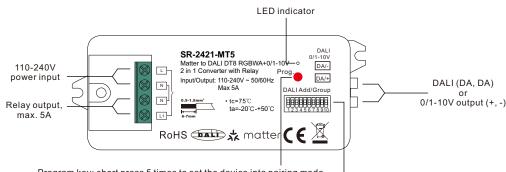
# Matter + Zigbee to DALI DT8 RGBWA+0/1-10V 2 in 1 Converter

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# Important: Read All Instructions Prior to Installation

# **Function introduction**



Program key: short press 5 times to set the device into pairing mode

Dip switches to select DALI or 0/1-10V output, DALI address or group control mode, DALI address to be controlled, DALI group to be controlled

# **Product Data**

Input				Output, 0/1-10V	Output, relay		Environment		Others	
Po	wer	Signal	DALI PS current	DALI current consumption	Current	Switching voltage		Operating temperature	Relative humidity	Dimensions
110-24	40VAC	Matter	Max. 50mA	Max. 4mA	Max. 20mA	110-240VAC	Incandescent: 5A LED: 1.6A	-20℃-+50℃	8% to 80%	95x37x20mm

• Matter + Zigbee to DALI DT8 RGBWA+0/1-10V 2 in 1 converter based on Thread

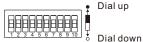
- Matter signal input, DALI signal output to DALI line or 0/1-10V signal output, 110-240VAC power input
- With relay output, max. 5A for traditional incandescent & HV halogen lamps, max 1.6A for LED load
- · Compatible with universal Matter over thread platform
- DALI signal or 1-10V signal output selectable by DIP switch
- Built-in DALI bus power supply, no extra DALI bus PS required
- With max. 50mA DALI bus power current output
- To supply control current to up to 25 DALI control gears
- Color control according to DALI specifications of Device Type 8,
- DALI address control mode or group control mode selectable by DIP switch
- Enables to select the DALI address (00-63) to be controlled by DIP switches
- Enables to select the DALI group (0-15) to be controlled by DIP switches
- Enable to control 1 DALI Group of devices or 1 DALI Address on DALI line
- · Enable to control all devices on DALI line via broadcast
- App control + touchlink remote control + green power kinetic switch control
- App control through Matter (e.g. Apple Home, Amazon Alexa, Google Home)
- Waterproof grade: IP20

# Safety & Warnings

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

## Operation

#### 1) Select DALI or 0/1-10V Output Using Dial Switch 10



1 2 3 4 5 6 7 8 9 10 DALI ○○○○○○○● 1 2 3 4 5 6 7 8 9 10 0/1-10V \crightarrow \c

Note: please first select output signal by the dial switch.

#### 2) Select DALI Address or Group Control Mode Using Dial Switch 7

Dial up	-	
<u>12345678910</u> ↓ Dial down		
1 2 3 4 5 6 7 8 9 10		1 2 3 4 5 6 7 8 9 10
Address Mode 00000000	Group Mode	0000000000

**Note:** once DALI output is selected, please then select address control mode or group control mode by dial switch.

#### 3) Select the DALI Group to be Controlled Using Dial Switches 2-6

•	Dial up
12345678910	Dial down

Controlled group	12345678910	Controlled group 1 2 3 4 5 6	378910
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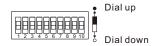
0	$\bullet\bullet\bullet\bullet\bullet\bullet\bullet\circ\circ\circ\bullet$	9	$\bullet \bullet \circ \bullet \bullet \circ \bullet \circ \circ \bullet \circ \bullet \bullet \circ \bullet \bullet \bullet \bullet \bullet \bullet$
1	$\bullet \bullet \bullet \bullet \bullet \bullet \circ \bullet \circ \circ \bullet \bullet$	10	$\bullet \bullet \circ \bullet \circ \bullet \bullet \circ \circ \bullet$
2	$\bullet \bullet \bullet \bullet \circ \bullet \bullet \circ \circ \bullet$	11	$\bullet \bullet \circ \bullet \circ \circ \bullet \circ \circ \bullet \circ \bullet \bullet \circ \bullet \bullet \bullet \bullet \bullet \bullet$
3	$\bullet \bullet \bullet \bullet \bullet \circ \circ \bullet \circ \circ \bullet$	12	$\bullet \bullet \circ \circ \circ \bullet \bullet \bullet \circ \circ \bullet \bullet$
4	$\bullet \bullet \bullet \circ \bullet \bullet \bullet \circ \circ \bullet$	13	$\bullet \bullet \circ \circ \bullet \circ \bullet \circ \circ \circ \bullet$
5	$\bullet \bullet \bullet \circ \bullet \circ \bullet \circ \circ \bullet \bullet$	14	$\bullet \bullet \circ \circ \circ \bullet \bullet \circ \circ \bullet$
6	$\bullet \bullet \bullet \circ \circ \bullet \bullet \circ \circ \bullet \bullet$	15	$\bullet \bullet \circ \circ \circ \circ \bullet \circ \circ \circ \bullet$
7	$\bullet \bullet \bullet \circ \circ \circ \bullet \circ \circ \bullet$	Broadcast	$\bullet \bigcirc \bullet \bullet \bullet \bullet \bullet \circ \bigcirc \bullet \bullet$
8	$\bullet \bullet \circ \bullet \bullet \bullet \bullet \circ \circ \bullet$		

Note: 1) once DALI group control mode are selected, please then select the DALI group (0-15 selectable) to be controlled on DALI line by dial switches.

2) The control gears that are assigned to the selected DALI group on DALI line will be controlled.

3) The control gears shall be first grouped by a DALI master controller, please refer to the user manual of corresponding master controller.

#### 4) Select the DALI Address to be Controlled Using Dial Switches 1-6



Controlled address	1 2 3 4 5 6 7 8 9 10	Controlled address	1 2 3 4 5 6 7 8 9 10
00	$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \circ \circ \circ \bullet$	32	$\bigcirc \bullet \bullet \bullet \bullet \bullet \odot \bigcirc \bigcirc \bullet \bullet$
01	$\bullet \bullet \bullet \bullet \bullet \bullet \circ \circ \circ \circ \bullet$	33	$\bigcirc \bullet \bullet \bullet \bullet \circ \circ \circ \circ \bullet$
02	$\bullet \bullet \bullet \bullet \bullet \circ \bullet \circ \circ \circ \bullet$	34	$\bigcirc \bullet \bullet \bullet \circ \bullet \circ \circ \circ \bullet$
03	$\bullet \bullet \bullet \bullet \bullet \circ \circ \circ \circ \bullet \bullet$	35	$0 \bullet \bullet \bullet 0 0 0 0 0 \bullet$
04	$\bullet \bullet \bullet \circ \bullet \bullet \circ \circ \circ \bullet$	36	$\bigcirc \bullet \bullet \bigcirc \bullet \odot \odot \odot \bullet \bigcirc \bigcirc \bullet $
05	$\bullet \bullet \bullet \circ \bullet \circ \circ \circ \circ \bullet$	37	$\bigcirc \bullet \odot \bullet \odot \bullet \odot \odot \odot \odot \bullet$
06	$\bullet \bullet \bullet \circ \circ \bullet \bullet \circ \circ \bullet \bullet$	38	$0 \bullet \bullet 0 0 \bullet 0 0 0 \bullet$
07	$\bullet \bullet \bullet \circ \circ \circ \circ \circ \circ \bullet$	39	00000000
08	$\bullet \bullet \circ \bullet \bullet \bullet \bullet \circ \circ \circ \bullet \bullet$	40	$\bigcirc \bullet \bigcirc \bullet \bullet \bullet \bullet \bigcirc \bigcirc \bigcirc \bullet \bullet$
09	$\bullet \bullet \circ \bullet \bullet \bullet \circ \circ \circ \circ \bullet$	41	$\bigcirc \bullet \bigcirc \bullet \bullet \bigcirc \bigcirc \bigcirc \bigcirc \bullet \bullet$
10	$\bullet \bullet \circ \bullet \circ \bullet \circ \circ \circ \circ \bullet$	42	$\bigcirc \bullet \bigcirc \bullet \bigcirc \bullet \bigcirc \bullet \bigcirc \bigcirc \bigcirc \bullet \bigcirc$
11	$\bullet \bullet \circ \bullet \circ \circ \circ \circ \circ \bullet$	43	$\bigcirc \bullet \bigcirc \bullet \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bullet \bigcirc$
12	$\bullet \bullet \circ \circ \bullet \bullet \circ \circ \circ \bullet$	44	$\bigcirc \bigcirc $
13 14	$\begin{array}{c} \bullet \bullet \circ \circ \bullet \circ \circ \circ \circ \circ \bullet \\ \bullet \bullet \circ \circ \circ \circ \bullet \circ \circ \circ \circ$	45 46	$\bigcirc$
14	••00000000	40	$\bigcirc \bigcirc $
16		48	
17		48	
18		50	
19		51	
20		52	0000000000
21	●Ŏ <b>●</b> Ŏ <b>●</b> ŎŎŎŎŎ●	53	000000000
22	<b>ĕ</b> ŏ <b>ĕ</b> ŏŏ <b>ĕ</b> ŏŏŏ <b>ĕ</b>	54	0000000000
23	$\bullet \circ \bullet \circ \circ \circ \circ \circ \circ \bullet$	55	000000000
24	$\bullet \circ \circ \bullet \bullet \bullet \circ \circ \circ \bullet$	56	000000000000000000000000000000000000
25	$\bullet \circ \circ \bullet \bullet \circ \circ \circ \circ \bullet$	57	000000000
26	$\bullet \circ \circ \bullet \circ \bullet \circ \circ \circ \bullet$	58	000000000
27	$\bullet \circ \circ \bullet \circ \circ \circ \circ \circ \bullet$	59	000000000
28	$\bullet \circ \circ \circ \bullet \bullet \circ \circ \circ \bullet$	60	$0000 \bullet \bullet 000 \bullet$
29	$\bullet \circ \circ \circ \bullet \circ \circ \circ \circ \bullet$	61	0000000000
30	$\bullet \circ \circ \circ \circ \bullet \circ \circ \circ \circ \bullet$	62	0000000000
31	$\bullet$ 00000000	63	000000000

Note: 1) Once DALI address control mode is selected, please then select the DALI address(00-63 selectable) to be controlled on DALI line by dial switches.

2) The control gear with the selected DALI address on DALI line will be controlled.

# Operation

1. Do wiring according to connection diagram correctly.

2. This Matter thread device is a wireless receiver that communicates with a variety of Matter compatible systems. This receiver receives and is controlled by wireless radio signals from the compatible Matter system.

3. Add to a Matter border router and control through the Matter platform:

Note: an Apple HomePod mini is used as a Matter border router for adding and controlling the device. For other Matter border routers, please refer to their user manuals to learn how to add and control Matter devices.

**Step 1:** Prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest version firmware, and prepare an Apple HomePod mini with the latest version firmware.

**Step 2:** Connect the iPhone or iPad to your home WLAN network. Run the Apple Home app and set up the HomePod mini as instructed by Apple (as shown in **Figure 1** to **Figure 7**).

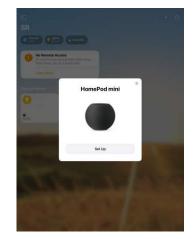
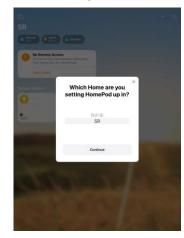


Figure 1



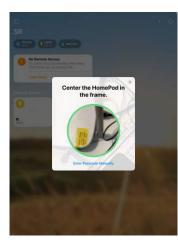


Figure 2



Figure 4



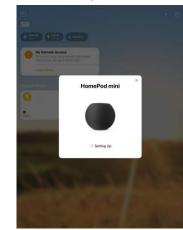






Figure 5





Step 3: Do wiring of the Matter converter according to the wiring diagram and power on it.

Step 4: Short press the Prog. button 5 times to set the converter into pairing mode.

Step 5: Add the Matter converter to the Apple Home app by scanning the QR code sticker on the converter as shown in Figure 8 to Figure 15.



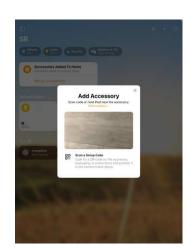


Figure 8







Figure 10

Figure 11

Note: before scanning the QR coder sticker on the converter as shown in Figure 10, short press the Prog. button 5 times to set the Matter converter into pairing mode so that it can be discovered by the Apple Home app. Otherwise it can not be discovered by the Apple Home App.



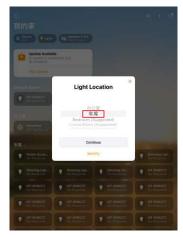


Figure 12

Figure 13

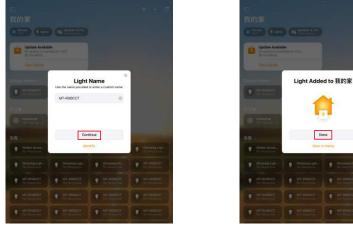


Figure 14

Figure 15

Note: when choose the room that you would like to add the converter to, please make sure to choose the same room that the HomePod mini is located as shown in Figure 13.

#### 4. Restore factory settings

To restore the factory settings, short press the "Prog." button 5 times or switch the device on and off in the following sequence.

Duration	State
< 1s	ON
> 3s	OFF
5s - 15s	ON
> 3s	OFF
< 1s	ON
> 3s	OFF
< 1s	ON
> 3s	OFF
< 1s	ON
> 3s	OFF
	<1s >3s 5s-15s >3s <1s >3s <1s >3s <1s >3s <1s

# 5. Touchlink to a Zigbee remote

Step 1: Short press "Prog." button 4 times to start Touchlink pairing.

Step 2: Bring the remote within 10cm of the receiver.

Step 3: Set the remote into Touchlink pairing, please refer to its manual.

Step 4: There shall be indication on the remote for successful link and the connected light will flash.

#### Note: There are two control situations:

1. Only one remote, to control one or more receivers: directly perform Touchlink pairing between the remote and the receiver.

2. Only one receiver, to be controlled by multiple remotes, or multiple remotes and multiple receivers with crosscontrol: use one receiver as the Zigbee hub, add all remotes and other receivers to the hub, and then perform Touchlink pairing between the remotes and the receivers. The steps are as follows:

Step 1: Use one receiver as the Zigbee hub and short press "Prog" button 4 times to start adding Zigbee devices. Step 2: Reset power of another receiver once to enter Zigbee network pairing mode, it will be added by the hub, and the

connected light will flash.

Step 3: Set a Zigbee remote to enter Zigbee network pairing mode, it will be added by the hub, and the indicator will flash to indicate.

Step 4: Add more receivers and remotes to the hub as you would like, refer to the corresponding remote manual. Step 5: Touchlink the added receivers and the remotes.

#### 6. Learning to a Zigbee Green Power Switch

Step 1: Short press "Prog." button 4 times to start Learning mode. Step 2: Set the green power switch into Learning mode, please refer to its manual.

Step 3: There shall be indication on the switch for successful learning.



Figure 16



Figure 17

Step 6: once the converter is added to the border router successfully, tap on the device to control on/off, and press and hold device icon to enter into brightness and color control interface as shown in Figure 16 to Figure 17.

#### Note: There are two control situations:

1. Only one receiver, to be controlled by multiple GP switches: directly perform pairing between the GP switch and the receiver.

2. Only one GP switch, to control multiple receivers, or multiple GP switches and multiple receivers with crosscontrol: use one receiver as the Zigbee hub, add all other receivers to the hub, and then pair the GP switch with the receiver. The steps are as follows:

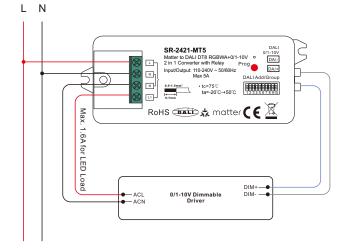
**Step 1:** Use one receiver as the Zigbee hub and short press "Prog" button 4 times to start adding Zigbee devices. **Step 2:** Reset power of another receiver once to enter Zigbee network pairing mode, it will be added by the hub and the connected light will flash.

Step 3: Add more receivers to the hub as you would like.

**Step 4:** Pair the added receivers with the GP switches.

## **Wiring Diagram**

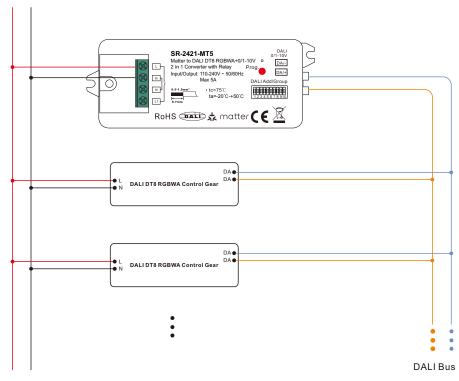
When 0/1-10V Output Selected



Note: the relay is only suggested to use when connected with 1-10V drivers which can not dim to off.

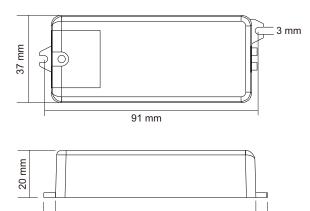
#### When DALI Output Selected





Note: Max. 50mA DALI bus PS output to supply control current to up to 25 control gears.

# Dimensions



85 mm