44487098

VON DUPRIN®

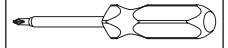## QEL Wiring and Configuration Instructions with 900-2Q

Tools for Install

⅝" Drill Bit

⚠DANGER:

To avoid risk of electric shock, turn off AC power to power supply before installing or wiring option board
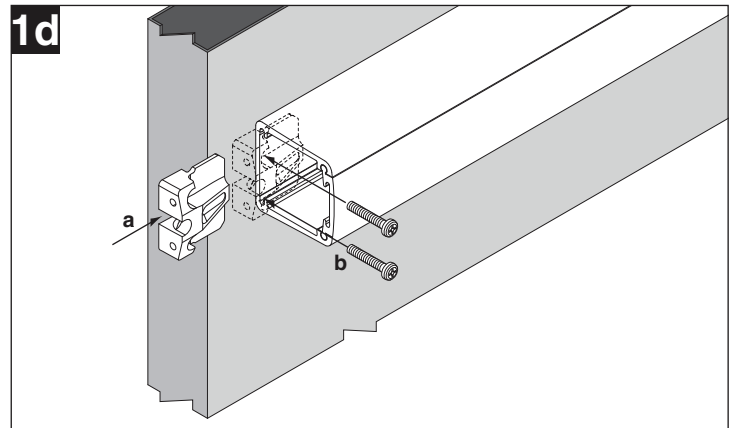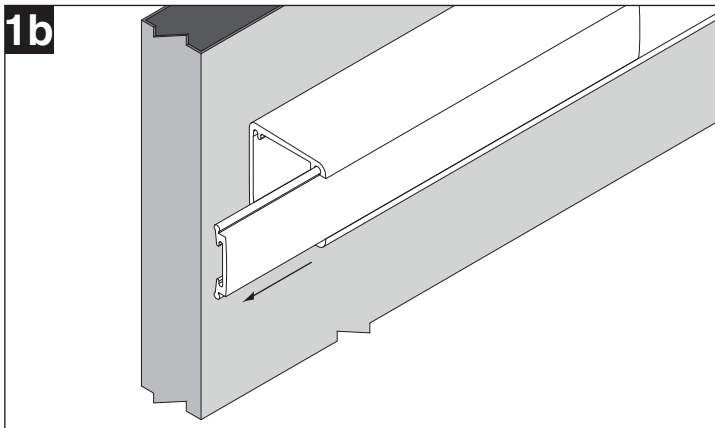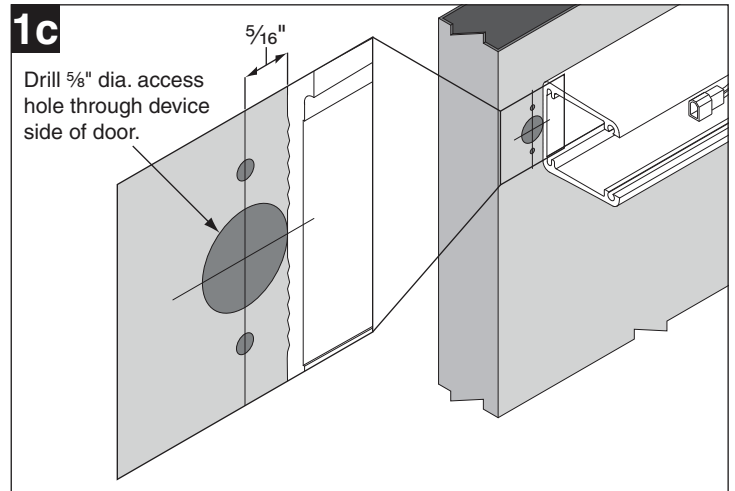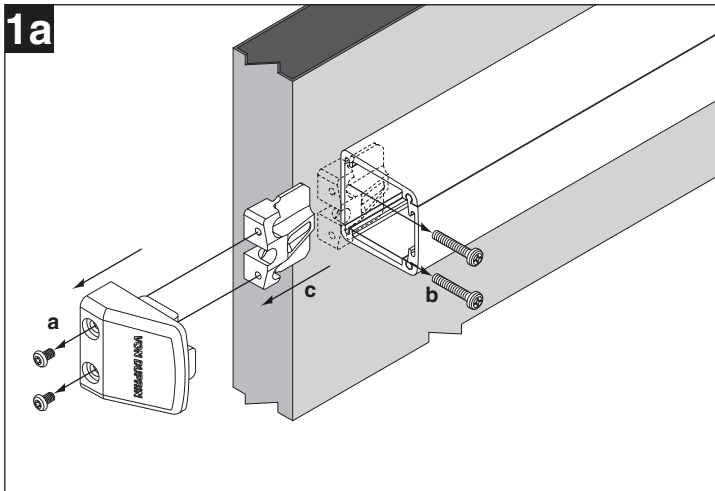
Note:
1. QEL must be powered by a PS900-Series Power Supply with 900-2Q board
2. QEL requires 18AWG minimum wire. Maximum wire run is 200' between power supply and QEL device.
3. QEL will NOT operate with a Von Duprin "4RL" or "2RS" power supply board.
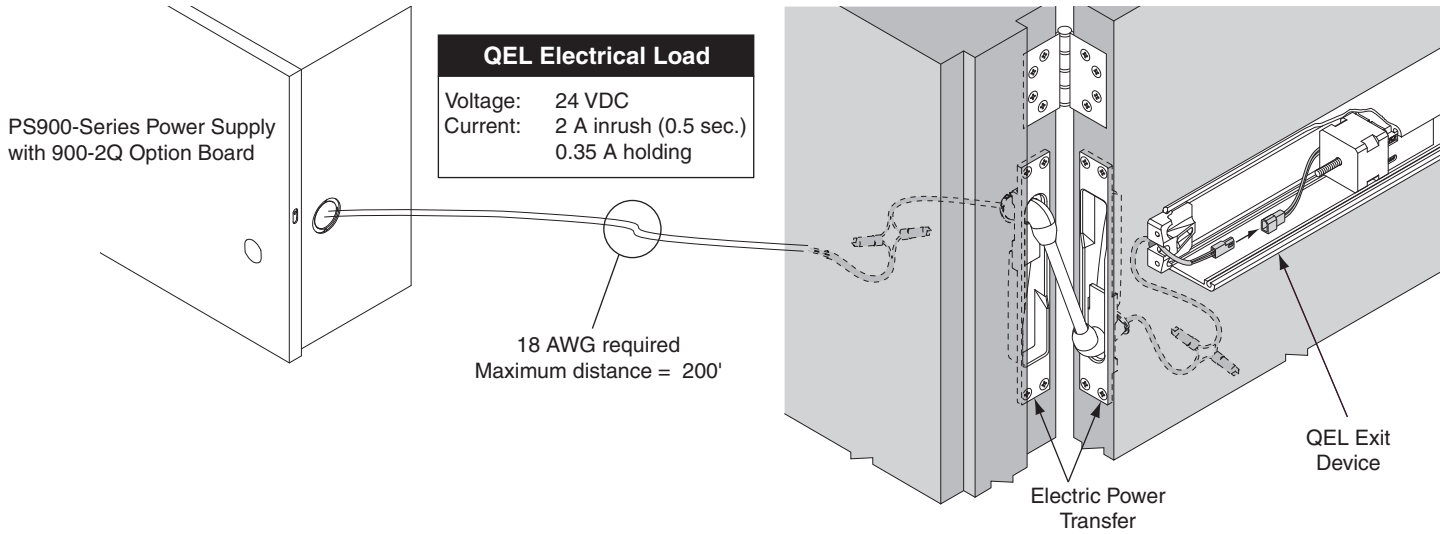
900-2Q Specifications:

Inputs I1,I2	Dry Contacts required (Closed = Active) Connect control contacts between SC (Signal Common) and any input
Outputs O1,O2	• 24VDC, 3A (wet) when AC powered • 19.2-26.4VDC when battery powered • May be used with PS914 to power EL device at 24VDC, 16A, 300ms • Maximum load cannot exceed power supply ratings or 3A for outputs combined
Board Input Power	Board requires 0.08A max. of power supply output current to operate
Temperature Range	32°-120° F (0°- 49° C)
Compliance	UL 294, ULC-S318, RoHS, & FCC Part 15
Fire Alarm Input	Accepts 900-FA Fire Alarm Board (Optional)

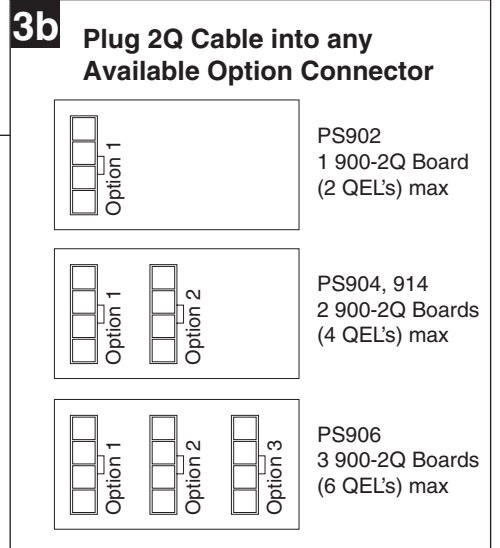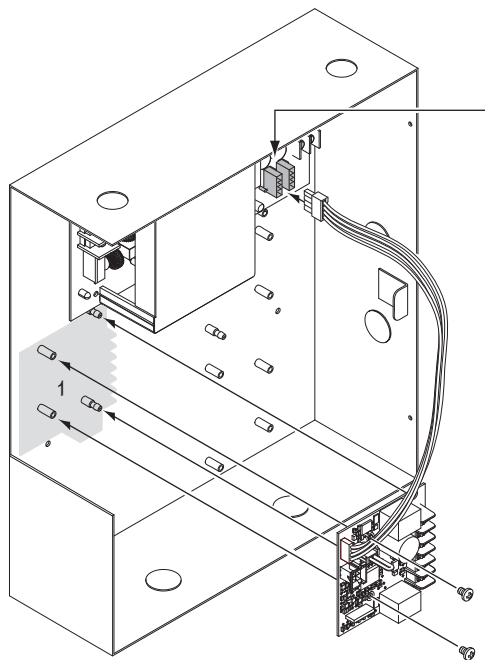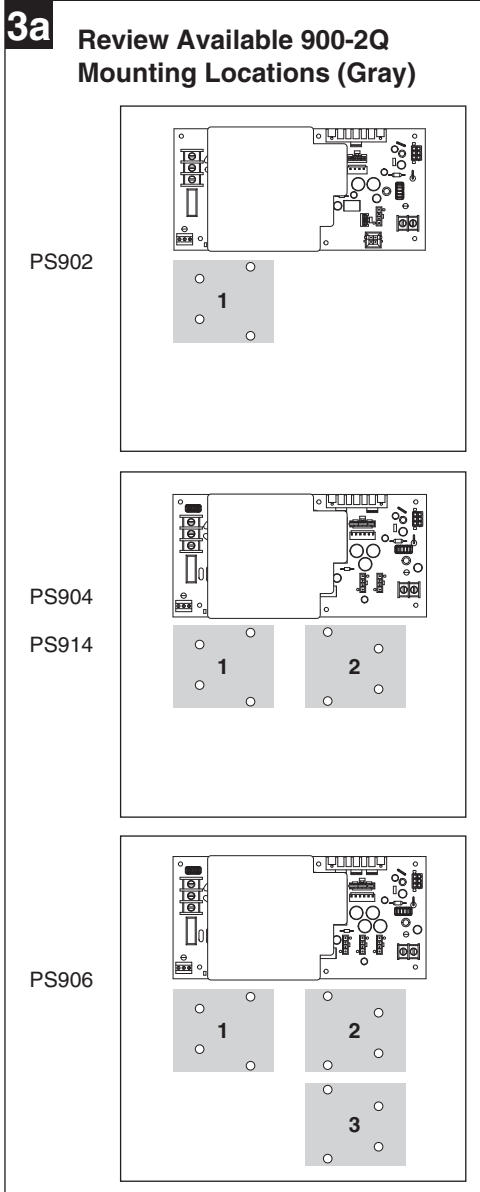Refer to installation instructions for compatible supply models - PS902, PS904, PS906, and PS914.

1 DRILL WIRE ACCESS HOLE

1a

1c

⁵⁄₁₆"

Drill ⅝" dia. access hole through device side of door.

1b

1d

© Allegion 2010 | 44487098 Rev. 10/10-a

ALLEGION™

2 ROUTE TWO WIRES FROM QEL EXIT DEVICE TO POWER SUPPLY

PS900-Series Power Supply
with 900-2Q Option Board

QEL Electrical Load

Voltage: 24 VDC
Current: 2 A inrush (0.5 sec.)
          0.35 A holding

18 AWG required
Maximum distance = 200'

QEL Exit
Device

Electric Power
Transfer

3 INSTALL 900-2Q OPTION BOARD(S) INTO POWER SUPPLY

3a Review Available 900-2Q Mounting Locations (Gray)

PS902

1

PS904
PS914

1   **2**

PS906

1   **2**

3

3b Plug 2Q Cable into any Available Option Connector

Option 1

PS902
1 900-2Q Board
(2 QEL's) max

Option 1   Option 2

PS904, 914
2 900-2Q Boards
(4 QEL's) max

Option 1   Option 2   Option 3

PS906
3 900-2Q Boards
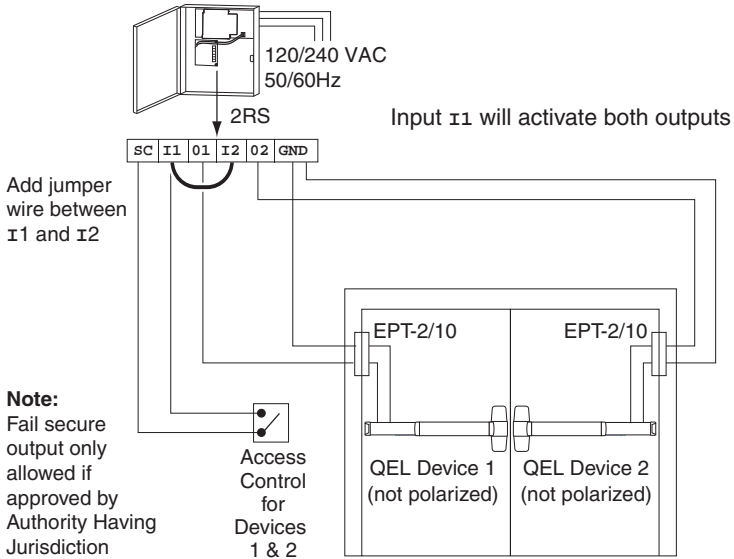(6 QEL's) max

3c Secure Board(s) with Screws

Note:
Power supply model needs to be set
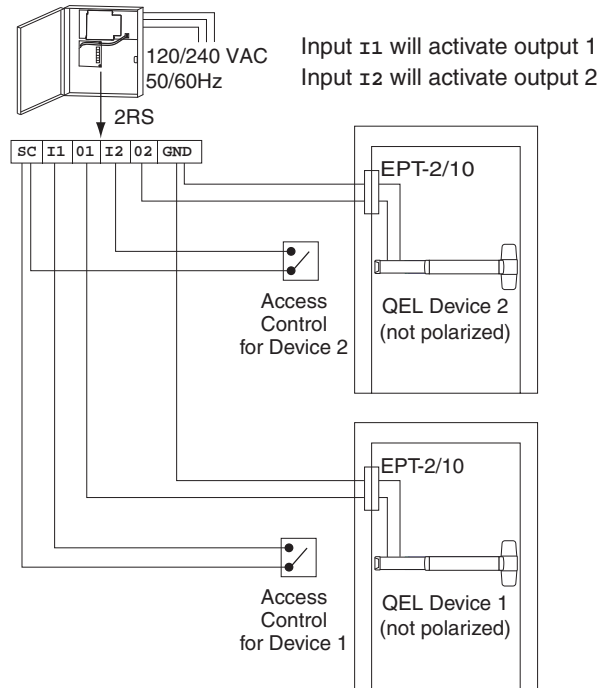to 24VDC to operate this device

4 CONNECT INPUT AND OUTPUT WIRES TO 900-2Q OPTION BOARD

- QEL requires 18AWG minimum wire.
- Maximum wire run is 200' between power supply and QEL device.
- Maximum of 2 QEL devices per 900-2Q board.
- For auto operator with unlock delay of 1 second or less, connect both QEL to output 1.
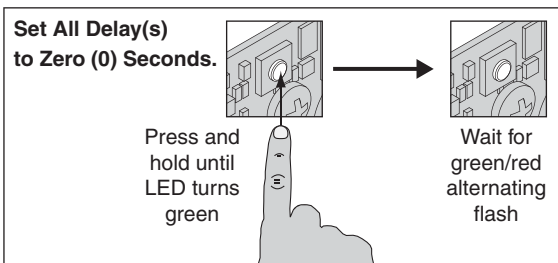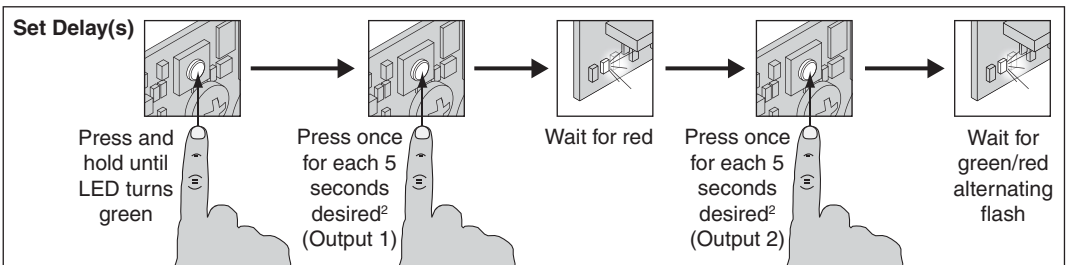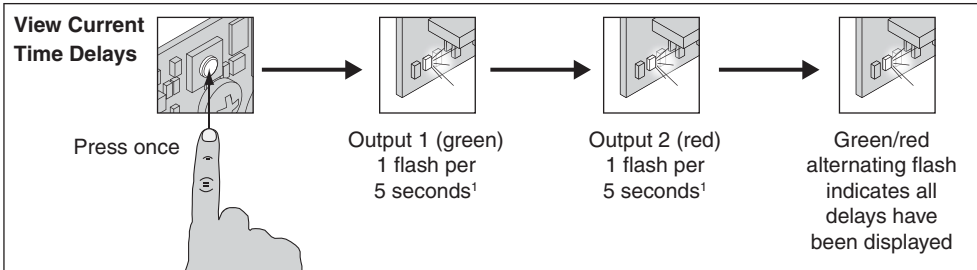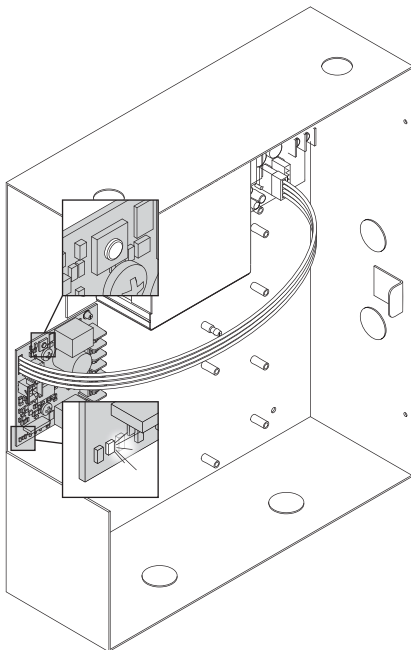
Sequential Mode - Typical Wiring

120/240 VAC 50/60Hz

2RS

| SC | I1 | 01 | I2 | 02 | GND |

Input I1 will activate both outputs

Add jumper wire between I1 and I2

Note:
Fail secure output only allowed if approved by Authority Having Jurisdiction

Access Control for Devices 1 & 2

EPT-2/10   EPT-2/10

QEL Device 1 (not polarized)   QEL Device 2 (not polarized)

Individual Mode - Typical Wiring

120/240 VAC 50/60Hz

2RS

| SC | I1 | 01 | I2 | 02 | GND |

Input I1 will activate output 1
Input I2 will activate output 2

EPT-2/10

Access Control for Device 2

QEL Device 2 (not polarized)

EPT-2/10

Access Control for Device 1

QEL Device 1 (not polarized)

5 APPLY POWER TO POWER SUPPLY. IF 900-BB IS USED, THEN RECONNECT BATTERIES

6 SET TIME DELAYS ON 900-2Q BOARD

View Current Time Delays

Press once → Output 1 (green) 1 flash per 5 seconds[1] → Output 2 (red) 1 flash per 5 seconds[1] → Green/red alternating flash indicates all delays have been displayed

Set Delay(s)

Press and hold until LED turns green → Press once for each 5 seconds desired[2] (Output 1) → Wait for red → Press once for each 5 seconds desired[2] (Output 2) → Wait for green/red alternating flash

Set All Delay(s) to Zero (0) Seconds.

Press and hold until LED turns green → Wait for green/red alternating flash

1. For example, 2 flashes = 10 seconds. If no delay has been set, no flashes will be displayed.

2. For example, 2 presses = 10 seconds. (Minimum time delay 5 seconds) (Maximum time delay 60 seconds) (Adjustable in 5 second increments)

7 CHECK OPERATION

a. Activate input(s) and verify all QEL devices operate properly.
   NOTE: During the first activation, each device will perform a self calibration. This is normal.
b. Check LED on the 900-2Q board for the following indications:

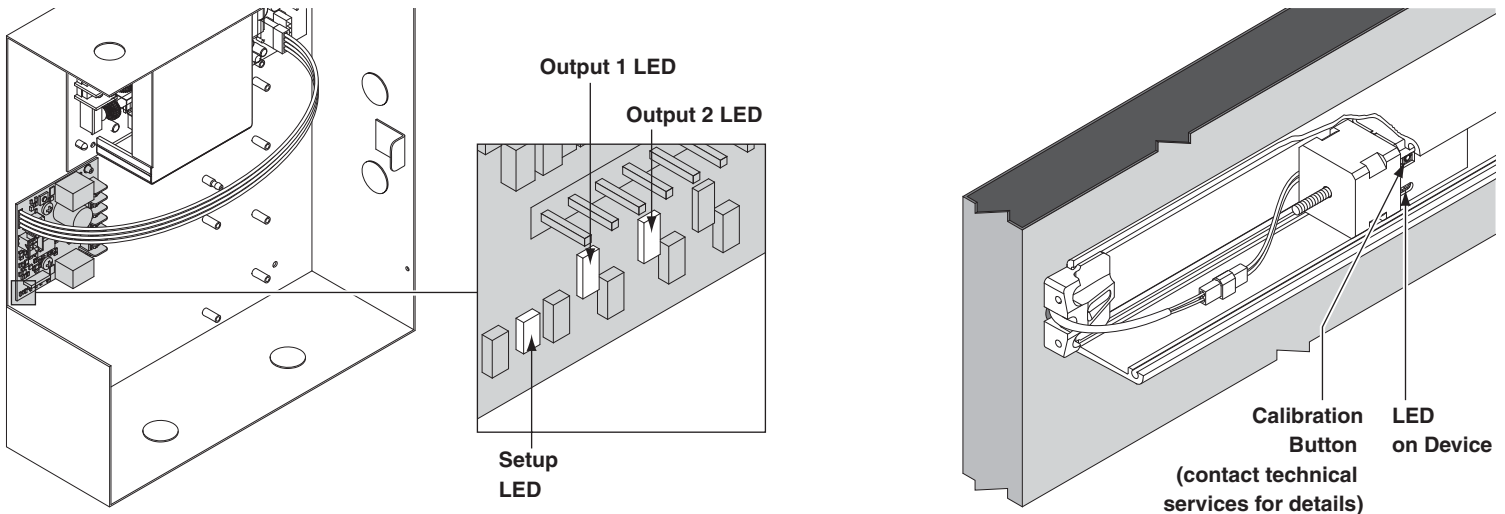| Output LEDs on 900-2Q Board	Indication
Solid	Input active
Flashing	Input has been released, and time delay is running

c. If any device does not operate properly, see step 8 for troubleshooting.
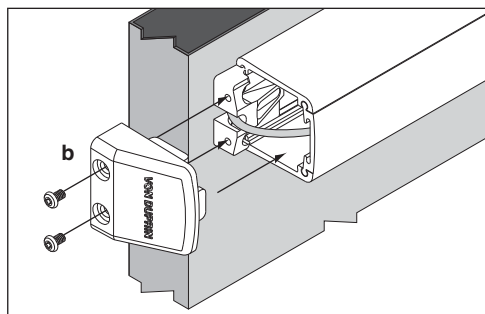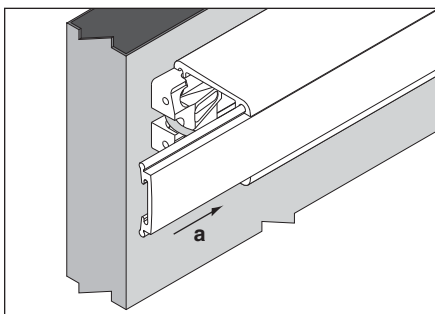
8 IF NECESSARY, TROUBLESHOOT OPERATION

Maintain input and then check for the following indications:
NOTE: The setup LED flashes slowly to indicate 900-2Q board is powered.

If Output LED on 900-2Q Board is:	and LED on Device is:	Indication
Off	Off	Problem with input wiring or input device
Solid	Off	Problem with wiring between power supply and exit device
Solid	Solid green	No detectable failures
Solid	Flashing green	Adjustment in progress
Solid	Solid red	**Pushpad may vibrate when powered**. This indicates that rods or mortise lock are misadjusted. See rod or mortise lock adjustment in installation instructions. If necessary, go to **www.vonduprin.com/installation_instruction_library.asp** or contact Technical Services at 1-877-671-7011
Solid	Flashing red	Contact Technical Services at 1-877-671-7011
Solid	Flashing green/red	Excessive tamper (automatically clears after 2 minutes)

Output 1 LED
Output 2 LED
Setup LED

Calibration Button (contact technical services for details)
LED on Device

9 REINSTALL COVER AND END CAP

a

b

NOTE: WHEN INSTALLATION IS COMPLETE, SECURE ENCLOSURE DOOR WITH SCREWS OR KEYLOCK