Instruction applies to devices built after Dec. 2014. To identify device, see QEL motor assembly as shown.

⚠️WARNING
Install in accordance with instructions or device will not function.

Devices covered by these instructions:
QEL94/9575 Mortise Device (Panic and Fire)

Read All Warnings
Before Starting Installation!

Index
- Warning ...................................... 1
- Parts ........................................... 2
- General Information .................... 3
- Specifications ............................. 3
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- Set Handing ............................... 3
- Installation .............................. 4

Customer Service
1-877-671-7011 www.allegion.com/us
PARTS

Mortise lock

Strike

Rod connector

Device

QEL motor

QEL cable

End cap

Dogging key (panic devices only)

End cap
GENERAL INFORMATION

The QEL94/9575 Exit Device is designed to provide reduced pushpad projection and a unique appearance by embedding the device into the face of the door.

These instructions assume that a factory-prepared door and frame are being used.


SPECIFICATIONS

<table>
<thead>
<tr>
<th>Mechanical</th>
<th>Electrical Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pushpad projection (depressed) 1(\frac{1}{8})&quot; to 1(\frac{1}{4})&quot;</td>
<td>• Voltage: 24 VDC</td>
</tr>
<tr>
<td></td>
<td>• Current: 1.0 A inrush (0.5 sec)</td>
</tr>
<tr>
<td></td>
<td>0.14 A holding</td>
</tr>
</tbody>
</table>

TOOLS NEEDED

These are the tools needed for installing a QEL94/9575 into a factory-prepared door and frame.

\(\frac{7}{64}\)“ hex key  
#2 Phillips screwdriver
**1 PREPARE DOOR FOR OUTSIDE TRIM (SKIP THIS STEP IF NOT USING TRIM)**

Drill through the four mounting holes and trim access hole at the latch side of the cutout. See trim installation instructions for hole sizes and locations.

**2 PREPARE DOOR FOR OUTSIDE CYLINDER (SKIP STEP IF NOT USING OUTSIDE CYLINDER)**

a. Temporarily install mortise lock in door and locate cylinder hole on outside face of door as shown.

b. Remove mortise lock and prepare cylinder hole through outside face of door only.
3 INSTALL STRIKE

1" flat head combination screws (quantity: 2)

4 WIRE LX SWITCH (LX DEVICES ONLY)

a. Connect field wiring to frame side of power transfer (Figure 4-1).

b. See LX switch wiring information (Figure 4-2) for switch configuration.

c. Connect LX switch wiring to door side of power transfer using crimp connectors. Unused wires should be insulated separately.

\[\text{NOTE}\]

Disconnect power before wiring LX switch.

\[\text{WARNING}\]

Switch Blue RedNC

The latch bolt monitor switch is activated whenever the latch bolt is retracted. The switch function is shown with the latchbolt extended and the touchbar not depressed.

\[\text{Figure 4-1}\]

\[\text{Figure 4-2}\]
5 MOUNT DEVICE ON DOOR

a. Mount device on door using supplied mounting screws (Figure 5-1).
b. Center device in pocket, leaving an even gap all around the device.
c. If outside trim is used, bolt through to trim (see Figure 5-2 and trim installation instructions).

![Figure 5-1](image)

6 INSTALL MORTISE LOCK

a. Thread rod connector into mortise lock.
b. Remove retaining screws, scalp plate, and insert.

![Figure 5-2](image)
c. Adjust faceplate for door bevel.
   1. Loosen top and bottom faceplate screws.
   2. Pivot faceplate to match door bevel.
   3. Tighten top and bottom faceplate screws.

d. Install mortise lock in door with two #12-12 x 12-24 combination screws.

e. If using outside cylinder:
   1. Back out cylinder set screws enough to clear cylinder mounting hole.
   2. Thread cylinder into mortise lock through hole in outside face of door.
   3. Tighten the cylinder set screw that is closest to outside face of door. Remove the other cylinder set screw.

f. Rotate latch bolt so flat side faces exit direction.

Keyhole position when installed

Door not shown for clarity

Cylinder set screws

Bevel on edge of door

Equal angles

Faceplate screw

Faceplate

Faceplate

Egress direction

Flat side of latch bolt

Top view

g. Replace insert, scalp plate, and scalp plate retaining screws (See step d).
7 ADJUST ROD CONNECTOR

a. Fully depress and hold pushpad and pull rod connector to set mortise lock latch bolt in fully retracted (hold) position (Figure 8-1).

b. Push down on center case connector, adjust rod connector length, and connect rod to center case connector (Figure 8-2).

c. Verify that pushpad projection is 1\(\frac{1}{8}\)" to 1\(\frac{1}{4}\)" when depressed. Adjust rod connector if necessary: **Lengthening the rod connector reduces pushpad projection when depressed.**

d. If using trim, verify that the trim fully retracts the latch bolt. If the trim does not fully retract the latch bolt, adjust the rod connector so it is shorter.

e. Open the door and release latch by pushing in auxiliary bolt. Check deadlocking: Latch bolt should not retract when pressed in.

---

8 INSTALL RETAINER CLIP ON ROD CONNECTOR AT CENTER CASE

- **Figure 8-1**
- **Figure 8-2**

- **Figure 8-3**
9  TEST MECHANICAL DEVICE OPERATION

a. Fully depress pushpad, push door open, and release pushpad.

- Mortise lock latch bolt should remain retracted
- Auxiliary bolt should extend
- Pushpad should remain in depressed position (1\(\frac{1}{8}\)" to 1\(\frac{1}{4}\)" projection)

**NOTE**
If latch bolt does not remain retracted, adjust rod connector shorter.

b. Close door or press auxiliary bolt in.

- Mortise lock latch bolt should fully extend (\(\frac{5}{8}\)" to \(\frac{3}{4}\)" projection)
- Auxiliary bolt should retract
- Pushpad should move from retracted to outward position (1\(\frac{3}{4}\)" to 1\(\frac{7}{8}\)" projection)

10  ROUTE TWO WIRES FROM QEL EXIT DEVICE TO POWER SUPPLY

**QEL Electrical Load**
- Voltage: 24 VDC
- Current: 1.0 A inrush (0.5 sec)
- 0.14 A holding

**Table:**

<table>
<thead>
<tr>
<th>Distance (one way)</th>
<th>Wire Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>200'</td>
<td>18AWG</td>
</tr>
<tr>
<td>320'</td>
<td>16AWG</td>
</tr>
<tr>
<td>500'</td>
<td>14AWG</td>
</tr>
<tr>
<td>800'</td>
<td>12AWG</td>
</tr>
</tbody>
</table>

**QEL device used with EPT, Door Loop, or Electric Hinge/Pivot**

- PS900-Series Power Supply with 900-Series Option Board(s) installed
- Note: Power wires to QEL are not polarized.

**QEL INPACT Exit Device**
- EPT shown. A door loop or electric hinge/pivot may also be used.
11 INSTALL 900-2RS, 4RL, OR 4R OPTION BOARD(S) INTO POWER SUPPLY

a Review Available 900 series Option Board Mounting Locations (Gray)

PS902
PS904
PS914
PS906

b Plug Option Board Cable into any Available Option Connector

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS902 1 Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS904, 914 2 Boards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS906 3 Boards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c Secure Board(s) with Screws

Notes:
1. 24VDC output setting required when QEL device connected
2. If installing board in location 2 or 3, rotate board 180°
3. The QEL is compatible with an existing 900-2Q board if currently installed.
4. Latchbolt retraction of (2) sequenced QEL's requires more than 1 second to complete.
5. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating.
12 CONNECT INPUT AND OUTPUT WIRES TO OPTION BOARD, 2RS SHOWN

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

14 CHECK OPERATION

a. Activate each input and verify all QEL devices operate properly.

b. If any device does not operate properly, see step 15 for troubleshooting.
15 IF NECESSARY, TROUBLESHOOT OPERATION

<table>
<thead>
<tr>
<th>Power at the QEL</th>
<th>QEL Response</th>
<th>Condition/Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>24VDC</td>
<td>LED - Solid green</td>
<td>Operation normal, latch retracted immediately</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - retracted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LED - Solid red after latchbolt attempts to retract multiple times</td>
<td>Latchbolt cannot fully retract mechanically</td>
</tr>
<tr>
<td></td>
<td>Latchbolt at attempts to retract multiple times</td>
<td>Verify mechanical adjustment (on vertical rod or mortise lock devices if used). Remove and reapply input voltage to reset this condition.*</td>
</tr>
<tr>
<td></td>
<td>LED - Flashing green/red</td>
<td>Excessive tamper (while power applied, the pushpad was pulled out at least 3 times)</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - not retracted</td>
<td>Wait 15 seconds and latchbolt will retract again OR remove and reapply power to clear condition</td>
</tr>
<tr>
<td>24VDC low</td>
<td>LED - Flashing green</td>
<td>Voltage low during latchbolt retraction (latchbolt retracts at reduced force)</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - retracted</td>
<td>Wire length is too long, wire gauge is too small or power supply has poor regulation</td>
</tr>
<tr>
<td>29VDC or greater</td>
<td>LED - Flashing red</td>
<td>Input voltage is too high for proper operation</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - will not retract</td>
<td>Wrong power supply, power supply defective.</td>
</tr>
<tr>
<td>13VDC or lower</td>
<td>LED - Flashing red</td>
<td>Input voltage is too low for proper operation</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - will not retract</td>
<td>Wrong power supply, power supply defective or not set to the proper output voltage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To set, remove AC power from power supply, change power supply setting from 12 to 24VDC, then reapply AC power and verify proper operation.</td>
</tr>
<tr>
<td>0VDC</td>
<td>LED - off</td>
<td>No input voltage</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - not retracted</td>
<td>Problem with the power supply, control switch or wiring</td>
</tr>
<tr>
<td>0VDC</td>
<td>LED - off</td>
<td>No input voltage</td>
</tr>
<tr>
<td></td>
<td>Latchbolt - retracted</td>
<td>Mechanical dogging is engaged</td>
</tr>
</tbody>
</table>

*For information about adjusting exit devices, you can find their installation instructions in the support area at www.allegion.com/us or call Technical Services at 1-877-671-7011

16 INSTALL END CAPS

**NOTE**
Make sure pushpad is in outward position before installing end caps.