LT-84A

LTECH

DMX/DALI To 0-10V Dimming Module

- Small size and light weight.Adopt SAMSUNG/COVESTRO V0 flame resistant polycarbonate protective housings.
- Dimming interfaces: DMX/RDM, DALI, Push Dim.
- Output signal: 0-10V
- With the RDM protocol, support DMX512 signal bidirectional communication.
- 4 channel output.
- Built-in relay for ON/OFF control of LED driver.
- Soft-on and fade-in dimming function enhances your visual comfort.
- Dimming range: 0~100%.
- Full protective plastic housing.
- DALI bus standard: IEC62386-101,102,207.
- Comply with Safety Extra Low Voltage standard.
- Suitable for indoor environments.

SELV　CE　RoHS　DALI

MODEL		LT-84A			
SPECIFICATIONS	Dimming interfaces	DMX/RDM,DALI,Push Dim			
	Output signal	0-10V×4CH			
	Dimming range	0~100%			
	Output signal logic	High potential			
	Input voltage	100-240Vac/277Vac (277 Vac for North America only)			
	Frequency	50/60Hz			
	AC current	0.055A			
	Inrush current	Cold start14A@230Vac			
	Leakage current	<0.5mA/240Vac			
	Power consumption	115Vac@3.0W MAX / 230Vac@3.5W MAX			
	Relay switch	240Vac/8A			
	Working temperature	ta: -30°C ~ 55°C tc: 70°C			
	Working humitdity	20 ~ 95%RH, non-condensing			
	Storage temp/Humidity	-40 ~ 80°C, 10~95%RH			
	Vibration	10-500HZ, 2G 12min/1cycle，72 min for X,Y and Z axes respectively.			
SAFETY & EMC	Withstand voltage	I/P-O/P:3750Vac			
	Insulation resistance	I/P-O/P:500VdC/25°C/70%RH≥100MΩ			
	Safety standards	CE	European Union	EN61347-1，EN61347-2-13，EN62384	
	EMC emission	CE	European Union	EN55015，EN61000-3-2，EN61000-3-3，EN61547	
	EMC immunity	EN61000-4-2,3,4,5,6,8,11，EN61547			
OTHERS	Dimensions	175×44×30mm(L×W×H)			
	Pacakge size	178×48×33mm(L×W×H)			
	Weight	110g±10g			

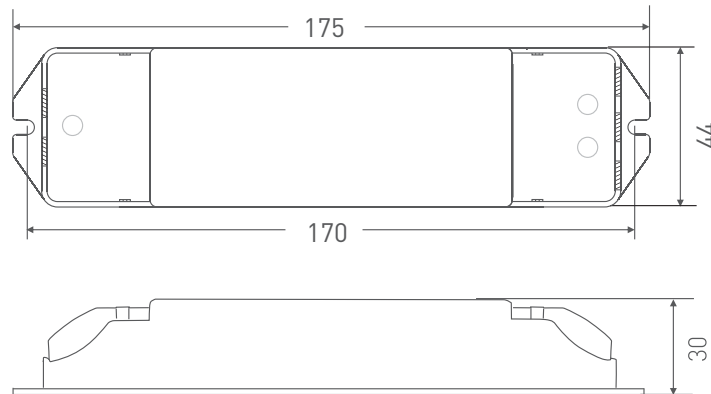## Push Dimming

Reset switch

- On/off control: Short press .
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when lights are turned off and on again.
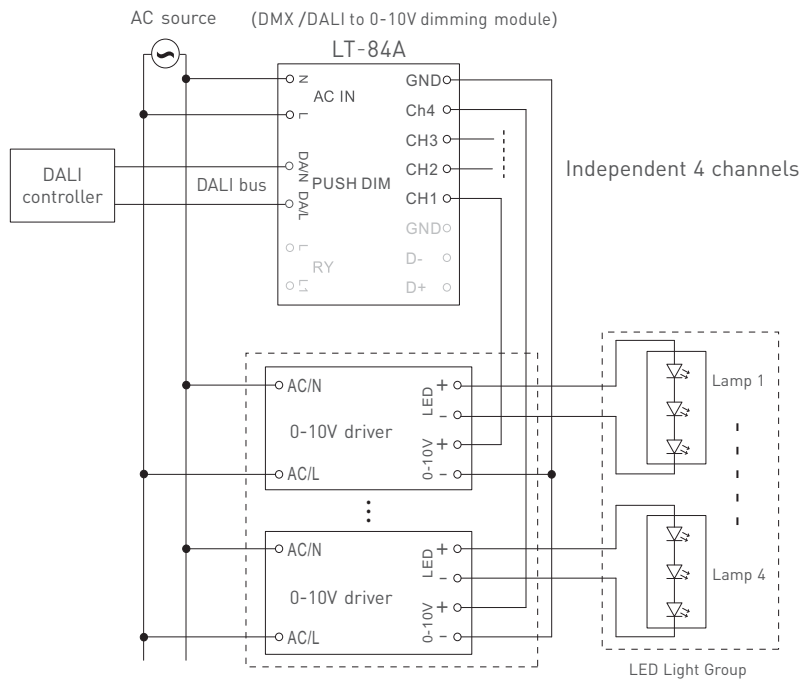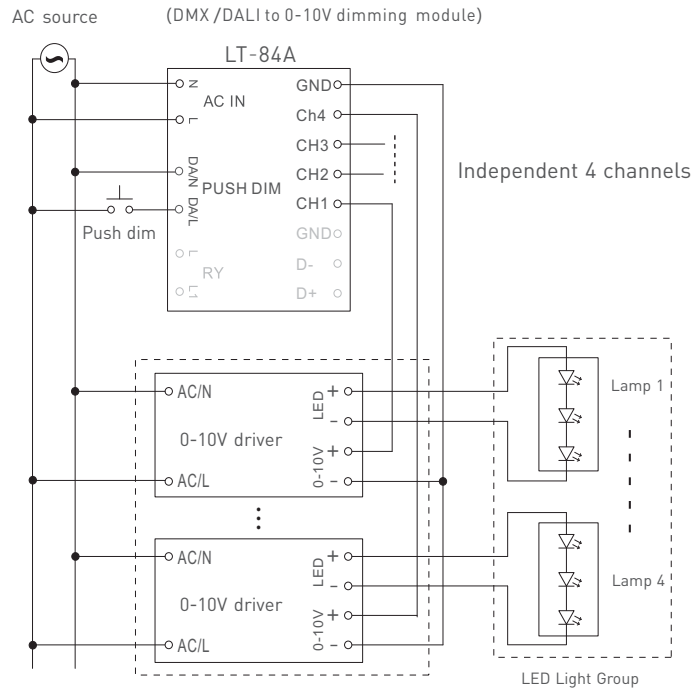
Dimensions

LT-84A

AC IN
N
L

PUSH DIM
DA/N
DA/L
DA/N —— N
DA/L —— L

RY
L
L1

OUTPUT
GND
CH4
CH3
CH2
CH1

DMX
GND
DMX-
DMX+

Product Size

Unit: mm

175
170
44
30

AC source   (DMX /DALI to 0-10V dimming module)

LT-84A

N
L
AC IN

DA/N
DA/L
PUSH DIM

RY

GND
Ch4
CH3
CH2
CH1
GND
D-
D+

Independent 4 channels

DALI controller

DALI bus

AC/N
0-10V driver
AC/L

LED +
−
0-10V +
−

Lamp 1

AC/N
0-10V driver
AC/L

LED +
−
0-10V +
−

Lamp 4

LED Light Group

LTECH

Push Dim connection

AC source (DMX /DALI to 0-10V dimming module)

LT-84A

AC IN — N, L
GND
Ch4
CH3
CH2
CH1

PUSH DIM
DALI DAIN
Push dim
RY

GND
D-
D+

Independent 4 channels

AC/N
0-10V driver
AC/L
LED + −
0-10V + −
Lamp 1

AC/N
0-10V driver
AC/L
LED + −
0-10V + −
Lamp 4

LED Light Group

DMX/RDM connection

AC source (DMX /DALI to 0-10V dimming module)

LT-84A

AC IN — N, L
GND
CH4
CH3
CH2
CH1

PUSH DIM
DALI DAIN
RY

GND
D-
D+

Independent 4 channels

DMX controller

AC/N
0-10V driver
AC/L
LED + −
0-10V + −
Lamp 1

AC/N
0-10V driver
AC/L
LED + −
0-10V + −
Lamp 4

LED Light Group
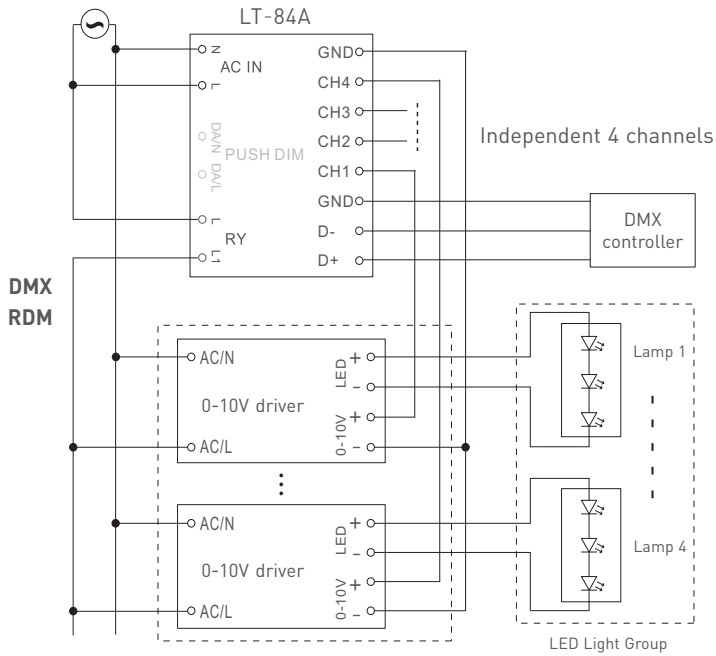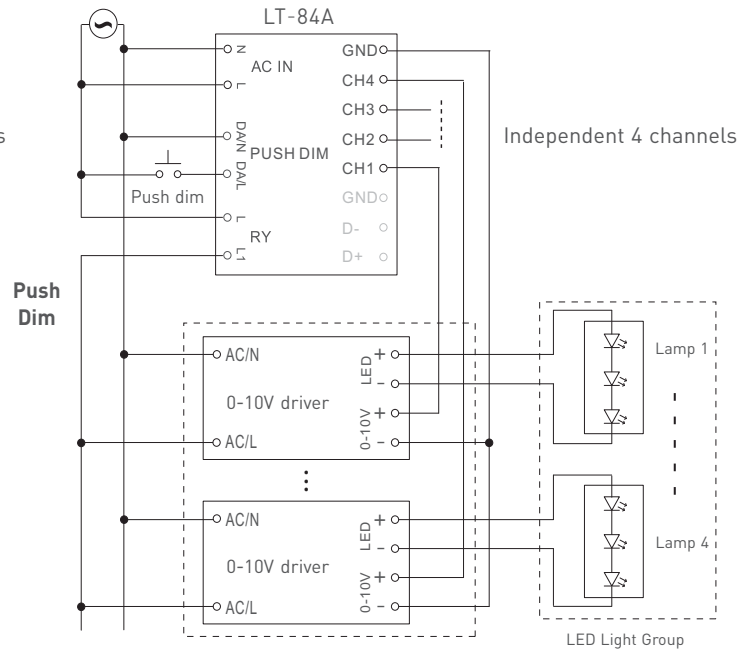
* Please make sure the maximum voltage drop between DMX/RDM, DALI controller and LT-84A should not be higher than 2V.Maximum cable length for 1.5mm^{2}cables is 300m.
* Each channel is individually addressable, light intensity of LED driver connected to the same channel with be the same; the maximum allowable voltage drop between the LT-84A and LED driver should not be higher than 0.5V; Maximum cable length for 1.5mm^2 cable is 300m.
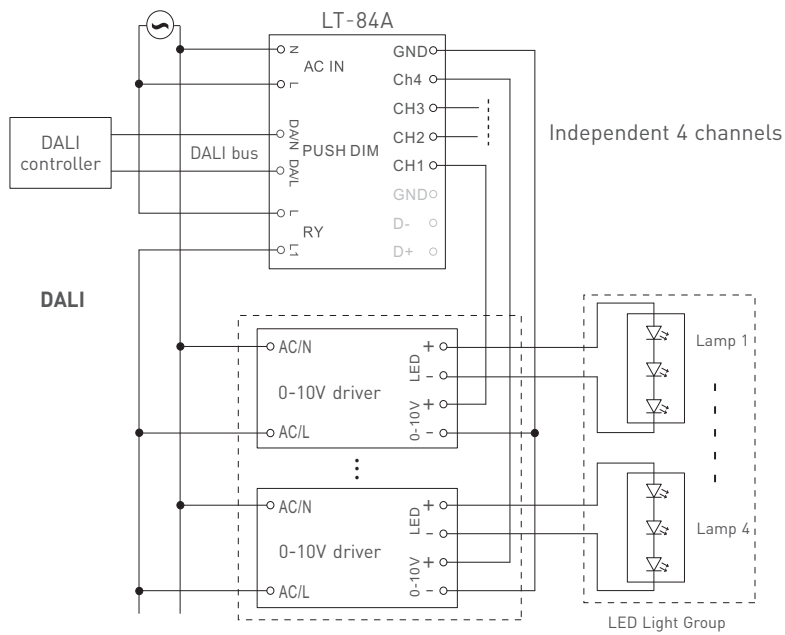
Built-in Relay connection

AC source   (DMX /DALI to 0-10V dimming module)

LT-84A

**DMX
RDM**

AC IN — N, L
DAL/N DAL/L
PUSH DIM
RY — L, L1

GND
CH4
CH3
CH2
CH1
GND
D-
D+

Independent 4 channels

DMX
controller

AC/N
0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 1

AC/N
0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 4

LED Light Group

AC source   (DMX /DALI to 0-10V dimming module)

LT-84A

**Push
Dim**

AC IN — N, L
DAL/N DAL/L
Push dim
PUSH DIM
RY — L, L1

GND
CH4
CH3
CH2
CH1
GND
D-
D+

Independent 4 channels

AC/N
0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 1

AC/N
0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 4

LED Light Group

AC source   (DMX /DALI to 0-10V dimming module)

LT-84A

DALI

AC IN — N, L
DAL/N DAL/L
PUSH DIM
RY — L, L1

GND
Ch4
CH3
CH2
CH1
GND
D-
D+

Independent 4 channels

DALI
controller

DALI bus

AC/N
0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 1

AC/N
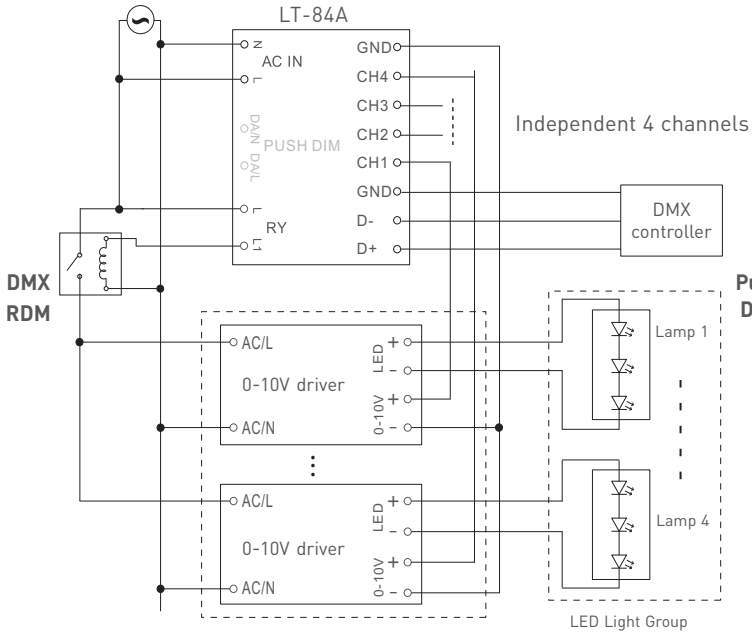0-10V driver
AC/L

LED +/−
0-10V +/−

Lamp 4

LED Light Group

* LT-84A is equipped with a relay that can be used to turn ON/OFF LED driver. The relay is in the closed position when the CH1 generates dimming signal, the relay is in the open position when there is no output signal on the CH1.
* The maximum load of built-in relay: 8A resistive current load or less than 50A inrush current load. The breakdowns caused by overloading is not covered by the warranty.
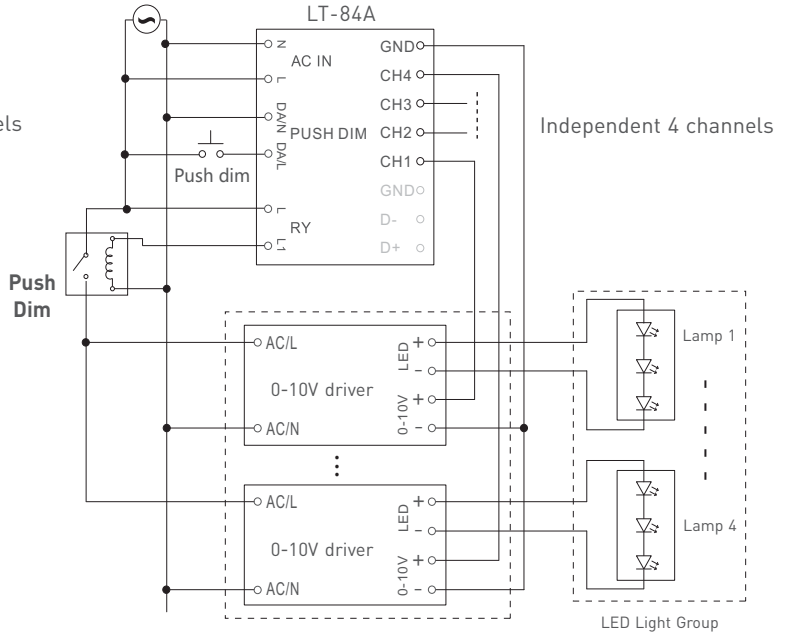
External Relay connection

An additional relay or magnetic switch is needed when the total input current of the LED driver is higher than 8A or inrush current is more than 50A. Connection diagram as below:
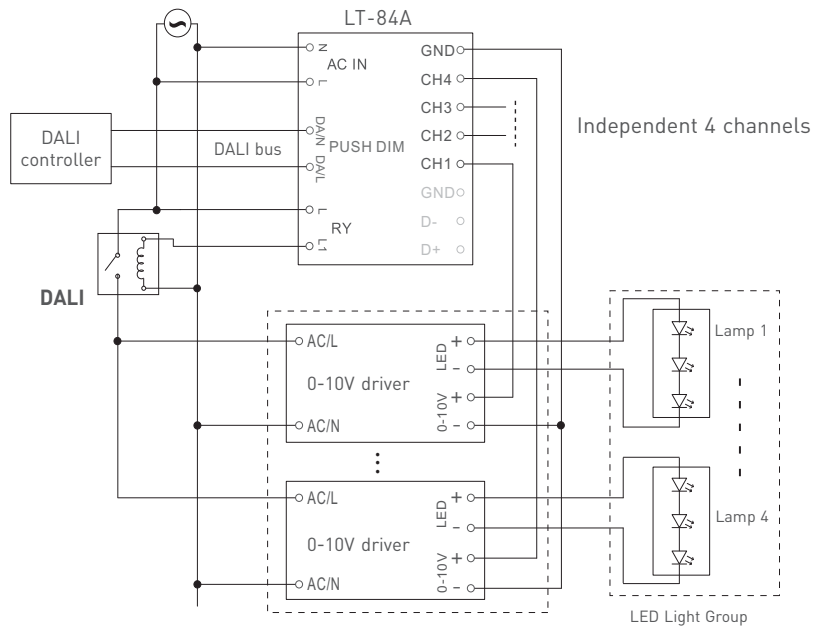

AC source　(DMX /DALI to 0-10V dimming module)

LT-84A

DMX RDM

Independent 4 channels

DMX controller

Lamp 1

Lamp 4

0-10V driver

LED Light Group

AC source　(DMX /DALI to 0-10V dimming module)

LT-84A

Push Dim

Push dim

Independent 4 channels

Lamp 1

Lamp 4

0-10V driver

LED Light Group

AC source　(DMX /DALI to 0-10V dimming module)

LT-84A

DALI controller

DALI bus

DALI

Independent 4 channels

Lamp 1

Lamp 4

0-10V driver

LED Light Group

＊ Note: Light intensity of LEDs in the same group may be decreased when one of the LED driver is AC OFF (This only happens in LED drivers of some certain brands).

Attentions

- Products shall be installed by qualified professionals.
- LTECH products are non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

✳ This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

Warranty periods from the date of delivery：5 years.

Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.
1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	2020.08.25	Original version	Xu Shujun
A1	2021.06.17	Deleted the description " (Default), 5V PWM ×4CH, 10V PWM ×4CH (Default 0-10V, Please specify if the other two output signals are needed)", which was placed after "Output Signal: 0-10V×4CH" on P1. Changed the "Optional output: 0-10V" to "Output signal: 0-10V" on P1.	Xu Shujun