

6. Drill 4 holes on the ceiling, and then select 5x40mm tapping screws to fasten the cable box on the ceiling.  
(Recommendation: cable box must be installed above the power input of screen) (figure 10-11).

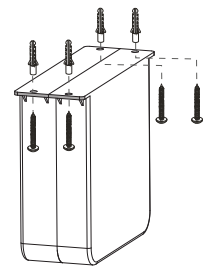


Figure 10

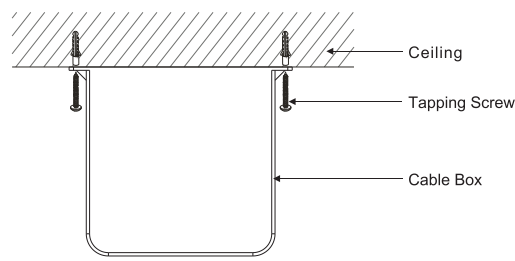


Figure 11

7. The screen includes two parts of cable; there are cable box and main cable. Firstly, please insert the plug into socket (figure 12-13).

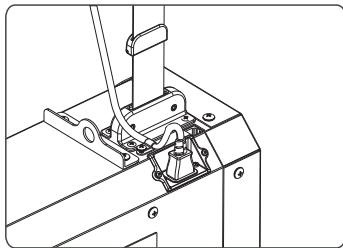


Figure 13

8. Loop the cable with cable lock, and then fasten it onto the casing top via 4x10mm screw(note: separate the cable and power to avoid the damages of power line).

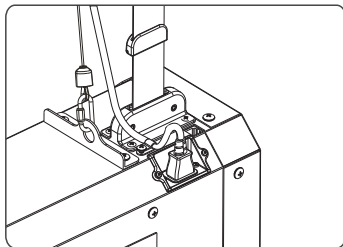


Figure 14

9. Insert the plug from main cable into the socket on the cable box (figure 15-16).

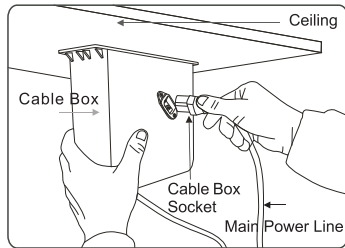


Figure 15

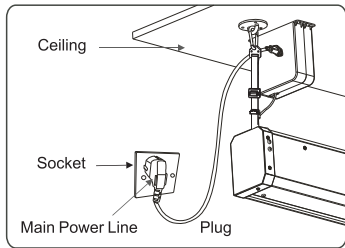


Figure 16

6. Positioning Instruction

There are totally 3 solutions to position the screen, upper/lower limitation hole for strap , remote localizer and position piece.

(1). Upper/Lower Limitation Adjustment for Sling Wires

Upper limitation and lower limitation are set from factory, the upper limitation should be at 30cm which is the distance between the screen and installation position (figure 22), and the lower limitation should be at 495cm which is the distance between the screen and installation position (figure 23) (upper/lower limitation hole for sling wires must be regulated by professional or dealers, please do not regulate yourself. Improper regulation will cause the risk of damages).

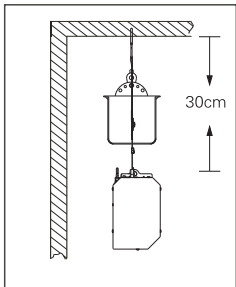


Figure 22

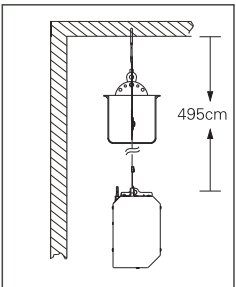


Figure 23

- a.Upper limitation adjusting. Take off the knob from the hole and use the provided allen key to adjust (figure 24). A clockwise adjustment will retract the screen (The distance between the screen and installation position will decrease) and a counter-clockwise adjustment will extend the screen (The distance between the screen and installation position will increase).
- b.Lower limitation adjusting. Take off the knob from the hole and use the provided allen key to adjust (figure 25). A clockwise adjustment will extend the screen (The distance between the screen and installation position will increase) and a counter-clockwise adjustment will retract the screen (The distance between the screen and installation position will decrease).

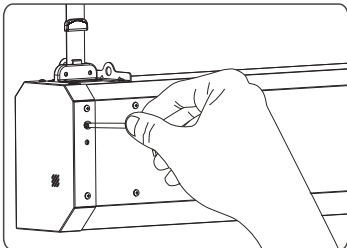


Figure 24

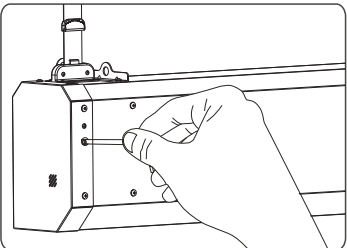


Figure 25

Remark: default setting should be kept. If it is special solution, the remote localizer is recommended.

(2). Remote Localizer

- a.When the screen is at loading situation, you can adjust the upper/lower limitation via the remote controller. (Retract position is larger than 30cm to the installation position, extend position is smaller than 495cm installation position).
- b.To press the localizer hole at the back of the remote controller with one small pin or equivalence for about 3 seconds and then release, then press Up button for strap to the desired position and stop, the screen is already reset for its retract limit (figure 26-27).

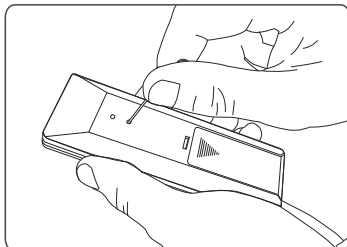


Figure 26

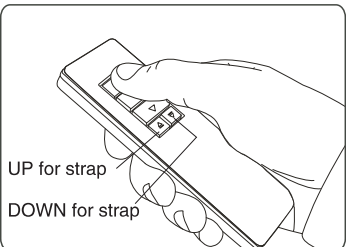


Figure 27

Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xDD  
Directive for stopping the screen: 0xFF 0x10 0x11 0x12 0xCC  
Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xEE  
Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xC9  
Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xE9  
Completed the studying in screen A, and then disconnect the power in screen A. Please operate the screen B in same way and change the address to 0xAA 0xAA 0xAA. Entering the operating address of screen B can control the screen.

Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xDD  
Directive for stopping the screen: 0xFF 0x10 0x11 0x12 0xCC  
Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xEE  
Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xC9  
Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xE9  
This studying is one address bit for a long time until next address bit change to update.  
After studying address bit, the common directive is still effective, so the address bit can not be 0xEE 0xEE 0xEE.

Attachment 1  
Compare 16 hexadecimal system to 10 hexadecimal system

16 hexadecimal system	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
10 hexadecimal system	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16

4.Load Mechanism

There is a load mechanism in the screen, assuring screen to work only after being properly installed. When hanging the screen on the rings, screen gravity would turn the wheel via strap, which connects the load switch automatically (figure 18-19).

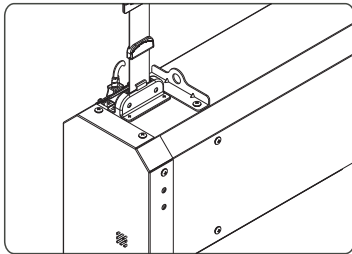


Figure 18

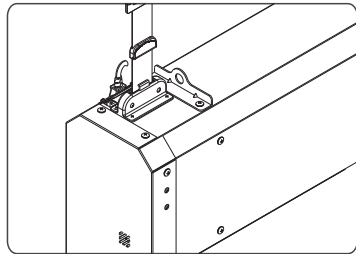


Figure 19

5. Remote Controller Instruction

- There is matching function between controller and screen, and then controller needs to be programmed before using.
- (1). The screen is at situation of load. After connecting the power within 5 seconds, please press 'UP' button and 'STOP' button simultaneously for 5 seconds then release.
  - (2). Press the 'DOWN' button to ensure whether the programming works?
  - (3). If the programming fails, please repeat step 2 and 3.

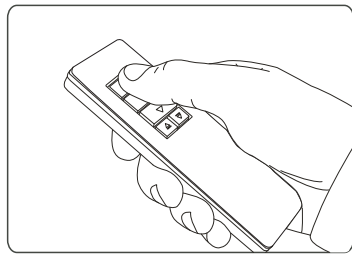


Figure 20

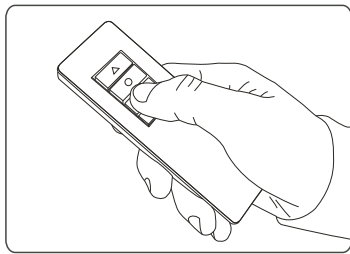


Figure 21

Recessed Mount

The screen can be installed on the ceiling, with the reference to the above-mentioned steps 1-9 (figure 17).

Recessed Mount Illustration

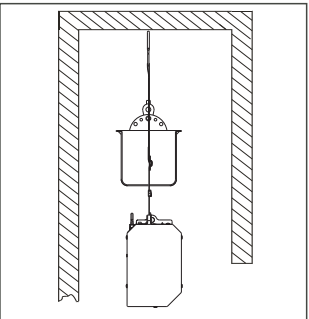
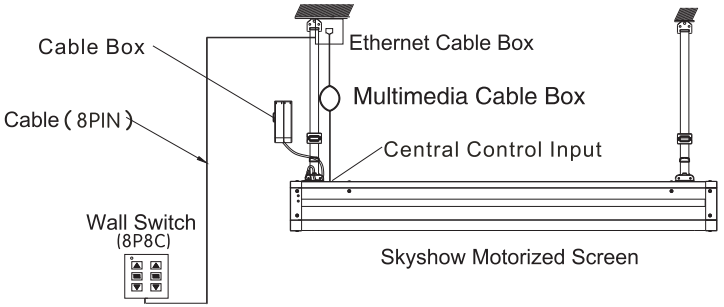


Figure 17

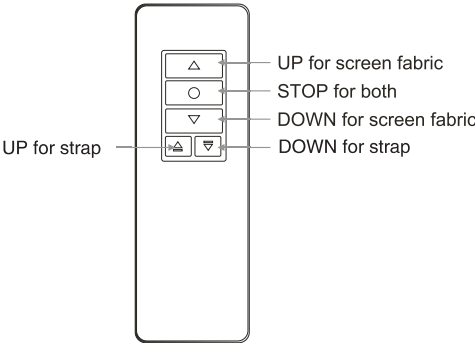
Product Instruction

1. Wall Switch Instruction

Please use the wall switch following the marking and symbols on switch.  
Note: please fix the cable box on the ceiling, and please ensure the cable box, retractor and central control input are at the same level.



Wall Switch Wiring Description



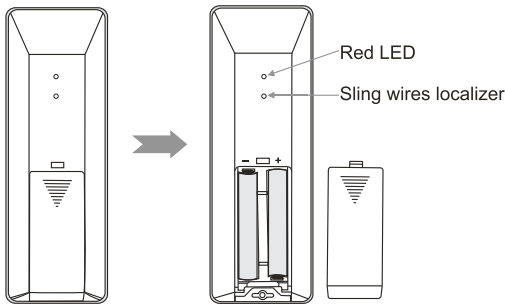
Front view

2.Remote controller instruction

- Remote controller instruction:
- 1. To retract screen, press "UP for screen fabric".
  - 2. To stop sling wires or screen fabric, press "STOP for both".
  - 3. To lower down screen, press "DOWN for screen fabric".
  - 4. To retract sling wires, press "UP for strap".
  - 5. To lower down sling wires, press "DOWN for strap".

**Remote controller guideline:**

- 1. Working temperature: -200C - +800C.
- 2. Protection index: IP30.
- 3. Batteries: 1.5V x 2pcs, model # AAA.
- 4. Working under normal polluted environment.
- 5. Take out batteries if the controller will not be used for a long time.
- 6. Please change the batteries when signal is weak.



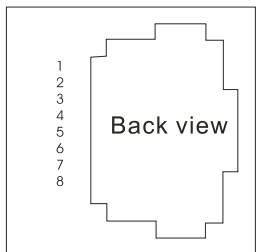
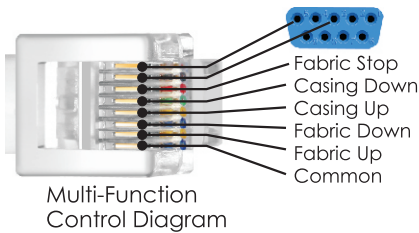
**How to install the batteries:**

- Please change the batteries as below when signal is weak.
- 1. Turn around the controller, push to pen the cover as guiding arrow.
  - 2. Put the batteries in according to the guide of anode and cathode.
  - 3. Close the cover.

**Caution**

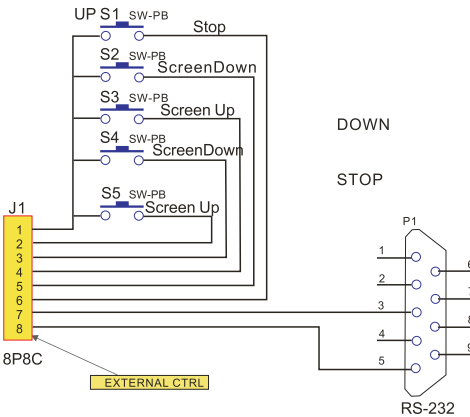
The controller does not work if mistaking the anode and cathode of batteries, please correct the direction according to the figure on the left.

**3. Central Control Instruction**  
**Emitter Function:**



**Central Control Format Agreement**

- 1)Communication Agreement Setting:  
data bits: 8 bits, start bits: 1 bit, stop bits: 1 bit, Baud Ratio: 2400.
  - 2)Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xDD
  - 3)Directive for stopping the screen: 0xFF 0xEE 0xEE 0xEE 0xCC
  - 4)Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xEE
  - 5)Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xC9
  - 6)Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xE9
- 232 setting: 2400, n, 8, 1 a continuous data sends two times, each time interval of 200 ms.



**RS485 Custom Setting Address:**

- 1、RS-485, RS-232 input
- A continuous data sends two times, each time interval of 200 ms.
- 3 bytes of studying address directive are custom setting address directive.

**Central Control Format Agreement**

**1)Communication Agreement Setting**

- Data Bits: 8 bits
- Start Bits: 1 bit
- Stop Bits: 1 bit
- Baud Ratio: 2400

Common directives are in chip of screen and can not be changed.

- 2)Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xDD
- 3) Directive for stopping the screen: 0xFF 0xEE 0xEE 0xEE 0xCC
- 4) Directive for extending the screen: 0xFF 0xEE 0xEE 0xEE 0xEE
- 5) Directive for retracting the screen: 0xFF 0xEE 0xEE 0xEE 0xC9
- 6) Directive for extending the screen: 0xFF 0xEE 0xEE 0xEE 0xE9
- 7) Studying address directive: 0xFF 0xFF 0xFF 0xFF 0xFF

**Directive Composing Instruction:**

0xFF is only bit; 0x stands for 16 hexadecimal system; FF is effective bit; a directive is composed by 5 bits.

Studying directive 0xFF 0xFF 0xFF 0xFF 0xFF

0xFF and 0xFF can not be changed, but 0xFF 0xFF 0xFF can be changed to any 16 hex data, which stand for address bit.

The changed working directive

- 1) Directive for retracting the screen: 0xFF 0xFF 0xFF 0xFF 0xDD
  - 2) Directive for stopping the screen: 0xFF 0xFF 0xFF 0xFF 0xCC
  - 3) Directive for extending the screen: 0xFF 0xFF 0xFF 0xFF 0xEE
  - 4) Directive for retracting the screen: 0xFF 0xFF 0xFF 0xFF 0xC9
  - 5) Directive for extending the screen: 0xFF 0xFF 0xFF 0xFF 0xE9
  - 6) Studying address directive: 0xFF 0xFF 0xFF 0xFF 0xFF
- Example: the studying directive is 0xFF 0x10 0x11 0x12 0xFF which can be changed to:
- 7) Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xDD
  - 8) Directive for stopping the screen: 0xFF 0x10 0x11 0x12 0xCC
  - 9) Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xEE
  - 10) Directive for retracting the screen: 0xFF 0x10 0x11 0x12 0xC9
  - 11) Directive for extending the screen: 0xFF 0x10 0x11 0x12 0xE9
  - 12) Studying address directive: 0xFF 0x10 0x11 0x12 0xFF

**Studying Directive and Operation**

After connecting power, studying status will operate within the first 10 seconds. The studying directive is 0xFF 0xFF 0xFF 0xFF 0xFF. The screen can be used normally after study completed, but the screen can not be used normally after the address bit changed, so that one port can be used to control many screens.

Example:

Screen A and screen B with RS-485 port, if need to control these two screens synchronously that the directive 0xFF 0xEE 0xEE 0xEE 0xDD will be sent out from the port. If need to control these two screens in different movement, such as screen A goes down and screen B goes up, common directive can not be used and separated by address bit at this time.

Connect the power for screen A, and send out directive 0xFF 0x10 0x11 0x12 0xFF. At the same time, the address of screen A is 0x10 0x11 0x12. Entering the operating address of screen A can control the screen.