Drukknop dimmer 1-10V/easy DALI
SR-2421-ZG-PUSH

integratech
less energy more light.

Armaturen met 1-10V/DALI driver bedienen met een drukknop

Technische parameters

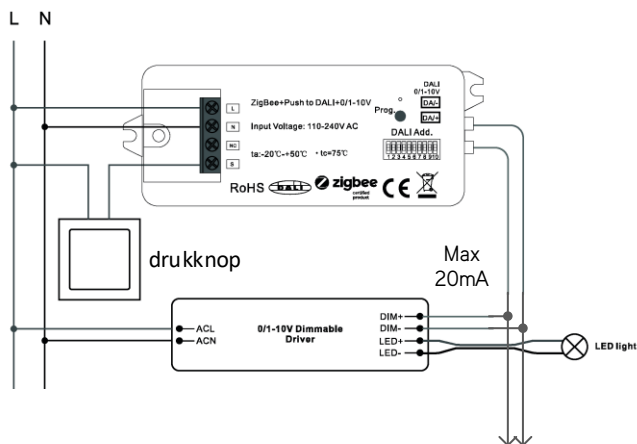| INPUT	
Aansluitspanning	110-240VAC
Bediening	drukknop/Zigbee
Output 0/1-10V	Max 20mA
DALI	Max 50mA
Omgevingstemp	-20~+50℃
Luchtvochtigheid	8~80%
Afmetingen	80x36x20,5mm

Instelling

Bij het aanpassen van de DIP-switch instellingen steeds de spanning uitschakelen!
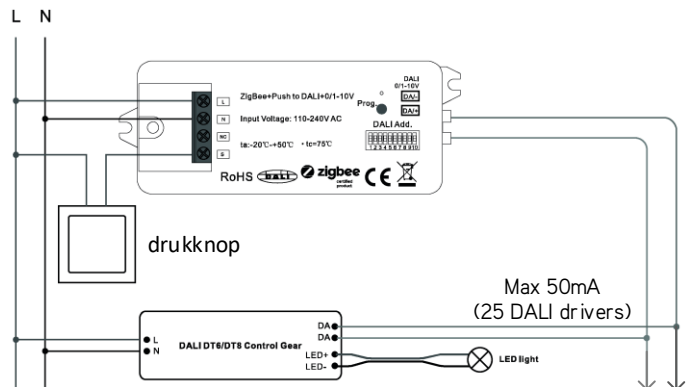
1. Kies de gewenste uitgangsmodus 1-10 of DALI

- DALI DT6 modus (broadcast) = DIP-SWITCH 1+3+4+5+6+7+10 op ON
- 0/1-10V modus = Alle DIP-SWITCH op OFF
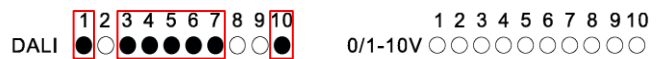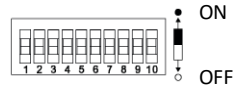
Aansluitschema 1-10V modus

drukknop

Max 20mA

Aansluitschema DALI modus

drukknop

Max 50mA
(25 DALI drivers)

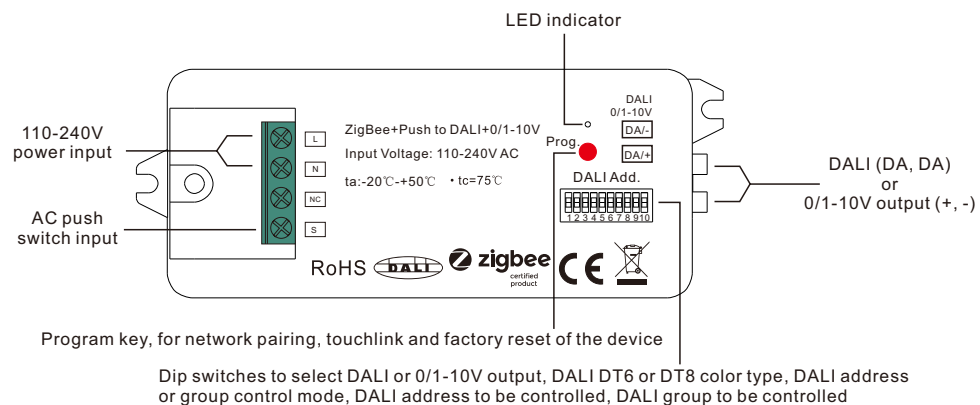### Bediening

Kort drukken = aan/uit
Lang drukken = dimmen

Zigbee+Push to DALI+0/1-10V Converter

09.2421ZGP.04791

Important: Read All Instructions Prior to Installation

Function introduction

LED indicator

110-240V power input

AC push switch input

ZigBee+Push to DALI+0/1-10V
Input Voltage: 110-240V AC
ta:-20℃-+50℃   • tc=75℃

DALI Add.

DALI 0/1-10V
DA/-
DA/+
Prog.

DALI (DA, DA)
or
0/1-10V output (+, -)

RoHS

Program key, for network pairing, touchlink and factory reset of the device

Dip switches to select DALI or 0/1-10V output, DALI DT6 or DT8 color type, DALI address or group control mode, DALI address to be controlled, DALI group to be controlled

Product Data

Input			Output, DALI		Output, 0/1-10V	Environment		Others
Power	Signal	Switch	DALI PS current	DALI current consumption	Current	Operating temperature	Relative humidity	Dimensions
110-240VAC	Zigbee 2.4GHz	1CH Push	Max. 50mA	Max. 4mA	Max. 20mA	-20℃-+50℃	8% to 80%	95x37x20mm

• Zigbee+Push to DALI+0/1-10V converter based on zigbee 3.0
• Zigbee signal input & push switch input, DALI output to DALI line or 0/1-10V signal output, 110-240VAC power input
• Can be controlled by both Zigbee signal & push switch input
• Integrates existing push switch into DALI or 0/1-10V
• Compatible with universal Zigbee gateway or hub products
• Can directly pair to a compatible ZigBee remote via Touchlink
• Compatible with universal Zigbee remotes
• Supports self-forming zigbee network without coordinator
• Supports find and bind mode to bind a ZigBee remote
• Supports zigbee green power and can bind max. 20 zigbee green power switches
• DALI signal or 1-10V signal output selectable by DIP switch
• Built-in DALI bus power supply, no extra DALI bus PS required
• With max. 50mA DALI bus power current output
• To supply control current to up to 25 DALI control gears
• DALI DT6 or DT8 device type selectable by DIP switch under DALI mode
• Color control according to DALI specifications of Device Type 8,
• Color type: Tc, XY coordinates, RGBW selectable by DIP switches

• DALI address control mode or group control mode selectable by DIP switch
• Enables to select the DALI address (00-63) to be controlled by DIP switches
• Enables to select the DALI group (0-15) to be controlled by DIP switches
• Enable to control 1 DALI Group of devices or 1 DALI Address on DALI line
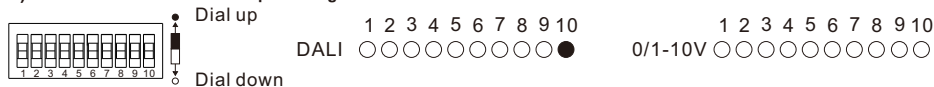• Enable to control all devices on DALI line via broadcast
• Waterproof grade: IP20

Safety & Warnings

• DO NOT set the DIP switches with power applied to the device.
• DO NOT install with power applied to device.
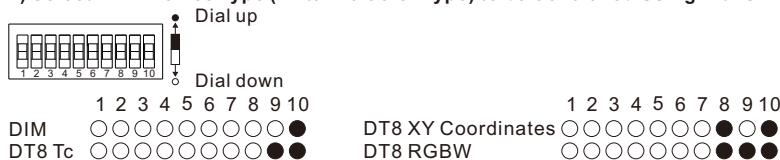• DO NOT expose the device to moisture.

Operation

1) Select DALI or 0/1-10V Output Using Dial Switch 10


Dial up
Dial down

DALI   0/1-10V

Note: please first select output signal by the dial switch.

2) Select DALI Device Type (DT6/DT8 Color Type) to be Controlled Using Dial Switches 8-9

Dial up
Dial down

DIM
DT8 Tc
DT8 XY Coordinates
DT8 RGBW

Note: once DALI output is selected, please then select the DALI device type you would like to control by the dial switches.
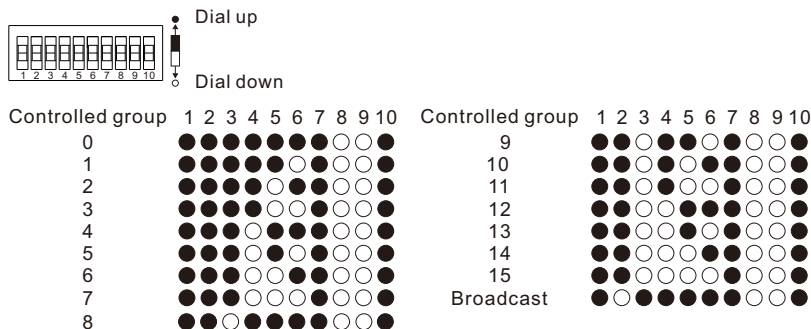
3) Select DALI Address or Group Control Mode Using Dial Switch 7

Dial up
Dial down

Address Mode   Group Mode
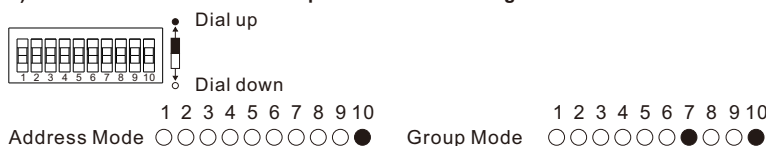
Note: once DALI device type is selected, please then select address control mode or group control mode by dial switch.

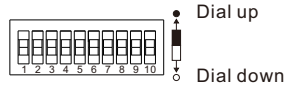**4) Select the DALI Group to be Controlled Using Dial Switches 2-6**
Note: here device type is selected as DIM as an example, please select your correct DALI device type.

Dial up
Dial down

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

Note: 1) once DALI device type and group control mode are selected, please then select the DALI group (0-15 selectable) to be controlled on DALI line by dial switches.
2) The control gears that are assigned to the selected DALI group on DALI line will be controlled.
3) The control gears shall be first grouped by a DALI master controller, please refer to the user manual of corresponding master controller.

5) Select the DALI Address to be Controlled Using Dial Switches 1-6
Note: here device type is selected as DIM as an example, please select your correct DALI device type.

Dial up
Dial down

Controlled address	1 2 3 4 5 6 7 8 9 10
00	
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	

Controlled address	1 2 3 4 5 6 7 8 9 10
32	
33	
34	
35	
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43	
44	
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63	

Note: 1) once DALI device type and address control mode are selected, please then select the DALI address (00-63 selectable) to be controlled on DALI line by dial switches.
2) The control gear with the selected DALI address on DALI line will be controlled.

6. ZigBee Clusters the device supports are as follows:

Input Clusters

• 0x0000: Basic   • 0x0003: Identify   • 0x0004: Groups   • 0x0005: Scenes   • 0x0006: On/off

• 0x0008: Level Control   • 0x0300: Color Control   • 0x0b05: Diagnostics

Output Clusters

• 0x0019: OTA

7. Do wiring according to connection diagram correctly.

8. This ZigBee device is a wireless receiver that communicates with a variety of ZigBee compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible ZigBee system.

9. Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network)

Step 1: Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail. Please refer to the part "**Factory Reset Manually**".

Step 2: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

Step 3: Reset power of the device from master circuit breaker to set it into network pairing mode (connected light flashes twice slowly), network pairing mode lasts 15S (enters into touchlink mode after 15S), once timeout, repeat this step.
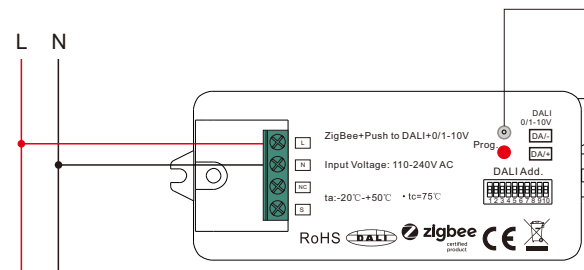
Step 4: LED indicator will blink 5 times and then stay solid on, then the device will appear in your controller's menu and can be controlled through controller or hub interface.

L N

ZigBee+Push to DALI+0/1-10V
Input Voltage: 110-240V AC
ta:-20℃-+50℃   • tc=75℃
Prog
DALI 0/1-10V
DA/-
DA/+
DALI Add.
RoHS   DALI   zigbee certified product   CE

10. TouchLink to a Zigbee Remote

Step 1: Method 1: Short press "Prog" button 4 times (or reset power of the device 4 times from master breaker) to start Touchlink commissioning (lasts for 180S) immediately under any circumstances, once time out, repeat this step.
**Method 2**: Reset power of the device, Touchlink commissioning will start after 15S if it's not added to a zigbee network, 165S timeout. Or start immediately if it's already added to a network, 180S timeout. Once timeout, repeat the step.
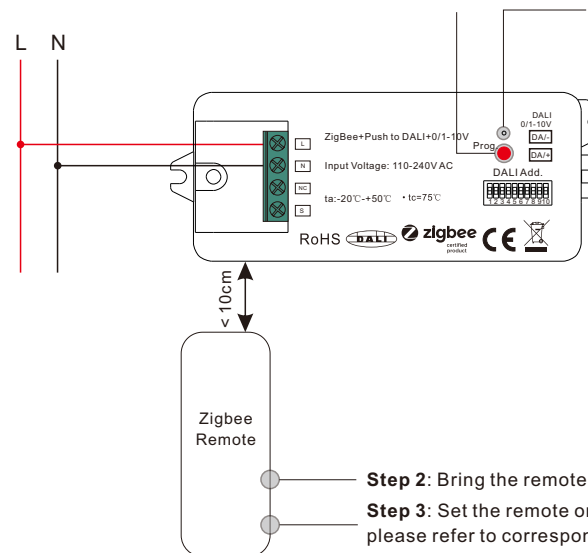
Step 4: There shall be indication on the remote for successful link and LED indicator on the device will flash twice.

L N

ZigBee+Push to DALI+0/1-10V
Input Voltage: 110-240V AC
ta:-20℃-+50℃   • tc=75℃
Prog
DALI 0/1-10V
DA/-
DA/+
DALI Add.
RoHS   DALI   zigbee certified product   CE

< 10cm

Zigbee Remote

Step 2: Bring the remote or touch panel within 10cm of the lighting device.

Step 3: Set the remote or touch panel into Touchlink commissioning, please refer to corresponding remote or touch panel manual to learn how.

Note: 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.
2) TouchLink after both added to a ZigBee network, each device can link with max. 30 remotes.
3) To control through both gateway and remote, add remote and device to gateway network first then TouchLink
4) After TouchLink, the device can be controlled by the linked remotes.

11. Removed from a Zigbee Network through Coordinator or Hub Interface
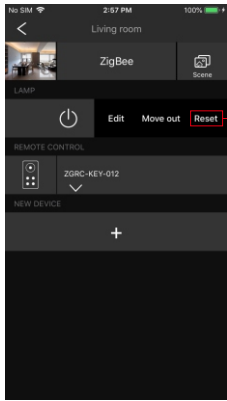
From your ZigBee controller or hub interface, choose to delete or reset the lighting device as instructed. The connected light blinks 3 times to indicate successful reset.

12. Factory Reset Manually

Step 1: Short press "Prog." key for 5 times continuously or reset power of the device for 5 times continuously from master breaker if the "Prog." key is not accessible.
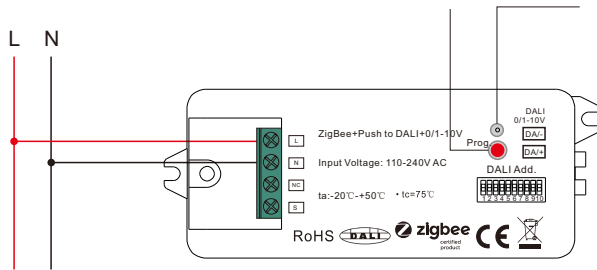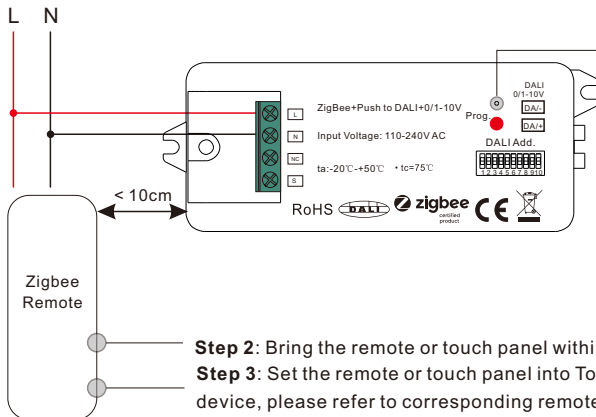
Step 2: LED indicator flashes 3 times for successful reset.

Note: 1) If the device is already at factory default setting, there is no indication when factory reset again .
2) All configuration parameters will be reset after the device is reset or removed from the network.

13. Factory Reset through a Zigbee Remote (Touch Reset)

Step 1: Reset power of the device to start TouchLink Commissioning, 180 seconds timeout, repeat this step.
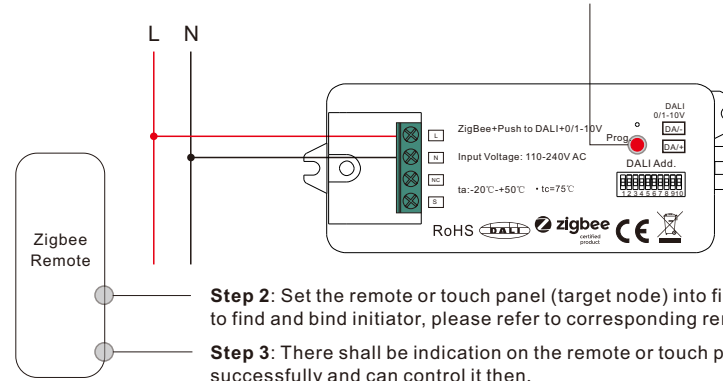
Step 4: There shall be indication on the remote and LED indicator on the device flashes 3 times for successful reset.

Step 2: Bring the remote or touch panel within 10cm of the lighting device.
Step 3: Set the remote or touch panel into Touch Reset procedure to reset the device, please refer to corresponding remote or touch panel manual to learn how.

Note: Make sure the device already added to a network, the remote added to the same one or not added to any network.

14. Find and Bind Mode

Step 1: Short press "Prog." button 3 times (Or reset power of the device (initiator node) 3 times) to start Find and Bind mode (connected light flashes slowly) to find and bind target node, 180 seconds timeout, repeat the step.


Step 2: Set the remote or touch panel (target node) into find and bind mode, and enable it to find and bind initiator, please refer to corresponding remote or touch panel manual.

Step 3: There shall be indication on the remote or touch panel that it bind the device successfully and can control it then.

Note: Make sure the device and the remote or touch panel already added to the same Zigbee hub.

15. Learning to a Zigbee Green Power Switch

Step 1: Short press "Prog." button 4 times (Or reset power of the device 4 times) to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat the step.
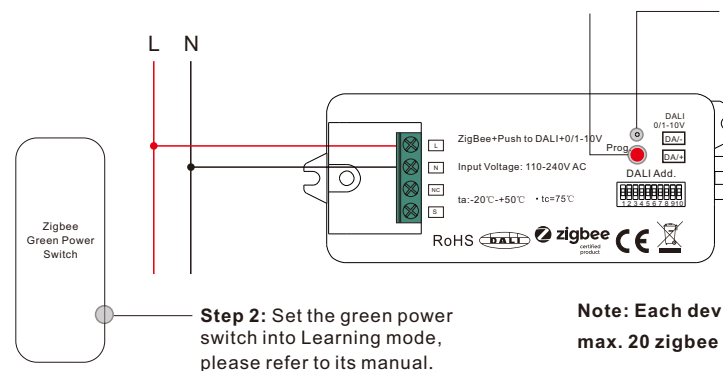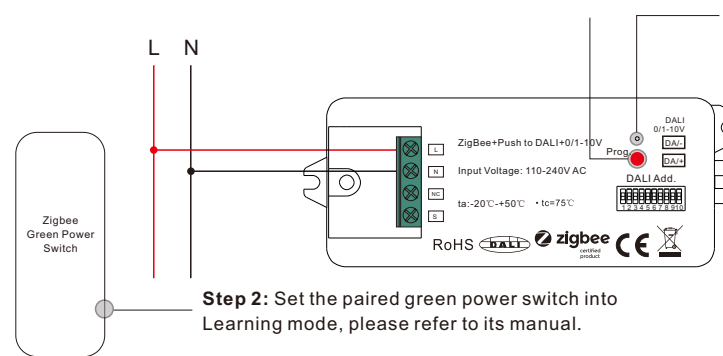
Step 3: LED indicator will flash twice to indicate successful learning. Then the switch can control the device.

Step 2: Set the green power switch into Learning mode, please refer to its manual.

Note: Each device can learn to max. 20 zigbee green power switches.

16. Delete Learning to a Zigbee Green Power Switch

Step 1: Short press "Prog." button 3 times (Or reset power of the device 3 times) to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat the step.

Step 3: LED indicator will flash 4 times to indicate successful deleting.

Step 2: Set the paired green power switch into Learning mode, please refer to its manual.

17. Setup a Zigbee Network & Add Other Devices to the Network (No Coordinator Required)

Step 1: Short press "Prog." button 4 times (Or reset power of the device 4 times) to enable the device to form a zigbee network (LED indicator flashes twice) to discover and add other devices, 180 seconds timeout, repeat the step.
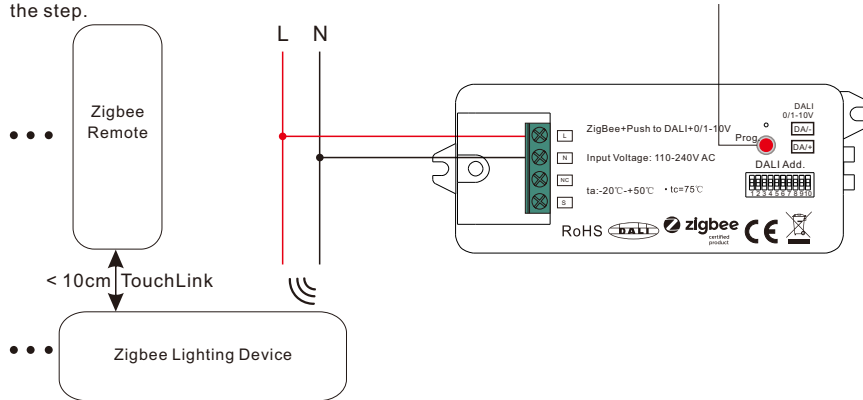
Step 2: Set another device or remote or touch panel into network pairing mode and pair to the network, refer to their manuals.

Step 3: Pair more devices and remotes to the network as you would like, refer to their manuals.

Step 4: Bind the added devices and remotes through Touchlink so that the devices can be controlled by the remotes, refer to their manuals.

Note: 1) Each added device can link and be controlled by max. 30 added remotes.

2) Each added remote can link and control max. 30 added devices.

18. OTA

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

19. Controlled through Push Switch

When DALI Output Selected

While connected with an AC push switch, and DALI output is selected, operations to control the DALI control gears are as follows:

While DT6 device type is selected,
- Click the button to switch ON/OFF
- Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction.

While DT8 XY coordinate or RGBW device type is selected,
- Click the button to switch ON/OFF
- Press and hold down the button to increase or decrease overall light intensity of RGB or RGBW to desired level and release it, then repeat the operation to adjust overall light intensity to opposite direction.

**While DT8 Tc device type is selected**,
- Click the button to switch ON/OFF
- Press and hold down the button to increase or decrease overall light intensity of tunable white to desired level and release it, then repeat the operation to adjust overall light intensity to opposite direction.
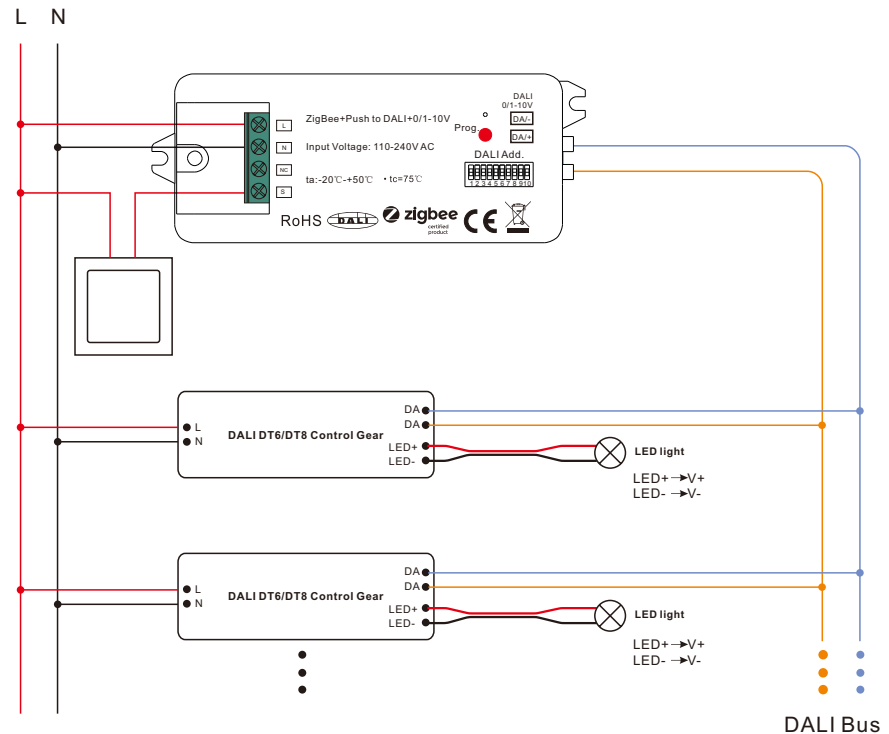
When 0/1-10V Output Selected

- Click the button to switch ON/OFF
- Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction.

Wiring Diagram

When 0/1-10V Output Selected
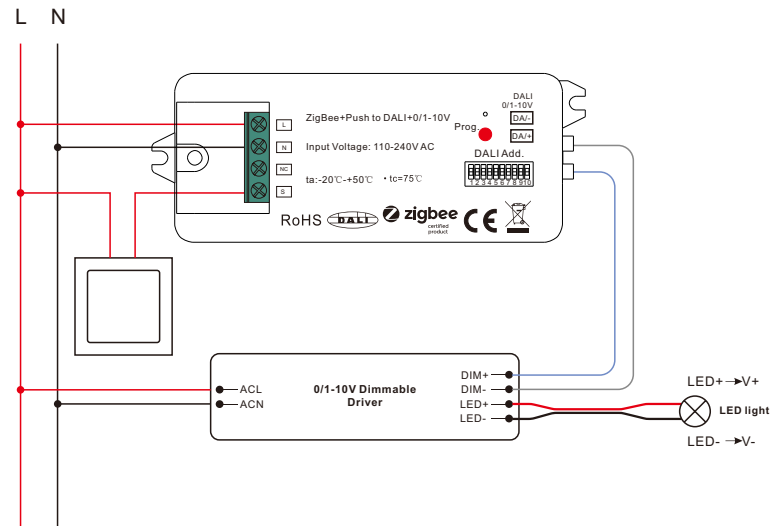
When DALI Output Selected

Note: Max. 50mA DALI bus PS output to supply control current to up to 25 control gears.