

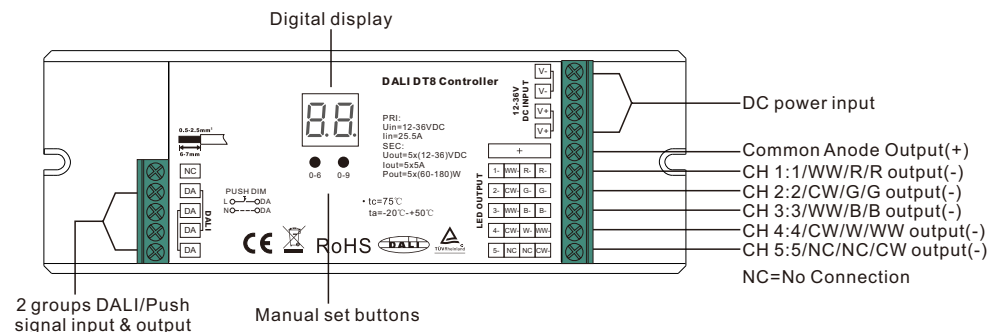
# Multi-addresses PRO DALI DT8 LED Controller

70040048



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

## Function introduction



## Product Data

No.	Input Voltage	Output Current	Output Power	Remarks	Size(LxWxH)	DALI Consumption	Dimming Range	Ambient Temperature
1	12-36VDC	5x5A	5x(60-180)W	Constant voltage	170x59x29mm	2mA	0.1%-100%	-20°C ~ +50°C
2	12-36VDC	5x350mA	5x(4.2-12.6)W	Constant current	170x59x29mm	2mA	0.1%-100%	-20°C ~ +50°C

- 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
- Multi-addresses enabled DT8 control gear
- Multi-devices integrated in one control gear
- Multi-functional, 8 in 1: Tc, RGBWAF, XY, 2\*Tc, XY+Tc, RGB+Tc, XY+W (DT6), DT6
- DALI address manually assignable through manual set buttons and showed on the display
- Can be set as different device types: single-address types or multi-addresses types
- Single-address device types: Tc, RGBWAF, XY, DT6
- Multi-addresses device types: 2\*Tc, XY+Tc, RGB+Tc, XY+W (DT6)
- 5 Channels constant voltage output
- Control of five PWM outputs via DALI device type 8
- Color control as defined in the DALI specification device type 8
- Supports DT8 device commands, compatible with universal DALI masters that support DT8 commands
- Configuration via DALI master USB interface
- Color temperature and RGB color control through push dim mode even if without DALI
- Waterproof grade: IP20

## 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 8 device types one by one as follows:

**7c**, means 2 Tc color type devices integrated in one control gear, which can control 2 groups of tunable white LED separately using 2 DALI addresses under this mode.

**Hc**, means XY & Tc color type devices integrated in one control gear, which can control RGB & CCT LED separately using 2 DALI addresses under this mode.

**rc**, means RGBWAF & Tc color type devices integrated in one control gear, which can control RGB & CCT LED separately using 2 DALI addresses under this mode.

**H6**, means XY & DT6 type devices integrated in one control gear, which can control RGB & W LED separately using 2 DALI addresses under this mode.

**H4**, means XY coordinate color type, which can control RGB LED using 1 DALI address under this mode.

**7c**, means Tc color type, which can control tunable white LED using 1 DALI address under this mode.

**rg**, means RGBWAF color type, the device can control RGB+CCT LED using 1 DALI address under this mode.

**76**, means DT6 device type, which can control single color LED using 1 DALI address 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



- 2.1. Press and hold down the first button on the left until digital display flashes, then release the button.
- 2.2. 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.
- 2.3. 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, depending on the device type selected, the control gear may occupies 2 consecutive addresses or 1 address. For example, if the control gear is addressed to 22 on the display, when the device type is multi-addresses type, the control gear occupies address 22 & 23, when the device type is single-address type, the control gear occupies 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 **RU** When the DALI master is assigning addresses. When the device type is multi-addresses type, the control gear will be discovered as 2 separate devices.

### 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 **7c** device type is selected, only the 1st group tunable white LED will be controlled by the push switch,
- ÿ Click the button to switch ON/OFF
- ÿ 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. The dimming range is from 1% to 100%.
- ÿ Double click the button to switch between brightness mode and color temperature mode.
- ÿ Press and hold down the button to change color temperature under color temperature mode.

While **H<sub>C</sub>** or **r<sub>C</sub>** or **H<sub>B</sub>** device type is selected, only the RGB LED will be controlled by the push switch,  
 ✓ 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. The dimming range is from 1% to 100%.  
 ✓ 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 **H<sub>4</sub>** or **r<sub>9</sub>** device type is selected, RGB LED will be controlled by the push switch,  
 ✓ 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. The dimming range is from 1% to 100%.  
 ✓ 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 **r<sub>C</sub>** device type is selected, tunable white LED will be controlled by the push switch,  
 ✓ 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. The dimming range is from 1% to 100%.  
 ✓ 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.

While **r<sub>B</sub>** device type is selected, single color LED will be controlled by the push switch,  
 ✓ 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. The dimming range is from 1% to 100%.

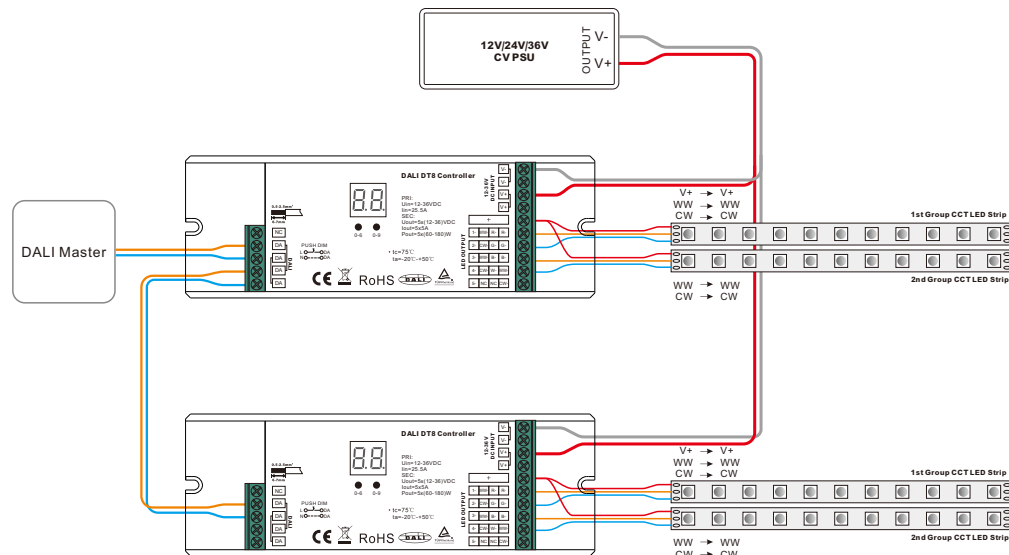
Memory function after power off or power failure enables the device to memorize the status before power off while power on again.

### Wiring Diagram

**When total load of each receiver is not over 20A**

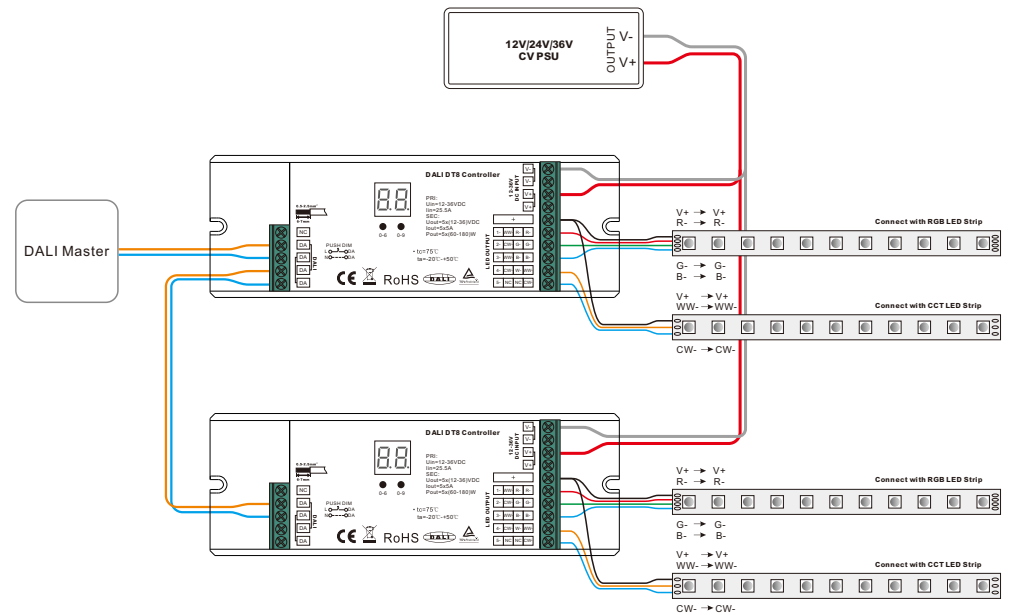
#### 1. With DALI Master

##### 1.1 When **r<sub>C</sub>** multi-addresses T<sub>c</sub> device type selected



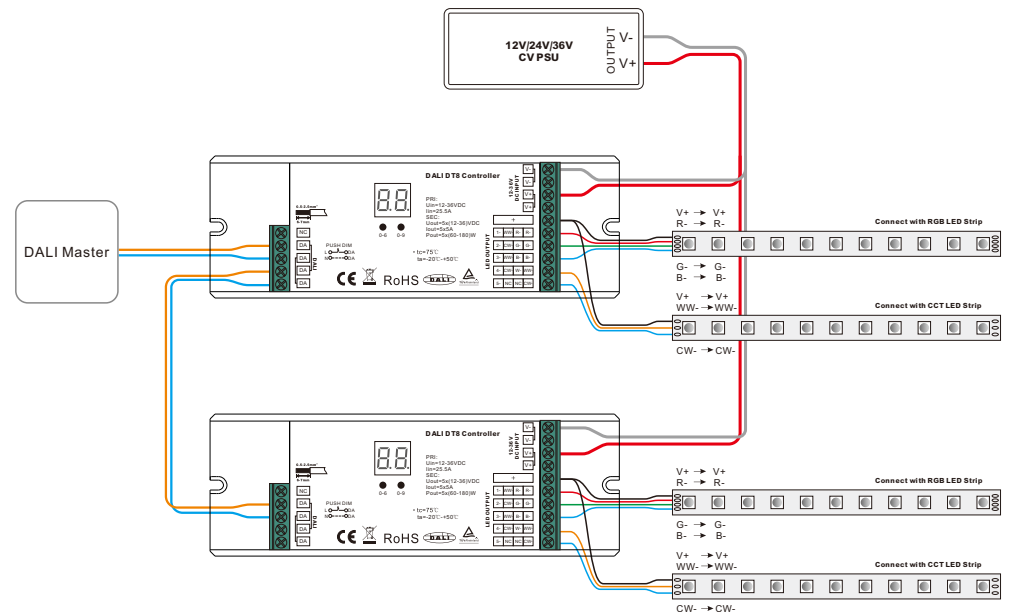
**Note: 1) Please make sure that the DALI master controller supports T<sub>c</sub> color type commands.**  
**2) The control gear will be discovered by master controller as 2 separate T<sub>c</sub> devices.**

##### 1.2 When **H<sub>C</sub>** multi-addresses XY+T<sub>c</sub> device type selected



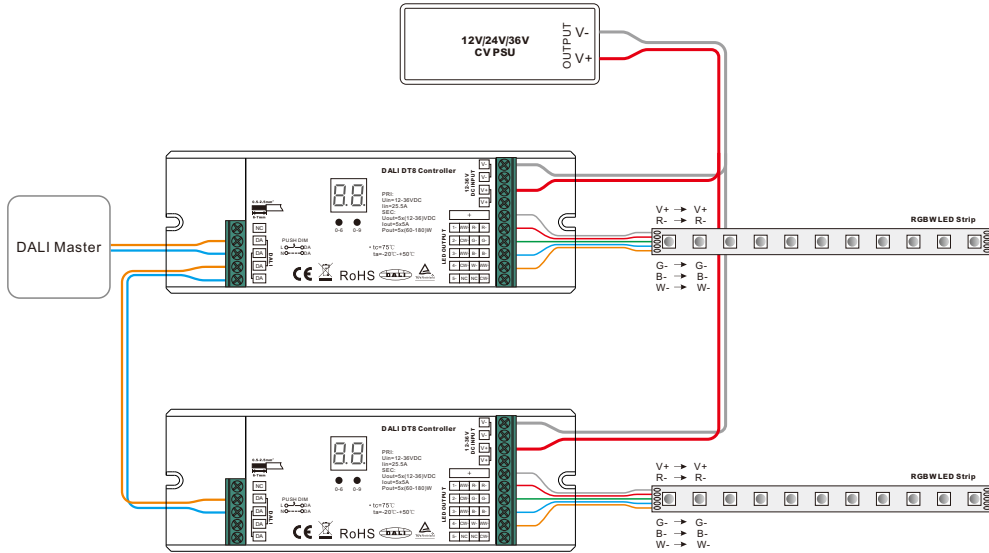
**Note: 1) Please make sure that the DALI master controller supports XY & T<sub>c</sub> color type commands.**  
**2) The control gear will be discovered by master controller as 2 separate devices: XY, T<sub>c</sub>.**

##### 1.3 When **r<sub>C</sub>** multi-addresses RGB+T<sub>c</sub> device type selected



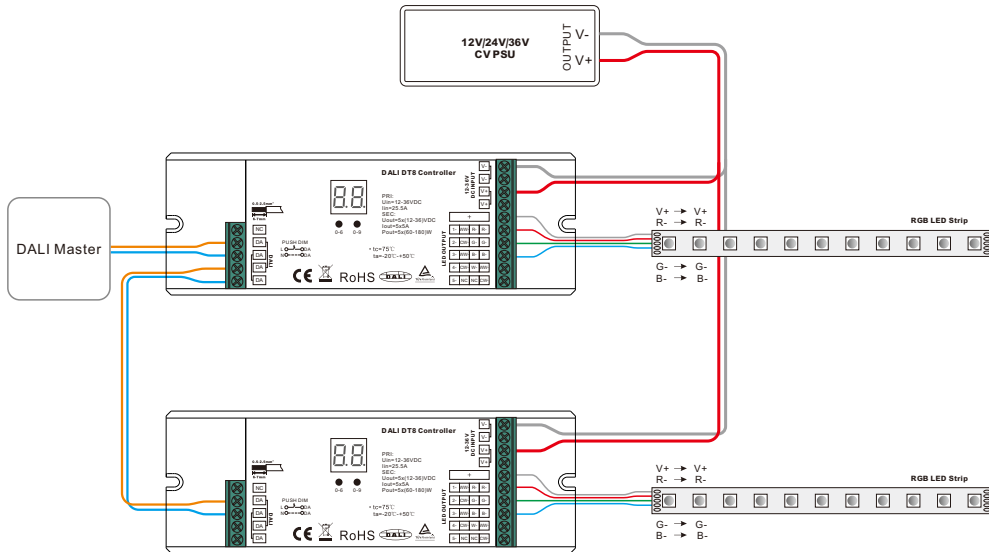
**Note: 1) Make sure that the DALI master controller supports RGBWAF & T<sub>c</sub> color type commands.**  
**2) The control gear will be discovered by master controller as 2 separate devices: RGB, T<sub>c</sub>.**

1.4 When **H6** multi-addresses XY+Single Color(DT6) device type selected



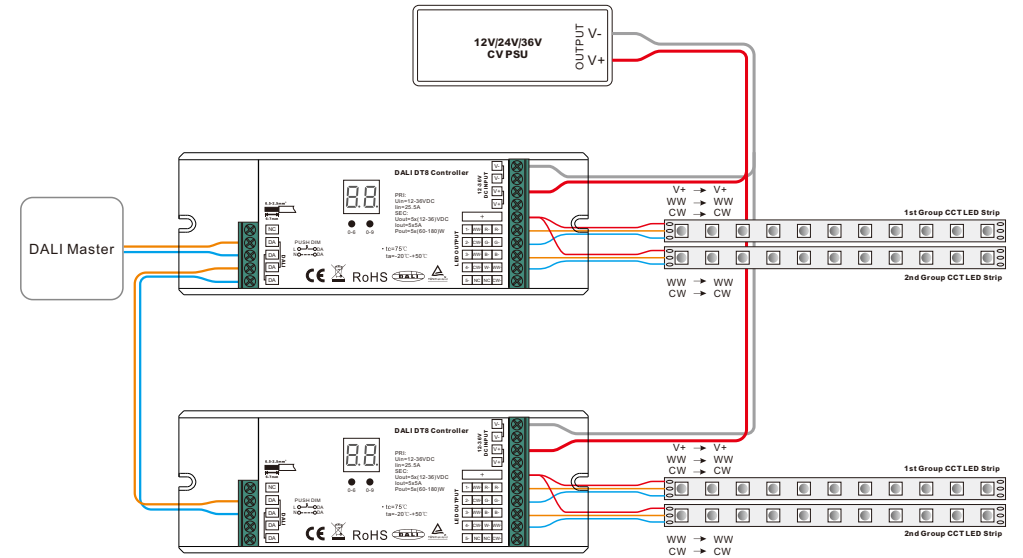
Note: 1) Please make sure that the DALI master controller supports XY & DT6 color type commands.  
2) The control gear will be discovered by master controller as 2 separate devices: XY, DT6

1.5 When **H4** single-address XY device type selected



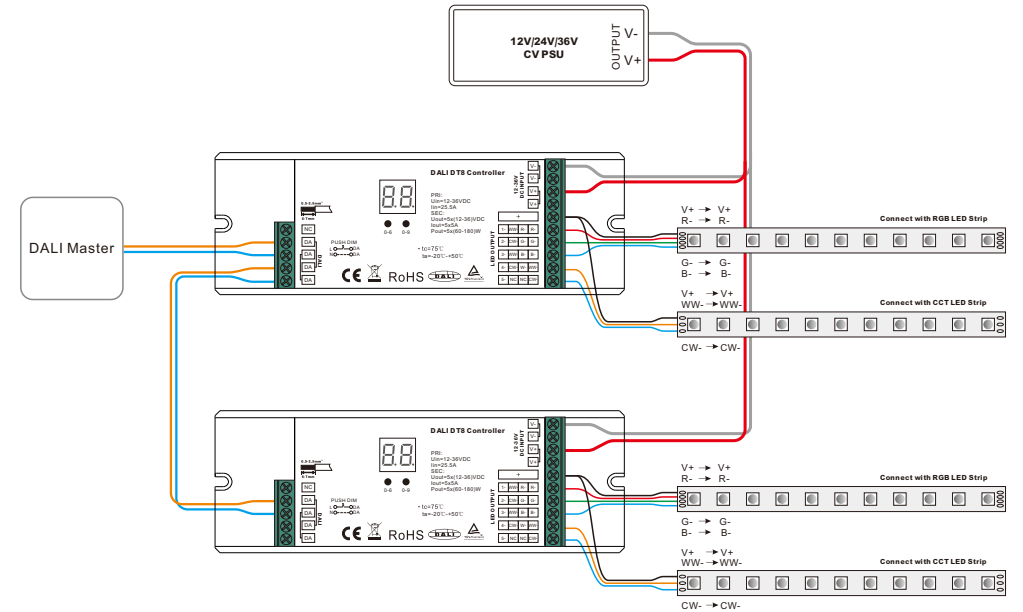
Note: Please make sure that the DALI master controller supports XY color type commands.

1.6 When **Tc** single-address Tc device type selected



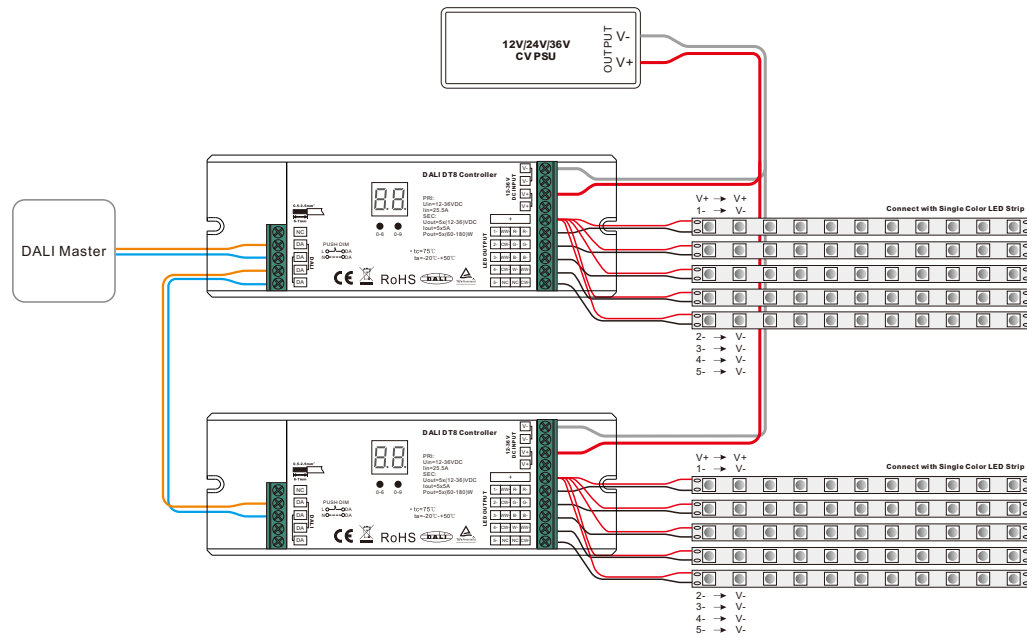
Note: 1) Please make sure that the DALI master controller supports Tc color type commands.  
2) 2 groups CCT LED are controlled together.

1.7 When **r9** single-address RGBWAF device type selected



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

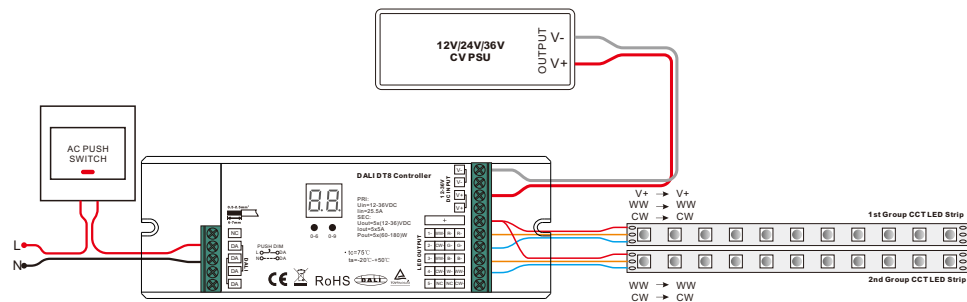
## 1.8 When $\overline{76}$ single-address DT6 device type selected



Note: The control gear will be discovered by DALI master as a DT6 device, 5 channels controlled together.

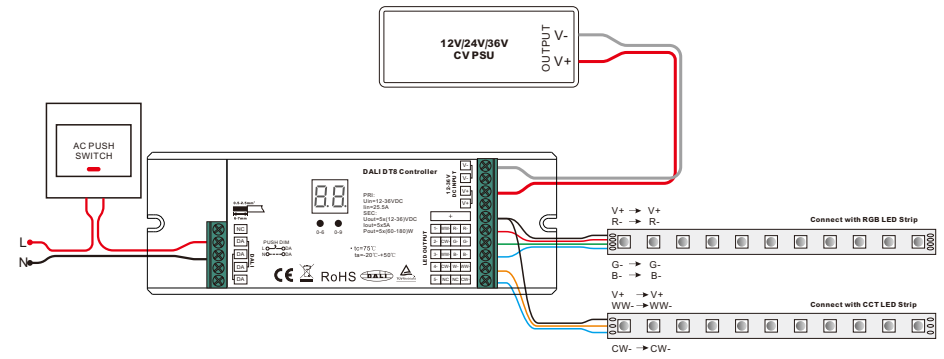
## 2. With Push Switch

### 2.1 When $\overline{7C}$ multi-addresses Tc device type selected



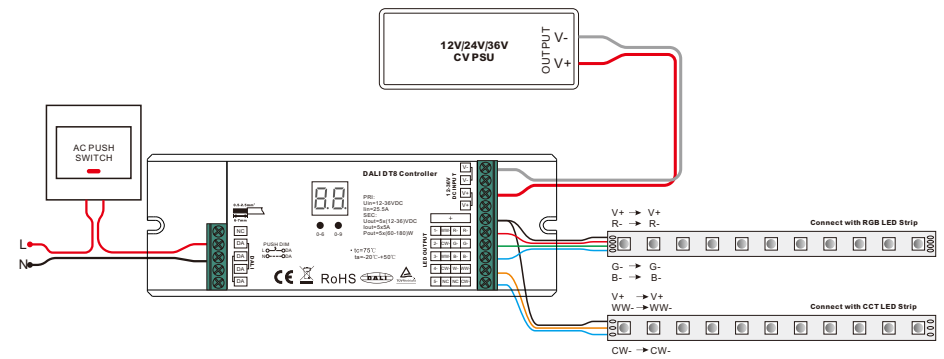
Note: only the 1st group CCT LED can be controlled under this mode.

### 2.2 When $H_C$ multi-addresses XY+Tc device type selected



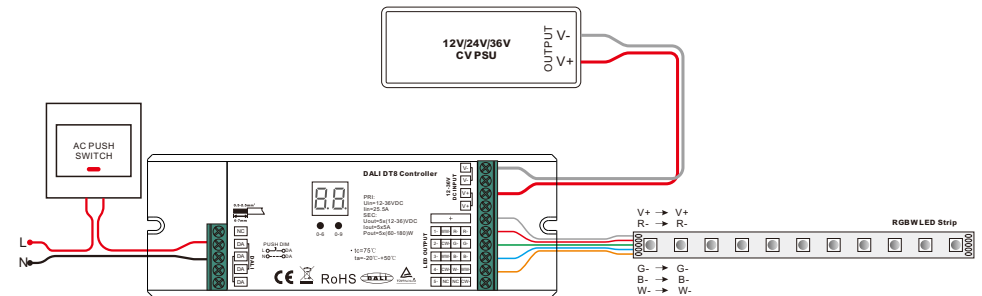
Note: only the RGB LED can be controlled under this mode.

### 2.3 When $\overline{7C}$ multi-addresses RGB+Tc device type selected



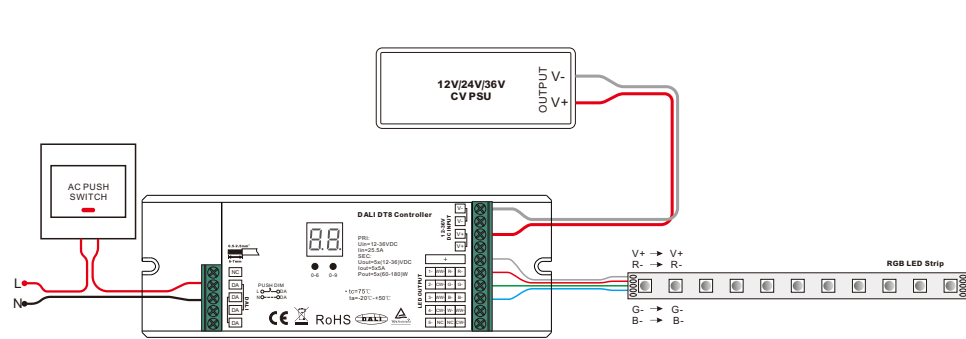
Note: only the RGB LED can be controlled under this mode.

### 2.4 When $H_6$ multi-addresses XY+Single Color(DT6) device type selected

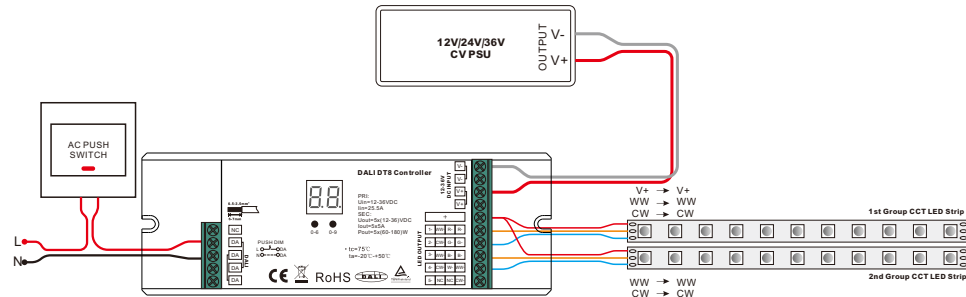


Note: only the RGB LED can be controlled under this mode.

2.5 When **H4** single-address XY device type selected

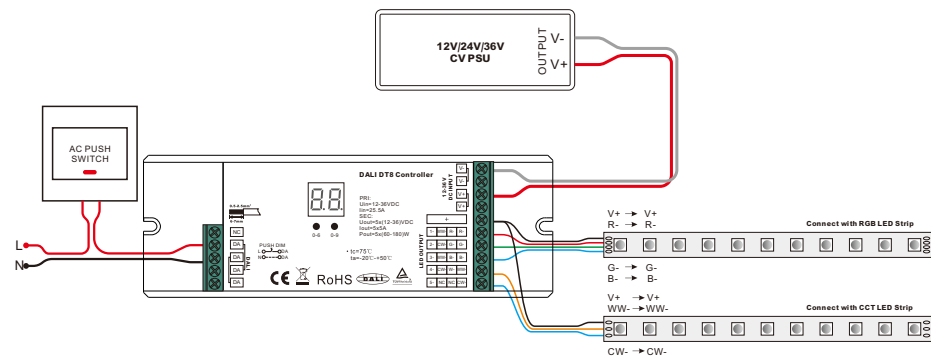


2.6 When **7C** single-address Tc device type selected



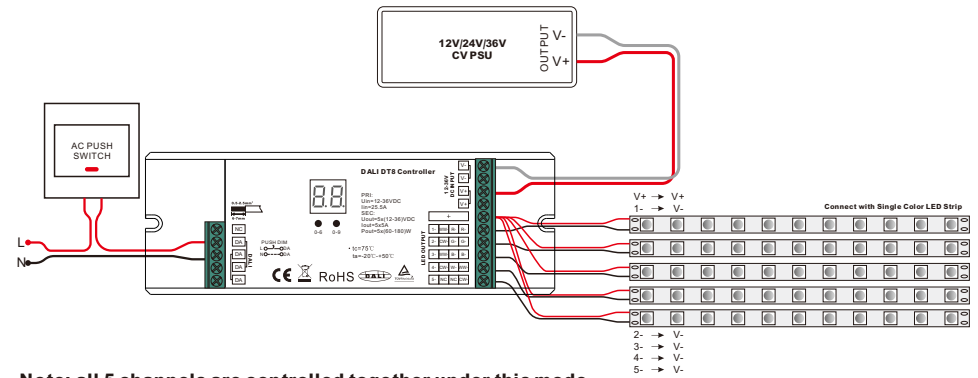
Note: 2 groups CCT LED are controlled together under this mode.

2.7 When **r9** single-address RGBWAF device type selected



Note: brightness of both RGB & CCT LEDs can be controlled, color control only applicable to RGB LED under this mode.

2.8 When **76** single-address DT6 device type selected

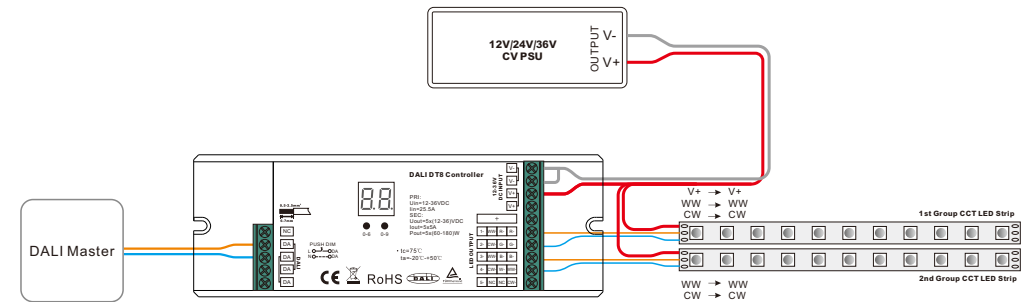


Note: all 5 channels are controlled together under this mode.

When total load of each receiver is over 20A

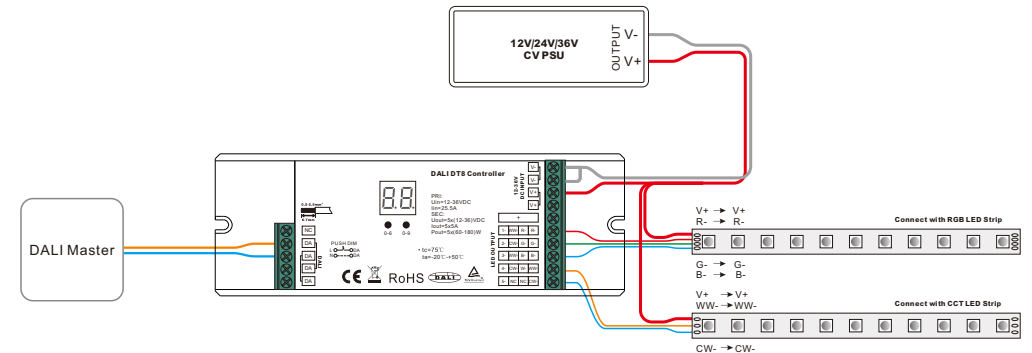
1. With DALI Master

1.1 When **7C** multi-addresses Tc device type selected



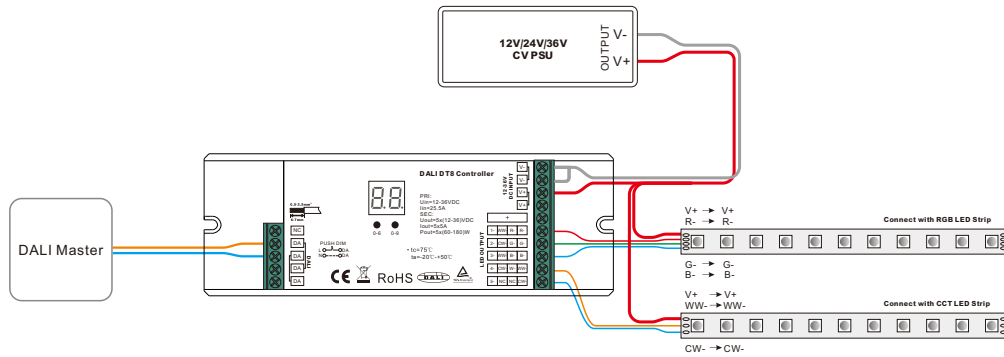
Note: 1) Please make sure that the DALI master controller supports Tc color type commands.  
2) The control gear will be discovered by master controller as 2 separate Tc devices.

1.2 When **Hc** multi-addresses XY+Tc device type selected



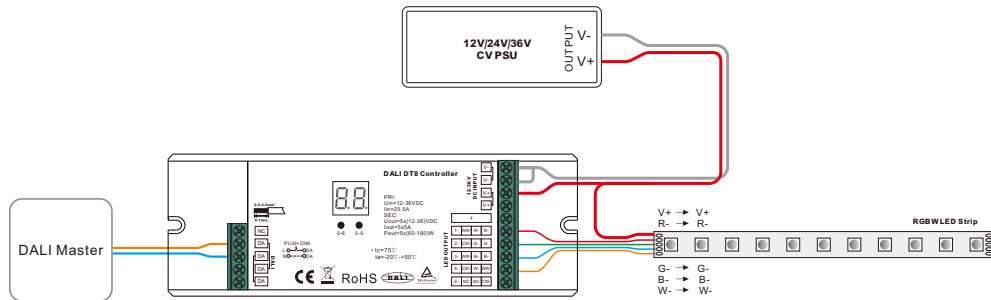
Note: 1) Please make sure that the DALI master controller supports XY & Tc color type commands.  
2) The control gear will be discovered by master controller as 2 separate devices: XY, Tc.

### 1.3 When **rC** multi-addresses RGB+Tc device type selected



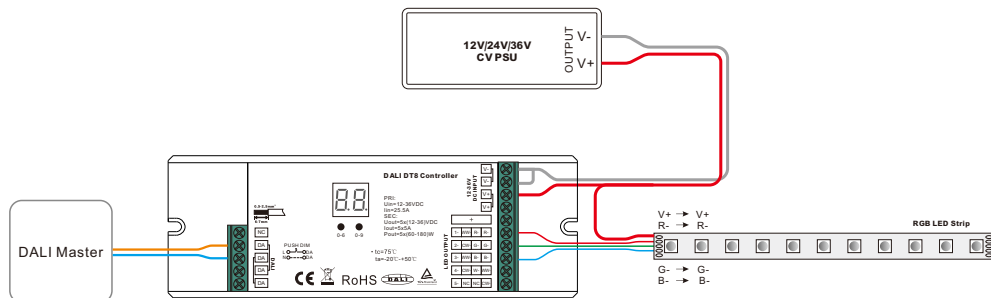
**Note: 1)** Make sure that the DALI master controller supports RGBWAF & Tc color type commands.  
**2)** The control gear will be discovered by master controller as 2 separate devices: RGB, Tc.

### 1.4 When **HE** multi-addresses XY+Single Color(DT6) device type selected



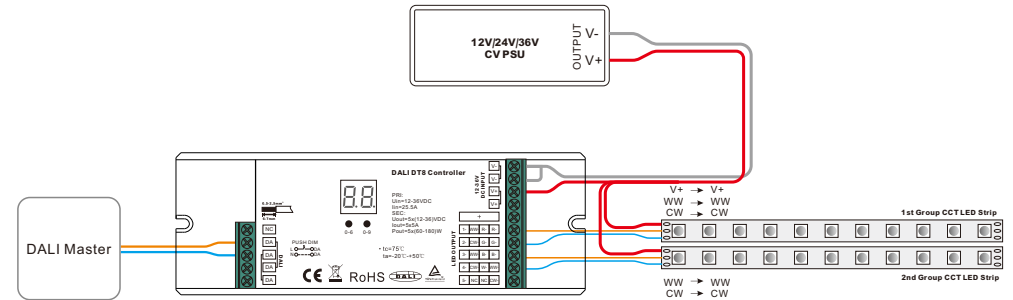
**Note: 1)** Please make sure that the DALI master controller supports XY & DT6 color type commands.  
**2)** The control gear will be discovered by master controller as 2 separate devices: XY, DT6

### 1.5 When **H4** single-address XY device type selected



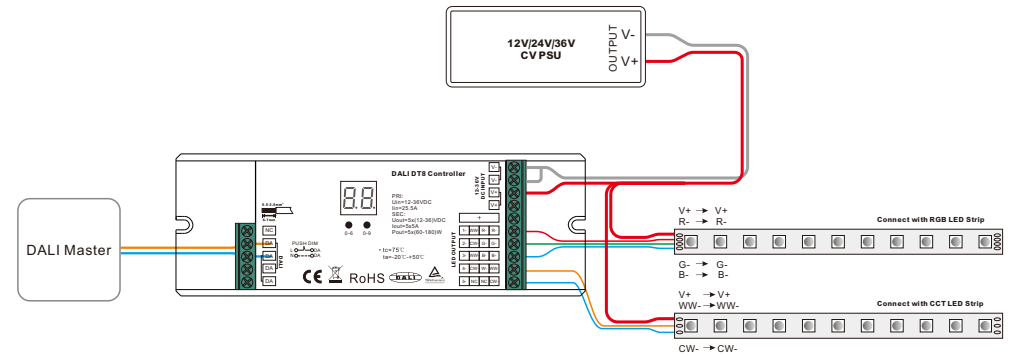
**Note:** Please make sure that the DALI master controller supports XY color type commands.

### 1.6 When **rC** single-address Tc device type selected



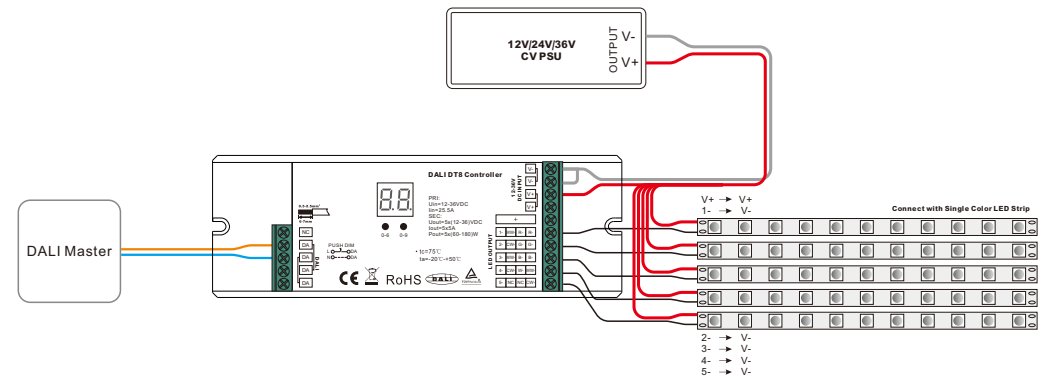
**Note: 1)** Please make sure that the DALI master controller supports Tc color type commands.  
**2)** 2 groups CCT LED are controlled together.

### 1.7 When **r9** single-address RGBWAF device type selected



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

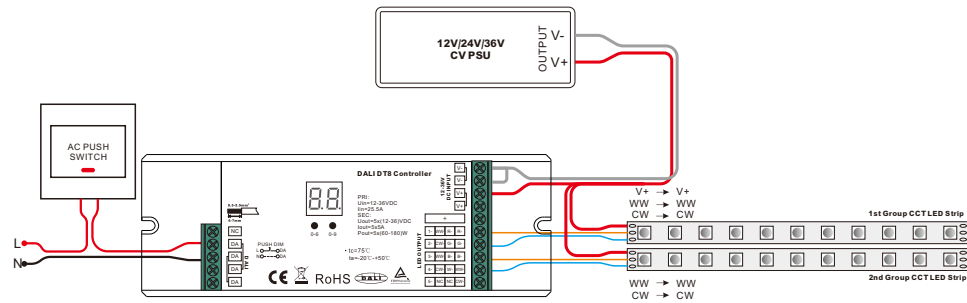
### 1.8 When **r6** single-address DT6 device type selected



**Note:** The control gear will be discovered by DALI master as a DT6 device, 5 channels controlled together.

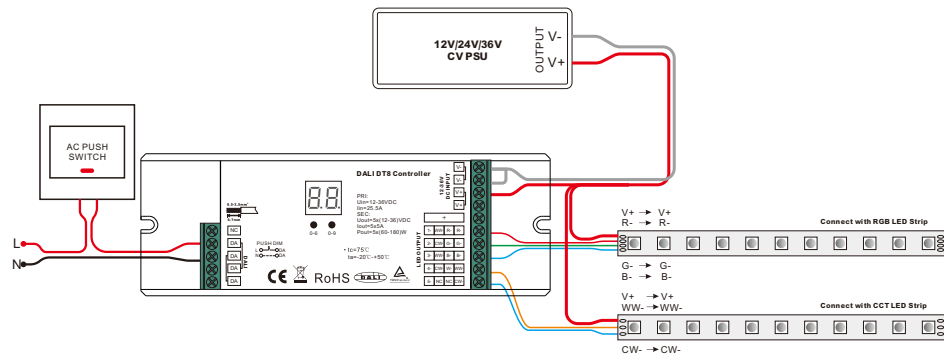
## 2. With Push Switch

### 2.1 When **Tc** multi-addresses Tc device type selected



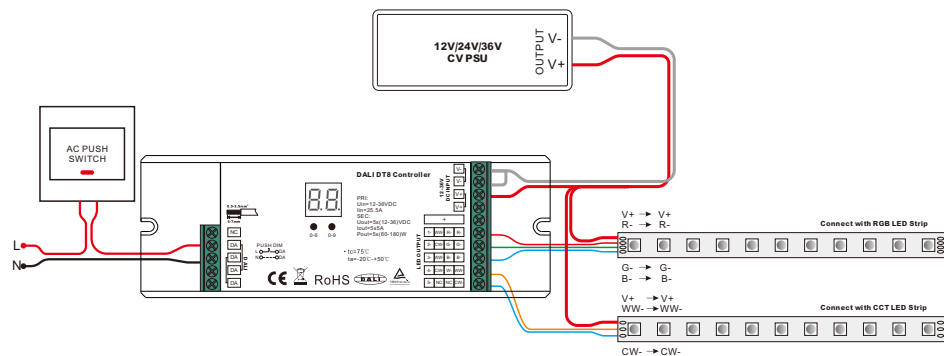
Note: only the 1st group CCT LED can be controlled under this mode.

### 2.2 When **Hc** multi-addresses XY+Tc device type selected



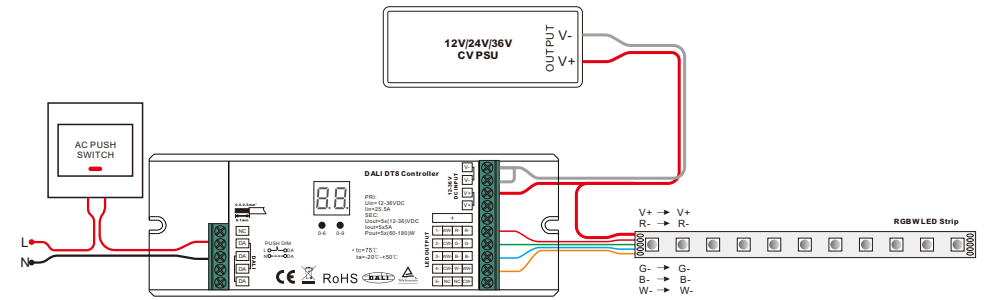
Note: only the RGB LED can be controlled under this mode.

### 2.3 When **r.c** multi-addresses RGB+Tc device type selected



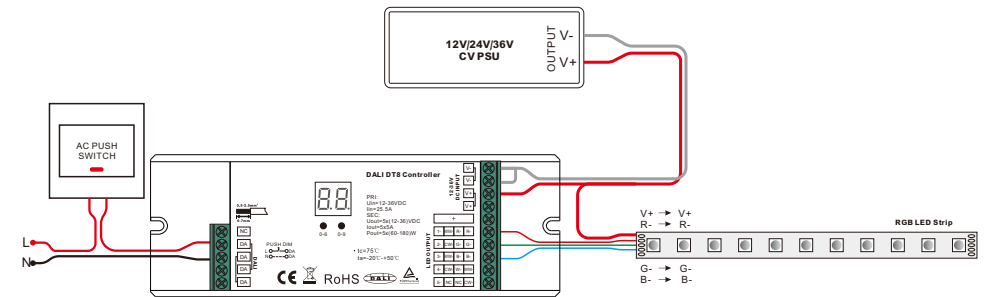
Note: only the RGB LED can be controlled under this mode.

### 2.4 When **H6** multi-addresses XY+Single Color(DT6) device type selected

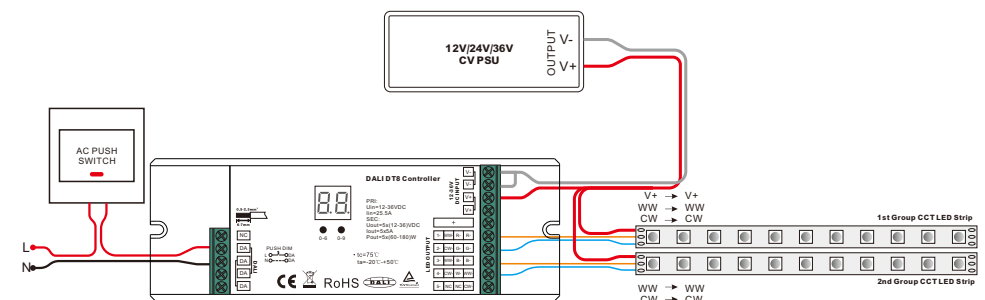


Note: only the RGB LED can be controlled under this mode.

### 2.5 When **H4** single-address XY device type selected

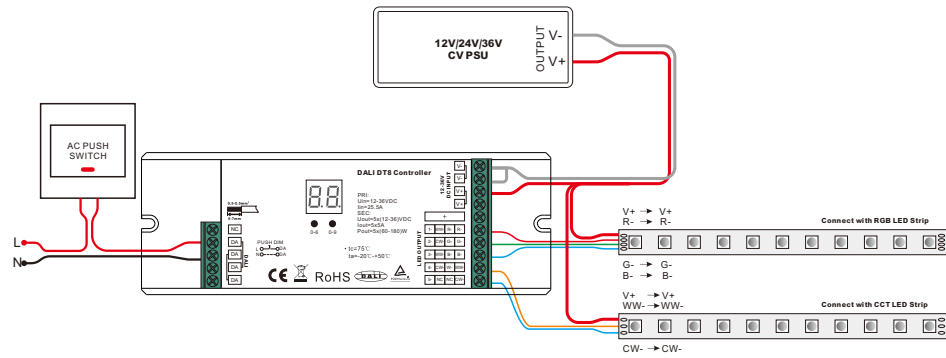


### 2.6 When **Tc** single-address Tc device type selected



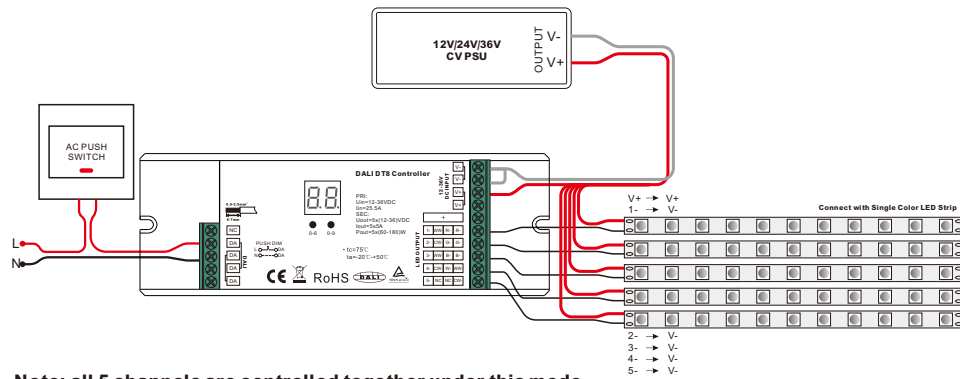
Note: 2 groups CCT LED are controlled together under this mode.

## 2.7 When **r9** single-address RGBWAF device type selected



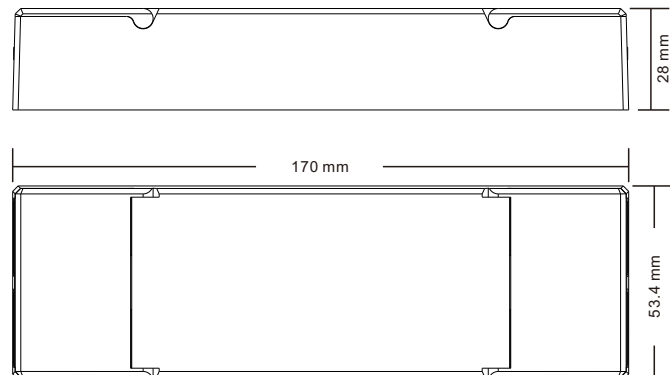
**Note:** brightness of both RGB & CCT LEDs can be controlled, color control only applicable to RGB LED under this mode.

## 2.8 When **r6** single-address DT6 device type selected



**Note:** all 5 channels are controlled together under this mode.

## Product Dimension



## Conformity & Standards

- Radio Frequency Interference according to EN 55015:2013/A1:2015
- Immunity standard according to EN 61547:2009
- TÜV SÜD marked, CE marked