LDT-DALI-DMX-CONV

Bidirectional DALI / DMX512 Signal Converter

A bidirectional DALI/DMX interface: choose DALI-to-DMX or DMX-to-DALI operation, then map the supported address range and channel count.

Supply voltage	12-48 VDC
Input / output signals	DALI to DMX512, or DMX512 to DALI; selectable working mode
Output type	Control-signal conversion; no LED load output
Maximum input current	Less than 40 mA
Standby power	Less than 0.5 W
Configuration	Working mode, channel count, first DALI address and first DMX address
User interface	Numeric display and 3 buttons
Mounting	DIN rail TS-35/7.5 or TS-35/15
Operating temperature	-20 to +55 °C
Maximum case temperature	+65 °C
IP rating	IP20
Body dimensions	110 x 67 x 48 mm

This interface converts lighting-control messages, not LED supply voltage or load current. Do not assume unlimited address conversion or every DT8 function; use the supported mode and mapping in the guide.

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.

DALI / DMX interface

DALI

DALI / DMX512 Signal Converter

- DALI/DMX512 signal converter,
  convert DALI signal to DMX512 signal to realize DALI master control of DMX devices.
  or convert DMX512 signal to DALI signal to realize DMX master control of DALI devices.
- 3-button operation with digital display.
- Set the work mode, channel number, DALI /rst address,
  and DMX512 first address by buttons.
- DALI-2 certified, in accordance with DALI standard protocol IEC 62386
  and in compliance with DALI products from other international incorporation.
- Compliant with DMX512 standard protocol.



DALI CE RoHS emc LVD

Technical Parameters

Input and Output	
Input voltage	12-48VDC
Input current	<40mA
Standby power	<0.5W
Input signal	DALI or DMX512
Output signal	DMX512 or DALI

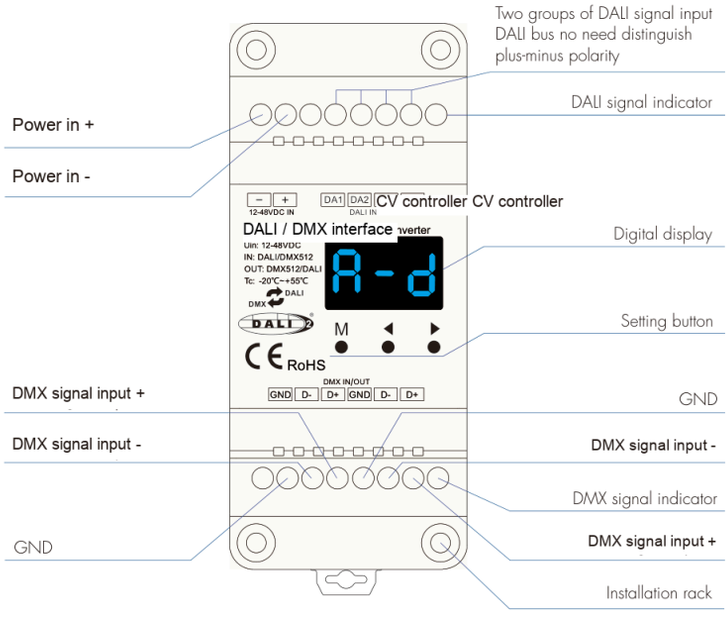
Environment	
Operation temperature	Ta: -20℃ ~ +55℃
Case temperature (Max.)	Ta: +65℃
IP rating	IP20

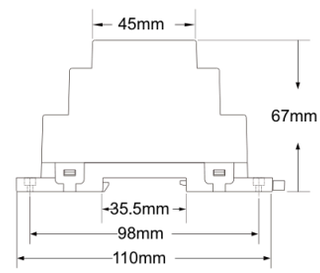
Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

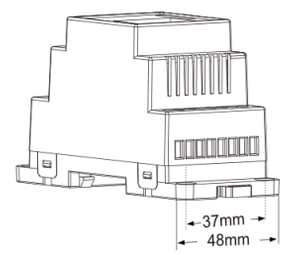
Safety and EMC	
EMC standard (EMC)	EN IEC 55015:2019+A11:2020 EN 61547:2009 EN IEC 61000-3-2:2019+A11:2021 EN 61000-3-3:2013+A11:2019
Safety standard(LVD)	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
Certification	CE,EMC,LVD, DALI-2

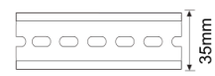
Package	
Size	L120x W78 x H55mm
Gross weight	0.164kg

Mechanical Structures and Installations





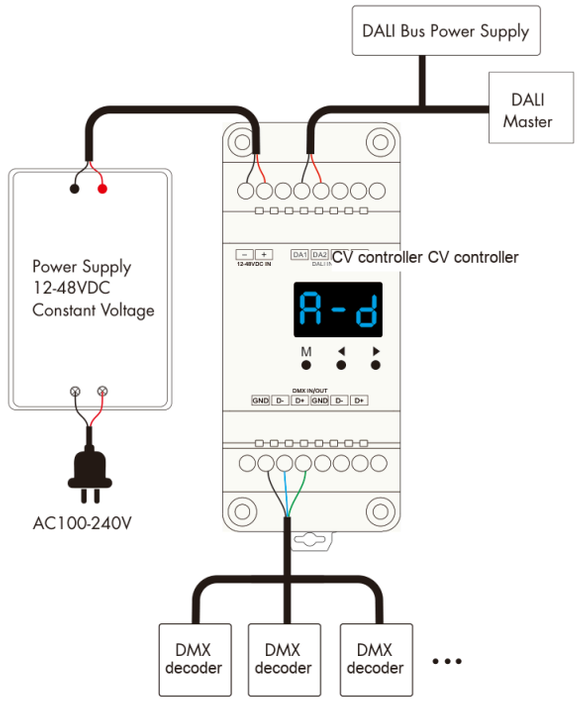




DIN Rail Mounting Size:
TS-35/7.5 or TS-35/15

Wiring Diagram

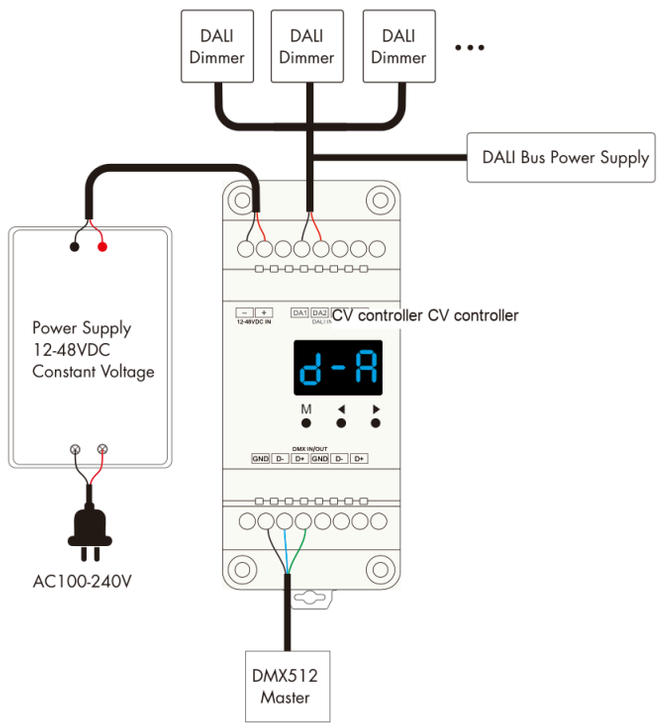
1. DALI to DMX512 mode wiring



Note:

- One or more DMX512 decoders can be connected to the DMX512 signal output ports.
- Indicator status:
  DALI signal indicator is always on. When the signal converter receives DALI signal, DALI signal indicator flashes.
  DMX signal indicator is always off. When the signal converter sends DMX signal, DMX signal indicator flashes.

2. DMX512 to DALI mode wiring



Note:

- One or more DALI dimmers can be connected to the DALI signal output ports.
- Indicator status:
  DMX signal indicator is always on. When the signal converter receives DMX signal, DMX signal indicator flashes.
  DALI signal indicator is always off. When the signal converter sends DALI signal, DALI signal indicator flashes.

Key operation

- Long press the M button for 2s, enter the system parameter setting interface, the digital tube blinks.
  Prepare to set the work mode, channel number, DALI /rst address, DMX512 /rst address.
  Short press M button to switch four setting items.
- Work mode: Short press □ or □ button to switch DALI to DMX512 ("A-d"), DMX512 to DALI ("d-A") two work modes.
- Channel number: Short press □ or □ button to set the channel number, setting range is 01-64, display "Cxx".
- DALI /rst address: Short press □ or □ button to set DALI /rst address, setting range is 00-63, display "Axx".
- DMX512 /rst address: Short press □ or □ button to set DMX512 /rst address, setting range is 001-512, display "xxx".
- Default display of digital tube: "A-d" in DALI to DMX512 mode; "d-A" in DMX512 to DALI mode.

DALI to DMX512 mode

According to channel number and the DALI first address, the DALI address dimming data is sequentially converted to the dimming data of the DMX channel.
(In the DALI to DMX mode, the DMX first address is fixed to 001.)

Example:
If the channel number is 30 and the DALI first address is A00,
the conversion relationship between DALI dimming data and DMX512 channel dimming data is shown in the table below.

DALI address	DMX address
A00	001
A01	002
A02	003
……	……
A28	029
A29	030
A30-A63	Invalid, not converted

DMX512 to DALI mode

According to the channel number, DMX512 first address, and DALI first address, the DMX512 dimming data is sequentially converted to DALI dimming data.

Example:
If the channel number is 30, the DMX512 first address is 100, and the DALI first address is A10.
Then the conversion relationship between DMX512 channel dimming data and DALI dimming data is shown in the table below.

DMX address	DALI address
000-099	Invalid, not converted
100	A10
101	A11
……	……
129	A39
130	A40
131-512	Invalid, not converted