Overview - Components

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TOOLS REQUIRED

PENCIL  |  TAPE MEASURE  |  LEVEL  |  POWER DRILL  |  PLIERS  |  HARDWARE (by others)

CAUTION

Read and understand all warnings before beginning installation.

PERSONNEL REQUIRED

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

Draper, Inc.  |  411 S. Pearl St. Spiceland, IN 47385
draperinc.com  |  765.987.7999  |  800.238.7999
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Please read - Important Installation Information

⚠️ Caution:
1. Inspect all boxes to make sure you have received the proper shades and parts. Controls may be shipped separately, or in same carton as shades.
2. Open cartons lengthwise.
3. Before mounting shades, verify measurements on label provided with shade, and ensure unit is installed at correct width.
4. Do not wire motors in parallel without written permission from Draper.
5. All endcaps, fascia, pocket headbox, and other hardware must be installed level. Shades must be level and square.
6. Read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fail or otherwise fail, and invalidates warranty.
7. Installer is responsible for selecting mounting hardware appropriate for site conditions.

Please read - Safety Information

⚠️ WARNING
Improper installation and use of the FlexShade® Recharge can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit 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 fail or otherwise fail, and could result in serious injury.
2. Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional.
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, headboxes, pockets, wall clips, and other hardware must be installed level. Unit must be level and square.
6. Never leave the area while operating the unit 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. Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.
9. Do not wire motors in parallel without written permission from Draper, Inc.
10. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
11. 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.
12. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the unit and understand its safety features.
13. The safety features of the unit, 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.
14. Unit 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.
15. Failure to precisely follow installation guidelines invalidates all warranties.
16. 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 serve 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 shade and parts. Controls may be shipped separately, or in same carton as shade.
6. If you have any difficulties with installing, servicing, or operating your shade, call your dealer or Draper, Inc., 765-987-7999.

Please read - 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 shimming fabric into the fabric roll when the shade is deployed on the side that the fabric will be drawn toward. For example: if the fabric is tracking to the left, place the shimming fabric on the right side.

Please read - Cleaning and Maintenance

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

Most standard Draper 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 dishwashing liquid is recommended. A clean dry cloth is recommended for the metal finish.

Please Note: Exceptions are GreenScreen Evolve®, GreenScreen Revive®, and Phifer® SW7000 fabrics, which must be cleaned with a dry art sponge. (GreenScreen Revive® and GreenScreen Evolve® are registered trademarks of Mermet® USA. SheerWeave® is a registered trademark of Phifer® Incorporated.)
FlexShade® Recharge

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

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

### Section 1 - Brackets
1. Mark wall, jamb, or ceiling for placement of mounting brackets.
2. Drill small starter hole (if necessary) in mounting surface.
3. Mount brackets using appropriate fasteners for surface (Fig. 1a-1b).
4. Place spring-loaded pin into idler end bracket, depress pin by pushing shade roller toward bracket, slip notches on operator end into other bracket, then press down to lock in place (Fig. 2a-2b).

#### Figure 1a
![Large IDLER END](image1)

#### Figure 1b
![Small IDLER END](image2)

### Section 2 - Endcaps
1. Snap end covers onto endcaps (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 (Fig. 4).
5. Place spring-loaded pin into idler endcap, depress pin by pushing shade roller toward endcap, slip notches on operator end into operator endcap, then press down to lock in place (Fig. 5a-5b).

#### Figure 3
![IDLER ENDCAP DIMENSIONS](image3)

#### Figure 4
![FLEXSHADE RECHARGE ENDCAP DIMENSIONS](image4)

#### Figure 5a - IDLER END
![IDLER ENDCAP DIMENSIONS](image5a)

#### Figure 5b - OPERATOR END
![OPERATOR ENDCAP DIMENSIONS](image5b)

### Section 3 - Fascia
1. Snap end covers onto endcaps.
2. Install endcaps and shade (see Section 2—Endcaps).
3. Place groove along top of fascia over endcaps, and snap into place (Fig. 6). Fascia is not fully seated until it clicks into place on both ends. Once in place, secure with appropriate fastener (not included) if necessary.

#### Figure 6
![Fascia Installation](image6)

### Reverse Roll Fascia
1. Mark mounting points.
2. Slide endcaps into extrusions.
3. Use pre-drilled endcap holes to mark fascia for drilling.
4. Attach endcaps to fascia using included hardware.
6. Install roller/fabric/operator assembly according to relevant instructions.
7. Attach endcap covers to endcaps. Use double-sided tape to help secure in place.

#### Figure 7
![Reverse Roll Fascia](image7)
Section 4 - Headbox

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

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

1. Snap endcap covers onto endcaps.
2. Slide endcaps into back/top portion of wall/ceiling headbox or into pocket extrusion of large pocket headbox. Using pre-drilled holes, mark headbox for drilling.
3. Drill holes in back (wall mount) or top (ceiling mount), or in a pocket.
4. Attach endcaps and wall/ceiling headbox back/top or pocket headbox extrusion to wall, ceiling, or pocket.
5. Install shade.
6. Attach headbox fascia (Section 3) or pocket closure (Fig. 8). Fascia is not fully seated until it clicks into place on both ends. Once in place, secure with appropriate fastener (not included) if necessary.

Figure 8
POCKET HEADBOX

Section 5 - Charging Options

### 12 Volt Options
This motor has a 12V built-in Li-ion battery pack with integrated charge management. Max power input for recharging: 12.6V / 1000mAh. Motor arrives charged from factory.

- Once battery has been depleted, motor must be charged for 6 hours using recommended AC charger.
- During operation, if voltage drops to less than 10V, motor will beep 10 times to indicate it needs to be charged.

⚠️ **Caution:** Ensure cable is kept clear of fabric. Ensure antenna is kept straight and away from metal objects.

### 5 Volt Options
This motor has a 5V built-in Li-ion battery pack with integrated charge management. Motor arrives charged from factory.

- Once battery has been depleted, motor must be charged for 6 hours using recommended AC charger.
- Determine the motor’s battery level using any of the Automate controller’s one-touch battery-check functions.

⚠️ **Caution:** Ensure cable is kept clear of fabric. Ensure antenna is kept straight and away from metal objects.
Section 6 - Remote Controller

Scan code with your smartphone to view a playlist of FlexShade® Recharge limit setting videos. These videos do not replace the written instructions, but offer valuable help.

Section 7 - 12 Volt Motor Initial Setup

Please Note: Programming buttons will face down when shade is installed.

Exiting Sleep Mode

FlexShade Recharge battery motors do not come preprogrammed from Draper® unless specified on order. Upon leaving factory each motor is placed into “Sleep Mode” to avoid accidental operation during shipping. It is necessary to “Wake” motor before operation and setup.

1. To “Wake” motor and exit Sleep Mode ensure motor is installed and secured in mounting hardware.
2. Press programming (P1) button (button or recessed based on motor size) and quickly release. Shade will move to lower limit if preprogrammed.
3. The motor is now no longer in “Sleep Mode” and ready for further setup unless preprogrammed by Draper.

Please Note: Remote will be locked if preprogrammed.

Pair Motor with Controller

1. Select channel on controller to be paired with motor.
2. Press and hold P1 button on motor until motor responds with 1 jog and 1 beep.
3. Within 4 seconds, press and hold Stop button on remote until motor responds.

Check Motor Direction

To check travel direction of shade, press UP or DOWN on controller.

To reverse shade direction, hold both UP and DOWN.

Quick Press = Step
Long Press = Continuous Travel

Important: Damage to shade may occur when operating motor prior to setting limits. Attention should be given.

Important: Reversing motor direction using this method is only possible during initial set-up.

Motor is now in programming mode and ready for setting limits.

Caution: Consult user manual for information on selecting channel.
Adjusting Upper Limit

Hold UP and STOP on controller. For 10-15 seconds screen will time out on remote: continue holding.

Motor Response: Approx. 10 Sec.

Adjusting Lower Limit

Hold DOWN and STOP on controller. For 10-15 seconds screen will time out on remote: continue holding.

Motor Response: Approx. 10 Sec.

Disable limit setting function of remote

Important: It is still possible to add/delete channels and perform P2 functions while lock function is enabled.

Important: This mode is intended to be used after all shade programming is completed. Locked Mode will prevent accidental or unintended changing of limits.

Reverse Motor Direction

Press and hold P1 button on motor for 10 seconds, 3 jogs and 3 beeps.

Motor Response: Approx. 10 Sec.

Factory Reset

Press and hold P1 button on motor for 14 seconds, 4 jogs and 4 beeps.

Motor Response: Approx. 14 Sec.

Important: Resetting motor to factory settings will erase all programming, including any set limits.
Section 9 - 5 Volt Motor Initial Setup

**15 Channel Remote**
Press right button for 1 second or less to display current mode.

**1 Channel Remote**

**RESPONSE**
LCD displays “L” when locked
LCD displays “U” when unlocked

**P1 Button Functions**

**Motor state test:** This table describes the function of a short P1 Button press/release (<2 seconds) depending on current motor configuration.

<table>
<thead>
<tr>
<th>P1 Press</th>
<th>Condition</th>
<th>Function Achieved</th>
<th>Visual Feedback</th>
<th>Audible Feedback</th>
<th>Function Described</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Press</td>
<td>If limit is NOT set</td>
<td>None</td>
<td>No Action</td>
<td>None</td>
<td>Operational control of motor, run to limit. Stop if running.</td>
</tr>
<tr>
<td></td>
<td>If limits are set</td>
<td>Operational control of</td>
<td>Motor Runs</td>
<td>None</td>
<td>Operational control of motor after pairing and limit setting is completed first time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>motor, run to limit. Stop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>if running.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If motor is in “Sleep Mode” and limits are set</td>
<td>Wake and control</td>
<td>Motor wakes and runs in a direction.</td>
<td>None</td>
<td>Motor is restored from Sleep Mode and RF control is active.</td>
</tr>
</tbody>
</table>

**Activate Pairing Mode**

**Sleep Mode**

**Reverse Direction**

**Reset to Factory Settings**

**Important:** Motor is now in step mode and ready for setting limits.
Section 10 - 5 Volt Motor Limits

**IMPORTANT**
Cycle shade up and down prior to setting limits to settle fabric.

**IMPORTANT**
Damage to shade may occur when operating motor prior to setting limits. Attention should be given.

Quick Press = Step
Long Press = Continuous Travel

To reverse shade direction, hold both UP and DOWN until the motor responds.

**IMPORTANT**
Reversing motor direction using this method is only possible during initial set-up.

---

**Setting 5 Volt Motor Limits**

**IMPORTANT**
Cycle shade up and down prior to setting limits to settle fabric.

Move shade to the desired highest or lowest position by pressing the UP or DOWN buttons on controller.

To save upper limit, hold UP and STOP.
To save lower limit, hold DOWN and STOP.

**IMPORTANT**
After setting limits, motor will automatically exit from initial setup mode.

---

**Adjusting 5 Volt Motor Limits**

To adjust upper limit:
Hold UP & STOP for 1 jog & 1 beep.
Move shade to new upper limit.
Hold UP & STOP for 2 jogs & 3 beeps.

To adjust lower limit:
Hold DOWN & STOP for 1 jog & 1 beep.
Move shade to new lower limit.
Hold DOWN & STOP for 2 jogs & 3 beeps.

---

**Using P2 Button on existing controller to add a new controller or channel**

A = Existing controller or channel (to keep)
B = Controller or channel to add or remove

Press P2 on controller A.
Press P2 on controller A.
Press P2 on controller B to add it.

**IMPORTANT**
Consult user manual for your controller or sensor.

---

**Using an existing controller to add or delete a controller or channel**

A = Existing controller or channel (to keep)
B = Controller or channel to add or remove

Press P2 on controller A.
Press P2 on controller A.
Press P2 on controller B to add it.
Press P2 on controller B to remove it.

**IMPORTANT**
Consult user manual for your controller or sensor.

---

**IMPORTANT**
Cycle shade up and down prior to setting limits to settle fabric.

Move shade to the desired highest or lowest position by pressing the UP or DOWN buttons on controller.

To save upper limit, hold UP and STOP.
To save lower limit, hold DOWN and STOP.

**IMPORTANT**
After setting limits, motor will automatically exit from initial setup mode.

---

**IMPORTANT**
The bottom limit should be set ~ 1.38 in. (35mm) below the Ultra-Lock to disengage the auto lock mechanism when the shade is raised.

---

**Important**
Consult user manual for your controller or sensor.
**Setting 5 Volt Favorite Position**

Move shade to the desired position by pressing the UP or DOWN button on the controller.

Press P2 on controller. 
Press STOP on controller. 
Press STOP on controller.

Send Shade to Favorite Position

**Deleting 5 Volt Favorite Position**

Press P2 on controller.

**Toggle 5V Motor to Roller Mode**

Default motor mode is Roller Mode (for use with roller shades) after initial Limits have been set. If motor is in Tilt Mode (for use with other product types), use the following steps to return to Roller Mode.

Hold UP and DOWN on controller.

Press STOP on controller.

**Adjusting 5V Motor Speed**

Increase Motor Speed (Default motor mode is the slowest speed.)

Press P2 on controller. 
Press UP. 
Press UP.

Decrease Motor Speed

Press P2 on controller. 
Press DOWN. 
Press DOWN.

**Deleting 5 Volt Favorite Position**

Press P2 on controller.
5V Motor Stop Configuration

Turn Soft Stop OFF:
Motor must be in slowest speed to turn Soft Stop OFF.

Press P2 on controller.  
Press DOWN.  
Press DOWN.  

Motor Response  
Motor Response  
Motor Response

Turn Soft Stop ON:
Motor must be in fastest speed to turn Soft Stop ON.

Press P2 on controller.  
Press UP.  
Press UP.  

Motor Response  
Motor Response  
Motor Response

5V Motor Battery Check Function

Send Shade to battery charge level.

⚠️ IMPORTANT
Shade must be at Upper Limit.  

Hold UP.  

Motor Response

Approx. 5 s

Percentage of Battery Charge Remaining

Percentage Depleted

5V Motor Charging LED

Turn Charging LED ON/OFF

⚠️ IMPORTANT
Shade must be at Lower Limit.  

Hold DOWN to toggle off.  
Hold DOWN to toggle on.  

Motor Response

Approx. 5 s

Red LED flashes 3x  

5V Motor Sleep Mode

If multiple motors are grouped on a single channel, Sleep Mode may be used to put all but 1 motor to sleep, allowing programming of just the one motor that remains “Awake”.

Enter Sleep Mode
Sleep mode is utilized to prevent a motor from incorrect configuration during other motor setup.  
Hold P1 button on the motor head.  
Motor Response

Exit Sleep Mode: Method 1
Exit sleep mode once the shade is ready.  
Press and release P1 button on the motor head.  
Motor Response

Exit Sleep Mode: Method 2
Remove power and then re-power the motor.

5V Motor Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor is not responding</td>
<td>Battery in motor is depleted</td>
<td>Recharge with a compatible charger</td>
</tr>
<tr>
<td></td>
<td>Insufficient charging from solar PV panel</td>
<td>Check connection and orientation of PV panel</td>
</tr>
<tr>
<td></td>
<td>Transmitter battery is discharged</td>
<td>Replace battery</td>
</tr>
<tr>
<td></td>
<td>Battery is inserted incorrectly into transmitter</td>
<td>Check battery polarity</td>
</tr>
<tr>
<td></td>
<td>Radio interference/shielding</td>
<td>Ensure transmitter is positioned away from metal objects and the aerial on motor or receiver is kept straight and away from metal</td>
</tr>
<tr>
<td></td>
<td>Receiver distance is too far from transmitter</td>
<td>Move transmitter to a closer position</td>
</tr>
<tr>
<td></td>
<td>Charging failure</td>
<td>Check power supply to motor is connected and active</td>
</tr>
</tbody>
</table>
|                          | Motor beeps x10 when in use                | Battery voltage is low  
Recharge with a compatible charger |
|                          | Cannot program a single motor (multiple motors respond) | Always reserve an individual channel for programming functions. Use Sleep Mode to program individual motors. |
FlexShade® Recharge

Section 11 - **Dimensions**

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**Small Endcap**
- 2" (51 mm)
- 1 1/8" (28.5 mm)
- 2 5/8" (67 mm)
- 3 3/4" (96 mm)

**Large Endcap**
- 3 3/4" (96 mm)
- 2 1/4" (57 mm)
- 3 1/2" (89 mm)
- 4 5/8" (117 mm)

---

**Shade Width**
- 3/4" (19 mm)

**Roller Width**
- 3/8" (9.5 mm)

**Fabric Width**
- 3/4" (19 mm)