Installation Instructions
Motorized FlexShade by Draper

Mounting Brackets

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

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

3. Mount brackets using appropriate fasteners for surface (see Fig. 4 for bracket types). The installer is responsible for selecting mounting hardware appropriate for site conditions.

Please Note: The brackets show are for standard and Quiet 110V motors. Hardware for other motors will vary. Please see page 4 of these instructions for comparison drawings.

4. Install motor so that limit switches are pointed down or accessible.

5. Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.

6. Before connecting switches, controls, or electrical, make sure power is off. Wiring indicated in diagram by dashed lines must be completed by an electrician.

7. Do not wire motors in parallel without written permission from Draper.

8. It is the installer's responsibility to make sure appropriate fasteners are used for mounting surface.

9. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and invalidates warranty.

Please Note: Custom products/installations may not be reflected by this document. Call Draper, Inc. if you have questions about your installation.

Mounting Endcaps

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

2. Slide notched pin on idler end into slot on bracket. Slip retainer clip onto idler end between bracket and roller (see Fig. 2).

3. Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.

4. All motors should be tested and limits set using test cord before electrician wires shade.

5. Before connecting switches, controls, or electrical, make sure power is off. Wiring indicated in diagram by dashed lines must be completed by an electrician.

6. Do not wire motors in parallel without written permission from Draper.

7. It is the installer's responsibility to make sure appropriate fasteners are used for mounting surface.

8. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and invalidates warranty.

Please Note: Custom products/installations may not be reflected by this document. Call Draper, Inc. if you have questions about your installation.

Fascia

1. Snap end covers into endcaps.

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

3. Slide notched pin into idler endcap and attach retainer clip(see Fig. 5).

4. Slide notched pin on idler end into slot on bracket. Slip retainer clip onto idler end between bracket and roller (see Fig. 2).

*Don't forget to install retainer clip!

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

Fascia is not fully seated until it clicks into place on both ends. Once in place, check for secure fit. If not secure, secure with appropriate fastener (not included).

If you encounter any difficulties installing or servicing your Motorized FlexShade, call your dealer or Draper, Inc., Spiceland, Ind., (765) 987-7999, or fax (765) 987-7142.
STEP 3

Please note that when you remove the crank handle assembly (if provided) there will be no washers to discard.

**Surface (Ceiling/Wall) Headbox or Pocket Headbox**

1. Snap endcaps onto endcaps.
2. Place endcaps into back/top portion of wall/ceiling headbox or into pocket extrusion of large pocket headbox. Using pre-drilled holes in endcaps, mark the headbox for drilling.

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

3. Drill holes in back or top, depending on whether you will be mounting the headbox to the wall or ceiling, or in a pocket.
4. Attach endcaps and wall/ceiling headbox back/top or large pocket headbox extrusion to wall, ceiling or pocket using mounting hardware appropriate for site conditions. The installer is responsible for selecting mounting hardware appropriate for site conditions.
5. Install shade following steps 2-5 under “Fascia” section.
6. Attach headbox fascia or pocket closure (see Fig. 7).
7. Snap endcap covers onto endcaps. Use double-sided tape to help secure in place.

**Surface Headbox** (Fig. 8)

- **Fascia**
  - Large Hardware
  - Small Hardware

- **Square Fascia**
  - Small Hardware

- **Radius Fascia**
  - Small Hardware

**Large Pocket Headbox**

**Small Pocket Headbox**

- Secure closure panel to endcap with screw

**Caution:**

- If crank override was included, reattach to endcap (see Fig. 8).

**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 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 you want the fabric drawn toward. For example: if fabric is tracking to the left, place the tape on the right side.

**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.

**Cleaning and Maintenance**

Idlers on motorized shades may occasionally need lubrication. If lubrication is required, apply a small amount of a lithium based grease direct to the idler pin.

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.

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

**Limit Switch 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.

**Cleaning and Maintenance**

Idlers on motorized shades may occasionally need lubrication. If lubrication is required, apply a small amount of a lithium based grease direct to the idler pin.

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.

**For instructions of 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.

**Cleaning and Maintenance**

Idlers on motorized shades may occasionally need lubrication. If lubrication is required, apply a small amount of a lithium based grease direct to the idler pin.

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.

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

**Limit Switch Adjustments—RTS Motors**

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

Standard and Quiet Single Shade Wiring Diagram

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

Position Function
- **DOWN**: Set LOWER limit
- **UP**: Set UPPER limit
- **CENTER**: Normal Operation

To 110-120V Line

110-120V ILT Standard and Quiet Shade Wiring Diagrams

Single Low Voltage Control

- **Internal Shade Wiring**
  - White (Neutral)
  - Black
  - Green (Ground)

- **Optional Splitter**

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

- **Data Cable**

- **Dashed wiring by electrician**

To 110-120V Line

Multiple Low Voltage Controls

- **Internal Shade Wiring**
  - White (Neutral)
  - Black
  - Green (Ground)

- **Optional Splitter**

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

- **Data Cables**

To 110-120V Line

Radio Technology

110-120V Motors

- **Internal Screen Wiring**
  - White (Neutral)
  - Black
  - Green (Ground)

- **Dashed wiring by electrician**

- **Wall Switch or RF Receiver**

To 110-120V Line

24V DC Quiet Shade Wiring Diagram

- **24V DC Motor**

- **120V AC Power Panel**

- **Radio Frequency DC Switch**

- **Dashed wiring by electrician**

To 110-120V Line

Multiple ILT Motors

- **Optional Modular Splitter**

- **Data Cable**

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

Please Note: 5V DC must be connected to be able to set limits using the wall switch.

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.

To 110-120V Power Supply (Dashed wiring by electrician)

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.

Return the slide switch to the center position to return to normal operation.

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.

Please Note: 5V DC must be connected to be able to set limits using the wall switch.

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.

Radio Technology

110-120V Motors

- **Internal Screen Wiring**
  - White (Neutral)
  - Black
  - Green (Ground)

- **Dashed wiring by electrician**

- **Wall Switch or RF Receiver**

To 110-120V Line

24V DC Quiet Shade Wiring Diagram

- **24V DC Motor**

- **120V AC Power Panel**

- **Radio Frequency DC Switch**

- **Dashed wiring by electrician**

To 110-120V Line

Multiple ILT Motors

- **Optional Modular Splitter**

- **Data Cable**

- **Wall Switch, IR or RF Receiver or integrated control system**
24 Volt Radio Technology Quiet FlexShade
(Shown with Fascia)

24V Radiot Technology Quiet Operator

24V units use the same hardware as Manual FlexShades. Please review manual shade instructions for parts information.

110-120V Quiet or ULTRA Quiet Operator

110-120V Quiet or ULTRA Quiet Operator

110-120V Standard and Quiet Motorized FlexShade
(Shown with Fascia)

110-120V Quiet or ULTRA Quiet Operator

24 Volt Radio Technology Quiet FlexShade
(Shown with Fascia)

110-120V ILT Standard and Quiet Motorized FlexShade
(Shown with Fascia)

110-120V Altus/RTS Standard or Quiet Operator

24 Volt Radio Technology Quiet FlexShade
(Shown with Fascia)

24V units use the same hardware as Manual FlexShades. Please review manual shade instructions for parts information.

110-120V Quiet or ULTRA Quiet Operator

110-120V Standard and Quiet Motorized FlexShade
(Shown with Fascia)