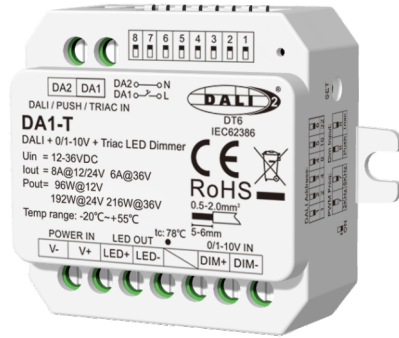


# DA1-T

## DAI + 0/1-10V + Triac Dimming

### Constant Voltage LED Controller

DAI



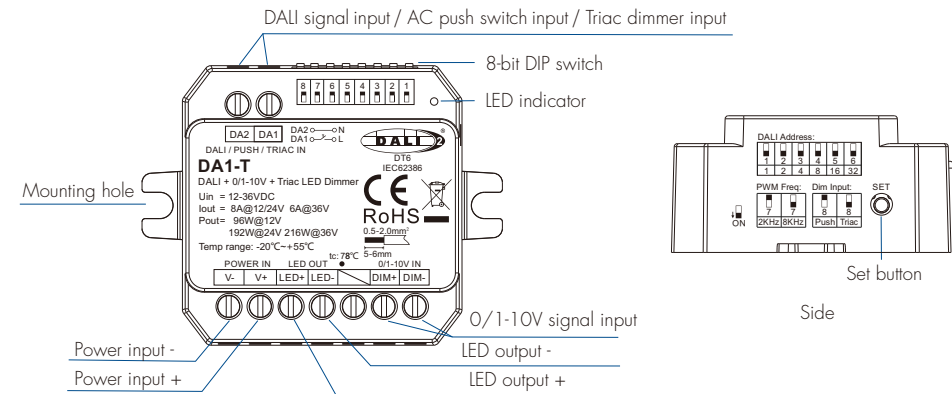
### Features

- DALI + 0/1-10V + Triac dimming constant voltage LED controller with 1 channel, maximum 8A output.
- DALI-2 certified, in accordance with DALI standard protocol IEC 62386-101, 102, 207 and in compliance with DALI products from other international incorporation.
- DALI addresses can be manually assigned via DIP switch or automatically assigned by the DALI master.
- The DALI signal input port supports triac dimming and AC auto-reset switch dimming.
- Compatible with active or passive 0-10V, 1-10V dimmer.
- PWM frequency 2KHz or 8KHz selectable.
- Standard DALI logarithmic dimming curve.
- Over-heat / Overload / Short circuit protection, recover automatically.

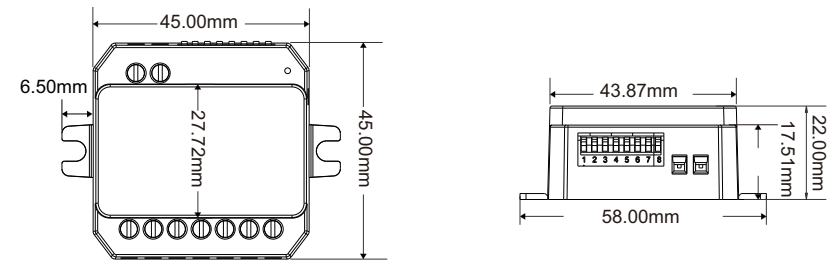
### Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-36VDC	Input signal	DALI + 0/1-10V + Triac + AC push switch	EMC standard	EN IEC 55015 EN IEC 61547
Input current	Max 8A				
Output voltage	12-36VDC	Dimming range	0-100%	Safety standard	EN 61347-1/-2
Output current	8A @12/24V 6A @36V	Dimming curve	Logarithmic	Certification	CE RoHS DALI-2
		PWM Frequency	2KHz(default), 8KHz	<b>Package</b>	
Output power	96W @12V 192W@24V 216W@36V	<b>Environment</b>		Size	L 60 x W60 x H32mm
		Operation temperature	Ta: -20°C ~ +55°C	Gross weight	0.049kg
Output type	Constant voltage	Case temperature (Max.)	Tc: +78°C	Warranty	5 years

### Mechanical Structures and Installations

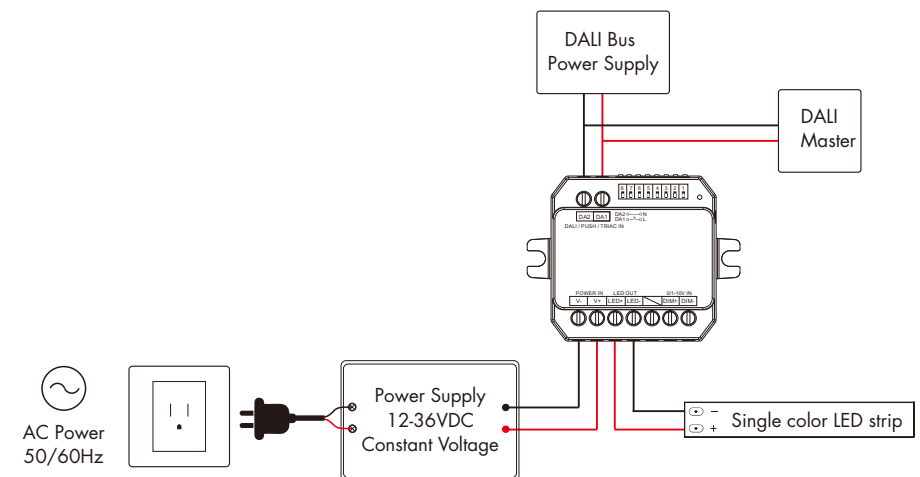


Note: The mounting tabs on both sides can be snapped off along the scored lines to accommodate different installation requirements.

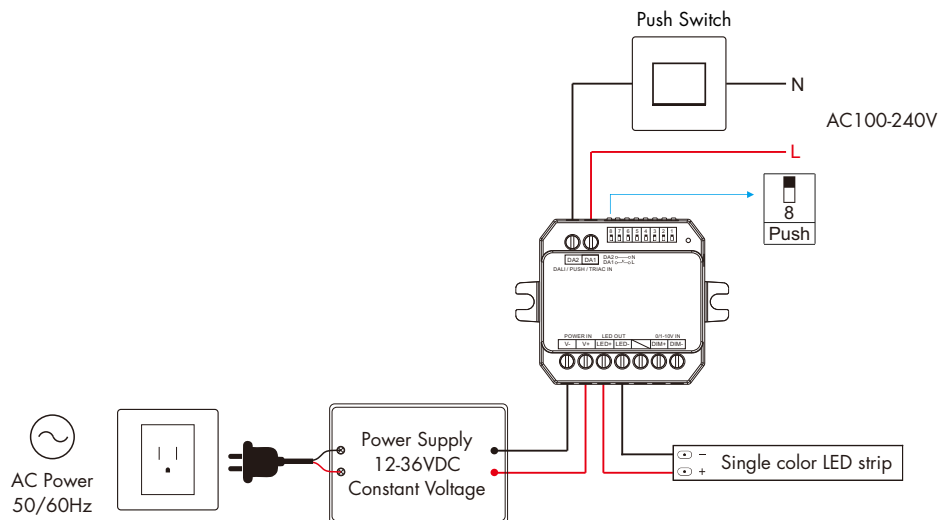


### Wiring Diagram

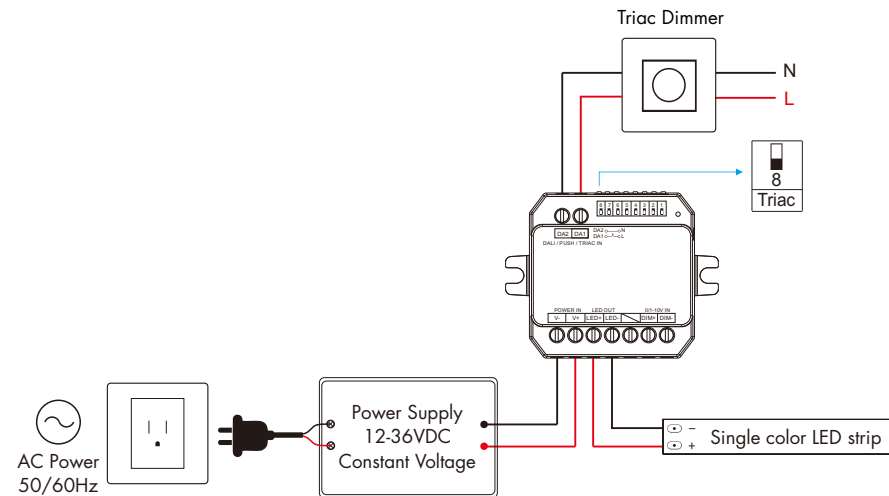
- Connect with DALI master



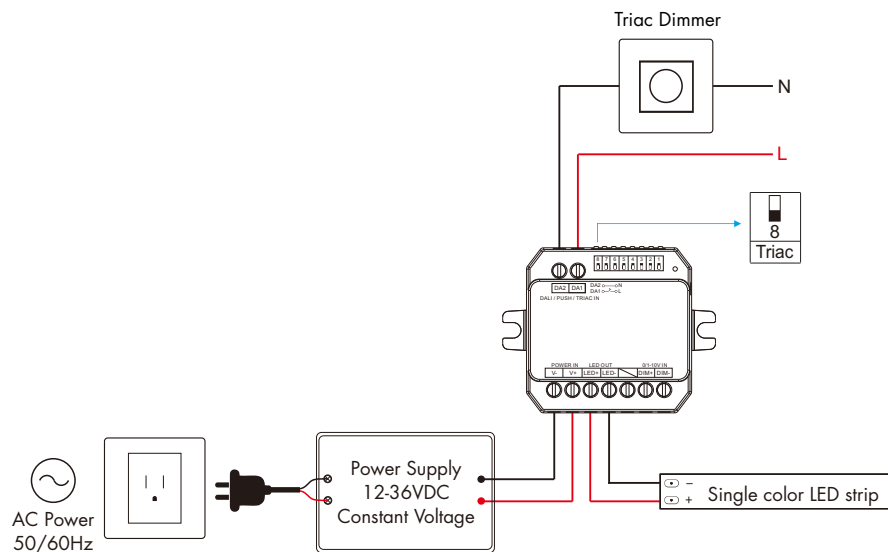
- Connect with push switch



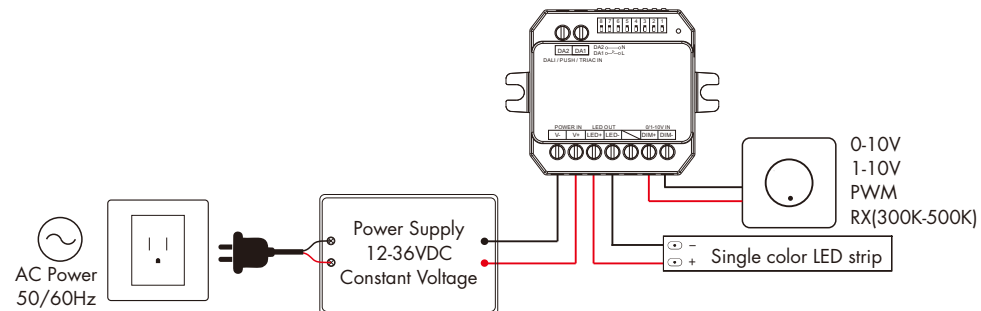
- Connect Triac dimmer with neutral wire input



- Connect single wire Triac dimmer without neutral wire



- Connect with 0/1-10V dimmer



**Note:**

- The 0/1-10V input is operable via commercially available simple rotary wall switches designed for 0/1-10V dimming equipment or from dedicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PWM, RX(4 in 1).
- We recommend the number of LED dimming controllers connected to 0/1-10V dimmer does not exceed 50 pieces, the maximum length of the wires from dimmer to LED driver should be no more than 50 meters.
- If the LED dimming controller be used with Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10V signal should change over 10% to return 0/1-10V control.
- Push switch (Push) and triac dimmer (Triac) inputs cannot be connected simultaneously. Please first use DIP switch 8 to select the dimming input method firstly.

## Push Dim Function

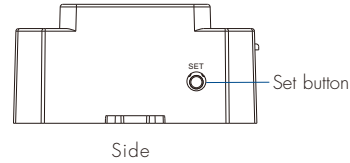
The self-reset switch interface can be connected to a self-reset panel switch or a self-reset button to dim the light.

- **Short press:**  
Turn on or off light.
- **Long press (1-6s):**  
Press and hold to stepless dimming. With every other long press, the light level goes to the opposite direction.
- **Synchronization:**  
If more than one controller are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.

## Set Button Function

- **Restore factory defaults**  
Press and hold the SET button for 10 seconds. The LED indicator will fast flash 6 times, restoring the device to factory default settings.  
Factory default parameters: DALI dimming mode, DALI address not assigned, open-circuit detection disabled.

- **Open-circuit detection**  
When the light is off, press the SET button 5 times in quick succession to enable or disable the open-circuit detection function.  
When the LED indicator flash 3 times, the open-circuit detection function is enabled.  
When the LED indicator flash 5 times, the open-circuit detection function is disabled.



## PWM Frequency Setting

Set the PWM frequency using DIP switch 7. The factory default PWM frequency is 2KHz.  
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera (No flickers for video).

PWM frequency and output current mapping:

U <sub>in</sub> \ PWM frequency	DIP switch 7	
	2KHz	8KHz
12-24V	8A	6A
36V	6A	5A

## DALI Address Setting

- Use DIP switches 1-6 to set the DALI address  
DALI Address(0-63) = (1 × dip1 + 2 × dip2 + 4 × dip3 + 8 × dip4 + 16 × dip5 + 32 × dip6)  
Please refer to the form below for address settings.  
In this form,  Corresponding DIP switch ON,  Corresponding DIP switch OFF.

DALI Address:					
1	2	3	4	5	6
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	4	8	16	32

DALI Address	DIP switch	DALI Address	DIP switch	DALI Address	DIP switch	DALI Address	DIP switch
0	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	16	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	32	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	48	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	17	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	33	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	49	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	18	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	34	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	50	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	19	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	35	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	51	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	20	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	36	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	52	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	21	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	37	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	53	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	22	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	38	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	54	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	23	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	39	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	55	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	24	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	40	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	56	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	25	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	41	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	57	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	26	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	42	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	58	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	27	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	43	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	59	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	28	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	44	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	60	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
13	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	29	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	45	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	61	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
14	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	30	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	46	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	62	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
15	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	31	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	47	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	63	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

- Use the DALI master controller to set the DALI address  
DALI addresses can also be automatically assigned by the DALI master. Please refer to the DALI master user manual.

## Safety & Warnings

- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.
- Cannot be connected to both the DALI master and the push switch, as this will burn out the DALI bus power supply.