

SmartScreen Motorized Standard 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**

Download the Help me app



Integration guide: <https://snabatoools.com/integration-configurator>

Quick guide: [Maestria Quick Visual Guide 10-2018.pdf \(somfy.com\)](#)

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

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

DO NOT PROCEED WITH INSTALLATION BEFORE DOING THE ABOVE.

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

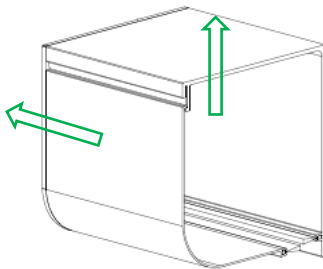
Min width = 3'

Max width = 30'

Max height = 16'

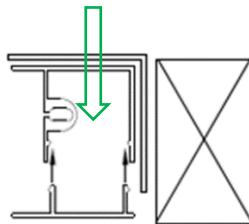
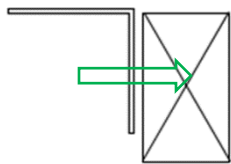
1) Determine the installation type

a) Reveal Fit - Unit mounted under header

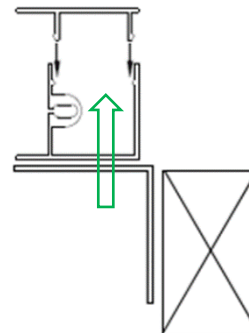


Tracks mounted to:

i) Angles



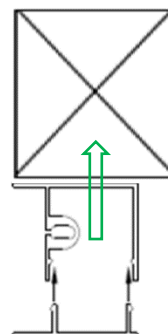
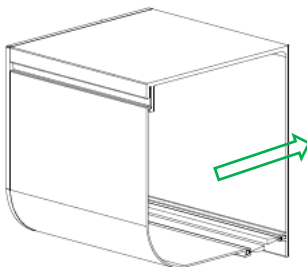
OR



ii) Box Channel



b) Face Fit - Unit mounted onto surface header



***NOTE:** Combination possible as installer sees fit.

2) Component & Sizing Table

Selectable					Dimensional Threshold	
Screen Material	Center core	Housing	Motor	Idler	Width	Height
Any (excl. vinyl)	4"	5 ½"	Maestria 525	Mack Daddy Pivot	3' to 22.5'	& less than 12'
Any (excl. vinyl)	5 ¾"	7"	Maestria 550	Double Idler (temp dc.)	22.5' to 30'	& 12' to 16'
Vinyl	Any	Any	Maestria 550	See "Dim. Thresh."		

***NOTE: If size is beyond threshold in first row, appropriate items will be auto-selected.**

For more details, see step 5 "ORDERING PROCESS"

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

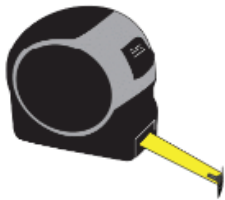
- a) The screen can be cut to a max 1 ½" grade.
- a) Mohair can accommodate an extra 1" grade

HOUSING MUST BE LEVEL!

Measurements

1) Tools required:

Tape Measure



Pencil



2-way Laser Level Kit



Laser Distance Measure



2) Determine unit dimensions and establish plumb marks.

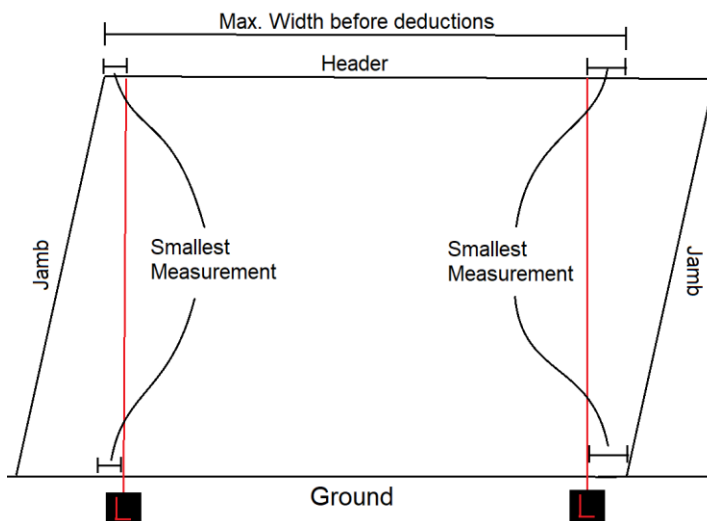
Consider that rough framing is almost never perfectly plumb, level, and square. The installed motorized system must maintain these three attributes for a screen to operate well.

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

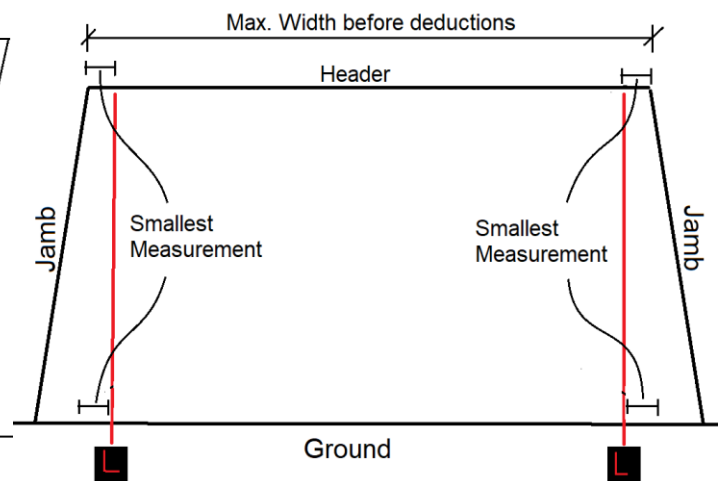
a) Measurement Method for **Reveal Fit**

i. Width

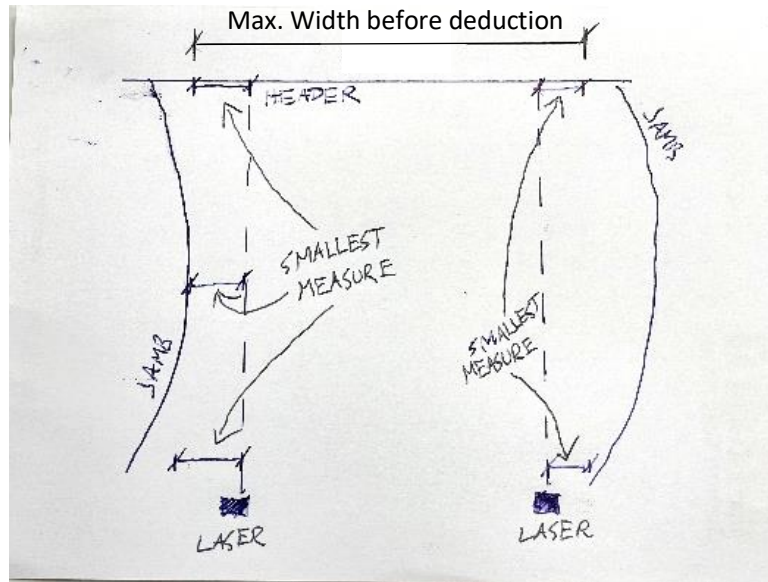
Case 1



Case 2



Case 3



- a. Angles: **Subtract 3/8"** (extra for angles) and **record**. Mark difference at both ends.
 - b. Box channels: **Subtract 1/8"** (safety) and **record**. Mark difference at both ends.
- ii. Height
- a. Establish level marks where top of housing will be.
 - b. Measure largest vertical measurement. **Record**.
 - c. If floor is graded, **record LEFT** and **RIGHT** heights.

b) Measurement method for **Face Fit**

i. Width

- Similar method as Reveal Fit, but mark the **LARGEST** measures.
- Measure between marks. **Add 4"** and **record**. Mark difference at both ends.



ii. Height

- Establish level marks where top of housing will be.
- Determine largest vertical measurement. **Record**.
- If floor is graded, **record LEFT** and **RIGHT** heights.

Ordering Process

- 1) Dimensions
- 2) Colors of components
- 3) Slide-bar Seals
 - a) Mohair
 - b) Rubber (necessary if adding extra weight)
- 4) 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 receipt of dealer approved, signed, and dated drawing.**
 - vi) Manufacturing clear vinyl requires an extended lead time.

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

5) Motor Location

- Select side as if looking at **front** unit, imagining how it will be oriented.
- Select power cable length
 - 10'
 - 24'

*Antennae within 18" of motor end. **Do not cut!**

Electrical Considerations: [Somfy-Maestria-50-RTS-specs.pdf](https://www.somfy.com/usa/maestria-50-RTS-specs.pdf)
(wizardscreens.com)



6) Component Table

Selectable					Dimensional Threshold	
Screen Material	Center core	Housing	Motor	Idler	Width	Height
Any (excl. vinyl)	4"	5 ½"	Maestria 525	Mack Daddy Pivot	3' to 22.5'	& less than 12'
Any (excl. vinyl)	5 ⅜"	7"	Maestria 550	Double Idler (temp dc.)	22.5' to 30'	& 12' to 16'
Vinyl	Any	Any	Maestria 550	See "Dim. Thresh."		

***NOTE: If size is beyond threshold in first row, appropriate items will be auto-selected.**

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

a) Retraction speed:

Assume some smaller openings only require 4" roll tubes (center core) and some larger openings require 5 ⅜" roll tubes.

- A 4" roll tube will retract faster than a 5 ⅜" roll tube. Order 7" housings and 5 ⅜" roll-tubes 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 with above assumptions, order 7" housing and 5 ⅜" roll-tubes for all units.

7) Remotes

a) Types

i) 1 unit = Telis 1 channel



ii) 2 - 5 units = Telis 5 channel



iii) 6 - 16 units = Telis 16 channel



b) 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.

8) 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**.



The remainder are ***special requests***:

b) **Somfy Repeater**

- i) Increases remote signal distance 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.

9) Special requests:

- a) Seam location
- b) Accessories
- c) Extra weight (ideal for heavy fabrics and windy areas)

Field Preparation

Before installing the SmartScreen Motorized units

- 1) Tools Required:
 - a) Cordless drill
 - b) Desired driver bits
 - c) Phillips screwdriver
 - d) 2-way laser level
 - e) Tape measure
 - f) Laser distance measure
 - g) Scissors
 - h) Needle nose pliers
 - i) Duct tape (if floor is graded)
 - j) Dry silicone spray
 - k) Caulking gun with desired color caulk
 - l) Chop saw with non-ferrous blade
 - m) Concrete, metal, or wood fasteners (minimum 2" long)
 - n) Appropriate fasteners. Determine what material the components will be fastened to (e.g. lumber, metal, plywood, etc.) **Min. 2" long.**

- 1) Contents of Shipment per unit

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

 - a) Assembled housing.
 - b) Assembled roll tube, motor, pivot (or double idler system), screen option, and power cord.
 - c) Slide bar with bottom seal attached.
 - d) Tracks with covers (x2).
 - e) Remote(s).
 - f) Probes (x2).

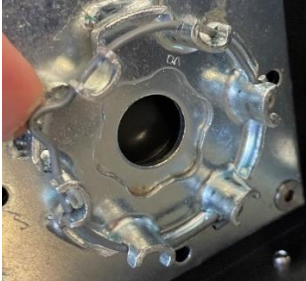
Optional:

 - g) 2" x 2" angles (x2).
 - h) 2" x 1" box channels (x2).

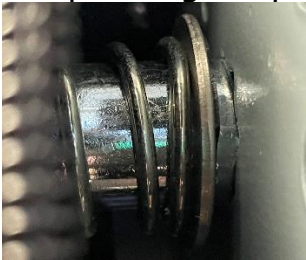
- 2) Package and unit visual inspection
 - a) If the **packages** are damaged, the **unit** may still be free of damage. **No matter, you must mark the external damage on the waybill.**
 - b) Report any potential damage to Wizard Screens **immediately** with pictures.

3) Unpackaging

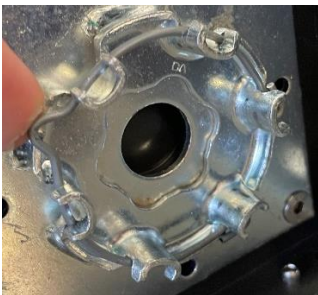
- a) Place packages on a flat surface.
- b) Carefully remove components from packages. **Do not cut screen! Do not scratch components!**
- c) Detach housing cover and set aside. **Do not lose fasteners!**
- d) Remove motor mount ring from crown. **Do not lose motor mount ring!**



- e) 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.



- f) Re-attach motor mount around the crown.



Installation

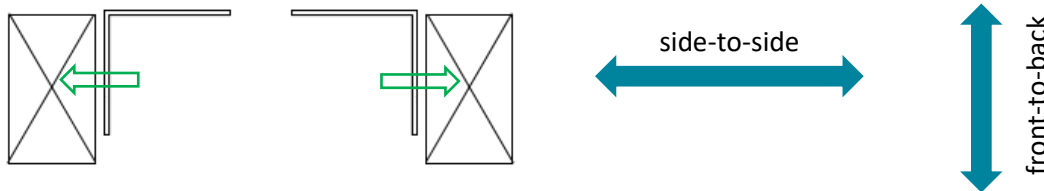
*Minimum 2 people recommended.

1) REVEAL FIT accessories

a) Install 2" x 2" angles

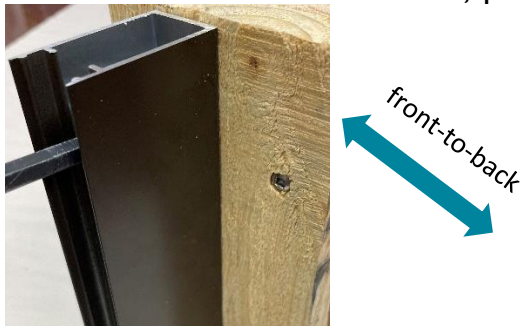
- Mark angles to desired lengths and cut. *They should not touch ground to prevent water from wicking.
- Pre-drill and countersink holes 2" from top and bottom. Then continue 48" O/C.
- Fasten angles to surface using flatheads, plumb front-to-back.

***EXCEPTION:** If the posts are *very* out-of-plumb side-to-side, you may need to plumb angle side-to-side as well.



b) Install 2" x 1" box channel

- Mark box channels to desired lengths and cut. *They should not touch ground to prevent water from wicking.
- Fasten box channel to surface, plumb front-to-back.



iii) Attach sashes **at end of installation.**

2) Install housing back

- Pre-drill a 3/8" hole through 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.



- b) Pre-drill mounting holes through bracket holes, then 24" O/C along in pairs.
- c) Align unit to width marks established earlier.
("Measurements" Step 2 - a).
- d) Fasten at ends and middle first, ensuring **level**. Shim if necessary.
- e) Fasten through remaining holes. Shim where necessary.



3) Install roll-tube.

- a) If not done yet, attach motor mount ring onto crown.

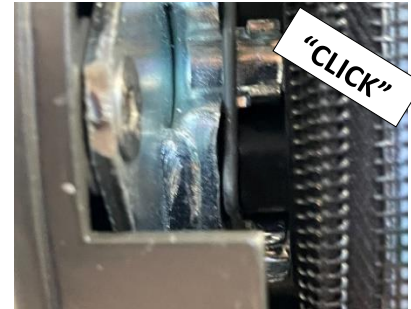
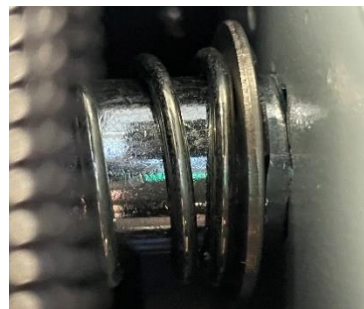
Motor mount
ring



- b) Insert the pivot.



- c) As lifting rolled screen into place, feed cord through hole, compress pivot end, and insert motor end into crown. ***There must be a distinct *click* sound and feel.**



*** If installing with a double idler system, see instructions on [tech page](#).**

4) Somfy Maestria 500 Series Motor programming

- a) Attach plug to cord per provided instructions. Plug into outlet.



*If hardwiring, consult with electrician. See also electrical specs on Wizard [tech page](#).

b) Program screen.

- i) See Somfy Quick Programming Guide on [tech page](#)
- ii) The limits will be more precisely set at the end.

5) Install slide bar

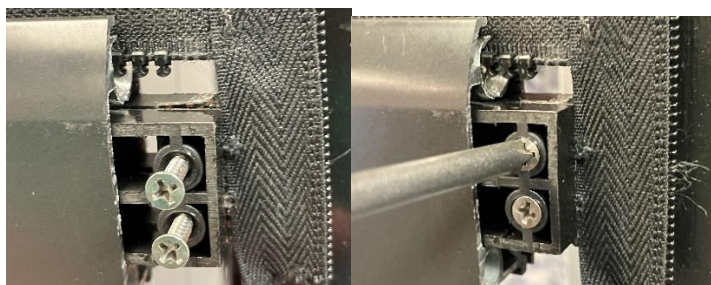
a) Send screen to comfortable height.



b) Fold tab up and feed slide-bar along zipper.



c) Manually screw probes onto tabs until they pinch fully. ***Do not over-tighten screws.**



d) Flush seal at one end of slide-bar and cut excess off at other. Cut zippers to be flush with bottom of slide-bar.



e) Send screen to upper limit, ensuring zipper stacks well.

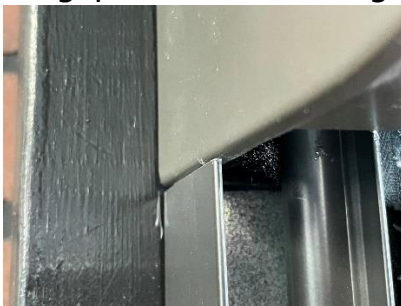


6) Affix tracks

- a) Measure from horizontal lip to ground. Subtract 1/8" and **record**. If lengths are different, label tracks.
- b) Measure from square part of tracks' entry ends. Mark and cut tracks. *Tracks should not touch ground to prevent water from wicking and ease insertion.



- c) Starting with one track:
 - i) Feed track along zipper.
 - ii) Fasten top of track first.
 - (1) Align back of track with side of housing.
 - (2) No gap between housing and track.



- iii) Fasten remainder of track, ensuring **straight** and **plumb** (notice laser).
*If affixing tracks to angles, ensure fasteners are less than 1" and do not penetrate zipper grooves.



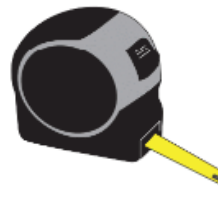
- d) Run the screen up and down, ensuring the zipper stacks well.
- e) Affix the other track.



- f) Check tracks are parallel, plumb, and straight.



Tape Measure



2-way Laser Level Kit



- g) Spray dry silicone into the zipper grooves.



7) Fine-tune screen limits

a) Fine-tune the screen's upper and lower limits



i) See Somfy Quick Programming Guide on tech page.

[Technical Materials | Wizard Screens | Premium Retractable Screens for Doors, Windows and Large Openings](#)

ii) When establishing lower limit, allow a $\frac{1}{4}$ " - $\frac{1}{2}$ " gap. The screen will settle over time and close gap.

iii) If screen is grade biased, it is typically desired for the slide-bar to be parallel with the housing at the upper limit. Stack strips of duct tape onto the roll-tube at the higher side until accomplished.

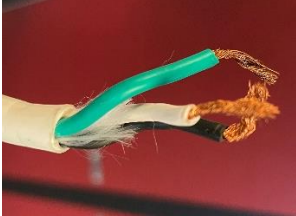


b) Ensure the following when operating:

- i) The zipper stacks on itself – no telescoping
- ii) Obstacle detection does not activate prematurely
- iii) Zipper does not unzip from tracks
- iv) Screen maintains trampoline like bounce
- v) Slide bar remains centered

8) Route Cord and Re-attach Plug

a) Remove plug from cord



b) If cord is to follow inside track, drill a 3/8" hole at bottom of a track and feed cord through.



c) Route cord.



d) Cut cord to desired length.

- i) Do not cut cord within 18" of motor where the antenna lies.
- ii) Ensure there is enough cord to form a drip loop at plug end.

e) Attach plug to cord per provided instructions. Plug into outlet.



9) Finishing Touches

a) Attach housing cover.

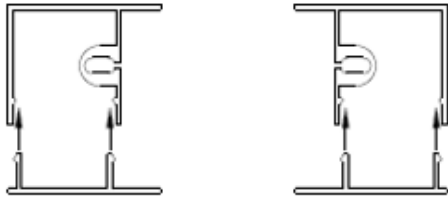
Top



Bottom



b) Mallet track covers onto tracks.



c) Affix the wall mount for the remote INSIDE because the remote is sensitive to moisture (IP 30 rating). Hang remote.



See "Homeowner Training and DO's & DON'Ts" on [tech page](#).