



TL56-D-2



TL56 is an AC input and 2-channel electric curtain controller in DALI protocol. The maximum control current of each circuit is 250W (curtain motor will stop when overload is more than 10%), and applicable to 250W AC motor and below device.

- a、 Motor current detection. When motor stops, the TL56 curtain controller will shut down AC output.
- b、 Motor running time can be set in APP(default 240 seconds).
- c、 Each channel can be controlled by external dry contact.
- d、 Support DALI 2.0 standard protocol with channel/channels of device, group and scene control.

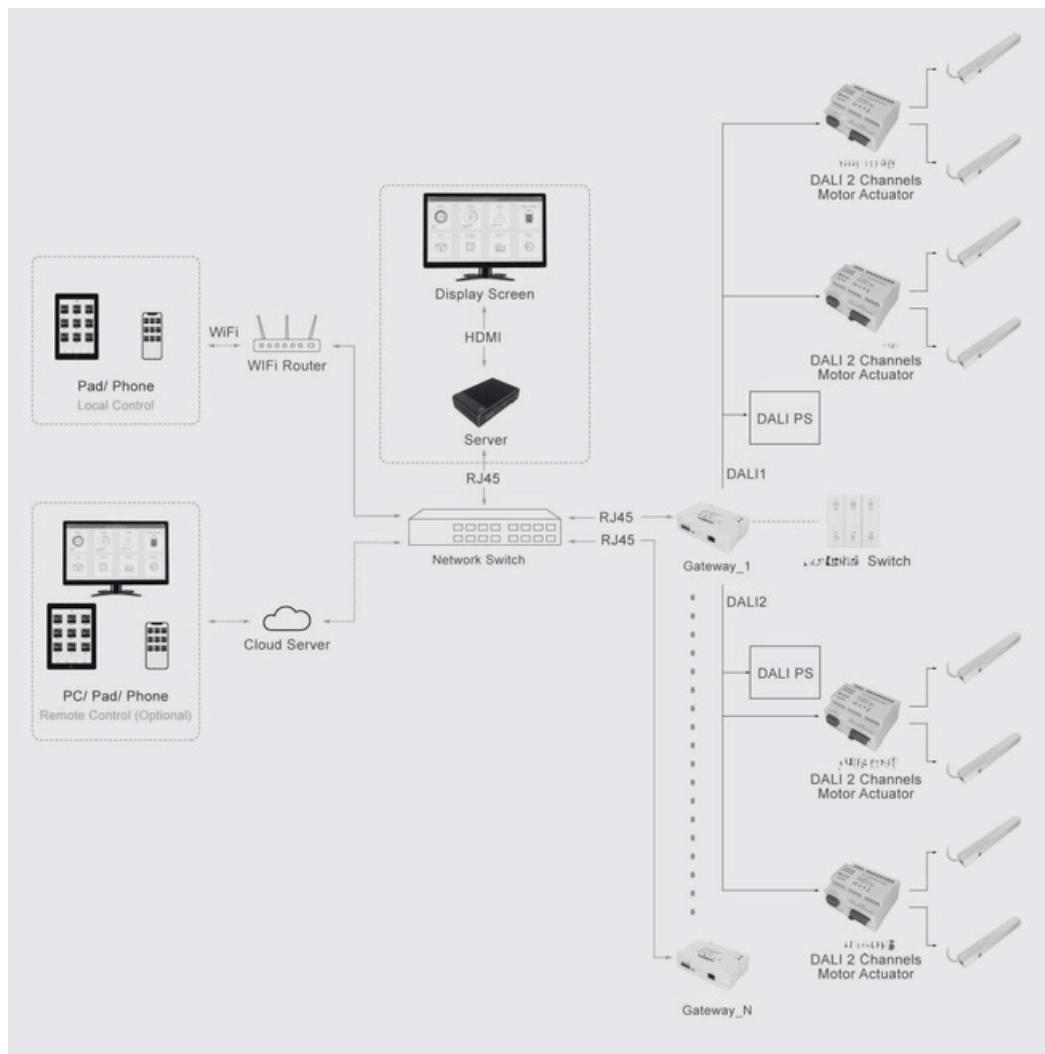
With Theorylight's TLW928-ZD/D Gateway, the curtain controller TL56 manages to short-distance or long-distance wireless control curtain motor by Mobile Phone, Tablet, PC, Wall Switch, Remote Control, Daylight Sensor and Motion Sensor.

Part no.

TL56-D-2

TL56	project name/ index		
D	DALI Standard Protocol		
2	2 Channel Motor		

System Diagram



Parameter

Input Voltage(V)	200-240Vac 50/60Hz
Load Type	AC220V motor
Motor No.	2 motors
Load Power	2*250W MAX ≥30W
DC Voltage Output Interface	12V 100mA
DALI Bus Interface	DALI 2.0 wire communications protocol
Standby Power	0.65W
Dry Contact Interface	2-channel Dry contact
Operating Humidity	5%-85%RH
Storage temperature	-40°C~85°C
Storage Humidity	0%~90%
IP Level	IP20
Housing Material	PCV0
Installation Mode	35mm mounted rail
Outdoor	NOT ALLOWED
Net weight	253g
Gross weight	276 g
Package	1 set / box

Terminal Definition/ Wiring Diagram

DALI 2.0 Code Definition

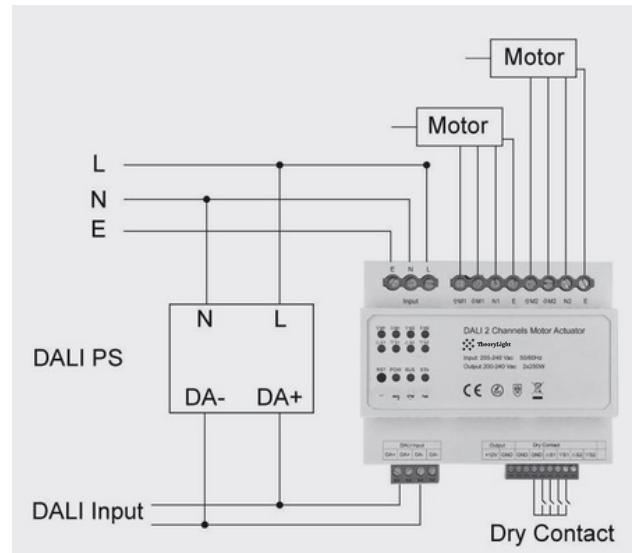
DALI value (0-254)	Motor Status					
	M1 Up	M1 Down	M1 Stop	M2 Up	M2 Down	M2 Stop
1		✓			✓	
4	✓					
7		✓				
9			✓			
12				✓		
14					✓	
17						✓
19	✓			✓		
22	✓				✓	
24		✓		✓		
27		✓			✓	
29	✓					✓
32		✓				✓
35			✓	✓		
37			✓		✓	
40			✓			✓
254	✓			✓		

Note: ✓ means the motor status to the DALI Brightness value.

Terminal Definition

	Terminal Name	Terminal Description
AC IN	L	Input 200-240VAC L
	N	Input 200-240VAC N
	E	Earth
Motor Output	M1 	M1 Motor UP
	M1 	M1 Motor DOWN
	M2 	M2 Motor UP
	M2 	M2 Motor DOWN
DALI Bus Input	DA+	DALI Bus+
	DA-	DALI Bus-
DC Output	+12V	Output DC 12V 100mA(Maximum)
	GND	GND
Dry Contact	GND	Dry Contact GND
	S1 	Control M1 Motor UP/STOP
	S1 	Control M1 Motor DOWN/STOP
	S2 	Control M2 Motor UP/STOP
	S2 	Control M2 Motor DOWN/STOP

Wiring Diagram



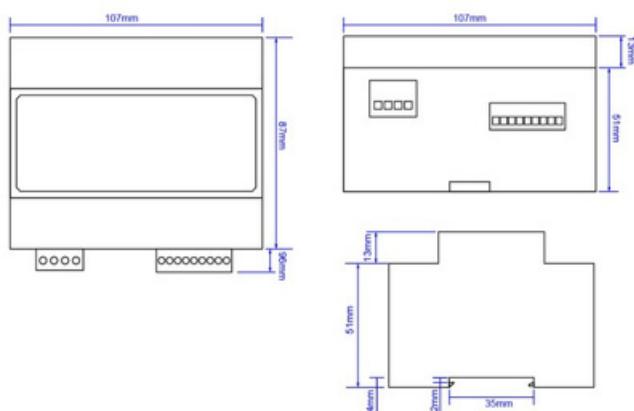
LED Indicator Status

LED Indicator	LED Indicator Status	Comments
M1 	M1 UP	UP/DOWN: The LED indicator keeps on when motor is running.
M1 	M1 DOWN	UP/DOWN: The LED indicator keeps off when motor stops.
M2 	M2 UP	UP/DOWN: The LED indicator keeps on when motor is running.
M2 	M2 DOWN	The channel LED indicator will keep on/off if current channel dry contact control and motor is running.
S1 	Dry Contact M1 UP	The LED indicator flashes once when that channel dry contact is pressed.
S1 	Dry Contact M1 DOWN	
S2 	Dry Contact M2 UP	
S2 	Dry Contact M2 DOWN	
RST	Reset Button	Long press 10s to Reset
POW	Power Indicator Light	The LED indicator keeps on after main power on.
BUS	Bus Indicator Light	The LED indicator keeps flashing when the bus has DALI DATA.
STA	Status Indicator Light	1. The LED indicator keeps flashing if the device is initial state. The LED indicator keeps on when the device is searched into gateway.

Software Operation

1. Initial states. When the motor actuator is powered up, "STA" LED Indicator will keep flashing.
2. First 30 minutes. The motor actuator in initial state is searchable by the ZigBee gateway in the first 30 minutes after power up.
3. Choose a gateway. Power on the ZigBee gateway, open the App "Theorylight Pro", select gateway from Settings/Add device.
4. Add device. Click "Search" button. Light is on 30% after added successfully.
5. For more operating details please refer to user manual of gateway.

Dimension



Initial States Setting

1. Soft reset: keep the device powered on and delete it on the "Theorylight Pro" App. Or,
2. Hard reset: power off the device and wait for > 3 secs, power on and wait for < 3 secs, power off power on, power off power on, 4 times in total.
3. If reset is successful, the light blinks 4 times and then stay ON. All data of the device is cleaned up.