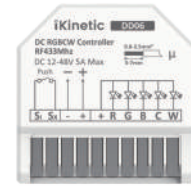# SPECIFICATION DOCUMENT

iKinetic®

DD06 Series   DC RGBCW Controller

Made in China.

CE UK CA RoHS

DD06 & DD06-MW& DD06-WF

DESCRIPTION

- 5-channels RGBCW, 5A max per channel, 5A total shared max.

- A compact RF&Smart RGBCW controller offers high flexibility for LED lighting color controls.

- Screw-free terminal as standard to provide fast installation.

- Dimming and RGB/CCT tuning can also be controlled via a standard push-button switch.

- 12-48Vdc input is ideal for RGBCW LED strip, furniture lighting and other low voltage DC LED application.

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

ONLY RF VERSION (R433MHZ)	
Model	DD06
Type	DC PWM RGBCW Controller
Channel	1CH
Input Voltage	12V-48V
Output Voltage	12V-48V
Output Current	Max 5A
Load Power	12V<60W;24V<120W ;36V<180W;48V<240W
Radio frequency	RF433Mhz
DMT	ASK
PWM	4KHz
Dimming Curve	0.1-100% Logarithmic
Memory Capacity	Maximum 10 switches
Wall switch Compatible	Support push button switch
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	DD06-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，Smarthings ,Google home, Tuya Smartlife, Alexa, Yandex

*Note:

- Smart receivers supports RF function which is based on RF433Mhz.

- Matter is an open protocol based on local communication, and workable under disconnected network.

- 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	DD06-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

*Note:

Smart receivers supports RF function which is based on RF433Mhz.

To work with Smart Speaker or Home automation system, please check Tuya official website for further information.

WIRING DIAGRAM

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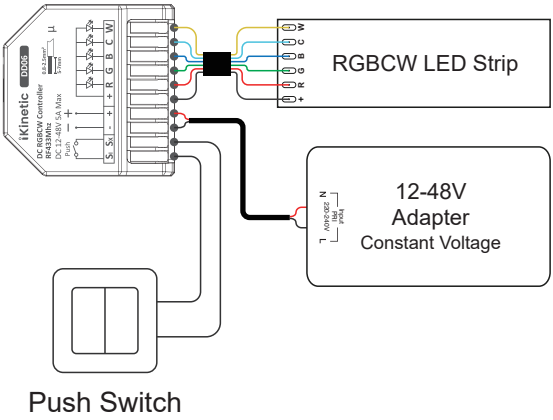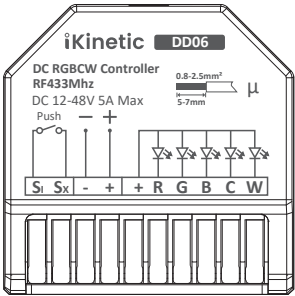
*Note: One receiver can be configured with up to 10 wireless switches.

DC RGBCW CONTROLLER APPLICATION

Controller Installation Method

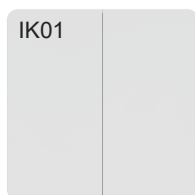Can be mounted in electrical boxes or on celling surface.

Application Scenarios

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

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

Product Composition

*Transmitter need to be purchased separately

Kinetic Switch

IK01

On/ Off: Press right key once

Dimming: Press the right key twice to enter dimming cycle, another press to lock in your selection

CCT&RGB: Press the left key once to enter CCT or RGB color cycling mode, press again to lock in your selection

Toggle CCT&RGB mode: Double press left key

Optional: 2G/3G+color

IK11

On/ Off: Press right key once

Dimming: Long press right key

CCT&RGB: Press the left key once to enter CCT or RGB color cycling mode, press again to lock in your selection

Toggle CCT&RGB mode: Double press left key

Optional: 2G/3G+color

Battery Switch

Each button works independently

On/Off: Press once

Dimming: Long press

CCT&RGB: Single click+long press to enter CCT or RGB color cycling mode. Release to lock in your selection

Toggle CCT&RGB mode: Double press

Optional: 1G/2G/3G+Surface (Plastic/ Polished/ Brushed)+ Color

Battery remote (TR series)

On/ Off: single press ①/②

Dim ▲/Dim▼: long press ①/②

CCT&RGB: single click+long press ② to enter CCT or RGB color cycling mode. Release to lock in your selection

Toggle CCT&RGB mode: double press ②

Optional: Surface (Plastic/ Glass) + Color

2 Key 1 Group Remote (TR01/TR11)

On/ Off: single press ①

Dim ▲/Dim▼: long press or single press ②

CCT&RGB: single press or long press ③

Toggle CCT&RGB mode: long press ④

Switch Group: single press ④

Optional: Surface (Plastic/ Glass) + Color

4 Key 4 Group Remote (TR03/TR13)

Battery remote (BR series)

On/ Off: single press ①/②

Dim ▲/Dim▼: long press ①/②

CCT&RGB: single click+long press ② to enter CCT or RGB color cycling mode. Release to lock in your selection

Toggle CCT&RGB mode: double press ②

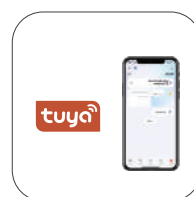**Optional:** Surface (Plastic/ Glass) + Color

Alexa   HomeKit   Google Home   Работает с Алисой   SmartThings   tuya

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

Max.Output Current TR Data

DD06	INPUT VOLTAGE=24(V) ;INPUT CURRENT=5(A); Ta: 33.5°C; TEST TIME: 2H						
Data Channel	CH01	CH02	CH03	CH04	CH05	CH06	CH07
Key component	Mos 1	Mos 2	Mos 3	Mos 4	Mos 5	Capacitor	Case
Temperature(°C)	61.3	55.8	53.2	50	50.1	55.6	48
Temperature Limit(°C)	150	150	150	150	150	105	105
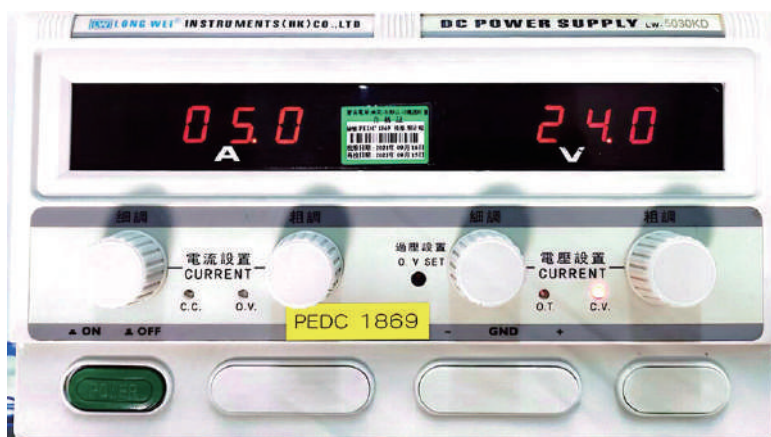
Fig. 1:Power Suppy

Fig. 2:Multi-channel Temperature recorder

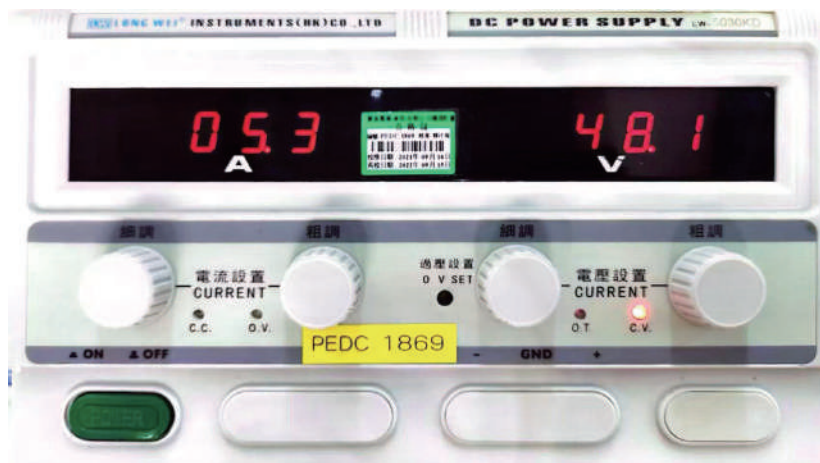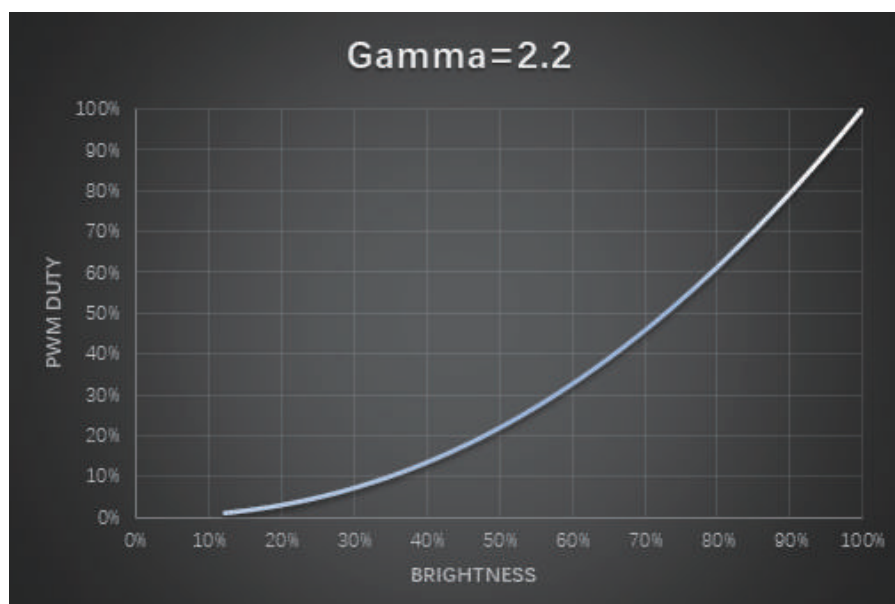| DD06	INPUT VOLTAGE=48(V) ;INPUT CURRENT=5(A); Ta: 34.4°C; TEST TIME: 2H						
Data Channel	CH01	CH02	CH03	CH04	CH05	CH06	CH07
Key componment	Mos 1	Mos 2	Mos 3	Mos 4	Mos 5	Capacitor	Case
Temperature(°C)	65.7	59.9	57.7	54.2	54.4	62.9	52.1
Temperature Limit(°C)	150	150	150	150	150	105	105

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 wiredless 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.
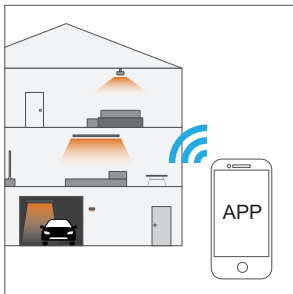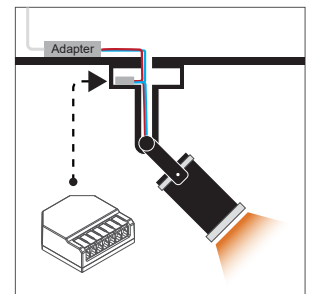

Smart Home Lighting Upgrade
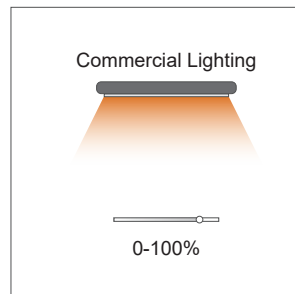
Energy-Efficient Commercial & Office Lighting
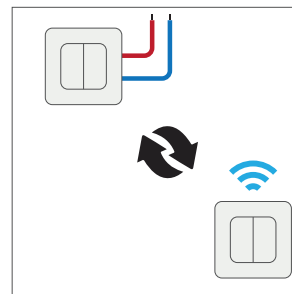
Indoor Lighting Retrofit Solutions

Compact Installation for Various Fixtures

NOTE

- Please supply with correct DC power supply between 12-48Vdc.
- Kindly note the maximum load power of the controller.
- You might need smart speaker to allow Matter over WiFi device working. Please check with smart speaker manufacturer if the model is matter 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.