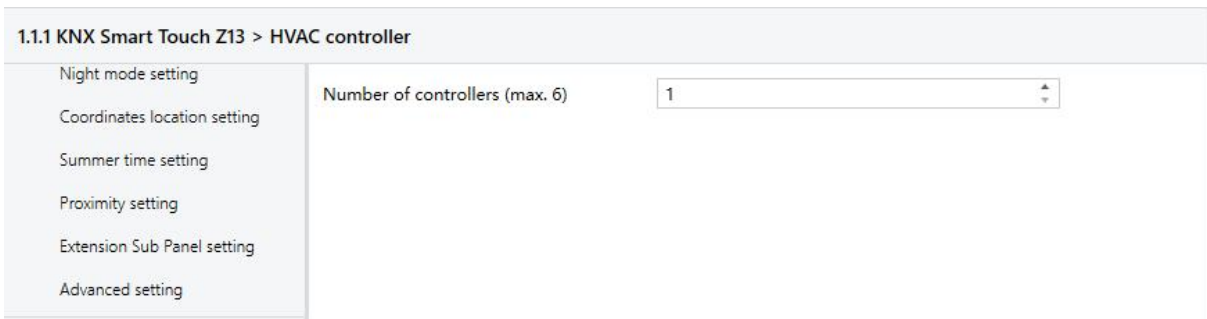
5.3-5.8



5.2.8 “Advanced setting”

5.3 ”HVAC controller”

5.2.8“Advanced setting” “HVAC controller” □ 5.3 k



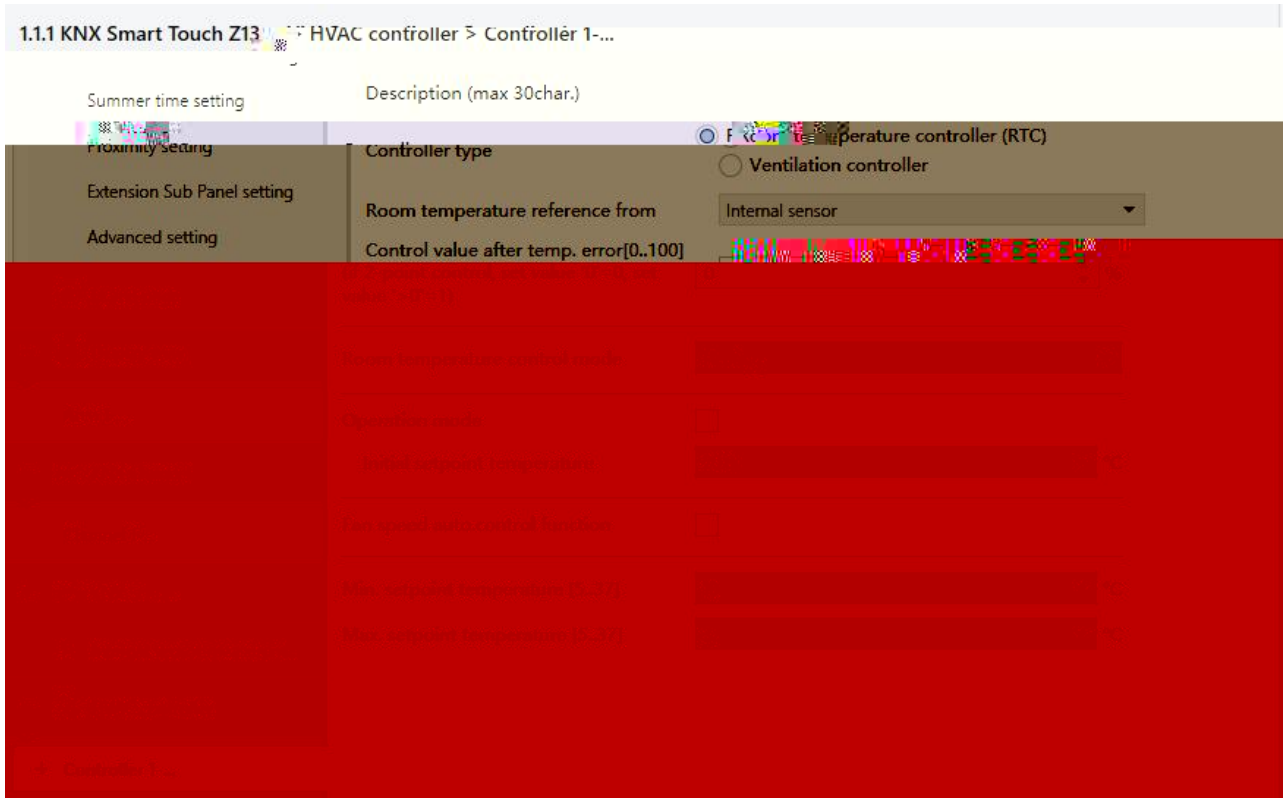
5.3 “HVAC controller”

“ Number of controllers (max.6)”

HVAC k □ □**1-6**

5.3.1 ”Cotroller x-Room temperature controller(RTC)”(x=1~6)

”Room temperature controller (RTC)” □ 5.3.1 k



5.3.1 “Controller x-Room temperature controller(RTC)”(x=1~6)

“Description (max 30char.)”

□ 30 k

“Controller type ”

k □ □

Room temperature controller (RTC)

Ventilation controller

"Room temperature reference from "

k □ □

Internal sensor

External sensor

Internal and External sensor combination

Internal sensor combine with External sensor □ k

• • **"Combination ratio"**

k □ □

10% Internal to 90% External

20% Internal to 80% External

...

80% Internal to 20% External

90% Internal to 10% External

□ □ "40% Internal to 60% External" □ 40% □ 60%

□ = □ Ô40% □ + □ Ô60% □ □

k

□ □ k

• • **"Period for request external sensor [0...255,0=inactive]"**

k □ □ **0...255min**

• • **“Send temperature when the result change by [0...10]”**

□ k □ □

Disable

0.5K

1.0K

1.5K

...

10K

• • **“Cyclically send temperature [0...255,0=inactive]”**

□ 0 k □ □ **0...255min**

“Control value after temp. error [0..100](if 2-point control, set value '0'=0, set value '>0'=1) ”

k □ □ **0..100%**

□ 0 □ 0 □ 0 □

1 k

“Room temperature control mode ”

k □ □

Heating

Cooling

Heating and Cooling

Heating and Cooling □ □ k □ k

“Heating/Cooling switchover”

/ k □ □

Via object

Automatic changeover

“Heating/Cooling status after download”

□ RTC / k □ □

Heating

Cooling

“Heating/Cooling status after voltage recovery”

□ RTC / k □ □

Heating

Cooling

As before voltage failure

As before voltage failure □ k

□ □

k

“ Room temperature control system”

□ □ k □ □

2 pipes system

4 pipes system

2 pipes system: □ □ k

4 pipes system: □ □

k

"Operation mode"

k

"Operation mode" □ k

- **" Initial setpoint temperature"**

k □ □

10.0

10.5

...

34.5

35.0

- **"Min./Max. setpoint temperature [5..37] "**

k k

□ k □ □

5-C

6-C

37-C

”Room temperature control mode” ”Heating and Cooling” ”Heating/Cooling switchover” ”Automatic changeover” k

“ Upper /Lower dead zone”

/ k □ □

0.5K

1.0K

...

10.0K

□ + □ □

□ - □ k

”Operation mode” □ k

“ Controller status after download”

□ k □ □

Standby mode

Comfort mode

Economy mode

“Controller status after voltage recovery ”

□ RTC k □ □

Comfort mode

Standby mode

Economy mode

Frost/heat protection

As before voltage failure

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

k >0 □ □1bit “comfort mode” k □ □

0..255

1 □ □ □ 1 □ □

□ k □ □ k

□ / k

“1 bit object function for operation mode”

1bit k 1 □ □

! 0 □ k

“1 bit object for standby mode”

□ k 1bit k

“Fan speed auto control function ”

□ □ k

“Window contact input function ”

RTC □ k k

”Window contact input function” □ k

• • **“Delay for window contact [0..65535]s”**

RTC □ k □

□ □ □

k □ □ **0..65535**

• • **“Controller mode for open window”**

RTC □ k open □

k □ □ ! /

□ k □ k □ □ □

Economy mode

Frost/heat protection

“Bus presence detector function”

RTC □ k k

□ □ k /

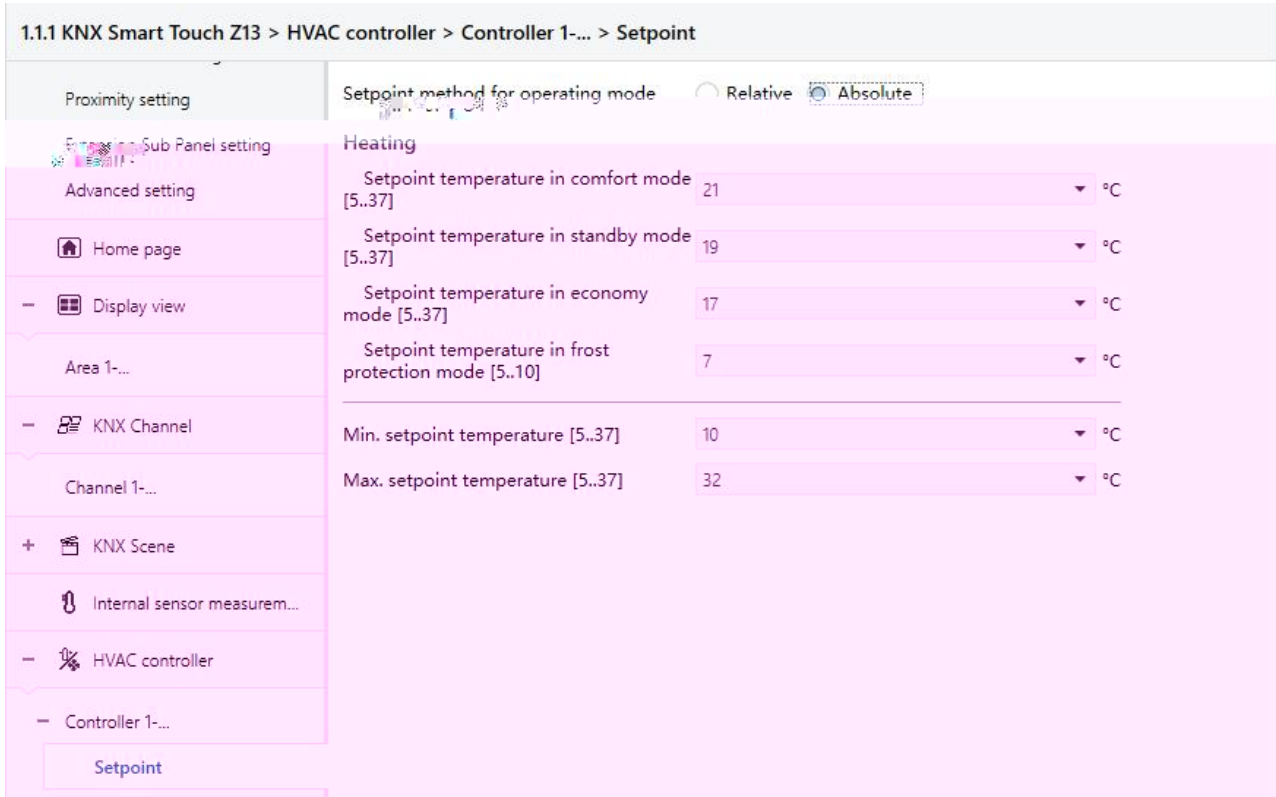
□ □ k □ □ □

k □

5.3.1.1 ”Setpoint”

”Room temperature controller (RTC)” □ □

5.3.1.1 k



5.3.1.1”Setpoint”

“Setpoint method for operating mode ”

k □ □

Relative

Absolute

Relative □ □ k

Absolute □ □ k

□ k

"Base setpoint temperature"

□ k □ □

10.0

10.5

...

35.0

"Base setpoint adjustment" □ □ k

= +/- □ □

□ □ k !

k

"Additional setpoint offset for setpoint adjustment"

□ 1bit

k □ □

Disable

Enable

1bit "Setpoint offset" / □ □ 2byte "Float offset value" k 1bit "Setpoint offset reset" □

2byte"Float offset value" k k

□ k

• • **“Step of setpoint offset”**

□ / □ 1- □ 0- k

k □ □

0.5K

1K

= + + □

□ □ /

k □ **1bit** **□Setpoint offset□** □ **2byte** **□Float offset value□**

k

• • **“Min. setpoint offset [-10..0]K”**

□ □ □ k □ □ **-10..0**

• • **“Max. setpoint offset [0..10]K”**

□ □ □ □ □ k □ □ **0..10**

Automatic H/C mode changeover dead zone (only for comfort mode)

”Upper/Lower dead zone ”

“Heating and Cooling” “Automatic changeover” □ k

k □ □

0.5K

1.0K

...

10K

□ + □ □

□ - □ k

"Reduced heating in standby mode [0...10]K"

"Increased cooling in standby mode [0...10]K"

k □ □

0K

1K

...

10K

Heating □ □

Cooling □ k

"Reduced heating in economy mode [0...10]K"

"Increased cooling in economy mode [0...10]K"

k □ □

0K

1K

...

10K

=

6°C

...

10°C

□ □ □

□ k

"Setpoint temperature in heat protection mode [30...37]-C"

k □ □

30°C

31°C

...

37°C

□ □ □ □

□ □ k

□ **k**

" Setpoint temperature in comfort [5 37]-C"

"Setpoint temperature in standby mode [5...37]-C"

"Setpoint temperature in economy mode [5...37]-C"

□ ! k □ □

5°C

6°C

...

37°C

"Setpoint temperature in frost protection mode [5...10]"

k

5°C

6°C

...

10°C

"Setpoint temperature in heat protection mode [30...37]"

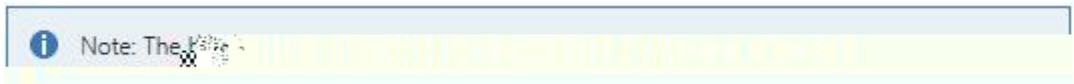
k

30°C

31°C

...

37°C



Heating and Cooling **Automatic changeover** k

Via object k

1. k

2. k

k

3. /

k

4. □ □ □

□ □ □ k

□ 2 ! 4 □ Via object □ k

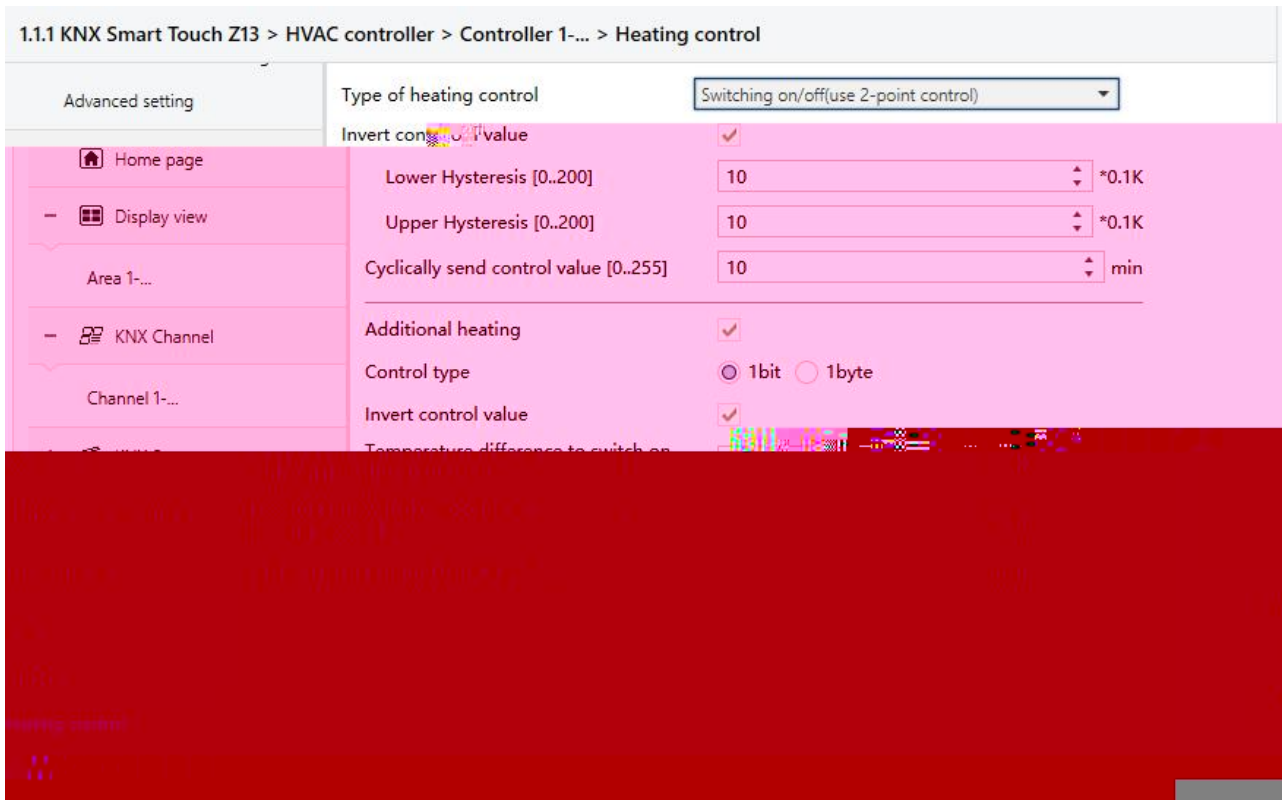
□ / □ □ **ETS** k **ETS**

□ □ k

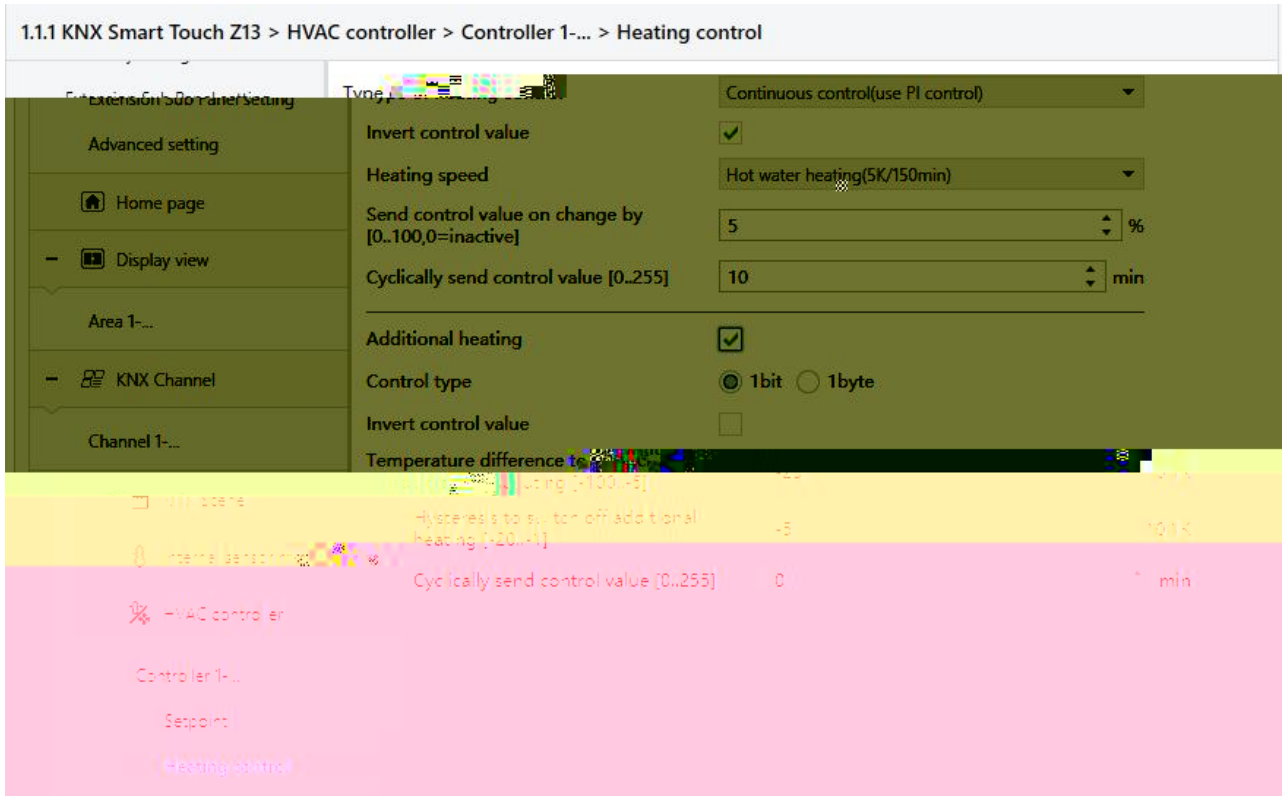
5.3.1.2 "Heating control/Cooling control/Heating/Cooling control"

"Room temperature controller (RTC)" □ □

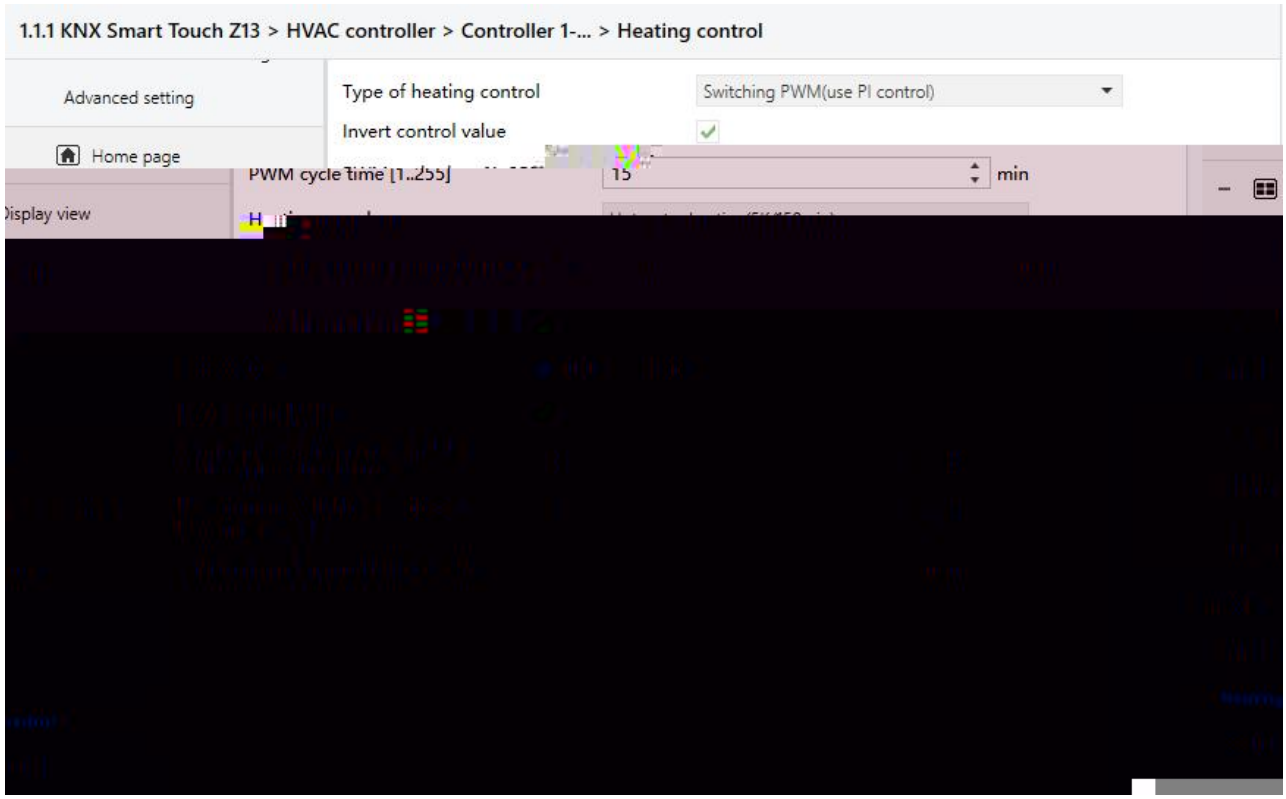
5.3.1.2 k



Switching on/off(use 2-point control)



Switching PWM(use PI control)



Continuous control(use PI control)

5.3.1.2"Heating control/Cooling control/Heating/Cooling control"

□2 4 □ k

"Type of heating/cooling control "

"Heating and Cooling&2pipe" , / □

k □ □

Switching on/off(use 2-point control)

Switching PWM(use PI control)

Continuous control(use PI control)

□Invert control value□

□ □ k

□ □

No

Yes

Yes□ □ k

(2 point control)

□Lower Hysteresis [0...200]□

□Upper Hysteresis [0...200]□

RTC □ k □ □ **[0...200]*0.1K**

□

□T□> **+□** **□** **□**

□T□< **-** **□** k

1K□ □ 2K□ 22℃□T 24℃ □ □

T 21℃ □ □T 21~24℃ □ k

□

□T□< **-** **□** **□**

□T□> **+□** **□** k

1K□ □ 2K□ 26℃□T 25℃ □ □

T □ 28℃ □ □T 28~25℃ □ k

□ □

□ □

1. □ □ □ □

2. □ □ □ k

5.3.1.2(2) ( )

PWM (PI control)

□PWM cycle time [1 255]min□

“Switching PWM(use PI control)” □

□ □ □ 10min, 80%□

8min □2min □ □ □ /

□ k □□**1..255**

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

□ □“Continuous control” PI (1byte)□

“Switching PWM” PI “on/off” k

PI (PI control)

Heating speed

"Cooling speed"

PI k k

Hot water heating (5K/150min)

Underfloor heating (5K/240 min)

Electrical heating (4K/100min)

Split unit (4K/90min)

Fan coil unit (4K/90min)

User defined

Cooling ceiling (5K/240min)

Split unit (4K/90min)

Fan coil unit(4K/90min)

User defined

- **“Proportional range [10..100]*0.1K”**

- **“Reset time [0..255]min”**

□ “User defined” □ k PI PI k

□ □ □

□2□

	P	I □ □	PI	PWM
Cooling ceiling	5K	240min	PWM	15-20mIn
Split unit	4K	90min	PWM	10-15min
Fan coil unit	4K	90min	Continuous	--

□3□

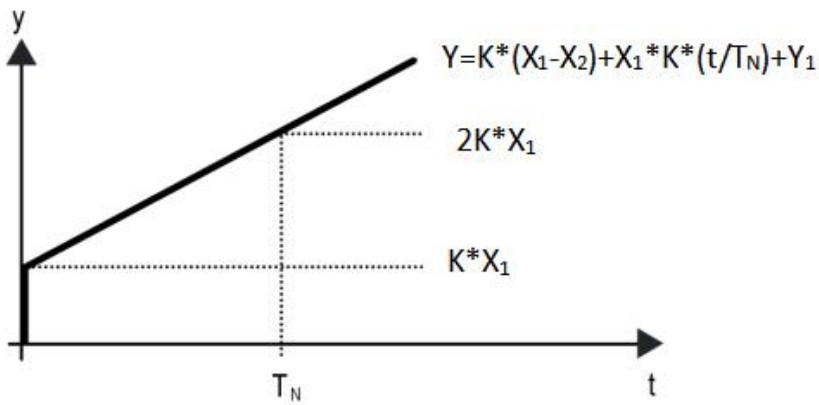
"Heating/Cooling speed" "User defined" □ P□ □

I□ □ k PI □

□ k

□ □ □ □ □

k 0 □ k



5.3.1.2(3) PI

Y□

Y1□

X1□ =

X2 □ =

T_N □

K □ □ □

PI

”Additional heating” □ k

• **“Control type”**

□ k □ □

1bit

1byte

• **“Invert control value”**

□ k

□ □

• **“Temperature difference to switch on additional heating [-100..-5]*0.1K”**

□ □ <□ + □□ □

k □ □ **-100...-5**

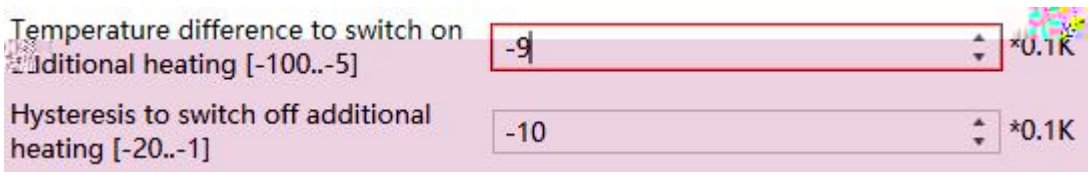
• **“Hysteresis to switch off additional heating [-20..-1]*0.1K”**

□ □ >□ + - □ □

□ k □ □ **-20 -1**

□ □ | | < | |□ **□ETS**

□ □ □



□ □

• • **“Temperature difference to switch on additional cooling [5..100]*0.1K”**

□ □ >□ + □□ □

k □ □ **5...100**

• • **“Hysteresis to switch off additional cooling [1..20]*0.1K”**

□ □ <□ + - □ □

□ k □ □ **1...20**

□ □ | | < | |□ □ **ETS**

□ □ □

Temperature difference to switch on additional cooling [5..100] 19 *0.1K

Hysteresis to switch off additional cooling [1..20] 20 *0.1K

• • **“Cyclically send control value [0..255]min”**

k □ □ **0、 255**

□

Auto=0/Man.=1 □ “Fan automatic operation” “0” □ □ “1” □

k

□ □ k

Fan speed output setting □

“Object datatype of 1byte fan speed”

1byte □ k □ □

Percentage (DPT_5.001)

Fan stage (DPT_5.100)

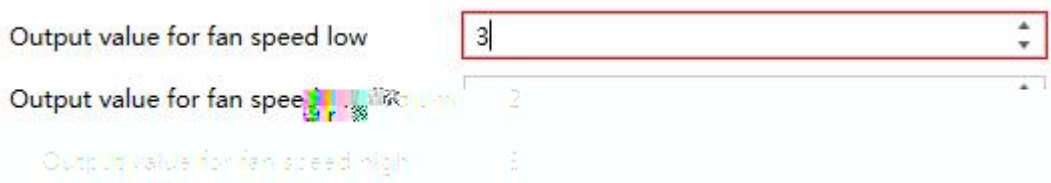
“Output value for fan speed low/medium/high”

□ k 0 □ □ k

□ □ □ **1..255 /1..100%**

□1byte □ □ □ **< <□ □** **□ETS**

□ □ □



“1 bit object function for fan speed”

□ 1bit k □ □ 1bit k

“1 bit object for fan speed off ”

□ k □ 1bit k

Fan speed control setting □

Condition setting for using PI control PI □

PI □ PI □

□ □ k

"Threshold value speed OFF<-->low [1..255]"

□ □ k □□**1..255**

□ □ □ □ □ k

"Threshold value speed low<-->medium [1..255]"

□ □ k □ □

k □□**1..255**

"Threshold value speed medium<-->high [1..255]"

□ □ □ k □ □ □

k □□**1..255**

□ k

□ ° OFF <-> □ ° □ <-> □ ° □ <->□□ k

□

OFF <-> □ □ <-> □ □ □ <-> □ □ <->□□

k

"Hysteresis threshold value in +/-[0..50]"

□ □ k □□

0..50

0□ □ □□ □ □

10□ 50□ 60□ + □□ 40□ -

□□ 40~60 □ □ □ k 40

( )60 □ k

Condition setting for using 2-point control □

2-point □ □ □ k

□ □ - □

□ □ - k

"Temperature difference speed OFF<-->low[1..200]*0.1K"

□ □ k □□**[1..200]*0.1**

□ □ □ □ k

"Temperature difference speed low<-->medium [1..200]*0.1K"

□ □ k □ □

k □□**1..200**

"Temperature difference speed medium<-->high [1..200]*0.1K"

□ □ □ k □ □

□ k □□**1..200**

"Hysteresis temperature difference in [0..50] *0.1K"

□ □ k □□

0..50

0□ □ □□ □ □

0.5℃□ 1℃□ 1.5℃□ + □□

0.5℃□ - □□ 0.5℃~1.5℃ □ □ □

k 0.5℃ ( )1.5℃ □ k

"Minimum time in fan speed [0..65535]"

□ □ □□ □ □ □

k

□ □ □ k

□ □□ k □□**0..65535**

0□ □ □ k

□ k

5.3.2

□

Auto=0/Man.=1 □ “Fan automatic operation” “0” □ □ “1” □

k

□ □ k

“State of Auto operation after startup”

□ k □ □

Disable

Enable

Fan speed output setting □

“Object datatype of 1byte fan speed”

1byte □ k □ □

Percentage (DPT_5.001)

Fan stage (DPT_5.100)

“Output value for fan speed low/medium/high”

□ k 0 □ □ k

□ □ □ **1..255 /1..100%**

Fan speed control setting □

“Control value reference from”

k □ □

PM2.5

CO2

VOC

" Object datatype of PM2.5/VOC"

PM2.5 VOC k □ PM2.5 VOC

k □ □

Value in ug/m3(DPT 7.001)

Float value in ug/m3(DPT 9.030)

DPT_7.001 □ k

DPT_9.030 □ k

"Object datatype of CO2"

CO2 k □ CO2 k

□ □

Value in ppm(DPT 7.001)

Float value in ppm(DPT 9.008)

DPT_7.001 □ k

DPT_9.008 □ k

"Period for request control value [0...255,0=inactive]min"

□ k □ □

0..255

"The fan speed status when the control value error"

□ □ □ □ k □ □

Off

Low

Medium

High

"Threshold value OFF<-->speed low [1..999]/ [1...4000]"

□ □ k □ □ **1..999/1..4000**

□ □ □ □ □ k

"Threshold value speed low<-->medium [1..999]/ [1...4000]"

□ □ k □ □

k □ □ **1..999/1..4000**

"Threshold value speed medium<-->high [1..999]/ [1...4000]"

□ □ □ k □ □ □

k □ □ **1..999/1..4000**

□ **k**

□ ° OFF <-> □ ° □ <-> □ ° □ <->□ □ k

□

OFF <-> □ □ <-> □ □ □ <-> □ □ <->□ □

k

"Hysteresis value is threshold in +/- [10...30]/[100..400]"

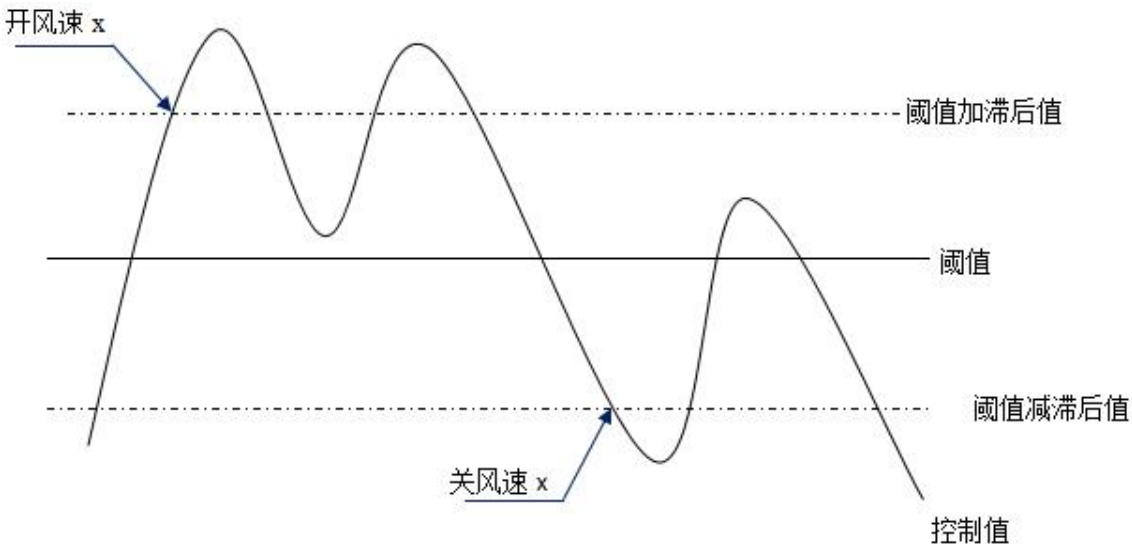
□ □ k

□ □ **10..30/100..400**

CO2□ 100□ 450□ 550□ + □ □ 350

□ - □ □ 350~550 □ □ □ k

350 550 □ k □



□

□ □ □ □

1□ □ □

2□ □ □ □ □ k

□**1**□ □

PM2.5

OFF <-> □ **35**

□ **<->** □ **55**

□ **<->**□ □ **75**

25

□ □ OFF □

□ OFF 60□ 25+35□ □ □ □ □ 60 55 75 □

□□ □ □

□ □ □□ □

□ □□ 50□<75-25□ □ □ □ □ 50 35 55 □

□□ □ k

□2□□

PM2.5

OFF <-> □ 20

□ <-> □ 40

□ <->□□ 70

10

□ □

□ k

3□ □ 0□ □ □

"Minimum time in fan speed [0..65535]s"

□ □ □ □ □ □ □

k □ □ **0..65535**

□ □ □ k

□ □ □ k

0□ □ □ k

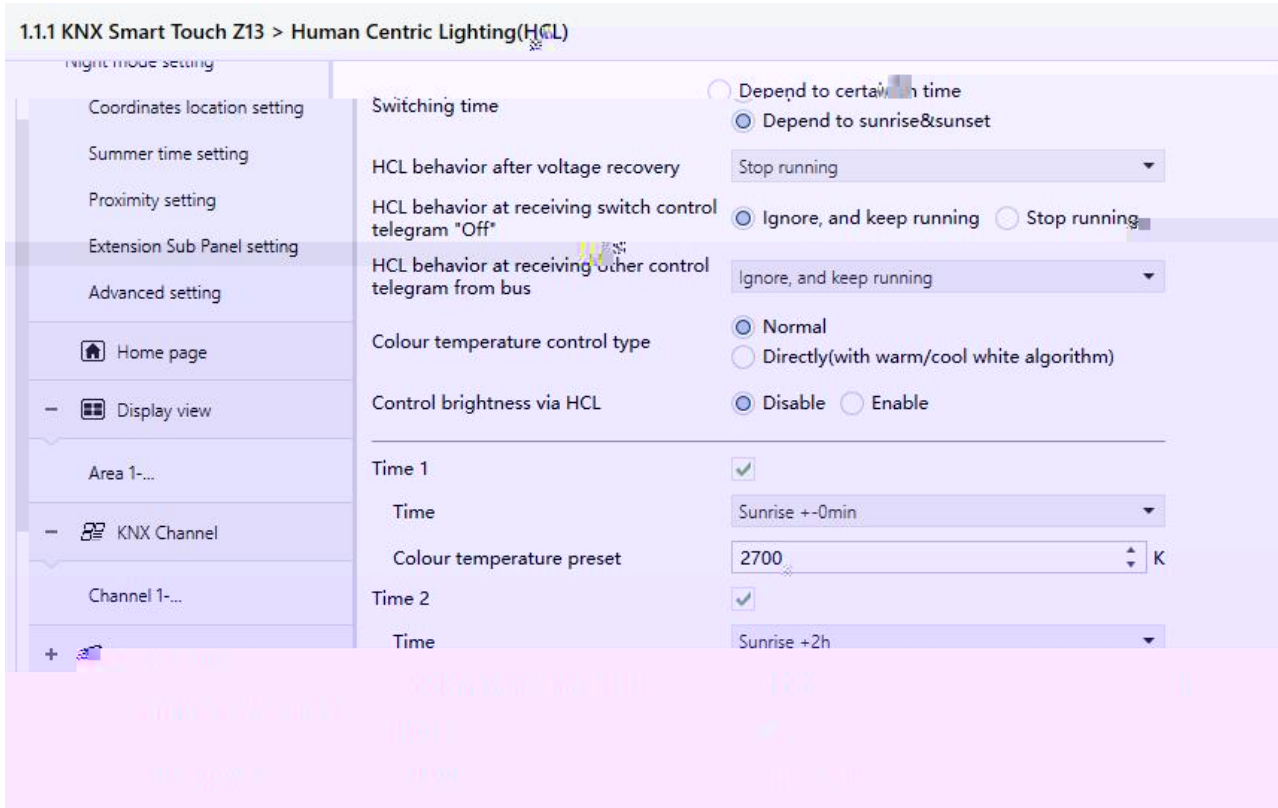
□ k

5.4 ”Human Centric Lighting(HCL)”

5.2.8“Advanced setting” “Human Centric Lighting(HCL)” □

5.4 □ k

“Human Centric Lighting(HCL)-Depend to certain time



"Human Centric Lighting(HCL)-Depend to sunrise&sunset"

5.4 "Human Centric Lighting(HCL)"

"Switching time"

k □ □

Depend to certain time

Depend to sunrise&sunset

"HCL behavior after voltage recovery"

□HCL k □ □

Start running

Stop running

As before voltage failure

"HCL behavior at receiving switch... ...ol telegram "Off""

HCL HCL k □ □

Ignore, and keep running

Stop running

Ignore, and keep running □ □ Switch control □

Stop running □ HCL k

"HCL behavior at receiving other control telegram from bus"

HCL HCL k □ □

Ignore, and keep running

Ignore, but stop running

Update preset value, and keep running

Update preset value, and stop running

Ignore, and keep running □ □ HCL □

Ignore, but stop running □ □ HCL □

Update preset value, and keep running □ □ □

HCL □

Update preset value, and stop running □ □ □

HCL k

□ □ □ □ □ □ □ □

"Colour temperature control type"

k □ □

Normal

Directly(with warm/cool white algorithm) □ / □

Normal □ 1byte 2byte □

Directly(with warm/cool white algorithm) □ □ " + "

“Depend to sunrise&sunset” □ □ □

Sunrise -5h	**Sunset +-0min**
Sunrise -4h	**Sunset +30min**
...	**Sunset +1h**
Sunrise -1h	**...**
Sunrise -30min	**Sunset +4h**
Sunrise +-0min	**Sunset +5h**
...	

- **“Colour temperature preset”**

  □ k □ □ **2000..7000K**

- **“Brightness preset”**

  “Normal” “Control brightness via HCL” □ “Directly(with warm/cool white algorithm)” □ k □ k □ □

  0%

  5%

  10%

  ...

  95%

  100%

5.5 ”Schedule function”

5.2.8“Advanced setting” “Schedule function” □ 5.5 □

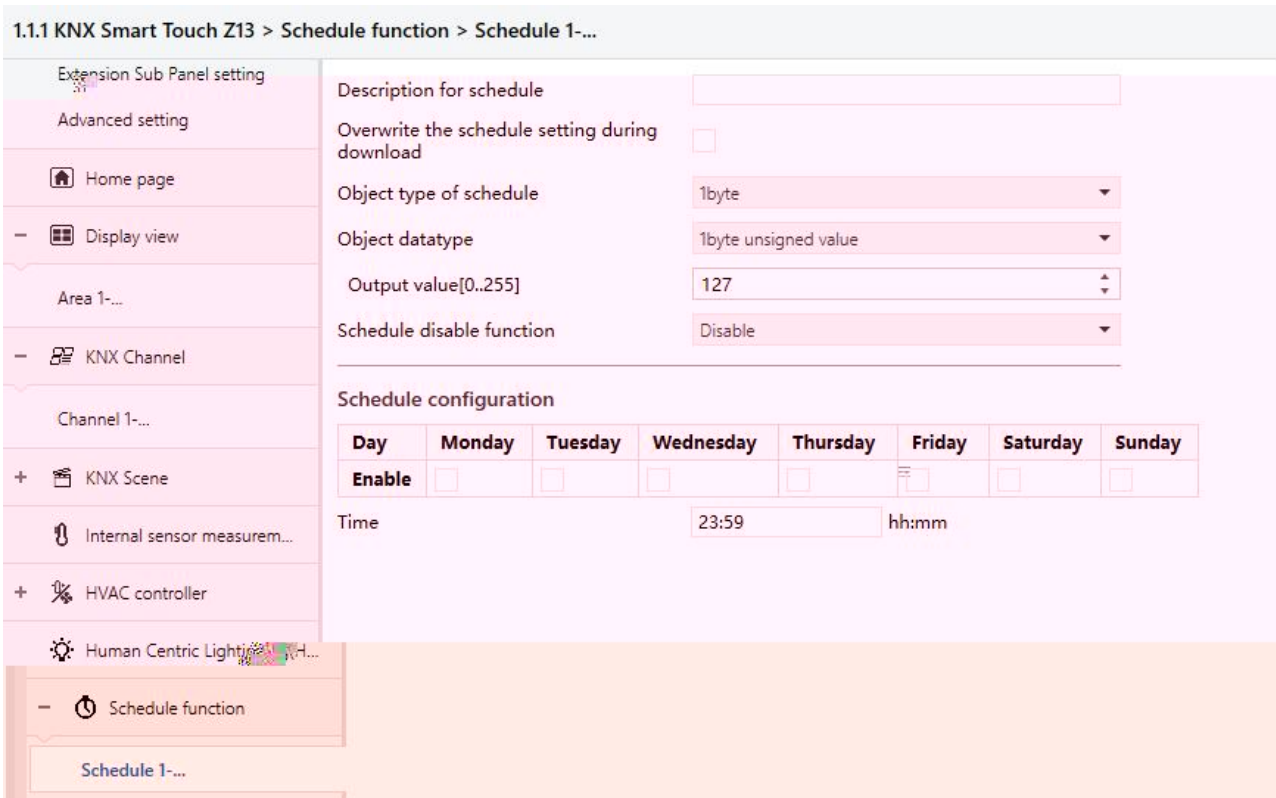
16 k

5.5 “Schedule function”

”Number of schedules (max.16)”

k □ □ **1....16**

5.5.1 ”Schedule X”



5.5.1 “Schedule X”

”Description for schedule function ”

x □ 18 □ 6 □ k

”Overwrite the schedule function setting during download ”

k

□ □ k

□ □ □

□ k

"Object type of schedulefunction "

x k □ □

1bit

1byte

2byte

"Object datatype"

1byte 2byte k

1byte □ □ □

1byte unsigned value

1byte[scene control]

HVAC mode

2byte □ □ □

2byte unsigned value

Temperature value

"Output value/ scene No.[...]"

x k k

"schedule disable function "

□ / k □ □

Disable

Disable=0/Enable=1 0 □1

Disable=1/Enable=0 1 □0

x □ □ x k

"Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday"

x k

"Time"

x k □ □

□ **0..23**

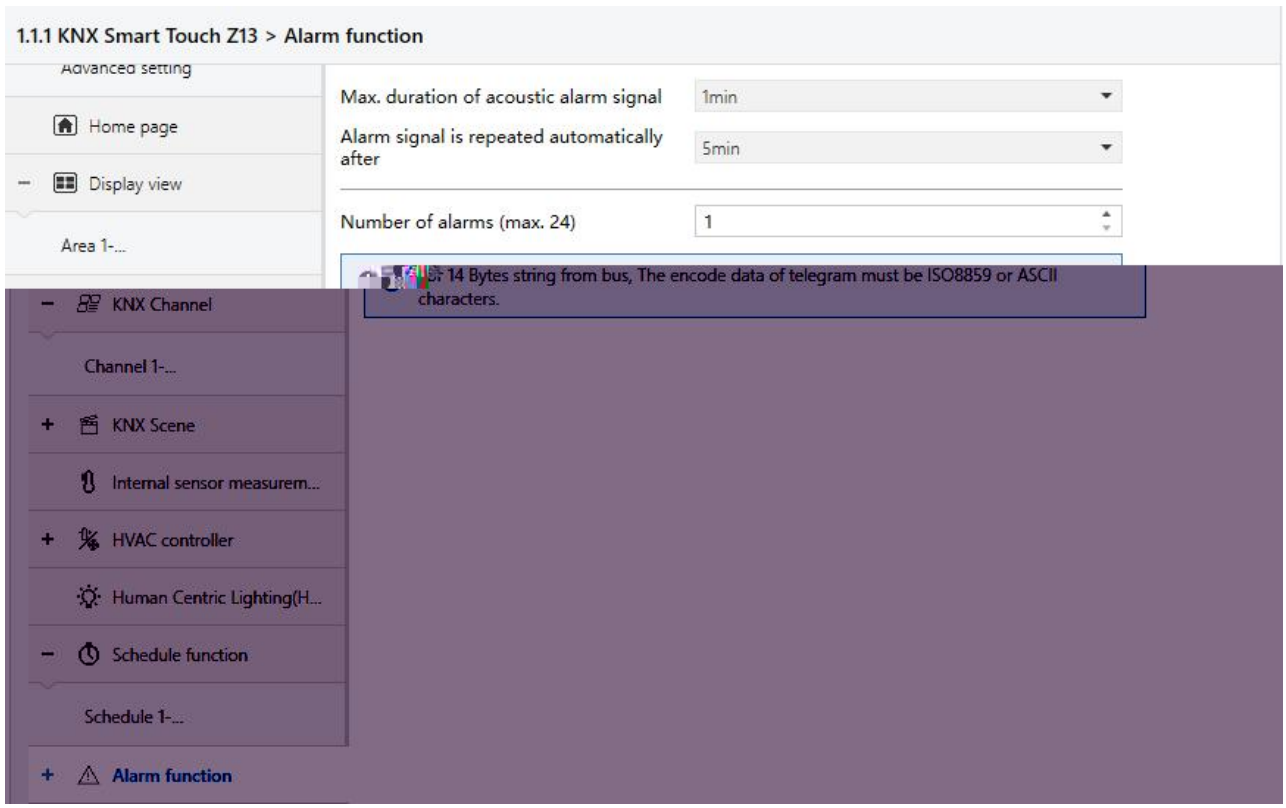
□ **0..59**

□ **RTC ®20 ppm k**

5.6 ”Alarm function”

5.2.8“Advanced setting” “Alarm function” □ 5.6 □

24 k



5.6 “Alarm function”

”Max. duration of acoustic alarm signal”

k □

□ □ k □ □

Disable

10s

20s

...

25min

30min

Disable □ □

□ □ k

"Alarm signal is repeated automatically after"

□ k □ □

Disable

10s

20s

...

25min

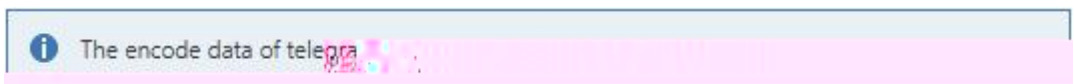
30min

Disable □ □

□ □ k

"Number of alarms (max.24)"

k □ □ **1...24**

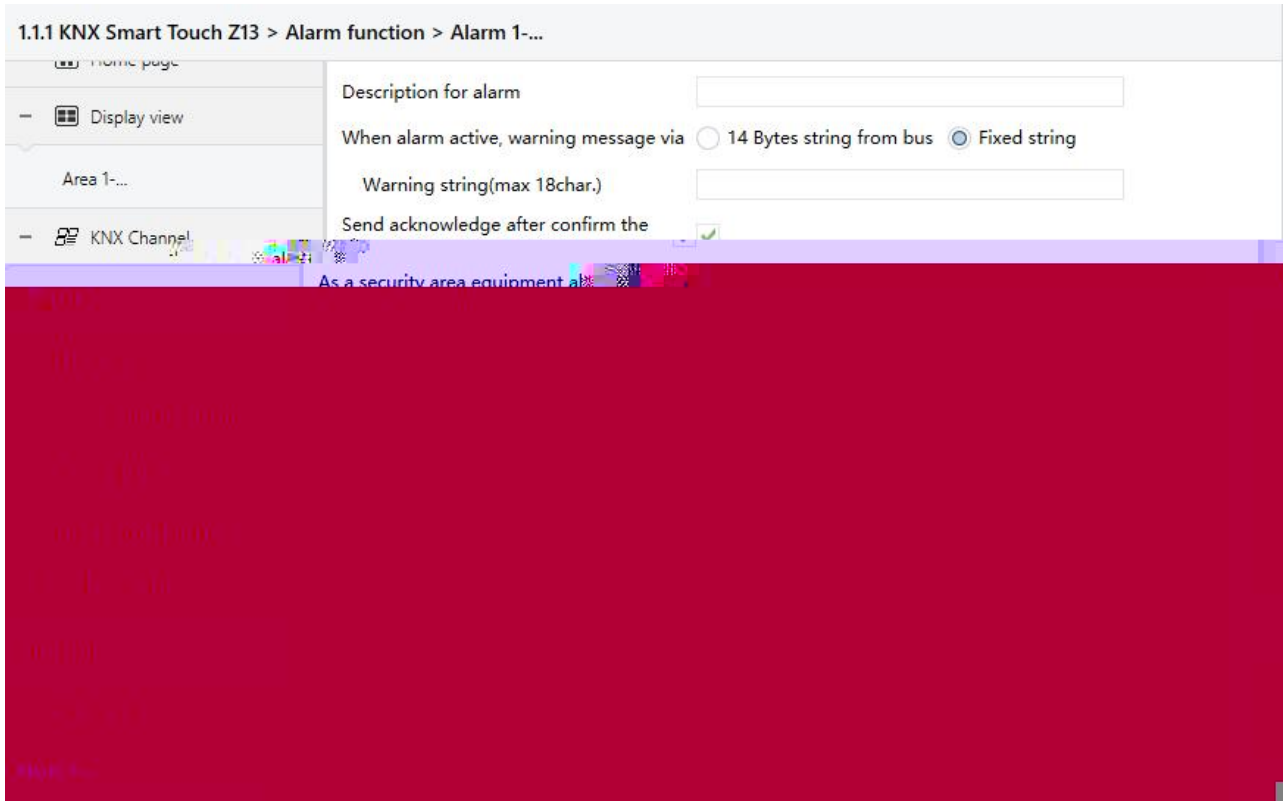


□ ! ! □ **UTF-8** □

ISO8859 k

5.6.1 “Alarm x”(x=1~24)

”Alarm x”(x=1~24)□ 5.6.1 □ k



5.6.1 “Alarm x”(x=1~24)

”Description for alarm ”

x □ 18 □ 6 □ k

”When alarm active, warning message via”

□ □ ETS

14byte k □ □

Fixed string

14 Bytes string from bus

“Warning string(max 18char.)”

“Fixed string” □ k □ k

“Send acknowledge after confirm the alarm ”

1bit □ k

“As a security area equipment alarm ”

k

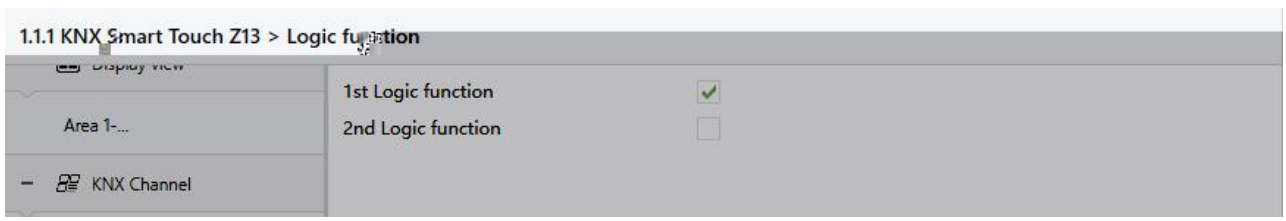
□ k

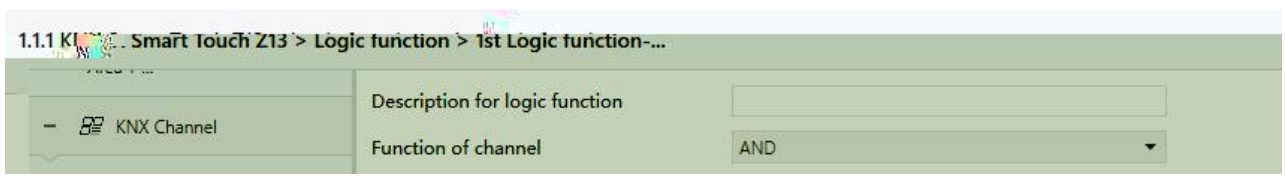
□ k

5.7 ”Logic function”

5.2.8“Advanced setting” “Logic function” □ 5.7 □

□ 8 k





5.7 “Logic function”

"1st/2nd/3rd... Logic function "

□ □ k 8 k

"Description for logic function "

k 30 k

"Function of channel "

k □ □

AND

OR

XOR

Gate forwarding

Threshold comparator

Format convert

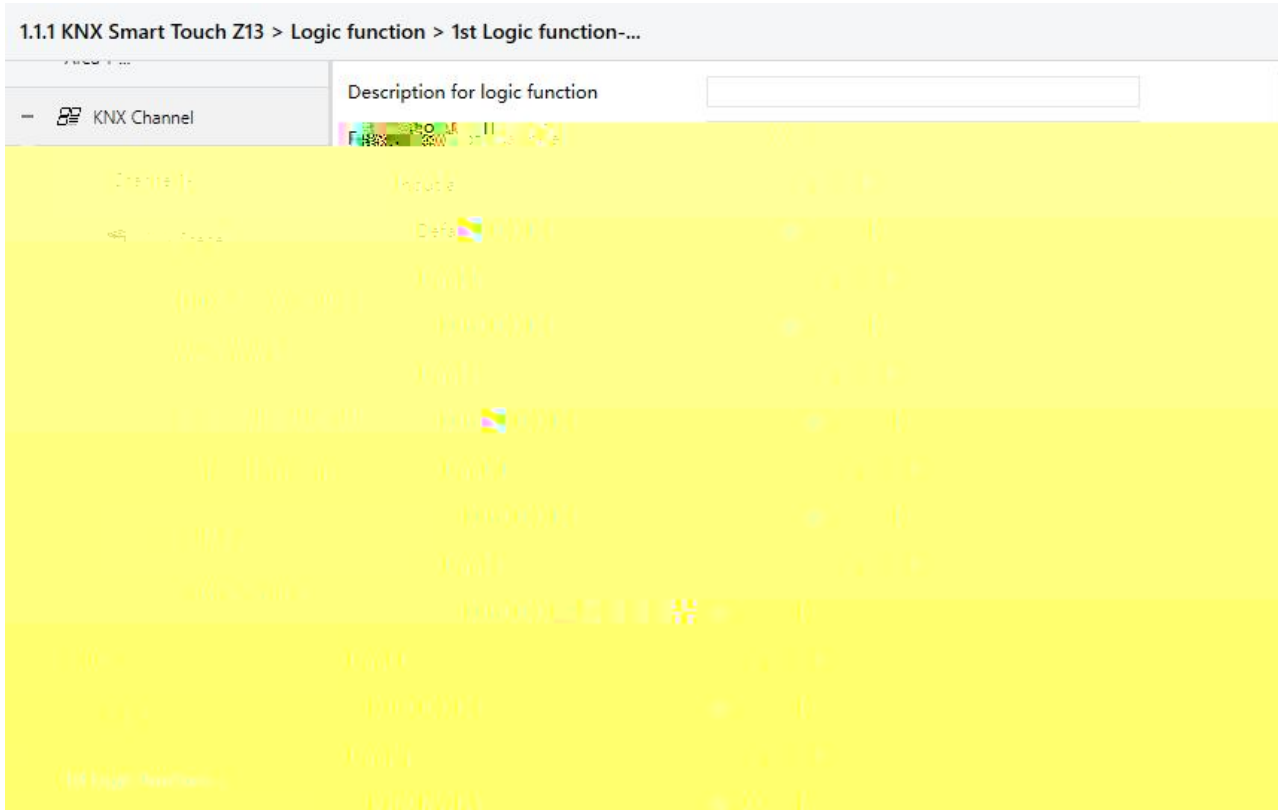
Gate function

Delay function

Staircase lighting

AND/OR/XOR□ □ □ □ k

5.7.1 “AND/OR/XOR”



5.7.1 “Logic function_AND/OR/XOR”

“input a/b/c/d/e/f/g//h”

input x □ □ k □ □

Disconnected

Normal

Inverted

Disconnected □ □ □

Normal □ □

Inverted □ □ k □ k

“Default value”

input x k □ □

0

1

“Result is inverted”

k □ □

No

Yes

No □ □

Yes □ □ k

“Read input object value after bus voltage recovery”

□ k □ □

No

Yes

“Output send when”

k □ □

Receiving a new telegram

Every change of output object

Receiving a new telegram □ □ □

Every change of output object □ □ k

□ □ □ □ k

“Send delay time”

Base: **None**

0.1s

1s

...

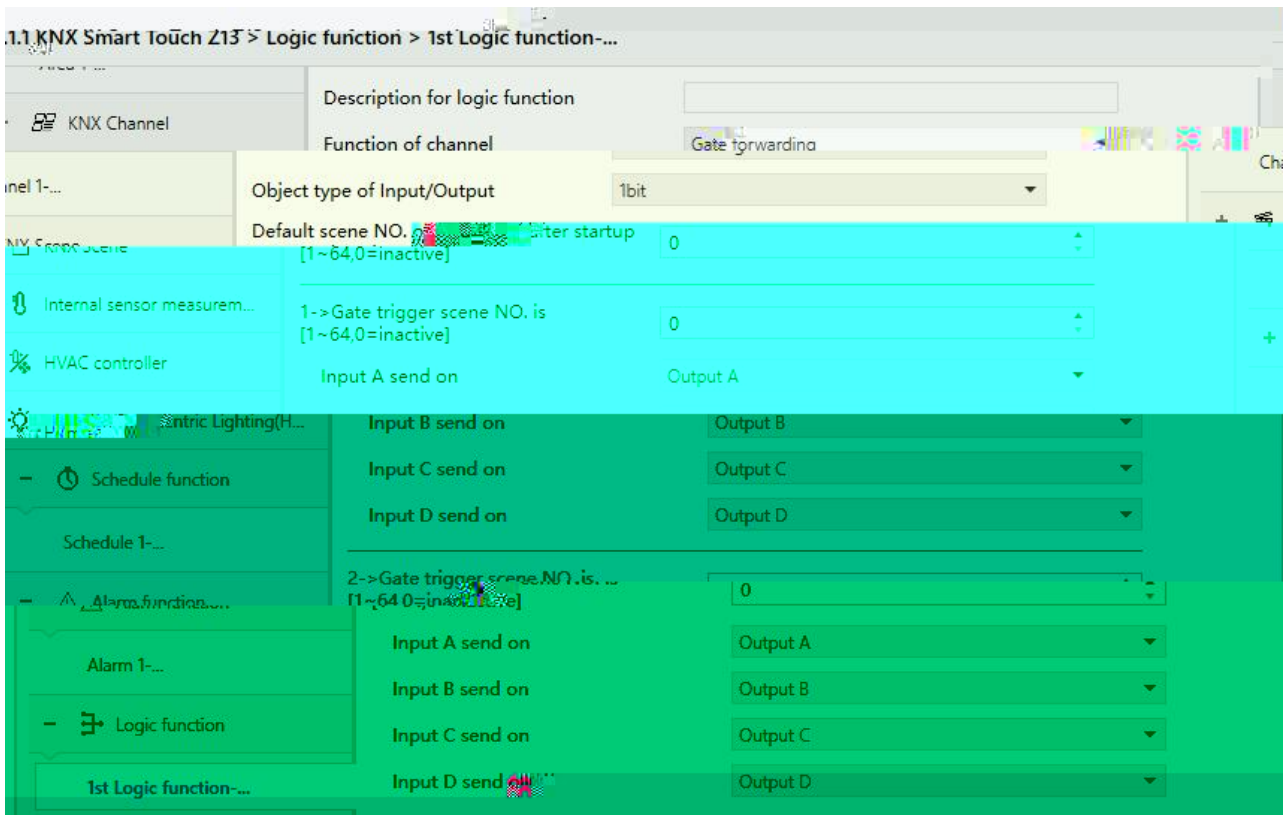
10s

25s

Factor: **1..255**

k □Base x Factor□ Base □ “None”□ k

5.7.2 “Gate forwarding”



5.7.2 “Logic function_Gate forwarding”

"Object type of Input/Output"

/ k □ □

1bit

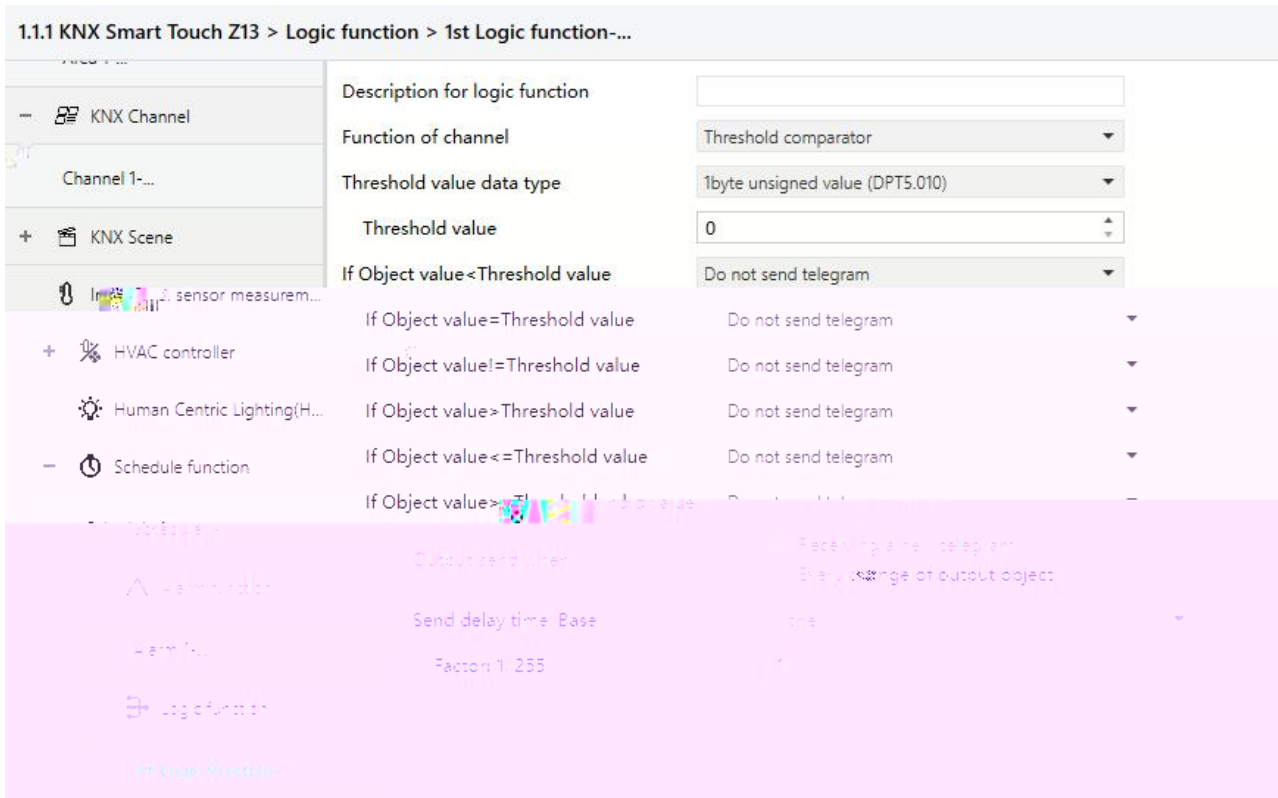
4bit

1byte

"Default scene NO. of Gate after startup [1..64, 0=inactive]"

□ □

5.7.3 “Threshold comparator”



5.7.3 “Logic function_Threshold comparator”

“Threshold value data byte”

k □ □

4bit value (DPT3.007)	**4byte unsigned value[0..4294967295]**
1byte unsigned value (DPT5.010)	**Ext. temperature value (DPT 9.001)**
2byte unsigned value (DPT7.001)	**Ext. humidity value (DPT 9.007)**
2byte signed value (DPT8.x)	**Illuminance value (DPT 9.004)**
2byte float value (DPT9.x)	

“Threshold value ”

k

4bit value (DPT3.007) 0..15 /1byte unsigned value (DPT5.010) 0..255 /

2byte unsigned value (DPT7.001) 0..65535 / 2byte signed value (DPT8.x) -32768..32767 /

2byte float value (DPT9.x) -670760...670760 / 4byte unsigned value[0..4294967295]

0..4294967295 /

Ext. temperature value (DPT 9.001) -20..95 / Ext. humidity value (DPT 9.007) 0..100% /

Illuminance value (DPT 9.004) 0..65535lux

"If Object value<Threshold value"

"If Object value=Threshold value"

"If Object value!=Threshold value"

"If Object value>Threshold value"

"If Object value<=Threshold value"

"If Object value>=Threshold value"

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

k

Do not send telegram

Send value "0"

Send value "1"

Do not send telegram

Send value “0”/“1” 0 1 k

□ □ k □ □ **If Object value=Threshold value** □ **Send value** □ **0** □ □ □ **If Object value<=Threshold value** □ **Send value** □ **1** □ □ □ □ **1** □ k

"Output send when"

k □ □

Receiving a new telegram

Every change of output object

Receiving a new telegram □ □ □

Every change of output object □ □ k

□ □ □ □ k

"Send delay time: Base"

Base:

None

0.1s

1s

...

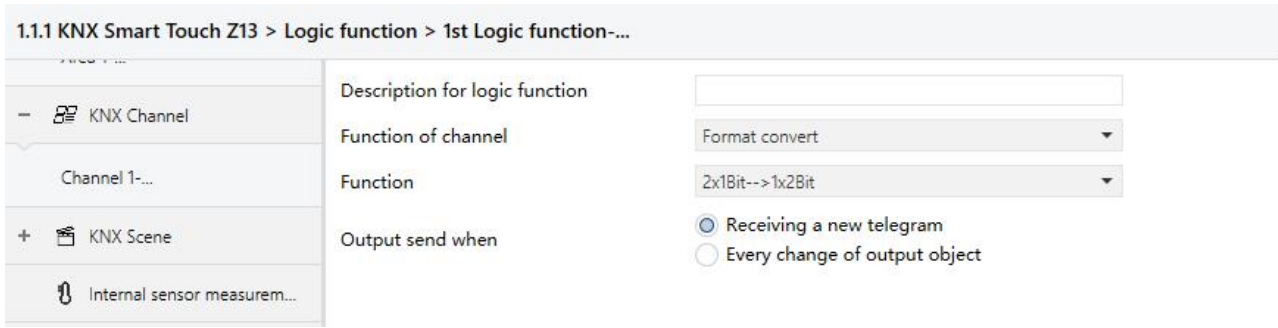
25s

Factor: 1..255

k □ Base x Factor □ Base □ "None" □

k

5.7.4 “Format convert”



5.7.4 “Logic function _Format convert”

”Format convert type”

k □ □

2x1bit-->1x2bit

8x1bit-->1x1byte

1x1byte-->1x2byte

2x1byte-->1x2byte

2x2byte-->1x4byte

1x1byte-->8x1bit

1x2byte-->2x1byte

1x4byte-->2x2byte

1x3byte-->3x1byte

3x1byte-->1x3byte

”Output send when”

k □ □

Receiving a new telegram

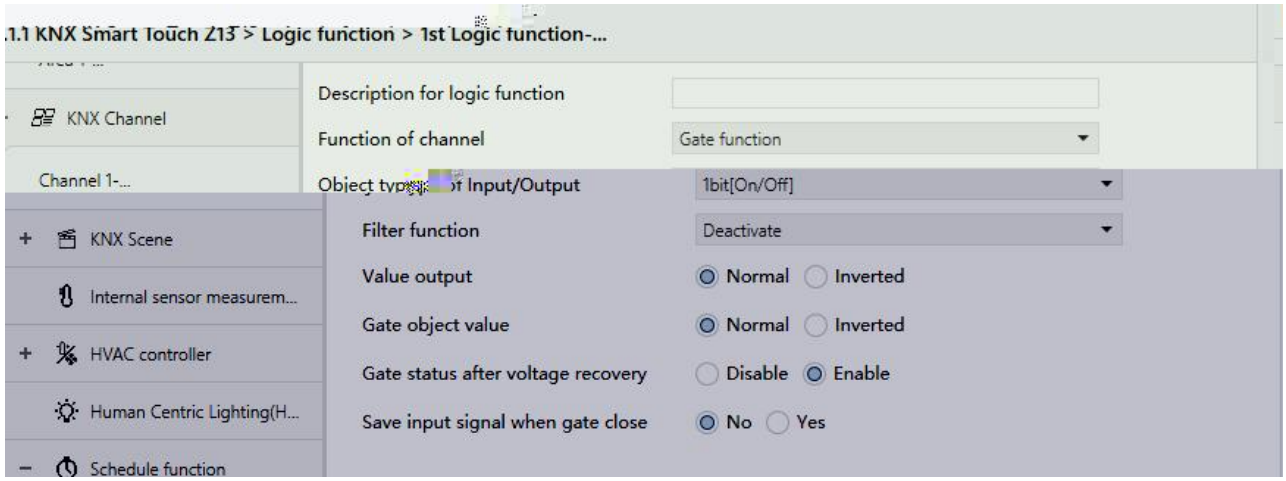
Every change of output object

Receiving a new telegram □ □ □

Every change of output object □ □ k

□ □ □ □ k

5.7.5 “Gate function”



5.7.5 “Gate function”

“Object type of Input/Output”

/ k □ □

1bit[On/Off]

1byte[0...100%]

1byte[0...255]

2byte[Float]

2byte[0...65535]

”1bit” □ k

“Filter function ”

ON OFF □ □ k □ □

Deactivate

On filter out

Off filter out

“Value output ”

□ k □ □

Normal

Inverted

“Gate object value”

k □ □

Normal

Inverted

“Gate status after voltage recovery”

k □ □

Disable

Enable

“ Save input signal when gate close”

k □ □

No

Yes

Yes □ □ □ □ k

NO □ k

5.7.6 “Delay function”

5.7.6 “Delay function”

“Object type of Input/Output”

/ k □ □

1bit[On/Off]

1byte[0..100%]

1byte[0..255]

2byte[Float]

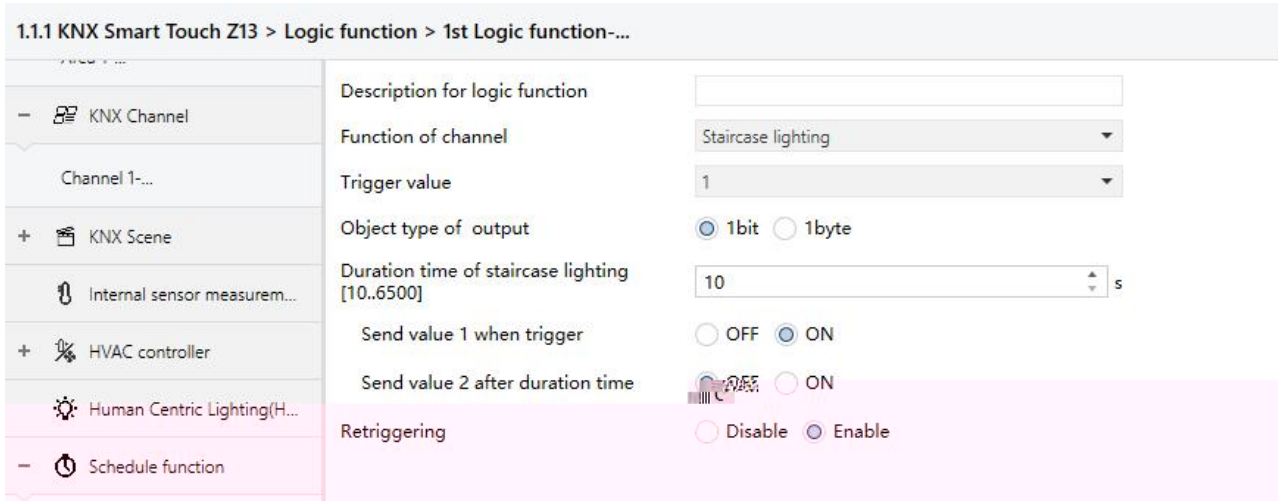
2byte[0..65535]

“Delay time [0..6500]s”

k □ □ **0..6500**

□ □ □ k

5.7.7 “Staircase lighting”



5.7.7 “Staircase lighting”

“Trigger value”

“Trigger value” k □ □

0

1

0 or 1

“Object type of output”

k □ □

1bit

1byte

“Duration time of staircase lighting[10..6500]s”

k □ □**10..6500**

"Send value 1 when trigger"

"Send value 2 after duration time"

k 1 □ 2 k □ k

1bit □ □ □

OFF

ON

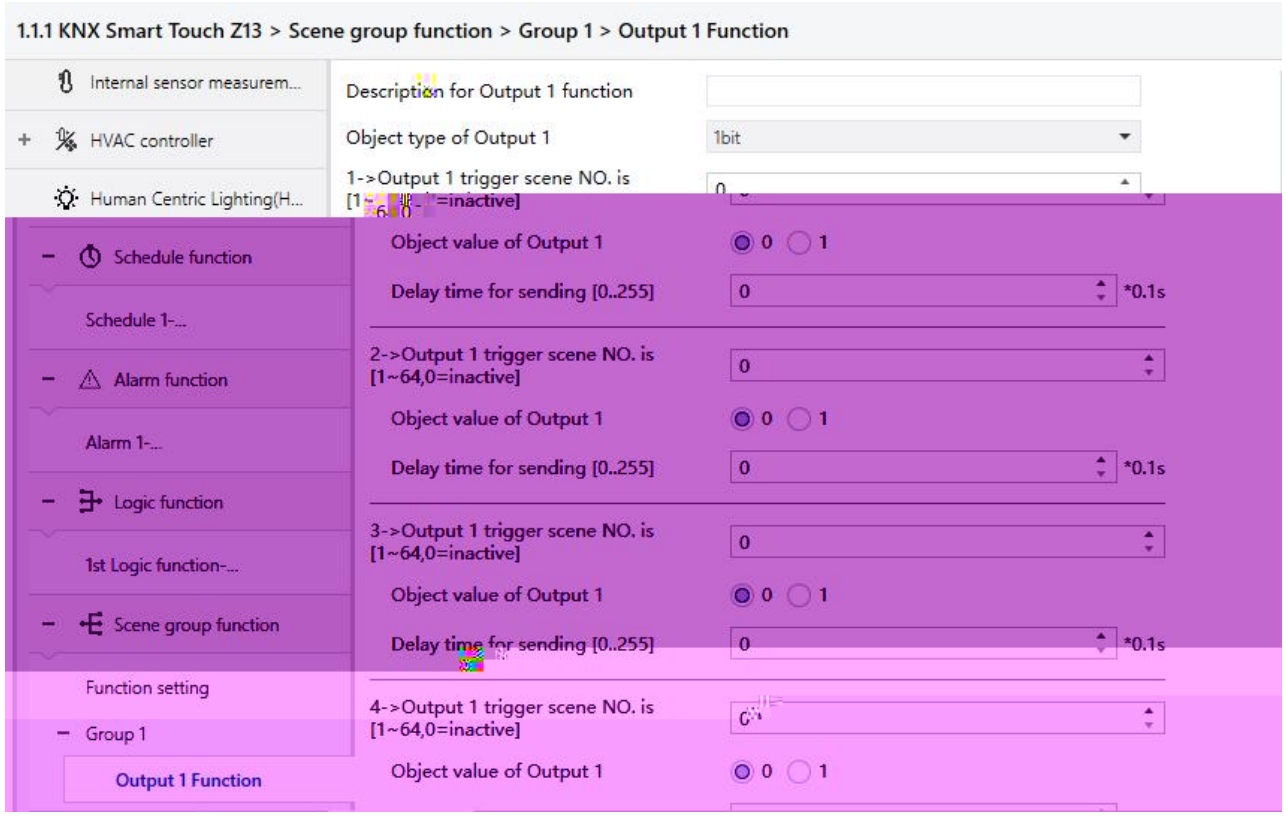
1byte □ □ □ **0..255**

"Retriggering"

□ □ k □ □

Disable

Enable



5.8(3) “Output Y function”

“Scene Group x Function,(X=1-8)”

x □ 8 k

“Output y Function,(X=1-8)”

x y□ 8 k

8 □ 8 □

□

“Description for Output y function,(y=1-8)”

x y k 30 k

“Object type of Output 1 y,y=(1-8)”

x y k □ □

1bit

1byte

2byte

RGB

RGBW

• • **“Object datatype”**

1byte 2byte k

1byte □ □ □

1byte unsigned value

HVAC mode

2byte □ □ □

2byte unsigned value

Temperature value

“z->Output 1 trigger scene NO. is [1~64,0=inactive],(z=1-8)”

x y k 8 k □ □**0..64**□

0= k

• • **“Object value of Output y”**

□ y k

1bit □ □ □ **0..1**

1byte-1byte unsigned value □ □ □ **0..255**

1byte-HVAC mode □ □ □

Comfort mode

Standby mode

Economy mode

Frost/heat protection

2byte-2byte unsigned value □ □ □ **0..65535**

2byte-Temperature value □ □ □

-5°C

-4°C

...

45°C

“ Delay time for sending [0...255]*0.1s ”

k □: **0..255**

5.9 ”Home page”

5.9 ”Home page”

”Overwrite the home page setting during download”

□ k

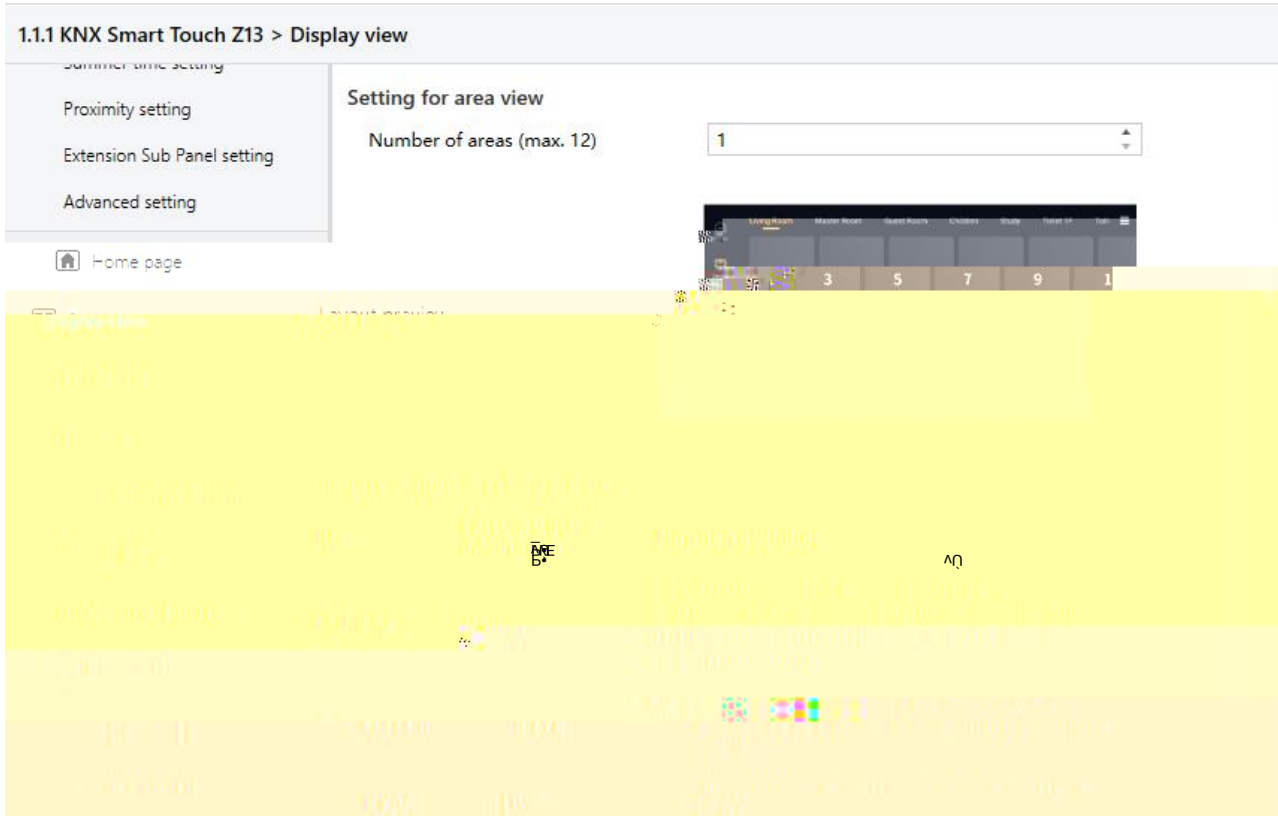
Widget selection in the home page □

”Number of widgets (max.24 channels or scenes)”

□ k □ □ **1...24**

Channel 1...Channel 120/Scene 1-Scene 30

5.10 ”Display view”



5.10 “Display view”

Setting for area view

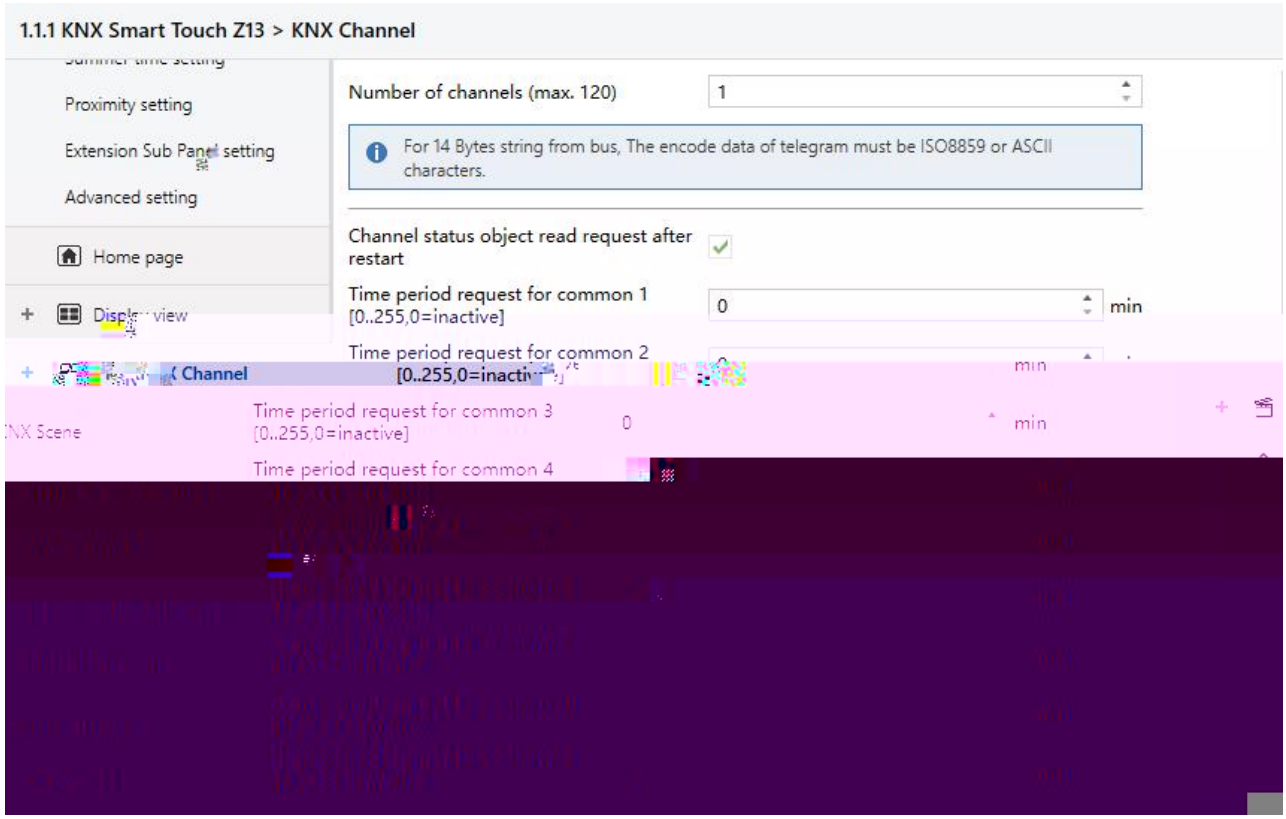
“Numbe areas (max.12)”

k **1....12**

tion set for ce view

Curtain	□ ! ! ! ! □ □
HVAC	□ ! □ □ ! □ □ ! □ + □ ! □ +□ □ ! □ + +□ □ ! □ □□ ! □ □□ ! □ □ □ □ ! □ □ □ □□
Audio	□ □ □ ! □ □ ! □ □ ! □ + □ ! □ + □
Energy	□ □ + □ ! □ + + □ ! □ + + + □□
Environment	□ ! ! PM2.5 VOC ! PM10 ! ! ! ! □ □
I/O Sensor	□I/O □
Other	□ □

5.11 ”KNX Channel”



5.11 “KNX Channel”

“Number of channels (max.120)”

□ □ k □ □ **1....120**

“Channel status object read request after restart ”

□ k

“Time period request for common X [0..255,0=inactive] ,(X=1-10)”

k □ □ **0...255min**

PM2.5/PM10/AQI/CO2/ monitoring level indication setting PM2.5/PM10/AQI/CO2

"Number of level "

k □ □ **1...5**

"Colour setting"

UI □ k □ □

Green

Light blue

Yellow

Orange

Red

Dark red

"Threshold for level 0<->level 1"

"Threshold for level 1<->level 2"

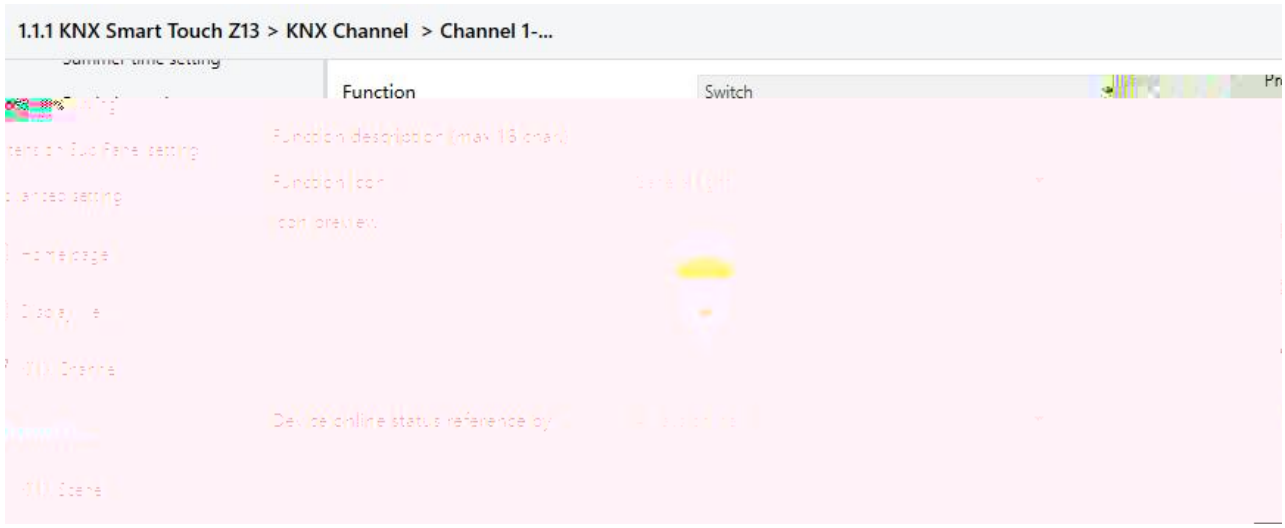
"Threshold for level 2<->level 3"

"Threshold for level 3<->level 4"

"Threshold for level 4<->level 5"

k □ □ **1...500/1...999**

5.11.1 ”Channel X”(X=1~120)



5.11.1 “Channel X”

”Function”

k □ □

Press/Release switch /

Switch

Relative dimming

Brightness dimming

Relative&Brightness dimming &

RGB dimming RGB

RGBW dimming RGBW

RGBCW dimming RGBCW

Colour temperature dimming

Curtain step/move

Roller blind step/move

Curtain position

Roller blind position

Venetian blind position and slat

Air conditioner

Air conditioner(with swing) (□)

Room temperature unit

Room temperature unit(with on/off)

( )

Room temperature unit(with operation mode)

( )

Room temperature unit(with on/off & operation mode)

(/)

Room temperature unit(with operation mode & fan speed)

(□)

Room temperature unit(with on/off&operation mode & fan speed)

(! □)

Ventilation system □

Ventilation system(with auto fan speed)

□ (□)

Audio control

Audio control(with on/off)

(/)

Audio control(play mode)

( )

Audio control(track information)

( )

Audio control(track information & playlist)

( )

Energy metering(power & energy)

( )

Energy metering(power & energy & current)

(! !)

Energy metering(power & energy & current & voltage)

(! ! !)

Temperature sensor

Humidity sensor

PM2.5 sensor PM2.5

PM10 sensor PM10

VOC sensor VOC

AQI sensor AQI

CO2 sensor CO2

Brightness sensor

Wind sensor □

I/O sensor I/O

Value sender

"Function description (max 18 char.)"

□ 18 k

"Function icon"

k □ □

General light

Ceiling light

...

AQI

□ □ k

k

GB ! RGBW ! RGBCW)

k

5.11.2.1.

5.11.2(1)

"Device online status reference by"

KNX k

Individual

Common 1

...

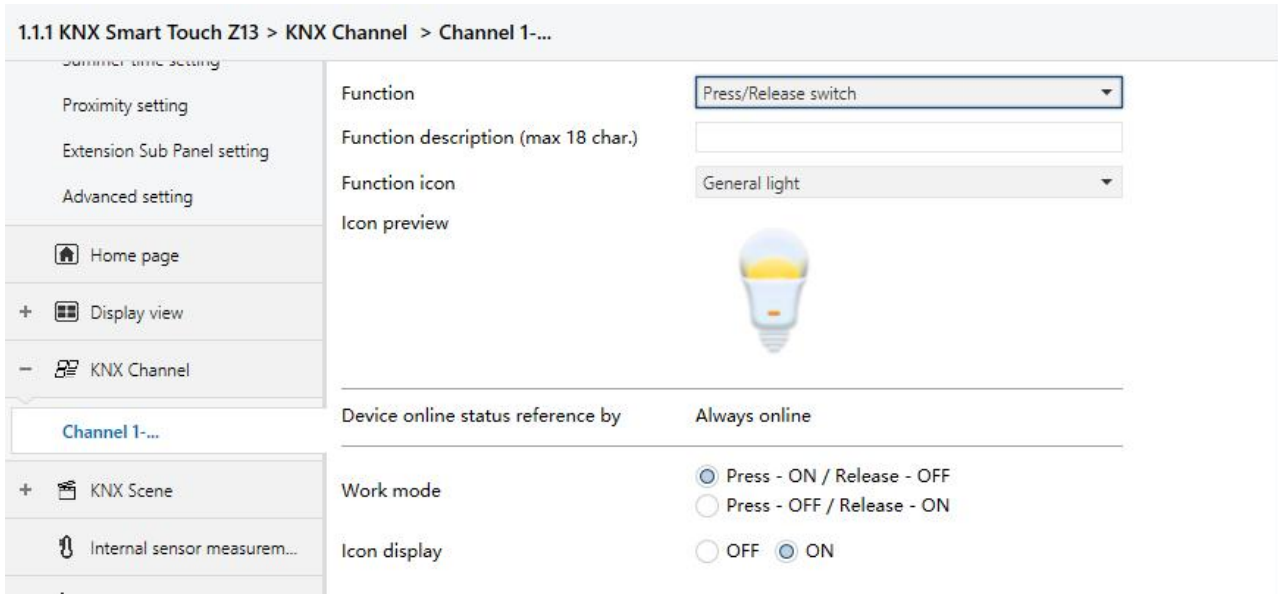
Common 10

“ Period for request device online status [1..255] min”

”Individual” □ k k

□ □ **0...255**

5.11.2.2. /



5.11.2(2) /

”Work mode”

k □ □

Press - ON / Release - OFF

Press - OFF / Release - ON

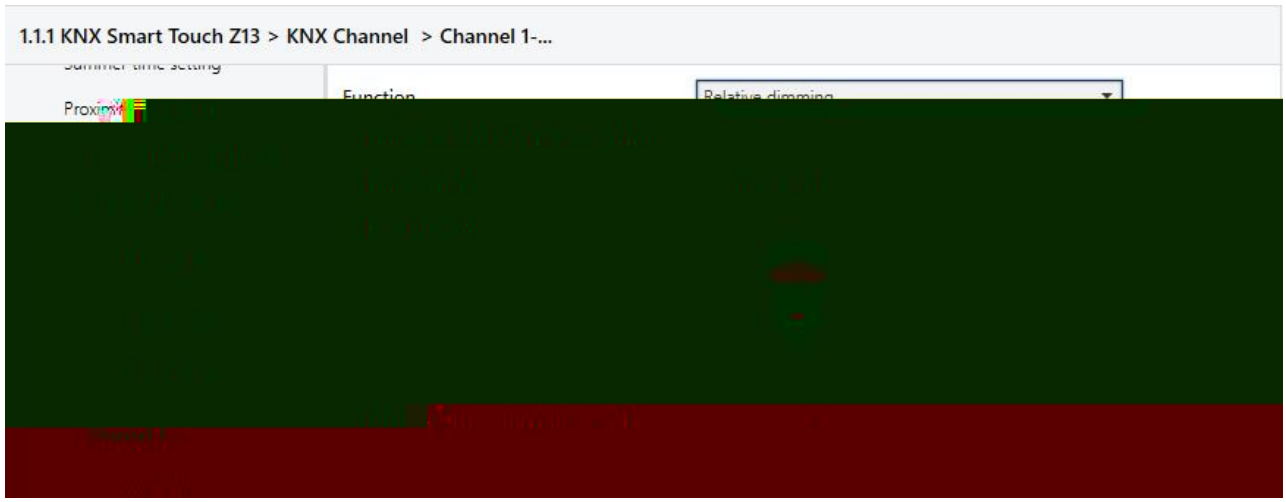
”Icon display”

k □ □

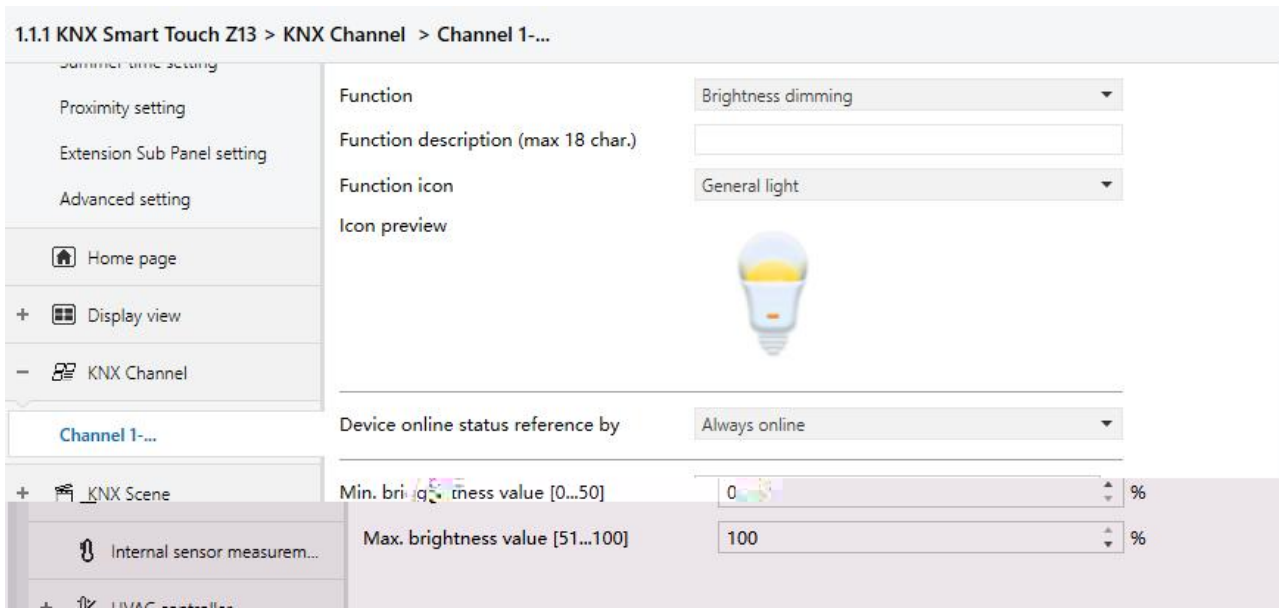
OFF

ON

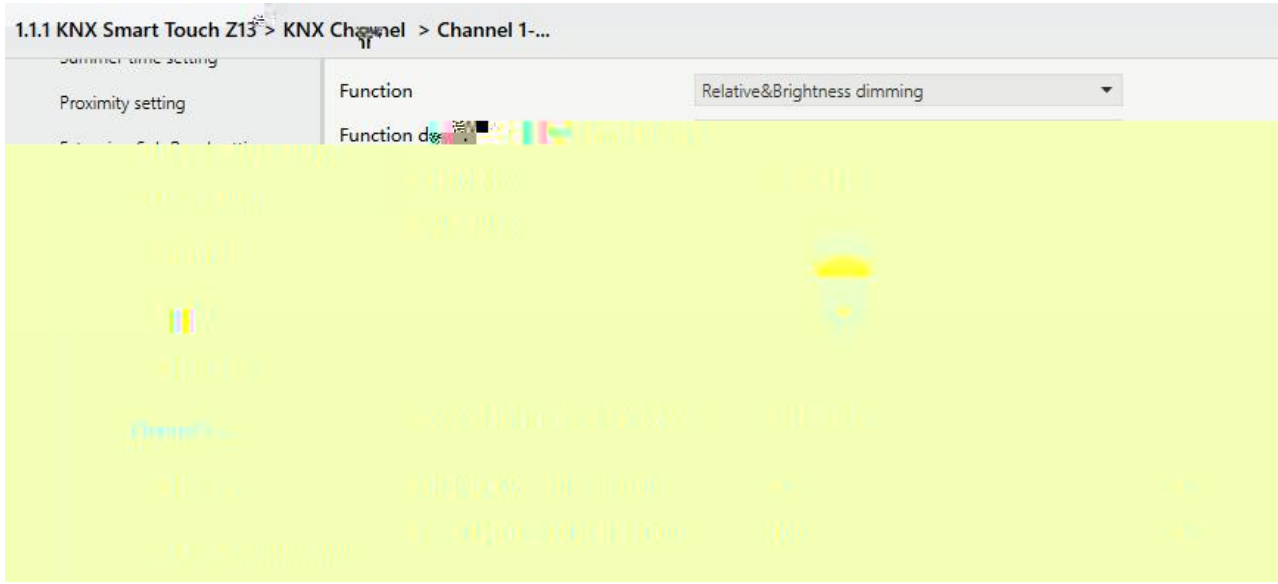
5.11.2.3. ! ! &



Relative dimming



Brightness dimming



Relative&Brightness dimming

5.11.2(3) /

“Brightness dimming/Relative&Brightness dimming” □ k

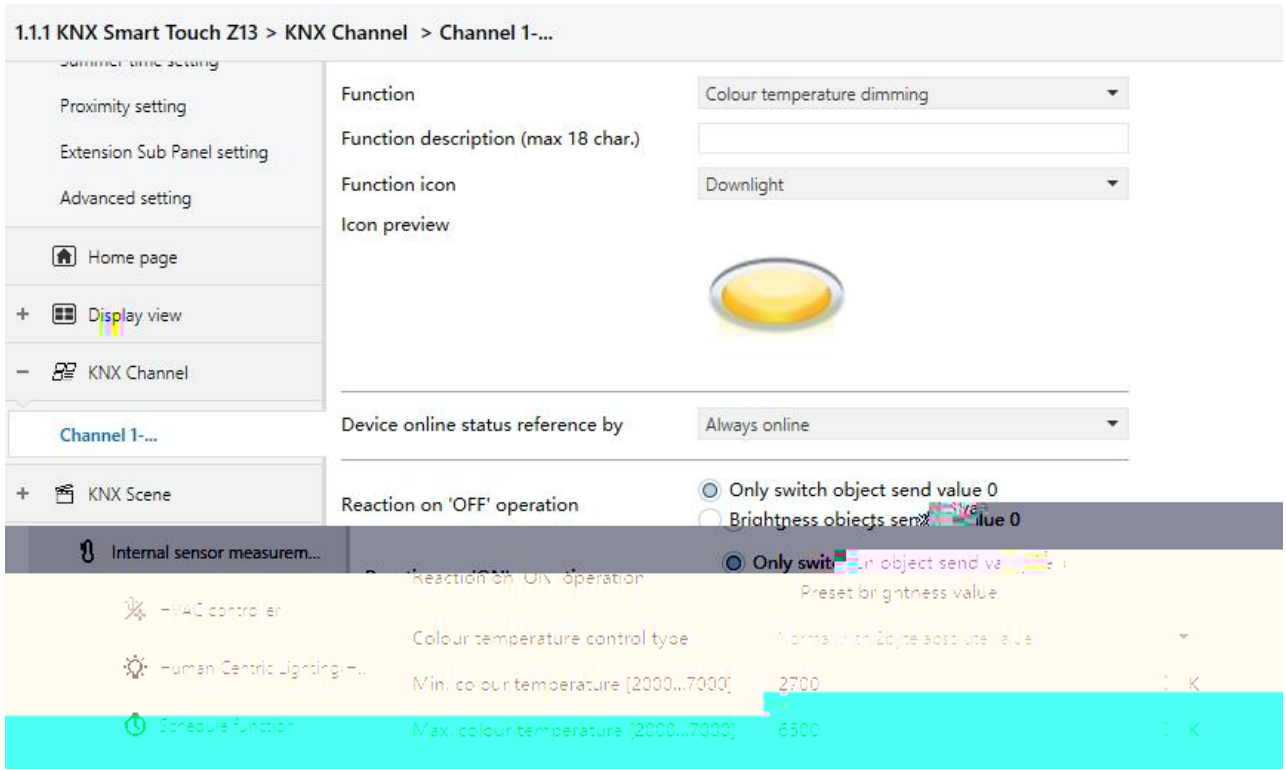
“Min. brightness value [0..50]%”

k □ □ **0..50**

“Max. brightness value [51..100]%”

k □ □ **51..100**

5.11.2.4.



Color temperature dimming

5.11.2(4)

"Reaction on 'OFF' operation"

□ 0□ 0 k □□

Only switch object send value 0

Brightness objects send value 0

"Reaction on 'ON' operation"

□ 1□ □ □ k □□

Only switch object send value 1

Preset colour brightness value

"Preset colour brightness value" □ k

• • **“Brightness value”**

□ k □ □ **0..100%**

“Colour temperature control type”

k □ □

Normal(with 2byte absolute value) **(2)**

Normal(with 1byte percentage value) **(1)**

Directly(with warm/cool white algorithm) **□ / □**

Normal□ 1byte 2byte □

Directly(with warm/cool white algorithm)□ □ “ + ” /

□ 2 1byte □ k

• • **“Status feedback object”**

“Directly(with warm/cool white algorithm)” □ k □ k

□ □

Brightness+2 byte Colour Temperature

Warm/cool white brightness

Brightness+2 byte Colour Temperature□ + □ □ □

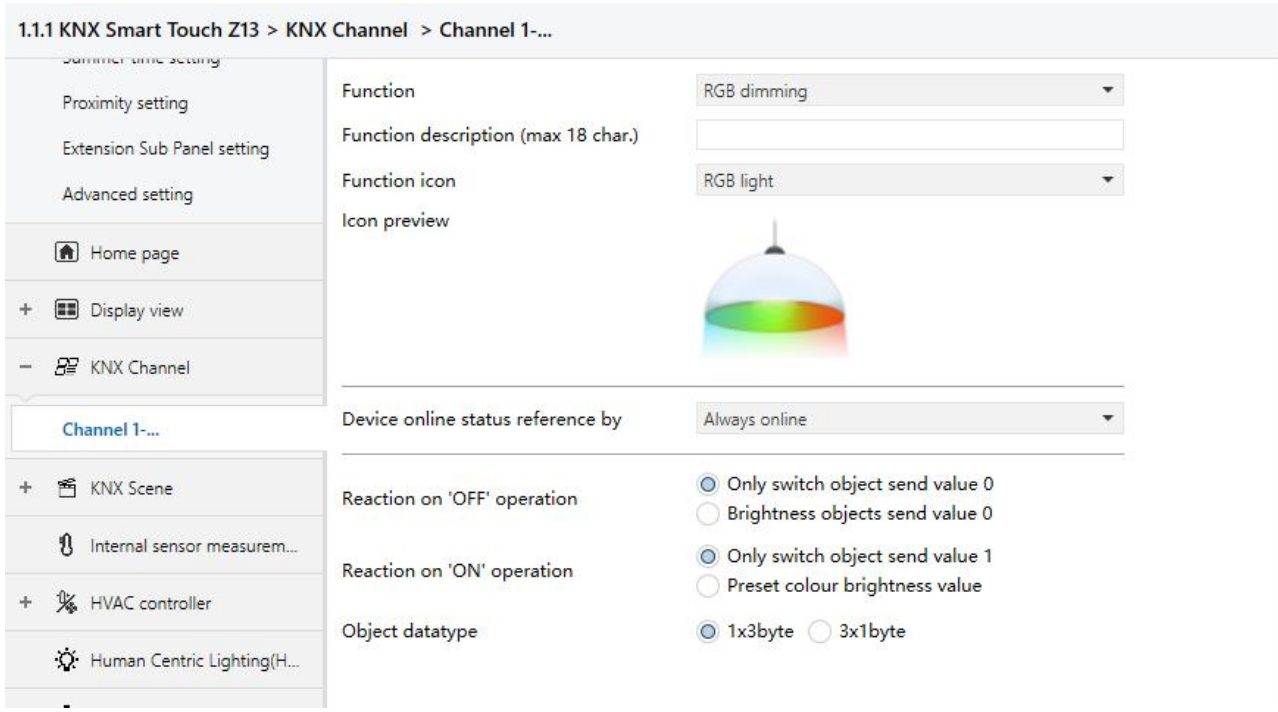
Warm/cool white brightness□ □ □ k

“Min. colour temperature [2000..7000]K”

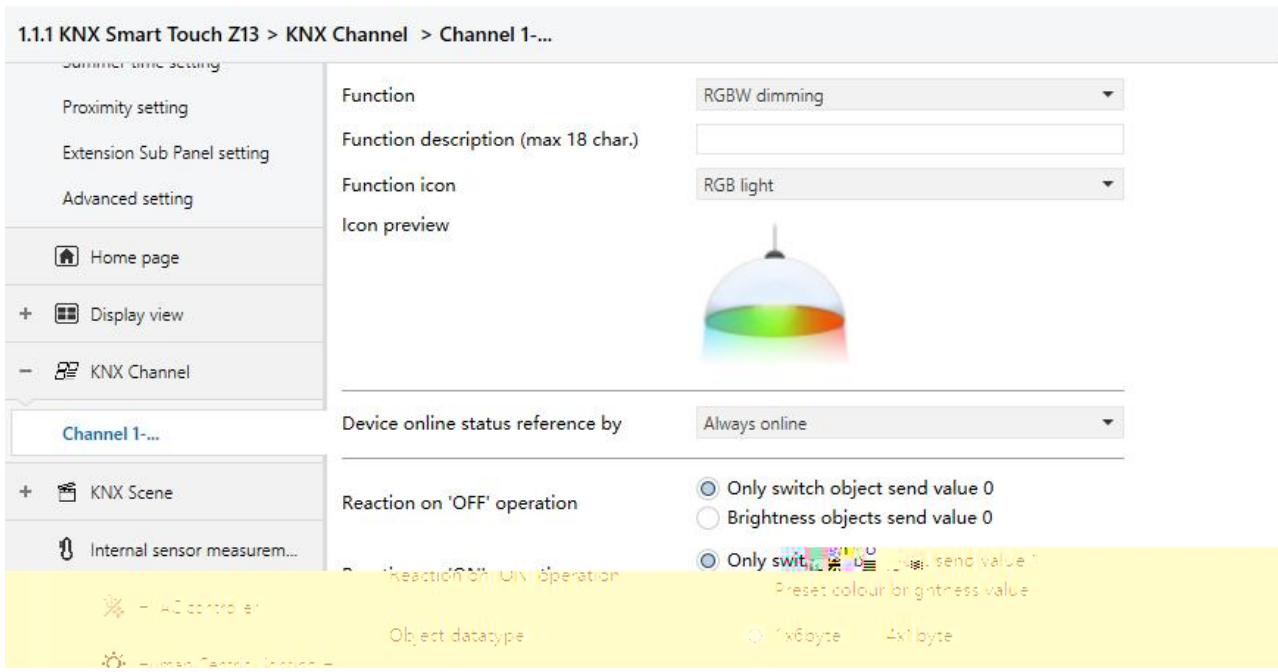
“Max. colour temperature [2000..7000]K”

k □ □ **2000..7000**

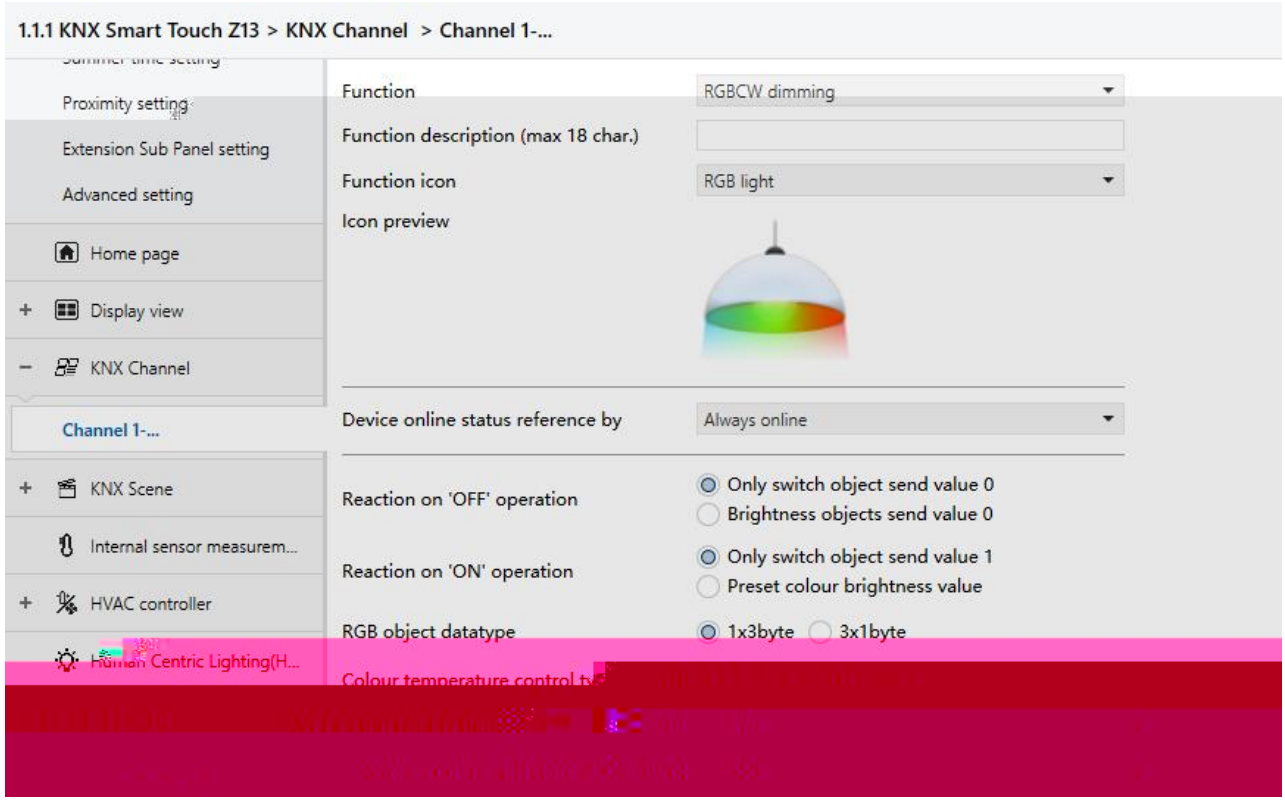
5.11.2.5.RGB/RGBW/RGBCW



RGB dimming



RGBW dimming



RGBCW dimming

5.11.2(5) RGB/RGBW/RGBCW

"Reaction on 'OFF' operation"

□ 0□ 0 k □ □

Only switch object send value 0

Brightness objects send value 0

"Reaction on 'ON' operation"

□ 1□ □ □ k □ □

Only switch object send value 1

Pres.EP P

- **“RGB value”**

  ,□ □ k □ □000000 ....#FFFFFF

- **“White brightness value”**

  ,□ □ k □ □0..255

- **“Brightness value”**

  □ k □ □0..255

“Object datatype”/“RGB object datatype ”

□ □**1x3byte/3x1byte/1x6byte/4x1byte**

RGB/ G

Directly(with warm/cool white algorithm) □ / □

Normal □ 1byte 2byte □

Directly(with warm/cool white algorithm) □ □ “ + ” /

□ 2 1byte □ k

“Status feedback object”

“Directly(with warm/cool white algorithm)” □ k □ k

□ □

Brightness+2 byte Colour Temperature

Warm/cool white brightness

Brightness+2 byte Colour Temperature □ + □ □ □

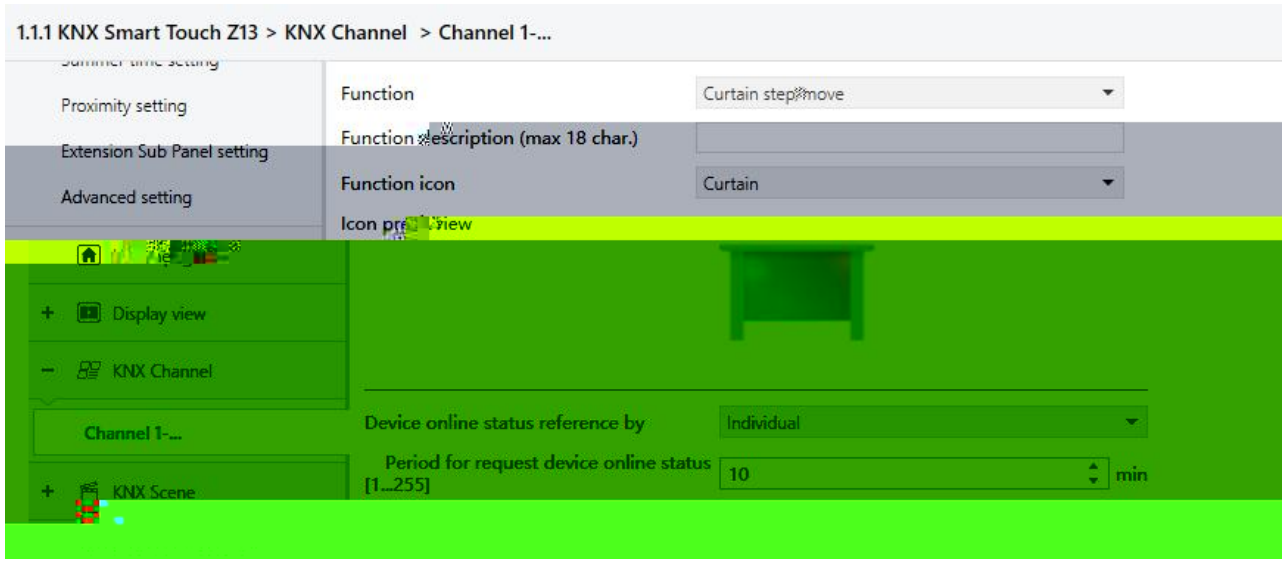
Warm/cool white brightness □ □ □ k

“Min. colour temperature [2000..7000]K”

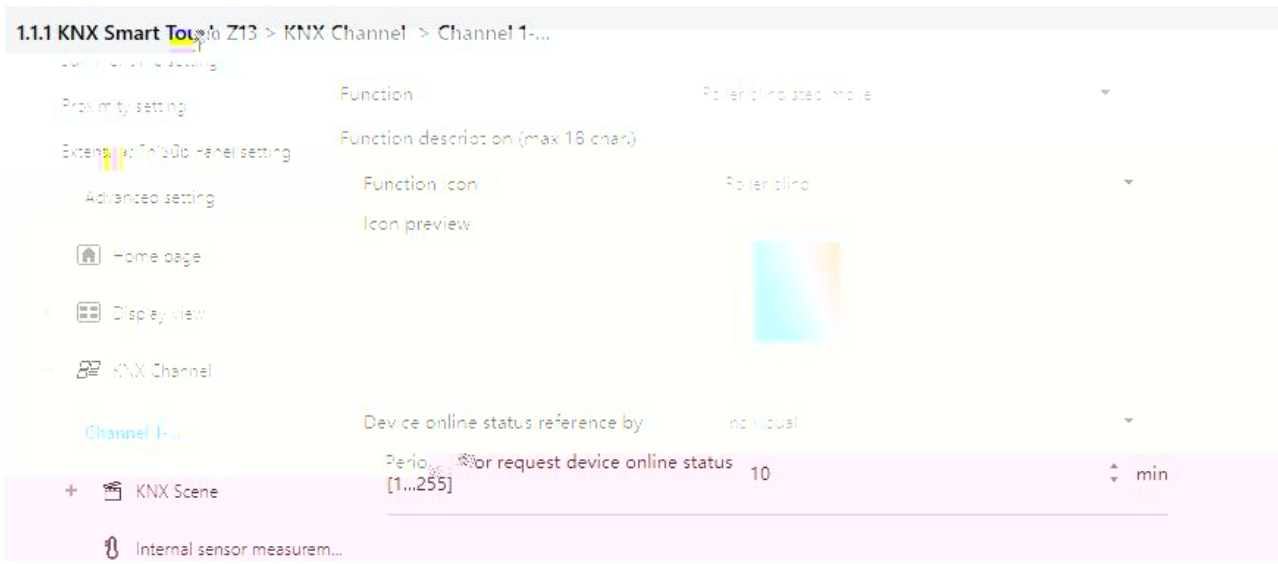
“Max. colour temperature [2000..7000]K”

k □ □ **2000..7000**

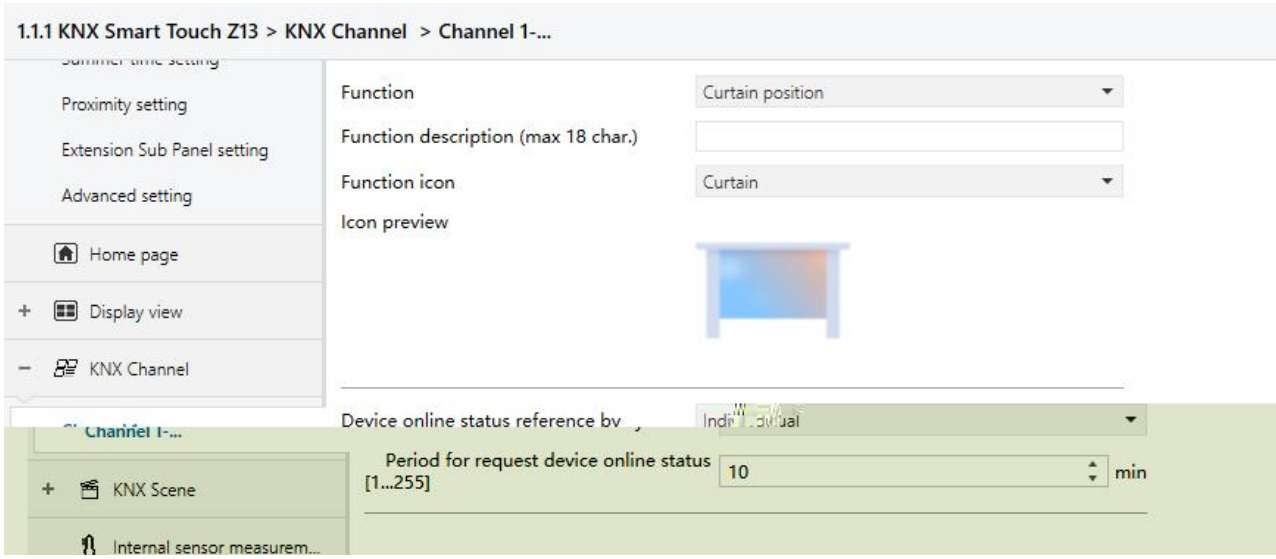
5.11.2.6.



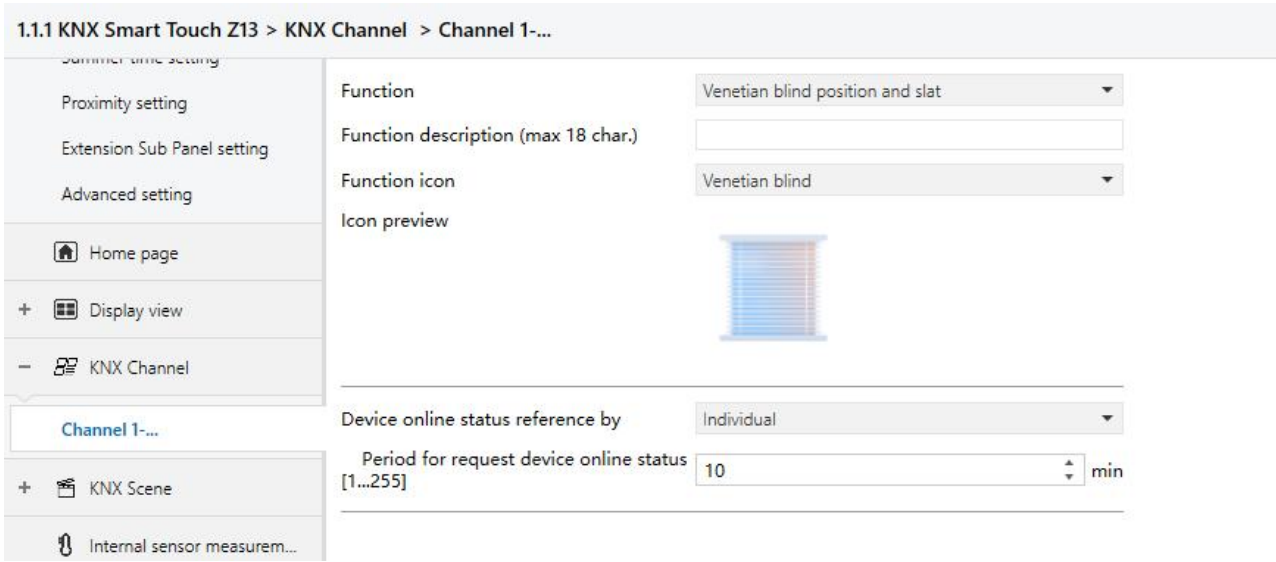
Curtain step/move



Roller blind step/move


1.1.1 KNX Smart Touch Z13 > KNX Channel > Channel 1-...
Proximity setting
Extension Sub Panel setting
Advanced setting
Home page
Display view
KNX Channel
KNX Scene
Internal sensor measurem...
Function
Curtain position
Function description (max 18 char.)
Function icon
Curtain
Icon preview
Device online status reference by
Period for request device online status [1...255]
10
min

Curtain n u



Venetian blind position and slat

5.11.2(6)

"Device online status reference by"

KNX k □ □

Individual

Common 1

...

Common 10

Always online

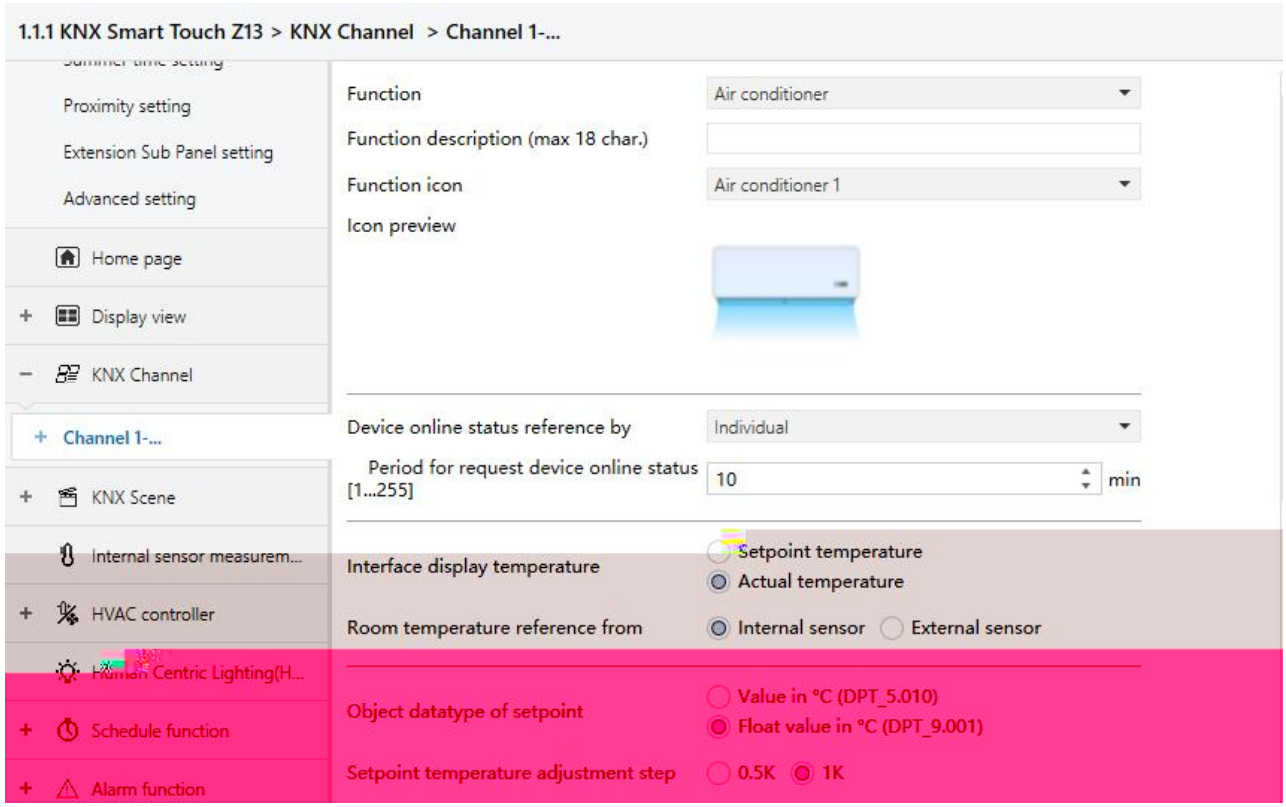
□ □**Press/Release switch** □ **Always online**□

"Individual" □ k

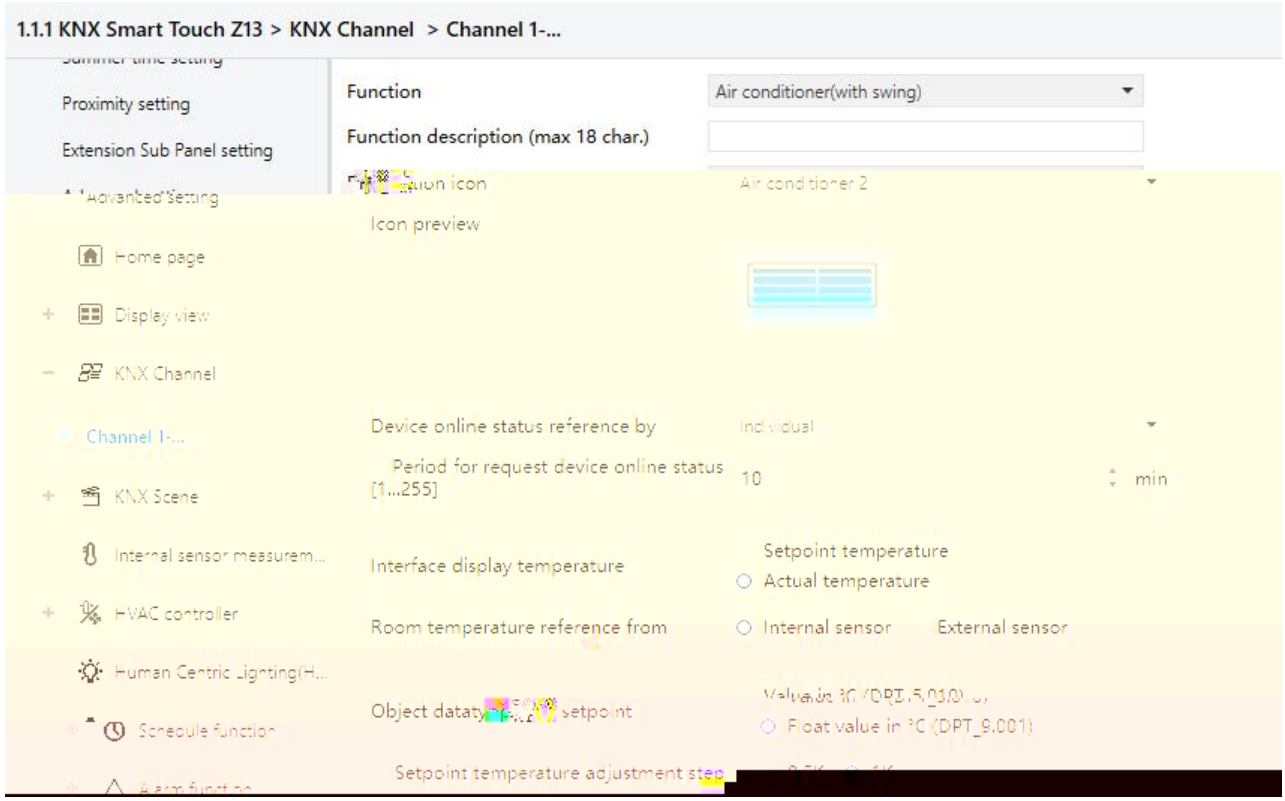
" Period for request device online status [1..255]min"

k □ □**0...255**

5.11.2.7.



Air conditioner(External sensor)



Air conditioner(with swing)

5.11.2(7)

"Interface display temperature"

k □ □

Setpoint temperature

Actual temperature

□ □ □ k

"Room temperature reference from"

"Actual temperature" k k □ □

Internal sensor

External sensor

“Period for request external sensor [0...255]min”

”External sensor” k k

□ □ **0..255**

□ □ □ k

”Object datatype of setpoint”

k □ □

Value in °C (DPT_5.010) □

Float value in °C (DPT_9.001) □ **KNX**

”Setpoint temperature adjustment step”

k □ □

0.5K

1K

“Value in °C (DPT_5.010)” 1K k

”Min/Max. setpoint temperature [16..32]-C”

k □

□ k □ □

16°C

17°C

...

32°C

□ □ □ □**ETS** k

"Timer"

□ □ k

□ k

Protection setting

"ON/OFF protection"

"Setpoint protection"

"Mode protection"

"Fan protection"

" Vanes swing protection"

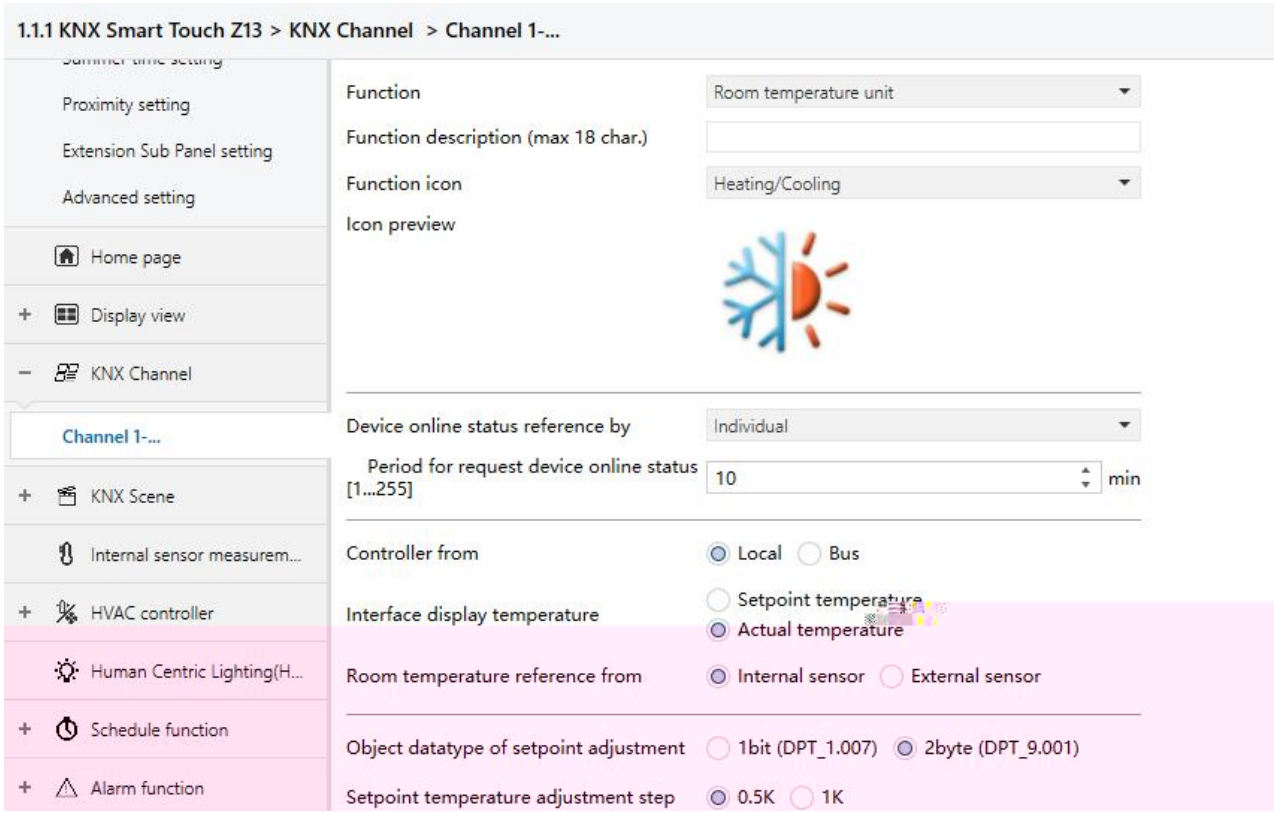
"Vanes swing protection" "Air conditioner(with swing)" k

□ □ k ! !

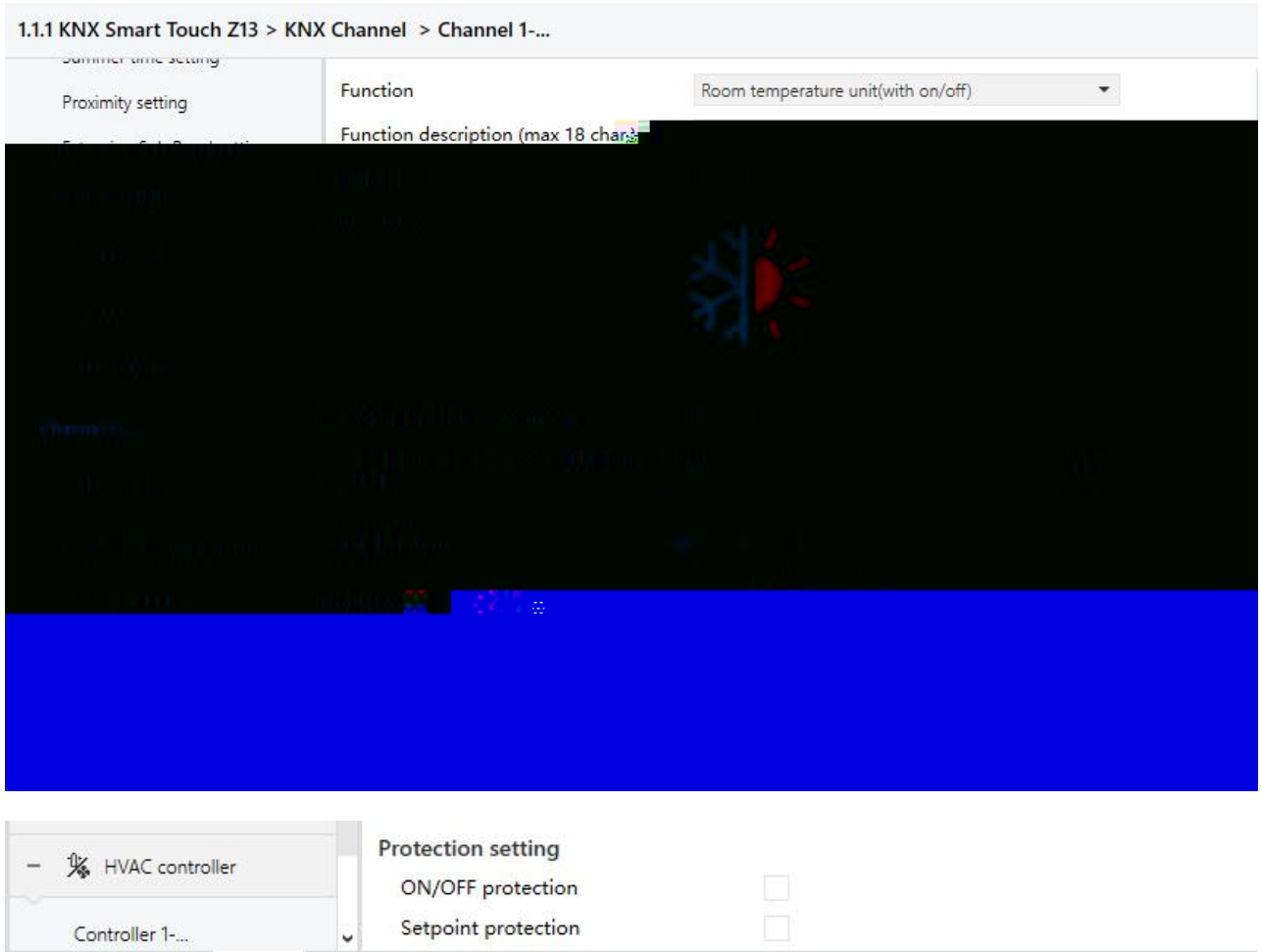
! □ □ k

□ □ k

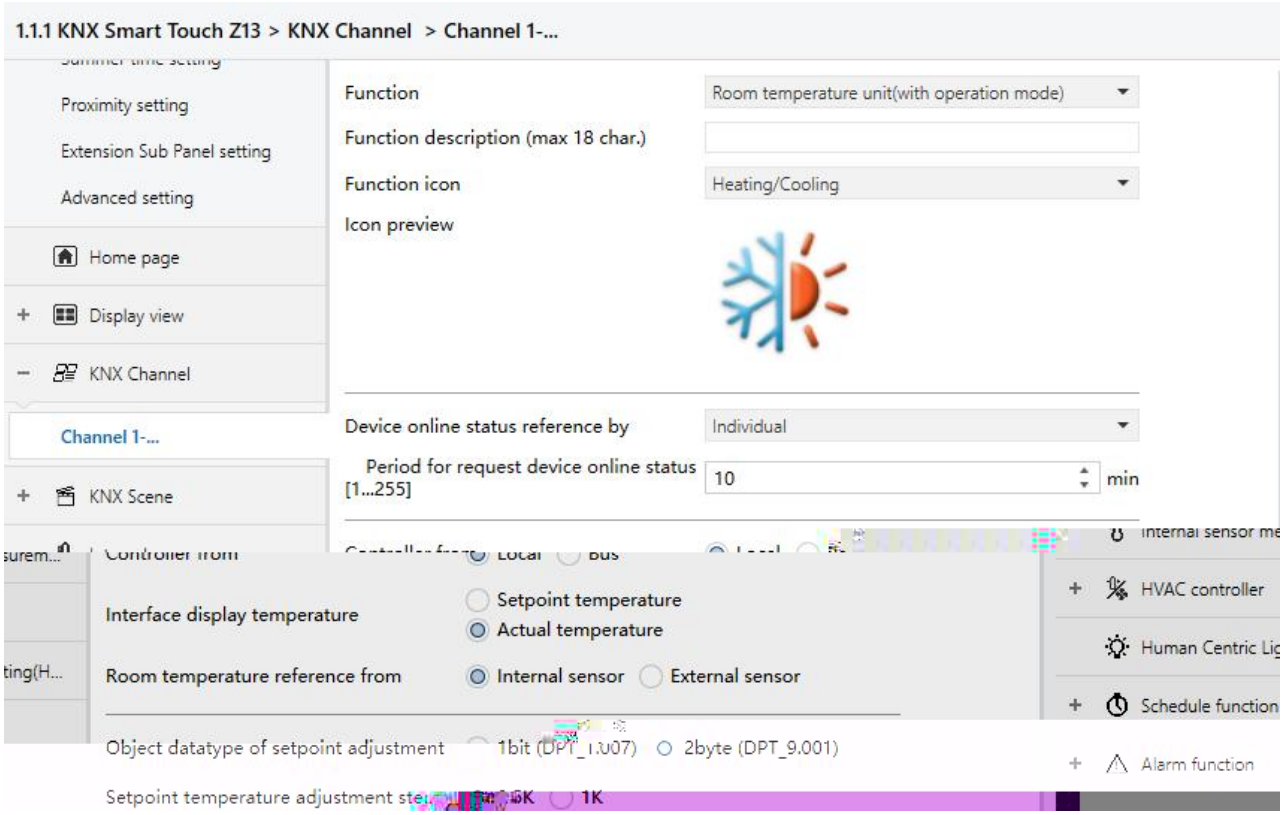
5.11.2.8.



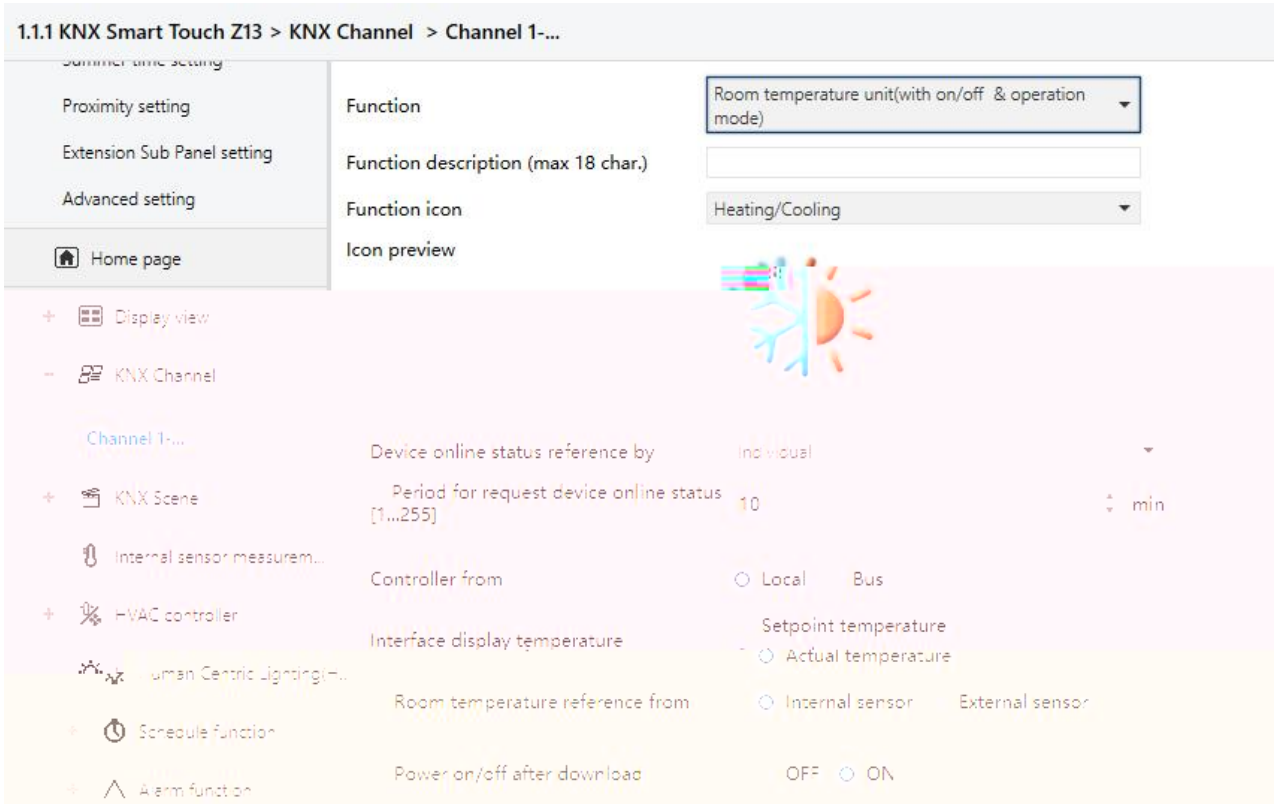
Room temperature unit(External sensor)



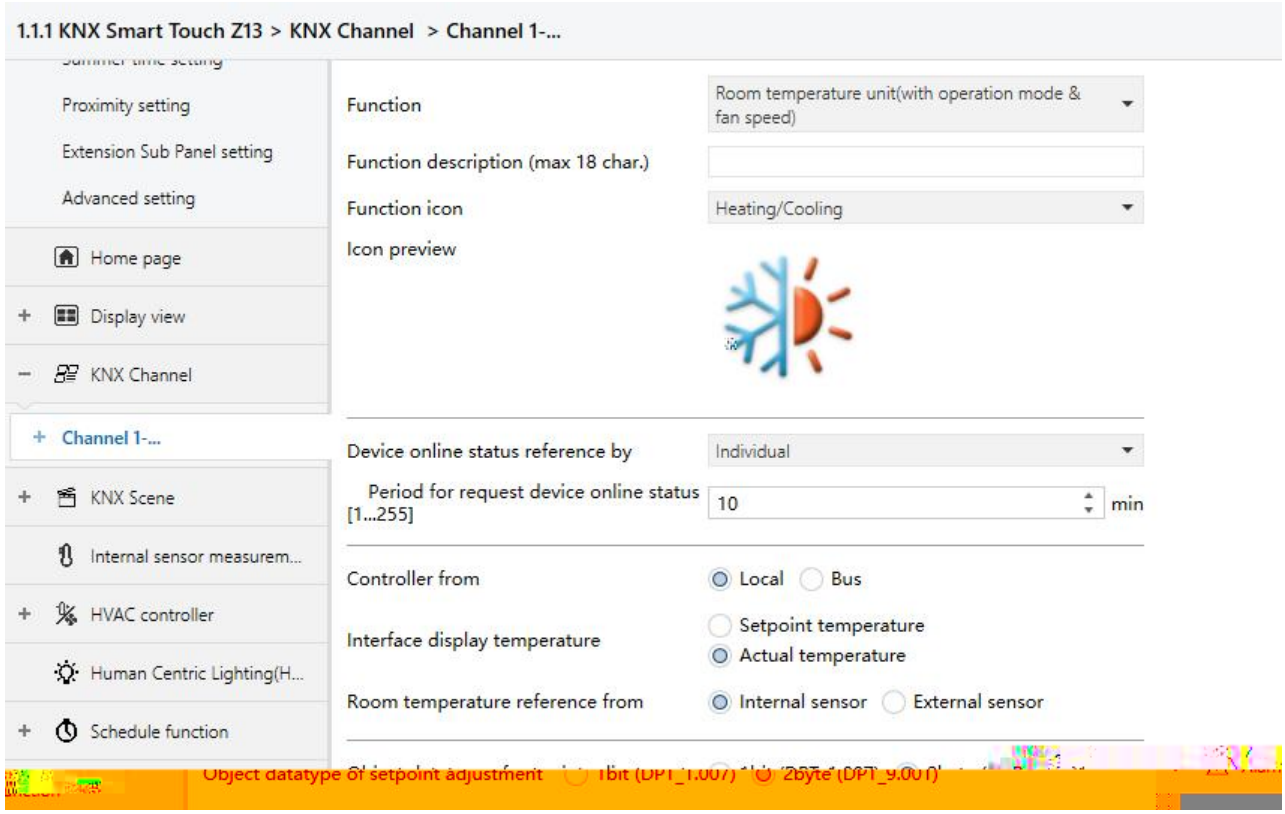
Room temperature unit(with on/off)-External sensor



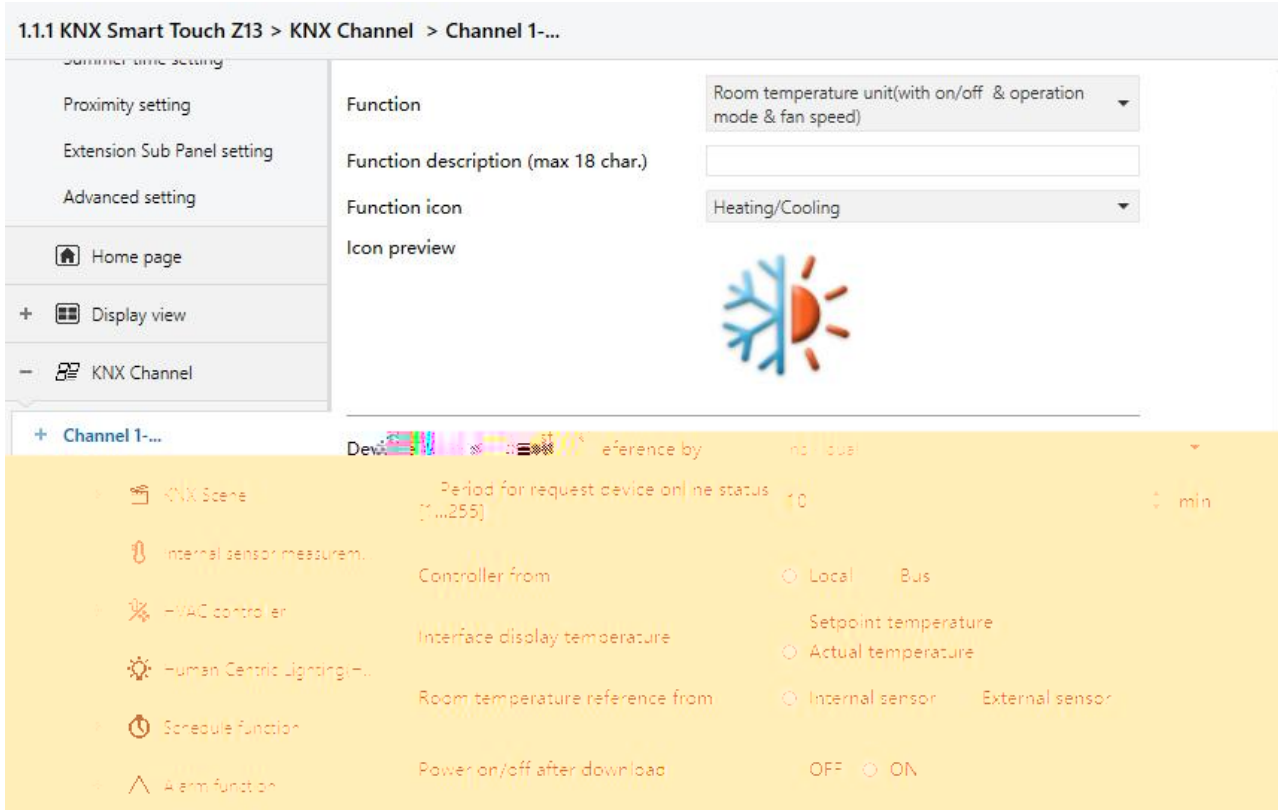
Room temperature unit(with operation mode)-External sensor



Room temperature unit(with on/off & operation mode)-External sensor



Room temperature unit(with operation mode & fan speed)-External sensor



Room temperature unit(with on/off & operation mode & fan speed)-External sensor

5.11.2(8)

5.11.2.1(9) Fan

"Controller from"

k □ !

! ( ) k □ □

Local

Bus

"Interface display temperature"

k □ □

Setpoint temperature

Actual temperature

□ □ □ k

• • **"Room temperature reference from"**

"Actual temperature" k k □ □

Internal sensor

External sensor

• • **"Period for request external sensor [0...255]min"**

"External sensor" □ k k

□ □ **0..255**

□ □ □ k

"Object datatype of setpoint adjustment"

k □ □

1bit (DPT_1.007)

2byte (DPT_9.001)

"Setpoint temp	7	p

"Fan protection"

□ □ k ! !

! □ □ k

□ □ k

□

1. on/off ON/OFF

2.Control mode Heating and Cooling □

3. operation mode Operation mode

4. fan speed Fan

Room temperature unit(with on/off) Room temperature unit(with on/off & operation mode) Room temperature unit(with on/off & operation mode & fan speed) k

"Power on/off after download"

k □ □

OFF

ON

"Power on/off after voltage recovery"

k □ □

OFF

ON

Before voltage failure

Before voltage failure

k

"Room temperature unit(with operation mode & fan speed)" "Room temperature unit(with on/off & operation mode & fan speed)" k **5.11.2.1(8)** k

Object datatype of 1byte fan speed"

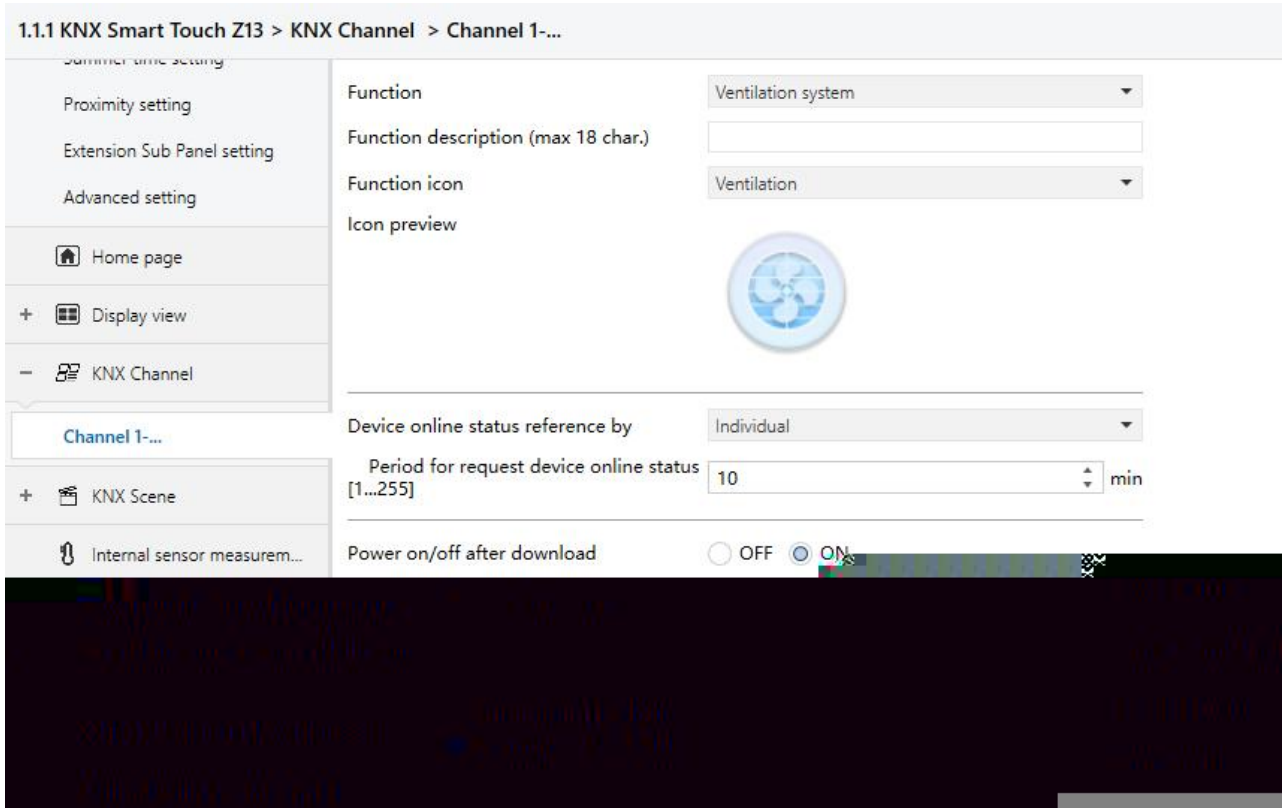
1byte k

Output value for fan speed

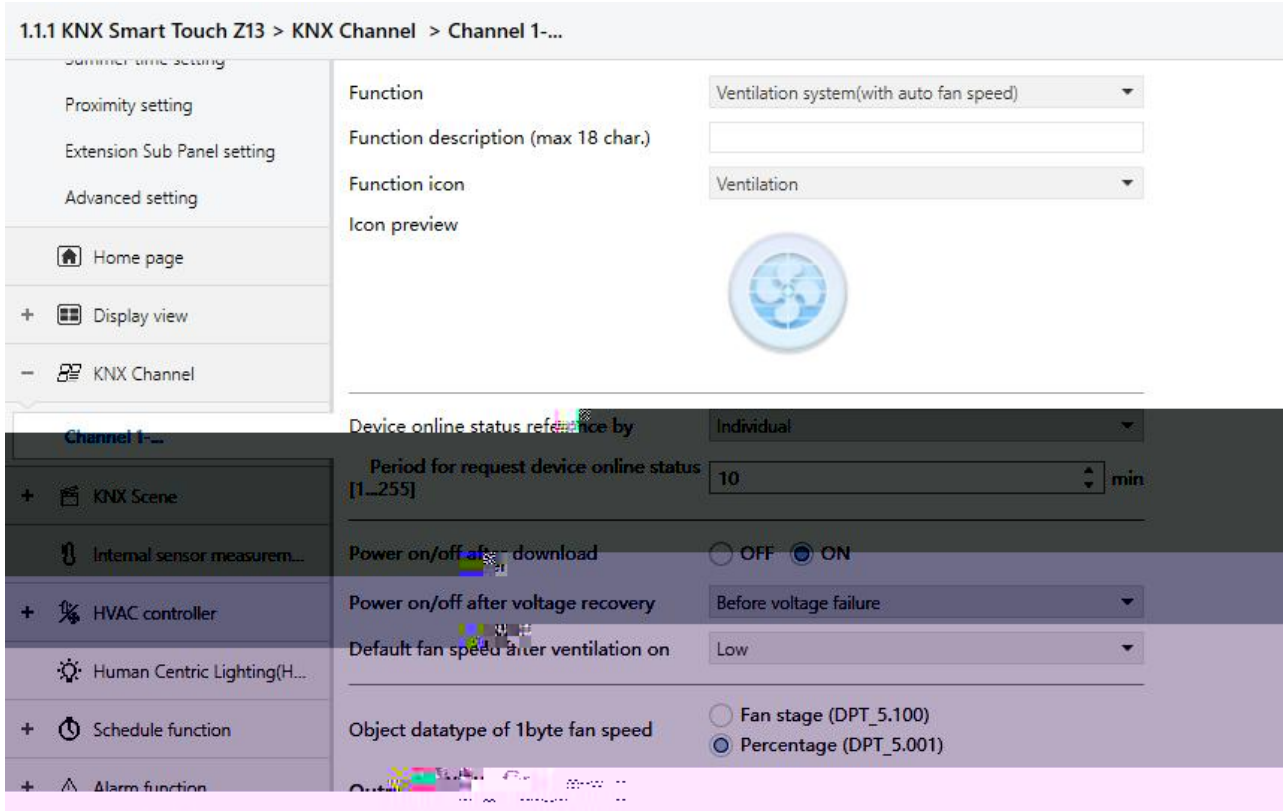
"Output value for fan speed low/medium/high"

4

5.11.2.9. □



Ventilation system



Ventilation system(with auto fan speed)

5.11.2(10) □

"Power on/off after download"

□ k □ □

OFF

ON

"Power on/off after voltage recovery"

□ k □ □

OFF

ON

Before voltage failure

OFF □ □ ! □ □

ON □ □ □

Before voltage failure □ □ k

"Default fan speed after ventilation on"

□ □ k □ □

Low

Medium

High

Last status

"Object datatype of 1byte fan speed"

1byte □ k □ □

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Output value for fan speed □

"Output value for fan speed low/medium/high"

□ □ ! ! □ 4 □ k □

□ **0..255/0..100**

Status feedback for fan speed □ □

"Status value for fan speed low/medium/high"

□ □ □ ! ! □ 4 □ k □ □

k □ □ **0..255/0..100**

"Heat recovery function"

□ k

"Filter timer counter"

□ k

• • "Evaluation time [100..10000]h"

k □ □ **100..10000**

□ □ k

"Filter timer reset" k

"Filter timer counter" □ □

□ "Filter timer counter change" k

Ventilation system(with auto fan speed) k

k

"Air Quality value reference from "

□ k □ □

PM2.5

CO2

VOC

" Object datatype of PM2.5"

PM2.5 k □ □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

" Object datatype of VOC"

VOC k □ □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

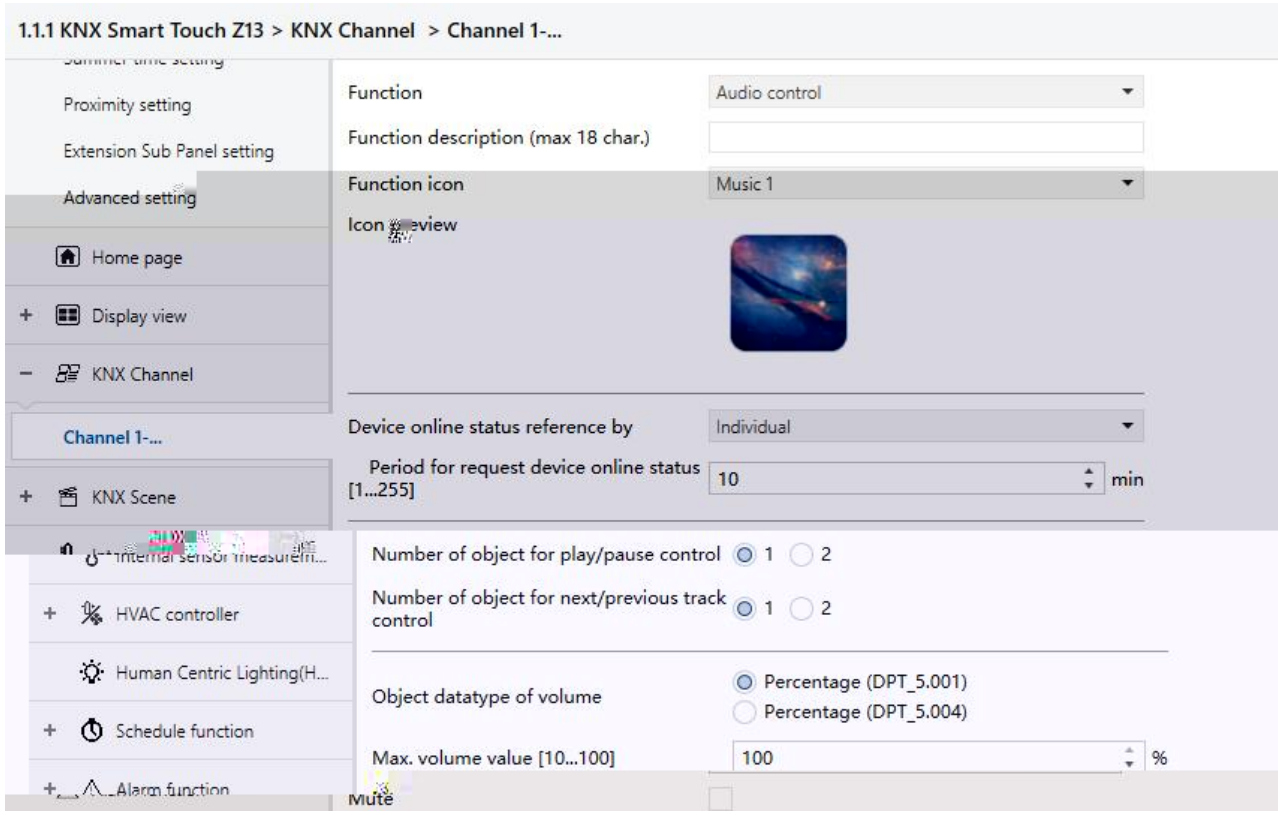
" Object datatype of CO2"

CO2 k □ □

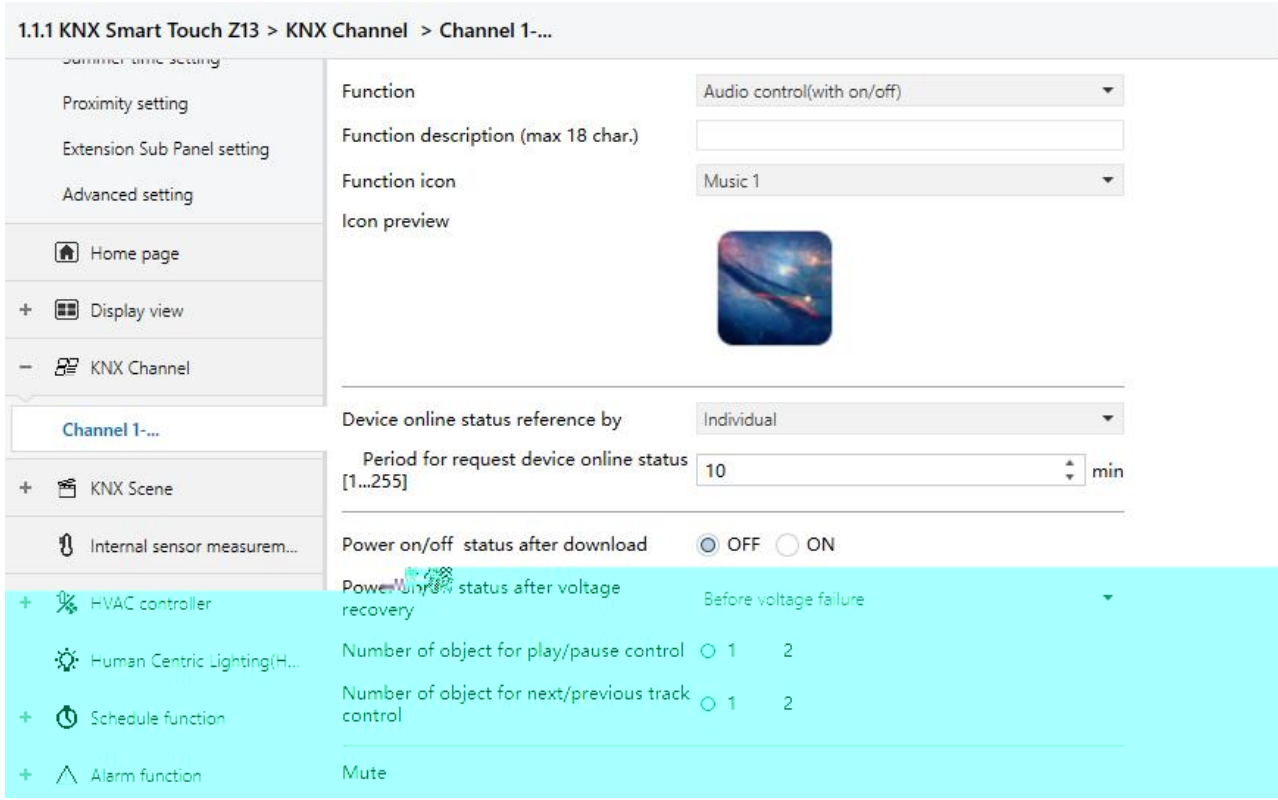
Value in ppm(DPT_7.001)

Float value in ppm(DPT_9.008)

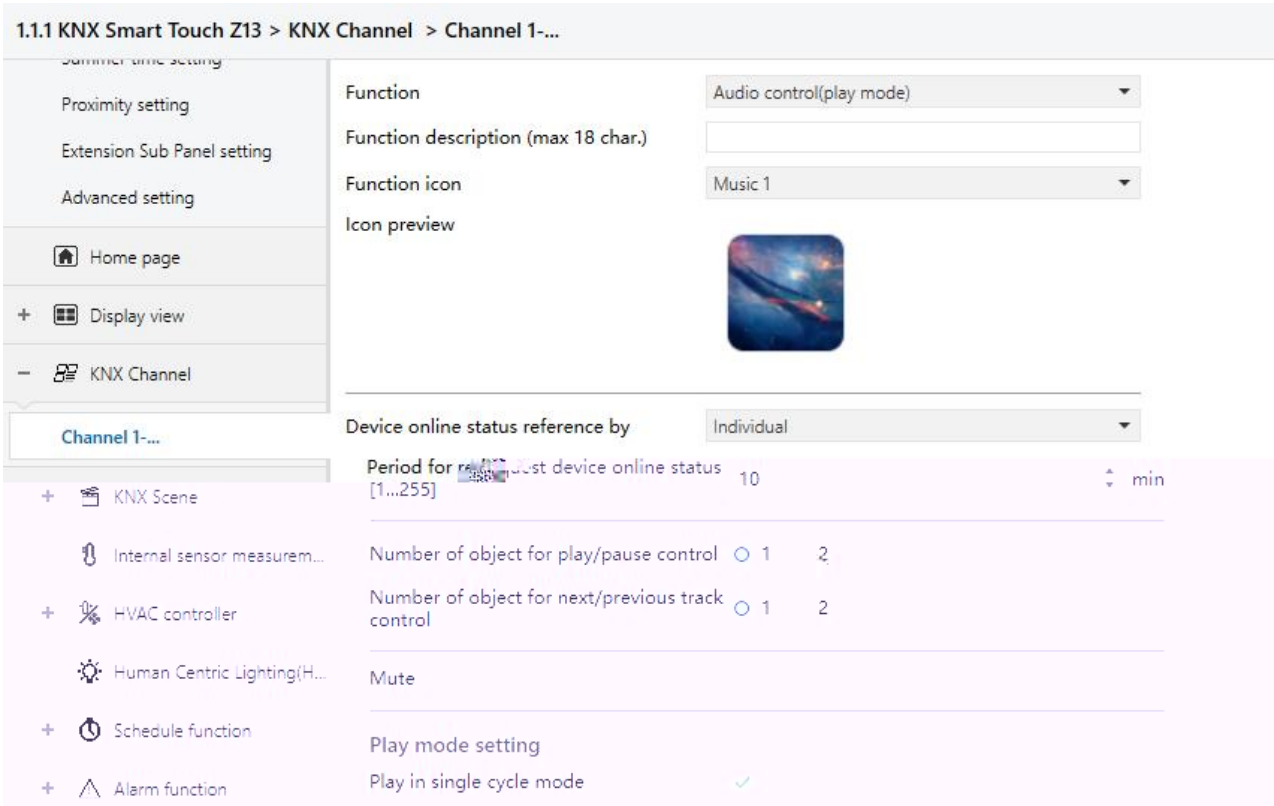
5.11.2.10.



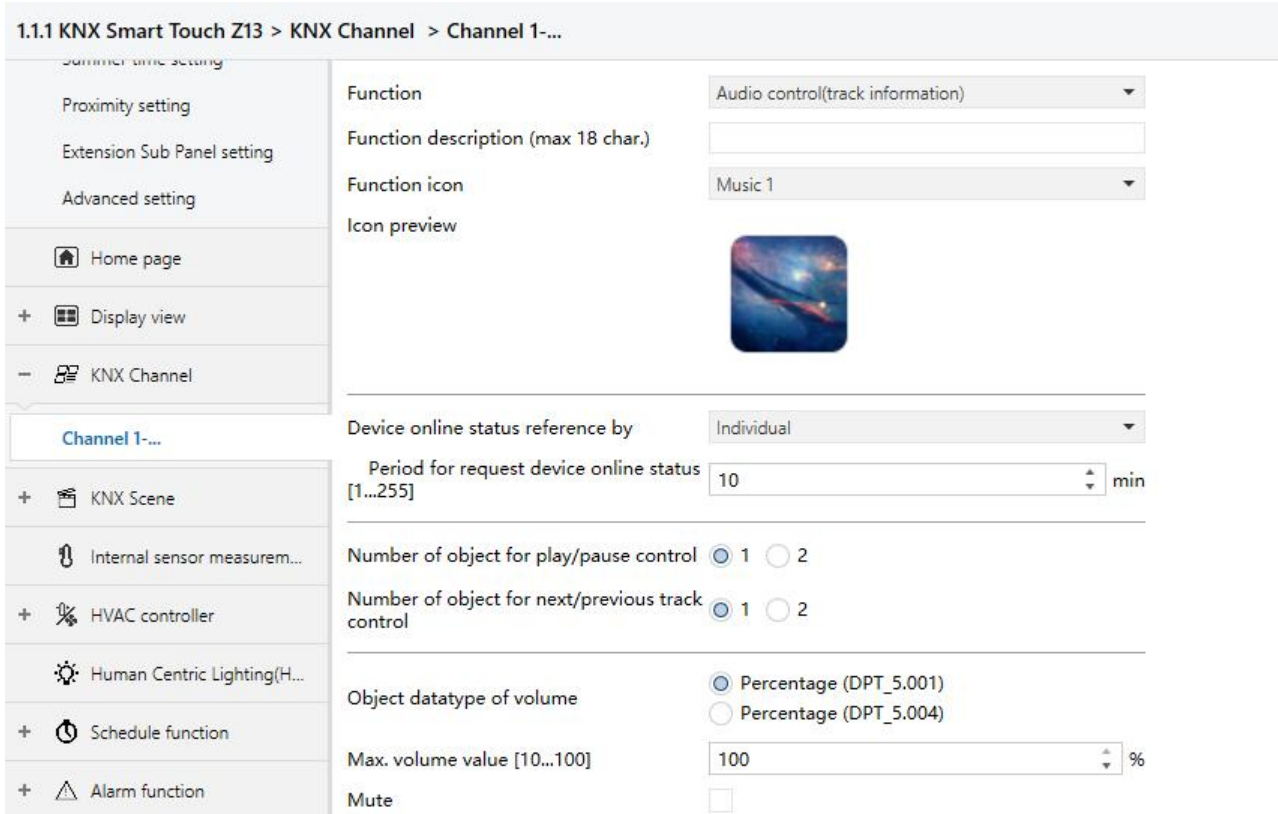
Audio control



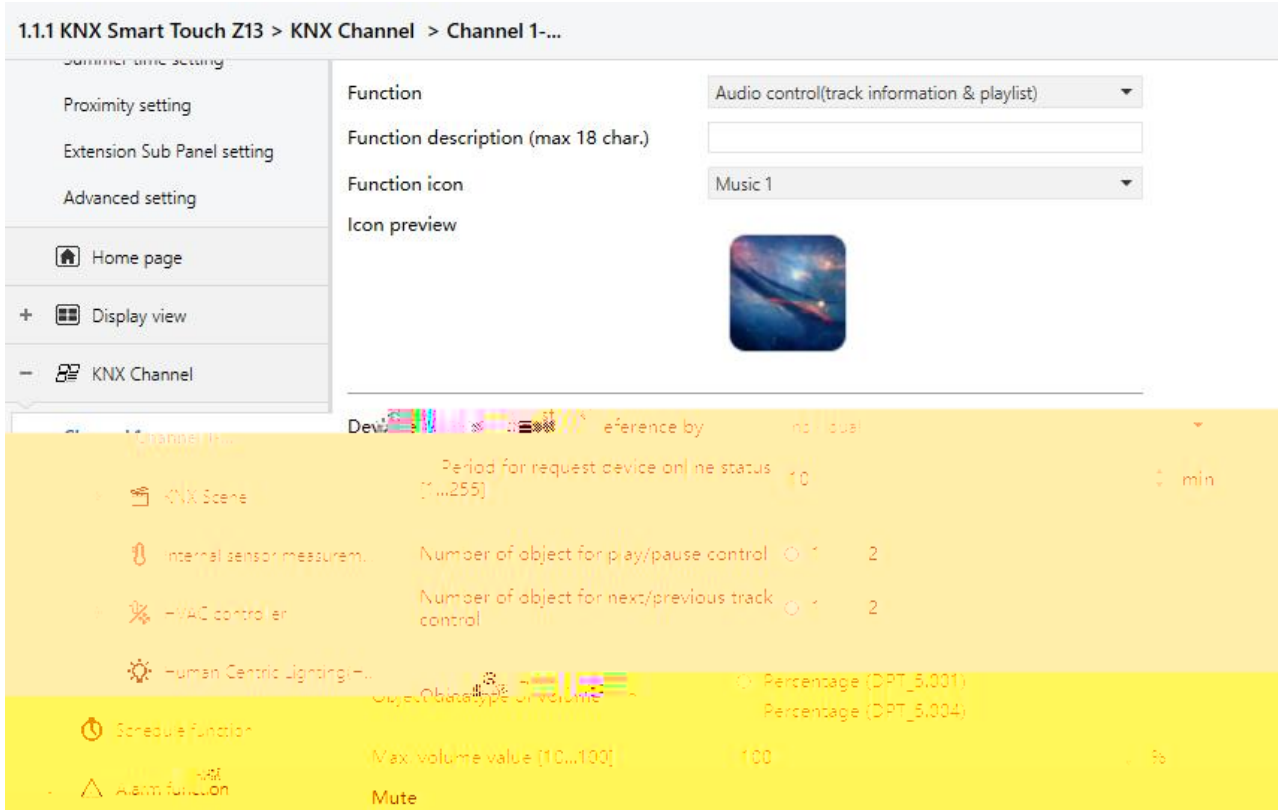
Audio control(with on/off)



Audio control(play mode)



Audio control(track information)



Audio control(track information+playlist)

5.11.2(11)

" Number of object for play/pause control"

/ □ 1 2 k □□

1

2

" Number of object for next/previous track control"

/ □ 1 2 k □□

1

2

" Mute"

k □ □**10..100**

”Audio control(play mode)” k

Play mode setting

“ Play in single cycle mode”

k k

“Output value for play in single cycle”

k □ □**0..255**

“Status value for play in single cycle”

k □ k □ □**0..255**

“ Play in order mode”

□ k k

“Output value for play in order”

□ k □ □**0..255**

“Status value for play in order”

□ k □ k □ □**0..255**

“ Play in random mode”

k k

“Output value for play in random”

k □ □**0..255**

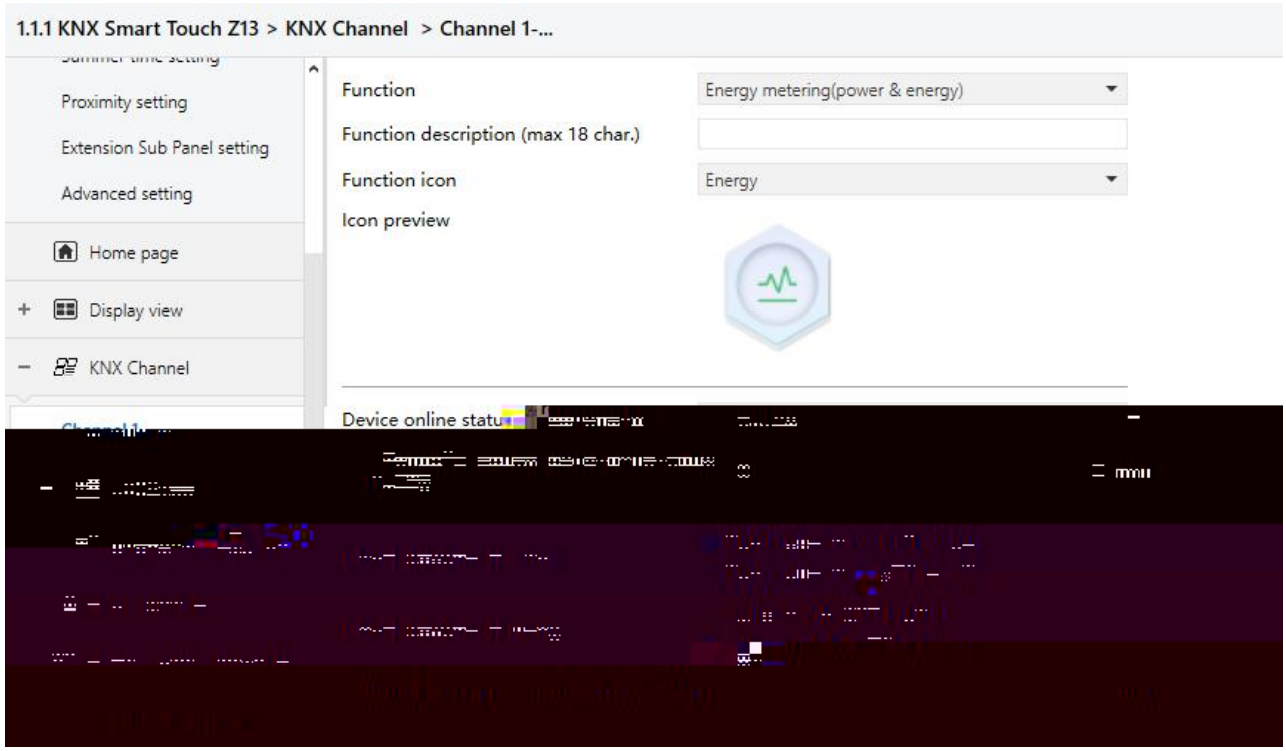
“Status value for play in random”

k **0..255**

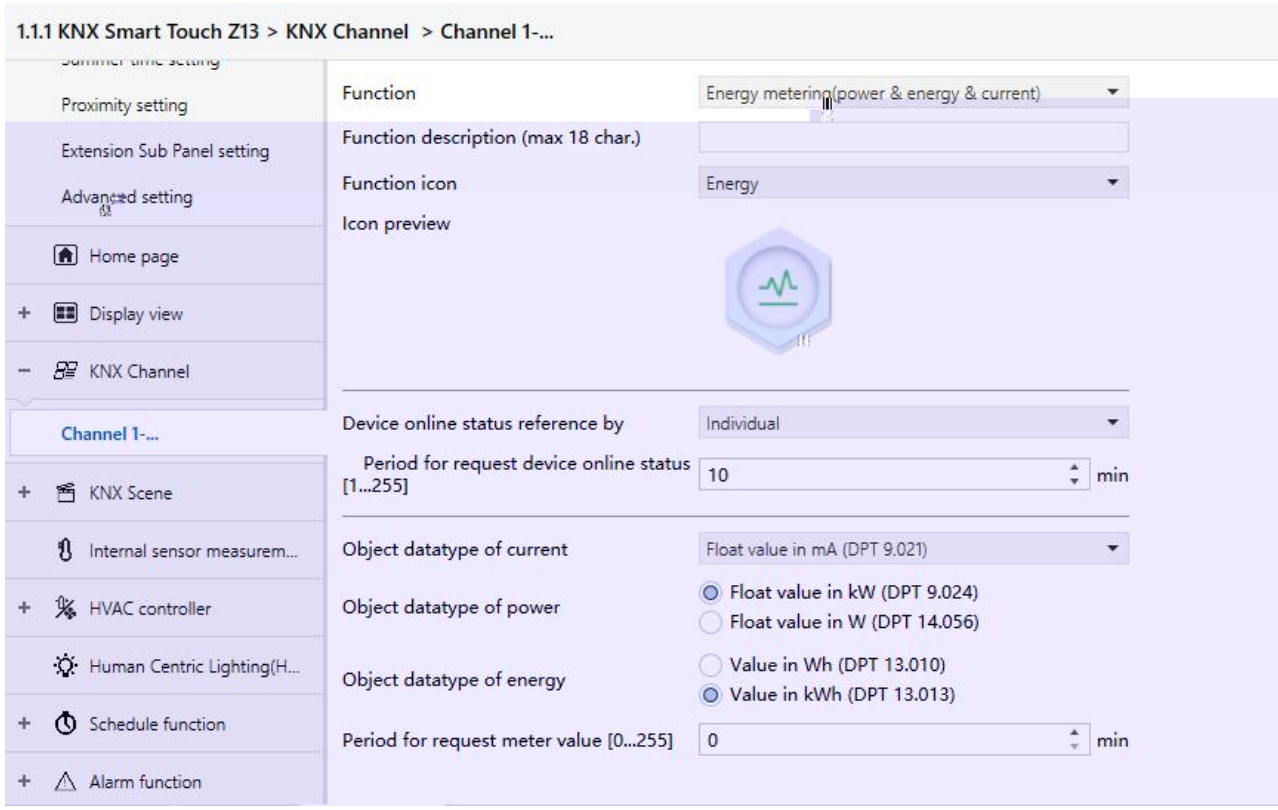
5.11.2.11.

5.11.2(12)

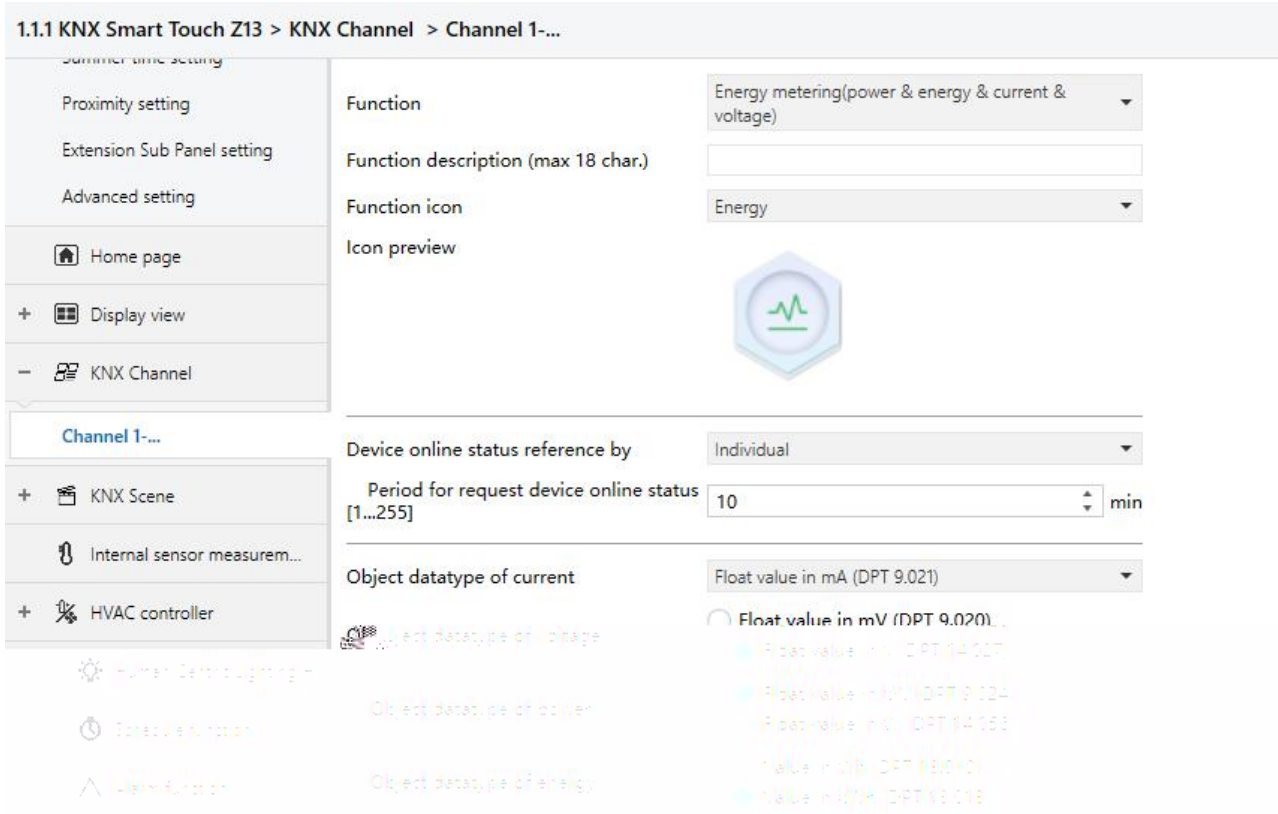
k



Energy metering(power & energy)



Energy metering(power & energy & current)



Energy metering(power & energy & current & voltage)

5.11.2(12)

" Object datatype of power"

□ k □ □

Float value in kW (DPT 9.024)

Float value in W (DPT 14.056)

" Object datatype of energy"

□ k □ □

Value in Wh (DPT 13.010)

Value in kWh (DPT 13.013)

" Period for request meter value [0...255]min"

k □ □ **0...255**

”Energy metering(power & energy & current) Energy metering(power & energy & current & voltage)” k

” Object datatype of current”

□ k □ □

Value in mA (DPT 7.012)

Float value in mA (DPT 9.021)

Float value in A (DPT 14.019)

”Energy metering(power & energy & current & voltage)” k

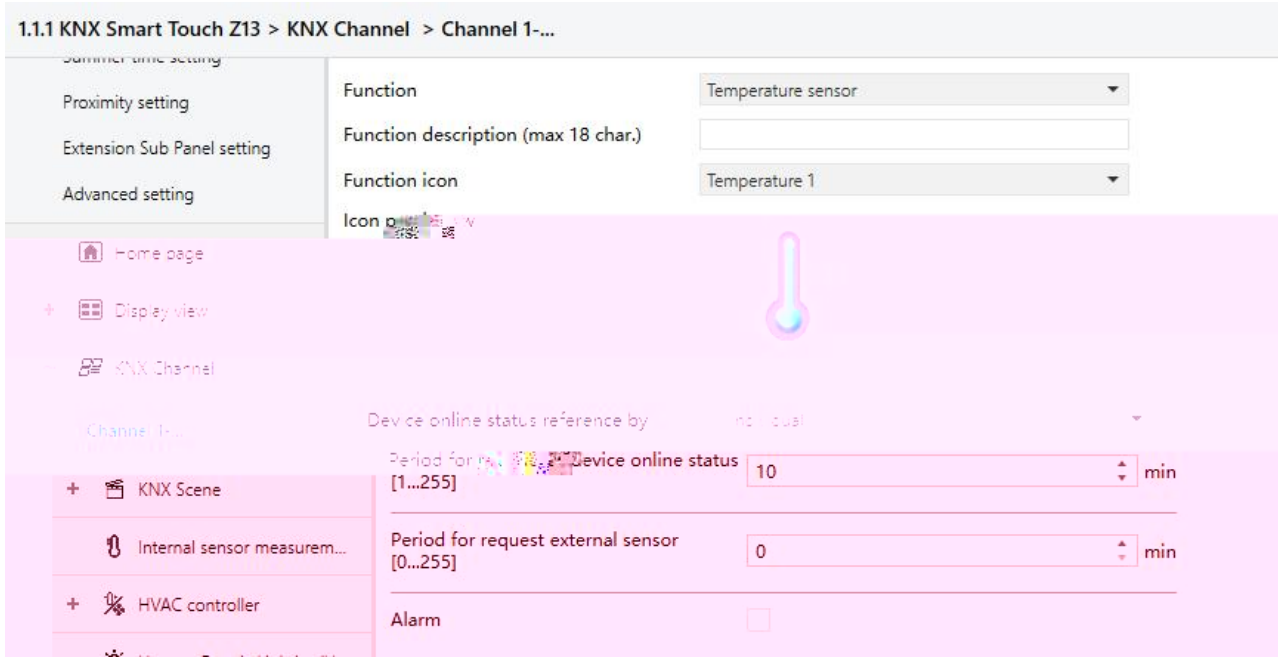
” Object datatype of voltage”

□ k □ □

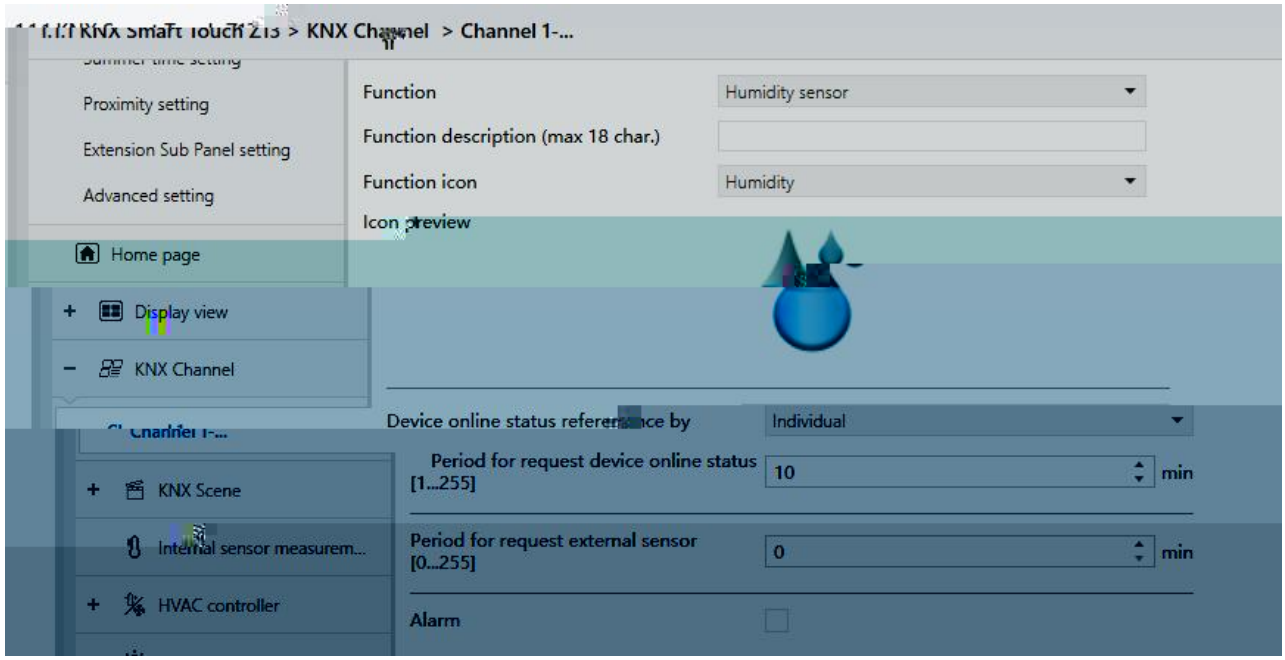
Float value in mV (DPT 9.020)

Float value in V (DPT 14.027)

5.11.2.12. /



Temperature sensor



Humidity sensor

5.11.2(13)

" Alarm"

k Temperature sensor □Humidity sensor □VOC □PM2.5 sensor □

PM10 sensor □ AQI sensor □ CO2 sensor

" Threshold for low temperature alarm [0...15]"

k □ k □ □

0°C

1°C

...

15°C

" Threshold for high temperature alarm [30...45]"

□ k □ □ □ □ k □ □

30°C

31°C

...

45°C

" Threshold for low humidity alarm [5...20]%"

k □ k □ □ **5..20**

" Threshold for high humidity alarm [70...85]%"

□ k □ □ □ □ k □ □ **70..85**

" Period for request external sensor [0...255]min"

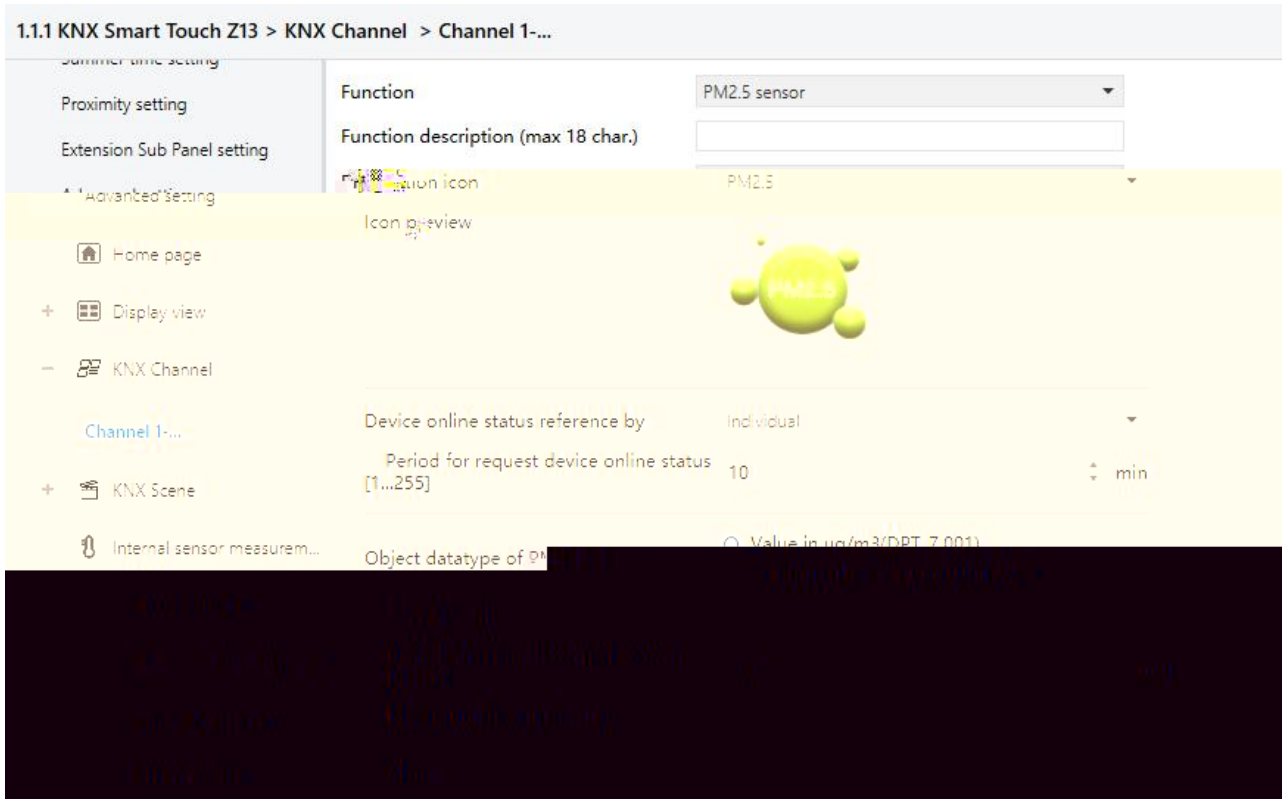
k □ □

0 k □ □ **0..255**

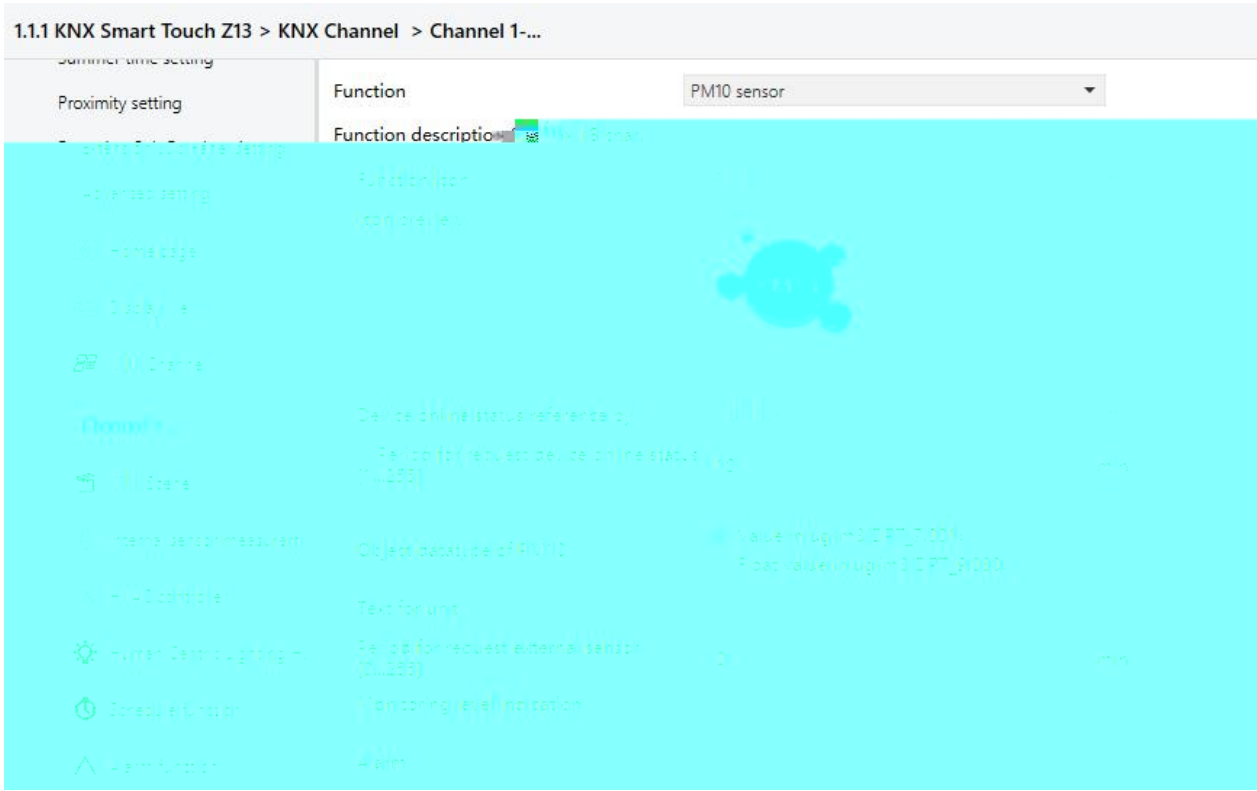
5.11.2.13.

” ” 5.11.2(14) □ □

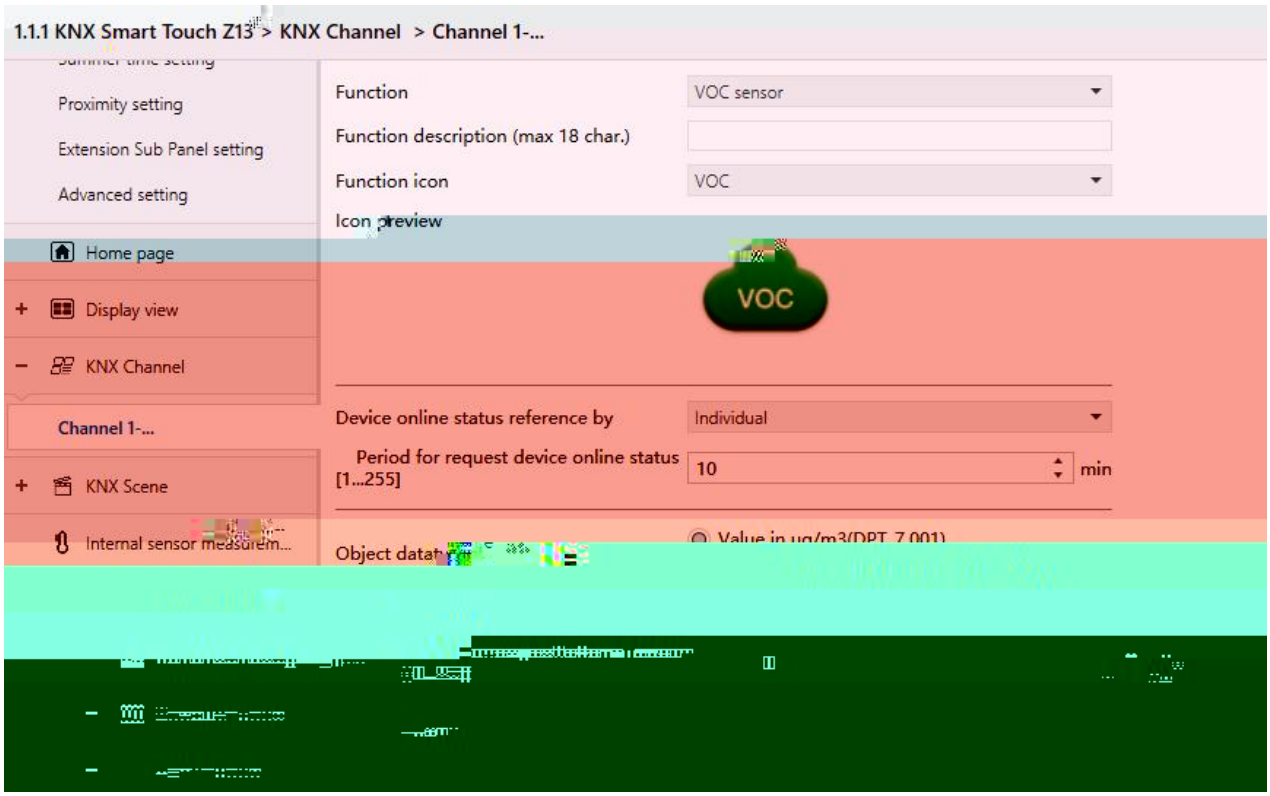
PM2.5 ! PM10 ! VOC ! AQI ! CO2 ! □ ! k



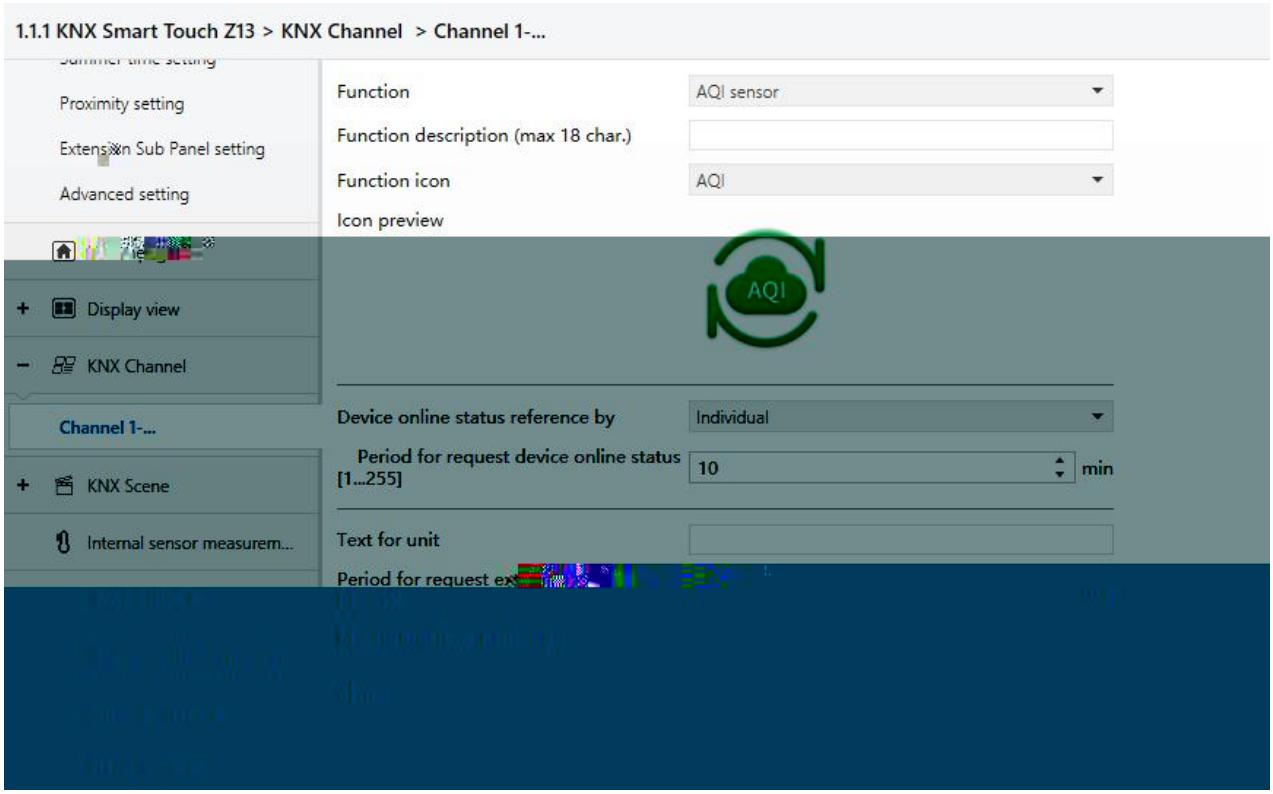
PM2.5 sensor



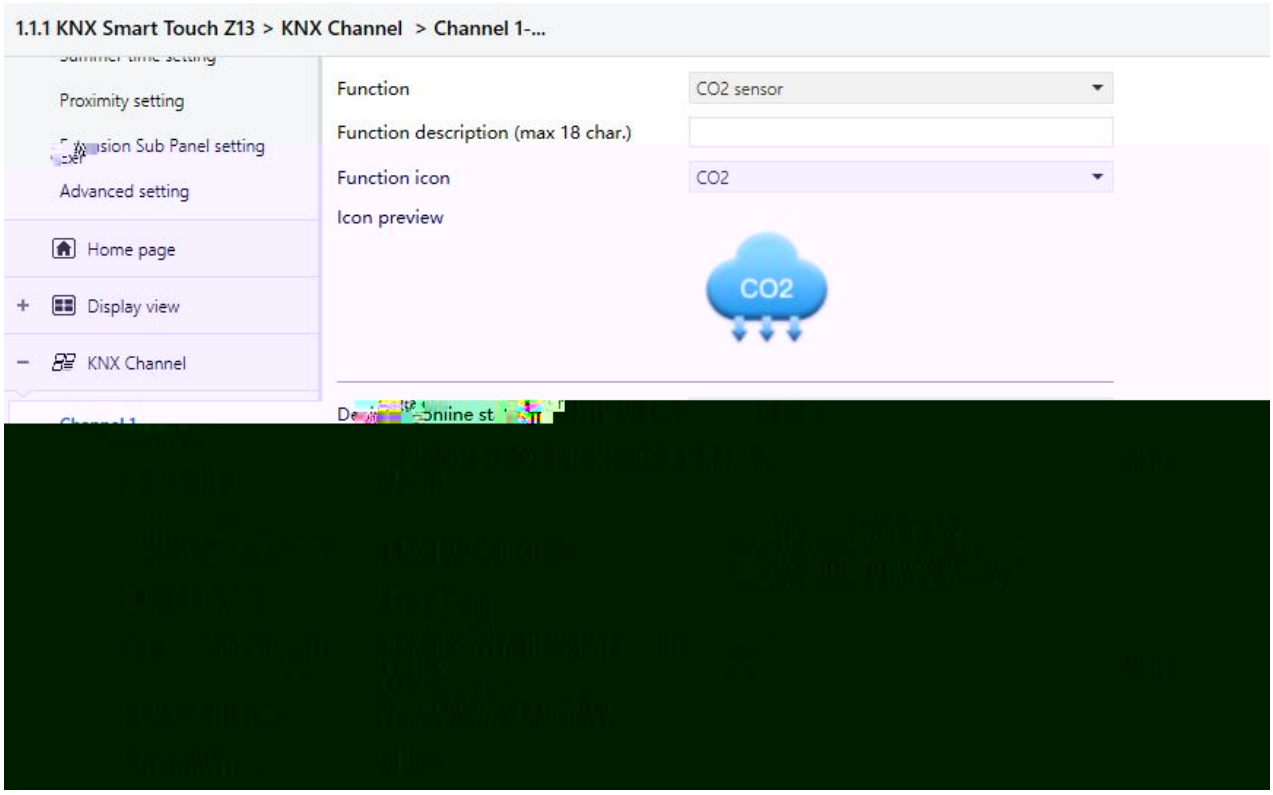
PM10 sensor



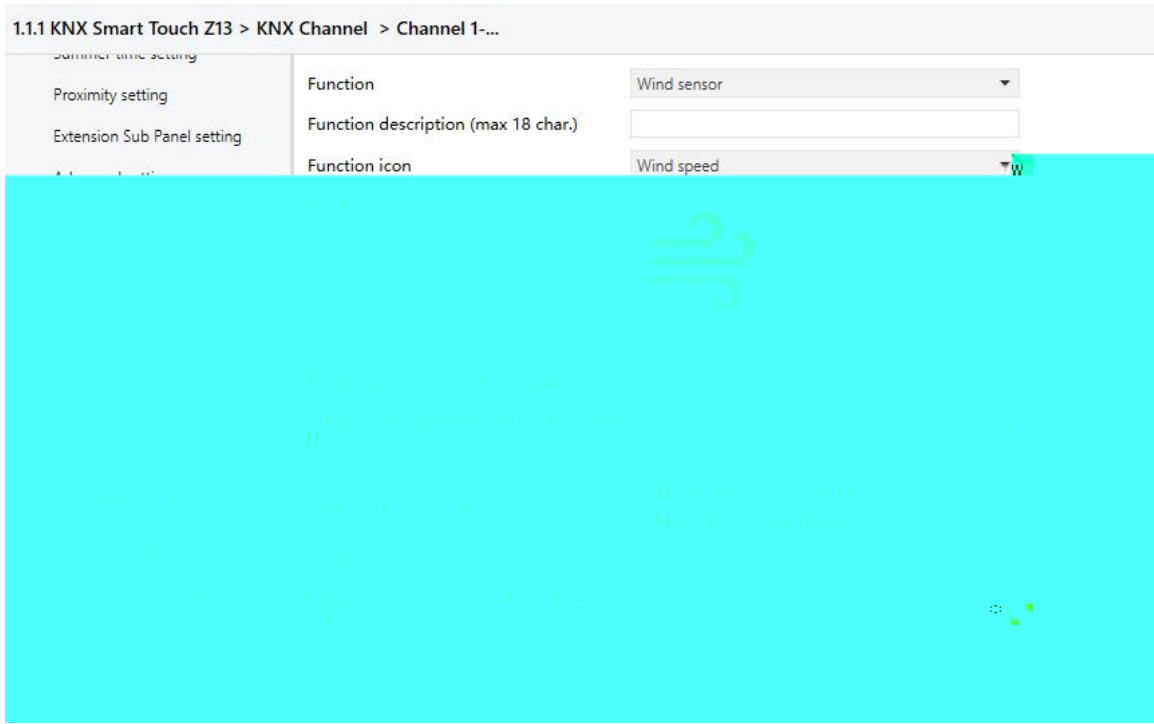
VOC sensor



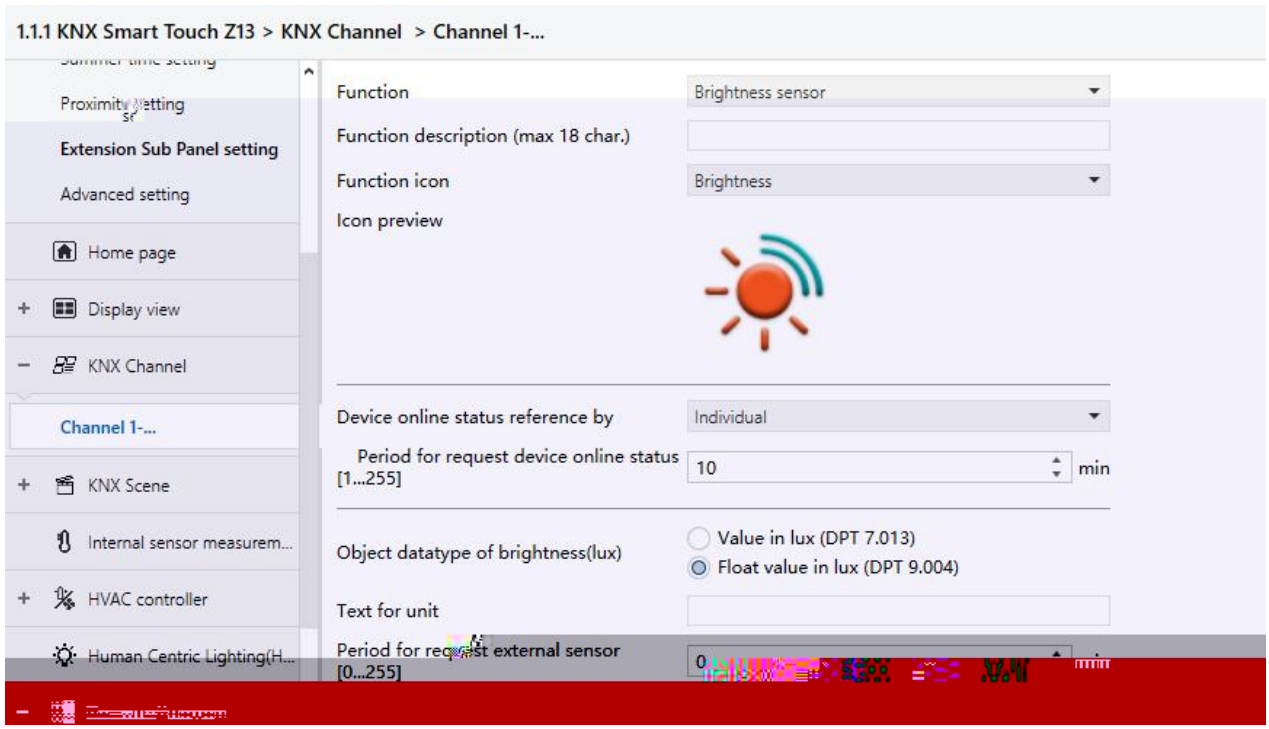
AQI sensor



CO2 sensor



Wind sensor



Brightness sensor

5.11.2(14)

" Text for unit"

□ □ k

" Period for request external sensor [0...255]min"

k □ □

0 k □ □ **0..255**

" Monitoring level indication"

"PM2.5 sensor" □ "PM10 sensor" □ "AQI sensor" □ "CO2 sensor" k

□ □ k

5.11 k

"PM2.5 sensor" **k**

" Object datatype of PM2.5"

PM2.5 k □ □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

" Alarm"

PM2.5 k

" PM2.5 alarm value [100....999]ug/m3"

k PM2.5 k PM2.5 □PM2.5

k □ □ **100...999**

M10 s

f PM1

PM10 k □ □

Value in ug/m3 (DPT 7.001)

Float value in ug/m3 (DPT 9.030)

" Alarm"

PM10 k

" PM10 alarm value [100....99]ug/m3"

k □□

"AQI sensor" k

" Alarm"

AQI k

" AQI alarm value [100....500]"

k AQI k AQI □AQI k

□ □**100...500**

"CO2 sensor" k

" Object datatype of CO2"

CO2 k □ □

Value in ppm(DPT_7.001)

Float value in ppm(DPT_9.008)

" Alarm"

CO2 k

" CO2 alarm value [1000....5000]ppm"

k CO2 k CO2 □CO2 k

□ □**1000...5000**

" Object datatype of brightness(lux)"

k □ □

Value in lux(DPT_7.013)

Float value in lux(DPT_9.004)

”Wind sensor” k

“ Object data type of wind speed”

?gÆ □ k □ □

Float value in m/s(DPT_9.005)

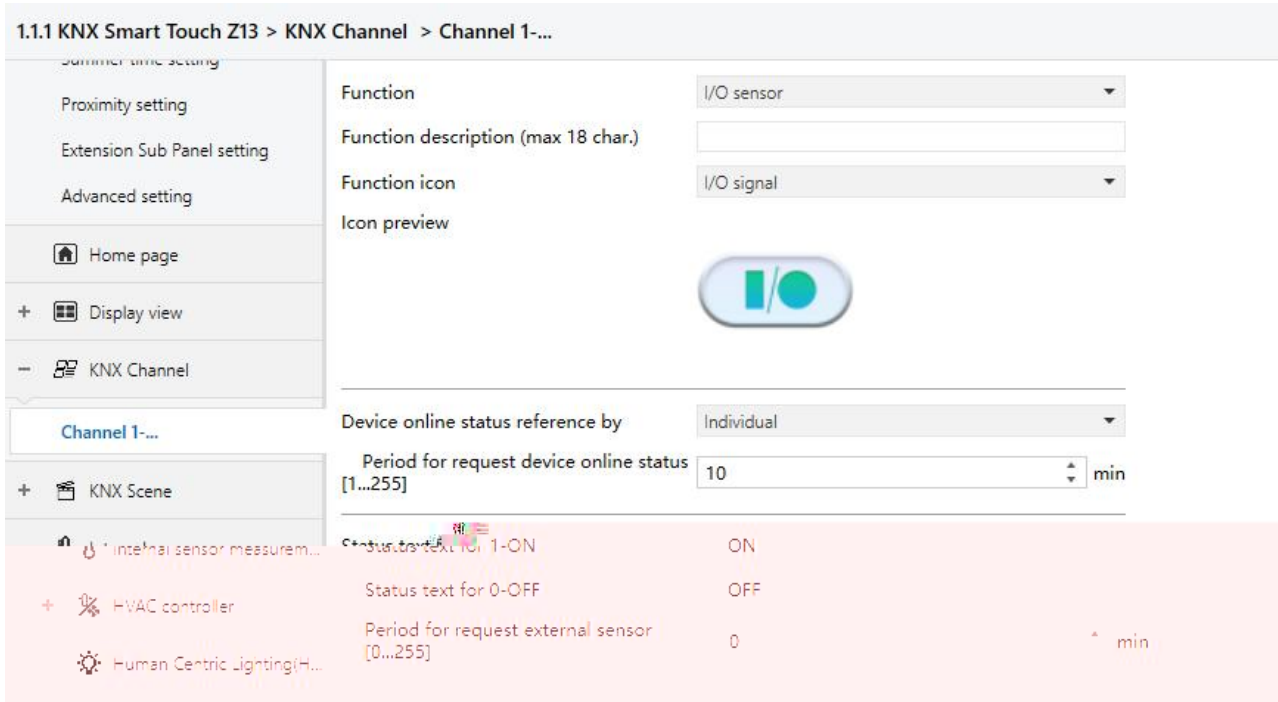
Float value in km/h(DPT_9.028)

“ Alarm”

□ k

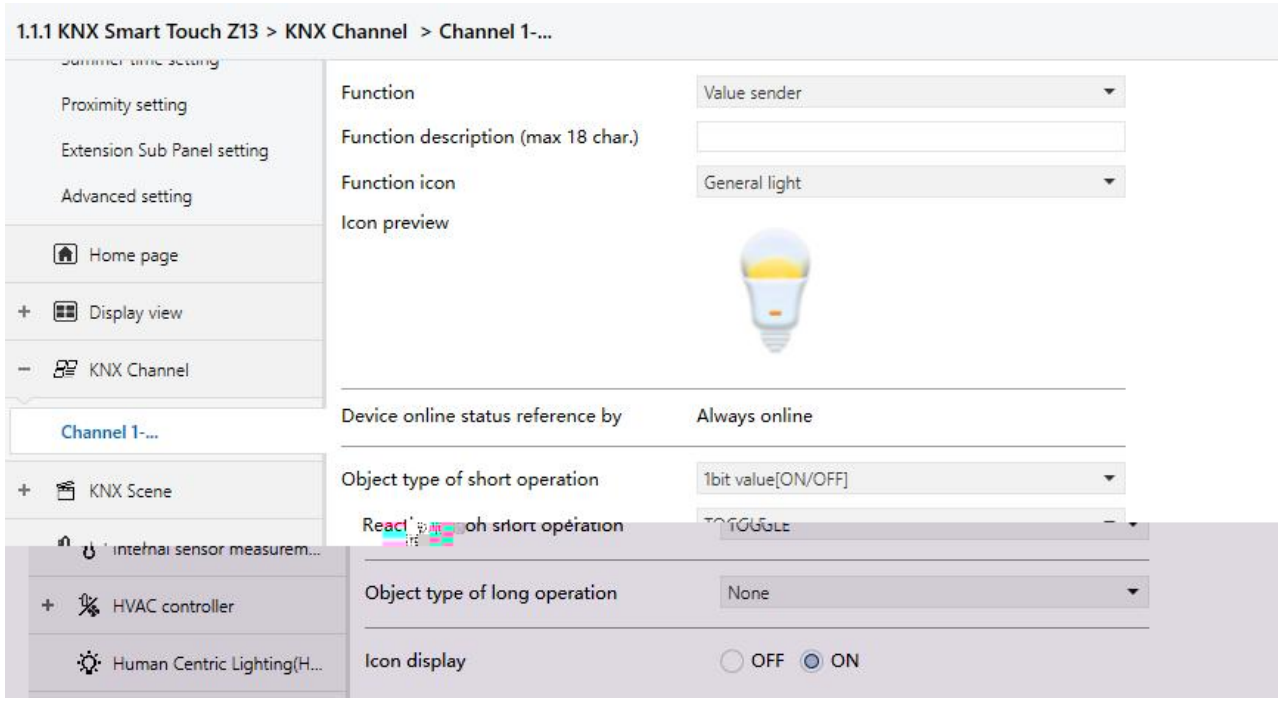
“ Wind alarm value [5..50]m/s”

5.11.2.14.I/O



- 9
5.1-

5.11.2.15.



5.11.2(16)

"Object type of short operation"

"Object type of long operation"

/ □ k □□

None

1bit value[ON/OFF]

2bit/4bit value

1byte value[0..255]

2byte value[0..65535]

2byte float value

4byte value[0..4294967295]

4byte float value

• • **“Object datatype”**

“2bit/4bit value” k 2bit 4bit k □ □

2bit value[0..3]

4bit value[0..15]

”Reaction on short operation”

”Reaction on long operation”

/ k k

1bit □ □ □

OFF

ON

TOGGLE

2bit/4bit/1byte/2byte/4byte □ □ □

Value 1

Alternating Value1/Value2 **1/ 2**

• • **“Value 1”**

2bit/4bit/1byte/2byte/4byte □ k / 1 k □

k □ □**0~3 / 0~15 / 0~255 / 0~65535 / -670760~670760 / 0~4294967295 / -3.40...~3.40...**

• • **“Value 2”**

2bit/4bit/1byte/2byte “Alternating Value1/Value2” □ k /

2 k □ k □ □**0~3 / 0..15 / 0..255 / 0..65535 / -670760~670760 / 0~4294967295 / -3.40...~3.40...**

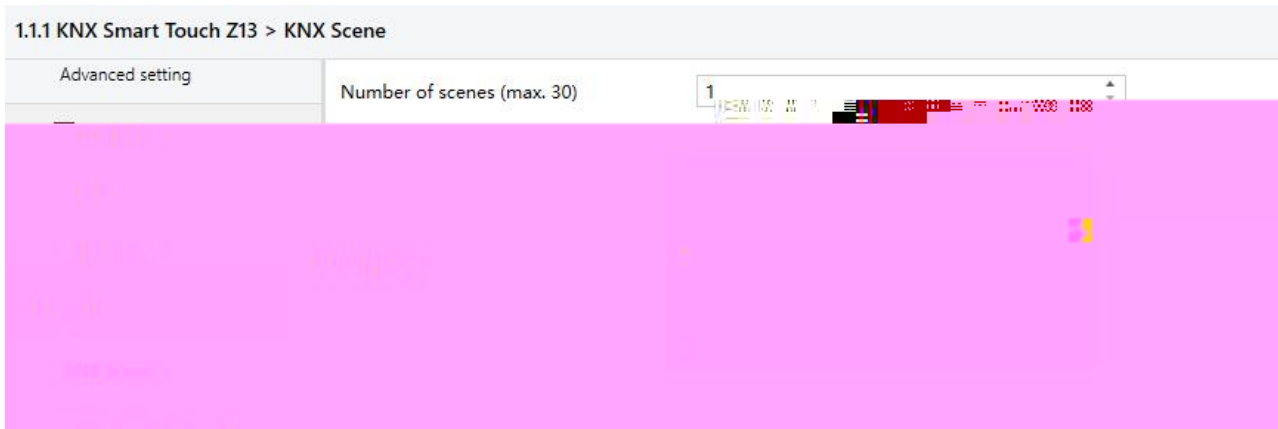
"Icon display"

k □ □

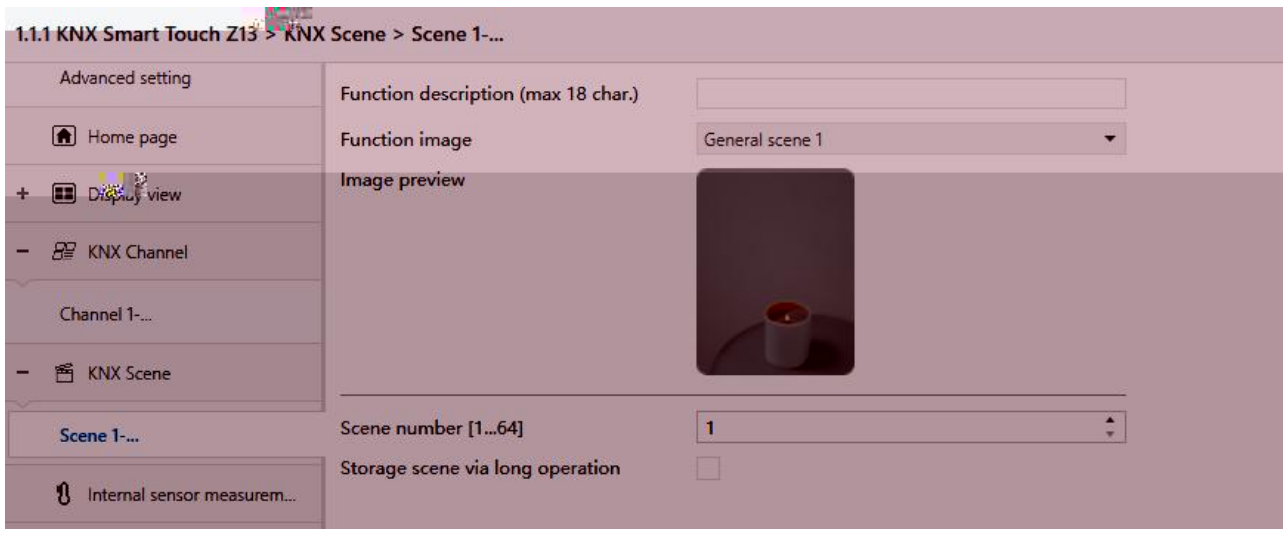
OFF

ON

5.12 "KNX Scene"



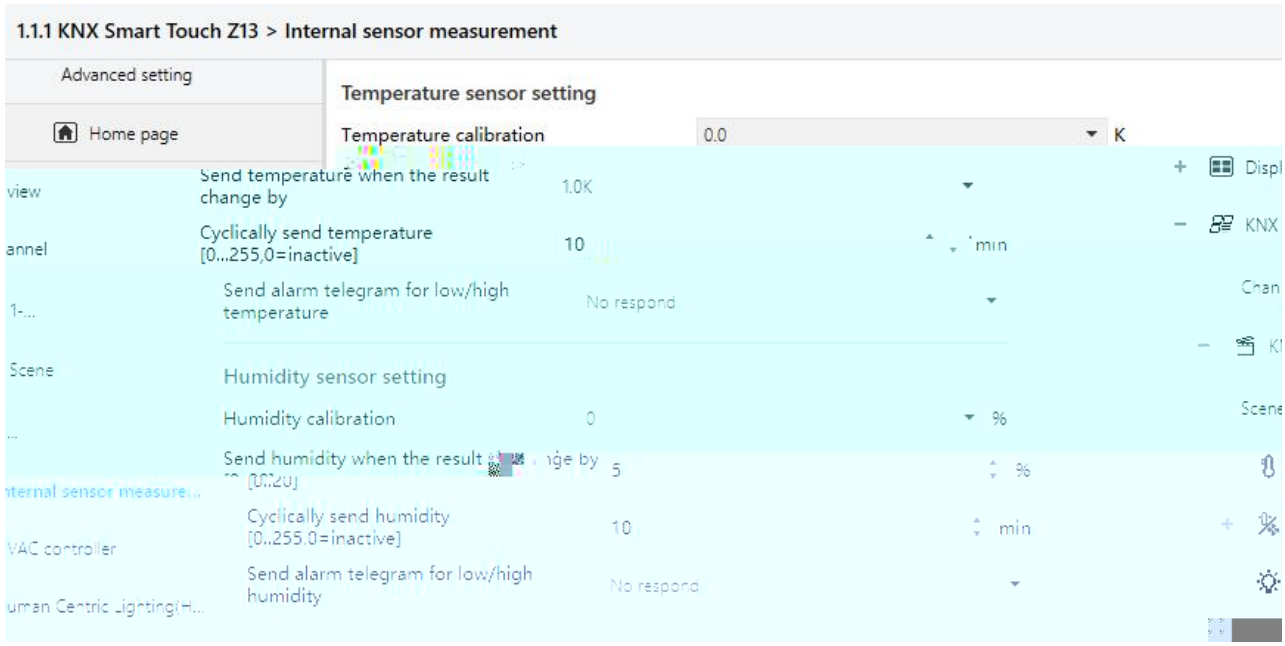
5.12(1) "KNX Scene"



5.12(2) "Scene X"

" Number of scenes (max.30)"

5.13 ”Internal sensor measurement”



5.13 “Internal sensor measurement”

/ ! □

□ k

Temperature sensor setting

“Temperature calibration”

□ □

k □ □

-5K

...

0K

...

5K

“Respond after read only” “Respond after change” k

“Threshold value for low temperature alarm [0..15]-C”

k □ k □ □

0°C

1°C

...

15°C

“Threshold value for high temperature alarm [30..45]-C”

□ k □ □ □ □ k □ □

30°C

31°C

...

45°C

Humidity sensor setting

“Humidity calibration”

□ □

k □ □ **-20% / -15% / -10% / -5% / -3% / -1% / 0% / 1% / 3% / 5% / 10% / 15% / 20%**

“Send humidity when the result change by [0..20]%”

□ k 0 k □ □ **0..20**

“Cyclically send humidity [0..255,0=inactive]min”

k 0 k □ □ **0..255**

□ □ k

"Send alarm telegram for low/high humidity"

□/ □ k □□

No respond

Respond after read only

Respond after change

No respond□ □

Respond after read only□ □

" Low humidity alarm"/" High humidity alarm" □

Respond after change□ □ " Low humidity alarm"/" High humidity alarm"

k

"Respond after read only" "Respond after change" k

"Threshold value for low humidity alarm [5..20]%"

k □ k □□**5..20**

"Threshold value for high humidity alarm [70..85]%"

□ k □ □ □□ k □□**70..85**

□ k

□ □C□ □□W□ □

□R□ □□T□ □□U□ k

6.1 “General”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	R	-	T	-	switch	Low
2	General	Date			3 bytes	C	-	W	-	-	date	Low
3	General	Time			3 bytes	C	-	W	-	-	time of day	Low
4	General	Screen brightness			1 byte	C	-	W	-	-	percentage (0..100%)	Low

6.1 “General”

					DPT
1	**General**	**In operation**	**1bit**	**C,R,T**	**1.001 switch**
1 □ k					
2/3	**General**	**Date/Time**	**3byte**	**C,W,T**	**11.001 date** **10.001 time of day**
k □ □ k □ □ k					
4	**General**	**Screen brightness**	**1byte**	**C,W**	**5.001 percentage(0..100%)**
k □10~100%□ 10% □ 10% k “Screen brightness can be changed via bus” k □ □ k					

6.1 “General”

6.2 “Internal sensor”

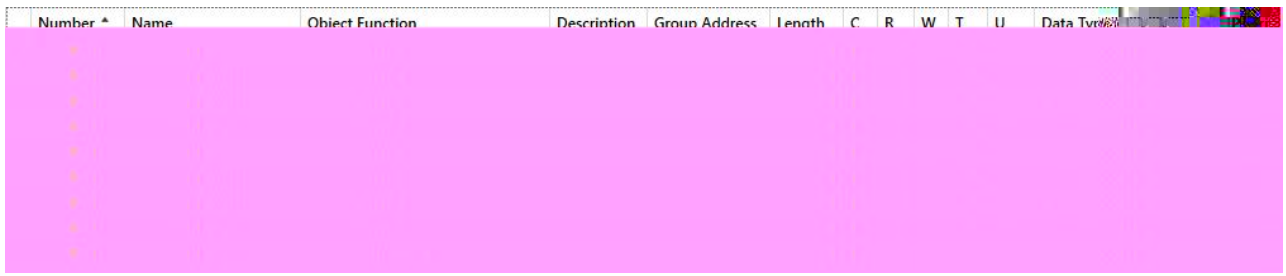
Number	Name	Object Fun	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
5	Internal sensor	Temperature value			2 bytes	C	R	-	T	-	temperature (°C)	Low
6	Internal sensor	Low temperature alarm			1 bit	C	R	-	T	-	alarm	Low
7	Internal sensor	High temperature alarm			1 bit	C	R	-	T	-	alarm	Low
8	Internal sensor	Humidity value			2 bytes	C	R	-	T	-	humidity (%)	Low
9	Internal sensor	Low humidity alarm			1 bit	C	R	-	T	-	alarm	Low
10	Internal sensor	High humidity alarm			1 bit	C	R	-	T	-	alarm	Low

6.2 “Internal sensor”

DPT

6.3 ”Logic”

6.3.1 “AND/OR/XOR”



6.3.1 “AND/OR/XOR”

					DPT
11/.../18	**1st Logic- {{...}}**	**Input X**	**1 bit**	**C,W,T,U**	**1.002 boolean**
“Description for logic function” □ □ □ “**1st Logic-{{...}}**” k k Input x k					
19	**1st Logic- {{...}}**	**Logic result**	**1 bit**	**C,T**	**1.002 boolean**
k					

6.3.1 “AND/OR/XOR”

6.3.2 “Gate forwarding”

6.3.2 “Gate forwarding”

					DTP
11	**1st Logic- {{...}}**	**Gate value select**	**1byte**	**C,W**	**17.001 scene number**
k					
12/.../15	**1st Logic- {{...}}**	**Input X**	**1bit/4bit/1byte**	**C,W**	**1.001 switch 3.007 dimming 5.010 counter**
Input x k					
16/.../19	**1st Logic- {{...}}**	**Output X**	**1bit/4bit/1byte**	**C,T**	**1.001 switch 3.007 dimming 5.010 counter**
k □ □ k					

6.3.2 “Gate forwarding”

6.3.3 “Threshold comparator”

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

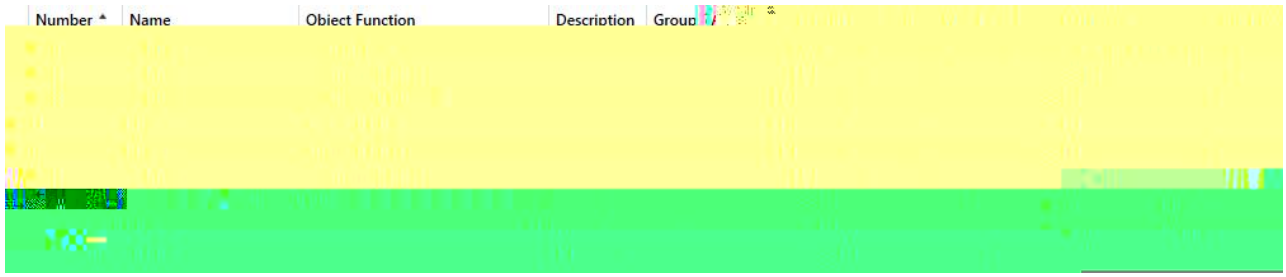
6.3.3 “Threshold comparator”

					DTP
11	**1st Logic- {{...}}**	**Threshold value input**	**4bit** **1byte** **2byte** **4byte**	**C,W,U**	**3.007 dimming** **5.010 counter pulses** **7.001 pulses** **12.001 counter pulses** **8.x signed value** **9.x float value** **9.001 temperature** **9.007 humidity** **9.004 lux**
k					
19	**1st Logic- {{...}}**	**Logic result**	**1bit**	**C,T**	**1.002 boolean**
k				□	k

6.3.3 “Threshold comparator”

6.3.4 “Format convert”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Input 1bit-bit0			1 bit	C	-	W	-	U	boolean	Low
12	1st Logic-...	Input 1bit-bit1			1 bit	C	-	W	-	U	boolean	Low
19	1st Logic-...	Output 2bit			2 bit	C	-	-	T	-	switch control	Low

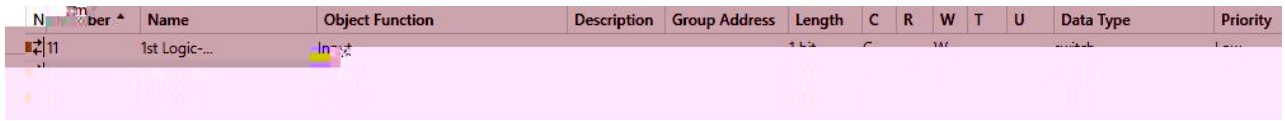


“1x1byte --> 8x1bit” □ 1 1byte 8 1bit

					DTP
11	**1st Logic- {{...}}**	**Input ...**	**1bit** **1byte** **2byte** **3byte** **4byte**	**C,W,U**	**1.002 boolean** **5.010 counter pulses** **7.001 pulses** **12.001 counter pulses** **232.600 RGB value 3x(0..255)**
k					
19	**1st Logic- {{...}}**	**Output ...**	**1bit** **2bit** **1byte** **2byte** **3byte** **4byte**	**C,T**	**1.002 boolean** **2.001 switch control** **5.010 counter pulses** **7.001 pulses** **12.001 counter pulses** **232.600 RGB value 3x(0..255)**
k					

6.3.4 “Format convert”

6.3.5 “Gate function”



6.3.5 “Gate function”

					DTP
11	**1st Logic- {{...}}**	**Input**	**1bit** **1byte** **2byte**	**C,W**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
k					
12	**1st Logic- {{...}}**	**Gate input**	**1bit**	**C,W**	**1.002 boolean**
k □ □ □ □ □ k					
19	**1st Logic- {{...}}**	**Output**	**1bit** **1byte** **2byte**	**C,T**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
k □ “Gate input” k					

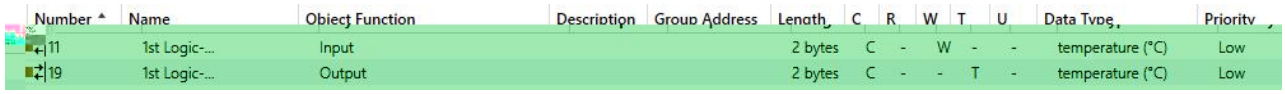
6.3.5 “Gate function”

6.3.6 “Delay function”

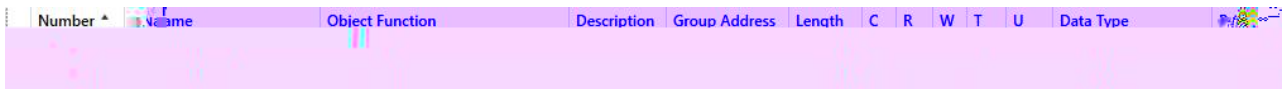
Input/Output - 1bit[On/Off]

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

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



Input/Output - 2byte[Float]



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

6.3.6 ”Delay function”

					DTP
11	**1st Logic- {{...}}**	**Input**	**1bit** **1byte** **2byte**	**C,W**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
k					
19	**1st Logic- {{...}}**	**Output**	**1bit** **1byte** **2byte**	**C,T**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
□ k					

6.3.6 ”Delay function”

6.3.7 “Staircase lighting”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	1st Logic-...	Trigger value			1 bit	C	-	W	-	-	trigger	Low
12	1st Logic-...	Light-on duration time			2 bytes	C	-	W	-	-	time (s)	Low
19	1st Logic-...	Output			1 bit	C	-	-	T	-	switch	Low

6.3.7 “Staircase lighting”

						DTP
11	**1st Logic- {{...}}**	**Trigger value**		**1bit**	**C,W**	**1.017 trigger**
12	**1st Logic- {{...}}**	**Light-on duration time**		**2byte**	**C,W**	**7.005 time(s)**

6.4 ”Scene Group setting”

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
84	1st Scene Group-Output 1	1bit value			1 bit	C	-	-	T	-	switch	Low

1 bit value

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
84	1st Scene Group-Output 1	1byte unsigned value			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

1 byte

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
84	1st Scene Group-Output 1	HVAC mode			1 byte	C	-	-	T	-	HVAC mode	Low

HVAC mode

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
84	1st Scene Group-Output 1	2byte unsigned value			2 bytes	C	-	-	T	-	pulses	Low

2byte unsigned value

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
84	1st Scene Group-Output 1	Temperature			2 bytes	C	-	-	T	-	temperature (°C)	Low

Temperature

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
84	1st Scene Group-Output 1	RGB value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low

RGB value

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
84	1st Scene Group-Output 1	RGBW value			6 bytes	C	-	-	T	-	RGBW value 4x(0..100%)	Low

RGBW value

6.4 “Scene Group setting”

					DPT
83	**Scene Group**	**Main scene trigger**	**1byte**	**C,W**	**17.001 scene number**
					k □0..63
84	**1st Scene Group-{{Output X}}**	**1bit value** **1byte unsigned value** **HVAC mode** **2byte unsigned value** **Temperature** **RGB value** **RGBW value**	**1bit** **1byte** **2byte** **3byte** **6byte**	**C,T**	**1.001 switch** **5.010 counter pulses** **20.102 HVAC mode** **7.001 pulses** **9.001 temperature** **232.600 RGB value 3x(0..255)** **251.600 DPT_Colour_RGBW**
		□			k □ k 8 □ 8 k

6.4 “Scene Group setting”

6.5 ”HVAC controller”

6.5.1 “Room temperature controller (RTC) ”

Number	Name	Object Function	Description									
181	Controller 1 - ...	Additional Heating control value		1 bit	C	R	-	T	-	switch		低
181	Controller 1 - ...	Additional Heating/Cooling control value		1 bit	C	R	-	T	-	switch		低
182	Controller 1 - ...	Additional Cooling control value		1 bit	C	R	-	T	-	switch		低

6.5.1 “Room temperature controller(RTC)”

152	**Controller X-{{...}}**	**Float offset value**	**2byte**	**C,W**	**9.002 temperature difference**
, k 2byte					
153	**Controller X-{{...}}**	**Setpoint offset reset**	**1bit**	**C,W**	**1.015 reset**
□ k 1 □ k					
154	**Controller X-{{...}}**	**Heating/Cooling mode**	**1bit**	**C,W**	**1.100 cooling/heating**
k □ 1 ˚ 0 ˚					
155	**Controller X-{{...}}**	**Operation mode**	**1byte**	**C,W**	**20.102 HVAC mode**
156	**Controller X-{{...}}**	**Comfort mode**	**1bit**	**C,W**	**1.003 enable**
157	**Controller X-{{...}}**	**Economy mode**	**1bit**	**C,W**	**1.003 enable**
158	**Controller X-{{...}}**	**Frost/Heat protection mode**	**1bit**	**C,W**	**1.003 enable**
159	**Controller X-{{...}}**	**Standby mode**	**1bit**	**C,W**	**1.003 enable**
1bit □ k 156 ˚ 157 ˚ 158 ˚ 159 ˚ “1” □ k 1bit □ ! 0 □ k 1bit □ “1” □0 k					
160	**Controller X-{{...}}**	**Extended comfort mode**	**1bit**	**C,W**	**1.016 acknowledge**

		k			k
166	**Controller X-{{...}}**	**Setpoint offset, status**	**2byte**	**C,R,T**	**9.002 temperature difference**
	□	k			k
167	**Controller X-{{...}}**	**Current temperature setpoint, status**	**2byte**	**C,R,T**	**9.001 temperature**
		k			
168	**Controller X-{{...}}**	**Heating/Cooling mode, status**	**1bit**	**C,R,T**	**1.100 cooling/heating**
	□	k			
169	**Controller X-{{...}}**	**Operation mode, status**	**1byte**	**C,R,T**	**20.102 HVAC mode**
170	**Controller X-{{...}}**	**Comfort mode, status**	**1bit**	**C,R,T**	**1.003 enable**
171	**Controller X-{{...}}**	**Economy mode, status**	**1bit**	**C,R,T**	**1.003 enable**
172	**Controller X-{{...}}**	**Frost/Heat protection mode, status**	**1bit**	**C,R,T**	**1.003 enable**
173	**Controller X-{{...}}**	**Standby mode, status**	**1bit**	**C,R,T**	**1.003 enable**

1bit □

k

170 ˚

171 ˚

172 ˚

173 ˚

□ “1” k 1bit □ □ !

0 k 1bit □ □ 1 k

□ □ □ □ k

174	**Controller X-{{...}}**	**Heating control value** **Heating/Cooling control value**	**1bit/1byte**	**C,R,T**	**1.001 switch/5.001 percentage**
175	**Controller X-{{...}}**	**Cooling control value**	**1bit/1byte**	**C,R,T**	**1.001 switch/5.001 percentage**
k k					
176	**Controller X-{{...}}**	**Fan speed**	**1byte**	**C,T**	**5.001 percentage** **5.100 fan stage**
177	**Controller X-{{...}}**	**Fan speed low**	**1bit**	**C,T**	**1.001 switch**
178	**Controller X-{{...}}**	**Fan speed medium**	**1bit**	**C,T**	**1.001 switch**
179	**Controller X-{{...}}**	**Fan speed high**	**1bit**	**C,T**	**1.001 switch**
180	**Controller X-{{...}}**	**Fan speed off**	**1bit**	**C,T**	**1.001 switch**

□ k

1bit □

177 □

178 □

179 □ □

180 □

□ □ “1” k 1bit-off □ □ □

“0” □ GVS □ □ □

1bit-off □ □ □ □ “1”□ □

□ k

181	**Controller X-{{...}}**	**Additional heating control value** **Additional heating/cooling control value**	**1bit/1byte**	**C,R,T**	**1.001 switch/5.001 percentage**
182	**Controller X-{{...}}**	**Additional cooling control value**	**1bit/1byte**	**C,R,T**	**1.001 switch/5.001 percentage**
		□ k			
	1bit □	1 □ 0			
	1byte □	100% □ 0%			

6.5.1 “Room temperature controller(RTC)”

6.5.2 “Ventilation controller”

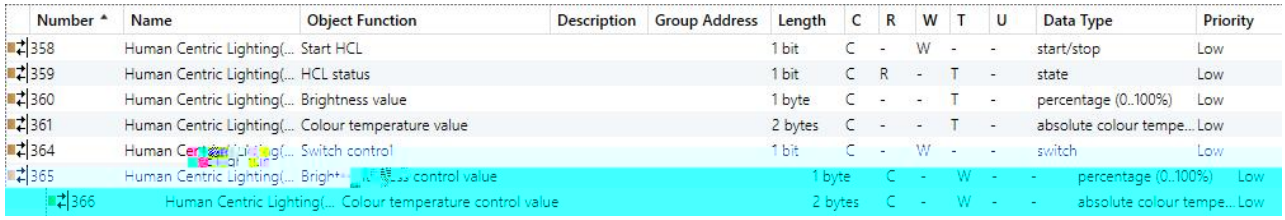
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
148	Controller 1 - ...	Fan automatic operation			1 bit	C	R	W	-	-	enable	Low
149	Controller 1 - ...	PM 2.5 value			2 bytes	C	-	W	T	U	pulses	Low
176	Controller 1 - ...	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	Low

6.5.2 “Ventilation controller”

					DPT
148	**Controller X-{{...}}**	**Fan automatic operation**	**1bit**	**C,R,W**	**1.003 enable**
k					
1					
0					
149	**Controller X-{{...}}**	**PM 2.5 value** **VOC value** **CO2 value**	**2byte**	**C,W,T,U**	**7.001 pulse** **9.030 concentration(ug/m3)** **9.008 parts/million(ppm)**
PM2.5/VOC/CO2 k ug/m^3 ppm k 0~999ug/m3 0~4000ppm					
176	**Controller X-{{...}}**	**Fan speed**	**1byte**	**C,T**	**5.001 percentage** **5.100 fan stage**
k k k					

6.5.2 “Ventilation controller”

6.6 ”Human Centric Lighting(HCL)”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
358	Human Centric Lighting(...	Start HCL			1 bit	C	-	W	-	-	start/stop	Low
359	Human Centric Lighting(...	HCL status			1 bit	C	R	-	T	-	state	Low
360	Human Centric Lighting(...	Brightness value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
361	Human Centric Lighting(...	Colour temperature value			2 bytes	C	-	-	T	-	absolute colour tempe...	Low
364	Human Centric Lighting(...	Switch control			1 bit	C	-	W	-	-	switch	Low
365	Human Centric Lighting(...	Brightness control value			1 byte	C	-	W	-	-	percentage (0..100%)	Low
366	Human Centric Lighting(...	Colour temperature control value			2 bytes	C	-	W	-	-	absolute colour tempe...	Low

Normal

362	Human Centric Lighting(HCL)	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	低
363	Human Centric Lighting(HCL)	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	低
364	Human Centric Lighting(HCL)	Switch control			1 bit	C	[illegible]	-	-	-	switch	[illegible]

Directly(with warm/cool white algorithm)

6.6 ”Human Centric Lighting(HCL)”

					DPT
358	**Human Centric Lighting(HCL)**	**Start HCL**	**1bit**	**C,W**	**1.010 start/stop**
□HCL□ k □ 1—— 0——					
359	**Human Centric Lighting(HCL)**	**HCL status**	**1bit**	**C,R,T**	**1.011 state**
HCL k					
360	**Human Centric Lighting(HCL)**	**Brightness value**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
365	**Human Centric Lighting(HCL)**	**Brightness control value**	**1byte**	**C,W**	**5.001 percentage(0..100%)**

HCL □ k □0…100%

Obj.360□ □ k

Obj.365□ k

361	**Human Centric Lighting(HCL)**	**Colour temperature value**	**2byte**	**C,T**	**7.600 absolute colour temperature**
366	**Human Centric Lighting(HCL)**	**Colour temperature control value**	**2byte**	**C,W**	**7.600 absolute colour temperature**

k □2000...7000 K

Obj.361□ HCL k

Obj.366□ k

362	**Human Centric Lighting(HCL)**	**Warm white brightness**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
367	**Human Centric Lighting(HCL)**	**Warm white brightness control value**	**1byte**	**C,W**	**5.001 percentage(0..100%)**

k □0…100%

Obj.362□ □ k

Obj.367□ k

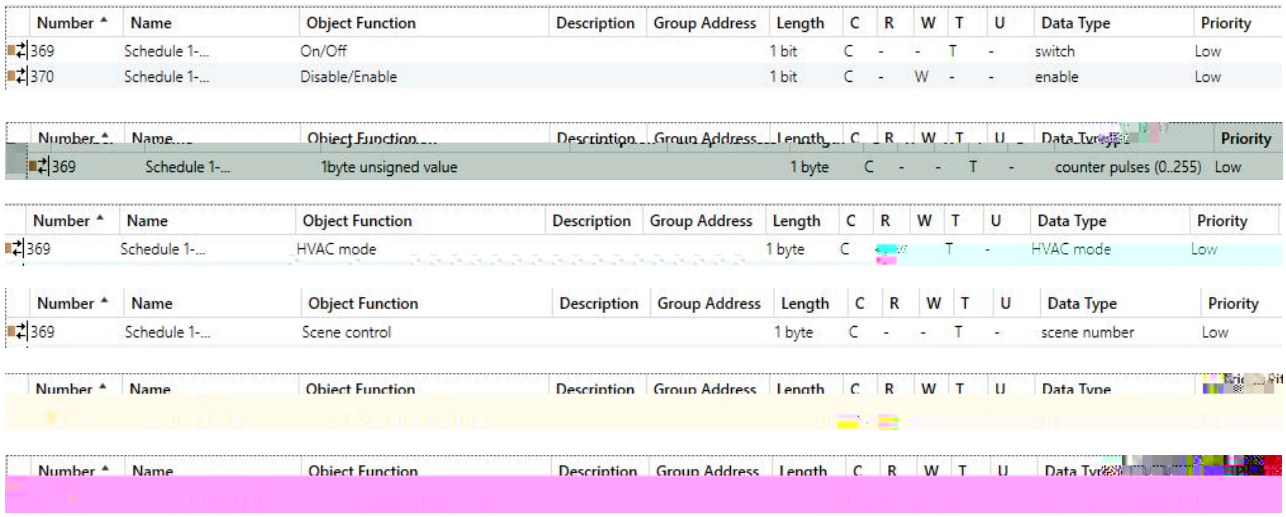
363	**Human Centric Lighting(HCL)**	**Cool white brightness**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
368	**Human Centric Lighting(HCL)**	**Cool white brightness control value**	**1byte**	**C,W**	**5.001 percentage(0..100%)**

k □0…100%

Obj.363 □ □ k Obj.368 □ k					
364	**Human Centric Lighting(HCL)**	**Switch control**	**1bit**	**C,W**	**1.001 switch**
HCL □ OFF HCL □ k 0 □1 k					

6.6 ”Human Centric Lighting(HCL)”

6.7 “Schedule function”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
369	Schedule 1-...	On/Off			1 bit	C	-	-	T	-	switch	Low
370	Schedule 1-...	Disable/Enable			1 bit	C	-	W	-	-	enable	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
369	Schedule 1-...	1byte unsigned value			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
369	Schedule 1-...	HVAC mode			1 byte	C			T	-	HVAC mode	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
369	Schedule 1-...	Scene control			1 byte	C	-	-	T	-	scene number	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type

6.7 “Schedule function”

					DPT
369	**Schedule X-{{...}}**	**On/Off** **1byte unsigned value** **HVAC mode** **Scene control** **2byte unsigned value** **Temperature value**	**1bit** **1byte** **1byte** **1byte** **2byte** **2byte**	**C,T**	**1.001 switch** **5.010 counter pulses(0..255)** **20.102 HVAC mode** **17.001 scene number** **7.001 pulses** **9.001 temperature**
		□ □ ! □ k □ k 16 k			
370	**Schedule X-{{...}}**	**Disable/Enable**	**1bit**	**C,W**	**1.003 enable**
		/ k / k □ k			

6.7 “Schedule function”

6.8 “Alarm function”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
401	Alarm 1-...	Alarm acknowledge			1 bit	C	-	-	T	-	acknowledge	Low
402	Alarm 1-...	Alarm message			14 bytes	C	-	W	-	-	Character String (ISO 8...	Low
403	Alarm 1-...	Alarm input			1 bit	C	-	W	T	U	alarm	Low

6.8 “Alarm function”

					DPT
401	**Alarm X-{{...}}**	**Alarm acknowledge**	**1bit**	**C,T**	**1.016 acknowledge**
			□		1 k
402	**Alarm X-{{...}}**	**Alarm message**	**14byte**	**C,W**	**16.001 character string (ISO 8859-1)**
			k	□	k
403	**Alarm X-{{...}}**	**Alarm input**	**1bit**	**C,W,T,U**	**1.005 alarm**
			k □		
			0 ˚ ˚		
			1 ˚ ˚		

6.8 “Alarm function”

6.9 “KNX Channel general”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
473	KNX Channel general	Device online common 1, status			1 bit	C	-	W	T	U	switch	Low

6.9 “KNX Channel general”

					DPT
473...482	**KNX Channel general**	**Device online common X, status**	**1bit**	**C,W,T,U**	**1.* 1-bit**
Time period request for common x >0 k □ k					

6.9 “KNX Channel general”

6.10 “KNX Channel X”

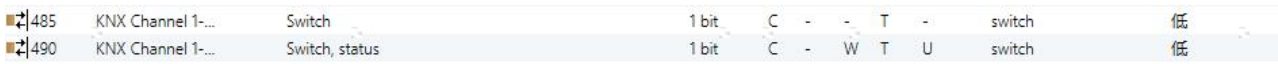
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low

6.10 “KNX Channel X”

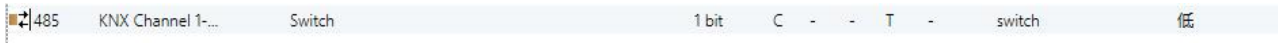
					DPT
483	**KNX Channel X-{{...}}**	**Device online, status**	**1bit**	**C,W,T,U**	**1.001 switch**
k □ k					
484	**KNX Channel X-{{...}}**	**Locking object**	**1bit**	**C,W**	**1.003 enable**
□ ! k / □1- □0- k					

6.10 “KNX Channel X”

6.10.1 “Switch”



Switch



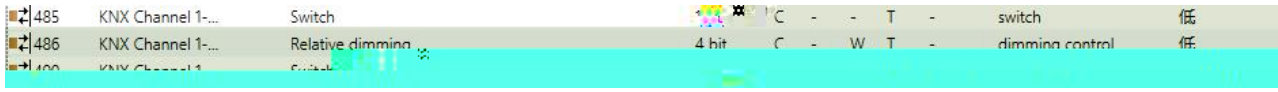
Press/Release switch

6.10.1”Switch”

					DPT
485	**KNX Channel X-{{...}}**	**Switch**	**1bit**	**C,T**	**1.001 switch**
/ □ ! / ! / ! + k □ 1 ˚ ˚ 0 ˚ ˚					
490	**KNX Channel X-{{...}}**	**Switch, status**	**1bit**	**C,W,T,U**	**1.001 switch** **3.007 dimming**
/ □ □ □ ! / ! + ! k					

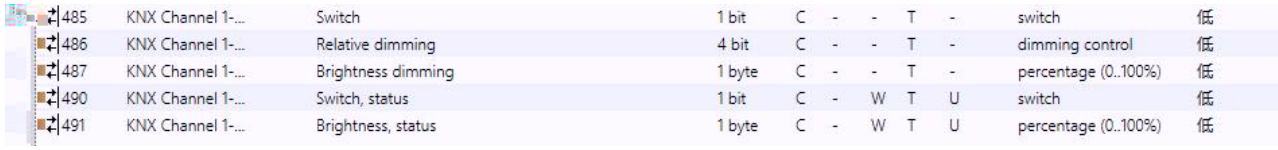
6.10.1”Switch”

6.10.2 ”Dimming”



Relative dimming

Brightness dimming



Relative&Brightness dimming

6.10.2 “Dimming”

					DPT
486	**KNX Channel X-{{...}}**	**Relative dimming**	**4bit**	**C,W,T**	**3.007 dimming control**
k				□ / /	k
487	**KNX Channel X-{{...}}**	**Brightness dimming**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
491	**KNX Channel X-{{...}}**	**Brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
k □0..100% Obj.487 □ □ k Obj.491 □ k					

6.10.2 “Dimming”

6.10.3 "Colour and colour temperature control"

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Red dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
487	KNX Channel 1-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
488	KNX Channel 1-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	Red brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
492	KNX Channel 1-...	Green brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
493	KNX Channel 1-...	Blue brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low

RGB_3x1byte

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	RGB dimming value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	RGB brightness, status			3 bytes	C	-	W	T	U	RGB value 3x(0..255)	Low

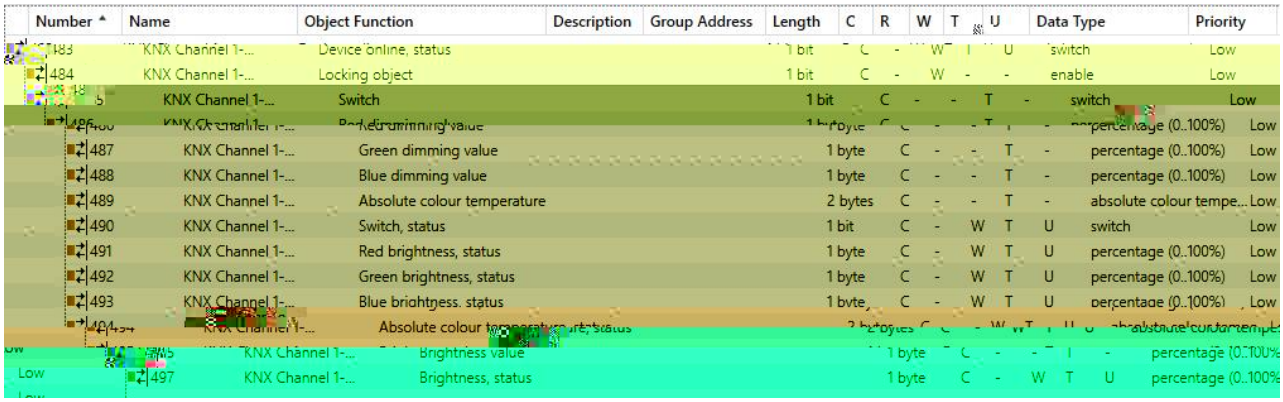
RGB_1x3byte

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Red dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
487	KNX Channel 1-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
488	KNX Channel 1-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
489	KNX Channel 1-...	White dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	Red brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
492	KNX Channel 1-...	Green brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
493	KNX Channel 1-...	Blue brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
494	KNX Channel 1-...	White brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low

RGBW_4x1byte

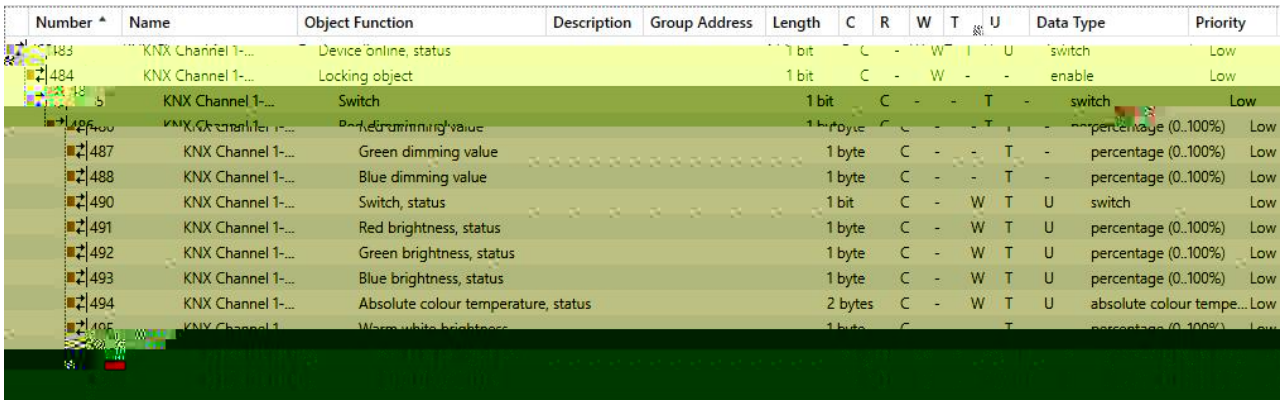
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	RGBW dimming value			6 bytes	C	-	-	T	-	RGBW value 4x(0..100%)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	RGBW brightness, status			6 bytes	C	-	W	T	U	RGBW value 4x(0..100%)	Low

RGBW_1x6byte



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
[illegible]	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
487	KNX Channel 1-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
488	KNX Channel 1-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
489	KNX Channel 1-...	Absolute colour temperature			2 bytes	C	-	-	T	-	absolute colour tempe...	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	Red brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
492	KNX Channel 1-...	Green brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
493	KNX Channel 1-...	Blue brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
497	KNX Channel 1-...	Brightness, status			1 byte	C	-	W	T	U	percentage (0..100%	

RGBCW_3x1byte_Normal



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
[illegible]	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
487	KNX Channel 1-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
488	KNX Channel 1-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	Red brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
492	KNX Channel 1-...	Green brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
493	KNX Channel 1-...	Blue brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
494	KNX Channel 1-...	Absolute colour temperature, status			2 bytes	C	-	W	T	U	absolute colour tempe...	Low

RGBCW_3x1byte_Normal_Directly(..) &Brightness+Colour Temperature

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online										

RGBCW_3x1byte_Normal_Directly(..) &Warm/Cool white brightness

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	RGB dimming value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low
489	KNX Channel 1-...	Absolute colour temperature			2 bytes	C	-	-	T	-	absolute colour tempe...	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	RGB brightness, status			3 bytes	C	-	W	T	U	RGB value 3x(0..255)	Low
494	KNX Channel 1-...	Absolute colour temperature, stat										

RGBCW_1x3byte_Normal

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	RGB dimming value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	RGB brightness, status			3 bytes	C	-	W	T	U	RGB value 3x(0..255)	Low
494	KNX Channel 1-...	Absolute colour temperature, status			2 bytes	C	-	W	T	U	absolute colour tempe...	Low
495	KNX Channel 1-...	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
496	KNX Channel 1-...	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
497	KNX Channel 1-...	Brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low

RGBCW_1x3byte_Directly(..) &Brightness+Colour Temperature

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	RGB dimming value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
491	KNX Channel 1-...	RGB brightness, status			3 bytes	C	-	W	T	U	RGB value 3x(0..255)	Low
495	KNX Channel 1-...	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
496	KNX Channel 1-...	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
497	KNX Channel 1-...	Warm white brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
498	KNX Channel 1-...	Cool white brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low

RGBCW_1x3byte_Directly(..) &Warm/Cool white brightness

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Switch			1 bit	C	-	-	T	-	switch	Low
490	KNX Channel 1-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
494	KNX Channel 1-...	Absolute colour temperature, status			2 bytes	C	-	W	T	U	absolute colour tempe...	Low
495	KNX Channel 1-...	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
496	KNX Channel 1-...	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
497	KNX Channel 1-...	Brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
495	KNX Channel 1-...	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	低
496	KNX Channel 1-...	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	低
497	KNX Channel 1-...	Warm white brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	低
498	KNX Channel 1-...	Cool white brightness			1 byte	C	-	W	T	U	percentage (0..100%)	低

Colour temperature dimming

6.10.3 “Colour and colour temperature control”

					DPT
486	**KNX Channel X-{{...}}**	**RGB dimming value**	**3byte**	**C,T**	**232.600 RGB value 3x(0..255)**
491	**KNX Channel X-{{...}}**	**RGB brightness, status**	**3byte**	**C,W,T,U**	**232.600 RGB value 3x(0..255)**

RGB 1x3byte RGBCW 1x3byte □

k

Obj.486□ RGB k

Obj.491□ RGB k

3 RGB □ U8 U8 U8□ □

3MSB	2	1LSB
R	G	B
UUUUUUUU	UUUUUUUU	UUUUUUUU

R: □G: □B: k

486	**KNX Channel X-{{...}}**	**RGBW dimming value**	**6byte**	**C,T**	**251.600 DPT_Colour_RGBW**
491	**KNX Channel X-{{...}}**	**RGBW brightness, status**	**6byte**	**C,W,T,U**	**251.600 DPT_Colour_RGBW**

RGBW 1x6byte □ k

Obj.486□ RGBW k

Obj.491□ RGBW k

6 RGBW □ U8 U8 U8 U8 R8 R4 B4□ □

6MSB	5	4	3	2	1LSB
R	G	B	W		r r r r mR mG mB mW
UUUUUUUU	UUUUUUUU	UUUUUUUU	UUUUUUUU	00000000	0000BBBB

R: □ G: □ B: □ W: □

mR: , 0= , 1= □

mG: , 0= , 1= □

mB: , 0= , 1= □

mW: , 0= , 1= k

486	**KNX Channel X-{{...}}**	**Red dimming value**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
491	**KNX Channel X-{{...}}**	**Red brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

RGB 3x1byte RGBW 4x1byte □

k □0…100%

Obj.486□ R( ) k

Obj.491□ R( ) □ k

487	**KNX Channel X-{{...}}**	**Green dimming value**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
492	**KNX Channel X-{{...}}**	**Green brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

RGB 3x1byte RGBW 4x1byte □

□ k □0…100%

k □2000...7000 K □ k					
494	**KNX Channel X-{{...}}**	**Absolute colour temperature, status**	**2byte**	**C,W,T,U**	**7.600 absolute colour temperature**
k □2000...7000 K &□ + □ □ □ k					
494	**KNX Channel X-{{...}}**	**Percentage colour temperature, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
k □2000...7000 K □ □ k					
495	**KNX Channel X-{{...}}**	**Brightness value**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
497	**KNX Channel X-{{...}}**	**Brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
/ k □0...100% Obj.495□ □ □ k Obj.497□ &□ + □ □ k					
495	**KNX Channel X-{{...}}**	**Warm white brightness**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
497	**KNX Channel X-{{...}}**	**Warm white brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

k □0...10 %

Obj.495□ □ □ k

Obj.497□ &□ / □ □ k

496	**KNX Channel X-{{...}}**	**Cool white brightness**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
498	**KNX Channel X-{{...}}**	**Cool white brightness, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

k □0...100%

Obj.496□ □ □ k

Obj.498□ &□ / □ □ k

485	**KNX Channel X-{{...}}**	**Switch**	**1bit**	**C,T**	**1.001 switch**
490	**KNX Channel X-{{...}}**	**Switch, status**	**1bit**	**C,W,T,U**	**1.001 switch**

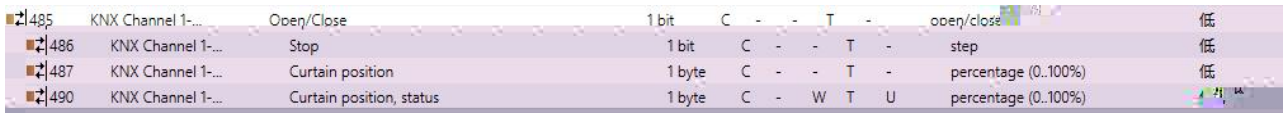
k □

0

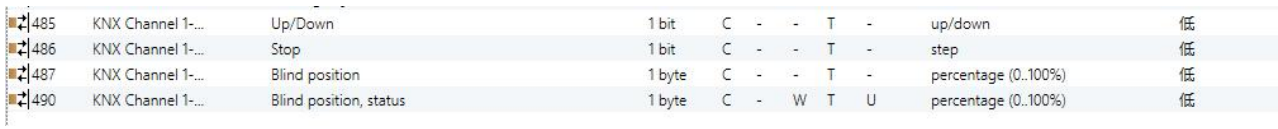
1

Obj.485□ ,

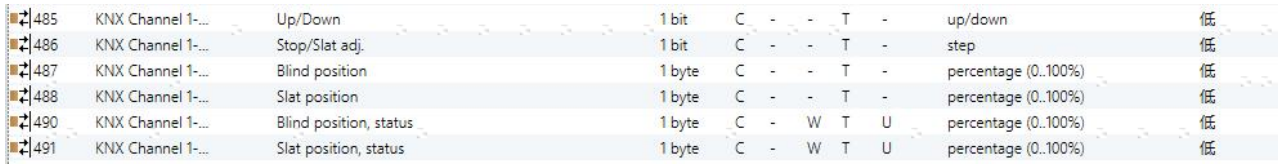
6.10.4 “Blind”



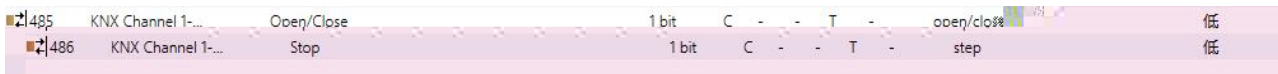
Curtain position



Roller blind position



Venetian blind position and slat



Curtain step/move

Roller blind step/move

6.10.4 “Blind”

					DPT
485	**KNX Channel X-{{...}}**	**Open/Close**	**1bit**	**C,T**	**1.009 open/close**
486	**KNX Channel X-{{...}}**	**Stop**	**1bit**	**C,T**	**1.007 step**
487	**KNX Channel X-{{...}}**	**Curtain position**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
490	**KNX Channel X-{{...}}**	**Curtain position, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
Curtain position □ k ! ! ! □ k					

Obj.485□ / k □

1↑ ˚

0↓ ˚

Obj.486□ k □

0/1↑ ˚

Obj.487□ k □0…100%

Obj.490□ k □0…100%

485	**KNX Channel X-{{...}}**	**Up/Down**	**1bit**	**C,T**	**1.008 up/down**
486	**KNX Channel X-{{...}}**	**Stop**	**1bit**	**C,T**	**1.007 step**
487	**KNX Channel X-{{...}}**	**Blind position**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
490	**KNX Channel X-{{...}}**	**Blind position, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

Roller blind position□ □ k ! ! ! □ k

Obj.485□ / k □

1↑ ˚

0↓ ˚

Obj.487□ k □0…100%

Obj.490□ k □0…100%

Obj.486 k

485	**KNX Channel X-{{...}}**	**Up/Down**	**1bit**	**C,T**	**1.008 up/down**
486	**KNX Channel X-{{...}}**	**Stop/Slat adj.**	**1bit**	**C,T**	**1.007 step**
487	**KNX Channel X-{{...}}**	**Blind position**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
488	**KNX Channel X-{{...}}**	**Slat position**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
490	**KNX Channel X-{{...}}**	**Blind position, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
491	**KNX Channel X-{{...}}**	**Slat position, status**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

Venetian blind position and slat □ □ k ! ! !

! □

Obj.486 ! Obj.487 Obj.490 k

Obj.486 □ k □

1 /

0 /

485	**KNX Channel X-{{...}}**	**Open/Close**	**1bit**	**C, T**	**1.009 open/close**
486	**KNX Channel X-{{...}}**	**Stop**	**1bit**	**C, T**	**1.007 step**

Curtain step/move □ k ! ! k

Obj.485 □ / k □

1

0

Obj.486 □ k □

0/1 ˚

485	**KNX Channel X-{{...}}**	**Up/Down**	**1bit**	**C, T**	**1.008 up/down**
486	**KNX Channel X-{{...}}**	**Stop**	**1bit**	**C, T**	**1.007 step**

Roller blind step/move □ k ! ! k

Obj.485 □ / k □

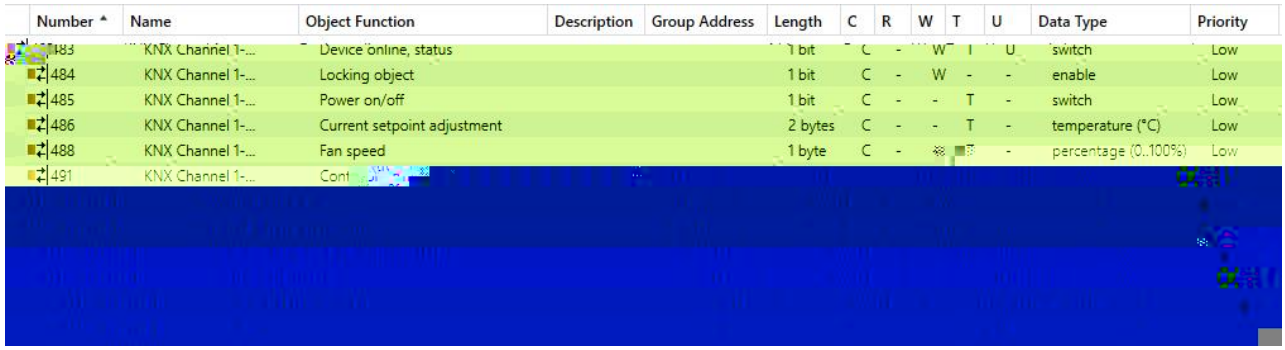
1 ˚

0 ˚

Obj.486 k

6.10.4 “Blind”

6.10.5 “Air conditioner”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	Low
488	KNX Channel 1-...	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	Low
491	KNX Channel 1-...	Cont...										

Air conditioner

488	**KNX Channel X-{{...}}**	**Fan speed**	**1byte**	**C,T**	**5.001 percentage** **5.100 fan stage**
		□ k			
489	**KNX Channel X-{{...}}**	**Vanes swing (1-swing,0-stop)**	**1bit**	**C,T**	**1.010 start/stop**
		”Air conditioner(with swing)” k		□	k
491	**KNX Channel X-{{...}}**	**Control mode**	**1byte**	**C,T**	**20.105 HVAC control mode**
		k			□
0- □1- □3- □9- □□14- □ k					
492	**KNX Channel X-{{...}}**	**Power on/off, status**	**1bit**	**C,W ,T,U**	**1.001 switch**
		□ □ k □			
1 ˚					
0 ˚					
493	**KNX Channel X-{{...}}**	**External temperature sensor**	**2byte**	**C,W ,T,U**	**9.001 temperature**
		□ k			
494	**KNX Channel X-{{...}}**	**Current temperature setpoint, status**	**2byte** **1byte**	**C,W ,T,U**	**9.001 temperature** **5.010 counter pulses**
		□ □ k			
496	**KNX Channel X-{{...}}**	**Fan speed, status**	**1byte**	**C,W ,T,U**	**5.001 percentage** **5.100 fan stage**
		□ □ □ k			k

497	**KNX Channel X-{{...}}**	**Vanes swing (1-swing,0-stop), status**	**1bit**	**C,W ,T,U**	**1.010 start/stop**

”Air conditioner(with swing)” k k □

1—— □

0—— □

498	**KNX Channel X-{{...}}**	**Control mode, status**	**1byte**	**C,W ,T,U**	**20.105 HVAC control mode**

□ □ k □□□□□□□□□□

6.10.6 “Room temperature unit control”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
486	KNX Channel 1-...	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	Low
487	KNX Channel 1-...	Current setpoint adjustment(1bit)			1 bit	C	-	-	T	-	step	Low
490	KNX Channel 1-...	Heating/Cooling mode			1 bit	C	-	-	T	-	cooling/heating	Low
493	KNX Channel 1-...	E[illegible]										

Room temperature unit

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	Low
487	KNX Channel 1-...	Current setpoint adjustment(1bit)			1 bit	C	-	-	T	-	step	Low
[illegible]	[illegible]	[illegible]/Cooling mode			1 bit	C	-	-	T	-	cooling/heating	Low
492	KNX Channel 1-...	Power on/off status			1 bit	C	-	W	-	-	switch	Low
493	KNX Channel 1-...	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
494	KNX Channel 1-...	Current setpoint adjustment, status			2 bytes	C	-	W	T	U	temperature (°C)	Low
495	KNX Channel 1-...	Current setpoint display, status			2 bytes	C	-	W	T	U	tem[illegible] (°C)	Low
498	KNX Channel 1-...	Heating/Cooling mode, status			1 bit	C	-	W	T	U	cooling/heating	Low
500	KNX Channel 1-	Timer			1 bit							

Room temperature unit(with on/off)

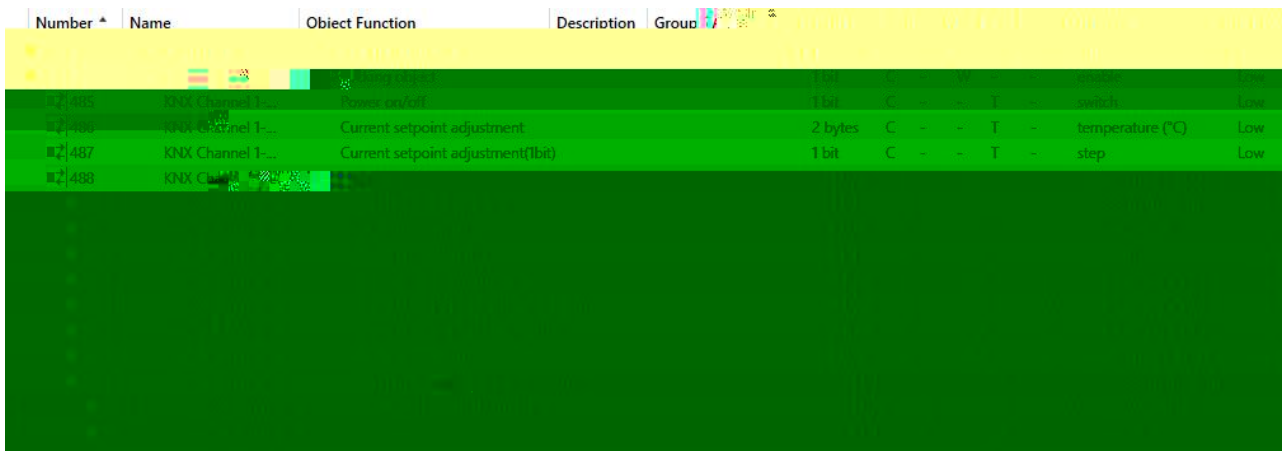
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
486	KNX Channel 1-...	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	Low
487	KNX Channel 1-...	Current setpoint adjustment(1bit)			1 bit	C	-	-	T	-	step	Low
490	KNX Channel 1-...	Heating/Cooling mode			1 bit	C	-	-	T	-	cooling/heating	Low
491	KNX Channel 1-...	Operation mode			1 byte	C	-	-	T	-	HVAC mode	Low
493	KNX Channel 1-...	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
494	KNX Channel 1-...	Current setpoint adjustment, status			2 bytes	C	-	W	T	U	temperature (°C)	Low
495	KNX Channel 1-...	Current setpoint display, status			2 bytes	C	-	W	T	U	temperature (°C)	Low
498	KNX Channel 1-...	Heating/C[illegible]										

Room temperature unit(with operation mode)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Current setpoint adjustment			2 bytes	C	-	-	T	-	temperature (°C)	Low
487	KNX Channel 1-...	Current setpoint adjustment(1bit)			1 bit	C	-	-	T	-	step	Low
490	KNX Channel 1-...	Heating/Cooling mode			1 bit	C	-	-	T	-	cooling/heating	Low
491	KNX Channel 1-...	Operation mode			1 byte	C	-	-	T	-	HVAC mode	Low
492	KNX Channel 1-...	Power on/off, status			1 bit	C	-	W	-	-	switch	Low
493	KNX Channel 1-...	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
494	KNX Channel 1-...	Current setpoint adjustment, status			2 bytes	C	-	W	T	U	temperature (°C)	Low
495	KNX Channel 1-...	Current setpoint display, status			2 bytes	C	-	W	T	U	temperature (°C)	Low
498	KNX Channel 1-...	Heating/Cooling mode, status			1 bit	C	-	W	T	U	cooling/heating	Low
499	KNX Channel 1-...	Operation mode, status			1 byte	C	-	W	T	U	HVAC mode	Low
500	KNX Channel 1-...	Timer			1 bit	C	-	W	-	-	enable	Low

Room temperature unit(with on/off & operation mode)

Room temperature unit(with operation mode & fan speed)



Room temperature unit(with on/off & operation mode & fan speed)

6.10.6 “Room temperature unit control”

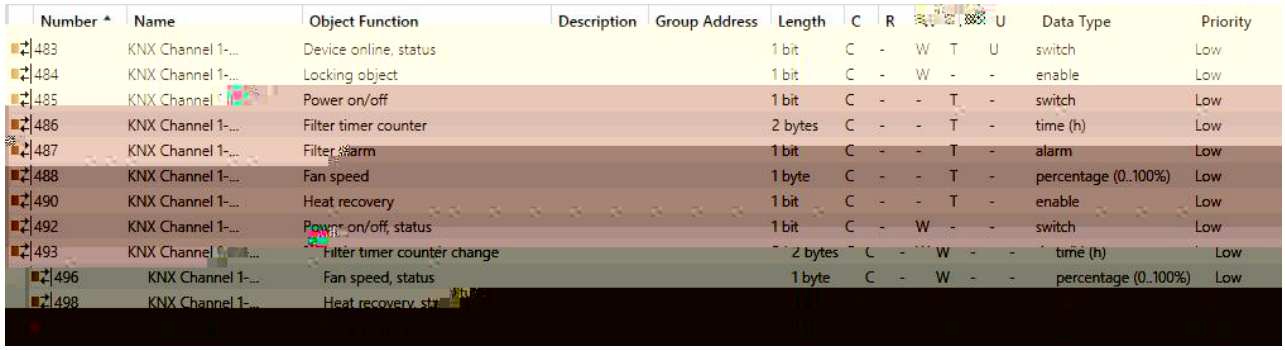
						DPT
485	**KNX Channel X-{{...}}**	**Power on/off**		**1bit**	**C,T**	**1.001 sw**

490	**KNX Channel X-{{...}}**	**Heating/Cooling mode**	**1bit**	**C,T**	**1.100 cooling/heating**
		k □ 1—— 0——			
491	**KNX Channel X-{{...}}**	**Operation mode**	**1byte**	**C,T**	**20.102 HVAC mode**
		k □ 1- □2- □3- □4- □ k			
492	**KNX Channel X-{{...}}**	**Power on/off, status**	**1bit**	**C,W**	**1.001 switch**
		□ □ k □ 1—— 0——			
493	**KNX Channel X-{{...}}**	**External temperature sensor**	**2byte**	**C,W, T,U**	**9.001 temperature**
		k □ □ □ k			
494	**KNX Channel X-{{...}}**	**Current setpoint adjustment, status**	**2byte**	**C,W, T,U**	**9.001 temperature**
		□ □ k			
495	**KNX Channel X-{{...}}**	**Current setpoint display, status**	**2byte**	**C,W, T,U**	**9.001 temperature**

	”Interface display temperature” Setpoint temperature k □ □ k				
496	**KNX Channel X-{{...}}**	**Fan speed, status**	**1byte**	**C,W, T,U**	**5.001 percentage 5.100 fan stage**
	□ □ □ k k				
497	**KNX Channel X-{{...}}**	**Fan automatic operation, status**	**1bit**	**C,W, T,U**	**1.003 enable**
	□ □ k □ 1—— 0——				
498	**KNX Channel X-{{...}}**	**Heating/Cooling mode, status**	**1bit**	**C,W, T,U**	**1.100 cooling/heating**
	□ □ k □ 1 ˚ 0 ˚				
499	**KNX Channel X-{{...}}**	**Operation mode, status**	**1byte**	**C,W, T,U**	**20.102 HVAC mode**
	k □ 1- □2- □3- □4- □ k				
500	**KNX Channel X-{{...}}**	**Timer**	**1bit**	**C,W**	**1.003 enable**
	□ k / k				

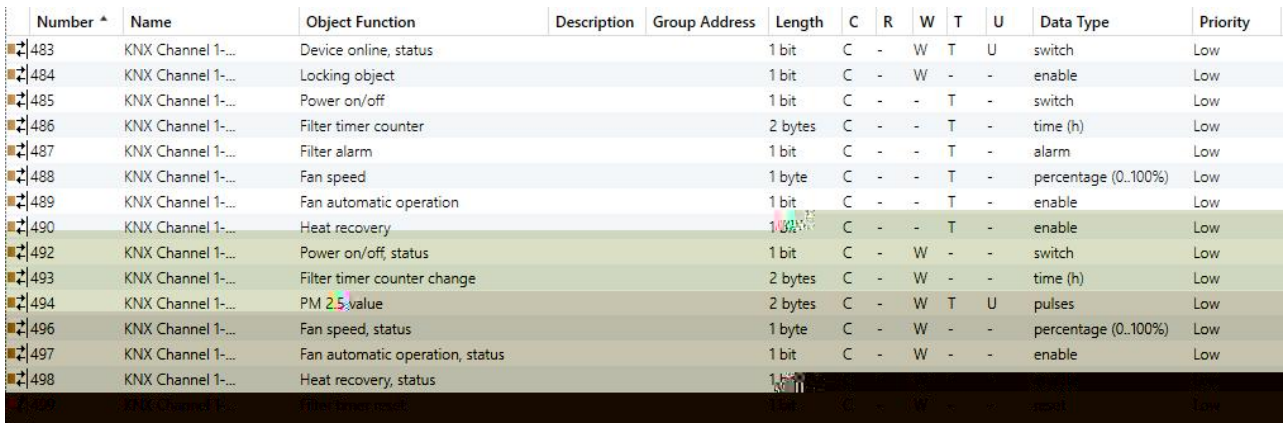
6.10.6 “Room temperature control”

6.10.7 “Ventilation system”



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Filter timer counter			2 bytes	C	-	-	T	-	time (h)	Low
487	KNX Channel 1-...	Filter alarm			1 bit	C	-	-	T	-	alarm	Low
488	KNX Channel 1-...	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	Low
490	KNX Channel 1-...	Heat recovery			1 bit	C	-	-	T	-	enable	Low
492	KNX Channel 1-...	Power on/off, status			1 bit	C	-	W	-	-	switch	Low
493	KNX Channel 1-...	Filter timer counter change			2 bytes	C	-	W	-	-	time (h)	Low
496	KNX Channel 1-...	Fan speed, status			1 byte	C	-	W	-	-	percentage (0..100%)	Low
498	KNX Channel 1-...	Heat recovery, st										

Ventilation system



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Filter timer counter			2 bytes	C	-	-	T	-	time (h)	Low
487	KNX Channel 1-...	Filter alarm			1 bit	C	-	-	T	-	alarm	Low
488	KNX Channel 1-...	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	Low
489	KNX Channel 1-...	Fan automatic operation			1 bit	C	-	-	T	-	enable	Low
490	KNX Channel 1-...	Heat recovery			1 bit	C	-	-	T	-	enable	Low
492	KNX Channel 1-...	Power on/off, status			1 bit	C	-	W	-	-	switch	Low
493	KNX Channel 1-...	Filter timer counter change			2 bytes	C	-	W	-	-	time (h)	Low
494	KNX Channel 1-...	PM 2.5 value			2 bytes	C	-	W	T	U	pulses	Low
496	KNX Channel 1-...	Fan speed, status			1 byte	C	-	W	-	-	percentage (0..100%)	Low
497	KNX Channel 1-...	Fan automatic operation, status			1 bit	C	-	W	-	-	enable	Low
498	KNX Channel 1-...	Heat recovery, status			1 bit							

Ventilation system(with auto fan speed)

6.10.7”Ventilation system”

					DPT
485	**KNX Channel X-{{...}}**	**Power on/off**	**1bit**	**C,T**	**1.001 switch**
	□ KNX k □ 1—— 0——				
486	**KNX Channel X-{{...}}**	**Filter timer counter**	**2byte**	**C,T**	**7.007 time(h)**
	□ k k				
487	**KNX Channel X-{{...}}**	**Filter alarm**	**1bit**	**C,T**	**1.005 alarm**

□ □ k □ 1—— 0——					
488	**KNX Channel X-{{...}}**	**Fan speed**	**1byte**	**C,T**	**5.001 percentage** **5.100 fan stage**
□ k k					
489	**KNX Channel X-{{...}}**	**Fan automatic operation**	**1bit**	**C,T**	**1.003 enable**
Ventilation system(with auto fan speed) □ □ k □ □ k ! □ ! k □□ 1- □0- k					
490	**KNX Channel X-{{...}}**	**Heat recovery**	**1bit**	**C,T**	**1.003 enable**
”Heat recovery function” □ / □ k □ 1—— 0——					
492	**KNX Channel X-{{...}}**	**Power on/off, status**	**1bit**	**C,W**	**1.001 switch**
□ □ k					
493	**KNX Channel X-{{...}}**	**Filter timer counter change**	**2byte**	**C,W**	**7.007 time(h)**
”Filter timer counter” k k					
494	**KNX Channel X-{{...}}**	**CO2 value**	**2byte**	**C,W, T,U**	**7.001 pulse** **9.030 concentration(ug/m3)** **9.008 parts/million(ppm)**

Ventilation system(with auto fan speed) k □ k

CO2 □ □ ppm k □

0~4000ppm

CO2□ □ □ CO2 □

k

494	**KNX Channel X-{{...}}**	**VOC value**	**2byte**	**C,W, T,U**	**7.001 pulse 9.030 concentration(ug/m3) 9.008 parts/million(ppm)**

VOC □ □ ppm k □

0~4000ppm

VOC□ □ □ VOC □

k

494	**KNX Channel X-{{...}}**	**PM 2.5 value**	**2byte**	**C,W, T,U**	**7.001 pulse 9.030 concentration(ug/m3) 9.008 parts/million(ppm)**

PM2.5 □ □ ug/m^3 k □

0~999ug/m^3

PM2.5□ □ □ PM2.5 □

k

496	**KNX Channel X-{{...}}**	**Fan speed, status**	**1byte**	**C,W**	**5.001 percentage 5.100 fan stage**

□ □ k □ k

497	**KNX Channel X-{{...}}**	**Fan automatic operation, status**	**1bit**	**C,W**	**1.003 enable**
Ventilation system(with auto fan speed) □ □ □ k					
498	**KNX Channel X-{{...}}**	**Heat recovery, status**	**1bit**	**C,W**	**1.003 enable**
”Heat recovery function” k □ □ k					
499	**KNX Channel X-{{...}}**	**Filter timer reset**	**1bit**	**C,W**	**1.015 reset**
”Filter timer counter” k □ □ k □ 1——					

6.10.7”Ventilation system”

6.10.8 “Audio control”

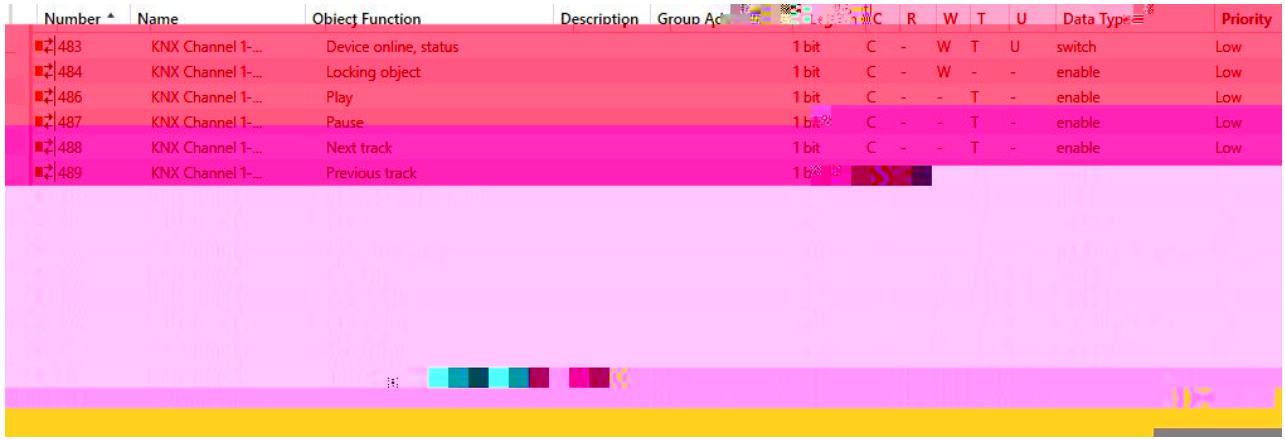
Audio control

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
486	KNX Channel 1-...	Play=1/Pause=0			1 bit	C	-	-	T	-	start/stop	Low
488	KNX Channel 1-...	Next track=1/Previous track=0			1 bit	C	-	-	T	-	step	Low
490	KNX Channel 1-...	Volume+=1/Volume-=0			1 bit	C	-	-	T	-	step	Low
491	KNX Channel 1-...	Mute			1 bit	C	-	-	T	-	enable	Low
494	KNX Channel 1-...	Power on/off, status			1 bit	C	-	W	-	-	switch	Low
495	KNX Channel 1-...	Play=1/Pause=0, status			1 bit	C	-	W	T	U	start/stop	Low
498	KNX Channel 1-...	Mute, status			1 bit	C	-	W	T	U	enable	Low

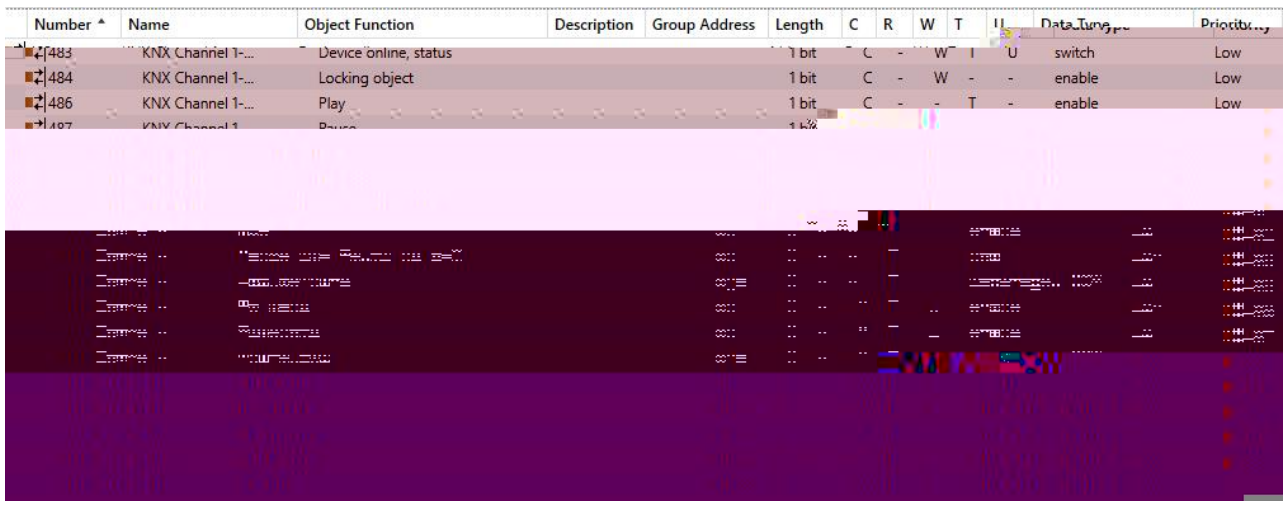
Audio control(with on/off)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
486	KNX Channel 1-...	Play			1 bit	C	-	-	T	-	enable	Low
487	KNX Channel 1-...	Pause			1 bit	C	-	-	T	-	enable	Low
488	KNX Channel 1-...	Next track			1 bit	C	-	-	T	-	enable	Low
489	KNX Channel 1-...	Previous track			1 bit	C	-	-	T	-	enable	Low
490	KNX Channel 1-...	Volume+=1/Volume-=0			1 bit	C	-	-	T	-	step	Low
491	KNX Channel 1-...	Mute			1 bit	C	-	-	T	-	enable	Low
493	KNX Channel 1-...	Play mode			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
495	KNX Channel 1-...	Play, status			1 bit	C	-	W	T	U	enable	Low
496	KNX Channel 1-...	Pause, status			1 bit	C	-	W	T	U	enable	Low
498	KNX Channel 1-...	Mute, status			1 bit	C	-	W	T	U	enable	Low
499	KNX Channel 1-...	Play mode, status			1 byte	C	-	W	T	U	counter pulses (0..255)	Low

Audio control(play mode)



Audio control(track information)



Audio control(track information+playlist)

6.10.8 “Audio control”

					DPT
485	**KNX Channel X-{{...}}**	**Power on/off**	**1bit**	**C,T**	**1.001 switch**
	□ k / KNX k □ 1—— 0——				

486	**KNX Channel X-{{...}}**	**Play=1/Pause=0** **Play**	**1bit**	**C,T**	**1.010 start/stop**
/ 1 □ k / k □ 1—— 0——					
486	**KNX Channel X-{{...}}**	**Play**	**1bit**	**C,T**	**1.003 enable**
/ 2 □ k k □ 1——					
487	**KNX Channel X-{{...}}**	**Pause**	**1bit**	**C,T**	**1.003 enable**
/ 2 □ k k □ 1——					
488	**KNX Channel X-{{...}}**	**Next track=1/Previous track=0**	**1bit**	**C,T**	**1.007 step**
□/ □ 1 □ k □ □/ □ k □ 1—— □ 0—— □					
488	**KNX Channel X-{{...}}**	**Next track**	**1bit**	**C,T**	**1.003 enable**
□/ □ 2 □ k □ □ k □ 1—— □					

489	**KNX Channel X-{{...}}**	**Previous track**	**1bit**	**C,T**	**1.003 enable**
□/ □ 2 □ k □ □ k □ 1—— □					
490	**KNX Channel X-{{...}}**	**Volume+=1/Volume-=0**	**1bit**	**C,T**	**1.007 step**
1bit □ k □ 1—— 0——					
493	**KNX Channel X-{{...}}**	**Absolute volume**	**1byte**	**C,T**	**5.001 percentage** **5.004 percentage**
1byte □ k □0..100 / 0..255					
491	**KNX Channel X-{{...}}**	**Mute**	**1bit**	**C,T**	**1.003 enable**
□ k k □ 1 ˆ ˆ 0 ˆ ˆ					
492	**KNX Channel X-{{...}}**	**Next playlist=1/Previous playlist=0**	**1bit**	**C,T**	**1.007 step**
□/ □ 1 □ k k □ 1——					

0——					
493	**KNX Channel X-{{...}}**	**Play mode**	**1byte**	**C,T**	**5.010 counter pulses**
□ □ k					
494	**KNX Channel X-{{...}}**	**Power on/off, status**	**1bit**	**C,W, T,U**	**1.001 switch**
□ k □ k					
495	**KNX Channel X-{{...}}**	**Play=1/Pause=0, status**	**1bit**	**C,W, T,U**	**1.010 start/stop**
□ / □ □ k					
495	**KNX Channel X-{{...}}**	**Play, status**	**1bit**	**C,W, T,U**	**1.003 enable**
/ 2 □ k □ □ □ k □ 1——					
496	**KNX Channel X-{{...}}**	**Pause, status**	**1bit**	**C,W, T,U**	**1.003 enable**
/ 2 □ k □ □ □ k □ 1——					
497	**KNX Channel X-{{...}}**	**Volume, status**	**1byte**	**C,W, T,U**	**5.001 percentage 5.004 percentage**

1byte □ □ □ k □0..100 / 0..255 k					
498	**KNX Channel X-{{...}}**	**Mute, status**	**1bit**	**C,W, T,U**	**1.003 enable**
□ k □ □ k					
499	**KNX Channel X-{{...}}**	**Play mode, status**	**1byte**	**C,W, T,U**	**5.010 counter pulses**
□ □ □ k					
500	**KNX Channel X-{{...}}**	**Track name**	**14byte**	**C,W, T,U**	**16.001 character string (ISO 8859-1)**
□ k					
501	**KNX Channel X-{{...}}**	**Album name**	**14byte**	**C,W, T,U**	**16.001 character string (ISO 8859-1)**
□ k					
502	**KNX Channel X-{{...}}**	**Artist name**	**14byte**	**C,W, T,U**	**16.001 character string (ISO 8859-1)**
□ k					
503	**KNX Channel X-{{...}}**	**Playlist name**	**14byte**	**C,W, T,U**	**16.001 character string (ISO 8859-1)**
□ k					

10.6.8 “Audio control”

6.10.9 “Energy Metering display”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
487	KNX Channel 1-...	Power value			2 bytes	C	-	W	T	U	power (kW)	Low
488	KNX Channel 1-...	Energy value			4 bytes	C	-	W	T	U	active energy (kWh)	Low

Energy metering(power & energy)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	Current value			2 bytes	C	-	W	T	U	current (mA)	Low
487	KNX Channel 1-...	Power value			2 bytes	C	-	W	T	U	power (kW)	Low
488	KNX Channel 1-...	Energy value			4 bytes	C	-	W	T	U	active energy (kWh)	Low

Energy metering(power & energy & current)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	Current value			2 bytes	C	-	W	T	U	current (mA)	Low
486	KNX Channel 1-...	Voltage value			4 bytes	C	-	W	T	U	electric potential (V)	Low
487	KNX Channel 1-...	Power value			2 bytes	C	-	W	T	U	power (kW)	Low
488	KNX Channel 1-...	Energy value			4 bytes	C	-	W	T	U	active energy (kWh)	Low

Energy metering(power & energy & current & voltage)

6.10.9 “Energy Metering display”

					DPT
485	**KNX Channel X-{{...}}**	**Current value**	**2byte**	**C,W,T,U**	**7.012 current(mA)**
		□		k	
	□0~65535mA□	1mA k			
485	**KNX Channel X-{{...}}**	**Current value**	**2byte**	**C,W,T,U**	**9.021 current(mA)**
		□		k	
	□-670760~670760mA□	0.1mA k			
485	**KNX Channel X-{{...}}**	**Current value**	**4byte**	**C,W,T,U**	**14.019 electric current(A)**
		□		k	
	□-99999999.9~99999999.9A□	0.1A k			
486	**KNX Channel X-{{...}}**	**Voltage value**	**2byte**	**C,W,T,U**	**9.020 voltage(mV)**

		□		k	
	□-670760mV~670760mV□		0.1mV k		
486	**KNX Channel X-{{...}}**	**Voltage value**	**4byte**	**C,W,T,U**	**14.027 electric potential(V)**
		□		k	
	□-99999999.9~99999999.9V□		0.1V k		
487	**KNX Channel X-{{...}}**	**Power value**	**2byte**	**C,W,T,U**	**9.024 power(kW)**
		□		k	
	□-670760~670760kW□		0.1kW k		
487	**KNX Channel X-{{...}}**	**Power value**	**4byte**	**C,W,T,U**	**14.056 power(W)**
		□		k	
	□-99999999.9~99999999.9W□		0.1W k		
488	**KNX Channel X-{{...}}**	**Energy value**	**4byte**	**C,W,T,U**	**13.010 active energy(Wh)**
		□		k	
	□-2147483648~2147483647Wh□		1Wh k		
488	**KNX Channel X-{{...}}**	**Energy value**	**4byte**	**C,W,T,U**	**13.013 active energy(kWh)**
		□		k	
	□-2147483648~2147483647kWh□		1kWh k		

10.6.9 “Energy Metering display”

6.10.10 “Sensor”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device [illegible] status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low
486	KNX Channel 1-...	Low temperature alarm			1 bit	C	R	-	T	-	alarm	Low
487	KNX Channel 1-...	High temperature alarm			1 bit	C	R	-	T	-	alarm	Low

Temperature sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	Humidity [illegible]			2 bytes	C	-	W	T	U	humidity (%)	Low
486	KNX Channel 1-...	Low humidity alarm			1 bit	C	R	-	T	-	alarm	Low
487	KNX Channel 1-...	High humidity alarm			1 bit	C	R	-	T	-	alarm	Low

Humidity sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	PM2.5 value			2 bytes	C	-	W	T	U	pulses	Low
486	KNX Channel 1-...	PM2.5 alarm			1 bit	C	R	-	T	-	alarm	Low

PM2.5 sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device [illegible] status			[illegible] bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	PM10 value			2 bytes	C	-	W	T	U	pulses	Low
486	KNX Channel 1-...	PM10 alarm			1 bit	C	R	-	T	-	alarm	Low

PM10 sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	[illegible]										

VOC sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	AQI value			2 bytes	C	-	W	T	U	pulses	Low
486	KNX Channel 1-...	AQI alarm			1 bit	C	R	-	T	-	alarm	Low

AQI sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	CO2 value			2 bytes	C	-	W	T	U	parts/million (ppm)	Low

CO2 sensor

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
483	KNX Channel 1-...	Device online, status			1 bit	C	-	W	T	U	switch	Low
485	KNX Channel 1-...	Brightness value(lux)			2 bytes	C	-	W	T	U	[illegible]x (Lux)	Low

Brightness sensor

! ! PM2.5 ! PM10 ! VOC ! AQI ! CO2 ! ! □ k

k k

486	**KNX Channel X-{{...}}**	**Low temperature alarm**	**1bit**	**C,R,T**	**1.005 alarm**
□ □ k □ 1—— 0——					
487	**KNX Channel X-{{...}}**	**High temperature alarm**	**1bit**	**C,R,T**	**1.005 alarm**
□ □ □ □ k □ 1——□ 0——					
486	**KNX Channel X-{{...}}**	**Low humidity alarm**	**1bit**	**C,R,T**	**1.005 alarm**
□ □ k □ 1—— 0——					

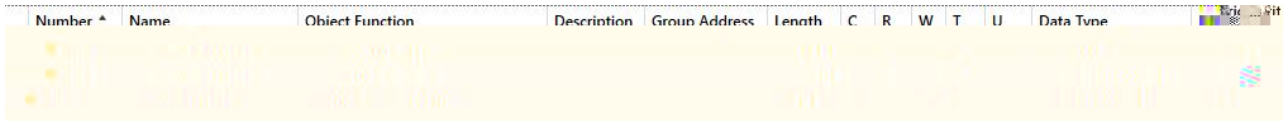
487	**KNX Channel X-{{...}}**	**High humidity alarm**	**1bit**	**C,R,T**	**1.005 alarm**
□ □ □ □ k □ 1——□ 0——					
486	**KNX Channel X-{{...}}**	**PM2.5 alarm**	**1bit**	**C,R,T**	**1.005 alarm**
486	**KNX Channel X-{{...}}**	**PM10 alarm**	**1bit**	**C,R,T**	**1.005 alarm**
486	**KNX Channel X-{{...}}**	**AQI alarm**	**1bit**	**C,R,T**	**1.005 alarm**
486	**KNX Channel X-{{...}}**	**CO2 alarm**	**1bit**	**C,R,T**	**1.005 alarm**
486	**KNX Channel X-{{...}}**	**VOC alarm**	**1bit**	**C,R,T**	**1.005 alarm**
486	**KNX Channel X-{{...}}**	**Wind alarm**	**1bit**	**C,R,T**	**1.005 alarm**
PM2.5/PM10/AQI/CO2/VOC/Wind □ PM2.5/PM10/AQI/CO2/VOC/Wind k □ 1—— 0——					

6.10.10 “Sensor”

6.10.11 “Value sender”

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Send 1bit value			1 bit	C	-	W	T	-	switch	Low
487	KNX Channel 1-...	Send 1bit value, long			1 bit	C	-	W	T	-	switch	Low

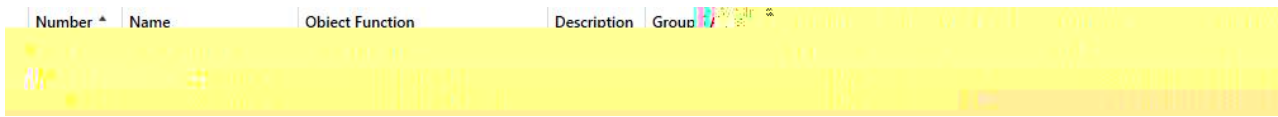
1bit value[ON/OFF]



2bit value[0...3]

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Send 4bit value			4 bit	C	-	W	T	-	dimming control	Low
487	KNX Channel 1-...	Send 4bit value, long			4 bit	C	-	W	T	-	dimming control	Low

4bit value[0...15]



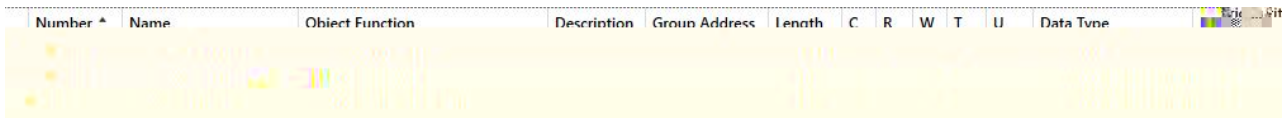
1byte value[0...255]

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
485	KNX Channel 1-...	Send 2byte value			2 bytes	C	-	W	T	-	pulses	Low
487	KNX Channel 1-...	Send 2byte value, long			2 bytes	C	-	W	T	-	pulses	Low

2byte value[0...65535]

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Send 2byte float value			2 bytes	C	-	W	T	-	2-byte float value	Low
487	KNX Channel 1-...	Send 2byte float value, long			2 bytes	C	-	W	T	-	2-byte float value	Low

2byte float value



4byte value[0...4294967295]

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
484	KNX Channel 1-...	Locking object			1 bit	C	-	W	-	-	enable	Low
485	KNX Channel 1-...	Send 4byte float value			4 bytes	C	-	W	T	-	4-byte float value	Low
487	KNX Channel 1-...	Send 4byte float value, long			4 bytes	C	-	W	T	-	4-byte float value	Low

4byte float value

6.10.11 ”Value sender”

					DPT
485	KNX Channel X-{{...}}	Send 1bit value	1bit	C,T,W	1.001 switch
485	KNX Channel X-{{...}}	Send 2bit value	2bit	C,T,W	2.001 switch control
485	KNX Channel X-{{...}}	Send 4bit value	4bit	C,T,W	3.007 dimming
485	KNX Channel X-{{...}}	Send 1byte value	1byte	C,T,W	5.010 counter pulses
485	KNX Channel X-{{...}}	Send 2byte value	2byte	C,T,W	7.001 pulses
485	KNX Channel X-{{...}}	Send 2byte float value	2byte	C,T,W	9.x float value
485	KNX Channel X-{{...}}	Send 4byte value	4byte	C,T,W	12.001 counter pulses
485	KNX Channel X-{{...}}	Send 4byte float value	4byte	C,T,W	14.x float value
□ □ □ k k					
487	KNX Channel X-{{...}}	Send 1bit value, long	1bit	C,T,W	1.001 switch
487	KNX Channel X-{{...}}	Send 2bit value, long	2bit	C,T,W	2.001 switch control
487	KNX Channel X-{{...}}	Send 4bit value, long	4bit	C,T,W	3.007 dimming
487	KNX Channel X-{{...}}	Send 1byte value, long	1byte	C,T,W	5.010 counter pulses
487	KNX Channel X-{{...}}	Send 2byte value, long	2byte	C,T,W	7.001 pulses
487	KNX Channel X-{{...}}	Send 2byte float value, long	2byte	C,T,W	9.x float value
487	KNX Channel X-{{...}}	Send 4byte value, long	4byte	C,T,W	12.001 counter pulses
487	KNX Channel X-{{...}}	Send 4byte float value, long	4byte	C,T,W	14.x float value
□ k					

6.10.11 ”Value sender”

6.11 “KNX Scene”

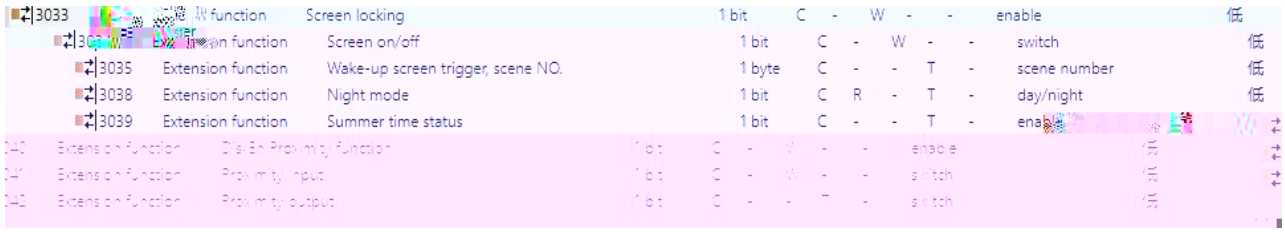
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
3003	Scene 1-...	Scene			1 byte	C	-	W	T	-	scene control	Low

6.11 “KNX Scene”

					DPT
3003/.../3032	**Scene X-{{...}}**	**Scene control**	**1byte**	**C,T,W**	**18.001 scene control**
	□	k		/	k

6.11 “KNX Scene”

6.12 “Extension function”



6.12 ”Extension function, Screensaver”

					DPT
3033	**Extension function**	**Screen locking**	**1bit**	**C,W**	**1.003 enable**
□ 1 ˚ ˚ 0 ˚ ˚			□		k □
3034	**Extension function**	**Screen on/off**	**1bit**	**C,W**	**1.001 switch**
□		/ k 1 ˚ ˚ 0 ˚ ˚			
3035	**Extension function**	**Wake-up screen trigger,1bit value/1byte value/scene NO.**	**1bit 1byte**	**C,T**	**1.001 switch 5.010 counter pulses 5.001 percentage 17.001 scene number**
k		□	k		□

3038	**Extension function**	**Night mode**	**1bit**	**C,R,T C,W,T ,U**	**1.024 day/night**
/ □ k / □ □ C,W,T,U□ □ □ C,R,T k					
3039	**Extension function**	**Summer time status**	**1bit**	**C,T**	**1.003 enable**
k □ 1 ˚ ˚ 0 ˚ ˚					
3040	**Extension function**	**Dis/En Proximity function**	**1bit**	**C,W**	**1.003 enable**
/ k					
3041	**Extension function**	**Proximity input**	**1bit**	**C,W**	**1.001 switch**
□ k □ 1 ˚ 0 ˚ □ □					
3042	**Extension function**	**Proximity output**	**1bit 1byte**	**C,T**	**1.001 switch 5.010 counter pulses 17.001 scene number 5.001 percentage**
“Object type of output value” □ □ □1byte□ ON(1bit) k k					

6.12 ”Extension function, Screensaver”