



Marquee Tension Series

In-Ceiling Electric Tab-Tensioned Projection Screen

Installation Guide

H Type (RC1)

V1

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Important Safety & Warning Precautions

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

In order for the screen material to maintain its projection qualities and optimum performance, please refer to the list below for proper maintenance and cleaning.

- Use a dry microfiber cloth to remove dust from the screen's surface.
- When cleaning, use a damp microfiber cloth with warm water to remove any marks.
- Never rub or apply pressure when cleaning the surface.
- Never attempt to use any solutions, chemicals or abrasive cleaners on the screen surface.
- To avoid damaging the screen, avoid touching it directly with your fingers, pens/pencils or any other sharp or abrasive objects.

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. 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 techsupport@epvscreens.com

- 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, inclined surfaces.
- Do not install in damp places to avoid an electric shock or short circuit.
- 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 overheating.
- Do not handle the power plug when your hands are wet or your feet are in contact with water.
- Properly dispose of this equipment according to the environmental regulations in your area when product is no longer of service.

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

The instructions provided in this user's guide are for reference only. Please consult a professional installation company for further installation and safety advice. The installer must insure that proper mounting hardware is used to provide adequate strength suitable for the installation. EPV is not liable for any faulty installations.

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.



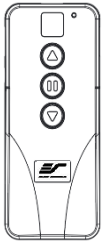
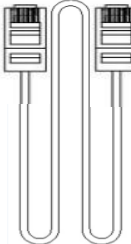
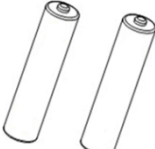

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

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.

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 at 60Hz/ 0.77A / 85W

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

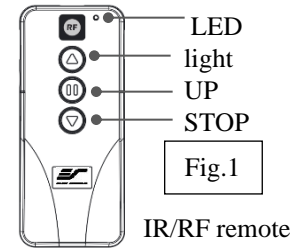
1. IR Remote control (Item A, Fig 1): The Infrared functions by direct line of sight contact using an effective beam range of 25 feet within a 30-degree angle. Aim the IR remote directly at the Wall Box Controller to operate the screen.



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.



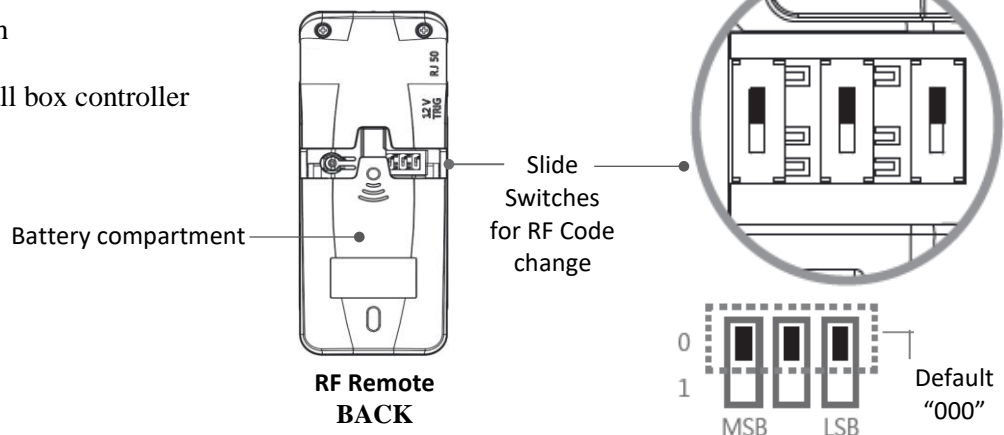
How to synchronize/pair a new RF remote:

- 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.

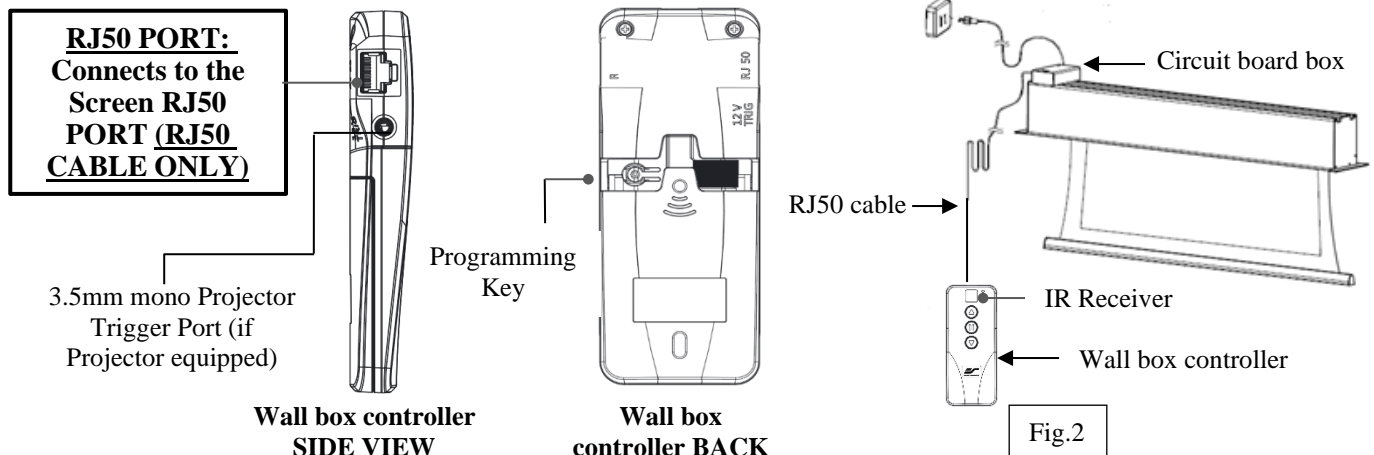
How to change the RF code (For use when multiple screens/RF remotes are owned)

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.



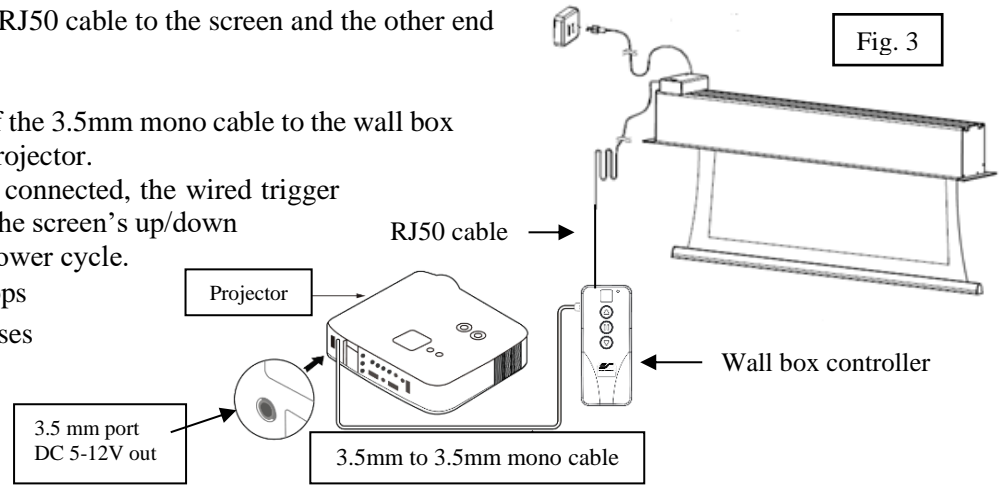
4. Wired 5-12 volt trigger (Fig. 3): Requires a 3.5mm to 3.5mm mono cable (not included)

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.

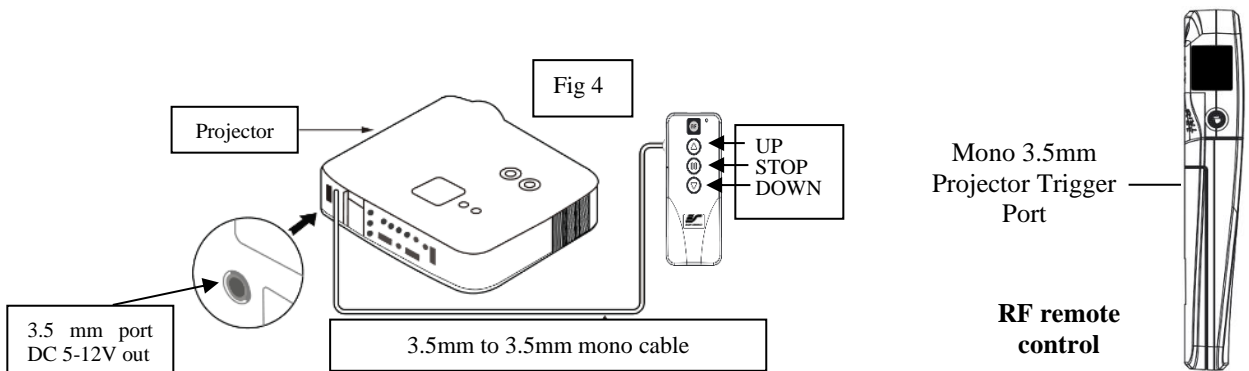
Once the two cables have been connected, the wired trigger feature is ready to synchronize the screen's up/down operation with the projector's power cycle.

- Projector on, screen drops
- Projector off, screen raises



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:

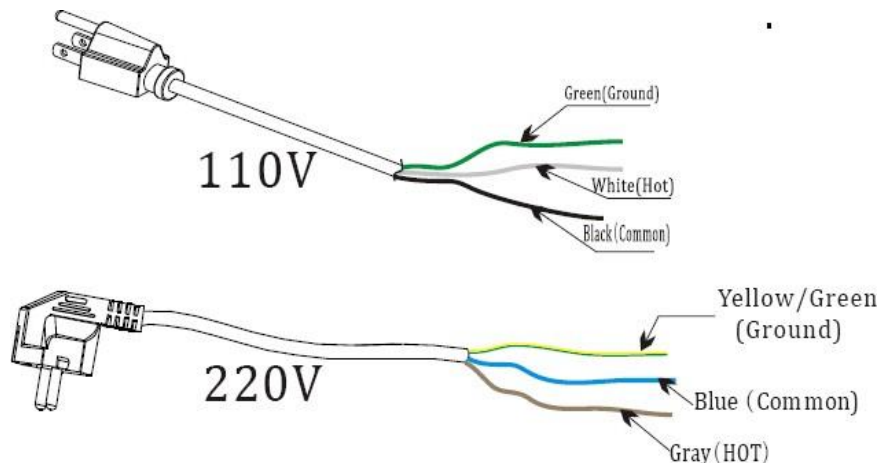
Press & hold the "**Programming Key** + "**Stop key**" on the wall box controller.

Installation Instructions

The Marquee Tension allows access for above or below ceiling installation. Please follow the instructions described in the following steps below for your type of installation.

Power

The Marquee Tension includes a 3-Prong Power Cord (2-Prong Power Cord for some countries) for use in a non-concealed power outlet. If your installation will be entirely concealed (including power outlet), EPV strongly recommends a hardwire connection. Please refer to the image below for both 110v & 220v wiring information.

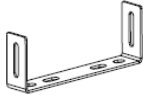
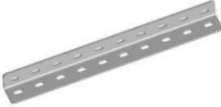









NOTE

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 the fasteners that are used are of adequate strength and suitable for the installation location.

Hardware Parts List for Marquee Tension Series

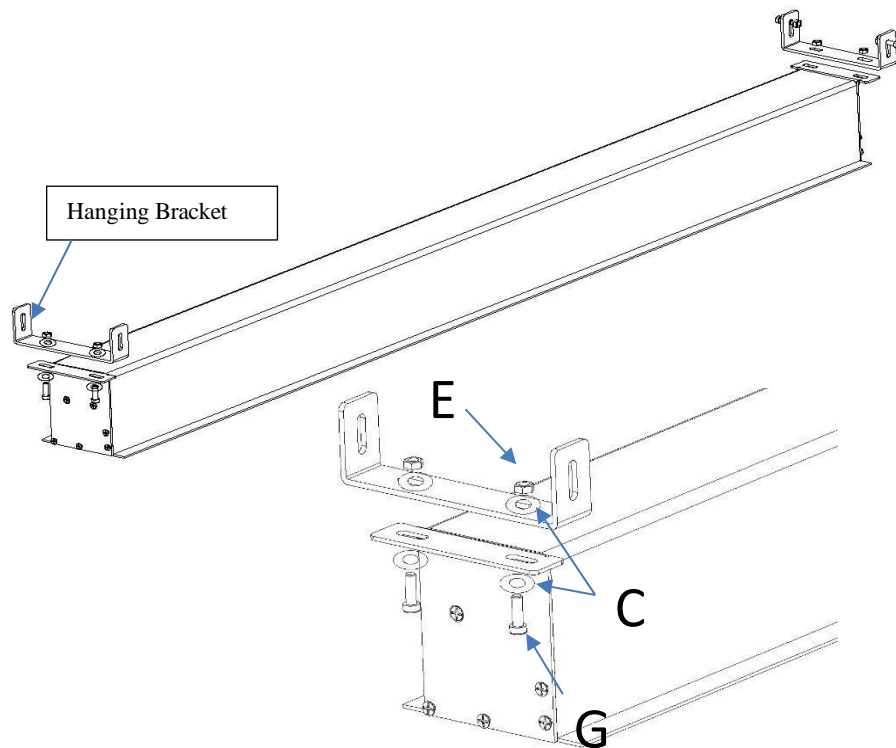
Please make sure all parts listed below are included before proceeding with the installation.

Hardware Parts List for above ceiling installation		
A. Suspension Bracket x 2 	B. Suspension Bar x 4 	C. End Flange x 2 
C. M8x16mmx1.5mm washer x 8 	D. M6x13mmx2mm washer x 8 	E. M8 nut x 4 
F. M6 nut x 4 	G. M8x40mm hex screw x 4 	H. M6x20mm screw x 4 

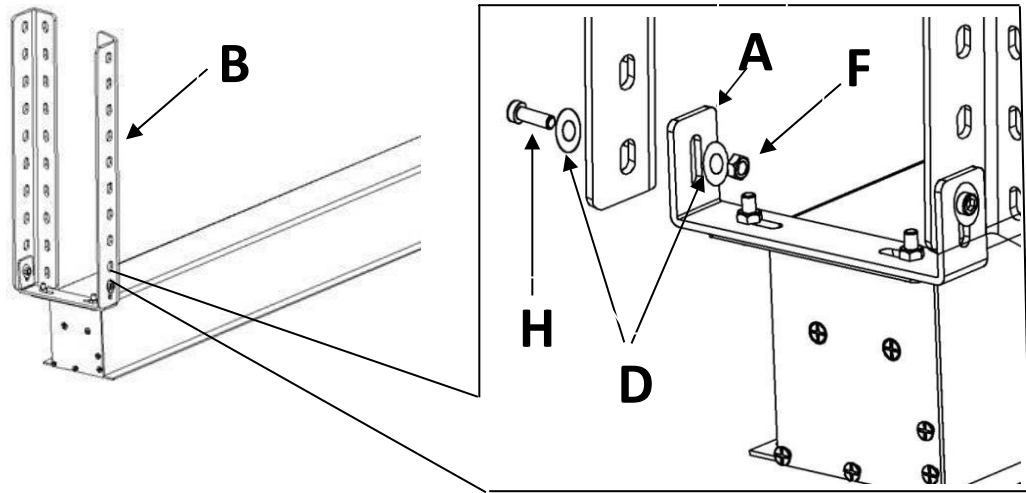
A. Above ceiling installation instructions

Assembly

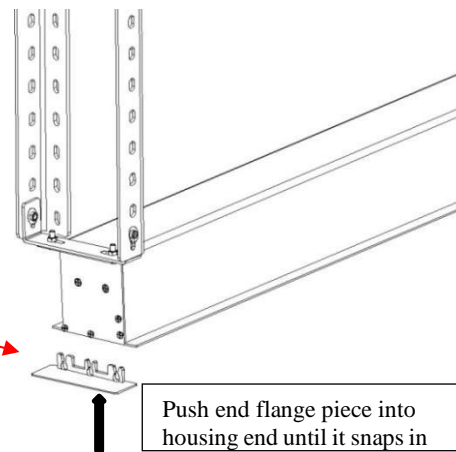
1. Place the **hanging bracket** (A) over the left and right side ends of the housing and secure each one using the **M8x40mm hex screw** (G), **M8x16mmx1.5mm washers** (C) and **M8 nut** (E) as shown below.



2. Place the **Suspension Bar (B)** over the **Hanging Bracket (A)** and align with the hole as shown below according to the height requirement for your installation area. Secure the **Suspension Bar (B)** with the **M6x20mmScrew (B)**, **M6x13mmx2mmWasher (E)** and the **M6 Nut (F)**. Repeat the process for the other side.











3. Insert the **end flange piece (C)** on the edge of the housing as shown below to complete the assembly. The screen is now ready for installation.



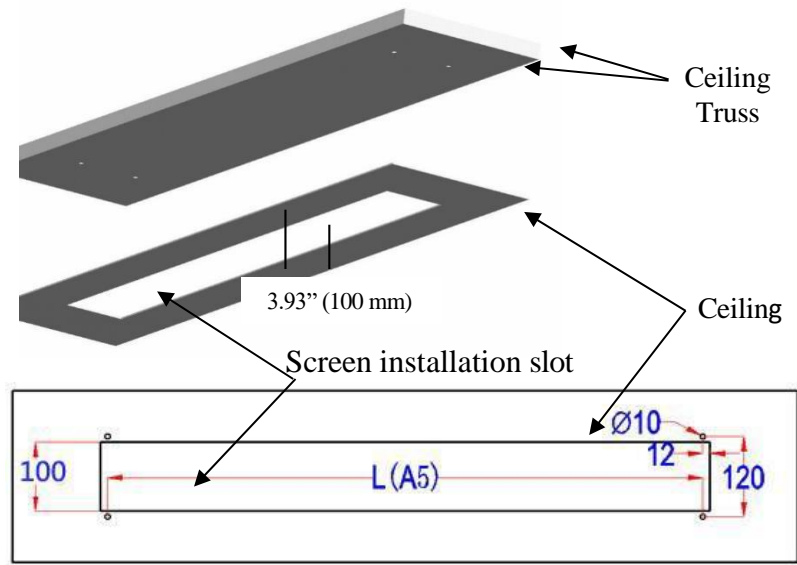
B. Below ceiling installation instructions

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

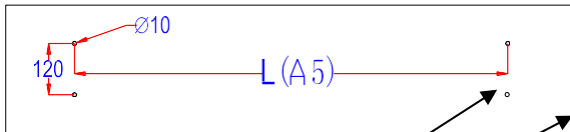
Hardware Parts List for below ceiling installation			
<p>A. End Flange x 2</p> 	<p>B. Hanging bracket x 2</p> 	<p>C. Threaded rod x 4</p> 	<p>D. Socket wrench x 1</p> 
<p>E. M8x16mm x 1.5mm washer x 28</p> 	<p>F. M8 nut x 20</p> 	<p>G.M8 Top expanding bolt x 4</p> 	<p>H. M8x40mm hex screw x 4</p> 

1. **Measure and cut the ceiling installation slot:**

The width should not exceed 3.93" (100mm) and not less than the width of the screen's housing. Measure the length of your screen to determine the length.

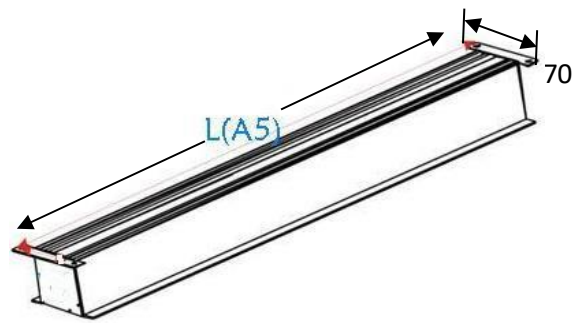


2. Drill 4 holes in the ceiling that correspond with the attachments on the various casing sizes. The width should be 120mm. The length of (A5) in the diagram below depicts the distance between the holes located on each ear end of the screen's case.

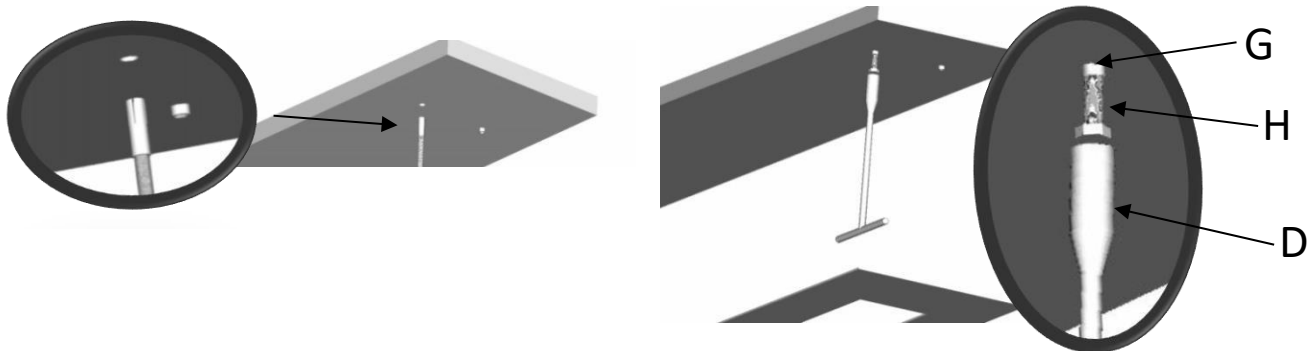


Install screw holes

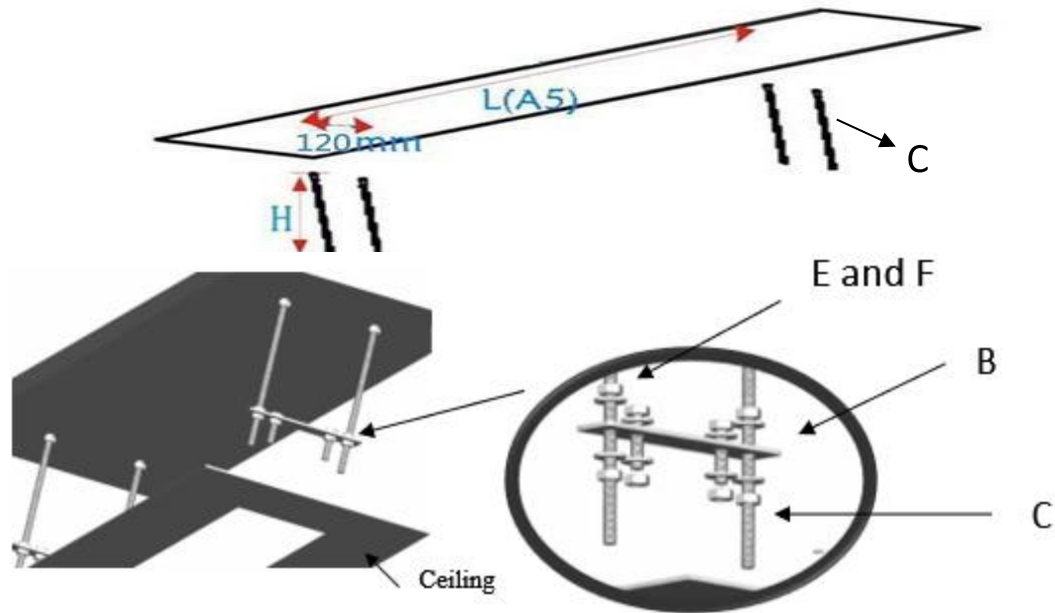
The ceiling wall



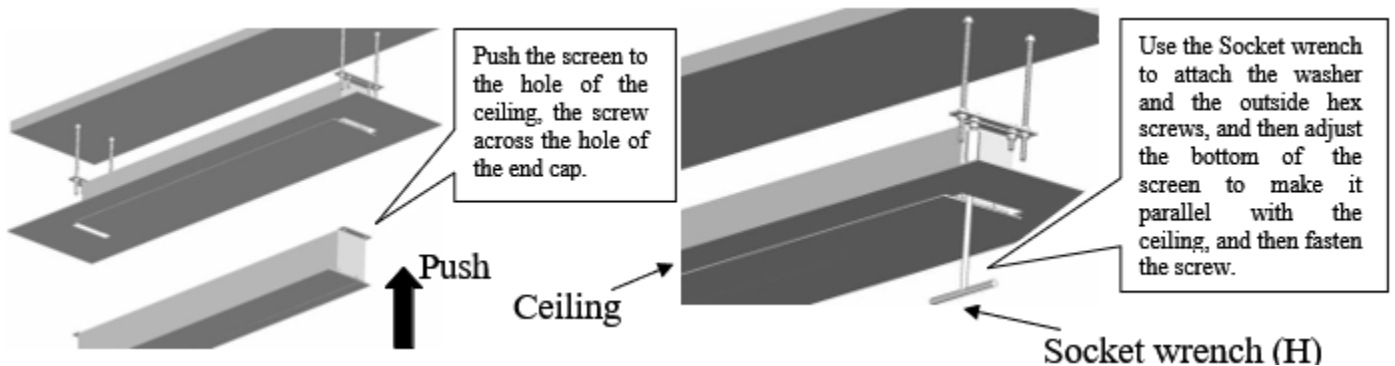
3. The **M8expanding bolts** (G) mount into thick wood beams, stone or concrete and will support the screen. Use the **Socket wrench** (D) to attach the **M8x40mm hexagonal screws** (H). The expanding bolts should be firmly tightened and tested to make sure that they will hold the weight of the screen.



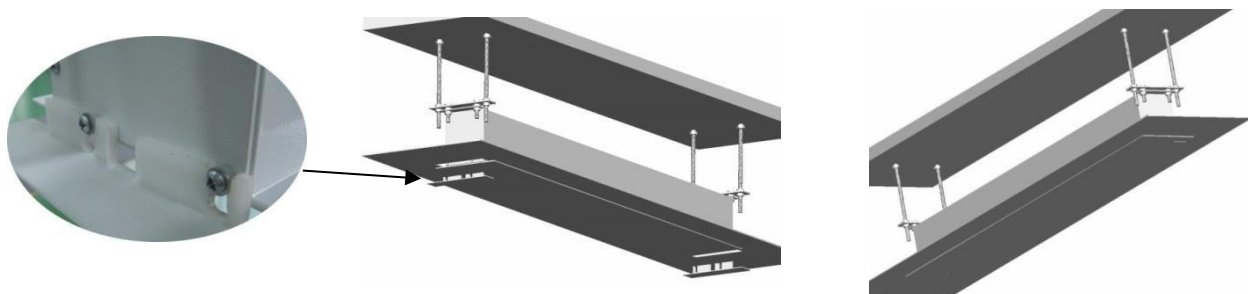
4. Insert the **threaded rods (C)** through the **M8 expanding bolts** and then attach the **M8x40mm hexagonal screws** with the **washer (E)**. Last put the **Hanging Bracket (B)** through the threaded rod equal to the height of the screen's housing. Once they are firmly in place (as shown below) make sure that they will hold the weight of the screen.



5. Push the screen up into the space. Use the **threaded rods (C)** to attach the screen assembly to the ceiling. The **hexagonal screws (E)** will connect the screen to the rest of the assembly. Once firmly in place; use the **nuts (F)** to ensure a firm connection. Use the **socket wrench (D)** to make sure that the bolts are firmly tightened.



6. Install **end flange cover panel (A)** between the gap and the screen to complete the installation.



For local EPV contact or Technical Support, please visit
www.epvscreens.com