Users' Manual

Mini-s series Projector Motorized Lift

Safety precautions:

- Please read this "safety precautions" carefully before using the projector lifts to ensure of the correct and safety using way.
- The warnings protect the human and property's safe.
- The following signs indicated what level of the danger and damage you will be suffer if not comply the "safety precautions"

⚠	**DANGER**	**DANGER** indicate the incorrect operation will cause the serious accident.
⚠	**WARNING**	**WARNING** indicate the incorrect operation will cause the serious accident.
⚠	**CAUTION**	**CAUTION** indicate the incorrect operation will cause the serious accident.

🚫	**Prohibited**	Prohibited operation。
❗	**Compulsory**	Compulsory operation。

	Disassembly Prohibited	Disassembly is Prohibited。
	Remove Power plug	Remove Power plug。

⚠ **DANGER**		⚠ **CAUTION**	
Must install the lift comply with this manual strictly. Replace the spare parts by other factories is prohibited. Please don't amend or modify the electric board or change the components without our factory 's permission ,or it will cause the motor accident or control failure, lead to the wire breaking ,ceiling damage, projector falling etc.	**!** Compulsory	Please don't use it under the condition of high temperature, wet and dirty . Don't use the wireless in the high interference.	🚫 Prohibited
		Try not to use an unstable power supply, to make sure the voltage is stable when using the auxiliary power.	🚫 Prohibited

⚠ **WARNING**

Over load capacity is prohibited. Don't make it up and down frequently to prevent fire the motor.	🚫 Prohibited	Please don't disassembled the lift without permission, it should be maintained and amended by professional worker. And can't the instruction of the lift.	Disassembly Prohibited
Please don't install or adjust the lift without the professional worker .	🚫 Prohibited	Please cut off the power when across the accident.	Remove Power plug

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Introduction：Features:

- Adopt the latest micro-computer control system ,intelligent and stable；
- Double power breakdown protection equipped with the audible alarm, Make the damage to the lowest by the accident；
- Multiple control methods combined various center control；
- Easy to adjust the running distance of the lift, stop position accurately. High position accuracy up to 1 mm；
- Originate the machine without demounting when installation or adjustment. Easy to maintain；
- Reasonable instruction with the high quality material, handsome Exterior.

Introduction：Parameter:

- Voltage   220V～
- Frequency   50/60Hz
- Peak load current   0.15A
- Continuous Power   0.8 watts

- Maximum Power   25 watts
- Maximum Length   1M
- Lift capacity   ≤10Kg
- Maximum noise   ≤50dB
- Lift Speed   0.9～1.8m/min

| Items / Parameter	MINI-S
Exterior dimension(mm)	280×226*150
Decoration board size(mm)	500X500
Distance between holes in installation board(mm)	325×325
Mini height between the real ceiling and the fake ceiling(mm)	350
Installation board size(mm)	320X250
Max size for the projector(mm)	360X300X200
Distance（mm）	1000
Load capacity（kg）	10
N.W（kg）	11

Power（W）	30
Rated voltage AC（V）	220V
R/C	W
Electric stop position	W/O

## Installation requirements:

- The height between the cement ceiling and fake ceiling must more than: projector height+ universal head height +projector height. Except special circumstance.
- Suggested ceiling open size：600mmX600mm （Base on the projector size）

- The open hole suggested set out at the distance of 100-200mm away from projector ,Open size:500*400mm

- There are four screw holes (13mm*58mm) in the top panel of the lift, use the anchoring screw (φ8mm～φ10mm),Fixing the lift to the cement ceiling. Confirm the install poison of the cement ceiling ,and make holes in the ceiling based on the screws. The anchoring screw must be set deeply into the ceiling to ensure the enough load capacity. Install avoid the warm equipment , for example the steam pipe, warm-air pipe.

- The power equipment must have a 5A circuit breaker. The copper cable cross-sectional area of the power must not less than 1.5mm. It should have a good ground cable, the resistance must not bigger than 4Ω.

- Use the CAT-5 as the extend control wire.

Installation step:
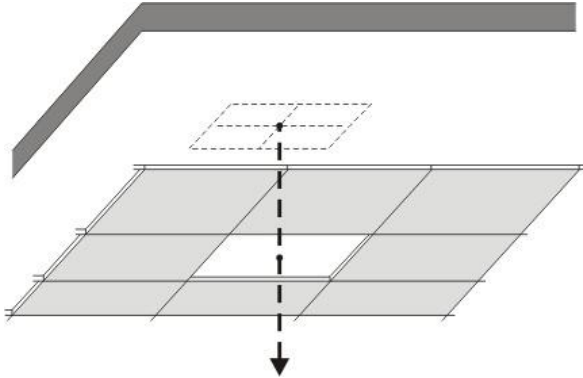
（Ceiling）

1. Open a hole on the fake ceiling according to the size of the decoration board (50X50cm). Then use 4 pcs M8×12 expansion bolts to fix the installation board on the cement ceiling.
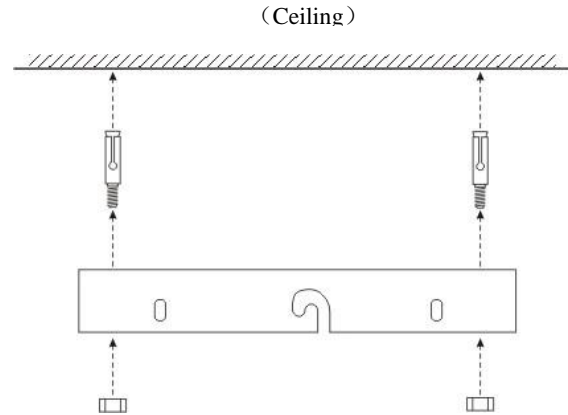
2. Insert the lift into the installation board, and use four pcs bolts (M6*12) to fix them.
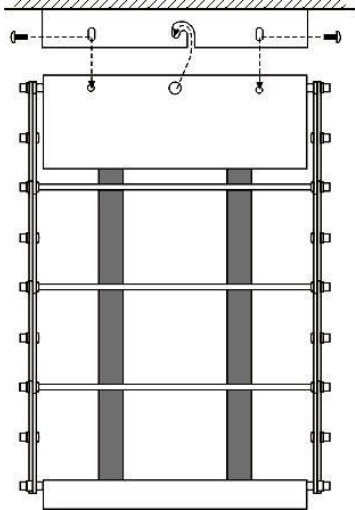
4. Insert the lift into the installation board, and use four pcs bolts (M6*12) to fix them.
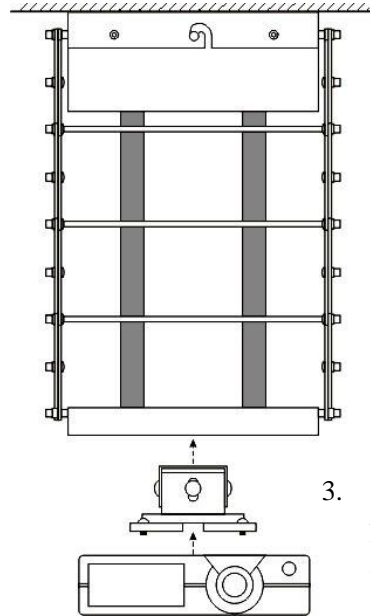
3. Install the universal head and claws to fix the projector.

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5，Install decoration board and adjust the screw poles to make the decoration board keep parallel with the fake ceiling.

（Ceiling）
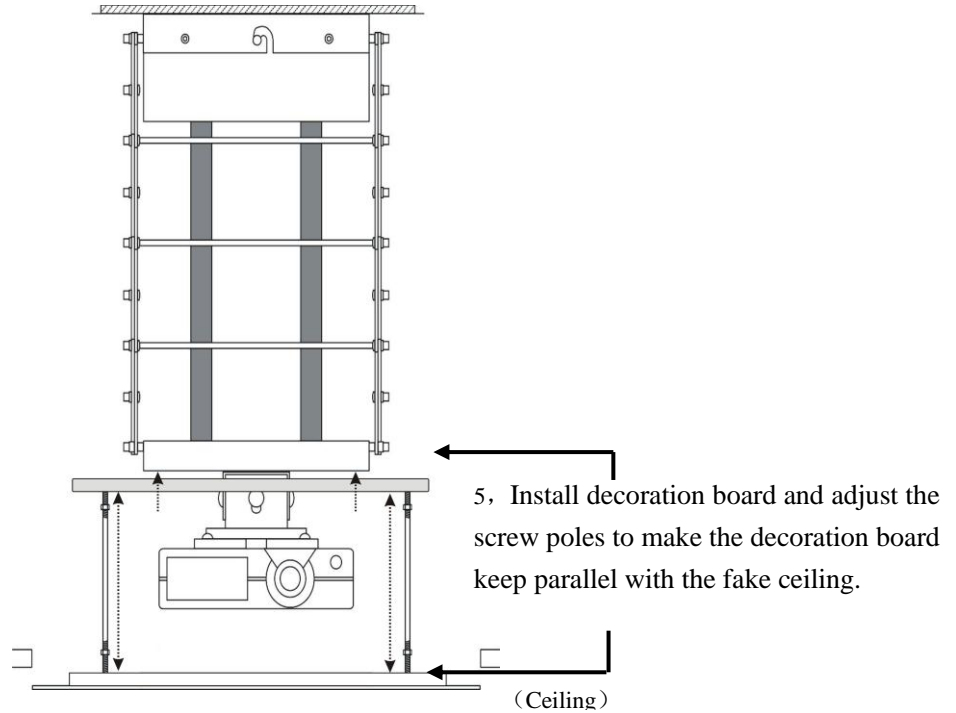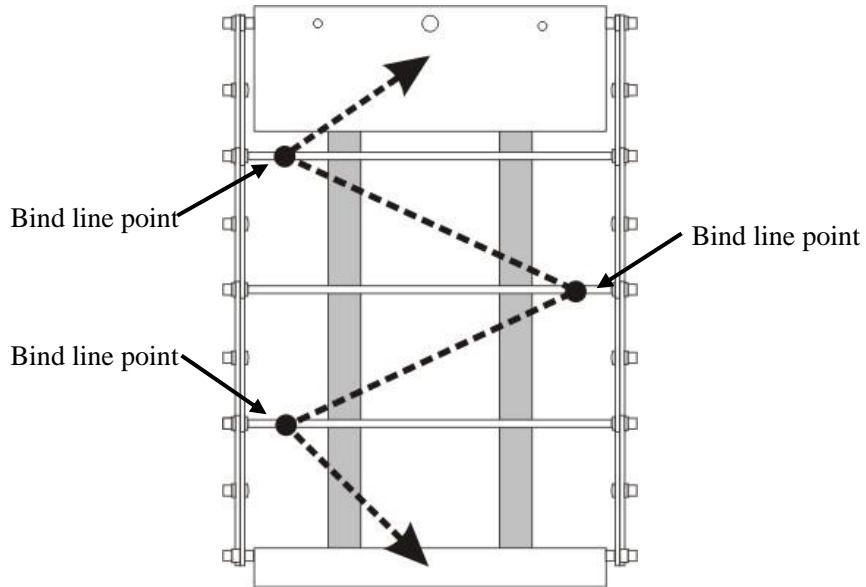
(Before binding the wires, please have the lift down to the projector working position)

Stop position setting step:

Electronic logic board illustration:
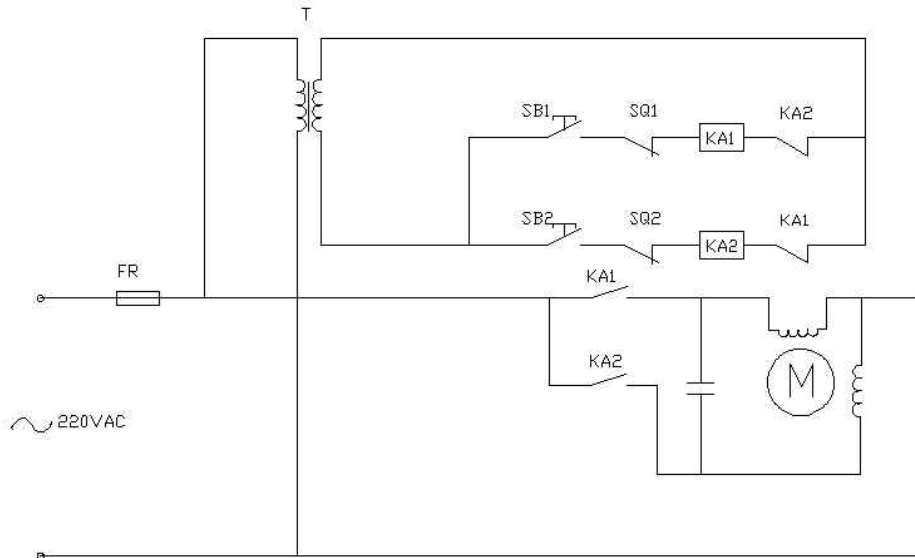
Remote controller and RS485(RS232) learning method:

■ single unit wireless remote control:
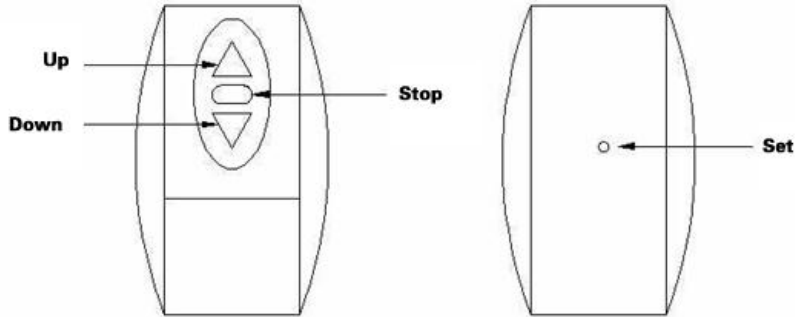
Wireless remote control receiving distance is 20 meters

1. press the red indicator light button, the red indicator light will blink slowly, then please release the button.
2. use a small screwdriver or other small needle shape object to press the switch in the samll hole of the back of the remote controller, the indicator light keep shine, which means the learning process succeed.

■ Grouping wireless remote control: (need to use the grouping remote controller)

Grouping remote controller
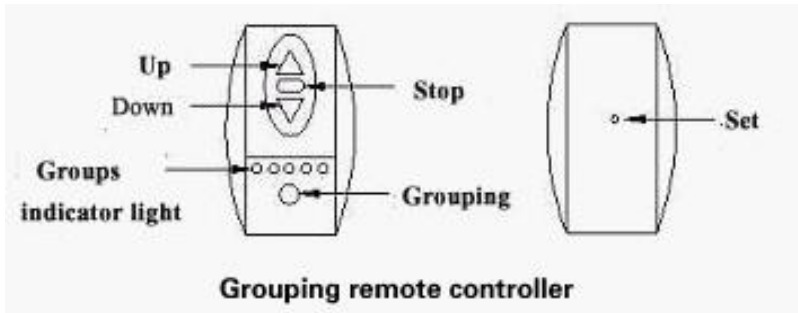
1. press the groups indicator light. One light comply to one group. The light which flashes means its group is on logo on status.

2. then repeat the procedure as "single unit wireless remote control:", one lift after another, until all the lifts in the group learn succeed.

■ Clear the old control code:

1. press the red indicator light button, and the red indicator light will blink slowly, then keep pressing the button until the light become blinking fast, then release the button.

2. press the red indicator light again, the indicator light will keep shine, which means the old control code be cleared successfully.

■ Central control setting:

Operation steps:

1. choose the COM port;

2. choose the group;
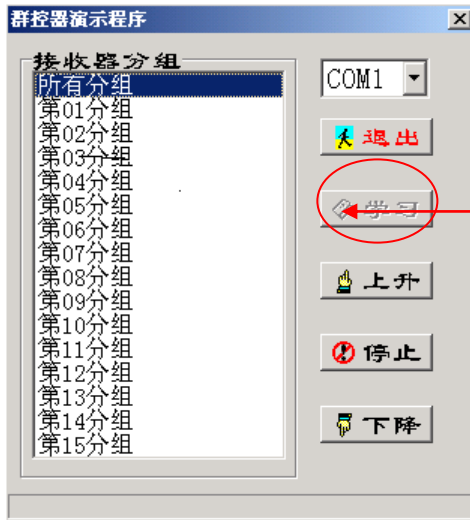
Learning

3. press the red indicator light at the same time, and the red indicator light will blink slowly, then

please release the button.

4. move the mouse cursor to the "learning" button on the window of the control program and hit it, then the red indicator light will keep shine, which means the learning process succeed.

■ 232 communication remote controller data format:

232 communication port setting: 1200, N, 8, 1. which mease: 1200 baud rate, no parity bit, 8 bit data, 1 stopping bit. One data string need to be blazed away 4 times above.

Operation code	instruction
An	Learning code: n=0~f, 1~f is group number，n=0 means control all
Cn	Stopping code: n=0~f, 1~f is group number，n=0 means control all
Dn	Upwards code: n=0~f, 1~f is group number，n=0 means control all
En	Downwards code: n=0~f, 1~f is group number，n=0 means control all

Troubleshooting:

Please call us for permission of customers' self service on the projector lifts if the newly installed or used products break down. Otherwise, unauthorized service will render the warranty void. Check the grounded protection to make sure of security in avoidance of electric shock accident.

■ After the lift power on, if press the operation button but the lift do not go upwards or downwards,

please check it as following steps:

1. check to confirm whether the fuse be burned broken, if yes, please replace it with new 2A fuse.
2. check to confirm whether the power wires be connected well, and whether the power in good status.

■ Thoroughly no response, no movement at all

stop operation for over 15 minutes then restart, to find out whether the lift is in the overheated status.

1. check and confirm whether the power wire end is live, and whether the voltage is OK. If it is not live please check whether the power circuit is OK.
2. If the power wire and end are OK, please check whether the connection between the wires and the engine are loosed and disconnected, and whether the fuse be burned broken, and whether the wire connection of the upwards stopping switch and downwards stopping switch are loosed and disconnected.
3. If need to disassemble the the lift for repairing, please lie down the lift, draw the lift apart (in level), then use screwdriver to open the top cover and take the repair.

■ The lift do not move when press neither the upwards button or the downwards button, but can hear the weak shocking sound.

Please check whether the capacitor be hit through, or short circuit, and whether the wire connection is loosed and broken. At the meaning time, the engine will will be overheated, you should shut down the power immediately to avoid the engine being burned, and then to check whether the capacitor is OK.

■ Can hear weak shocking sound when the lift run upwards and reach the up end.

Please check whether the upwards stopping position switch is OK.

- when the lift move downwards and reach the down end, the engine do not stop working but keep rotate, and make the lift be up again.

Please check whether the downwards stopping position switch is OK.

- The lift do not move when press neither the upwards or downwards button, but it makes big noise.
1. please check whether the transmission gear is blocked by other object, or broke.
2. check whether the teeth of the gears do not meet each other.
- The lift is not in balance or joggle when it move upwards or downwards.
1. please check whether the rolling belts are rolled neatly and orderly on the rolling axis.
2. please check whether the 2 pcs of rolling belts are in the same force dencity.
3. please check whether the connecting screws between the crossing scissors are loosed or disconnected.