LDT-WIFI-RF-DALI-ADDR

Wi-Fi & RF Addressable DALI Converter

An app and RF-to-DALI master converter with physical light-type and address selection. Integrate compatible DALI drivers using individual, group or broadcast control.

Model specifications

Supply voltage	24 VDC
Static current	2 mA at 24 VDC
Output signal	DALI
Lighting modes	DIM / DUO / RGB / RGBW / RGB+DUO / switch
DALI device types	DT6 dimming; DT8-TC, RGB, RGBW; DT7 switch
Addressing	One DALI start address; rotary unicast / group / broadcast selection
Control inputs	Wi-Fi + 2.4 GHz RF
RF distance	Up to 30 m, unobstructed
Operating temperature	-20 to +50 °C
Maximum case temperature	+55 °C
IP rating	IP20
Dimensions	52 x 52 x 27 mm

Requires 24 VDC device power and a separate DALI bus power supply. It is not a constant-voltage LED driver.

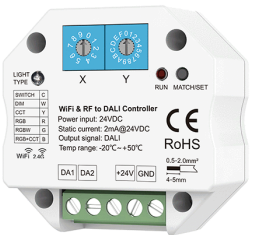
The following technical-reference pages retain the complete diagrams, dimensions, settings and installation instructions. Select the lighting variant stated on this cover; family diagrams may also illustrate other variants.

Wi-Fi + RF

WiFi & RF to DALI Converter

Features

- WiFi & RF DALI master, 6 in 1 function, support single color, color temperature, RGB, RGBW, RGB+CCT, or switch light control.
- smart APP cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit and music play function.
- 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, and in compliance with DALI products from other international incorporation.
- Enable to select DALI address by encoding switch, support unicast, group and broadcast mode.



CE RoHS

Technical Parameters

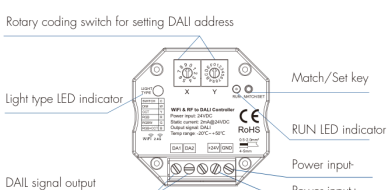
Input and Output	
Power input	24VDC
Static current	2mA@24VDC
Input signal	WiFi + RF 2.4GHz
Output signal	DALI
Remote control distance	30m(open and barrier-free)

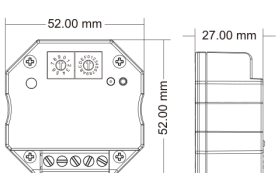
Environment	
Operation temperature	Ta: -20°C ~ +50°C
Case temperature (Max.)	Tc: +55°C
IP rating	IP20

Package	
Size	L60 x W60 x H40mm
Gross weight	0.060kg

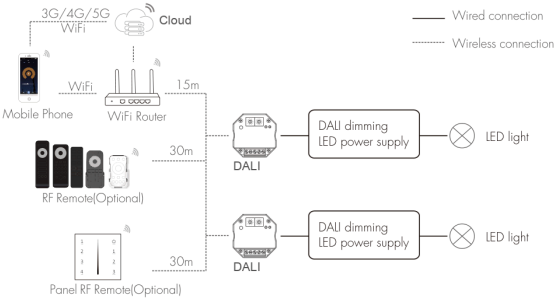
Safety and EMC	
EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3
Safety standard	EN 61347-1/-2
Radio Equipment	ETSI EN 300 440
Certification	CE RoHS
Warranty	5 years

Mechanical Structures and Installations



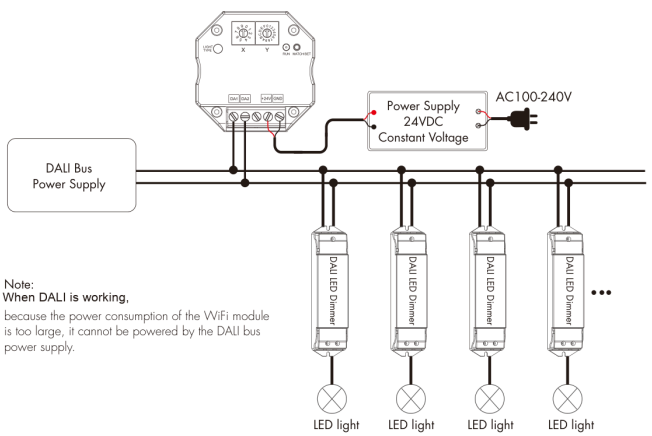


System Wiring



Note:
1. The above distance is measured in spacious(no obstacle) environment, Please refer to the actual test distance before installation.
2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
3. **Please keep the distance between DALI devices and router close, and check the WiFi signals.**
4. WiFi signal strength detection: open the main interface of the device, click to enter the device interface, and click "Check the device network" to detect.

Wiring Diagram



Note:
When DALI is working,
because the power consumption of the WiFi module is too large, it cannot be powered by 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** config.

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
Yellow: DUO
Red: RGB
Green: RGBW
Blue: RGB+DUO
Cyan: SWITCH

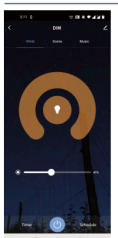
Control app Network Connection

Push twice Match/Set key fastly: Clear previous network connection, enter WiFi config mode, the RUN LED indicator flash fastly.
Press and hold Match/Set key for 5s: Clear previous network connection, enter WiFi config mode, the RUN LED indicator fast flash.

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

When controlling the light with Smart Life app, if the network connection is poor,
you can control the light with Bluetooth connection within the Bluetooth control range.
Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

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

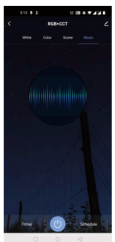
For RGB or RGBW type:
Touch color wheel to adjust static RGB color.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation, namely gradient from the current color to white(RGB mixed).

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

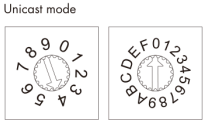
Match:
Switch off the power of the receiver, then switch on power, repeat again.
Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote.
The RUN LED indicator blinks 3 times means match is successful.

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

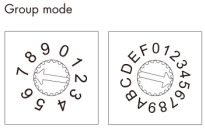
Address value = X * 10 + Y.
For example: X = 5, Y = 4, Address value = 5 x 10 + 4 = 54.

Unicast mode



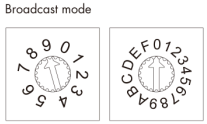
X is 0-6, Y is 0-9.
Address value 0-63 correspond to DALI unicast address 00-63.
For example:
Address value = 40,
the unicast address value is 40.

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.