Installation Instructions
Motorized Exterior FlexShades - by Draper

Caution
1. Inspect all boxes to make sure you have received the proper parts.
2. Open cartons lengthwise.
3. All hardware must be installed level. Shades must be level and square.
4. DO NOT wire motors in parallel without written permission from Draper.
5. Fasteners are not supplied by Draper. It is the responsibility of installer to make sure that appropriate ones for the mounting surface are used. For Jamb Mounting, Draper recommends the use of low profile head screws to allow the hembar to easily pass through the Side Channels.
6. Motorized Exterior FlexShade is designed to operate only when the fabric panel is installed vertically, perpendicular to the ground. Angled installations, where the sidechannels are NOT installed vertically, may prevent the unit from closing.
7. DO NOT run down shade cloth outside of the Side Channels.

If you encounter any difficulties installing or servicing your Motorized Exterior FlexShades, call your dealer or Draper, Inc. in Spiceland, Indiana, 765-987-7999, or 800-635-8647.

Preparation for Installation
1. Make sure mounting surface is strong enough to hold the FlexShade. Please Note: It is the responsibility of installer to use appropriate fasteners for the mounting surface.
2. Verify unit measurements, and make sure it will fit in the desired location. Please Note: The Hembar does not retract into the Headbox. This will need to be accounted for if mounting over a swinging window or door.
3. Mounting brackets MUST be installed with a gap of 1¾" (45mm) between the End Cap and the Mounting Bracket edge (See Fig. 1). Mark wall, jamb or ceiling.
4. Drill small starter holes (if necessary) in mounting surface.

Mounting Headbox - Permanently to Ceiling or Wall

1. Attaching Mounting Brackets to Headbox
   - Attach Mounting Brackets to the Headbox as a spacer between the Headbox and the wall.
   - Leave a 1¾" (45mm) gap between End Cap and Mounting Bracket (See Fig. 4), and tighten set screws.

2. Removing Roller Assembly
   - A. Remove screws from bottom of Headbox, remove Fascia and set aside.
   - B. Remove Quick Release Pin from Idler End of Roller Assembly.
   - C. Remove Roller Assembly, Idler End first, and set aside.

3. Mounting to Ceiling / Wall
   - Using the mounting holes in the end caps as a guide (See Fig. 6), drill pilot holes on both ends of the Headbox. Attach to mounting surface using appropriate fasteners.
   - Please Note: It is the responsibility of installer to use appropriate fasteners for the mounting surface.

4. Once the Headbox is secured to the mounting surface, re-install Roller Assembly*, Quick Release Pin and Fascia.
   - *Note: If there is no cable exit provided, you must drill one before re-installing Roller Assembly. See Cable Exit on Page 4.

5. You are now ready to mount the Side Channels (See Page 2).

Mounting Headbox with Brackets - Wall Installation

1. Attaching Mounting Brackets
   - Attach mounting brackets to the wall using #10 flat head screws installed flush with bracket. Be sure to use AT LEAST 2 of the top mounting holes (See Fig. 2).

2. Attach Headbox to brackets and tighten Set Screws (See Fig. 3).

3. You are now ready to mount the Side Channels (See Page 2).
Installing Cable Guides
Before installing the Cable Guides, remove the Roller assembly from the Headbox. See Removing Roller Assembly section on Page 1.

1. Thread Cable Guide through hembar and then the provided hole in the endcap. (see Figure 7).
2. Tighten the Cable Clamp. It should rest on the endcap with no slack or kinks in the cable guide.
3. Pull the Cable Guide taught and parallel with edge of the fabric panel. Determine the location of the Wall or Deck Mount.
4. Attach Wall or Deck Mount to surface using appropriate hardware.
5. Insert the Jackscrew end of the Cable Guide into the Wall/Deck Mount. Tension to 8 in-lbs, so the shade will move up and down easily along the cable.

Please Note: Depending on the height of the shade, you may need to adjust where the Cable Clamp is located on the Cable Guide.

6. Cut off the excess Cable.
7. Repeat on the opposite side of the shade.
Motorized Exterior FlexShades by Draper

For Exterior FlexShades with Side Channels

**Preparation**

1. Use 3mm Hex Wrench to remove Screws from Side Channel and set aside.
2. Remove Side Channel Cover. **Please Note: Do NOT remove the Bottom Caps from Side Channel.**
3. For jamb mounting, also remove the Fabric Retainer Strip and set aside.
4. Drill through Side Channel at desired mounting points (See Fig. 8).
5. Mark wall or jamb and drill small pilot holes in mounting surface.

**Wall Mounting**

1. Use 3mm Hex Wrench to remove Screws from Side Channel and set aside.
2. Remove Side Channel Cover. **Please Note: Do NOT remove the Bottom Caps from Side Channel.**
3. For jamb mounting, also remove the Fabric Retainer Strip and set aside.
4. Drill through Side Channel at desired mounting points (See Fig. 8).
5. Mark wall or jamb and drill small pilot holes in mounting surface.

**Jamb Mounting**

1. With Hembar engaged Side Channel, insert side channel guide into bottom of the endcap (See Fig. 11).
2. Attach side channel to the mounting surface using appropriate fasteners.
3. Re-attach Side Channel Cover using the screws removed in Step 1.

**Please Note:** Failure to use provided fasteners to re-attach side channel cover may result in product failure in high wind.

**Side Channel**

1. Insert Hem Bar into the Side Channel (See Fig. 9).
2. Insert Side-Channel Guide into the Side Channel (See Fig. 9).
3. Insert Side-Channel Guide into the Side Channel (See Fig. 10).

**Wall Mounting**

1. Insert Ham Bar into the Side Channel (See Fig. 9).
2. Insert Side-Channel Guide into the Side Channel (See Fig. 10).
3. Insert Side-Channel Guide into the Side Channel (See Fig. 10).
4. Insert Side-Channel Guide into the Side Channel (See Fig. 11).

**Jamb Mounting**

1. With Hembar engaged Side Channel, insert side channel guide into bottom of the endcap (See Fig. 11).
2. Attach side channel to the mounting surface using appropriate fasteners.
3. Re-attach Side Channel Cover using the screws removed in Step 1.

**Please Note:** Failure to use provided fasteners to re-attach side channel cover may result in product failure in high wind.
Motorized Exterior FlexShades by Draper

Complete Electrical Connection

The Motorized Exterior FlexShades operates on 110-120V, 60 Hz. current. Shade is shipped with internal wiring complete and control switch(es) fully boxed, and supplied with a 6' cable lead (standard). Longer lead can be substituted by removing two screws in motor end of roller, removing lead, plugging new lead in, and replacing screws. Wires 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.

Limit Switch Adjustments—Standard Motor

CAUTION: Be sure all switches are in “off” position before adjusting limit switches. Always be prepared to shut off manually when new adjustment is being tested. Do not allow the shade roller to become exposed by running the shade fabric too far down. Shade may be severely damaged if allowed to run too far up or down. Each shade’s limit switch must be set if using group control system.

1. Fully depress both limit switch push buttons, then operate wall switch to make sure system works properly.
2. Raise shade to desired “up” stop position.
3. Set upper limit by depressing and releasing the proper (back) push button.
4. Lower shade to desired “down” stop position.
5. Set lower limit by depressing and releasing the proper (front) push button.

Limit Switch Adjustments—RTS Motors

For instructions on setting limits on these motors, consult Draper’s Motorized Shade Handbook, available in the motorized shades section of www.draperinc.com.

Limit Adjustments (ILT Motors)

1. Connect the ILT switch to the motor via the terminal blocks, or via the modular port using four conductor modular cable. When using modular cable, the cable connectors MUST NOT be crimped in reverse, as with standard telephone cable.
2. Set the slide switch to the lower position. Press and hold the DOWN button on the switch to move the viewing surface to the desired lower limit. If the shade moves in the opposite direction, release the DOWN button and press and hold down the STOP button for four seconds. This will reverse the operation of the UP and DOWN switches.
3. Move slider switch into center position. Wait a couple of seconds.

Please Note: If you move the slider switch from down to up in one motion it sets the two limits in the same position.

4. Set the slide switch to the higher position. Move the shade to the desired upper limit by pressing and holding the UP button on the wall switch.
5. Return the slide switch to the center position to return to normal operation.
6. To set the shade to an intermediate position, move the shade to the desired position and press the STOP button. Press and hold the STOP button for at least three seconds to record the position.

Please Note: Pressing and releasing the UP button on the switch will move the shade to its upper limit. Pressing and releasing the DOWN button will move the shade to its lower limit. While the motor is in motion, pressing the STOP button for less than two seconds will stop the shade at its present position. Once the motor is stopped, pressing the STOP button will move the shade to its intermediate position. Pressing and holding the STOP button, when the motor is at rest or in motion, for at least three seconds will record a new position.

Cable Exit

The Motorized Exterior FlexShades can be ordered with a cable exit pre-drilled in the top or back of the Headbox. If there is no cable exit provided, you must drill one.

Before drilling out a cable exit, remove the Roller assembly from the Headbox. See Removing Roller Assembly section on Page 1.

Remove the 3 screws from each end of the Headbox and drill a 7/16” diameter hole in one of the 3 suggested locations (See Fig. 12).

After drilling, return Roller Assembly and replace the screws.

Attaching Anti-Insect Brush Seals (Optional)

The Motorized Exterior FlexShades has optional Anti-Insect Brush Seals pre-installed along the width of the fascia. There are also brush seals supplied for each of the side channels that will need to be installed. Remove the double-sided tape and apply to the side channels as shown at right (Fig. 13).

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 may also be cleaned by using a sponge or soft cloth and mild solution of warm soapy water. A dishwashing liquid, such as Ivory liquid, is recommended. A clean dry cloth is recommended for the metal finish.

www.draperinc.com (765) 987-7999
Motorized Exterior FlexShades by Draper

Assembled Dimensions (Front View)

- **Shade Width**
- **Fabric Width**
- **Shade Height**
- **Side Channel Length**
- **Hembar Length**

Hardware Dimensions

- **Side Channel Dimensions**
  - 1 5/8" (41mm)
  - 3/8" (10mm)
  - 1/2" (19mm)
  - 1 1/2" (38mm)
  - 1" (25mm)
  - 3 5/8" (92mm)

- **Mounting Bracket**
  - 4" (102mm)
  - 1 1/4" (32mm)
  - 1 3/4" (45mm)
  - 1 1/2" (38mm)
  - 7/8" (22mm)

Dimensions - Headbox Styles

- **Exterior FlexShade Square Headbox**
  - 3 5/8" (92mm)

- **Exterior FlexShade Curved Headbox**
  - 3 5/8" (92mm)

NOTE: Mounting brackets attach to surface with #10 Flat Head Screw.
Eolis Wind and Soliris Wind/Sun Sensor Operating Instructions

1. Place the RTS Motor in Programming Mode.
2. Press the programming button on the back of the Soliris or Eolis RTS Sensor to program it in the memory of the motor.
3. When the measured wind speed exceeds the threshold set on the RTS Sensor, an UP command is transmitted after 2 seconds. As long as the measured wind speed is greater than the threshold, all other commands will be ignored. Once the measured wind speed falls below the threshold, the exterior window covering can be operated with a Telis transmitter after a 30 second delay. With the Soliris RTS Sensor, the sun will automatically activate the motor after a 12 minute delay.
4. When the measured sun intensity exceeds the threshold set on the Soliris RTS Sensor, a DOWN command is transmitted after 2 minutes. After approximately 20 minutes, if the sun intensity falls below the threshold, an UP command will be transmitted.

Wiring Diagrams

Standard Single Shade Wiring Diagram

Do not wire motorized units in parallel without written consent from Draper.

- White (Neutral)
- Black
- Red
- Green (Ground)

Control switch

Red
Black

Single gang box by others
Min. 4" x 2 1/8" x 1 1/8" deep

Dashed wiring by electrician

For multiple shade or low voltage wiring consult diagrams provided with control.

To 110-120V Line

NOTE: Test shade operation. If shade direction does not correspond with the switch orientation, turn power back off then switch the red and black wires from the motor to the switch.

NOTE: This wiring diagram is for standard right-hand motor placement and fabric from rear of roller. For left hand motor placement with fabric from rear of roller, Red becomes “Up” and Black becomes “Down.”

110-120V ILT Standard Shade Wiring Diagrams

Single Low Voltage Control

- White (Neutral)
- Black
- Green (Ground)

Dashed wiring by electrician

Data Cable

Wall Switch, RF or IR Receiver, or integrated control system

To 110-120V Line

Multiple Low Voltage Controls

- White (Neutral)
- Black
- Green (Ground)

Dashed wiring by electrician

Data Cables

Wall Switches, RF or IR Receivers, or integrated control systems

Optional splitter

Radio Technology 110-120V Motors

- White (Neutral)
- Black
- Green (Ground)

Dashed wiring by electrician

To 110-120V Line

Wall Switch or RF Receiver