

# RollSeal RS500 WIC Door User Manual



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## 1. Limited Warranty

All products are warranted to be free from defects in material and workmanship for a period of one (1) year or 100,000 cycles, whichever occurs first, from the date of purchase if installed and used in strict accordance with the installation instructions. Liability is limited to the sale price of any products proved to be defective or, at manufacturers' option, to the replacement of such products upon their return. No products are to be returned to the manufacturer, until there is an inspection and/or a return-goods authorization (RGA) number is issued.

All complaints should be directed first to the authorized distributor who sold the product. If satisfaction is not obtained or the name of the distributor is not known, write the manufacturer that appears below, directed to the attention of Customer Service Manager.

This limited warranty is expressly in lieu of any and all representations and warranties expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. The remedy set forth in this limited warranty shall be the exclusive remedy available to any person. No person has authority to bind the manufacturer to any representation or warranty other than this limited warranty. The manufacturer shall not be liable for any consequential damages resulting from the use of our products or caused by any defect, failure or malfunction of our products. (Some areas do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)

This warranty gives you specific legal rights and you may also have other rights that vary from area to area.

Warrantor: RollSeal 1733 County Road 68 Bremen, Al 35033 256-287-7000



## 2. RollSeal RS500 WIC Door Overview

The RollSeal RS500 WIC Door is specifically designed for walk in cooler applications. This RollSeal Door has an integrated controller, motor, and switch that reduces the footprint and gives the door a clean and sleek appearance. This door features a patented egress track system that is effortless for the user to exit the cooler in case of an emergency.

<b>RS-500 WIC Door Specifications</b>					
Techr	nical Specifications				
Power Supply	115 VAC 50/60 Hz Single Phase or 230 VAC 50/60 Hz Single Phase				
Temperature Range	32°F - 115°F (0°C - 46°C)				
Input Power	10 Amps @ 115 VAC Single Phase or 6 Amps @ 230 VAC Single Phase				
Operational Power	3 Amps @ 115 VAC Single Phase or 1.5 Amps @ 230 VAC Single Phase				
Standby Power	0.2 Amps @ 115 VAC Single Phase or 0.1 Amps @ 230 VAC Single Phase				
Outputs	230 VAC Three Phase 1/6 HP				
Speed	Up To 27"/Sec.				
Horsepower	1/6 hp				
	Features				
Soft Start / Soft Stop	Yes				
Programmable Control	Yes				
Auto Closure Feature	Yes				
Manual Override	Yes (3/4" Socket)				
Safety Beams	Monitored (Per UL 325)				
Tension Pipes	Foam Covers Fiberglass				
Emergency Egress	Egress Track System (ETS)				
	Certifications				
EISA Exempt	Yes				
NSF (National Sanitation Foundation)	Yes				
UL	UL325				

## 3. Ratings, Specifications, and Certifications

Table 1: Technical S	Specifications
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# 4. RS500 WIC Door Components



Figure 1: Door Components



Drive Board Figure 2: Controller Components



## 5. RS500 WIC Door Dimensions

Figure 3: RS500 WIC Dimensions

Door	Α		D		F	
Width	Inches	cm	Inches	cm	Inches	cm
3'-0''	36	91	52.25	133	64	163
3'-6''	42	107	58.25	148	70	178
4'-0''	48	122	64.25	163	76	193
4'-6''	54	137	70.25	178	82	208
5'-0''	60	152	76.25	194	88	224
5'-6''	66	168	82.25	209	94	239
6'-0''	72	183	88.25	224	100	254

WIDTH Related Dimensions

Table 2: Door Width Dimensions

#### **HEIGHT Related Dimensions**

Door	В		С		Ε	
Height	Inches	cm	Inches	cm	Inches	cm
7'-0''	84	213	100	254	110	279
7'-6''	90	229	106	269	116	295
8'-0''	96	244	112	284	122	310
8'-6''	102	259	118	300	128	325
9'-0''	108	274	124	315	134	340

Table 3: Door Height Dimensions

## 6. Installation of RS500 WIC Doors

This door was designed and manufactured for easy assembly and installation. Follow the below instructions to install and set up your RollSeal RS500 WIC Door.

#### 6.1. Adjusting the Door Framing or Clear Opening

Referring to Table 2 and Table 3, determine the particular system that you are installing. Read the values of the height and width of the clear opening for the door size you are installing. This gives the required dimensions of the clear opening. If necessary, adjust the dimensions of the mounting posts or framing members to the height and width of your RS500 WIC series door system as shown. Refer to Section 6.4 for details of attaching door to framing members. Framing material must provide suitable support for attachment of screws. Make sure that mounting posts or framing members are positioned so that the screw holes will align with the mounting posts or framing members.

**NOTE:** It is optimal that there be 1' (30.4 cm) clearance above the Head Unit for future panel maintenance or replacement. Allow 6" (15.2 cm) clearance on the sides to allow for track cladding access.

#### 6.2. Attachment Points of the Door

When sizing the clear opening for attachment of the door, pay close attention to the following guidelines. Door tracks and back plate have pre-drilled holes that serve as mounting points of door.

1. Make sure the door assembly is plumb & square.

2. The back plate has mounting holes in it for ease of installation. Make sure these fasteners are secured into structural members if possible.

3. The vertical track members have pre-drilled holes for installation. With the track cladding cover removed, the mounting holes should be aligned with the structural members if possible.

4. When the door is raised in front of clear opening as shown in Figure 9, ensure that all mounting holes are aligned and flush with the attachment surface.

#### 6.3. Assembly of Tracks to the Head Unit

It is recommended that the tracks be assembled to the head unit in close proximity to the clear opening that the door is being installed on. Install the tracks to the head as follows:

- 1. Remove the cover from the head unit by unlatching the two latches at the bottom of the cover and rotating the cover upward. One of the latches will have a phillips head screw in the bottom of the latch. This screw will be required to be replaced when the door is fully installed and the cover is closed. Refer to Figure 4 for screw placement in the latch. With the cover rotated slightly, push up and the two hinge plates will be lifted out of the alignment slots at the top of the head unit. Once the cover is removed, place it to the side until the door is installed.
- 2. Turn the head unit over and lay it front down on a piece of cardboard to prevent damage to the head unit. This will make it easier to stand the door up against the wall after track installation.
- 3. Remove the track cladding covers by removing three screws on the left and right side of each cover. With the six screws removed, pull the cladding cover upward away from the track frame to allow the tracks to be mounted to the head unit.
- 4. With the cladding removed and the tracks facing downward, align the upper track holes with the threaded holes on either end of the head unit as shown in Figure 5.
- 5. Using the supplied hardware that has been hand tightened in the fastener holes on the head unit, fasten the tracks to the head unit be removing the three  $5/16 \times 1^{\circ}$  bolts and aligning the tracks with these holes. Once the tracks are aligned, replace the bolts and tighten.



Figure 5: Assembly Tracks to Head

#### 6.4. Fastening Door Assembly to Clear Opening

Now that the tracks have been secured to the head unit, the door is ready to be installed to the clear opening. In order to do this, follow the below steps:

- 1. To begin this installation process, the door should be lying on the ground facing downward with the bottom of the tracks near the bottom of the clear opening.
- 2. Slowly lift the head unit and walk the door up to the upright position as shown in Figure 6.
- 3. Slide the bottom of the tracks backwards to the point that the back of the tracks make contact with the clear opening mounting structure.
- 4. Before securing the door in position, ensure that the door assembly is plumb and square.
- 5. Ensure that all the track and back plate mounting holes are aligned with the structural support members if possible.
- 6. Once step 4 and step 5 have been performed, the door can be secured in position with the use of the provided hardware as shown in Figure 9.
- 7. It is imperative that the tracks be secured to the floor properly so that the Infrared Safety Beams are aligned with each other as shown in Figure 7. Once the tracks are square, at least one tapcon should be used to secure the bottom of the tracks to the floor as shown in Figure 8. If the Safety Beams are not aligned, the "PS" LED will be on when looking at the smart switch.
- 8. The head unit cover can be installed by inserting the two downward facing tabs on the back of the cover in the two slots located at the top of the frame of the door. Leave the cover open and propped on the stand while proceeding to Section 6.5.



Figure 6: Standing RS500 WIC Door



Figure 7: Infrared Safety Sensor Alignment



Figure 8: Tapcon Installation



Figure 9: RS500 WIC Fastener Locations

#### 6.5. Infrared Safety Sensor Connection

With the door installed and the cover open, the Infrared Sensors and Integrated Switch can be connected and the Track Cladding Covers can be installed. Refer to the below steps to install the track covers.

- 1. Beginning with the left track section, there will be a three wire harness gathered in the head unit between the motor and the controller enclosure.
- 2. Navigate this harness under the motor and through the rubber grommet on the left end plate.
- 3. Proceed to run the harness down the left track through the large holes in the track braces and plug the connector at the end of the harness into the infrared safety sensor connector. If there is any excess wire length, neatly bundle it and secure it to the inside track frame.
- 4. At this time, the left track cladding cover can be installed with the hardware removed in Section 6.3. To install the track cladding cover, feed the cladding cover up at an angle from the face of the door pushing it up against the rubber seal at the head unit, in toward the track frame and then sliding it toward the track frame at the floor.
- 5. There will be a harness gathered to the right side of the controller enclosure in the head unit. Navigate this harness with the 20 pin connector on the end through the rubber grommet at the bottom of the right endplate.
- 6. Bring the harness down the right track through the large holes in the track braces.
- 7. Position the right track cladding cover next to the track frame.

- 8. As explained in Section 8.1, plug the 20 pin connector into the back of the switch card to power the smart switch.
- 9. There will be a harness bound together next to the Infrared Safety Sensor in the right track. Unroll this harness and run it up the right track through the large holes in the track braces to the smart switch.
- 10. Plug the harness into the 4 pin connection on back of the smart switch. At this point, the Infrared Safety Beams will be connected. Refer to Figure 10 for more details as to the location of these connectors.
- 11. Once the infrared safety beams and integrated switch are connected, neatly bundle any excess wire and secure it to the inside track frame with a drip loop.
- 12. Before installing the right track cladding cover, the interior switch needs to be mounted and connected. Refer to Section 8.2 for installation instructions on installing the interior switch.
- 13. At this time the right track cladding cover can be installed in the same manner as the left side was installed.



Figure 10: Front Switch & Infrared Safety Sensor Connection

#### 6.6. Egress Track System (ETS)

After the completion of Section 6.5, the egress tracks can be installed.

- 1. With the head unit cover open, take one egress track at a time and position it with the tab facing toward the ground. The Egress Tracks are not interchangeable for the left and the right. In order to determine which side they should be installed, the magnets should be facing the rear of the door and the mounting tabs should be facing the ground. Refer to Figure 29
- 2. Position the tabs horizontally in the slots.
- 3. Pull the egress track down so that the tabs are engaged in the slots.
- 4. Refer to Figure 11 and Section 18 for more details as to how to install these egress tracks.
- 5. Once the folding egress tracks are installed, you may proceed to Section 7.



Correctly installed track will resemble the track shown to the left in this figure. It will have the ability to rotate freely.

Figure 11: Install of Egress Tracks (ETS)

## 7. Connecting Electrical Power to RS500 WIC Door

The RS500 WIC Door is designed to accept either 115v or 230v power supply.

The electrical wire should be a minimum 3 wire, 16AWG or larger. There is a pre-determined location for line power wire to be brought into the unit by an electrician. There is a CPC connector on the right track midway of the head unit. There will be a bracket attached to the CPC connector that will be secured to the right track after the door is secured to the wall as shown in Figure 13. The standard harness that is sent with this door is a 3-wire pigtail that has the mate to the CPC located on the right track. There is also an optional disconnect that is shown in Section 11. This optional disconnect will hook up to the door in the same manner as the 3-wire pigtail. This location allows the head unit cover to still move freely after line power is hooked up. Refer to Figure 14.

Both the 3-wire pigtail harness and the optional disconnect require that the line power be connected in a junction box (not supplied).

Look to the bottom right side of the open controller door and make sure that the voltage selection switch is positioned properly for the power voltage being supplied as shown in Figure 12.



Voltage Selection Switch

Figure 12: Voltage Selection Switch

#### Only activate line power if the voltage selection switch is configured to match the line power.



Figure 13: Line Power CPC Bracket



Figure 14: Line Power CPC (Head unit cover Closed)

## 8. Installation and Connection of Prewired Switch

#### 8.1. Connection of the Front Prewired Switch

The front facing RollSeal Smart Switch is built into the front track. There is a harness with a twenty pin connector proceeding out from the right hand side of the controller enclosure. That harness will run down the right track and plug into the back of the switch card. This will power the switch as well as allow the Indicator LEDs to function as designed. Refer to Figure 10 for more information.

#### 8.2. Installation and Connection of the Interior Prewired Switch

The rear facing RollSeal Smart Switch is mounted in an enclosure due to its mounting location inside of the conditioned space. This assembly comes wired and pre-assembled. The front and rear switches will be in line with each other on either side of the wall.

- 1. Drill a 1 <sup>3</sup>/<sub>4</sub> inch through hole using the 1 <sup>3</sup>/<sub>4</sub> inch hole in the back of the right track four feet up from the floor as a guide as shown in Figure 10.
- 2. Remove the lid from the interior switch assembly enclosure. Be careful not to lose the four screws.
- 3. The base of the box has a 1 <sup>3</sup>/<sub>4</sub> inch hole predrilled to mount over the hole in the wall. Make sure the box is centered over the hole and level before attaching it to the wall with 4 screws in the predrilled holes of the top and bottom flanges of the enclosure. Refer to Figure 15 for installation of the interior switch housing.



Figure 15: Installing the Interior Switch Housing

- 4. There is a short harness that has two connectors on the end that will link the two switches. Route this harness through the 1 <sup>3</sup>/<sub>4</sub> inch hole and plug the ends into the corresponding headers on the front switch.
- 5. This will render the switches operational. It is imperative that the included foam plugs are securely placed around the harness and into the through hole before the switch enclosure lid is fastened back in place with the 4 screws from earlier. If these foam plugs are not installed correctly, condensation can form in the interior switch enclosure.
- 6. Refer to Figure 16 for more information on installing and connecting the interior switch kit.



Figure 16: Installation of Interior Switch Kit

## 9. Field Installed Labels

There are two labels that are required to be field installed after the door has been secured to the clear opening. The label that has to be applied is the Moving Door Label shown in Figure 17. There are specific locations that this label must be installed. There must be a label on the front of the door three inches to the right of the switch as shown in Figure 10 and one on the inside of the box three inches above the rear switch as shown in Figure 16.



Figure 17: Moving Door Warning Label

## 10. RollSeal Smart Switch Indicator LEDs

#### **10.1. Indicator LEDs**

The Indicator LEDs have multiple functions that are used to help troubleshoot door issues, indicate the status of the door operation, and warn for door movement.

1. LED on solid indicates that the sensor is in error or a problem has occurred. It will light up momentarily when the sensor is tripped but will go off when the condition is satisfied.

2. All eight LEDs fading together indicates door is in a timed open cycle and will eventually begin the close cycle.

3. All eight LEDs flashing together indicates the door is moving or about to move.

#### 10.2. Open and Close Switches/LEDs

1. Press and release to initiate an open or close cycle. In the event that the door will not operate due to an issue, press and hold to override with constant pressure.

2. If the green LEDs located behind the open or close switch are illuminated, it indicates that only the illuminated function is allowed. If the LEDs located behind the open or close switch are not illuminated, that function is not allowed in the current state of the door. In the case of an issue, it may be necessary to override on the direction needed by pressing and holding the non-functioning switch with constant pressure.

#### **10.3. Smart Power Functions: (Future Functions)**

- 1. AC Line Power is present when illuminated.
- 2. DC Battery Power is present when illuminated.
  - a. Battery is fully charged when the LED is solid.
  - b. Battery is charging when the LED is flashing.

#### 3. Power/Test Button

a. A solid LED indicates that the door is operational and ready for action.

- b. Press the button to test the battery and the UPS function (if UPS is equipped).
- c. Releasing the button will force a controller soft reset.
- d. If the LED is fading, the door is in sleep mode to prolong the life of the system.
- e. If LED is flashing, the door has shut down to conserve battery power (if UPS is equipped).

#### 4. Battery Condition:

- a. Battery is not present if on solid.
- b. Battery is present but too low to operate door if flashing.
- 5. UPS (Battery Backup):
  - a. Future Feature that is not standard on all RollSeal Models

b. UPS is engaged if the LED is illuminated. This means that the door is functioning only on battery backup.

c. UPS is not engaged if the LED is not illuminated. This means that the door is being powered off of AC Line Power.



Figure 18: RollSeal Smart Switch

Error Name	Switch LED Error Code	Description
Primary Safety	PS	Safety Beams (located at bottom of track)
Auxiliary Safety	AS	Auxiliary Safety (FLY) (located in bottom of head unit)
Leading Edge	LE	Leading Edge ( lead edge bar located in head unit)
Home Switch	HS	Home Switch (located inside internally mounted controller)
Feedback Error	FE	Encoder (error with encoder counting or door not operating)
Open Switch	OP	Open Activation
Close Switch	CL	Close Activation
Stop Switch	ST	Stop Switch (If Present)

Table 4: Switch LED Callouts

## 11. Optional Power Connection with Disconnect

- 1. It is recommended that the CPC Connector connected to the Disconnect be connected to the RollSeal door CPC (Located on the right endplate of the door) before securing disconnect to the wall.
- 2. Mount Disconnect in desired location between RollSeal Door and an Electrical Junction Box.
- 3. Open Disconnect cover. Pull the connection tab to ensure that disconnect is in the safe position.
- 4. Connect conduit and electrical supply to Disconnect. (Not Supplied)
- 5. Connect 115V or 230V power supply to Disconnect.
- 6. Place cover back on Disconnect as shown in Figure 19.
- 7. Add conduit straps to conduit.



Figure 19: Power Disconnect

## **12.** Preparation for Operation

Note: If you detect any problems, STOP. Disconnect electrical power. Contact your distributor for assistance.

1. Apply 115VAC or 230VAC power to Control and turn Control Rocker switch to the ON position.

2. Set the Open and Close Limits: (The limits are factory set based on order size but may need to be adjusted once installation is complete.)

A. Depress the Mode button  $(\bullet)$  on the controller for at least 5 seconds. P1 (Close Time Delay) will be then be displayed in the Display Indicator.

B. Depress and release the Mode button until PS1 (Change Program Limits) is displayed. C. Depress Up () until "yes" is displayed.

D. Depress the Mode button again (•). PS2 (Set Open Limit) will be displayed.

E. The door will proceed to the open limit and then stop. Once the door stops, adjust open limit using the Up () or Down () buttons until open limit is satisfactory.

F. Depress the Mode button (•) again. PS3 (Set Closed Limit) will be displayed.

G. The door will proceed to the closed limit and then stop. Once door stops, adjust this limit using the Up () or Down () buttons until the close limit is satisfactory.

H. Depress the Mode button ( $\bullet$ ) again and the controller will exit the programming mode and return to displaying the actual position.

3. Press "Open" button on the controller, the door should proceed to the open limit. If the door is set to automatically close, the door will time out and automatically close if safety beams are clear. If the door is set to manually close, press the "Close" button on the controller and the door should close to the lower limit.

4. Press "Open" (and "Close" if required) a couple times to insure proper operation.

5. Repeat steps 3 and 4 for Outside and Inside Switch.

6. Verify Safety Beams reverse door when blocked during closing.

7. Verify that the Auxiliary Safety (Fly Sensor) is functioning properly. The door should stop and reverse if movement is detected during a close cycle.

7. Verify Leading Edge Switch is operational. To check the Leading Edge functionality, place your arms in the doorway while the door is in the open position. Have a helper press the close button and let the leading edge of the door make contact with your arms. The door should promptly sense that there is an object in the way and reverse to the open limit.

Verify that the Door Movement LED's are functioning properly as explained in Section 10.
 Adjust the Close Time Delay as detailed in Section 14.3. The door will be shipped with a delay of 20 seconds. It is recommended that the close time delay be set to the lowest time delay that is reasonable for the application.

The door is now ready for operation.

## 13. Operation of RS500 WIC Door

The controller keeps track of the "open" and "closed" positions of the door by means of an encoder that is located between the motor and the drive pipe. The controller counts as the wheel turns to keep track of the door position. The door seals by means of magnetic strips along the edges of the door curtain and vertical members.

 Depress "Open" switch button on right track. Door curtain will roll up to 'open' position and find "HOME" position and drop some to the set upper limit. If door was set for "timer" it will count down from set delay and close on its own. If not set on "timed" function proceed to step "2" to close.
 Depress "Close" switch button. Door curtain will roll down to the 'closed' position or the lower limit and stay.

3. Depress button to open or close door as desired.

4. Open and close the door a few times to test door operation and remove any wrinkles in the door curtain.

## 14. Smart Controller User Interface

#### 14.1. Overview

The Display Indicator can show four different types of readings that can be selected by pressing the **Mode** button on the Display. Each time the **Mode** button is depressed the display steps to the next parameter as indicated by the green LED next to the display.

The four readings on the Display Indicator selected by using the **Mode** button are:

Actual Position – The position of the door curtain in relative position units called Counts. A low Count reading indicates that the door is at the top or open position. The highest Count reading is when the door is at the bottom or closed position.

**Open Speed** – The percentage of full speed that the door will open. The full speed will depend on the type of drive motor installed. This can be changed from a low of 20 percent to a high of 100 percent.

**Close Speed** – The percentage of full speed that the door will close. The full speed will depend on the type of drive motor installed. This can be changed from a low of 20 percent to a high of 75 percent.

**Total Cycles** – The total number of times (cycles) that the door has been opened and closed. The value displayed is in units of 100 cycles. For example a reading of 20 means that the door has been operated between 2000 and 2099 times. One cycle is an open and close operation.

**Service Cycles** – The number of times (cycles) that the door has been opened and closed since the last service reset. The value displayed is in units of 100 cycles. For example, a reading of 20 represents between 2000-2999 cycles. This cycle count is used for service purposes. Refer to Section 14.2.6 for information on how to reset this count and how to set Service Reminders.

To view each of the four parameters, press the Mode button repeatedly until the green LED on the Display Indicator shows the desired parameter to be read or changed. Use the Up/Down arrows to adjust the Speed percentage to the desired setting. To read the number of times the door has been cycled, press the Mode button until the green LED beside Cycles (x100) is lighted. To return to the Actual Position, press the Mode button again, or wait a few seconds and the controller will automatically return to displaying Actual Position.

Up/Down Arrows

Mode

Mode

There is an LED on the Display Indicator that will light when the Safety beam is interrupted. See Section 14.2.7 for more discussion on the function of the Safety Beam.

#### 14.2. Interpreting the Display Indicator

In addition to the readings that can be selected by using the Mode button, the Smart Controller will occasionally display other readings on the Display Indicator that can show the operating status of the controller. This section describes some other types of displays that will occur in the normal operation of the controllers.

#### 14.2.1. Software Version and Model Number

When the Smart Controller is turned off and subsequently on again, the Display Indicator will flash the current software version and model number in the display. This will remain on the display about two seconds. Then the display will show the Actual Position of the door.

#### 14.2.2. Actual Position Reading

When displaying the actual position of the door, the Display Indicator will appear similar to the diagram on the right. In the example shown, the door is in a position of 240 counts.

#### 14.2.3. Unknown Position Indication

There are occasions when the controller may not know the exact position of the door, for example, when returning from the Jog Mode. In these cases the Display Indicator will display a series of three bars as shown at the right. This is known as the Unknown Position Indication. When the door is

actuated, the door will proceed to the full open position, however the speed of the door will be reduced. When the door has returned from the home switch position to the open limit position, the display will show the actual position of the door. This indicates that the door has reset its position and is ready for normal operation.

#### 14.2.4. Assumed Position Indication

When the controller is first turned on, the display will flash between a numerical actual position reading and the unknown position indication. This flashing indicates the controller has assumed the current position of the door. When the control button is pressed, the controller will open at full speed to the open limit of the door. Then the door will proceed to the home sensor to verify the position reading and return to the open limit position. This operation takes place to verify that the door was not manually adjusted during the time that power was removed from the controller.



Unknown Position Indication



#### 14.2.5. Jog Mode Indication

When the Smart Controller is in the Jog Mode, the display will indicate "J O G" as shown at the right. See Section 14.5 for a description of the Jog Mode.

#### 14.2.6. Service Reminder Indication

When the Smart Controller has exceeded the selected Service Cycle Limit, the Service Cycles LED will begin flashing to indicate that service is needed. See Section 14.3 P10 and P11 for a description of the Service Cycle Reset and Service Reminder.

#### 14.2.7. Infrared Safety Sensors

The Smart Controller uses an invisible safety beam near the bottom of the automatic doors to prevent the door from closing on an object that has moved into position under the door. If an object interrupts this beam of invisible light, the door will stop and the Door Obstruction Light in the controller display will light. The door may then proceed to open.

#### Close Speed TotalCycles (Cycles \* 100) Actual Position Open Speed Close Speed TotalCycles (Cycles \* 100) Mode Mode

JOG Mode

#### 14.2.8. Leading Edge Switches

The door is equipped with Leading Edge Switches. These switches work in conjunction with the safety beam. If anything comes in contact with the leading edge of the panel, the door will react in the same manner as the safety beam.

The Lead Edge System that is used with this door consists of a piece of hollow tubing held at both ends with pivoting bearing assemblies and two micro switches. This lead edge bar is held tight to the switches when there is weight pulling down on the panel. At the moment that the weight is relieved due to impact with an object, the lead edge bar will pivot away from the switch and the door will auto reverse.

#### 14.2.9. Home Switch

The RollSeal automatic doors contains a Home limit sensor for determining the "Home" or fully opened position of the door. When the door is fully opened the home limit sensor is triggered to stop the door. The Smart Controllers also use the operation of the home sensor to verify the position of the door. This sensor is a limited distance sensor.

#### 14.2.10. Secondary Safety (Fly Sensor)

The door has a secondary safety sensor that is mounted in the underside of the head unit. This sensor has various functions as described in Section 14.3 (P22). When the door is powered up, the sensor will take roughly 10 seconds to initialize. This sensor is considered a passive infrared sensor which means that it requires motion as well as heat to be activated.

#### 14.3. Program Mode

PROGRAM PARAMETERS						
<ul> <li>P1 - Close Time Delay (Seconds)</li> <li>P3 - Deceleration Range</li> <li>P4 - Warning Output Function (Aux #1)</li> <li>P7 - Refresh Door Limits</li> <li>P10 - Service Cycle Reset</li> <li>P11 - Service Reminder (Cycles x 100)</li> <li>P12 - Input Status</li> <li>P20 - Open Input Function</li> <li>P21 - Input Switch Response</li> </ul>	<ul> <li>P22 - Auxiliary Safety Response</li> <li>P23 - Encoder Operation</li> <li>P24 - CMS Output Function (Aux #2)</li> <li>P25 - CMS On Time (Minutes)</li> <li>P26 - CMS Off Time (Minutes)</li> <li>PS1 - Set Limits?</li> <li>PS2 - Set Open Limit</li> <li>PS3 - Set Close Limit</li> </ul>					

Settings that are usually set up when the Smart Controller is installed or adjusted are referred to as Program Parameters. To get to the Program Mode, press and hold the Mode button for at least five seconds. When the controller has entered the Program Mode, the display will flash between P1 and the current value of the program parameter. All the program parameters have a program number assigned to them. When in the Program Mode, the current displayed parameter can be changed by pressing the Up or Down arrows. When the current parameter has been set, press the Mode button to move to the next parameter. The Program parameters are:

#### P1 - Close Time Delay – Default set to 20 (May be adjusted. See Below)

This is the time that the controller waits before automatically closing the door. Close Time Delay only applies when the door has been opened using the Timed Input. All safety sensors must be cleared before the controller begins counting the Close Time Delay. To change the value of P1, Press the Up() arrow to increase the delay and the Down () arrow to decrease the delay. The Close Time Delay can be adjusted between 5 and 240 seconds.

#### P3 - Deceleration Range - Default set to 0

The method for determining the deceleration range was changed from previous versions and therefore P3 has a different effect on the deceleration range that the controller uses. The controller automatically sets the minimum deceleration range based on the programmed Open and Close speeds. If that deceleration proves to be inadequate, then P3 allows the user to increase that range. The default setting will be zero and it should stay zero unless the door has problems stopping the door at the set limits.

#### P4 – Warning Output Function (Aux #1)

The P4 setting can be configured to operate in 1 of 5 modes.

#### 0 = Door Movement/Door about to Close

The Warning Output can be used to indicate door movement or warn that the door is about to close.

#### 1 = Sequential Interlock

The Warning can be used to Sequentially Interlock two doors together. In this case, it is a sequential interlock where the opening of Door #1 will hold Door #2 closed but the closing of Door #1 will immediately initiate the opening of Door #2 and vice-versa.

NOTE: Either door can initiate the cycle allowing for two-way traffic.

#### 2 = Passive Interlock

The Warning Output can be used to Passively Interlock to doors together. In this case, when Door #1 is open Door #2 will not be allowed to open and vice-versa.

#### **3** = Door Open Indication

The Warning Output will be used to signal when the door is fully "open" for monitoring purposes.

#### 4 = Door Closed Indication

The Warning Output will be used to signal when the door is fully "closed" for monitoring purposes.



Figure 20: P4 Auxiliary Relay Status (Door\Status)



#### P7 – Refresh Door Limits – Default Set to 25

This parameter is associated with the Open and Close Limits programmed into the door. These limits are determined using an encoder and they are referenced off of the Home Sensor/Switch located in the door header. From time to time, the Open and/or Close Limits may drift due to the nature of the encoder. This setting allows the user to set a number of Open & Close cycles before the door refreshes its limits by going back to its Home reference. This value can be set from 1 to 25. One means it will refresh every time it opens; Twenty-five means it will refresh every 25th time it opens.

#### P10 – Service Cycle Reset

This parameter provides a means for a service technician to reset the Service Cycle Count. This provides a means to track cycles in an effort to properly maintain the door system. If you desire to reset the Service Cycle Count, you must change P10 from "NO" to "YES" by pressing the Up () arrow button. To complete the reset, you must then depress the "MODE" button.

#### P11 – Service Reminder – Default Set to 240

This parameter works in conjunction with P10 to provide a means for the controller to visually remind the service technician when it is time for service. The user can set a Service Cycle Limit in this parameter. The limit (displayed number from 10 to 240) shown is "Cycles x 100" just as the cycle counts are displayed. This parameter is constantly compared to the value in "Service Cycles". Once the "Service Cycles" is greater than or equal to "Service Reminder", the "Cycle LED" on the controller interface will begin blinking indicating that service is needed. EXAMPLE: If the P11 displayed value is 10, the "Cycle LED" on the controller interface will begin blinking after the door has operated 1000 cycles.

#### P12 – Input Status

This parameter is used only to service or troubleshoot the door. The various inputs are represented by LED segments on the display. Refer to Section 15.1.

#### **P20 – Open Input Function**

The Open Input can be programmed to operate the door in 1 of 3 methods

**0.** *Timed Open* – In this mode, the open switch will function in the same manner as the timed input. If pressed, it will open the door and then initiate a timed close cycle.

**1.** *Manual/Sequential Operation* – In this mode the open switch will function in the same manner as the manual input in which the operation will toggle between open and close each time the switch is pressed. This provides the user with the means to operate the door in both directions using a single switch.

**2.** *Normal Operation* – In this mode the open switch will only initiate a single open cycle for each depression.

#### **P21** – Input Switch Response

This setting selects whether the Open and Close switch response is Momentary (0) or Maintained (1). If maintained, the switch must be held during the entire open or close cycle for the door to operate.

#### P22 – Auxiliary Safety Response

This parameter adds an input for a second safety sensor. This setting allows this input to be enabled (1) or disabled (0). It also adds a third setting which is Safety & Timed Open (2). The Safety & Times Open allows this input to initiate a timed open cycle in addition to the provided safety functions.

#### **P23** – Encoder Operation

This parameter allows the user to set the door to just use one encoder channel in the event one of the encoder channels stops working. The default setting is for using two channels (0) and it is only

recommended to use one channel (1) if absolutely necessary. Using one channel will result in the door not being able to accurately keep its open and close limits.

#### P24 – CMS Output Function (Aux #2)

This parameter allows the user to program the function for the CMS output.

 $\mathbf{0}$  = (Default) Output to control CMS for freezer applications. Relay status solely based on P25 and P26 settings.

**1** = Indicates when the door is fully closed.

#### P25 – CMS On Time (minutes) (NOT APPLICABLE)

#### P26 – CMS Off Time (minutes) (NOT APPLICABLE)

#### *IF P24 = (0):*

#### P25- "CMS Mode" Auxiliary ON Time – Default Set to 15

If P24 = 0, this setting, along with P26, allows the user to cycle the fan & heater On & Off. Since not all applications are the same, some will not require as much help eliminating condensation while others may require more. This setting, along with P26, allows the user to operate the unit as efficient as possible.

#### P26- "CMS Mode" Auxiliary OFF Time – Default Set to 10

This setting works in conjunction with P25 to complete the On/Off cycle of the condensation management system.

\*\*15 On and 10 Off are the default settings for the duty cycle. The cycles may be increased or decreased according to specific environment conditions.\*\*

#### **PS1 – Change Program Limits**

This parameter can be either "Yes" or "No". To change the Open Limit (PS2) or the Closed Limit (PS3) set this parameter to "Yes" and then proceed by pressing the Mode button. To leave the programming mode at this time, set PS1 to "No" and press the Mode button. The controller will exit the programming mode and return to displaying the actual position.

#### PS2 – Set Open Limit – Default set to 25

When the Mode button is pressed after setting PS1, the door will open to the position of the Home switch then proceed toward the current setting of the Open Limit. Use the Up and Down arrows to set the door to a new Open Limit position. Then press Mode to proceed to the next parameter.

#### PS3 – Set Closed Limit - Default set to 400 (Must Be Lower To Seal At The Bottom)

When the Mode button is pressed after setting the Open Limit, the door will close to the current setting of the Closed Limit. Use the Up() and Down() arrows to set the door to a new Closed Limit position. Then press Mode to exit the programming mode and return to displaying the actual position.

#### **14.4. Deceleration Range**

The Smart Controllers have programmable adjustment for the Deceleration Range. Deceleration range can be adjusted by setting the program parameter P3. See Section 14.3 for the procedure to set this parameter.

The controller establishes a minimum deceleration range based on the speed that the door is travelling when it begins to stop. P3 is now a range that can be used to increase the total deceleration range over the minimum that the controller calculates. In other words, if the door is having trouble stopping as it is closing, the P3 setting can be increased to allow the controller more time to stop the door as it goes down.

#### 14.5. Jog Mode

The Jog Mode will permit an operator to manually control the position of the door with the Up () and Down () arrow buttons. To enter the Jog Mode, press both the Up () and Down () arrows at the same time for at least 5 seconds. The Feedback "FE" LED will be flashing while in JOG Mode.

In the Jog Mode the door can be opened and closed and is not affected by the Home limit switch or the Safety beam. Therefore, the operator must carefully watch the door movement when nearing the full open and full closed positions. To exit the Jog Mode, press and hold the Up () and Down () arrow buttons for at least 5 seconds.

The controller will return to the normal operating mode with the Actual Position shown in the display. When returning to the normal operating mode, the controller will not know the exact position that the operator has left the door when exiting the Jog mode. Therefore, the controller will display a series of three horizontal bars. Upon the next command the door will slowly proceed to the full open position to reset its memory. The door will always follow this procedure after exiting the Jog Mode.

## 15. Troubleshooting Controller and/or Door

#### 15.1. P12 – Input Status Indicators

This parameter is used to service or troubleshoot the door. The various inputs are represented by LED segments on the display as shown below.



If a display segment is "ON", the switch is made; Segment is "OFF", switch is Not Made. For Example, when the Safety Beam is obstructed, the Safety Beam display segment will turn ON and remain ON until the obstruction is removed.

**Important Indicators:** 

- For the door to close, the "Primary Safety" & "Leading Edge" display segments must be "OFF".
- If the "Stop Switch" display segment is "ON", the door will not operate.
- If the "Open Switch" display segment is "ON", the door will not close.
- The "KB Status" display segment will be "ON" when the KB Drive is charged and "OFF" when the drive is powered down.
- The "CMS Status" display segment is "ON" when the CMS is running and "OFF" when the CMS is not running.
- The "UPS Status" display segment is "ON" when the door is being powered from the battery and "OFF" when the door is being powered from AC Line power. (Future Use)

		Switch LED	Panel		Recommended Action		
Code	Condition	Error Code	Movement	Problem Area			
EO1	Opening, Home Switch tripped	HM	-	Llama Cuuitah	Ensure harness connectors are secured and that		
EC1	Closing, Home Switch tripped	HM	-	Home Switch	the sensor/switch is not tripped		
EO8	Opening, Encoder Fault	FE	-	Encodor Count Foult	Ensure harness connectors are firmly secured		
EC8	Closing, Encoder Fault	FE	-		Ensure namess connectors are finning secured		
EO16	Opening, Memory Fault	FE	-	Momony Fault	Rosat Controllar		
EC16	Closing, Memory Fault	FE	-	IVIEITIOI y Fault	Reset Controller		
EO32	Opening, Major Fault	FE	-	Major Fault	Pasat Controllar		
EC32	Closing, Major Fault	FE	-	Iviajor Fault	Reset Controller		
	Opening, Encoder Fault	FE	Up	Encoder	Ensure harness connectors are firmly secured		
EOF1			None	Drive or Brake	Ensure drive not overloaded.		
			Down	Encoder	Panel has reversed on pipe.		
	Closing, Encoder Fault	FE	Up	Encoder	Panel has reversed on pipe.		
ECF1			None	Drive or Brake	Ensure drive not overloaded.		
			Down	Encoder	Ensure harness connectors are firmly secured		
	Opening, Direction Fault		Up	Encoder	Signal Wires reversed.		
EOF2		Opening, Direction Fault FE None Drive or Brake	Drive or Brake	Ensure drive not overloaded.			
			Down	Drive	Reverse two phases to the motor.		
	Closing, Direction Fault				Up	Drive	Reverse two phases to the motor.
ECF2		FE	None	Brake	Ensure tension pipes are not caught in head unit		
			Down	Encoder	Signal Wires reversed.		
EOF3	Opening, Motor Stall Fault	FE	-	Motor Stall Fault			
ECF3	Closing, Motor Stall Fault	FE	-				
EOF4	Opening, Over Speed Fault	FE	-	Over Speed Fault			
ECF4	Closing, Over Speed Fault	FE	-	over speed rault			

#### 15.2. Error Codes and Recommended Action

Refer to Section 10 and Figure 18 for more information about how to relate the RollSeal Smart Switch with the error codes that can be seen on the controller faceplate.

## 16. Manual Operation of RS500 WIC Door

Due to the fact that some of the RS500 WIC Doors are purchased without a battery backup, there may be a time where the line power goes out while the door is in the open position. If this were to occur, the door will need to be lowered manually.

To lower the door manually, the cover on the head unit must be opened and the stand must be folded out to hold the cover open. With the cover open, begin by turning the line power off to the controller with the use of the rocker switch located on the right of the control box. After power has been turned off to the door, reposition your ladder to the right side of the door. There will be label on the right endplate that gives direction as to how to operate the door manually to allow the door to be closed as shown in Figure 21. This task will require a ratcheting wrench or drill with a <sup>3</sup>/<sub>4</sub>" socket. Once a drill and a <sup>3</sup>/<sub>4</sub>" socket have been obtained, proceed to rotate the drive in the clock-wise direction. As the door closes, ensure that the lower limit is resting on the floor but that the panel is not slack. Once the door is in the closed position, the power rocker switch can be turned back to the ON position and the head unit cover can be shut and latched back into position.

If it is necessary that the door must be used while line power is not present, the front egress tracks can be opened to allow the panel to be pulled forward. This will make room for passage through the door

opening. The egress tracks will remain open until the door is exited. At this point, the panel should be positioned back into the tracks and the egress tracks should be rotated back into position. This can be done until line power is present. Once the line power is restored, the door will be back in operation. Run a full cycle of the door to make sure that no problems in operation exist.



Figure 21: Manual Operation

## **17.** Replacement of an Existing Panel

If the panel on the RS500 WIC Door gets damaged or begins to wear due to age, it may need to be replaced. Explained below is a specific process used to change the panel on this model door.

#### **17.1. Removal of Existing Panel**

- 1. Remove the Front Egress Track on both sides before beginning panel removal. Refer to Section 18.
- 2. With the door in the fully closed position, open the head unit cover and allow the cover to rest on the stand (the cover can also be removed for easier access). Place the controller in JOG Mode as explained in Section 14.5.

- 3. Proceed to roll the door down until the hook and loop that holds the center panel to the drive pipe is visible.
- 4. Turn the controller power switch to the OFF position.
- 5. Remove both the tension pipes as shown in Figure 22 and set aside to be reused.
- 6. In the head unit, remove the wing nuts from the corners and center of the back panel and remove the metal plate that holds down the panel. Save this plate and wing nuts for installing the new panel. Refer to Figure 23.
- 7. Pull the back panel from one corner to break the hook and loop seal and let the back panel fall to the floor.
- 8. Remove the wing nuts from the corners and center of the front panel and repeat step 7 with the front and center panel.
- 9. At this time the existing panel will been removed.



Figure 22: Removal of Tension Pipes



Figure 23: Removal of Rear Sealing Plate

#### **17.2. Replacement Panel Installation**

- 1. The replacement panel will be rolled up and secured for transport. Unwrap the rolled panel and find all three ends. Hold the three ends at one time and ensure that they are positioned correctly before proceeding to the next step. The front and back panels are white anti-static material and the center panel is clear material. The hook fastener that is sown on the front and back panel should be facing out for each and the hook that is sown on the center panel should be facing the user as it is pulled up and attached.
- 2. Raise the three panel ends at one time into the head unit. Ensuring that the front and center panels are held, navigate the back panel into position behind the lead edge bar and secure the center tab of the panel over the extruding center pim stud.
- 3. Ensuring that the front panel is still held, navigate the center panel behind the lead edge bar and over the drive pipe. Use the half-moon notch located at the middle of the center panel and the mark located at the center of the drive pipe to align the center panel. (If there is no center mark on drive pipe, measure and mark the center). Secure the panel to the drive pipe with the hook and loop fastener that is sewn to the panel. Refer to Figure 24 for aligning the center panel.
- 4. Raise the front panel into position and secure the center tab over the protruding center pim stud.
- 5. At this time, the three panels are held and need to be aligned and secured as shown in Figure 25.
- 6. Starting with the back panel, pull the unconstrained corners up and secure them on the protruding pims with the corresponding holes in the panel tabs. Go across the panel between the constraints and ensure that all the hook and loop is secured and is smooth. Once the hook and loop is secured, re-install the metal plate with the wing nuts to follow.
- 7. Repeat the first part of step 6 for the front panel. At this time, all three panels should be aligned and secured as shown in Figure 26.
- 8. At this time, power can be restored to the controller by flipping the power switch to the ON position.

- 9. The door should be placed in JOG mode as explained in Section 14.5 and the door should be raised enough to where the bottom of the panel is off the floor.
- 10. Place both the tension pipes back into the door (front then back).
- 11. Reinstall the Front Egress Tracks in accordance with Section 18.
- 12. With the front Egress Tracks in the closed position, the controller can be taken out of JOG mode and the door can be raised to the open position.
- 13. Run the door several cycles to ensure that there are no issues with the new panel.
- 14. If everything is functioning properly, the head unit cover can be closed and the latches can be placed in the secured position.



Figure 24: Drive Pipe Mark for Center Panel



Figure 25: Installation of Replacement Panel



Figure 26: Fully Installed Panel

## 16. Cleaning Panels

Panels and Windows can be cleaned using a solution of cold to warm, mild soapy water and a cloth. Wipe off the soiled area to remove dirt particles. Using a cloth gently wipe the panel and window with the soapy solution. Thoroughly rinse the area with pure cold or warm water to remove soap.

Dry off thoroughly with a dry cloth. **DO NOT ROLL-UP the panel onto itself without making sure it is completely dry!!!** 

**DO NOT USE:** Solvents or strong alkaline cleaners. Use of these products could cause damage. If in doubt about a particular cleaning solution, please do not hesitate to contact customer service for our recommendation.

## **17.** Emergency Egress

In the case that line power is lost and the door does not have a backup power supply, emergency egress may be required. The RS500 WIC has an emergency egress track system (ETS) that allows for easy exit and use of the door.

#### 17.1. Exiting (Opening) the Door

Similar to Section 16 discussing manual operation of the RS500 WIC Door, the egress system will be of the same action. In order to egress the RS500 WIC Door from inside the cooler or from the back side of the door, the user needs to push outward on the panel. When a force is applied from the back side of the door, the egress tracks will break away and allow the panel to be pushed out enough to walk out as shown in Figure 28. The Emergency Egress Label shown in Figure 27 is placed on the back panel and is facing the user as they use this egress system.



Figure 27: Emergency Egress Label



Figure 28: Emergency Egress Functionality

#### 17.2. Resetting (Closing) the Door

If the emergency egress has been used, the egress tracks will have to be reset to allow the door to seal. In order to reset the front egress tracks, ensure that the panel and the two tension pipes are pushed back into the track cavity. While holding the panel in position, flip each track back into the operational position so that the magnet can seal to the panel.

The door will open with the egress tracks in the open position but the door will not close with the egress tracks open. This is due to the fact that when the egress tracks are open, the safety beams located at the bottom of the tracks will we covered.

Once the panel and tracks have been reset, the door is ready for operation.

## 18. Removing and Replacing Front Egress Tracks (Floating)

In the case that the egress tracks get damaged, they may have to be replaced. To replace the front egress tracks, roll the door up so that the panel is out of the way and there is no risk in damaging the front panel during installation. Open the head unit cover and prop it on the folding stand. **Turn off power to the door.** With the panel rolled up, flip the tracks to the open position and slide it upward until the tabs clear the slots and pull the bottom toward the center of the opening as shown in Figure 29 and Figure 30. The floating will come free of the door at this point. Repeat this process on the other side of the door if both sides are being replaced.

To install the egress tracks, ensure the panel is rolled up into the head unit to keep from being damaged. Rotate the new track so that the magnet is facing the center of the opening and lift the top of the track into the crease between the track and the header. Pushing the track toward the leg of the door, the tabs on the track should slip into the slots. With all the tabs lined up in the slots, allow the track to drop into position until the L-shaped sections are fully engaged and rotate the track toward the panel. At this point the egress track should rotate freely. Repeat this process on both sides if necessary. Turn the power back on to the door with the use of the rocker switch on the controller and lower the head unit cover into the closed position.

At this point the door is ready for operation.



Figure 29: ETS Notched Attachment



Slide the Front Egress Track up until the tabs clear the slots in the track frame.





Figure 31: ETS Removal/Replacement

# 19. RS500 WIC Series Door Wiring Diagram



Figure 32: RS500 WIC Wiring Diagram (Part 1)



Figure 33: RS500 WIC Wiring Diagram (Part 2)

## 20. Wiring Optional Accessories

There are several accessories that are offered with the RS500 WIC Door. Listed below are the most common accessories and the corresponding wiring diagram.



#### **20.1.** Wiring Falcon Motion Detectors

Figure 34: Falcon Motion Detector

## 20.2. Wiring Wave Switch

![](_page_44_Figure_1.jpeg)

Figure 35: Wiring Wave Switch

### 20.3. Wiring BEA Receiver

![](_page_45_Figure_1.jpeg)

![](_page_45_Figure_2.jpeg)

Figure 36: BEA Receiver

# 21. Replacement Parts

This manual can be obtained electronically at <u>www.rollseal.net</u> under manual number 4801-5164.

![](_page_46_Figure_2.jpeg)

Figure 37: Controller Replacement Parts

![](_page_47_Figure_0.jpeg)

Figure 38: Door Replacement Parts

Part Number	Description	Ref Number
1903-6167	Fixed Field Home Sensor	1
1903-6141	Infrared Motion Sensor (Fly)	2
1903-6146	Buzzer	3
6407-6082	/PCB AC DriveKBVF-22D w/QA V1	4
6407-1701	Control Board (PCB201 WIC)	5
3001-7016	Power Rocker Switch	6
Based on Size	Front Egress Track (Left)	7
Based on Size	Track Cladding Cover (Left)	8
1903-6155	Hall Effect Encoder	9
3017-5081	Brother 1/6 hp Motor	10
3001-1570	Lead Edge Micro Switch	11
Based on Size	Head Unit Cover	12
Based on Size	Front Egress Track (Right)	13
Based on Size	Track Cladding Cover (Right)	14
6407-1706	Smart Switch (PCB202)	15
6450-9008	KIT WIC PhotoEye Sensors	16 & 17
Based on Size	Door Fabric Panel	N/A
Based on Size	Foam Tension Pipes	N/A
3595-0150	Touchless Switch (Wave)	N/A
3595-0108	Motion Detector (Falcon XL)	N/A

 Table 5: Replacement Part Numbers

## 22. Warnings (Avertissements)

Warning!

Disconnect All Power Sources Before Installing This Equipment. Failure To Disconnect Power Source Can Result In Property Damage, Serious Injury Or Death!

# Warning!

Dangerous Rotating Machinery! Keep Hands, Clothing, Etc. Clear When Operating! Do Not Operate Without All Guards And Covers In Place!

# Warning!

All Wiring Should Be In Accordance with National Electrical Codes Or Other Local Codes.

# Warning!

The Installer Is Responsible For Complying With All Relevant Regulations, Such As National Wiring Regulations And Accident Prevention Regulations. Particular Attention Must Be Given To The Cross-sectional Areas Of Conductors, The Selection Of Fuses Or Other Protection, And Protective Earth/Ground Connections!

# **Marning**!

Drives Are Intended As Components For Incorporation Into Electrical Control Systems Or Machines. It Is The Responsibility Of The Installer To Ensure That The Drive Is Installed Safely And In Accordance With Any Regulations Which Apply To The End Product At The Place Of Use, For Example, Regarding Safety Or Electromagnetic Compatibility. To Ensure Mechanical Safety, Additional Safety Devices Such As Electro-Mechanical Interlocks May Be Required!

# Warning!

The Voltages In The Power Cables And Certain Parts Of The Drive Can Result In Death. Whenever The Drive Has Been Used, It Must Be Isolated And Disconnected For 5 Minutes Before Any Work Commences.

# Danger!

Only Qualified Electrical Personnel Familiar With The Construction And Operation Of This Equipment And The Hazards Involved Should Install, Adjust, And/Or Service This Equipment. Read And Understand This Manual In Its Entirety Before Proceeding.

Failure To Observe This Precaution Could Result In Severe Bodily Injury Or Death!

![](_page_50_Picture_3.jpeg)

# **IMPORTANT INSTALLATION INSTRUCTIONS**

# Warning!

# To Reduce The Risk Of Severe Injury Or Death:

- 1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
- 2. Do not connect the door operator to the source of power until instructed to do so.
- 3. Locate the control station: (a) within sight of the door, (b) at a minimum height of 5 feet so small children cannot reach it, and (c) away from all moving parts of the door. Remove all ropes and remove or make inoperative all locks connected to the garage door before installing opener.
- 4. For products having a manual release, instruct the end user on the operation of the manual release. Where possible, install the door opener 8 feet or more above the floor. For products having an emergency release, mount the emergency release within reach, but at least 6 feet above the floor and avoiding contact with vehicles to avoid accidental release.
- 5. Install Egress Handle, containing the egress instruction label/placard, on the control station (Open/Close Button) side.

# **IMPORTANT SAFETY INSTRUCTIONS**

# Warning!

# To Reduce The Risk Of Severe Injury Or Death:

- 1. READ AND FOLLOW ALL INSTRUCTIONS!
- 2. Never let children operate or play with door controls. Keep the remote control (where provided) away from children.
- Personnel should keep away from a door in motion and keep the moving door in sight until it is completely closed or opened. NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.
- 4. Test the door's safety features at least once a month. After adjusting either the speed or the limit of travel, retest the door operator's safety features. Failure to adjust the operator properly may cause severe injury or death. NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
- 5. For products having a manual release, if possible, use the manual release only when the door is closed. Use caution when using this release when the door is open.
- 6. KEEP DOORS PROPERLY OPERATING AND BALANCED. See Door Manufacturer's Owner's Manual. An improperly operating or balanced door can cause severe injury or death. Have trained door systems technician make repairs to cables, spring assemblies, and other hardware.

- 7. Install the Entrapment Warning label next to the control button in a prominent location. Install the Emergency Release Marking. Attach the marking on or next to the emergency release.
- 8. After installing the opener, the door must reverse when it contacts a 1-1/2 inch high object (or a 2 x 4 board laid flat) on the floor.
- 9. SAVE THESE INSTRUCTIONS.

# Proposition 65 Warning!

California Proposition 65 Warning: This product can expose you to chemicals, including Lead, which is known to the state of California to cause cancer or birth defects or other reproductive harm. For more information, go to www.p65Warnings.ca.gov/furniture.

# **French Translated Warnings**

Avertissement!

Disjoindre fournissent de l'énergie tout les sources avant qu'installer cet équipement. F|ailure| à disjoindre la source de pouvoir peut résulter dans dommage de propriété, blessure sérieuse ou mort !

Avertissement!

Mécanisme tournant dangereux ! Garder les mains, vêtissant, etcC|lear| quand fonctionner ! Ne fonctionnez pas sans toutes gardes et couvertures dans lieu !

# Avertissement!

Tout montage sur fil de fer doit être selon codes électriques nationaux ou autres indicatifs régionaux.

# Avertissement!

L'Installer est responsable pour conformer avec tout règlement pertinent, telles que règlement et règlement de prévention d'accident de montage sur fil de fer nationaux. Pl'attention articulaire doit être donnée pour les aires sectionnelles transversales de conducteurs, le choix d'elles fusées ou autre protection, et terre / prises de terre protecteur !

# Avertissement!

Les promenades en voiture sont projetées comme composants pour l'incorporation dans les systèmes ou machines d'autorité électriques. Il est la responsabilité de l'installer pour assurer que la promenade en voiture est installé sans risque et selon tout règlement qui appliquer pour le produit fini au lieu d'utilisation, par exemple concernant sécurité ou la compatibilité électromagnétique. Pour assurer que sécurité mécanique, les dispositif de sécurité supplémentaires telle que de lelectrol mécanique enclenche pouvoir être exigé!

# Avertissement!

Les tensions dans le pouvoir câblent et certains parties de la promenade en voiture peuvent résulter dans la mort. Wle |henever| la promenade en voiture a été utilisé il doit être isolé et détaché pendant 5 procès avant que tout travail commence.

# Danger !

Seulement familier électrique de personnel qualifié avec la construction et opération de cet équipement et les hasards ont enveloppé devoir installer, arranger, et/ou - la révision cet équipement. R|ead| et comprendre ce manuel en entier avant que procéder. F|ailure| à observer cette précaution peut résulter dans dommage corporel sévère ou mort !

# Constraint Co

# LES INSTRUCTIONS D'INSTALLATION IMPORTANTES

# **AVERTISSEMENT!**

# À réduire le risque de blessure sévère ou mort:

- 1. LU ET SUIVENT TOUTES INSTRUCTIONS D'INSTALLATION.
- 2. Ne liez pas l'opérateur de porte per la source de pouvoir jusqu'à instruit faire ainsi.
- 3. Localisez la station de commande: (a) en vue de la porte, (b) à un minimum la hauteur de 5 pieds ainsi petit enfants ne peuvent pas l'atteindre, et (c) loin de tous parties en mouvement de la porte.
- 4. Pour produits ayant un délivrance manuelle, instruire l'utilisateur final sur l'opération de la délivrance manuelle.
- 5. Installer la poignée d'évacuation, contenant l'étiquette d'instruction de sortie/plaque signalétique, sur le côté du poste de commande (bouton d'ouverture/fermeture).

# **RÈGLEMENTS DE SÉCURITÉ IMPORTANTS**

# AVERTISSEMENT!

# À réduire le risque de blessure sévère ou mort:

#### LU ET SUIVENT TOUTES INSTRUCTIONS!

Jamais laisser fonctionner enfants ou mouvoir vivement avec les autorités de porte. Gardez la télécommande (où a fourni) loin des enfants.

Le personnel devrait garder loin une porte dans mouvement et subsistance la porte en mouvement dans vue jusqu'à est complètement fermé ou avoir ouvert. CES AUCUNS DOIVENT CROISER LE CHEMIN D'UNE PORTE EN MOUVEMENT.

Éprouvez les traits de sécurité de la porte au moins une fois par mois. Après qu'arrangeant la vitesse ou la fin de course, retest les traits de sécurité de l'opérateur de porte. Manque à arranger l'opérateur correctement peut causer blessure sévère ou mort.

Pour produits ai manuel la délivrance, si possible, utiliser la délivrance manuelle seulement quand la porte est fermée. Précaution d'utilisation à utiliser cette délivrance quand la porte est ouverte.

GARDER LES PORTES CORRECTEMENT QUI OPÈRE ET ÉQUILIBRÉ. Voir la porte fabricant propriétaire manuel. Un improprement qui opère ou balancé porte peut causer blessure sévère ou mort. Formez les technicien de systèmes de porte faitez les réparations per les câbles, réunions de source, et autre quincaillerie.

SAUVEZ CES INSTRUCTIONS.