

*SmartScreen Motorized
5 ½" and 7" Housing
Comprehensive Instructions*



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Recommendations & Resources

1. Read these instructions before first installation.
2. Bookmark these instructions and print copies to have on hand.

Technical info

www.wizardscreens.com/technical in “SmartScreen Motorized” table

3. Learn about the **Somfy Maestria 500 motor**

Quick guide: [Maestria Quick Visual Guide 10-2018.pdf \(somfy.com\)](http://www.somfy.com/maestria-quick-visual-guide-10-2018.pdf)

Video: [Maestria Quick Guide - Manual Limit Adjustment](#)

Training Portal: https://www.somfy.com/users/sign_up

4. Call **1-888-949-3667**
 - a. to schedule an installation training session if deemed necessary
 - b. if problems arise during installation
5. Wizard Ordering Portal
<https://portal.wizardscreens.com/>

Preliminary Planning

Min width = 3'

Max width = 30' (25' for Vinyl)

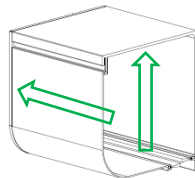
Max height = 23' (16' for Vinyl)

1) Determine the installation type

a) IUH (Inside Under Header)

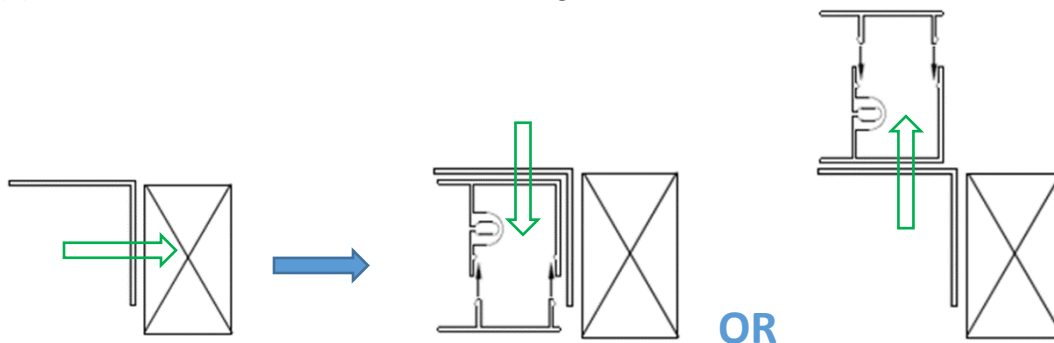
i) Housing is mounted **inside** the opening, **under** the **header**.

- (1) The housing can be attached through the top into the header and/or through the end caps into the jamb.



ii) Tracks are mounted inside the opening between the jambs.

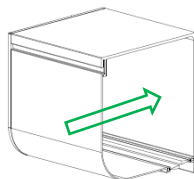
- (1) 2" x 2" angle accommodates installation of the tracks within the opening.
- (2) The 2" x 2" angle runs from the bottom of the housing to where the slide bar will stop at the lowest point, or the full length of the track.
- (3) The angle is attached to the jamb on either side of the opening.
- (4) The track is then fastened to the 2" x 2" angle.



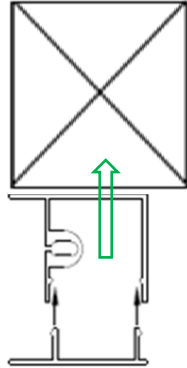
b) OAH (Outside Above Header) or Standard Face Mount

i) Housing is mounted to the header face surface.

- (1) The housing can be attached through the back of the housing into the header.



- ii) Tracks are fastened to the face of the jamb/post.



***NOTE:** A combination of the mounting methods can be used if installer sees fit.

- 2) Determine what material the unit will be fastened to.
 - a) Different surfaces require certain fasteners.
 - b) When fastening to a steel (or other metal) structure, avoid including welds in measurement. If you must include, shims may be necessary.

- 3) Sizing Considerations (determined after measuring)

Roll tube size	Housing size	Motor size	Dimensional thresholds of opening	
			Width	Height
4"	5 ½"	Somfy 525	Less than 22'	and less than 12'
5"	7"	Somfy 550	22' or greater	and/or 12' or greater

For more details, see step 5 "ORDERING PROCESS"

- 4) Additional considerations
 - a) Humps or dips in the floor cannot be accommodated.
 - b) Units wider than 250" and all units with clear vinyl screen will require the double idler system rather than the standard pivot.
 - c) Neither the pivot nor the double idler system will affect the dimensions of the unit.

Measurements

Min width = 3'

Max width = 30' (25' for Vinyl)

Max height = 23' (16' for Vinyl)

- 1) Tools required:
 - a) Pencil or marker
 - b) Tape measure
 - c) 2-way line laser
 Optional:
 - d) Laser distance measure

- 2) Determine unit dimensions and establish plumb marks.

*****Consider that rough framing is almost never perfectly plumb, level, and square. The installed motorized system must maintain these three attributes for a screen to operate well.*****

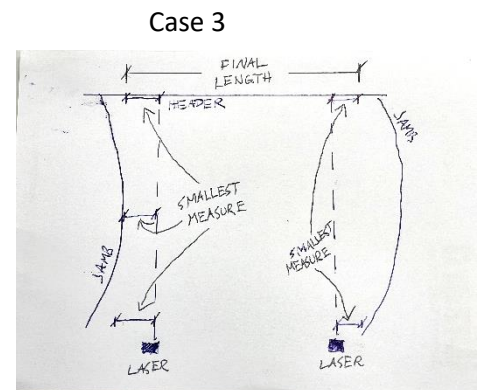
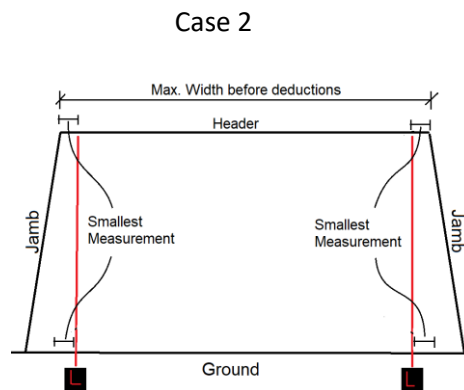
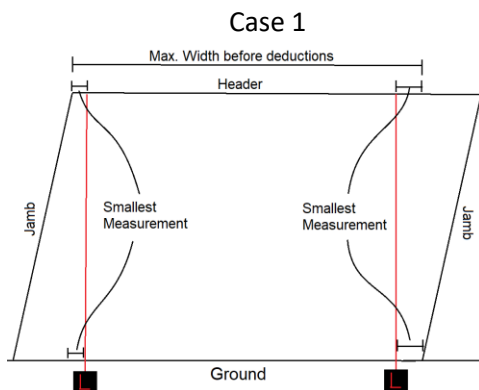
***The following measuring methods are the *most accurate* methods that leaves the least room for error. Use any other methods at your own discretion.**

Measurement method for IUH (Inside Under Header)

ia) Width

- (1) Turn on the 2-way laser **vertical function** and set an arbitrary distance from the jamb (e.g., 12"). It should be fairly square if using a line laser.
- (2) Measure multiple points along the height from the **laser to the jamb** and record the **smallest measurement**.

***These examples are exaggerated for illustration purposes.**



- (3) At the top and bottom, establish marks with **smallest measurement** from plumb laser line.

- (4) Repeat on other side.
- (5) Measure between the marks (top and bottom measurements should be identical. Just use bottom measurement).
- (6) **Subtract 3/8"** (to accommodate the 2x2 angles and some extra room).
- (7) Record this **final width dimension**.

OR

ib) Width 2nd Option

- (1) Set the vertical laser on the part of the post that is most **inwards** towards center of opening.
- (2) Mark on ground and header at the laser.
- (3) Follow above steps (5) – (7).

ii) Height

- (1) Measure from *bottom of header to the ground* at multiple locations and record the **largest measurement**.
- (2) Record this **final order height**.

Measurement method for OAH (Over Above Header)

WIDTH OPTIONS

ia) Width 1st Option

- (1) Turn on the 2-way laser **vertical function** and set an arbitrary distance from the jamb (e.g., 12"). It should be fairly square if using a line laser.
- (2) Measure multiple points along the height from the *laser to the jamb* and record the **largest measurement**.
- (3) At the top and bottom, establish marks with the **largest measurement** from vertical laser line.
- (4) Repeat on the other side.
- (5) Measure between the marks (top and bottom measurements should be identical. Just use measurement at bottom).
- (6) **Add 5"** (a little wider than both tracks together).
- (7) Record this **final order width**.

OR

ib) Width 2nd Option

- (1) Set the vertical laser on the part of the jamb that is most **outwards** away from center of opening.
- (2) Mark on ground and header at the laser.
- (3) Follow above steps (5) – (7).

HEIGHT OPTIONS

ii a) Height 1st Option

- (1) Measure from *bottom of header to the ground* at multiple locations and record the **largest measurement**.
- (2) Add the following
 - (i) **5 ½"** or **7"** (height of housing)
 - (ii) **4"** (height of slide bar and seal)
- (3) Record this **final order height**.

*If the header is not high enough to hide all components:

ii b) Height 2nd Option

- (1) Measure from the *soffit to the ground* at multiple locations and record the **largest measurement**.
- (2) Record this **final order height**.

***NOTE:** The components may be visible from the other side.

In any case, measure order height from where **top of housing** will be to **lowest point of ground**.

3) Graded floor (i.e., sloped patio)

- a) Mohair can accommodate up to a **total 1" graded floor**.

DO NOT MOUNT HOUSING AT ANGLE – MUST BE LEVEL!

Ordering Process

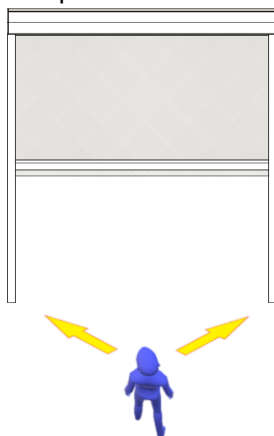
- 1) Color(s) of:
 - a) tracks, 2x2 angles, slide bar, zipper, and vinyl border.
- 2) Slide-bar Seals
Select the type(s) of slide bar bottom seal(s)
- 3) Screen type
 - a) Insect, Solar, and Privacy screens
 - i) Due to restrictions of the max roll width sizes, two pieces of mesh may need to be welded together horizontally, causing a seam.
 - b) Clear vinyl
 - i) Includes a colored border surrounding the clear vinyl on 4 sides.
 - (1) The minimum dimensions of the borders are 8" on both left and right sides, 12" on the bottom, and 12" on the top between the roll tube and clear vinyl when fully unrolled.
 - (2) Border color options are black, white, and beige.
 - ii) Clear vinyl comes in 50" x 100" width rolls, so several panels may need to be welded together side-by-side to accommodate a width and a vertical seam(s) will be visible.
 - iii) If the clear vinyl height is greater than 100", the remaining height is finished with the border material, even if it is greater than 12".
 - iv) The extra border material can also be added above the slide bar rather than between the roll tube and the top of the clear vinyl, depending on the homeowner's request.
 - v) When choosing clear vinyl, a drawing showing the dimensions of the clear vinyl and the border will be sent to you for approval. **Manufacturing the vinyl will commence only upon Wizard's approval of the drawing.**
 - vi) Manufacturing clear vinyl requires an extended lead time.

The latest offerings are on the [Wizard online portal](#).

4) Motor location

- Imagine the unit is in place. Position yourself to look at the opening **towards the curved housing hood and the screen rolls away from you.**
- The motor in the roll tube can be located on either the left or right side of the roll tube.
- Select a side closest to where the outlet is or will be placed.

* The units come with a 10' power cable. 24' power cables are available upon request via portal.



Considerations:

- Motors need 110v and pull 1.6 amps per unit.
- Ideally, the outlet should be located as close to the unit as possible.

5) Motor, roll tube, and housing sizes.

Screen Material	Roll tube size	Housing size	Min. motor size	Dimensional thresholds of opening	
				Width	Height
Any (excl. vinyl)	4"	5 ½"	Maestria 525	Less than 22'	and less than 12'
Any (excl. vinyl)	5 1/2"	7"	Maestria 550	22' or greater	and/or 12' or greater
Vinyl	Any	Any	Maestria 550	Any	Any

* If the unit will be **less than 22' wide** and/or the **height less than 12'**, a 7" housing can be used if necessary (see below).

If the project has multiple openings of varied sizes, and some require the larger size unit, consider the following:

a) Screen retraction speed:

Assume some larger openings require a 550 motor and some only require a 525 motor.

- A 4" roll tube with a 525 motor will retract faster than a 5 1/2" roll tube with a 550 motor. Order the **550 motor and 7" housing** for *all* units.

b) Aesthetics:

Assume larger openings require 7" housings and smaller openings only require 5 ½" housings.

- Order **7" housings** for *all* units.

c) If both **retraction speed** and **aesthetics** are important, order the **550 motor and 7" housing** for *all* units.

6) Remotes

Type and number of remotes necessary:

- a) Somfy offers a Situo 1 & 5 channel and Telis 16 channel remotes:
 - i) 1 unit = 1 channel remote.
 - ii) 2 - 5 units = 5 channel remote.
 - iii) 6 - 16 units = 16 channel remote.
- b) Consider how you'll program the remotes:
 - i) For multi-channel remotes, each screen can be programmed onto a separate channel.
 - ii) If there is a spare channel on a multi-channel remote, all the screens can be added to that empty channel to allow movement of all the screens at once.
- c) The effectiveness of remotes is subject to:
 - i) Distance (**should be within 30'**)
 - ii) Physical obstructions (i.e., concrete, wood, drywall, windows, etc.).
 - iii) Wired and wireless devices (i.e., refrigerators, wifi extenders, etc.)

*Multiple remotes may be necessary.

7) Optional accessories

- a) Somfy myLink
 - i) Converts the home's Wi-Fi to RTS (Radio Technology Somfy ®) that the motors can read.
 - ii) Allows for control of the screen through an app on a smartphone.
 - iii) Allows for third party home automation integration.

*The myLink must be located both **within the Wi-Fi hot zone** and **within 30' of the motorized screen**.
- b) Somfy Repeater
 - i) Increases the distance a remote signal can reach by another 30'.
- c) Somfy Sun Control
 - i) Can be set to control the motorized screens based on how much sun it detects.
- d) Somfy Wind Control
 - i) Can be set to control the motorized screens based on how much wind it detects.

***Note:** for Somfy wind and sun control options – using these accessories can cause the screen to be in motion without it being checked for debris or damage prior to the screen being in motion, which can lead to new or further damage. Customer would have to use at own risk.

*All SmartScreen Motorized units use Somfy Maestria 500 series motors with obstacle detection.

8) Finalize

Place the order using the information gathered during the measuring process through Wizard's online ordering system.

- a) Note all special requests:
 - i) Seam location
 - ii) Extra remotes
 - iii) Accessories
 - iv) Bottom seal option

Field Preparation

Before installing the SmartScreen Motorized units

1) Tools Required:

- a) 3/8" cordless drill
- b) 1/4" hex driver bit
- c) #2 Phillips driver bit
- d) 3/8" drill bit (10"-14" long)
- e) 3/16" drill bit
- f) 1/8" drill bit
- g) 3/8" hammer drill
- h) 3/8" concrete drill bit (10"-14" long)
- i) Concrete drill bits for 3/16" or 1/4" concrete screws
- j) Small flat and Phillips head screwdrivers
- k) 2' level
- l) 25' tape measure
- m) Scissors
- n) Needle nose pliers
- o) Duct tape
- p) Silicone spray for tracks
- q) 3 prong electrical plug (1 per motor)
- r) Caulking gun with desired color caulk
- s) Chop saw with non-ferrous blade
- t) Concrete, metal or wood fasteners (minimum 2" long)
- u) 1" tek fasteners
- v) **Determine what material the components will be fastened to (e.g. lumber, metal, plywood, etc.).** Then decide what other fasteners will be necessary.

**drill and fastener bits may be adjusted to suit different types and sizes of fasteners to be used*

Optional:

- a) Laser distance measure

2) Contents of Shipment

**contents may vary depending on type or style ordered*

- a) Housing front, housing back, and end caps (attached to each other).
- b) Roll tube, motor, pivot (or double idler system) and screen option.
 - i) Screen option will be wrapped around the tube and inside the housing.
 - ii) Motor and pivot will be in the tube.
 - iii) Power cord will be attached to the motor.
- c) Slide bar with bottom seal attached.
- d) Tracks with track covers (x2 of each piece).
- e) Remote, usually packaged with the tracks and the slide bar (if ordered).
 - i) If multiple units are ordered, the remote will be packaged with one of them.
- f) Probes (x2)
- g) 2" x 2" angle (x2 of each piece if ordered).

3) Package and unit visual inspection

- a) If the **packages** are damaged, the **unit** may still be free of damage. No matter, **you must mark the external damage on the waybill.**
- b) Be careful when unpacking contents (Step 4).
- c) Report any potential damage to Wizard Screens immediately with pictures.

4) Unpackaging

- a) Place the packages on a flat surface.
- b) Carefully open the packages.
- c) Remove the housing, slide bar, and tracks (and 2" x 2" angle if included) from each package.
- d) Cut the tape that holds the packaging material that is wrapped around the housing.
- e) Remove the plastic tubing from the housing package.
- f) Remove hex head screws that attach the housing cover to the housing.
 - * **DO NOT LOSE THESE SCREWS**
- g) Remove housing cover and set aside.
- h) Using needle nose pliers, remove the c-ring that holds the motor to the end cap.
 - * **DO NOT LOSE THE C-RING**
- i) Remove roller, screen, pivot, and motor by sliding the tube towards the pivot end, compressing the pivot until the motor comes free from the crown on the end cap.
 - i) Be careful not to tilt the roller as the motor may easily fall out of the roller assembly.
 - ii) Place the roller and motor on a flat surface in a safe place.
 - iii) Do not damage the screen that is wrapped around the tube.
- j) Reinstall the c-ring around the crown on the end cap.
- k) Cut the tape that holds the packaging material that is wrapped around the slide bar and tracks/track covers (and 2" x 2" angle if included).
- l) Remove the plastic tubing from the slide bar and tracks/track covers (and 2" x 2" angle if included).
- m) Set aside the slide bar, tracks, track covers (and 2" x 2" angle if included).

Installation

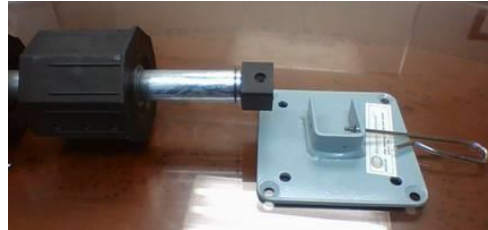
These installation instructions cover both the 5 ½" and the 7" housing SmartScreen Motorized

*Motorized screen installations require at least 2 people. More may be necessary for wider screens. Please plan accordingly.

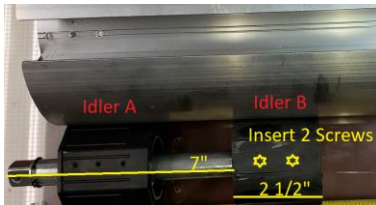
Installing an IUH (Inside Under Header) Unit

- 1) Install the housing back
 - a) Turn the housing so that the top is facing up.
 - b) Drill 3/ 16" mounting holes into the top of the housing. Start at the middle and every 24" toward the ends. The holes should be about ¾ " above the back of the housing. Drill 3/16" mounting holes at each end of the housing between the two pop rivets (top of housing back).
 - c) **Center unit** between width marks established earlier. (See "Measurements Step 2 – a – i").
 - d) Drill fasteners through the predrilled holes to the header at both ends first, using **horizontal function** of elevated laser to set level. Then drill in rest of fasteners while sighting down housing back for straightness or by using laser.
 - e) Before tightening fasteners to the header, attach the front cover of the hood, ensuring the top and back hood assembly is not bowed and you are able to satisfactorily attach the front cover. Once this is done, remove front cover and tighten fasteners. Shim where necessary.
*NOTE: If the header sags in the middle, you may have to establish height of housing using laser level. Relieve the appropriate fasteners and shim where necessary.
 - f) Drill a 3/8" hole through the top, back, or side of the housing **as far from the rolled screen as possible** to ensure the cord will not interfere with operation. The cord may also run inside a track and out a drilled hole at the bottom of the track.
*If drilling through the bracket, only drill through an existing hole.
- 2) Install the roll tube
 - a) Insert the pivot into the end cap and compress
 - b) Move the motor end of the tube to line up with the crown on the end cap
 - i) Ensure the power cord coming out of the motor is **facing down**
 - ii) This is to ensure water does not run in to the motor, otherwise call a *drip loop*
 - c) Line the shape on the motor to the corresponding shape of the crown and connect the motor to the crown
 - i) You must hear a *distinctive clicking sound* that ensures the motor is completely in place
 - d) Loop the power cord around the motor and pull through the opening drilled earlier
 - i) If the outlet is towards the bottom of the screen the cord can hang straight down
- 3) Install the roll tube using the double idler system
 - a) Unroll the screen material from the tube
 - i) Be careful not to damage the screen
 - ii) Ensure the screen zipper does not move out of the tube
 - b) Insert the pivot cap in to the end cap and pin in to the bracket using the provided cotter pin
 - i) Ensure the holes line up

- ii) Cotter pin fits **upwards**



- c) Move the motor end of the tube to line up with the crown on the end cap making sure the idler does not come out of the tube
- i) Ensure the power cord coming out of the motor is facing down
 - ii) This is to ensure water does not run in to the motor, otherwise called a drip loop
- d) Line the shape on the motor to the corresponding shape of the crown and connect the motor to the crown
- i) You must hear a distinctive clicking sound to ensure the motor is completely in place
- e) At the double idler end measure an install locking pins to ensure the tube does not shift
- i) Measure 7" from the front end of the shaft to find Idler B, add ½" and insert 2 screws into in any of the roller tubes three channels to secure Idler B to the roller tube



- f) Loop the power cord around the motor and pull through the opening drilled earlier
- i) If the outlet is towards the bottom of the screen the cord can hang straight down
 - ii) A 3/8" hole may need to be drilled in to the track to pull the power cord through

4) Plug Attachment

Attach the 3-prong plug to the wires at the end of the cord **plug designs may be different however below lists the basic rules for installing the plug*

- a) Excess cord may be cut if necessary
 - *Important – when cutting the power cord, leave a **minimum of 18"** of cord between the motor and the end of the power cord. The antenna for the motor is within those 18" and if cut it will limit the usage of the remote*
- b) Using a Phillips screw driver attach the white wire to the silver tab, the green wire to the green tab and the black wire to the bronze tab
- c) Once all the wires are secure complete plug install by tightening plug cover to plug

5) Somfy Maestria 500 Motor programming

Wake up the motor and set the limits **if power is lost before this process is complete the steps will need to be repeated*

- a) Take the remote out of its box and set it to the correct channel if multiple units (remotes come with battery and are ready to use out of the box)
- b) Plug the unit in to the outlet
 - i) Screen will jog up and down
- c) To wake the motor up press the up and down buttons together until the unit jogs up and down

- i) When the motor jogs the unit is woken up
- d) Ensure the motor is rolling the correct way
 - i) If you press the down button the screen should move down
 - ii) If you press down and the screen rolls up, press and hold the My button until the motor jogs up and down
 - iii) Once the motor jogs press the down button and the screen will roll the correct way
- e) If the screen is still wrapped around the tube, press the My and the down buttons together to set that point as the upper limit
 - i) The screen will begin to roll down
 - ii) Hold the middle of the screen material at the zipper and with light pressure helps guide the screen material down
 - (1) This is because there is currently no weight on the screen material
- f) Once the screen gets to about 1' from the lowest point press the My button to stop the screen
- g) Press the My button and the up button together to set the bottom limit
 - i) The screen will begin to roll up
- h) Press the My button to stop the screen
- i) Within 6 seconds of stopping the screen press and hold the program button on the back of the remote until the motor jogs twice
- j) This motor is now programed and can be unplugged if necessary
- k) If the screen is not wrapped around the tube (double idler system install) press the up button to move the screen up to wrap around the tube
 - i) Ensure the zipper is rolling over on itself at the tube on both sides (no telescoping)
- l) When the screen reaches 1' below the housing press the My button and the down button together to set the upper limit
 - i) The screen will start to roll down
- m) When the screen reaches 1' from the lowest point press the My button to stop the screen
- n) Press the My button and the up button together to set the lower limit
 - i) The screen will start to roll up
- o) Press the My button to stop the screen
- p) Within 10 seconds of stopping the screen press and hold the program button on the back of the remote until the motor jogs twice
- q) This motor is now programed and can be unplugged if necessary
 - *Once screen is programmed the My button can be pressed to stop a screen in motion at any point*

- 6) Install slide bar
 - a) Using the up or down buttons on the remote move the screen material to a level where it is comfortable to slide the slide bar on to the zipper
 - i) Use the My button to stop the screen at the desired point
 - b) Pick up the slide bar and with the bottom seal facing down slide the slide bar on to the zipper by moving the screen bottom tag to the side and sliding the zipper through the rounded hole on the slide bar
 - c) Continue to feed the zipper through the hole until the slide bar is fully attached to be screen
 - i) If installed correctly the zipper will hold to the slide bar
 - d) With a Phillips screw driver loosen the 2 screws on both probes (do not take the screws all the way out)
 - e) On 1 side of the slide bar fit the probe in to the end with the screws facing out
 - f) Move the screen tab in between the screws in the slot on the probe and fit so that the end of the probe is 1/16" away from the stitching on the tab
 - g) Tighten both screws so that the *screws puncture **the tab*** and fully attach to the other side of the probe

- h) Repeat for the other side
 - i) Line the bottom seal up with one end of the slide bar and cut off the excess material on the other end
 - i) The excess material can bunch up within the tracks and cause the obstacle detection to engage
 - j) Cut the remaining zipper so that it is level with the bottom seal on both ends of the slide bar
 - i) The excess zipper can bunch up at the lower limit and affect where the lower limit is
 - k) Press the up button on the remote to move the screen back up to the upper limit
 - i) Ensure the zipper is rolling over on itself at the tube on both sides (no telescoping) and make adjustments as necessary
- 7) Install the 2" x 2" angle
- a) On one side of the screen (left or right), measure from the ground or the lowest point up to the bottom of the end cap. That will be the length of the 2" x 2" angle
 - b) Take 1 piece of the 2" x 2" angle and measure the distance measured
 - c) Mark on the angle and cut
 - d) Pre-drill and countersink a hole 2" from both top and bottom, and a hole every 48".
 - e) Fasten angle from the top-down firmly against post, ensuring flush with *back of housing* and plumb front-to-back.
 - *EXCEPTION:** If the post is *very* out-of-plumb side-to-side, you may need to plumb angle laterally as well.
 - f) Repeat steps for the other side



- 8) Install the side tracks and covers
- a) On one side of the screen (left or right) measure from the ground or the lowest point up to the bottom of the end cap. That is the length of the track
 - b) Take the corresponding side track
 - i) To find which track goes on which side, take 1 piece of track and face it so that the beveled end is pointing up towards the housing, the open end (where the track cover will snap on to) is facing out and the groove for the zipper is facing in towards the other post
 - ii) Whichever side matches that lay out is the correct track side
 - c) Measure the back side of the track below the bevel towards the bottom end
 - d) Mark the length measured earlier
 - e) With the chop saw cut at that point
 - f) Take the track cover and measure the same length and cut
 - g) Repeat the same steps for the other track
 - i) Each track may be a different length so it is important to ensure you cut the correct track for both the left and the right side
 - h) Take one side of tracks and feed the zipper in to the groove of the track through the beveled end of the track
 - i) Use needle nose pliers to hold on the tab beside the slide bar to help guide the zipper in to the groove
 - i) Line the outside edge of the track with the outside edge of the end cap and install a fastener in the middle of the track through the angle and back of the track back 2" below the housing
 - i) Ensure the screw does not extend past where the track cover will be placed (1" screws are ideal for this)

Diagram A

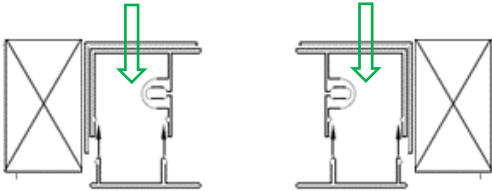
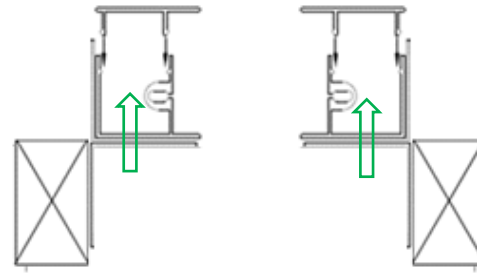


Diagram B



- j) The beveled part of the track will fit inside the housing
- k) Repeat step for the other track
- l) Ensure the slide bar is centered between the tracks
- m) Each installer holds a track (on either side of the opening) perpendicular to the ground
- n) Press the down button on the remote and stop the screen when the slide bar reaches the mid-way point between the upper limit and the lower limit
- o) Ensure the track is level and perpendicular to the ground and that the screen is not too tight or too loose (the screen should provide a bounce similar to a trampoline when tapped on)
- p) At the point of the slide bar install a fastener in the middle through the angle and in to the back of the track on both tracks
 - i) Ensure the screw does not extend past where the track cover will be placed (1" screws are ideal for this)
- q) Press the down button on the remote
 - i) The screen will hit the bottom limit (about 1' above the lowest point)
- r) Ensure the track is level and perpendicular to the ground and that the screen is not too tight or too loose (the screen should provide a bounce similar to a trampoline when tapped on)
- s) Install a fastener in the middle through the angle in to the back of the track on both tracks 2" above the lowest point
 - i) Ensure the screw does not extend past where the track cover will be placed (1" screws are ideal for this)
- t) Press the up button on the remote and ensure the screen rolls up without being impeded
 - i) The zipper must roll over on itself on both sides of the roll tube (no telescoping)
- u) Spray silicone in the groove of each track on both sides of the unit from top to bottom
- v) Press the down button on the remote and ensure the screen rolls down without being impeded
 - i) The obstacle detection will engage if the screen is impeded
- w) If the screen rolls up and down smoothly, install a fastener through the angle in to the back of the track at the midway point between the top and middle fasteners and another between the middle and the bottom fastener
 - i) If the screen does not roll down smoothly, or the obstacle detection engages
 - (1) check the groove in the tracks where the zipper rides at the point the screen stops to make sure there is nothing impeding the screen
 - (2) If the obstacle detection engages and there is nothing impeding the zipper in the groove, ensure the tracks are level and perpendicular to the ground
 - (3) If the obstacle detection still engages ensure the slide bar is not rubbing against the tracks
 - (a) If the slide bar is rubbing against the tracks, adjust the slide bar so it is centered between the tracks
- x) If the outlet is towards the bottom of the unit drill a 3/8" hole through the back of the track and 2x2 angle and feed the power cord through the hole
 - i) The plug will need to be unplugged and removed in order to feed the cable through the hole, then reattached once the plug is through the hole and plugged back in

- y) Snap the track cover over the corresponding track starting at the top of the track and working your way down ensuring the cover snaps on (a distinctive snapping sound can be heard)



- 9) Adjust the upper and lower limits
- Press the up button on the remote to move the screen to the upper limit
 - Press the up and down buttons on the remote and hold until the screen jogs
 - Press the up button on the remote until the slide bar reaches the point where you want the upper limit
 - The slide bar should be level and within 1" of the housing cover
 - Press and hold the my button on the remote to lock in the upper limit
 - Press the down button on the remote to move the screen to the lower limit
 - Press the up and down buttons on the remote and hold until the screen jogs
 - Press the down button on the remote until the slide bar reaches about 1" above the point where you want the upper limit
 - The screen will stretch when it has been hanging down and that 1" gap will be filled by the bottom seal
 - Press and hold the my button on the remote to lock in the lower limit
- 10) Install the housing cover (hood)
- Slide the housing cover in to the grove on the front edge of the housing back
 - Using the hex screws fasten the housing cover to the end cap at the point where the hex screw faces the ground
 - Repeat for the other side
 - Install the remaining hex screens along the top front of the housing cover (hood)
- 11) Repeat above steps for each IUH screens remaining on project

13) Final Considerations

** Any creases and much of the puckering that may be seen after a screen is install will disappear as the screen hangs down*

** The limits may need to be adjusted once the screen has been in use and settled after install – Follow up with the customer to arrange a time to go back and review the limits*

Installing an OAH (Outside Above Header) Unit

- 1) Install the housing back
- Turn the housing so that the back is facing up
 - Drill 3/ 16" mounting holes into the back of the housing. Start at the middle and every 24" toward the ends. The holes should be about ¾ " below the top of the housing. Drill 3/16" mounting holes at each end of the housing between the two pop rivets (back of housing back).
 - Elevate the 2-way laser (i.e., tripod, telescoping pole, etc.) at an arbitrary height and turn on the **horizontal function**.
 - 2 methods to establish top of housing location:
 - If header is tall enough to accommodate heights of components:
 - Measure multiple points from the **laser to the header underside** and record **the largest measurement**.

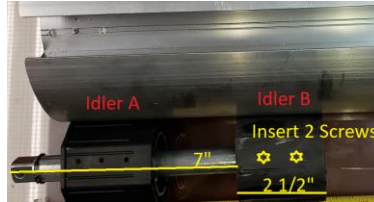
- (2) Mark at both ends this measurement
 - (3) Measure up **5 ½" or 7"** (height of housing) and **4"** (height of slide bar and seal) and mark.
 - ii) If header is not tall enough to accommodate heights of components:
 - (1) Measure multiple points from **laser to soffit** and record the **smallest measurement**.
 - (2) Mark at both ends this measurement. (Or just fasten housing at lower end, then fasten other end level).
 - e) Center unit between earlier established marks. (See "Measurements Step 2 – b – i").
 - f) Drill fasteners through the predrilled holes to the header.
 - g) Before tightening fasteners to the header, attach the front cover of the hood, ensuring the top and back hood assembly is not bowed and you are able to satisfactorily attach the front cover. Once this is done, remove front cover and tighten fasteners.
 - e) Drill a 3/8" hole through the top, back, or side of the housing **as far from the rolled screen as possible** to ensure the cord will not interfere with operation. The cord may also run inside a track and out a drilled hole at the bottom of the track.
- *If drilling through the bracket, only drill through an existing hole.
- 2) Install the roll tube
 - a) Insert the pivot into the end cap and compress
 - b) Move the motor end of the tube to line up with the crown on the end cap
 - i) Ensure the power cord coming out of the motor is facing down
 - ii) This is to ensure water does not run in to the motor, otherwise call a drip loop
 - c) Line the shape on the motor to the corresponding shape of the crown and connect the motor to the crown. You must hear a distinctive clicking sound to ensure the motor is completely in place
 - d) Loop the power cord around the motor and pull through the opening drilled earlier
 - i) If the outlet is towards the bottom of the screen the cord can hang straight down
 - 3) Install the roll tube using the double idler system
 - a) Unroll the screen material from the tube
 - i) Be careful not to damage the screen
 - ii) Ensure the screen zipper does not move out of the tube
 - b) Insert the pivot cap in to the end cap and pin in to the bracket using the provided cotter pin
 - i) Ensure the holes line up

- ii) Cotter pin fits upwards



- c) Move the motor end of the tube to line up with the crown on the end cap making sure the idler does not come out of the tube
 - i) Ensure the power cord coming out of the motor is facing down

- ii) This is to ensure water does not run in to the motor, otherwise called a drip loop
- d) Line the shape on the motor to the corresponding shape of the crown and connect the motor to the crown
 - i) You must hear a distinctive clicking sound to ensure the motor is completely in place
- e) At the double idler end measure an install locking pins to ensure the tube does not shift
 - i) Measure 7" from the front end of the shaft to find Idler B, add ½" and insert 2 screws into in any of the roller tubes 3 channels to secure Idler B to the roller tube



- f) Loop the power cord around the motor and pull through the opening drilled earlier
 - i) If the outlet is towards the bottom of the screen the cord can hang straight down
 - ii) A 3/8" hole may need to be drilled in to the track to pull the power cord through

4) Plug Attachment

Attach the 3-prong plug to the wires at the end of the cord **plug designs may be different however below lists the basic rules for installing the plug*

- a) Excess cord may be cut if necessary
 - *Important – when cutting the power cord leave a minimum of 18" of cord between the motor and the end of the power cord. The antenna for the motor is within those 18" and if cut it will limit the usage of the remote*
- b) Using a Phillips screw driver attach the white wire to the silver tab, the green wire to the green tab and the black wire to the bronze tab
- c) Once all the wires are secure complete plug install by tightening plug cover to plug

5) Wake up the motor and set the limits **if power is lost before this process is complete the steps will need to be repeated*

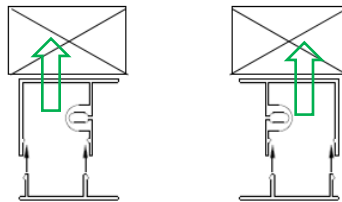
- a) Take the remote out of its box and set it to the correct channel if multiple units (remotes come with battery and are ready to use out of the box)
- b) Plug the unit in to the outlet
 - i) Screen will jog up and down
- c) To wake the motor up press the up and down buttons together until the unit jogs up and down
 - i) When the motor jogs the unit is woken up
- a) Ensure the motor is rolling the correct way
 - i) If you press the down button the screen should move down
 - ii) If you press down and the screen rolls up, press and hold the My button until the motor jogs up and down
 - (1) Once the motor jogs press the down button and the screen will roll the correct way
- b) If the screen is still wrapped around the tube, press the My and the down buttons together to set that point as the upper limit
 - i) The screen will begin to roll down
 - ii) Hold the middle of the screen material at the zipper and with light pressure helps guide the screen material down
 - (1) This is because there is currently no weight on the screen material
- c) Once the screen gets to about 1' from the lowest point press the My button to stop the screen

- d) Press the My button and the up button together to set the bottom limit
 - i) The screen will begin to roll up
- e) Press the My button to stop the screen
- f) Within 6 seconds of stopping the screen press and hold the program button on the back of the remote until the motor jogs twice
- g) This motor is now programed and can be unplugged if necessary
- h) If the screen is not wrapped around the tube (double idler system install) press the up button to move the screen up to wrap around the tube
 - i) Ensure the zipper is rolling over on itself at the tube on both sides (no telescoping)
- i) When the screen reaches 1' below the housing press the My button and the down button together to set the upper limit
 - i) The screen will start to roll down
- j) When the screen reaches 1' from the lowest point press the My button to stop the screen
- k) Press the My button and the up button together to set the lower limit
 - i) The screen will start to roll up
- l) Press the My button to stop the screen
- m) Within 10 seconds of stopping the screen press and hold the program button on the back of the remote until the motor jogs twice
- n) This motor is now programed and can be unplugged if necessary
 - *Once screen is programmed the My button can be pressed to stop a screen in motion at any point*

6) Install slide bar

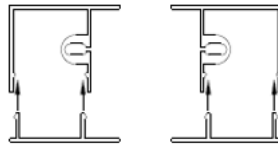
- a) Using the up or down buttons on the remote move the screen material to a level where it is comfortable to slide the slide bar on to the zipper
 - i) Use the My button to stop the screen at the desired point
- b) Pick up the slide bar and with the bottom seal facing down slide the slide bar on to the zipper by moving the screen bottom tag to the side and sliding the zipper through the rounded hole on the slide bar
- c) Continue to feed the zipper through the hole until the slide bar is fully attached to be screen
 - i) If installed correctly the zipper will hold to the slide bar
- d) With a Phillips screw driver loosen the 2 screws on both probes (do not take the screws all the way out)
- e) On 1 side of the slide bar fit the probe in to the end with the screws facing out
- f) Move the screen tab in between the screws in the slot on the probe and fit so that the end of the probe is 1/16" away from the stitching on the tab
- g) Tighten both screws so that the screws puncture the tab and fully attach to the other side of the probe
- h) Repeat for the other side
 - i) Line the bottom seal up with one end of the slide bar and cut off the excess material on the other end
 - i) The excess material can bunch up within the tracks and cause the obstacle detection to engage
- j) Cut the remaining zipper so that it is level with the bottom seal on both ends of the slide bar
 - i) The excess zipper can bunch up at the lower limit and affect where the lower limit is
- k) Press the up button on the remote to move the screen back up to the upper limit
 - i) Ensure the zipper is rolling over on itself at the tube on both sides (no telescoping) and make adjustments as necessary

- 7) Install the side tracks and covers
 - a) On one side of the screen (left or right) measure from the ground or the lowest point up to the bottom of the end cap. That is the length of the track
 - b) Take the corresponding side track
 - i) To find which track goes on which side, take 1 piece of track and face it so that the beveled end is pointing up towards the housing, the open end (where the track cover will snap on to) is facing out and the groove for the zipper is facing in towards the other post
 - ii) Whichever side matches that lay out is the correct track side
 - c) Measure the back side of the track below the bevel towards the bottom end
 - d) Mark the length measured earlier
 - e) With the chop saw cut at that point
 - f) Take the track cover and measure the same length and cut
 - g) Repeat the same steps for the other track
 - i) Each track may be a different length so it is important to ensure you cut the correct track for both the left and the right side
 - h) Take one side of tracks and feed the zipper into the groove of the track through the beveled end of the track
 - i) Use needle nose pliers to hold on the tab beside the slide bar to help guide the zipper in to the groove
 - i) Line the outside edge of the track with the outside edge of the end cap and install a fastener in the middle of the track through the back 2" below the housing



- j) The beveled part of the track will fit inside the housing
- k) Repeat step for the other track
- l) Ensure the slide bar is centered between the tracks
- m) Each installer holds a track (on either side of the opening) perpendicular to the ground
- n) Press the down button on the remote and stop the screen when the slide bar reaches the mid-way point between the upper limit and the lower limit
- o) Ensure the track is level and perpendicular to the ground and that the screen is not too tight or too loose (the screen should provide a bounce similar to a trampoline when tapped on)
- p) At the point of the slide bar install a fastener in the middle through the back of the track on both tracks
- q) Press the down button on the remote
 - i) The screen will hit the bottom limit (about 1' above the lowest point)
- r) Ensure the track is level and perpendicular to the ground and that the screen is not too tight or too loose (the screen should provide a bounce similar to a trampoline when tapped on)
- s) Install a fastener in the middle through the back of the track on both tracks 2" above the lowest point
- t) Press the up button on the remote and ensure the screen rolls up without being impeded
 - i) The zipper must roll over on itself on both sides of the roll tube (no telescoping)
- u) Spray silicone in the groove of each track on both sides of the unit from top to bottom
- v) Press the down button on the remote and ensure the screen rolls down without being impeded
 - i) The obstacle detection will engage if the screen is impeded
- w) If the screen rolls up and down smoothly, install a fastener at the midway point between the top and middle fasteners and another between the middle and the bottom fastener

- i) In the middle of the track and through the back
- ii) If the screen does not roll down smoothly, or the obstacle detection engages
 - (1) Check the groove in the tracks where the zipper rides at the point the screen stops to make sure there is nothing impeding the screen
 - (2) If the obstacle detection engages and there is nothing impeding the zipper in the groove, ensure the tracks are level and perpendicular to the ground
 - (3) If the obstacle detection still engages ensure the slide bar is not rubbing against the tracks
 - (a) If the slide bar is rubbing against the tracks, adjust the slide bar so it is centered between the tracks
- x) If the outlet is towards the bottom of the unit drill a 3/8" hole through the side of the track (opposite of the zipper groove side) and feed the power cord through the hole
 - i) The plug will need to be unplugged and removed in order to feed the cable through the hole, then reattached once the plug is through the hole and plugged back in
- y) Snap the track cover over the corresponding track starting at the top of the track and working your way down ensuring the cover snaps on (a distinctive snapping sound can be heard)



- 8) Install the housing cover (hood)
 - a) Slide the housing cover into the groove on the front edge of the housing back
 - b) Using the hex screws fasten the housing cover to the end cap at the point where the hex screw faces the ground
 - i) Repeat for the other side
 - c) Install the remaining hex screens along the top front of the housing cover (hood)
- 9) Adjust the upper and lower limits
 - a) Press the up button on the remote to move the screen to the upper limit
 - b) Press the up and down buttons on the remote and hold until the screen jogs
 - c) Press the up button on the remote until the slide bar reaches the point where you want the upper limit
 - i) The slide bar should be level and within 1" of the housing cover
 - d) Press and hold the my button on the remote to lock in the upper limit
 - e) Press the down button on the remote to move the screen to the lower limit
 - f) Press the up and down buttons on the remote and hold until the screen jogs
 - g) Press the down button on the remote until the slide bar reaches about 1" above the point where you want the upper limit
 - i) The screen will stretch when it has been hanging down and that 1" gap will be filled by the bottom seal
 - h) Press and hold the my button on the remote to lock in the lower limit
- 10) Repeat above steps for each OAH screens remaining on project

11) Final Considerations

- * Any creases and much of the puckering that may be seen after a screen is install will disappear as the screen hangs down
- * The limits may need to be adjusted once the screen has been in use and settled after install – Follow up with the customer to arrange a time to go back and review the limits



Homeowner training

1. Operation
 - a) Demonstrate screen operation. Press “up” to send the screen up. Press “down” to send the screen down.
 - b) Ask, “Would you like the screen to stop at a certain location in between as well?”
Should they answer, “yes”, program the “My” button to stop at certain location.
 - i) Position the slide bar at their preferred location.
 - ii) Hold the “My” button until it jogs.
 - c) Obstacle detection is *on* by default. Explain and demonstrate the “obstacle detection”. Increase the sensitivity if deemed necessary.
2. Assurances
 - a) Any creases and much of the puckering that may be seen after screen installation will disappear over time as the screen hangs down.
 - b) In the unlikely event the screen settles down too much, the customer may follow up with you. Arrange a return date to adjust the limits.
3. Warranty
 - a) Make the homeowner aware of your company’s warranty and/or Wizard’s warranty.
 - b) Preferably have printed copies available to give.

Cleaning and Maintenance
SEE “DO’S AND DON’TS” NEXT PAGE

Wizard Motorized SmartScreen

Do's & Don'ts

DO 	DON'T 
Clean mesh with soft cloth and mild detergent	Vacuum mesh. The vacuum head could catch on and rip the mesh
Use silicone spray to lubricate the tracks	Use WD-40 or other degreasers. Those will clog the tracks
Leave the mesh stationary if it is windy. The mesh designed to withstand winds between 60 and 80 mph (depending on size & installed location)	Move the mesh if windy. There is a high likelihood that moving the mesh in the wind will cause more damage than the wind itself
Retract the screen when not in use	Use the screen solely as a wind breaker
Call your local Wizard dealer if there is an issue	Try and fix an issue yourself as that could cause an issue that would void the warranty

Appendix

Replace the Screen Material

1. Open package the mesh came in to ensure it is free of defects
 - a. The mesh may be folded and boxed to save on shipping costs however the creases will come out of the screen material once installed and is hanging
 - b. Clear vinyl will be rolled in a tube
2. Press the up button on the remote to send the mesh to the upper limit
3. Remove the housing cover (hood)
4. Remove the track covers on both tracks and unscrew fasteners to remove both tracks
5. Press the down button on the remote to send the unit to a comfortable position where the slide bar can be removed and press the My button to stop the screen in that position
6. With a Phillips screw driver loosen the screw on the probes that hold the zipper tags on both side
 - a. Be careful not to lose the screws
7. Remove probes and set aside in a safe place
8. Slide the slide bar off the screen zipper and set aside in a safe place
9. Press the down button on the remote to send the screen down to the lower limit
 - a. With the slide bar off you will need to hold the screen zipper in the middle and help guide the screen down
10. Reset lower limit so that the screen zipper attached to the tube is facing down and can be accessed
 - a. At the lower limit press the up and down buttons on the remote until the screen jogs up and down
 - b. After the screen jogs press the down button on the remote and slowly move the screen to the new lower limit where the screen zipper at the roll tube is visible and can be accessed
 - c. Once you reach that point press and hold the My button until the screen jogs. This will be the new lower limit
11. At the roll tube slide the screen zipper off either side
*Note the front-back orientation of the screen.
12. Set old screen to the side
13. Unfold new screen
14. Ensure the screen is facing the correct way (as you noted the old screen to be). Additionally:
 - a. The smaller zipper or Keder system should be on both sides of the screen.
 - b. The larger zippers will be at both top and bottom of the screen.
 - c. The zipper tags for the screen will be at the bottom of the screen.
15. Insert the zipper into the roll tube's round groove.
16. Carefully slide the screen all the way across the roll tube, taking care not to damage the screen
 - Ensure there are equal number of zipper teeth on both ends of the roll tube so that the screen will be centered. **Do not stretch too tight.**
17. Reset the lower limit 1' above the original position
Remote:
 - a. Press the up and down buttons until the screen jogs up and down.
 - b. Press the up button until the screen reaches approximately 1' above the original position.
 - c. Press and hold the My button until the screen jogs.

- d. A new lower limit is now set.
- 18. Send the screen up to a comfortable position so that the slide bar can be reinstalled
 - a. Press the My button on the remote to stop at that position
- 19. Reinstall slide bar and probes
- 20. Press the up button on the remote to send the screen back up to the upper limit
 - a. Ensure the zipper of either side of the roll tube is rolling over on top of itself (no telescoping)
- 21. Reinstall the tracks and track covers
- 22. Press the down button to send the screen back to its lower limit
- 23. Adjust the lower limit so that screen slide bar bottom seal is approximately 1" above the ground or lowest point
 - a. The screen will stretch as it flattens out while hanging
- 24. Press the up button on the remote to send the screen back to its upper limit
- 25. The screen has been replaced