



# Aerie Tension Series

## *In-Ceiling Electric Motorized Front Projection Screen*

### User's Guide – E Type (RC1)

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#### **Important Safety & Warning Precautions**

**Make sure to read this user's guide and follow the procedure below.**

**Caution:** The screen's Black Top Drop is already set to its maximum drop distance. There is NO extra Black Top Drop in the roller. Please be aware of this as it will void your warranty with Elite Screens. Unapproved changes or modifications (except for cutting the power cord for hardwire installations) to this unit are prohibited and will void your warranty. For more information, please contact our Technical Support Department at (877) 511-1211 Ext. 604.

- Please retain this user's guide for future reference.
- To avoid damaging the unit, do not use with any unauthorized accessories not recommended by the manufacturer.
- Handle the unit carefully during transportation to avoid any damages.
- To ensure safe and reliable operation, direct connection to a properly grounded power source is advised.
- The power outlet supplying power to the unit should be close to the unit and easily accessible.
- Do not install the unit on uneven or inclined surfaces.
- Do not place any heavy objects over the power cord.
- Position the power cord properly to avoid creating a trip obstacle.
- To avoid an electrical shock or fire, due to a loose contact or short circuit, do not overload the power cord.
- The internal & external parts of this unit are not end user serviceable. Do not attempt to disassemble this unit by yourself. No one except authorized technicians can open and make repairs to this unit.
- Make sure the power source that this unit is connected to has a continuous power flow.
- If there is need to use an extension cord, make sure the cord has an equal rating as the appliance to avoid over heat.
- Do not handle the power plug when your hands are wet or your feet are in contact with water.

#### **Do not use this unit under the following circumstances.**

- Disconnect the power cord under the conditions of heavy rain, wind thunder or lightning.
- Avoid direct sun light, rain shower and moisture.
- Keep away from fire sources and high temperature to prevent this device from overheating.
- Cut off the power supply first before transportation or maintenance.
- To avoid possible injury and/or an electric shock, do not attempt to use this screen if there is obvious damage or if there are any evident broken parts.

## Installation Warning

Due to various installation environments, the instructions provided in this user's guide are for reference only. Please consult a professional installation company for further installation and safety advice. EPV Screens is not liable for any faulty installations.

Individual modifications to this product are prohibited and will void the warranty with the manufacturer. Please contact EPV Screens Customer Service for any questions.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that the interference will not occur on a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.




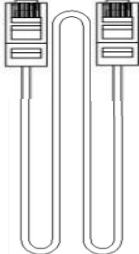
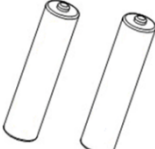

- ✓ **Reorient or relocate the receiving antenna of the device which may be causing the interference.**
- ✓ **Increase the separation between the screen and the device's receiver.**
- ✓ **Connect the equipment into a different power outlet other than the device.**

## Pre-Installation

1. Carefully unpack the screen.
2. Always handle the screen in a leveled position on a clean surface.
3. In order to protect the screen from exposure to stains, keep the screen out of contact with foreign particles such as dust, sawdust, and/or liquids.

## NOTE

Regardless of the mounting method, the screen should be securely supported so that the vibration or pulling on the viewing surface will not cause the casing to become loose or fall. The installer must ensure that the fasteners used are of adequate strength and suitable for the installation location.

Polar Max Recessed   Controls and Accessories					
A. IR Remote ZRC1-IR	B. RF Remote ZRC1-RF	C. Wall box controller ZRC1-WB	D. RJ50 cable ZRC1-RJ50	G. AAA batteries	H. Bubble leveler
					

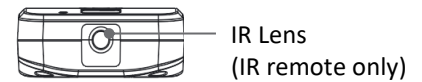
## Screen operation

**Electric Current:** The screen operates on AC110V.

1. After ensuring the power outlet & screen are compatible (voltage), plug the power cord into the power outlet.
2. Once the screen has power, you'll be able to control it using any of the 5 methods described below.

## 5 Ways to control your screen

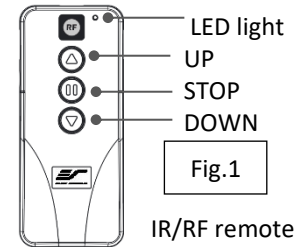
**1. IR Remote control (Item A, Fig 1):** The Infrared functions by direct line of sight contact using an effective beam range of 25 feet within a 30-degree angle. Aim the IR remote directly at the Wall Box Controller to operate the screen.



**Note:** Assure there is no obstruction between the IR remote and IR receiver.

**2. RF Remote Control (Item B):** The radio waves eliminate the need for a direct line of sight and has a longer distance control range.

The RF remote is already pre-synced/paired and ready to use. If synchronization/ pairing is needed, please follow the steps below.



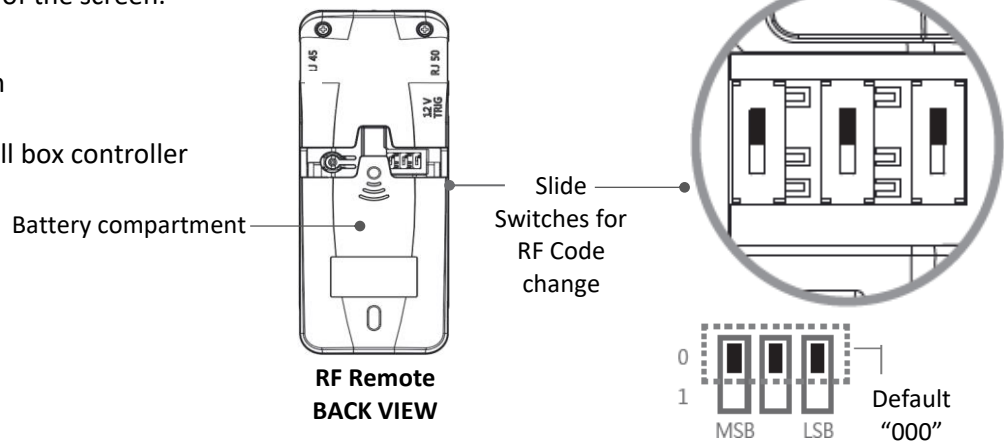
### How to synchronize/pair a new RF remote:

- Press & hold the “Programming Key”, then press the “Up Key” on the Wall box controller (wall-box LED flashes). *Reference the wall box controller section for programming key location.*
- Then press the “Up Key” on the RF remote.
- The Wall box LED will flash 5 times, to indicate the RF remote has been properly synchronized/paired.

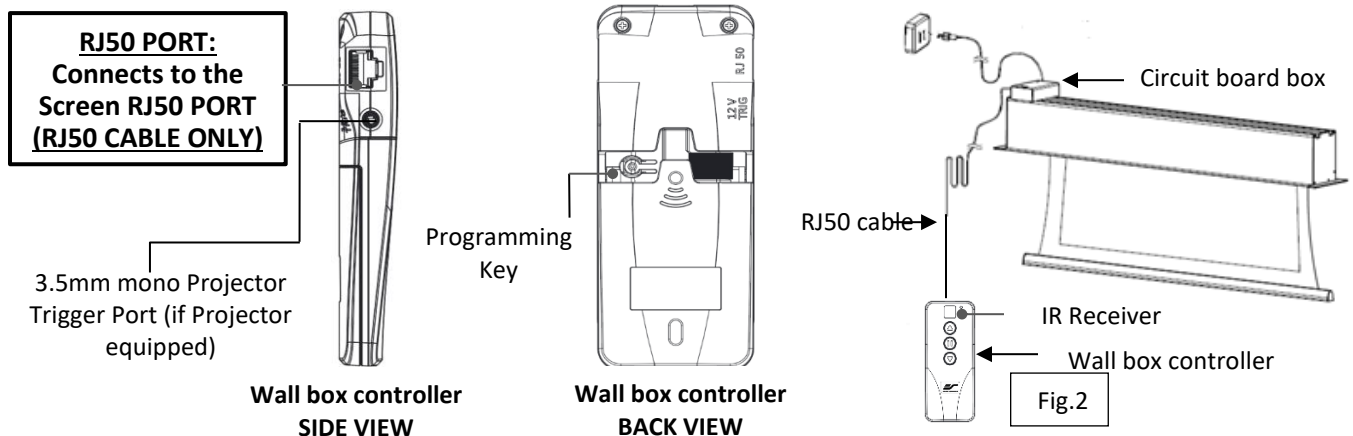
### How to change the RF code (For use when multiple screens/RF remotes are owned)

Changing the RF code avoids controlling multiple screens at the same time and prevents electrical interference leading to accidental control of the screen.

1. Remove the batteries
2. Change the RF code switch
3. Insert the batteries
4. Synchronize it with the wall box controller



**3. Wall box controller (Item C, Fig 2):** The wall box controller switch is a wall mounted control box with an up/stop/down button. It plugs directly into the screen’s RJ50 port located on the circuit board box.



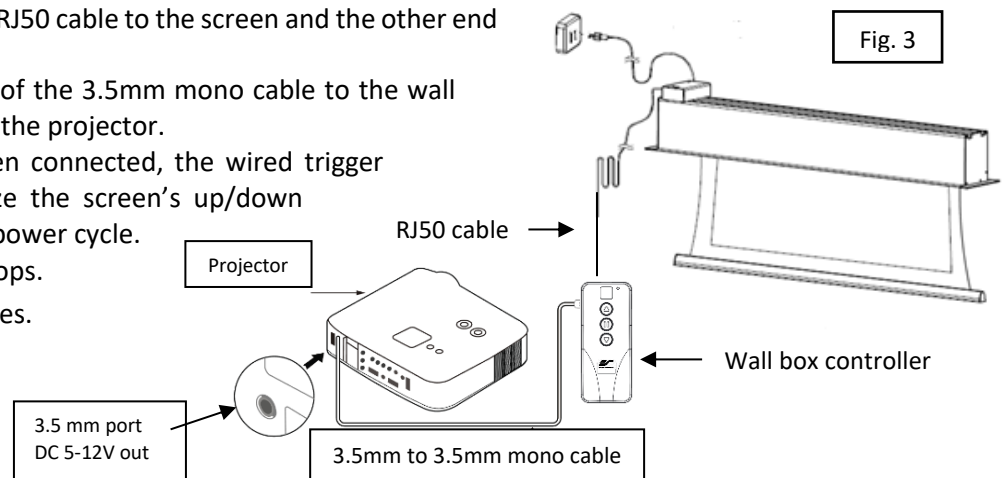
**4. Wired 5-12 volt trigger (Fig. 3):** Requires a 3.5mm to 3.5mm mono cable (not included)

**Step 1:** Connect one end of the RJ50 cable to the screen and the other end to the Wall box controller.

**Step 2:** Then connect one end of the 3.5mm mono cable to the wall box controller and the other to the projector.

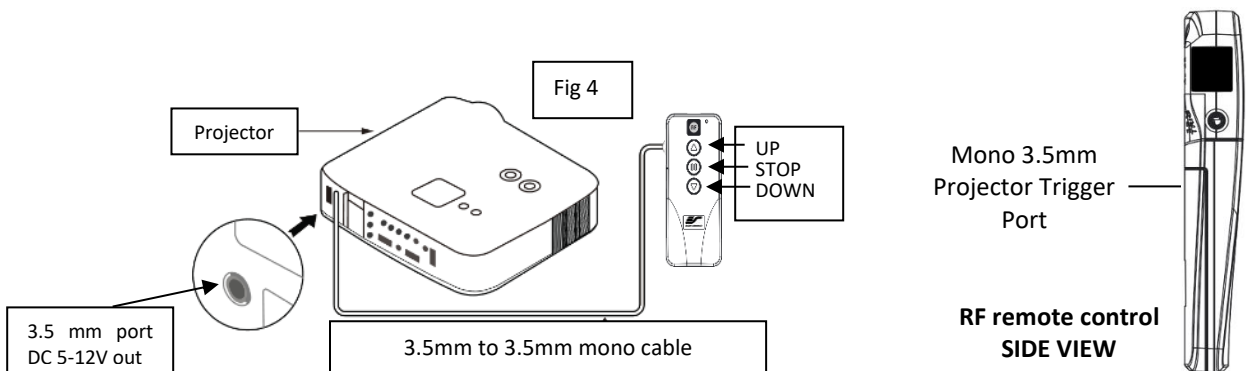
Once the two cables have been connected, the wired trigger feature is ready to synchronize the screen's up/down operation with the projector's power cycle.

- Projector on, screen drops.
- Projector off, screen rises.



**5. Wireless 5-12 volt trigger (Fig 4):** Requires a 3.5mm to 3.5mm mono cable (not included).

The Radio Frequency (RF) remote control serves as a dual purpose, independently as a handheld remote control, or as a Wireless 5-12 volt trigger. The radio frequency technology sends a wireless signal that synchronizes the screen's drop & rise with the projector's power cycle.



**Here's how to set up your Wireless 5-12 volt trigger**

The 5-12V wireless trigger should already be synced and ready to work.

**Step 1:** Connect one end of the 3.5 mm mono trigger cable to the RF remote.

**Step 2:** Connect the other 3.5 mm mono end of the cable to your projector

**Step 3:** Turn on the projector and the screen should automatically deploy.

**Step 4:** Turn off your projector and the screen should automatically retract.

*(Please be aware, the projector on/off cycle may take longer to fully activate. It usually takes around 20- 30seconds for full off and on cycle each time)*

**Note:** If the wireless trigger feature does not work, please resync the RF remote to the Wall box controller per the instructions in the Radio Frequency remote section.

**ADVANCED Programming Key Instructions: (FOR ADVANCED USERS ONLY)**

Wall box controller must be connected to the screen.

**ATTENTION:** Reducing the factory’s full screen drop may produce waves/wrinkles on the projection surface on tab-tension screens. The full drop is recommended to allow the screen to rely on the tab-tension system to maintain the projection surface flat and taut on all sides.

The same applies on non-tensioned screens, although some level of waves may be present due to the nature of the screen not being tensioned. If wrinkles/waves develop after making the adjustment to the desired drop position, reset it to the factory’s default position per the instructions below.

**FLATNESS AFFECTED BY NEW PROGRAMMED VERTICAL POSITION IS NOT COVERED UNDER A REPLACEMENT WARRANTY.**

**1. Preset the Screen’s Drop Position:**

Use the RF/IR remote or Wall Box Controller to Drop the screen to the desired position you want to set it at. Press & hold the “**Programming Key**”, then press the “**Down key**” on the Wall Box Controller. The LED will flash 5 times to confirm new programmed drop position.

**PROGRAMMING NOTE:**

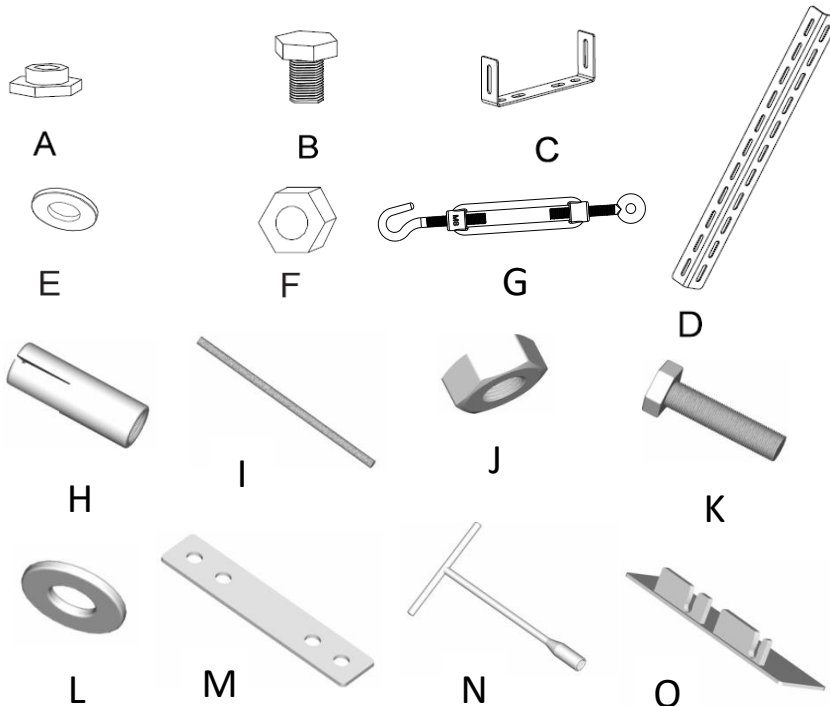
The programmed vertical position relies on a time-count which adjusts itself according to the programmed timed difference. Multiple up/down programming will result in the vertical position being off a few inches. It is recommended that programming is done the **first-time** the desired vertical position is determined or **RESET** it to factory default and programming the desired vertical position afterwards.

**2. Clear/Reset the Screen’s Drop Position to factory default:**

Press & hold the “**Programming Key + “Stop key**” on the wall box controller.

**Hardware Parts List for Aerie Tension Series**

Please make sure all parts listed below are included before proceeding with the installation.

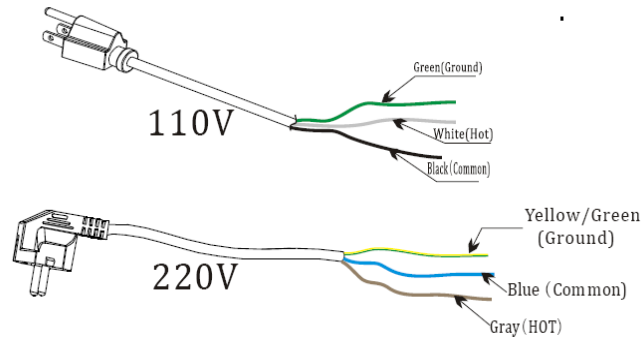


Hardware Parts List	QTY
A. Case Rail Nut	4-6
B. Hex Screw	4-6
C. Hanging Bracket	2-3
D. Suspension Bar	4
E. Washer	8-10
F. Hex Nut	4-6
G. Suspension Bar J- Hook	4
H. M8 Top Expanding Bolt	4
I. M8 Threaded Rod	4
J. M8 Screw Nut	20
K. M8 Hexagonal Screw	4
L. M8 Screw Washer	28
M. Installation Bracket	2
N. Socket Wrench	1
O. White cover flange panel	2

## Installation Instructions

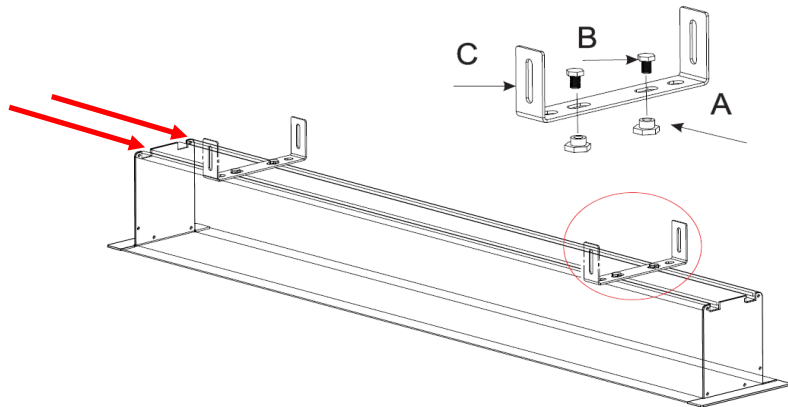
### Power

1. The Aerie Tension Series includes a 3-Prong Power Cord for use in a non-concealed power outlet. If your installation will be entirely concealed (including power outlet), Elite Screens strongly recommends a hardwire connection. Please refer to the image below for both 110v & 220v wiring information.

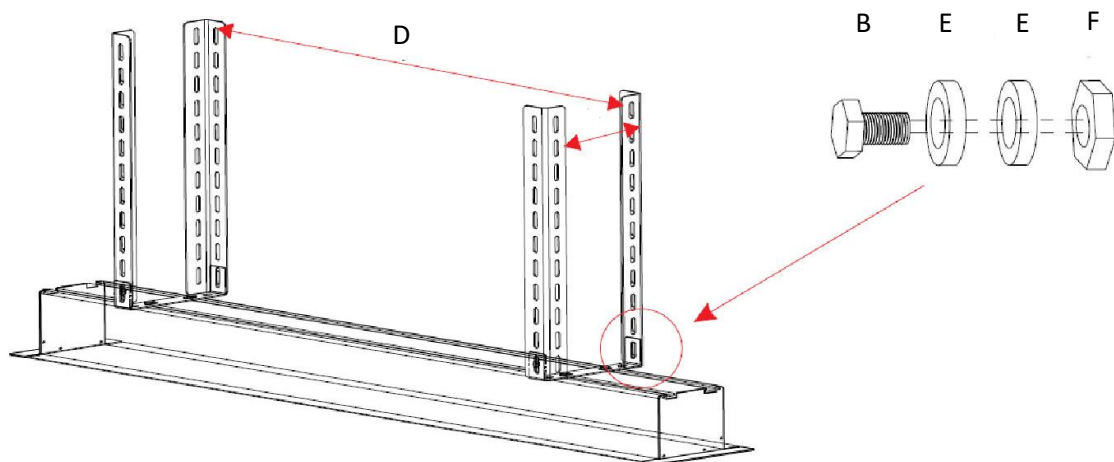


### Assembly

2. Insert the Hex Screw (B) through the Hanging Bracket's (C) screw hole and secure with the Case Rail Nut (A). Slide the Hanging Bracket (C) through the railing on top of the case.

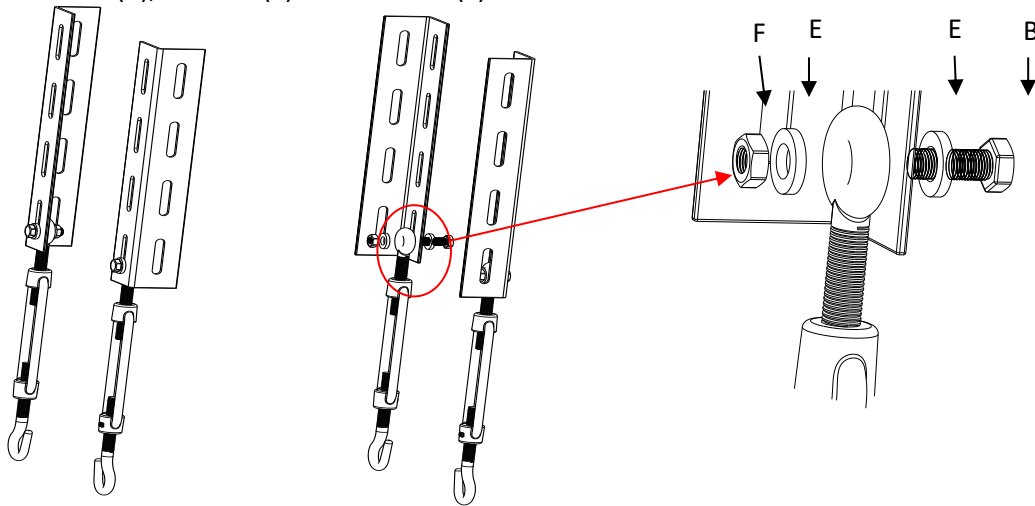


3. Place the Suspension Bar (D) on the Hanging Bracket (C) and align with the hole as shown below. Secure the Suspension Bar (D) with the Hex Screw (B), Washer (E) and the Hex Nut (F). Install the Suspension Bars (D) to your ceiling according to their distance.

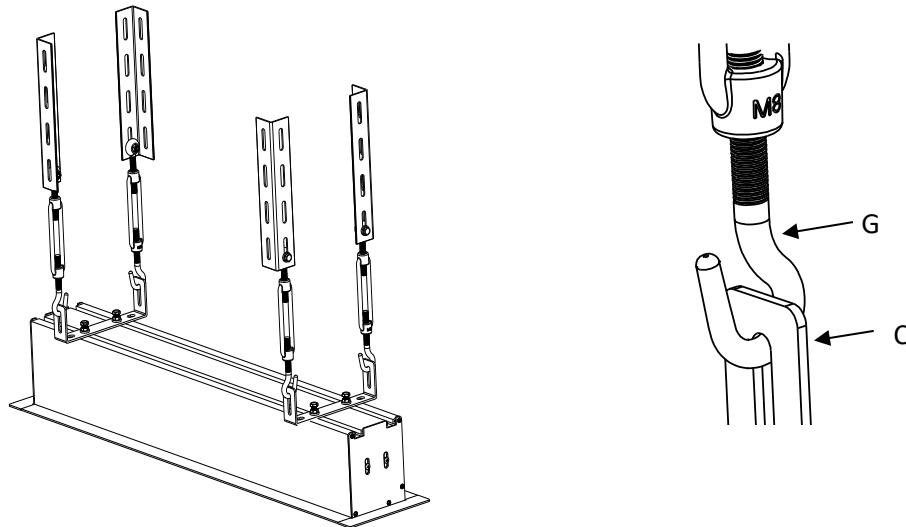


## Optional Suspension Bar J-Hook (G)

1. Attach the Suspension Bar J-Hook (G) to the bottom of the Suspension Bar (D) and secure with the Hex Screw (B), Washer (E) and Hex Nut (F).



2. Attach the Suspension Bar J-Hook (G) to the Hanging Bracket (C) as shown in figure below. Install the Suspension Bars (D) to your ceiling according to their distance.



## Optional Installation (parts & hardware not included)



Screw bolt X 4

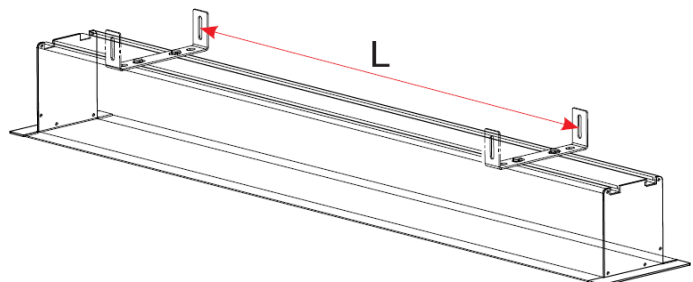


Washer X 8

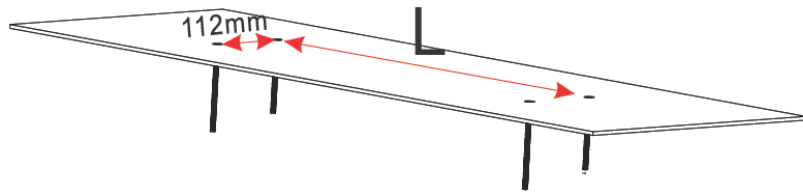


Nut X 8

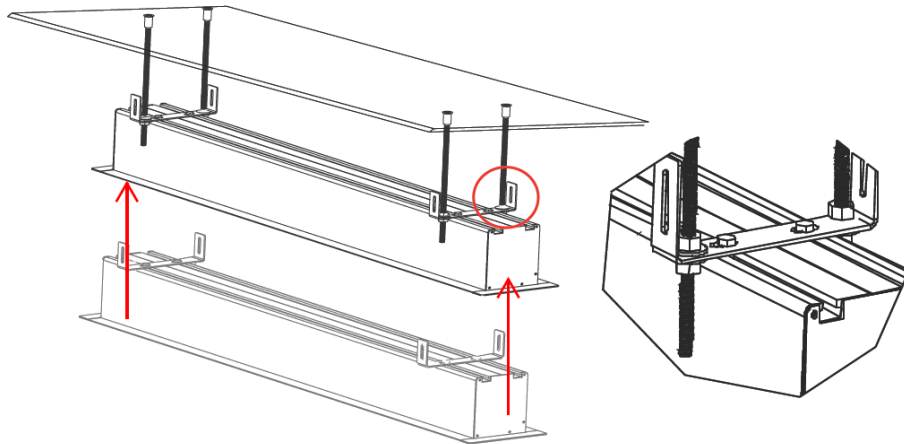
1. Place the Hanging Bracket (C) in the desired location on the screen's housing and measure the distance as shown below. (L = Distance)



2. Mark the location of where the screen will be installed according to the distance (L) and then secure the bolt to the ceiling.



3. Install the screen to the screw bolt as shown in the figure below.



For local EPV Screens contact or Technical Support, please visit  
[www.epvscreens.com](http://www.epvscreens.com)