The Display Shield™

INSTALLATION MANUAL
Thank you for purchasing The Display Shield. Please read the following, before starting the installation process.

The Display Shield is designed to be used in conjunction with a TV wall mount, ceiling mount or any other mount using a VESA Standardized mounting pattern (sold separately). Upon successful installation, The Display Shield should be “sandwiched” between the back of the Display, and the mount.

You will need to remove the security screws with tool provided from the front panel to open The Display Shield.

Note: 19”-26” model includes ten (10) security screws
Note: 30”-46” model includes twelve (12) security screws
Note: 50”-55” model includes ten (16) security screws

Refer to this information only if using the horizontal Display Shield unit
Please be advised that the “divots” are only to be used as guides to help with horizontal leveling during installation on only the horizontal units. If using a vertical Display Shield unit please use provided template in installation. Please measure according to instructions. To locate your TV’s VESA hole patterns please refer to your TV box, TV manual or by doing an internet search for your specific TV.

On the 19” to 26” Display Shield (Horizontal) the VESA divots are 75X75, 100X100, and 200X200 - starting from inner set of divot lines to outer set of divot lines.
On the 30” to 46” Display Shield (Horizontal) the VESA divots are 100X100, 200X200, and 400X400 - starting from the inner set of divot lines.
On the 50” to 55” (up to 60”) Display Shield (Horizontal) the VESA divots are 100X100, 200X200, 400X400, and 600X400 - starting from the inner set of divot lines.

Do not drill the incorrect hole(s). I.E. If your TV’s VESA mounting pattern is 200X200 and you are using the 19” to 26” Display Shield you would drill your first hole in the very left divot line and when you drill your holes on the right side you should be on the far right divot line. If you are using the 75X75 VESA pattern you should drill your first hole on the left inner divot line and find the measurement on the inner right divot line before drilling a hole.

TOOLS NEEDED: Drill, 5/16, 7/16 or 9/16 drill bit (depends on mounting screws needed), Hardware from separately sold TV wall/ceiling mount, Foam Blocks (included), Phillips Head screw driver, Ruler or Measuring tape (preferably with millimeter measurements), Flashlight.

INCLUDED IN BOX: (1) The Display Shield, (2) Foam blocks for mounting, (1) Small black drawstring bag with (4) Small grommets, (4) medium grommets (4) Large grommets, (1) T25 Alan wrench, (1) T25 Driver tip
VESATM Mount Standards

What is VESA?

VESATM (Video Electronics Standards Association) is a professional organization made up of a group of video electronics industry professionals; their purpose is to review proposals and develop standards to promote uniformity in the video electronics industry. Established in 1989, VESA works to develop industry-wide interface standards for a large variety of products including Flat Panel TVs and monitors.

What are VESA Mount Standards?

VESATM has developed a set of standards for the manufacturing of flat screen televisions and PC monitors. Most manufacturers comply with this standard by adhering to an industry wide hole pattern on the back of their displays for mounting purposes. A typical VESA hole pattern for flat panel displays can be one of the following sizes:

- 75 mm x 75 mm (75 mm = 2.95 inches)
- 100 mm x 100 mm (100 mm = 3.94 inches)
- 200 mm x 200 mm (200 mm = 7.87 inches)
- 400 mm x 400 mm (400 mm = 15.7 inches)
- 600 mm x 400 mm (600 mm = 23.62 inches)

**MOUNTING INSTRUCTIONS FOR HORIZONTAL UNITS ONLY (SEE VERTICAL MOUNTING INSTRUCTIONS ON PAGE 5).**

1. Locate Horizontal Center line of TV.
   See Picture…

   ![Horizontal Center Line](image)

   Step 1

2. Measure from center line to top left mounting hole.
   See picture…

   ![Step 2](image)

3. Locate center horizontal line of The Display Shield.
   See picture…

   ![Step 3](image)
4. **Accuracy of measurements are highly important for step 4, 6 and 7**

   Measure up from center horizontal line on The Display Shield, the same distance measured from center horizontal line of TV in the correct divot line. (I.E. if you measured 5 inches from the center line of the TV to the top left mounting hole, measure 5 inches from the center horizontal line of The Display Shield to the correct divot in the correct VESA pattern for your TV/Mount). See picture

5. Drill hole with either a 5/16 bit if using 4mm screws or 7/16 bit if using 6mm screws, or 9/16 bit if using 8mm (screws marked as 4M, 6M or 8M on bag of mounting hardware or mount instructions provided with separately sold mount). (Hole will be bigger than screw to account for grommet being inserted to prevent water intrusion.)

6. Measure from the "CENTER" of drilled hole down by the distance in MM associated with the mounting hole measurements as found on TV box, in TV manual or by doing an internet search for your specific TV Model. I.E. if your TV VESA mount pattern is 200X200 than you will measure down 200MM from hole drilled in step 5. See picture

7. Drill holes on opposite side. I.E. If you drilled top left hole on the 5th divot down from the top, drill the top right hole on the correct divot line, in the 5th divot down, and repeat step 6. See picture

8. Install correct grommet into drilled holes. (Small grommet if using 4mm screw, medium grommet if using 6mm screws or large grommet if using 8mm screw)

9. Lay provided foam blocks on ground, preferably on carpet. Place the TV face down onto the foam blocks. *Position blocks under the outside edges/frame of TV (not screen). See picture

10. Install power cord and any HDMI/Coax Cable/Component cable needed, into the correct "port(s)" on the TV.

   **STOP**

   If installing the separately sold spacer kit, see installation instructions for the 2" spacer kit on page 7 before moving on
11. Place The Display Shield directly over the TV (and blocks). See picture

12. Locate the top left mounting hole of the TV by looking through the drilled hole in The Display Shield and slightly moving The Display Shield until all holes are aligned. Using a flashlight in this step is very helpful.

13. Align the TV mount bracket (sold separately) on the back of The Display Shield and install screw provided with the TV mount, through the mount, through The Display Shield and into the mounting holes on the TV. Tighten accordingly. (The screw may not screw in all the way, depending on the TV do not be alarmed. If you prefer, use the spacers provided with your TV mount hardware.)

14. Remove grommets from the bottom of The Display Shield (see picture). Pull all cords and wires through opening where you removed the grommets. If only using one opening for all cords and wires please reinstall grommet in unused hole. Cut lines in the grommets like picture below. (see picture). Reinstall grommets around cords.

15. Carefully flip the unit over and install all security screws using supplied tool.

17. Mount the TV, enclosed within The Display Shield as one unit, according to the TV mount instructions provided with your separately sold mount. Remove white protective covering and enjoy.
MOUNTING INSTRUCTIONS FOR VERTICAL DISPLAY SHIELD UNITS

1. Locate the center horizontal line of your display. See picture.

2. Place provided template on your TV or Display. Be sure that the center line of the template lines up with the center line of your TV or Display. Stand your display up, and use a level to insure line on template is level with your TV’s center horizontal line.

3. Punch holes in template where your mounting holes are in your TV or Display. See picture.

4. Place template on the back of the Display shield unit lining up the lines Top, Bottom, Left and right with the lines set in the Display Shield. See picture.

5. Drill holes with either a 5/16 bit if using 4mm screws or 7/16 bit if using 6mm screws, or 9/16 bit if using 8mm (screws marked as 4M, 6M or 8M on bag of mounting hardware or mount instructions provided with separately sold mount). (Hole will be bigger than screw to account for grommet being inserted to prevent water intrusion.)

6. Install correct grommet into drilled holes. (Small grommet if using 4mm screw, medium grommet if using a 6mm screw or large grommet if using 8mm screw)

7. Lay provided foam blocks on ground, preferably on carpet. Place the TV face down onto the foam blocks. *Position blocks under the outside edges/frame of TV (not screen). See picture

8. Install power cord and any HDMI/Coax Cable/Component cable needed, into the correct “port(s)” on the TV.

If installing the separately sold spacer kit, see installation instructions for the 2” spacer kit on page 7 before moving on to step 9.
9. Place The Display Shield directly over the TV (and blocks). See picture.

10. Locate the top left mounting hole of the TV by looking through the drilled hole in The Display Shield and slightly moving The Display Shield until all holes are aligned. Using a flashlight in this step is very helpful.

11. Align the TV mount bracket (sold separately) on the back of The Display Shield and install screw provided with the TV mount, through the mount, through The Display Shield and into the mounting holes on the TV. Tighten accordingly. (The screw may not screw in all the way, depending on the TV-do not be alarmed. If you prefer, use the spacers provided with your TV mount hardware.)

12. Remove grommets from the bottom of The Display Shield (see picture). Pull all cords and wires through opening where you removed the grommets. If only using one opening for all cords and wires please reinstall grommet in unused hole. Cut lines in the grommets like picture below. (see picture) . Reinstall grommets around cords.

13. Carefully flip the unit over and install all security screws using supplied tool.

14. Mount the TV, enclosed within The Display Shield as one unit, according to the TV mount instructions provided with your separately sold mount. Remove white protective covering and enjoy.

Helpful Tips:

- After mounting unit, it may be necessary when opening and closing to continue to align threaded screws in to front panel until unit completely settles which can take up to 2 to 4 weeks depending on climate. Please be advised that this “alignment” system is integral to the structural rigidity and water tight sealing of The Display Shield.

- If back of The Display Shield is drilled incorrectly, it is essential that the incorrect hole(s) be repaired. As a courtesy to our customers, The Display Shield will provide rubber plugs to seal the holes- Please call our customer service department.

- Use only approved cleaning products (sold on our website) as regular household products may cause streaking and reduction in optical clarity.
2” SPACER KIT INSTALLATION INSTRUCTIONS

INCLUDED IN KIT: (2) Slotted Styrofoam blocks, (4) 4mmX80mm bolts, (4) 5mmX80mm bolts, (4) 6mmX80mm bolts, (4) 8mmX80mm bolts. Note: 50 - 60” Units include (4) four slotted styrofoam blocks.

Please note:
If using the 19” to 26” Display Shield your spacers will need to be placed on the back of the TV lengthwise from side to side (horizontal)

If using the 30” to 42” Display Shield your spacers will need to be placed on the back of the TV lengthwise going up and down (vertical)

INSTRUCTIONS:

1. Prior to doing step 11 in The Display Shield horizontal or step 9 in the Display Shield Vertical mounting instructions, please install spacers.

2. While TV is face down on mounting blocks, remove adhesive backing on spacers and place spacers centered over threaded mounting holes in your TV. You should be able to see the mounting holes through the cutout in spacer when done.

3. Verify which size bolt fits your TV by screwing one in and removing it prior to continuing.

4. Go back to step 11 (for horizontal) or step 9 (for Vertical) of The Display Shield mounting instructions and continue as instructed. Use bolts included with spacer kit when doing step 13 (for horizontal) or step 11 (for vertical) of The Display Shield mounting instructions.
CLEANING INSTRUCTIONS

Polycarbonate:
When polycarbonate sheet is first installed, the glazing compound and masking paper adhesive can be easily removed by applying naphtha (VMandP) or kerosene with a soft cloth, followed immediately with a thorough soap and water cleaning. DO NOT USE GASOLINE. Adherence to regular and proper cleaning procedures is recommended to preserve appearance.

Washing to Minimize Scratching:
Wash polycarbonate sheet with a mild soap or detergent (such as 409 cleaner) and lukewarm water, using a clean sponge or a soft cloth. Rinse well with clean water. Dry thoroughly with a chamois or moist cellulose sponge to prevent water spots. Do not scrub or use brushes or abrasives on these products; splashes, grease and smeared glazing compounds can be removed easily before drying by rubbing lightly with a good grade of naphtha or isopropyl alcohol. Follow the alcohol rub with a mild detergent wash with warm water and end with a thorough rinsing with clean water.

Minimize Hairline Scratches:
Scratches and minor abrasions can be minimized by using a mild automobile polish. Three such products that tend to polish and fill scratches are Johnson Paste Wax, Novus Plastic Polish #1 and #2, Novus, Inc., Minneapolis, MN and Mirror Glaze plastic polish (MG M10) Mirror Bright Polish Co., Pasadena, CA. It is suggested that a test be made on a sample of the polycarbonate sheet with the product selected and that the polish manufacturer’s instructions be followed.

• DO NOT use abrasive or highly alkaline cleaners on the polycarbonate.
• DO NOT scrape the polycarbonate sheet with squeegees, razor blades or other sharp instruments.
• DO NOT ever use benzene, gasoline, acetone or carbon tetrachloride on the polycarbonate sheets.
• DO NOT clean polycarbonate sheets in hot sun or on very hot days.

Compatible Cleaners for Polycarbonate Plastic:
The following cleaning agents have been found to be compatible with polycarbonate. The manufacturer’s instructions should be followed:

• The Display Shield recommended cleaners (found on our website at www.thedisplayshield.com)
• Formula 409™ (Clorox Co.) Top Job™ (Proctor and Gamble)
• VM and P grade Naphtha Joy™ (Proctor and Gamble)
• Windex w/Ammonia D™ (Drackett Products)
• Palmolive Liquid™ (Colgate Palmolive)

Graffiti Removal:

• Butyl Cellosolve (For removal of paints, marking pens, lipstick, etc.)
• The use of masking tape, adhesive tape or lint removal tool s work well for lifting off old weathered paints.
• To remove labels, stickers, etc., the use of kerosene, naphtha, or petroleum spirits is generally effective. When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the
• Adhesive and promote removal. GASOLINE SHOULD NOT BE USED.

Job Site Precautions:
New construction and renovations frequently require that the glazing and surrounding sash and wall finish be cleaned of any excess mortar, paint, sealant, primers or other construction compounds. Only recommended cleaners should be used to clean the polycarbonate sheets. Contact with harsh solvents such as methyl ethyl ketone (MEK) or muriatic acid can result in surface degradation and possible crazing of the polycarbonate.
ENERGY FILM APPLICATION INSTRUCTIONS:

What You Will Need: Squeegee (included), Window Cleaner, Liquid Soap, Spray Bottle, Soft Cloth

Important: Visual clarity will significantly improve over 5 to 10 days as the water used in the application process evaporates.

The Display Shield Energy film consists of two layers of film laminated together. One layer is the Energy Film and the second layer is a thinner, more rigid polyester film. The polyester layer does not help insulate your polycarbonites. We do recommend removing the polyester layer to reduce glare. Only the Energy Film side of the film will adhere to the polycarbonate. When in doubt place a corner of the film against dry polycarbonate and drag it. The side that is tackier is the Energy Film side which goes against the polycarbonate. This film is supposed to be installed on the outside of the front polycarbonate panel.

1. Clean Polycarbonate Front Panel. Using soap and water, thoroughly remove any dirt or debris from the polycarbonate. A successful application will depend on a completely clean glass surface. It is best to use a squeegee rather than a cloth or paper towel to dry the window to minimize fibers on the polycarbonate.

2. Wet Front Panel. Mix a couple of drops of liquid soap in a spray bottle with cold water and thoroughly wet the Front of Panel (outside part of polycarbonate). Applying a generous amount of the water/soap mixture will allow the film to slide into the proper position with greater ease.

3. Apply Film. Place film on the polycarbonate. Do not apply film to the polycarbonate when it is hot. If the polycarbonate is too warm the water on the polycarbonate will evaporate too quickly for a good bond. Position film onto wet exterior of polycarbonate. Film should be easy to slide into place. If not, peel back and add more water/soap mixture.

4. Spray Film. When film is in place, wet the exposed side of the film. This step is necessary to allow the squeegee to glide over the film and remove all air bubbles and water.

5. Squeegee. Carefully squeegee the entire surface to remove the air bubbles and excess water. Squeegee from the center of the film and work your way to the edges. You may reapply water to the surface of the film and squeegee again to remove more air bubbles and water. When installing larger sizes, two people may be required to position on the polycarbonate without creasing the film.

Removal:
Energy Film does not use adhesives and is easily removed. Slowly peel away from the polycarbonate starting from the corner.

Helpful Hints:
Visual clarity will significantly improve over 5 to 10 days as the water used in the application process evaporates. After application, the water between the film and glass may come together to form spots. Over time, the spots will disappear, or you may apply water on the surface of the film and attempt to squeegee the water spots to the side of the film.
FAN KIT INSTALLATION INSTRUCTIONS

INCLUDED IN KIT: Fan, Fan cord, Fan filter kit, (4) #8-32 1 ¾ inch screws, (4) Hex bolts.

TOOLS NEEDED: Drill, 3/16 Drill bit or something equivalent, 3inch hole saw for the 19-26inch fan kit or 3 ½ inch hole saw for the 30-42inch and 50-60inch fan kit, Phillips head screwdriver. You may use other tools to drill out the 3 or 3 ½ inch hole at your own risk.

The Display Shield comes standard with 1 fan in the 19-26" and 30-46" units

INSTRUCTIONS:

1. If installing additional fans, please drill hole with hole saw to the left or right of existing fan in the center of the unit.

2. Pull filter grate and filter housing apart and place over hole drilled in step 1. Drill all 4 holes out using grate as template.

3. Install screws through filter grate, through The Display Shield and through both holes of the fan and install hex bolts.

4. Install filter housing along with foam insert over filter grate. Install fan power cord to fan.
HEATER INSTALLATION INSTRUCTION

1. Install power cord to heater and press On/Off button in. Note: Heater will only activate at temperatures below 41°F/5°C.

2. Clean the area where you are installing heater with alcohol or other household cleaner to remove any dirt or oils. Remove white backing on the Velcro coins.

3. Install heater with fan port facing upward and heater pointed towards side of The Display Shield in designated install zones on diagram.

4. Make sure thermostat portion that is attached to the power cord is inside The Display Shield. This is how the unit will determine temperature inside of the enclosure.

Please Note:
In extremely cold environments we recommend blocking side vents to hold in heat. Please be sure to remove anything blocking side vents during warmer conditions. Keep heater as far as possible from sidewall. Keep all power/component cords away from heating element. The thermostat will turn on heater at 41°F/5°C and turn off when it reaches 47°F/8.3°C.
THE DISPLAY SHIELD LIMITED PRODUCT WARRANTY

This limited warranty is provided by on for The Protective Enclosures Company Display Shield products identified by the purchaser’s registrar on as indicated below, and there are no other warranties, expressed or implied, except as required by law, including warranties of merchantability and fitness for a specific purpose, that are provided for herein, however all such implied warranties, if any, are limited to the duration of this specific limited product warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

The Protective Enclosures Company shall not be liable, under any circumstances, for incidental, indirect, special, and consequential or multiple damages as a result of the sale or use of this Display Shield product. Some states/countries do not allow the exclusion or limitation on of incidental or consequently damages, so the above limited on or exclusion may not apply to you.

Display Shield Limited Product Warranty:

• 5 Year Limited Warranty on high molecular weight plastic housing against cracking and breaking with normal consumer use.
• 2 Year Limited Warranty on optically clear polycarbonate front cover/panel against cracking or breaking with normal consumer use, this warranty does not cover any scratches or damaged caused by abuse or normal use, it only covers against cracking or breaking of the polycarbonate front cover.
• 1 year Limited Warranty on product failure or quality of workmanship and on all other components against any manufactures defects.

This is a limited warranty, subject to the conditions, limitations and exclusions identified here. The Protective Enclosures Company warrants to the original purchaser of the registered or identified product for a period of time listed above from the date of purchase that the product shall be free of defects in design, material and workmanship and subject to the limitations set forth below. The Protective Enclosures Company will repair or replace, at its discretion, any defective unit. The Protective Enclosures Company hereby warrants to the original retail purchaser of this product, should this product or any part thereof, under normal use and conditions, prove to be defective in material or workmanship within one (1) year from date of original purchase, such defect(s) will be repaired or replaced with reconditioned product (The Protective Enclosures Company's option on) without charge for parts and repair labor. The purchaser must return the product to The Protective Enclosures Company, return receipt requested or by other means that confirms delivery and The Protective Enclosures Company shall make the said repairs or replacement within 60 days of receipt. In some instances, the product may have been discontinued and cannot be replaced, or repaired. In that instance, The Protective Enclosures Company shall, at its discretion, attempt to replace the product with a substantially similar product in a current model or design or pay the purchaser a sum for the then fair market value of the price, considering the amount of depreciation since sale, and the use of the product. This Limited Warranty is the original retail purchaser's sole remedy for any and all such defect(s).

Conditions and Limitations:
Proof of purchase is required (i.e. the sales receipt of other proof of payment). Damage caused by accidents, abuse, misuse or modification on of the product will render this warranty null and void. This warranty is applicable only to the original purchaser and is not assignable or transferable. To obtain repairs or replacement under the terms of this warranty, please contact The Protective Enclosures Company at 1-800-331-2628 or visit www.thetvshield.com. You will need to provide proof of purchase (dated receipt showing where purchased) and product part number in order to receive warranty service. The purchaser is required to send the product back to The Protective Enclosures Company or to a designated repair center and the purchaser is responsible for all charges for shipping and handling.

This Limited Warranty does NOT cover:
Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, improper installation, lack of reasonable care, unauthorized repair or service, or if the model or serial number has been altered, tampered with, defaced or removed.

1. Initial installation or the removal and re-installation of product.
2. Cosmetic damage, damage that occurs in shipment, act of God or natural disaster.
3. Missing accessories or components.
4. Products used for any and all industrial purposes.
THE EXTENT OF THE PROTECTIVE ENCLOSURES COMPANY’S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT AS PROVIDED ABOVE AND, IN NO EVENT SHALL THE PROTECTIVE ENCLOSURES COMPANY LIABILITY EXCEED THE PURCHASE PRICE PAID BY THE ORIGINAL RETAIL PURCHASER FOR THE PRODUCT.

Any questions of Notifications regarding this warranty should be addressed to:
Warranty Department The Protective Enclosures Company
385 CenterPointe Circle, Ste. # 1319, Altamonte Springs, FL 32701.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES OR LIABILITIES. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. IN NO EVENT SHALL THE PROTECTIVE ENCLOSURES COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY EXPRESS OR IMPLIED WHATSOEVER.

No person or representative is authorized to assume for The Protective Enclosures Company any liability other than expressed herein in connection with the sale of this product. Some jurisdictions do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from jurisdiction to jurisdiction.

LIMITED WARRANTY
The Protective Enclosures Company – Display Shield – Limited Warranty – Valid in the United States and Canada
INDEX

VESA Mount Standards 02
  What is VESA
  What are VESA Mount Standards?
MOUNTING INSTRUCTIONS FOR HORIZONTAL UNITS ONLY 02
MOUNTING INSTRUCTIONS FOR VERTICAL DISPLAY SHIELD UNITS 05
2” SPACER KIT INSTALLATION INSTRUCTIONS 07
CLEANING INSTRUCTIONS 08
  Polycarbonate
  Washing to Minimize Scratching
  Minimize Hairline Scratches
  Compatible Cleaners for Polycarbonate Plastic
  Graffiti Removal
  Job Site Precautions
ENERGY FILM APPLICATION INSTRUCTIONS 09
FAN KIT INSTALLATION INSTRUCTIONS 10
HEATER INSTALLATION INSTRUCTION 11
THE DISPLAY SHIELD LIMITED PRODUCT WARRANTY 12

IMPORTANT PRODUCT INFORMATION

Serial Number: __________________________________________

Warranty Date: __________________________________________