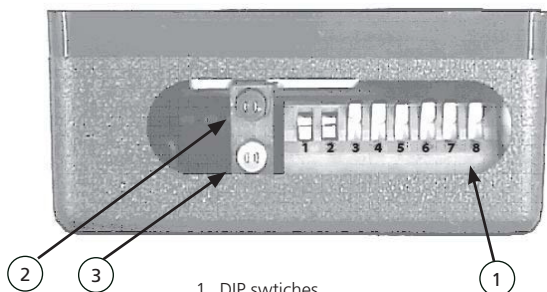


8310-889 SAFETY MODULE

Lock-out relay



DESCRIPTION



1. DIP switches
2. Red LED (safety)
3. Green LED (activation)



TECHNICAL SPECIFICATIONS

Power supply:	12 – 24 VAC/VDC
Operating frequency:	4 MHz (microprocessor)
Power consumption:	10 mA at rest; 50 mA max.
Output:	2 SPST relays
Max. voltage (relay contact):	60 VDC / 120 VAC
Max. current (relay contacts):	2.0A DC / 0.5A AC

*Specifications are subject to change without prior notice.
All values measured in specific conditions.*

PRECAUTIONS

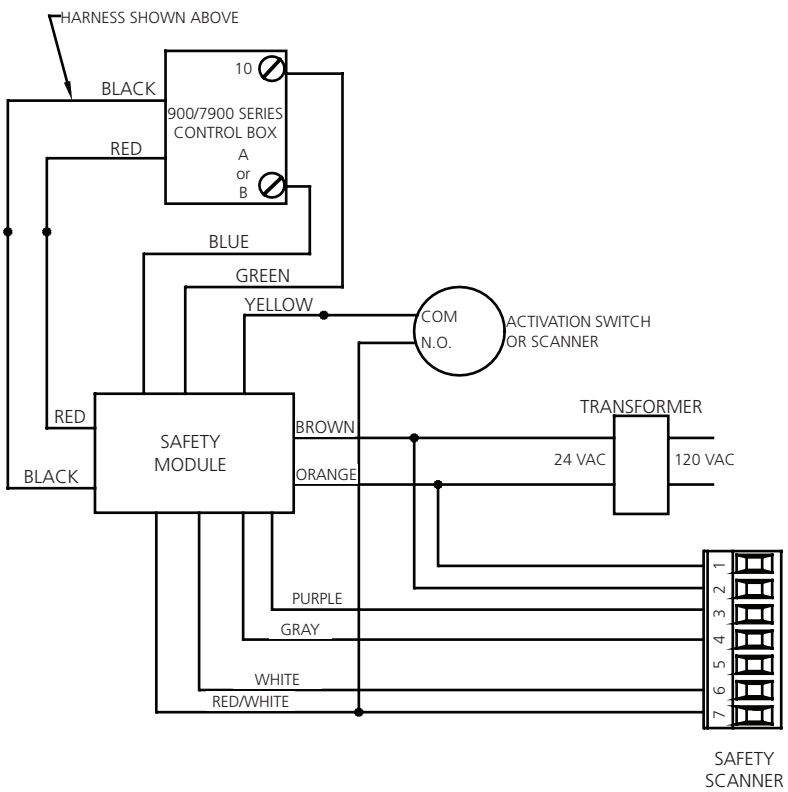
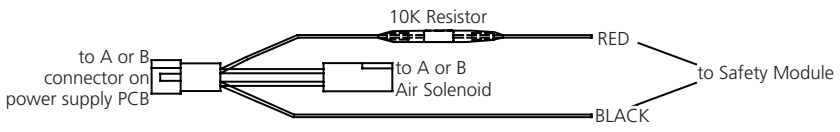
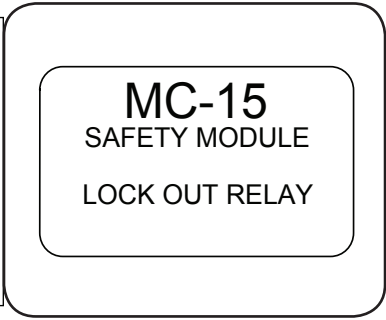


CAUTION

- ❑ Shut off all power going to header before attempting any wiring procedures.
- ❑ Maintain a clean and safe environment when working in public areas.
- ❑ Constantly be aware of pedestrian traffic around the door area.
- ❑ Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- ❑ **ESD (electrostatic discharge):** Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board, ensure you dissipate your body's ESD charge.
- ❑ Always check placement of all wiring before powering up to ensure that moving door parts will not catch any wires and cause damage to equipment.
- ❑ Ensure compliance with all applicable safety standards (i.e. ANSI A156.10) upon completion of installation.
- ❑ **DO NOT** attempt any internal repair of the components. Unauthorized disassembly or repair:
 1. May jeopardize personal safety and may expose one to the risk of electrical shock.
 2. May adversely affect the safe and reliable performance of the product resulting in a voided warranty.

WIRING

- MOTOR INPUT — BLACK
- MOTOR INPUT — RED
- 8310-877 NO — GRAY
- 8310-877 COM — WHITE
- 12-24 VAC/VDC — ORANGE
- 8310-877 COM — PURPLE
- 8310-877 DATA + & ACTIVATION NO — RED/WHITE
- 12-24 VAC/VDC — BROWN
- CONTROL BOX COMMON — GREEN
- CONTROL BOX ACTIVE — BLUE
- ACTIVATION COM — YELLOW

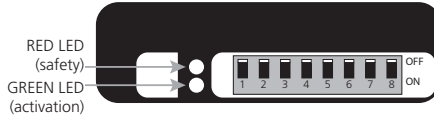


PROGRAMMING

1. Apply power.

RED LED = When the door is closed and someone steps into the safety zone, this indicates that it will ignore any activation signal it receives. Therefore, the door will remain closed until the HMSS safety zone is clear. Once the safety zone is clear and the door has been activated, a normal opening cycle will commence.

GREEN LED = If someone steps into the safety zone when the door is open, the Safety Module's green LED will indicate that the HMSS will be connected to the activation circuitry of the door thus holding the door open for as long as someone is in its pattern.



2. SET LOCK-OUT TIME DELAY

The lock-out time delay for the door closing cycle must be set using the six DIP switches located on the front of the unit. A 0 to 31 second lock-out time delay can be achieved. The lock-out time delay must be set so that the HMSS does not send a safety signal during the closing cycle. As soon as the door reaches the jamb, the Safety Module should reactivate the HMSS.

3. SET TIME DELAY ON SAFETY MODULE

Check to make sure that the Safety Module locks out the HMSS for the entire closing cycle of the door. If the scanner sends a safety signal (scanner red light on) anytime during the closing cycle, the time delay set on the Safety Module must be increased. If the door goes into safety swing as soon as it starts to close and you have a time delay set for the length of the closing cycle, ensure that the AC power is being switched on and off at the point of connection for the red and black wires. Correct any faults before proceeding.

4. SET DIP SWITCHES

Set the DIP switches according to the chart on page 4 to achieve the desired lock out time delay. The DIP switches are configured to send a binary coded input to the microprocessor to establish the correct lock out time delay.

For example:

The normal closing cycle of an automatic door lasts about 7 seconds. In order to get the proper closing lock-out time delay needed for the closing cycle of the door, the DIP switches need to be set according to the chart on page 4 for 7 seconds (Default Setting). To get the proper lock-out time delay DIP switches 1, 2, and 3 must be in the ON position and DIP switches 4 thru 8 must be in the OFF position.

PROGRAMMING (cont.)

TIME DELAY (sec)	DIP 1 (1 sec)	DIP 2 (2 sec)	DIP 3 (4 sec)	DIP 4 (8 sec)	DIP 5 (16 sec)
1	ON	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF
9	ON	OFF	OFF	ON	OFF
10	OFF	ON	OFF	ON	OFF
11	ON	ON	OFF	ON	OFF
12	OFF	OFF	ON	ON	OFF
13	ON	OFF	ON	ON	OFF
14	OFF	ON	ON	ON	OFF
15	ON	ON	ON	ON	OFF
16	OFF	OFF	OFF	OFF	ON
17	ON	OFF	OFF	OFF	ON
18	OFF	ON	OFF	OFF	ON
19	ON	ON	OFF	OFF	ON
20	OFF	OFF	ON	OFF	ON
21	ON	OFF	ON	OFF	ON
22	OFF	ON	ON	OFF	ON
23	ON	ON	ON	OFF	ON
24	OFF	OFF	OFF	ON	ON
25	ON	OFF	OFF	ON	ON
26	OFF	ON	OFF	ON	ON
27	ON	ON	OFF	ON	ON
28	OFF	OFF	ON	ON	ON
29	ON	OFF	ON	ON	ON
30	OFF	ON	ON	ON	ON
31	ON	ON	ON	ON	ON

INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

The sensor manufacturer cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor/device; therefore, the sensor manufacturer does not guarantee any use of the sensor outside of its intended purpose.

The sensor manufacturer strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor system installation is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSIDASMA 102, ANSIDASMA 107).

Verify that all appropriate industry signage and warning labels are in place.



Do not leave problems unresolved. If a satisfactory solution cannot be achieved after troubleshooting a problem, please contact Allegion at 1-877-671-7011. If you must wait for the following workday to call Allegion, leave the door inoperable until satisfactory repairs can be made. Never sacrifice the safe operation of the automatic door or gate for an incomplete solution.

For more information, visit www.allegion.com.



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