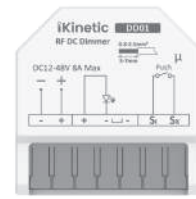


SPECIFICATION DOCUMENT

iKinetic®

DD01 Series DC 12V-48V PWM Dimmer

Made in China.



DD01 & DD01-MW& DD01-WF

DESCRIPTION

- 1 way PWM dimming, Max 8A/CH, mounted in.
- A compact Matter/Tuya & RF433Mhz DC dimmer offers high flexibility for LED lighting controls.
- Screw-free terminal as standard to provide fast installation.
- Push dim function is also allowed by using standard push type switch.
- 12-48Vdc input is typically suitable for LED strip, furniture lighting and other low voltage DC LED products.

FEATURES

1. Encrypted RF transmission, anti-interference ability.
2. 0.1-100% logarithmic dimming curve.
3. Minimum dimming level is adjustable.
4. Power cut memo function available.
5. Built-in overcurrent protection.
6. Smart and RF control works interactively.

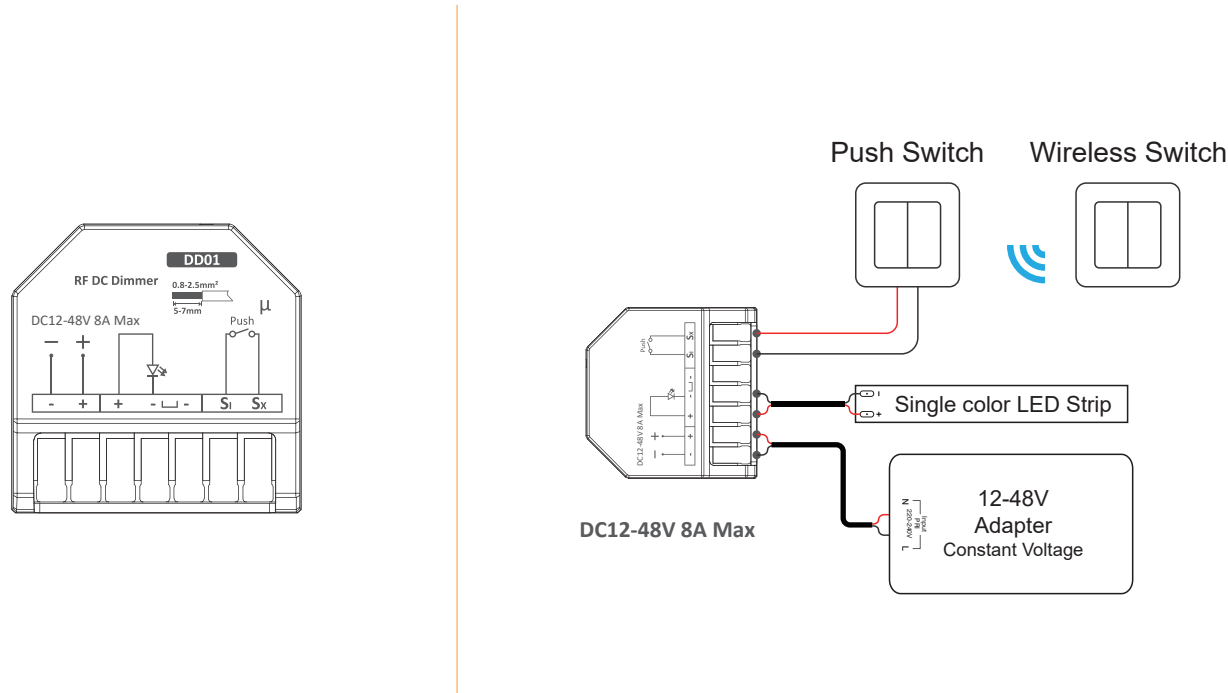
SPECIFICATION

RF VERSION

Model	DD01
Type	DC PWM Dimmer
Channel	1CH
Input Voltage	12V-48V
Output Voltage	12V-48V
Output Current	Max 8A
Load Power	12V<96W;24V<192W ;36V<288W;48V<384W
Radio frequency	RF433Mhz
PWM	4KHz
Dimming Curve	0.1-100% Logarithmic
Memory Capacity	Maximum 10 switches
Wall switch Compatible	YES
Housing Material	UL 94-V0
IP Rating	IP20
Operating Temperature	-20°C ~+40°C
Ta/Tc	Ta: 40°C Tc: 85°C
Dimensions	42mm*42mm*16.5mm
Warranty	5 years

SMART VERSION (RF433Mhz+Matter Over WiFi)	
Model	DD01-MW
Protocal	2.4Ghz for Matter Over Wi-Fi
Wi-Fi Security Protocol	WEP, WPA/WPA2, WPA/WPA2 PSK (AES), WPA3
Wireless Frequency	2.400-2.480GHz
APP	Homekit, Google Home, Alexa, Smarthings, Tuya Smart Life, Yandex
<p>*Note:</p> <ul style="list-style-type: none">Smart receivers supports RF function which is based on RF433Mhz.Matter is an open protocol that relies on local communication, and works even when the internet is disconnected.To enable Matter device operation, a compatible third-party smart speaker corresponding to your chosen app is required. Remote control is supported, excluding Tuya Smartlife.Matter devices using the Tuya Smartlife app support local control only and certain functions on Smartlife app may not be fully available or display due to Tuya-Matter compatibility issues.	
SMART VERSION (RF433MHZ+TUYA OVER WIFI)	
Model	DD01-WF
Protocal	2.4Ghz for Tuya Over Wi-Fi
Wi-Fi Security Protocol	WEP, WPA/WPA2, WPA/WPA2 PSK (AES), WPA3
Wireless Frequency	2.400-2.480GHz
APP	Tuya Smartlife, Google Home, Amazon Alexa
<p>*Note:</p> <p>Smart receivers supports RF protocol function which is based on RF433Mhz.</p> <p>To work with Smart Speaker or Home automation system, please check Tuya official website for further information.</p>	

WIRING DIAGRAM



*Note: One receiver can be configured with up to 10 wireless switches.

DC PWM DIMMER APPLICATION

Controller Installation Method

Small size, mounted in.

Application Scenarios

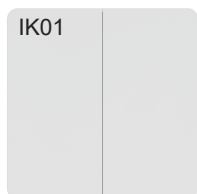
Widely used in smart home ,residential,office ,classrooms, hotel,commercial space,ect.

Suitable for smart lighting control DIY retrofits, wireless switch can be placed at will.

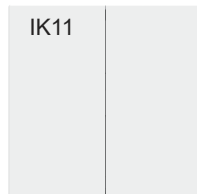
Product Composition

*Transmitter need to be purchased separately

Kinetic Switch



Every Key works independently
On/ OFF: Press Once
Dimming: Press twice to enter dimming cycle,
another press to set brightness
Optional: 1G/2G/3G+Color



Every Key works independently
On/ OFF: Press Once
Dimming: Push Dimming
Optional:1G/2G/3G+Surface
(Plastic/Glass/Metal)+Color

Battery Switch



Every Key works independently
On/ OFF: Press Once
Dimming: Long press
Optional: 1G/2G/3G+Surface (Plastic/ Polished/ Brushed)+ Color

Battery Remote (TR)



On/ OFF Key: Press Once
Dimming +/- Key: Long press
Optional: 2 key/4 key+1channel/4channel+PC/Glass+Color

Battery Remote (BR)



On/ OFF Key: Press Once
Dimming +/- Key: Long press
Optional: 1channel/4channel



Alexa



HomeKit



Google Home



Pabotany



SmartThings



tuya

*Note: Refer to the USER MANUAL for application and pairing methods.

TEST DATA

Max.Output Current TR Data

DD01	INPUT VOLTAGE=24(V) ;INPUT CURRENT=8.2(A); Ta: 31°C; TEST TIME: 2H				
Data Channel	CH01	CH02	CH03	CH04	CH05
Key componment	Mos 1	Mos 2	Capacitor	Terminal	Case
Temperature(°C)	68.7	69	65.9	53.7	53.6
Temperature Limit(°C)	150	150	105	105	105

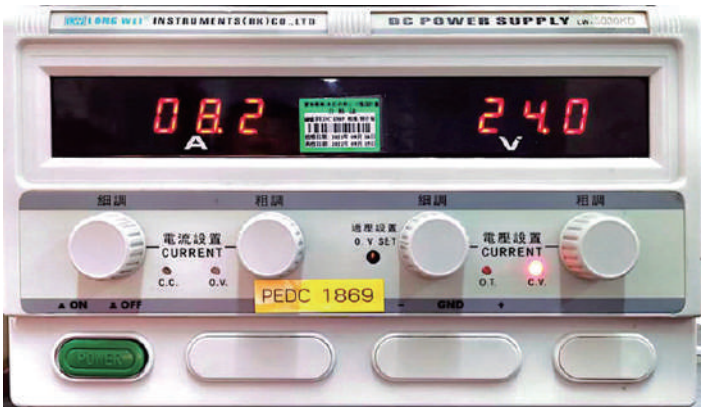


Fig. 1:Power Supply



Fig. 2:Multi-channel Temperature recorder

DD01	INPUT VOLTAGE=47.1(V) ;INPUT CURRENT=8.1(A); Ta: 33.1°C; TEST TIME: 2H				
Data Channel	CH01	CH02	CH03	CH04	CH05
Key componment	Mos 1	Mos 2	Capacitor	Terminal	Case
Temperature(°C)	65.4	71.4	69.1	54	54.8
Temperature Limit(°C)	150	150	105	105	105

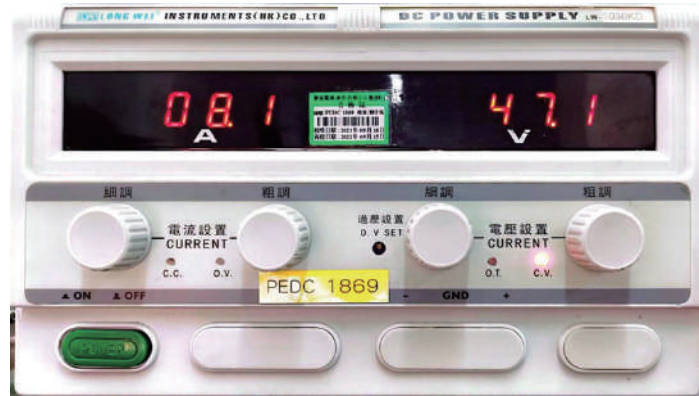
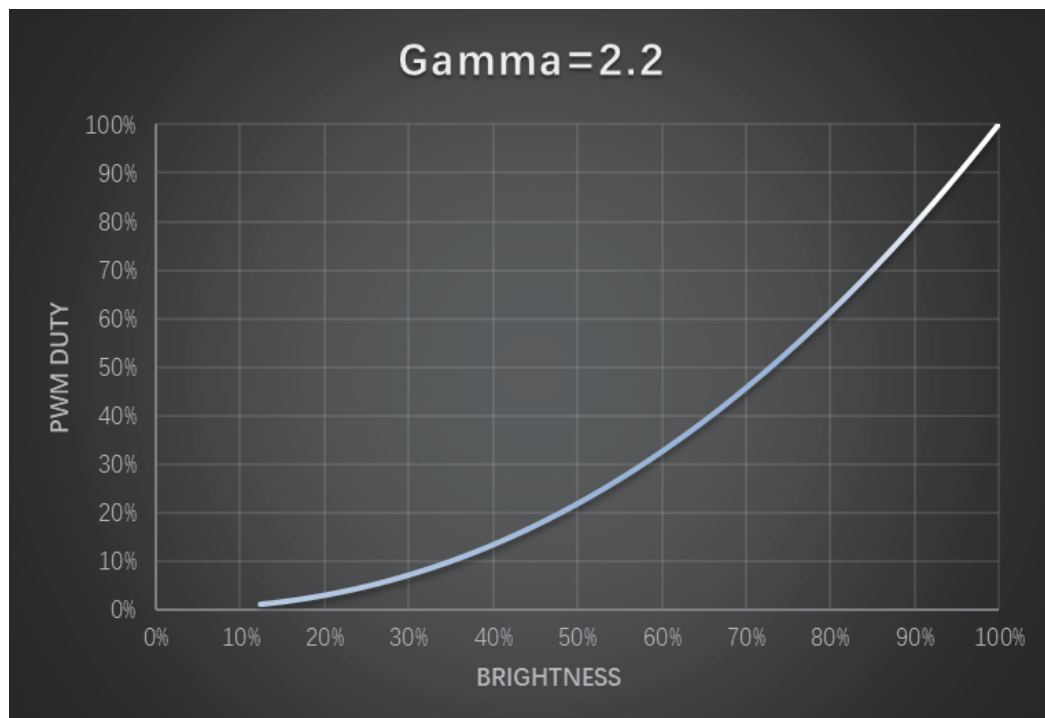


Fig. 1:Power Meter



Fig. 2:Multi-channel Temperature recorder

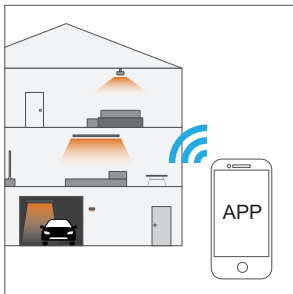
Dimming curve setting



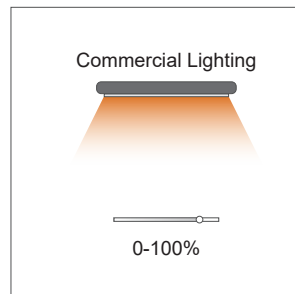
Logarithmic dimming curve

IKINETIC SMART LIGHTING SOLUTION

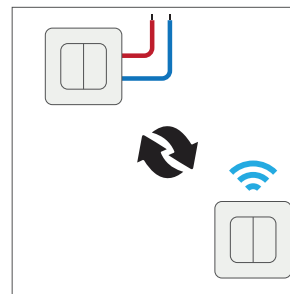
- **Smart Home Lighting Upgrade:** Supports Matter over Wi-Fi, allowing seamless integration into smart home ecosystems with app control, voice activation, and scheduled dimming.
- **Energy-Efficient Commercial & Office Lighting:** Enables 0-100% precise dimming, optimizing energy use based on ambient lighting conditions, reducing power consumption.
- **Indoor Lighting Retrofit Solutions:** Compatible with Ikinetic wireless switches (433MHz), making it ideal for both new installations and retrofitting existing lighting systems without additional wiring.
- **Compact Installation for Various Fixtures:** The small form factor allows easy integration into recessed lighting, linear lights, track lights, and panel lights.



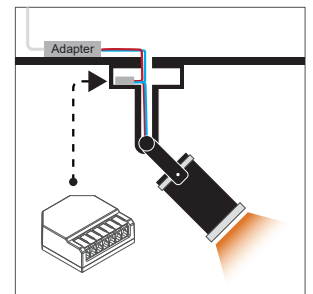
Smart Home Lighting Upgrade



Energy-Efficient Commercial
& Office Lighting



Indoor Lighting Retrofit
Solutions



Compact Installation
for Various Fixtures

NOTE

- Please supply with correct DC power supply between 12-48Vdc.
- Kindly note the maximum load rating of the controller before installation.
- You might need smart speaker to allow Matter over WiFi working. Please check with smart speaker manufacturer if the matter is supported.
- Transmission distance refer to transmitter user manual.
- The DC dimmer and RF switch shall be installed 20cm away from any metal surface and strong electromagnetic wave nearby to give better performance.
- Damage caused by incorrect installation and operation are not covered under warranty.

CAUTIONS

- Ensure that the power is turned off before carrying out electrical installation.
- Do not short-circuit and over-load, it may cause permanent damage to the receiver.
- If a fault occurs, please seek advice from a local supplier.