



Extreme Roll Up Series



# Elite Model Installation Guide



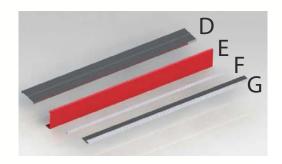


R Airlift Doors, Inc.
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www.airliftdoors.com

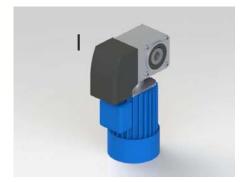
## **XRS Parts List**













- B: Left Hand Track
- C: Right Hand Track
- D: Aluminum Cover w/Support Bar
- E: Vinyl Cover w/Support Bar
- F: Single Support Bar
- G: Double Support Bar w/Seal
- H: Bearings
- I: XRS Opener
- J: Opener Mounting Brackets (2)
- K: Shaft Collar
- L: PVC Shaft Spacer

**Not Pictured** 

M: XRS Fastener Kit

**Optional Accessories** 

N: Motor Cover









## \*\*\*\*CAUTION\*\*\*\*

Please read through these instructions before beginning installation of the door. Only trained professional door installers should attempt installation of the XRS series doors from Airlift Doors, Inc.

Some steps in this process require lifting up to 200 lbs and we strongly recommend using a mechanical lift or 3 people with proper lifting and safety equipment.

Always inspect your tools and equipment such as ladders and be sure all are in proper working operation before beginning the installation.

For all XRS Plus models, both Premium and Elite, 120v power will need to be run to the control box. Furthermore, wiring capable of supporting 3phase/230v power will need to be run from the control box to the door opener.

Only a licensed electrician should make the necessary connections to the controls & motor and you should never attempt to service the motor without first disconnecting the power supply to the motor. Performing service on this motor without disconnecting the power supply may result in serious injury or death.

All components of this door have been engineered according to measurements provided to Airlift Doors, Inc. Do not attempt to modify any components or use any substitute parts without first consulting a factory representative of Airlift Doors, Inc. Failure to do so may alter the operation of the door and may create dangerous scenarios upon installation or normal operation that could result in personal injury or death. Any modifications to the product without factory approval will void all factory warranties.



Please read all instructions prior to beginning installation. Use caution, improper installation of door can cause severe injury or death. Door to be installed by qualified personnel utilizing proper safety equipment.

#### STEP 1 - MEASURE DOOR OPENING AND FLOOR TO CEILING HEIGHT

The door tracks have been pre-cut at the factory to match ceiling measurements given to us at the time of the order. DO NOT CUT TRACKS WITHOUT CONSULTING THE FACTORY FIRST!! IF TRACKS WILL NOT FIT OR YOU FEEL THEY NEED TO BE CUT, PLEASE CALL TECH SUPPORT AT 1-888-368-4403 BEFORE PROCEEDING.

#### STEP 2 - UNPACK HARDWARE

Unpack door and all hardware. Confirm all parts listed in the parts list have been included.

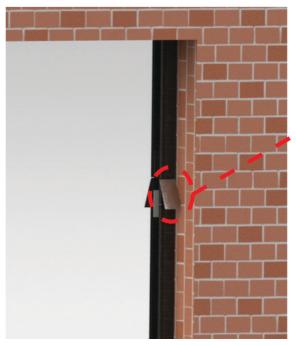
#### STEP 3 - DETERMINE LH & RH TRACKS

- 3-1: The left hand track will have the bearing plate at the top and the brush seal pointed to the right towards the center of the door opening.
- 3-2: The right hand track will have the bearing plate at the top and the brush seal pointed to the left towards the center of the door opening.
- 3-3: For each track, the fastening portion of the track with the pre-drilled holes will be pointed away from the door opening.

#### STEP 4 - MOUNT LEFT HAND TRACK

4-1: Place track against the wall so the black fiberglass reset bracket is against the inside of the door jamb and the brush seal is pointed towards the center of the opening. (FIG. 4A & 4B)





Black fiberglass reset bracket flush against inside of door jamb.

FIG. 4A FIG. 4B

#### STEP 4 - MOUNT LEFT HAND TRACK cont...

4-2: Level the track and mount to the door jamb at the midpoint of the track *using only 1 anchor at this time.*The remaining anchors will be used in a later step.

#### STEP 5 - MOUNT RIGHT HAND TRACK

5-1: Repeat step 4 for the right hand track assembly.

#### STEP 6 - MOUNT TOP COVER

- 6-1: Using two people, lift the aluminum top cover assembly onto the top of the bearing plates. Make sure the square support bar is on the bottom of the cover and is towards the wall. (FIG. 6A)
- 6-2: Using two 5/16" x 1" bolts, attach the cover support bar to each bearing plate. Use the inner most pre-drilled hole at the top of the bearing plates. (FIG. 6B)





FIG. 6A

FIG. 6B

#### STEP 7 - MOUNT VINYL COVER SUPPORT BAR

7-1: Unroll vinyl cover from aluminum support bar as shown in FIG. 7A below.



FIG. 7A

#### STEP 7 - MOUNT VINYL COVER SUPPORT BAR cont...

7-2: Using two people, lift the support bar with the cover attached and fasten it to each bearing plate using two 5/16" x 1" bolts. The bar will mount to the outer most mounting hole at the top of each plate.

DO NOT TIGHTEN BOLTS AT THIS POINT. Leave them slightly loose until you complete step 15.

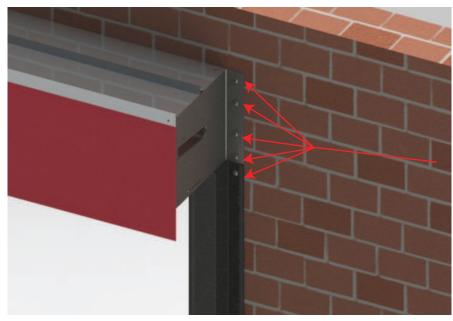
(FIG. 7B)



FIG. 7B

#### STEP 8 - COMPLETE TRACK MOUNTING

- 8-1: Check that both tracks are level and square with the mounting surface.
- 8-2: Complete the mounting of the track by fastening the track to the wall through the remaining pre-drilled holes in both the track and the bearing plates. (FIG. 8A)



Fasten tracks and bearing plates to wall through all remaining pre-drilled holes.

#### STEP 9 - INSTALL DOOR ASSEMBLY



DO NOT REMOVE THE ROPES FROM THE DOOR ASSEMBLY YET. THE DOOR NEEDS TO REMAIN ROLLED UP UNTIL A LATER STEP!!

\*\*IMPORTANT\*\* USE EXTREME CAUTION WHEN LIFTING THE ROLLED DOOR ASSEMBLY INTO PLACE. DOOR WEIGHT IS APPROXIMATELY 160-200 LBS. LIFTING THE DOOR IMPROPERLY AND/OR USING LESS THAN THE RECOMMENDED NUMBER OF PEOPLE CAN RESULT IN SERIOUS INJURY OR DEATH.

- 9-1: Lift vinyl cover on top of the door assembly so it is not in the way. (NOTE, the vinyl cover has been removed from the figures below for clarity.)
- 9-2: Slide one 1" PVC shaft spacer on each end of the shaft. (FIG. 9A)
- 9-2: Remove rolled door assembly from box. Using 3 people or a mechanical lift, lift the door assembly into place and slide the exposed ends of the shaft into the slots at the front of each bearing plate.
- 9-3: \*\*IMPORTANT\*\* Be sure to orient the door so the yellow bottom edge is closest to the wall. The door panels will unroll on the wall side of the tube.

#### SEE FIGURES 9A & 9B BELOW

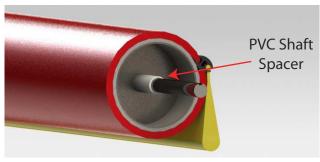


FIG. 9A

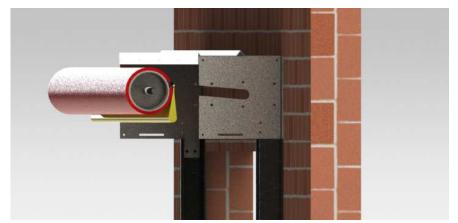


FIG. 9B

9-4: Lift the rolled door assembly into place by sliding the ends of the shaft into the slots at the front of each bearing plate.
(FIG. 9C)



FIG. 9C

#### STEP 10 - INSTALL BEARINGS

- 10-1: Slide bearing onto shaft. Llft the shaft slightly to align the the bearing mounting holes with the pre-installed 3/8" bolts. Slide the bearing onto the mounting bolts until it is against the retaining nut. (FIG. 10A
- 10-2: Use (2) 3/8" lock washers and (2) 3/8" nuts to fasten the bearing to the bearing plate. (FIG. 10B)



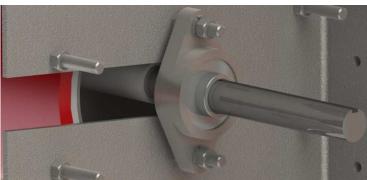


FIG. 10A FIG. 10B

10-3: Repeat steps 10-1 and 10-2 for the opposite side of the door.

#### STEP 11 - SET DOOR OPENING HEIGHT

- 11-1: Have one person place a vice grip on the door shaft on the side opposite to where the opener will be installed. This person must hold the vice grip firmly to prevent the door from unrolling.
- 11-2: While the vice grip is being held, have another person until the ropes from the door assembly.
- 11-3: \*\*IMPORTANT\*\* Guide the edges of the door into each track and lower the door by hand until the bottom edge is at the desired opening height. For instance, if you have a 10' high opening, but only want the door to open to 8', you must lower it to 8' before proceeding. (FIG's. 11A & 11B)
- 11-4: Once the door at the desired opening height, place the vice grip on the shaft and against the wall so the door remains in that position and doesn't unroll. Be sure to place the vice grip on the side of the door that the opener WILL NOT be mounted on. (FIG. 11C)



FIG. 11A (Door set to open to 10')



FIG. 11B (Door set to open to 8')



FIG. 11C

#### STEP 12 - MOUNT BOTTOM SUPPORT BAR

12-1: Install the outer, bottom support bar to each bearing plate using (2) 5/16" x 1" bolts. (FIG. 12A)

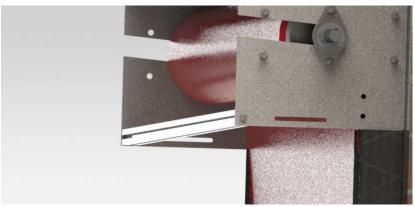


FIG. 12A

#### STEP 13 - INSTALL COVER BOLTS

- 13-1: Lay the double wide support bar flat on the ground with the black rubber seal on top.
- 13-2: Slide (5) 1/4"X1/2" hex head bolts into the slot next to the rubber seal as shown below. (FIG. 13A)
- 13-3: Space the bolts evenly along the length of the support bar.

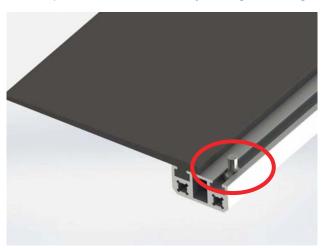
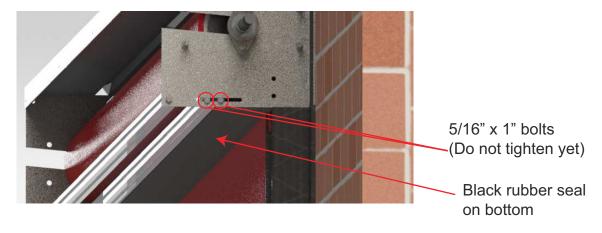


FIG. 13A

#### STEP 14 - MOUNT DOUBLE SUPPORT BAR

- 14-1: Flip the double support bar over so the rubber seal is on the bottom.
- 14-2: Mount the double support bar to the slot in the bottom of each bearing plate using (4) 5/16" x 1" bolts.
- 14-2: Do not tighten these bolts yet. Leave them loose so the bar can slide in the slot.



#### STEP 15 - COMPLETE VINYL COVER INSTALL

- 15-1: Pull the front vinyl cover down and wrap it around the bottom support bars. (FIG. 15A)
- 15-2: Adjust the location of the 1/4" bolts in the bottom slot of the double support bar so they are aligned with the 5 grommets in the bottom edge of the vinyl cover.
- 15-3: Using (5) 1/4" x 1/2" hexhead bolts, fasten the vinyl cover to the double support bar. \*\*NOTE: Be sure to stretch the vinyl cover as you go to prevent a wrinkled appearance. (FIG. 15B)

15-4: Once the vinyl cover is fastened to the double support bar, slide the black rubber seal in towards the door until the rubber seal just touches the vinyl. (Fig. 15C) 15-5: While holding the rubber seal in place tighten the (4) 5/16"x1" bolts that fasten the bar to the bearing plate. Next rotate the upper support bar until the vinyl cover is tight. Tighten the (2) 5/16" bolts holding the upper support bar. (Fig. 15D)







FIG. 15B

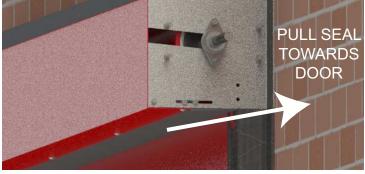


FIG. 15C



FIG. 15D

#### STEP 16 - INSTALL POLY INTO BEARING PLATE SLOTS

16-1: Slide one of the 2" x 5" pieces of polycarbonate into the slot in each bearing plate as shown. (FIG's. 16A & 16B)

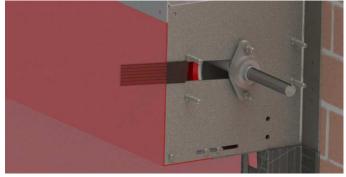


FIG. 16A

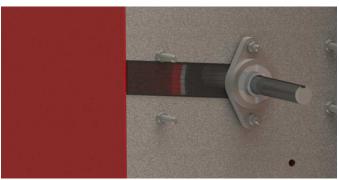


FIG. 16B

#### STEP 17 - OPENER INSTALLATION

- 17-1: Unpack the opener and lay it flat on the ground.
- 17-2: Determine which side of the opener to attach the mounting brackets. \*\*NOTE\*\* When the opener is mounted, the black electronics cover will be facing away from the wall. (FIG's. 17A & 17B)







FIG. 17B (Left Hand Motor Mount

- 17-3: Attach the opener brackets to the correct side of the opener using (4) M8 x 1/2" bolts.

  \*\*NOTE\*\* The opener brackets mount to the opener through the smaller round holes, NOT the larger slotted holes.
- 17-4: Slide the opener onto the end of the shaft making sure the brackets are towards the bearing plate and the black opener cover is facing away from the wall. (FIG. 17C)

  \*\*OPTIONAL\*\* Apply Anti-Seize to the door shaft before installing the motor. (Not supplied)

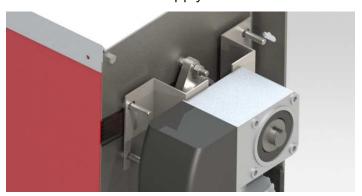


FIG. 17C

17-5: Align the slotted holes in the mounting brackets with the bolts on the bearing plate. Slide the opener onto the bolts. Fasten the mounting brackets to the bearing plate using 3/8" lock washers and 3/8" nuts. (FIG. 17D)



FIG. 17D

#### STEP 17 - OPENER INSTALLATION continued......

- 17-6: Rotate the door shaft with a vice grip until the keyway of the shaft is in line with the key slot in the opener. (FIG. 17E)
- 17-7: Insert the opener key into the keyway and key slot and push it in until approximately 1/4" is sticking out. (FIG's. 17F & 17G)





FIG. 17E FIG. 17F



FIG. 17G

17-8: Slide the 1" shaft collar onto the end of the shaft. Push it against the key and tighten the collar set screw. (FIG. 17H)



FIG. 17H

#### STEP 17 - OPENER INSTALLATION continued......

- 17-9: Mount and wire your door control according to the wiring insert included in your installation packet.
- 17-10: Proceed to step 18 when wiring is complete.

#### STEP 18 - INSTALL PHOTO EYES

- 18-1: Using the aluminum mounting brackets provided, first mount each photo eye to a bracket.
- 18-2: Next, mount the brackets to the door track approximately 2 ft above the floor as shown below. (FIG. 18A or 18B)



FIG. 18A (Banner Eyes)



FIG. 18B (Telco Eyes)

18-3: Wire the photo eyes to the controls as specified in the wiring diagram included with this guide.

#### STEP 19 - OPENER ADJUSTMENTS

The XRS Roll Up Door Opener allows the user to adjust the overall speed of the opener by using the arrow buttons on the VFD inside the control box. PLEASE NOTE that adjustments to the opener speed will require adjustments to the open and close limits on the opener. This is due to the fact that as the opener runs at a faster speed, the momentum of the door and the time it takes to slow the door down both increase. In other words, the faster the door moves, the more it will "coast" to a stop. Please use the following step by step instructions to properly set the opener limits.

- \*\*CAUTION\*\* During this entire procedure you must be ready to press the STOP button on the control box to prevent the door from travelling too far in either the open or close direction. Failure to do so may result in damage to the door and may require replacement or disassembly in order to fix the problem.
  - The opener limits are set by adjusting two of the four plastic cams at the top of the opener.
    - The green cam closest to the opener sets the open limit.
    - The white cam, 2nd closest to the opener sets the close limit.

The opener limits were preset at the factory to allow the door to travel within 1-2 ft of the floor at 20% opener speed. Follow these steps to set the door to open and close to the desired position.

#### STEP 19 - OPENER ADJUSTMENTS continued.......

19-1: The first step is to adjust the opener run at the desired speed. This is done by using the UP/DOWN arrows on the face of the VFD inside the control box. (FIG. 19A)



Fig. 19A - VFD

UP arrow increases opener speed

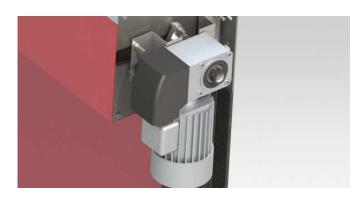
Digital readout shows current opener speed as a percentage of the maximum speed. The range is from 0% to 100%. A setting of 100% is equal to approximately 30" per second of door travel.

DOWN arrow decreases opener speed

\*\*NOTE\*\* The remaining buttons on the VFD are NOT USED.

OPEN AND CLOSE SPEED ARE NOT INDIVIDUALLY ADJUSTABLE

- 19-2: Adjust the VFD to a desired speed using the UP/DOWN arrows and press CLOSE on the control box. \*\*REMEMBER TO BE READY TO PRESS STOP\*\*
- 19-3: Adjust the door speed as needed.
- 19-4: Once the desired opener speed has been set, press the open button and stop the door when it is approximately 12" below the desired opening height.
- \*\*The opener limits are set by adjusting the Open and Close limit cams inside the gear head portion of the motor. Before proceeding, remove the black plastic cover from the opener so you have access to the Limit Assembly.





#### STEP 19 - OPENER ADJUSTMENTS continued.......

- 19-5: Press the open button and then stop the door approximately 12" below the desired opening height.
- 19-6: Loosen the set screw on the Open Limit Cam (Innermost Green Cam) and rotate it clockwise until the limit switch is pressed in from below. Retighten the set screw. (FIG. 19B)

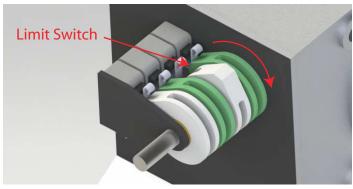


Fig. 19B

- 19-7: Now press the close button and stop the door when it is approximately 12" above the floor.
- 19-8: Loosen the set screw on the Close Limit Cam (Inner White Cam) and rotate it counterclockwise until the limit switch is pressed in from above. Retighten the set screw. (FIG. 19C)

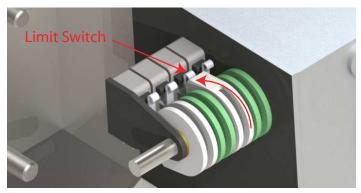


Fig. 19C

19-9: Depending on the speed you have chosen for the opener, you may have to fine tune adjust the limit cams. This is due to the coasting nature of the opener.

Run the door open and closed and adjust the fine tuning screw on the Open/Close limit cams until the door stops at the desired open and close positions.

#### \*\*IMPORTANT\*\*

Once the opener limits have been set, any adjustment to the opener speed will require that you adjust the opener limits as well.

#### STEP 20 - MOTOR COVER INSTALL

- 20-1: Thread a 3/8" nut on the two outer mounting bolts located on the motor side bearing plate. (FIG. 20A)
- 20-2: Remove the front panel of the motor cover.
- 20-3: Lift the motor cover up and around the motor and align the slots in the mounting bracket with the mounting bolts that you threaded a nut onto. Push the motor cover onto the bolts until it is snug against the wall. (FIG. 20B)

#### STEP 20 - MOTOR COVER INSTALL (OPTIONAL)

- 20-4: Level the motor cover and fasten the mounting bracket to the mounting bolts using a large 1-1/2" washer, a 3/8" lock washer, and a 3/8" nut.
- 20-5: Drill a 1/4" hole through the side of the door track using the hole in the 90 deg mounting bracket as a guide. Fasten the bottom 90 deg bracket to the track using a 1/4" bolt and nut. (FIG. 20D)
- 20-5: Re-install the front panel on the motor cover.





FIG. 20A





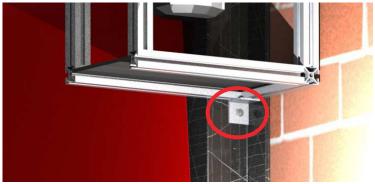


FIG. 20C FIG. 20D

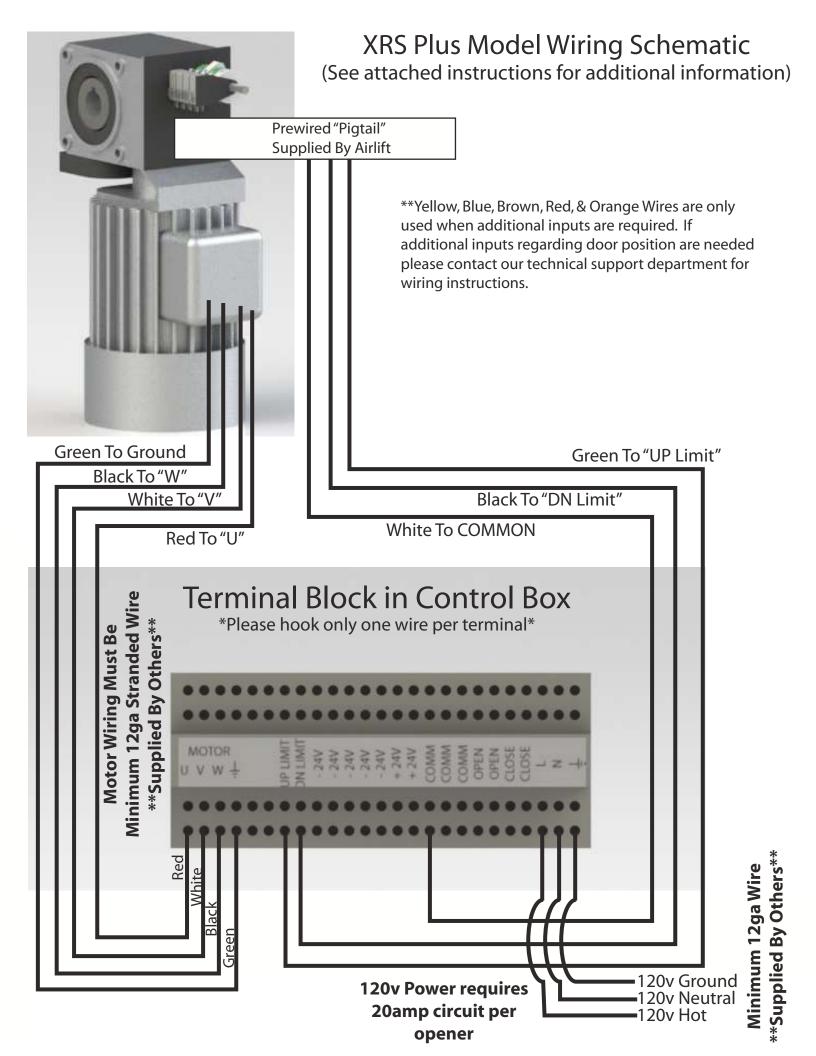


## **XRS Plus Model Wiring Instructions**

- 1. Each control must be supplied by its own 20amp / 120v power. Wire this power directly to the 120v terminals at the bottom right hand of the terminal block.
- 2. 3~240v wiring from control box to motor must be minimum 12AWG / Stranded wire. This wire is not included with the opener system and must be supplied by others.
- 3. Low voltage wiring is pre-wired to control box but may be extended if necessary. See wiring schematic for wire placements.
- 4. All high voltage input and output wiring MUST BE INSTALLED BY A LICENSED ELECTRICIAN.
- 5. Photo eye interrupt wiring. \*\*OPTIONAL\*\*
  - Wiring the photo eyes in this manner will disable the photo eyes when the door is fully closed. This does not affect the normal operation of the photo eyes. If the door is in transit, the photo eyes will still reverse the door. This is simply to prevent a closed door from being opened by a blocked photo eye.
  - The wiring instructions for this are shown on the wiring schematic (Orange and Red wires from the opener limit assembly).
  - If this feature is used, the outer Green Limit Cam (3rd from wall) must be matched to the inner White Limit Cam (2nd from wall) so both cams are pushing in their respective switches when the door is closed.
  - If you need the photo eyes to open the door even if the door is closed, you can bypass this feature by wiring the white wire from the receiver photo eye directly to the open terminal on the terminal block.

#### 6. Accessory Contacts

- A separate set of N/O & N/C contacts are available to provide a door position indication to an outside source such as a car wash controller. If the car wash controller needs to know the position of the door, use the following wires:
  - Blue (Common), Brown (N/O), Yellow (N/C)
- If this feature is used, the outer White Limit Cam (4th from wall) will need to be matched to either the inner Green Limit Cam (To signal door is open) or the inner White Limit Cam (To signal door is closed).



## **Banner Infrared Safety Eyes**

