

Installation Parts List

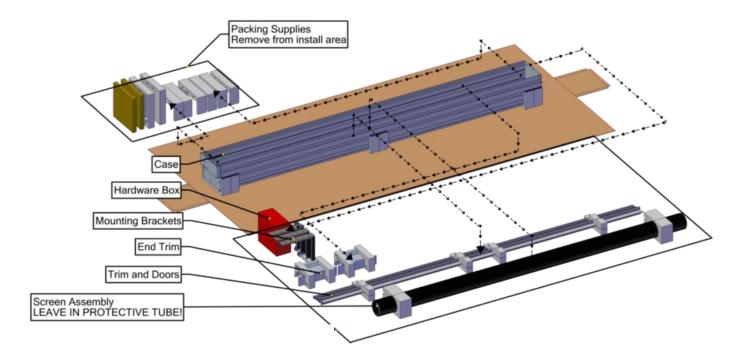


Cautionary Statements

- 1) The required Operating Temperature Range of this product is 65F 85F (15C 29C).
- 2) Due to the effects of thermal expansion, this screen must be protected from exposure to direct sunlight.

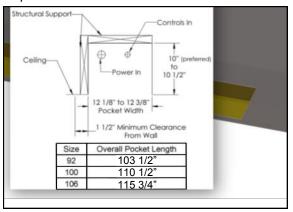
Unpacking the box (Video Chapter 1—50 seconds)

- 1. Position the box such that it will be out of the way of the installation wall. Cut the strapping and open the box.
- 2. Remove the mounting brackets from the packing foam—there are L Brackets (2) and Straight Brackets (2) that will be attached together to form the completed mounting brackets.
- 3. Locate the hardware box and identify components in the above parts list.
- 4. Tear off the top half of the foam pieces that wrap around the case, then remove the plastic wrapping from the case.
- 5. Remove the components packed inside the case in the following order:
 - a) End Trim
 - b) Trim and Doors
 - c) Screen Assembly (Do not remove the screen from protective tube.)



Installing the Brackets (Video Chapter 2—51 seconds)

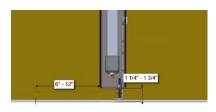
6. Verify ceiling pocket is LEVEL and constructed to the 7. Hang the front bracket requirements below.



hooks on both brackets as shown below.

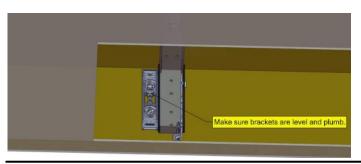


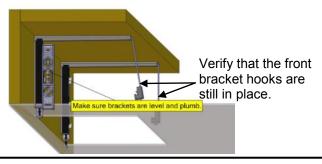
8. Place the brackets in the pocket using the dimensions shown below.



Important Note: Before installing brackets, be certain the structural components where the brackets are attached will enable each bracket to support 200 lbs.

9. Mount brackets to structural surfaces making sure brackets are plumb as illustrated below. Also make certain to set the brackets level with each other before proceeding. To do this, run a long level across the bottom of the two brackets.

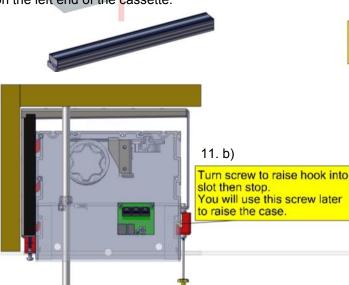




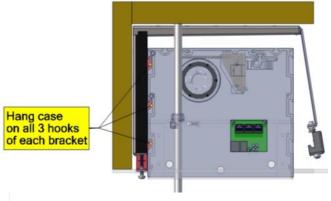
Hanging the cassette—this requires two people and two ladders to safely lift the cassette into position (Video Chapter 3—33 seconds)

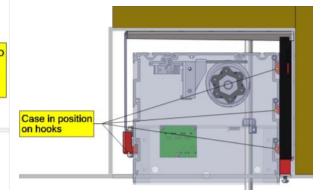


10. Lift the cassette off the floor and thread the AC power-in cable through the black plastic cord grip on the left end of the cassette.



11 a). Hang the cassette on each bracket—make sure all hooks are properly engaged with the cas-



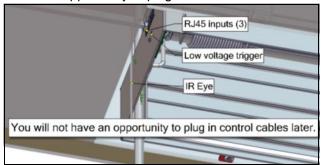


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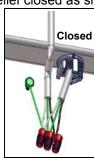
Connecting controls, power, internal brackets & wall switch (Video Chapter 4—64 seconds)

12. Connect ALL controls to left end of cassette—you will not have an opportunity to plug in control cables later.

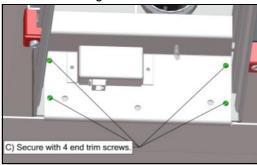


14. Pinch black plastic strain relief closed as shown below.

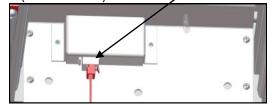




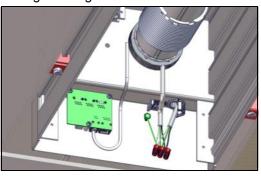
- 16. a) Move the bracket into place by aligning the screw holes as shown below. Making sure not to pinch the data cable that's behind the bracket, insert and tighten the four screws to secure the bracket to the case.
- 16. b) Install the other internal bracket on the right side. Insert 4 screws and tighten.



17. a) Connect wall switch by plugging RJ45 end of wall switch cable into the port attached to the left internal bracket (shown below).

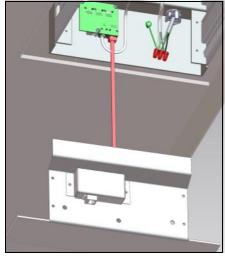


13. Connect AC power in to motor power cable; connect ground wires to cassette with supplied jumper wire and grounding screw.

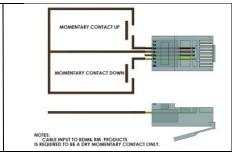


15. Locate the left internal bracket (it has a short data cable attached-see drawing below). Plug in the data cable found on the back of the bracket to the port on the left inside of

case.

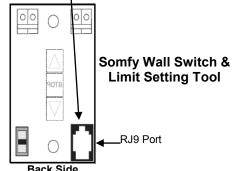


For reference: RJ45 Pin-out diagram for control of screen by automated control systems.



17. b) Plug in other end (RJ9) of cable to port on back of Somfy wall switch. The switch can hang from the cable while you go on to the next steps.



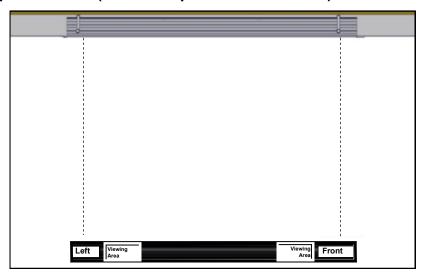


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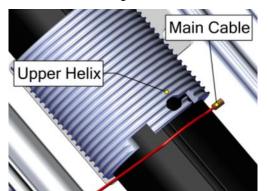
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Connecting the screen assembly to upper cassette (Video Chapter 5—31 seconds)

18. a. Position the black screen packing tube on the floor centered directly below the case The "Left" label will be on the viewers left hand side, while the Front label should be visible on viewer's right side.



18. b. At each end of the black screen tube, locate and unwrap the left and right steel cables—they are wrapped in grey foam packaging material. Connect the steel cables to the threaded helixes (inside the case) by first sliding the cable underneath the edge of the helix as shown below. Pull down on the cable to lock it in place as shown below.





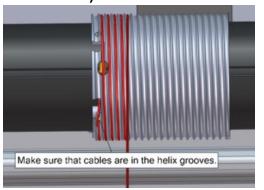


Raising the screen using the wall switch (Video Chapter 6—26 seconds)

19. a) IMPORTANT: The wing and tube are going to be lifted up off the floormake sure the wing and tube are centered and nothing is interfering with the cables before raising the screen.

19. b) With one on person on each side, guide the cables into the first groove of the helixes, and apply downward tension to straighten each cable to plumb.

Pull straight down on cables until screen is raised off the floor.



- 19. c) Using the wall switch, press and hold the Up arrow button until the screen is lifted off the floor, then release the button to stop the screen. During this step, **DO NOT PRESS THE STOP BUTTON as it will reverse the direction of the motor.** If you inadvertently reverse the direction of the motor, you can change it back to the correct direction by pressing the stop button again.
- 19. d) Look at the helixes to verify that the cables start on the first groove, and are following the grooves of the helix as shown in the above right image. If you experience a problem with the cables, lower the screen with the Down button, realign the cables with the grooves, and repeat step 19. c).

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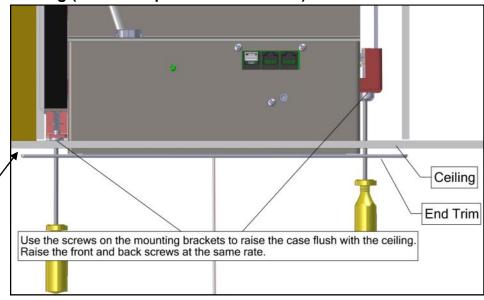


Black Diamond Motorized Flush Mount Instructions

Flushing the cassette with the ceiling (Video Chapter 7—15 seconds)

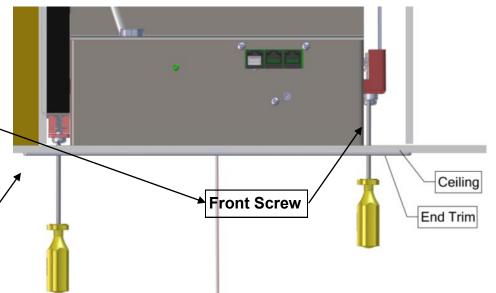
20. a) With the end trim in place on each side, tighten the screws on the front and back of each mounting bracket until the end trim makes contact with the ceiling. Alternate turning the front and back screws keeping the cassette as level possible.

Note the open space between end trim plate and ceiling before screws are tightened.



20. b) Once the end trim is flush with the ceiling at the front and the back of each end, tighten the front screws one full additional turn. Only do this to the two front screws, which are labeled on the drawing to the right.

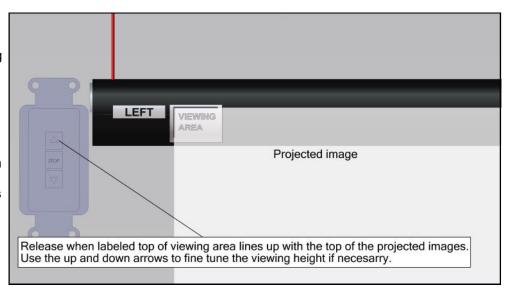
Note the gap between end trim plate and ceiling is closed after screws are tightened.



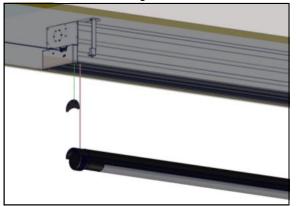


Setting the viewing height & installing the wing end caps (Video Chapter 8—45 seconds)

- 21. a) Raise the screen to the desired viewing height. Start by turning on the projector and projecting the image at the desired height on the wall.
- 21. b) Using the wall switch, press and hold the Up arrow button to raise the screen. Release the button when the top of the projected image is roughly aligned within corner lines on both sides of the tube.



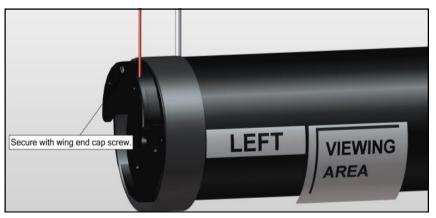
22. Locate the wing end caps inside the cassette and pull each down to the end of the wing as shown in the drawings below.



23. Align pins with holes in wing and secure with black hex screw.







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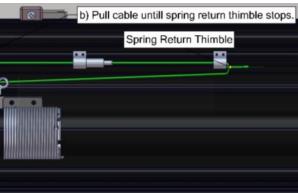
Locking the final height of screen (Video Chapter 9—32 seconds)

IMPORTANT NOTE: The following steps will permanently lock the final viewing height in place. Do not proceed with these steps until you're certain of the final viewing height, and that the screen is set to that position as described in Step 28.

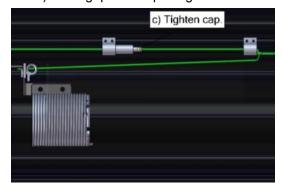
- 24. To **permanently** set drop, perform these steps on both sides of cassette:
- 25. a) Unscrew cap of grip lock that cable passes through.



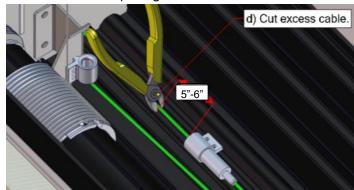
25. b) Pull cable toward the end of the cassette until the spring return thimble stops as shown below.



25. c) Turn grip lock cap to tighten it closed.



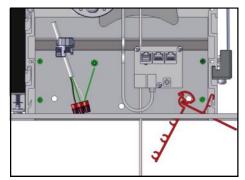
25. d) Cut excess cable between 5"-6" from grip lock shown below. Be certain to cut the proper end of the cable—it should be the tag end that's hanging down below the cassette opening.

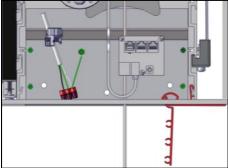


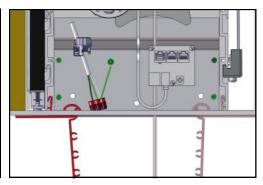


Installing the trim and doors (Video Chapter 10—47 seconds)

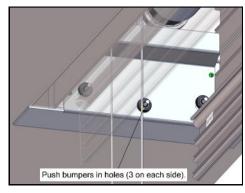
26. Hang the front and back trim pieces on the cassette as shown below. The two are identical, so no need to worry which is front or back. Seat the hook on the trim firmly into the groove in the cassette, then rotate to flush with the ceiling.

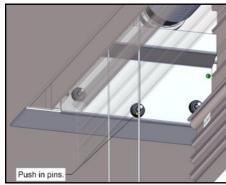






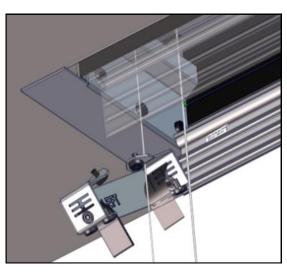
27. a) Push black rubber bumpers in each of the 3 holes in the end trim.

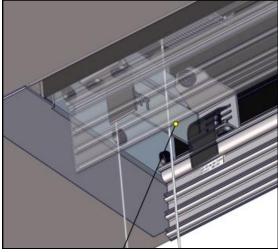




27. b) Push in center pin on each bumper to lock the bumper in place.

28. a) Place internal brackets on inside of cassette, one on the left and one on the right. Line up the rubber bands with the labels on the trap doors..



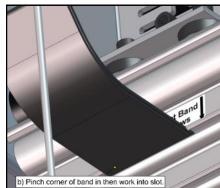


28. b) Verify that the word "Left" is showing on the left side bracket and "Right" is showing on the right side bracket. The rubber bands should be dropping down near the labels on the trap doors.



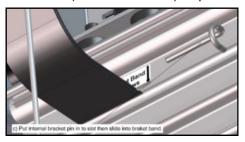
29. a) Insert rubber bands into the trap doors by pinching the corner and inserting the corner into the slot below the label.





29. b) Once the corner is inserted, feed the rest of the rubber band into the slot.

29. c) Insert internal bracket pin into the slot and the rubber band. Press the pin all the way in to secure the rubber band in the slot (as shown below.) Repeat these steps to connect all 4 rubber bands to the trap doors.

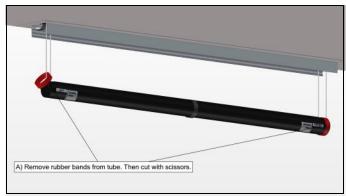


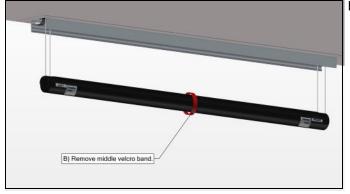




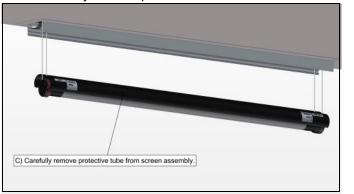
Removing protective tube from screen (Video Chapter 11—19 seconds)

30. a. Slide rubber bands off tube on each end, then cut with scissors and discard.

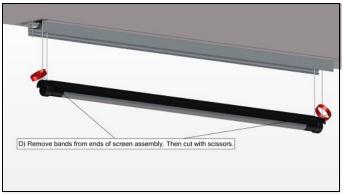




30. c. Carefully remove protective tube from screen assembly.



30. d. Remove rubber bands off tube on each end, then cut with scissors and discard.

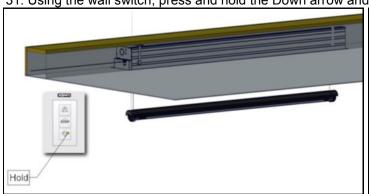


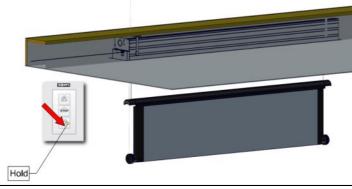
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30.

Setting the lower screen limit (Video Chapter 12—28 seconds)

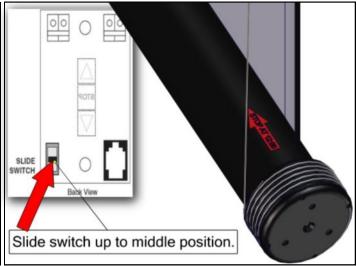
31. Using the wall switch, press and hold the Down arrow and the screen will begin to open.





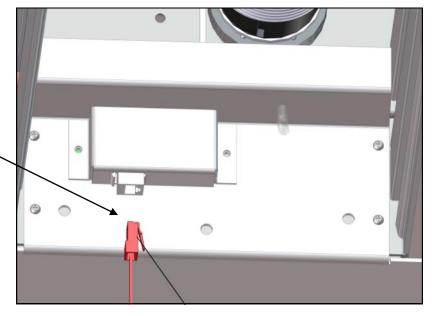
- 32. a) Continue unrolling the screen with the Down button while carefully watching the bottom tube from behind the screen. Release the button when the arrow on the tube is at 12:00—denoted by a red arrow on the tube (as shown in the images below). You may toggle with the Up and Down arrows to fine tune the 12:00 position of the arrow.
- 32. b) Turn the wall switch over, and move the slide switch from the lower position to the middle position as shown in the below right image. Do not proceed until the slide switch is in the middle position.





33. Unplug the wall switch from the inside of the case.

This a very important step so the cable doesn't get caught in the doors when they close.



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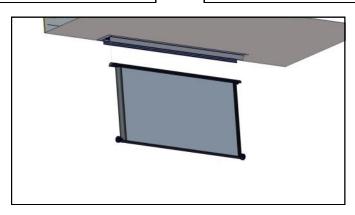
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Operating screen and confirming limits (Video Chapter 13—28 seconds)

34. Operate the screen as desired using the control methods you've selected for your screen. Please note: Running the screen excessively may signal the thermal protection circuitry on the Somfy motor to temporarily stop the motor. This is not a serious problem. The motor will be able to be operated after the motor has been given time 20-30 minutes to cool down.







Operating Your Screen

The most stable method of controlling the operation of your screen is the use of a Low Voltage Trigger. This method lowers the screen for use when the projector is powered on, and raises it when the projector is turned off. When not in use, the screen is protected from needless exposure to scrapes, dust, pets, and other unnecessary risks.

Regardless of the control method you select, be certain to raise the screen after using—by following this advice, it will be rolled on the tube and safely nested inside the case. It's the best way to extend the screen's useful life.

Installer Notes: _	

