DALI-Config

Startup Guide

DALI-2 Configuration Tool

Commissioning of DALI-components

bus power supply : 80mA

DALI-Config

Content

1. Software Installation

1.1. Requirements

For the connection from your PC to a DALI-line an interface is required. DMUmini is the interface available that are supported by the DALI-Config software. The DALI-Config software has been tested under Windows 7/Windows 10/Windows 11(32-bit and 64-bit). Download the latest software version from our website.

1.2. Installation

The DALI-Config software is a configuration tool, double-click the '**DALI-Config x.x setup.exe**' to start the installation process. Please don't choose the '**system disk**' as the installation path, If installed on the '**system disk**', due to permission issues, it is easy to cause work abnormalities. Other options can be set to default. After installation, insert DMUmini into the USB port of your computer then open the DALI-Config software.

- If the icon of ' 🖥 DALI BUS ' is found and shown automatically in the component tree, it means install success.
- If the icon of ' 🖥 DALI BUS ' don't appear in the component tree. Please install '**CP210x_Windows_Drivers**'(download the latest software version from our website). After install '**CP210x_Windows_Drivers**'. Restart your computer and then try again, if the icon of ' 🖥 DALI BUS ' is found and shown automatically in the component tree, it means install success. if no success, it might be that your computer has blocked this software. You need to set the relevant security permissions in the '**Settings**' interface of your computer.

After installation is finished you will find a DALI-Config folder in the start menu entries.

2. System Preparation

2.1 Build connection to the DALI-System

Connect the PC to the DALI-line via DMUmini interface, connect the 'DA+' and 'DA-'of the DMUmini to the DALI-line. If the connection between DMUmini and DALI-Config is OK, ' 🖥 DALI BUS ' interface will be found and shown automatically in the component tree. After having started the DALI-Config software, left click '**Scan**'-button to scan already defined DALI addresses and group dependencies on the DALI-line.

If the icon of ' 🖥 DALI BUS 'don't appear, check the connection between your PC and the DMUmini interface, please close the DALI-Config software. Connect DMUmini to your PC and start the DALI-Config software again.

2.2 Installation example
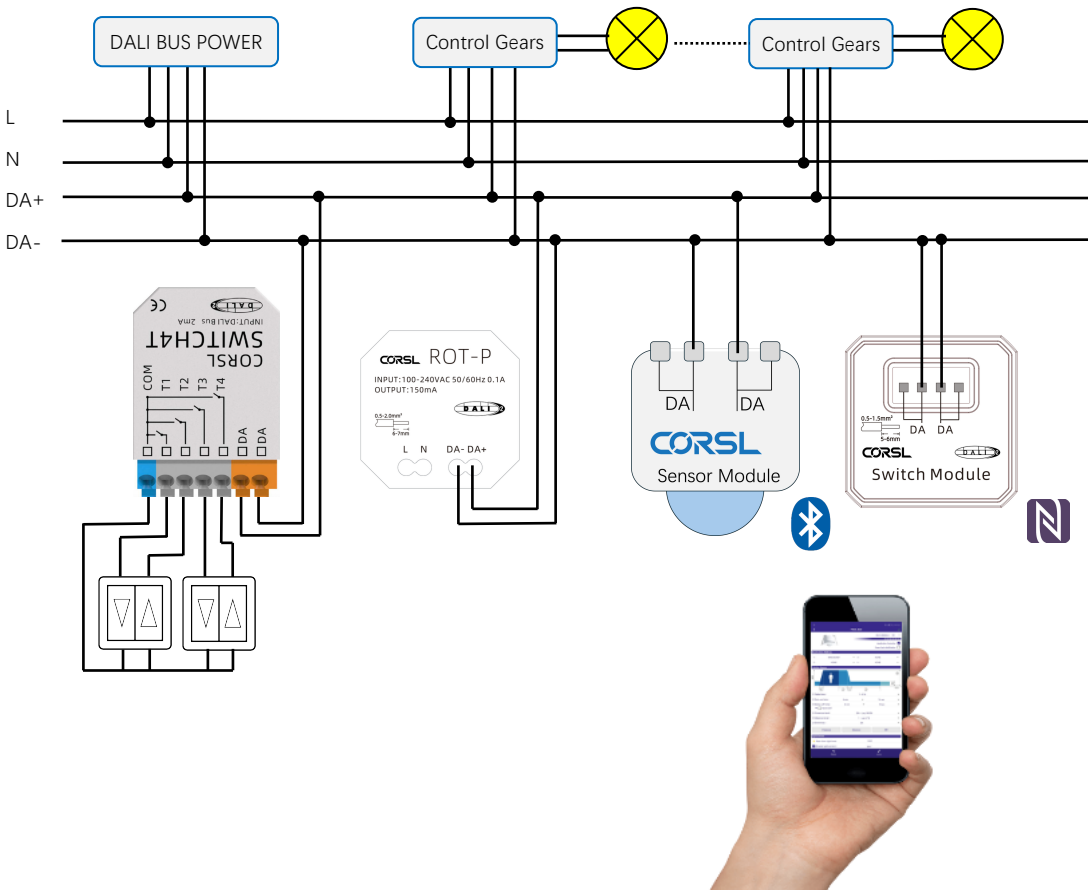
Only one DALI Bus Power can supply on the DALI-line, The DALI Bus Power of DMUmini can supply is 80mA. if any device integration DALI Bus Power supply on the DALI-line, The DALI Bus Power of DMUmini will automatically close. If no DALI Bus Power supply on the DALI-line, the DALI Bus Power of DMUmini will automatically be opened..

When DALI device has no address, you can operate it by broadcast. Before configuration, you need to address them first.

2.3 DMUmini Page

Parameter Block(After Configuration, you need to click 'Save'-button on the right side to save)	
Max Level	Configuration the selected control gear's max level from the drop-down menu on the right side
Min Level	Configuration the selected control gear's min level from the drop-down menu on the right side
Power ON Level	From the drop-down menu on the right side, Configuration the brightness of the selected control gears after its power supply back to normal."255" is a special numerical, it means the brightness after the normal power supply is the brightness before the power supply off
System Failure Level	From the drop-down menu on the right side, Configuration the brightness of the selected control gears when it's DALI-line is abnormality."255" is a special numerical, it means the brightness when the DALI-line abnormality is the brightness before DALI-line abnormality
Fade Time	The time from one brightness to another brightness of the selected control gears, the larger the value, the slower the change
Fade Rate	For the selected control gears, continue dimming for 200ms, the smaller the value, the greater of the brightness variation within 200ms

Light Level Block	
Button	Description
Up	dim up (using fade rate) for the selected control gears
Step Up	Increases light level by one increment for the selected control gears, If the current state is off, keep off
Down	dim down (using fade rate) for the selected control gears
Step Down	decreases light level by one increment for the selected control gears, If the current state is Min level, keep Min level
On And Step Up	for the selected control gears, increases light level by one increment, if OFF switch Min
Step Down And off	for the selected control gears, decreases light level by one increment, if Min switch OFF
Max	for the selected control gears, recalls MAX value
Min	for the selected control gears, recalls MIN value
Off	close the selected control gears
Send	Drag the slider to the desired location, then click 'Send'-button
Recall	Select the scene on the right drop-down menu , Then click 'Recall'-button, the selected control gears will goto the scene.

3. Test Communication

Selection of the effective range first: broadcast , groups, individual addresses。Then you can click Save, Up, Step Up, Down, Step Down, On And Step Up, Step Down And Off, Max, Min, Off, Send, Recall button.

keep the parameters of the 'Destination Address', delete the address of 'Destination Address'

keep the address of 'Destination Address', Reset' the parameters of 'Destination Address'

Before starting commissioning, the DALI communication should be tested. The DALI communication can be tested easily by sending commands broadcast on the DALI-line. This can be done

e.g. by pressing 'Max' and 'Min'-button and check the reaction of DALI control gear (optical feedback).
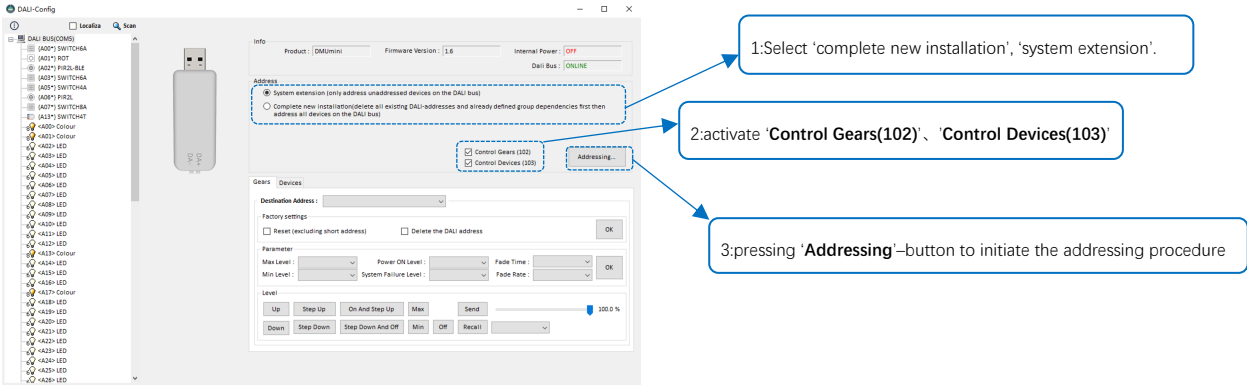
4. DALI System Commissioning

4.1 Address

The addressing procedure can be initiated by pressing the '**Addressing**'-button on the DALI BUS page. An alternative is to start the process via the DALI-Bus menu.

In the DALI Addressing wizard there are two options. First you can select between '**complete new installation**' and '**system extension**'. Performing a '**complete new installation**' will delete all existing DALI-addresses and already defined group dependencies, whereas the '**system extension**' mode keeps already defined DALI addresses and group dependencies, only unaddressed devices will get an address.

Next you need to activate '**Control Gears(102)**' and '**Control Devices(103)**'.'**Control Gears(102)**' representative control gears, '**Control Devices(103)**'representative control devices. You need to select which kind of devices the DALI-Config should address for: Control Gears, Control Devices. Then the addressing procedure can be initiated by pressing '**Addressing**' –button, After the addressing process has finished you will find an overview of all addressed DALI- components in your system in the component tree on the left.
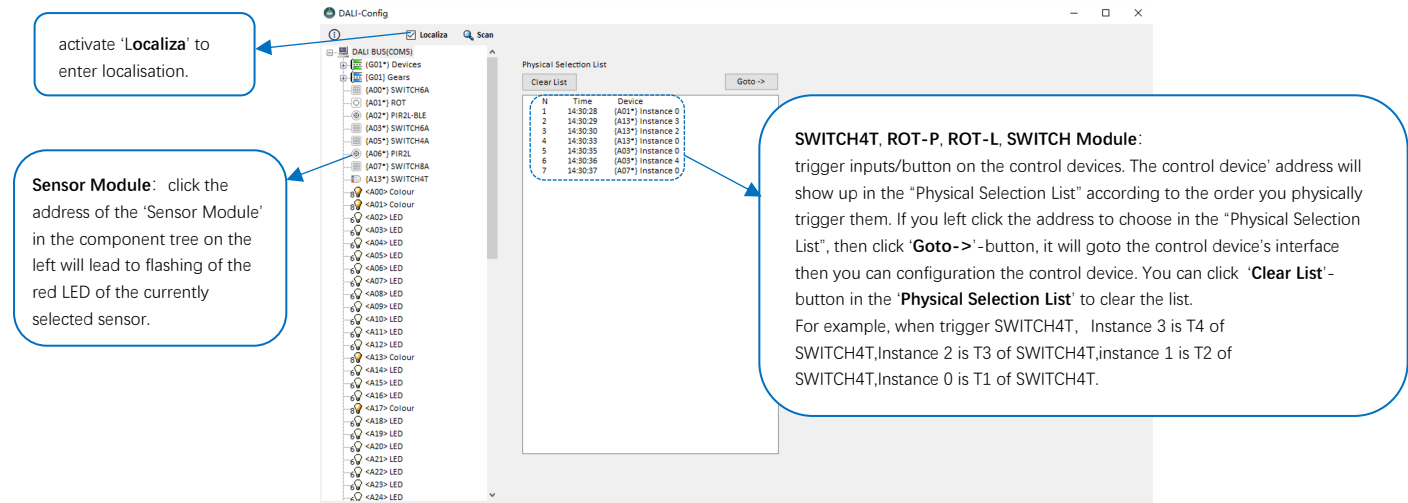

1:Select 'complete new installation', 'system extension'.

2:activate '**Control Gears(102)**'、'**Control Devices(103)**'

3:pressing '**Addressing**'–button to initiate the addressing procedure

4.2 Scan

The scan procedure can be initiated by pressing the '**Scan**'-button. you will find an overview of all addressed DALI-components and group dependencies in your system in the component tree on the left.

4.3 Device Localisation

For easier localisation of your lamps and control devices, you can select the specific device or group and use the localize checkbox to switch between two states. When you deactivate the '**Localize**'-checkbox，it will exit the localization.

activate 'L**ocaliza**' to enter localisation.

Sensor Module: click the address of the 'Sensor Module' in the component tree on the left will lead to flashing of the red LED of the currently selected sensor.

SWITCH4T, **ROT-P**, **ROT-L**, **SWITCH Module**:
trigger inputs/button on the control devices. The control device' address will show up in the "Physical Selection List" according to the order you physically trigger them. If you left click the address to choose in the "Physical Selection List", then click '**Goto->**'-button, it will goto the control device's interface then you can configuration the control device. You can click '**Clear List**'-button in the '**Physical Selection List**' to clear the list.
For example, when trigger SWITCH4T, Instance 3 is T4 of SWITCH4T,Instance 2 is T3 of SWITCH4T,instance 1 is T2 of SWITCH4T,Instance 0 is T1 of SWITCH4T.

4.3.1 Control device

The "**Physical Selection List**" can be used for the control devices and contains the order in which the inputs/buttons are triggered. This should make locating of control devices after addressing easier. To create a "**Physical Selection List**", you have to trigger inputs/button on the control devices. The control device's address will show up in the "**Physical Selection List**" according to the order you physically trigger them. If you left click the address to choose in the "**Physical Selection List**", then click '**Goto->**'-button, it will goto the control device's interface then you can configuration the control device. You can click '**Clear List**'-button in the "**Physical Selection List**" to clear the list.

For PIR2L, When you click the address of the PIR2L in the component tree on the left will lead to flashing of the red LED of the currently selected sensor.

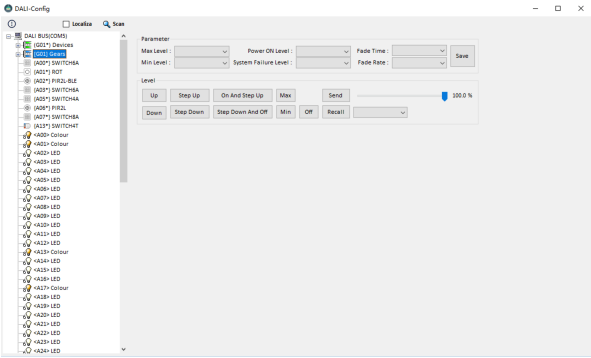| N	serial number
Time	The time of inputs/button are triggered, it matches the time on the computer
Device	{the address of the control device}button

4.3.2 Control gear

When you left click the address of the lamp in the component tree on the left, the lamp will be Max Level, other lamps will be Min Level.

4.3.3 Control gears Group

When you left click the address of the group(control gears) in the component tree on the left, the group will be Max Level, other groups and lamps will be Min Level.

4.4 Group Configuration

Left click the group (control gears) in the component tree on the left will enter its configuration site


Parameter Block(After configuration, you need to click 'Save'-button on the right side to save)

MAX Level	Configuration the group's max level from the drop-down menu on the right side, update the "MAX Level" parameter of the group's control gears.
MIN Level	Configuration the group's min level from the drop-down menu on the right side, update the "MIN Level" parameter of the group's control gears.
Power ON Level	From the drop-down menu on the right side, configuration the brightness of the group after its power supply back to normal,"255" is a special numerical, it means the brightness after the normal power supply is the brightness before the power supply off, update the "Power ON Level" parameter of the group's control gears.
System Failure Level	From the drop-down menu on the right side, configuration the brightness of the group when it's Dali-line is abnormality,"255" is a special numerical, it means the brightness when the DALI-line abnormality is the brightness before Dali-line abnormality, update the "System Failure Level" parameter of the group's control gears
Fade Time	The time from one brightness to another brightness, the larger the value, the slower the change. update the "Fade Time" parameter of the group's control gears.
Fade Rate	Continue dimming for 200ms,the smaller the value, the greater of the brightness variation within 200ms, update the "Fade Rate" parameter of the group's control gears.

Level Block

Button	Description
Up	dim up (using fade rate) for the group's control gears
Step Up	Increases light level by one increment for the group's control gears. If the current state is off, keep OFF
Down	dim down (using fade rate) for the group's control gears
Step Down	decreases light level by one increment for the group's control gears, If the current light is MIN, keep MIN.
On And Step Up	For the group's control gears, increases light level by one increment, If OFF switch MIN
Step Down And off	For the group's control gears, decreases light level by one increment, if value at MIN switch OFF
Max	recalls MAX value of the group's control gears
Min	recalls MIN value of the group's control gears
Off	OFF the group's control gears
Send	Drag the slider to the desired location, Then click 'Send'-button
Recall	Select the scene from the right drop-down menu, Then click 'Recall'-button, the group's control gears goto the scene.

4.5 Scene Configuration
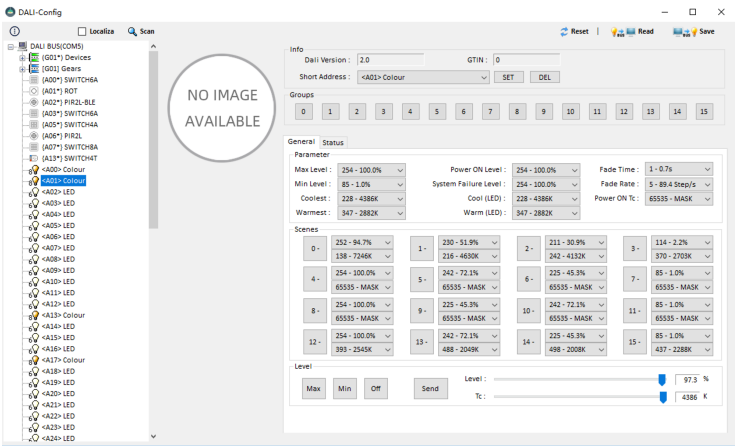
Left click the control gear in the component tree on the left will enter its configuration site. Configure scenes for control gears is on the device page itself, you can select the values from the scene's drop-down menu, pressing '**Save**'-button at the top right side to store the parameters to the control gear.

4.6 Configuration of control gear

Left click the control gear in the component tree on the left will enter its configuration site.

For DT6、DT8
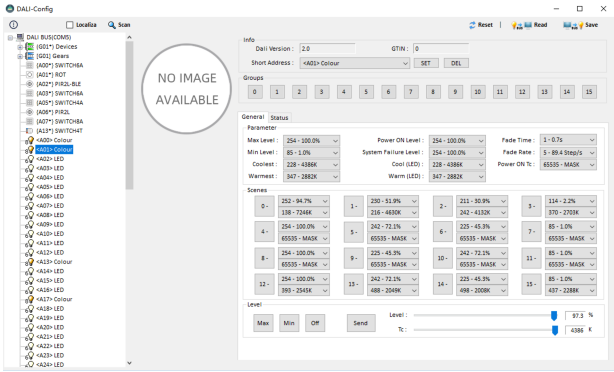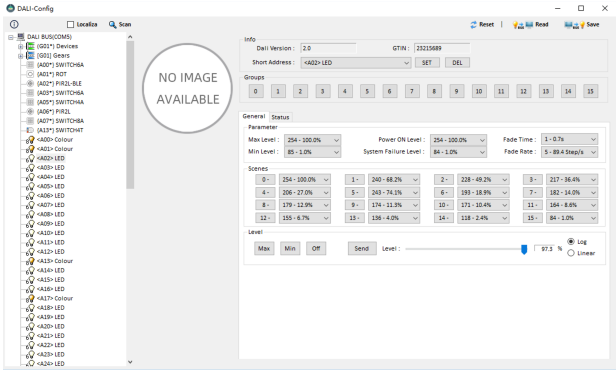
The control gear site is separated in the device info block、Groups block、Parameter block、Scenes block、Level block. In the general block all standard DALI parameters and scenes values can be defined. you can use the Light Level to commission.

Button	Description
Reset	Only keep address，Reset the device' parameter
Read	Read parameter from the devices(Control gears/Control devices)
Save	Save the parameter to the devices(Control gears/Control devices)

<div align="center">

Info Block

</div>

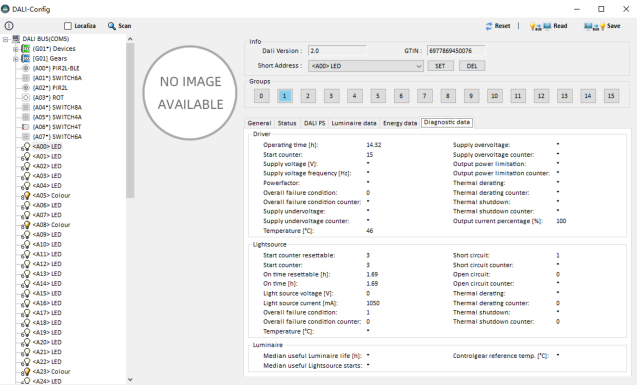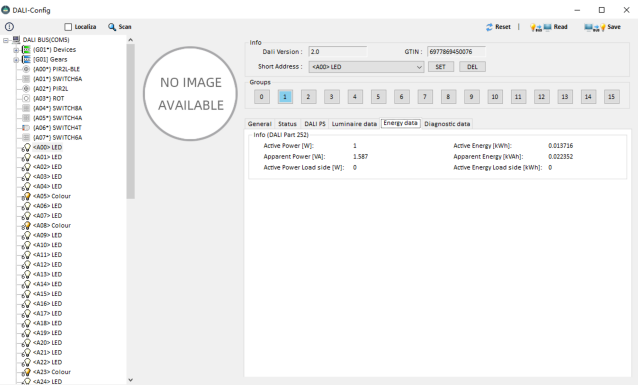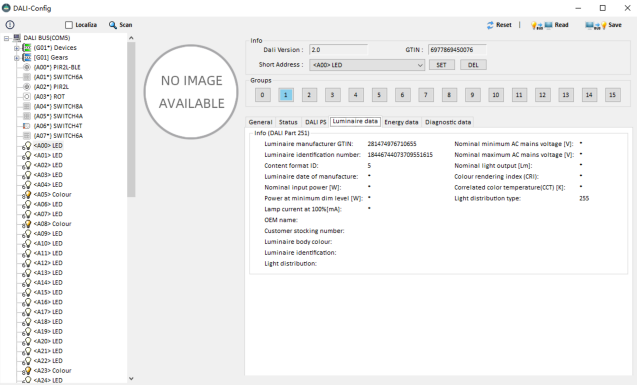|	
Short Address	You can select an address that is not in using, then click '**Set**'-button to save
'**SET**'-button	Choose an address(the address isn't in using) from the drop-down menu on the left side, click '**SET**'-button to save
'**DEL**'-button	Only delete its address, keep other parameters

<div align="center">

Group (automatically saved)

</div>

Left click a group, the control gear will join the group and automatically saved, if you click the group again, it will exit the group

<div align="center">

Parameter Block(After Configuration, you need to click 'Save'-button on the top right side to save)

</div>

Max Level	Configuration the control gear's max level from the drop-down menu on the right side.
Min Level	Configuration the control gear's min level from the drop-down menu on the right side.
Power On Level	From the drop-down menu on the right side, Configuration the brightness of the control gear after its power supply back to normal."255" is a special numerical，it means the brightness after the normal power supply is the brightness before the power supply off.
System Failure Level	From the drop-down menu on the right side, Configuration the brightness of the control gear when it's DALI-line is abnormality."255" is a special numerical, it means the brightness when the DALI-line abnormality is the brightness before DALI-line abnormality.
Fade Time	The time from one brightness to another brightness, the larger the value, the slower the change
Fade Rate	Continue dimming for 200ms, the smaller the value, the greater of the brightness variation within 200ms
Warm (LED)	Setting the warm color temperature value of the connected lamp according to luminaire specifications
Cool (LED)	Setting the cool color temperature value of the connected lamp according to luminaire specifications
Warmest	Setting the warmest color temperature value, the value greater than or equal to the value of Warm (LED)
Coolest	Setting the coolest color temperature value, the value less than or equal to the value of Cool (LED)

<div align="center">

Scenes Block(After Configuration, you need to click 'Save'-button on the top right side to save)

</div>

Select the values from its drop-down menu, pressing '**Save**'-button to store the parameters to the device. when you left click the scene it will goto the scene.

<div align="center">

Light Level Block

</div>

'**Max**'-button	recalls MAX value
'**Min**'-button	recalls MIN value
'**Off**'-button	OFF the control gear
'**Send**'-button	Drag the slider to the desired location, Then click 'Send'-button
1.0 %	display the brightness percentage when drag the slider
4500 K	display the color temperature value when drag the slider
◉ Log ○ Linear	"Log" stands for logarithm，"Linear" stands for Linear，select between "Log" and "Linear" will be automatically saved. update the parameter of DMUmini and control gears

For D4i

The following are screenshots of the DALI-Config tool interface:

Screenshot 1 (General tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Parameter
Max Level: 254 - 100.0%   Power ON Level: 254 - 100.0%   Fade Time: 1 - 0.7s
Min Level: 1 - 0.1%   System Failure Level: 254 - 100.0%   Fade Rate: 7 - 44.7 Step/s
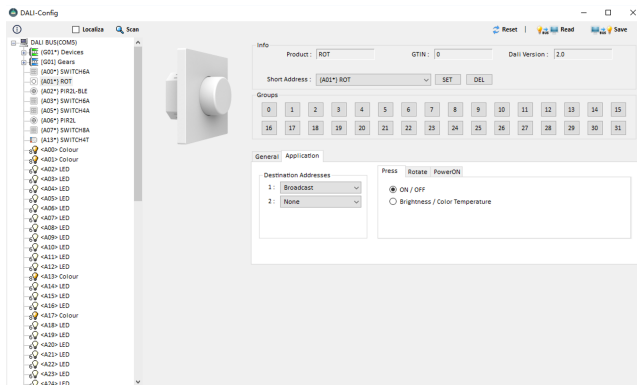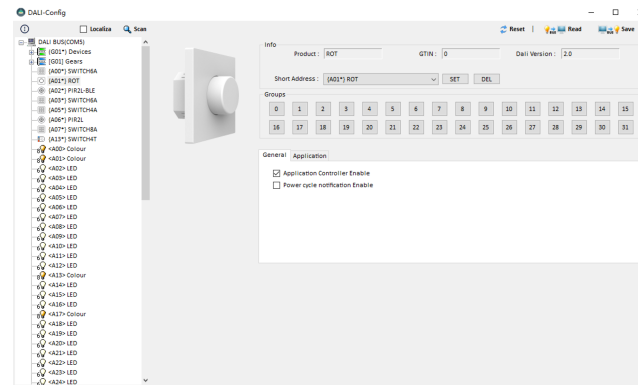
Scenes
0 - 255 - MASK   1 - 255 - MASK   2 - 255 - MASK   3 - 255 - MASK
4 - 255 - MASK   5 - 255 - MASK   6 - 255 - MASK   7 - 255 - MASK
8 - 255 - MASK   9 - 255 - MASK   10 - 255 - MASK 11 - 255 - MASK
12 - 255 - MASK 13 - 255 - MASK 14 - 255 - MASK 15 - 255 - MASK

Level
Max Min Off   Send   Level: _____ 100.0 %   ● Log ○ Linear

Screenshot 2 (Status tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Status
Control gear failure: No   Fade time active: No
Lamp failure: Yes   Reset values: No
Lamp on: No   Address missing: No
Limit violation: No   Power cycle seen: Yes

Screenshot 3 (DALI PS tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Info (DALI Part 250)
☑ Enable
Guaranteed output current: 50
Maximum output current: 250
► Take care about the polarity, if you want to connect more than one power supply to the DALI line.

Screenshot 4 (Luminaire data tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Info (DALI Part 251)
Luminaire manufacturer GTIN: 28147497671065   Nominal minimum AC mains voltage [V]: *
Luminaire identification number: 1844674407370951615   Nominal maximum AC mains voltage [V]: *
Content format ID: 5   Nominal light output [Lm]: *
Luminaire date of manufacture: *   Colour rendering index (CRI): *
Nominal input power [W]: *   Correlated color temperature(CCT) [K]: *
Power at minimum dim level [W]: *   Light distribution type: 255
Lamp current at 100%[mA]: *
OEM name:
Customer stocking number:
Luminaire body colour:
Luminaire identification:
Light distribution:

Screenshot 5 (Energy data tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Info
Active Power [W]: 1   Active Energy [KWh]: 0.013716
Apparent Power [VA]: 1.587   Apparent Energy [kVAh]: 0.023352
Active Power Load side [W]: 0   Active Energy Load side [kWh]: 0

Screenshot 6 (Diagnostic data tab):

NO IMAGE AVAILABLE

Info
Dali Version: 2.0   GTIN: 6977869450076
Short Address: <A00> LED   SET DEL

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

General Status DALI PS Luminaire data Energy data Diagnostic data

Driver
Operating time [h]: 14.52   Supply overvoltage: *
Start counter: 15   Supply overvoltage counter: *
Supply voltage [V]: *   Output power limitation: *
Supply voltage frequency [Hz]: *   Output power limitation counter: *
Powerfactor: *   Thermal derating: *
Overall failure condition: 0   Thermal derating counter: *
Overall failure condition counter: *   Thermal shutdown: *
Supply undervoltage: *   Thermal shutdown counter: *
Supply undervoltage counter: *   Output current percentage [%]: 100
Temperature [°C]: 46

Lightsource
Start counter resettable: 3   Short circuit: 1
Start counter: 5   Short circuit counter: 1
On time resettable [h]: 1.69   Open circuit: 0
On time [h]: 1.69   Open circuit counter: 0
Light source voltage [V]: 0   Thermal derating: *
Light source current [mA]: 1050   Thermal derating counter: *
Overall failure condition: 1   Thermal shutdown: *
Overall failure condition counter: 0   Thermal shutdown counter: 0
Temperature [°C]: *

Luminaire
Median useful Luminaire life [h]: *   Controlgear reference temp. [°C]: *
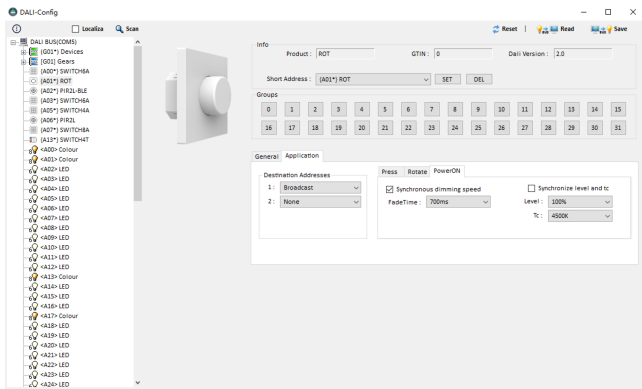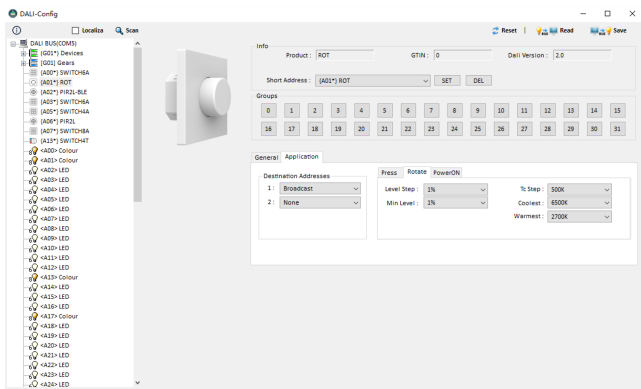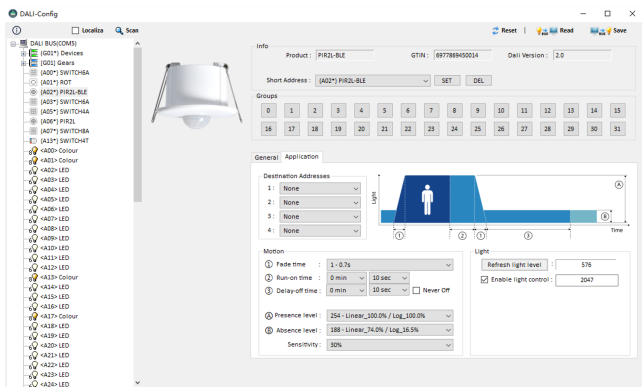Median useful Lightsource starts: *
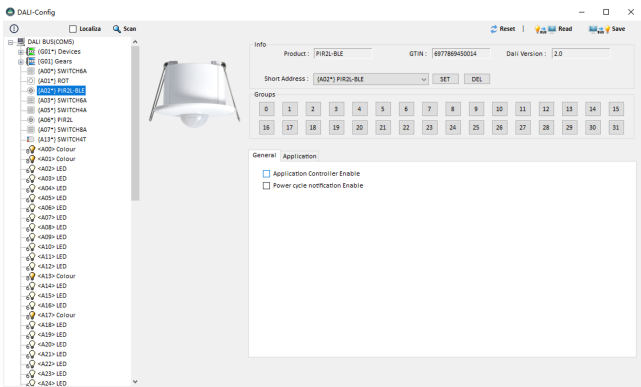
4.7 Configuration of control device

Please refer to the corresponding DALI control device user manual for details.
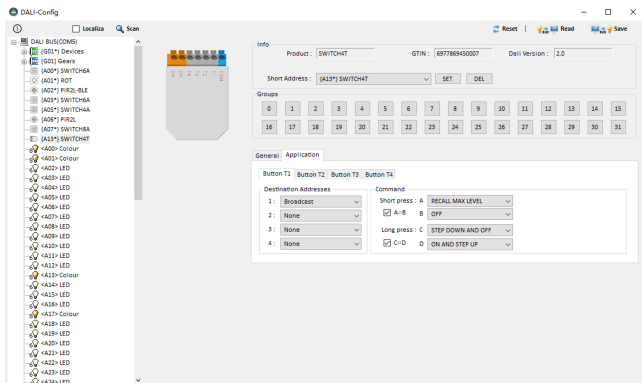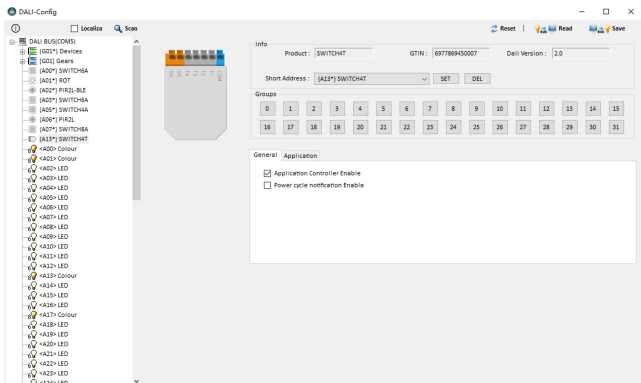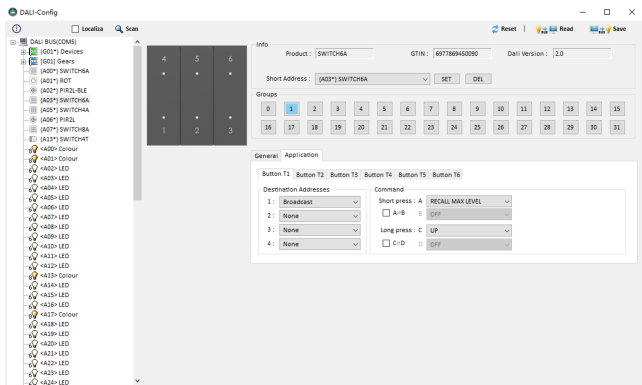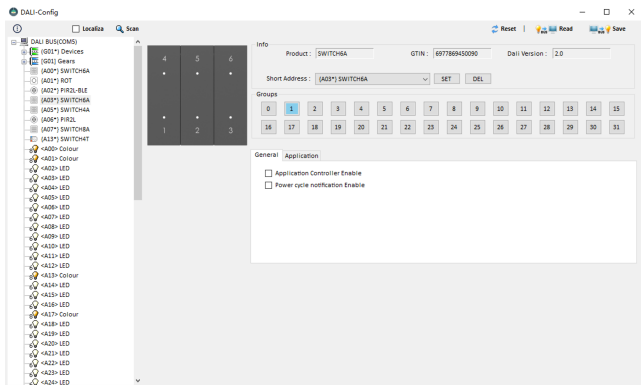
4.7.1 DALI-2 Rotary Switch

Screenshot 7 (General tab - Rotary Switch):

Info
Product: ROT   GTIN: 0   Dali Version: 2.0
Short Address: <A01> ROT   SET DEL

Groups:
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

General Application

☑ Application Controller Enable
☐ Power cycle notification Enable

Screenshot 8 (Application tab - Rotary Switch):

Info
Product: ROT   GTIN: 0   Dali Version: 2.0
Short Address: <A01> ROT   SET DEL

Groups:
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

General Application

Destination Addresses
1: Broadcast
2: None

Press Rotate PowerON
● ON / OFF
○ Brightness / Color Temperature

4.7.2 DALI-2 Sensor Module

4.7.3 DALI-2 Switch Input Module

4.7.4 DALI-2 Switch Module

Contact

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