LDT-ZB-RF-DALI-ADDR

Zigbee & RF to Addressable DALI Converter

A Zigbee and compatible proprietary-RF control bridge for a correctly matched DALI lighting system. Select its lighting mode and DALI addressing for the actual connected gear.

Supply voltage	DALI bus or 24-48 VDC
Supply current	23 mA at 16 V bus; 2 mA at 24-48 VDC
Control inputs	Zigbee + proprietary 2.4 GHz RF
Output type	Addressable DALI control signal
Lighting profiles	DIM, DUO, RGB, RGBW, RGB+DUO or switching
DALI profiles	DT6, DT8-TC, DT8-RGB, DT8-RGBW or DT7 switching, as configured
Addressing	Unicast, group or broadcast via rotary coding switches
Published RF distance	Up to 30 m, unobstructed
App/cloud requirements	Supported Zigbee gateway, app/account and required network services
Operating temperature	-20 to +50 °C
Maximum case temperature	+55 °C
IP rating	IP20
Body dimensions	52 x 52 x 27 mm

This is not a Wi-Fi radio device. A router alone is not a Zigbee gateway. The DALI bus still requires appropriate system power.

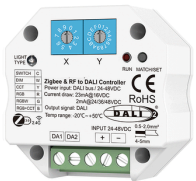
The following reference pages include the complete wiring, dimensions, settings and operating instructions. Use the lighting and hardware variant identified above; shared references may illustrate other separate models.

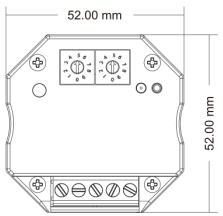
Zigbee + RF

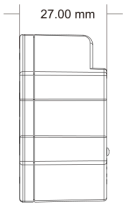
ZigBee & RF to DALI Converter

Features

- ZigBee & RF DALI master, 6 in 1 function, support single color, color temperature, **RGB, RGBW, RGB+DUO, or switch light control.**
- **Control app cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit and music play function.**
- Philips HUE APP control by connect with Philips HUE bridge.
- Match with RF 2.4G single zone or multiple zone remote control optional.
- 1 DALI address, support DT6 dimming, DT8-TC color temperature, DT8-RGB, DT8-RGBW or DT7 switch.
- In accordance with DALI standard protocol IEC 62386-101, 102, 207, 208, 209 and in compliance with DALI products from other international incorporation.
- **Powered by DALI bus or 24-48VDC power supply.**
- Enable to select DALI address by encoding switch, support unicast, group and broadcast mode.







DALI 2 CE RoHS

Technical Parameters

Input and Output	
Power input	DALI bus/24-48VDC
Current draw	23mA@16VDC, 2mA@24-48VDC
Input signal	ZigBee + RF 2.4GHz
Output signal	DALI
Remote control distance	30m(open and barrier-free)

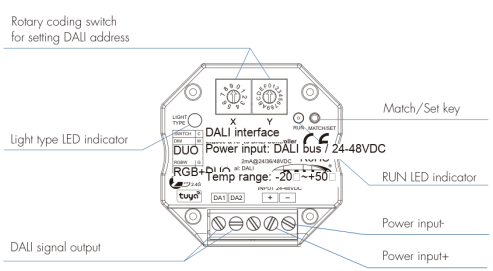
Environment	
Operation temperature	Ta: -20 ˚C ~ +50 ˚C
Case temperature (Max.)	Tc: +55˚C
IP rating	IP20

Package	
Size	L60 x W 60 x H40mm
Gross weight	0.060kg

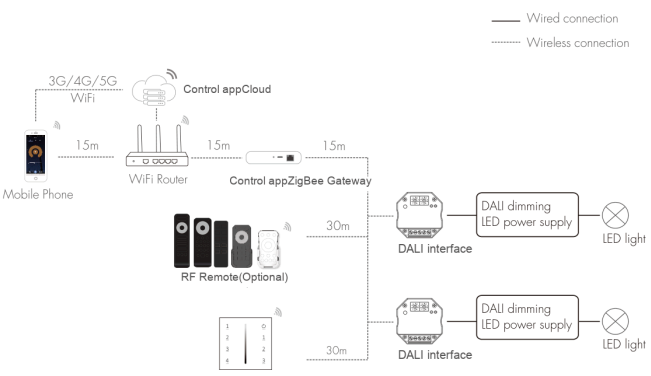
Safety and EMC	
EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3/-17
Safety standard	EN 61347-1/-2
Radio equipment	ETSI EN 300 328 ETSI EN 300 440
Certification	CE RoHS DALI-2

Warranty	
Warranty	5 years

Mechanical Structures and Installations



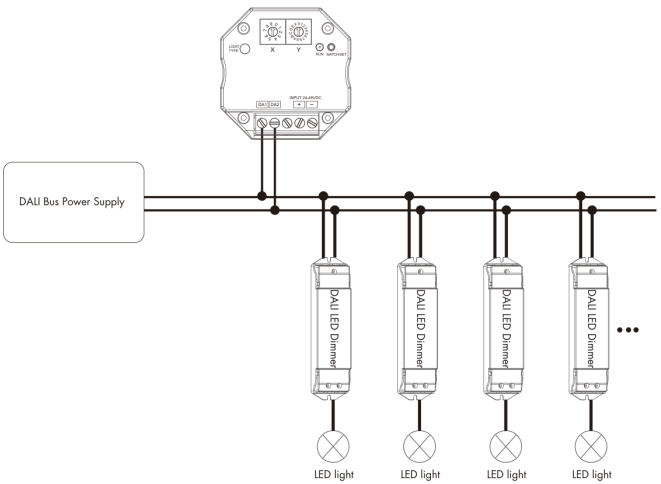
System Wiring



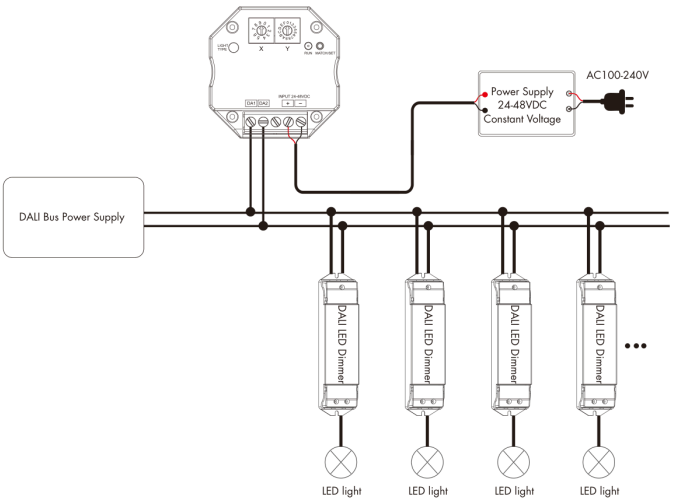
Note:
1. The above distance is measured in spacious(no obstacle) environment, Please refer to the actual test distance before installation.
2. **Users must use the Control appZigBee gateway to realize remote control and voice control.**

Wiring Diagram

1. DALI bus power supply



2. 24-48VDC power supply



Note: It is recommended to use a 24-48VDC power supply for the DALI master to reduce the load on the DALI bus power supply.

Light Type Settings

SWITCH	C
DIM	W
DUO	Y
RGB	R
RGBW	G
RGB+DUO	B

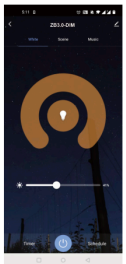
Please select the light type before **Control app network connection** nfig.
Press and hold Match/Set key for 2s, switch 6 kinds light type in sequence, and light type LED indicator turn corresponding color.
White: DIM (default)
Yellow: **DUO**
Red: RGB
Green: RGBW
Blue: **RGB+DUO**
Cyan: SWITCH

Control app Network Connection

Press and hold Match/Set key for 5s, or push twice Match/Set key fastly, clear previous network connection, enter config mode, the RUN LED indicator flash fastly.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter config mode, the RUN LED indicator flash fastly.
If Control app network connection succeed, the N LED indicator stops flash.
And in Control app, you can Gnd ZB3.0-DIM device (or DUO, RGB, RGBW, RGB+DUO, SWITCH device).

Control app Interface



White interface

For DIM type:
Touch brightness slide to adjust brightness.

For RGB type:
Touch brightness slide,
get RGB mixed white firstly,
then to adjust white brightness.

For RGBW type:
Touch brightness slide,
adjust white channel brightness.



Color temperature interface

For DUO type:
Touch color wheel
to adjust color temperature.
Touch brightness slide
to adjust brightness.

For RGB+DUO type:
Touch color wheel to adjust color temperature,
RGB will turn off automatically.
Touch brightness slide to adjust white brightness.



Colour interface

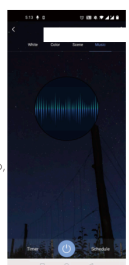
For RGB or RGBW type:
Touch color wheel to adjust static RGB color.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation, namely gradient from the current color to white(RGB mixed).

For RGB+DUO type:
Touch color wheel to adjust static RGB color, DUO will turn off automatically.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed)



Scene interface

The 1-4 scene is static color for all light type.
the inner color of these scene can be editable.
The 5-8 scene is dynamic mode for RGB type,
such as green fade in and fade out, RGB jump,
6 color jump, 6 color smooth.



Music, Timer, Schedule

The music play can use
smart phone music player
or micro-phone as music signal input.
The Timer key can turn on
or turn off light in the next
24 hours.
The Schedule key can add
multiple timers to turn on
or turn off light according
to different time periods.

Match Remote Control (Optional)

Please select the same light type of RF remote control for matching,
End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the Match key

Match:
Short press match key,
immediately press on/off key (single zone remote)
or zone key (multiple zone remote) on the remote.
The RUN LED indicator fast flash a few times means
match is successful.

Delete:
Press and hold match key for 10s to delete all match,
The RUN LED indicator fast flash a few times means
all matched remotes were deleted.

Use Power Restart

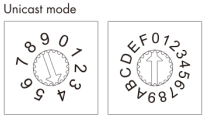
Match:
Switch off the power of the receiver, then switch on power,
repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
The RUN LED indicator blinks 3 times means match is successful.

Delete:
Switch off the power of the receiver, then switch on power,
repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
The RUN LED indicator blinks 5 times means all matched remotes
were deleted.

DALI Address Setting

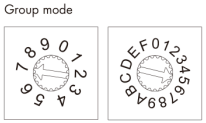
Address value = X * 10 + Y.
For example: X = 5, Y = 4, Address value = 5 x 10 + 4 = 54.

Unicast mode



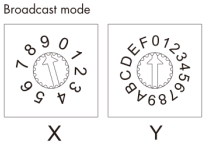
X is 0-6, Y is 0-9.
Address value 0-63 correspond to DALI unicast address 00-63.
For example:
Address value = 40, the unicast address value is 40.

Group mode



X is 7, Y is 0-F.
Address value 70-7F correspond to DALI group address 0-15.
For example:
Address value = 75, the group address value is 5.

Broadcast mode



X is 9, Y is 0-F.
Address value 90 - 9F correspond to broadcast address.