



E Cube Lift

Model: ECU

Installation Instructions

E CUBE LIFT
INSTALLATION INSTRUCTIONS

Please read installation instructions carefully before installation and keep it for future reference.

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*The information in this manual is subject to change without any prior notice.
Updated on March 9, 2011*

Installation and Operation Manual

This manual explains how to install, operate and maintenance of **XLT ECube** lift for video projector. This manual is for installer, interior designer, architect, M&E consultant and system integrator who has known about XLT E Cube lift.



IMPORTANT SAFETY INSTRUCTIONS

WARNING: FAILURE TO FOLLOW ALL THE FOLLOWING INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT.

CAUTION

- 1) The lift is not for outdoor use.
- 2) Do not install the lift on adjacent ceiling or light fixture.
- 3) The equipment is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions.
- 4) Please do not allow children being supervised to play with the equipment.
- 5) Entire bottom of the lift must be unobstructed to allow proper operation.
- 6) The lift must be installed in level from front-to-back and side-to-side.
- 7) Please do not attach any projector with the weight above maximum weight capacity.

WARNING

- 1) Please read the instruction before installation. Improper installation could lead to serious injury or damage to the lift.
- 2) Do not obstruct the operation of the lift with hands or any other object. It may cause serious injury or damage.
- 3) Keep hands and other objects away from the mechanism when the lift is operating. Serious injury or damage could result.

- 4) Clear all persons and obstructions along the lift travel path while it is operating or in service.
- 5) Watch the moving projector lift and keep people away until the projector lift is completely closed.
- 6) Please do not close the lift while the projector is running or while it is in “cool down” operation to avoid premature failure of electrical or electronic components.
- 7) Please do not step on the lift. Overloading could lead to damage of equipment or injury.

ELECTRICAL RISK

- 1) Please check the standard of the local power supply before installation and ensure that the operation voltage of the motor is related to the local power supply. The motor may damage due to incorrect voltage supply.
- 2) Never operate the lift with damaged or faulty cord or plug.
- 3) Please keep the cord away from heated surface.
- 4) Please turn off power supply before cleaning or servicing.

The ECube Lift

Overview

The lift is powered by a tubular motor which is operated on Single phase 230 V AC 50 Hz with the convenience of a remote controller with limit switches automatically stop at store level and projection level. It provides an attractive solution to recess a projector in ceiling and it can be extended to the show position.

The lift is shipped with the carton box and the following items are allocated. Please inspect them for any damages once you received the lift.

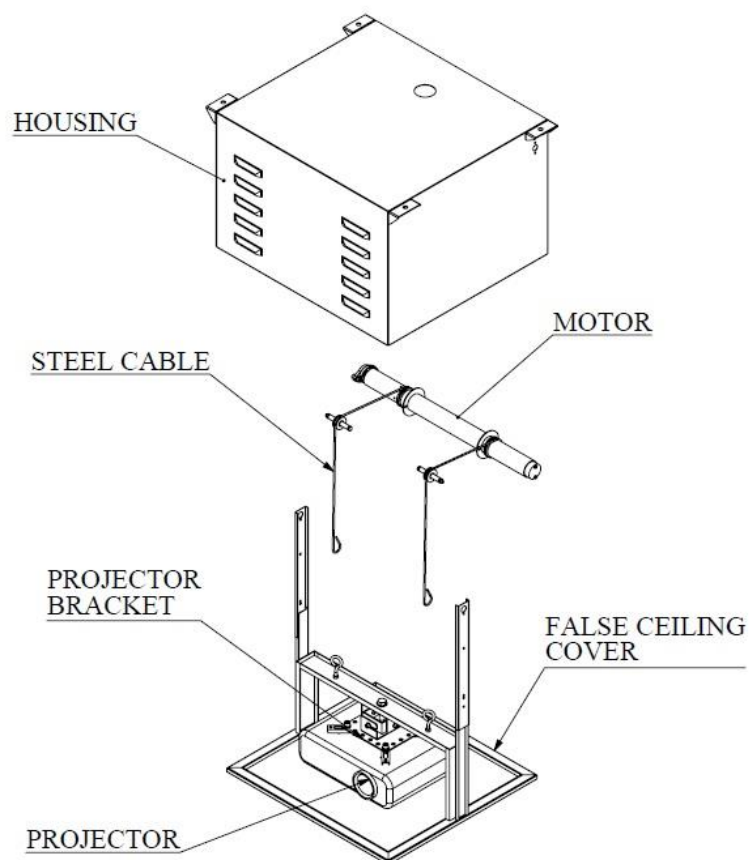
- 1) The ECube lift
- 2) IR Transmitter and Remote Control
- 3) User Manual
- 4) A package of screws for projector

Specification:

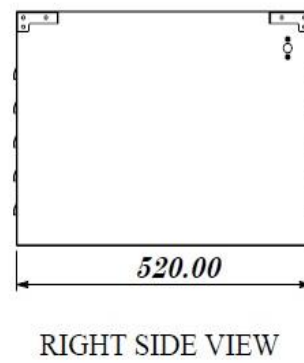
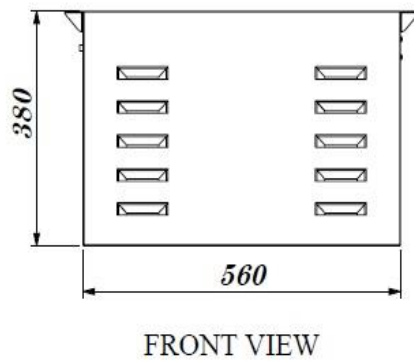
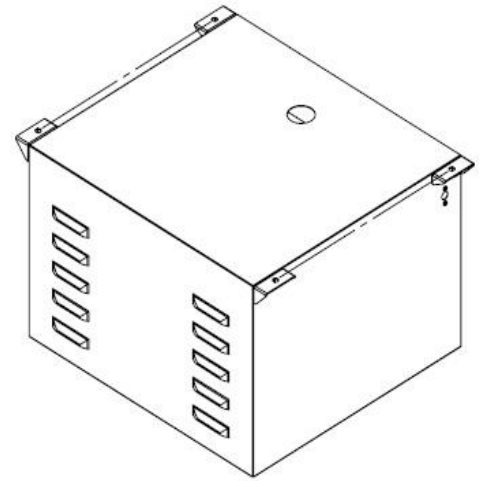
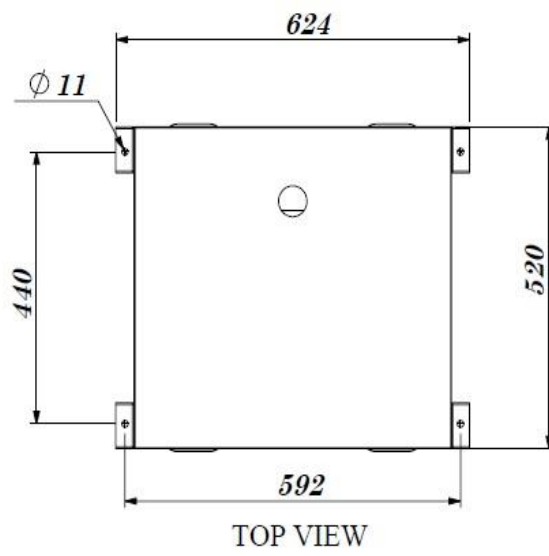
Model: XLT- ECU- 350

Dimension (W x D)	625 mmx520mm
Height in Closed Position	380 mm
Weight	24 kg
Max. Lifting Capacity	15 kg
Power Consumption	100 W
Voltage	Single Phase 230VAC 50 Hz
Rated Current	0.5 A
Max. Lowering Distance	350 mm
Max. available space for projector (W x D x H)	440 mm x 430 mm x 170 mm

Explodedview of the E Cube Lift



Dimensions



Installation Instructions

PLEASE ENGAGE LOCAL PROFESSIONAL INSTALLER TO PERFORM INSTALLATION. PLEASE ALWAYS FOLLOW LOCAL BUILDING CODES, ELECTRICAL CODES AND LOCAL LAWS.

1. Preliminary Checking:

- 1) The ceiling structure should support at least **FOUR** times the total weight of the lift and projector. Please reinforce additional supporting structure if needed.
- 2) 60mm length and 12mm pitch louvers are arranged at front and back cover of the lift for ventilation.
- 3) 100mm (4") clearances from all surrounding structures are recommended. The minimum ceiling space required for the lift to install at ceiling is 765mmWx725mmDx480mmH. The installer must be accessible to every side in order to install the lift.
- 4) Please check the overall dimensions of the lift and ensure that there is sufficient space above ceiling before installation.
- 5) Check the dimensions of the projector to be mounted within the available space.
- 6) Determine the projector installation position based on projection screen location and projector specifications.
- 7) Arrange the space for service and the access to the lift.
- 8) Confirm height of ceiling with maximum travel of the lift.
- 9) Physically check for any damages or loose parts on the lift.

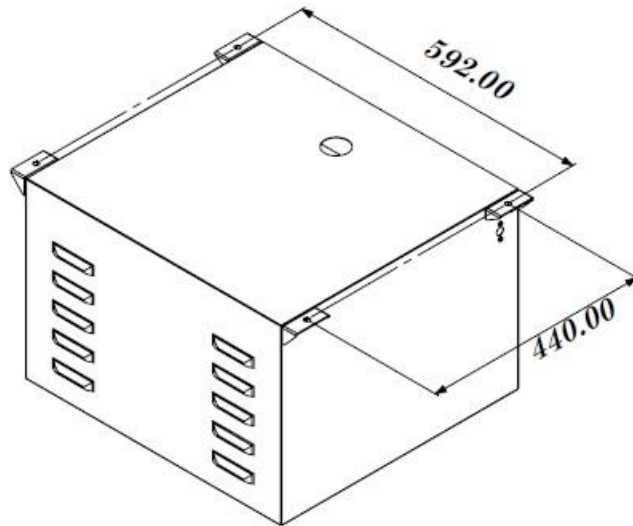
2. Guidelines for Installation:

- 1) Read the instructions carefully before installation. An incorrect installation could lead to serious injury or damage to the lift.
- 2) Installer must ensure that all fasteners support have adequate strength to securely support the lift and projector.
- 3) The lift must be installed in level from front-to-back and side-to-side.
- 4) Make sure that the lift is level in all directions and weight should be shared equally by all four threaded mounting rods.
- 5) Bottom of the lift must be unobstructed after installation.

3. Installing at Ceiling:

NOTE: It is installer's responsibility to make sure that the ceiling structure can support at least FOUR times the total weight of the lift and the projector. Reinforce the structure as required before installing the lift.

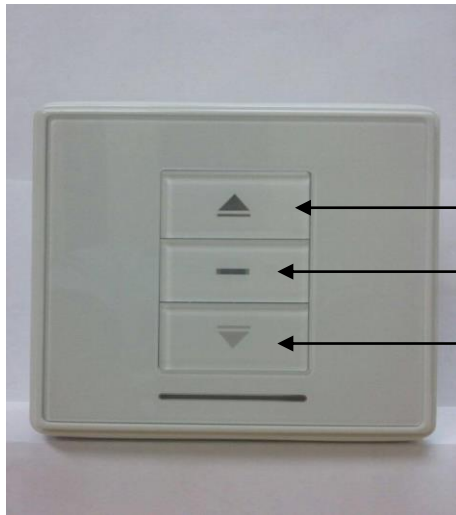
- 1) Please check that the ceiling has enough space to mount the lift.
- 2) **No mounting material is provided.** Please use suitable anchors and fasteners base on the ceiling type.
- 3) The lift should be supported by four **M10 or 3/8"** threaded mounting rods spaced at **590 mm wide x 460 mm depth.**



- 4) The threaded rods must be supported by a rigid structure and should not extend more than **2' (600mm)**. If the rods need to extend more than 2', please use the **cross bracing** to enhance stability.
- 5) The threaded rods must pass through the mounting holes and be secured by nuts above and below.
- 6) Use the threaded locking compound angle nuts to prevent swinging.
- 7) Adjust the threaded rods length to get the proper height (the lower ceiling cover should be same level with false ceiling).
- 8) A minimum opening of **570mmWx530mmD** on false ceiling is required for the lift to travel.
- 9) Check that the lift is leveled from front-to-back and side-to-side.

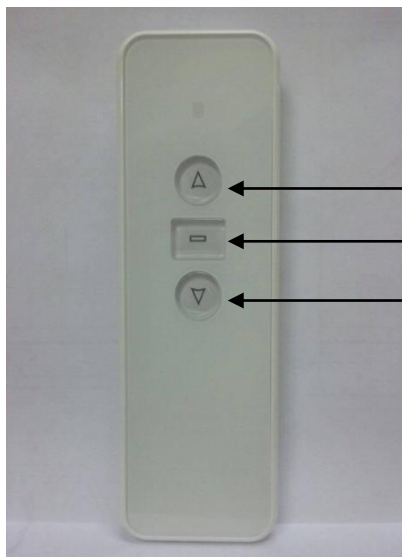
4. Connecting to Power Supply

NOTE: All electrical wiring required for installation should be done by qualified electrical technician.



- ← 'UP' button switch
- ← 'STOP' button switch
- ← 'DOWN' button switch

Wall Mount IR Receiver



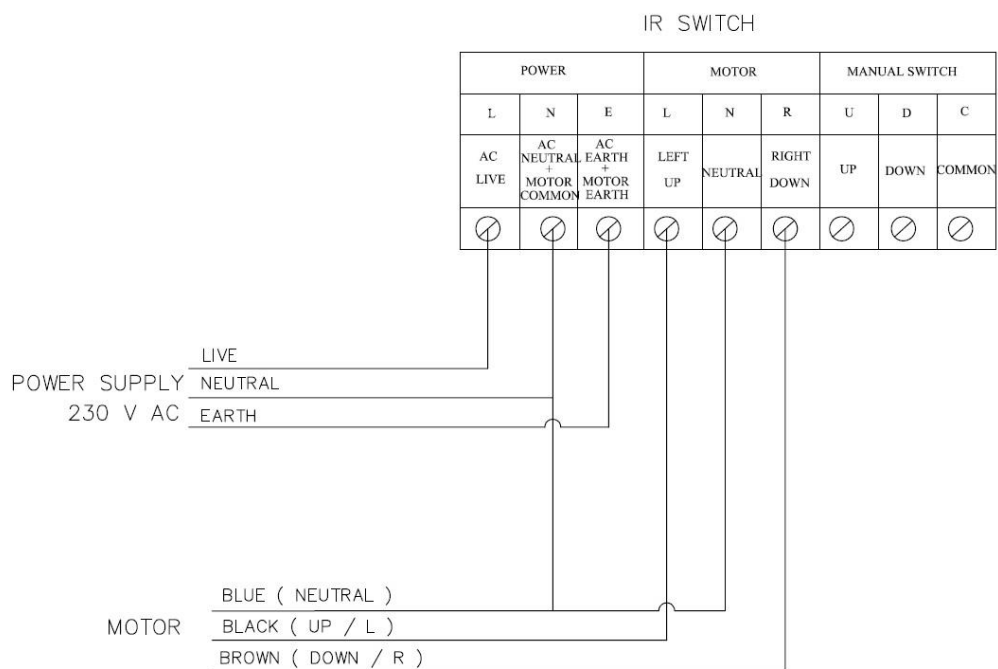
- ← 'UP' button
- ← 'STOP' button
- ← 'DOWN' button

IR Transmitter



IR switch (Top)

1) Please refer the wiring diagram shown below.



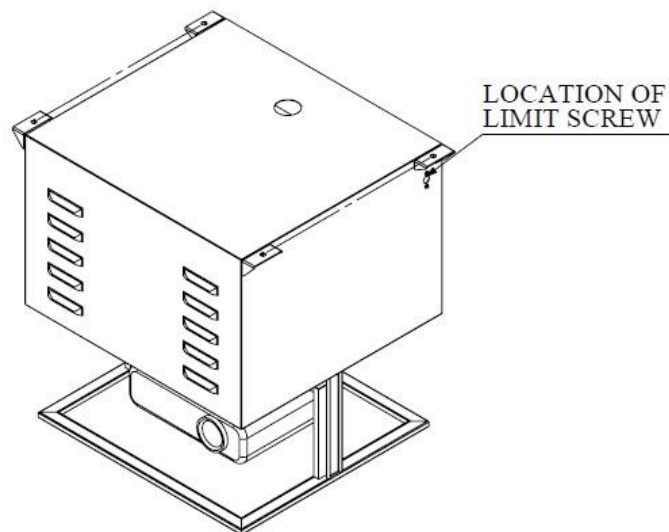
2) Turn on the power to conduct functional check to ensure that the wire is connected in the correct direction (UP= raises, DOWN= lowers).

5. Installing Projector:

- 1) Prior to the installation of projector, the lift should be checked for proper operation.
- 2) Check the dimensions of the projector for properly operated within the available space.
- 3) The projector should be suspended on projector mounting bracket. Please follow the projector manufacturer's instructions for installation.
- 4) Make sure that the cables are long enough for the lift to go up and down.
- 5) The projector should be adjusted at the screen level as necessary.

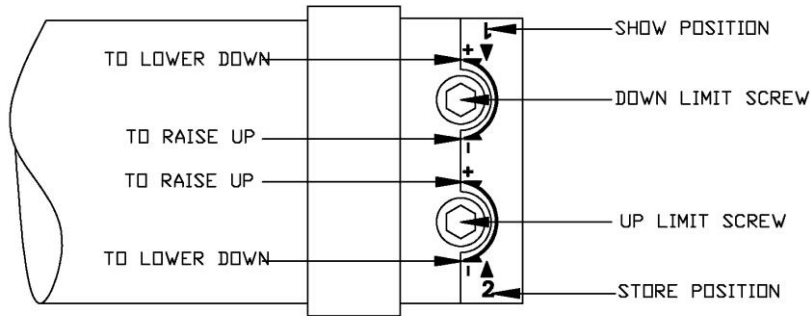
6. Adjusting Upper and Lower Positions

- 1) Please check the limit setting which is preset by the factory and re-adjust the setting if necessary.
- 2) The limit setting screw is located at the back of the lift.



- 3) Please check and ensure that you are turning the correct setting screw on the direction that you want to adjust. **Overturning of the limit screw may damage the motor.**

(Note: 7 turns of hexagonal screw equals 1 turn of roller tube)

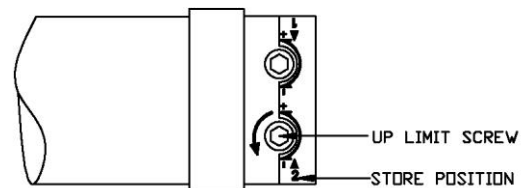
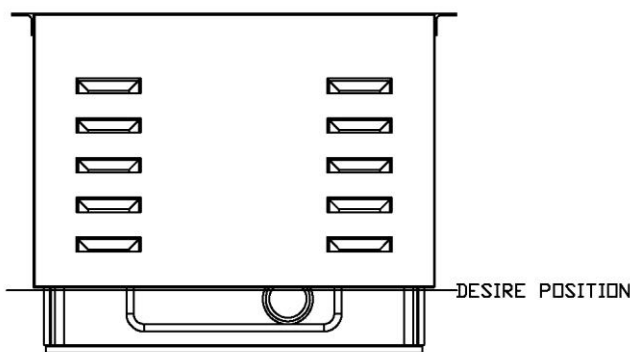


6.1. Adjusting Store Position (UP Limit)

NOTE: The UP limit is already set by the factory.

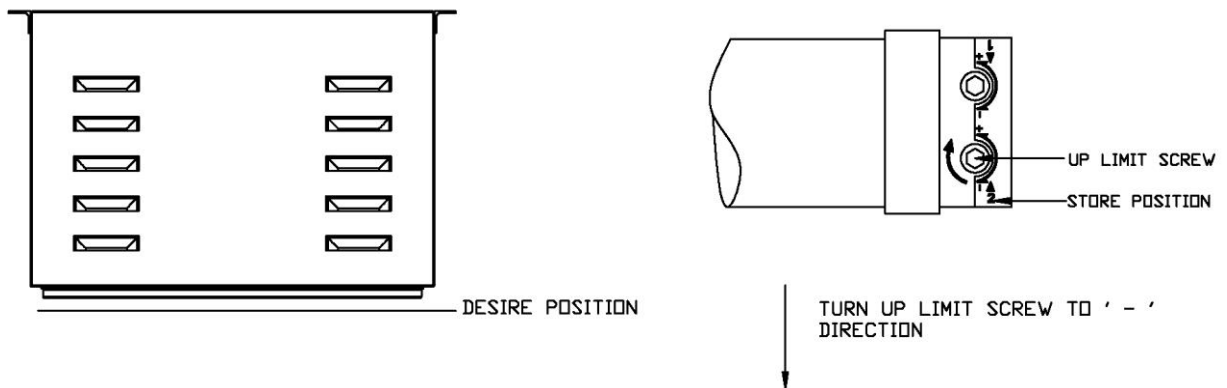
- a) In case you had disturbed the UP limit preset by the factory, please refer the following steps to reset the setting.
- b) Make sure that you are not overturning the screw when you raise up the lift (step 1), as the lower ceiling cover will hit the frame and cannot move further, you may not realize that the limit screw is overturned and the motor is continuously working.
- c) This may damage the motor permanently.

- 1) If the system stops before (i.e. lower than) its desire store position , turn the UP limit screw to '+' direction to raise up.



↑ TURN UP LIMIT SCREW TO ' + ' DIRECTION

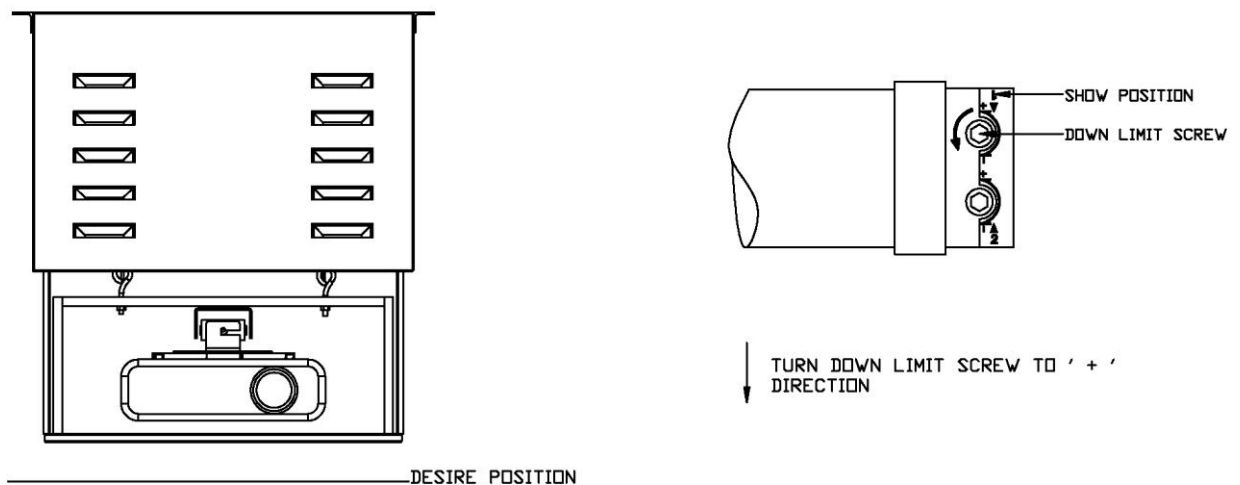
- 2) If the system stops over (i.e. higher than) its desire store position, turn the UP limit screw to ‘-’ direction to lower down.



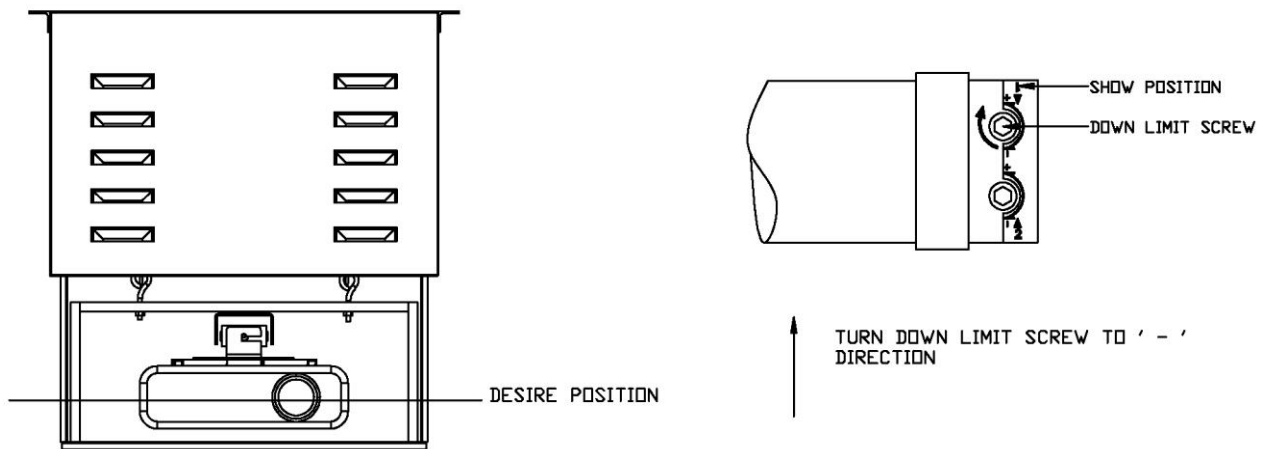
- 3) Repeat this until the correct setting is achieved.

6.2. Adjusting Show Position (DOWN Limit)

- 1) If the system stops before (i.e. higher than) its desire show position , turn the DOWN limit screw to ‘+’ direction to lower down.



2) If the system stops over (i.e. lower than) its desire store position, turn the DOWN limit screw to ‘-’ direction to raise up.



3) Repeat this until the correct setting is achieved.

After adjusting the settings, please operate the lift up and down to double check the settings.

