

HX-MINI005-RFBT15-V1.1

Category: Tunable White / CCT Controllers

Source model: HX-MINI005-RFBT15-V1.1

Internal reference: HOION-CTRL-020

Product Overview

MINI005 series led controller for DIM/CCT/RGB/RGBW with RFBT15 remote

Controller adopts the most advanced PWM (Pulse Width Modulation) digital control technology, it is used for controlling constant voltage LED lamps. For instance, point source of light, flexible light strip, led modules, led strings and so on; Receiver items are separately for DIM or CCT or RGB or RGBW, remote control adopts RFBT remote the same one for all types.

Technical Details

Features:

- 1) Easy-going products set for small application;
- 2) Remote control powered by 3V (AAA*2), receiver powered by DC12-24V;
- 3) Output current: 1ch*6A(DIM), 2chs*3A(CCT), 3chs*2A(RGB), 4chs*1.5A(RGBW).
- 4) Easy to access and store with magnetic suction;
- 5) Circular knob design, unique interface and easy operation;
- 6) Functions: ON/OFF, dim function, colors, dynamic modes;
- 7) Adopts RF 2.4GHz wireless control, remote control distance up to 30m and no directional;
- 8) 3 years warranty.

Technical Parameters

Remote control

| Working temperature | -20-60℃ | Working voltage | 3V(AAA*2PCS)

| Sleep current | <25uA | Emission current | <17mA

| Sleep power consumption | <75uW | Emission power consumption | <51mW

| Net weight | 80g | Dimension | Φ60*35mm

| RF distance | ≤30m | RF frequency | 2.4GHz

| Accessories | holder 1pc, 3M foam sponge glue 1pc.

Receiver: MINI005

| Working temperature | -20-60℃ | Supply voltage | DC12V-24V

| Static power consumption | <1W | Connecting mode | Common anode

| Grayscale | 1024 levels | Speed stage | 1024 levels

| External dimension | L48*W26*H13 mm | Net weight | 20g

| RF frequency | 2.4GHz | RF distance | ≤20m

| Button control | Yes | Memory function | Yes

| Output | Depends on

DIM: 1 CH

CCT: 2 CHs

RGB: 3 CHs

RGBW: 4 CHs | Output current | ≤6A(total)

DIM: 1*6A

CCT: 2*3A

RGB: 3*2A

RGBW: 4*1.5A

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| PWM frequency | 1.95KHz | Max. Output power | 12V:<72W, 24V:<144W

Dimensions

Button control function of receiver: MINI005

Short pressing to switch on/off the light in any time.

Long-pressing during the controller in working state, the output light brightness (DIM)/ color (CCT/RGB/RGBW) will change to any available state in cycle, just release press when it get the desired brightness/color.

Remote Control Function

DIM

(work with single color receiver) Item

1/4

HX-MINI005-DIM

ON/OFF: Short-click

Adjusting brightness/speed: Rotating

Modes: Double-short-click

Modes list

|

No. |

Mode |

Marks

| 1 | Flash | Rotating to adjust the speed

| 2 | Fade

CCT

(work with CW+WW receiver)

Item

1/4

HX-MINI005-CCT

ON/OFF: Short-click

Adjusting brightness/speed: Rotating

Adjusting CCT: Pressing+Rotating

Modes: Double-short-click

Modes list

|

No. |

Mode |

Marks |

No. |

Mode |

Marks

| 1 | WW+CW flash | Rotating to adjust the speed | 3 | WW/CW flash in turn | Rotating to adjust the speed

| 2 | WW+CW fade | 4 | WW/CW fade in turn

RGB

(work with RGB receiver)

Item

1/4

HX-MINI005-RGB

ON/OFF: Short-click

Adjusting brightness/speed: Rotating

Adjusting color: Pressing+Rotating

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Modes: Double-short-click

Modes list

No.	
Mode	
Marks	
No.	
Mode	
Marks	
1 3 colors flash Rotating to adjust the speed 5 White flash Rotating to adjust the speed	
2 7 colors flash 6 White fade	
3 3 colors fade 7 Red-blue fade	
4 7 colors fade 8 Green-blue fade	

RGBW

(work with RGBW receiver)

Item

1/4

HX-MINI005-RGBW

ON/OFF: Short-click

RGB/W switching: 2s-long-pressing

Adjusting brightness/speed: Rotating

Adjusting color: Pressing+Rotating

Modes: Double-short-click

Hotkey: 3 times-short-click to overall ON/OFF

Modes list

No.	
Mode	
Marks	
No.	
Mode	
Marks	
1 3 colors flash Rotating to adjust the speed 5 White flash Rotating to adjust the speed	
2 7 colors flash 6 White fade	
3 3 colors fade 7 Red-blue fade	
4 7 colors fade 8 Green-blue fade	

Typical Applications

Application Circuit 1: Single color (power input by DC male plug 2.1/5.5, led output by DC female plug 2.1/5.5)

Application Circuit 2: CW+WW(power input by DC male plug 2.1/5.5, led output by 4 pin*2.54 connector: V+ CW NC WW)

Application Circuit 3: RGB (power input by DC male plug 2.1/5.5, led output by 4 pin*2.54 connector: V+ G R B)

Application Circuit 4: RGBW (power input by DC male plug 2.1/5.5, led output by 5 pin*2.54 connector: V+ G R B W)

Wireless remote control code value setting method

The number of controllers and remote controls in one system is unlimited. 2.4G Smart system has one unique RF code for communication. Each controller and each remote control can remember only one RF code, recorded in the first programing. New RF code can be recorded after delete the old one.

Code matching operation: the receiver will only be controlled by the value code remote control.

| Step | Operation | Instructions

- | 1 | Connecting the load to the receiver and power on it. | 1. It is necessary to clear the code first, if the receiver was coded before.
2. Batch operation can be performed within the remote control range.
3. Please remember to cut off other un-code zones power, or will be paired together.

| 2 | Press and hold "C" on the remote control for 5 seconds | The indicator of the remote control will flash quickly, see the load light flashes 3 times and return to the initial state, means matching coding is finished successfully

| 3 | Press any key to exit and end the operation | Also will automatically exit code transmission status after 60 seconds

Code clearing operation: that the original code value of the receiver will be cleared and returned to the factory state. Then it can be controlled by any compatible remote control, also can be paired to a new code.

| Step | Operation | Instructions

- | 1 | Connecting the load to the receiver and power on it. | 1. The clearing operation should be finished within 1 minute after the receiver is powered on.
2. Batch operation can be performed within the remote control range.

| 2 | Press and hold "D" on the remote control for 5 seconds | 1. The indicator of the remote control will flash quickly, see the load light flashes 3 times and return to the initial state, means pairing coding is finished successfully.

2. If the original remote control is lost, the new remote control can be used for clearing operations.

| 3 | Press any key to exit and end the operation | Also will automatically exit code transmission status after 60 seconds.

Code learning operation between remote controls: Used to unify system code values or copy a new remote control.

Since each remote control has its own unique RF code at the time of delivery, when there are multiple remote controls in one system, one of them must be selected as a main, and other remote controls should copy its RF code.

- 1)
Main remote control: Press and hold
"C" key for 5 seconds. The indicator of the remote control will flash quickly, means it enters the pairing code transmission status.

- 2)
New remote control: Press and hold
"B" key for 5 seconds, indicator will turn from 100% to off means it enters learning code status.
3) Indicator of the new remote control flash three times after successful code learning.

Remote control RF code learning from controllers

- 1) Turn off the power supply of the controllers.
2) Press and hold
"B" key for 5 seconds until indicator of remote control turns off.
3) Turn on the power supply of the controllers. Indicator of the remote control flashes three times after successful code learning.

Note: The distance from controllers to remote controls should be less than 2 meters.

Restoring factory settings of remote control

- 1) Press and hold "
B" key for 20 seconds until indicator of remote control process the state as 100% -off-100%.
2) Press
"D" button to submit and finish the operation. Indicator of the remote control will flash three times after successful operation.

7. Remote control accessories installation instructions

Accessories include holder 1pc, 3M foam sponge glue 1pc, AAA batteries 2pcs.

Installation instruction:

Using 3M foam sponge glue make free drilling installation of the holder onto the suitable wall or furniture surface.

Placing Knob on the holder to operate the controlling, or take the knob and use it on any tabletop as convenience.

Packing

Product information for placing order

| Product name | Item number

| HX-MINI005-RFBT15-DIM/CCT/RGB/RGBW |

HX-MINI005-RFBT15-V1.1

Set packing:

HX-MINI005-RFBT15-DIM
HX-MINI005-RFBT15-CCT
HX-MINI005-RFBT15-RGB
HX-MINI005-RFBT15-RGBW

Remote control:

HX-RFBT15

Receiver:

HX-MINI005-DIM
HX-MINI005-CCT
HX-MINI005-RGB
HX-MINI005-RGBW

Source reference: <https://www.hoionlighting.com/products/LEDdiaoguangqi/LEDshuangsewenkongzhiqi/2021/0417/327.html>