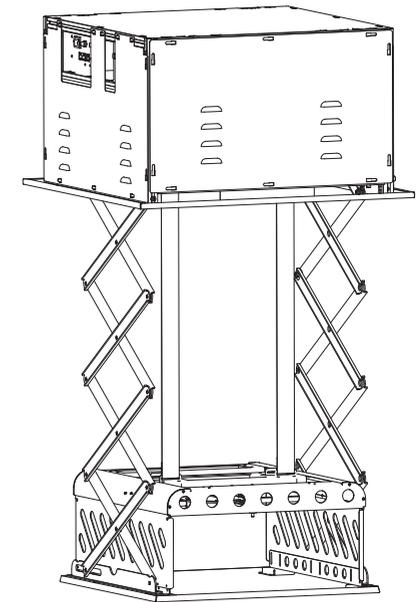


### Recessed-Ceiling Motorized Projector Lift

Applicable Model  
GPCK-MB1000B

#### Please read before using

Thank you for purchasing our products.  
Please read the instruction manual  
carefully in order to ensure this  
mounting bracket is suitable for your  
installation condition.



### Caution



#### Warnings

This instruction manual is written for dealers and technicians.

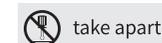
The customer must employ the technicians for installation. Please process the construction following this instruction manual to avoid injury caused by accidents.

For ensuring safety, the maximum load of ceiling must be less than 12KG



#### Caution

Only for assembling Projector Lift



#### take apart

Please do not take apart the accessories of mounting bracket

#### Grandview Crystal Screen Canada Ltd.

#11- 3751 North Fraser Way,  
Marine Way Business Centre,  
Burnaby, BC, Canada V5J 5G4  
Tel: 1-604-412-9777 Fax: 1-604-412-9796  
Website: www.grandviewscreen.ca

#### Guangzhou Grandview Crystal Screen Co., Ltd.

No.43,Guomao Road South, Hualong Town,  
Panyu District, Guangzhou City, China  
Tel: +8620-8489-9499 Fax: +8620-8480-3343  
Website: www.grandviewscreen.com



## Caution

Warnings: Please prevent projector lift from wet place to avoid electric or fire dangerous.

1. Please read carefully with this instructions before installation to avoid damage to product causing by inappropriate installation or operation.
2. Please keep the projector lift away from hot sources, such as radiator, heating machine, fireplace, loudspeaker or other relative device.
3. Only Plug with ground wire is acceptable.
4. Only accessories from authorized supplier is acceptable.
5. Please unplug the power wire when lighting and raining or not use with a long time.
6. Please handle the repair work to the professional agent.
7. Please prevent screen from water as well as putting stuff with water (such as vase) on the screen.
8. As soon as the plug of the screen is connected to the power source, the screen is connecting with electricity.
9. Please use the approved power line (three-core power line)/ device interface/power plug.
10. Please use the rating (voltage, amps) power line (three-core power line) / device interface/power plug. If have any questions about power line/ device interface/power plug, please contact the professional people.
11. After installation, please locate a power device in order to disconnect power or connect the power plug to electrical socket. This electrical socket should be installed to a convenient position. If the accident occurs during operation, please disconnect power or take out the power plug.
12. The ceiling or wall used for fixture installation must be secure enough; load-bearing requirement must be 4 times of the projector lift to prevent the projector lift from falling.



Please notice the non-insulated voltage of the spare parts to prevent from electric dangerous.



Please operate according to the instruction manual

### Cleaning

Please clean the projector and projector lift at the same time.

## Accessories

- M4 Hexagonal Adjuster (1 pcs)



- M5, M4, M3×20mm Screw (each 4 pcs)



- Rubber Washer  $\phi$ 5x10mm (4 pcs)



- Controller (1 pcs)



- Instruction Manual (1 pcs)

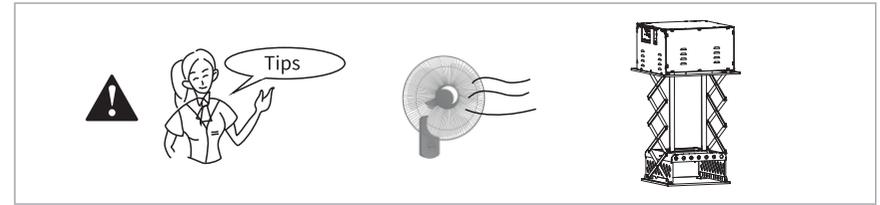
## Optional Accessories

- Wall-Switch (1 pcs)



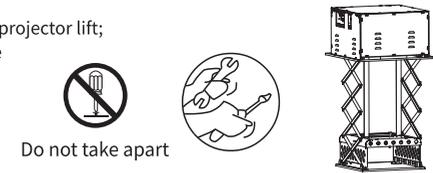
## Cautions for Location

- Please keep away from hot resources, dirty, high temperature and high humidity. Do not use the projector off the large wind.



## Cautions for Repairing

- Please do not take apart the screws of the projector lift; if this product needs to be repaired, please contact our company or dealers.



## Questions & Answers

Grandview projector lift can be used for years, most problems are cost by simple incidents. If problem occurs, please find the list below for some common solutions. If problems keep on, please contact authorized agent of Grandview or call service number: (8620)84899499

	Reason	Solution
Projector Lift responds nothing to any operation	Battery mis-installed or powerless	Please check about the batteries with referring instruction manual.
	Power line disconnection	Please connect the power line with referring instruction manual.

### Three years warranty

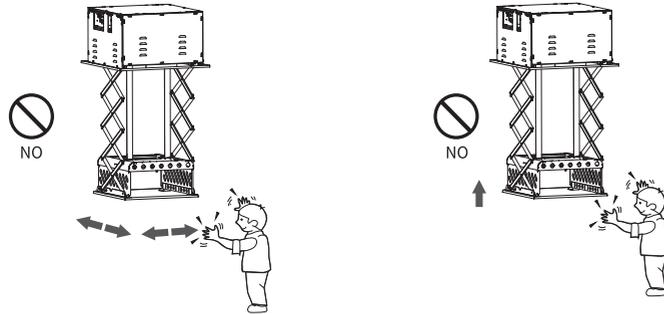
Grandview provides three years warranty for projector lift. Contents of warranty include replacement of spare parts while problems occur with correct operation. Not include inappropriately operating projector lift or uninstall the product by self. You should reserve in advance for the repair with Grandview or appointed service center.

## Cautions

Please comply the following contents for installation and use

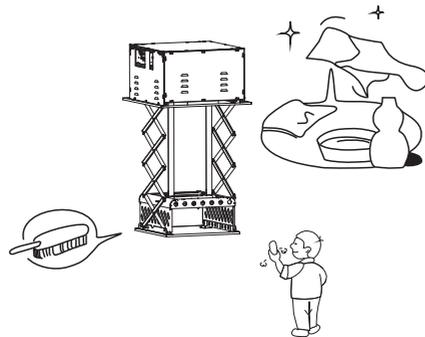
### Cautions

- Please do not shake the projector lift
- Please do not lift up the projector lift

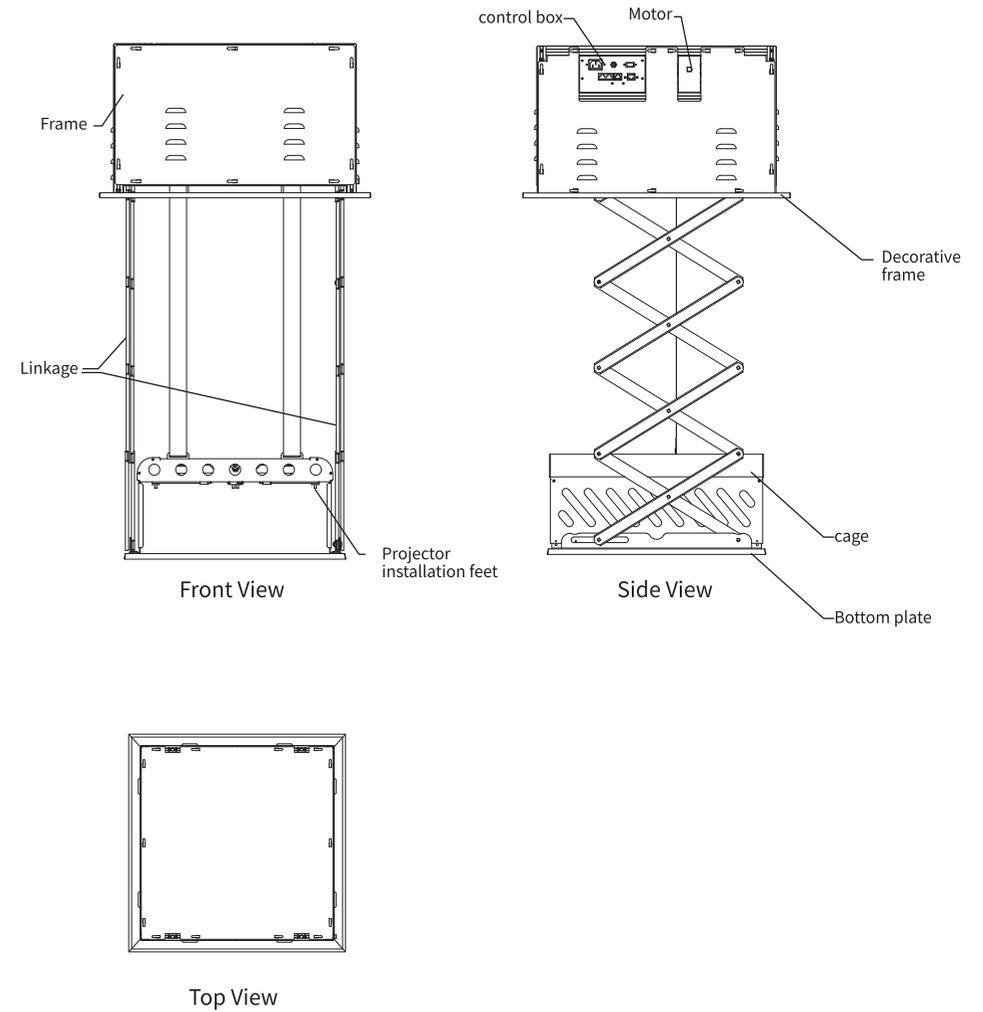


### Maintain

- Please clean the projector lift with dilute detergent slightly, and then dry up the lift. Use the soft hairbrush to clean the gap



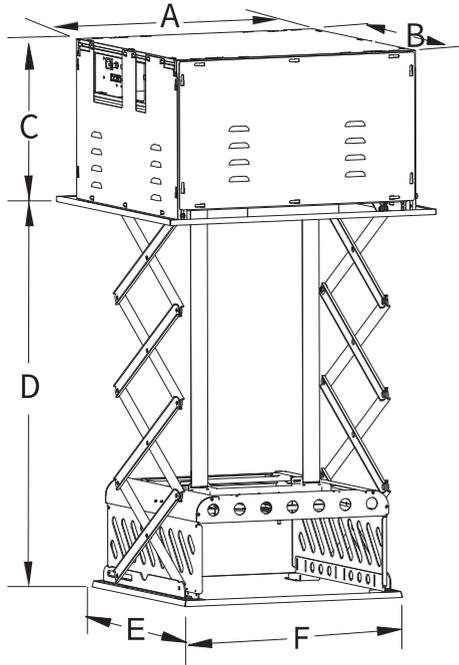
## Construction for Projector Lift



# Specifications

## Product Specifications

Model	Size(unit:mm)							Maximum projector size(unit:mm)		
	A	B	C	D	E	F	G	W	H	D
GPCK-MB1000B	541.6	541.6	342	0~1000	494	494	225.7	365	150	425



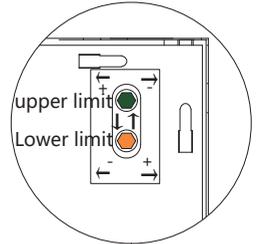
### Ceiling hole size

The ceiling opening size is 15mm A size, B size +15 that is for projector lift model GPCK-MB1000B. ceiling opening size is 556.6mm in A direction (541.6+15), B direction 556.6mm (541.6+15). Among them, the size of the ceiling decoration frame is: 605x605mm

⚠ Note: For ensuring the security of positioning function, the effective setting period of electric positioning should be 60 seconds, after 60 seconds will return to normal situation. If the setting fails within 60 seconds, please repeat as following step; to press the setting button; then LED light will turn off; press the setting button again, then LED light will turn on. In this movement, the resetting function will begin.

### Motor Positioning

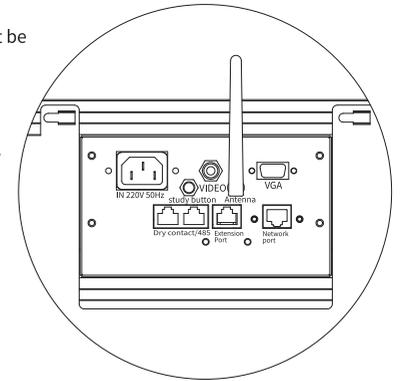
Do not roll and retract the projector lift continuously over 4 minutes in a time to avoid overheating. If the motor overheats, keep 30 minutes for heat elimination. No lubrication needed for the motor, the drop and retract limit of the projector lift has been prepositioned to an optimal configuration before delivery. In order to avoid motor damage, please ask the local dealer or professional for consultation when a new position setting is needed



Use the M4 allen-key for adjusting the upper and lower limitation of projector lift, but the distance can not be over than the value D in specification table

## Linkage learning method of projector and projector lift

1. After the lift is connected to the power supply, the projector is powered from the power cord of the lift.
2. When using for the first time, the projector and the lift must be studied first.
3. Studying method:
  - a. Turn on the projector first
  - b. When the projector is playing normally, press and hold the study button for about 5 seconds, and you hear the lift buzzer sound, it means the studying is successful
4. After the projector and the lift studying is successful, when the projector is turned on again, the projector and the lift will be synchronized.
5. After the first studying is successful, the lift has a memory storage function, so there is no need to repeat studying later.



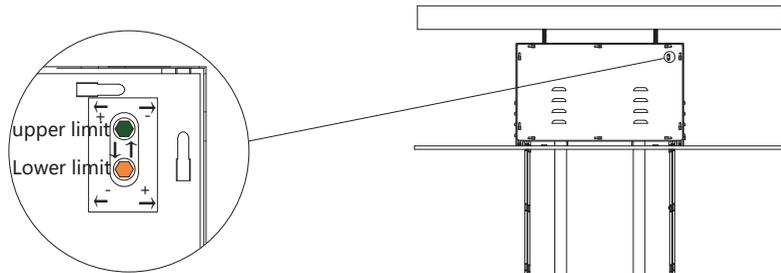


figure 14

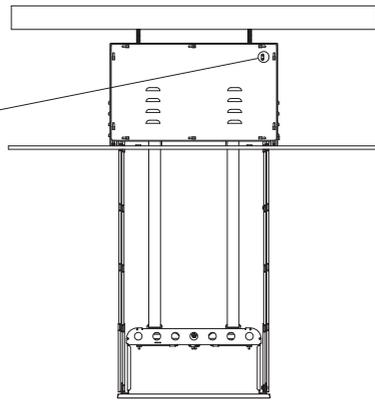


figure 15

Reminder: If there is no special situation, it is recommended not to change the factory default settings. If you need to adjust the lift, you can use the following remote control electronic positioning.

## 2. Remote control electronic positioning

- When the lift is under load, you can use the remote control to set the upper and lower limits of the lift according to the needs of the site.
- Use a small paper clip or small round needle to insert the electronic positioning setting key hole of the elevator on the back of the remote control (as shown in Figure 16), press the electronic positioning setting button of the elevator, the red and blue LEDs will light up, and then press the elevator Rack up button, at this time, after the lift rises to a suitable position, press the stop button of the remote control (as shown in Figure 17), and then press the up button electronic positioning setting button, the red and blue light-emitting diodes are off, and the lift moves up and down. Once, the electronic upper limit setting of the lifting frame is completed.

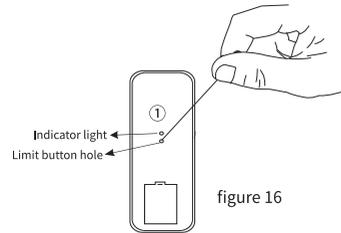


figure 16

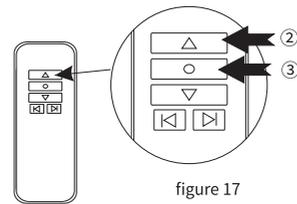


figure 17

- Use a small paper clip or small round needle to insert the electronic positioning setting key hole of the elevator on the back of the remote control (as shown in Figure 18), press the electronic positioning setting key of the elevator, the red and blue LEDs will light up, and then press the elevator Rack down button, at this time, after the lifting frame is lowered to a suitable position, press the stop button of the remote control as shown in Figure 19), and then press the electronic positioning setting button of the lifting button, the red and blue light-emitting diodes are off, and the lifting frame moves up and down. The electronic lower limit setting of the lifting frame is completed.

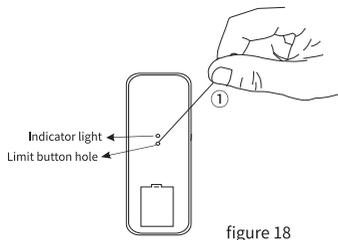


figure 18

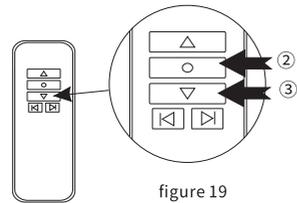
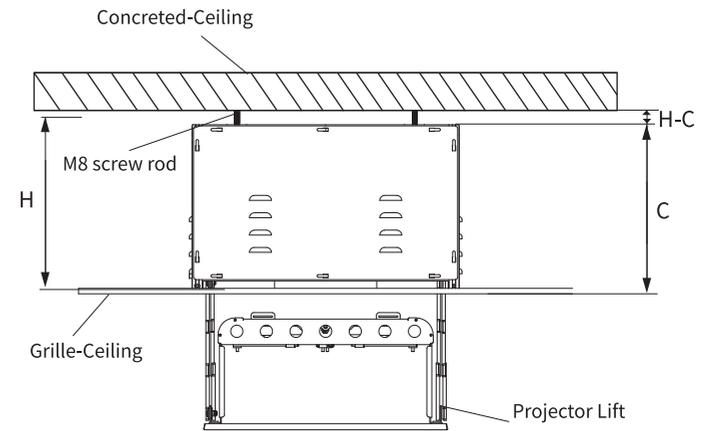


figure 19

## Installation

This projector lift needs to be recessed into the ceiling, and this instruction shows us the grille-ceiling as the example. Please install the projector lift according to different application. The projector lift needs to be recessed at the best viewing angle in order to improve the image. Take out all the parts from the packaging and follow the accessories guideline to ensure you have all parts.

- For the convenience and safety, please read this instruction manual carefully and choose a installation according to your requirement.



### Grille-Ceiling Mount

- Choose a position according to the required space, and then take apart the ceiling (figure 1). Please measure the distance H between roof and ceiling surface correctly (figure 2)

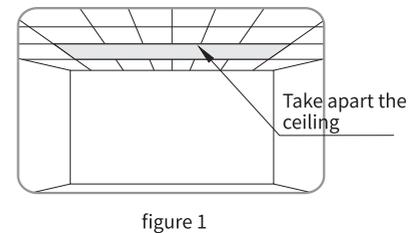


figure 1

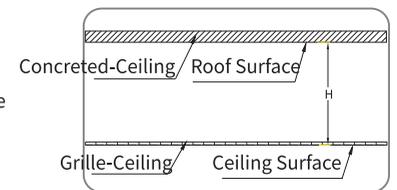
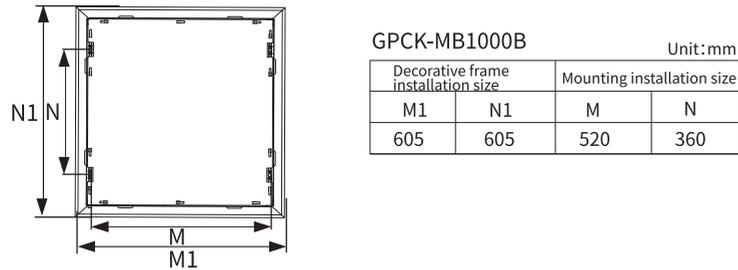


figure 2

2. Ensure the security distance M、N according to the figure3 and the model of table. Install the brackets to the roof via the screws, figure4.

(note: Due to product updates, sizes and specifications are subject to change at any time)



GPCK-MB1000B		Unit:mm	
Decorative frame installation size		Mounting installation size	
M1	N1	M	N
605	605	520	360

figure 3

Drill the mounting hole first before put in the tapping screw

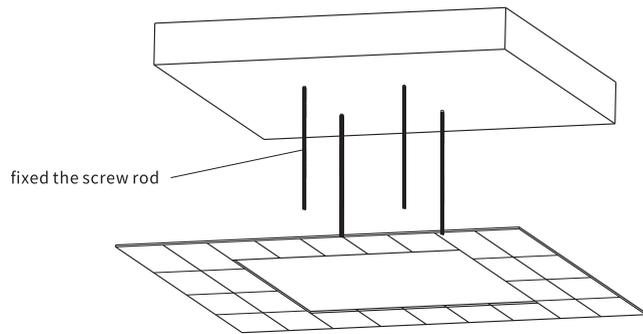


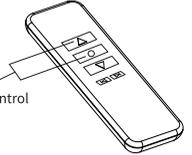
figure 4

## Remote Controller Instruction

There is matching function between controller and projector lift, and then the controller needs to be programmed before using.

- 1) The projector lift is at situation of load. After connecting the power within 5 seconds, please press UP button and stop button simultaneously for 5 second then release
- 2) Press DOWN button to ensure whether the programming works
- 3) If the programming fails, please repeat step 2 and 3

Press and hold these two buttons at the same time when studying the remote control



## 5. Function description of projector lift positioning device:

The two positioning of the projector lift includes:  
 I/upper and lower limit adjustment positioning of the motor,  
 II/remote control electronic positioning,

1. The upper and lower limit adjustment and positioning of the motor  
 The upper and lower limit positions of the motor have been set to the default safety settings at the factory. The upper limit position is slightly higher than the ceiling, and the lower limit position is the "D" value in the specification data table.  
 (The adjustment of the upper and lower limits of the motor should be adjusted by professional technicians. Do not adjust by yourself. If the adjustment is improper, the projector lift may be damaged or there may be certain safety hazards.)

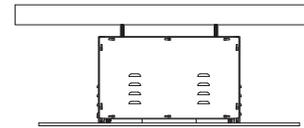


figure12

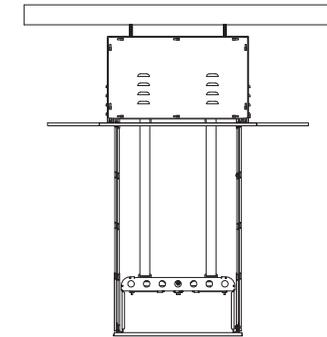


figure13

⚠ The following operation must be controlled by professional people

- a.For upper limitation adjustment,take off the knob from the hole and use the provided allen key to adjust. A clockwise adjustment will extend the projector lift (the distance of installation position of casing will increase) and a counter-clockwise adjustment will retract the projector lift (the distance of installation position of casing will decrease)
- b.For lower limitation adjustment, take off the knob from the hole and use the provided allen key to adjust. A clockwise adjustment will retract the projector lift (the distance of installation position of casing will decrease) and a counter-clockwise adjustment will extend the projector lift (the distance of installation position of casing will increase)

### 3.The central control equipment group bit code setting

When using RS485, the group code and bit code are non-zero numbers.

For example, 01 01 is the first device of the first group, and 01 02 is the second device of the first group. Among them, the group control group code and bit code are 00 00

Rs485 protocol

Serial port settings:

Baud rate: 9600

Data bits: 8 bits

Stop bit: 1 bit

Correction: CRC

instruction code	07	Rising
	08	Falling
	09	Stop
	A6	code learning

Protocol format (hexadecimal)

Packet header (F6), group code, bit code, instruction code, CRC

CRC = packet header + group code + bit code + instruction code

CRC correction digits = generator polynomial digits -1

Group control code

Rising: F6 00 00 07 FD Falling: F6 00 00 08 FE

Stop: F6 00 00 09 FF

When setting the code, learn the code first, such as learning the first device of the first group: F6 01 01 A6 9E,

Among them,  $9E = F6 + 01 + 01 + A6$  (calculated by hexadecimal calculator)

The group code is 01, the bit code is 01, and the control code is calculated with a hexadecimal counter

Rise: F6 01 01 07 FF Fall: F6 01 01 08 00 Stop: F6 01 01 09 01, other codes are calculated in the same way

Notice

1. When connecting to RS232 or RS485, if the device cannot be controlled to perform related actions, please swap the two control lines.
2. The resistance of the wiring loop is less than  $20\Omega$
3. Do not line up in parallel with strong interference sources

RS-485 plug description:

RS-485 plug: 7 is + / 8 is -

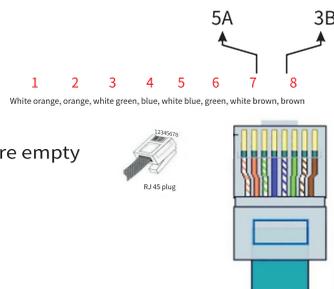
485-RJ45 plug

7 feet-connect to 485A

White orange, orange, white green, blue, white blue, green, white brown, brown

8 feet-connect to 485B

The rest of the feet are empty



3.First remove the bottom plate and decorative frame before installation, and then tighten the nut, as shown in Figure 5

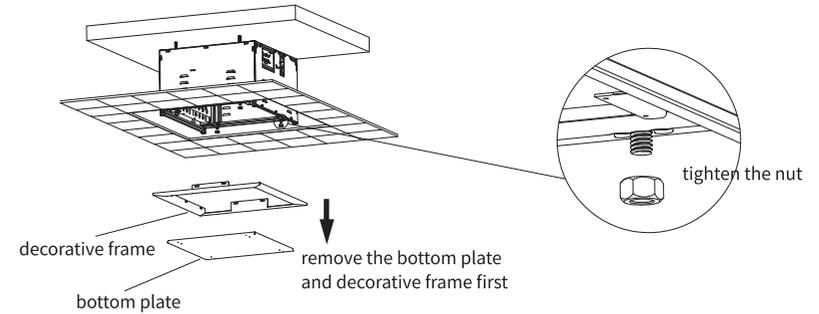


figure 5

4. After flattening the projector lift, cut the elongated screw flat (cut to a 5mm more than the nut, and the length cannot be longer than the square tube of the bottom frame of the projector lift), as shown in Figure 6, and then install back the decorative frame and bottom plate .

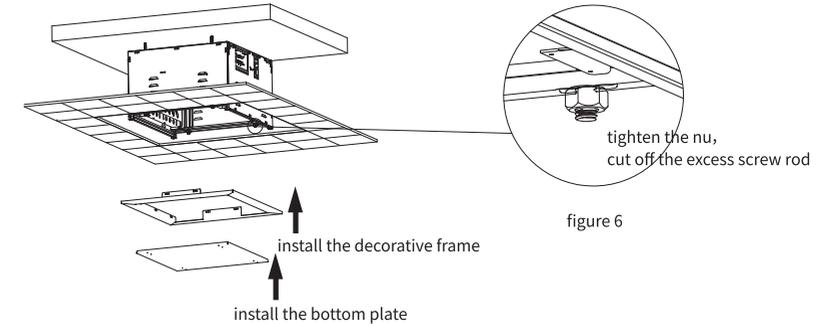


figure 6

5. Figure 8, connect the power cord and signal cord (Circuit wiring diagram 9)

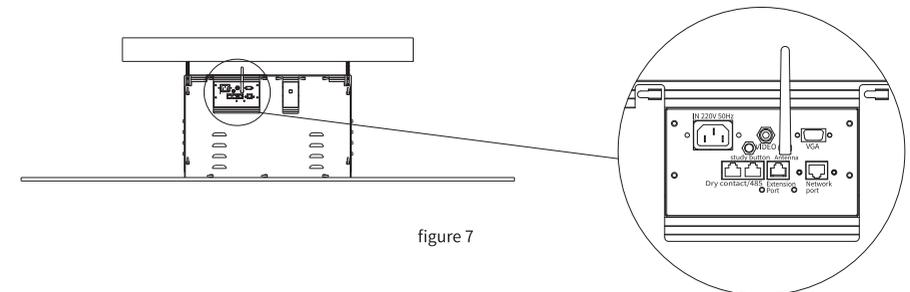


figure 7

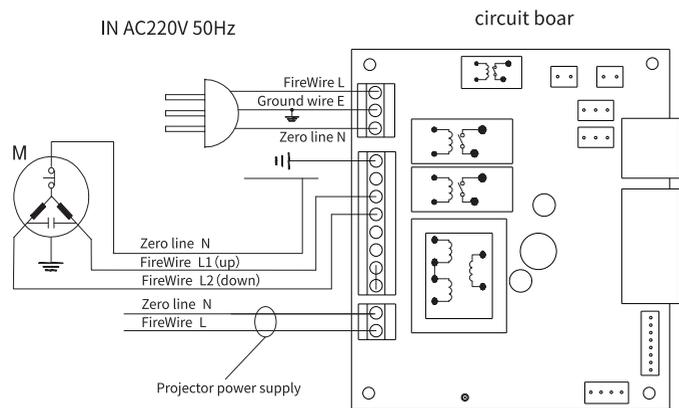


figure 8

6. Cut the ceiling board(Step 1)to a suitable size,which can maintain the gap after retracting of the projector lift

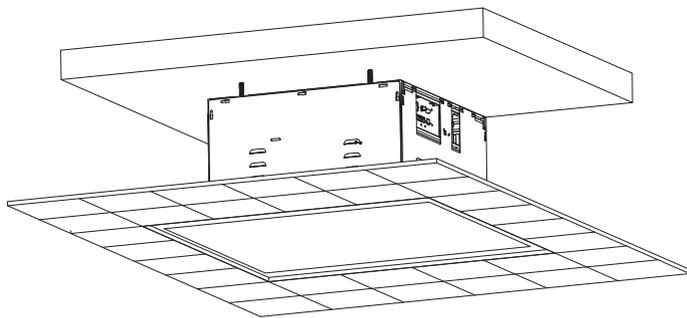


figure 9

7. Please read the《Remote Electric Positioning》for controlling the projector lift. After the adjustment, ensure the height of projector lift can satisfy your requirement after extending. And then, ensure the bottom of projector lift must align to the ceiling afer retracting. Note: the operating must be controlled by professional people.

## Electricity

Voltage:IN AC 220V 50Hz

Power:170W

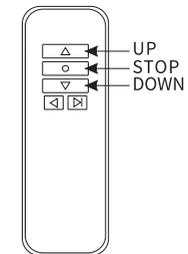
Current:0.77A

## Instruction

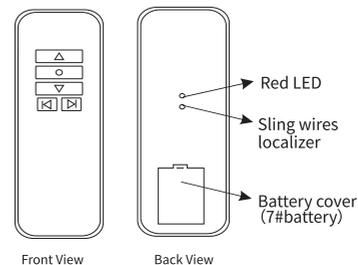
### 1.Remote controller instruction

Button instruction for controller

1. Press "UP" , projector goes up
2. Press "STOP" , projector stops
3. Press "DOWN" , projector goes down



Front view



Remote controller guideline:

1. Work temperature: -20°to 70°
2. Batteries: 1.5V x 2pcs, model: AAA.
3. Take out batteries if the controller will not be used for a long time.
4. Please change the batteries when signal is weak.

Installation for controller batteries

Please replace the batteries when the signal of controller is weak

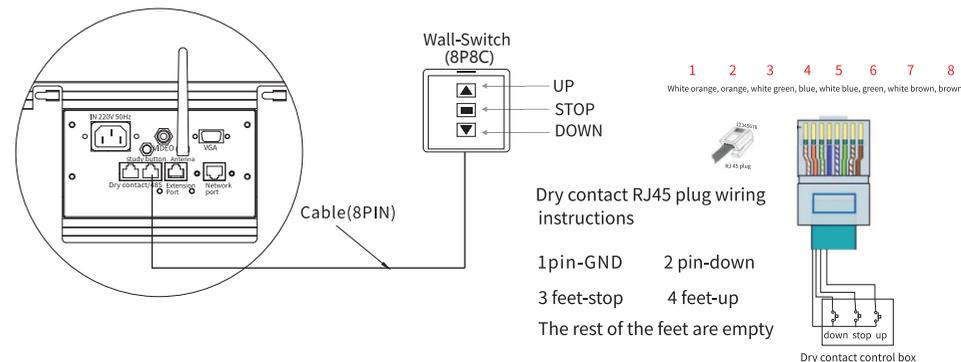
1. Push out the battery cover on the back of controller
2. Install the batteries as guide arrow
3. Reinstall the battery cover

Caution

Install the batteries correctly

### Wall-Switch Function

Please follow the signs and symbols on the wall-switch



Dry contact RJ45 plug wiring instructions

1 pin-GND 2 pin-down

3 feet-stop 4 feet-up

The rest of the feet are empty

Dry contact control box