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**1 . SUMMARY**

KNX DALI-2 Gateway is designed for KNX intelligent building control system and used to connect KNX bus and DALI bus. As the interface between KNX installation system and DALI network, messages from the KNX bus can be converted into information that can be identified by the DALI device via this gateway. The information contains the DALI device address and command, and send to the DALI network to control the DALI device, thus to realize the functions of switching, dimming, brightness value and colour temperature of various lamps with DALI ballasts, while the DALI gateway can request the status of the DALI device. KNX DALI-2 Gateway can connect up to 64 DALI devices. Each DALI device can be controlled by a direct switching, dimming, brightness value, by using a KNX communication object. The assignment of DALI device addresses can be done manually or automatically. At the same time, we provide Legrand+DALI+Configurator tool for users to easily modify the address, test, and assign groups and scenes to the DALI device, etc.

**■ 1.1 DALI System Introduction**

In the same DALI network, there are up to 64 slave units, each with a separate address (Short address). It is also possible to assign a slave unit to a group (up to 16 groups can exist at the same time). The host can also send information to all slave units. The main features of the DALI protocol: asynchronous serial communication, 1200 baud rate, two-wire differential signal, a DALI bus can be connected to 64 slaves, each slave can be individually addressed, not two-way communication at the same time.

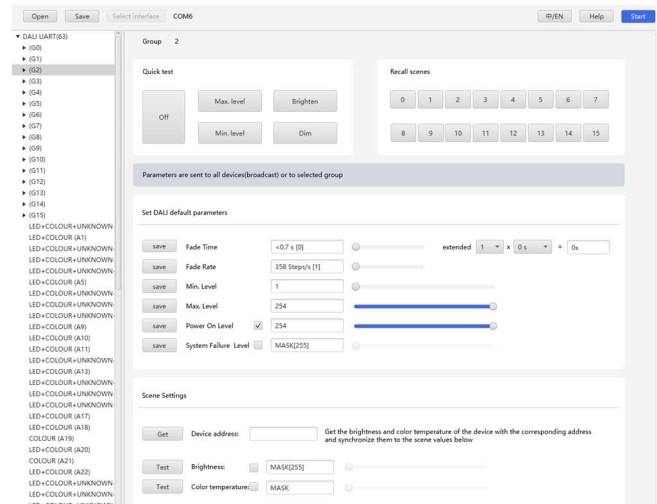
**■ 1.2 Product and Function Description**

KNX DALI-2 Gateway is a modular mounting device. For easy installation into the distribution box, it can be mounted on a 35 mm DIN-rail according to EN 60 715. The device is screwed to the electrical connection and the bus connection is directly through the KNX. Connect the terminal block and input the power supply voltage of 230Vac. For the assignment of physical addresses and parameter settings, the engineering tool software ETS (version ETS5.7.7 or higher) with the .knxprod file can be used. The main functions of the KNX DALI-2 Gateway are summarized as follows:

- Number of DALI devices: Max. 64, each DALI device can be individually switching, dimming, set brightness value, etc.

**1 . SUMMARY(continues)**

- Group control: up to 16 different groups. Assign DALI devices to groups via the Legrand+DALI+Configurator tool. And switching, dimming control, colour temperature for each group.



- 16 DALI scenes. And the brightness value of scenes are configured by the legrand+DALI+Configurator tool.
- Group scenes or global scenes in DALI channels can be recalled via KNX scenes.
- Broadcast control: brightness for all DALI devices.

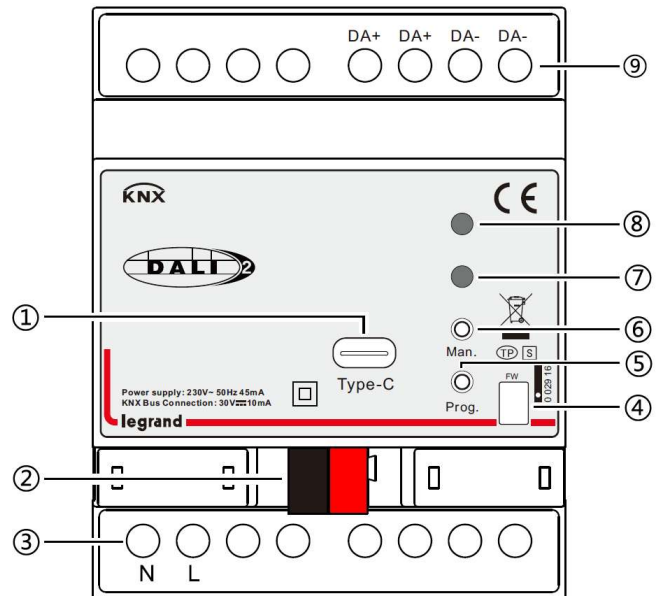
**2. TECHNICAL SPECIFICATIONS**

KNX Supply	Voltage: 30V DC, SELV
	Current consumption: < 10 mA
Mains supply	Voltage: 230VAC
	Frequency: 50Hz
	Current consumption: 45mA
DALI supply	Voltage: 16-18V DC
	Current: Max. 150 mA
DALI devices	Number of DALI devices: Max. 64
DALI Cable length:	1.5 mm <sup>2</sup> (Max. 300 m)
	0.75 mm <sup>2</sup> (Max. 150 m)
	0.5 mm <sup>2</sup> (Max. 100 m)
Mounting	Mounted on a standard 35mm DIN rail, DIN EN 60 715
Mechanical characteristics	IP 20
	Safety class II
	Number of modules: 4
	Weight: 260 g
Climate characteristics	Operating temperature: -5°C to +45°C
	Storage temperature: -25°C to +55°C
	Operating humidity: 5%~95%RH
Operating elements	Programming LED and button: physical address localization
	Manual button: activate the manual test

**3 . DIMENSION FUNCTIONAL AND CONNECTION DIAGRAM**

(continues)

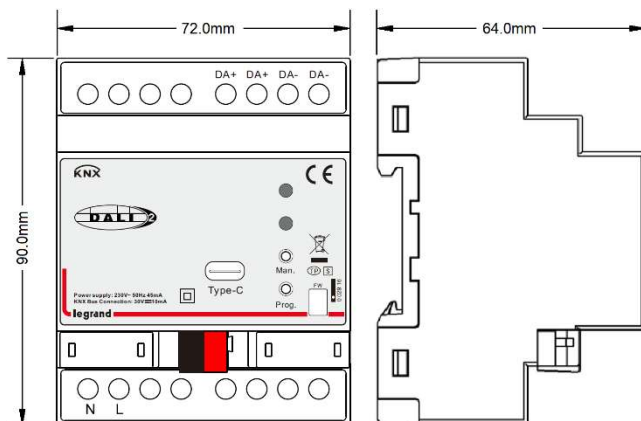
■ 3.2 Connection diagram



- ① USB Type- C interface for DALI configuration
- ② KNX BUS connection
- ③ Power supply
- ④ Firmware upgrade interface
- ⑤ KNX programming button: Short press to enter programming mode, long press 5s to restore factory Settings.
- ⑥ Manual mode button: Short press can realize the broadcast switch control of DALI equipment.
- ⑦ KNX programming LED indicator
- ⑧ Manual mode LED indicator
- ⑨ DALI BUS connection

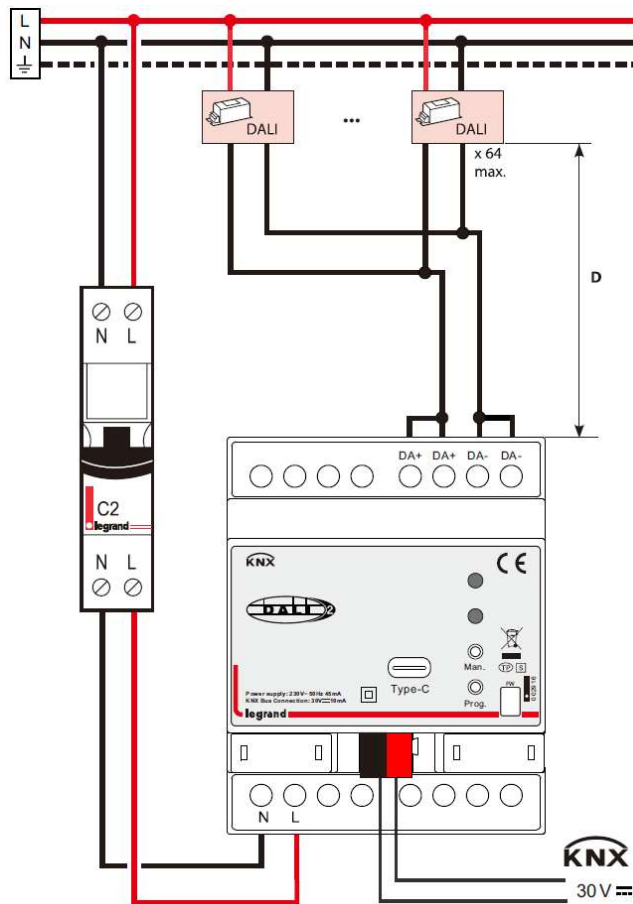
**3 . DIMENSION FUNCTIONAL AND CONNECTION DIAGRAM**


■ 3.1 Dimension diagram



3 . DIMENSION FUNCTIONAL AND CONNECTION DIAGRAM

(continues)



D	
≤ 100 m	0,5 mm <sup>2</sup>
≤ 150 m	0,75 mm <sup>2</sup>
≤ 300 m	1,5 mm <sup>2</sup>

4 . CONFIGURATION AND DEBUGGING STEPS

- Step 1:** Connect the wires correctly according to the wiring diagram in section 3.2.
- Step 2:** Install "Legrand DALI Installer.exe" on the computer. DALI software is available for download at [www.legrand.com](http://www.legrand.com)
- Step 3:** Connect the DALI-2 gateway and computer using a USB cable with Type-C and Type-A plugs, as shown in the wiring diagram in 5.2.
- Step 4:** Start the DALI2 configuration software of "Legrand DALI Configurator" and communicate with the DALI-2 gateway.
- Step 5:** Configure the address, lighting parameters, group, and scene of DALI devices.
- Step 6:** Disconnect the USB cable between the DALI-2 gateway and the computer.
- Step 7:** Launch ETS software and create KNX project, configure DALI-2 gateway parameters and group address, download physical address and application.

**5. DALI-2 GATEWAY CONFIGURATION SOFTWARE**

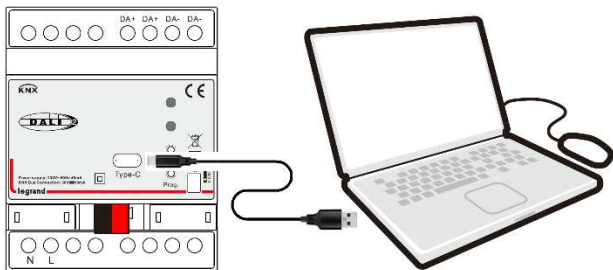
**■ 5.1 Function Overview**

Legrand+DALI+Configurator tool.exe is the configuration software for DALI-2 gateway. The overview of the functions of the configuration software is as follows:

- Import/Export Configuration.
- Initialize the DALI bus and assign addresses to DALI devices.
- Query the device status on the DALI bus and read the DALI device configuration.
- Supports switching operations on 64 DALI devices for a single channel.
- Assign groups to DALI devices and read all configurations of DALI devices.
- Support on/off operations on groups .
- Assign scenes and set scene brightness values for each DALI device.
- Address adjustment can be performed on devices that have already been assigned DALI addresses.

**■ 5.2 Connection diagram**

Connect the DALI-2 gateway and computer using a USB cable with Type-C and Type-A plugs.



**Note:** The DALI-2 gateway does not support USB cables with Type-C and Type-C plugs. After connecting the DALI-2 gateway to the computer using a USB cable, the DALI-2 gateway will prioritize communication with the computer through the USB port, and any activity on the KNX bus will be ignored. This also means that ETS software will not be able to operate the KNX function of the DALI-2 gateway.



**5. DALI-2 GATEWAY CONFIGURATION SOFTWARE(continues)**

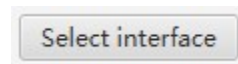
**■ 5.3 Language**

Legrand+DALI+Configurator tool provides language interfaces in Chinese and English, which can be switched by clicking on the icon in the upper right corner of the software.

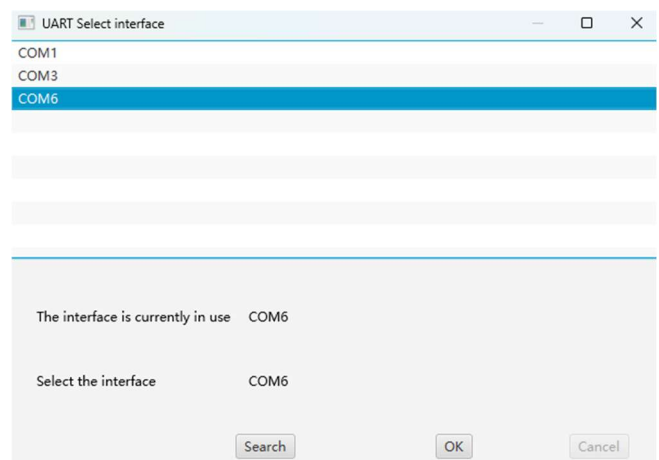


**■ 5.4 Configure software and DALI-2 gateway communication**

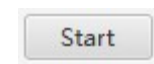
- Click the Selection interface button in the upper left corner of the configuration software



- Search and confirm the selection of USB interface



- Click the Start button in the upper right corner

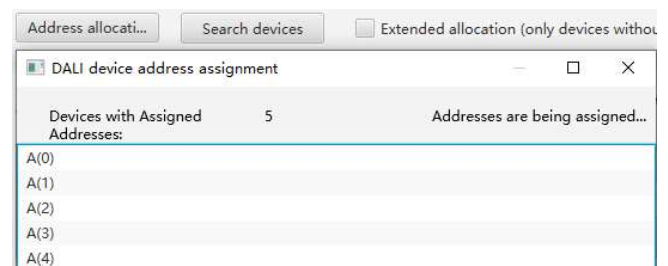


**■ 5.5 DALI device address assignment**

- Click the Address allocation button

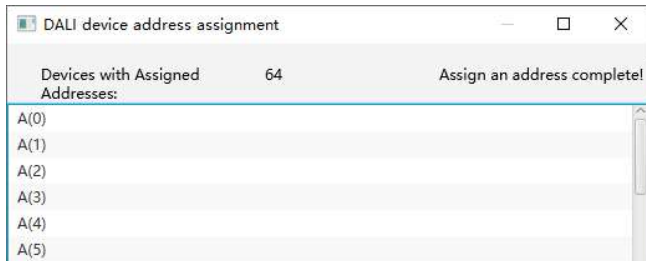


- The configuration software will automatically assign an address to each DALI device. The address assignment time is about 6 minutes and 30 seconds, during which other functions of the software cannot be operated.



**5. DALI-2 GATEWAY CONFIGURATION SOFTWARE(continues)**

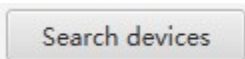
- Wait for the configuration software to prompt for address allocation completion information and close the address allocation interface.



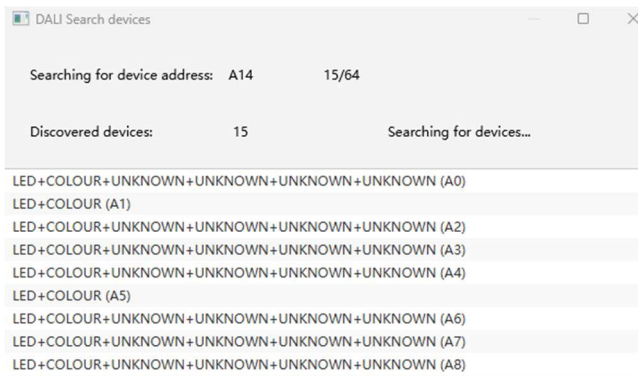
**Note:** The address allocation of DALI devices follows the DALI-2 protocol to randomly allocate addresses. Each time an address allocation operation is performed, the assigned device address may be different from the previously assigned address.

**5.6 Search DALI devices**

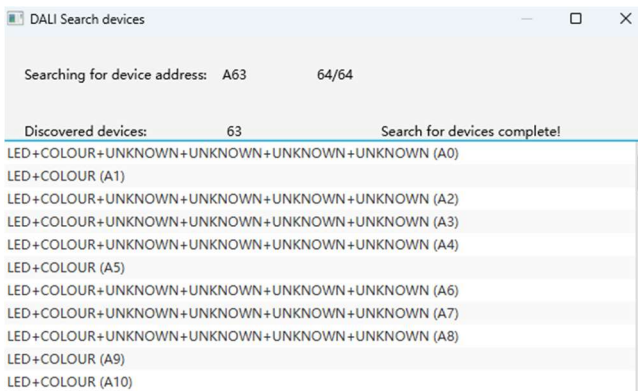
- Click the Search devices button



- The configuration software will search for devices in the DALI system that have already been assigned addresses. The device search time is about 1 minute and 30 seconds, during which other software functions cannot be operated.



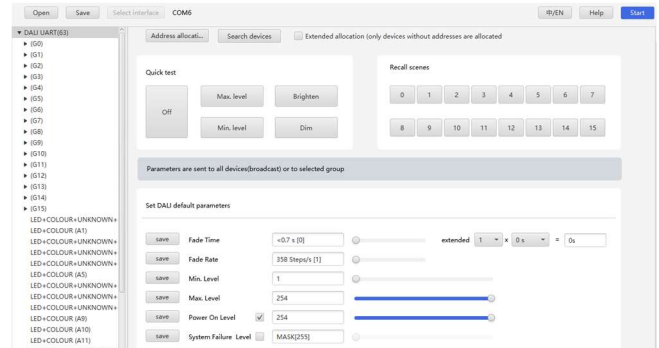
- Search devices completed, close the search interface.



**5. DALI-2 GATEWAY CONFIGURATION SOFTWARE(continues)**

**5.7 Main functional area and parameter editing area**

After closing the search device interface, the software will display the following interface.



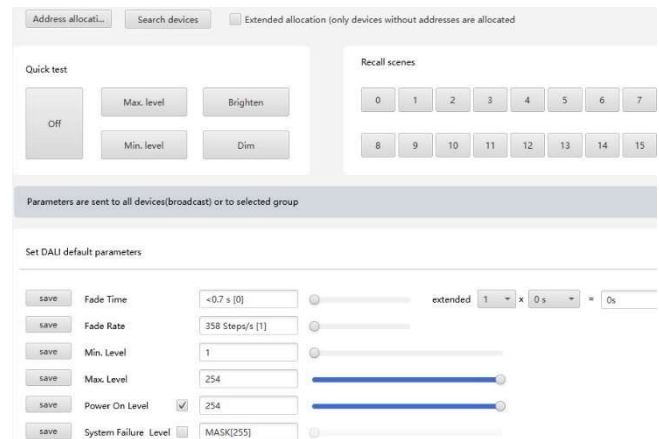
- The left side of the software interface displays the main function operation area.
  - Broadcast
  - Group
  - Individual lamp
- The parameter editing operation interface of the main functional area is displayed on the right side of the software interface.

**5.7.1 Broadcast debugging**

Please click on the left broadcast icon



The broadcast control interface will be displayed on the right side.



- Quick test
  - Max.level: Turn all the lights to their Max level
  - Min.level: Turn all the lights to the Min level
  - Brighten: Dimming up
  - Dim: Dimming down

5. DALI-2 GATEWAY CONFIGURATION SOFTWARE(continues)

- Recall scene: 0-15.
- Set DALI default parameters:
  - Fade Time: 0.7[0] - 90.5[15]
    - Extended: (1-16) x (0, 100ms, 1s, 10s, 1min)
  - Fade Rate: 1-15
  - Min.Level: 1-254
  - Max.Level: 1-254
  - Power On Level: 0-254
  - System Failure Level: 0-254

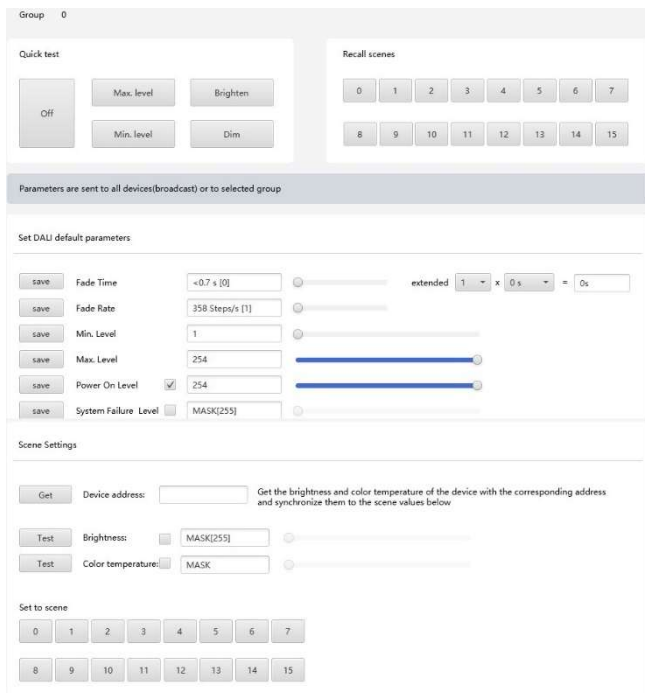
**Note:**

- The fade time used in the default parameters of DALI (<0.7s [0], extended 1x0s=0s) may result in dimming jumps, Please set the extended time ≥100ms.
- The fade time in the default parameters of DALI is used (0.7 s [1]), and there may be a delay in dimming time.
- After each change, please click the save button on the left to save the settings.

■ 5.7.2 Group debugging

Click on the group icon on the left: (G0) – (G15)

The group control interface will be displayed on the right side.



- Quick test
  - Max.level: Turn all the lights to their Max level
  - Min.level: Turn all the lights to the Min level
  - Brighten: Dimming up
  - Dim: Dimming down
  - Recall scene: 0-15.

5. DALI-2 GATEWAY CONFIGURATION SOFTWARE(continues)

- Set DALI default parameters:
  - Fade Time: 0.7[0] - 90.5[15]
    - Extended: (1-16) x (0, 100ms, 1s, 10s, 1min)
  - Fade Rate: 1-15
  - Min.Level: 1-254
  - Max.Level: 1-254
  - Power On Level: 0-254
  - System Failure Level: 0-254
- Scene Setting
  - Get Device address: Get the brightness and color temperature of the device with the corresponding address and synchronize them to the scene values below.
  - Test Brightness: 0-254
  - Test Color temperature: 2000K-7000K
  - Set to scene: 0-15

**Note:**

- The fade time used in the default parameters of DALI (<0.7s [0], extended 1x0s=0s) may result in dimming jumps, Please set the extended time ≥100ms.
- The fade time in the default parameters of DALI is used (0.7 s [1]), and there may be a delay in dimming time.
- After each change, please click the save button on the left to save the settings.

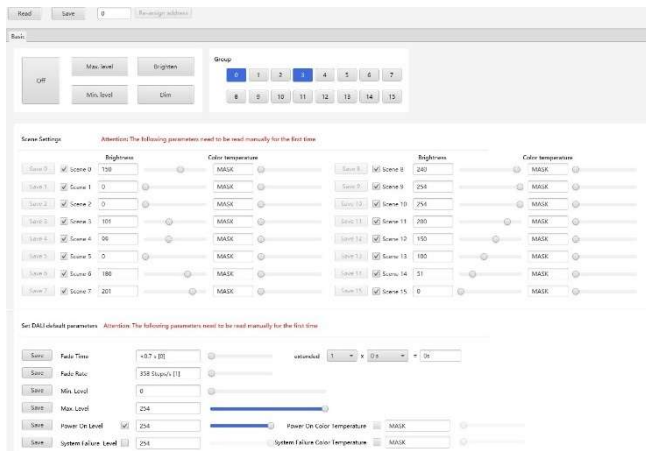
■ 5.7.3 Individual lamp debugging

Click on the independent light in the left list:



**5. DALI2 GATEWAY APPLICATION DESCRIPTION(continues)**

The independent light control interface will be displayed on the right side.



- Quick test
  - Max.level: Turn all the lights to their Max level
  - Min.level: Turn all the lights to the Min level
  - Brighten: Dimming up
  - Dim: Dimming down
- Group: You can set the independent light to the scene of 0-15.
- Scene Settings
  - You can set the brightness and color temperature of independent lights in the scene.
  - Brightness: 0-254
  - Color temperature: 2000K-7000K
- Set DALI default parameters:
  - Fade Time: 0.7[0] - 90.5[15]
    - Extended: (1-16) x (0, 100ms, 1s, 10s, 1min)
  - Fade Rate: 1-15
  - Min.Level: 1-254
  - Max.Level: 1-254
  - Power On Level: 0-254
  - System Failure Level: 0-254

**Note:**

- The fade time used in the default parameters of DALI (<0.7s [0], extended 1x0s=0s) may result in dimming jumps, Please set the extended time ≥100ms.
- The fade time in the default parameters of DALI is used (0.7 s [1]), and there may be a delay in dimming time.
- After each change, please click the save button on the left to save the settings.

**6. ETS SYSTEM PARAMETER SETTINGS**

**6.1 ECG General**

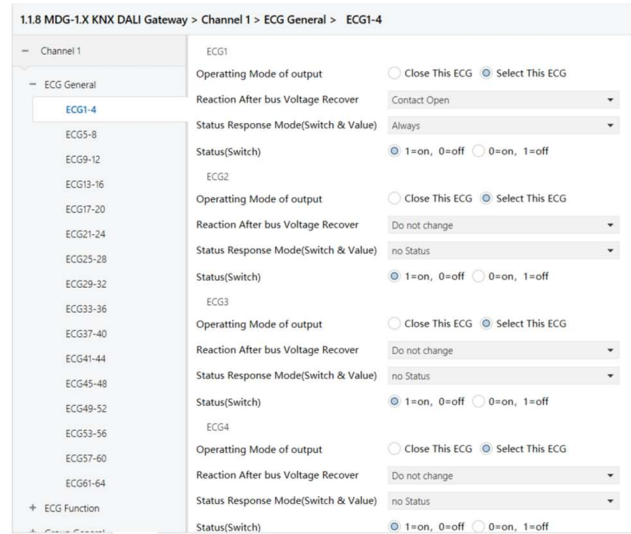


Figure 6.1 Parameter setting interface“ECG General”

**Argument“Operating Mode of output”**

This parameter selects the mode of operation of the output, whether to turn off or turn on the single light control.

Optional:

Close This ECG

Select This ECG

Close This ECG: Disable this single light channel.

Select This ECG: Enable this single light channel.

The following parameter Settings are displayed only when single light control is enabled.

**Argument“Reaction After bus Voltage Recover”**

This parameter defines the bus response after a power-off reset.

Optional:

Do not change

Contact Open

Contact Closed

Contact Brightness Value

Do not change: The light status does not change when the bus is powered on.

Contact Open: Turn off the light when the bus is powered on.

Contact Closed: Turn on the lights when the bus is powered on.

Contact Brightness Value: Set the lamp brightness value when the bus is powered on.

One of the following parameters appears when Contact Brightness Value is selected.

**6. ETS SYSTEM PARAMETER SETTINGS(continues)**

**Argument“Reaction of Contact Brightness Value”**

This parameter defines the brightness value after power-on.

Optional:

0...100%

**Argument“Status Response Mode(Switch & Value)”**

This parameter selects the mode of the feedback response.

Optional:

- no Status
- Only After Change
- Always

No Status: There's been no status feedback.

Only After Change: Feedback only after a state change.

Always: Feedback on any state.

**Argument“Status(Switch)”**

This parameter selects the data type of the feedback

Optional:

- 1=on,0=off
- 0=on,1=off

The general Settings for single lights 1 to 64 are described above.

**■ 6.2 ECG Function**

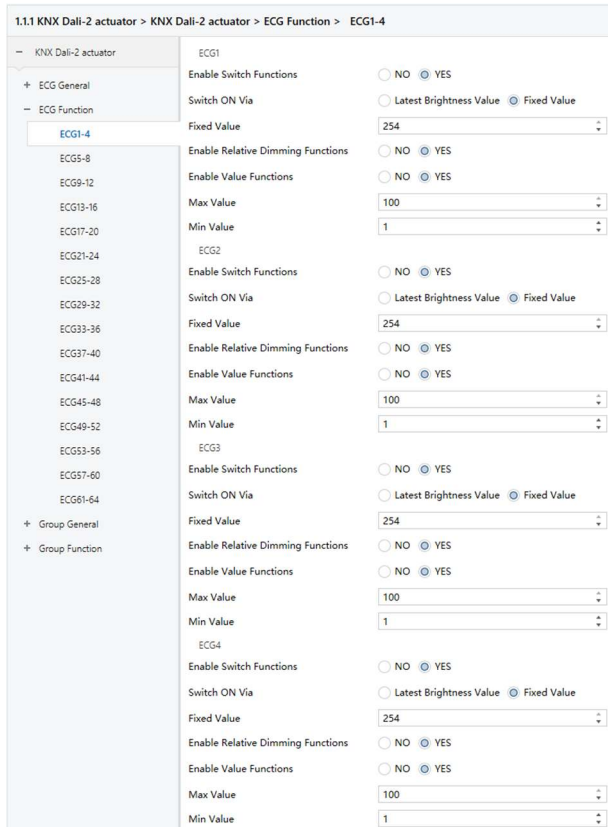


Figure 6.2 Parameter setting interface“ECG Function”

**6. ETS SYSTEM PARAMETER SETTINGS(continues)**

**Argument“Enable Switch Function”**

This parameter enables the on/off function.

Optional:

- Yes
- No

Yes: Enable the single light function

No: Disable the single light function

**Argument “Switch ON Via”**

What default brightness switch ON is used for this parameter .

Optional:

- Latest Brightness Value
- Fixed Value

Latest Brightness Value: Brightness before the last shutdown

Fixed Value: Fixed value of 0-255

**Argument “Enable Relative Dimming Functions”**

This parameter indicates whether to activate relative dimming

Optional:

- Yes
- No

Yes: Enable Relative Dimming Functions

No: Disable Relative Dimming Functions

**Argument “Enable Value Functions”**

This parameter is the activation value for dimming function

Optional:

- Yes
- No

Yes: Enable value for dimming function

No: Disable value for dimming function

**Argument“Max Value”**

This parameter sets the upper limit of the dimming brightness.

Optional:

0...100%

**Argument“Min Value”**

This parameter sets the lower limit of the dimming brightness.

Optional:

0...100%

The function Settings of single light 1~64 are described above.

## 6. ETS SYSTEM PARAMETER SETTINGS(continues)

### 6.3 Group General(Group general Settings)

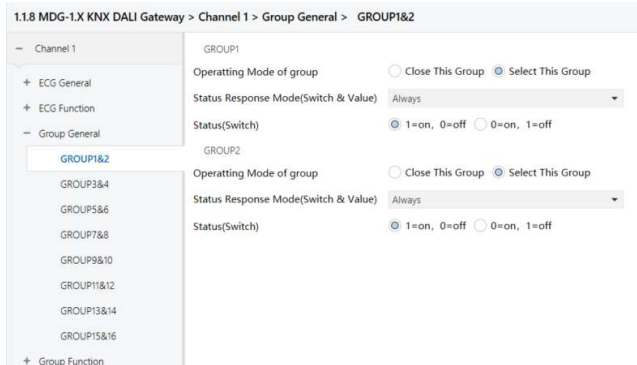


Figure 6.3 Parameter setting interface "Group General"

#### Argument "Operating Mode of group"

This parameter selects how the output works, whether the group control is turned off or on.

Optional:

- Close This Group
- Select This Group

Close This Group: Turn off the group control parameter

Select This Group: Open the group control parameters

The following parameters are displayed only when Enable group control is selected.

#### Argument "Status Response Mode(Switch & Value)"

This parameter selects the mode in which the feedback response is sent.

Optional:

- No Status
- Only After Change
- Always

No Status: There's been no status feedback

Only After Change: Feedback only after a state change

Always: Feedback on any state

#### Argument "Status(Switch)"

This parameter selects the data type of the feedback

Optional:

- 1=on, 0=off
- 0=on, 1=off

The general Settings for groups 1 through 16 are described above.

## 6. ETS SYSTEM PARAMETER SETTINGS(continues)

### 6.4 Group Function(Group function Settings)

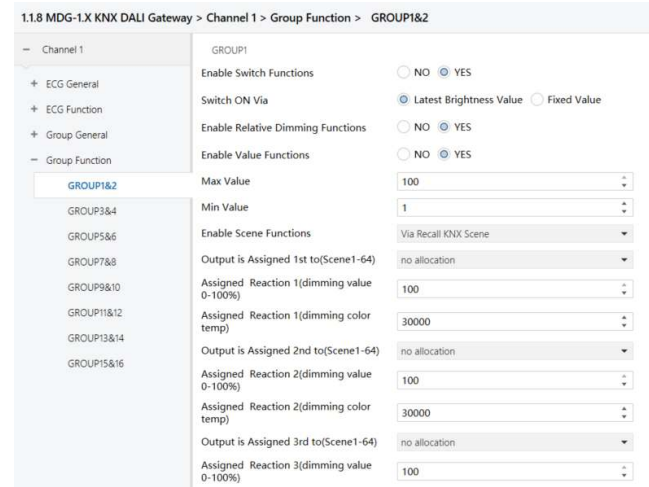


Figure 6.4 Parameter setting interface "Group Function"

#### Argument "Enable Switch Functions"

This parameter enables the on/off function.

Optional:

- Yes
- No

Yes: Enabling the Group function

No: Disable the Group function

#### Argument "Switch ON Via"

This parameter selects the brightness when the lamp is turned on.

Optional:

- Latest Brightness Value
- Fixed Value

Latest Brightness Value: Preset the brightness of the last dimming value.

Fixed Value: At a fixed brightness value.

One of the following parameters appears when the Fixed Value option is selected.

#### Argument "Fixed Value"

This parameter sets the fixed brightness value when turned on.

Optional:

- 0...100

#### Argument "Enable Relative Dimming Functions"

This parameter is whether to set relative dimming.

Optional:

- Yes
- No

**6. ETS SYSTEM PARAMETER SETTINGS(continues)**

Yes: Enable the group relative dimming function

No: Disable the group relative dimming function

**Argument“Enable Value Functions”**

This parameter is whether to set value dimming.

Optional:

Yes

No

Yes: Enable the group value dimming function

No: Disable the group value dimming function

The following two parameters appear when the Yes option is selected.

**Argument“Max Value”**

This parameter sets the upper limit of the dimming brightness.

Optional:

0...100%

**Argument“Min Value”**

This parameter sets the lower limit of the dimming brightness.

Optional:

0...100%

**Argument“Enable Scene Functions”**

This parameter is set to enable the scene function.

Optional:

Disable

Via Recall KNX Scene

Via Recall Dali Scene

Disable: The scenario function is disabled

Via Recall KNX Scene: Using KNX internal scene (The KNX scene is configured in ETS software)

Via Recall Dali Scene: Upper airport view using DALI(The DALI scene needs to be configured on the DALI host software)

The following three parameters appear when the Via Recall KNX Scen option is selected.

**Argument“Output is Assigned 1st to(Scene1-64)”**

This parameter is used to assign a KNX scene number to the DALI scene (the KNX scene number to which the first DALI scene is assigned).

Optional:

No allocation

Scene1

...

Scene 64

no allocation: DALI scene x Not used

Scene1 ... Scene64: Put the KNX scene number y (1...64)

**6. ETS SYSTEM PARAMETER SETTINGS(continues)**

Assigned to DALI Scene x

**Argument“Assigned Reaction 1 (dimming value 0-100%)”**

This parameter is used to set the dimming value of the lights in the scene.

Optional:

0...100%

**Argument“Assigned Reaction 1 (dimming color temperature 0-65535)”**

This parameter is used to set the color temperature of the light in the scene.

Optional:

0..65535

Each group can set up to 10 scenes, and the functional Settings and KNX scene Settings for groups 1 to 16 are described above.

**The following parameters appear when the Via recall DALI scene option is selected.**

Enable Scene Functions	Via Recall Dali Scene
Dali Scene 1:KNX Scene Num	Scene1
Dali Scene 2:KNX Scene Num	Scene2
Dali Scene 3:KNX Scene Num	Scene3
Dali Scene 4:KNX Scene Num	Scene4
Dali Scene 5:KNX Scene Num	Scene5
Dali Scene 6:KNX Scene Num	Scene6
Dali Scene 7:KNX Scene Num	Scene7
Dali Scene 8:KNX Scene Num	Scene8
Dali Scene 9:KNX Scene Num	no allocation
Dali Scene 10:KNX Scene Num	no allocation
Dali Scene 11:KNX Scene Num	no allocation
Dali Scene 12:KNX Scene Num	no allocation
Dali Scene 13:KNX Scene Num	no allocation
Dali Scene 14:KNX Scene Num	no allocation
Dali Scene 15:KNX Scene Num	no allocation
Dali Scene 16:KNX Scene Num	no allocation

**Argument“Dali Scene 1:KNX Scene Num”**

This parameter is used to set the trigger KNX scene number of this DALI scene. Optional:

No allocation

Scene1

...

Scene 64

no allocation: DALI scene x Not used

Scene1 ... Scene64: Put the KNX scene number y (1...64)

Assigned to DALI Scene x Each group can be configured with 16 DALI scene. The functional Settings and DALI scene Settings for groups 1 to 16 are described above.

**7. DESCRIPTION OF COMMUNICATION OBJECTS**

The communication object is the means for communicating with other devices on the bus, that is, only the communication object can communicate with the bus.

Note: In the "Flag" column of the table below, "C" indicates that the communication function of the enabled object is enabled; "W" indicates that the value of the object can be written from the bus; "R" indicates that the value of the object can be read by other devices; "T" indicates that the object has a transmission function; "U" indicates that the value of the object can be updated.

Number	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
1	Dali Scene	Dali Scene			1 byte	C	-	W	-	U	scene number	Low
2	Dali Status	Dali Status			1 byte	C	R	-	T	-	diagnostic value	Low
3	Broadcast Control	Broadcast Control			1 byte	C	-	W	-	U	percentage (0..100%)	Low
4	ECG1	Switch			1 bit	C	-	W	-	U	switch	Low
5	ECG1	Status Of Switch			1 bit	C	R	-	T	-	switch	Low
6	ECG1	Value			1 byte	C	-	W	-	U	percentage (0..100%)	Low
7	ECG1	Status Of Value			1 byte	C	R	-	T	-	percentage (0..100%)	Low
8	ECG1	Relative Dimming			4 bit	C	-	W	-	U	dimming control	Low
324	GROUP1	Switch			1 bit	C	-	W	-	U	switch	Low
325	GROUP1	Status Of Switch			1 bit	C	R	-	T	-	switch	Low
326	GROUP1	Value			1 byte	C	-	W	-	U	percentage (0..100%)	Low
327	GROUP1	Status Of Value			1 byte	C	R	-	T	-	percentage (0..100%)	Low
328	GROUP1	Relative Dimming			4 bit	C	-	W	-	U	dimming control	Low
329	GROUP1	Color Temperature			2 bytes	C	-	W	-	U	absolute colour temperature (K)	Low
330	GROUP1	Color Temperature S...			2 bytes	C	R	-	T	-	absolute colour temperature (K)	Low
331	GROUP1	8 bit Scene input			1 byte	C	-	W	-	U	scene number	Low

**7.1 "DALI Scene" communication object**

Number	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
1	Dali Scene	Dali Scene			1 byte	C	-	W	-	U	scene number	Low
2	Dali Status	Dali Status			1 byte	C	R	-	T	-	diagnostic value	Low

Number	Object function	Name	Length	Logo	Date Type
1	Dali Scene	Dali Scene	1Byte	C,W,U	Scene number
This communication object is used to send the scene numbers ranging from 1 to 64 to the upper-level mechanism for the scene (group control) to be determined.					
2	Dali Status	Dali Scene	1Byte	C,R,T	diagnostic value
This communication object is used to receive feedback data from ballasts or lamps failures.					

**7.2 "Broadcast Control" communication object**

Number	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
3	Broadcast Control	Broadcast Control			1 byte	C	-	W	-	U	percentage (0..100%)	Low

Number	Object function	Name	Length	Logo	Date Type
3	Broadcast Control	Broadcast Control	1Byte	C,W,U	percentage (0.100%)
This communication object is used to control the brightness of the lamps (for by broadcast control). Percentage: 0 - 100%					

**7. DESCRIPTION OF COMMUNICATION OBJECTS(continues)****■ 7.3 "Single Lamp Control" communication object**

Number ▲	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
4	ECG1	Switch			1 bit	C	-	W	-	U	switch	Low
5	ECG1	Status Of Switch			1 bit	C	R	-	T	-	switch	Low
6	ECG1	Value			1 byte	C	-	W	-	U	percentage (0..100%)	Low
7	ECG1	Status Of Value			1 byte	C	R	-	T	-	percentage (0..100%)	Low
8	ECG1	Relative Dimming			4 bit	C	-	W	-	U	dimming control	Low

Number	Object function	Name	Length	Logo	Date Type
4	Switch	ECG1-64	1bit	C,W,U	switch
The communication object is used to send a single lamp switch control command to the bus. Value: 0 - 1					
5	Status Of Switch	ECG1-64	1bit	C,R,T	switch
The communication object is used to receive the status feedback value indicating whether a single lamp is on or off. Value: 0 - 1					
6	Value	ECG1-64	1byte	C,W,U	percentage (0.100%)
The communication object is used to send the absolute dimming value of a single lamp's brightness to the bus. Percentage: 0 - 100%					
7	Status Of Value	ECG1-64	1byte	C,R,T	percentage (0.100%)
The communication object is used to receive the status value of the single lamp's brightness feedback. Percentage: 0 - 100%					
8	Relative Dimming	ECG1-64	4bit	C,W,U	dimming control
The communication object is used to send the relative dimming value of the single lamp brightness to the bus. Dimming control: increase or decrease proportion					

**7. DESCRIPTION OF COMMUNICATION OBJECTS(continues)****■ 7.4 "Light Group Control" communication object**

Number	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
324	GROUP1	Switch			1 bit	C	-	W	-	U	switch	Low
325	GROUP1	Status Of Switch			1 bit	C	R	-	T	-	switch	Low
326	GROUP1	Value			1 byte	C	-	W	-	U	percentage (0..100%)	Low
327	GROUP1	Status Of Value			1 byte	C	R	-	T	-	percentage (0..100%)	Low
328	GROUP1	Relative Dimming			4 bit	C	-	W	-	U	dimming control	Low
329	GROUP1	Color Temperature			2 bytes	C	-	W	-	U	absolute colour temperature (K)	Low
330	GROUP1	Color Temperature S...			2 bytes	C	R	-	T	-	absolute colour temperature (K)	Low

Number	Object function	Name	Length	Logo	Date Type
324	Switch	GROUP1-16	1bit	C,W,U	switch
The communication object is used to send the light group switch control command to the bus. Value: 0 - 1					
325	Status Of Switch	GROUP1-16	1bit	C,R,T	switch
The communication object is used to receive the feedback value of the status of the lamp group's on/off operation. Value: 0 - 1					
326	Value	GROUP1-16	1byte	C,W,U	percentage (0.100%)
The communication object is used to send the absolute dimming value of the light group brightness to the bus. Percentage: 0 - 100%					
327	Status Of Value	GROUP1-16	1byte	C,R,T	percentage (0.100%)
The status value used by the communication object to receive the feedback on the brightness of the lamp group. Percentage: 0 - 100%					
328	Relative Dimming	GROUP1-16	4bit	C,W,U	dimming control
The communication object is used to send the relative dimming value of the light group brightness to the bus. Dimming control: increase or decrease the proportion					
329	Color Temperature	GROUP1-16	2byte	C,W,U	absolute colour temperature (K)
The communication object is used to send the absolute dimming value of the color temperature of the light group to the bus. Color temperature control: 0 - 65535K (The actual sent value depends on the color temperature supported by the lamp)					
330	Color Temperature Status	GROUP1-16	2byte	C,R,T	absolute colour temperature (K)
The communication object is used to receive the status value of the color temperature feedback from the lighting group. Color temperature control: 0 - 65535 K					

**■ 7.5 "Lighting Group Scene" communication object**

Number	Name	Object Function	Linked with	Other Linked Groups	Length	C	R	W	T	U	Data Type	Priority
331	GROUP1	8 bit Scene input			1 byte	C	-	W	-	U	scene number	Low

Number	Object function	Name	Length	Logo	Date Type
331	8 bit Scene input	GROUP1	1byte	C,W,U	Scene number
This communication object is used to send the 1-64 scene numbers to invoke the scene (group control) defined by the upper-level mechanism or to set the scene (group control) on KNX. Scene number 1-64					