

Motorized Mosquiteria

Installation Guide

Septembre 2020



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Read Me!

This section contains **important warnings for your safety and the integrity of your Mosquiteria** and its installation.

<u>IMPORTANT SAFETY NOTICE:</u> IT IS ESSENTIAL TO FOLLOW THESE INSTRUCTIONS, OTHERWISE IT MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND VOID THE WARRANTY. BE SURE TO READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE BEGINNING INSTALLATION.

<u>NOTE:</u> BEFORE INSTALLING THE MOSQUITERIA, CHECK THE MOUNTING SURFACE AND MAKE SURE THAT THERE ARE NO OBSTACLES ON THE WALL SURFACE SUCH AS FIXTURES, LIGHTS, DOOR HANDLES, ETC.

WARNING: Your Mosquiteria is not designed to withstand high winds and snow or ice accumulation. This could damage your Mosquiteria and cause it to fall, causing personal injury and property damage and subsequently voiding the warranty. Retract the Mosquiteria during high wind events.

CAUTION: Proper installation and the integrity of the structure on which Mosquiteria will be installed is the sole responsibility of the customer - user. In case of doubt, consult a professional contractor.

1 Preparation

1.1 Equipment and tools

- Safety knife
- Measuring tape
- Masking tape
- Pencil or marker
- Drill
- Two ladders
- Level
- Caulking
- Robertson type screwdriver bit #1
- Robertson type screwdriver bit #2
- Robertson type screwdriver bit #3
- Philips type screwdriver bit #4
- Hexagonal socket 8 mm
- Hexagonal key 3 mm
- A rubber mallet
- Shims (metal or nylon washers)
- 5/32" metal drill (for wood installation)
- 3/16" masonry bit (for masonry installation)
- 5/16" masonry bit (for masonry installation)

1.2 Workspace requirements

Before installing the Mosquiteria, check the mounting surface and ensure that there are no obstacles on the surface such as gutters, fixtures, etc. that could interfere with or block the Mosquiteria when it is deployed. The compensator must be screwed to the structure from the back, never from the side.

The professional installer must make sure that the brackets and compensators are properly fixed to the structure to ensure that the assembly is done according to the specifications and that the Mosquiteria will function properly.



Figure 1.1-1

1.3 Operating the Mosquiteria system during install

It will be necessary to operate the Mosquiteria to install it, some steps require to raise or lower the shade. If the Mosquiteria is motorized, the power cord is 15' long. A functional GFCI plug must be available for installation, an extension cord can be used. When operating the motorized Mosquiteria, **monitor the movement until the motor limits have been calibrated and stop the movement manually by pressing the center button on the remote control if the tiller reaches the limits of its travel and the motor is still running.**

If the Mosquiteria is manual, simply hook the included crank to the winch and use the crank.

1.4 Measurements specifications

The Mosquiteria was produced according to very precise measurements provided to us. Its operation depends on a perfectly level installation. It is possible to install the Mosquiteria with shims up to 1/8th of an inch (0.125). A greater gap may be difficult to hide with the caulking.

In some cases, 0.25 inch is removed from one side of the casing to allow the power cord to pass through. In this case, you must offset the casing towards the side that does not have a power cord. One of the tabs will then have to be installed outside the track of the casing. It may also be necessary to use shims on the compensator on this side.

If you use shims for the casing brackets, you may need to cut the compensation and guides since the casing will be lower than expected.

1.5 Types of siding

It is important to secure the casing in a structural part of your building. For all buildings that have an internal wooden structure, there is very often a header above the window or door that will be protected by the Mosquiteria.

For a structure, such as a gazebo, or a balcony, **it is necessary to evaluate the horizontal support between the columns**. **Make sure you have a solid base** such as a wood beam or a metal support that will hold the brackets.

In some cases, such as concrete or structural brick, it will be possible to use masonry screws. Aluminum screws are also provided to secure the compensators to an awning or gazebo. It is important to always use the appropriate fasteners for your situation. It may be necessary to use different screws than those provided.

1.6 Unboxing procedure

Unscrew and completely remove the 8 wood screws holding the transport tube covers (i.e., the four wood screws at each end of the tube). Make sure that all screws are removed from the tube, otherwise they could damage the structure of the Mosquiteria.

Remove the caps at each end of the tube to free them. Pull the Mosquiteria out of the tube onto the grass or a blanket.

Place the Mosquiteria box on trestles or two stable chairs. Remove the crank (if Mosquiteria manual) and the brackets that are wrapped on the Mosquiteria structure. Carefully remove the plastic wrap with a safety knife. <u>DO NOT CUT with an ordinary knife</u> or an x-acto, which could damage your Mosquiteria.

1.7 Box contents

Attached to the main casing:

- One crank (Mosquiteria manual only)
- One remote control (if motorized version)
- Two brackets for casing less than 8 feet (or)
- Three (3) brackets for casing of 9 feet and more.
- Two (2) legs assembled.

Hardware bag:

Number	Description	Quantity
V1 et V3	Cover retention screws by color (the cover is delivered with	4
	a screw at each end; however 2 spare screws are included in	
	case of loss). Keep in a safe place.	
V2 et V4	Retention screws for the profile-guide (depending on the	4
	color of the system)	
V5	Screws for fixing the guides in the wood	12
V6	Screws to secure the guides in concrete	12
V7	Screws to anchor the guides in the aluminum	12
V8	Screws to secure the brackets	8
V9	Sleeve for securing brackets in concrete	8



Figure 1.7-1

2 Installation steps

The installation of the Mosquiteria requires a precise sequence, **please read all the instructions before starting the installation.**

For proper operation of the system, the casing must be installed level to the horizontal and the legs must be installed level to the vertical. If necessary, USE COUPLINGS.

2.1 Brackets

Mark the location of the retention brackets. Brackets should be installed approximately eight inches from each end of the box (for a Mosquiteria of 9 feet or more, the third support is installed approximately in the center of the box).

The retention screw (Figure 2.7-1) of the anchor must point downward for wall installation or forward for soffit installation. Install the brackets using the #8 screws on the diagram. BRACKETS MUST BE LEVEL, USE SHIMMERS IF NECESSARY; we suggest the use of metal or nylon washers as shims.

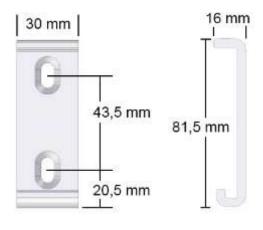
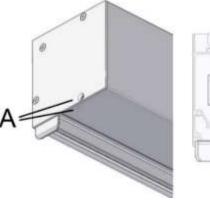


Figure 2.1-1

2.2 Casing

Remove screw A so that the housing cover can be removed. Screw A can be located on the side or under the housing cover. Place the cover in a safe place (figure 3.2-1).



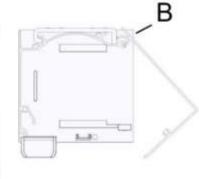


Figure 2.2-1

2.2.1 Mounting of the wall

Once the brackets have been installed, hang the casing to the brackets by inserting the top of the casing (C) first, into the track of the anchor. Then, push the bottom of the casing towards the wall to fully insert it into the brackets, secure the casing (D) by tightening the bracket's retention screw with the Allen wrench (figure 3.2-2) Make sure the casing is securely fastened in place before releasing it.

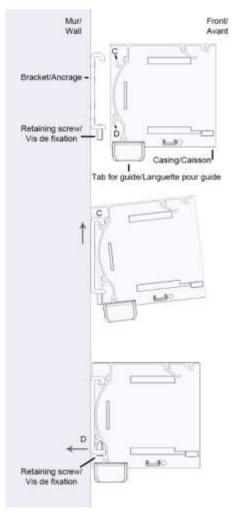


Figure 2.2-2

2.2.2 Mounting on the soffit

Once the brackets are installed, hang the casing to the brackets by inserting the back of the casing (C) first, into the tongue of the anchor. Then push the front of the casing (D) upwards to fully press it into the brackets, secure the casing by tightening the bracket's retention screw with the Allen wrench (figure 3.2-3). Make sure that the casing is securely fastened in place before releasing it.

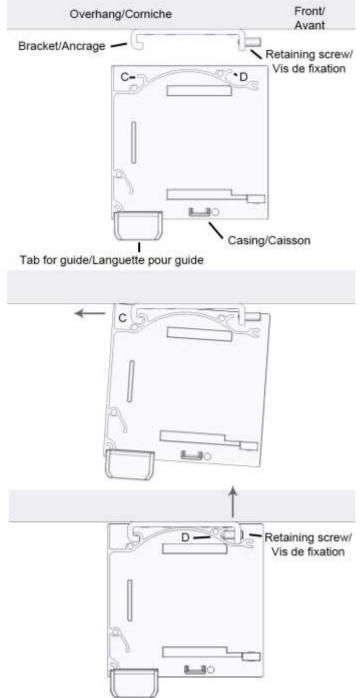


Figure 2.2-3

2.3 Guides

Guides are shipped assembled to avoid damage in transit.

There are 2 aluminum profiles inserted inside each other. The outer profile (2) is called a compensator and is screwed to the building. The inner profile (3) is the guide profile and is used to hold the fabric and the load bar to the Mosquiteria. There is also a plastic zip guide and two zip guide retaining moldings (4 and 5). The zip guide is used to guide and retain the shade and the load bar. See Figures 3.3-1 and 3.3-3.

Plastic caps complete each leg by holding the zip guide in place vertically. Cap 6 (without screw holes) goes at the top of the leg and cap 7 is the bottom one. See figure 3.3-2.



2.4 Compensators

Start by removing the guide profile (3) from the inside of the compensator (2). Mark the location of the compensators on the wall or structure. Check the wall or structure for plumbness, use spacers if necessary. The compensators must be level in both axes and fit into the tongue of the box. They must be flush with the side and back of the box as shown in Figures 3.4-1 and 3.4-2.





Figure 2.4-2

Figure 2.3-3

3

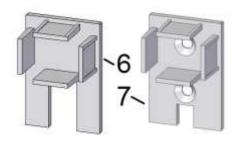
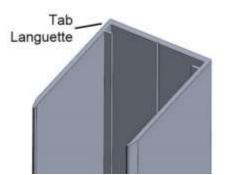


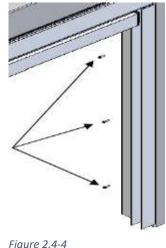
Figure 2.3-2

The compensator may not fit into the tab as shown in Figure 3.4-3. This may occur if the cabinet is offset to permit a wire to pass through or if measurements have not been taken perfectly. It is possible to install the compensator up to 1/8 inch (0.125) outside the end of the cabinet. The tab will then fit between the notches and the edge of the compensator. The guide profile will then not be able to rest on the bottom of the trim tab and will protrude a little.



Drill a minimum of 3 holes of 5/32nd of an inch evenly distributed *Figure 2.4-3* along the profile through the compensator and the structure. Use

a drill bit appropriate for the metal and the type of surface of the wall or structure. Secure the compensator in place with the appropriate screws (V5, V6 or V7.) See Figure 3.4-4.



2.5 Profiles

Remove one of the plastic caps from the guide profiles, then remove the zip guide (1) and the 2 retaining mouldings (4 and 5.) Replace the plastic cap and ensure that the other plastic cap is securely in place on the guide profiles; the caps with the large opening (6) must be at the top of the guide profiles. The V-notch (E) in the zipper guide should also be at the top to facilitate insertion of the fabric, see Figure 3.5-1.

Lower the Mosquiteria's load bar by approximately twenty-four inches (24") to pull the load bar out from between the compensators. Insert the guide profile (3) into the compensator with the upper cap at the top end.

E

2.6 Mesh fabric

Insert the lower end of the zip (F) into the notch of the plastic zip guide. Slide the zip guide (1) up gently, guiding the zip until about 12 inches of the zip is inserted. Holding the load bar with one hand and the zip guide with the other hand, insert the top of the zip guide into the guide profile, you may need to lift the end of the load bar to give the mesh fabric enough leeway. Insert the entire zip guide and then replace the retaining moldings (4 and

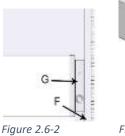
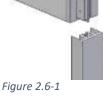


Figure 2.5-1



5.) Ensure that the zip guide is completely secured by the moldings and that the moldings are completely clipped to the guide profile to ensure the strength of the zip guide and the mesh fabric. It will probably be necessary to raise and lower the load bar to install the entire molding. Proceed in the same manner for the second zip guide.

2.7 Anchoring the guide-profiles

Lower the entire load bar and raise it again to align the mesh fabric and the load bar with the guide profiles. The guide profiles should be equally positioned in each of the compensators. If the box has been offset to allow a cord or obstacle to pass through, the guides will not be equal in the compensators. The guide profiles should not be fixed until the load bar moves up and down freely. Adjust the position of the guide profiles until the bar moves freely. It may be necessary to help the bar to move initially by pulling it down.

When the guide rails are in a position that allows the load bar to move freely, mark the locations of the guide rail mounting screws (V2 and V4) 1 inch from the top and 1 inch from the inside edge (towards the fabric) of the guide rail (Figure 3.6-1). Drill a pilot hole on each side of the compensator and install the screws, securing the top of the guide rail in the compensator, with the bottom free to adjust as needed. Proceed in the same way for the other guide.

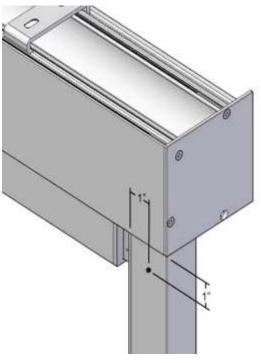


Figure 2.7-1

2.8 Finishing touches

Replace the housing cover using the screws (V1 or V3).

Use caulking if necessary, to cover possible gaps between the compensator and the structure or between the housing and the structure. If there is a possibility of water ingress into the housing, caulk it.

If necessary, adjust the closing and opening limits of the motor. See Appendix.

3 Programming the system

3.1 Setting the opening and closing limits

Note: All steps are sequential, and each must be executed in the below listed order. You must wait for the end of each step before executing the next one. The end routine of each step is underlined below. Moreover, the delay between each step should never exceeded 2 seconds. Failure the heed the previously listed note would entail a restart of the whole process.

- Press and hold the button on the motor <u>for 6 beeps</u> (2 series of 3) and 8 movements (2 + 4 + 2). After all the movements have completed, release the button.
- Press and release the motor button again. <u>One long</u> beep and 2 movements should be observed at this stage.
- Press and release the P2 button at the back of the remote. <u>One beep and 2 movements should be</u> <u>observed at this stage.</u>
- Again, press and release the P2 button at the back of the remote. <u>One beep and 2 movements should be</u> <u>observed at this stage.</u>



- 5. Press and release the down button on the remote resulting in <u>2 movements</u>.
- 6. Press the down button again. The fabric should begin to unroll (stop manually).
- 7. Once the fabric has reached the desired lower limit, press and release the stop button.
- Once the motor stops, press and hold the stop button <u>until 1 beep and 2 jogs are observed</u> (this might take a couple of seconds).
- 9. Once the lower limit is set, press the up button. <u>The motor should start pulling the fabric back</u>.
- 10. Use the stop button when the system reaches the desired height.
- 11. Press and hold the stop button until the system emits 1 beep and 2 motor jogs.
- 12. Wait 30 seconds.
- 13. Test the limits.

3.2 Reversing the remote direction (optional)

In case you want to reverse the direction on the remote buttons (i.e., up goes down and vice-versa), follow the below listed procedure.

Note: All steps are sequential, and each must be executed in the below listed order. You must wait for the end of each step before executing the next one. The end routine of each step is underlined below. Moreover, the delay between each step should never exceeded 2 seconds. Failure the heed the previously listed note would entail a restart of the whole process.

- 1. Press and hold the motor button until 3 beeps are emitted from the motor.
- 2. Wait 30 seconds.
- 3. Test the direction on the remote.

3.3 Programming an extra remote (optional)

Note: All steps are sequential, and each must be executed in the below listed order. You must wait for the end of each step before executing the next one. The end routine of each step is underlined below. Moreover, the delay between each step should never exceeded 2 seconds. Failure the heed the previously listed note would entail a restart of the whole process.

- Ensure that the second remote is on the desired channel. The channel can be cycled by using the left button on the remote.
- Press and release the motor button. <u>Three distinct</u> beeps should be emitted by the motor unit.
- Press and release the P2 button at the back of the remote. <u>One beep and 2 movements should be</u> <u>observed at this stage.</u>
- Again, press and release the P2 button at the back of the remote. <u>One beep and 2 movements should</u> <u>be observed at this stage.</u>
- Press and release the down button on the remote resulting in <u>2 movements</u>.
- Expected orientation for the remote

6. Wait 30 seconds.

7. Test out the new remote.

4 Safety Notices & Disclaimers

<u>WARNING</u>: BEFORE USING YOUR MOSQUITERIA, MAKE SURE THAT NO OBJECT OR PERSON OBSTRUCTS ITS PATH WHEN OPENING OR CLOSING IT. KEEP CHILDREN OUT OF REACH OF ALL MOVING PARTS WHILE THE MOSQUITERIA IS IN OPERATION. THIS COULD CAUSE PERSONAL INJURY.

<u>WARNING</u>: Never suspend any part of the Mosquiteria from any part of the Mosquiteria except for the accessories provided by the manufacturer.

<u>WARNING</u>: NEVER repair or disassemble parts of your Mosquiteria without following the procedures provided by the manufacturers of these replacement parts. Repair without proper instructions may cause BODILY INJURY OR FAILURE TO OPERATE YOUR MOSQUITERIA AND SUBSEQUENTLY VOID THE WARRANTY.

<u>CAUTION</u>: DAMAGE TO MOSQUITERIA OR MECHANISM CAUSED BY ACCUMULATION OF WATER, RAIN, ICE OR HIGH WIND are not covered by the manufacturer's warranty. Always retract the Mosquiteria during periods of snow, ice, rain or strong winds. Never leave Mosquiteria open unattended in high winds.

Be sure to reopen Mosquiteria to allow it to dry if it is wet when retracted.

For long term storage or non-use of a motorized Mosquiteria, the manufacturer suggests running the engine after a few months to maintain lubrication of the internal components.

5 Maintenance

To ensure the proper functioning and prolog the lifespan of your Mosquiteria follow the recommendations listed below.

5.1 Lubrification

We recommend applying lubricant on the lateral tracts (*Fig 4-1*) at least 3 times per season on the following schedule: (1) at springtime, before first use, (i.e., Mach – June); (2) during the summer months (i.e., July – August) and (3) near the end of the fall season.

Use the following steps to ensure that the system is properly lubricated.

- 1. Make sure no object of debris is present on the tracts.
- 2. Ensure that the system is fulling retracted (i.e., the lower bar sits at the upper limit).
- Use a dry silicone spray lubricant, such as Adseal 4000A2. Using the included straw, inject the lubricant inside the plastic PVC guides from top to bottom.
- 4. Unroll the fabric to until you reach the lower limit and roll up again.

Figure 5.1-2

5.2 Mesh fabric

The main solar fabric (composed of 74% PVC and 26% polyester) is coated with a special protective solution which delays the formation and accumulation of debris. Use the following cleaning instructions to maintain the above protective layer and maximize the life of the mesh fabric

Warning: Never use a pressure washer to clean the Mosquiteria system as it will strip the antimildew coating, rip the seams and/or potentially damage the motor unit.

- 1. Using a soft brush and/or a vacuum cleaner remove any dust and dirt from the dry fabric.
- 2. To remove excess debris, use a sponge, non-abrasive soap and a mild water temperature.

- 3. Rinse thoroughly to remove all traces of soap.
- 4. Leave the fabric fully extended to dry.

Warning: Never retract the fabric into its casing if its wet. While the fabric is coated with an antimildew protective layer, this layer is inadequate to safeguard the fabric under extremely moist conditions. If you retracted the wet fabric in its casing, extend the system back to a fully open position as soon as possible.

5.3 Motor

The electric motor is equipped with an automatic overheating shut-off system. If you open and close your Mosquiteria several times in a row, the motor stops automatically before overheating. The motor will resume normal operation after 20 minutes of cooldown.

To maximize the lifespan of the Mosquiteria system, cycle the motor at least a few times a year to ensure proper lubrication of the internal components.

5.4 Remote

The batteries (CR2430) need to be replaced every couple of years. A simple way to determine the state of the batteries is by pressing any buttons on the unit and see if the red LEDs, located on the bottom left, light up. If the LEDs on the remote do not light up and/or they all flash Figure 5.4-1 for less than 5 seconds change the battery. Additionally, we recommend storing the remote in a safe environment with low humidity. We advise to remove the bat teries if you are not planning to use the remote for an extended period (i.e., winter).





Figure 5.4-2

Battery replacement procedure:

- 1. Slide off the plastic case on the back of the remote (Fig 5.4-2).
- 2. Once the battery is exposed remove it from the plastic holder.
- 3. Place the new battery in the plastic holder.
- 4. Slide back the carrying tray into the remote.

5.5 Winter storage procedure

Warning: You cannot use the Mosquiteria system during winter as the snow and ice will not only damage the main mesh fabric, however it could result in an inoperable motor unit.

- 1. Ensure that the solar fabric is clean and dry before retracting it into its casing (refer to point x.x if necessary).
- 2. Completely retract the fabric in its casing (i.e., the upper limit).
- 3. Unplug the motor unit from the wall.
- 4. Using a plastic bag and tape wrap the end of the motor cord. This will protect the plug from rain, snow, and ice.
- 5. Remote the battery from the remote.
- 6. Store the remote control in a low humidity environment.

6 FAQ

1. Can I connect my Mosquiteria directly to the electrical system (without a plug)?

It is possible to connect the motor directly to the electrical system by cutting the plug but doing so will void the motor warranty and may make programming more difficult. If you really want to do this, make sure you have an easily accessible switch for motor programming procedures.

NEVER CUT THE WIRE WITHIN 12 INCHES OF THE MOTOR AS YOU COULD CUT THE MOTOR'S ANTENNA.

2. My remote control does not close or open the Mosquiteria.

If your Mosquiteria is almost closed, but not completely, it may sometimes refuse to close. In this case, it is necessary to open it a little before closing it completely.

If the Mosquiteria stops during its run or just after moving, it is possible that the overheating protection is effective. Wait at least 20 minutes and try again.

Check if the electrical outlet is functional by plugging in another appliance, such as a lamp.

If the plug is functional but the Mosquiteria does not work, test the remote control (i.e., leds functioning).

Check if the batteries in the remote control are charged. A remote control with a low battery will take longer to turn on the LED light and will have a reduced range.

If the LED light does not blink, replace the battery with a new one; this is a CR2430 lithium battery.

If the problem persists, erase the motor programming and re-program the motor (see section 5.2 Reset and synchronize motor and remote control). You will also have to reprogram the limits.

3. My motor does not respond but it was working a few minutes ago.

If your Mosquiteria is almost closed, but not completely, it may sometimes refuse to close. In this case, it is necessary to open it a little before closing it completely.

If the Mosquiteria stops during its run or just after moving, it is possible that the overheating protection is effective. Wait at least 20 minutes and try again.

Check if the outlet has power.

4. The Mosquiteria stops before it is completely open and/or it opens too far and the mesh fabric becomes loose.

The opening and closing limit of the motor needs to be adjusted. See section 4.

5. The Mosquiteria only opens and closes if one of the buttons on the remote control is kept pressed.

You need to redo the limits (refer to section 3.2)

6. Can other remotes interfere with my Mosquiteria?

No, each remote control must be added to the Mosquiteria. Garage door openers and other remotes cannot communicate with your Mosquiteria.

7. I've lost my remote control and I'm not able to program my new remote control.

Follow the steps listed in the programming section (3.2)

8. I'm trying to open my Mosquiteria but the load bar doesn't go down or it goes down more on one side than the other.

The zip-guides may be dirty, see section 6.1 Also check the alignment of the zip-profiles in the compensators.

9. I try to add a new remote control, but it does not work

Follow the procedure listed in the programming section (3.3)