## **Grandview**®

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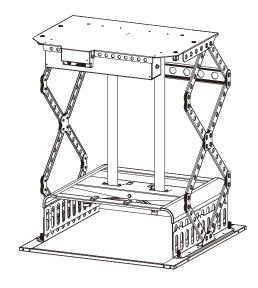


# **Grandview**®

## **Instruction Manual**

## X – Arm Projector Lift

Models GPSC-5006 GPSC-5010 GPSC-5015



Thank you for purchasing this product. Before use, please ensure that the mounting bracket is suitable for your projector equipment and read this manual carefully.

## Important safety instructions

WARNING: To reduce the risk of fire or electric shock, do not expose product to rain or moisture.

- Please read this manual before installation and use to avoid damage to the product due to improper installation and use.
- Keep away from heat sources such as radiators, heaters, stoves and other equipment (including amplifiers).
- Only connect power plugs with grounded conductors.
- Only use accessories provided by the supplier.
- If you encounter lightning storms or if the product is not used for a long time, please unplug the power cord.
- Please leave it to professional service personnel for installation and maintenance.
- Never install the product in a humid or location where water may be splashed.
- This unit is not disconnected from AC power as long as the product plug is connected to the power source.
- Please use a power cord (3-core wire/device/connector/plug) that meets specific voltage and current ratings. If you have any questions about its use, consult professional maintenance personnel.
- Please use an approved power cord (3-core power cord)/device interface/plug, and its grounding plug should comply with applicable national safety regulations.
- When installing this equipment, provide an easily accessible disconnect device in the fixed wiring, or connect the mains plug to an electrical outlet that is close to the equipment and easily accessible. If a malfunction occurs while operating the device, the device can be disconnected by cutting power to the de-energized device power supply, or disconnect the power plug.
- The installation location must have sufficient mechanical strength, and the load-bearing requirement is 4 times the weight of the projector lift. Otherwise, an accident may occur or the lift may fall off.
- The ceiling cutting height must be greater than the product height; otherwise, it cannot be installed properly. Please ensure the ceiling installation height exceeds the product height by at least 100mm.



Objects other than projectors cannot be mounted.



Do not disassemble or dismantle the components of the mounting bracket!

This installation and operation manual is written for dealers and installation technicians. Customers are advised not to install it by themselves. They must hire qualified professional technicians to install and follow the installation instructions.

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## **Troubleshooting**

The projector lift is designed for years of trouble-free use, with most problems stemming from simple issues. If you find an issue, check out the list of simple fixes below.

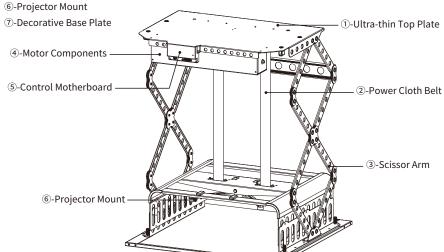
Lift stand fully installed but not functioning properly	Reasons	Solutions
	The positive and negative poles of the transmitter battery are reversed or the battery power is insufficient.	Refer to the instruction manual to check whether the battery is installed backwards. If the fault is not eliminated, replace the battery.
	The power cord is not connected properly	Refer to the instruction manual to connect the power cord and plug it in tightly.
Remote control does not respond	Poor reception/blocked signal	Restart the lift power
Restart the lift power	The rear signal line is blocked	Deal with the wire direction/adjust the lift position

## **Parts**

## GPSC-5006 Ultra-Thin Motorized Projector Lift

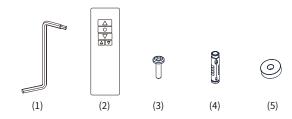
- ①-Ultra-thin Top Plate
- ②-Power Cloth Belt
- ③-Scissor Arm
- **4**-Motor Components
- ⑤-Control Motherboard





## **Accessories**

**7-Decorative Base Plate** 



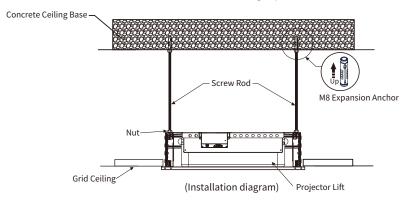
- (1) Allen Key 1pc
- (2)Remote Control 1pc
- (3-1) M5x30 Socket Screw 4pcs
- (3-2) M4x30 Socket Screw 4pcs
- (3-3) M5x20 Socket Screw 4pcs
- (3-4) M4x20 Socket Screw 4pcs
- (4)M8 Expansion Anchor
- (5)Mounting Spacer 4pcs Instruction Manual 1pc

## **Installation**

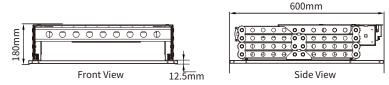
#### Installation instructions

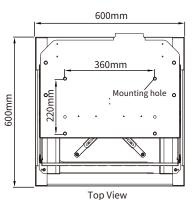
This product is suitable for installation in various suspended ceilings. This manual takes the installation method of the grille ceiling as an example. Please adapt the installation method to suit different environments. This product should be installed in the best projection position. Correct installation will make the product more convenient and safer during use. Open the packaging box, check whether the spare parts are complete, then take them out and put them in a suitable place for installation according to the following operation methods.

\* For the safety and convenience of the lift, please read the entire installation section of the instruction manual and choose the most suitable installation method according to your actual site conditions!



## **Parameters**





#### **Product Parameters:**

Model: GPSC-5006

Product Dimensions:W600 x D600 x H180mm

Max Projector Size (with plug and lens):W480 x D470 x H160 mm

Ceiling Opening Dimensions:W590 x D590 mm

Installation hole distance:W360 x D220 mm

Decorative Base Plate:W600 x D600 mm

Rated power:145W

Max Travel:600 mm

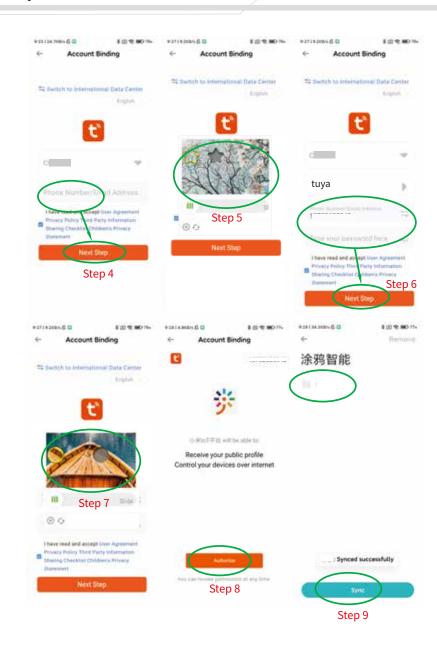
Weight capacity:15Kg

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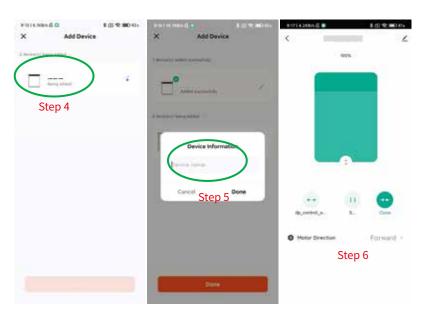
Rated voltage: AC110~120V / 60Hz or AC220V~240V / 50Hz

(Actual voltage shall be subject to the electrical label shown on the product)

## **AI Speaker Connection Method**



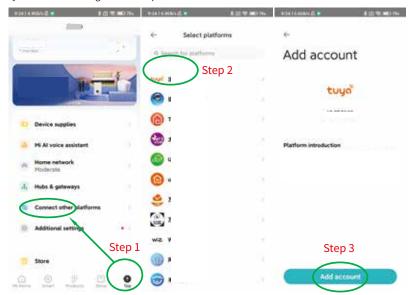
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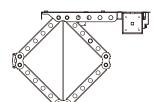
## **AI Speaker Connection Method**

Supports AI speakers like Xiaomi XiaoAI, Xiaodu, Tmall Genie, etc. Using Xiaomi XiaoAI speaker as an example:

- 1. Open the Mi Home APP and click 'Profile' in the bottom right corner.
- 2. Click 'Connect to other platforms' and add 'Tuya Smart'.
- 3. Bind your account: Enter your phone number (Tuya account) and proceed. Verify your account. Enter your Tuya account password and proceed. Authorize the connection.
- 4. Sync devices. Binding is now complete.

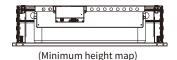


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Unit: mm Table 1 Travel height | Maximum load bearing Model Name range capacity(KG) 500 GPSC-5006 Single X node 15 GPSC-5010 Double X node 1000 12 1500 GPSC-5015 Triple X node 10

Flush Installation: The projector's decorative base plate is flush with the ceiling Cover Installation: The decorative base plate of the projector just covers the ceiling Maximum projector installation size:W480xD470xH160mm



Refer to the figure and table for the model-specific dimensions needed to determine the ceiling opening size for your projector lift.f the ceiling is higher than the minimum height, please secure it with screws. If the ceiling is lower than the minimum height, it is recommended that the ceiling opening size be larger than the reference value. Finally, the user chooses the installation method based on the actual situation. (Refer to the lifting frame model: Table-1. Note that the ceiling opening must ensure that the projector lift is not blocked.)

For cover installation: 590 mm x 590 mm For flush installation: 610 mm x 610 mm

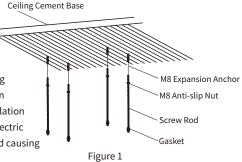
(Maximum height map)

## **Installation Steps**

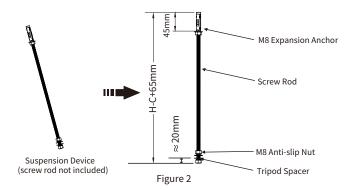
Ceiling opening size

## Projector ceiling mount installation

1. Select the installation location, (we recommend installing on the ceiling cement base) use an impact drill to drill holes for positioning, screw the M8 Expansion Anchor into the ceiling base, and then follow the order in Figure 1, sequentially put on the M8 screw, and tighten the installation. Note that the installation location here must ensure that it can bear the weight of the electric hoist and the projector to prevent the hoist from falling off and causing accidents.



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2. Assemble the suspension device using the parts in figure 2 Cut the rod (M8) to a length of: H-C+65mm / H-C+52.5mm, where H is the distance from the bottom surface of the concrete roof measured in the previous step to the bottom surface of the ceiling, and C represents the frame height. (For example: If H is 1000mm, and the suspension height is 180mm based on the installation method chosen, if choosing cover installation method, the screw length should be H-C+65mm=925mm. If choosing flush installation, the screw length should be H-C+52.5mm=912.5mm), determine the installation distance of the frame.

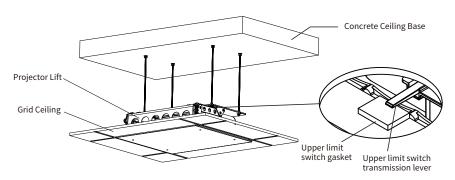


Figure 3 (overall diagram)

3. During installation, making sure to align the holes accurately, then lock it in place with nuts, ensuring the bottom frame of the lift just covers the ceiling frame, completely concealing any gaps left after installing the projector lift, as shown in Figure 3.

Note: The upper limit switch transmission lever is located below the top plate of the lift. When the lift is closed and the decorative panel touches the ceiling, the upper limit switch must make contact as shown in the figure. Otherwise, it may damage the lift. (For ease of installation, you can first remove the decorative panel, install and secure the projector, and then reattach the decorative panel.)

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## **Wi-Fi Network Control**

#### Tuya Smart APP Wi-Fi Configuration

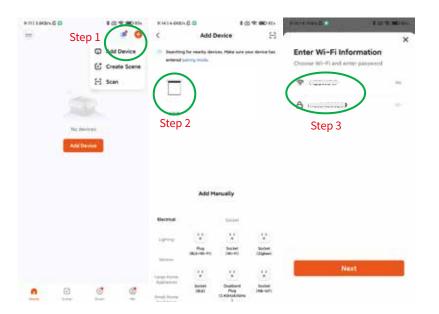
If the product has already been connected to a network but needs to connect to a new network or new phone, it must first be cleared.

#### a. Clearing Network Using the Bracket Remote Controller:

- 1. Press the button on the back of the remote control. The light will turn on, and the bracket's mainboard will beep once and vibrate to enter setup mode.
- 2. Then, press the 'Stop' button on the remote control for 5 seconds. The bracket will vibrate, and the mainboard will beep twice ('beep beep'). Clearing is complete.

#### b. Connecting to the Network:

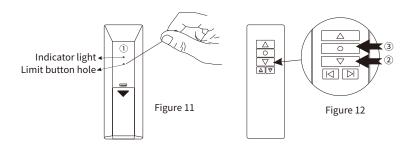
- 1. Ensure your phone is connected to a 2.4G Wi-Fi network and Bluetooth is enabled.
- 2. Open the Tuya Smart APP, click the '+' icon to add a device, and select the discovered device to add.
- 3. Enter the 2.4G Wi-Fi password, modify the device name (optional), and complete the addition.
- 4. A control interface will pop up, and setup is complete.



#### Remote control electronic positioning

a. When the motorized lift is under load, you can set the electronic lower limit using the remote control according to the requirements of the installation site.

b.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 11), 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 12), 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.



## **RS-485 Protocol**

## 1.RS-485 port settings

a.Baud rate:2400

b.Data length:8

c. Parity check:N

d.Start bi: 1

e.Stop bit:1

#### 2.Control code

a.Rise command: FF EE EE EE DD b.Stop command: FF EE EE EC C c.Descending command:FF EE EE EE EE

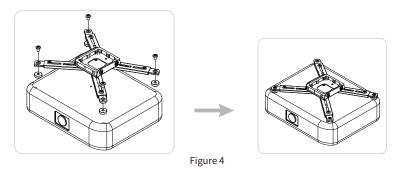
Learn address code instruction: if FF-- -- -- AA, Can be any character or number, If input FF 11 11 11 AA, It is FF 11 11 11 DD actually, Other codes do the same.



#### Notice:

- 1. When connecting via RS485, if any control fails, please switch two controlling cables.
- 2.The resistance measured by a Loop Resistance Tester should not exceed  $20\Omega$ .
- 3. Prohibit parallel line with strong interference source.

#### Projector installation (Figure 4)



Remove the angle adjuster and mounting bracket assembly from the projector lift, align the mounting bracket hole in the assembly with the projector hole, and tighten it to the projector with screws. The installation is complete, as shown in Figure 4.

### Projector angle adjustment (Figure 5)

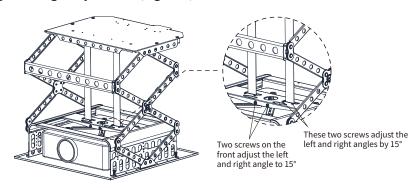
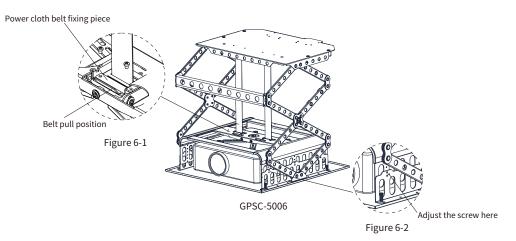


Figure 5

- 1. As shown in Figure 5, detect the level of the projector lift in the front and rear and left and right directions. If it is tilted, you can adjust the level of the projector by adjusting the up and down positions of the nuts in the picture. The center of gravity of the projector cannot be tilted too far forward.
- Note: Make sure that the projector lift is smooth and unobstructed when moving up and down.
- 2. When adjusting the vertical angle, you need to loosen the front positioning screw, insert the screwdriver into the vertical adjustment hole and turn the screw.
- Use a screwdriver to fine-tune the required angle, and then tighten the screws. (Vertical tilt angle: 15°)
- 3. When adjusting the horizontal angle, you need to loosen the positioning screw in front of the cloth belt, insert the screwdriver into the horizontal adjustment hole and turn

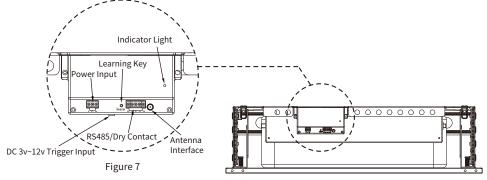
  Use a screwdriver to fine-tune the required angle, and then tighten the screws. (Horizontal tilt angle: 15°)



4. As shown in Figure 6-1, you can loosen the screws in the cloth strap fixing piece to pull the cloth strap to reduce the height of the projector (0mm-600mm). In addition, when encountering a larger projector, you can loosen the originally fixed screws and adjust them to the screw holes suitable for the height of the projector as shown in Figure 6-2.

## **Electrical and Installation Instructions**

## Connect the power cable and signal cable, as shown in Figure 7



L: Live wire, E: Ground wire, N: Neutral wire

Φ2.5 interface: DC 3v~12v trigger input

B: RS-485-, A: RS-485+

U: Up, G: public, D: Down

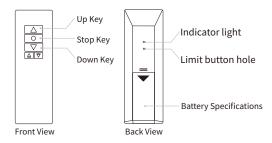
When the 'G' (ground) and 'U' (up) wires are connected, the lift will rise.

Touch G and D once and the lift will descend.

#### Remote Functions Guide

#### **Remote Functions**

- 1. Press the up button and the projector lift will rise.
- 2. Press the stop button to stop the projector lift.
- 3. Press the button to lower the projector lift.



#### Precautions when using remote control

- 1. Working temperature:  $-20^{\circ}$ C to  $\pm 70^{\circ}$ C.
- 2. Transmitter battery: Two AAA 1.5V batteries.
- 3. When the signal from the remote control is weak, pleasereplace the battery.

Remote control battery replacement and installation When the signal from the remote control is weak, please replace the battery as follows:

- 1. Push the back cover of the remote control downward to remove it.
- 2. Install new batteries, ensuring correct polarity (+/-).
- 3. Replace the back cover. Battery replacement is complete.

## Remote Controller Pairing and Clearing Methods

Remote Controller Pairing Method:

(Factory-paired, no need for re-pairing)

#### Method 1:

- 1. Turn off the power of the electric bracket and then turn it back on.
- 2. Within 10 seconds, press the 'Up' and 'Stop' buttons on the remote control simultaneously. 3. The electric bracket will slightly move up and down, indicating successful pairing.

# ①Learning Key Figure 8

Figure 9

<sup>(2)</sup>Press both buttons

simultaneously

Δ Ο ∇ Δ ₹

#### Method 2:

- 1. With the electric bracket powered on, press the 'Learn' button on the mainboard with a pin.
- 2. The bracket enters pairing mode. Press the 'Up' and 'Stop' buttons on the remote control simultaneously.
- 3. The bracket will move slightly up and down, indicating successful pairing. Remote Controller Clearing Method:

To clear the pairing, perform the pairing procedure again with the already paired remote controller.