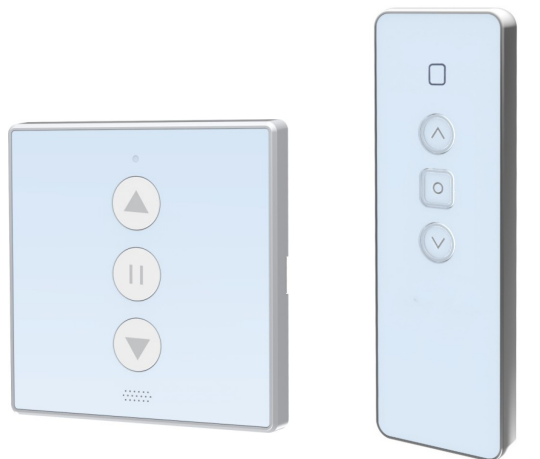


# HC-E01/02 Series 86×86mm Control Box Operating Instructions



86 Control Box

Remote Control

## 1. Function and Features

1. AC input, 100-240VAC, 50/60Hz;
  2. 24VDC/5A output, connect up to two window openers simultaneously;
  3. RF remote control, built-in antenna, 100 meters as a straight distance;
  4. Fire linkage interface, support dry contact fire signal input;
  5. Dry contact function, connect switch panel or dry contact group control;
  6. RS485, support RS485 central control or MODBUS RTU
  7. 12VDC sensor voltage output, connect rain sensor optionally;
  8. The shell is made of fireproof plastic material, fireproof grade 94V0;
  9. Power supply and operation tips, intuitive and convenient;
  10. Simple and fashionable appearance design, easy installation
- Humanized industrial design, easy installation and use, safe and reliable.

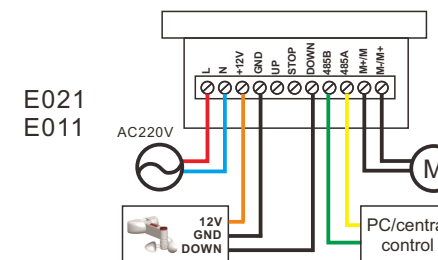
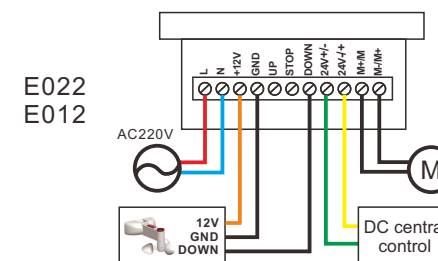
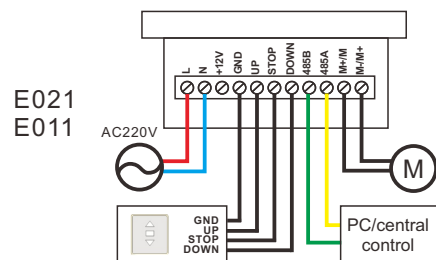
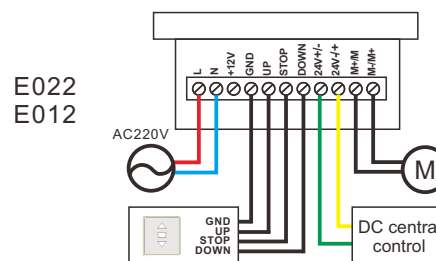
## ! Precautions Before Installation

- \* Keep the receiver at a distance of more than 1.5m from the ground;
- \* Keep the receiver at a distance of more than 0.3m from the ceiling;
- \* Keep the receiver at a distance of more than 1.5m from the motors;
- \* Avoid static interference, which can damage some electronic components;
- \* The main power supply must be cut off before wiring is installed to ensure safe operation;
- \* After installation, ensure that the cable carrier is not affected by longitudinal forces;
- \* Use twisted-pair cables for THE RS485 signal cable. When the RS485 signal cable exceeds 200m, an RS485 repeater is required.
- \* The power of the external sensor should be less than 2W, and the length of the lead less than 50 meters.
- \* Do not route the external dry contact leads side by side with the strong current. The distance between the leads should be less than 100m.
- \* When dry contact is connected to multiple group control units, the wire diameter should be more than 0.75 square.

## 2. Product Parameters

Product model	Input voltage	Output power	Receiving frequency	Working temperature	Dimension	Function
HC-E022-D24	100-240VAC/50Hz	24VDC / 2A	433.92MHz	-20 ~ +55°C	86*86*38mm	DC24V central control
HC-E012-D24	100-240VAC/50Hz	24VDC / 3A				
	220VAC/50Hz	24VDC / 5A				
HC-E021-D24	100-240VAC/50Hz	24VDC / 2A	433.92MHz	-20 ~ +55°C	86*86*38mm	RS485 central control
HC-E011-D24	100-240VAC/50Hz	24VDC / 3A				
	220VAC/50Hz	24VDC / 5A				

## 3. Product Wiring

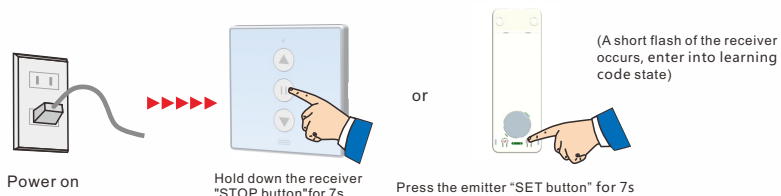


## 4. Operating Instruction

- The maximum running time of the motor is 5 mins, and the UP/DOWN switching time is 500ms;
- When using the multi-channels emitter, please select the channel you need and then operate it.

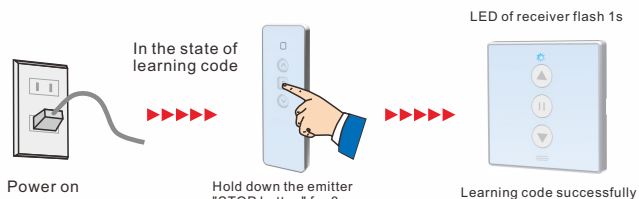
### 1. Enter Learning code state

- The single-channel receiver is debugged in the same way as the dual-channel receiver;
- For the operation of two-channels emitter, please select the channel you need to debug firstly.



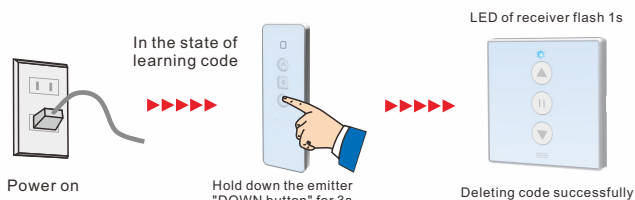
### 2. Learning code

- The single-channel receiver is debugged in the same way as the dual-channel receiver;
- For the operation of two-channels emitter, please select the channel you need to debug firstly.



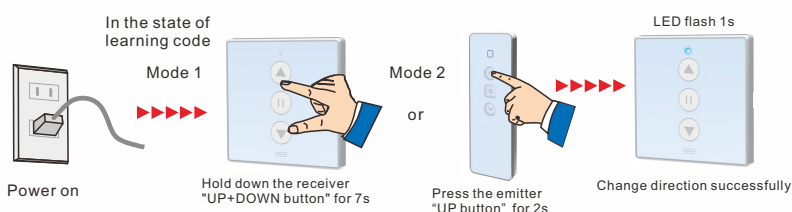
### 3. Delete single code

- The single-channel receiver is debugged in the same way as the dual-channel receiver;
- For the operation of two-channels emitter, please select the channel you need to debug firstly.

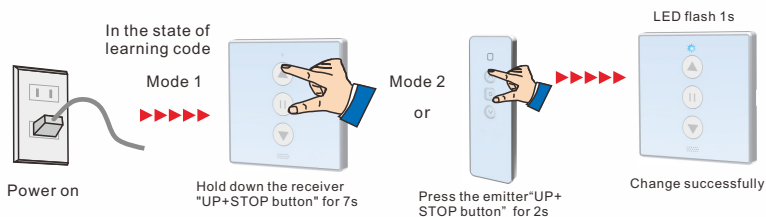


### 4. Change direction

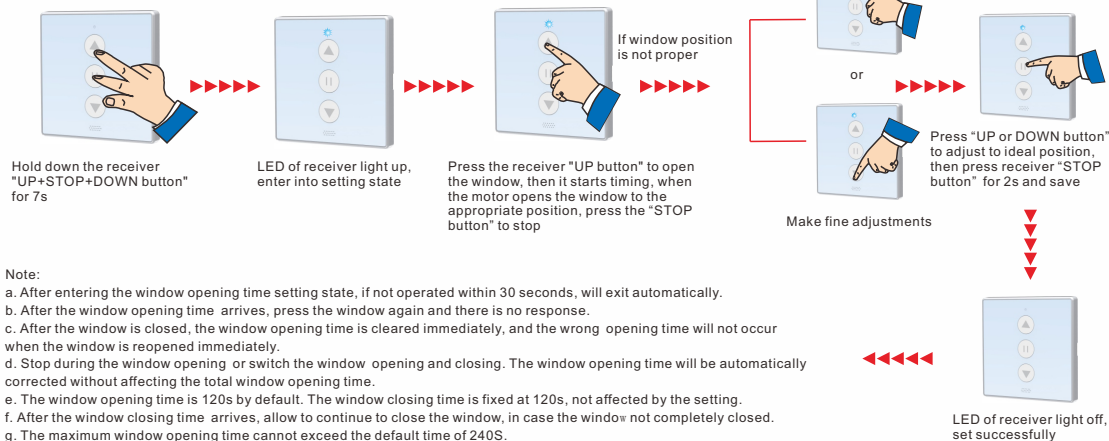
- The single-channel receiver is debugged in the same way as the dual-channel receiver;
- For the operation of two-channels emitter, please select the channel you need to debug firstly.



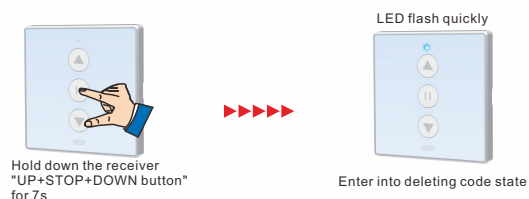
### 5. Dot move/Continuous move switching



### 6. Window opening time setting



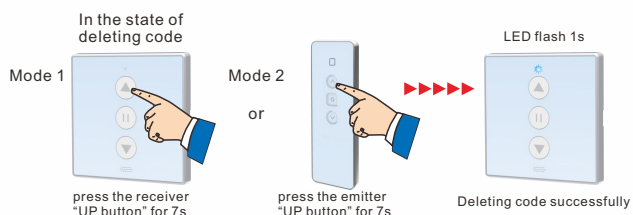
### 7. Enter into deleting code state



### 10. Fire control linkage

When the fire signal is detected, the motor goes up immediately, and E021 control box feedback signal to big control box through the central control or RS485, while shielding the buttons of the receiver and emitter function. The LED on the receiver flashes quickly until the fire signal disappears and LED goes out.

### 8. Delete all codes

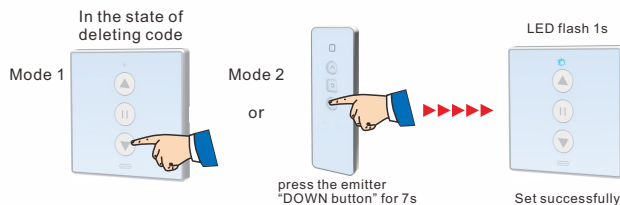


### 11. Fire resetting

When the fire alarm signal is triggered, the reset will not respond to the fire signal. Press the "stop" button" of the receiver for 7s to reset the receiver and stop responding to the fire signal. After the receiver is reset, LED of receiver is off, and the buttons of receiver and emitter function return to normal.

### 9. Restore factory setting

Note: direction, dot move/continuous move, dot move time, emitter, RS485 functions are all cleared.



### ★ Tips

1. In the state of setting learning and deleting codes, if not operated within 30s, exit automatically.
2. In the state of learning and deleting codes, press UP and DOWN button, the motor will not work.
3. A delay of 0.5s when the motor is switched. The maximum working time of the motor is 5 mins.