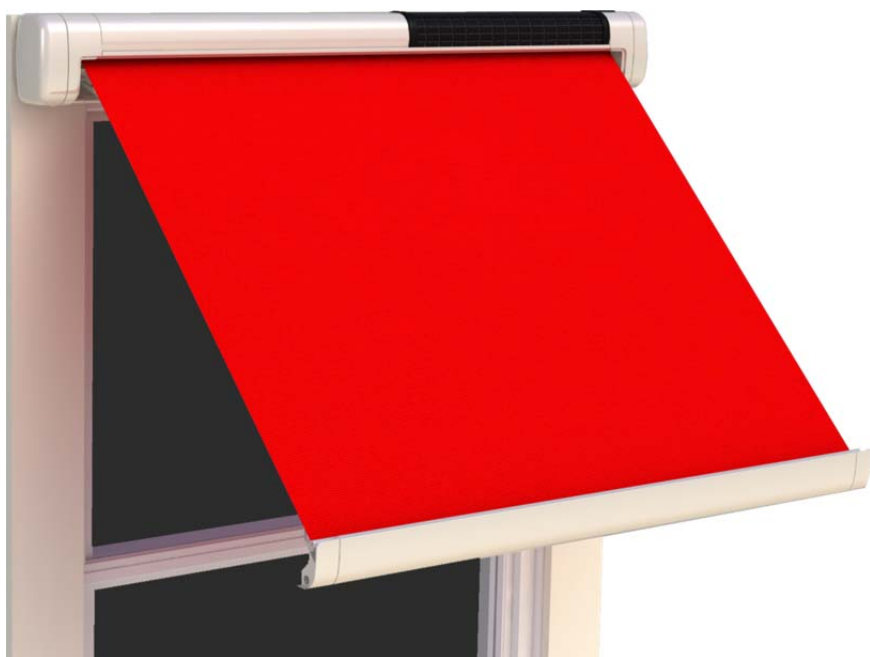


SOL-LUX

Home Window Awning System

EOS



wireless technology



**Read this manual before installing or using this product.
Failure to follow the instructions and safety precautions in this
manual can result in personal injury and/or cause the product to
not operate properly.**

**SAVE THIS MANUAL.
INSTALLERS PLEASE LEAVE THIS MANUAL FOR OWNER'S USE**

Notices and Disclaimers

TRADEMARKS

SOL-LUX® and the SOL-LUX logo are registered trademarks of Carefree of Colorado.

The SOL-LUX Eos Awning, application firmware and the SOL-LUX Mobile App software are patent pending.

The *Bluetooth*® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. Use of such marks by Carefree of Colorado is under license.

Other trademarks and trade names are those of their respective owners.

STATEMENT OF COMPLIANCE

FCC and IC identification numbers are located on the back of the awning, below the battery.

FCC COMPLIANCE

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 and, (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/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IC COMPLIANCE

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) These devices may not cause harmful interference and, (2) These devices must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme aux normes RSS exonérées de licence d'Industrie Canada. L'opération est soumise aux deux conditions suivantes: (1) Ces appareils ne doivent pas causer d'interférences nuisibles et, (2) Ces appareils doivent accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

FCC/IC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC and IC radiation exposure limits for an uncontrolled environment. The minimum distance between the radiator and people is designed to be 20cm when installed and operated.

Cet équipement est conforme aux limites d'exposition aux radiations FCC et IC pour un environnement non contrôlé. La distance minimale entre le radiateur et les personnes est de 20 cm lorsqu'installé et utilisé.

DISCLAIMER

The SOL-LUX Eos awning and the SOL-LUX Mobile App are products of Carefree of Colorado, located in Broomfield, Colorado, USA. The information contained in or disclosed in this document is considered proprietary to Carefree of Colorado. Every effort has been made to ensure that the information presented in the document is accurate and complete. However, Carefree of Colorado assumes no liability for errors or for any damages that result from the use of this document.

The information contained in this manual pertains to the current configuration of the model listed on the title page. Carefree of Colorado reserves the right to cancel, change, alter or add any parts and assemblies, described in this manual, without prior notice.

Carefree of Colorado agrees to allow the reproduction of this document for use with Carefree of Colorado products only. Any other reproduction or translation of this document in whole or part is strictly prohibited without prior written approval from Carefree of Colorado.

This manual is intended to assist contractors and homeowners by providing information about the characteristics of the awning. It does not relieve you of the responsibility of using accepted safety practices in the installation, operation, and maintenance of this awning.

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INTRODUCTION

Thank you for your recent purchase of the SOL-LUX Eos awning. We appreciate having the opportunity to do business with you. Our customers are our top priority, and we strive for 100% satisfaction. If you have any questions or concerns about this order, please do not hesitate to contact us.

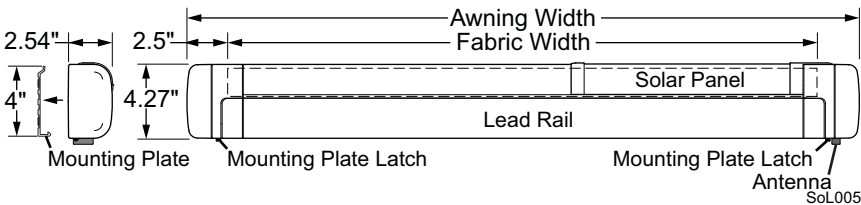
PRODUCT DESCRIPTION

The Eos Home Window Awning provides automated shade with simple to use technology and stylized to blend with your home.

It comes ready for use with the following features:

- Solar powered;
- Automatic operation: Opens with daylight; closes when it becomes dark;
- Bluetooth enabled to allow control via the SOL-LUX Mobile App for your smartphone or tablet;
- Available in a wide variety of colors and fabrics to match your home;
- Simple DIY installation;
- Low maintenance.

TECHNICAL INFORMATION



WIDTHS AVAILABLE:	39" to 96" [99cm – 244cm] in 1/2" [1cm] increments
FABRIC EXTENSION:	30" [76cm] (measured from cassette to lead rail)
CANOPY PITCH	45° Fixed (angle the canopy slopes down)
CASSETTE	Aluminum components with a durable powder coat finish
FABRIC	Sunbrella® Woven Acrylic Fabric
	<i>For available cassette colors and fabric options go to www.sol-lux.com</i>
POWER	Rechargeable 9.6V Lithium-ion Battery Pack with PCM
CHARGING	Integrated Solar Panel
CHARGING TIME	Battery comes partially charged and ready for use. It will reach full charge within 2 to 5 days depending on amount of use and the amount of sunlight the solar panel receives. <i>*Charging time will be slower under cloudy or overcast conditions.</i>
AWNING WEIGHT	Base weight = 17.25 lbs. (based on a 48" awning with bracket) Add 3.25 lbs. for each additional 12" of length

WARNINGS AND CAUTIONS



This is the safety alert symbol. It is used to alert individuals to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible personal injury or death.



Indicates a hazardous situation, which if not avoided, could result in death or serious bodily injury.



Indicates a hazardous situation, which if not avoided, may result in minor or moderate bodily injury.



Indicates a situation that may result in equipment-related damage.

GENERAL SAFETY:



ELECTROCUTION HAZARD. ALWAYS maintain at least 10 feet (3 meters) from electrical sources. This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical power lines. Obey all local and governmental regulations regarding required clearance from electrical power lines. Failure to follow this warning could result in death or serious bodily injury.



Always wear appropriate safety equipment including gloves and eye protection.



FALL HAZARD. ALWAYS use a ladder that meets or exceeds the standards and requirements of the American National Standards Institute and the Occupational Safety and Health Administration. **ALWAYS** follow the manufacturer's instructions for ladder safety. Failure to follow this warning could result in death or serious bodily injury.



RISK OF FIRE. Keep all sources of heat and flame away from the awning canopy. Fabric is **NOT** fireproof.



Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.

The state of California requires the following warning:

CALIFORNIA PROPOSITION 65



This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm. California's Proposition 65 requires this warning to be given to customers in the state of California.

INSTALLATION

TOOLS

Tools are not included in the kit. The items listed below are available at most local hardware stores. Installer must furnish the following items:

Required

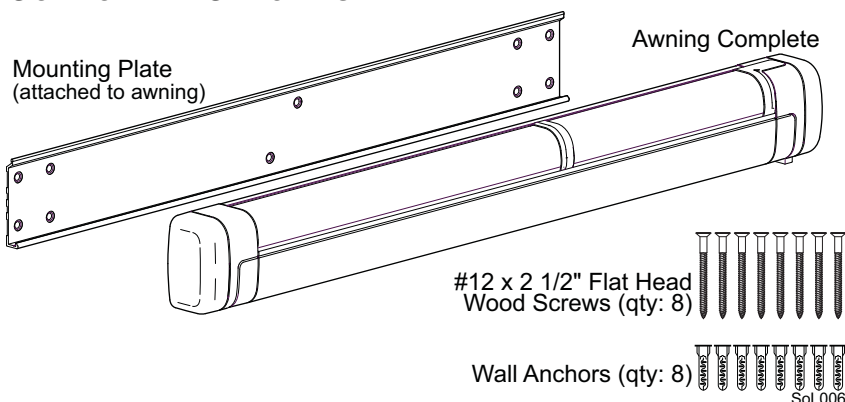
- Tape Measure
- Drill Motor/Driver
- #3 Phillips Driver Bit
- 1/8" Drill Bit *
- Pencil or marker
- Small tube of urethane based sealant

Suggested

- Ladder
- Level
- Alcohol Cleaner
- Cleaning Rag

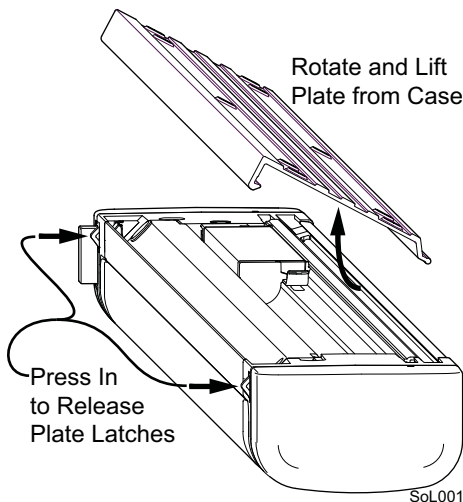
*NOTE: * Additional drill sizes may be required for some installations. Refer to page 8 for examples.*

COMPONENT CHECKLIST



UNPACKING

1. Remove the awning from the shipping carton.
2. Lay the awning face down on a non-abrasive padded surface.
3. Remove the mounting plate from the back of the awning.
 - 3.1. Press in the two latches on the bottom of the cassette to release the mounting plate.
 - 3.2. Rotate the plate up and out from the awning cassette.
 - 3.3. Set plate aside.

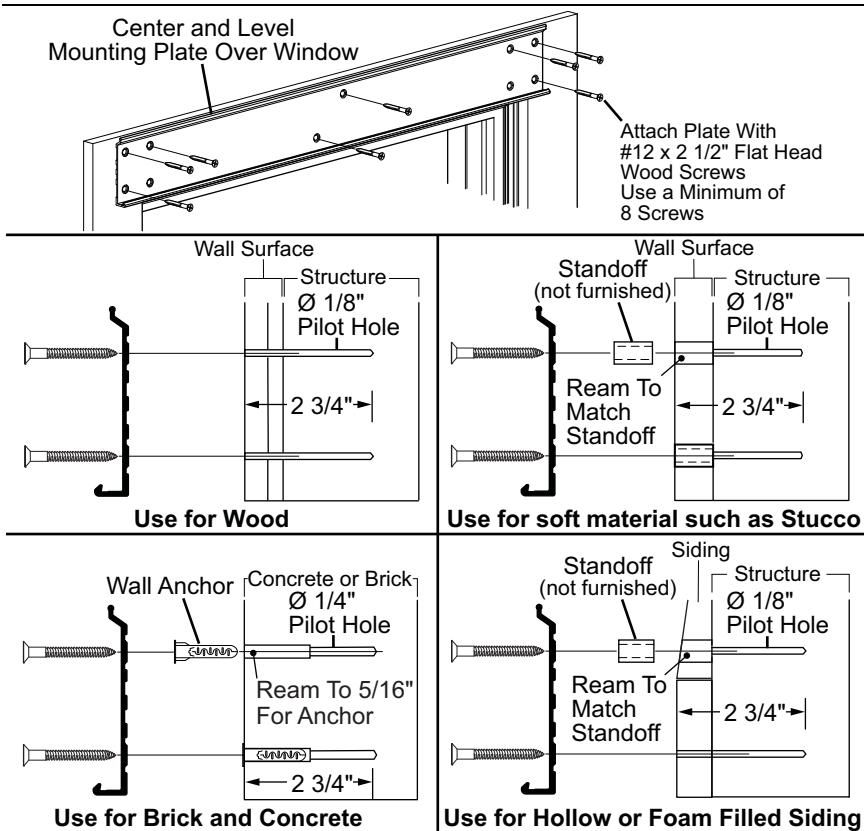


INSTALLING THE MOUNTING PLATE

The Eos window awning mounts directly above the window.

1. Prior to attaching the mounting plate, inspect and clean the mounting area. The area must be flat without ridges or irregularities. Smooth the area as required.
2. Determine the best method to attach the plate to the wall. Examples for attaching the plate are shown below.
3. Center and level the mounting plate and mark the location of the mounting holes.
4. Drill $1/8"$ pilot holes approximately $2\ 3/4"$ deep at the marks made in step 3.
5. Apply a quality sealant/caulk to the mounting holes to prevent water entry.
6. Lift the plate up and attach using #12 x 2 1/2" flat head wood screws. A minimum of 8 screws are required.

NOTICE Do not over tighten the fasteners. Soft materials, such as wood, can be "stripped out" and lose the ability to grip and hold.



Notes about Standoffs:

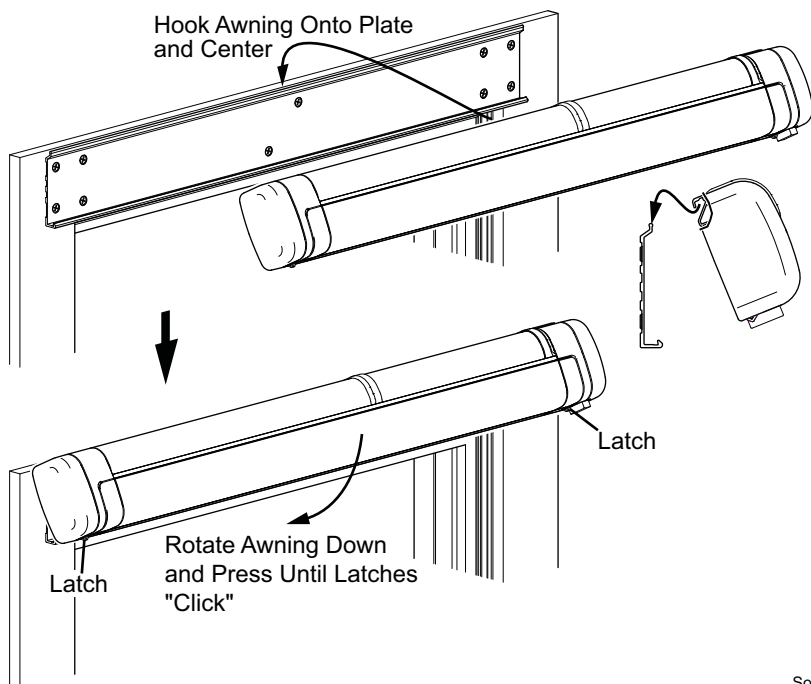
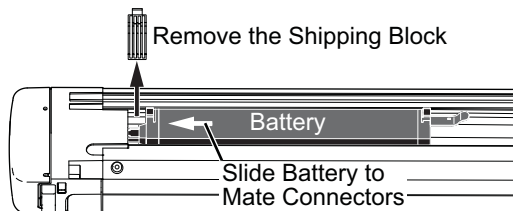
- Standoffs are used for two purposes 1) to hold the bracket plumb (vertical) on uneven surfaces; or, 2) to prevent the plate from crushing soft material such as thin wall, hollow siding or soft stucco with foam backing.
- Standoffs are generally made from rigid tube large enough to allow the screw to pass through. Standoff material is available from local hardware stores.



Sol003

MOUNTING THE AWNING

1. On the back of the awning, remove the shipping block between the battery and housing. Slide the battery in to mate the connectors. The tab will "ratchet" and lock as the battery is being moved into place. The awning will sound three (3) short beeps to indicate the battery is connected. The motor will briefly run to ensure that the awning is fully retracted



SoL004

2. Lift the awning and hook onto the mounting plate. Center the awning.
3. Rotate the awning down onto the bracket. Firmly press the bottom of the awning until the latches "click".

Beep Pattern	Meaning
 3 short beeps	Battery connected
 1 short beep	- Awning recognizes calibration request - Calibration complete
 Persistent long beeps that become short, frequent beeps	Awning is starting the calibration.
 1 long beep	The awning failed calibration due to wind or movement.
 2 long beeps	- Awning failed calibration - Obstruction prevented the awning from fully extending during calibration. - The awning is not level.
 3 long beeps	Battery charge is too low to attempt calibration.
 4 long beeps	Battery temperature is out of operating range.

AUTONOMOUS FUNCTIONS

The Eos awning has built-in functions with factory preset values for automatic operation. See the Sol-Lux Mobile App manual for more information.



AUTOMATIC OPEN AND CLOSE

The Eos automatically opens and closes based upon the amount of sunlight that is detected.



When the factory preset sunlight level is matched or exceeded for the extension delay time, the awning will extend.

When the light drops below the factory preset level and stays below the preset level for the retraction delay time, the awning will retract.

INCLEMENT WEATHER DETECTION

The Eos can detect inclement weather to prevent damage to the awning.



WIND SENSING

The Eos can detect and react to excessive motion due to windy conditions. When the motion level equals or exceeds the factory preset value, the awning will retract to prevent the awning from damage due to wind.

After the wind extend reattempt delay time, the awning will extend if conditions still warrant awning extension. If the wind is persistent and causes the awning to close, the 2nd wind extend reattempt delay time will double from the original value. The second value will continue until a safe extension is completed or until a new autonomous operation cycle begins.



LOW TEMPERATURE

To allow sunlight to warm the interior of your home on cold days, temperature sensing is used to pause autonomous operation. When the awning temperature is below the factory preset of 40°F the awning will not open. If the awning is open and the temperature drops below the setting, it will close.

Awning temperature is monitored with a sensor in the RH arm of the awning. This can be influenced by the environmental conditions and the colors of the case and canopy, the awning temperature may not match the actual ambient outdoor temperature.



LOAD SENSING

The Eos can detect accumulations of material (such as snow) on the canopy. The awning will close when excessive constant sag is detected. After closing, the awning will enter a disabled state.

1. Clear all the accumulated material from the awning.
2. If the load material blocks the lead rail from closing completely, the awning will then change to obstruction detected.



OBSTACLE SENSING

If the lead rail comes in contact with an obstacle while operating, the Eos will stop. When this happens, do the following:

1. Clear the obstacle from the lead rail travel path.
2. Briskly shake the lead rail to simulate a strong wind. The awning will close. Normal operation will resume after the wind extend reattempt delay time has expired (see Wind Sensing).
3. When using the SOL-LUX Mobile App:
 - a. If the awning was blocked while opening, close the awning using the close button.
 - b. If the awning was blocked while closing, open the awning using the open button. Normal operation will then resume.



BATTERY MONITORING

The Eos monitors the battery condition to ensure safe and reliable awning operation.

Charge – If the battery charge level falls below 7%, the awning will not open. If the awning is open when this occurs, it will close until the battery is sufficiently charged to resume normal operation.

Temperature – If the internal temperature of the battery is too high or too low, the awning will close and disable operation. This is a safety setting. When the internal temperature returns to within the acceptable temperature operating range, normal operation will resume.



SERVICE MODE

If it becomes necessary to service your Eos, the awning may be placed in Service Mode. Autonomous functions will be disabled while in this state.

1. Manually close the awning if open (see page 14).
2. Remove the awning from the mounting plate (see page 14).
3. Disconnect the battery (it is not necessary to remove the battery).

FACTORY PRESET VALUES FOR AUTONOMOUS FUNCTIONS

	Daylight Sensitivity:	OPEN CLOSE	See NOTE
	Extension Delay Time	1 Minute	See NOTE
	Retraction Delay Time	10 Minutes	See NOTE
	1 st Extend Reattempt Delay Time	60 Minutes	See NOTE
	2 nd Reattempt Delay Time	120 Minutes	See NOTE
	Minimum Operating Awning Temperature	40°F (4.5°C)	See NOTE
	Minimum Charge	7%	Fixed
	Maximum Internal Battery Temperature	140°F (60°C)	Fixed
	Minimum Internal Battery Temperature	5°F (-15°C)	Fixed

NOTE: Preset values may be adjusted with the SOL-LUX Mobile App.

BATTERY

The Eos uses a rechargeable 9.6V Lithium-ion battery pack.

The battery is charged by the integrated solar panel located on the top right of the cassette. The battery comes partially charged and ready for use. It will reach full charge within 2 to 5 days depending on the amount of use and the amount of sunlight the solar panel receives. Charging time will be slower during cloudy or overcast conditions.

The battery will continue to charge from sunlight as long as the battery temperature remains within the safe charging range.



CAUTION

The battery used in this product may present a risk of fire or chemical burn if mistreated.

- Do not attempt to disassemble or destroy the battery. There are no user serviceable parts.
- Do not incinerate or dispose of in fire.
- Replace the battery with SOL-LUX battery part # 012687-001 only.

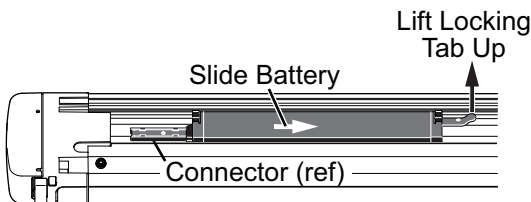


This product contains a Lithium-ion battery. To preserve natural resources, please recycle or dispose of batteries properly. Consult your local waste authority for information regarding available recycling and/or disposal options.

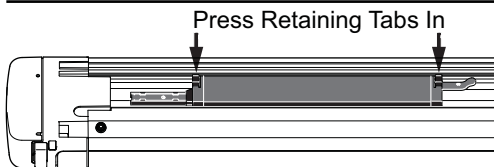
REMOVING THE BATTERY

1. Remove the awning from the mounting plate (see page 14).
2. Lay the awning face down on a padded surface.

3. Lift the locking tab and slide the battery to the right until the connector clears the housing.



4. Press in the two (2) retaining tabs and rotate the battery out of the cassette.



SoL012

NOTE: When the battery is disconnected, the awning will be reset. When the battery is installed and the awning is correctly mounted the awning will perform a calibration. The SOL-LUX Mobile App will remain paired to your smartphone or tablet if previously paired before the battery was disconnected.

The autonomous functions may be activated through the Service screen of the SOL-LUX Mobile App.

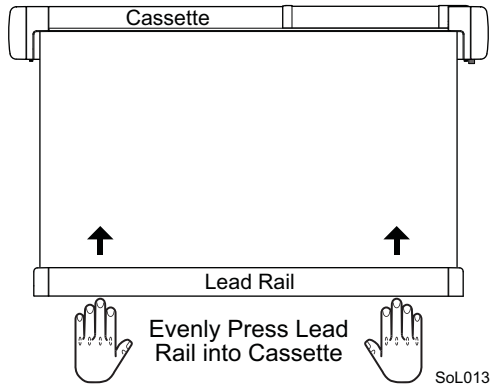
MANUALLY CLOSING THE AWNING

The Eos awning can be closed manually.

Using both hands, gently press the lead rail into the cassette. Apply pressure evenly to both sides of the lead rail.

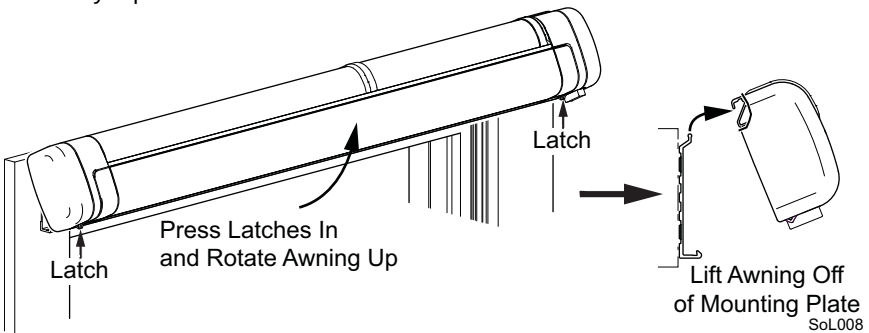
The fabric will roll up into the cassette.

NOTE: After closing the awning, the lead rail may “relax” and move out from the cassette a little. This is normal. The awning is secure and can be removed for service.



REMOVING THE AWNING

The awning may be easily removed from the mounting plate for storage, service or battery replacement.



1. Retract the awning either by shaking the lead rail to simulate wind, closing manually as described above, or by using the Sol-Lux Mobile App..
2. Press the latches in and rotate the awning up.
3. Lift the awning up and off the mounting plate.

NOTE: It is not necessary to remove the mounting plate from the window.

AWNING CARE

Maintaining an Eos Awning is easy. Just follow these basic steps:

- Always operate the awning according to the instructions.
- Keep the awning fabric and solar panel clean.

FABRIC CARE

NOTICE

Do not use oil based cleaners or any caustic, granulated, or abrasive type cleaners on your Eos product.

1. One of the best ways to keep the fabric looking good and to delay the need for deep or vigorous cleanings is to hose fabrics off on a monthly basis with clear water. This practice will help prevent dirt from becoming deeply imbedded in the fabric. In most environments, a thorough cleaning will be needed every two to three years.
2. When it is time for a thorough cleaning, the fabric can be cleaned while still on the awning frame. Use a stiff brush and warm water with soap.
3. When cleaning the fabric, it is important to observe the following:
 - Always use a natural soap, never detergent.
 - Water should be cold to lukewarm, never more than 100°F.
 - Air-dry only. Never apply heat to the fabric.
 - Always allow the fabric to dry thoroughly before rolling up the awning.

MILDEW

Mildew is a fungus growth that looks like dirt. Under ordinary conditions, mildew will not appear. However, in areas where high temperature and humidity are common, mildew can be a problem and required the material to be washed more frequently. Thoroughly rinse the fabric with clean water and allow to air dry completely before rolling up the awning.

ARM CARE

The best method of keeping the awning support arms operating smoothly is to clean them. Dirt and debris can cause the arms to not pivot easily. Periodically wash the arms with running water (i.e. a hose). If the joints do not move easily, lightly spray the joints with a dry silicone lubricant after the arms have been cleaned and dried thoroughly.

FREQUENTLY ASKED QUESTIONS

This section covers the autonomous functions. Additional information for the SOL-LUX Mobile App is in the app manual available on-line at www.sol-lux.com.

WHY IS MY AWNING NOT EXTENDING?

- **Calibration required.** The awning must be calibrated before the autonomous functions are active. Refer to page 10.
- **Low light level.** The ambient sunlight is not bright enough to match or exceed the required light level threshold.
- **Awning temperature is below 40°F.** When the awning temperature rises above the preset value, normal operation will resume.
- **Wind detected.** The Eos retracts when wind causes excessive movement of the awning. The awning will attempt to extend after the wind reattempt delay time has expired and the environmental settings are met (sunlight, temperature).
- **Obstruction detected.** An obstacle is blocking the lead rail travel path.
- **Battery charge level.** The battery charge is too low. Allow the battery to recharge.
- **Battery internal temperature.** If the battery's internal temperature is outside the safety limits, the awning will close. When the internal temperature returns to within the temperature operating range, normal operation will resume.

WHY IS MY AWNING EXTENDING NOW?

- **Light level.** The ambient sunlight is bright enough to match or exceed the required light level threshold.
- **Awning temperature.** When the awning temperature is below the preset value of 40°F the awning will not extend. If the awning is open and this occurs, it will close. When the awning temperature rises above the preset value, normal operation will resume.
- **Wind detected.** The Eos will retract when wind causes excessive movement of the awning. The awning will attempt to extend after the wind reattempt delay time has expired and there is sufficient sunlight.
- **Battery charge level.** If the battery charge is too low the awning will not open or will automatically close if extended. Allow the battery to recharge. The awning will return to normal operation when the battery charge exceeds the minimum charge level.
- **Battery internal temperature.** If the battery's internal temperature is outside the safety limits, the Eos will disable operation. If the awning is open when this occurs, it will close. When the internal temperature returns to within the temperature operating range, normal operation will resume.

WHY IS MY AWNING RETRACTING NOW?

- *Light level.* The ambient sunlight has fallen below the light level threshold.
- *Awning temperature.* When the awning temperature is below the preset value of 40°F the awning will not extend. If the awning is open and this occurs, it will close. When the awning temperature rises above the preset value, normal operation will resume.
- *Wind detected.* The Eos will retract when wind causes excessive movement of the awning. The awning will attempt to extend after the wind reattempt delay time has expired and there is sufficient light. If the wind is still present, the awning will close until the 2nd wind reattempt delay time has expired.
- *Battery charge level.* If the battery charge is too low the awning will not open or will automatically close if open. Allow the battery to recharge. The awning will return to normal operation when the battery exceeds the minimum charge level.
- *Battery internal temperature.* If the battery's internal temperature is outside the safety limits, the Eos will disable operation. If the awning is open when this occurs, it will close. When the internal temperature returns to within the temperature operating range, normal operation will resume.

THE SOL-LUX MOBILE APP



The SOL-LUX Mobile App allows you to interact with your awning(s) from your mobile device. The app provides access to enhanced features and additional options. The mobile app may be used on any device that supports current iOS or Android operating systems and Bluetooth low energy technology.



For personalized operation controls visit your app store for your smart phone or tablet and download the free SOL-LUX Mobile App.

The SOL-LUX Mobile App provides programmable controls and status readings for:



Real-time open and close with the touch of a button.



Time delay settings for automatic open and close.



Sunlight sensitivity.



Wind sensitivity and extend reattempt delay time.



Minimum awning temperature for automatic operation.



Real time awning temperature monitoring.



Time of day scheduling for open and close functions.



Vacation disable to prevent operation while away.



Control of multiple Eos awnings.



Battery monitoring including charge level and internal battery temperature.



Notification screens for awning status information.



Service Mode setting.

Visit www.sol-lux.com for a complete description and walk-through of the SOL-LUX Mobile App operation.

SOL-LUX Eos AWNING LIMITED WARRANTY

Carefree of Colorado (hereafter referred to as Carefree) warrants to the first retail Purchaser that the SOL-LUX Eos is free of defects in material and workmanship within the terms and conditions as set forth in the warranty statement available online at www.sol-lux.com. Carefree's obligation under this warranty is limited to the repair or replacement, at Carefree's option, of any defective component with new or factory refurbished components.

OWNER MUST RETAIN THE ORIGINAL PROOF OF PURCHASE AND/OR HAVE THE PRODUCT WARRANTY REGISTRATION ON FILE AT CAREFREE FOR WARRANTY CLAIMS.

THIS WARRANTY IS NOT TRANSFERABLE.

Visit www.sol-lux.com for

- **Warranty Duration;**
- **Warranty Coverage and Exclusions;**
- **Warranty Terms of Coverage; and,**
- **Warranty Claim Procedures.**

SERVICE AND SUPPORT

	www.sol-lux.com	
	support@sol-lux.com	
	SOL-LUX 2145 W. 6 th Ave. Broomfield, CO 80020	

Save this page!

The label contains important information about your awning.

Place product label here



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