K-BUS® KNX/DALI

KNX/DALI Gateway, 1/2-Fold_V1.5

BTDG-01/64.1 ( )

BTDG-02/64.1 ( )

KNX/EIB

注意事项

1、请远离强磁场、高温、潮湿等环境；

4、请勿自行拆卸本设备。

----------1
---------- 1
1.2 ---------- 2
---------- 3
----------5
3.1 ---------- 5
3.2 ---------- 5
DALI ----------7
4.1 ---------- 7
4.2 ----------7
4.2.1 DALI ----------7
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ETS ---------- 14
5.1 “General” ----------14
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5., ----------:

5.6 “X: Scene (X=A,B)” ----------40

----------43

6.1 ---------- 43

6.2 ----------44

6.3 ---------- 47

6.4 DALI ----------49

!

k

k

k

! !

k

DCA ETS App k **PC** **PC**

KnxDaliDebug.exe k

k

1.1 DALI

k

k

k

k

1.2

k

k

- **KNX/DALI 64 DALI DALI !**
- **16**

  DCA PC
- **16 ETS**

  !
- **8 KNX 16 DALI KNX ETS**

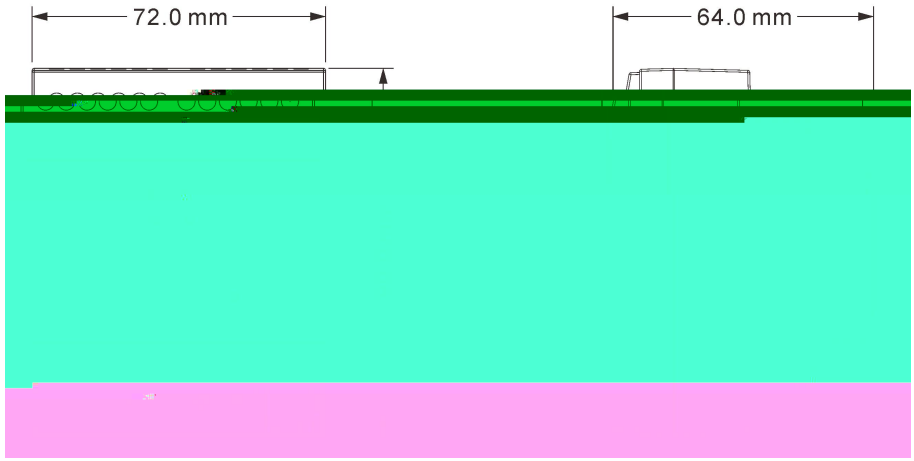
  DALI
- **8 DALI DALI !**

  ECG
-
- **DALI**
- **DALI ! DALI DALI**
- **DALI**

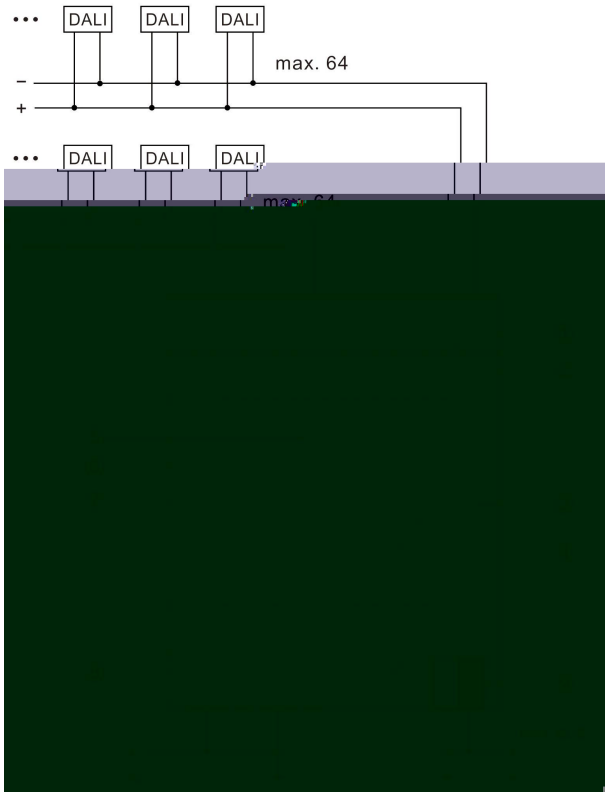
DALI

k

3.1

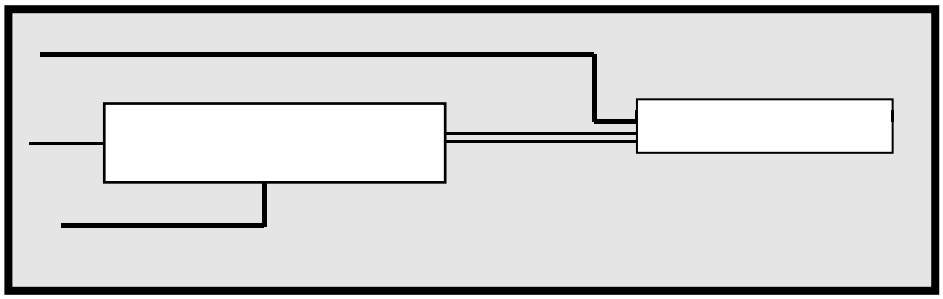


3.2



DALI

4.1



4.2

4.2.1 DALI

k

K-BUS®

4.2.3

k

k

k

k

k

k

k

4.2.4

k

k

4.2.5

!

k

k

k

DALI **ECG**

!

k

k

/ □ □

4.2.6

k

k

4.2.7 ECG

k

k k

k

k

k

k

k

4.2.8

k

k

k

4.2.9

k

k

k

k DALI 63 DALI k

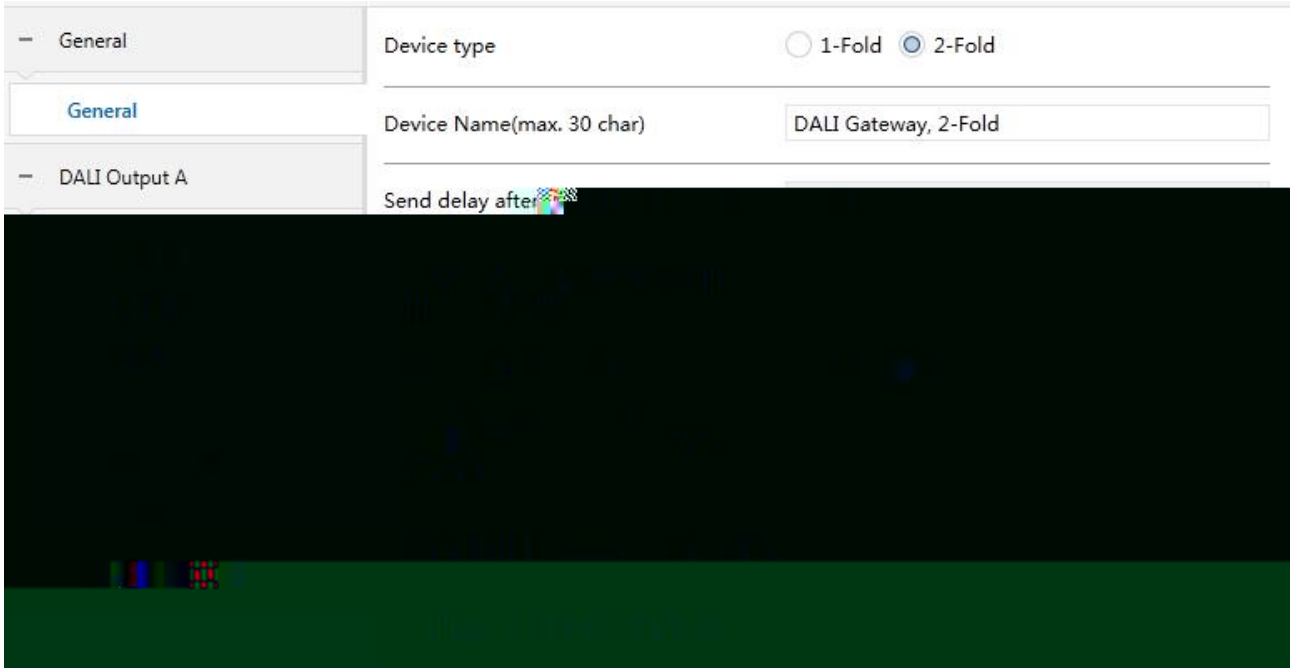
k

DALI k

ETS

5.1 “General”

k



Device type

k

1-Fold

2-Fold

k

Device Name(max.30 char)

k

Send delay after KNX bus recovery

k

k k

Immediately

5s

10s

...

60s

k k

□

-- **Max.number of send telegrams**

k **1…255**

-- **In period**

k

50ms

100ms

…

1min

k

k

k

k

Send delay between DALI status objects

k

No delay

1s

2s

…

10s

k

Cycle time for DALI status requests

! k

k

No request

1s

2s

...

10s

k

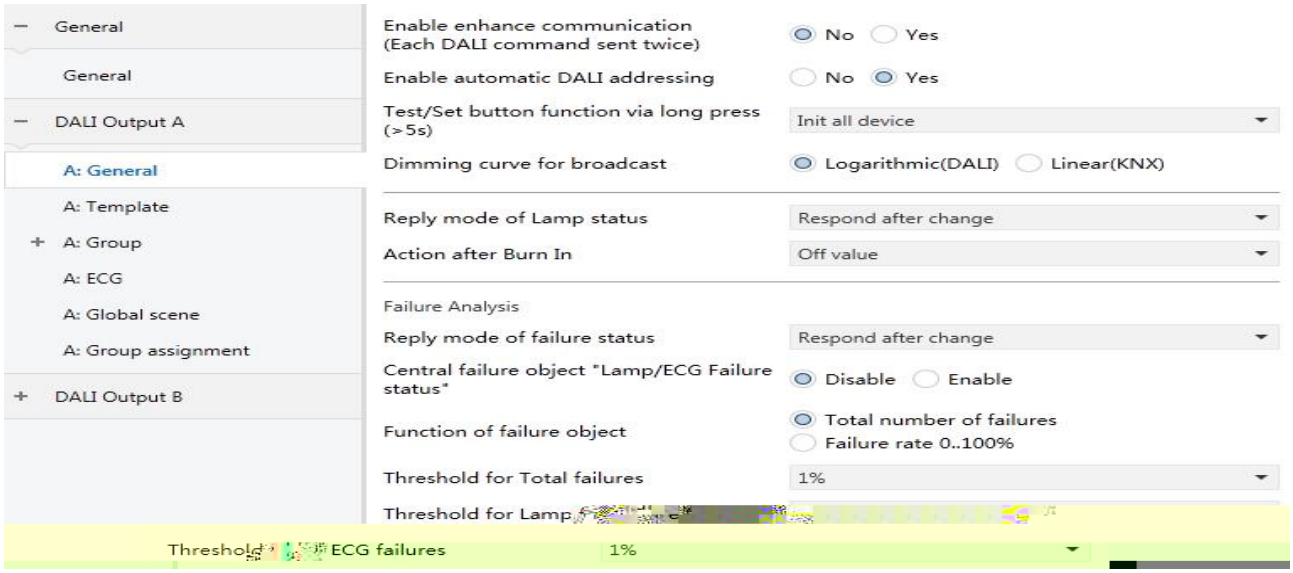
No request **ECG**

/ **k**

5.2 “X: General (X=A,B)”

k

k



Enable enhance communication (Each DALI command sent twice)

k

No

Yes

k

k

Enable automatic DALI addressing

k

No

Yes

k

k

k

k

k

DALI **1.3** k

Test/Set button function via long press(>5s)

k

No action

Init no address device

Init all device

k

Test/Set **1.3** k

Dimming curve for broadcast

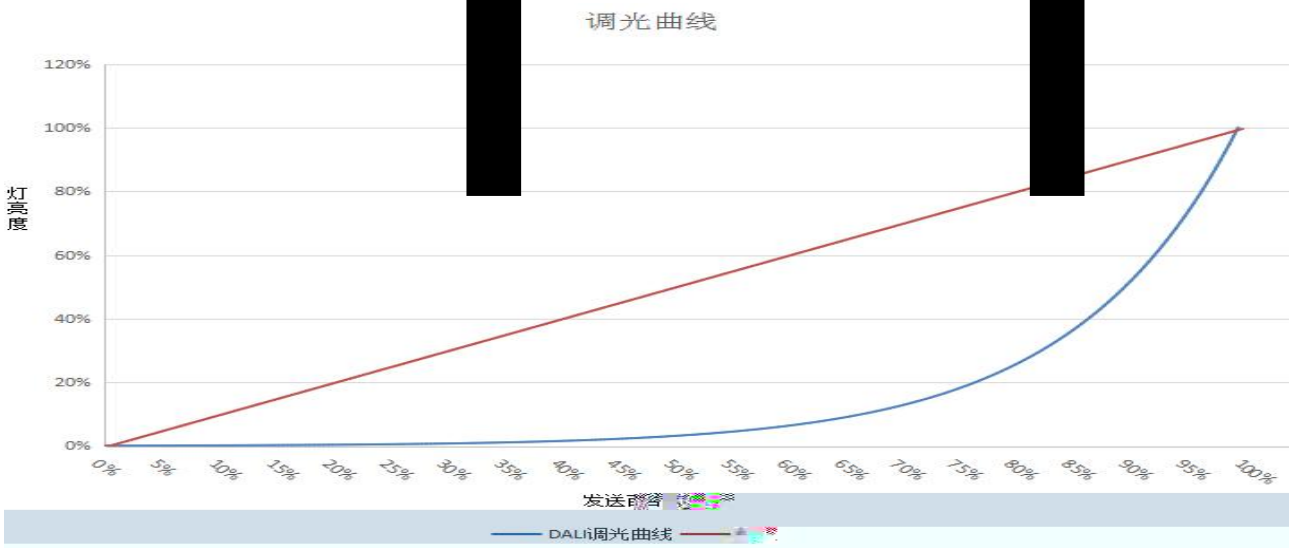
k

Logarithmic(DALI)

Linear(KNX)

k

k k



DALI **1.3** k

Reply mode of Lamp status

7«&:9ú&€9ú'Ñ&:9ú&F19úmL"; l, 2©FL 2©&:9úmL k

Respond after read only

Respond after change

Respond fter a

Action after Burn In

k

On value

Off value

Last brightness value

k

ECG

Reply mode of failure status

k

Respond after read only

Respond after change

Respond after change and bus reset

Central failure object **Lamp/ECG Failure status**

k

Disable

Enable

k

ECG **DALI** k

Function of failure object

! k

! k

Total number of failures

Failure rate 0..100%

k

k

Threshold for Total failures

k

k **1..100%**

Threshold for Lamp failures

k

k **1..100%**

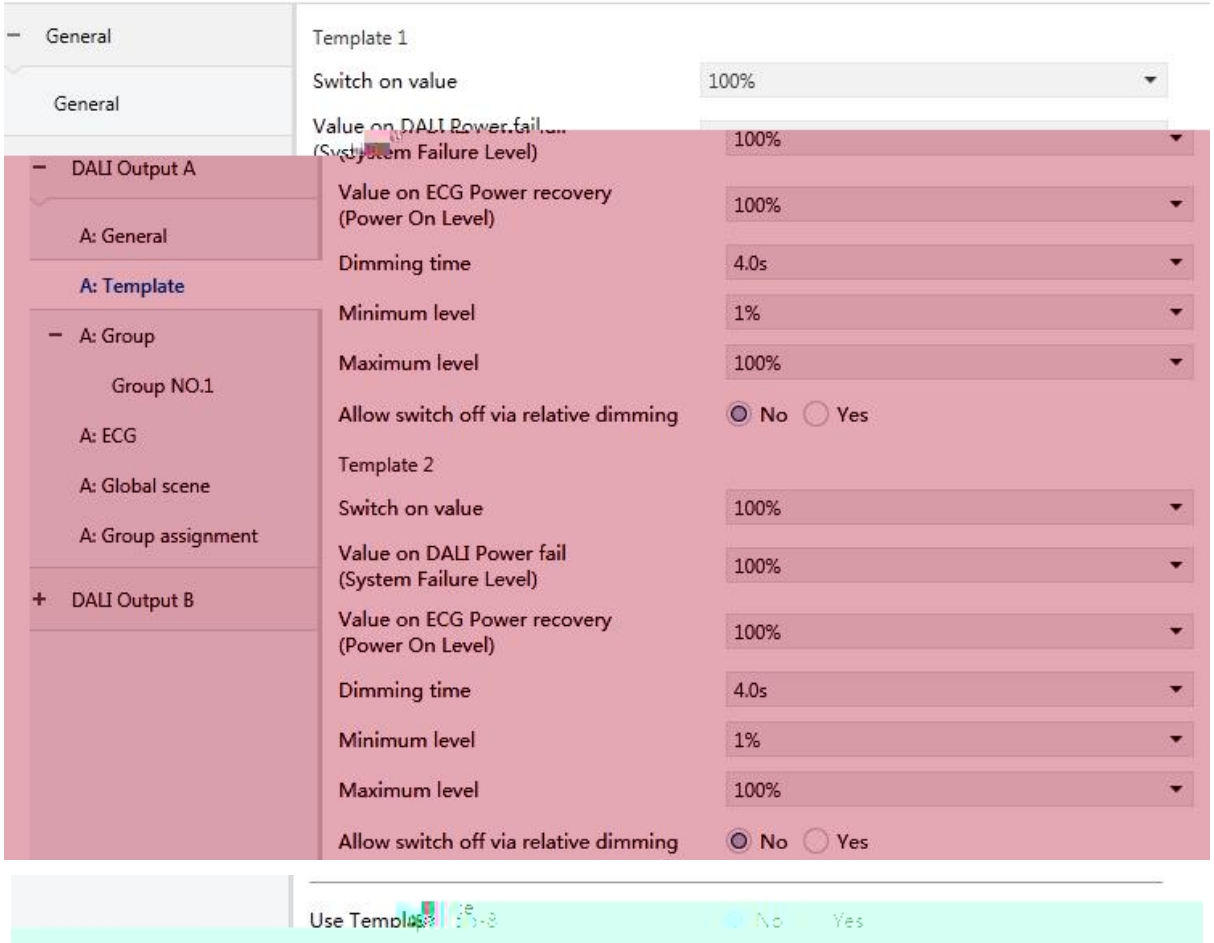
Threshold for ECG failures

k

k **1..100%**

5.3 “X: Template (X=A,B)”

k k



Switch on value

k

1%
5%
...
100%
Last brightness value

k

Value on DALI Power fail (System Failure Level)

k

k

0%

1%

5%

...

100%

Last brightness value

k

Value on ECG Power recovery (Power On Level)

k

k

0%
1%
5%
...
100%
Last brightness value

k

Dimming time

k

<0.7s
0.7s
1.0s
...
90.5s

k

k k k

Minimum level

k

0%
1%
2%
...
100%

k

Maximum level

k

0%
1%
2%
...
100%

k

Allow switch off via relative dimming

k

No
Yes

k

k

1.4

Use Template 5-8

k

No

Yes

k

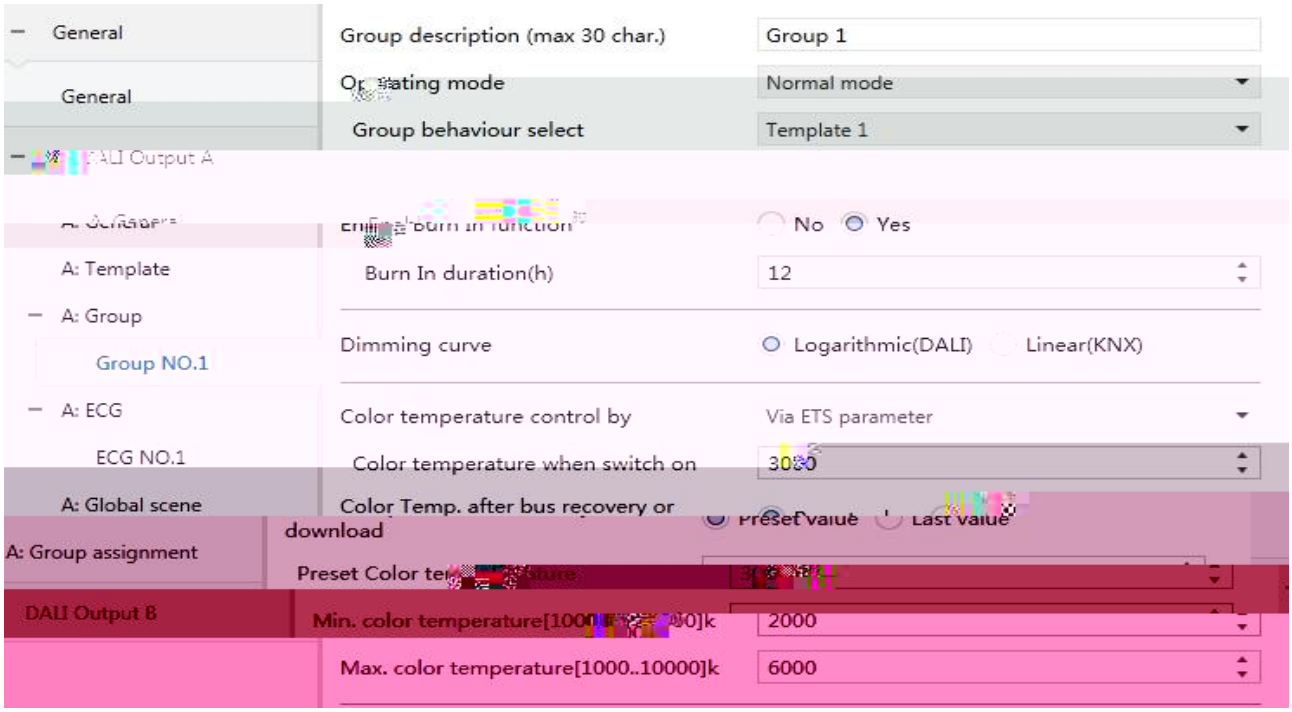
ECG **ECG** **ECG** k

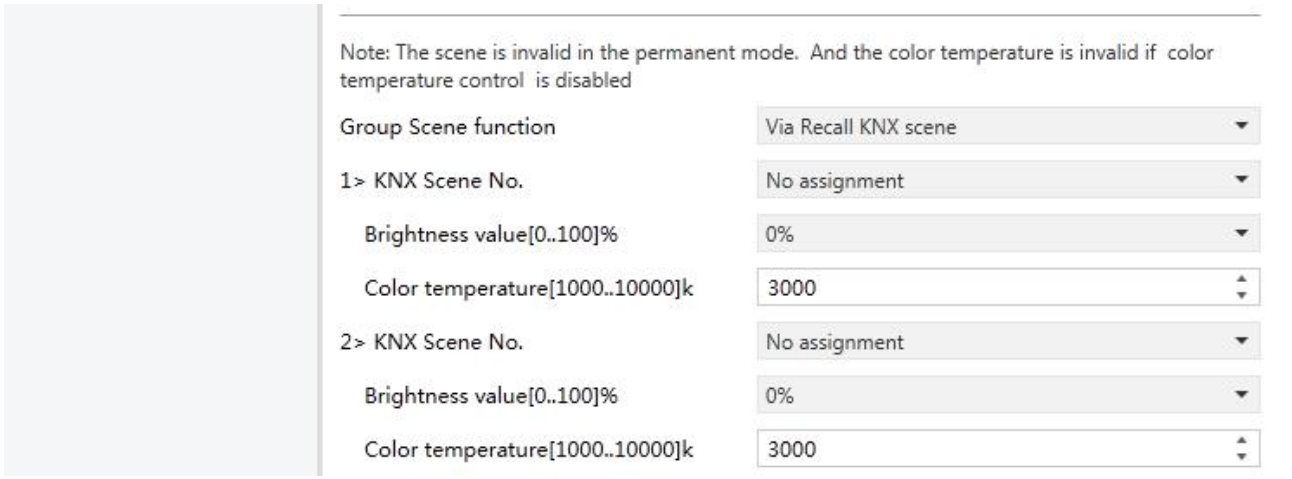
5.4 “X: Group (X=A,B)”

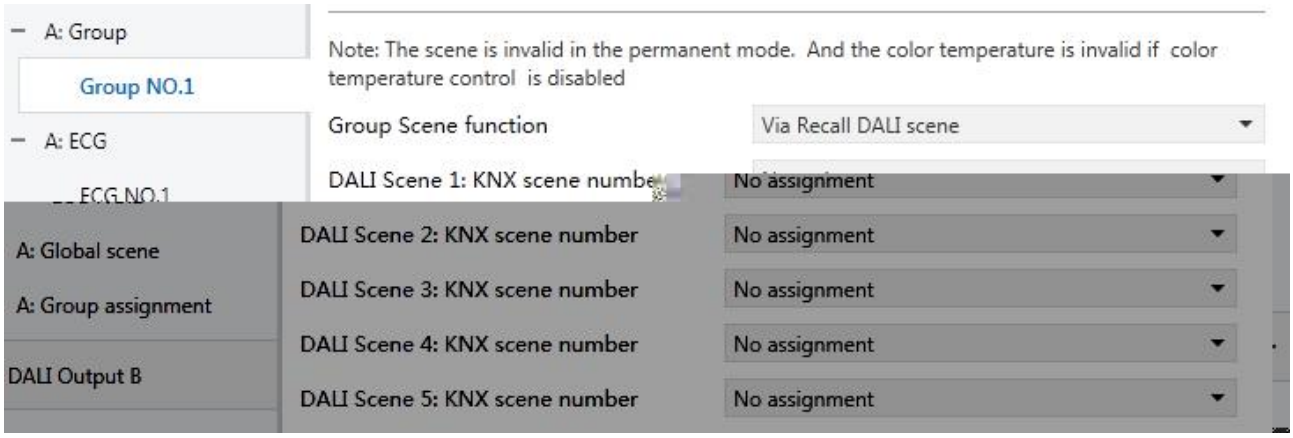
k

! k

k


General
General
DALI Output A
A: Template
A: Group
Group NO.1
A: ECG
ECG NO.1
A: Global scene
A: Group assignment
DALI Output B
Group description (max 30 char.)
Group 1
Operating mode
Normal mode
Group behaviour select
Template 1
No
Yes
Burn In duration(h)
12
Dimming curve
Logarithmic(DALI)
Linear(KNX)
Color temperature control by
Via ETS parameter
Color temperature when switch on
3000
Color Temp. after bus recovery or download
Preset value
Last value
Preset Color temperature
Min. color temperature[1000..10000]k
2000
Max. color temperature[1000..10000]k
6000


Note: The scene is invalid in the permanent mode. And the color temperature is invalid if color temperature control is disabled
Group Scene function
Via Recall KNX scene
1> KNX Scene No.
No assignment
Brightness value[0..100]%
0%
Color temperature[1000..10000]k
3000
2> KNX Scene No.
No assignment
Brightness value[0..100]%
0%
Color temperature[1000..10000]k
3000


A: Group
Group NO.1
A: ECG
ECG NO.1
A: Global scene
A: Group assignment
DALI Output B
Note: The scene is invalid in the permanent mode. And the color temperature is invalid if color temperature control is disabled
Group Scene function
Via Recall DALI scene
DALI Scene 1: KNX scene number
No assignment
DALI Scene 2: KNX scene number
No assignment
DALI Scene 3: KNX scene number
No assignment
DALI Scene 4: KNX scene number
No assignment
DALI Scene 5: KNX scene number
No assignment

Group description(max 30 char.)

k

Use Group 1..16

k

No
Yes

k

Operating mode

k

Normal mode
Permanent mode
Normal/Night mode
Staircase mode

k

k

k

k

k

5.4.1 “Normal mode”

k

Group behaviour select

k

As configuration of ECG (must set via DCA or Tool)

Template 1

...

Template 8

k

k

ECG

1.ECG

k

2. k

ECG k

5.4.2 “Permanent mode”

k

Lamp Value in Permanent mode

k

0%

5%

...

100%

5.4.3 “Normal/Night mode”

k

Action in night mode

k

Delay switch off automatically

Activate permanent mode and ignore telegrams

k k

k k

-- **Automatic switch off after**

k

1min

2min

...

90min

-- **Lamp Value in Permanent mode**

k

0%

5%

...

100%

Group behaviour select

k

As configuration of ECG (must set via DCA or Tool)

Template 1

...

Template 8

k

k

k

5.4.4 “Staircase mode”

k

Automatic switch off after

k

1min

2min

...

90min

Group behaviour select

k

As configuration of ECG (must set via DCA or Tool)

Template 1

...

Template 8

k

k

Enable Burn In function

k

No

Yes

-- Burn In duration(h)

k **0..120 h**

k

Dimming curve

k

Logarithmic(DALI)

Linear(KNX)

k

k k

Color temperature control by

k

Disable

Via ETS parameter

Keep last object value

k

-- **Color tempera raine**

-- **Preset Color temperature**

k **1000..10000**

Min.color temperature[1000..10000]k

k **1000..10000**

Max.color temperature[1000..10000]k

k **1000..10000**

k

1.4

Delay between brightness and color temperature telegram[1..100]s

k **1..100**

k

DALI **DALI** **DALI** k

k

1.4

Note: The scene is invalid in the permanent mode. And the color temperature is invalid if color temperature control is disable.

k

Group Scene function

k

Disable

Via Recall KNX scene

Via Recall DALI scene

k

k

k

k

k

k

z>KNX Scene No.(z=1..8)

k

No assignment

1

...

64

k

k

KNX k

-- Brightness value[0..100]%

k

0%

5%

...

100%

-- Color temperature when switch on

k 1000..10000

DALI Scene x: KNX scene number(x=1..16)

k

No assignment

1

...

64

k

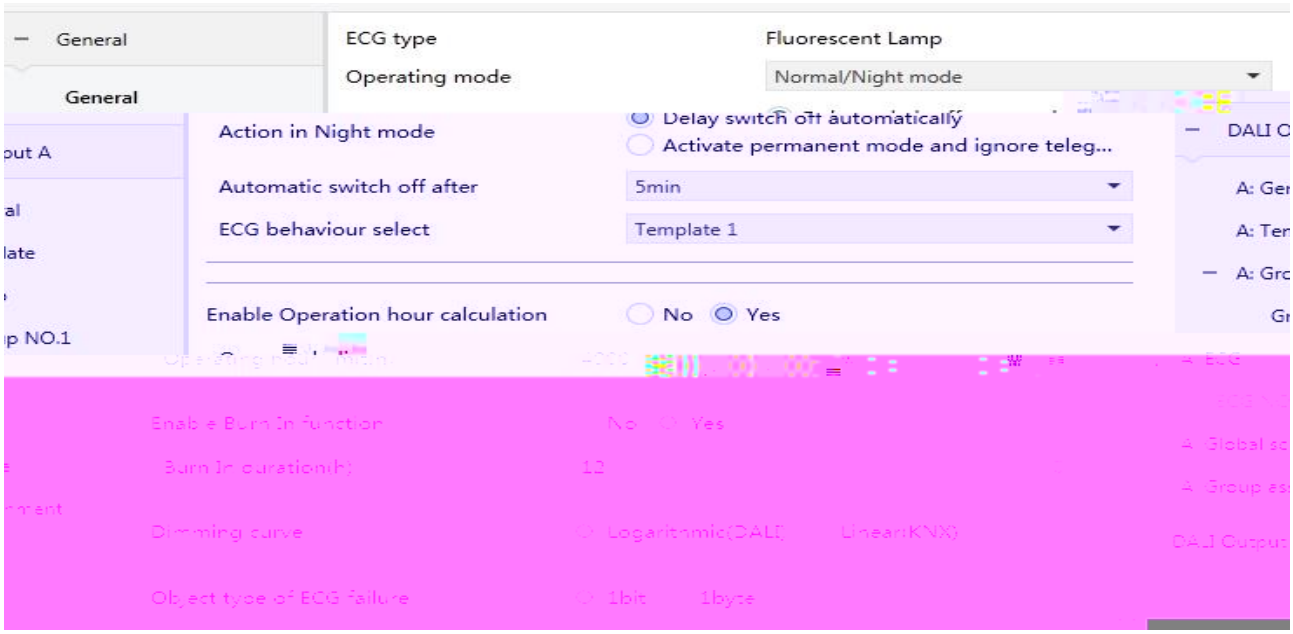
k

5.5 “X: ECG (X=A,B)”

k

! k

k



Use ECG 1..64

k

No

Yes

k

ECG **ECG x**

ECG k **ECG** k

ECG k

ECG type

k k

Operating mode

k

Normal mode

Permanent mode

Normal/Night mode

Staircase mode

k

k

k k

k

k

Enable Operation hour calculation

k

No

Yes

-- **Operating hour limit(h)**

k

k **1..200000**

5min

k

Enable Burn In function

k

No

Yes

-- **Burn In duration(h)**

k **0..120 h**

k

Dimming curve

k

Logarithmic(DALI)

Linear(KNX)

k

k k

Object type of ECG failure

k

1bit

1byte

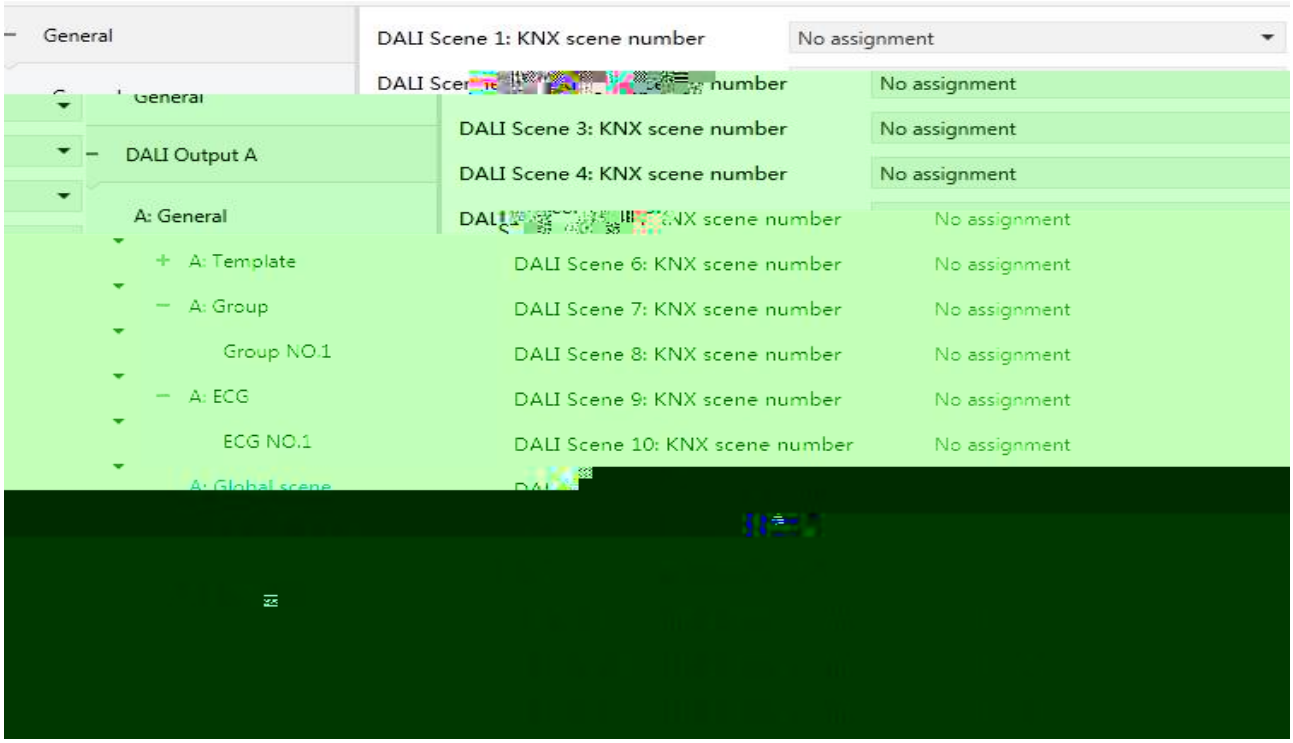
k

5.6 “X: Global scene (X=A,B)”

k

k k

k



DALI Scene x: KNX scene number(x=1..16)

k

No assignment

1

...

64

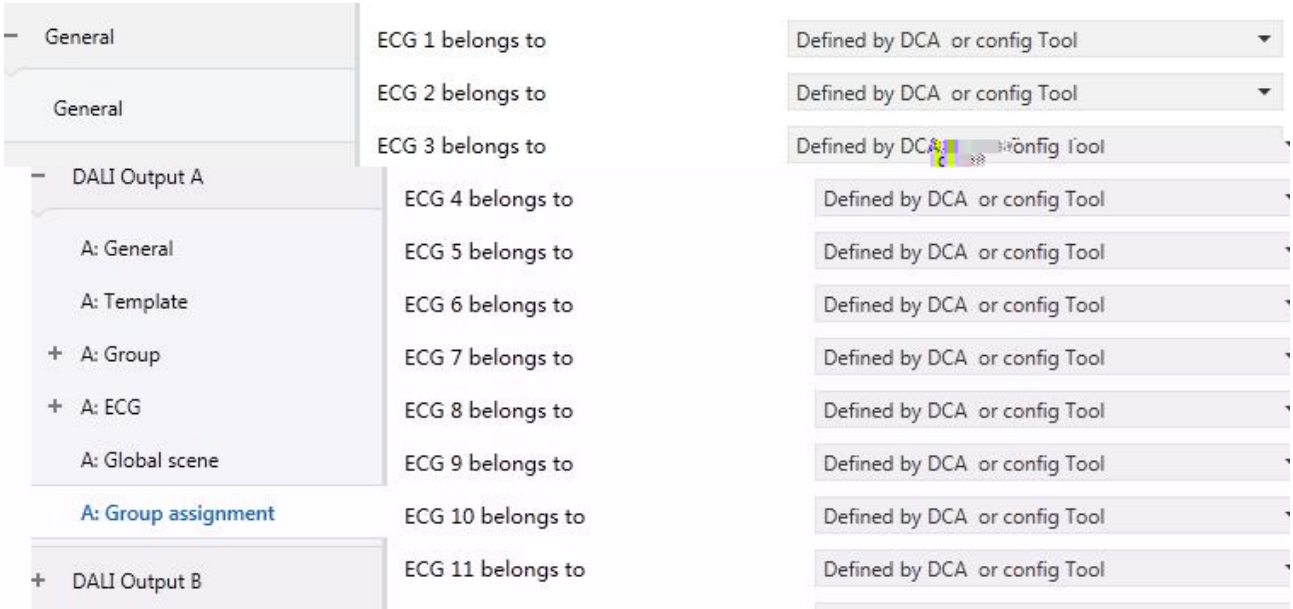
k

k

5.7 “X: Group assignment (X=A,B)”

k

k



ECG x belongs to (x=1..64)

k

Defined by DCA or config Tool

Group 1

...

Group 16

None

k

ETS **k**

k

k

k

k

k

C **W**

R **T** **U**

k

DALI **DALI** **1.2k**

7

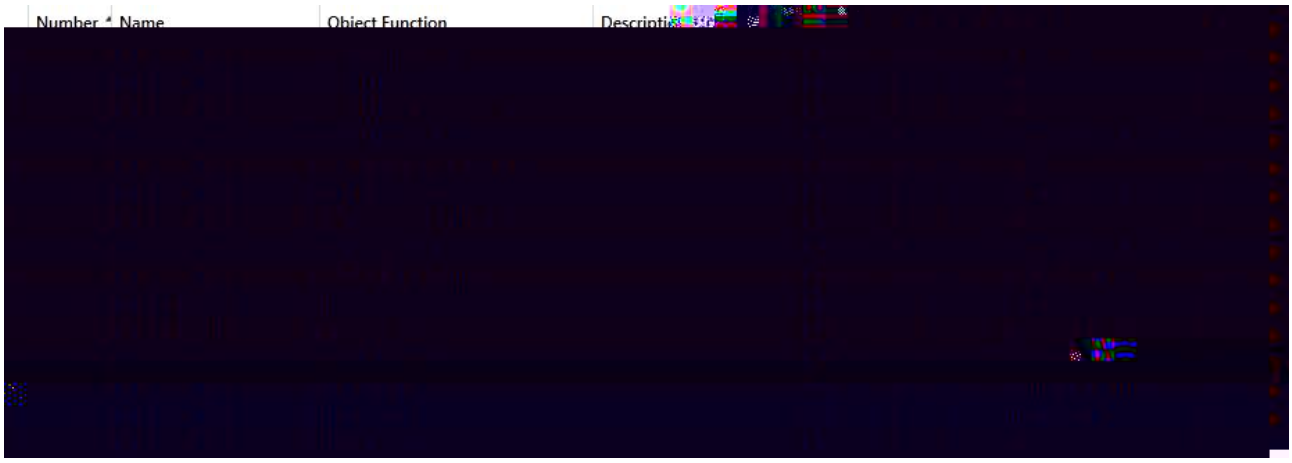
k

6.1

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
2027	General	In operation			1 bit	C	R	-	T	-	switch	Low

2027	**General**	**In operation**	**1bit**	**C,R,T**	**1.001 switch**
					k

6.2



3	Output X - General	Activate Night mode	1bit	C,W	1.010 start/stop
		k			
4	Output X - General	General failure	1bit	C,R,T	1.005 alarm
		k			k
6	Output X - General	General failure exceeds threshold	1bit	C,R,T	1.005 alarm
			k		
7	Output X - General	General failure in Total	1byte	C,R,T	5.010 counter pulses(0..255)
		k			
	ECG		ECG		k
7	Output X - General	General failure in %	1byte	C,R,T	5.001 percentage(0..100%)
			k		k
	ECG		ECG		k
8	Output X - General	Lamp failure exceeds threshold	1bit	C,R,T	1.005 alarm
			k		

9	Output X - General	Lamp failure in Total	1byte	C,R,T	5.010 counter pulses(0..255)
		k			
9	Output X - General	Lamp failure in %	1byte	C,R,T	5.001 percentage(0..100%)
			k		
10	Output X - General	ECG failure exceeds threshold	1bit	C,R,T	1.005 alarm
			k		
11	Output X - General	ECG failure in Total	1byte	C,R,T	5.010 counter pulses(0..255)
		k			
11	Output X - General	ECG failure in %	1byte	C,R,T	5.001 percentage(0..100%)
			k		
14	Output X - General	Lamp/ECG Failure status	1byte	C,W,T	238.600 diagnostic value

1. 1000 0011 131 ECG4 ECG

2. 0100 0010 66 ECG3

ECG3 1100 0010 194

ECG3 ECG 1000 0010 130

17	Output X - Broadcast	Switch	1bit	C,W	1.001 switch
k k ECG DALI ECG k					
18	Output X - Broadcast	Brightness value	1byte	C,W	5.001 percentage(0..100%)
k					
19	Output X - Scene	Scene recall/stored	1byte	C,W	18.001 scene control
k k k k k k					
20	Output X - General	DALI bus voltage	4byte	C,R,T	14.027 electric potential(V)
k					
21	Output X - General	DALI bus current	2byte	C,R,T	7.012 current(mA)
k					
22	Output X - General	DALI short circuit	1bit	C,R,T	1.005 alarm
k					

6.3

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
23	Output A - Group 1	Switch			1 bit	C		W	-	-	switch	Low
24	Output A - Group 1	Relative dimming			4 bit	C	-	W	-	-	dimming control	Low
25	Output A - Group 1	Brightness value			1 byte	C	-	W	-	-	percentage (0..100%)	Low
26	Output A - Group 1	Switch status			1 bit	C	R	-	T	-	switch	Low
27	Output A - Group 1	Brightness status			1 byte	C	R	-	T	-	percentage (0..100%)	Low
28	Output A - Group 1	Activate Burn In			1 bit	C	-	W	-	-	start/stop	Low
29	Output A - Group 1	Color Temperature setting			2 bytes	C	-	W	-	-	absolute colour temperature (K)	Low
30	Output A - Group 1	Color Temperature status			2 bytes	C	R	-	T	-	absolute colour temperature (K)	Low
31	Output A - Group 1	Scene			1 byte	C	-	W	-	-	scene control	Low
32	Output A - Group 1	Relative Color Temperature			4 bit	C	-	W	-	-	dimming control	Low

23 Output X - Group y Switch 1bit C,W 1.001 DPT_Switch

k

k k

24 Output X - Group y Relative dimming 4bit C,W 3.007 DPT_Control Dimming

k k

27	Output X - Group y	Brightness status	1byte	C,R,T	5.001 percentage(0..100%)
k k					
28	Output X - Group y	Activate Burn In	1bit	C,W	1.010 start/stop
k ! k k k					
29	Output X - Group y	Color Temperature setting	2bytes	C,W	7.600 absolute colour temperature(K)
k k					
30	Output X - Group y	Color Temperature status	2bytes	C,R,T	7.600 absolute colour temperature(K)
k					
31	Output X - Group y	Scene	1byte	C,W	18.001 scene control
k k					
32	Output X - Group y	Relative Color Temperature	4bit	C,W	3.007 DPT_Control Dimming

k

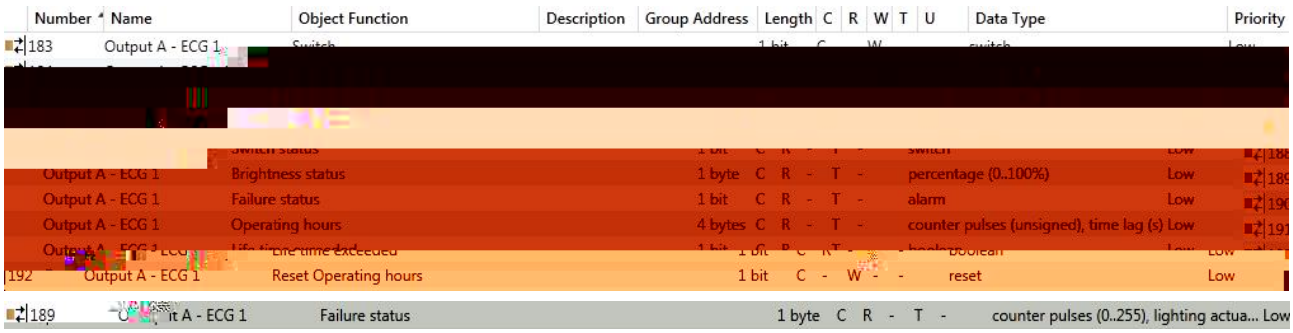
k

	0	1	2	3	4	5	6	7
	8	9	10	11	12	13	14	15

DALI k

6.4 DALI

k



183	**Output X - ECG y**	**Switch**	**1bit**	**C,W**	**1.001 DPT_Switch**
k k k					
184	**Output X - ECG y**	**Relative dimming**	**4bit**	**C,W**	**3.007 DPT_Control Dimming**
k k k					
185	**Output X - ECG y**	**Brightness value**	**1byte**	**C,W**	**5.001 percentage(0..100%)**
k					
186	**Output X - ECG y**	**Activate Burn In**	**1bit**	**C,W**	**1.010 start/stop**
k ! k k k					

187	Output X - ECG y	S