INSTRUCTION BOOK FOR
DescenderPro
Original Instructions

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Important Safety Instructions

When using your video equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions before using.
2. Maximum surrounding air temperature 122°F (50°C).
3. Main disconnect must be incorporated in the fixed wiring in accordance with the wiring rules.
4. Rated for indoor use only.
5. Use copper rated conductors rated 167°F (75°C) or higher.
6. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard.
7. Supplied drive is only intended for use in Da-Lite screen models Advantage, Contour, and Cosmopolitan.
8. Position the cord so that it will not be tripped over, pulled, or contact hot surfaces.
9. If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.
10. To reduce the risk of electric shock, do not disassemble this appliance. Contact an authorized service dealer when repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.
11. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.
12. Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer’s responsibility to make sure the structure to which this component is attached can support the weight of all equipment. Reinforce the structure as required before installing the component.
13. Use this projection screen only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

Save These Instructions
Suggested Methods of Installation

Method 1

Method 2

NOTE: For method 2 threaded rod must be 5/16-18 thread.
Tools Required for Installation

1/2” Open Wrench or Socket Driver
1/8” Hex Key (included)
#2 Phillips Screwdriver

Pre-Installation

1. Carefully unpack case from shipping carton.
2. Set aside the Installation Kit. Items inside will be used during installation.
3. Make sure to recheck measurement of case for proper installation clearance.
4. Remove any protective foam covering the outside of the case.
5. Remove the hanger brackets from the top of the case using a 1/2” wrench. Do not discard the hardware; it will be used during case installation to re-attach the hanger brackets for mounting.

Case Installation

1. Hang case and attach to support structure with bolts. See Suggested Methods of Installation.
2. Tighten bolts until trim flange is flush with ceiling. **NOTE:** For proper operation, case must be levelled side to side and front to back.
3. Loosen screw using a #2 Phillips screwdriver to slide junction box door and rotate open. Install electrical connections that apply to your unit. Make sure to review the wiring diagram for proper hook up. Close junction box by rotating lid and sliding over screw. Secure shut by fastening closing screw. (Figure 1)

**NOTE:** Must be installed in accordance with the requirements of the Local Building Codes, the Canadian Electrical Code (CEC), CAN/CSA C221 and the National Electric Code (NEC), NFPA 70.
4. If screen surface is tab-tensioned, use a #2 Phillips screwdriver to remove white shipping brackets attached to slat and screen (Figure 2).
5. Test installation by running screen up and down a few times. Be prepared to stop screen should any objects obstruct the movement of the screen. To prevent damage to the motor, the standard duty cycle is 1 minute on and 3 minutes off.

6. Install finishing trim covers on both ends of the case. Line up trim cover flush with case (Figure 3). Magnet will hold cover in place and secure with safety screw #2 Phillips screwdriver through motor and pin end bracket (Figure 4).

7. Install access door. Slide motor end of door onto mounting post (Figure 5). Lift up slat on pin end side and hook door onto pin end mounting post (Figure 6).

8. Rotate access door upward and push until you hear springs latch into door bracket (Figure 7). There are three attachment points, motor end, pin end and center.

**NOTE:** If the center latch does not engage, press inward on flange at the center latch position and rotate access door upward. The slot in door must be positioned between the case and the clip (Figure 8).
Installation for 120V Screens

120V Wiring Diagram

3-conductor 20-24 gauge wire can be used in place of the supplied RJ-14 cable to connect the wall switch. Connect the BUS terminals on the wall switch to the corresponding BUS terminals on the splitter board.

**IMPORTANT NOTE:** The wall switch is REQUIRED to make any limit switch adjustments, EVEN if a third party control system is used. Therefore, it is advised to wire the switch or provide a 3-conductor connection that is accessible.

Installation Video

To view a video of this installation, visit [http://youtu.be/t2ZQ9PVAhEg](http://youtu.be/t2ZQ9PVAhEg) or use the QR code below.

**Power Input 120VAC / 60Hz**

<table>
<thead>
<tr>
<th>RJ-14 Pin-Outs (Tab Is Facing Down)</th>
<th>RJ-22 Pin-Outs (Tab Is Facing Down)</th>
<th>RJ-45 Pin-Outs (Tab Is Facing Down)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus (RP Data)</strong></td>
<td>+12V</td>
<td>Manual 2</td>
</tr>
<tr>
<td><strong>RQ Data</strong></td>
<td><strong>Bus (RP Data)</strong></td>
<td>+12V</td>
</tr>
<tr>
<td><strong>+5V</strong></td>
<td><strong>RQ Data</strong></td>
<td><strong>Bus (RP Data)</strong></td>
</tr>
<tr>
<td><strong>Ground</strong></td>
<td><strong>+5V</strong></td>
<td><strong>Ground</strong></td>
</tr>
<tr>
<td><strong>Ground</strong></td>
<td><strong>Ground</strong></td>
<td><strong>Ground</strong></td>
</tr>
<tr>
<td>Supplied RJ-14 cable</td>
<td>Standard RJ-22 can be used in place of RJ-14 cable</td>
<td>Brown</td>
</tr>
</tbody>
</table>
230V Wiring Diagram with Operation & Limit Adjustment
Wall Switch

3-conductor 20–24 gauge wire can be used in place of the supplied RJ-14 cable to connect the wall switch. Connect the BUS terminals on the wall switch to the corresponding BUS terminals on the splitter board.

IMPORTANT NOTE: The wall switch is REQUIRED to make any limit switch adjustments, EVEN if a third party control system is used. Therefore, it is advised to wire the switch or provide a 3-conductor connection that is accessible.
Installation for 230V Screens (continued)

230V Wiring Diagram with European Style Wall Switch

Use 3-conductor 20-24 gauge wire for wall switch connections.

**IMPORTANT NOTE:** The European style wall switch is for operation only and CANNOT be used to make limit switch adjustments. Therefore, it is advised to wire the limit adjustment switch or provide a 3-conductor connection that is accessible.

Power Input 230VAC / 50Hz

- Green / Yellow (Ground)
- Blue (Hot)
- Brown (Common)
- Red (Up)
- White (L / Common)
- Black (Down)

Push Down on Tab to Insert Wire

Data Cable

RJ-45 Jack

Black (Down)

White (L / Common)

Red (Up)

White (Common)

Red

Black

White
Screen Adjustment

1. Locate the wall switch and remove the cover plate from the wall switch and remove the switch from the junction box.
2. Locate the two tactile buttons on the back of the switch. They are black round buttons on silver plates.
3. To adjust the down limit switch, press and hold the down tactile button until the LED on the back of the switch turns solid red. This will put the motor in limit set mode. Turn the wall switch over and use the down button on the front of the switch. Press and hold the down button until the desired down position is reached. If you travel too far down, press the up button to move the screen upward. If you press and let go of either the up or down buttons, the motor will do a small jog in that direction for fine adjustment of the screen. Once the desired position is reached, turn the switch over; press and hold the down tactile button until the LED on back of switch blinks red twice. The down limit is now set.

**CAUTION:** Do not adjust for more drop than what was ordered. At least 1-1/2 wraps of fabric must remain on the roller.

**ATTENTION!** N’effectuez pas de réglage pour obtenir un déroulement supérieur à celui commandé. Au moins 1 à 1/2 tour de toile doit être maintenu sur le cylindre.

**NOTE:** If the screen is in limit set mode and no buttons are pushed for 20 seconds, the LED on the back of the wall switch will turn off; the motor will return to run mode and no changes will be saved. If this occurs, return to step 3 for down limit adjustment or step 4 for up limit adjustment.

4. To adjust the up limit switch, press and hold the up tactile button until the LED on the back of the switch turns solid green. This will put the motor in limit set mode. Turn the wall switch over and use the up button on the front of the switch.

5. To test the limit switch settings, press and release the up or down buttons on the switch to operate the screen.

6. Replace the switch and cover plate on the wall.

**IMPORTANT NOTE:** The wall switch is REQUIRED to make any limit switch adjustments, even if a third party control system is used. Therefore, it is advised to wire the switch or provide a 3-conductor connection that is accessible.

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**Tensioned Screens**

Models with tab-tensioned surfaces are standard with 12” of black drop at the top.

**CAUTION:** Adjusting the down limit switch for less drop by more than 6” can cause the screen surface to lose proper tensioning.

**ATTENTION!** LE FAIT D’AJOUTER NE DÉROULEZ PAS TROP L’ÉCRAN PLUS DE 15 CM (6PO) AUX INTERRUPTEURS DE FIN DE COURSE PEUT FAIRE PERDRE LA BONNE TENSION À LA SURFACE DE L’ÉCRAN.

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**Non-Tensioned Screens**

Non-tensioned screens are pre-set with 2” of black drop at the top with a total of 12” of fully adjustable black drop available.
**Third Party Control**

**Control Panel**

A control panel may be connected to the splitter board by using the dry contact Up, Down and Common connections. The control panel must provide a momentary, dry contact closure of at least 1/2 second.

1. Use 3-conductor 20-24 gauge wire to connect the control panel to the splitter board.
2. A momentary closure across the common and up wires will be an “up” command.
3. A momentary closure across the common and down wires will be a “down” command.
4. A momentary closure across the common, up and down wires will be a “stop” command.
## Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen will not operate and motor does not hum.</td>
<td>Incorrect line voltage.</td>
<td>Verify 115-125V (or 220-240V). If insufficient voltage, rewire incoming electric line.</td>
</tr>
<tr>
<td></td>
<td>Blown fuse.</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td></td>
<td>Tripped circuit breaker.</td>
<td>Reset circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>No power to operating switch or junction.</td>
<td>Check above. Tighten all loose wire connections. Correct any improper connections.</td>
</tr>
<tr>
<td>Screen will not operate and motor does not hum. Power at junction box.</td>
<td>Thermal overload tripped.</td>
<td>Let motor cool down for 15 minutes. Try again.</td>
</tr>
<tr>
<td></td>
<td>Broken wire in the “down” or “up” position.</td>
<td>Check for continuity. Cut off old splice and reconnect.</td>
</tr>
<tr>
<td></td>
<td>Defective motor, limit switch or capacitor.</td>
<td>Replace motor assembly. NOTE: Motor is a sealed assembly.</td>
</tr>
<tr>
<td></td>
<td>Capacitor burned out.</td>
<td>Replace motor assembly.</td>
</tr>
<tr>
<td>Screen does not stop at correct position.</td>
<td>Limit switch out of adjustment.</td>
<td>See Screen Adjustment section.</td>
</tr>
<tr>
<td>Noise. NOTE: Screen will operate with a low pitched hum.</td>
<td>Squeaking, rubber end plug rubbing on motor.</td>
<td>Center roller in case.</td>
</tr>
<tr>
<td></td>
<td>Grinding. Foreign object in screen rubbing on roller or fabric.</td>
<td>Remove.</td>
</tr>
<tr>
<td></td>
<td>Gear noise.</td>
<td>Replace motor assembly.</td>
</tr>
<tr>
<td>Fabric hangs crooked.</td>
<td>Screen not installed properly.</td>
<td>Check for level and plumb.</td>
</tr>
<tr>
<td></td>
<td>Fabric has backed up inside case.</td>
<td>Adjust “down” limit switch slowly until roller is exposed and wrinkle comes out, then readjust for proper drop.</td>
</tr>
<tr>
<td></td>
<td>Fabric is damaged.</td>
<td>Replace fabric.</td>
</tr>
</tbody>
</table>

### Conditions for Transportation and Storage

- Temperature: Between 40 - 100°F (5 - 40°C)
- Relative Humidity: 30% to 70%, non-condensing
- Always keep the projection screen horizontal during transport and storage

Screen surface should be allowed to air out once every two months, or otherwise used on a regular basis, if the temperature is above 72°F (22°C) and at least once every month if the temperature goes above 85°F (30°C).
LIMITED FIVE YEAR WARRANTY ON DA-LITE DESCENDER PRO PRODUCTS ONLY

Milestone AV Technologies LLC warrants these Da-Lite branded products to the original purchaser only, to be free from defects in materials and workmanship for a period of five (5) years from the date of purchase by the original purchaser, provided they are properly operated according to Da-Lite’s instructions and are not damaged due to improper handling or treatment after shipment from the factory.

This warranty does not apply to equipment showing evidence of misuse, abuse or accidental damage, or which has been tampered with or repaired by a person other than authorized Da-Lite personnel.

Da-Lite’s sole obligation under this warranty shall be to repair or to replace (at Da-Lite’s option) the defective part of the merchandise. Returns for service should be made to your Da-Lite dealer. If it is necessary for the dealer to return the screen or part to Da-Lite, transportation expenses to and from Da-Lite are payable by the purchaser and Da-Lite is not responsible for damage in shipment.

To protect yourself against damage or loss in transit, insure the product and prepay all transportation expenses.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO FITNESS FOR USE AND MERCHANTABILITY. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the five (5) year warranty period. This warranty gives you specific legal rights, and you may also have other rights, which vary from state-to-state. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, OR FOR INCIDENTAL, DIRECT, OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

In the event that there is a defect in materials or workmanship of a Da-Lite product, you may contact our Customer Care Specialists at 3100 North Detroit Street, Warsaw, IN 46582, (574) 267-8101, (800) 622-3737.

IMPORTANT: THIS WARRANTY SHALL NOT BE VALID AND DA-LITE BRANDED PRODUCTS SHALL NOT BE BOUND BY THIS WARRANTY IF THE PRODUCT IS NOT OPERATED IN ACCORDANCE WITH THE DA-LITE WRITTEN INSTRUCTIONS.

Keep your sales receipt to prove the date of purchase and your original ownership.