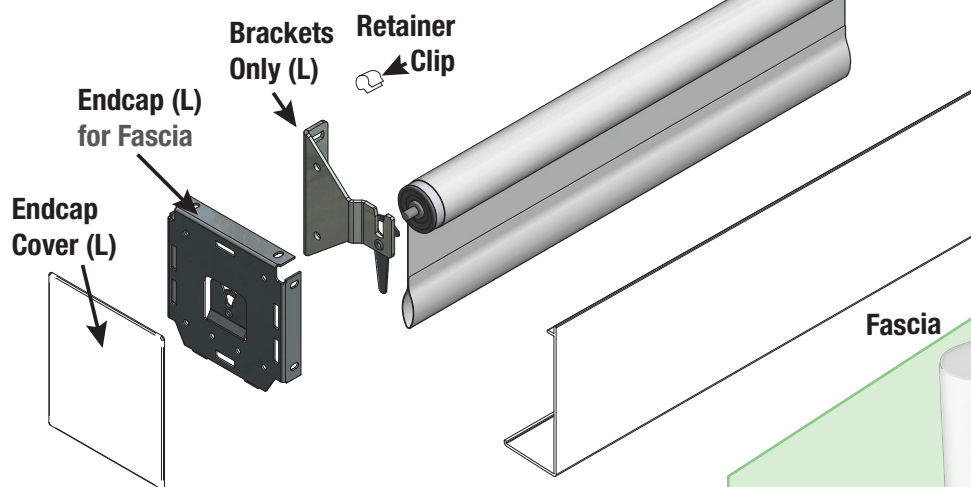
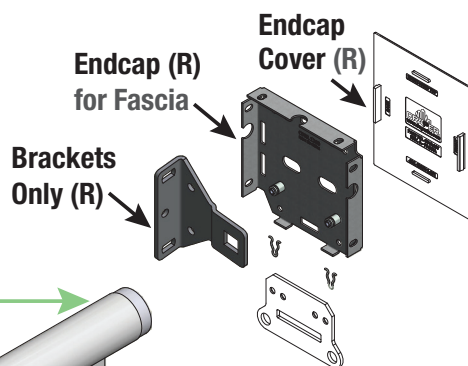


Overview - **Motorized FlexShade Components**

**FlexShade Motor**

**OPTIONS:**

- 120V Standard AC Motor
- 120V RTS AC Motor
- 120V 485 Intelligent AC Motor



Fascia

**TAHOMA SWITCH**

(Serves as a "hub" for standard Zigbee installations.)

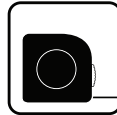
**SMART PLUG**  
(Used with the Tahoma switch "hub" in standard Zigbee installations.)

**YSIA REMOTE**  
(Used in conjunction with the Tahoma switch "hub" in standard Zigbee installations or in the "hubless" installation option.)

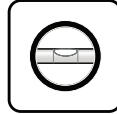
**TOOLS REQUIRED**



PENCIL



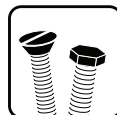
TAPE MEASURE



LEVEL



POWER DRILL



HARDWARE (by others)

**CAUTION**

**Read and understand all warnings (Page 2 of this document) before beginning installation.**

Section 1 - **Optional Hardware Accessories for Light Gap Reduction ('L' Angle, 'U' Channel, 'H' Channel)**

Optional light gap reduction hardware may be included with the Motorized FlexShade®. Light gap reduction hardware is provided in stock lengths unless otherwise specified. It is the installers responsibility to measure, cut and properly install this hardware in a manner that does not interfere with shade operation.

Contents

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Section 1 - Optional Hardware Accessories for Light Gap Reduction.....	1	Section 6 - Electrical Connections.....	4
PLEASE READ: Important Safety Information.....	2	Section 7 - Programming Somfy Wire-Free Zigbee®.....	5
PLEASE READ: Field Adjustments, Cleaning and Maintenance.....	2	Section 8 - Wiring Diagrams.....	6
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Section 3 - Endcaps with Fascia.....	3	Section 10 - Motorized FlexShade Dimensions.....	8
Section 4 - Attaching Fascia to Endcaps.....	4		

If you have any difficulties installing or servicing your Motorized FlexShade, call your dealer or Draper, Inc.

PLEASE READ: Important Safety Information



**Improper installation and use of Motorized FlexShade can result in serious injury or death. Primarily, injuries can occur when the Motorized FlexShade falls due to imprecise installation, mishandling of the Motorized FlexShade during installation or installation on an insufficient wall or ceiling structure. Please use extreme care.**

1. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and could result in serious injury.
2. Installation and calibration of the Motorized FlexShade should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring [indicated in diagram by dashed lines] must be completed only by a qualified professional electrician who has read this manual completely and is familiar with the construction and operation of this equipment and the hazards involved.
3. Do not affix the unit to wall or ceilings that have inadequate strength to permanently hold the unit during use. It is the owner's and installer's responsibility to confirm the wall or ceiling to which the unit attaches is sufficient to permanently hold the weight and stress loads of the unit at all times. Draper, Inc., is not responsible for improper installation, application, testing or workmanship related to the product at place of installation.
4. It is the installer's responsibility to make sure appropriate fasteners are used for mounting.
5. All brackets, fascia, head boxes, pockets, wall clips, and other hardware must be installed level. Motorized FlexShade must be level and square.
6. Never leave the area while operating the Motorized FlexShade during installation, maintenance, or normal operation, unless it is secure and safe.
7. Before testing or operation, carefully inspect the entire area and path of the shade and areas underneath the shade to be sure no persons or objects are in the area.
8. Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
9. Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.
10. All motors should be tested and limits set using test cord before shades are wired.
11. Do not wire motors in parallel without written permission from Draper, Inc.
12. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
13. Do not use an extension cord. If the power supply cord is too short, have a qualified electrician install an outlet near the drapery operator.
14. After installation, the entire system, including all sensors, should be carefully tested to ensure safe and normal operation. Extreme care should be taken during testing to remain clear of moving parts to avoid possible injury.
15. Operation of Motorized FlexShade should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the Motorized FlexShade & understand its safety features.
16. The safety features of the Motorized FlexShade, including sensors, should never be disabled, bypassed or overridden. The system should not be operated until all safety features, including the sensors, are properly and completely installed, calibrated and tested.
17. Motorized FlexShade may need to comply with local, state or district rules and regulations, in particular when installed in schools. All applicable rules and regulations should be reviewed before installation and use.
18. Failure to precisely follow installation guidelines invalidates all warranties.
19. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about the installation of custom products or any questions about your installation.

## ***Before Beginning Installation***

1. Look for any job site conditions that could interfere with installation or operation of the system.
2. Read carefully and be sure to understand all installation instructions and all related operations manuals. These instructions are intended to be as a guide for the installer and owner. They should be followed closely and combined with the expertise of experienced qualified installers. Draper, Inc., is not responsible for improper installation, application, testing or workmanship related to the product at place of installation. Please retain all instructions for future use.
3. Open cartons lengthwise.
4. Locate and lay out all pieces.
5. Inspect all boxes to make sure you have received the proper Motorized FlexShade and parts. Controls may be shipped separately, or in same carton as Motorized FlexShade.
6. If you have any difficulties with installing, servicing or operating your Motorized FlexShade, call your dealer or Draper, Inc., (765) 987-7999.

### Field Adjustments

Each Draper Solar Control Shade is tested to ensure proper operation. Even with this testing, some field adjustments may be needed for telescoping. If the shade is telescoping, place a piece of high quality gaffer tape about 1" wide on the exposed roller (*where the fabric will cover it*) on the side that the fabric will be drawn toward. For example: if the fabric is tracking to the left, place the tape on the right side.

### Cleaning and Maintenance

Window covering products manufactured by Draper, when properly installed, should require no operational maintenance or lubrication.

Most of Draper's standard fabrics may be cleaned at the window by vacuuming with a soft brush attachment. They also may be cleaned by using a sponge or soft cloth and mild solution of warm soapy water. A mild dish washing liquid is recommended. A clean dry cloth is recommended for the metal finish.

**Please Note:** Exceptions are Flocké and Phifer SW7000 fabrics, which must be cleaned with a dry art sponge.

## Section 2 - Mounting Brackets (Brackets Only Installation)

1. Mark wall, jamb or ceiling for placement of mounting brackets.

**⚠ Caution:** Before mounting shades, verify measurements on the card provided with the shade, and ensure the brackets are installed at the correct width.

2. Drill small starter hole in mounting surface (if necessary).

3. Attach brackets using appropriate fasteners for mounting surface. The installer is responsible for selecting mounting hardware appropriate for site conditions.

**Please Note:** The brackets shown are for standard 120V motors. Hardware for other motors will vary.

4. Place operator (motor) end onto its bracket. If a coupled unit, see separate instruction sheet for Coupled FlexShades.

5. Slide notched pin on idler end into slot on bracket. Slip retainer clip onto idler end between bracket and roller (see Fig. 2) If required, use a 5/16" (8mm) wrench to ensure proper alignment.

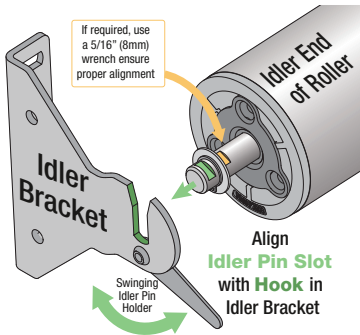
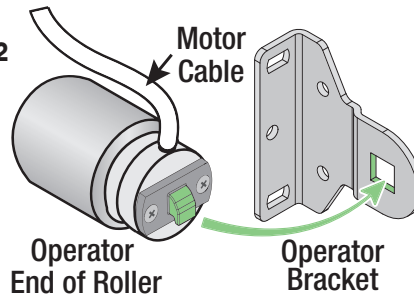


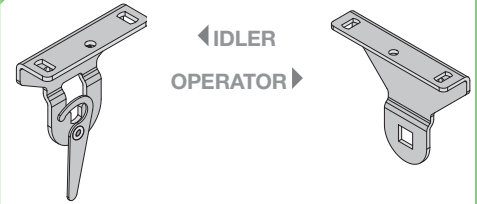
Figure 2



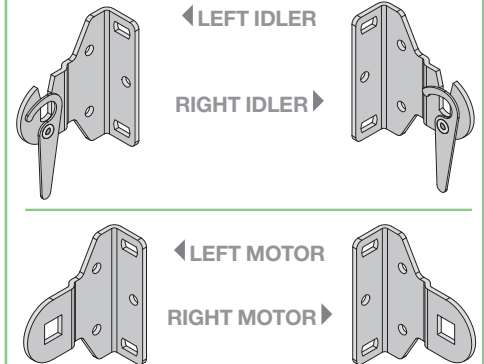
**Please Note:** Install motor so that limit switches are pointed down or accessible.

**\*Don't forget:** Install retainer clip on shaft between bracket and roller!

### CEILING MOUNTING BRACKETS



### WALL MOUNTING BRACKETS



**⚠ Caution:** DO NOT use wall brackets for ceiling installations. DO NOT use ceiling brackets for wall installations.

## Section 3 - Endcaps with Fascia

### Mounting Fascia to Endcaps

1. Snap endcap covers into place (see Fig. 3).

2. Mark wall, jamb or ceiling for placement of mounting endcaps.

3. Drill small starter hole (if necessary) in mounting surface.

4. Mount endcaps using appropriate fasteners for surface. If this is a coupled unit, be sure to mount coupled endcap in the center position.

**Please Note:** Installer is responsible for selecting mounting hardware appropriate for site conditions.

**⚠ Caution:** Before mounting shades, verify measurements on the card provided with the shade, and ensure the endcaps are installed at the correct width.

5. Place operator (motor) end into its endcap (see Fig. 4).

6. For coupled units see separate instruction sheet for Coupled FlexShades.

7. Slide notched pin into idler endcap and attach retainer clip (see Fig. 4).

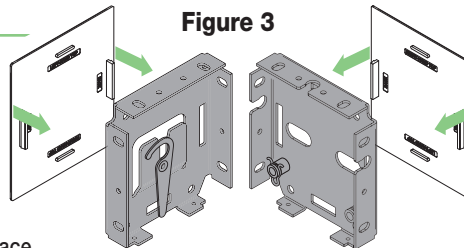


Figure 3

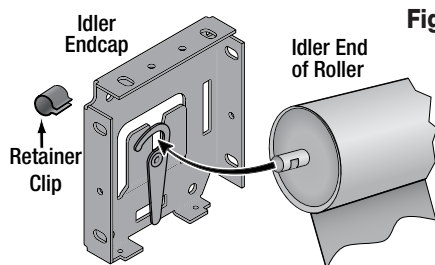
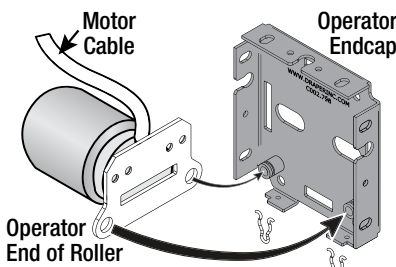


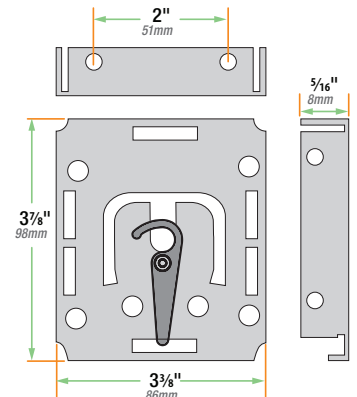
Figure 4



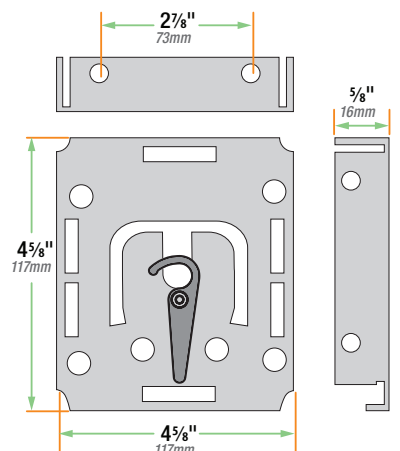
**Please Note:** Install motor so that limit switches are pointed down or accessible.

**\*Don't forget:** Install retainer clip on shaft between bracket and roller!

### SMALL ENDCAPS



### LARGE ENDCAPS



## Section 4 - Attaching Fascia to Endcaps

1. Place groove along top of fascia over endcaps, and snap into place (see Fig. 5).

Endcaps must be installed the correct distance apart for fascia to be properly attached with full engagement. Fascia is not fully seated until it clicks into place on both ends. Once in place, check for secure fit. If not secure, use an appropriate fastener (not included).

### ATTACHING FASCIA

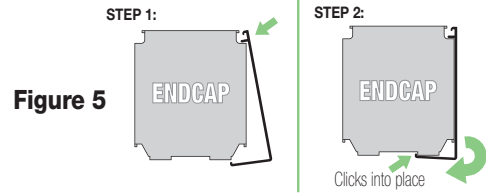


Figure 5

### Section 4.3 - Reverse Roll Fascia

1. Slide endcaps into extrusions.
2. Using provided holes in endcaps, mark the fascia for drilling.
3. Attach endcaps to fascia.
4. Mount Endcaps/Reverse Roll Fascia.
5. Install roller/fabric/operator assembly according to relevant instructions.
6. Attach endcap covers to endcaps. Use double-sided tape to help secure in place.

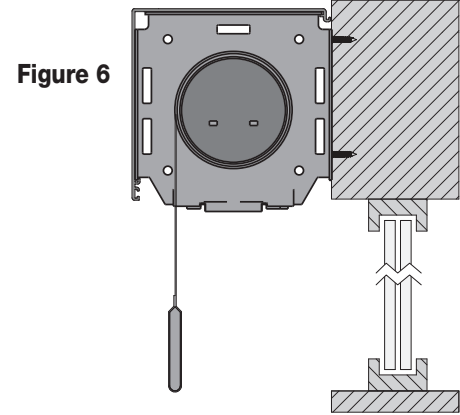


Figure 6

## Section 5 - Surface Headbox or Pocket Headbox

1. Snap endcap covers onto endcaps. (See Section 4.2 - Attaching Fascia to Endcaps Step 1).
2. Slide endcaps into the top/back portion of surface headbox or into pocket extrusion of large pocket headbox. Using provided holes in endcaps, mark headbox for drilling.

**Please Note:** The installer is responsible for selecting mounting hardware appropriate for site conditions.

**⚠ Caution:** Before mounting shades, verify measurements on the provided with shade, and ensure endcaps are installed at correct width.

3. Drill holes in back (wall mount) or top (ceiling mount), or in a pocket.
4. Attach endcaps and Surface Headbox back/top or Large Pocket Headbox extrusion to wall, ceiling or pocket using mounting hardware appropriate for site conditions.
5. Install shade (See Section 4.1 - Mounting Endcaps for Fascia).
6. Attach headbox fascia or pocket closure (see Fig. 7).

**Note on surface style headbox:** Fascia is not fully seated until it clicks into place on both ends. Once in place, check for secure fit. If not secure, use an appropriate fastener (not included)

### ATTACHING CLOSURE PANEL

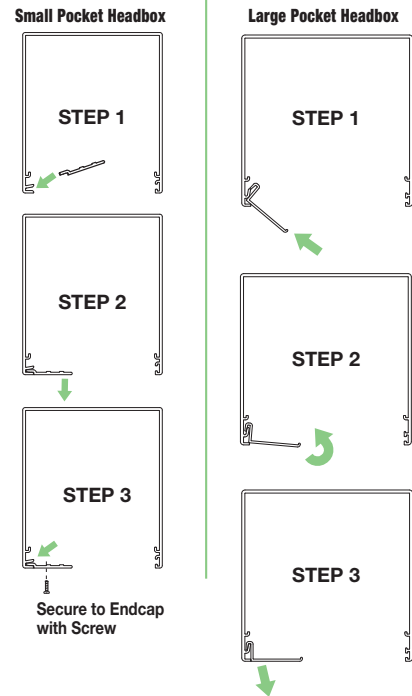


Figure 7

## Section 6 - Electrical Connections

Shade operates on 110-120V, 60 Hz. current. Shade is shipped with internal wiring complete and control switch(es) fully boxed, and standardly supplied with a 6' cable lead. Longer lead can be substituted by removing two screws in motor end of roller, removing lead, plugging new lead in, and replacing screws. Wire to connect shade to switch(es) and switch(es) to power supply should be furnished by installer. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes. DO NOT wire motors in parallel without written permission from Draper.

All operating switches should be "off" before power is connected.

**Please Note:** For low voltage wiring requirements, Draper recommends consulting with a professional low voltage electrical contractor. It is very important that shielded and stranded CAT 5 cable be used to prevent any electrical interference.

**Please Note:** A Draper Motor Test Cable (Part# 503109) and M12 Pigtail (Part# C107.089.60) are available for temporary power for testing and limit setting.


**⚠ IMPORTANT:** To reduce the risk of electric shock, equipment that features a grounding type attachment plug has a third (grounding) pin on the attachment plug. This plug will ONLY fit into a grounding type outlet. If the plug does not fit into the outlet, a qualified electrician must install the proper outlet. Do not change the plug in any way. Do not use an extension cord. If the power supply cord is too short, a qualified electrician must install an outlet near the drapery operator.

## Section 7 - Programming Somfy Wire-Free Zigbee®

**IMPORTANT:** Consult the [Zigbee Planning Sheet & Sales Guide](#) to help plan a Zigbee project.


**IMPORTANT:** Locate QR code on the shade cloth ticket to initiate your project. QR code can also be found on several other components, in case ticket is lost: Motor Antenna, Physical motor (*must remove motor from tube*), Shade Roller (*must unroll shade completely to locate*)

**1.** The Zigbee System is controlled in one of two ways:




**A.** The TaHoma switch, a wireless router "hub" with 2.4 Ghz support

**Please Note:** One (1) TaHoma switch is supported per Zigbee system.

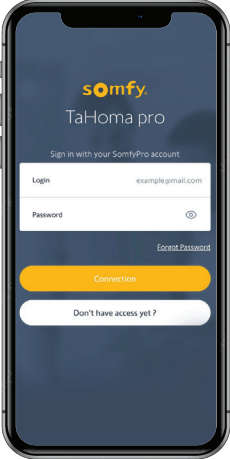




**B.** As a "hubless" system, using only Ysia remotes

**Please Note:** No integration is possible with this "hubless" option, and range is limited to roughly 35'.



**2.** Download the TaHoma Pro app from the Apple App Store or Google Play to a Bluetooth enabled device.



**3.** Scan QR code on the shade cloth ticket to initiate your project. QR code can also be found on several different components, in case ticket is lost:

- Shade Cloth Ticket
- Motor Antenna
- Physical motor
- Shade Roller


**4.** Follow the steps in the app to set up the TaHoma system.




**5.** End Users will utilize TaHoma North America, an app available for smart devices available on the Apple App Store or Google Play.



**6.** Program the Zigbee system, devices, and equipment.



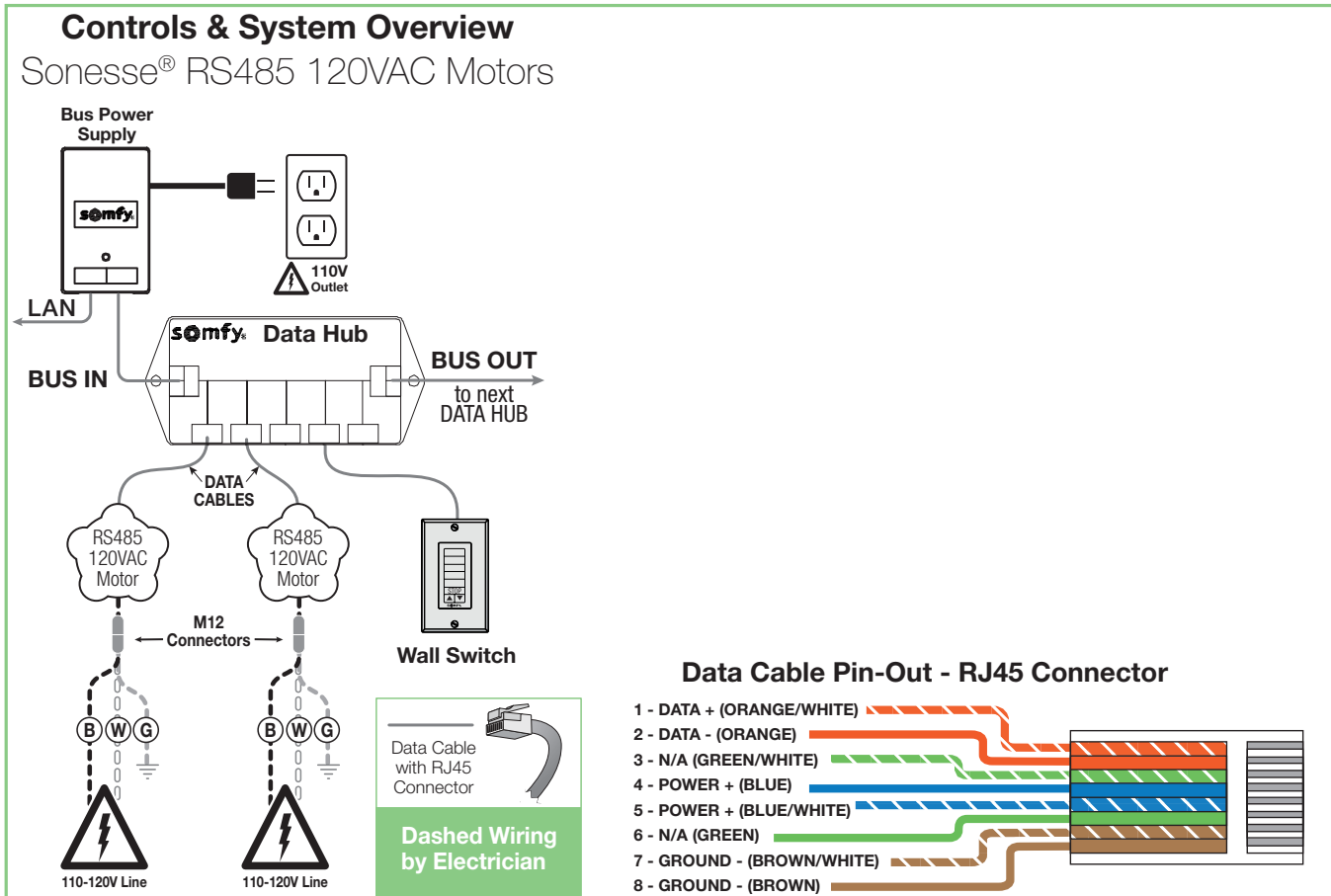
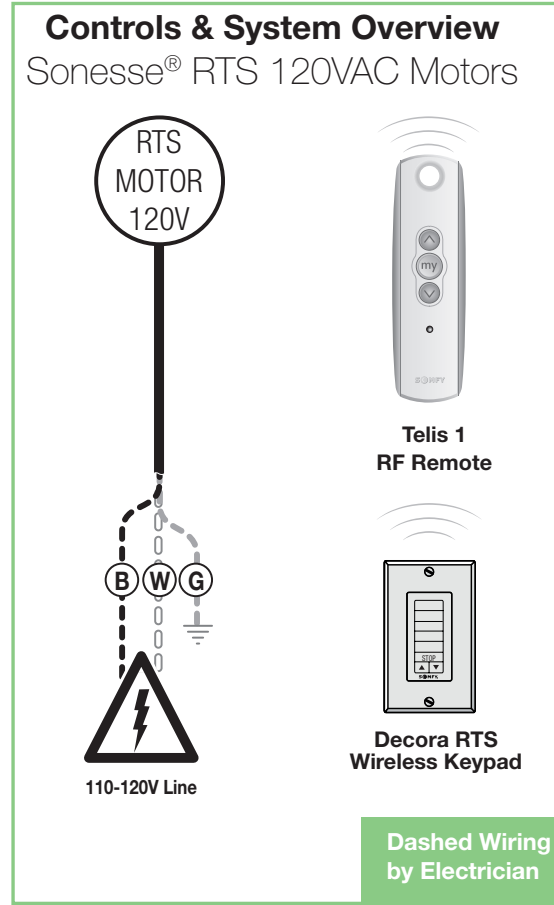
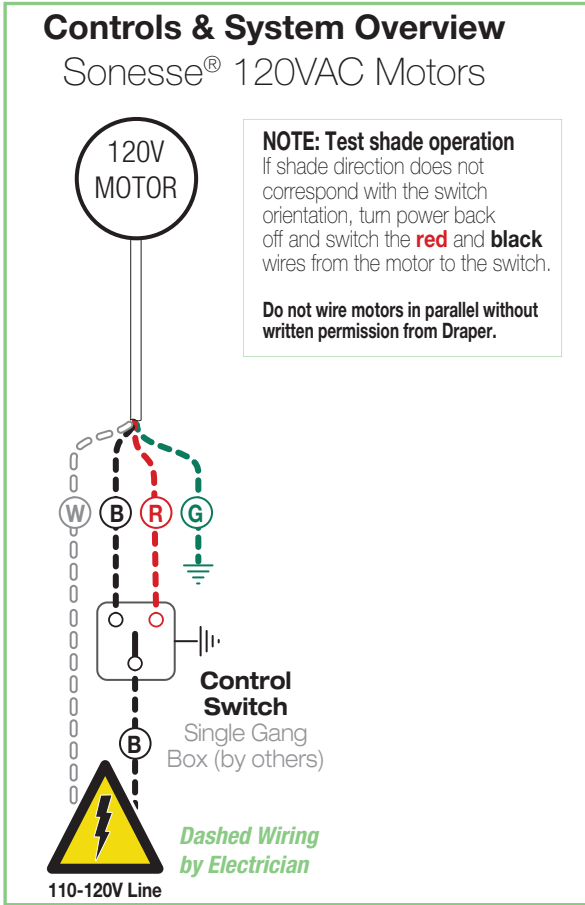
To program a TaHoma system, follow the steps in the app or download the [Somfy TaHoma Pro Programming Guide](#).



To program a Hubless or Standalone system, download the guide for [Zigbee Standalone Solution Using Ysia Remotes](#).

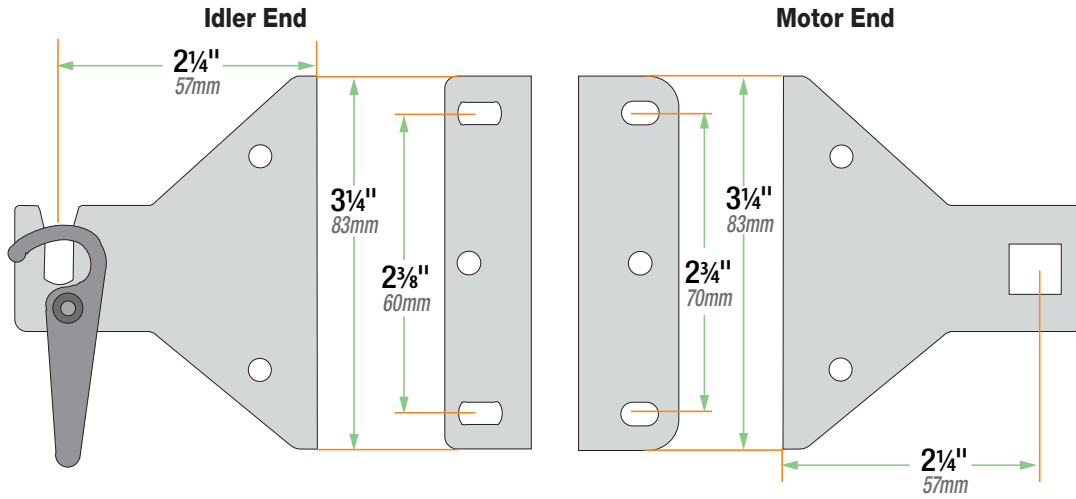
## Section 8 - Wiring Diagrams

Sonesse® is a registered trademark of Somfy® Systems, Inc.

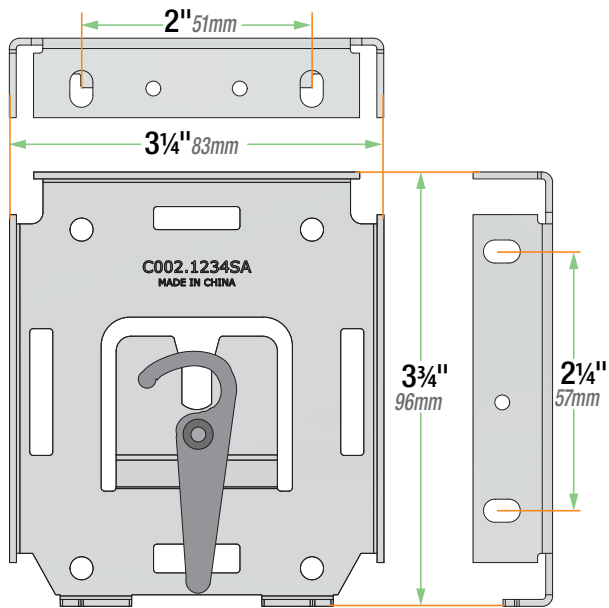


## Section 9 - Component Dimensions

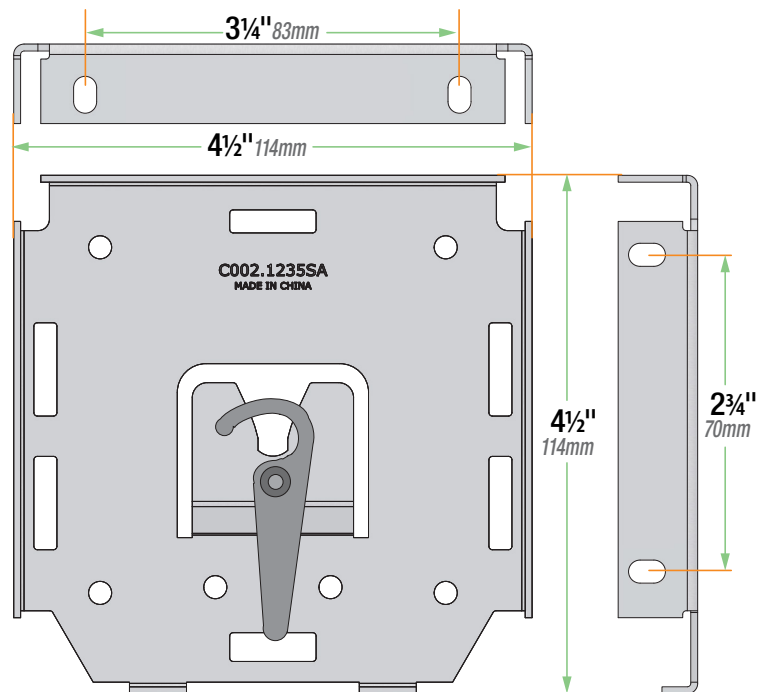
### Brackets



### Small Endcaps

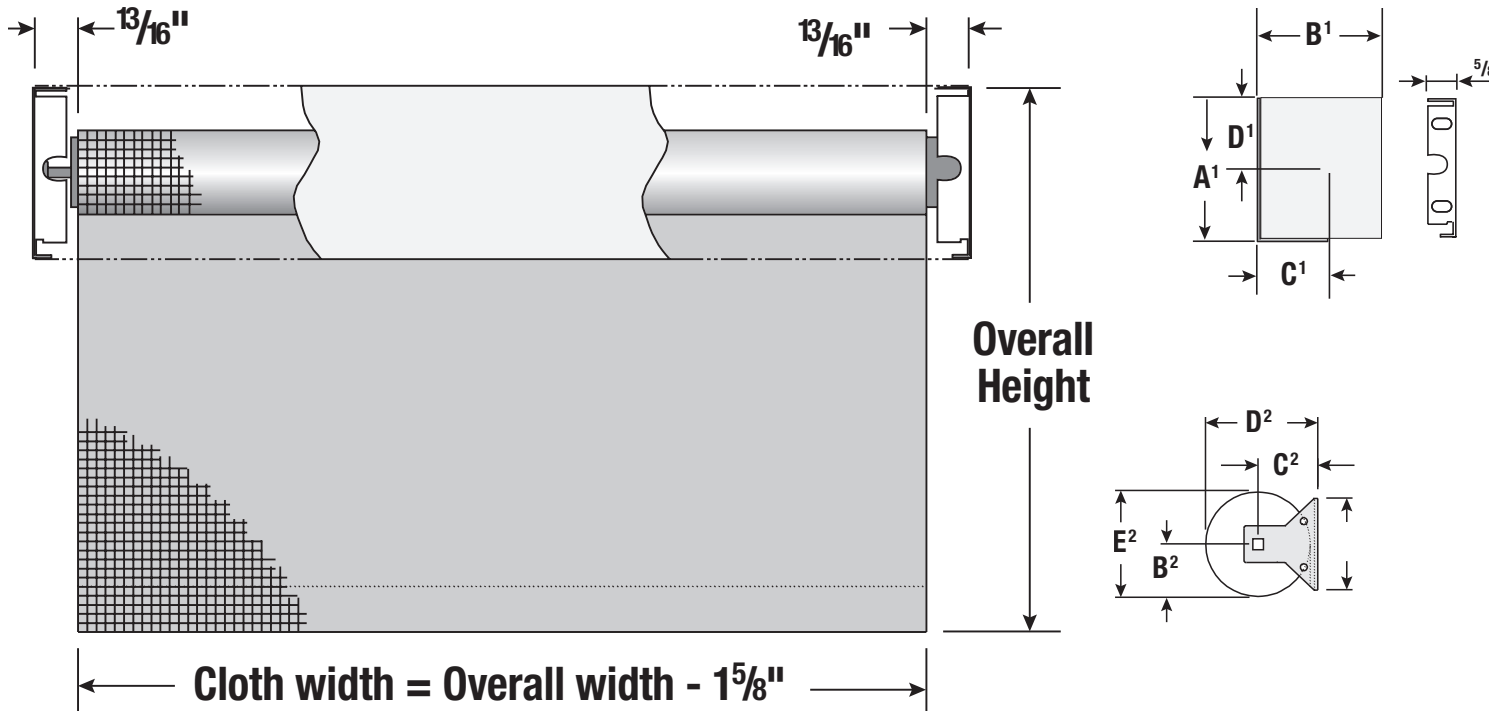


### Large Endcaps



## Section 10 - Motorized FlexShade Dimensions

*Fascia Overall Width includes plastic endcap covers. Pair adds 1/8" (3mm) to Overall Width of Small Hardware; 3/16" (5mm) to Overall Width of Large Hardware).*



HEADBOX WITH ENDCAPS*					ENDCAPS WITH FASCIA					BRACKETS				
	SMALL		LARGE			SMALL		LARGE			SMALL		LARGE	
A <sup>1</sup>	3 15/16"	100mm	4 11/16"	119mm	A <sup>1</sup>	3 7/8"	98mm	4 5/8"	117mm	A <sup>2</sup>	2 1/2"	64mm	3 1/4"	83mm
B <sup>1</sup>	3 7/16"	87mm	4 11/16"	119mm	B <sup>1</sup>	3 3/8"	86mm	4 5/8"	117mm	B <sup>2</sup>	2"	51mm	2 5/8"	67mm
C <sup>1</sup>	1 1/2"	38mm	1 5/8"	41mm	C <sup>1</sup>	1 1/2"	38mm	1 5/8"	41mm	C <sup>2</sup>	1 5/8"	41mm	2 1/4"	57mm
D <sup>1</sup>	5/8"	16mm	5/8"	16mm	D <sup>1</sup>	5/8"	16mm	5/8"	16mm	D <sup>2</sup>	2"	51mm	2 5/8"	67mm
E <sup>1</sup>	1/16"	1.6mm	3/32"	2.4mm	E <sup>1</sup>	1/16"	1.6mm	3/32"	2.4mm	E <sup>2</sup>	3/4"	20mm	3/4"	20mm

\* For Fascia, Subtract 1/16" (1.6mm) from dimensions A and D