Thank you for choosing InvisiShade!

Please read and understand all instructions before installation. If you have any questions, please don't hesitate to contact us at info@invisishade.com.

Improper installation can cause a fire or shock hazard. While most do-it-yourselfers find installation simple and straight-forward, we highly recommend you consult a licensed electrician for installation.

Tools/materials needed:

-Window scraper/blade
-Rubber roller
-Small hand squeegee
-Nitrile gloves (or other non-powdered, lint-free gloves)
-Cleaning cloths
-Liquid glass polish
-Isopropyl alcohol
-22-gauge or larger electrical cable
-Cable strippers
-Soldering iron w/solder
-Clear, double-sided tape
-Silicone sealant
-Trim of your choice (can be tape, vinyl, wood, or anything nonconductive)

Please note:

- Do NOT use water or any other liquids for installation other than for cleaning beforehand. Installation surface must be clean and dry.
-The electrical contact strip and leads should NEVER come into contact with any metal frame, trim, or surrounding objects. The finished trim should be nonconductive. Always ensure the completed project is trimmed with nonconductive materials and that all exposed wires, leads, etc. are covered sufficiently to eliminate the possibility of electrical shock or fire. We are not responsible for improper installations and highly recommend professional installation.

The following steps should be done in a clean, dust-free environment for best results.

STEP 1

Unbox the film and place it on a clean, dry surface free of dust and other contaminants.

STEP 2

Identify the side with the adhesive (the side that will go against the glass). Make sure this side is facing up. Do not remove the protective liner until instructed to do so.

STEP 3

Spray the glass with the liquid glass polish and use the window scraper/blade to remove any dust or blemishes on the glass. Repeat until satisfied the glass is completely smooth. Wipe with a soft, lint-free cloth.

STEP 4

Using a fresh, soft, lint-free cloth, wipe the glass with isopropyl alcohol. Let it evaporate until it is completely dry.

STEP 5

Wipe the protective liner (that protects the adhesive on the side already facing up) and ensure it is free from dust or other contaminants.

STEP 6

Peel back the first 2-3" of the protective liner from the electrical contact side.

STEP 7

Align the electrical contact side of the switchable film with the top edge of the glass. Run your finger along the electrical contact side while pressing firmly on the film. The exposed adhesive will hold the film in position. Gently reposition if necessary.

STEP 8

Slowly pull away the protective liner and let the film adhere to the glass under its own weight. Use the roller to gently press on the film and adhere it to the glass as you continue to slowly pull away the liner. The roller should be used in a side-to-side motion, dispersing and removing any air bubbles that may form. If you miss an air bubble, carefully lift the film and let it re-adhere to the glass under its own weight. Repeat the process until the entire film adheres to the glass and the installation is free of bubbles.

STEP 9

Use the small squeegee to work and remove any trapped air bubbles around the edges of the film. The edges may appear to be lifting. This is normal, and the edges will relax down upon removal of the remaining protective liner.

STEP 10

Once the film is installed to your satisfaction, you can begin wiring. Carefully solder the electrical cable to the mesh contacts. Once it is safe to do so, check the operation of the film by connecting its wires to a switch and fused power supply. **A GFCI outlet or breaker is required for all installations near water or heavy condensation.** (110VAC)

STEP 11
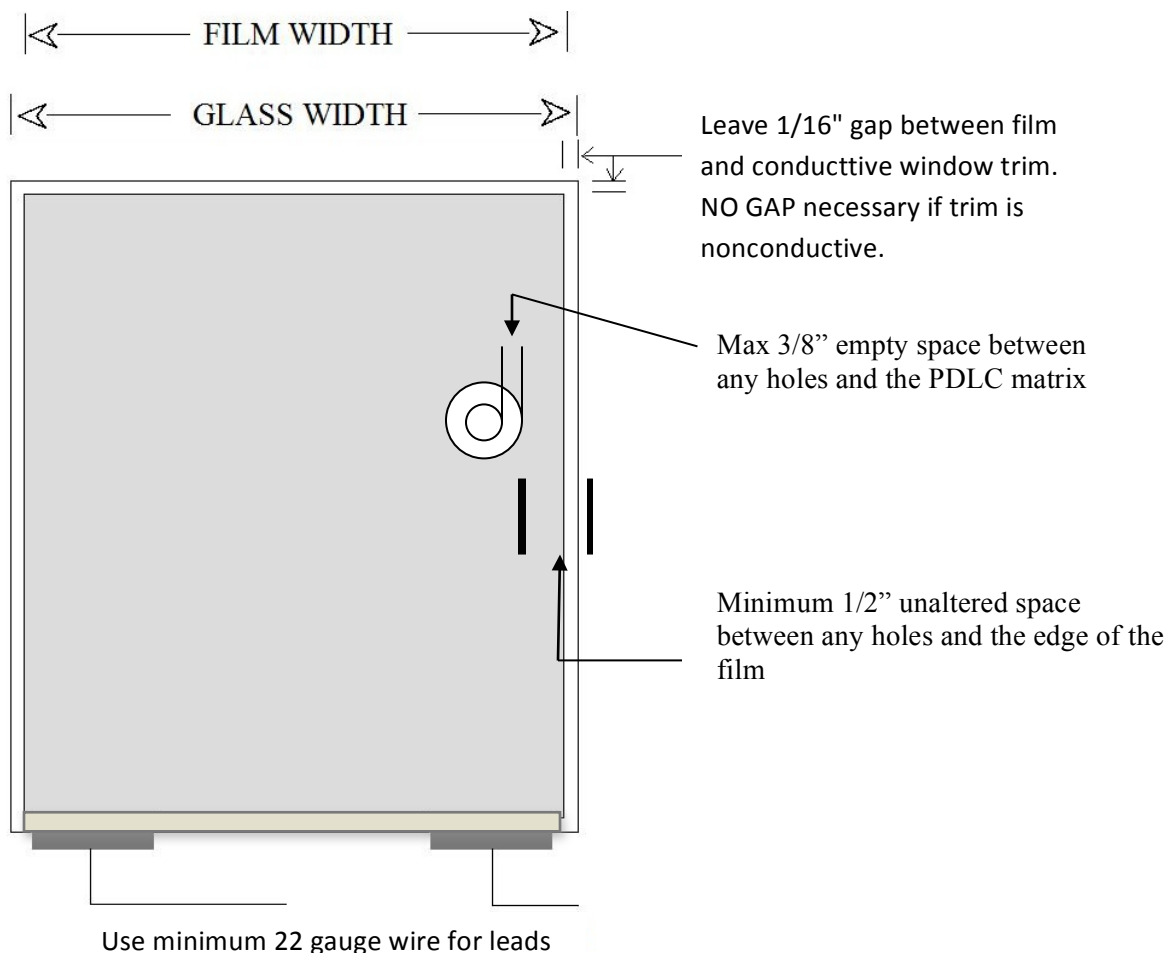
Remove the protective liner.

STEP 12

Run clear double-sided tape along the electrical contact side to hold your electrical cables in place while you prepare the surrounding trim.

STEP 13

Use non-acid-based silicone along the electrical contact edge to hold your trim in place. The trim should be plastic, wood, or a non-conductive material of your choice. If you need to use metal trim, consult a licensed electrician as special grounding must be installed.

STEP 14

Once all trim is in place, test operation of film to make sure no wiring has come loose. Check to make sure there is no exposed metal that could cause shock or fire.
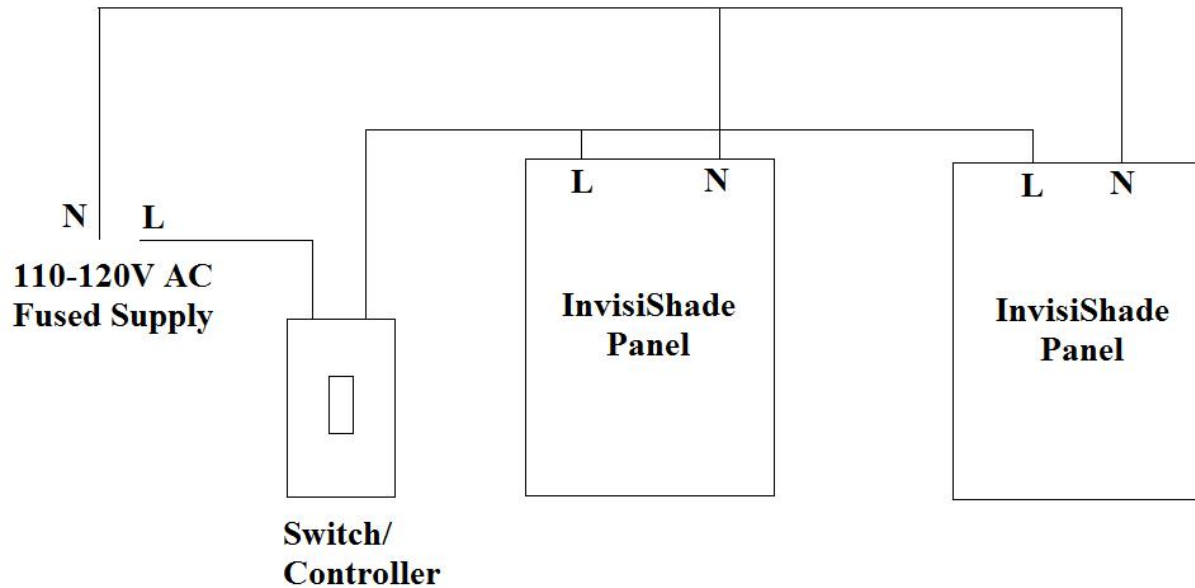
FILM WIDTH

GLASS WIDTH

Leave 1/16" gap between film and conducttive window trim. NO GAP necessary if trim is nonconductive.

Max 3/8" empty space between any holes and the PDLC matrix

Minimum 1/2" unaltered space between any holes and the edge of the film

Use minimum 22 gauge wire for leads

Please note:

1. Leave a minimum 1/16" gap between the film and the edge of the glass on every side if the window trim is conductive (**no gap necessary if trim is nonconductive**). Gap is to be covered with nonconductive trim or tape if full privacy is desired.
2. The bus bar (copper strip with the electrodes) is approximately 1/4" wide. It can be installed on any edge.
3. The edge where the electrodes are placed must be covered by 3/4" of nonconductive tape or trim under the electrodes.
4. If you must make a hole in the film, be sure to leave a minimum 1/2" of unaltered film between the hole and the edge of the film.
5. Max. 3/8" empty space between hole and PDLC matrix.

Standard Wiring Diagram

*A GFCI outlet or breaker is highly recommended for all installations and is required for all installations near water or heavy condensation.

Please note:

1. Film pieces can be mounted side-by-side and touching.
2. Wire extensions must be 22 gauge minimum with a max length of 6'. Longer lengths will need thicker gauge. Consult a licensed electrician for proper installation.
3. Seal all edges with neutral cure silicone to prevent moisture infiltration. Failure to do so will void the warranty.

Again, if you have any questions whatsoever, please don't hesitate to contact us at info@invisishade.com.

We appreciate your business and hope you enjoy your InvisiShade!