

Owner's Manual

Virtual Cord™ Motorized Shades

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Please be sure to read and remove the securing tape and label before operating your motorized shade.

<p>RF Antenna wire</p> <p>Power cable/</p>	<p>RF Antenna wire</p> <p>Power cable</p>	<p>Remove securing tape and position motor RF antenna wire and power cable away from roller tube (see A) or outside of headrail (see B) depending upon product type.</p> <p>Avoid crimping or damaging the antenna and power lead during installation process.</p> <p>NOTE: RF antenna should be visible (exposed outside headrail) for greatest RF range. In some cases, RF antenna wire may need to be repositioned for optimal performance.</p>
<p>A. Solar, Roller, Artisan Fabric, Natural</p>	<p>B. Cellular, Pleated, Classic Roman</p>	
<p>ATTENTION! IMPORTANT INSTALLATION INFORMATION ¡ATENCIÓN! INFORMACIÓN IMPORTANTE SOBRE LA INSTALACIÓN</p>		

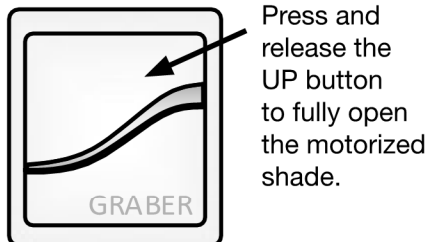
About Your Motorized Shade

Motorized shades offer a convenient solution to everyday challenges. They provide instant privacy, glare reduction, and eliminate the need to manually adjust shades. Motorized shades also eliminate dangerous cords and create a comfortable and energy efficient environment. Motorized shades feature Z-Wave Radio technology, Z-Wave is omnidirectional and operates within a range of 65 feet, eliminating the need to aim the remote.

Z-Wave is the most widely used radio protocol in leading home automation systems, making integration simple and inexpensive.

Basic Shade Control

Upon first power up, you will see a green light illuminate on the headrail or motor end of the shade. This will happen whenever power is first applied or restored after an outage. Press the UP or DOWN button to operate the shade.





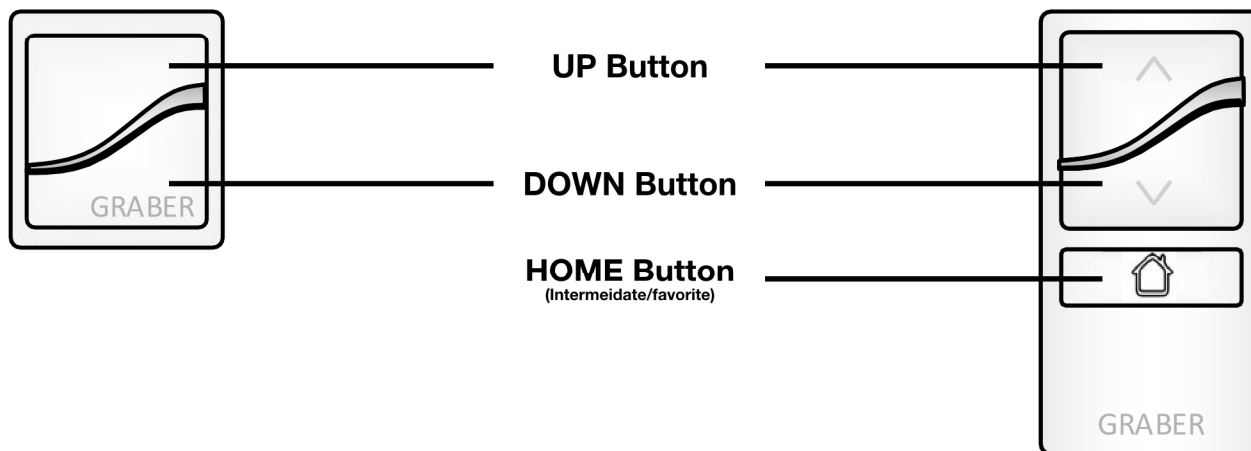
Note: you can press and release the opposite directional button to stop the shade while it is in motion.

Control Features

Operating your shade with the two-button remote or optional single-channel remote.







Your controls have been pre-programmed to control your shade. The upper and lower limits and  position have already been set. If you are not satisfied with the default upper, lower, or  position of your shade, see steps in the following sections of this manual.



Home Button – Single-Channel Remote



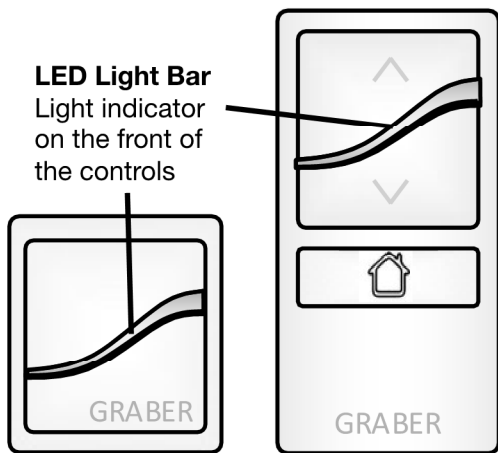
 button: Acts as a STOP button while shade is in motion. It can also be programmed as a quick way to bring shades to your preferred intermediate position.

1. Press and releasing  while your shade is at rest will bring your shade to your  position.
2. Press and releasing  while the shade is in motion will stop the shade.

LED (Light) Locations and Indications

Remote LED Indications

Operation on LED light bar:



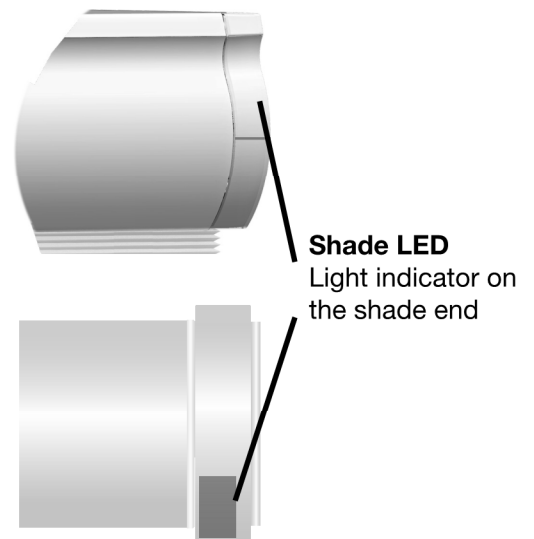
LED Colors	When	Definition
Green blinking	After operation	Battery is good
Amber blinking	After operation	Battery is low
Red Blinking	After operation	Battery is dead
Solid green to solid amber to flashing green	From user mode	Entering a programming state
Solid amber to blinking green	From user mode	Leaving a programming state
Flashing amber to blinking green	From user mode	Intermediate limit set

Replacement battery: #CR2430

Shade LED Indications

There is a discreet LED located on the end of your shade to provide additional valuable feedback. In bright conditions, it may be difficult to see, so steps may need to be taken for limit light for better visibility.

LED Colors	When	Definition
Amber blinking	After operation	Battery is at 20%
Red blinking	After operation	Battery is dead
Red/green alternating	From user mode	Entering a programming state
blinks green then turns off	From user mode	Leaving a programming state
Solid green then turns off	From user mode	Setting an intermediate position



Replacement batteries: 8AA Lithium per battery case; larger shades may require multiple battery cases

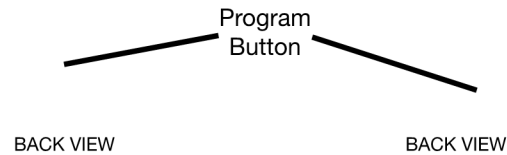
Program Buttons

Program Button (remote)

Button on the back of the Virtual Cord or single-channel remote used to put the control into programming mode for various set up options within this guide.

Single-Channel Remote

Two-Button Remote



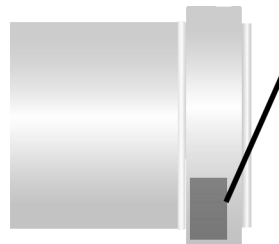
Program/Operation Button (shade)

Button located on the shade headrail or motor end used to operate the shade if the control is misplaced or to put the shade into programming mode for various set up options listed in this guide.



Cellular and Pleated and Roman

Located on the headrail



Solar, Roller, Natural, and Soft Shades

Located on the motor end

Installation Notes

Installation of Product:

Two-button remote only

- Check and adjust limits

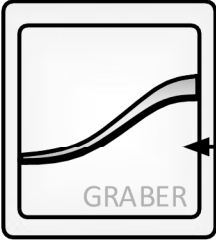
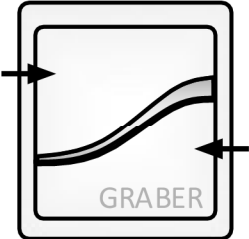
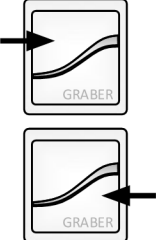
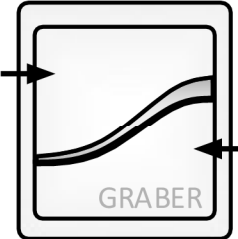
Single-channel remote only

- Associate
- Adjust limits
- Adjust Home position

It is necessary to install and adjust each product prior to moving on to the next product.

Adjusting Your Shade's Default Lower Limit (optional)

The upper limit of your shade is factory pre-set to an open position which protects the shade from damage while maximizing view. If you desire the shade to have an upper limit at a lower position when fully opened, follow these steps. **Note:** a jog is a brief up and down movement of the shade.

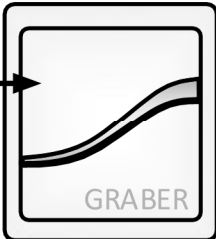
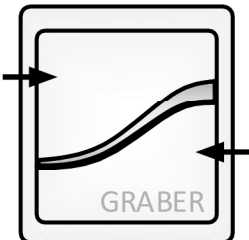
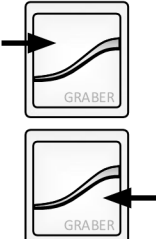
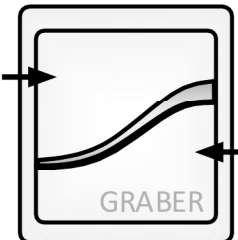
- 
1. Briefly press DOWN and release. Allow the shade to reach its default lower limit.
- 
2. Once the shade stops, press and hold UP and DOWN buttons simultaneously until LED light turns amber and release both buttons. The shade will jog and the remote will flash green. The LED on the shade will alternately flash green and red.
- 
3. Adjust your lower limit by using UP or DOWN to move your shade to your desired lower limit.* The shade will only move while UP or DOWN is being pressed while in this adjustment mode.
- 
4. When the shade is stopped at your new desired lower limit, press and hold UP and DOWN buttons simultaneously until the shade jogs.



***PRODUCT SAFETY NOTE:** Be careful not to exceed the ordered product length, this may result in damaged product. Should this happen, immediately push UP to correct. If your shade will not lower to your desired lower limit, contact a customer service agent for assistance.

Adjusting Your Shade's Default Upper Limit (optional)



The lower limit of your shade is factory pre-set to a closed position matching the ordered length. You may want to adjust the lower limit to accommodate window hardware or other obstructions. **Note:** a jog is a brief up and down movement of the shade.

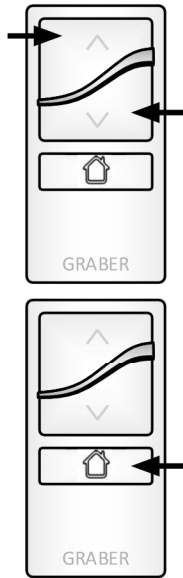
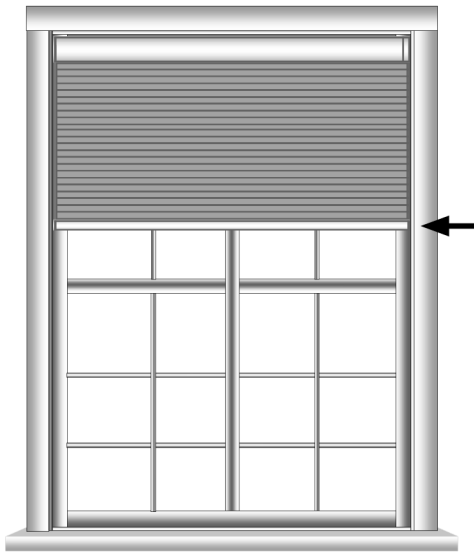
- 
1. Briefly press UP and release. Allow the shade to reach its default upper limit.
- 
2. Once the shade stops, press and hold UP and DOWN buttons simultaneously until the shade jogs. (A jog is a brief up and down movement of the shade.)
- 
3. Adjust your upper limit by using UP or DOWN to move your shade to your desired upper limit.* The shade will only move while UP or DOWN is being pressed while in this adjustment mode.
- 
4. When the shade is stopped at your new desired upper limit, press and hold UP and DOWN buttons simultaneously until the shade jogs.










***PRODUCT SAFETY NOTE:** When adjusting the upper limit on cellular or pleated shades, do not raise the product too tight. Adjusting the product too tight can cause the motor to fail and/or break/fray the internal cording. When installing a solar or roller shade in a fascia or cassette valance, be sure the hembar does not lift into the fascia or cassette, as this could cause the hembar to get stuck and/or damage the fabric.

Adjusting Your Shade's Home Position (optional)



If your shade system includes an optional single-channel remote, it has been pre-programmed to control your shade(s). The default  position (intermediate position) is pre-set to mid-length of your shade. To change the  position, follow these steps. **Note:** if the single-channel remote controls multiple shades as a group, refer to the next section.

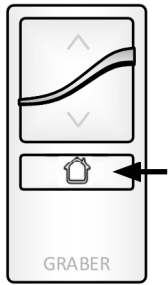




1. Use the UP or DOWN button to put the shade in motion. When the shade reaches your desired  position, press and release  to stop the shade.
2. To set your  position, press and hold the  button until the LED on the remote turns amber, then release the button. The shade will jog and the new  position is set.


Note: Always adjust the upper and lower limits before adjusting your  position. After adjusting the upper or lower limits, the  position will reset to the new mid-length position.

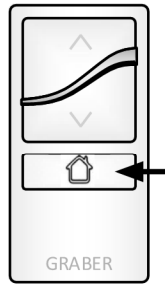
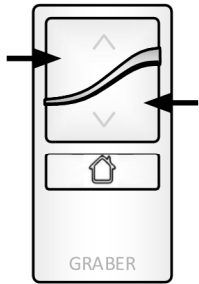
Adjusting the Home Position on a Group of Shades (optional)

If your shade system includes an optional single-channel remote as a group control, it has been pre-programmed to control your shades. The default  position (intermediate position) of all shades is pre-set to mid-length. To change the  position on multiple shades, follow these steps.





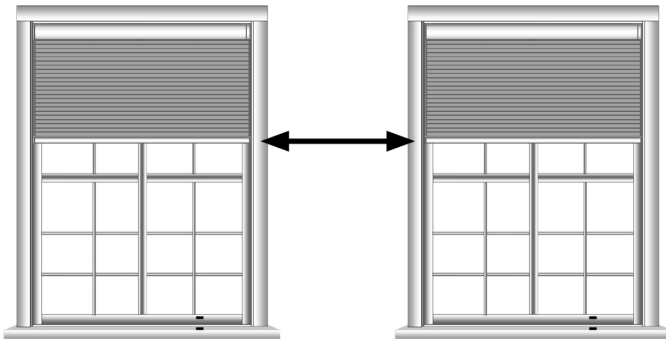
1. Press and release the  button to bring the group of shades to their pre-programmed  position.

2. In order to adjust the  position of each shade, you must first target the individual shade you want to adjust. To do this, press and release the back of the single-channel remote (1 tap). The LED on the remote will alternately flash green. Then on the shade that you want to adjust, press and hold the program button on the headrail/motor end until the LED begins to flash green and release. the shade will jog.






3. Using the two-button remote that controls the shade, adjust the shade to the new desired position.

4. Using the single-channel remote, press and HOLD the  button until the LED turns amber and release the button. The  position of the target shade is now reset.



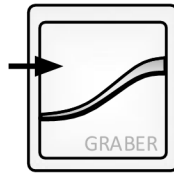
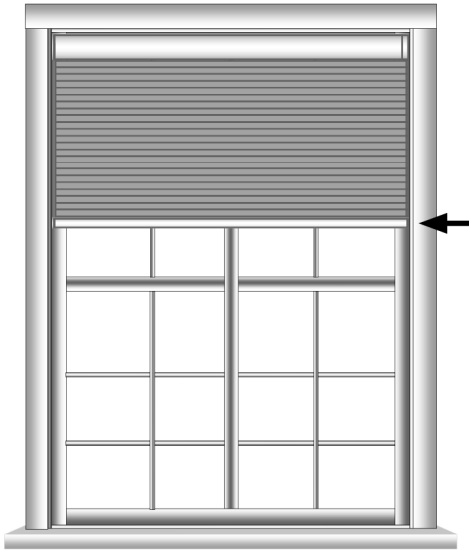
5. Repeat process for additional shades to adjust the new desired position.

Note: Always adjust the upper and lower limits before adjusting your  position. After adjusting the upper or lower limits, the  position will reset to the new mid-length position.

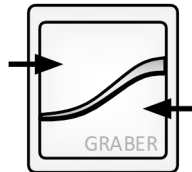
Installer Note: You are required to access the motor head to adjust the  position.

Reversing Motor Direction

Each shade is pre-programmed from the factory to operate up and down corresponding to the appropriate buttons on your Virtual Cord. However, if the directions are inadvertently reversed, follow these steps to return the shade to proper operation.

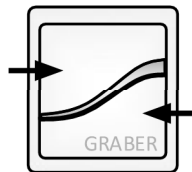


1. Move the shade to any position between the upper and lower limits by pressing and releasing the directional buttons.



2. Press and hold UP and DOWN buttons until the LED light turns amber then release buttons.

The shade will jog and the LEDs on the motor will begin to blink green and red and the LEDs on the remote will blink green.



3. Press and hold the UP and DOWN buttons until the LED turns amber then release buttons.

Shade direction has now been reversed; however, the upper and lower limits have been maintained.



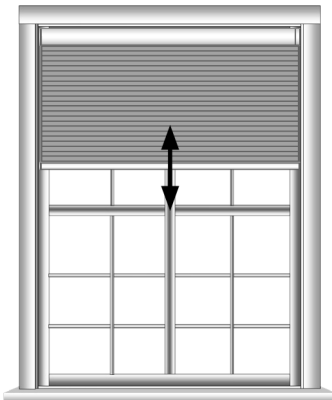
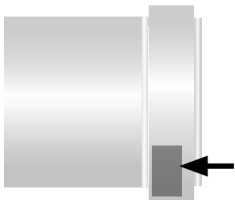
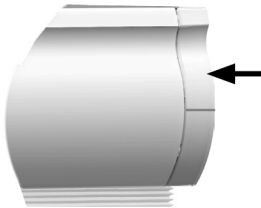
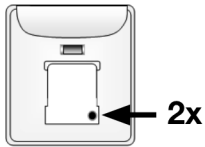
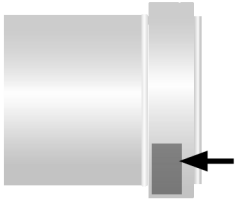
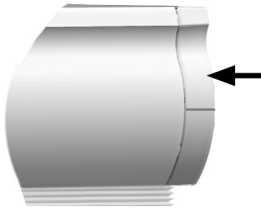
All programming steps are associated with a time-out feature to preserve battery life.

Adding Remotes, Creating Groups and Pairing to Z-Wave Smart Systems

Your motorized shades are pre-programmed from the factory with the appropriate pairing and grouping between remotes and shade motors. There are several scenarios when additional programming steps will be required. The next sections explain how to accomplish the most common scenarios you will encounter. If the appropriate scenario is not included, please contact a customer service representative prior to attempting any adjustments.

Adding a New Remote When the Only Remote Controlling the Shade is Lost

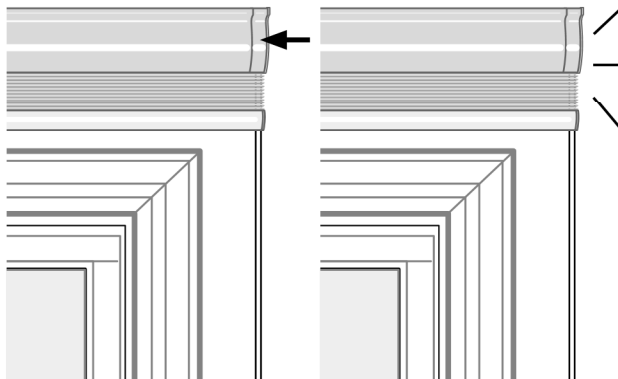
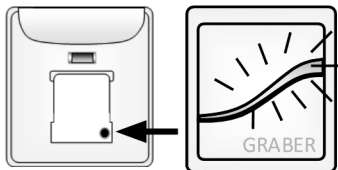
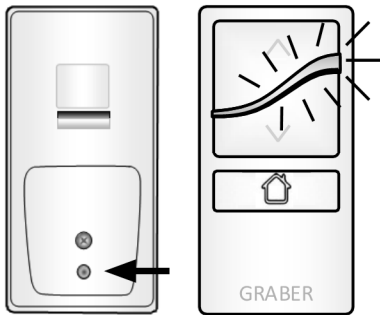
If you no longer have your remote, or the remote no longer works, follow these steps.



1. Press and hold the program button on the headrail/motor end, the LED will flash green then amber. When the shade jogs once, release the button and the LED will turn solid amber and turn off. The motor is now ready to learn a new remote.
2. Using a paper clip or a similar item, press and release the programming button located on the back side of the new remote twice in rapid succession (two taps within a second in between). The LED on the remote will flash alternatively amber and green.
3. Press and hold the program button on the headrail/motor end until the LED flashes green, then release the button. This places the motor into a learning mode for approximately 20 seconds. (LED continues to flash green.)
4. The shade will jog, confirming the motor and remote are now paired.

Adding a New Remote as a Group Control

If a group control was not selected at the time of purchase and is being added to an existing motorized shade, follow the steps below. **Note:** Individual shade control will be maintained with the original two-button remote only after it is associated with the shade (see next page).



To add a group control to an existing shade, you must first clear the current remote(s) from the motors and remotes.

1. Press and hold the program button on the back side of the old remotes until the LED turns from flashing green to flashing amber, then release.
2. At the headrail/motor end, press and hold the program button until the LED turns from flashing green to flashing amber. The shade will jog once, then release.
3. The LED light bar will turn solid green and the shade will jog, confirming they are now joined.

Include the new remote as the group (primary) control

1. Press and release the program button on the back side of the new remote twice in rapid succession (with one second between taps).
2. The LED on the new remote will alternately flash amber and green to identify inclusion mode.
3. Press and hold the program button on the headrail/motor end, release when LED flashes green.
4. The shade will jog and all LED's will turn off.
5. The shade will now operate from the newly added remote.

Repeat this process for each remote to be added to this group.

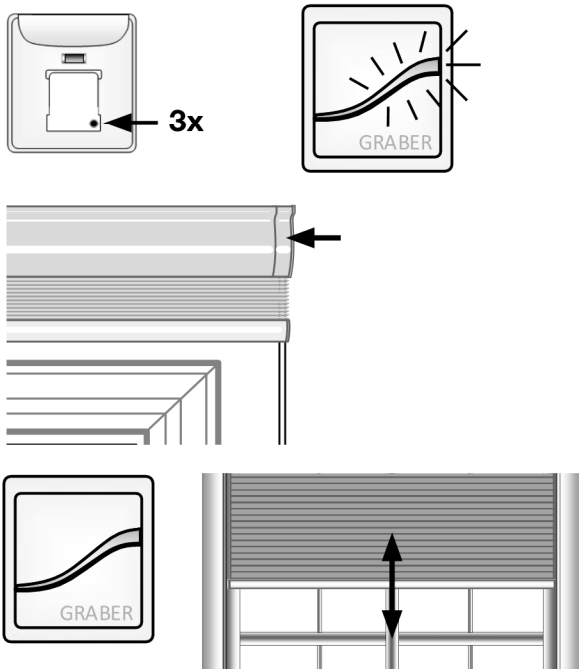
Associate existing remotes as secondary control.

1. Press and release the program button on the back side of the primary group remote twice (with one second between taps).
2. The LED on the primary remote will alternately flash amber and green to identify inclusion mode.
3. On the existing remote, press and hold the programming button until the LED begins to flash green, then release the button.
4. Once the LEDs are off, on the existing remote, press and release the program button until the LED begins to alternately flash green.
5. Press and HOLD the program button on the headrail/motor end until the LED flashes green, then release the button.

Repeat this process for each remote to be added to this group.

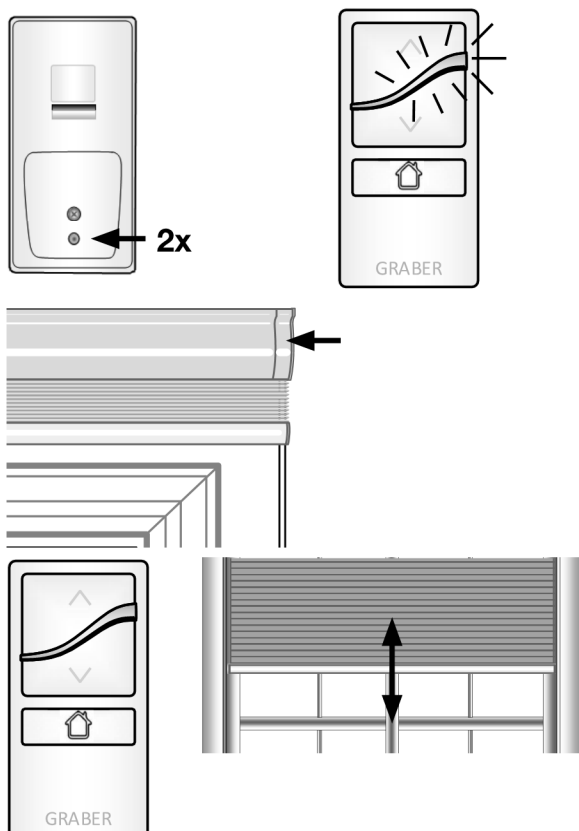
Assigning the Single-Channel Remote as Primary

This process is followed when the end user desires to add a single-channel control point for a group of shades as well as individual control. You must first exclude all individuals and include the single-channel remote as the primary controller.



Exclude the 2-button as the Primary Controller

1. Triple tap the program button on the back of the Virtual Cord.
2. The LED light bar on the Virtual Cord will blink, alternating amber to identify exclusion mode.
3. Press and hold the button on the headrail endcap until the light begins to blink green (about three seconds).
4. The LED light bar on the remote will turn solid green then turn off and the shade will jog, confirming exclusion.

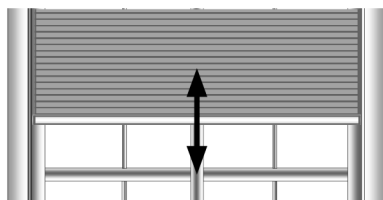
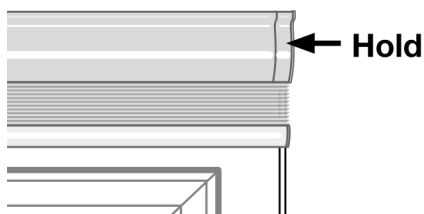
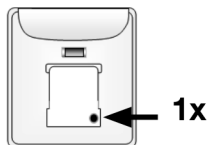
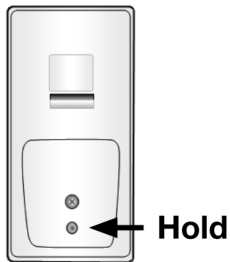
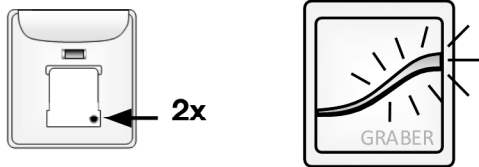


Include Single-Channel Remote as the Primary Controller

1. Double tap the program button on the back of the Virtual Cord.
2. The LED light bar on the single-channel remote will blink, alternating between amber and green lights to identify exclusion mode.
3. Press and hold the button on the headrail endcap until the light begins to blink green (about three seconds).
4. Shade will jog and LED will turn off.
5. The shade will now operate from the single-channel remote.

Adding Individual Control Back After Creating a Group

Adding individual control to shades which are part of a newly formed group. This remote will now be referred to as the secondary control.



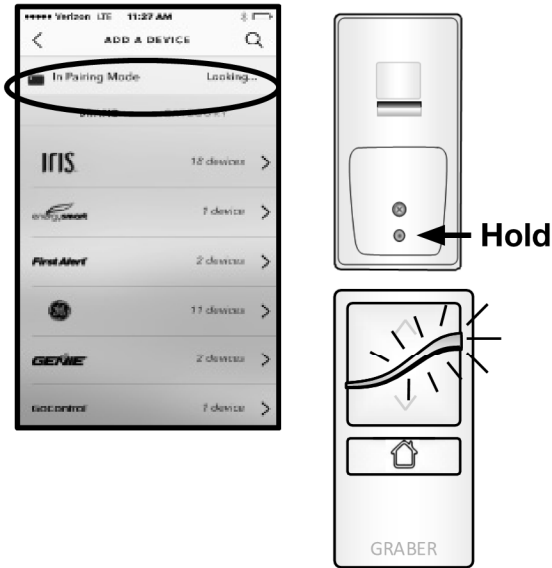
Adding a Secondary Controller

1. Starting with the primary control, press and release the program button on the back side of the current remote twice in rapid succession (one second between taps).
2. The LEDs will flash alternating amber and green to identify inclusion mode.
3. Press and hold the program button on the secondary remote control until the LEDs flash green, then release the button.
4. Both the primary and secondary remote LEDs will flash green, then off confirming inclusion.
5. The secondary control is now ready for final steps to control the shade.
6. Press and release the program button on the back side of the secondary control once. The LEDs will alternately flash green.
7. Press and hold the program button on the target shade headrail or motor end until the LED flashes green, then release the button.
8. The LED on the secondary control will turn green and the shade will jog.
9. Both the primary (group) and secondary (individual) controls will now operate the shade.

Repeat this process on all shades you want to individually control.

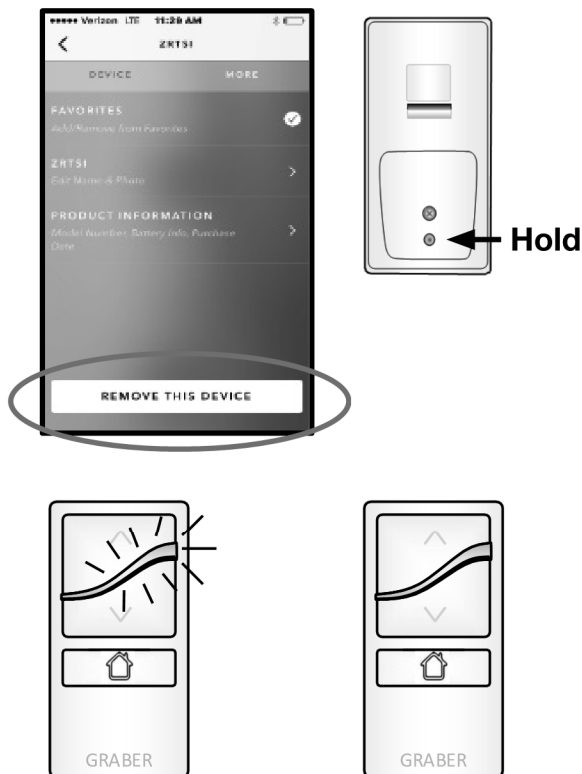
Joining an Existing Z-Wave Network

All shade end limits, controls, and intermediate positions should be programmed prior to joining the network.



1. Place hub into discovery mode (add device). There will be some form of feedback from the hub that it is searching for a device.
2. Place single-channel remote in programming mode by pressing and holding the programming button until the LED light bar begins to flash green then release the button.
3. The hub will find the device.
4. Follow instructions for the system.

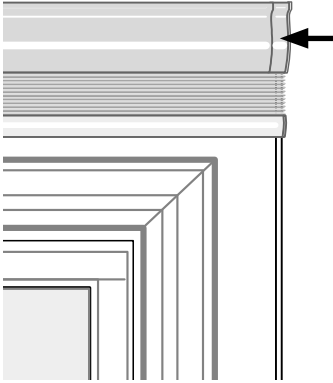
Removing a Device from a Hub



1. Place hub into remove device mode (exclude).
2. Press and hold the programming button until the LED light bar begins to blink green then release the button.
3. LED light bar will turn solid green and turn off.
4. Follow instructions on the hub.

Please use these procedures only when the network primary controller is missing or otherwise inoperable.

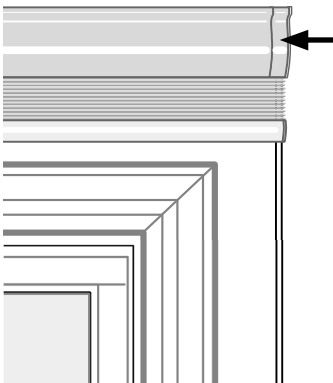
Network Reset



1. Press and hold the button on the headrail endcap until the shade jogs once (about 7 seconds), then release the button.

NOTE: Shade limits are not lost.

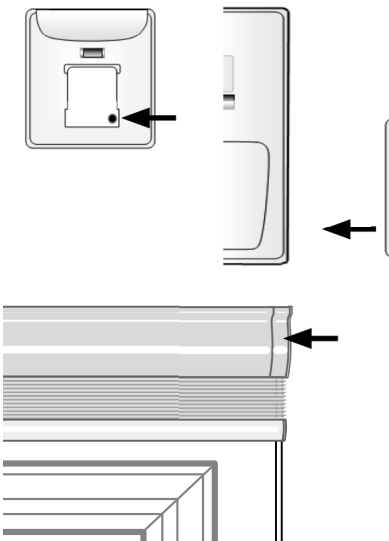
Factory Limits Reset



1. Press and hold the button on the headrail endcap until the shade jogs twice (about 15 seconds), then release the button.

NOTE: Factory limits are set in the motor at about 2 to 4 inches apart. All controllers will remain in the motor's memory.

Local Reset



1. Press and hold the programming button until the LEDs stop blinking. LEDs will blink green, amber, red, and then finally turn off (about 15 seconds).

NOTE: Local reset must be performed on both the controllers and motors.



Z-Wave is a wireless mesh-networking protocol for reliable, intelligent home control of all Z-Wave compatible devices. Z-Wave devices can act as repeaters to create a mesh-network to ensure reliable communication regardless of the manufacturer or type of device. This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from any other manufacturer. Z-Wave devices such as lamp modules, fan controllers, thermostats, dimmer switches and many other types of home control devices are available from a wide range of manufacturers. The Z-Wave Alliance (www.z-wavealliance.com) provides a list of manufacturers of Z-Wave compliant devices. Z-Wave was created by Sigma Designs and more details on the technology can be found at www.z-wave.com.

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

ZWAVE COMMAND CLASS BASIC

The ZWave BASIC COMMAND CLASS can be used to control/operate the products detailed in this manual. The BASIC CC can be used for normal shade control operations- moving shade position between End Point Limits. The BASIC COMMAND CLASS (SET) parameter definition is as follows:

BASIC_COMMAND_CLASS (0x20) PARAMETER DEFINITION

FCC Class B Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications: Any modifications made to this device that are not approved by Oracle may void the authority granted to the user by the FCC to operate this equipment.