

HunterDouglas

Installation



16 Shade DC Power Supply Wiring Guide

PowerView® Gen 3 Automation &
SoftTouch® Motorization

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Questions?

Contact Hunter Douglas Consumer Support at help.hunterdouglas.com.

Safety

IMPORTANT: For replacement, only use the provided 6' IEC power cord, equivalent UL 14 AWG 3-conductor SJT 6' power cord, or permanent wiring.

- To reduce the risk of electric shock, this appliance has a grounding-type plug (three prongs). This plug will only fit into a grounding receptacle (three slots). If the plug does not fit into the receptacle, contact a qualified electrician to install the proper grounding-type outlet. Do not alter the three-prong plug in any way.
- If permanent wiring is to be used, then you are required to follow local codes (NEC) for all wiring and safety.
- This appliance has a grounding-type pin for receptacle connection which must be used. NEVER modify or remove the ground. A ground is necessary for proper operation.
- For field wiring between the Class 2 output of the 16 Shade DC Power Supply and the shades, ONLY use Class 2, or better, flammability-rated wiring. The wiring must also meet VW-1 and FT-1 flame rating standards.
- Do not use an extension cord. If the provided 6' power cord does not reach a grounding-type wall receptacle, have a qualified electrician install a new grounding-type wall receptacle within 6 feet of the appliance.

GETTING STARTED

Maintenance

- Perform inspection yearly to verify the serviceable fuse is in working condition. If necessary, replace the fuse with the same, or equivalent fuse type. ALWAYS remove power before servicing.

Product View



Thank you for purchasing the Hunter Douglas 16 Shade DC Power Supply. With this power supply properly installed, you will be able to power up to sixteen Hunter Douglas standard PowerView® or SoftTouch® Motorization shades, or up to eight Aura™ Illuminated Shades. When determining the maximum number of shades in a mixed order of Aura and other PowerView products, a single Aura shade counts as two standard shades.

Tools and Fasteners Needed

- ¼" flat blade screwdriver
- #1 Phillips screwdriver
- Level (laser level is recommended)
- Measuring tape and pencil
- Power drill and ⅛" drill bit
- #2 and #3 Phillips screw bits
- Wire cutter and wire stripper
- 14/2, 16/2, or 18/2 AWG low-voltage electrical wire (Not Provided)
- Wire Connectors (Optional, Not Provided).

NOTE: In addition, you will need fasteners designed to work with your specific mounting surface(s). Mounting fasteners are not included due to the wide variety of mounting surfaces. The installer should determine the appropriate mounting fasteners for their mounting needs.

GETTING STARTED

Components

When unpacking the power supply, be sure the following components are included:

- One NEMA enclosure with power supply, cover, and cover screws (cover pre-installed onto NEMA enclosure)
- One 6' IEC power cord
- One ½" strain relief and one 1¼" strain relief
- Four packages of Quick-Lever barrel connectors, female (32 count)
- Four mounting feet (pre-installed onto NEMA enclosure)
- Installation guide

NOTE: If you are installing Aura™ Illuminated Shades, one PowerView+™ Male Plug-In Connector is required per shade. These are provided with the shade order.



WARNING: To reduce the risk of fire, electric shock, or injury to persons, installation work and electrical wiring must be done by a qualified person in accordance with all applicable codes and standards.

Specifications

Input: 120V AC, 6A

Output: 18V DC, 90 Watts

Wire Compatibility: 14–18 AWG Wire

Circuit Class: 2

Dimensions

Length: 10" (without mounting feet)

12¼" (with mounting feet)

Width: 10"

Depth: 4¼"

Weight: 10 lbs

Schematic

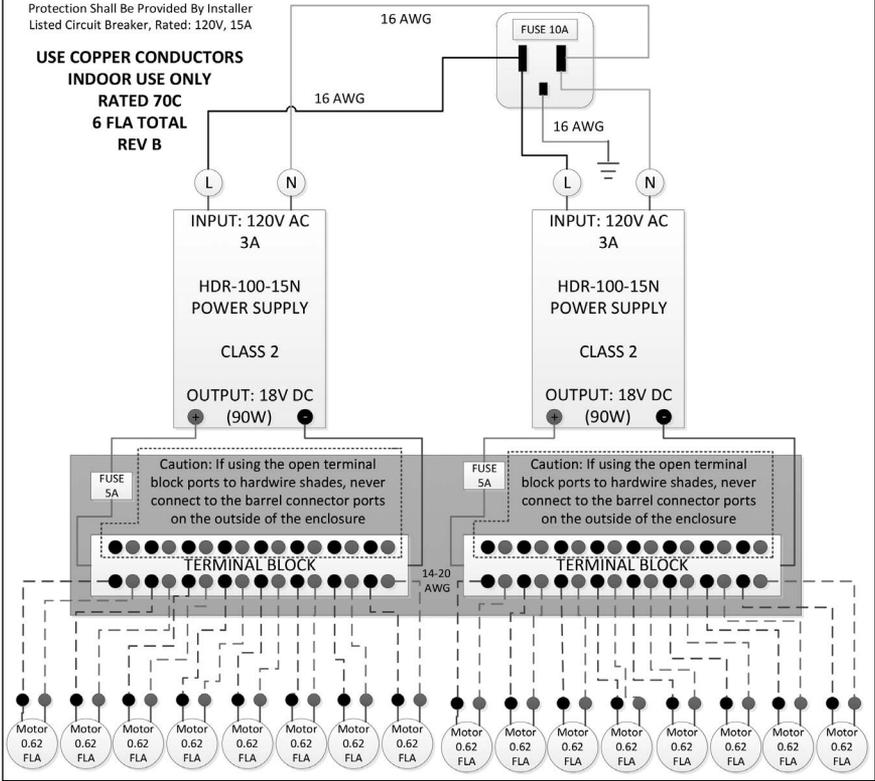


WARNING: Do not place more than two 16 Shade DC Power Supplies on a single home circuit with a 15 amp breaker.

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The Main Disconnect and Branch Circuit Protection Shall Be Provided By Installer Listed Circuit Breaker, Rated: 120V, 15A

USE COPPER CONDUCTORS
INDOOR USE ONLY
RATED 70C
6 FLA TOTAL
REV B



CAUTION: A maximum of 8 standard shades or 4 Aura™ Illuminated Shades are allowed per HDR-100-15N. Do not daisy-chain shades when using the 16 Shade DC Power Supply.

INSTALLATION

Installation Overview

To install your 16 Shade DC Power Supply, you will need to complete the following four steps:

STEP 1: Mounting Applications

STEP 2: Wiring

STEP 3: Connect the Power Source

STEP 4: Install the Enclosure Cover

Step 1: Mounting Applications

The 16 Shade DC Power Supply may be surface mounted or recess mounted within the wall.

NOTE: The four mounting feet are preinstalled on the enclosure.

Surface and Recessed Mounting for the Enclosure

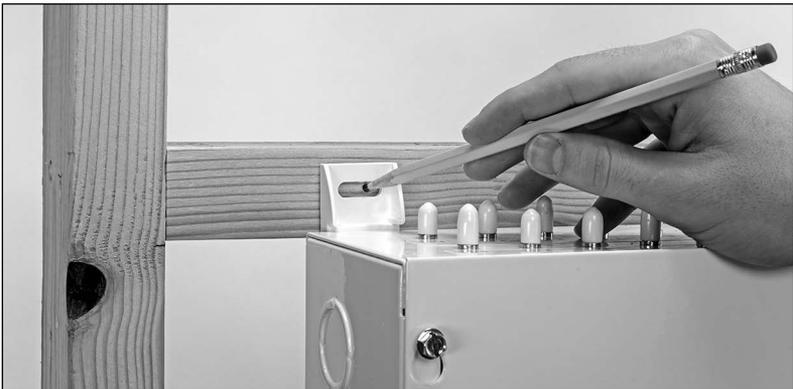
For recessed mounting, mount the enclosure so that it protrudes from the front of the stud by a measure equal to the thickness of the finished wall. The front of the enclosure should be visible and flush with the surface of the finished wall.

If using the Mounting Feet

- Place the enclosure on an appropriate mounting surface and mark the location of the screw holes.

NOTE: Studs or solid wood are the preferred mounting surface.

IMPORTANT: If mounting to drywall, two of the mounting feet should be secured to a stud and two should be secured to drywall anchors.



- Drill the screw holes using a 1/8" drill bit.

- Attach the enclosure to the mounting surface with screws, which go through the holes in the mounting feet.

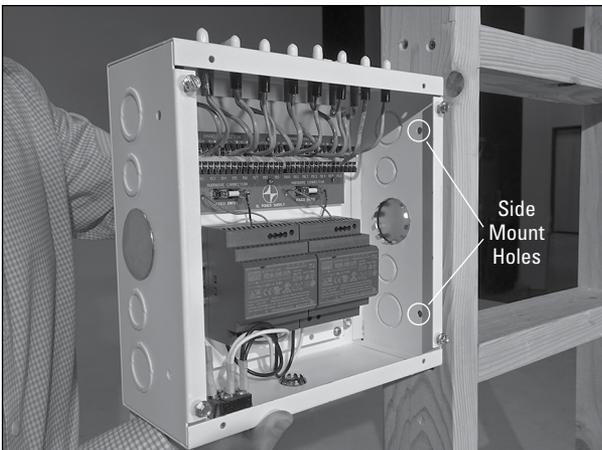


If not using the Mounting Feet for Surface or Recessed Mounting

- You may optionally remove the mounting feet.
 - On the inside of the enclosure, remove the screws that secure the four mounting feet to the enclosure.
 - Secure the enclosure to an appropriate mounting surface.
 - Use the four pre-drilled holes located on the back panel of the power supply enclosure.
- NOTE:** Studs or solid wood are the preferred mounting surfaces.

Side Mounting for the Enclosure (Optional)

- Secure the enclosure to an appropriate mounting surface.
 - Use the pre-drilled holes located on the side panels of the power supply enclosure.
- NOTE:** Studs or solid wood are the preferred mounting surfaces.



INSTALLATION

Step 2: Wiring

The 16 Shade DC Power Supply uses low-voltage electrical wiring to supply power to the shade motors. Wire terminations must be made at both the power supply as well as the shade. Wire terminations at the power supply can be made using either the Quick-Lever barrel connectors or the terminal ports inside the power supply enclosure. Two-stranded 14, 16, or 18 gauge low-voltage electrical wiring may be used with the 16 Shade DC Power Supply. See the table below for maximum wire run distances for each wire gauge.

Wire Gauge	Type	Maximum Run Distance
18/2	2-conductor AWG electrical wire	150 feet
16/2	2-conductor AWG electrical wire	300 feet
14/2	2-conductor AWG electrical wire	450 feet

Wire Terminations at the Power Supply

Surface Mount Applications

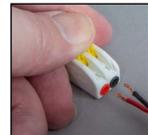
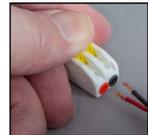
- Strip ¼" of the insulation material away from the end of the electrical wiring.

- Lift both of the yellow levers on the Quick-Lever barrel connector.

IMPORTANT: Quick-Lever wire terminals are color coded to indicate which electrical polarity should be connected (red = positive and black = negative).

- Insert the positive and negative wires into the correct terminal and flip the levers down, clamping the wires in place. Check that the wires were inserted far enough for the lever to catch by gently pulling on the wires. If successfully clamped, the wires will not pull out.

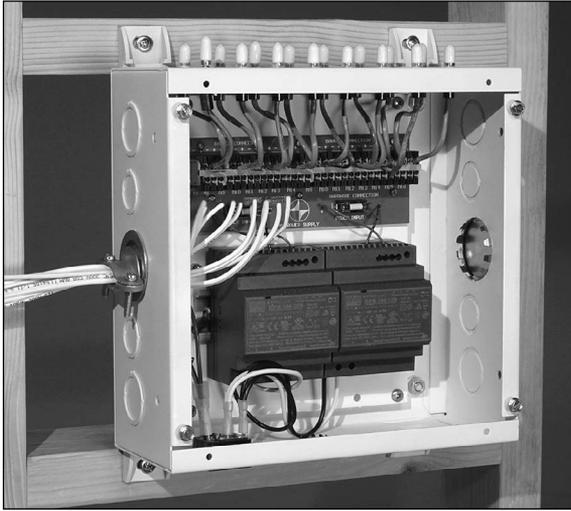
- Plug the female barrel connector into the male connector on outside of the enclosure.



Recessed Mount Applications

CAUTION: If using the terminal block ports on the inside of the enclosure to hard-wire the shades, do not connect barrel connectors to the male connectors on the outside of the enclosure.

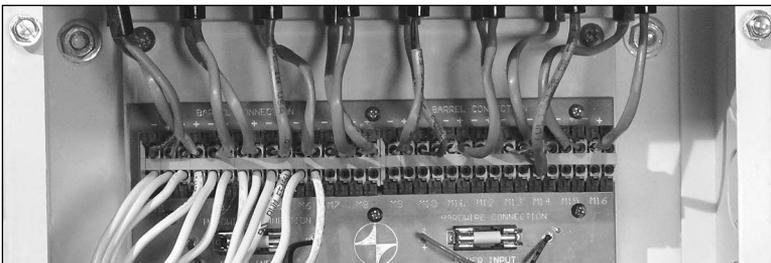
- Route the electrical wiring to the shades through one of the punch-outs in the enclosure.
 - For the pre-drilled punch-out, as shown below, use the 1¼" strain relief (provided). For one of the other punch-outs, use the appropriate size strain relief (not provided).



- Strip ¾" of the insulation material away from the end of the electrical wiring.
- Insert the stripped electrical wiring into the positive/negative pairs of ports in the terminal block.

CAUTION: There are 16 pairs of open ports in the terminal block. The ports are marked to show which electrical polarity should be connected to each port as well as the motor number. Make certain the wires from each shade are connected to the correct corresponding positive or negative port and motor number. Ensure the wire fits securely in the terminal port and that adjacent conductors do not touch.

- Push down on the top of the terminal port with a screwdriver, then insert the wire.



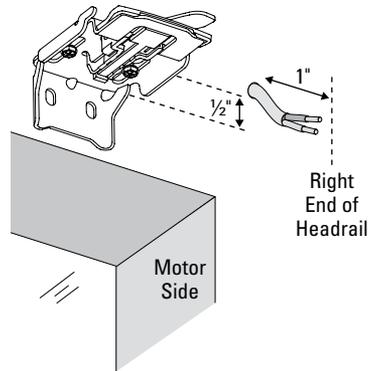
INSTALLATION

Wire Terminations at the Shade – Standard PowerView® or SoftTouch®

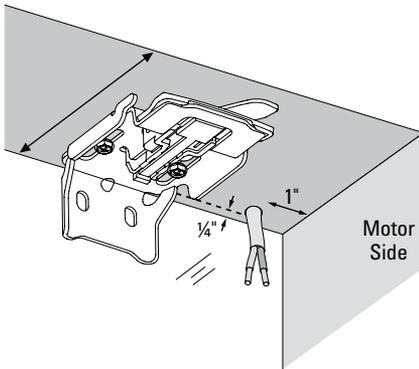
Wire terminations at the shade are made by connecting the electrical wiring to a provided female Quick-Lever barrel connector. The female barrel connector is then connected to the power cable coming from the shade. For wiring of Aura™ Illuminated Shades, see page 12.

- Drill a hole in the side of the frame (IB), or above the window header (OB), for the electrical wiring.
- Thread the electrical wiring through the drilled hole.

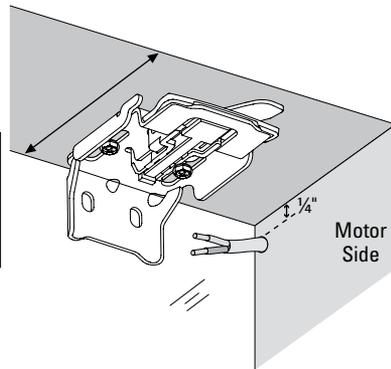
Outside Mount



Inside Mount — Wiring from the Head Jamb



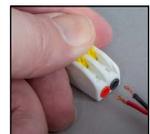
Inside Mount — Wiring from the Side Jamb



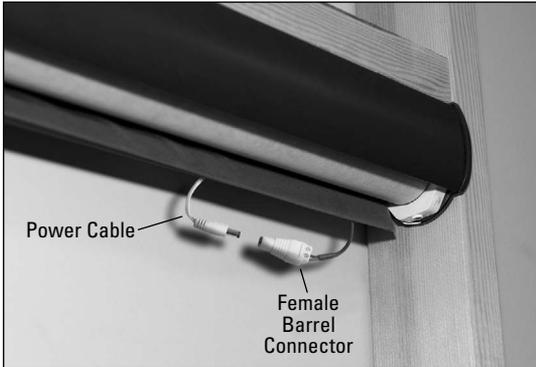
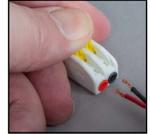
NOTE: Before mounting shade installation brackets, ensure that the bracket mounting location allows room for the cable from the shade motor to fit behind the shade without interfering with operation. This requirement varies depending on product type, but for shades that roll up into a headrail or cassette, 3/8" clearance is needed to accommodate the power cable.

- Strip 1/4" of the insulation material away from the end of the electrical wiring.
- Lift both of the yellow levers on the Quick-Lever barrel connector.

IMPORTANT: Quick-Lever wire terminals are color coded to indicate which electrical polarity should be connected (red = positive and black = negative).



- Insert the positive and negative wires into the correct terminal and flip the levers down, clamping the wires in place. Check that the wires were inserted far enough for the lever to catch by gently pulling on the wires. If successfully clamped, the wires will not pull out.
- Locate the power cable coming from the shade.



- Plug the female barrel connector into the power cable.



- Hide the power cable and female barrel connector behind the shade to prevent interference with the operation of the shade.



Step 3: Connect the Power Source

Provide 120V AC power to the enclosure.

INSTALLATION

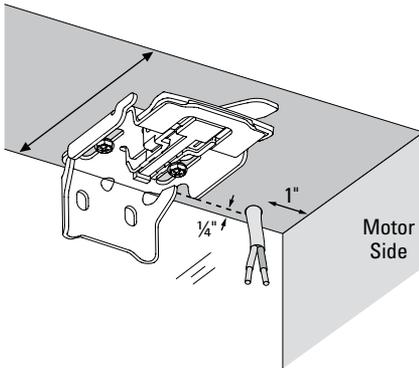
Wire Terminations at the Shade – Aura™ Illuminated Shades

Wire terminations at the shade are made by connecting the electrical wiring to the power terminals, marked + and -, of the provided male plug-in connector. The male plug-in connector is then connected to the female power cable coming from the shade.

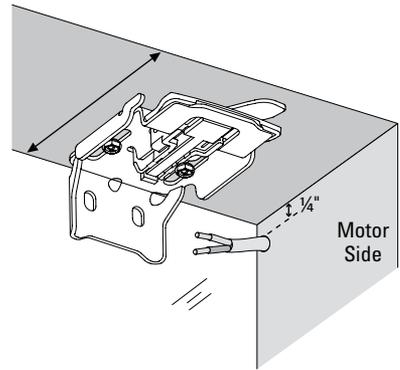
NOTE: The data terminals marked D- and D+ on the male plug-in connector will not be used in this configuration.

- For the electrical wiring, drill a hole in the side of the frame (IB) or above the window header (OB).
- Thread the electrical wiring through the drilled hole.

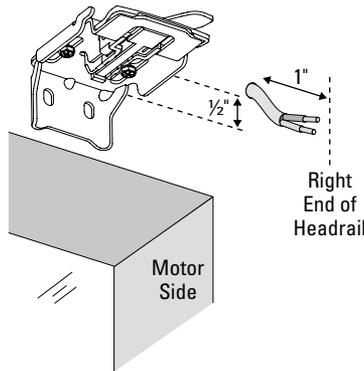
Inside Mount — Wiring from the Head Jamb



Inside Mount — Wiring from the Side Jamb



Outside Mount



NOTE: Before mounting shade installation brackets, ensure that the bracket mounting location allows room for the cable from the shade motor to fit behind the shade without interfering with operation. This requirement varies depending on product type, but for Aura™ Illuminated Shades or PowerView+ shades, 5/8" clearance is needed to accommodate the power cable.

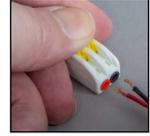
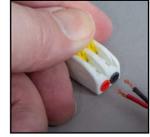
Wire Terminations at the Power Supply

Surface Mount Applications

- Strip $\frac{1}{4}$ " of the insulation material away from the end of the electrical wiring.
- Lift both of the yellow levers on the Quick-Lever barrel connector.

IMPORTANT: Quick-Lever wire terminals are color coded to indicate which electrical polarity should be connected (red = positive and black = negative).

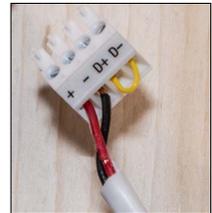
- Insert the positive and negative wires into the correct terminal and flip the levers down, clamping the wires in place. Check that the wires were inserted far enough for the lever to catch by gently pulling on the wires. If successfully clamped, the wires will not pull out.
- Plug the female barrel connector into the male connector on outside of the enclosure.



- Strip $\frac{1}{4}$ " of the insulation material away from the shade end of the electrical wiring.
- Using a $\frac{1}{8}$ " flat blade screwdriver, loosen the two screw terminals for power, marked + and -, on the male plug-in connector.

IMPORTANT: Make sure to wire each terminal correctly. Incorrect wiring terminations risk permanent damage to the shade's motor. The screw terminals are marked + and - to show which electrical polarity should be connected to a terminal. Ensure the wire fits securely in the screw terminal and that adjacent conductors do not touch.

- Insert the positive and negative wires into the correct terminal and tighten the screws with a screwdriver. The data terminals will not be used in this configuration.
- Locate the power cable coming from the shade.



INSTALLATION

- Plug the male plug-in connector into the power cable.



- Hide the power cable and male plug-in connector behind the shade to prevent interference with the operation of the shade.



Surface Mount Applications

- Plug the provided power cord into the IEC power inlet on the bottom of the enclosure.
- Plug the other end of the power cord into a standard 120V AC outlet.



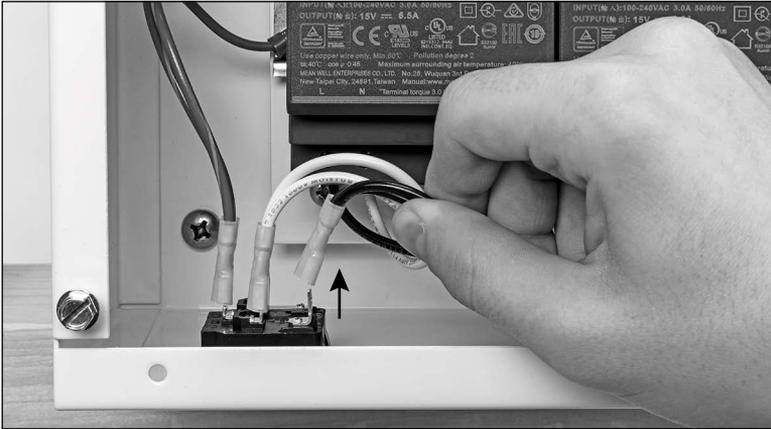
WARNING: To reduce the risk of fire, electric shock, or injury to persons, installation work and electrical wiring must be done by a qualified person in accordance with all applicable codes and standards.



Recessed Mount Applications

CAUTION: Turn off local electrical power before making any electrical connections.

- Disconnect the hot, neutral, and ground connectors from the IEC power inlet inside the enclosure.



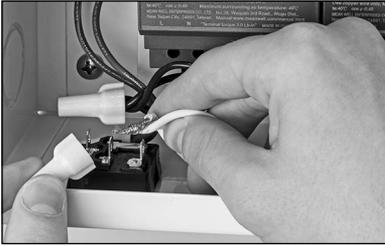
- Cut off the three connectors, leaving three sets of unterminated wires.



- Strip $\frac{1}{2}$ " of the insulation away from each of the six wires.
- Remove the knock-out plug from the bottom-center of the enclosure.
- Route appropriate field wiring through the hole in the bottom of the enclosure. When using NM cable, use the $\frac{1}{2}$ " strain relief (provided).
- Strip $\frac{1}{2}$ " of the insulation away from the incoming hot, neutral, and ground wires.

INSTALLATION

- Use wire nuts or other approved wire connectors (not provided) for the following connections:
 - Connect the incoming hot wire to the two black wires inside the enclosure.
 - Connect the incoming neutral wire to the two white wires inside the enclosure.
 - Connect the incoming ground wire to the two green wires inside the enclosure.



- Turn on power at the circuit breaker.

Step 4: Install the Enclosure Cover

- Prior to installing the cover, loosen or install the cover screws part way.
- Place the large holes in the cover over the loosened cover screws, push back, then slide the cover down until hooked by the small holes.
- Secure the cover by tightening the cover screws with a flat blade screwdriver.



LIFETIME GUARANTEE

The Hunter Douglas® Lifetime Guarantee is an expression of our desire to provide a thoroughly satisfying experience when selecting, purchasing and living with your window fashion products. If you are not thoroughly satisfied, simply contact Hunter Douglas at **(800) 789-0331** or visit hunterdouglas.com. In support of this policy of consumer satisfaction, we offer our Lifetime Limited Warranty as described below.

COVERED

BY A LIFETIME LIMITED WARRANTY

- Hunter Douglas window fashion products are covered for defects in materials, workmanship or failure to operate for as long as the original retail purchaser owns the product (unless shorter periods are provided below).
- All internal mechanisms.
- Components and brackets.
- Fabric delamination.
- Operational cords for a full 7 years from the date of purchase.
- Repairs and/or replacements will be made with like or similar parts or products.
- Hunter Douglas motorization components are covered for 5 years from the date of purchase.

Hunter Douglas (or its licensed fabricator/distributor) will repair or replace the window fashion product or components found to be defective.

NOT COVERED

BY A LIFETIME LIMITED WARRANTY

- Any conditions caused by normal wear and tear.
- Abuse, accidents, misuse or alterations to the product.
- Exposure to the elements (sun damage, wind, water/moisture) and discoloration or fading over time.
- Failure to follow our instructions with respect to measurement, proper installation, cleaning or maintenance.
- Shipping charges, cost of removal and reinstallation.

TO OBTAIN WARRANTY SERVICE

1. Contact your original dealer (place of purchase) for warranty assistance.
2. Visit hunterdouglas.com for additional warranty information, frequently asked questions and access to service locations.
3. Contact Hunter Douglas at **(800) 789-0331** for technical support, certain parts free of charge, for assistance in obtaining warranty service or for further explanation of our warranty.

NOTE: In no event shall Hunter Douglas or its licensed fabricators/distributors be liable or responsible for incidental or consequential damages or for any other indirect damage, loss, cost or expense. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Different warranty periods and terms apply for commercial products and applications.

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