

Summary	Retrofit to Light Curtains from Photo Eyes on Spiral Doors				
Products Affected	Spiral Doors with Photo Eyes				
Key Word Tags	SD, Light Curtain, Retro				
Tools/Equipment (If Required)					
Parts/Materials (If Required)	R00122022 (1ea) LIGHT CURTAIN TRANS, TST LGBS-C,2087MM R00122023 (1ea) LIGHT CURTAIN RCVR, TST LGBE-C,2087MM R00141086 (1ea) CABLE,ENCODER,M12,FEMALE,TYPE A,8PIN,15M R0012154 (1ea) CABLE 4PIN STRAIGHT PE 15M 50' R1071627-0 (10ea) CLIP, LIGHT CURTAIN, FEIG R002112119 (1ea) LIGHT CURTAIN INTERFACE BOARD,SYS4,SPRL				
Related Media	System 4 Drive and Control Manual, USB Stick with 1.50 software, Bulletin 249				
Author	Mike Burzlaff	Issue Date	2/14/18	Status	Active

Please Read The Entire Bulletin Before Proceeding

The spiral door can now be retrofit from the photo eyes on either side of the door opening to the light curtains which will be in the door path.

Place the door in the full open position and turn off the disconnect.

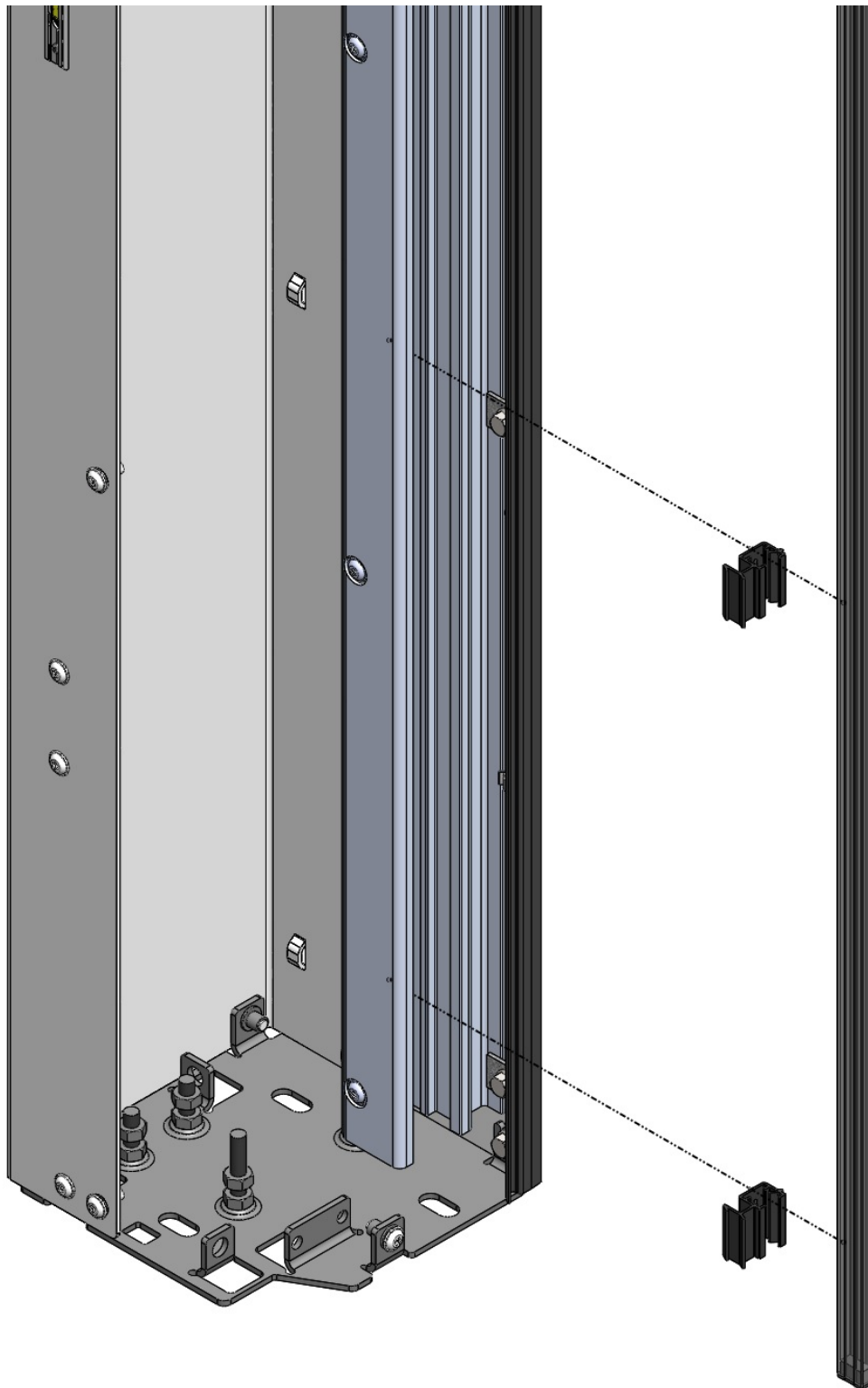


The disconnect must be in the OFF position and properly locked and tagged before performing the next step of the procedure.

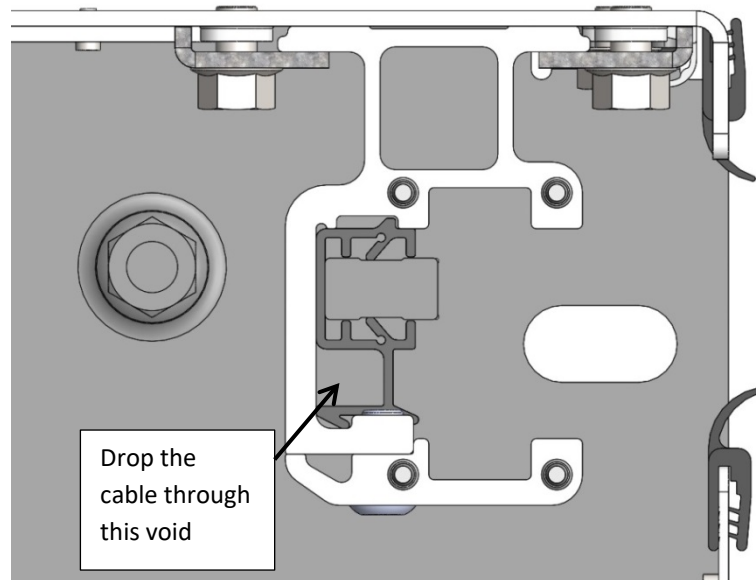
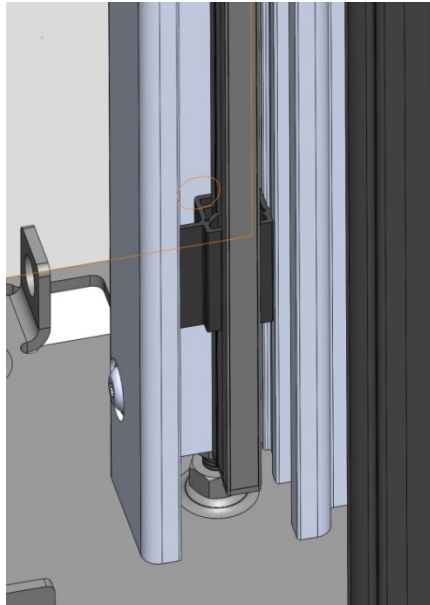
Remove the existing photo eye wiring from the terminal blocks from the x10 cable. Leave the x10 cable in the control box. Remove the encoder wires from the encoder terminal block. Leave the encoder wires in the controller.

Remove the side column covers from both sides of the door. Remove the existing column photo eyes from either side of the guides and/or exterior of the door if applicable. Unwire and remove the photo eye cables form the x10 junction box in the head assembly. If any of the photo eye cables are wired directly to the system 4 controller, remove those as well.

Install the clips provided into the column. Space them out equally for the length of the light curtain.



Install the light curtain into the clips. The cords should be on the top of the guides. The light curtains should be flush to the bottom of the guides, which should be approximately 2" from the baseplate of the column. **Make sure the protective film has been removed from the light curtains.**



Feed the cable through the clips from the top down with the quick connect at the top by the light curtain. The cable needs to be pulled tight all the way through the clips to prevent being damaged by the rollers during door travel. **(See note above)**

Route the cables from the bottom of the guide through the column conduit to the x10 junction box in the head assembly (this should be the same path the old photo eye cables took). Make the terminal connections as per the schematic below. **(x10 J-box Connections pg. 4)**

NOTE: Make sure the cables will not interfere with the door travel or the components inside the side columns.

Install the light curtain interface board on the old encoder terminal block position. Connect the wires from the x10 cable and the encoder cable per the schematics below. **(System 4 Connections pg. 5)**

X10 J-box Connections

System 4 Connections

Restore power to the controller.

Check parameter P.991 for the default and P.F07 and write down the mobile unit address. **(Reference the System 4 Drive and Control Manual for navigating parameters)**

Insert the USB with version 1.50 software. **(Follow Bulletin 249 for software update)**

Set P.990-1. After the default is complete set P.991 to the previous default number.

Set P.F07 to the mobile address.

Set A.480-4 (this parameter is located just below P.000 and A.831)

Set P.524-4

Exit parameters and set limits.

NOTE: The door must be clear of the light curtains to start this. The door will need to set the *OPEN* limit first with light curtains.

The close limit will set based off the bottom of the light curtains. It is important to make sure the light curtains are flush with the bottom of the guides as described on page 3.

If the close limit needs adjustment, moving the value at P.275 will change the close position. A positive number will move the door up and a negative number will move the door down. **(Reference the System 4 Drive and Control Manual for navigating parameters)**

If you have any questions please contact Rytec Customer Support at 1-800-628-1909.