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**CAUTION**

Read and understand all warnings (Page 2 of this document) before beginning installation.
Section 1 - Electrical Connections

Screen operates on 110-120V, 60 Hz. current. Screen ships with internal wiring complete and control switch(es) fully boxed.

Wire to connect screen to switch(es) and switch(es) to power supply should be furnished by installer.

Please Note: Plug and Play is supplied with a 9’8” 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.

Please Note: Screen must be installed in accordance with requirements of Local Building Codes, Canadian Electrical Code (CEC), CAN/CSA C22.1 and National Electric Code (NEC), NFPA 70. An appropriate disconnect device shall be provided as part of building installation.

⚠️ CAUTION: All operating switches should be “off” before power is connected.

FOR OPTIONAL PLUG AND PLAY:

Plug-in power cord option available with Motor with Internal Low Voltage Controller. For Reconfiguration/Conversion of Non-detachable Power Cord to Field Wiring for Models PRE-28, PRE-29, PRE-30, TAR-28, TAR-29 and TAR-30 Only:

1. Disconnect cord plug from outlet.
2. Remove junction box cover.
3. Disconnect wire nuts from black, white and green wires.
4. Remove power cord and strain relief from screen.
5. Connect black motor wire to “hot” supply wire.
6. Connect white motor wire to “neutral” supply wire.
7. Connect green/yellow wire to “ground” supply wire.
8. Replace junction box cover.

⚠️ WARNING ⚠️

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

1. Please read 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 Unit 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 construction and operation of this equipment and hazards involved.
3. Do not affix unit to wall or ceilings that have inadequate strength to permanently hold unit during use. It is owner’s and installer’s responsibility to confirm wall or ceiling to which unit attaches is sufficient to permanently hold weight and stress loads of unit at all times. Draper, Inc., is not responsible for improper installation, application, testing or workmanship related to product at place of installation.
4. It is installer’s responsibility to make sure appropriate fasteners are used for mounting.
5. All brackets and other hardware must be installed level. Unit must be level.
6. Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
7. After installation, entire system, including all sensors, should be carefully tested to ensure safe and normal operation.
8. The safety features of Unit, including sensors, should never be disabled, bypassed or overridden. The system should not be operated until all safety features, including sensors, are properly and completely installed, calibrated and tested.
9. 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.
10. Failure to precisely follow installation guidelines invalidates all warranties.
11. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about installation of custom products or any questions about your installation.

Before Beginning Installation

1. Installation should be completed by a qualified installer. Look for any job site conditions that could interfere with installation or operation of system.
2. Read carefully and be sure to understand all installation instructions and all related operations manuals. These instructions are intended as a guide for installer and owner. They should be followed closely and combined with expertise of experienced qualified installers. Draper, Inc., is not responsible for improper installation, application, testing or workmanship related to product at place of installation. Instructions are packed in carton. Please retain all instructions for future use.
3. Locate and lay out all pieces.
4. Inspect all boxes to make sure you have received proper Unit parts.
5. Operates on 110-120V, 60 Hz. current.
6. If you have any difficulties with installing, servicing or operating your Unit, call your dealer or Draper, Inc., (765) 987-7999.
Section 2 - Hanging Screen

**General:**
1. Screen should be lifted into position only by end mounting brackets. Keep case level by lifting end plates simultaneously to prevent surface damage. Never attempt to lift screen along its length.
2. When locating viewing surface and checking clearance for screen's operation, remember surface is centered in case. Handle case carefully to protect its finish.
3. Regardless of mounting method, screen should be positively and securely supported so that vibration or even abusive pulling on viewing surface will not cause case to work loose or fall. Installer must insure that fasteners used are of adequate strength and suitable for mounting surface chosen.
4. **CAUTION:** Product is very heavy: Installer must provide adequate attachment hardware and anchors as required. Installer must also insure that structure is of adequate strength.
5. **CAUTION:** Case must be mounted low enough from ceiling to gain access to bracket screws.
6. **Please Note:** Do not use a power screwdriver to tighten screw. Maximum torque for tightening screw is 5 lb-inches.

Section 3 - Operation

**Please Note:** Before fully operating screen: For Targa, remove tape; on Premier, lower viewing surface enough to fully expose shipping brackets, then remove shipping brackets by loosening screws, removing end shipping brackets, sliding center shipping brackets off dowel, and re-tightening screws (Fig. 3).

110-120V Single Station Control — 3-position up-off-down switch permits operation to be stopped at any point. Factory adjusted limit switches automatically stop screen when fully down or fully up.

110-120V Multiple Station Control — Switches similar in appearance to 110-120V Single Station Control. Screen stops when switch is released and may be restarted in either direction. Factory adjusted limit switches stop screen automatically when fully down or fully up.

For LVC-IV Controls:

24V Control — Three-button up-stop-down switch(es) stop at any point desired, operate in any sequence. Factory adjusted limit switches automatically stop screen when fully down or fully up.

1. The key-operated power supply switch controls power to unit and switches. When it is “off”, switches will not operate. Key may be removed from switch in either “on” or “off” position.
2. A three-position key switch permits screen to be operated directly by key. In this case, screen operator must always have a key.

RS232 / Ethernet — Serial communication and network communication available.

Plug & Play™ — Supplied with a 9’8” cable lead. No wiring is necessary. Screen is equipped with a handheld remote or 3-position operating switch. Three positions (up-off-down) permit operation to be stopped at any point. Factory adjusted limit switches automatically stop screen when fully down or fully up.

Section 4 - Tab Tension Adjustment Procedure

1. Determine which side requires adjustment.
2. Secure dowel with one hand.
3. Using Phillips-head screwdriver, depress spring-loaded adjustment screw and slowly turn CLOCKWISE TO INCREASE tension, or COUNTER-CLOCKWISE TO RELEASE tension. The screw adjusts in ¼ turn increments. Adjust only one increment (¼ turn) at a time.
4. If problem is not corrected, leave screen in position for 24 hours to allow surface material to stretch into position.
5. If problem still is not corrected, repeat steps 2 and 3.

**CAUTION:** Do not touch or bend surface.
Section 5 - **Limit Adjustments (Motor with Internal Low Voltage Controller)**

<table>
<thead>
<tr>
<th>POSITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWN</td>
<td>Set LOWER limit</td>
</tr>
<tr>
<td>UP</td>
<td>Set UPPER limit</td>
</tr>
<tr>
<td>CENTER</td>
<td>Normal Operation</td>
</tr>
</tbody>
</table>

**Please Note:** Screen limits are factory set for optimum performance of screen. Any adjustment of these limits could void warranty. Please check with Draper prior to resetting screen limits.

**CAUTION:** Always be prepared to shut screen off manually when new adjustment is being tested. Screen may be severely damaged if viewing surface is allowed to run too far up or too far down.

**CAUTION:** Be sure all switches are in “off” position before adjusting limit switches. (Height adjustments are made from wall switch)

1. Connect ILT switch to motor via terminal blocks, or via modular port using four conductor modular cable. When using modular cable, cable connectors MUST NOT be crimped in reverse, as with standard telephone cable.

2. Set slide switch to lower position. Press and hold DOWN button on switch to move viewing surface to desired lower limit. If screen moves in opposite direction, release DOWN button and press and hold down STOP button for four seconds. This will reverse operation of UP and DOWN switches.

3. Move slider switch into center position. Wait a couple of seconds.

**Please Note:** Moving slider switch from down to up in one motion sets two limits in same position.

4. Set slide switch to higher position. Move viewing surface to desired upper limit by pressing and holding UP button on wall switch.

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

**Note:** 5V DC must be connected in order to set limits using wall switch.

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Section 6 - **Limit Adjustments (Standard Motor)**

**Please Note:** Screen limits are factory set for optimum performance of screen. Any adjustment of these limits could void warranty. Please check with Draper prior to resetting screen limits.

**CAUTION:** Always be prepared to shut screen off manually when new adjustment is being tested. Screen may be severely damaged if viewing surface is allowed to run too far up or too far down.

**CAUTION:** Be sure all switches are in “off” position before adjusting limit switches.

1. Adjusting “fully up” position — If you do, however, “Up” stopping position may be adjusted by turning yellow limit switch adjustment socket. The yellow socket is located on left end of screen roller and is accessible to a screwdriver/Allen wrench (4mm or 5/32”). Turning socket counterclockwise will allow viewing surface to retract farther into case. Turning it clockwise will cause surface to stop farther out of case. One full revolution of socket will alter stopping position of viewing surface by approximately 1½”.

2. Adjusting “fully down” position — “Down” stopping position may be adjusted by turning white limit switch adjustment socket. The white socket is located on left end of screen roller and is accessible to a screwdriver/Allen wrench (4mm or 5/32”). Turning socket counterclockwise will allow viewing surface to run farther down. Turning it clockwise will shorten viewing surface, causing it to stop in a less extended position. At no time should viewing surface be unrolled enough to expose any part of screen roller.
Premier XL® / Targa XL®
Electric Projection Screen

Section 7 - Wiring Diagrams

Please Note: Do not wire motors in parallel.

Single Station Control

Multiple Station Control

Wiring Diagrams—Plug & Play 110-120V Motor
(Low Voltage Control Built Into Motor)

Connecting Switch to ILT Motor

ILT Data Cable Connection

Dry Contacts

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

Please Note: This Splitter/Jack is located inside the junction box of your Access screen.
**Section 8 - Wiring Diagrams (continued)**

**External LVC-IV - Single or Multiple Projection Screen Wiring Diagram**

**Internal Screen Wiring**

- **White (Common)**
- **Red (Up)**
- **Black (Down)**
- **Green/Yellow (Motor Ground)**

**To Motor Leads**

- **To 110-120 VAC Line**
- **N**
- **GND**

**External LVC-IV - Single or Multiple Projection Screen Wiring Diagram**

**Built-In LVC-IV - Single or Multiple Projection Screen Wiring Diagram**

**Section 9 - Accessing Built-In Low Voltage Control Unit (LVC-IV)**

**To access Built-In LVC-IV:**

1. Remove two (2) Torx head screws from motor end of screen housing.
2. Remove access panel with LVC-IV from screen housing.
Case Dimensions* (Premier Tab Tension Surface Shown)

**Methods of Installation (Targa Dowel Shown)**

CAUTION: Product is very heavy; Installer must provide adequate attachment hardware and anchors as required. Installer must also insure that wall or ceiling structure is of adequate strength.

**Section 10 - Dimensions and Methods of Installation**

**Case Dimensions** (Premier Tab Tension Surface Shown)

<table>
<thead>
<tr>
<th>Dim</th>
<th>Premier (shown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Varies</td>
</tr>
<tr>
<td>B</td>
<td>Varies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dim</th>
<th>Targa</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fabric Width</td>
</tr>
<tr>
<td>B</td>
<td></td>
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</tbody>
</table>

**Methods of Installation**

- **Wall Mounted**: Appropriate hardware provided by installer.
- **Ceiling Mounted**: Appropriate hardware provided by installer.