FlexShade® XL
Very large motorized shading system.

**INSTRUCTIONS**
INSTALLATION & OPERATION

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**FlexShade XL Angled Headbox**
(Ceiling Mount shown)

**FlexShade XL Curved Headbox**
(Surface/Wall Mount Shown)

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

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**Important Safety Information**

**WARNING**

Improper installation and use of FlexShade XL can result in serious injury or death. Primarily, injuries can occur when the FlexShade XL falls due to imprecise installation, mishandling of the FlexShade XL 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 FlexShade XL 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. FlexShade XL must be level and square.

6. Never leave the area while operating the FlexShade XL 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. 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.

14. Operation of FlexShade XL should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the FlexShade XL & understand its safety features.

15. The safety features of the FlexShade XL, 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.

16. FlexShade XL 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.

17. Failure to precisely follow installation guidelines invalidates all warranties.

18. 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 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. **DO NOT REMOVE ROLLER FROM HEADBOX** without written permission from Draper.

6. Inspect all boxes to make sure you have received the proper FlexShade XL parts. Controls may be shipped separately, or in same carton as FlexShade XL.

7. If you have any difficulties with installing, servicing or operating your FlexShade XL, call your dealer or Draper, Inc., (765) 987-7999.
Section 1 - Preparation for Installation

1. Make sure mounting surface is strong enough to hold the FlexShade XL.

   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. Brackets must be spaced no more than 5 feet (152cm).

4. Drill small starter holes (if necessary) in mounting surface.

Section 2 - Mounting Headbox with Brackets - Wall Installation

Attaching Mounting Brackets

1. 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. 2).

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

Section 3 - Mounting Headbox with Bracket Ceiling Installation

Attaching Mounting Brackets

1. Attach mounting brackets to the ceiling using #10 flat head screws installed flush with bracket. Mounting bracket must be secured to the overhead building structure (See Fig. 3).

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

Section 4 - Pocket Installation

The FlexShade XL can also be installed in a pocket in the ceiling.

The minimum depth of the ceiling pocket for installation of the FlexShade XL is 5 5/8” (158mm). (See Fig 4).
Section 5 - 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.

Section 6 - Limit Switch Adjustments

Section 6.1 - Standard and Quiet Motors

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. Motor should be installed so limit switches are pointed down or accessible.

Section 6.1.1 - Push Button Limits

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.

Section 6.1.2 - Screw-Type Limits

1. Determine which direction of fabric travel corresponds with arrows on motor.
2. Operate shade to desired “down” stop position.
   - Set limit by turning the proper socket toward the “+” to lower the limit, and “-” to raise it.
3. Operate shade to desired “up” stopping position.
   - Set limit by turning the proper screw toward the “-“ to raise the limit, and “+” to lower it.

Section 6.2 - Limit Switch Adjustments—RTS Motors

For limit setting instructions on these motors, see Draper’s RFRC_Motor_Prog_Inst available in the motorized shades section of www.draperinc.com.

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

Please Note: Exceptions are Flocké, Roc-Rol, Obion and Phifer SW7000 fabrics, which must be cleaned with a dry art sponge.
Dimensions

**Fabric Width**

- 7/8" (22 mm)

**Shade Width**

- 5" (127 mm)

**Mounting Bracket Dimensions**

**FlexShade XL Ceiling Mounting Bracket**

- 5 5/16" (135 mm)
- 6" (152 mm)
- 1½" (38 mm)
- 1½" (38 mm)
- ½" (19 mm)
- ½" (19 mm)
- 2¼" (57 mm)
- 1¾" (45 mm)
- 1" (25 mm)
- 5" (127 mm)

**FlexShade XL Wall Mounting Bracket**

- 4" (102 mm)
- 1½" (38 mm)
- 1½" (38 mm)
- ½" (19 mm)
- ½" (19 mm)
- 2¼" (57 mm)
- 1¾" (45 mm)

**NOTE:** Mounting brackets attach to surface with #10 Flat Head Screw
### Controls & System Overview

**Sonesse 120VAC Motors**

- **120V MOTOR**
- **M12 Connector**
- **Control Switch**
  - Single Gang
  - Box (by others)
- **110-120V Line**

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

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

**Dashed Wiring by Electrician**

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**Sonesse RTS 120VAC Motors**

- **RTS MOTOR 120V**
- **M12 Connector**
- **Telis 1 RF Remote**
- **Deco Flex Wireless Keypad**
- **110-120V Line**

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**M12 Connector**

#### for 4-Wire Motors

- **To Motor**
- **Ø 0.61” 15.5 mm**
- **1 - BLACK**
- **2 - WHITE**
- **3 - RED**
- **4 - GREEN**

- **To Switch & 120VAC**

#### for 3-Wire Motors

- **1 - BLACK**
- **4 - GREEN**
- **3 - NOT USED**

- **To Switch & 120VAC**

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

**Dashed Wiring by Electrician**

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**Wiring Diagrams** By Electrician