# The Da-Lite Difference.





# Instruction Book for HORIZON ELECTROL®



### DA-LITE SCREEN COMPANY, INC.

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## **IMPORTANT SAFETY INSTRUCTIONS**

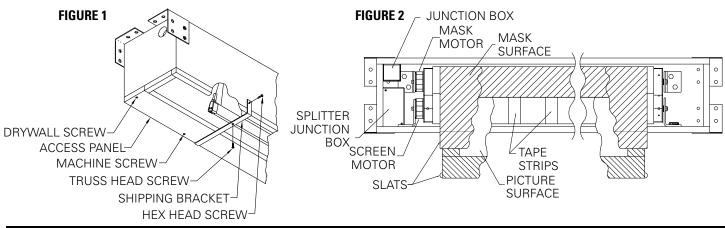
When using your video equipment, basic safety precautions should always be followed, including the following:

- 1. Read and understand all instructions before using.
- 2. 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.
- 3. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.

## SAVE THESE INSTRUCTIONS

## PRE-INSTALLATION

- 1. Carefully unpack screen and remove outer wrapping from case.
- 2. Make sure to recheck measurements of screen location before installation.



## INSTALLATION

- 1. Install screen by raising unit into position between joists at one end only. Install one lag screw in each mounting bracket.
- 2. Level unit lengthwise with a carpenter's level and plumb level. Secure opposite end.
- 3. Detach access panel by removing screws (Figure 1).

#### CAUTION! Do not seal in until screen has been secured in position and properly tested for satisfactory operation.

- 4. Remove the two screws holding the splitter junction box (Figure 2).
- 5. Unwrap the supplied 25 ft. RJ-14 cord. Plug one end into a QEYE port on the primary splitter (see wiring diagram).
- 6. Run the 25 ft. RJ-14 card to the back of the wall keypad and plug into the RJ receptacle.
- 7. Remove the two screws holding the junction box cover plate. Install the electrical hookup (see wiring diagram).

# NOTE: Must be installed in accordance with the requirements of the Local Building Codes, the Canadian Electrical Code (CEC), CAN/CSA C22.1 and the National Electric Code (NEC), NFPA 70.

- 8. After the electrical connections are completed, replace the junction box cover plate.
  - Carefully remove tape strips securing picture surface around roller..



- 10. Carefully remove wood boards securing mask surface to case.
- 11. Test installation by carefully running picture surface and mask surfaces up and down several times. Be prepared to stop the screen. **IMPORTANT: READ OPERATING INSTRUCTIONS BEFORE TESTING SCREEN.**

# NOTE: When rolled down, the picture surface should wrap fully around the roller. No part of the roller should be exposed. Picture surface and mask surfaces will automatically stop in the down position.



CAUTION! Excessive continuous operation may cause overheating. If this happens, the motors will shut off until they cool to a Normal operating temperature. Duty Cycle of screen is 1 MIN. ON / 3 MIN. OFF.

## SCREEN OPERATION

The Horizon has been preset to three or four different formats. The screen can be set to any format by pressing the corresponding button on the keypad. Below is a list of each button function.

# IMPORTANT! When operating the switch, press and release buttons. Do not hold the button for more than three (3) seconds or the button will be reprogrammed to the current screen position.

#### NATIVE NTSC (1.33:1) FORMAT SCREENS

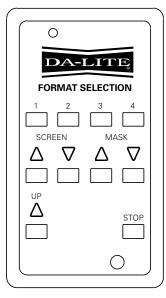
- 1 Lowers screen to NTSC (1.33:1) format. Mast will travel down and reverse wrap on the roller. The mask it not used for this format.
- 2 Sets format to HDTV (1.78:1).
- 3 Sets format to Letterbox (1.85:1).
- 4 Sets format to Cinemascope (2.35:1).

#### **NATIVE HDTV (1.78:1) FORMAT SCREENS**

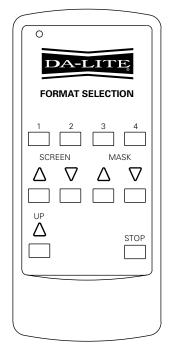
- 1 Lowers screen to HDTV (1.78:1) format. Mast will travel down and reverse wrap on the roller. The mask it not used for this format.
- 2 Sets format to Letterbox (1.85:1).
- 3 Sets format to Cinemascope (2.35:1).
- 4 Open: User defined preset.
- Stop Stops the screen and mask movement at any position when pressed.
  - Up Returns the screen and mask to the up position.

Screen - Runs the screen up and down without mask movement.

Mask - Runs the mask up and down without screen movement.



WALL KEYPAD TRANSMITTER

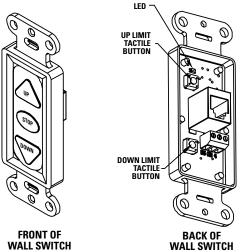


DUAL IR/RF REMOTE

#### **MOTOR LIMIT ADJUSTMENTS**

Surface travel is stopped automatically in the fully opened and closed positions by limit switches that are properly adjusted at Da-Lite. Should it be necessary to adjust for more or less drop of picture, proceed in the following manner:

- 1. Remove the two screws holding the junction box cover. Located on the left end of the case (see Figure 1).
- 2. Unplug the 6P6C wire that is plugged into the secondary splitter "QEYE" port (see wiring diagram).
- 3. Unplug the 6P4C wire from the Operating Keypad at the wall. Plug the 6P4C wire into the Limit Setting Switch. The LED on the back of the Limit Setting Switch will blink green twice.
- 4. If adjusting the screen limit, the 6P4C cable will need to be plugged into the "QEYE" port of the primary splitter. If adjusting the mask limit it will need to be plugged into a "QEYE" port on the secondary splitter.
- 5. Press and hold both the UP and DOWN LIMIT SWITCH on the back of the Limit Setting Switch until the LED blinks red twice.
- 6. To adjust the down limit, press and hold the DOWN tactile button until the LED on the back of the Limit Setting Switch turns solid red. This will put the motor in limit set mode. Turn the switch over and use the



DOWN button on front of switch. Press and hold until the desired travel 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 button, the motor will do a small jog in that direction for finer adjustment of the screen. Once the desired position is reached, turn the switch over and press and hold the DOWN tactile button until the LED on the back of the switch blinks red twice. The down limit is now set.

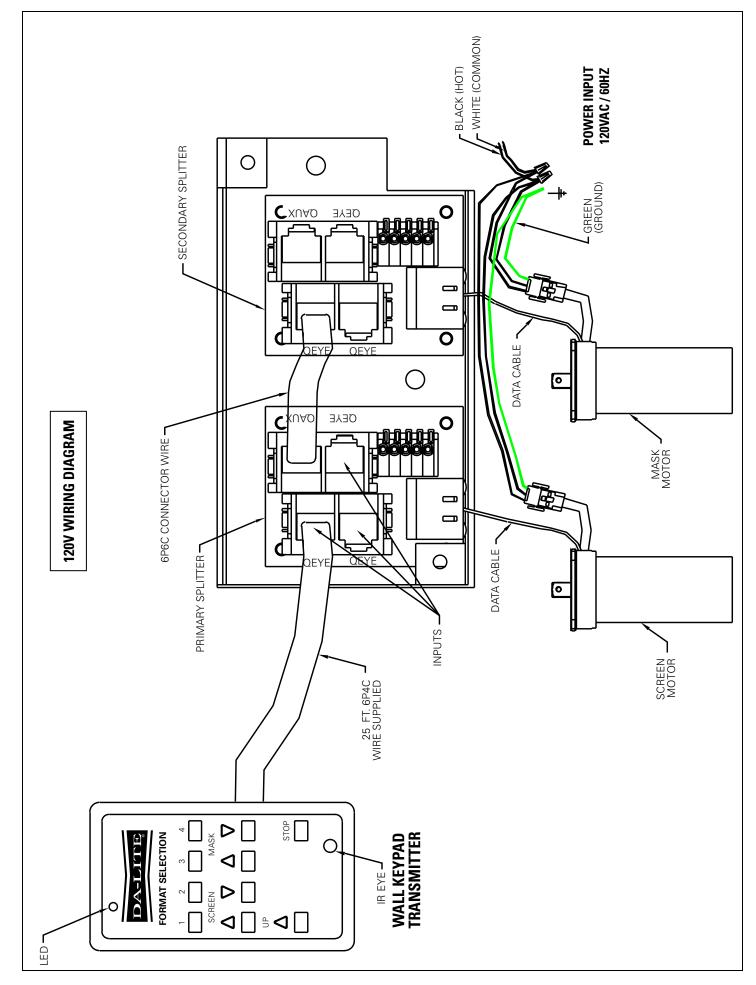
- 7. To adjust the up limit, press and hold the UP tactile button until the LED on the back of the Limit Setting Switch turns solid green. This will put the motor in limit set mode. Turn the switch over and use the UP button on front of switch. Press and hold until the desired travel position is reached. If you travel too far up, press the DOWN button to move the screen downward. If you press and let go of either the UP or DOWN button, the motor will do a small jog in that direction for finer adjustment of the screen. Once the desired position is reached, turn the switch over and press and hold the UP tactile button until the LED on the back of the switch blinks green twice. The down limit is now set.
- 8. To test limit switch settings, press and release the UP or DOWN button on the Limit Setting Switch to operate the screen.
- 9. Press and hold both the UP and DOWN tactile buttons on the back of the Limit Setting Switch until the LED blinks red twice.
- 10. Unplug the 6P4C cable from the limit switch and plug it back into the Operating Keypad.
- 11. Plug the 6P6C connector back into the "QEYE" port of the secondary splitter and replace the splitter junction box cover.

#### **INTERMEDIATE POSITIONS**

The motors on the Horizon Electrol<sup>®</sup> have been preset to three or four different screen formats based on your screen size. See the Screen Operation section for the standard screen formats. It is possible to adjust these format for your particular needs. The following instructions will walk you through this process.

(See Motor Limit Adjustments to adjust the stop positions for all the way up or all the way down positions)

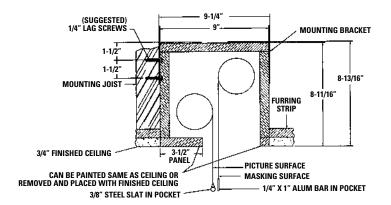
- 1. Press the screen down button on the wall keypad or remote. When the screen reached the desired position, press the stop button. If you go past the desired position, press the stop button and then press the up arrow to return the screen to a position above the new stop point and try again until the screen stops at the new position.
- 2. Press the mask down button on the wall keypad or remote. When the mask reached the desired level, press the stop button. If you go pas the desired position, press the stop button and then press the up arrow to return the mask to a position above the new stop point and try again until the mask stops at the new position.
- 3. Press and hold either the 1, 2, 3 or 4 button until the LED stop blinking. The new stop position is now recorded for the selected button. Repeat this process for any other changes to the remaining three positions.



#### SUGGESTED METHODS OF INSTALLATION

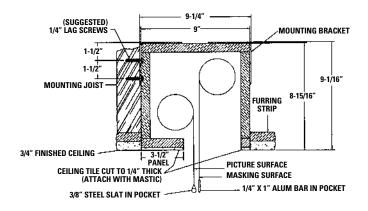
SELECT INSTALLATION METHOD ACCORDING TO CEILING TYPE. 11/16' NOTE: MUST MARK HOLE LOCATION OF SCREWS IN 3-1/2" PANEL FOR REMOVAL, IF COVERING WITH TILE. CASE LENGTH = SCREEN FABRIC WIDTH + 13-1/2", ALL SIZES 6-3/4 1 - 1/2ELECTRICAL OUTLET ON THIS END OF CASE MOUNTING BRACKET MOTOR END CONTROL WIRE OUTLET 6-3/4

**METHOD A** 

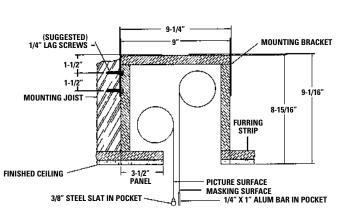


Offset mounting, recessed above ceiling. For plaster, dry wall, tile or paneling. Bottom of case painted same finish as ceiling.

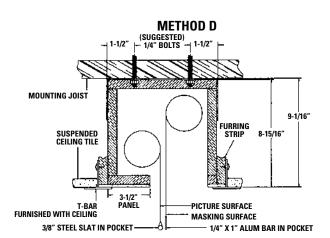
**METHOD B** 



Offset mounting, recessed above ceiling. May be adapted for 3/4" ceiling, but cut to 1/4" thick under screen case and panel.



Offset mounting, recessed above ceiling. May be adapted for 1/4" paneling for ceiling.



Flush mounting, recessed above ceiling. For use with dropped ceiling. May also be adapted for use with acoustical or other ceiling 3/4" thick but cut to 1/4" thick under screen case and panel.

METHOD C

## TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
<ol> <li>Screen or mask will not operate. Motor does <b>not</b> hum.</li> </ol>	<ul><li>(a) Blown facility fuse.</li><li>(b) Tripped facility circuit breaker.</li><li>(c) No power to control board in junction box.</li></ul>	<ul> <li>(a) Replace facility fuse.</li> <li>(b) Reset facility circuit breaker.</li> <li>(c) Check above. Tighten all loose wire connections. Correct any improper connections.</li> </ul>
	(d) Loose control wire connections.	(d) Check all T4 and T6 wire connections - see wiring diagram.
	Power at junction box (e) Thermal overload tripped.	(e) Let motor cool down for 15 minutes. Try again.
	(f) Defective motor.	(f) Replace motor assembly. <b>NOTE: Motor is a sealed assembly.</b>
Motor <b>hums</b> .	(g) Temporary binding.	(g) With power off, turn roller by hand to free binding.
2. Image on screen does not match picture area.	(a) Screen not set to the correct format.	(a) Set screen to the format being projected.
	(b) Screen or mask out of adjustment.	(b) See screen adjustment. We recommend you have your dealer make these adjustments for you.
3. Noise. NOTE: Screen will operate with a low pitched hum.	(a) Grinding. Foreign object in screen rubbing on roller or fabric.	(a) Remove.
4. Coasting.	(a) Defective brake.	(a) Replace motor assembly.
5. Fabric hangs crooked	(a) Screen not installed properly.	(a) Check for level and plumb.
	(b) Fabric has backed up inside case.	(b) Lower screen and carefully pull fabric to remove any slack on the roller.
	(c) Fabric is damaged.	(c) Replace fabric.

### LIMITED ONE YEAR WARRANTY ON DA-LITE PRESENTATION PRODUCTS

Da-Lite Screen Company, Inc. warrants its products to the original purchaser only, to be free from defects in materials and workmanship for a period of one (1) year 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.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO FITNESS FOR USE AND MERCHANT ABILITY. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the one (1) year warranty period. This warranty gives you specific legal rights, and you may also have other rights, which vary from state-to-state. 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 Sales Partners at PO Box 137, Warsaw, IN 46581-0137, (574) 267-8101, (800) 622-3737.

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

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