



Special Edition Dark Star® Series

Ambient/Ceiling Light Rejecting Fixed Frame Screen

USER'S GUIDE



Congratulations on your new **Special Edition Dark Star®** purchase! The screen material included is our **ISF certified Dark Star® 9** which is a reference quality front projection material, precisely formulated for environments with minimal control over room lighting. It was designed to enhance picture brightness, offer accurate color fidelity, and improve contrast levels. The **Dark Star® 9** is best for family rooms, educational facilities, conference rooms or any applications in which incident light is a factor.

Cautionary notice for the Dark Star® 9 material

The Dark Star Fixed Frame Screen material is composed of high quality sensitive multi-layer projection material. Please follow the precautions below for proper care procedures and to prolong the life of your screen.

Failure to use [these safeguards] will result in voiding your warranty.

1. Avoid using any chemical compounds or harsh abrasives which will result in permanently damaging the screen material.
2. Use only a soft microfiber cloth with mild soap and water to clean the screen material.
3. Please wear a pair of clean, powder-free glove in the process of installing and operating the screen to keep hand oil and dirt from being transferred to the viewing surface.
4. Be very careful when unrolling and handling the material. Lay the material flat only to avoid permanently creasing the material.
5. Do not rub the cloth with force when cleaning to avoid permanently scratching the surface.
6. Do not touch the screen surface with sharp objects or allow the screen surface to come in contact with anything other than the frame.
7. Use only a soft feathered brush to remove dust.
8. Dark Star® 9 material damaged in handling, installation, or use is not covered under warranty.

Frame Parts List

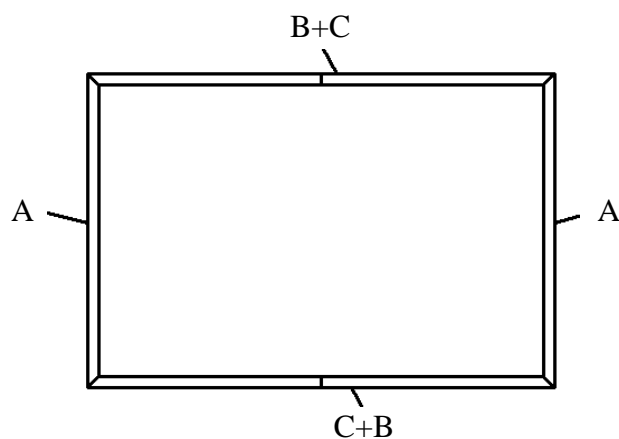
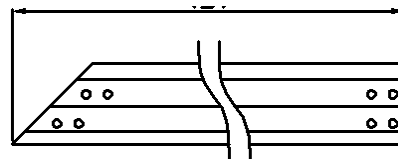
A. Vertical Frame x 2pcs



B. ½ Horizontal Frame x2 pcs

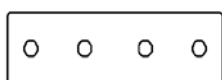


C. ½ Horizontal Frame x 2 pcs



Hardware Parts List

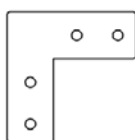
a.



b.



c.



d.



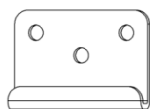
e.



f.



g.



h.



i.



j.



k.

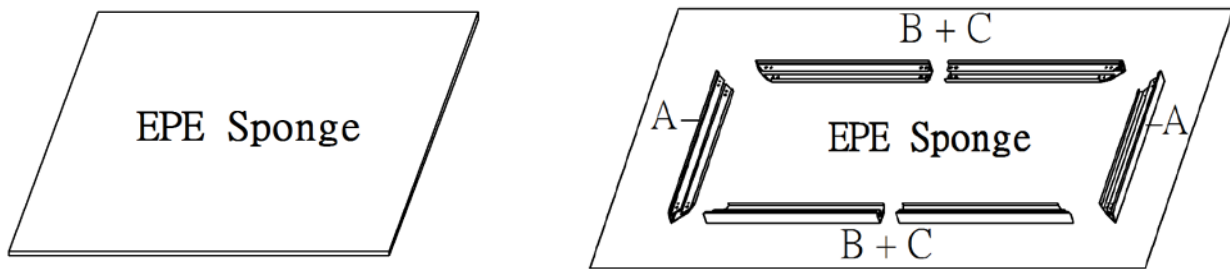


Item	Parts List	106H Screen	122H Screen	156C Screen
a.	Center Joints	4	4	4
b.	Spring	96	108	132
c.	Elbow Joints	8	8	8
d.	Screws M4x6	48	48	48
e.	Center Support Bar	1	1	2
f.	Top hanging brackets	2	2	2
g.	Bottom brackets	2	2	2
h.	Wall Screws $\Phi 5 \times 50$	8	8	8
i.	Hollow Wall anchors	8	8	8
j.	Pull Hook	2	2	2
k.	White gloves	2	2	2

Frame Assembly

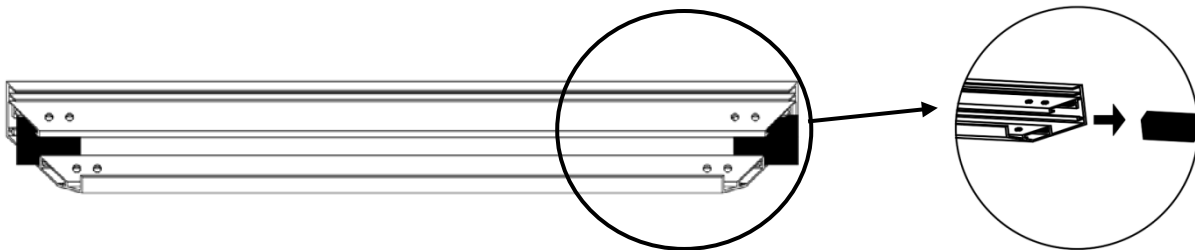
Step 1. Place the included EPE sponge sheet on a clean area where the screen will be assembled.

Step 2. Position the pieces of the frame on the EPE sponge sheet in the arrangement shown below.

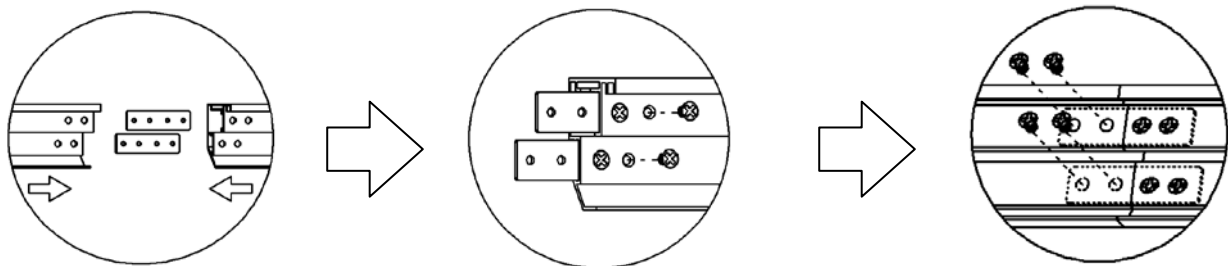


Step 3. Remove the foam in all frame ends before assembling the frame

Note: The springs were inserted into the grooves of the frame before shipment already, please make sure to avoid the springs slips out from the grooves, when you remove the foam.

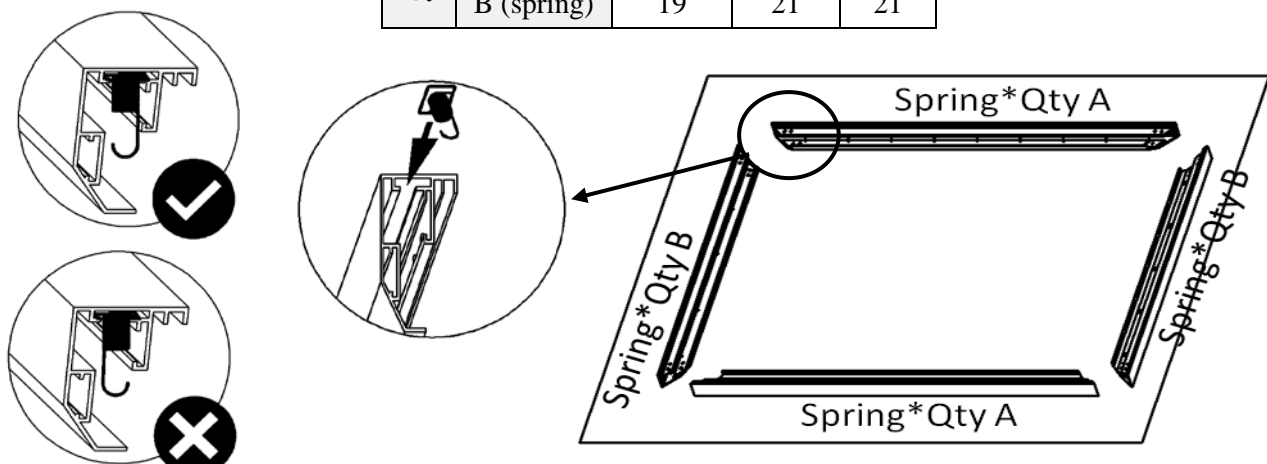


Step 4. Insert the center joint connectors into one-half of the horizontal frame and secure with the M4x6 screws (2 for both top and bottom). Once secure, connect the other half of the horizontal frame and fasten with the M4x6 screws (2 for both top and bottom).

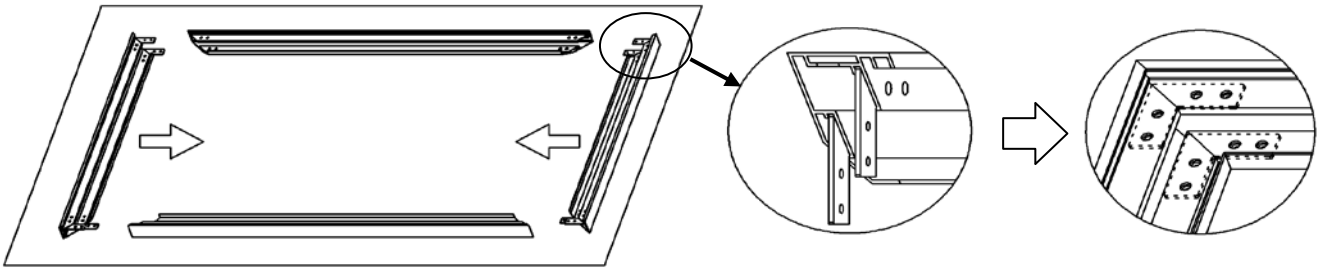


Step 5. Insert the springs into the grooves of the frame. The spring hooks should be facing the front side of the frame. For the correct amount of springs to place into the frame, please refer to the table listed below. **Note: The springs are pre-installed into the grooves of the frame.**

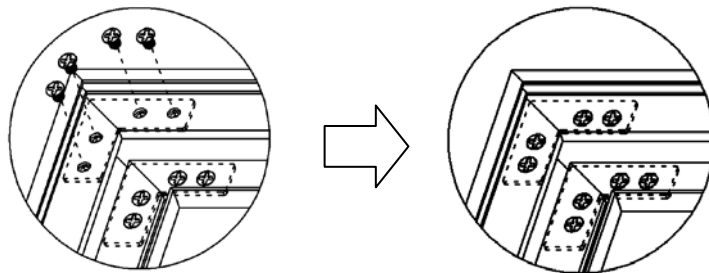
Screen Size		106H	122H	158C
Qty	A (spring)	31	35	47
	B (spring)	19	21	21



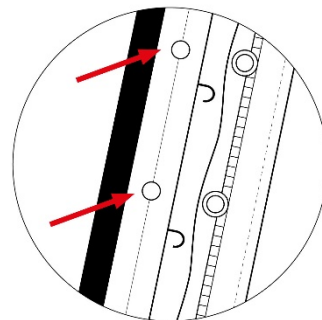
Step 6. Connect the elbow joints to top and bottom sections of the vertical frame. Once inserted, connect the vertical sections to the horizontal frame sections. Make sure all the holes are in alignment and the frames pieces are flush (no gaps). They should form perfect right angles.



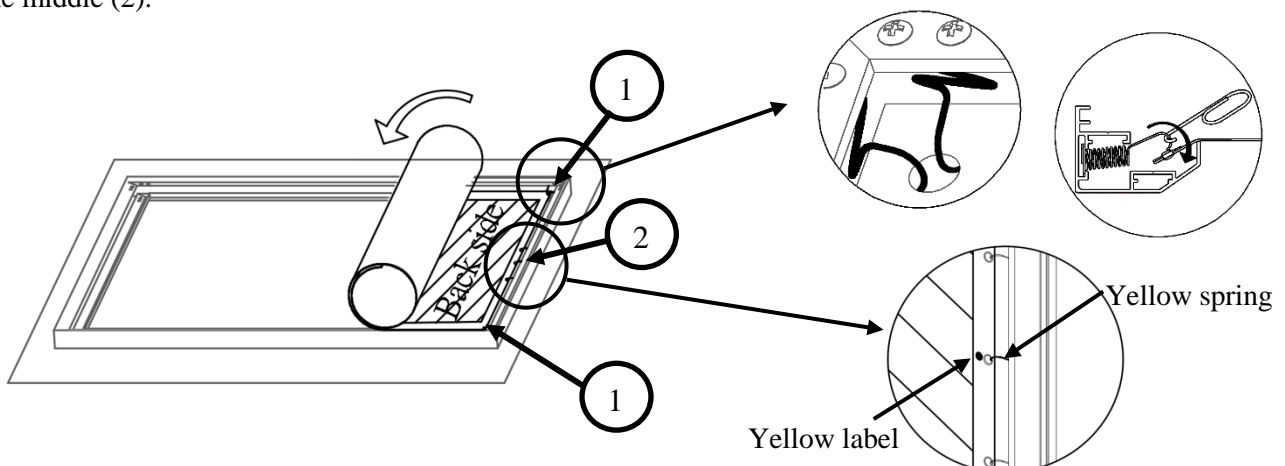
Step 7. Secure the elbow joints by fastening them with 4 M4x6 screws (4 at each corner). Do not tighten completely until all frame pieces are assembled correctly.



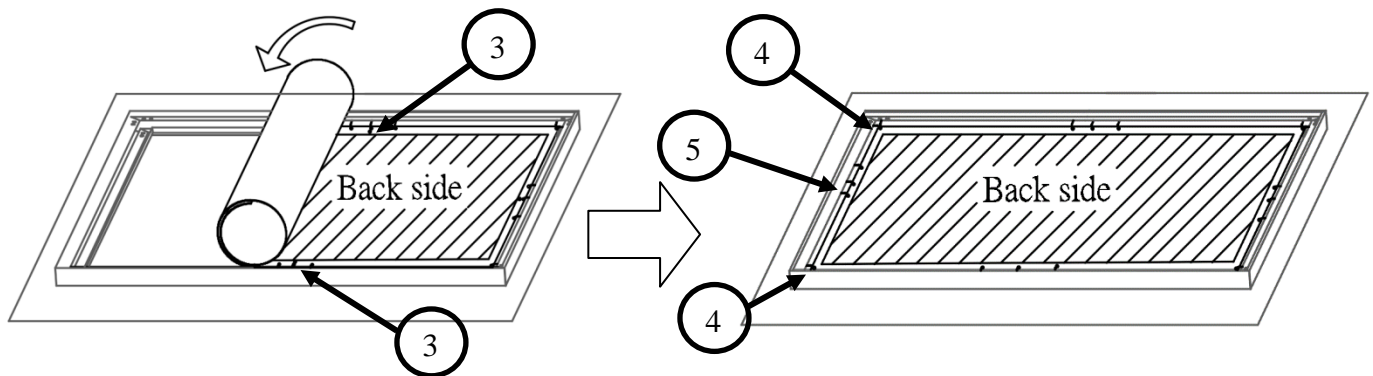
Step 8. Before getting started, position all the springs on the marked areas on the frames so they are near the grommet holes on the screen material. This step is very important as it will be a bit challenging to move the spring hooks once the material is completely unrolled on the frame.



Carefully unroll a small area of the material over the frame as shown below and secure the top and bottom corners by hooking them with two springs on the corner of the material (1), then hook and secure the spring in the middle (2).

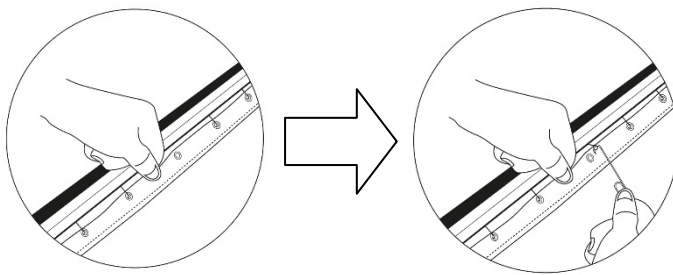
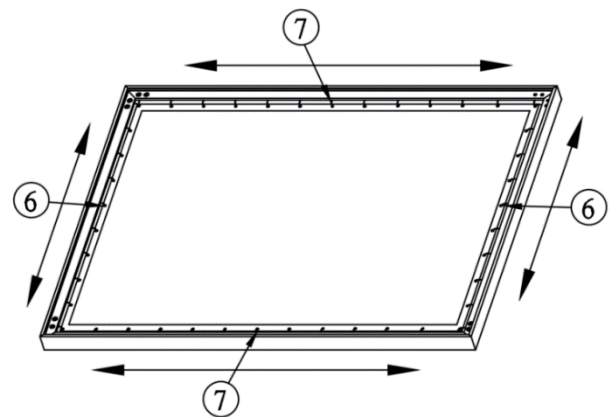


Carefully unroll the material to the middle area then hook the yellow spring on both the top and bottom (3). Continue unrolling the entire material to the other end, hook the springs in the corners (4) and hook the yellow spring in the middle (5).

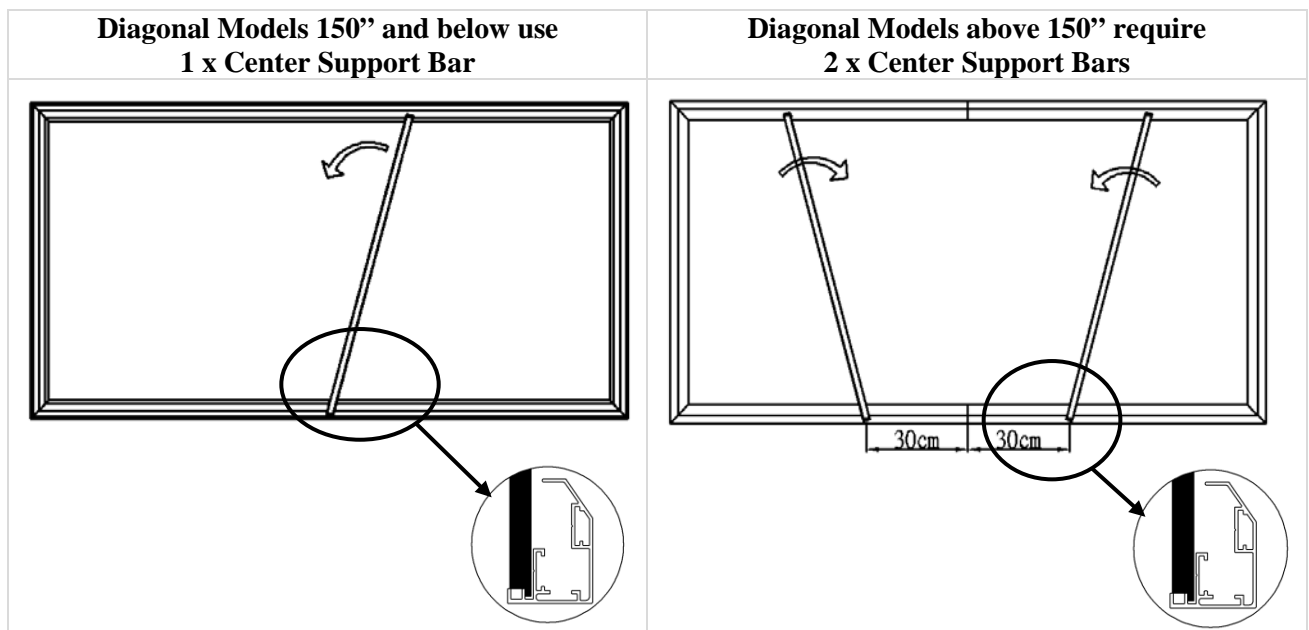


Step 9. Attach the vertical portions of the material, begin in the center, and move towards the corners (6). Lastly, connect the horizontal sections of the material by connecting the center of the material and make your way towards the corners (7).

Tip: Grab the material by the edge to hook the spring.



Step 10. Insert the Center Support Bar into the upper top groove on the back of the frame (not where the spring inserts) with the bottom end near the approximate center point of the frame. Rotate it in at an angle so that both ends of the bar are in alignment with the groove. (See illustrations below for details)



Notice to Installer:

Please use the following installation instructions to obtain superior optical performance from the Retro Reflective ALR (Ambient Light Rejecting) Dark Star 9 Screen.

The following guidelines should also be followed.

1. Minimum throw distance of 1.5 x the image width

- Avoid a *hotspot* effect
- **Light absorption** – The angle of incident light is too steep and will get absorbed by the optical lenses. This will create a very dim image and affect the overall picture quality.

2. **Ambient light** should not come from the same direction as the projector's light

Proper projector placement

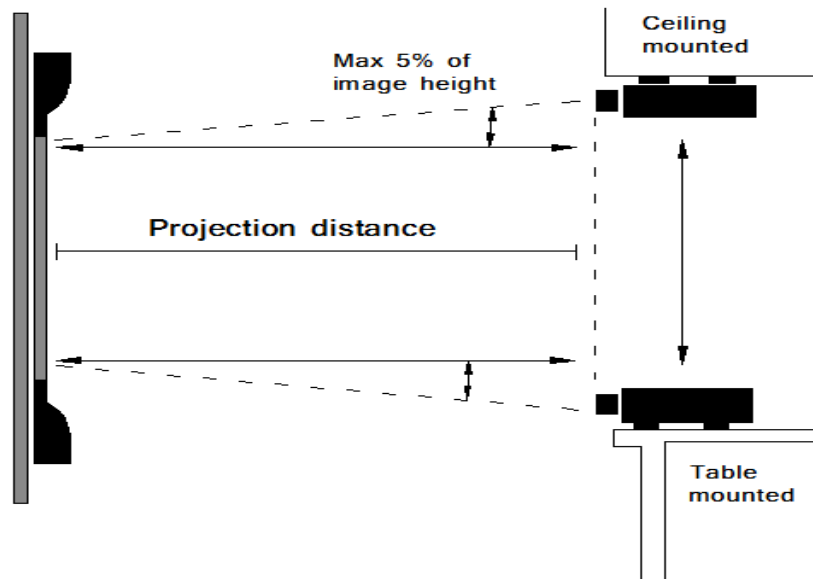
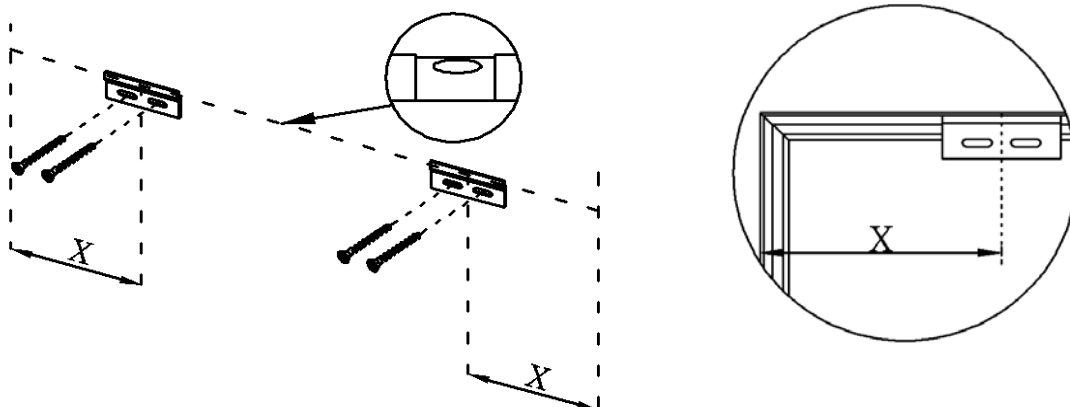


Image is not up to scale and is for illustrations purposes only.

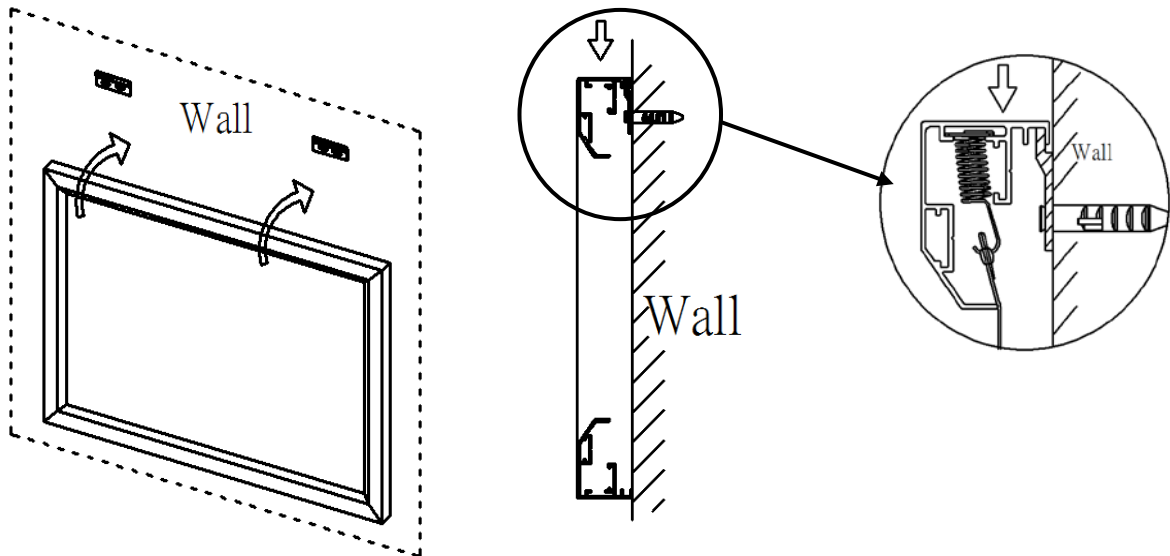
Note: Do not install the projector at an angle that is greater than 5° off the vertical axis from the screen. The ambient light filtration layer in the material is designed to absorb off-axis light rather than reflect it.

Installation

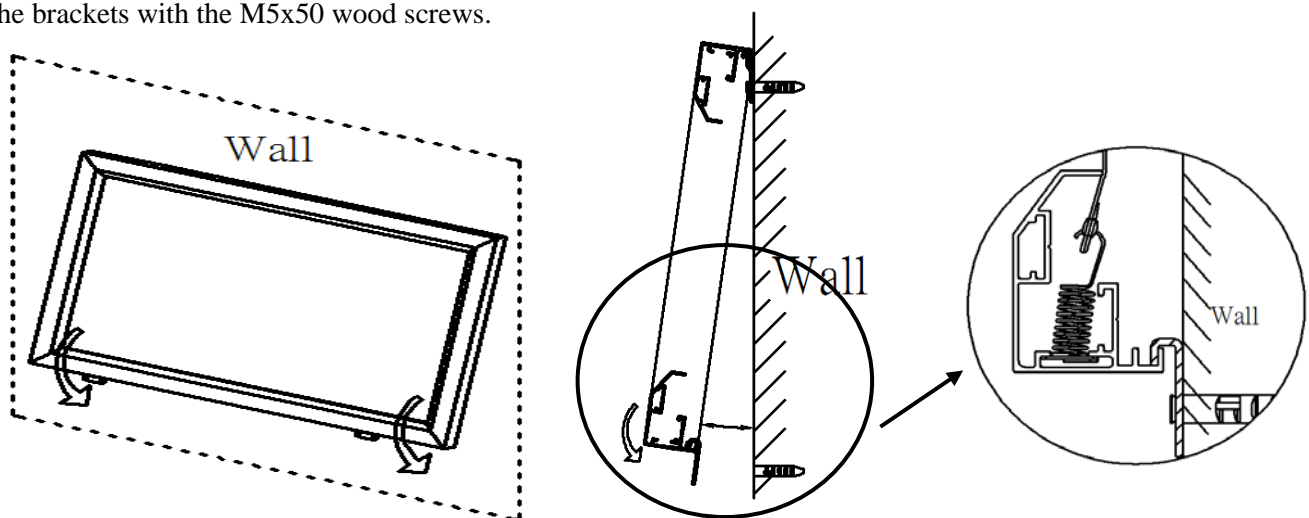
Step 11. Measure the overall length and height of the frame and drill holes for the top brackets. Line up the wall brackets with the drilled holes on the installation location and screw them in using a Phillips screwdriver. If not installing into a structural wood stud, use a hollow wall anchor then screw in the M5x50 wood screws with a screwdriver. Make sure the brackets are leveled.



Step 12. Position the fixed frame screen onto the top wall brackets as shown below and push down at the center of the top of the frame to secure.



Step 13. With the frame slightly tilted outward; connect the bottom brackets onto the bottom groove of the frame. Slowly return the screen to a normal upright position. Once the screen is flush to the wall, secure the brackets to the wall with a screw. If not installing into a structural wood stud, mark the sites where the hollow wall anchors will be placed using the same instructions above. With the wood anchor installed, repeat the process and fasten the brackets with the M5x50 wood screws.



CAUTION

Please follow these instructions carefully to ensure proper maintenance and safety of your Screen.

1. When hanging the screen up, please make sure that no other objects such as power switches, outlets, furniture, ladders, windows, etc. occupy the space designated for your Fixed-Frame screen.
2. Regardless if the screen is hung on or installed into the wall, make sure that the proper mounting anchors are used and that a strong and structurally sound surface appropriately supports the weight of the screen.
3. Frame parts are made of high quality velour-surfaced aluminum and should be handled with care.
4. When not in use, cover over the screen with a furniture sheet to protect it from dirt, grime, paint or any other impurities.
5. Spare Parts should be placed out of reach of small children in accordance with household safety guidelines.

For Technical Support or an Elite ProAV® contact in your area, visit
www.eliteproav.com