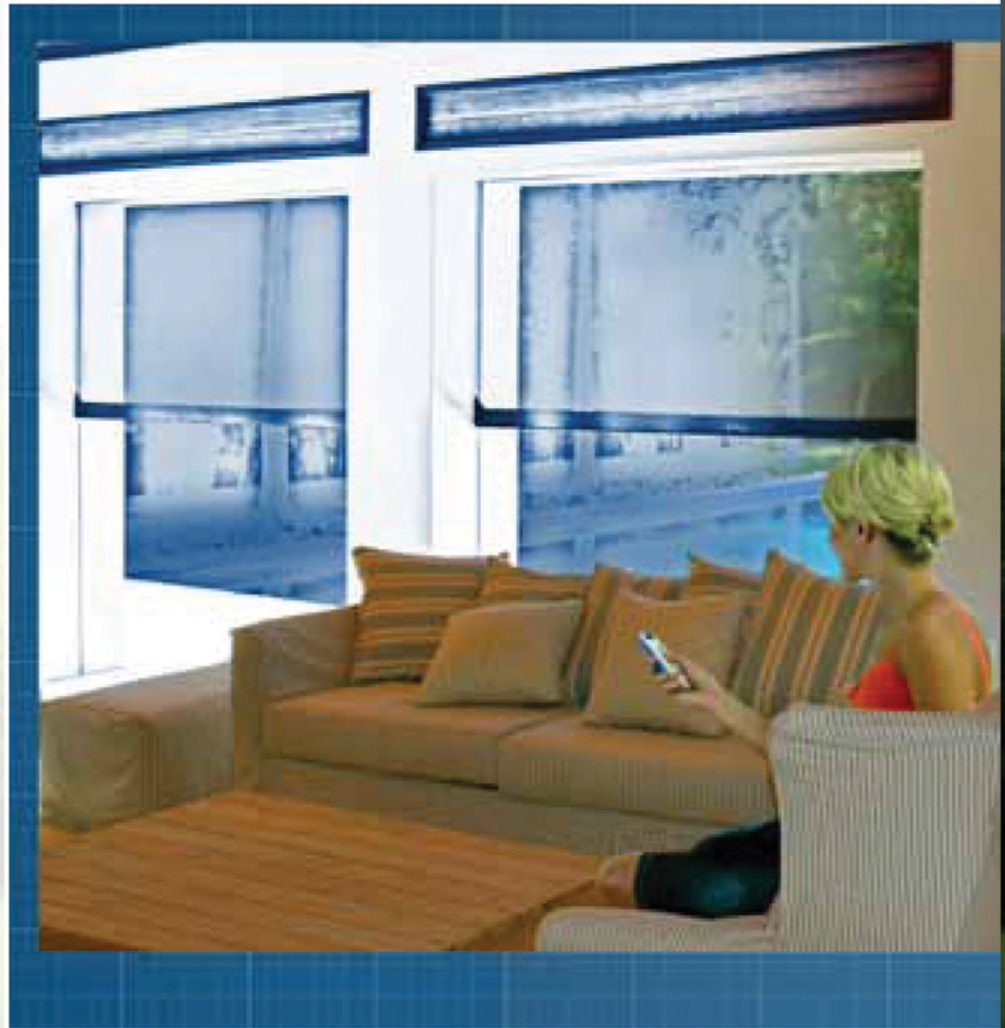


Installation and Programming Instructions



Motorized Retractable Screens

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Installation

Introduction

Titan Screen installations are recommended for patios, porches, lanais, windows, garage doors or any opening utilized for indoor/outdoor use and can be installed with or without a sill. Prepare for the installation by verifying that all components and tools are available and working properly. Every Titan Screen cannot be installed with one set of sequential instructions. These instructions are to be considered standard and used as a primary guide. Incorrect installation will result in the screens malfunction and will nullify warranties. Keep in mind it may be easier or necessary to complete one part of the assembly out of sequence. The installer assumes all responsibility to fully understand the following instructions and any variance to them will be the sole responsibility of the installer.

Titan Screen technical support is available Monday - Friday, 8am - 5pm - (239) 262-8823

Safety Information



Thoroughly read the following instructions before installation and operation of this roll down system. Always exercise general safety practice during application of this product. Eye protection should be worn at all times. All electrical connections must be performed by a licensed electrical contractor. Be aware of your environment and execute safe working habits according to location requirements.

Before installing Titan Screen retractable screens, please check with your local code enforcement official on permit requirements.

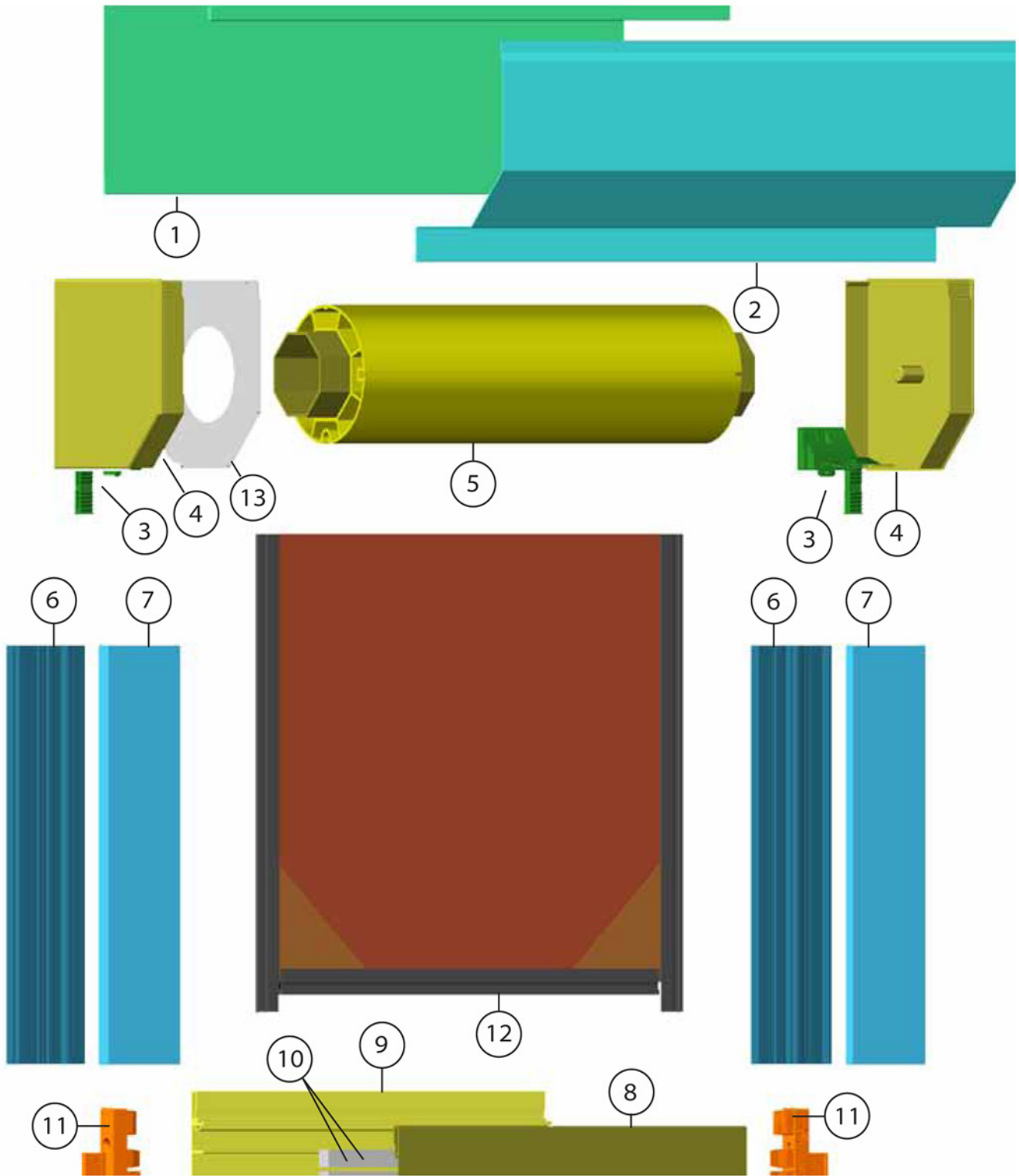
Sunmaster of Naples, Inc. and/or Titan Screen® shall not be liable for any direct, indirect, incidental, special or consequential damages (including, but not limited to, loss of profits, revenue or business), or damage or injury to persons or property in a way related to the manufacture or the use of its products. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.

Tools Required

- Cordless Drill
 - 1/4" and 1/2" Drill Bits
 - Dead Blow Hammer
 - Needlenose Pliers
 - Spline Roller
 - Laser or Water Level
 - Screw Drivers
 - Nut Drivers
 - Tape Measuer
 - Square
 - Utility Knife or Scissors
 - Motor Tester Cables
 - Chop Saw (if trimming tracks)
 - Fasteners (not supplied with screen assembly; must be approved fasteners for substrate you're mounting to)
 - 100% Silicone Spray
-

Installation

Exploded View of Screen Assembly



Installation

Parts Description

- ① **Rear Housing:** (available in 4 standard colors) Made from .040 aluminum. This, in combination with the access cover, makes up the hood assembly, which contains the roller tube and screen.
- ② **Access Cover:** (available in 4 standard colors) Made from .040 aluminum. This, in combination with the rear housing, makes up the housing, which contains the roller tube and screen.
- ③ **Entry Guides:** (Set of two; black Delrin). Once the screen has been fed through the entry guide and into the track, it ensures proper alignment of the zipper regardless of screen angle.
- ④ **End Caps:** (Set of two; available in 4 standard colors). The 5.5" die-cast aluminum end caps hold the roller tube and the entry guide. They each have a leg which inserts snugly into the track.
- ⑤ **Roller Tube:** (mill finished aluminum). The 4" roller tube enables the Titan Screen® to span 252". The step down to 2 5/16" hexagon tube on the ends allows the zippers to stack.
- ⑥ **Inside Track:** (One right, one left; available in 4 standard colors). Combined with the outside track, makes up the full .875" x 2.5" track system. The zipper, which is fully hidden in the track, travels up and down in this track.
- ⑦ **Outside Track:** (One right, one left; available in 4 standard colors). Combined with the inside track, makes up the full .875" x 2.5" track system. This piece covers the fasteners and snaps onto the inside track leaving a seamless appearance.
- ⑧ **Bottom Bar Front:** (black aluminum-standard). Combined with bottom bar #2, makes up the full .625" x 2.875" bottom bar. This houses the two weight bars and is kept in the tracks via the bottom bar insert.
- ⑨ **Bottom Bar Back:** (black aluminum-standard). Combined with bottom bar #1, makes up the full .625" x 2.875" bottom bar. This houses the two Weight Bars and is kept in the tracks via the bottom bar insert.
- ⑩ **Weight Bars:** (Two pieces; 304 stainless steel). The weight bars give the Titan Screen® the weight needed to keep the screen taut. The use of stainless steel helps ensure the weights against rust.
- ⑪ **Bottom Bar Insert:** (Set of two; black or white Delrin). This keeps the bottom bar engaged in the tracks. There is almost 1" of engagement in each track allowing for quite a bit of bottom bar flex before disengagement.
- ⑫ **Screen:** (available in multiple fabric options). The heart of The Titan Screen® has large molded zippers on three sides for the tracks and bottom bar and attaches to the roller tube with round spline.
- ⑬ **Safety/Alignment Plate:** (galvanized steel sheet metal). This plate prevents the motor wire from interfering with the operation of the screen.

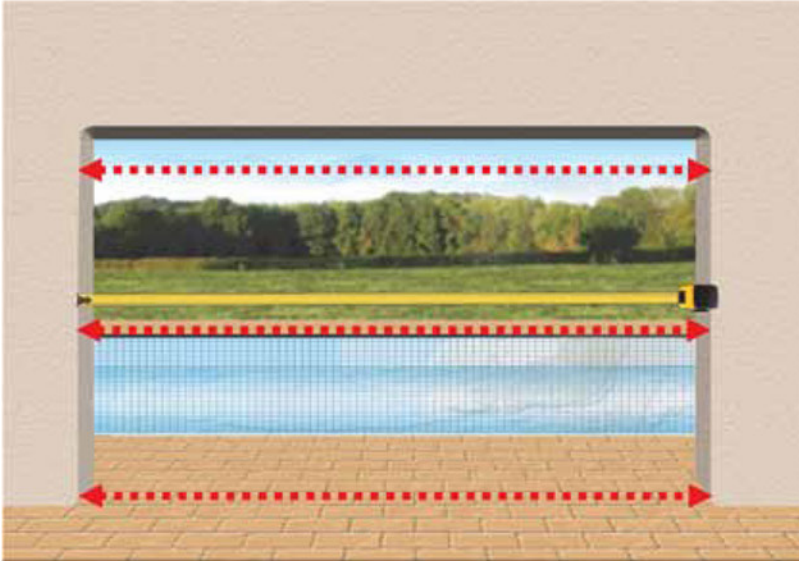
Included Parts not displayed: Tubular Motor (or manual gear); Spring Clip; Crown & Drive Gear; Motor Mounting Plate; Idler and Bearing; Obstacle Detection Component (ABS); spline, optional controller.

NOTE: When unpacking crate, ensure that all parts are enclosed and free of damage.

Installation

Measuring Methodology

Total Width:



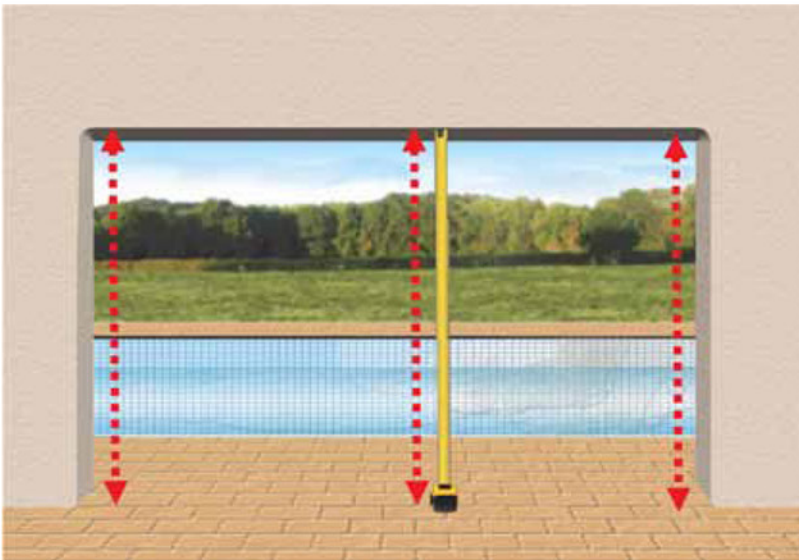
NOTE: Accuracy in measurements is imperative for properly functioning screens. When measuring the opening, check the width at the top, in the center, and at the bottom.

Since openings are rarely completely square and plumb:

For surface mount – use the longest measurement and add 5 inches to account for the width of the side tracks.

For trapped mount – use the shortest measurement. (Do not add additional width for the side tracks; this type of installation will require build-out tubes or angles)

Total Height:



NOTE: Accuracy in measurements is imperative for properly functioning screens. When measuring the opening, check the height on the left, in the center, and on the right.

Since openings are rarely completely squared and plumb:

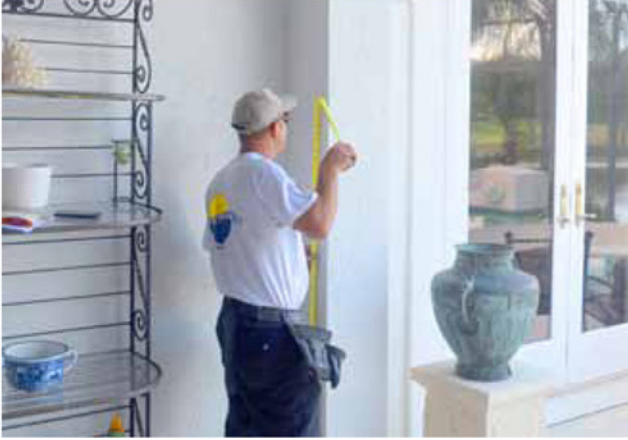
For surface mount - take the longest measurement and add 8.5 inches account for the height of the housing (5.5 inches for the height of the housing and 3 inches for the bottom bar while in the “up” position).

For trapped mount – use the shortest measurement. (Do not add additional height for the housing or bottom bar.)

Installation

Recommended Installation Procedure

Step 1



IMPORTANT:

Before standard installation, verify dimensions of opening and Titan Screen units.

Do not install clear vinyl installations when outdoor, ambient temperature is 60 degrees Fahrenheit or less.

Step 2



Remove access cover:

With the housing laying flat on the back surface, remove the pan head screws, two on the left and two on the right, that hold the access cover. Once all screws are removed, the access cover can be removed.

Step 3



(A)



(B)

Remove motor tube:

(A) On motor side, remove screws from safety/alignment plate and set aside. Behind the safety plate, remove the spring-clip with needlenose pliers.

(B) On idler side, remove the Tek screws that secure the idler to the roller tube, and slide the idler off the post on the side cap. The roller tube can now be removed.

NOTE: On motor side of CMO motors, unscrew bolts connecting gear to motor bracket (*not shown*).

IMPORTANT: Do not separate the inner and outer roller tubes.

Installation

Recommended Installation Procedure

Step 4



Pre-drill holes in housing for motor wire and mounting anchors:

Determine the best place to run motor wire based on motor mount side and location of power supply. Using 1/2" bit, drill hole for motor wire. Not applicable for gear drive systems.

Determine the best place to anchor housing on both the right and left side. In most cases, this will be in the upper back corner, but may be through the top for trap-mounted assemblies. Using 1/4" bit, pre-drill hole for mounting screws through both the sheet metal hood and the tabs of end cap, using caution to not crack the end cap.

Step 5



Cut side tracks (if necessary):

In many installations, tracks might not be the same length due to un-level surface. Determine length of tracks needed by re-checking the height on both the right and the left side of the opening. Using chop saw, trim one or both tracks as needed.

IMPORTANT: Tracks MUST BE trimmed at the bottom. The top of the track is pre-notched during fabrication to allow end caps and screen guides to sit flush to the top of the side tracks. Top of tracks are labeled with a bright green sticker. Trimming the top will cause side caps to not sit flush on tracks and could damage screens when operated.



Step 6



Attach the tracks to hood assembly:

With housing laying on a flat surface, slide top of right inside track and top of left inside track onto the legs of the side cap. **Care should be used not to damage delrin entry guide. While durable, the entry guide could be damaged if mishandled.** Make sure that entry guide and end cap snap securely into top of track and sit flush (refer to step 5 images).

Installation

Recommended Installation Procedure

Step 7



Stand the assembled unit:

Stand the assembled unit in place and anchor with a fastener through top hole of each track. Check that the left track is completely plumb and fasten bottom fastener of left side track **ONLY**.

IMPORTANT: Once the unit is up, check that the housing is level. The unit must be perfectly level for the screen to operate properly.

Step 8



Secure tracks after verifying they are parallel:

Tracks **MUST BE** perfectly plumb and parallel for the screen to function properly. From left track to right, measure across the top, the middle and the bottom to ensure that the distance is the same at each spot. Make sure to place the tape measure in the exact position at each height. Once equal distance is verified, install all remaining fasteners into tracks.

IMPORTANT: Do not level down each track separately. It is important that the distance between both track stay the same from top to bottom. If installed incorrectly, the screen will not operate properly.

Step 9



Anchor housing to wall:

Anchor the housing through the holes previously drilled in the upper corners of the rear housing (see step 4)

Installation

Recommended Installation Procedure

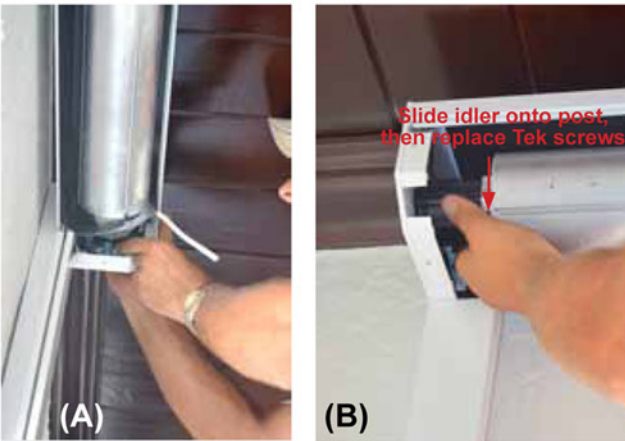
Step 10



Snap on the outside tracks:

Place each outside track over the corresponding inside track, aligning the outside edge. Using a dead blow hammer and beginning at the top, snap the outside track into place. Repeat for the opposite side.

Step 11



Install roller tube assembly:

(A) On motor side, place safety/alignment plate over motor side of roller tube. Install the roller tube back into its original location by attaching motor into motor bracket with spring-clip (removed in Step 3).
NOTE: For CMO motor, reattach mounting bolts.

(B) On idler side, slide idler over post on end cap and reset Tek screws removed in Step 3.

Step 12



Fasten safety/alignment plate:

Feed motor wire through hole drilled in Step 4. Reattach safety/alignment plate using screws removed in step 3.

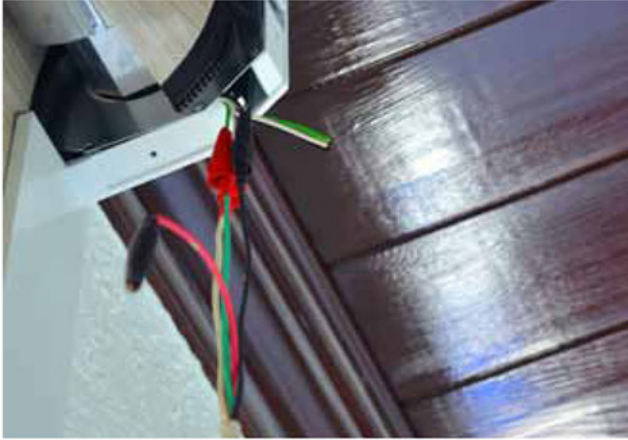
NOTE: For RTS (remote operated) motors, if you are cutting the motor wire down, you **MUST** leave at least an 18" lead. The antenna for the remote transmitter is located within the cord, and cutting it smaller will damage communication with the motor.

IMPORTANT: Safety/alignment plate helps secure the motor wire from interfering with the rotation of the motor. Ensure that the motor wire is completely clear of roller tube before reattaching safety/alignment plate.

Installation

Recommended Installation Procedure

Step 13



Test the motor:

Using tester cables (available from Titan Screen), test that the motor is functioning. Rotate the roller tube until the spline groove is facing forward. The spline groove is marked with a green label. **Prior to the screen being splined to the tube, the motor will only rotate in the "UP" direction due to the obstacle detection component.**

NOTE: If screen is gear operated, make sure roller tube is rotated to the bottom limit.



Tester Cables

Step 13a



Load the torsion spring:

NOTE: Torsion springs are only used in some installations with 4" housing. When ordering 4" housing, check with your Titan Screen rep to see if springs will be required.

Before splining the screen, load the spring by manually rotating the tube in the "DOWN" direction the specified number of revolutions per chart at right.

IMPORTANT: DO NOT wind the tube in the "UP" direction as this will damage the spring.

Track Length (inches)	# of Revolutions
10.....	7
19.....	8
28 1/2.....	9
38.....	10
47 1/2.....	11
57 1/2.....	12
67 1/2.....	13
77 1/2.....	14
87 1/2.....	15
98.....	16
108 1/2.....	17
120.....	18

Step 14



Attach bottom bar to screen:

(A) Fold back one corner of screen where the side zipper extends slightly lower than the screen.

(B) Insert the zipper along the bottom edge of the screen into the zipper channel of the bottom bar.

(C) Continue sliding the zipper across the bottom bar until both the right side zipper and left side zipper are even with the bottom bar guide tabs.

NOTE: All screens 15' or wider have a 1.5" x 1.5" angle attached to the bottom bar for added structural rigidity. Requests to leave the angle off may void your warranty. You can request that all openings match by adding the angle to each bottom bar for an additional fee.

Installation

Recommended Installation Procedure

Step 15



Install screen:

NOTE: Steps 15, 16, and 17 require two people. Extreme care should be used for each step so that screen and zipper do not get damaged.

Feed the top of the screen behind and over the top of the roller tube. Carefully pull screen over tube until bottom bar is above the top of the tracks and up into housing.

IMPORTANT: The roller tube **MUST BE** securely in place when the screen is installed. The roller tube will help guide the screen down the tracks evenly. Failure to do so can cause damage to the screen.

Step 16



Engage bottom bar and screen into side tracks:

On both the right and left sides, insert the tab of the bottom bar guides and the zipper into the top entry guides on the side tracks. One person should be in place on each side.

Step 17



Drop screen down the tracks:

With the zipper fully inserted into the tracks, slowly and carefully lower the screen down the tracks, making sure the bottom bar remains level. A sudden drop on one side will damage the screen.

Installation

Recommended Installation Procedure

Step 18



Spline the screen to the roller tube:

Pull the screen tight over the motor tube and adjust until the bottom bar sits evenly on the ground with no light gap under the bottom bar felt. Make sure to use the spline groove and roll out a channel in the screen with a spline roller, continually keeping the screen pulled taut. Using the supplied round spline, start splining the screen to the tube from the center out. Repeat on the other side. Use scissors to trim the end of the spline where the spline meets the fabric of the zipper. Use caution to not cut the fabric.

Step 19



Set the motor limits:

NOTE: Using a licensed electrician, wire motor for power. (Refer to P.13 for motor wiring schematics)

Once power is established, follow instructions on pages 15 to 17, to pair the motor with the controller and set the upper and lower limits.

IMPORTANT: When setting the upper limit, NEVER raise the bottom bar up into the housing, causing the bottom bar guides to raise higher than the top of the tracks. This will cause damage to the screen and zipper.

Step 20



Re-attach access cover:

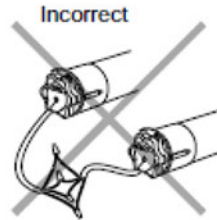
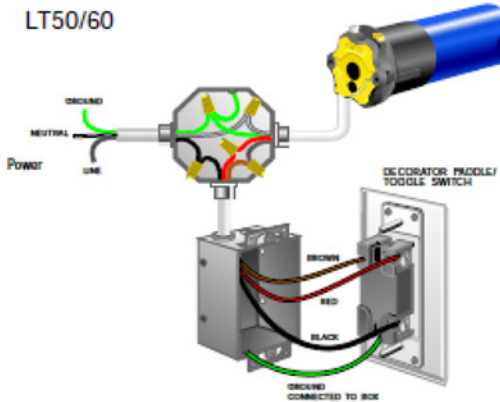
Insert the lip at the top of the access cover into a groove in the top of the Rear hood. Using the pan head screws removed in Step 2, re-attach the front access cover.

IMPORTANT: Lubricate side tracks with a dry silicone spray.

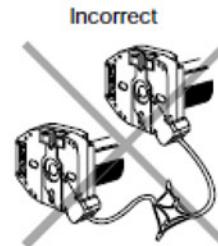
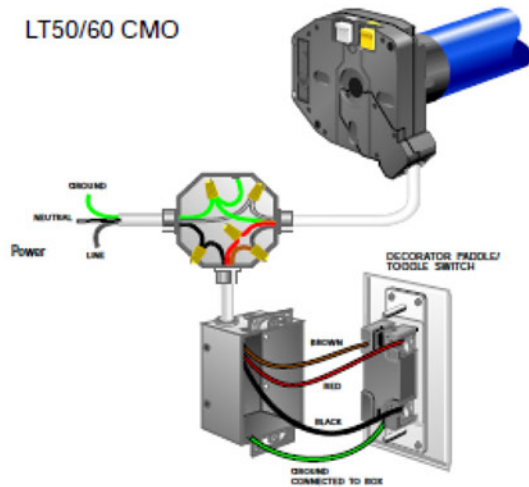
Installation

Somfy Motor Wiring Schematic

SOMFY. Operator Wiring Instructions



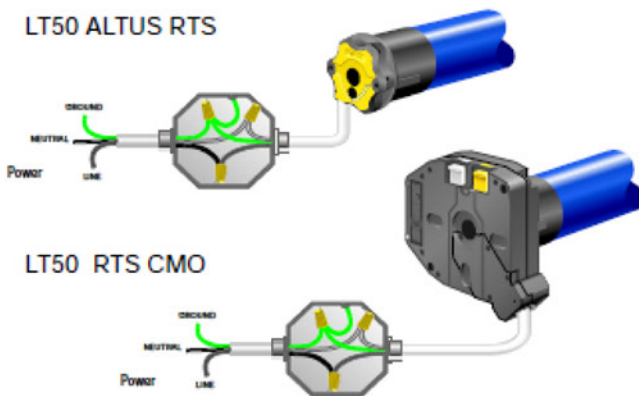
WARNING:
Do not wire two or more LT operators to one single pole switch.
This will cause the motors to malfunction.



LT MOTOR WIRING COLOR CODE

120V AC	CODE
BLACK	WHITE PUSH-BUTTON
RED	YELLOW PUSH-BUTTON
WHITE	(C) COMMON
GREEN	(G) GROUND

Note: Only RTS and ILT motors can be wired in parallel.



LT50 ALTUS RTS AND LT50 RTS CMO MOTOR WIRING COLOR CODE

120V AC	CODE
BLACK	(H) HOT
WHITE	(N) NEUTRAL
GREEN	(G) GROUND

Installation

Gear Drive Instructions



Arrow indicates direction in which to rotate roller tube to reach bottom limit for right side gear mount.

NOTE: Step 1 and Step 2 below **MUST BE** done **BEFORE** the screen is splined to the roller tube.

Step 1: Attach the hand crank to the universal and rotate the roller tube downward (counter-clockwise for right side mount and clockwise for left side mount) until the roller tube stops, which will indicate the bottom limit.

Step 2: Make sure the spline groove is accessible to spline the screen to the tube. The spline groove is marked with a green sticker on the roller tube. If it is not accessible, remove the roller tube and reinstall with the spline groove facing the correct direction.

Step 3: Spline the screen to the tube (refer to Step 18 on Pg. 12) Once the screen is installed, insert the up stop screws at the top of the tracks.

Installation

Programming Limits for Hard-Wired Motor (switch operated, with or without manual override)

IMPORTANT: For right-side mounted motors, the white button is the “UP” limit set and the yellow button is the “DOWN” limit set. For left-side mounted motors, the yellow button is the “UP” limit set and the white button is the “DOWN” limit set.

NOTE: Titan Screen strongly recommends using a Tester Cable to set the motor limits and to ensure the system is operating correctly BEFORE the final electrical connection is made.

Top Button Sets “DOWN” limit
(Yellow for right-side motor mount;
White for left-side motor mount)



Bottom Button Sets “UP” limit
(White for right-side motor mount;
Yellow for left-side motor mount)

Step 1: Ensure the tester cable switch is in the center “OFF” position, and connect tester cables to motor leads by matching color codes and clipping alligator clips to corresponding color leads.

Step 2: Depress both the white and the yellow buttons. They will automatically lock in the down position. Test the tester cable switch in both the up and down directions to ensure that the motor is operating correctly. **CAUTION: Limits are not yet set. Do not run screen up fully inside the housing or down past expected down limit. This will damage the screen.**

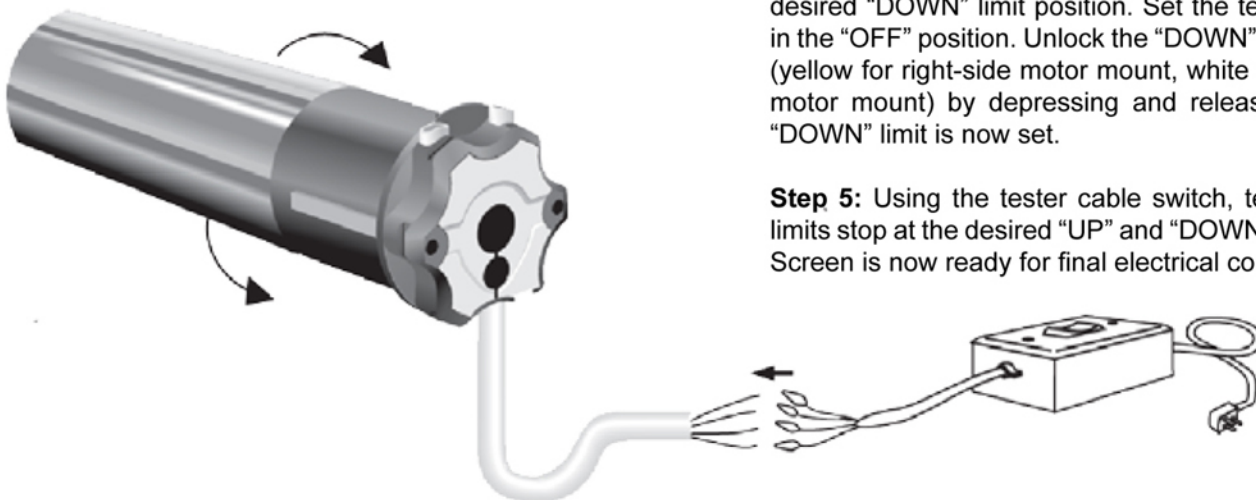
Step 3: Setting the “UP” Limit -

Using the tester cable box, run the screen to the desired “UP” limit position. Set the tester cables in the “OFF” position. Unlock the “UP” limit button (white for right-side motor mount, yellow for left-side motor mount) by depressing and releasing it. The “UP” limit is now set.

Step 4: Setting the “DOWN” Limit -

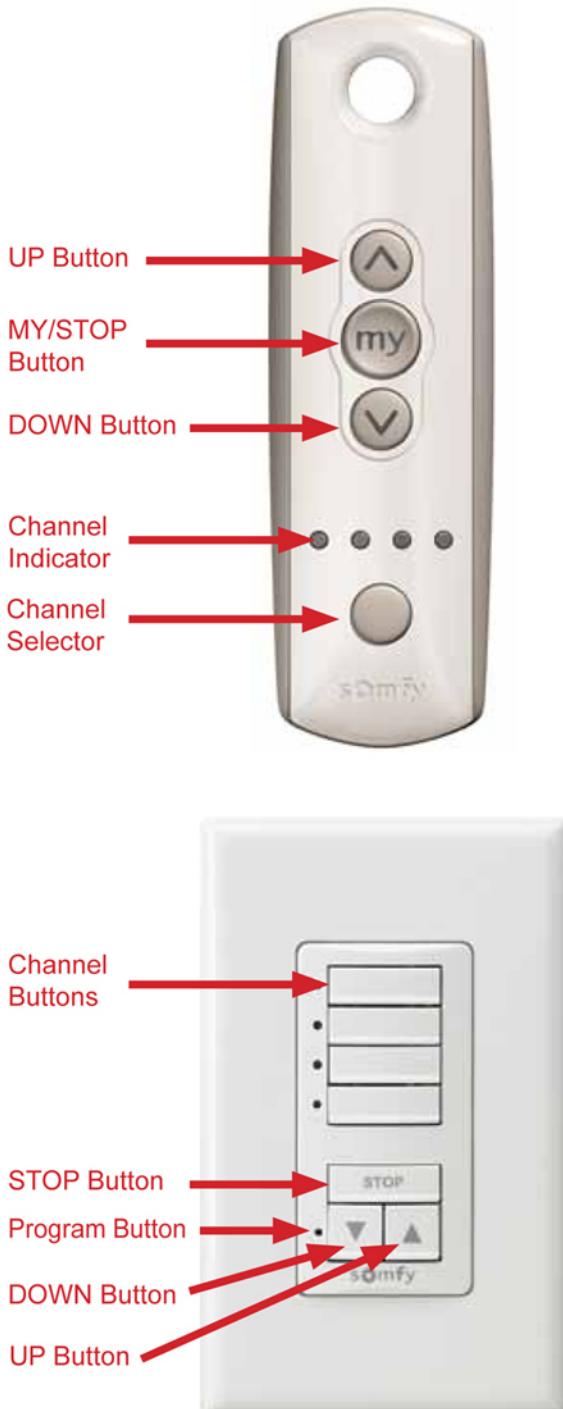
Using the tester cable box, run the screen to the desired “DOWN” limit position. Set the tester cables in the “OFF” position. Unlock the “DOWN” limit button (yellow for right-side motor mount, white for left-side motor mount) by depressing and releasing it. The “DOWN” limit is now set.

Step 5: Using the tester cable switch, test that the limits stop at the desired “UP” and “DOWN” positions. Screen is now ready for final electrical connection.



Installation

Programming Limits for RTS Motor (remote operated)



IMPORTANT: Only one motor can be programmed at a time. Connect only the motor you are programming to the power supply. Make sure all other motors are disconnected from power supply.

Step 1: On multiple-channel hand held remotes, select the channel you want to program by pressing the **Channel Selector** button until the correct **Channel Indicator** light is lit. **NOTE:** This step is not applicable on 1-channel hand held remotes. On wall-mount remotes, select and press the **Channel** button you want to program.

Step 2: Initiate programming by pressing the **▲** (up) button and **▼** (down) button simultaneously until the motor jogs.

Step 3: Check the direction of operation. Press and hold the **▼** (down) button and confirm the motor turns in the down rotation. The motor will be in momentary operation mode. If the motor travels in the wrong direction, press and hold the **MY** (stop) button until the motor jogs. Check the direction again by pressing and holding the **▼** button. The direction should now be correct.

Step 4: Press and hold the **▲** (up) button until the screen is located at the desired upper limit. Adjust position by pressing the **▲** (up) or **▼** (down) buttons. **IMPORTANT:** Bottom bar should never be raised into housing and above the top of the tracks. Doing so will damage the screens.

Step 5: Press and hold the **MY** (stop) button and the **▼** (down) buttons simultaneously until the screen begins to move down, then release. If the screen stops when buttons are released, bring the screen back to the desired upper limit using the **▲** (up) button, and repeat Step 5. When the screen continues travelling down when buttons are released, stop the motor when the screen reaches the desired lower limit position by pressing the **MY** (stop) button. Adjust position by pressing the **▲** (up) or **▼** (down) buttons.

Step 6: With the screen in the desired lower limit position, press and hold the **MY** (stop) and **▲** (up) buttons until the motor begins to move up. Lower limit is now set and the motor will stop at the upper limit set in Step 5.

Step 7: Press and hold the **MY** (stop) button until the motor jogs to confirm the motor settings.

Step 8: Using a paper clip, press and hold the **Program** button until the motor jogs. The **Program** button is located on the back of hand held remote or on lower left of wall mount remotes. Limits are now set and screen will operate in a maintained fashion. Double check the limits as a precaution.

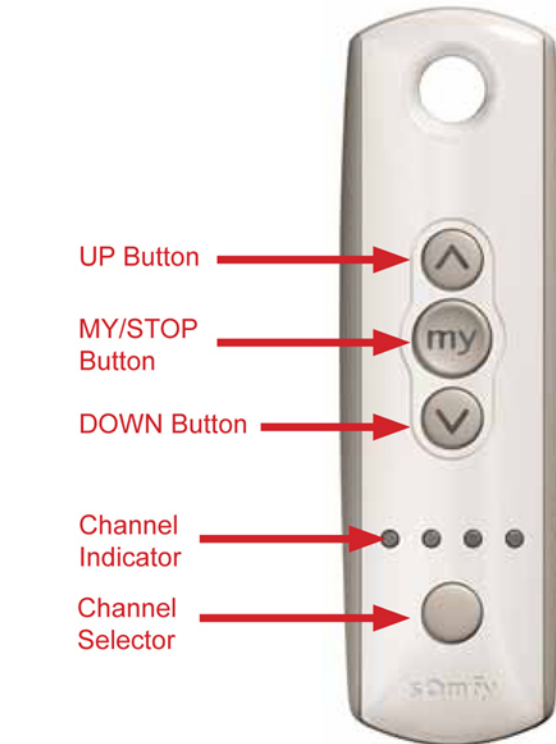
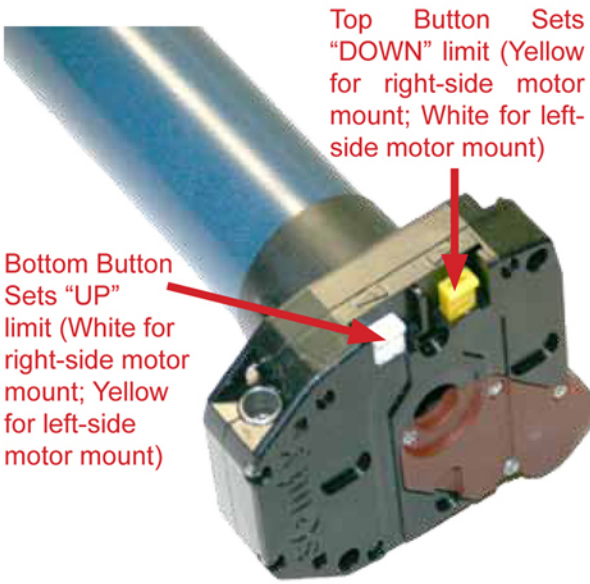
Setting the MY button (favorite location): Move the motor to a desired mid-point location. Hold the **MY** (stop) button until the motor jogs. When the **MY** (stop) button is pressed, the screen will now move to this location.

Adjusting the limits: Move the motor to the limit that needs to be adjusted. Hold the **▲** (up) and **▼** (down) buttons simultaneously until the motor jogs. Use the **▲** (up) button OR **▼** (down) button to adjust to the new limit position. When the desired new limit is achieved, hold the **MY** (stop) button until the motor jogs. The new limit is now set.

For Advanced Programming Instructions, see page 18

Installation

Programming Limits for RTS CMO Motor (remote operated with manual override)



For diagram of wall mount remote, refer to page 39

IMPORTANT: Only one motor can be programmed at a time. Connect only the motor you are programming to the power supply. Make sure all other motors are disconnected from power supply.

IMPORTANT: For right-side mounted motors, the white button is the "UP" limit set and the yellow button is the "DOWN" limit set. For left-side mounted motors, the yellow button is the "UP" limit set and the white button is the "DOWN" limit set.

Step 1: Depress both the white and the yellow buttons. They will automatically lock in the down position.

Step 2: On multiple-channel hand held remotes, select the channel you want to program by pressing the **Channel Selector** button until the correct **Channel Indicator** light is lit. **NOTE:** This step is not applicable on 1-channel hand held remotes. On wall-mount remotes, select and press the **Channel** button you want to program.

Step 3: Initiate programming by pressing the ▲ (up) button and ▼ (down) button simultaneously until the motor jogs.

Step 4: Check the direction of operation. Press and hold the ▼ (down) button and confirm the motor turns in the down rotation. The motor will be in momentary operation mode. If the motor travels in the wrong direction, press and hold the **MY** (stop) button until the motor jogs. Check the direction again by pressing and holding the ▼ button. The direction should now be correct.

Step 5 - Set Upper Limit: Press and hold the ▲ (up) button until the screen is located at the desired upper limit. Adjust position by pressing the ▲ (up) or ▼ (down) buttons. When correct upper limit position is reached, press and release UP limit button (white for right-side motor mount; yellow for left-side motor mount). **IMPORTANT:** Bottom bar should never be raised into housing and above the top of the tracks. Doing so will damage the screen.

Step 6 - Set Lower Limit: Press and hold the ▼ (up) button until the screen is located at the desired lower limit. Adjust position by pressing the ▲ (up) or ▼ (down) buttons. When correct lower limit position is reached, press and release DOWN limit button (yellow for right-side motor mount; white for left-side motor mount).

Step 7: Using a paper clip, press and hold the **Program** button until the motor jogs. The **Program** button is located on the back of hand held remote or on lower left of wall mount remotes. Limits are now set and screen will operate in a maintained fashion. Double check the limits as a precaution.

Setting the MY button (favorite location): Move the motor to a desired mid-point location. Hold the **MY** (stop) button until the motor jogs. When the **MY** (stop) button is pressed, the screen will now move to this location.

Adjusting the limits: Depress the UP or DOWN limit button on the motor, whichever needs adjusting. Use the ▲ (up) button OR ▼ (down) button to adjust to the new limit position. When the desired new limit position is reached, press and release the UP or DOWN limit button on the motor. The new limit is now set.

For Advanced Programming Instructions, see page 18

Installation

Advanced Programming Instructions



Add a remote or channel:

Step 1: Using a paperclip, press the program button on the back of the already programmed remote until the motor jogs.

Step 2: Using a paperclip, press the programming button on the new remote to be added until the motor jogs.



2 SECONDS



10 SECONDS



2 SECONDS



Reset motor to factory defaults:

Step 1: Disconnect motor from power supply for 2 seconds, reconnect the power for 10 seconds, disconnect the power AGAIN for 2 seconds, and then reconnect power. The motor should start to move and then stop on its own. If this does not happen, repeat the disconnect process again until it does.

NOTE: Correct timing of the disconnect from and reconnect to power is crucial. Repeat as necessary.

Step 2: Once the motor stops moving on its own, using a paperclip, press and hold the programming button on the back of the remote and count to ten without letting go. The motor will jog twice to confirm that it has been reset.

NOTE: One "jog" is movement both back and forth. Allow approximately 10 seconds between jogs.

Installation

Obstacle Detection (ABS)



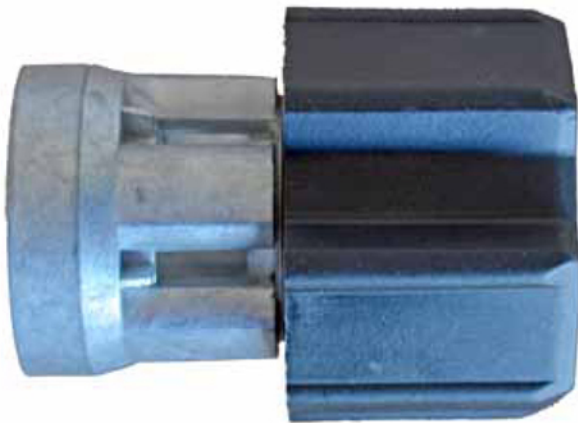
If Titan Screen is lowered with obstacle in the way,



Obstacle will be detected and motor stops running.



Screen can then be raised with no damage to unit.



- All motorized Titan Screen assemblies now feature mechanical obstacle detection; no additional programming required.
- The obstacle detection works by stopping the motor when an obstacle is encountered while lowering the screen. Once the motor has stopped, the user should raise the screen using the "up" button, remove the obstacle and then re-lower the screen using the "down" button.
- During the installation step of testing the motor (P. 33, Step 13), before the curtain is splined to the tube AND before the limits are set, the obstacle detection will ONLY allow the motor to operate freely in the UP direction.
- If you are installing a screen and the limits have previously been set, you will have to manually assist the motor tube rotation to get the motor to its lower limit position before splining the screen.
- Once the installation is complete, the obstacle detection should be tested for each screen by placing a secure object, like a chair, under the screen and running it down. If the obstacle detection is installed in the factory, failure is a rare occurrence since each ABS component is tested prior to assembly. Be prepared to immediately stop the motor in the event of the obstacle detection failing.
- When retrofitting installations with the ABS component, you will need to check that the set screw has not been over-tightened prior to installing it onto the motor assembly. Failure of the obstacle detection is usually the result of an over-tighten set screw. Instructions on how to check that it has not been over-tightened are included with your ABS component.
- When ordering ABS for a retrofit installation, be sure to indicate whether the motor is a right or left side mount.

NOTE: The Obstacle Detection (ABS) component has been preset for either left-side motor mount or right-side motor mount. If you need to reverse the direction of the ABS, contact Titan Screen for detailed instructions.

Installation

Trouble Shooting

Problem	Cause of Problem	Solution
<p>Bottom bar will not lower completely.</p>	<ul style="list-style-type: none"> • Tracks may not be parallel. • Tracks may have a twist. • Tracks may have dent in zipper slot. • Windy conditions. • Debris in tracks. 	<ul style="list-style-type: none"> • Reinstall tracks so they are parallel. • Apply shim behind track to remove twist. • Use screwdriver to remove dent • Wait for wind to stop to continue. • Remove debris from track
<p>Screen doesn't travel down tracks smoothly.</p>	<ul style="list-style-type: none"> • Tracks may not be parallel. • Tracks may have a twist. • Tracks may have dent in zipper slot. • Windy conditions. • Debris in tracks. 	<ul style="list-style-type: none"> • Reinstall tracks so they are parallel. • Apply shim behind track to remove twist. • Use screwdriver to remove dent • Wait for wind to stop to continue. • Remove debris from track
<p>Bottom bar is not parallel with housing.</p>		<ul style="list-style-type: none"> • If the purpose of the screen is to block insects, it is best to leave the screen as-is. If the bottom bar needs to be adjusted to travel parallel with the housing, use a spacer block under the bottom bar on the low side when splining the screen.
<p>Spline is hard to install.</p>	<ul style="list-style-type: none"> • You may be trying to spline the wrong channel on motor tube. 	<ul style="list-style-type: none"> • Respline screen in spline channel, Label on the roller tube that indicates the correct channel.
<p>End cap is hard to insert into track.</p>	<ul style="list-style-type: none"> • Tracks may be installed upside down. • The entry guide may not be inserted into the end cap properly. 	<ul style="list-style-type: none"> • Remove tracks and install properly. • Make sure entry guide is installed as low as possible and completely seated into end cap.
<p>Screen comes out of track.</p>	<ul style="list-style-type: none"> • Zipper is not installed into zipper slot. • Upper limit is set too high. 	<ul style="list-style-type: none"> • Make sure zipper is installed into zipper slot. • Adjust upper limit. Make sure 1/2" of zipper is still in track when the screen is in the upper position.