Warning Electrical Shock Hazard
To prevent serious injury or death always ensure power is disconnected when wiring anything into the ZAP Controller.

Materials Needed
401002 photo eye, 401001 photo eye, 871-FS Module, 16-20 AWG 3 wire cable.

The 871-FS is a special variant if the 871 Interface Module which uses a photo eye connected to the COM and Cycle inputs to inhibit the auto-close function until a vehicle has passed through the photo eye.

You must employ the UL325-2010 approved photo eye PN (401002) wired to TB7 as a standard safety photo eye to utilize the 871FS. ZAP Part number 401001 through beam photo eyes are best suited for use with the 871 FS module. However, other 4 wire, N/C, Non monitored photo eyes may be used. The photo eyes used with the 871-FS may act as a safety device, however they are not intended to be used as the primary UL325-2010 photo eye. Retro-reflective photo cells should not be used with the 871-FS as reflective tape is often used on vehicles where this device is employed.

Wiring the photo cells used with the 871-FS

Isolate the power supply before wiring any device into a ZAP Controller.

Mount the photo cells in a position where a vehicle will break the beam as a vehicle leaves the facility. It should be at a height where a person will not break the beam as they walk through or near the door opening.

Terminate both N/C safety wires (Black) of the 401001 photo-eye to the Cycle inputs of the 871-FS. (Figure A)

Terminate both N/C safety common wires (White) of the 401001 photo-eye to the COM inputs of the 871-FS. (Figure A)

Terminate the power wire of the 401001 photo-eye into the 24V terminal on TB7. (Figure B)

Terminate the power common wire of the 401001 photo-eye into the 0V terminal on TB7. (Figure B)

Unplug the terminal block from TB3. Remove the close wire from the terminal block (Figure B) and wire to the close terminal on the 871-FS (Figure C)

When the door is opened fully the 871 Module will continue to drive the open signal to the control panel which will stop the door from closing. Moving the close wire to the close input of the 871-FS will enable the close button to operate normally.

Before plugging the 871-FS Module onto the control board, ensure the power supply is isolated.

Align the 871 Module with all 10 pins of the 10 pin socket header. (Figure E)

Ensure the 871 is seated completely onto the socket header. (Figure F)
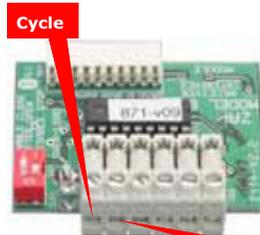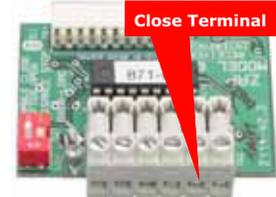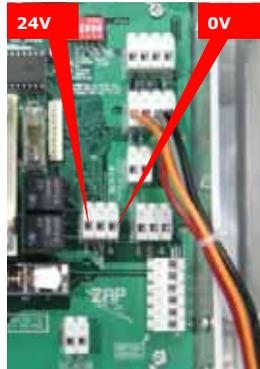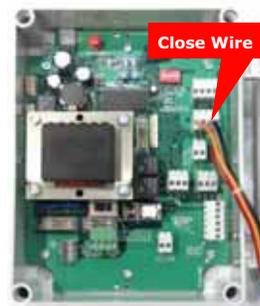

Figure A

Figure D

Figure B

Figure E

Figure C

Figure F