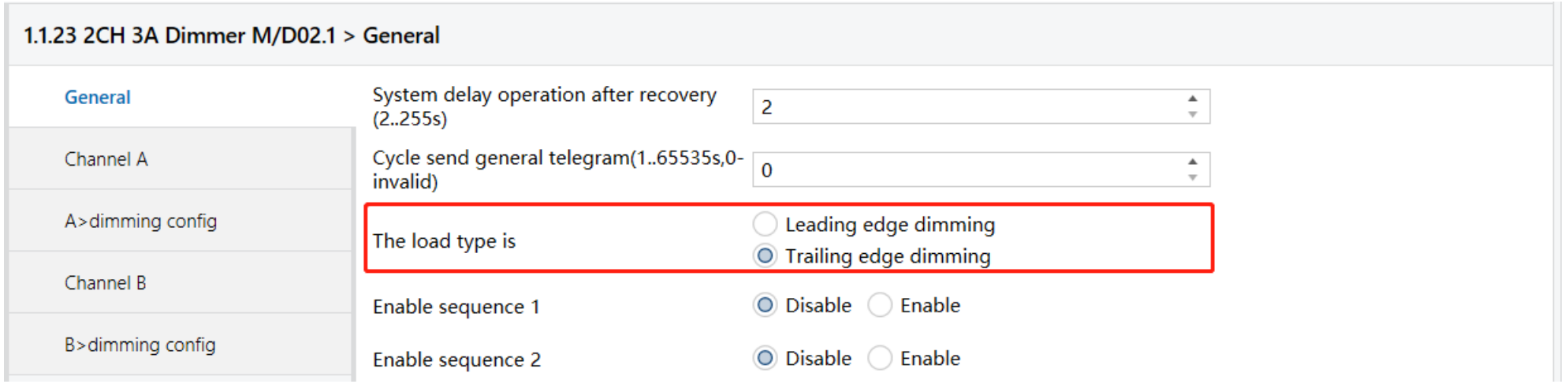
Mosfet Dimming Actuator

Take M/D02.1 as example

CONTENTS

Part 01

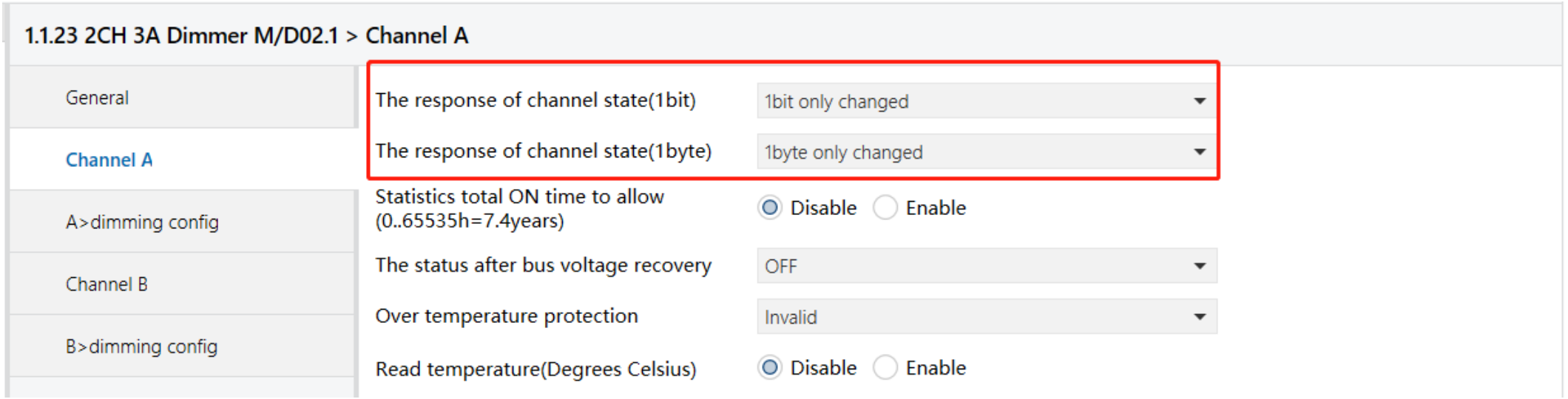
Introduction



The MOSFET dimmer supports two dimming modes, select the correct one according to the load type.

Leading edge dimming: suitable for resistive or inductive load type, such as incandescent, halogen, motor, etc

Trailing edge dimming: suitable for resistive or capacitive load type, such as incandescent, LED etc



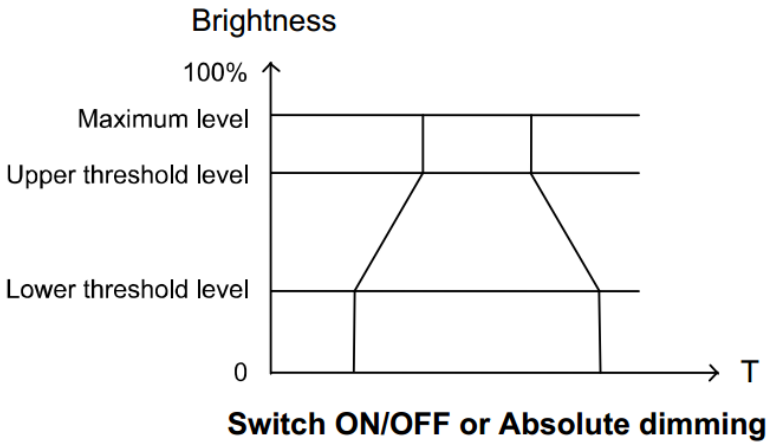
1bit:
normally use this object to feedback the channel state to the button, so the button indicator can show the correct state of it. if the channel brightness>0, send out command '1'; if the brightness=0, send out command '0'.

1 byte:
normally use this object to feedback the channel specific brightness to the app, then the app can show the percentage value of its brightness.

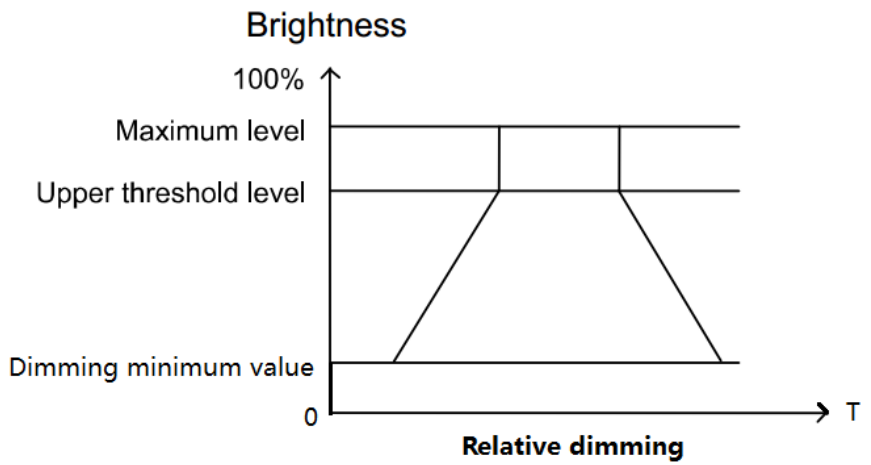
1.1.23 2CH 3A Dimmer M/D02.1 > Channel A

- General
- Channel A
- A>dimming config
- Channel B
- B>dimming config

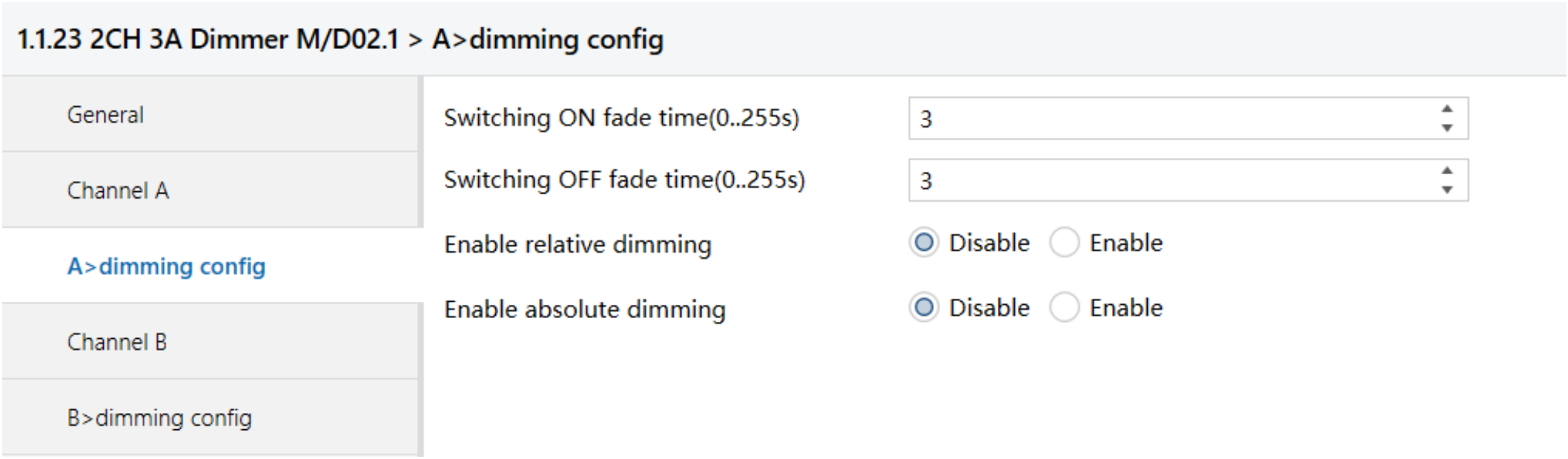
The response of channel state(1bit)	1bit only changed
The response of channel state(1byte)	1byte only changed
Statistics total ON time to allow (0..65535h=7.4years)	Disable / Enable
The status after bus voltage recovery	OFF
Over temperature protection	Invalid
Read temperature(Degrees Celsius)	Disable / Enable
Maximum level	100%(255)
Upper threshold level	100%(255)
Lower threshold level	0%(0)
Dimming minimum level	0%(0)
Show the function page ==>>	Disable / Enable



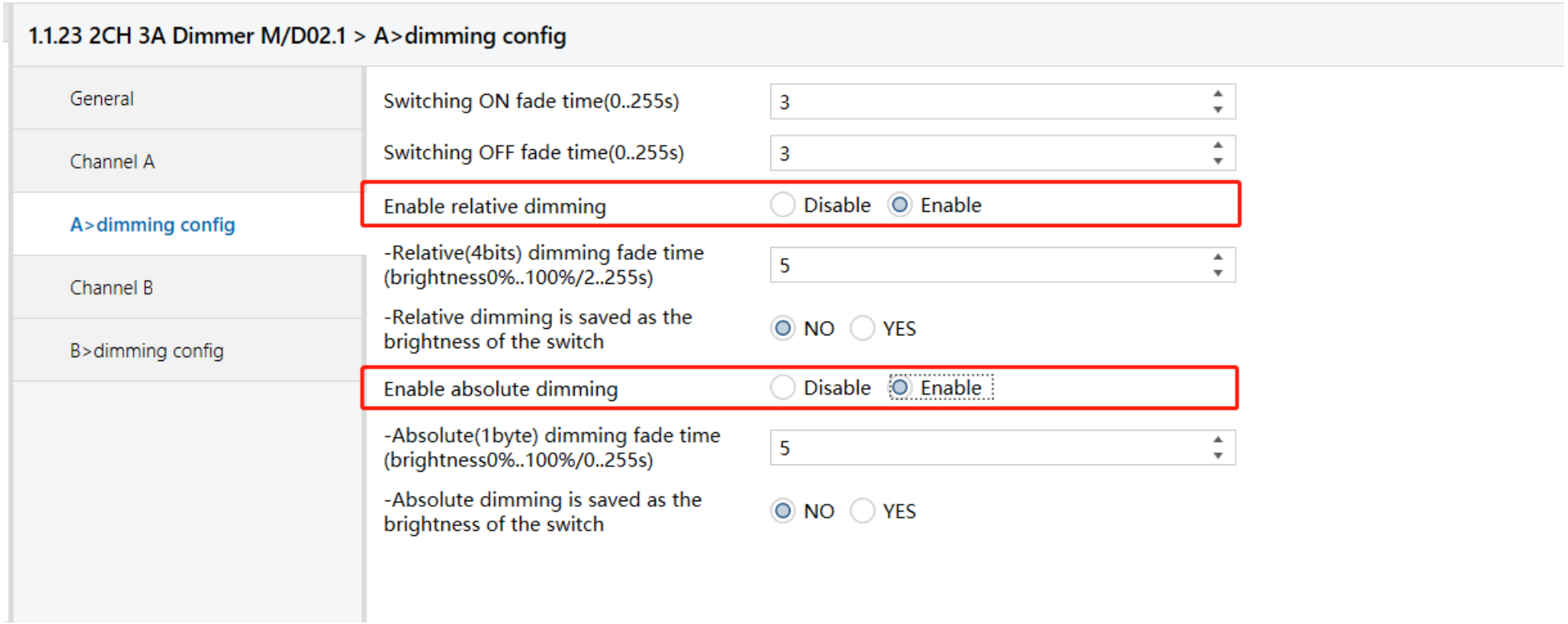
Switch ON/OFF or Absolute dimming



Relative dimming



ON/OFF fade time: For example, you set 3 seconds and turn it on by pressing a user panel, the load will turn on slowly and reach the max brightness 3 seconds later.

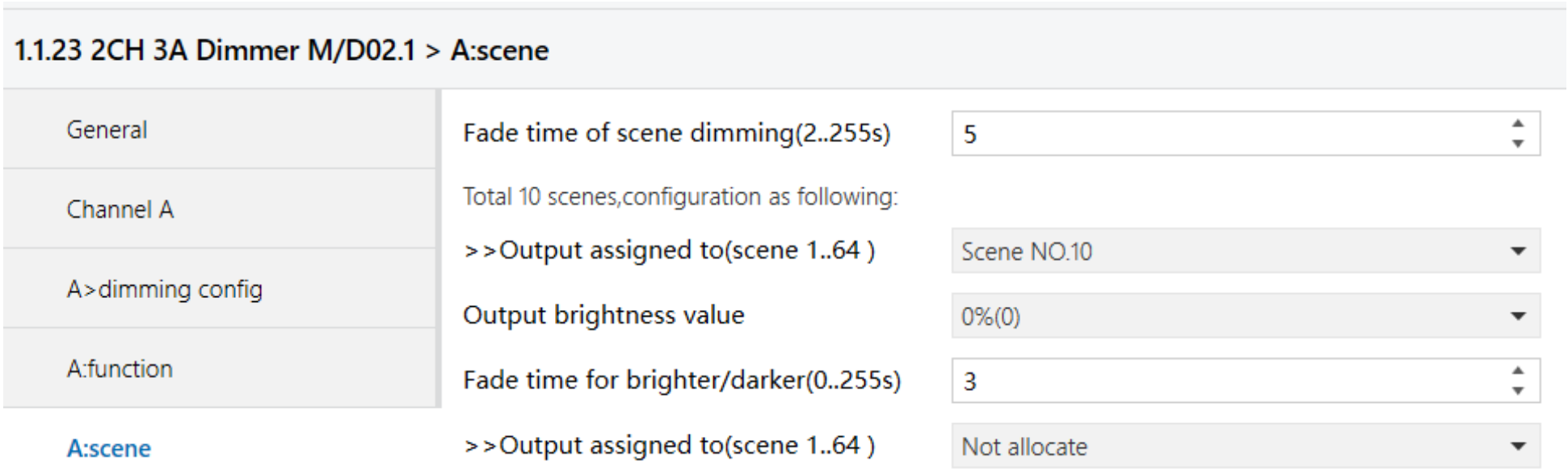


Relative dimming:

long pressing the button to dim up/down, adjust the brightness visually.

Absolute dimming:

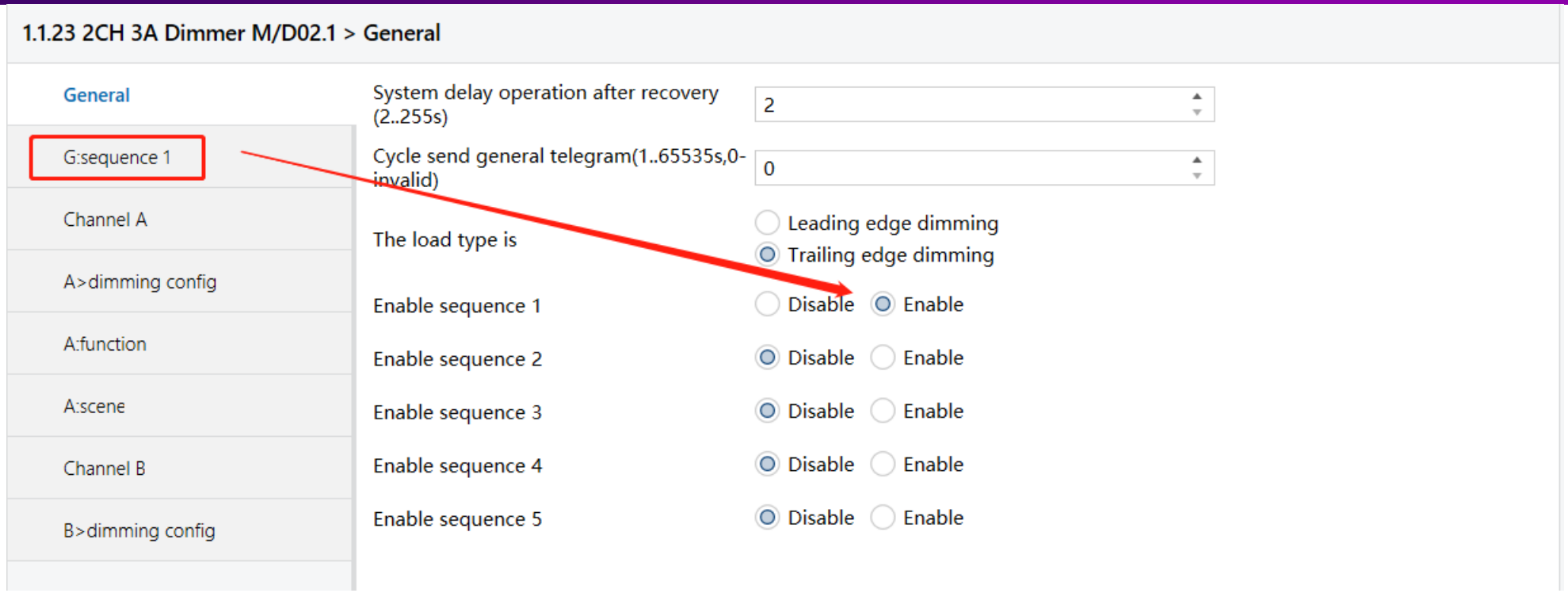
The channel will output a certain brightness when receives a percentage telegram



Scene: the combination of several channels' status (on/off or different brightness levels.)

This dimmer supports 64 scenes totally, and each channel can be applied to 10 scenes at most

Assign current channel to some scenes and set the brightness for different scenes in scene page.



Sequence: the combination of difference scenes with playing parameters.

one sequence can have up to 24 steps, one step can call one scene, set the step running time, when this time elapses, will turn to next step.

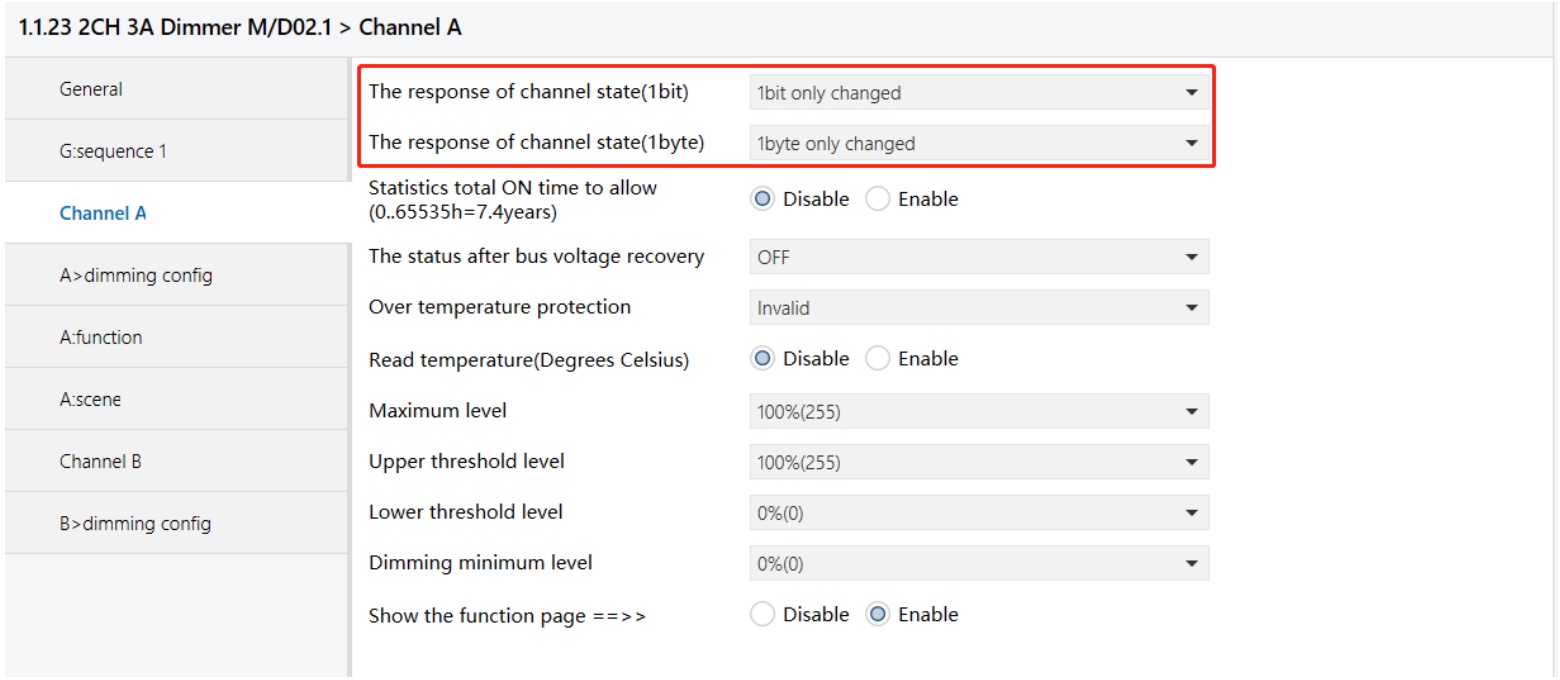
Part 2

Commission

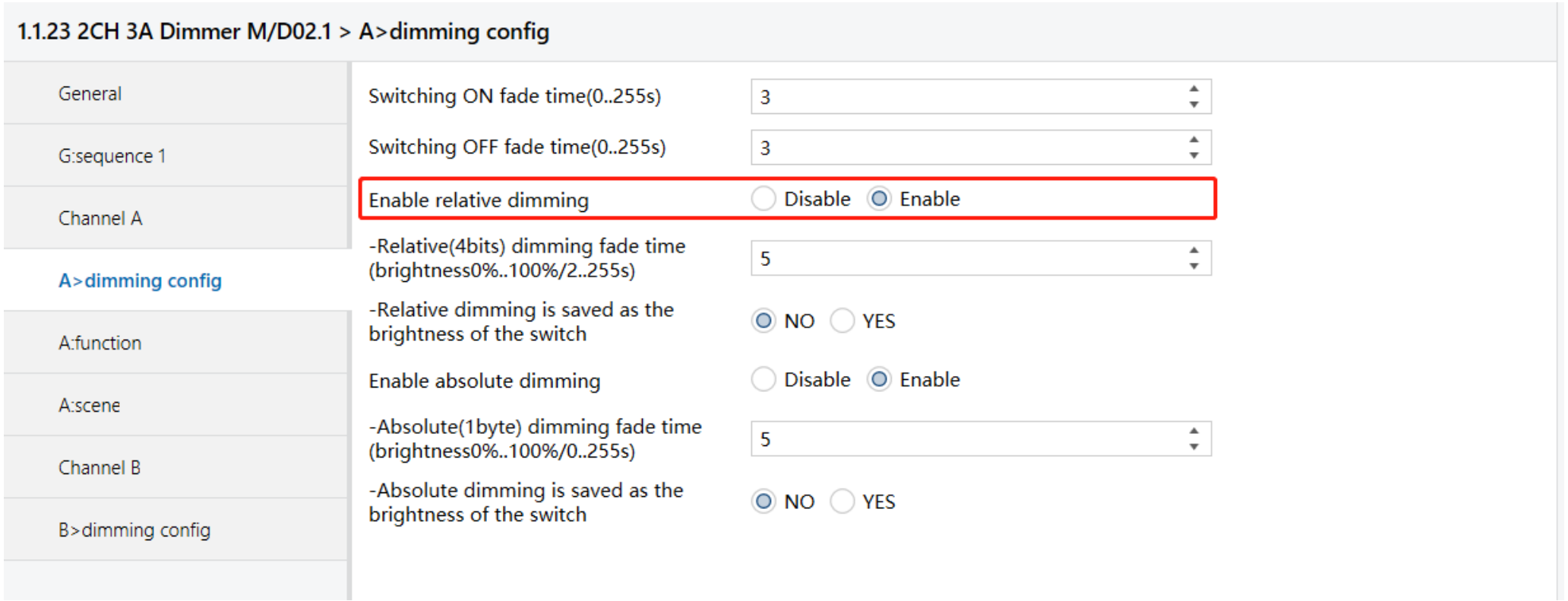
Commission Examples- Common Function 1

If we want to use DLP panel's Rocker C to control dimmer's channel A to realize this functions:
a. short press left button to turn on it.
b.short press right button to turn off it.
c.long press left button to dim up.
d.long press right button to dim down.
Here are the steps:

1.Select the status feedback type of Channel A.



2.Enable relative dimming



3.Create group address for Channel Output, Relative Dimming ,Response State.

0	General	Send cycles			1 bit	C	R	-	T	-		
10	Output A	Channel output	Living Room Spotlight	1/0/5	1 bit	C	-	W	-	U		
11	Output A	Relative dimming(4bit)	Living Room Spotlight Relative Dimming	1/0/6	4 bit	C	-	W	-	U		
13	Output A	Respone state(1bit)	Living Room Spotlight on/off Feedback	2/0/5	1 bit	C	R	-	T	-		
14	Output A	Respone state(1byte)	Living Room Spotlight Dimming Feedback	2/0/7	1 byte	C	R	-	T	-		

4. Select Independent button mode

1.1.6 DLP Panel M/DLP04.1 > Rocker C

General1

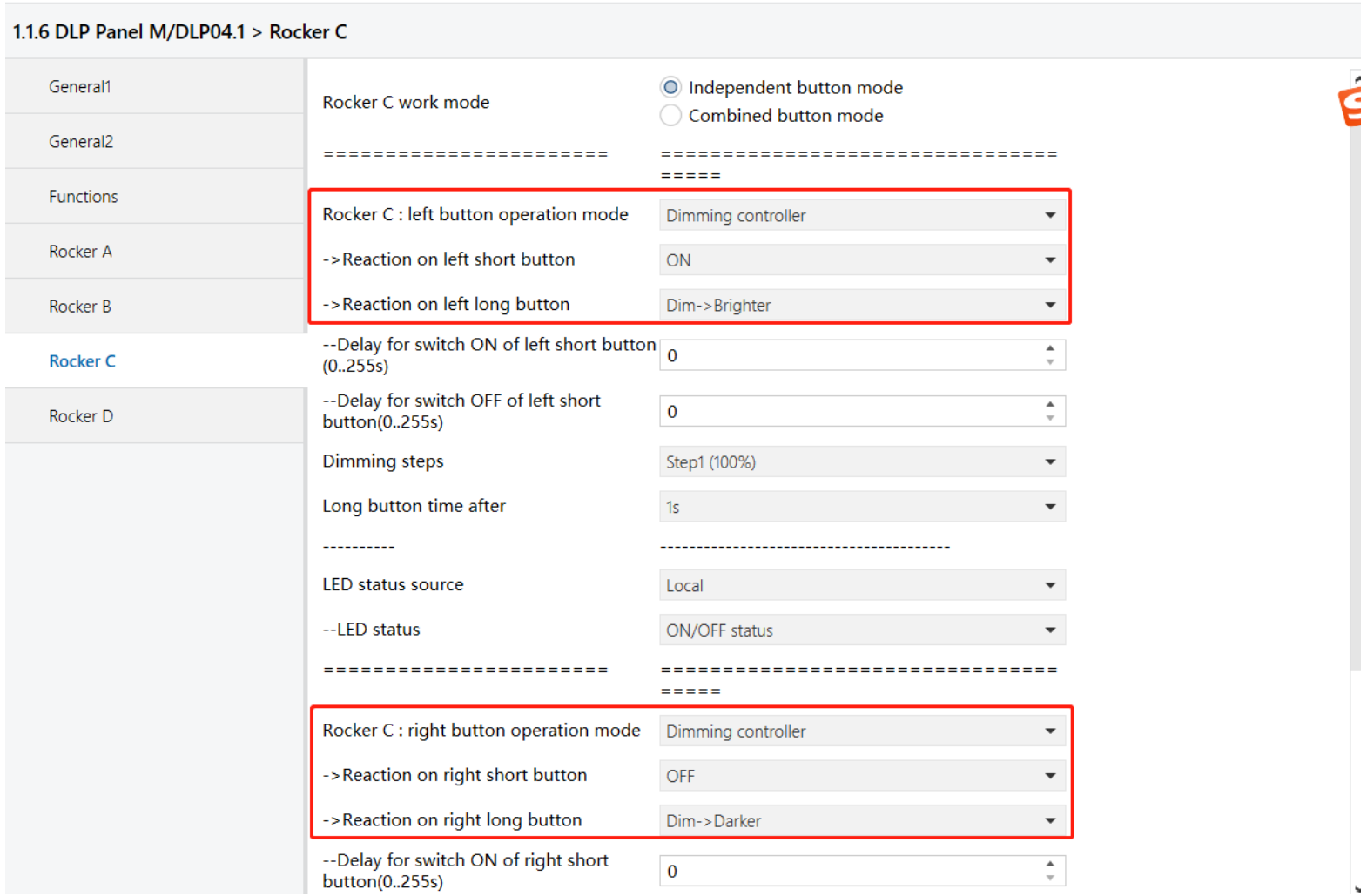
General2

Rocker C work mode

(●) Independent button mode

( ) Combined button mode

5. Select the button operation mode and reaction on each button.



6.Link the group address with the button.

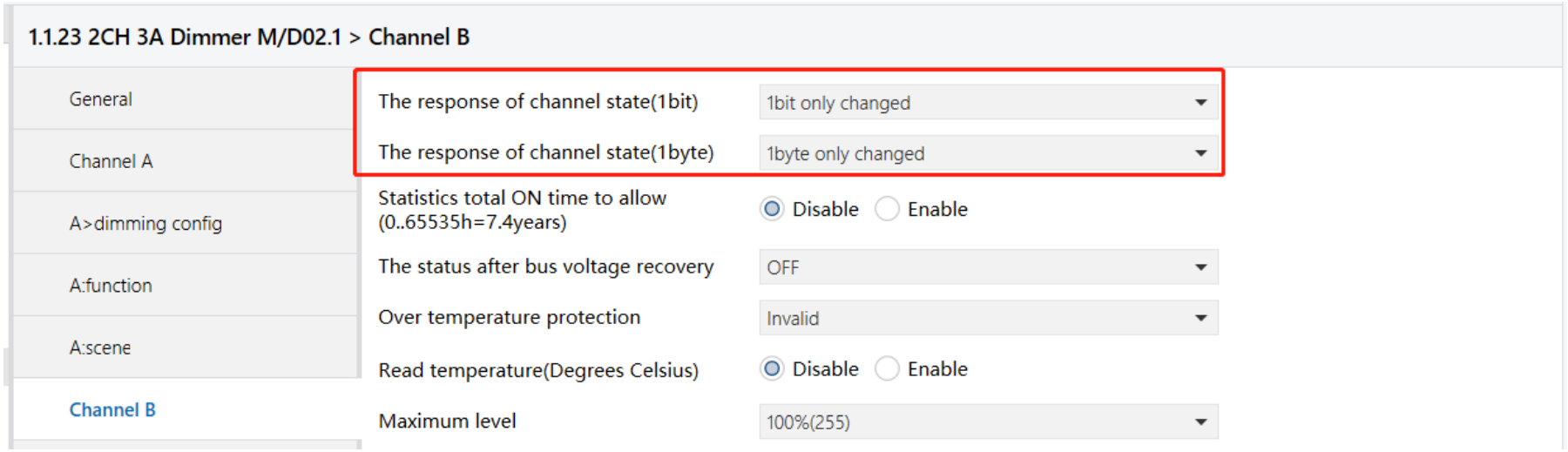
60	Rocker C left short	Switching	Livingroom Spotlight	1/0/5	1 bit	C	-	W	T	U
61	Rocker C left long	Dimming	Livingroom Spotlight Relative Dimming	1/0/6	4 bit	C	-	W	T	U
65	Rocker C right short	Switching	Livingroom Spotlight	1/0/5	1 bit	C	-	W	T	U
66	Rocker C right long	Dimming	Livingroom Spotlight Relative Dimming	1/0/6	4 bit	C	-	W	T	U

7.Download data for both panel and dimmer.

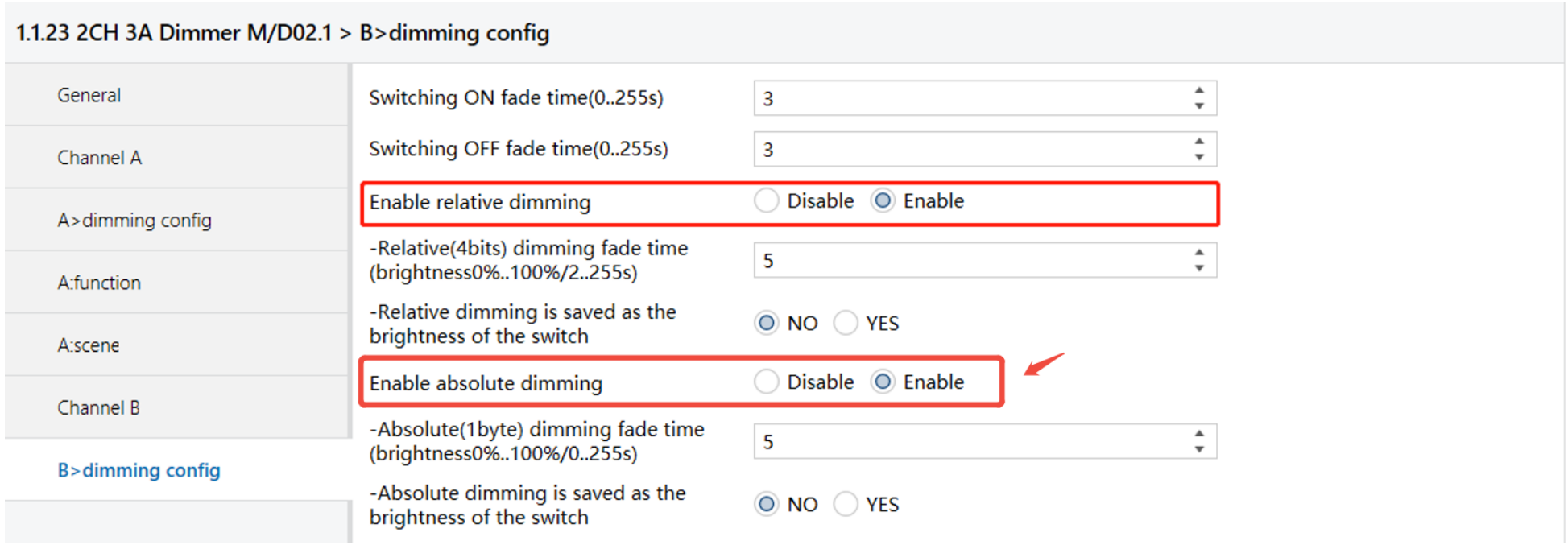
Commission Examples- Common Function 2

Use the DLP panel's rocker D to control the dimmer Channel B and realize these functions:
a.short press left button to dim to 50%
b.short press right button to dim to 100%
Here are the status:

1.Select the status feedback type of Channel B.



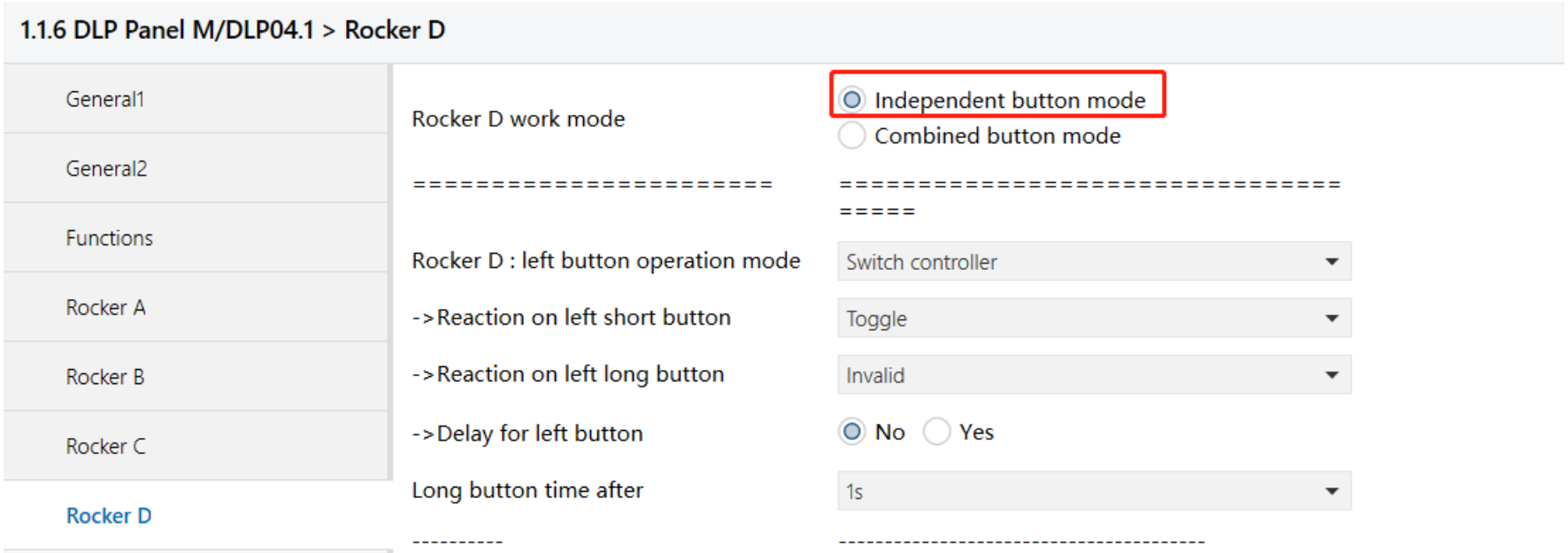
2.Enable Absolute Dimming



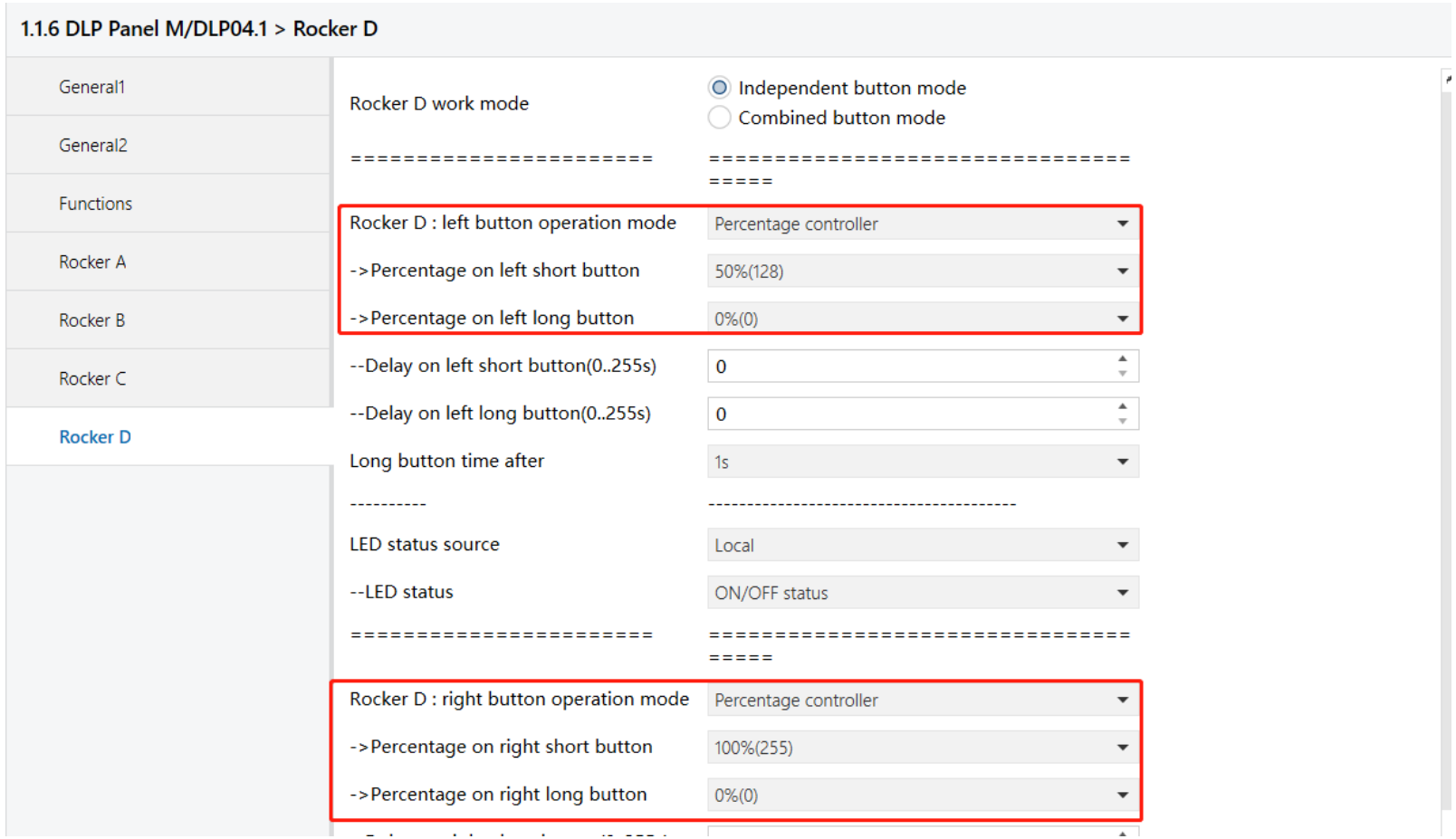
3.Create group address for Absolute dimming.

30	Output B	Channel output	Bedroom Spotlight	1/0/8	1 bit	C	-	W	-	U
31	Output B	Relative dimming(4bit)	Bedroom Spotlight Relative Dimming	1/0/9	4 bit	C	-	W	-	U
32	Output B	Absolute dimming(8bit)	Bedroom SpotlightAbsolute Dimming	1/0/10	1 byte	C	-	W	-	U
33	Output B	Respone state(1bit)	Bedroom Spotlight on/off Feedback	2/0/8	1 bit	C	R	-	T	-
34	Output B	Respone state(1byte)	Bedroom Spotlight Relative Dimming Feedback	2/0/10	1 byte	C	R	-	T	-

4. Select Independent button mode for Rocker D.



5. Select the button operation mode and reaction on each button.



6.Link the Group address with button.

70	Rocker D left	Percentage	Bedroom Spotlight Absolute Dimming	1/0/10	1 byte	C	-	W	T	U
75	Rocker D right	Percentage	Bedroom Spotlight Absolute Dimming	1/0/10	1 byte	C	-	W	T	U

7. Download data to the panel and dimmer.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THANKS