

# 4 in 1 200W DALI DT8 LED Driver(Constant Voltage)

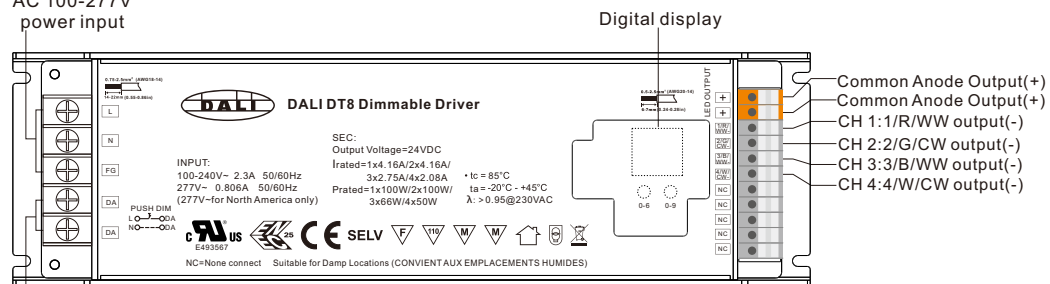
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**Important:** Read All Instructions Prior to Installation

## Function introduction

AC 100-277V  
power input



DALI/Push input

## Product Data

Output	LED Channel	4	
	DC Voltage	12V DC	24V DC
	Max. Current	Max. 8.3A/ch, ch1+ch2+ch3+ch4=16.6A	Max. 4.1A/ch, ch1+ch2+ch3+ch4=8.4A
	Voltage Tolerance	± 1%	
	Rated Power	max. 200W	
Input	Voltage Range	100-277V AC	
	Frequency Range	50/60Hz	
	Power Factor (Typ.)	> 0.98 @ 230VAC	
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)	
	Efficiency (Typ.)	93% @ 230VAC full load	
	AC Current (Typ.)	2.3A @ 100VAC, 1A @ 230VAC, 0.9A@277VAC	
	Inrush Current (Typ.)	COLD START Max. 57.8A at 230VAC, 312µs duration	
	Leakage Current	< 0.5mA /230VAC	
Control	Standby Power Consumption	< 1W	
	Dimming Interface	DALI Device Type 8 (DALI consumption<2mA)/Push	
	Dimming Range	0.1%-100%	
	Dimming Method	Pulse Width Modulation	
	Dimming Curve	Logarithmic	

Protection	Over Current	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after fault condition is removed
Environment	Working Temp.	-20°C ~ +45°C
	Max. Case Temp.	85°C (Ta= "45°C")
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, EN61347-1, EN61347-2-13 approved
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11, surge immunity Line-Line 1KV
	Others	MTBF

- 4 in 1 DALI DT8 LED driver, max. output power 200W total
- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2, IEC 62386-209:2011
- Built-in DALI-2 interface, DALI DT8 device
- 4 channels 12/24VDC constant voltage output
- Class 1 power supply, full isolated metal casing
- Power factor > 0.98, efficiency > 93%
- 4 universal device types in 1: primary N, Tc, XY coordinate, RGBW, can be set by the buttons
- DALI DT8 device to control RGBW outputs or tunable white outputs via a single DALI address
- Only 1 address required to control 4 outputs separately under primary N mode
- Control of four PWM outputs via DALI device type 8
- Color control as defined in the DALI specification device type 8
- Color type primary N, Tc, XY coordinate, RGBW can be set by manual set buttons
- Supports DT8 device commands, compatible with DALI masters that support DT8 commands
- Configuration via DALI master USB interface
- Numeric digital display for setting DALI address manually
- Compatible with universal AC push switch
- Compliant with Safety Extra Low Voltage standard
- Over load, over temperature protection
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

## Safety & Warnings

- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.

## Operation



### 1. Select a DALI Device Type

- 1.1. Press and hold down both buttons until digital display flashes, then release the button.
- 1.2. Keep clicking the 2nd button, you will get the 4 device types one by one as follows:

**nn**, means primary N color type, the device can control 4 channels single color LED separately under this mode.

**r9**, means RGBW color type, the device can control RGBW LED under this mode.

**7c**, means Tc color type, the device can control tunable white LED under this mode.

**H4**, means XY coordinate color type, the device can control RGBW LED under this mode.

1.3. Select a device type you would like and then press and hold down both buttons until digital display stops flashing to confirm the selection.



## 2. Setting DALI address

- Press and hold down any of the two buttons until numeric digital display flashes, then release the button.
- Click any of the two buttons once to select a digit, click again to change the digit until the desired DALI address appears. Click first button to set "tens" position and second button to set "units" position. The address can be set from 00-63.
- Then press and hold down any of the 2 buttons until the numeric digital display stops flashing to confirm the setting.

**Note:** DALI address can be manually assigned from 00-63-FF, by factory defaults, no DALI address is assigned for the dimmer, and the display shows **FF**. Setting DALI address as **FF** will reset the dimmer to factory defaults.

3. Once an address is selected, all four channels' address will be the same. For example, if the dimmer is addressed to 22 on the display then CH1, CH2, CH3, CH4 will be the same address 22.

## 4. DALI Address Assigned by DALI Masters

DALI address can also be assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations.

**Note:** The digital display will show **AU** When the DALI master is assigning addresses.

## 5. Push Dimmer Mode

While connected with an AC push switch, the digital display will show "PD" which means Push Dimmer Mode, operations under Push Dimmer Mode are as follows:

While **nn** 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 **r9** or **H4** 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.
- Double click the button to switch between brightness mode and RGB color mode.
- Press and hold down the button to change RGB colors under RGB color mode.

While **7c** device type is selected,

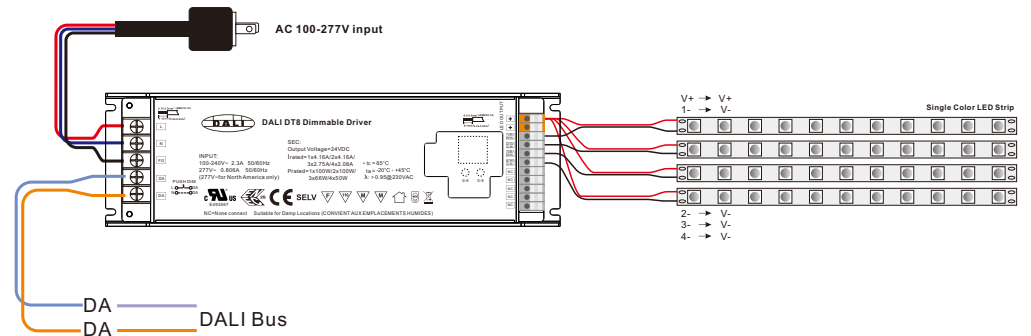
- Click the button to switch ON/OFF
- Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction.
- Double click the button to switch between brightness mode and color temperature mode.
- Press and hold down the button to change color temperature under color temperature mode.

The driver has memory function under push dimmer mode after power off or power failure, which enables the device to memorize the status before power off while power on again.

## Wiring Diagram

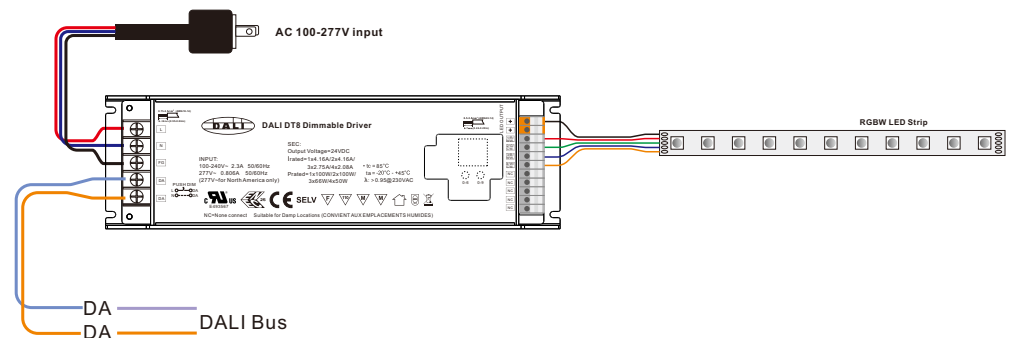
### 1. With DALI Master

#### 1.1 When **nn** primary N color type selected



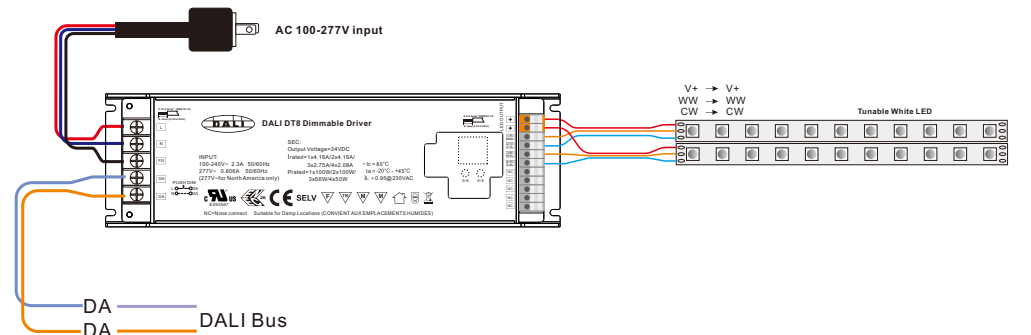
**Note:** Please make sure that the DALI master controller supports primary N color type commands.

#### 1.2 When **r9** RGBW color type selected



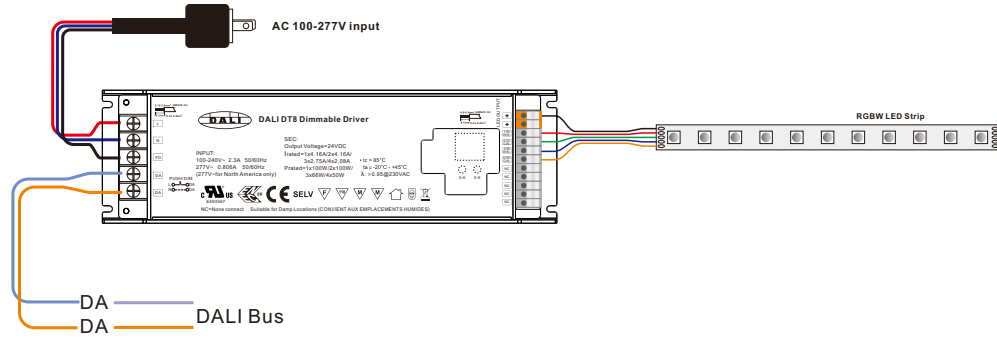
**Note:** Please make sure that the DALI master controller supports RGBW color type commands.

#### 1.3 When **7c** Tc color type selected



**Note:** Please make sure that the DALI master controller supports Tc color type commands.

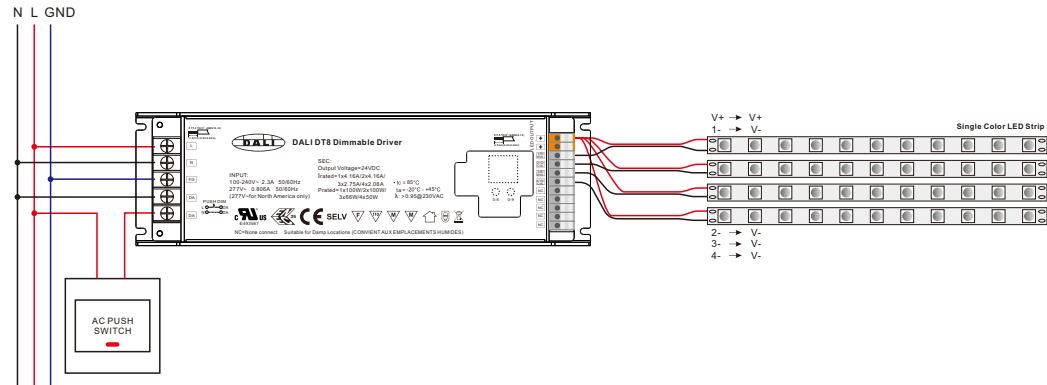
#### 1.4 When **H4** XY coordinate color type selected



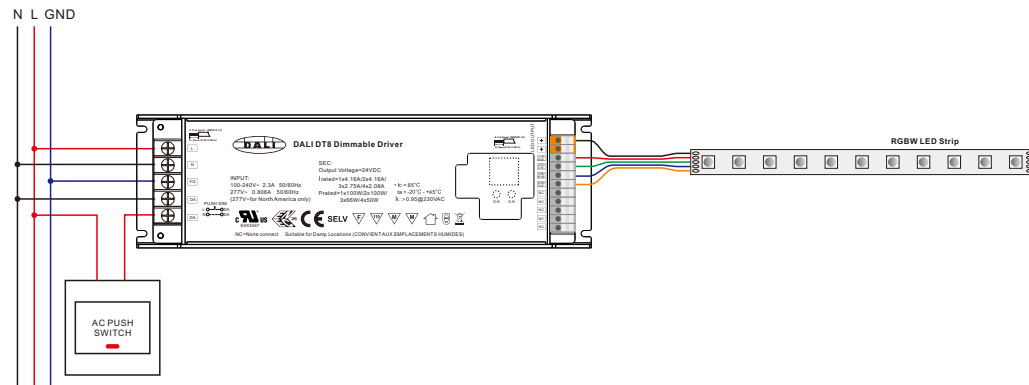
- Note:**
- 1) Please make sure that the DALI master controller supports XY coordinates color type commands.
  - 2) For color type XY coordinates, the 4th W channel can only be controlled together with RGB channels.
  - 3) Only when the coordinate point at the area where R, G, B three colors mix color will W channel turn on.
  - 4) W channel intensity will go up only as R, G, B three colors' intensity goes up simultaneously.
  - 5) W channel intensity will go down only as R, G, B three colors' intensity goes down simultaneously.
  - 6) If controlled by XY type touch panel, use W button on the panel to mix RGB thus turn on 4th channel W.

#### 2. With AC Push

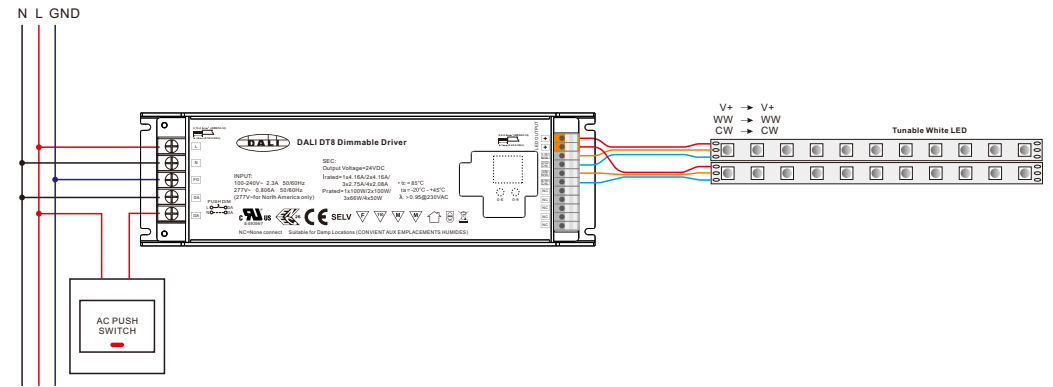
##### 2.1 When **r1** primary N color type selected



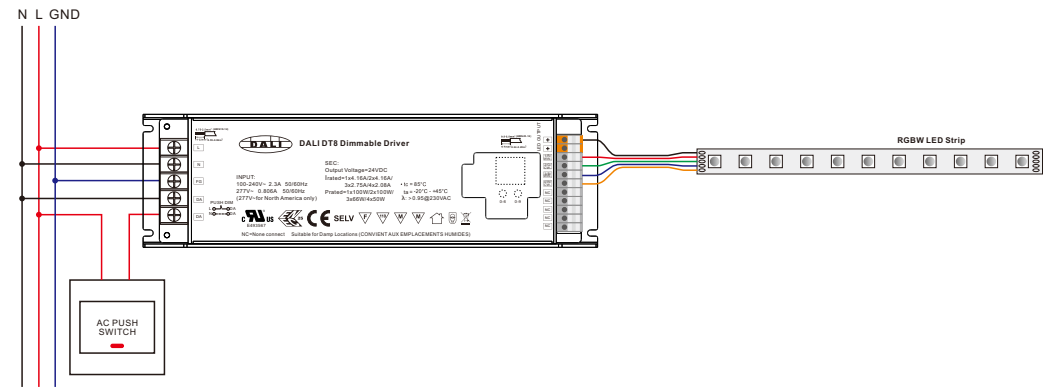
##### 2.2 When **r9** RGBW color type selected



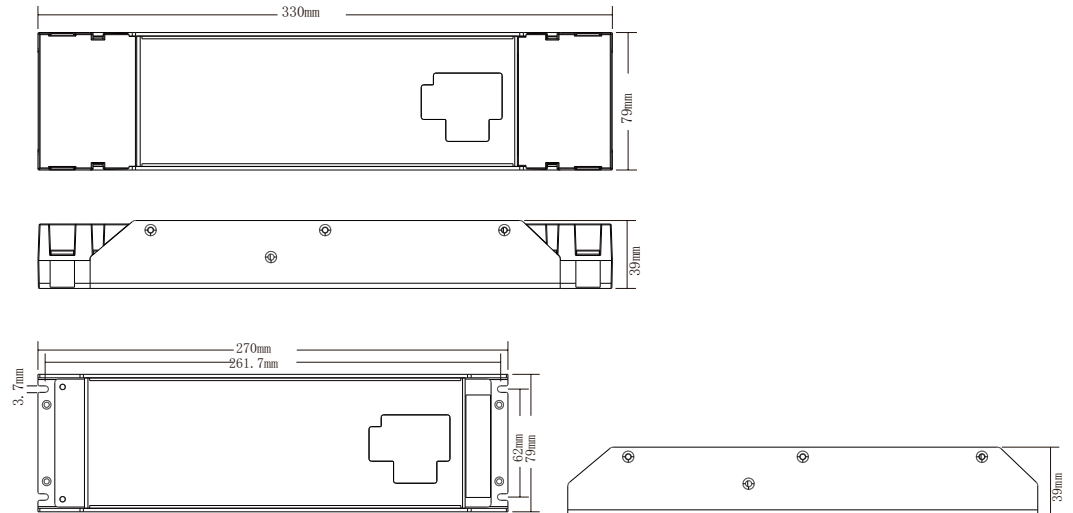
#### 2.3 When **r7c** Tc color type selected



#### 2.4 When **H4** XY coordinate color type selected

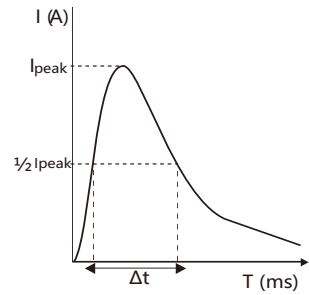


#### Product Dimension



## MCB Load Quantity

Module Number	I <sub>peak</sub>	T <sub>width</sub>	Max. quantity of LED Driver per MCB														
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRPC-2309PRO-12-200CVF	57.8A	312μs	3	4	5	7	8	6	7	9	11	14	11	14	18	22	28
SRPC-2309PRO-24-200CVF	57.8A	312μs	3	4	5	7	8	6	7	9	11	14	11	14	18	22	28



Note:

1. Those MCB parameters are based on ABB S200 series circuit breakers.
2. For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.
3. Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.
4. When the installation environment temperature of MCBs exceeds  $30^{\circ}\text{C}$  or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.
5. Type C MCB's are strongly recommended to use with LED lighting