

INSTALLATION AND OPERATION MANUAL OF ELECTRIC PROJECTION SCREEN

Suitable for aluminum alloy shell



[Attention] Please read this manual before installing and using the projection screen, and retain this manual for future reference.

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General situation

Professional aluminum alloy electric screen

With a breakthrough design concept and configuration, our electric screen has very high quality and standard; a number of patents and mute technology have been used, showing the new trend of top screen technology to the public. Equipped with supermute tube motor and QUIETTUNING mute technology, the lifting speed of EC1 is 50% faster than synchronous motor screen. What's more, the noise is decreased by 80%.



Gorgeous

The designer has added the concepts of dynamics, elegance and smoothness, to create gorgeous design style. The end cap on the front and side adopts card slot connection. No exposed screw. It is well designed.

High-performance power

Firstly adopted positive shock absorption stable system, it is equipped with high-speed and high-performance mute tubulous motor, which reflects top power technology;



High-speed and high-performance mute tubulous motor
 Compared to normal motor
 50% faster
 80% less noisy
 Lifetime is 5 times longer



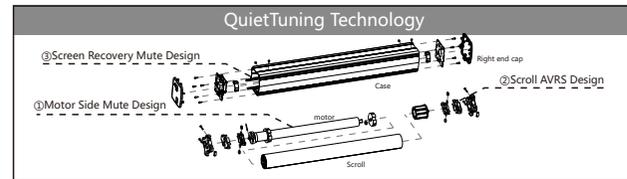
Remote Transmitter

General situation

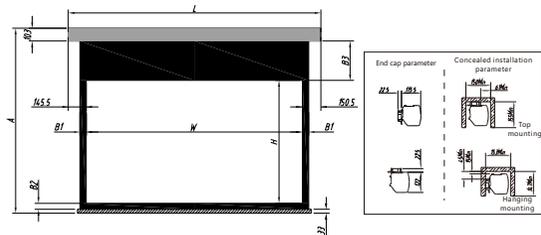
Quiet

This product adopts complete QuietTuning technology, which includes three major designs:

- ①Motor Side Mute Design: Built-in positive shock absorption mute technology tubulous motor;
- ②Scroll AVRS Design: Moving parts and fixed parts are adopted flexibly connected. Vibration of moving parts is absorbed by flexible connection device, to reduce noise and vibration caused by resonance of motor and the shell.
- ③Screen Recovery Mute Design: While recovering the screen, the screen and the shell have mutual movement. Also, when the shell and the balance weight lever are connected, there will be noise. The sound absorption strip will reduce the noise by 30%. You will nearly hear no noise 2 meters away.



Screen parameter



Format	Size	Projected Area		Left-Right Frame (B1 size)	Bottom Frame (B2 size)	Top Frame (B3 size)	Screen Total Height (A size)	Screen Total Length(L)		Packing Size <L(mm)*W(mm)*H(mm)>		N.W (KG)	G.W (KG)	
		W(mm)	H(mm)					Ele Screen	Ele tab tension Screen	Ele Screen	Ele tab tension Screen			
16:9	80"	1771	996	50	50	649	1847	2047	2222	2237*211*223	2412*211*223	17.8	22.9	
	90"	1992	1120	50	50	525	1847	2268	2443	2458*211*223	2633*211*223	18.8	23.9	
	100"	2214	1245	50	50	400	1847	2490	2665	2679*211*223	2854*211*223	19.8	24.9	
	110"	2435	1369	50	50	430	2001	2711	2886	2901*211*223	3076*211*223	21.3	26.7	
	120"	2656	1494	50	50	300	2000	1996	2932	3107	3122*211*223	3297*211*223	22.6	28.2
	130"	2878	1618	50	50	180	2000	2000	3154	3329	3344*211*223	3519*211*223	22.9	28.5
	135"	2989	1680	50	50	110	1992	3265	3440	3455*150*158	3630*150*158	23.5	30.5	
	150"	3321	1867	50	50	100	2169	3597	3772	3787*211*223	3962*211*223	26.8	33.2	
	160"	3542	1991	50	50	100	2293	3818	3993	4008*211*223	4183*211*223	28.4	35	
	170"	3763	2116	50	50	100	2418	4039	4214	4229*211*223	4404*211*223	28.4	35	
4:3	80"	1626	1219	50	50	426	1847	1902	2077	2092*211*223	2267*211*223	17.8	22.9	
	100"	2032	1524	50	50	270	1996	2308	2483	2498*211*223	2673*211*223	18.8	23.9	
	110"	2235	1676	50	50	120	1998	2511	2686	2701*211*223	2876*211*223	19.8	24.9	
	120"	2438	1829	50	50	100	2131	2714	2889	2904*211*223	3079*211*223	21.3	26.7	
	135"	2743	2057	50	50	100	2359	3019	3194	3209*211*223	3384*211*223	22.6	28.2	
	150"	3048	2286	50	50	100	2588	3324	3499	3514*211*223	3689*211*223	24	30	

General situation

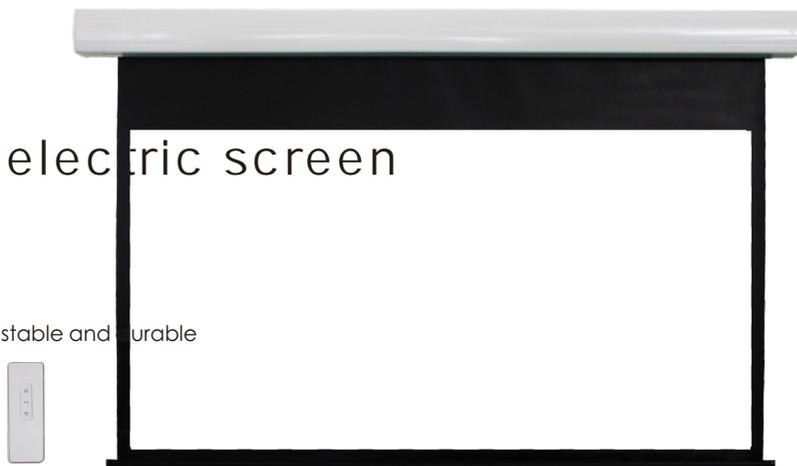
Smart aluminum alloy electric screen

Standard configuration

Screen: HD screen

Motor: high quality synchronous motor, stable and durable

Case: Aluminum alloy case



Remote Transmitter (Optional)

Appearance design

The delicate and exquisite appearance, coupled with aluminum alloy textures, is more suitable for the modern family.

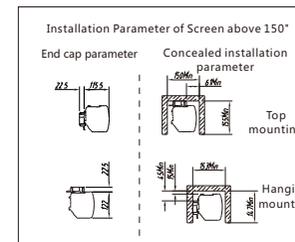
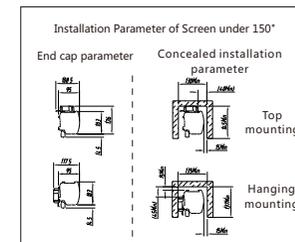
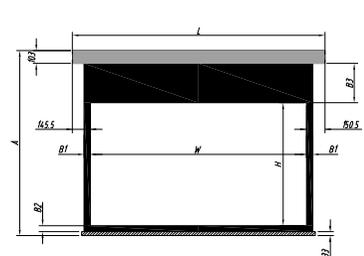
Stable motor

Equipped with high quality synchronous motor, to ensure that the screen runs smoothly.

General situation

Screen parameter

Format	Size	Projection Area		Left-Right Frame	Bottom Frame	Top Frame	Screen Total Height	Screen Total Length(L)		Packing Size<L(mm)*W(mm)*H(mm)>		N.W	G.W
		W(mm)	H(mm)	(B1 Size)	(B2 Size)	(B3 Size)	(A Size)	Ele Screen	Ele tab tension Screen	Ele Screen	Ele tab tension Screen	(KG)	(KG)
16:9	80"	1771	996	50	50	668	1850	2066	2216	2296*150*158	2446*150*158	13.5	17.9
	92"	2037	1145	50	50	519	1850	2332	2482	2562*150*158	2712*150*158	14.6	19.4
	100"	2214	1245	50	50	419	1850	2509	2659	2739*150*158	2889*150*158	15.4	20.3
	110"	2435	1369	50	50	450	2005	2730	2880	2960*150*158	3110*150*158	16.6	21.7
	120"	2656	1494	50	50	320	2000	2952	3101	3182*150*158	3331*150*158	17.6	23.1
	130"	2878	1618	50	50	200	2004	3173	3323	3403*150*158	3553*150*158	18	24
	135"	2989	1680	50	50	130	1996	3284	3434	3514*150*158	3664*150*158	19	24.8
	150"	3321	1867	50	50	100	2169	3597	3772	3787*211*223	3962*211*223	25.8	31.9
4:3	160"	3542	1991	50	50	100	2294	3818	3993	4008*211*223	4183*211*223	27.3	33.7
	170"	3763	2116	50	50	100	2418	4039	4214	4229*211*223	4404*211*223	27.8	34.4
	80"	1626	1219	50	50	445	1850	1921	2071	2151*150*158	2301*150*158	12.8	17.1
	100"	2032	1524	50	50	290	2000	2328	2477	2558*150*158	2707*150*158	14.8	19.5
	110"	2235	1676	50	50	140	2002	2531	2680	2761*150*158	2910*150*158	15.7	20.6
	120"	2438	1829	50	50	100	2114	2691	2883	2921*150*158	3113*150*158	16.7	21.9
	135"	2743	2057	50	50	100	2343	3040	3188	3270*150*158	3418*150*158	18.5	24
	150"	3048	2286	50	50	100	2588	3324	3499	3514*211*223	3689*211*223	24	30



Installation

! Important safety instruction

Warning Please strictly comply with the following safety rules, wrong installation or using methods will bring damage to machinery or personnel injury.

Considerations for installing / using this product

1. Please handle with care.
2. Don't expose it in the rain and keep away from water.
3. Keep away from fire/heat.
4. Please don't fold or scratch the screen.
5. Check that the voltage is consistent with the requirement to use voltage, it can only connect the power plug and socket with grounding wire.
6. Don't scatching the screen fabric.
7. Please recover the screen after used.
8. Don't rise and fall the screen in short time.
9. Ensure the screen to be installed in a horizontal position.



Please follow the manual to operate.
Please contact professional services staff for installation and maintenance.



Please pay attention to insulation of product Shell and accessories.
Do not remove the end cap, to avoid risk of electric shock.

- For any fault of installation or operation, we do not assume compensation liability for any mechanical damage or casualties.

**Forbidden arbitrarily debug the screen.
It must be debugged under the guidance of professionals**

Cleanning

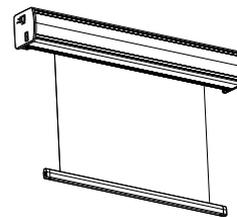
Please use dry and soft cloth with non - corrosive components and neutral soap water to clean the screen and the shell carefully. Do not use chemicals or corrosive materials, or it will damage the product.

Installation

Check the list of items

Our company reserves the right to the accessories contained in the manual, and we are subject to change without notice.

installation instructions(1 copy)
warranty card(1 copy)
reminder sticker(1 copy)



Screen(1)



Remote Transmitter(1)
(optional)



Movable all-round
installation pendant(2)



Ring safe lock(2)



Ring(2)



M6 sleeve hook(2)



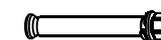
5X40 tapping screw(4)



No.8 Swell plastic button(4)



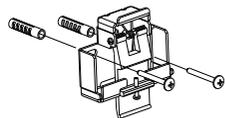
Hex nut(2)



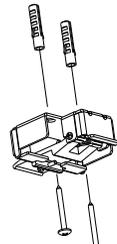
Sleeve screw(4)

Installation methods

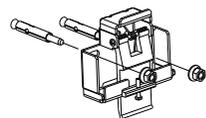
Wooden wall installation mode



Wooden ceiling top mounting installation mode



Concrete/brick wall installation mode



Concrete mounting installation mode

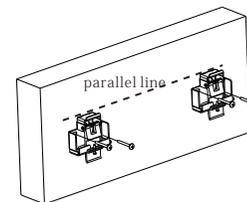


► Wall mounting installation

⚠ Warning

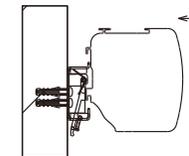
When installing the screen on the wall, please make sure the mounting points are on the same horizontal plane. When the screen expanded, it must keep parallel to the wall.

1



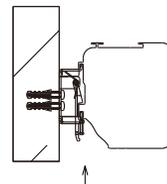
1.If conditions permit, use sleeve screw or swell plastic button on the solid wall with tapping screw(use tapping screws on wooden walls), to install the movable all-round installation pendant horizontally and fix it.

2



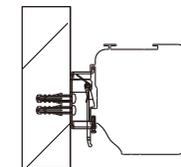
2.According to wall mounting installation principle, lift the screen, and let the shell match the movable all-round installation pendant, the screen falls by gravity, and when you hear a click, it means the screen has been installed.

3



3. Finished.

4



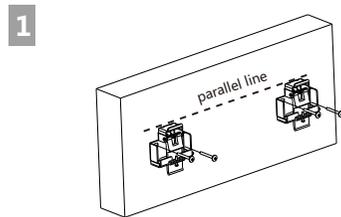
4. Hold the shell with one hand when disassemble the screen. Unbutton with fingers.Push up the shell and the the screen can be disassembled.

Installation

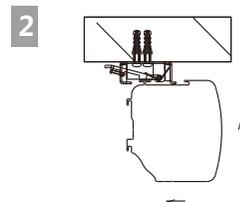
► Ceiling top mounting installation

⚠ Warning

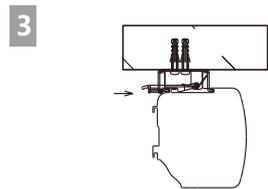
While installing ceiling top mounting screen, the ceiling must have enough bearing capacity, in order to avoid the screen from falling off, and then lead to accidents and injuries.



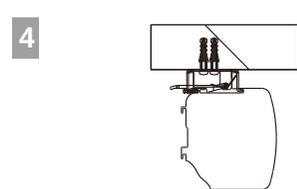
1.If conditions permit, use sleeve screw or swell plastic button on the solid wall with tapping screw(use tapping screws on wooden walls), to install the movable all-round installation pendant horizontally and fix it.



2. According to wall mounting installation principle, lift the screen, and let the shell match the movable all-round installation pendant, the screen falls by gravity, and when you hear a click, it means the screen has been installed.



3. Finished



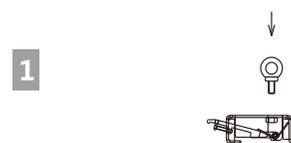
4. Hold the shell with one hand when disassemble the screen. Unbutton with fingers. Push up the shell and the the screen can be disassembled.

Installation

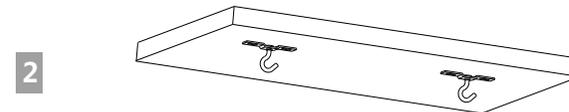
► Ceiling hanging installation

⚠ Warning

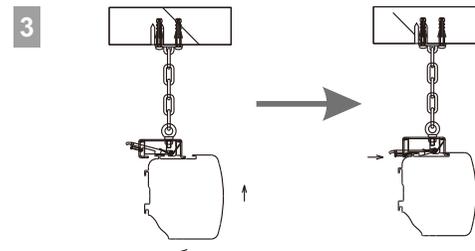
While installing ceiling top mounting screen, the ceiling must have enough bearing capacity, in order to avoid the screen from falling off, and then lead to accidents and injuries.



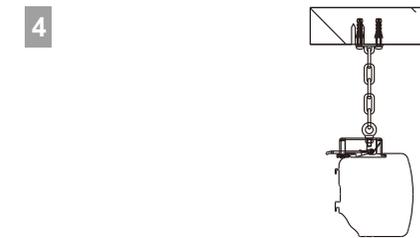
1. Movable all-round installation pendant connects with the ring through the hole.



2.If conditions permit, use sleeve screws on solid walls.



3. If is the ceiling is too high, please use clasp to connect the ring and screen.



4. Finished

► Zenith Angle installation mode

⚠ Warning

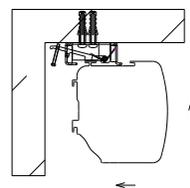
While installing ceiling top mounting screen, the ceiling must have enough bearing capacity, in order to avoid the screen from falling off, and then lead to accidents and injuries.

1



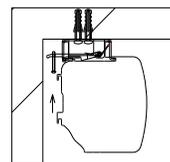
1.If conditions permit, use sleeve screw or swell plastic button on the solid wall with tapping screw(use tapping screws on wooden walls), to install the movable all-round installation pendant horizontally and fix it.

2



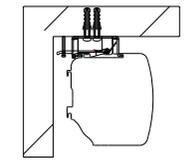
2. According to wall mounting installation principle, lift the screen, and let the shell match the movable all-round installation pendant, the screen falls by gravity, and when you hear a click, it means the screen has been installed.

3



3. Finished.

4



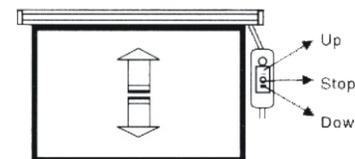
4. Hold the shell with one hand when disassemble the screen. Unbutton with fingers. Push up the shell and the the screen can be disassembled.

Electric screen using method

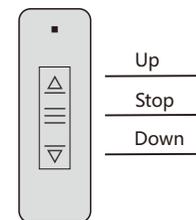
There are two electric screen control modes, manual control mode and remote control mode.

First: Manual control instruction:

Use the switch to control the screen up and down. When you choose "down", the screen will expand; when you choose "up", the screen will recover.



Second: Build-in wireless control/external wireless control/ IR remote control is optional for electric screen users.



- 1.extend :
The screen will fall to the setting position when you push this button.
- 2.recover :
The screen will recover when you push this button.
- 3.Stop
The screen will stop when you push this button.

Remote control

Control Mode

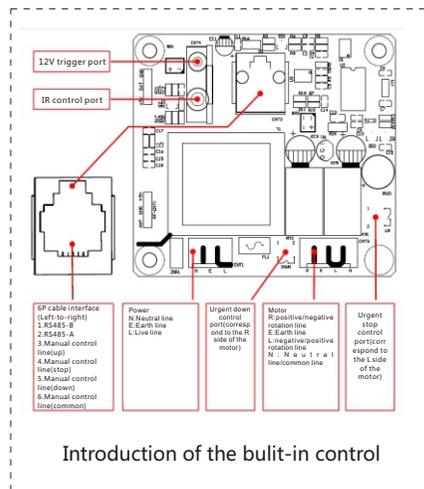
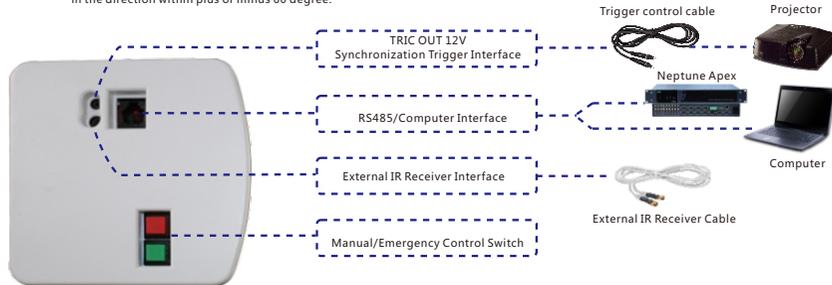
- 1 Remote control**
Remote-controlled distance reaches 25m in any direction



- 2 IR control**
Remote-controlled distance reaches 8m, in the direction within plus or minus 60 degree.

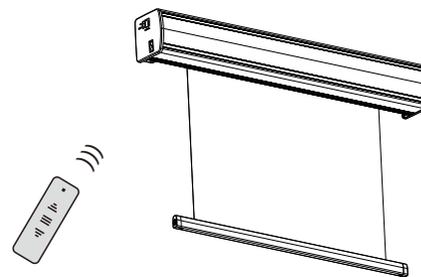


- 3 End cap control**
Remote-controlled distance reaches 8m, in the direction within plus or minus 60 degree.



Remote control

Built-in control coding steps



Enter coding state :

- 1) Long press the "up" button of the transmitter for 5 seconds, the receiver is powered up, the receiver buzzer rings slowly, then come to the coding state.
 - 2) Long press the "stop" button of the coded transmitter for 5 seconds, the receiver buzzer rings slowly, then come to the coding state.
- If there are not any action in 5 seconds on the coding state, the receiver buzzer will stop ringing, it automatically exit coding state.

Coding:

Coding state, press the "up" button, the receiver buzzer quickly rings 3 times, coding succeeded (The transmitter can be matched up to 20 remote controllers)

Delete single code :

Coding state, press the down button, the receiver buzzer quickly rings 3 times, single code is deleted successfully

Delete full code :

Coding state, press the delete code button on the back of the transmitter, the receiver buzzer quickly rings 3 times, full code is deleted successfully.

External DC/AC 12V power control

- DC/AC 12V When power on, the motor is automatically down ,
- DC/AC 12V When power off, the motor is automatically up ,
- Input voltage range: DC/AC 5V — DC/AC 20V

Remote control

Rs485 control

A. RS485 port setting

- 1) Baud rate: 2400
- 2) Parameter length: 8
- 3) Odd-even check: N
- 4) Start position: 1
- 5) Stop position: 1

B. Control code

- 1) Up code: 0xFF 0xAA 0xEE 0xEE 0xDD
- 2) Stop code: 0xFF 0xAA 0xEE 0xEE 0xCC
- 3) Down code: 0xFF 0xAA 0xEE 0xEE 0xEE

C. Function control

- 1) Up code: motor up
- 2) Stop code: motor stop
- 3) Down code: motor down

Identification and elimination of faults

Fault phenomenon	Fault analysis	Solution
The indicator light of the transmitter flashes but the receiver has no response.	1. The wire connection of receiver is correct or not. 2. Check the transmitter is coded or not.	A. According to the manual to connect the wire. B. The transmitter and the receiver are coded correctly.
The transmitter and the receiver operate smoothly but the motor does not operate.	1. Whether the motor wired is correct.	A. According to the manual to connect the wire.
Remote control is insensitive and has no response.	1. Whether the battery of the remote controller is run out of.	A. Replace a new battery.

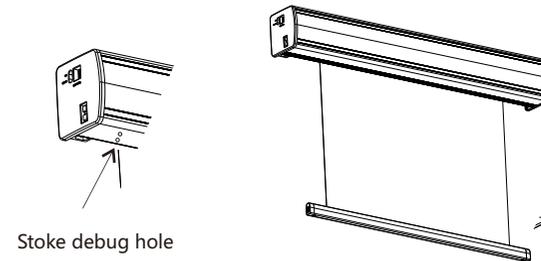
Failures and warranty

Identification and elimination of faults

Symptom	Symptom analysis	Solution
There is no response when controlling the screen up and down	Battery is run out of.	Replace new battery
	Power line hasn't been connected.	Ensure that appropriate power is connected
The screen is lower than the setting position or not folded or unfolded completely	Stoke have been changed	Refer to this manual to adjust the up stoke and down stoke

Screen stoke regulation

Forbidden to arbitrarily debug the screen stoke, which should be debugged under the guidance of professionals



A: Debug the up position (black bottom):

- 1) Stoke debug hole is "red button"
- 2) To increase the position, please rotate in the direction of (+), 2.15cm per circle;
- 3) To decrease the position, please rotate in the direction of (-), 2.15cm per circle

B: Debug the down position (black top):

- 1) Stoke debug hole is "white button"
- 2) To decrease the position, please rotate in the direction of (-), 2.15cm per circle;
- 3) To increase the position, please rotate in the direction of (+) 2.15cm per circle.