Manuals+ — User Manuals Simplified.
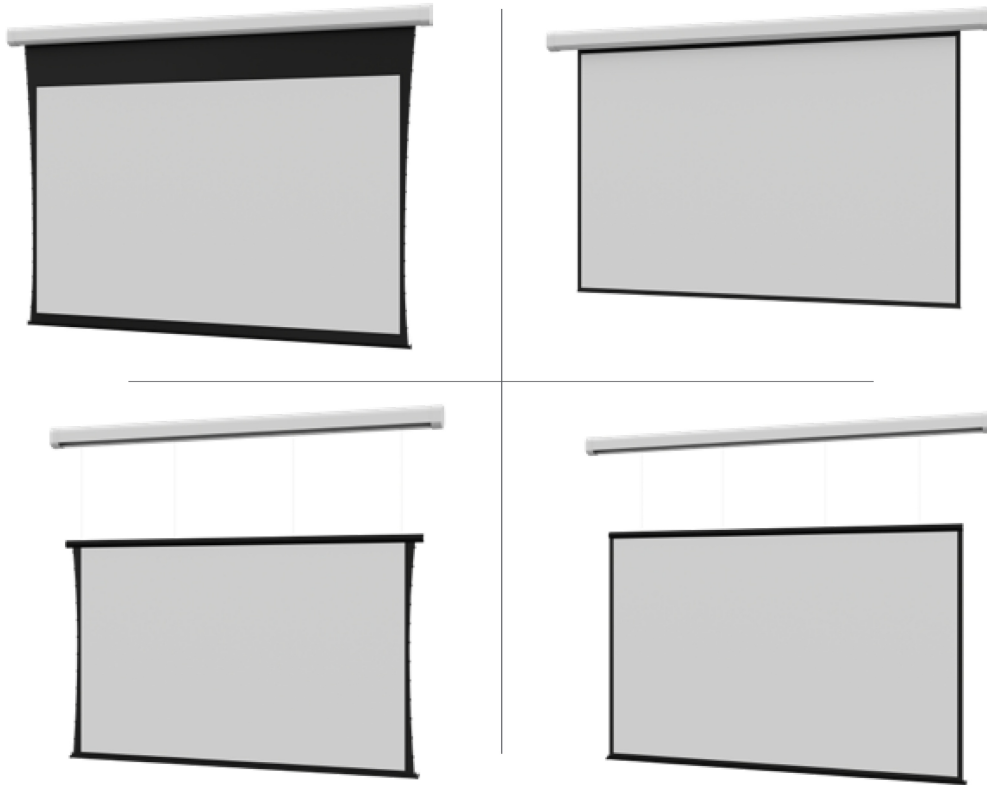

DA-LITE DL16754 Tensioned and Non Tensioned With and Without Sightline Installation Guide

Contents

DA-LITE DL16754 Tensioned and Non Tensioned With and Without Sightline

INSTALLATION GUIDE

Myriad™ Reveal (tensioned and non-tensioned, with and without SightLine)
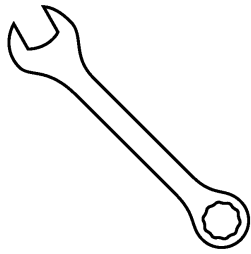
PRE-INSTALLATION

1. Carefully unpack case and remove from shipping carton.
2. Recheck measurements of screen location before installation.

Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring 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.

PLEASE NOTE: Projection Screen 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. An appropriate disconnect device shall be provided as part of the building installation.

Connections must be made in accordance with attached wiring diagram, and wiring must comply with national and local electrical codes. All operating switches should be "off" before power is connected
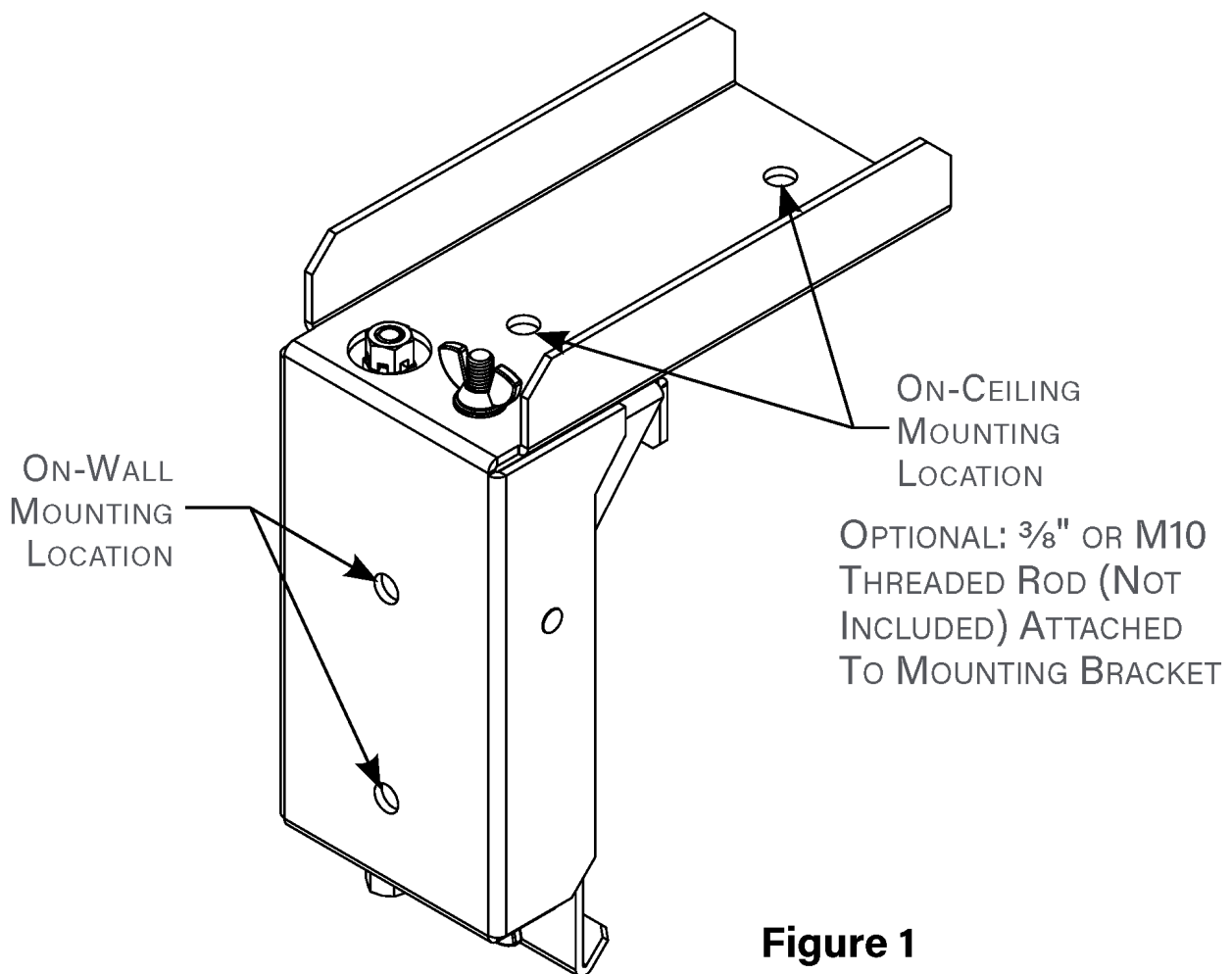
REQUIRED TOOLS

M8 open wrench
or socket driver

INSTALLATION

1. Remove the mounting brackets and mount them to the desired location.
a. On wall: screw into wall from back (Figure 1)

NOTE: For stud wall mounting, use wood stud (2 by 4) for wall mount and metal frame of the building b. On ceiling: screw into ceiling from top (Figure 1)

ON-WALL
MOUNTING
LOCATION

ON-CEILING
MOUNTING
LOCATION

OPTIONAL: ⅜" OR M10
THREADED ROD (NOT
INCLUDED) ATTACHED
TO MOUNTING BRACKET

Figure 1

2. On ceiling suspended using 3/8″ or M10 threaded rod (not included).

NOTE: All 3 mounting brackets must be used for wall or ceiling mount. It is recommended to place the center bracket +/- 12″ [305 mm] from the center of the case and remaining brackets within 36″ [915 mm] of the ends of the

case.

3. Installer to use proper hardware per local code requirements.
4. Make sure all brackets are level.
5. Ensure the hook part of bracket is in the down position before setting the case on (Figure 2).

ENSURE HOOK IS IN DOWN
POSITION BEFORE SETTING
CASE ON
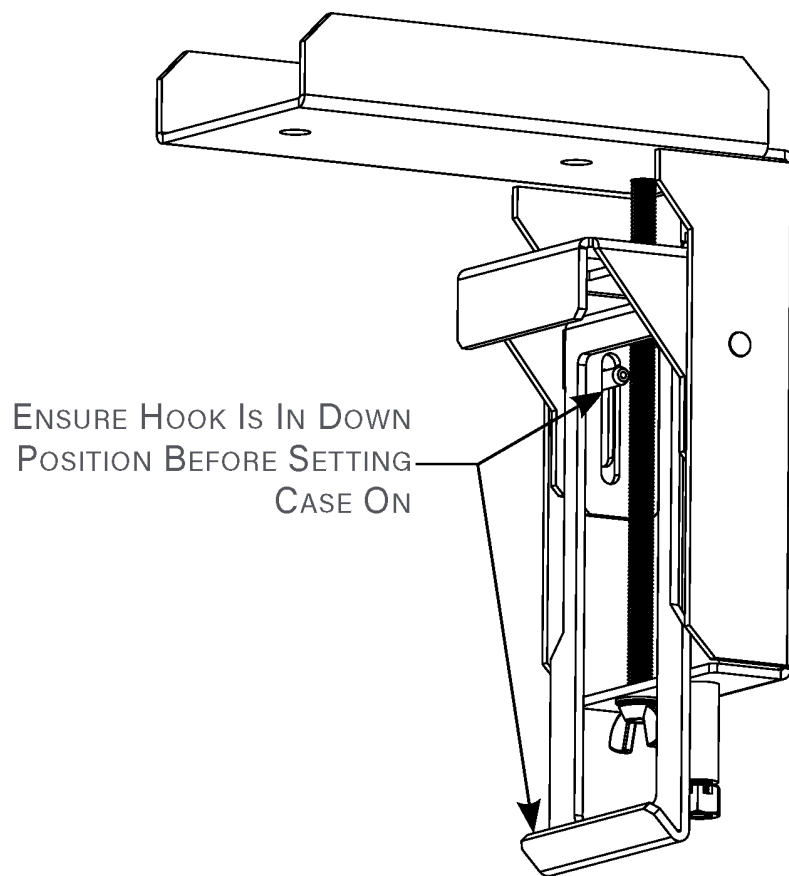
Figure 2

6. The case is shipped on its side. Lift the case out of its packaging and carry on its side to prevent damage to the rounded doors (Figure 3).

CARRY CASE ON FLAT SIDES TO PREVENT
DAMAGE ON ROUNDED DOORS
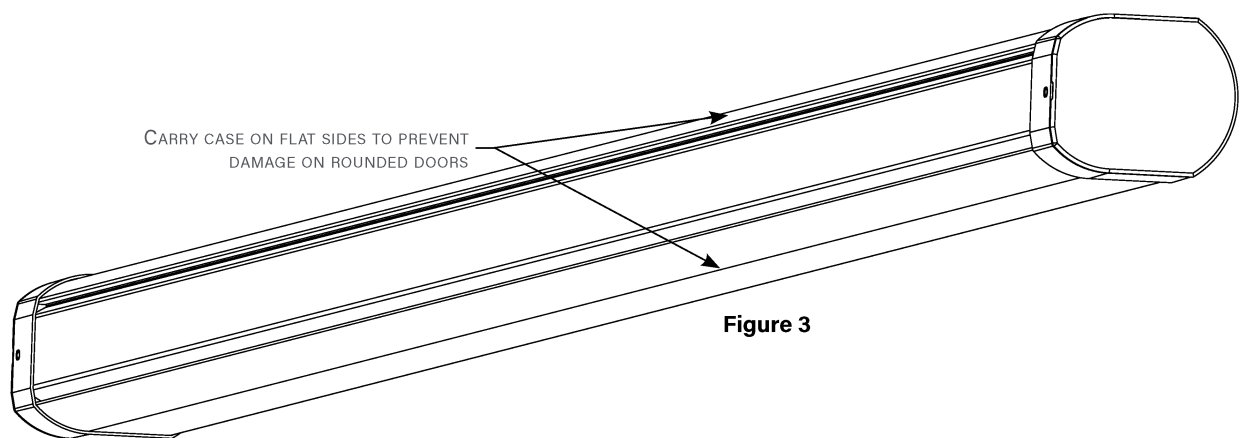
Figure 3

7. Once close to the brackets, lift and rotate the case so that the mounting bracket teeth lock into the case profile (Figure 4).

LIFT AND ROTATE CASE INTO
MOUNTING BRACKETS

Figure 4

8. Rotate the case down to set into the mounting bracket hook (Figure 5).
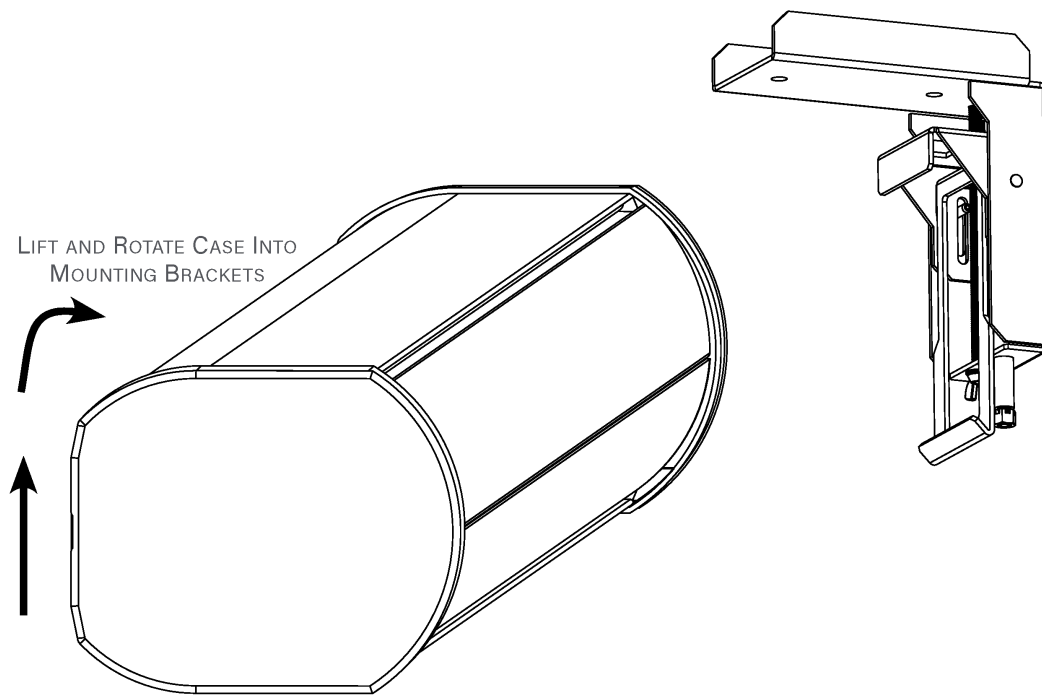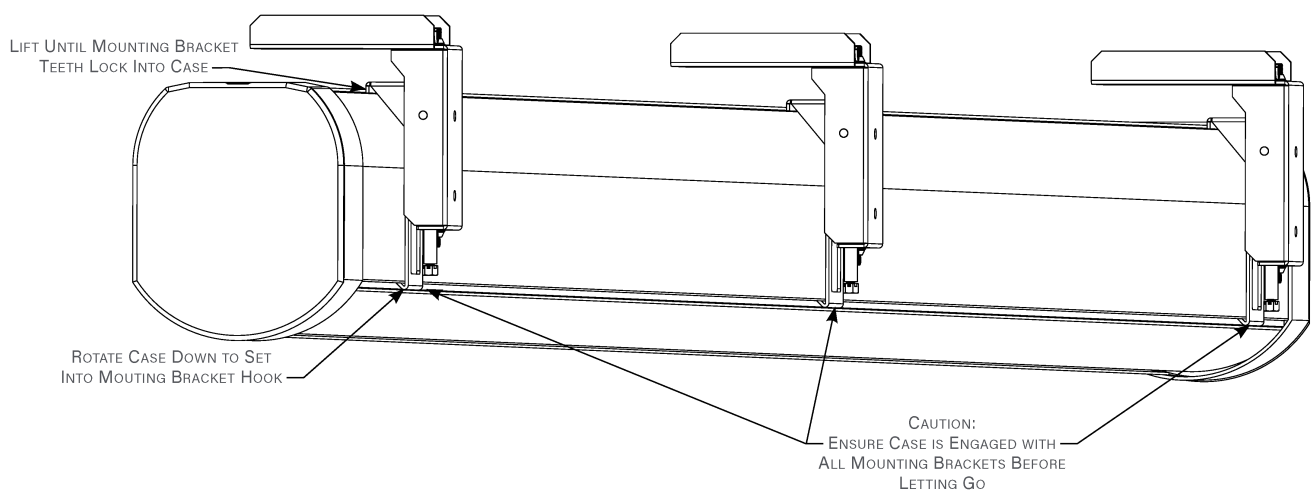a. Caution: ensure the case is engaged with all mounting brackets before releasing

LIFT UNTIL MOUNTING BRACKET
TEETH LOCK INTO CASE

ROTATE CASE DOWN TO SET
INTO MOUTING BRACKET HOOK

CAUTION:
ENSURE CASE IS ENGAGED WITH
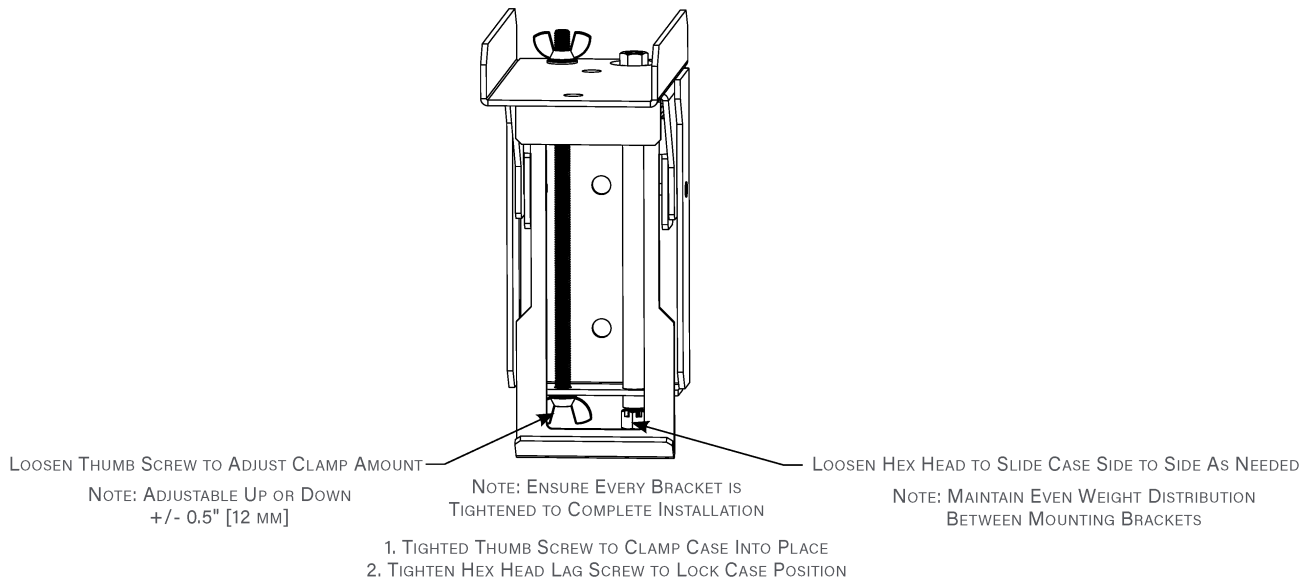ALL MOUNTING BRACKETS BEFORE
LETTING GO

Figure 5

9. Adjustment options (Figure 6):

a. Left, right: loosen hex head to slide case side to side as needed (while maintaining even weight distribution)
b. Up, down: loosen thumb screw to adjust up or down +/- 0.5" [12 mm]

10. Clamp the mounting bracket down with thumb screw. Tighten the hex head screw to keep the case in place

Loosen Thumb Screw to Adjust Clamp Amount

Note: Adjustable Up or Down
+/- 0.5" [12 mm]

Note: Ensure Every Bracket is
Tightened to Complete Installation

Loosen Hex Head to Slide Case Side to Side As Needed

Note: Maintain Even Weight Distribution
Between Mounting Brackets

1. Tighted Thumb Screw to Clamp Case Into Place
2. Tighten Hex Head Lag Screw to Lock Case Position

WIRING IN END CAPS

Remove End Panel

1. Push up on the bottom of the panel and lightly push the tab down (Figure 7).

LIGHTLY PUSH TAB DOWN

PUSH UP ON BOTTOM
OF END PANEL
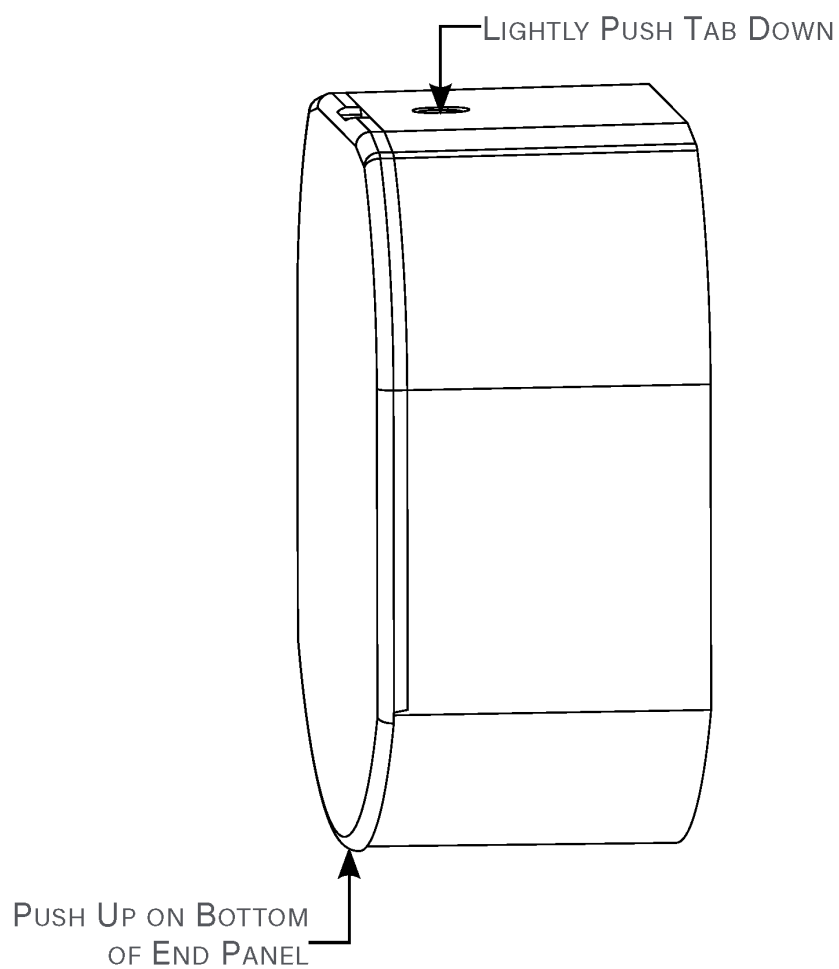
END PANEL REMOVE

Figure 7

2. Swing the bottom out (Figure 8).

SWING BOTTOM OUT
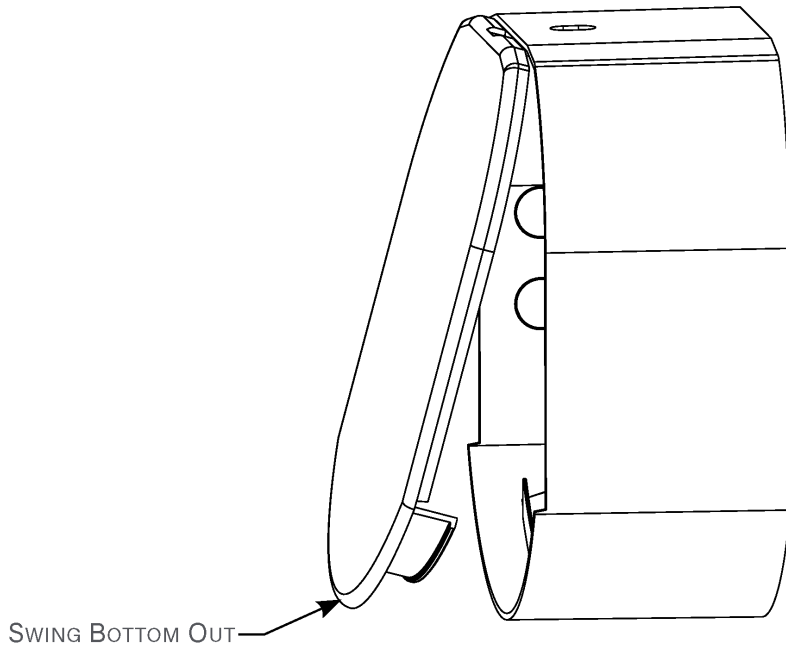
END PANEL REMOVE

Figure 8

Attach End Panel

1. Align the tab on the end panel with the slot on the end cap (Figure 9).
2. Push the bottom of the end panel forward to snap onto the rib inside the end cap (Figure 9).

TAB

ALIGN END PANEL
TAB WITH SLOT

PUSH END PANEL FORWARD
TO CATCH END CAP RIB

END PANEL

END PANEL ATTACH
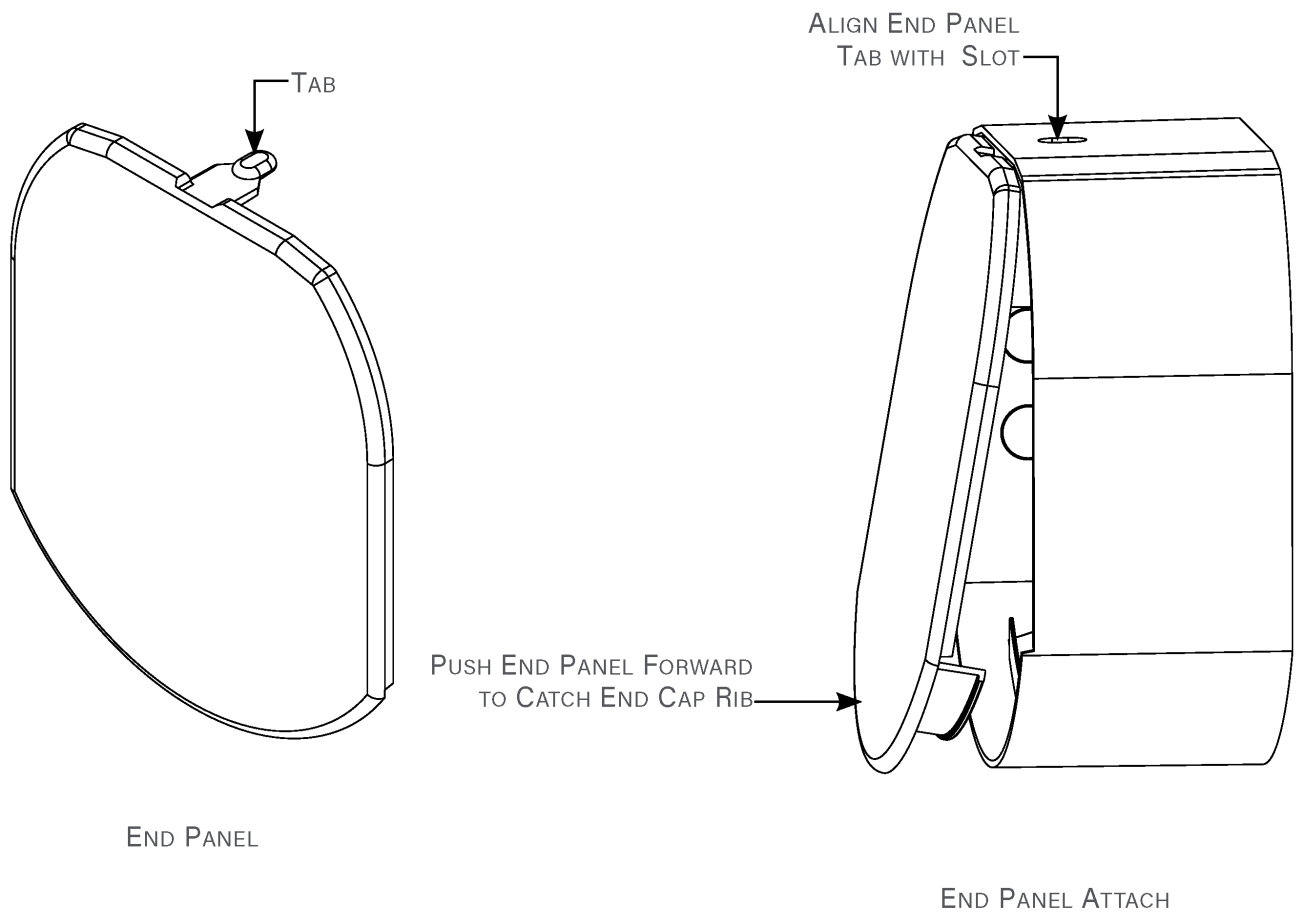
Figure 9

Knockouts and Wiring

1. Each end cap has wiring knockout options (Figure 10).

KNOCKOUT
OPTIONS

Figure 10

2. Remove the chosen knockout location.
3. The power cable is connected to the plate.
Run wires out of the knockout to the power connection
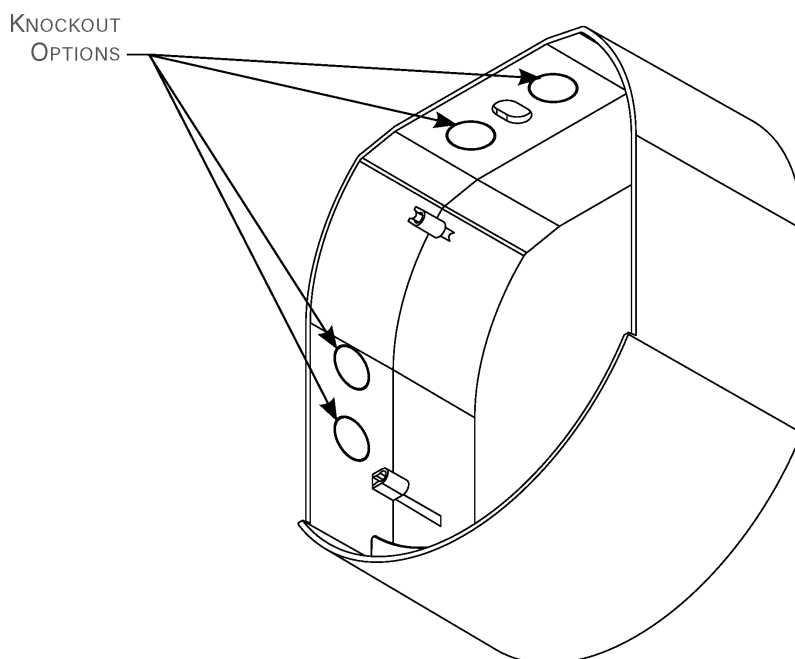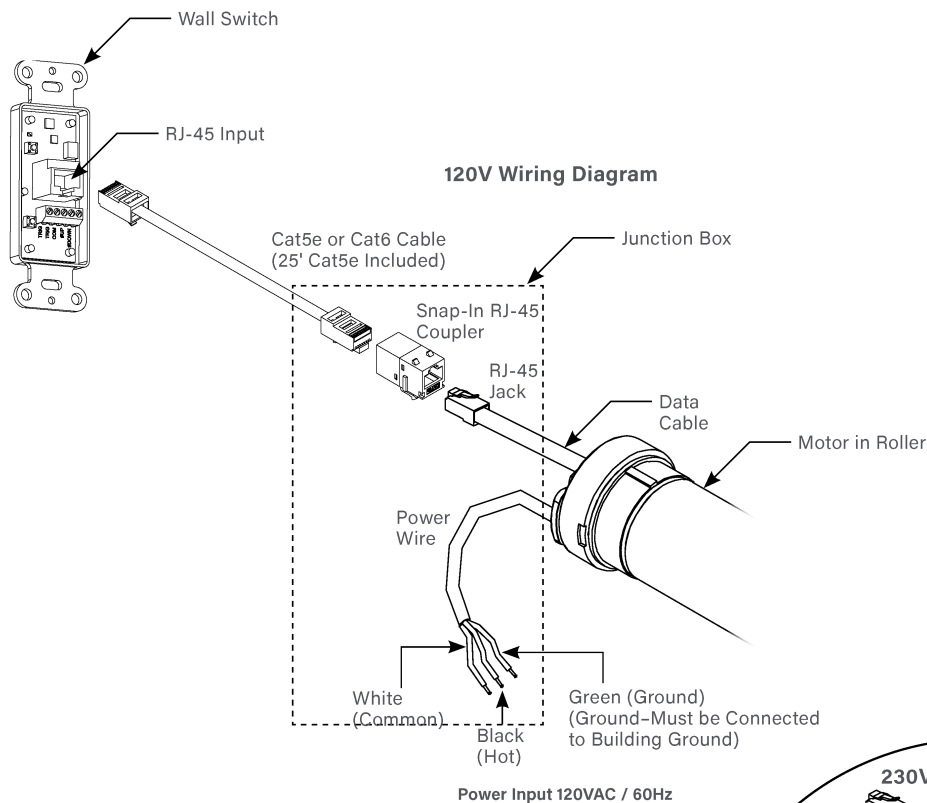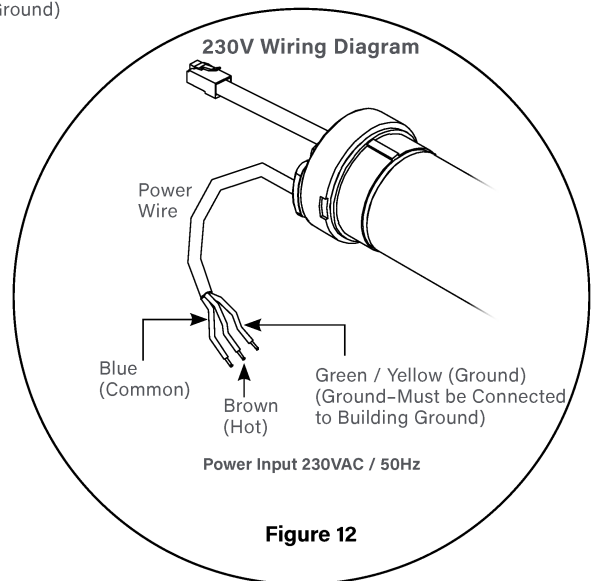4. Plug the Cat5e cable into the RJ-45 connector (Figure 11).
5. Connect the Cat5e cable included to the wall switch (Figure 11).

120V Wiring Diagram

Wall Switch

RJ-45 Input

Cat5e or Cat6 Cable
(25' Cat5e Included)

Junction Box

Snap-In RJ-45
Coupler

RJ-45
Jack

Data
Cable

Motor in Roller

Power
Wire

White
(Common)

Black
(Hot)

Green (Ground)
(Ground–Must be Connected
to Building Ground)

Power Input 120VAC / 60Hz

Figure 11

230V Wiring Diagram

Power
Wire

Blue
(Common)

Brown
(Hot)

Green / Yellow (Ground)
(Ground–Must be Connected
to Building Ground)

Power Input 230VAC / 50Hz

Figure 12

ALTERNATE WALL SWITCH FOR FOR 230V SCREENS

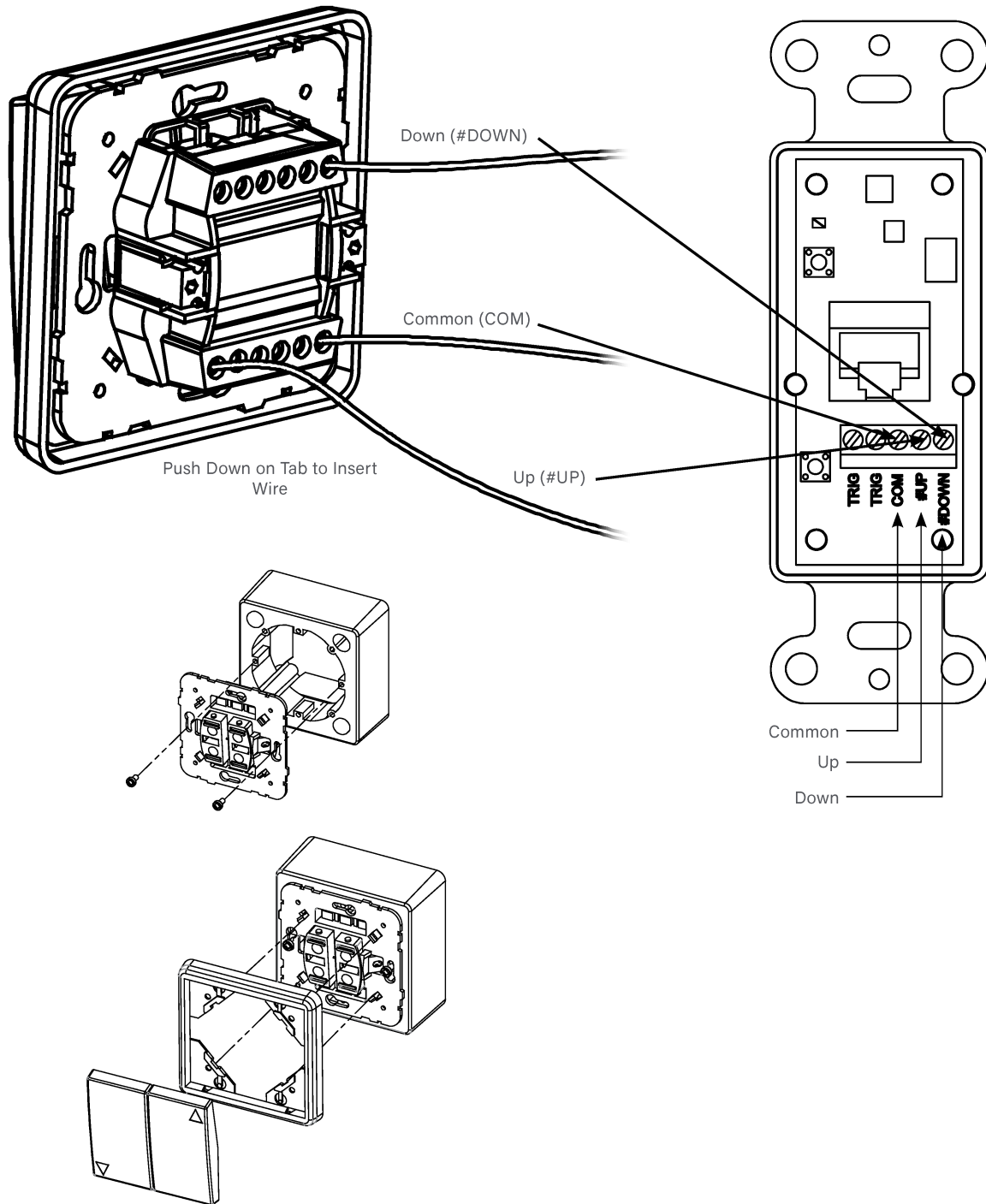230V Wiring Diagram with Optional European Style Wall Switch

Use 3-conductor 20–24 gauge wire to connect European style wall switch to the COM, #UP, and #DOWN to the limit adjustment wall switch

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 locate the limit adjustment wall switch in an accessible location.

Down (#DOWN)

Common (COM)

Push Down on Tab to Insert Wire

Up (#UP)

TRIG
TRIG
COM
#UP
#DOWN

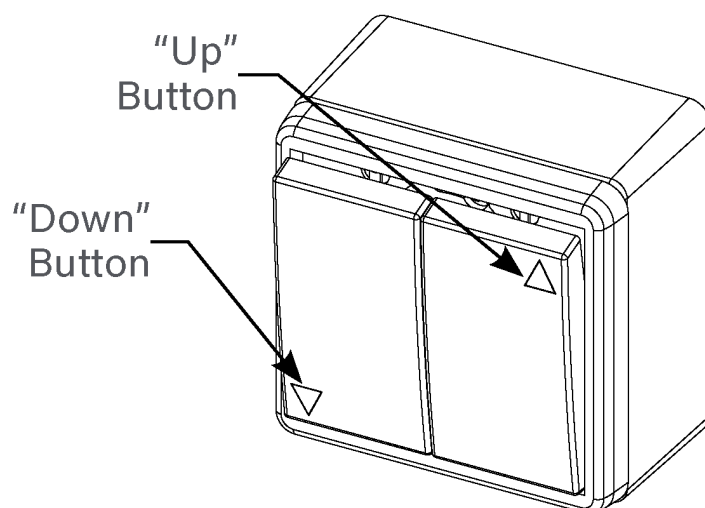Common

Up

Down

OPERATION OF SCREEN

Operation & Limit Adjustment Wall Switch

1. Press "DOWN" button on screen switch and screen will deploy out of case in downward direction.
2. Press "STOP" button on screen switch and screen will stop if in movement.
3. Press "UP" button on screen switch and screen will retract upward into case.

"Up"
Button

"Stop"
Button
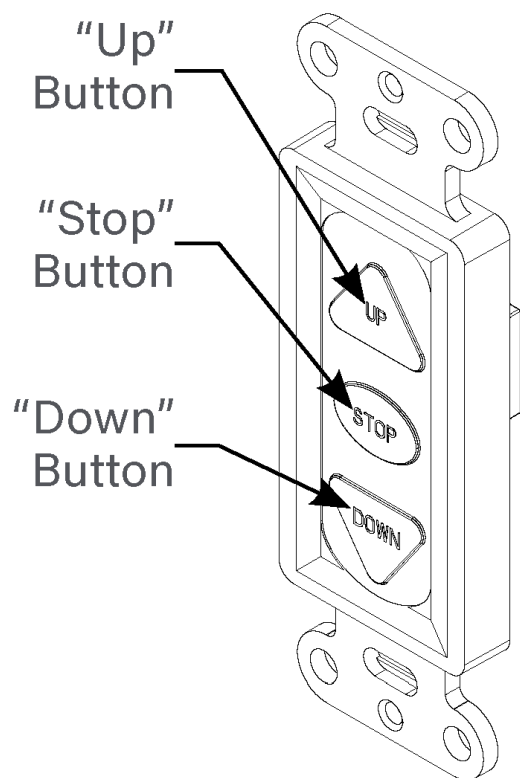
"Down"
Button

European Style Wall Switch (230V models only)

1. Press "DOWN" button on screen switch and screen will deploy out of case in downward direction.
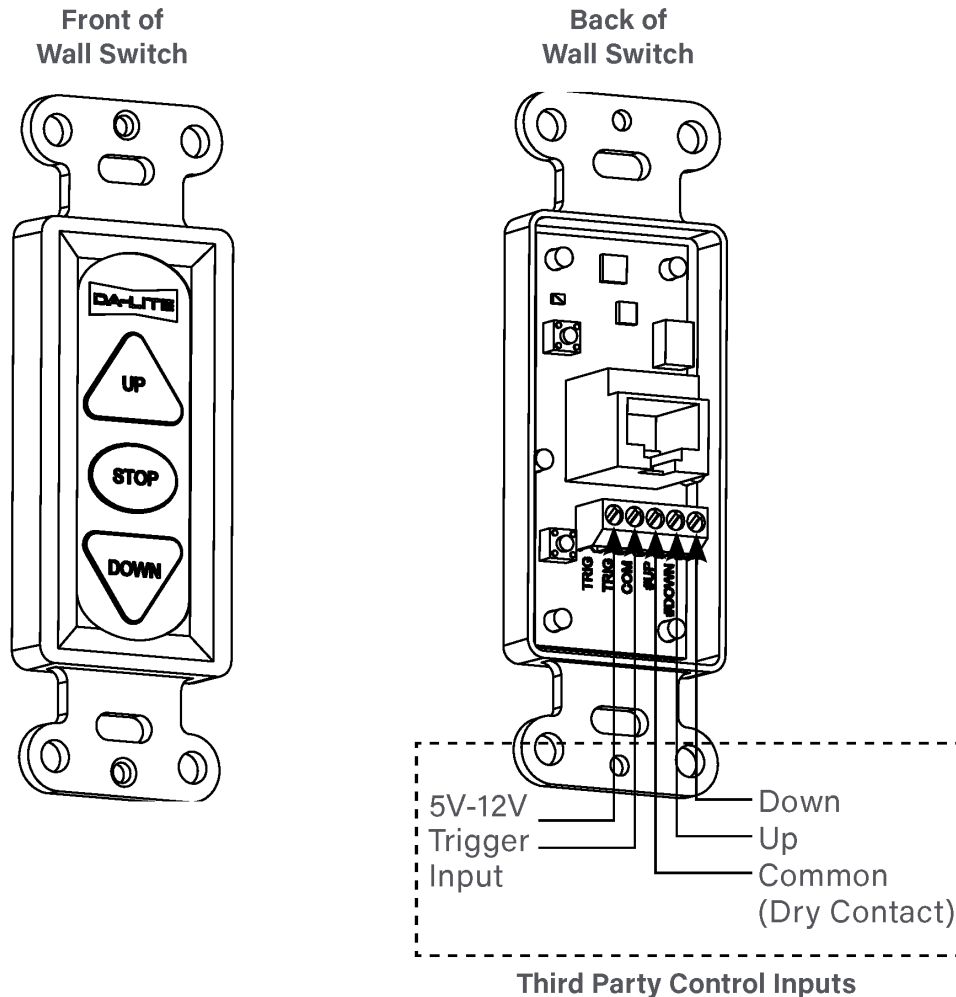2. Press "UP" button on screen switch and screen will retract upward into case.

"Up"
Button

"Down"
Button

THIRD PARTY CONTROL

Control Panel

A control panel may be connected to the wall switch 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 Screen Controller.
2. A momentary closure across the COM and #UP inputs will be an "up" command.
3. A momentary closure across the COM and #DN inputs will be a "down" command.
4. A momentary closure across the COM, #UP and #DN inputs will be a "stop" command.

Front of Wall Switch

Back of Wall Switch

5V-12V Trigger Input

Down
Up
Common (Dry Contact)

Third Party Control Inputs

Projector Trigger

When a 5-12V signal is received from a projector tigger output (or trigger output from any other device) the screen will move to the down position.
When voltage is removed the screen will run to the up position.

Use 2-conductor 18–24 gauge wire to extend the low voltage connection from the 5 to 12-volt trigger output to the TRIG input on the wall switch.

NOTE: When extending the low voltage connection from the trigger output polarity does not matter. The wires are interchangeable.

SCREEN ADJUSTMENT

If general adjustment is needed, please follow the steps below and refer to the Wiring Diagram.

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.

NOTE: If the screen is in limit set mode and no buttons are pushed for 2 minutes, 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. Press and hold the up button until the desired up 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 TENSIONED AND NON-TENSIONED MODELS

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

SIGHTLINE MODELS (TENSIONED AND NONTENSIONED)

CAUTION: Do not adjust for more than 16′ of wire drop. At least 2 wraps of wire must remain on the roller. This screen comes standard with 0″ to 16′ of wire drop. See the specification data sheet for details. 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 up tactile button until the LED on back of switch blinks green twice. The up limit is now set.

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.

Front of Wall Switch

Back of Wall Switch

Up Limit Tactile Button

Down Limit Tactile Button

LED
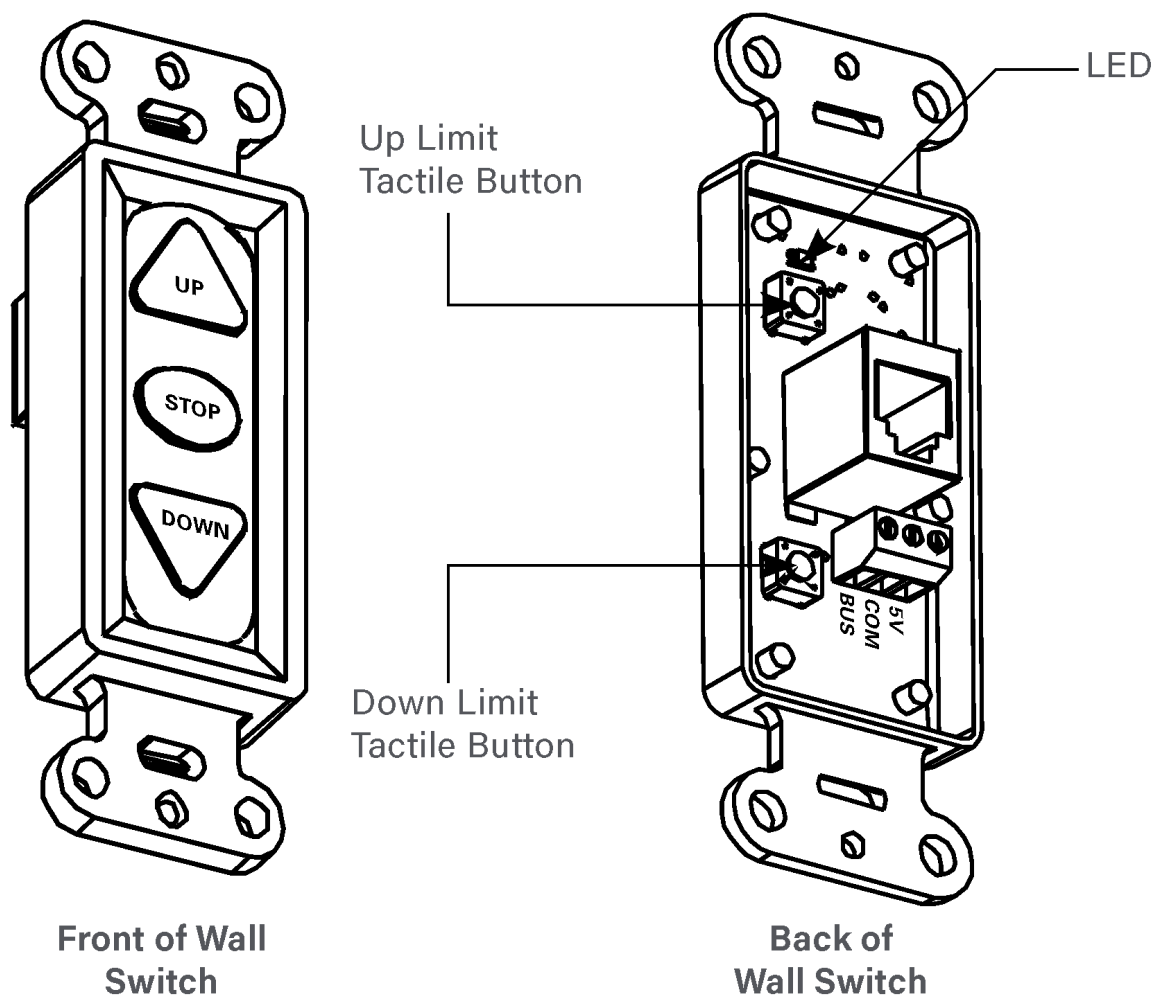
TENSIONED MODELS

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.

NON-TENSIONED AND SIGHTLINE (TENSIONED AND NON-TENIONED) MODELS
No restrictions on adjusting for less drop.

TROUBLESHOOTING

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

CONDITIONS FOR TRANSPORTATION AND STORAGE

- Temperature: Between 40 – 1000F (5 – 400C)
- Relative Humidity: 30% to 70%, non-condensing
- Always keep the projection screen horizontal during transport and storage
- Make sure the entire package is supported when stored Do not stack more than six projection screens on top of each other
- Make sure the heaviest package is places at the bottom of the stack

Screen surface should be allowed to air out once every two months, or otherwise used on a regular basis, if the temperature is above 720F (220C) and at least once every month if the temperature goes above 850F (300C).

Specifications:

- Product Name: MyriadTM Reveal
- Variants: tensioned and non-tensioned, with and without SightLine
- Model Number: 240215 Rev B DL16754

Product Usage Instructions:

Pre-Installation:

1. Carefully unpack the case and remove it from the shipping carton.

Required Tools:

M8 open wrench or socket driver

Installation:

1. Remove the mounting brackets and mount them to the desired location:
    - On wall: screw into wall from back
    - On ceiling: screw into ceiling from top
2. For ceiling suspension using threaded rod: All 3 mounting brackets must be used. Place the center bracket +/- 12″ from the center of the case and remaining brackets within 36″ of the ends of the case.
3. Use proper hardware per local code requirements.
4. Ensure all brackets are level.
5. Ensure the hook part of the bracket is in the down position before setting the case on.
6. Lift the case out of its packaging on its side to prevent damage to the rounded doors.
7. Once close to the brackets, lift and rotate the case so that the mounting bracket teeth lock into the case profile.
8. Rotate the case down to set into the mounting bracket hook. Ensure all mounting brackets are engaged before releasing.
9. Adjustment options:
    - Left, right: loosen hex head to slide case side to side as needed while maintaining even weight distribution.
    - Up, down: loosen thumb screw to adjust up or down +/-0.5″.

FAQ:

Q: Can I use attachments not recommended by the manufacturer?

A: No, using accessory attachments not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.

Q: What should I do if I encounter structural strength issues during installation?

A: It is important to reinforce the structure to ensure it can support the weight of all equipment before installing the component. Failure to provide adequate structural strength can result in serious personal injury or equipment damage.

Documents / Resources

DA-LITE DL16754 Tensioned and Non Tensioned With and Without Sightline [pdf] Installation Guide
DL100136EL, DL16754, DL16754 Tensioned and Non Tensioned With and Without Sightline, DL16754, Tensioned and Non Tensioned With and Without Sightline, Tensioned With and Without Sightline, Sightline

References

- 🌐 **av.asia**
- **User Manual**