PASSPORT 1000
Exit Device
Installation Instructions
Warning

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada:

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for use with the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

To avoid possible damage from electrostatic discharge (ESD), some basic precautions should be used when handling electronic components:

- Minimize build-up of static by touching and/or maintaining contact with unpainted metal surfaces such as door hinges, latches, and mounting plates especially when mounting electronic components such as readers and controllers onto the door.
- Leave components (reader and controller) protected in their respective anti-static bags until ready for installation.
- Do not touch pins, leads or solder connections on the circuit boards.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

1 Warning

2 General Description

3 Hardware Specifications

4 Electronic Specifications

5 Installation Wiring

6 Parts Breakdown

7 Rim Type 8877/8878 Exit Device Installation

8 Mortise Type 8977/8978 Exit Device Installation

9 Operational Check
Passport 1000 P1 Exit Device

2 General Description

An ANSI/BHMA Grade 1 lock utilizing Power over Ethernet (PoE) technology, the Passport 1000 P1 provides a cost-effective, future-proof solution for campuses. Featuring multiCLASS SE® Technology from HID Global®, it provides simultaneous support for multiple credentials and offers an easy migration path to higher security credentials and mobile access. Recognized for its contribution to sustainable buildings, the P1 re-uses existing IEEE 802.3af PoE infrastructure, streamlines the installation process, reduces costs and components, and minimizes power consumption.

3 Hardware Specifications

- Complete lockset with on-board memory
- Magnetic swipe standard with optional multiCLASS SE reader and/or keypad
- ADA compliant
- Exit Device always allows immediate egress
- UL Listed for panic and available UL Listed for fire-rated openings (12- option)
- SARGENT exit devices furnished for 1-3/4” standard; specify 31- and thickness for thicker doors
- ANSI/BHMA A156.25 Listed Grade 1 Compliant
- May be used in outdoor and indoor applications
- Available with ET Trim only (many lever designs available)

NOTE: A weather-protective gasket is required for outdoor applications.

Passport 1000 P1 Rim Exit

- Easily retrofits existing Passport 1000 rim exit devices
- Latch – 3/4” throw, stainless steel
- Accepts all SARGENT rim cylinders (8877 only)
- Key override standard with 8877 (#34 rim cylinder supplied)

Passport 1000 P1 Mortise Exit

- Easily retrofits existing Passport 1000 mortise lock exit devices
- Latch – 3/4” throw, anti-friction, brass
- Key override standard with 8977 [#46 (1-3/4”) mortise cylinder supplied]

4 Electronic Specifications

- HID® multiCLASS SE® technology offers support for the following credentials:
  - 2.4 GHz credential compatibility:
    - Secure Identity Object™ (SIO) on Mobile IDs (Bluetooth Smart)
  - 13.56 MHz credential compatibility:
    - iCLASS®
    - iCLASS SE® (SIO-enabled)
    - iCLASS Seos®
    - SIO on MIFARE® Classic
    - SIO on MIFARE®DEFire® EV1
    - MIFARE® Classic
    - DEFire® EV1
    - NFC-enabled mobile phones
  - 125 kHz credential compatibility:
    - HID Prox®
    - Magnetic Stripe

- 2,400 users per lock; 10,000 event audit trail
- Multiple time zone and holiday access scheduling
- First-In unlock configuration, based on specified time schedule
- Uses existing Magstripe keycards (track 2)
- Magnetic Stripe Card Coercivity: HiCo (4000 Oersted) or LoCo (300 Oersted)
- Power requirements: 55VDC, 90mA
- PoE Class 1 Device, as defined by IEEE 802.3af, requires less than 3.84 watts over structured cabling
- UL Listed* - UL 294 Indoor Use
- CUL Listed - S319: Class 1

UL 294 Access Control Ratings:

<table>
<thead>
<tr>
<th>Security Feature</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destructive Attack</td>
<td>Level 1</td>
</tr>
<tr>
<td>Line Security</td>
<td>Level 1</td>
</tr>
<tr>
<td>Endurance</td>
<td>Level 4</td>
</tr>
<tr>
<td>Standby Power</td>
<td>Level 1</td>
</tr>
</tbody>
</table>

*UL testing was conducted on product powered by UL Listed model 9001GR/AC injector; manufactured by Microsemi Corp.
Installation Wiring

Installation Wiring Overview

SARGENT Passport 1000 PoE P1 Typical Application

LMT: Lock Management Tool

A. PoE frame harness assembly
B. PoE data hinge from McKinney (patent pending)
C. PoE door harness* from McKinney
D. Passport 1000 P1 PoE Lock (Cylindrical and Exits only)
E. DPS: Door Position Switch (Only needed on Cylindrical and Exits only)

* Door width determines length
Passport 1000 P1 Exit Device

Installation Wiring (Continued)

- PoE frame harness assembly (From McKinney)
- PoE data hinge (Patent Pending) (From McKinney)
- PoE door harness* (From McKinney)
- Passport 1000 P1 PoE Lock

* Order of installation may vary. Refer to appropriate sections for instructions.

- PoE Lock

PoE frame harness assembly (From McKinney)
PoE data hinge (Patent Pending) (From McKinney)
PoE door harness* (From McKinney)
Passport 1000 P1 PoE Lock

Supplied by CI
- B-Splice Crimp Connector
- Ceiling
- RJ45-M
- RJ45-F Jack
- Cable: CAT 5e or higher
- 24 AWG
- 100ohm

Supplied by End User
- Patch Panel
- PoE Switch
- PoE Switch is Terminated to Earth Ground

Certified Integrator (CI) supplies and terminates the B-Splice connector and the male RJ45 connector from harness to end user provided facility cable.

Notes:
- Connectors go on only one way. They cannot be placed in an incorrect position.
- Do not force and do not offset connectors.
- Be sure they are completely seated (flush)
- PoE power source cannot be connected to a receptacle controlled by a switch.

Approved Software

Wiring to TIA/568-B Standard

Approved Software
Installation Wiring (Continued)

Frame Harness Installation

Components and wire harness supplied by McKinney, Suggested installation: Cut end / ceiling-side PoE harness:

Do not confuse pair numbers with pin numbers. A pair number is used for reference only (eg: 10Base-T Ethernet uses pairs 2 & 3). The pin numbers indicate actual physical locations on the plug and jack.

Hinge side of PoE harness:
1. Feed cut end of harness into hole on hinge-side through single access hole.
2. Push one connector back through the hole and feed into the other access hole. Each of the hinge-side harness connectors should end up threaded through a different access hole and matched to the same size pin connector from the door harness:
   • 4-pin male molex connector.
   • 6-pin male molex connector with ground wire.

PoE Data Hinge

Hinge-side harness connectors:
• 4-pin female molex connector
• 6-pin female molex connector with ground wire

Lock-side harness connectors:
• 4-pin female molex connector
• 6-pin female molex connector with ground wire

TIA/EIB-568-B Standard Wiring

<table>
<thead>
<tr>
<th>PIN</th>
<th>Wire</th>
<th>Pair Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White/orange</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>White/green</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Blue</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>White/blue</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Green</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>White/brown</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Brown</td>
<td>4</td>
</tr>
</tbody>
</table>
Passport 1000 P1 Exit Device

Installation Wiring (Continued)

G PoE Door Harness
Order of installation may vary. Refer to appropriate sections for instructions.

Hinge-side harness connectors:
• 4-pin male Molex connector
• 6-pin male Molex connector with ground wire

Lock-side harness connectors:
• Ring terminal
• Male RJ45 connector (crimped after cable is fed through door)

Notes:
• Connectors go on only one way. They cannot be plugged to incorrect position.
• Do not force and do not offset connectors.
• Be sure they are completely seated (flush).

PoE Door Harness

PoE Hinge

PoE Door Harness

PoE Lock

D PoE Lock
Order of installation may vary. Refer to appropriate sections for instructions.

1. Prop door open.
2. Using the ring terminal, carefully route the assembly through the door channel to the lock.
### Parts Breakdown

**Passport 1000 P1 Exit Device**

**P1 PoE Lock with Magnetic Card Swipe With or Without Keypad**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>52-3583-[finish]</td>
<td>Outside Escutcheon Assembly, mag stripe</td>
</tr>
<tr>
<td></td>
<td>52-3582-[finish]</td>
<td>Outside Escutcheon Assembly, mag stripe and Keypad (shown)</td>
</tr>
<tr>
<td></td>
<td>52-4244-[finish]</td>
<td>Outside Escutcheon Assembly, Mag Swipe, Keypad, and HID 125 kHz Prox</td>
</tr>
<tr>
<td></td>
<td>52-4759-[finish]</td>
<td>Outside Escutcheon Assembly, iCLASS, keypad, mag stripe, Prox, smart card (MIFARE, DESFIRE)</td>
</tr>
<tr>
<td></td>
<td>52-4777-[finish]</td>
<td>Outside Escutcheon Assembly, iCLASS, mag stripe, Prox, smart card (MIFARE, DESFIRE)</td>
</tr>
<tr>
<td></td>
<td>52-4782-[finish]</td>
<td>Outside Escutcheon Assembly, FeliCa, keypad, mag stripe, Prox</td>
</tr>
<tr>
<td></td>
<td>52-4788-[finish]</td>
<td>Outside Escutcheon Assembly, FeliCa, mag stripe, Prox</td>
</tr>
<tr>
<td></td>
<td>52-4894-[finish]*</td>
<td>Outside Escutcheon Assembly, Standard Reader and Keypad</td>
</tr>
<tr>
<td></td>
<td>52-4895-[finish]*</td>
<td>Outside Escutcheon Assembly, Standard Reader</td>
</tr>
<tr>
<td></td>
<td>52-4896-[finish]*</td>
<td>Outside Escutcheon Assembly, FeliCa Reader and Keypad</td>
</tr>
<tr>
<td></td>
<td>52-4897-[finish]*</td>
<td>Outside Escutcheon Assembly, FeliCa Reader</td>
</tr>
<tr>
<td>2</td>
<td>52-4779</td>
<td>Mounting Plate Assembly</td>
</tr>
<tr>
<td>3</td>
<td>52-4940</td>
<td>PoE Controller Assembly</td>
</tr>
<tr>
<td>4</td>
<td>52-4776-[finish]</td>
<td>Inside Escutcheon Assembly with Privacy Button</td>
</tr>
<tr>
<td>5</td>
<td>52-5373</td>
<td>Door Position Switch Kit</td>
</tr>
</tbody>
</table>

*Bluetooth® Smart option*
## Parts Breakdown (continued)

**8877/8878 x ET x Lever Design  Passport 1000 Rim Exit Device**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
<th>REQ'D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>--</td>
<td>Cylinder Assembly (Reference Catalog for Available Cylinders)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>--</td>
<td>Lever (Reference Catalog for Available Styles)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>97-4105</td>
<td>Exit Trim (ET) With Cylinder</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>97-4106</td>
<td>Exit Trim (ET) Without Cylinder</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>52-4845</td>
<td>Motor Assembly (Separate - not shown)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>68-7255</td>
<td>Chassis Assembly</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>68-7256</td>
<td>Chassis Assembly (Fire Rated)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>68-5836</td>
<td>Chassis Assembly (Latch Guarding)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>68-5837</td>
<td>Chassis Assembly (Fire-Rated Latch Guarding)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>68-2143</td>
<td>Trim Pack “A” - 1/4-20 x 2-3/8” ET Screws</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trim Pack “A”- #10 x 1-1/4” Chassis Screws</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trim Pack “A”- #10-24 x 3/4” Chassis Screws</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>68-3905</td>
<td>Trim Pack “B” - #8-32 x 5/16” Cover Screws</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>68-0406</td>
<td>Chassis Cover</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>68-1014</td>
<td>Chassis Cover (With Guarding)</td>
<td></td>
</tr>
</tbody>
</table>
### Passport 1000 P1 Exit Device

#### Parts Breakdown (continued)

8977/8978 x RT x Lever Design Passport 1000 Mortise Exit Device

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
<th>REQ'D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>--</td>
<td>Cylinder Assembly (Reference Catalog for Available Cylinders)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>--</td>
<td>Lever (Reference Catalog for Available Styles)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>97-4107</td>
<td>Exit Trim (ET) With Cylinder</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>97-4108</td>
<td>Exit Trim (ET) Without Cylinder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52-4845</td>
<td>Motor Assembly (Separate - not shown)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>99-2401</td>
<td>8900 Lock Body Assembly LHR</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>99-2402</td>
<td>8900 Lock Body Assembly RHR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99-2403</td>
<td>8900 Lock Body Assembly LHR (Non-Beveled Door)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99-2404</td>
<td>8900 Lock Body Assembly RHR (Non-Beveled Door)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>01-1019</td>
<td>Machine Screw</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>01-2298</td>
<td>Wood Screw</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>68-7253</td>
<td>Chassis Assembly LHR</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>68-7254</td>
<td>Chassis Assembly RHR</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>68-2143</td>
<td>Screw Pack</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>68-0407</td>
<td>Chassis Cover</td>
<td>1</td>
</tr>
</tbody>
</table>
7 Installation Instructions for 8877/8878 Rim Exit

1 Door Preparation

A. Verify Hand and Bevel of Door
   • Check hand of door
     The exit device is non-handed and the trim is field reversible.
   • Door should be fitted and hung

B. Verify Product Label

C. Door Preparation
   1. If mullion is used, install prior to installing hardware.
   2. Doors should be pre-prepped (recommended).
   3. Use appropriate templates:
      • Passport 1000 template A8070 (with DPS); A8071 (without DPS)
        (wood and metal)
      • Exit installation instructions A6770
        Note: Instruction examples show wood door installation.
        For metal doors, route cables inside door.
2 Install Door Position Switch (DPS)

Wood doors have 3/8" raceway to controller cutout and metal doors have 3/4" raceway to the controller cutout.

Refer to template A7951.

1. Insert connector end of DPS through the raceway on the latch edge of the door (Fig. 2A).

   Note: For metal doors, use DPS Collar.

2. Push DPS firmly into place by hand.

   IMPORTANT: DO NOT TAP SWITCH WITH ANY TOOL.

3 Position Exit Trim (ET)

For exterior applications, use ET gasket (52-0263) to seal between ET escutcheon and outside door surface.

1. For wood doors: Route ET wire harness through the cylinder hole, out the other side, and through the wire run channel to the controller cutout.

   For metal doors: Route ET wire harness through the cylinder hole and door and out the controller cutout.

2. Position and hold ET trim on the door.
4 Mount Exit Device Chassis

1. Position exit chassis carefully, verifying that the ET spindle engages the lower hub of the exit chassis.
   DO NOT PINCH THE WIRE HARNESS.

2. Secure the exit chassis with through bolts to the ET trim using (2) 1/4-20 x 2-3/8” flat head machine screws.

3. For wood door applications, attach ground harness (Fig. 4C) using the top through-bolt screw.

5 Install Cylinder

For devices without cylinder, go to Step 6.

1. While installing the rim cylinder, support the tail piece of the cylinder, verifying its engagement with the top hub of the exit chassis.
   Note: Be sure ET harness is clear of cylinder and tailpiece.

2. Secure the cylinder by through-bolting the cylinder through the exit chassis using (2) #12-24 x 1-7/8” connecting screws (see Fig. 6A).

3. Verify that the key retracts latchbolt.
Secure Exit Chassis

To comply with UL certifications and for security: Fasten exit chassis to door using (4) #10 wood screws (for wood door) or (4) #10-24 machine screws (for metal door).

Connect Door Position Switch (DPS)

Connect DPS to harness (Fig. 7A and 7B).
8 Install Chassis Cover

Secure chassis cover to chassis using (4) #8-32 x 5/16" oval head machine screws (Fig. 8).

9 Install Wire Cover (Wood Doors Only)

1. Position the wire cover plate above the chassis cover and covering the wire channel. Mark hole positions. Note: Make sure stamped side of plate is against door.

2. Drill (2) 3/32" diameter by 1/2" deep holes (Fig. 9A).

3. Cover wires with cover plate by securing plate to door directly above chassis (note orientation) using two (2) #6 x 1/2" flat head security torx wood screws (Fig. 9B).
   Note: Position lower edge of cover plate against the cover to ensure that no wires are visible.
10 Install Outside Escutcheon (with Optional Gasket)

Note: Gasket optional, for non-fire rated doors only.

For non-fire rated door applications, an optional gasket (Part number 52-0782) may be used as a weather seal between the escutcheon and the outside door surface.

Peel off adhesive backing and attach to (outside) escutcheon.

1. On the inside of the door, position the mounting plate over the indicated holes.
2. Feed reader and DPS cables through central opening on mounting plate (Fig. 10A, B).
3. Route ground ring terminal from lock body through bottom of mounting plate and attach to bottom left corner using (1) #8-32 x 1-7/8" flat head machine screw.
4. Insert other three #8-32 x 1-7/8" flat head machine screws and tighten, fastening the outside escutcheon to the door (Fig. 10B).

**IMPORTANT:** If the following step is skipped, the product will not be UL-compliant:

5. Attach two (2) #8 x 3/8" flat head wood screws for wood doors or (2) #8-32 x 3/8" flat head machine screws for metal doors (Fig. 10).

Note: Cable lengths exaggerated for illustrative purposes.
11 Installation of Connectors

CAUTION - Do not touch or allow debris to enter connector contacts.

Secure the following connectors to their respective terminals (Fig. 11A, B):
A. Secure the 4-pin DPS connector.
B. Secure the 10-pin lock body assembly connector.

IMPORTANT: Do not run wires through bottom hole in plate (Fig. 11A, B) - it will damage wires and the controller connector. Route wires around flange, do not route wires through the flange hole (Fig. 11B).

Secure Mounting Plate
1. Tuck excess cable into wire hole on inside of door.
2. Secure the mounting assembly while ensuring proper alignment of outside reader and fully tighten the (2) through-bolts on the inside of the door to secure the reader and plate to the door.

C. Secure the 24-pin card reader connector (Fig. 11B).
D. Crimp* RJ45 to Cat 5e cable from hinge (Fig. 11C).
*For more detail, refer to section (5) ‘Installation Wiring’, “A - Frame Harness Installation”.

TIA/EIA 568-B Standard Wiring

<table>
<thead>
<tr>
<th>PIN</th>
<th>Wire</th>
<th>Pair Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White/Orange</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>White/Green</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Blue</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>White/Blue</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Green</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>White/Brown</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Brown</td>
<td>4</td>
</tr>
</tbody>
</table>

Do not confuse pair numbers with pin numbers. A pair number is used for reference only (eg: 10BaseT Ethernet uses pairs 2 & 3). The pin numbers indicate actual physical locations on the plug and jack.
12 Installation of Inside Module Component Assembly

1. Insert top tabs of controller into slots on mounting plate (Fig. 12A, B).

2. Ensure proper alignment of board-to-board connectors while pivoting bottom of controller toward door until tab on bottom snaps securely into place on mounting plate.

   **CAUTION:** To avoid possible damage to board-to-board connectors, care should be taken when securing controller to mounting plate. If there is resistance when securing, detach controller to determine cause before re-attaching controller.

3. Connect RJ45 male Connector to female RJ45 on controller board (Fig. 12B).

4. Remove **pull tab** from its position beneath the coin cell by pulling on tab in direction of arrows printed on tab (Fig. 12B).
13 Install Inside Escutcheon

1. Position inside escutcheon as shown (Fig. 13).
   Verify that all wires are positioned within the escutcheon to avoid pinching.
2. Attach escutcheon with (2) #8-32 x 1/2" T-20 Torx pan head screws.
3. Straighten escutcheon and tighten securely.
   DO NOT OVERTIGHTEN.

14 Installation of Rail Assembly

1. Retrieve harness from end of rail. Harness has limited travel and can be damaged.
2. Attach harness to female connector on chassis.
3. Install rail and screws per exit device instructions.
   Note: This view shows rim exit device version
Installation Instructions for Mortise Type 8977/8978 Exit Device

1 Door Preparation

A. Verify Hand and Bevel of Door
   - Check hand of door. This exit device is handed and is not reversible.
   - Door should be fitted and hung.

B. Verify Product Label

C. Door Preparation
   1. If using a mullion, install it prior to installing hardware.
   2. Doors should be pre-prepped (recommended).
   3. Use appropriate templates:
      - Passport 1000 template A8074 (with DPS); A8075 (without DPS)
      - Exit installation instructions A6705.
      Note: Instruction examples show wood door installation.
      For metal doors, route cables inside door.

Fig. 1B
2 Install Door Position Switch (DPS)

Wood doors have 3/8" raceway to controller cutout and metal doors have 3/4" raceway to the controller cutout.

Refer to template A7951.

1. Insert connector end of DPS through the raceway on the latch edge of the door (Fig. 2A).
   
   Note: For metal doors, use DPS Collar.

2. Push DPS firmly into place by hand.

   **IMPORTANT:** DO NOT TAP SWITCH WITH ANY TOOL.

---

---

3 Position Exit Trim (ET)

1. Slide mortise lock into door and loosely secure with (2) flat head screws.

   Note: For exterior applications, use ET gasket (52-0263) to seal between ET trim and the door surface.

2. For wood doors: Route ET wire harness through the wire cutout, out the other side and through the Wire Run Channel (on the inside) to the Controller Cutout.

   For metal doors: Route ET wire harness through the wire cutout and door and out the controller cutout.

3. Position the ET trim so the ET spindle engages the mortise lock hub and hold in place.
4 Mount Exit Device Chassis

1. Position exit chassis carefully, verifying the chassis lift lever engages the mortise lock (Fig. 4B). DO NOT PINCH THE WIRE HARNESS.

2. Secure the exit chassis by through bolting to the ET trim with (2) 1/4 -20 x 2-3/8” flat head machine screws.

3. For wood door applications, attach Ground Harness as shown in Fig. 4A, using the top through-bolt screw.

Fig. 4A

5 Secure Exit Chassis

Fasten exit chassis to door using (4) #10 wood screws for wood door or (4) #10-24 machine screws for metal door (Fig. 5).

Fig. 5
6 Install Cylinder

For devices without cylinder, go to Step 7.
1. Slide cylinder through ET Trim and thread into the lockbody, rotating the cylinder clockwise. Cylinder should rest flush on ET Case.
   Note: SARGENT logo must be horizontal and on the top of the cylinder (Fig. 6B).
2. Secure the cylinder by tightening cylinder clamp screw located above the guardbolt.
3. Verify that the key retracts the latchbolt.

Fig. 6A

- Outside of Door
- Set Screw
- #46 Cylinder

Fig. 6B

Position cylinder so that the SARGENT logo is right-side up.

Correct
Incorrect

7 Install Chassis Cover

Secure chassis cover to chassis using (4) #8-32 x 5/16" oval head machine screws.

Fig. 7

- Inside of Door
- Chassis Cover
- (4) #8-32 x 5/8" Oval Head Machine Screws
8 Install Wire Cover (Wood Doors Only)

1. Position the wire cover plate above the chassis cover and covering the wire channel. Mark hole positions. Note: Make sure stamped side of plate is against door.

2. Drill (2) 3/32" diameter by 1/2" deep holes (Fig. 8A).

3. Cover wires with cover plate by securing plate to door directly above chassis (note orientation) using two (2) #6 x 1/2" flat head security torx wood screws (Fig. 8B). Note: Position lower edge of cover plate against the cover to ensure that no wires are visible.

9 Install Outside Escutcheon (with Optional Gasket)

Note: Gasket optional, for non-fire rated doors only.

For non-fire rated door applications, an optional gasket (Part number 52-0782) may be used as a weather seal between the escutcheon and the outside door surface.

Peel off adhesive backing and attach to (outside) escutcheon.

1. Position the outside escutcheon, aligning the posts with the door prep (Fig. 9).

2. On the inside of the door, position the mounting plate over the indicated holes.

3. Feed reader cable through opening.
**10 Mounting Plate Assembly**

1. On the inside of the door, position the mounting plate over the indicated holes.
2. Feed reader and DPS cables through central opening on mounting plate (Fig. 10).
3. Route ground ring terminal from lock body through bottom of mounting plate and attach to bottom right corner using (1) #8-32 x 1-7/8” flat head machine screw.
4. Insert other three #8-32 x 1-7/8” flat head machine screws and tighten, fastening the outside escutcheon to the door (Fig. 10).

**IMPORTANT:** If the following step is skipped, the product will not be UL-compliant:

5. Attach two (2) #8 x 3/8” flat head wood screws for wood doors or (2) #8-32 x 3/8” flat head machine screws for metal doors (Fig. 10).
11 Installation of Connectors

CAUTION - Do not touch or allow debris to enter connector contacts.

Secure the following connectors to their respective terminals (Fig. 11A, B):
A. Secure the 4-pin DPS connector.
B. Secure the 10-pin lock body assembly connector.

IMPORTANT: Do not run wires through bottom hole in plate (Fig. 11A, B) - it will damage wires and the controller connector. Route wires around flange, do not route wires through the flange hole (Fig. 11B).

Secure Mounting Plate

1. Tuck excess cable into wire hole on inside of door.
2. Secure the mounting assembly while ensuring proper alignment of outside reader and fully tighten the (2) through-bolts on the inside of the door to secure the reader and plate to the door.

C. Secure the 24-pin card reader connector (Fig. 11B).

D. Crimp* RJ45 to Cat 5e cable from hinge (Fig. 11C).

*For more detail, refer to section (5) ‘Installation Wiring’, “A - Frame Harness Installation”.

TIA/EIA 568-B Standard Wiring

<table>
<thead>
<tr>
<th>PIN</th>
<th>Wire</th>
<th>Pair Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White/Orange</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>White/Green</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Blue</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>White/Blue</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Green</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>White/Brown</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Brown</td>
<td>4</td>
</tr>
</tbody>
</table>

Do not confuse pair numbers with pin numbers. A pair number is used for reference only (eg: 10BaseT Ethernet uses pairs 2 & 3). The pin numbers indicate actual physical locations on the plug and jack.
Installation of Inside Module Component Assembly

1. Insert top tabs of controller into slots on mounting plate (Fig. 12A, B).

2. Ensure proper alignment of board-to-board connectors while pivoting bottom of controller toward door until tab on bottom snaps securely into place on mounting plate.

   **CAUTION:** To avoid possible damage to board-to-board connectors, care should be taken when securing controller to mounting plate. If there is resistance when securing, detach controller to determine cause before re-attaching controller.

3. Connect RJ45 male Connector to female RJ45 on controller board (Fig. 12B).

4. Remove **pull tab** from its position beneath the coin cell by pulling on tab in direction of arrows printed on tab (Fig. 12B).
13 Install Inside Escutcheon

1. Position inside escutcheon as shown (Fig. 13).
   Verify that all wires are positioned within the escutcheon to avoid pinching.

2. Attach escutcheon with (2) #8-32 x 1/2” T-20 Torx pan head screws.

3. Straighten escutcheon and tighten securely.
   DO NOT OVERTIGHTEN.

Fig. 13
14 Installation of Rail Assembly

1. Retrieve harness from end of rail.
   Note: Harness has limited travel and can be damaged.

2. Attach harness to female connector on chassis.

3. Install rail and screws per exit device instructions.
   Note: This view shows rim exit device version.

9 Operational Check

**IMPORTANT**: Be sure to test functions prior to closing door.

In all cases, perform the following checks:

1. Ensure that inside lever retracts latch.
   - For units with cylinders, the following checks apply:
     Insert key into cylinder and rotate:
     a. There should be no friction against lock case or any other obstructions. If friction or binding occurs, readjust cylinder to eliminate issues.
     b. The key should retract the latch and the key should rotate freely.
   - For units without a keypad, add card using LCT software* and test.
   - For units with a keypad, add pin and card using LCT software* and test.

2. LED signaling:
   - After using a valid credential, a green flash followed by three fast amber flashes indicates a low power condition.
     Check the battery voltage.
     If the voltage is low, replace the batteries.
   - If the lock loses power, it will flash rapid blue for approximately one minute. Lock will default to programmed fail safe or fail secure.
     After that, the lock will no longer be functional.

3. When you have completed the tests, close the door, ensuring latchbolt and deadbolt fully extend into strike plate without binding.

*Refer to Network and Lock Configuration Tool user manual (WFMN1) for information on how to configure and program locks.
Founded in the early 1800s, SARGENT® is a market leader in locksets, cylinders, door closers, exit devices, electro-mechanical products and access control systems for new construction, renovation, and replacement applications. The company's customer base includes commercial construction, institutional, and industrial markets.

Copyright © 2016, Sargent Manufacturing Company, an ASSA ABLOY Group company. All rights reserved.

Reproduction in whole or in part without the express written permission of Sargent Manufacturing Company is prohibited.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.