

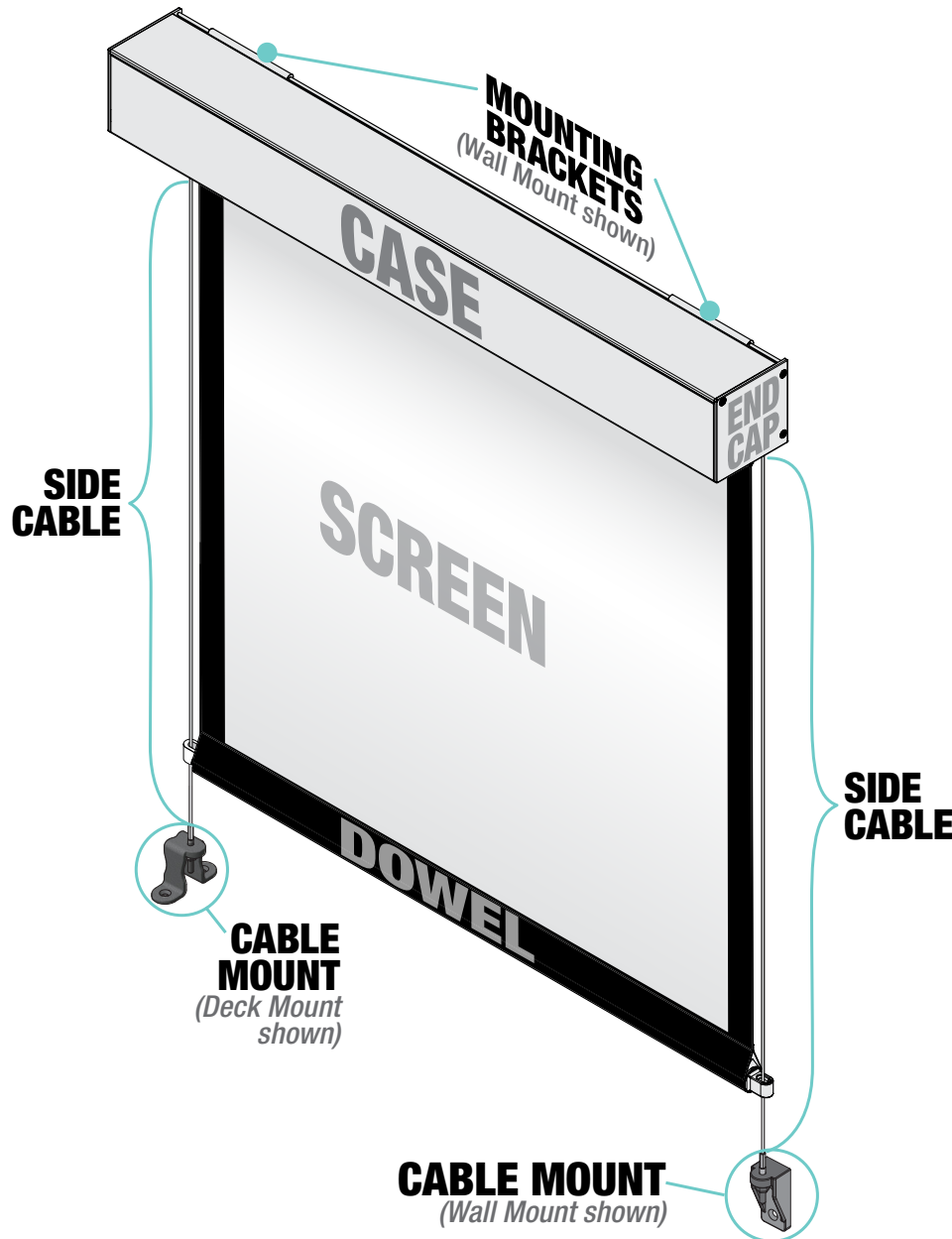
Nocturne®+ E

Outdoor electric projection screen

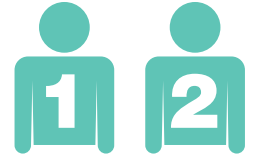
INSTRUCTIONS

INSTALLATION & OPERATION

Overview - Components



PERSONNEL REQUIRED



TOOLS REQUIRED



⚠ CAUTION ⚠

Read and understand all warnings before beginning installation.

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If you have any difficulties installing or servicing your Nocturne+ E, call your dealer or Draper, Inc.

Section 1 - Prepare for Installation

1. Make sure mounting surface is strong enough to hold Nocturne+E.

Please Note: Installer is responsible for selecting mounting hardware appropriate for site conditions. Ensure that fasteners are of adequate strength and suitable for the mounting surface chosen.

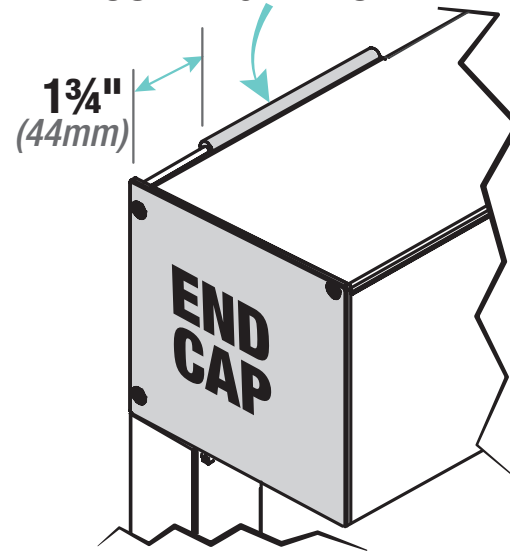
2. Verify unit measurements, and make sure it will fit in desired location.

Please Note: The Dowel does not retract into Case. 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 1 $\frac{3}{4}$ " (44mm) between Endcap and Mounting Bracket edge (Fig. 1). Mark wall, jamb, or ceiling.

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

Figure 1
MOUNTING BRACKET



PLEASE READ - Safety Information

Important Safety Information



WARNING

Important Safety Information

Improper installation and use of the Nocturne+ E screen can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit 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 fall or otherwise fail, and could result in serious injury.
2. Installation and calibration of the 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 the construction and operation of this equipment and the hazards involved.
3. Do not affix the unit to walls 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 hardware must be installed level. Unit must be level and square.
6. Never leave the area while operating the unit during installation, maintenance, or normal operation, unless it is secure and safe.
7. Before testing or operation, carefully inspect the entire area and path (especially underneath) of unit 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. Do not wire motors in parallel without written permission from Draper, Inc.
10. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
11. 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.
12. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in its safe and effective operation and understand its safety features.
13. The safety features of the unit should never be disabled, bypassed, or overridden. The system should not be operated until all safety features are properly and completely installed, calibrated, and tested.
14. 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.
15. **Failure to precisely follow installation guidelines invalidates all warranties.**
16. 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 serve 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. Inspect all boxes to make sure you have received the proper unit and parts. Controls may be shipped separately, or in same carton as unit.
6. If you have any difficulties with installing, servicing, or operating your unit, call your dealer or Draper, Inc., 765-987-7999.

Section 2 - Mounting Case with Brackets - Wall Installation

Section 2.1 - Attaching Mounting Brackets

1. Attach mounting brackets to wall using #10 flat head screws installed flush with bracket. Be sure to use AT LEAST 2 of top mounting holes (Fig. 2).

Section 2.2 - Attaching Case to Mounting Brackets

1. Attach Case to brackets and tighten Set Screws (Fig. 3).
2. Proceed to Section 4 (Installing Cable Guides).

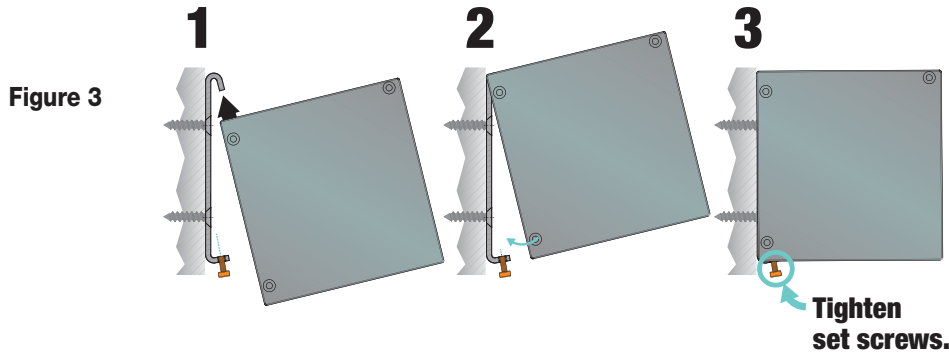
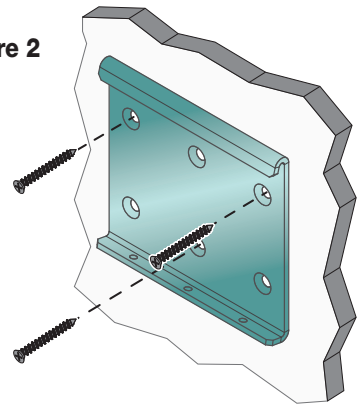


Figure 2



Section 3 - Mounting Case Directly to Ceiling or Wall

1. Attach Mounting Brackets to Case as a spacer between Case and wall.

Please Note: Leave a 1¼" (44mm) gap between Endcap and Mounting Bracket (Fig. 4), and tighten set screws.

2. Remove roller assembly.
 - A. Remove screws from bottom of Case, remove Cover and set aside (Fig. 5).
 - B. Remove Quick Release Pin from Idler End of Roller Assembly.
 - C. Remove Roller Assembly, Idler End first, and set aside.
3. Mount to Ceiling / Wall.
 - A. Using mounting holes in endcaps as a guide (Fig. 6), drill pilot holes on both ends of Case.
 - B. Attach to mounting surface using appropriate fasteners.

Please Note: Installer is responsible for selecting mounting hardware appropriate for site conditions.

4. Once Case is secured to mounting surface, re-install Roller Assembly, Quick Release Pin and Cover.
5. Proceed to Section 4 (Installing Cable Guides).

Figure 4

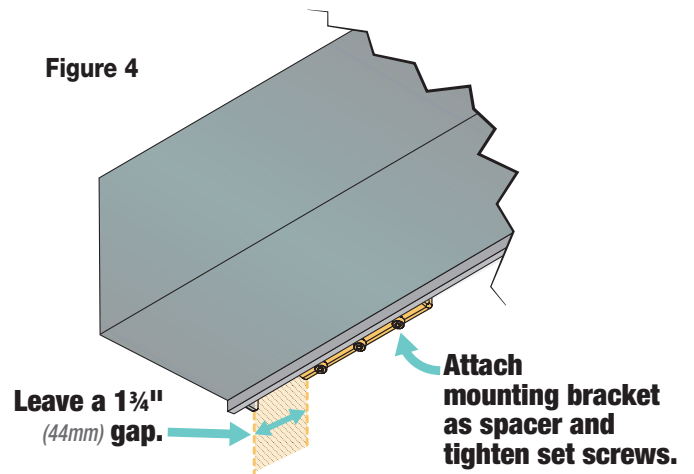


Figure 5

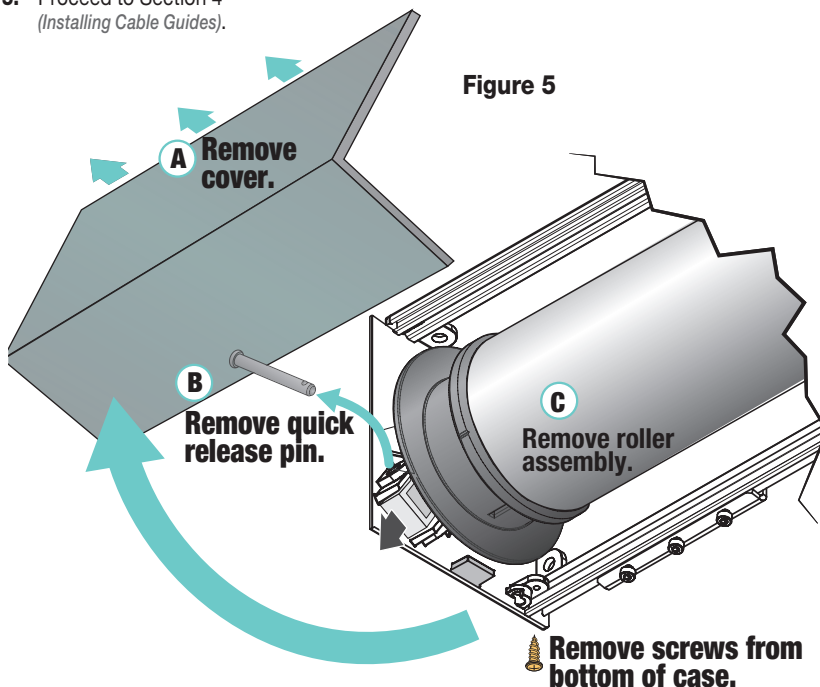
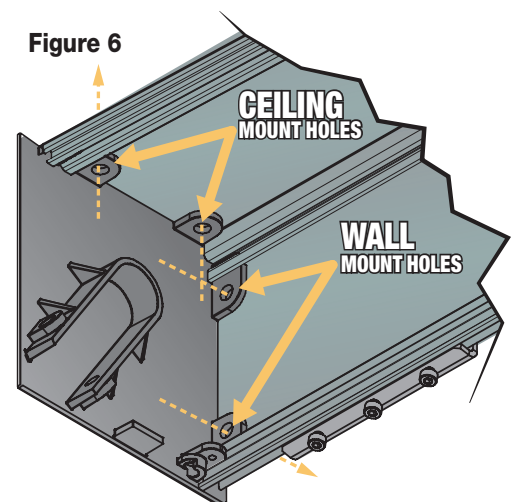
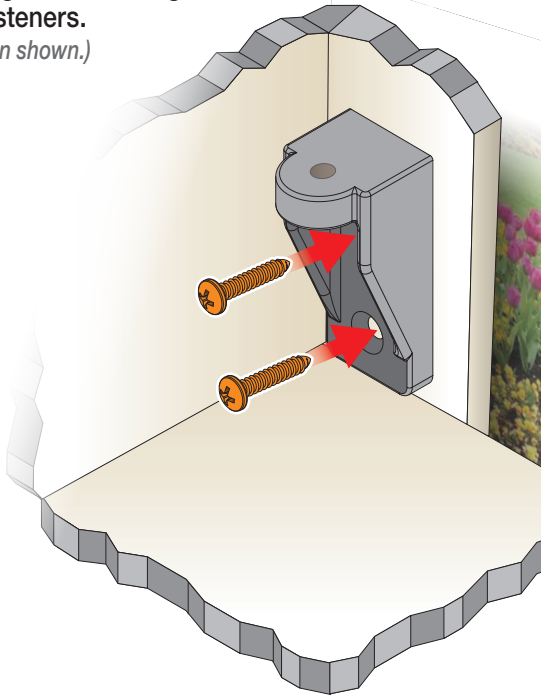


Figure 6

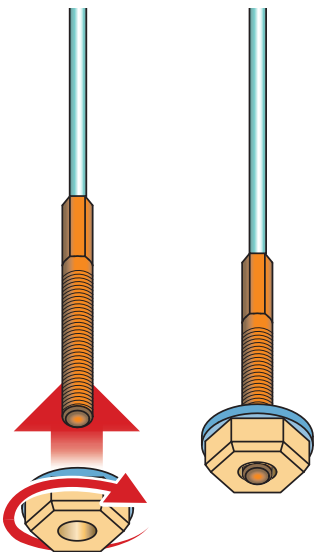


Section 4 - Installing Cable Guides

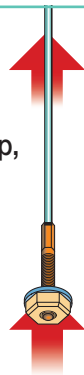
- 1.** Install Mounting Bracket using appropriate fasteners.
(Wall mount option shown.)



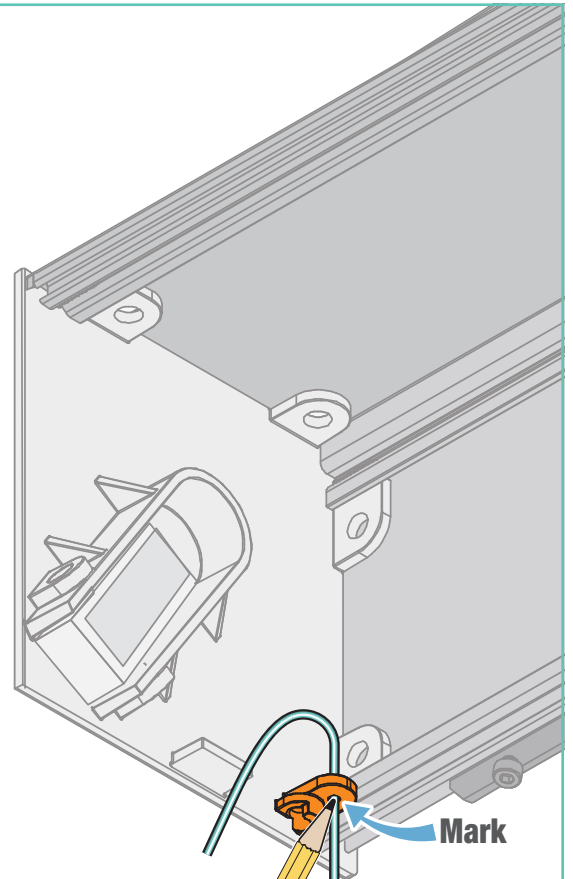
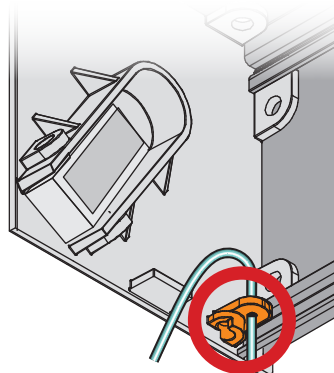
- 2.** Place washer and nut on threads of bolted end of cable to allow space for travel.



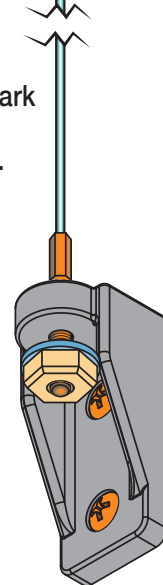
- 3A** Pull cable up, through the Mounting Bracket

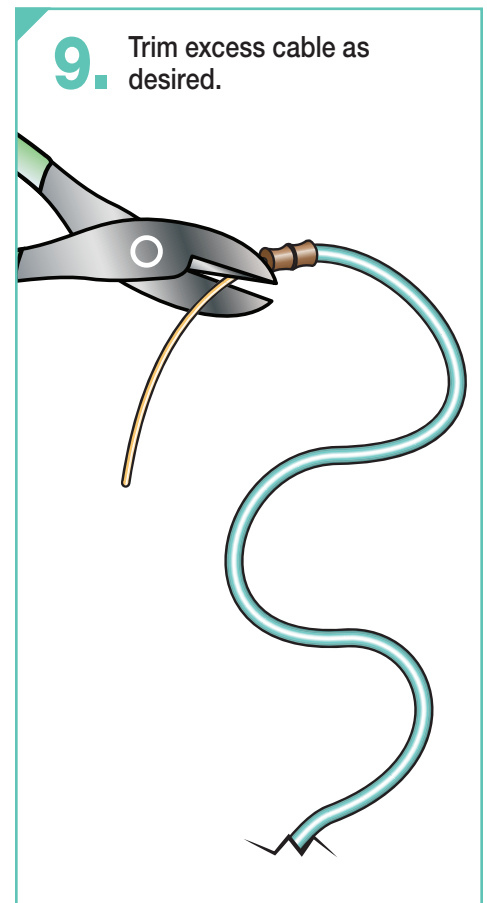
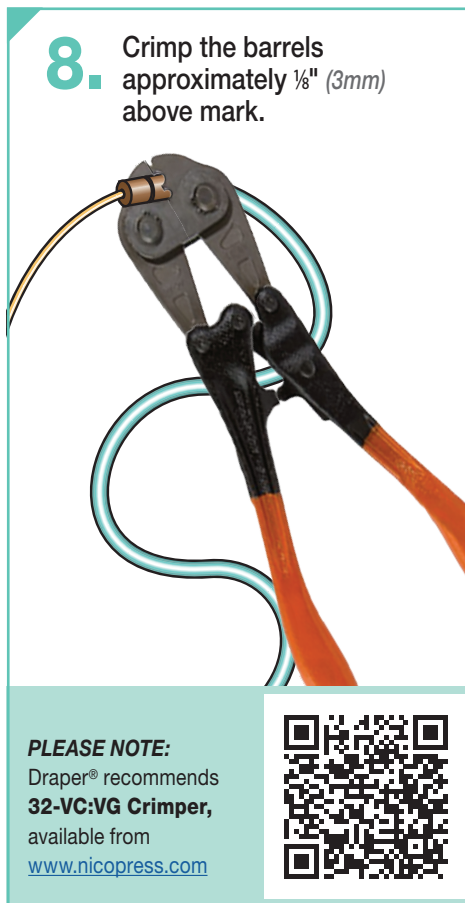
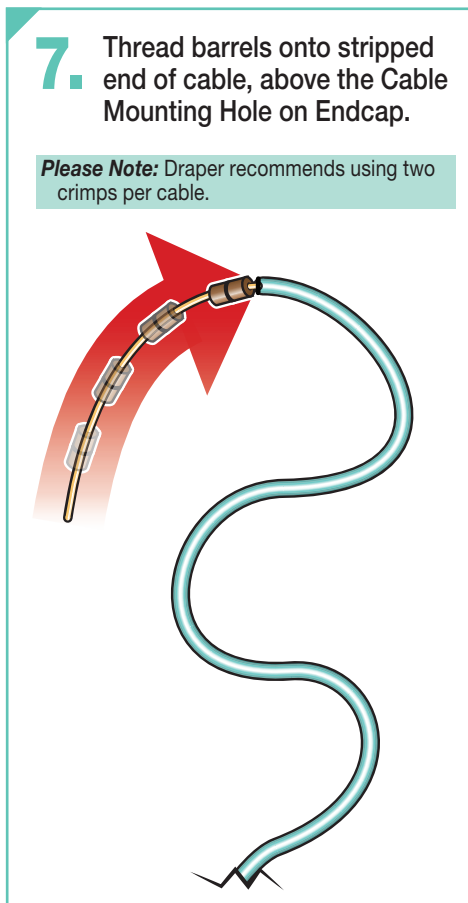
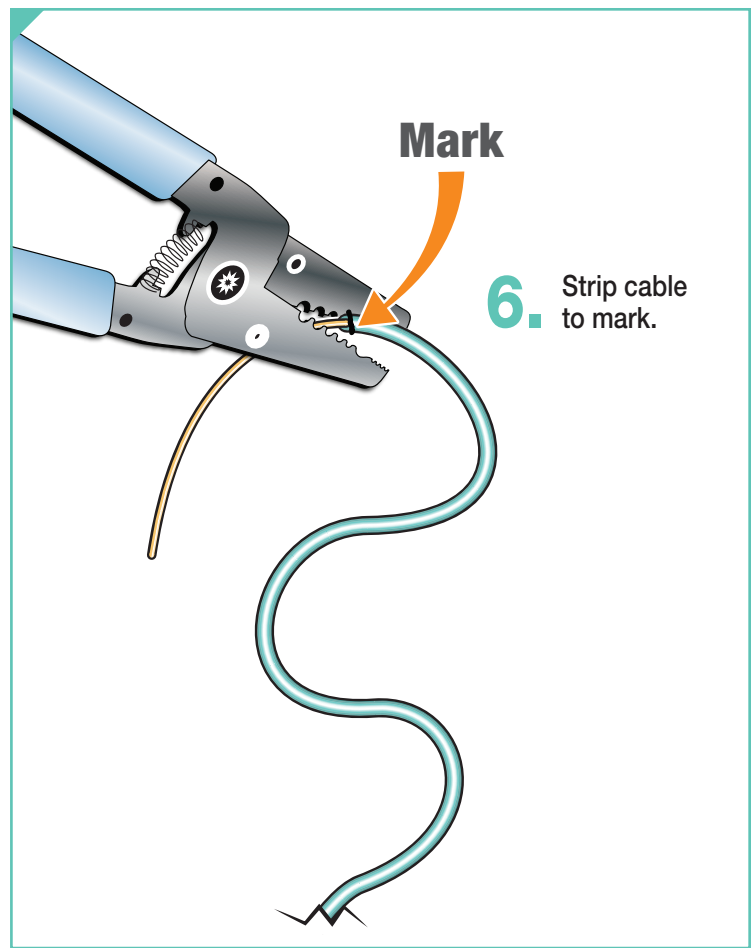
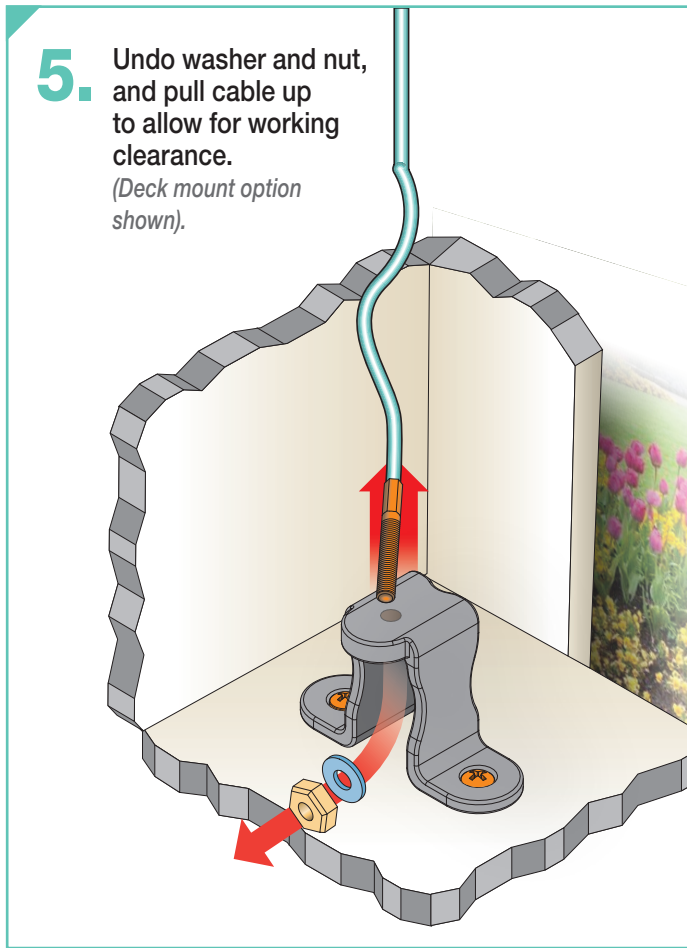


- 3B** Pull cable up, through Cable Mounting Hole on Endcap.
(Wall mount option shown.)



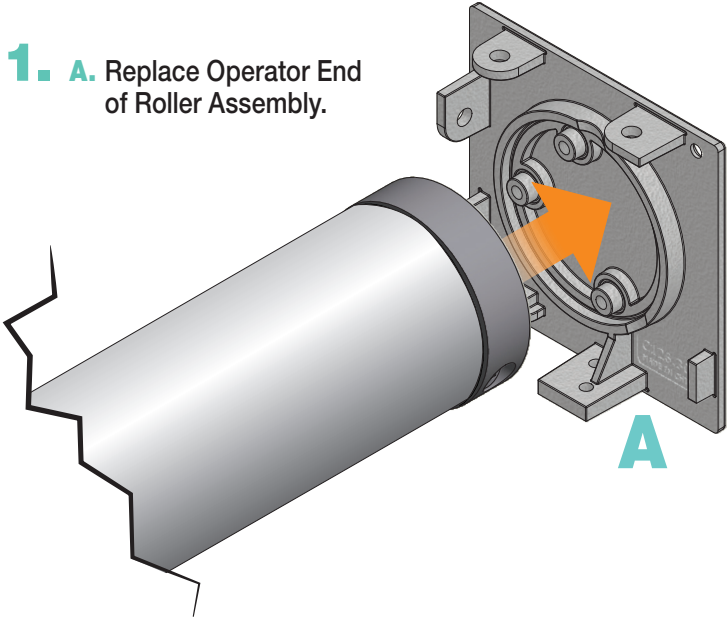
- 4.** Pull cable taut and mark cable under Cable Mounting Hole.
(Wall mount option shown.)



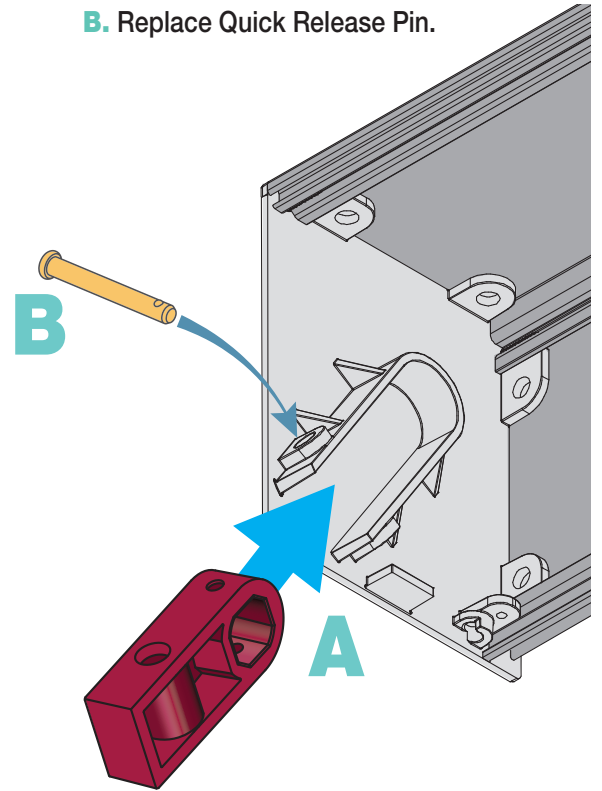


Section 5 - Replace Roller Assembly & Fascia

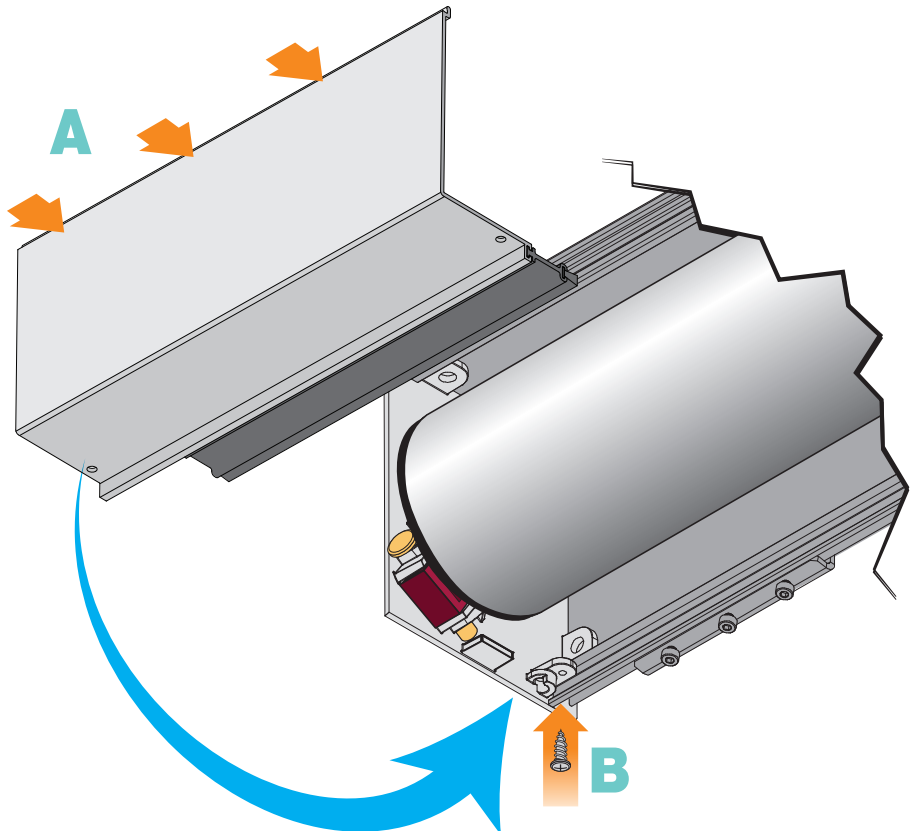
- 1.** **A.** Replace Operator End of Roller Assembly.



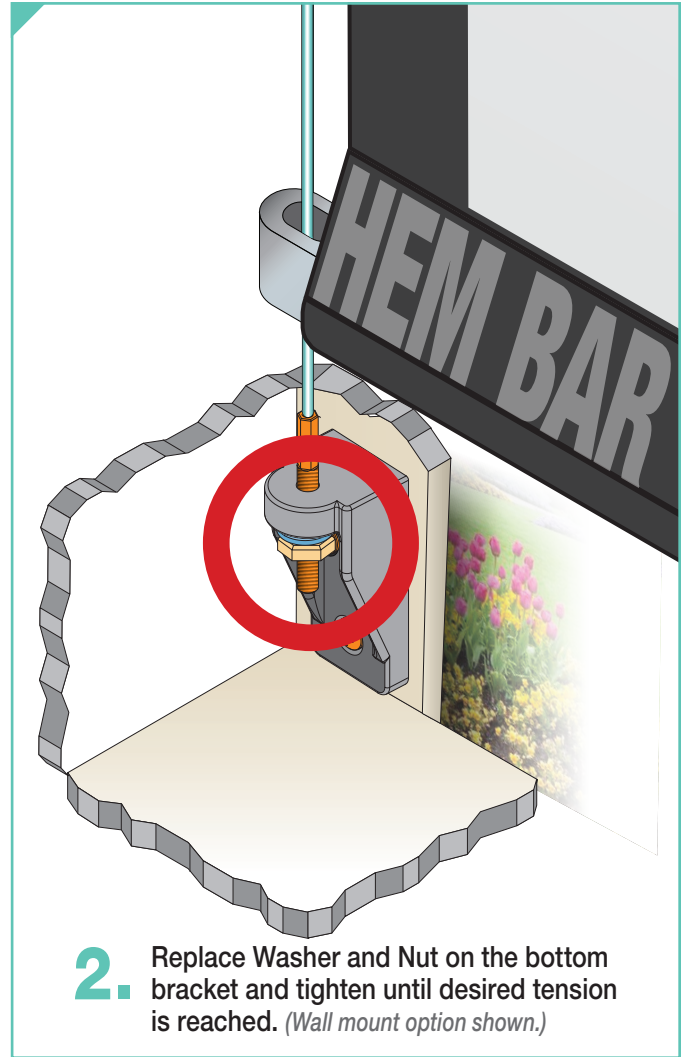
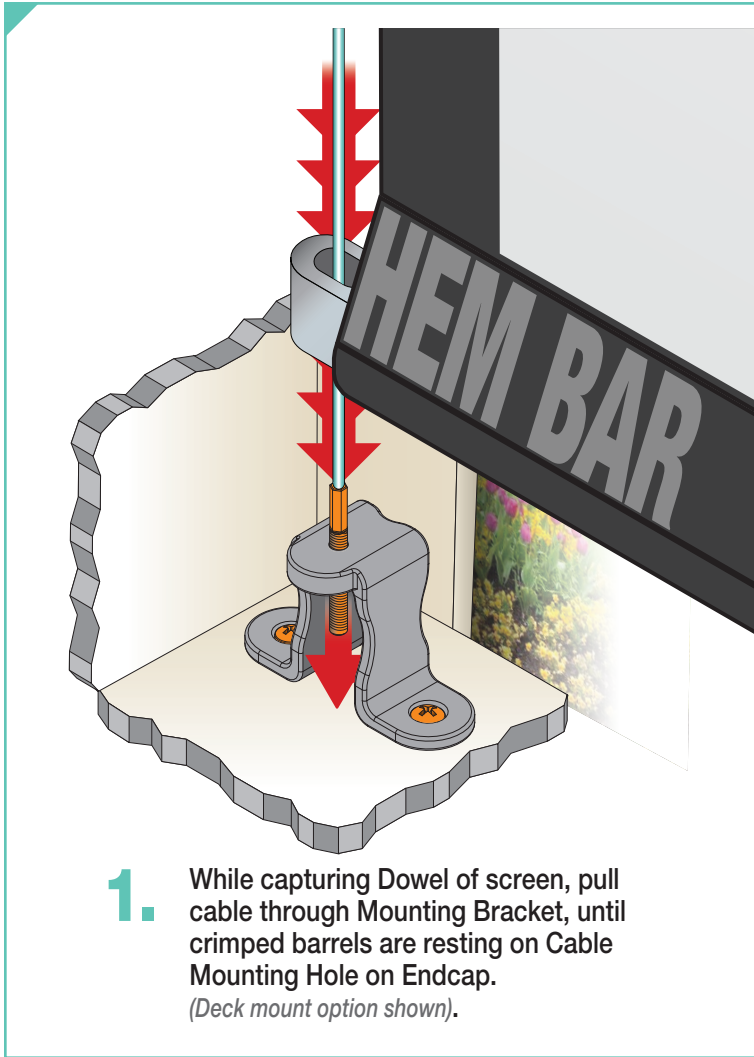
- 2.** **A.** Replace Idler Mounting Gudgeon on Idler End of Roller Assembly.
B. Replace Quick Release Pin.



- 3.** **A.** Replace Fascia.
B. Replace screws on bottom of Case.



Section 6 - Securing Guide Cable



Section 5 - Limit Adjustments (Standard Motors)

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

Please Note: If Screen is "Right Hand Motor" the WHITE/DOWN (I) and YELLOW/UP (II) limit screws are reversed (Fig. 7).

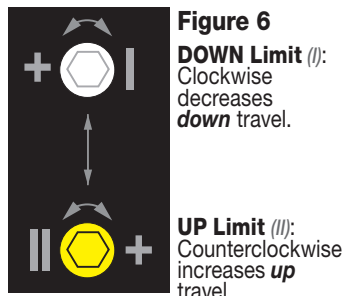


Figure 6

DOWN Limit (I): Clockwise decreases down travel.

UP Limit (II): Counterclockwise increases up travel.

"Down" Limit Adjustment (requires 5/32" (4mm) Allen wrench)

To Reduce Screen Drop:

1. Raise screen surface approximately 1' (30cm) above desired setting and turn off.
2. Turn DOWN (I) limit screw clockwise (3 screw turns = 1/2 roller revolution).
3. Test by lowering screen. Repeat steps 1 & 2 until desired position is reached.

To Increase Screen Drop:

1. Lower screen to down limit.
2. With down switch on, turn DOWN (I) limit screw counterclockwise (3 screw turns = 1/2 roller revolution) to increase drop.
3. Test by raising screen approximately 1' (30cm) then lower to new down limit.
4. Repeat steps 2 and 3 until desired position reached.

Please Note: For Quiet Motor with alternate limit screws: WHITE screw = UP and RED screw = DOWN. (Fig. 10).

"Up" Limit Adjustment

If Screen Raises Too High:

1. Lower screen surface approx. 1' (30cm) below desired setting and turn off.
2. Turn UP (II) limit screw clockwise (3 screw turns = 1/2 roller revolution).
3. Test by advancing screen up.
4. Repeat steps 1 through 3 until desired position is reached.

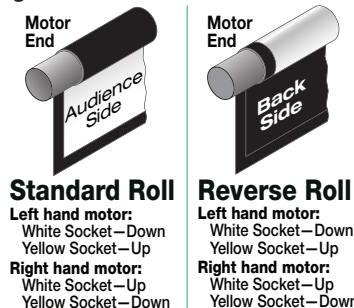
If Screen Needs to Raise Higher:

1. Lower screen surface approx. 1' (30cm) below desired setting and turn off.
2. With UP switch on, turn UP (II) limit screw counterclockwise (3 screw turns = 1/2 roller revolution).
3. Repeat steps 1 and 2 until desired position is reached.

CAUTION:

- Be sure all switches are in "off" position before adjusting limit switches.
- Be prepared to shut off manually while testing.
- Screen may be damaged by lowering it too far and exposing roller.
- Motor must be installed so that limit switches are pointed down.

Figure 7



Standard Roll

Left hand motor:
White Socket—Down
Yellow Socket—Up
Right hand motor:
White Socket—Up
Yellow Socket—Down

Reverse Roll

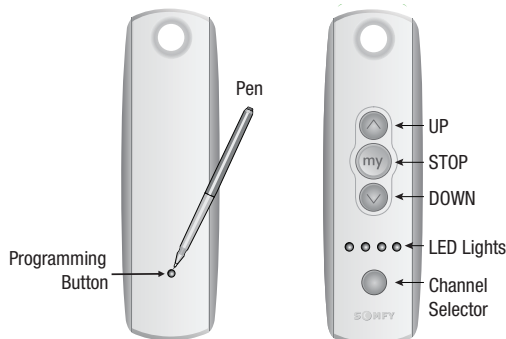
Left hand motor:
White Socket—Down
Yellow Socket—Up
Right hand motor:
White Socket—Up
Yellow Socket—Down

CAUTION: DO NOT allow dowel to wrap over roller when operating screen! This could damage screen.

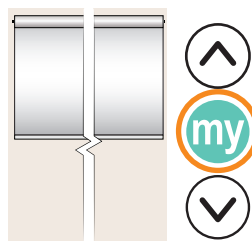
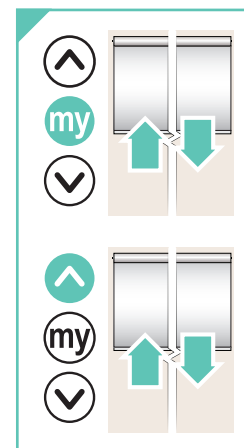
Section 6 - RF Remote Programming Instructions (ONLY used if optional RTS Motor is specified)

IMPORTANT: This section ONLY applies if optional RTS Motor has been ordered.

Please Note: The motor ships with no programming. Follow these instructions to program unit to the desired transmitter.

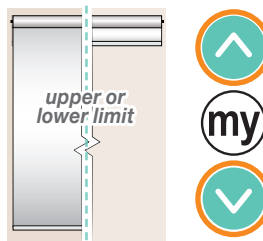


1. Select a transmitter channel to assign motor. Hold UP and DOWN buttons until motor jogs, then release.
2. Check motor direction. To reverse motor direction, hold MY/STOP button for 5 seconds until motor jogs. Check direction again.
3. Move motor to upper limit position. Hold MY/STOP and DOWN buttons until motor moves down, then release. Use UP and DOWN buttons to move screen to correct lower limit and press MY/STOP.
4. While motor is at lower limit, hold UP and MY/STOP buttons until motor moves up, then release. The screen should move to upper limit and stop.
5. Next, hold MY/STOP button until motor jogs.
6. Put motor into USER MODE by holding small programming button on the back of transmitter and waiting for motor to jog.



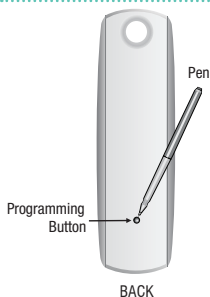
Setting an Intermediate Stop - Screen MUST BE in USER mode.

1. Move screen to desired mid-point location and hold MY/STOP button until motor jogs.
2. To test, press the MY/STOP button when motor is standing still. The screen will move to that intermediate stop.
3. To delete an intermediate stop, go to the intermediate stop and hold the MY/STOP button until motor jogs.



Adjust Limits in User Mode

1. Move motor to limit (upper or lower) to be changed. Screen must move to previously set limit and will stop automatically.
2. Hold UP and DOWN buttons until motor jogs.
3. Move motor to its new limit location and hold MY/STOP button until motor jogs.



Add a Channel - Screen MUST BE in USER mode.

1. Select channel currently operating motor, then hold programming button until motor jogs.
2. Select new channel to add to motor, then hold programming button until motor jogs.
3. The motor should now work on both old and new channel.

Delete a Channel - Screen MUST BE in USER mode.

1. Select channel operating motor desired, then hold programming button until motor jogs.
2. Select channel to remove, then hold programming button until motor jogs. Motor should now only work on channel kept from Step 1.

Reset Motor

1. Disconnect for 3 seconds, reconnect for 10 seconds, disconnect for 3 seconds. Screen will roll.
2. Hold program button on remote and wait for 2 separate jogs. Motor is now reset.

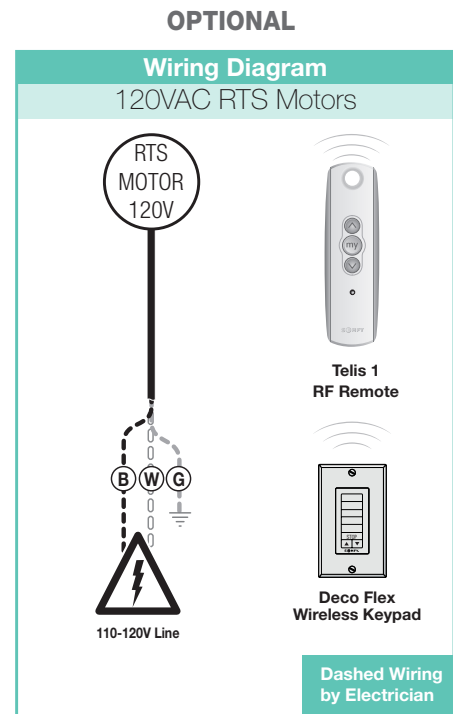
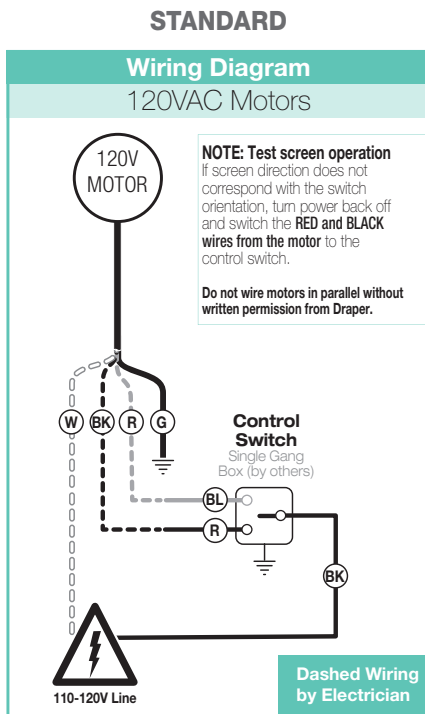
Section 7 - Electrical Connections

1. Screen operates on 110-120V, 60 Hz., 1.1 Amp current draw.
2. If optional low-voltage control is specified, please refer to wiring diagrams (Section 8).
3. Screen is shipped 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. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes.
4. All operating switches should be "off" before power is connected.

Section 8 - Wiring Diagrams

Please Note: Do not wire motors in parallel.

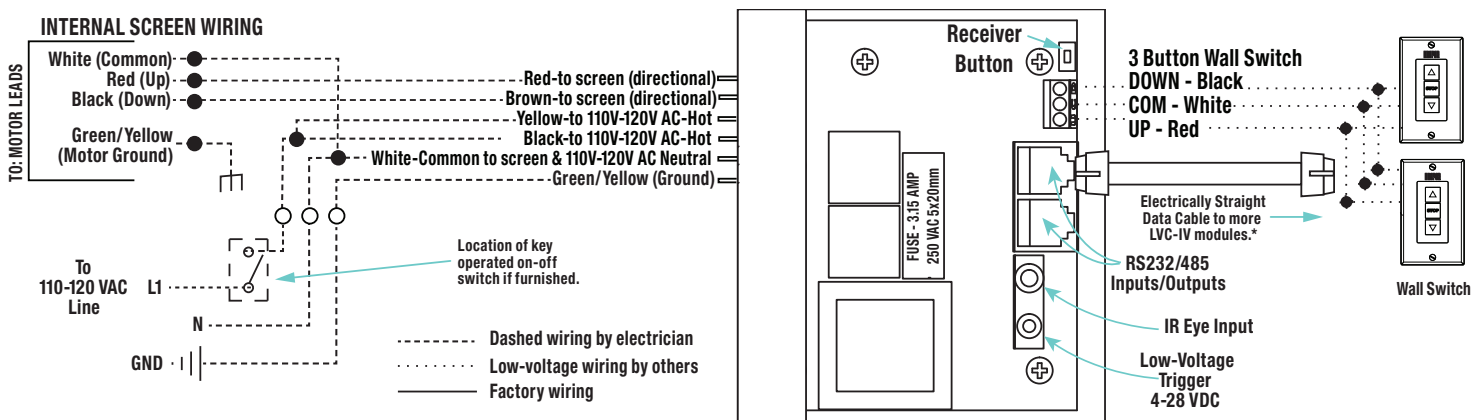
110-120V Motor



Decora wireless keypad is optional.
Remote comes standard with RTS motor.

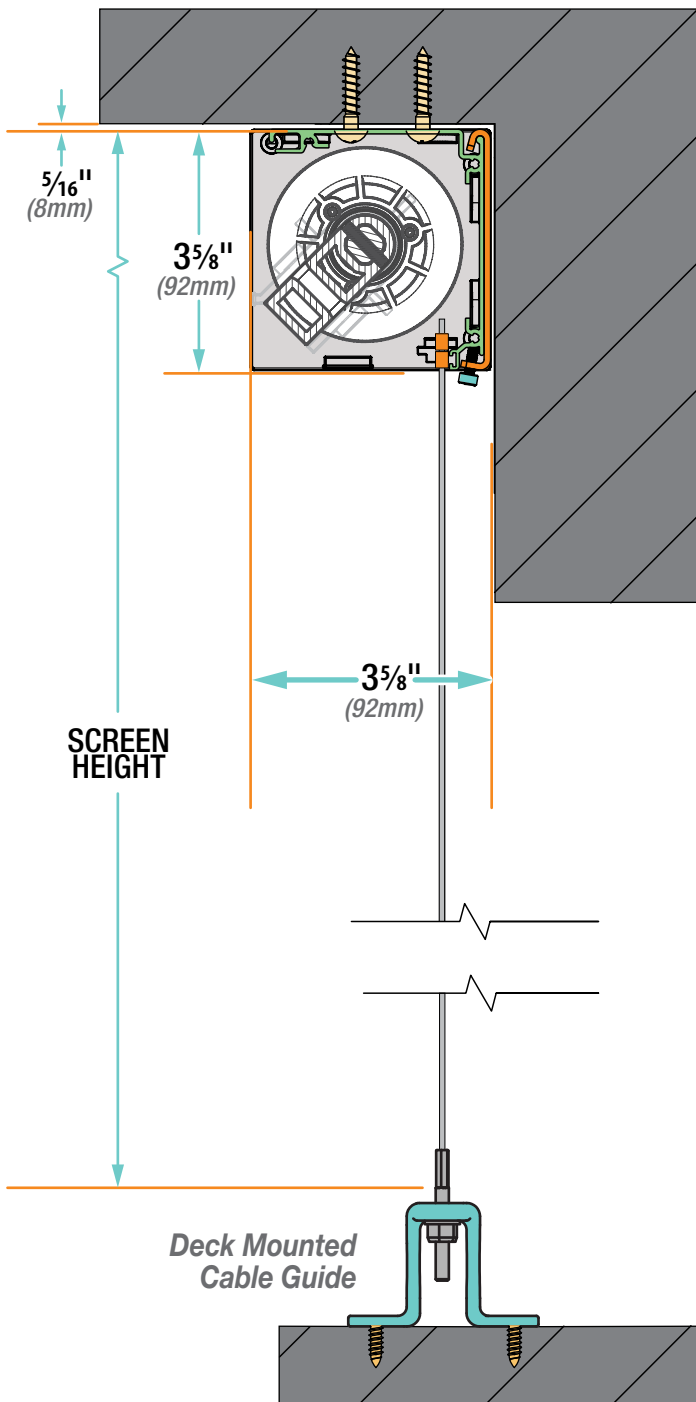
Sonessa® is a registered trademark of Somfy® Systems, Inc.

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

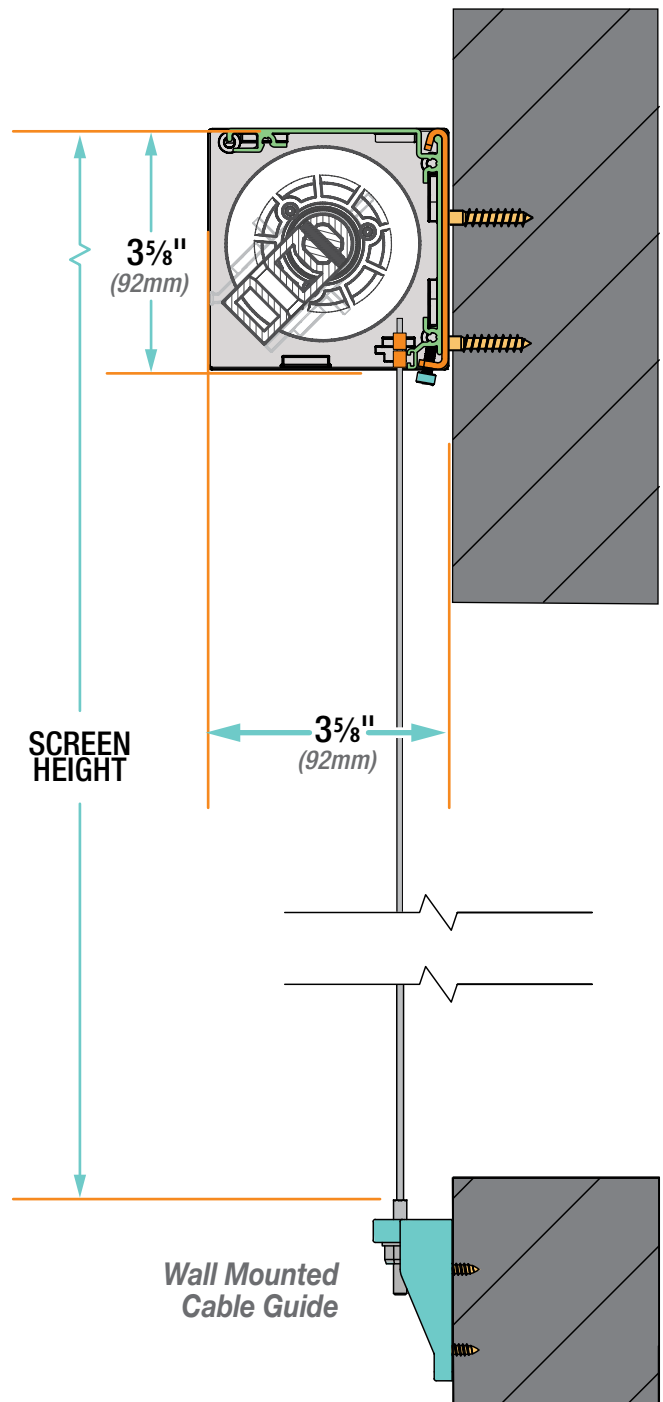


Section 9 - Dimensions: Components

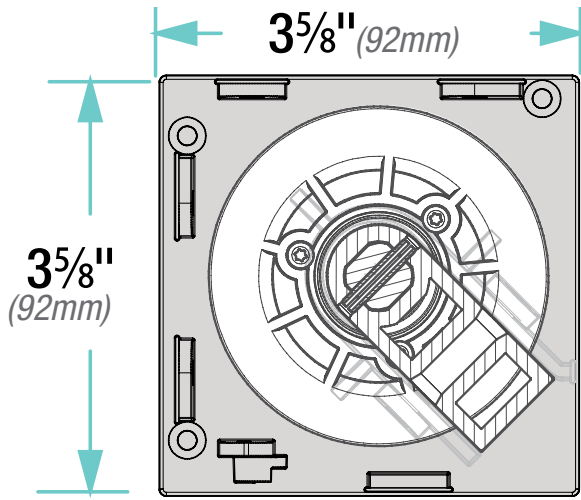
Side Cable Wall Mount Option



Side Cable Ceiling Mount Option

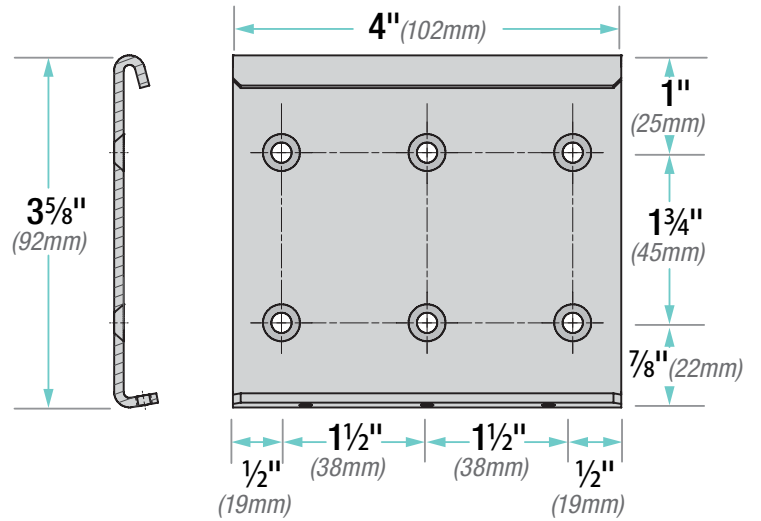


Case



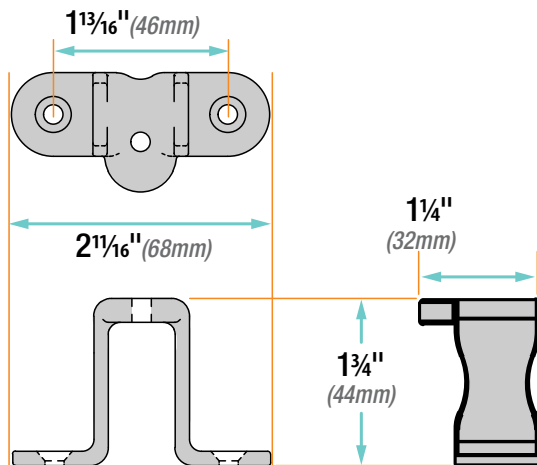
Wall Mounting Bracket

Mounting Bracket

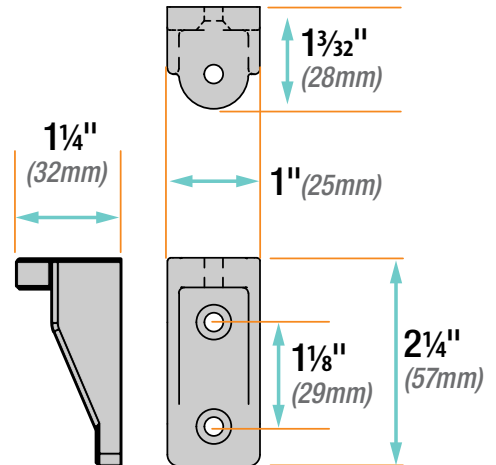


NOTE: Mounting brackets attach to surface with #10 Flat Head Screw

Cable Guide - Deck Mount



Cable Guide - Wall Mount



Section 10 - Assembled Dimensions

