



# PASSPORT TECHNOLOGIES INC. SICM INSTALLATION MANUAL

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We have checked the contents of this manual for compliance with the hardware and software described. Nevertheless, discrepancies may exist. However, the data in this manual is reviewed regularly and any necessary corrections will be included in subsequent editions. Suggestions for improvement are welcomed.

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## SICM Installation Manual

Thank you for purchasing a Passport Technologies Inc. Software Interface and Control Module (SICM). Please read and follow these simple steps to ensure the proper installation and operation of the system with your membership management software.

### 1. Package Contents

Before installing the SICM, please verify the contents of the package to ensure that you received all required components. Keep in mind that this is the standard list of items and that additional items may be included depending on the level of application customization. Please contact customer support immediately upon receipt should you have any questions.

- SICM unit with 5VDC power supply attached
- RS232 Null Modem female DB9 to female DB9 cable, beige, 10ft
- Cat5 network cable, white, 10ft
- USB to RS232 converter
- 12VDC power supply

### 2. Physical Location

The SICM should be located as close as possible to the main computer used for check-in and card validation. It is not recommended that the SICM be placed in a hidden location, such as inside a wall or above the ceiling. If the same computer is not used for both check-in and registration purposes and/or a secondary reader is used for card/keyfob registration, the secondary reader should be located close to the main *registration* computer while the SICM should be located close to the main *check-in* computer.

### 3. Power Requirements

Unless otherwise specified, two (2) power supplies are provided with the unit. A minimum of two (2) grounded 120VAC outlets must be available near the location of the SICM.

#### 3.1 12VDC Power Supply

Round connector as indicated on back of SICM for operation of the SICM output with an electric lock, **12VDC input only**. (Please see **Note** below for use with **Magnetic Lock**.)

***NOTE: The use of an external power supply is strongly recommended for magnetic lock applications. An open contact output may also be configured for these applications. Please contact Technical Support for details.***

#### 3.2 5VDC Power Supply

Already attached to the back of unit for operation of the main control and the Wave Passport reader (if applicable), **5VDC operation only**.

### 3.3 Optional Power Supply

Optionally, a third power supply may be required for certain types of readers: Wave Passport desktop reader, barcode reader, etc. In this case, the power supply is connected directly to the reader and an AC outlet must be provided close to the reader location.

## 4. Communication and Connection Requirements

### 4.1 Input/Output Connections

Grey cable extending from the SICM enclosure with one white 8-pin terminal block or two 4-pin terminal blocks.

There are two (2) possible connection types:

(A) Wave Passport reader: Single 8-pin terminal block

(B) Barcode reader or Biometric reader: Two 4-pin terminal blocks

**NOTE: Color code of cables must be respected if cable extension is required.**

(A) Wave Passport Reader (Door or turnstile location), single 8-pin terminal block

- Terminals 1 through 5 are used for reader operation only.
- Terminals 6 and 7 are used to operate an electric lock; either door or turnstile type.
- Terminal 8 is used to connect a manual pushbutton (optional). Pushbutton is connected between pin-8 and pin-1

(B) Barcode reader or biometric reader (same connection), two 4-pin terminal blocks

- ▶ 4-pin terminal block is used only for connection to the electric lock and manual pushbutton (optional).
  - Lock connection is between pin “Out” (orange) and “Com” (yellow)
  - Pushbutton connection is between pin “PB+” (green) and “PB-” (white)
- ▶ A second 4-pin terminal block is used for external power as required.
  - +12VDC: Brown wire
  - Com: Blue wire
  - +5VDC: Red wire
  - Com: Black wire

### 4.2 Panel Mount Network Connector (Ethernet RJ45)

The Ethernet (RJ45) connector located on the back of the SICM and white network cable supplied with the unit are used for connection to the local network during normal operations. DHCP operation is preferred (fixed IP option available). Please check with your local installer for more information.

**NOTE: Please ensure that a high-quality and high-speed internet connection is available through your network or router. It is strongly recommended that the system be connected directly to the router and not through a modem.**

- This connection is critical to proper operation of the SICM.

- It must be a direct cable connection from the SICM to the network switch or router only, NOT a wireless connection.
- Slower internet speed connections will result in slower response times and delays in opening the electric lock when access is granted.
- Poor quality connections may cause the SICM to deny access if the signal is lost momentarily.
- If communication with the SICM is required for configuration purposes, the unit may be accessed through the network via any PC on the same network.

***NOTE: To ensure proper system functionality, please use a direct cable or network connection only. The use of a wireless connection is not recommended under any circumstances. Wireless network connection to the Local PC only may be used, if required.***

#### **4.3 RS232 Connection to the Main PC (“PC” DB9 Connector)**

The DB9 (RS232) serial port labeled “PC” on the side of the SICM is used for communication with the main PC for check-in and card registration purposes.

- Please use only the beige communication cable supplied with the unit for this connection.
- This communication cable should not be extended. Please contact technical support if the cable is not long enough for your application.
- The main PC must have at least one (1) DB9-RS232 serial port available. Please check with your local installer if unsure.
- If the PC does not have a serial port available, an internal PCI-board type may be used.
- If an internal PCI-board RS232 port is not available, a Passport Technologies Inc. approved external USB-to-serial-RS232 converter may be used.

***NOTE: One (1) external USB-to-RS232 converter is supplied with each SICM system for this purpose.***

#### **4.4 Optional RS232 Connector for Barcode or Biometric Reader (“READER” DB9 Connector)**

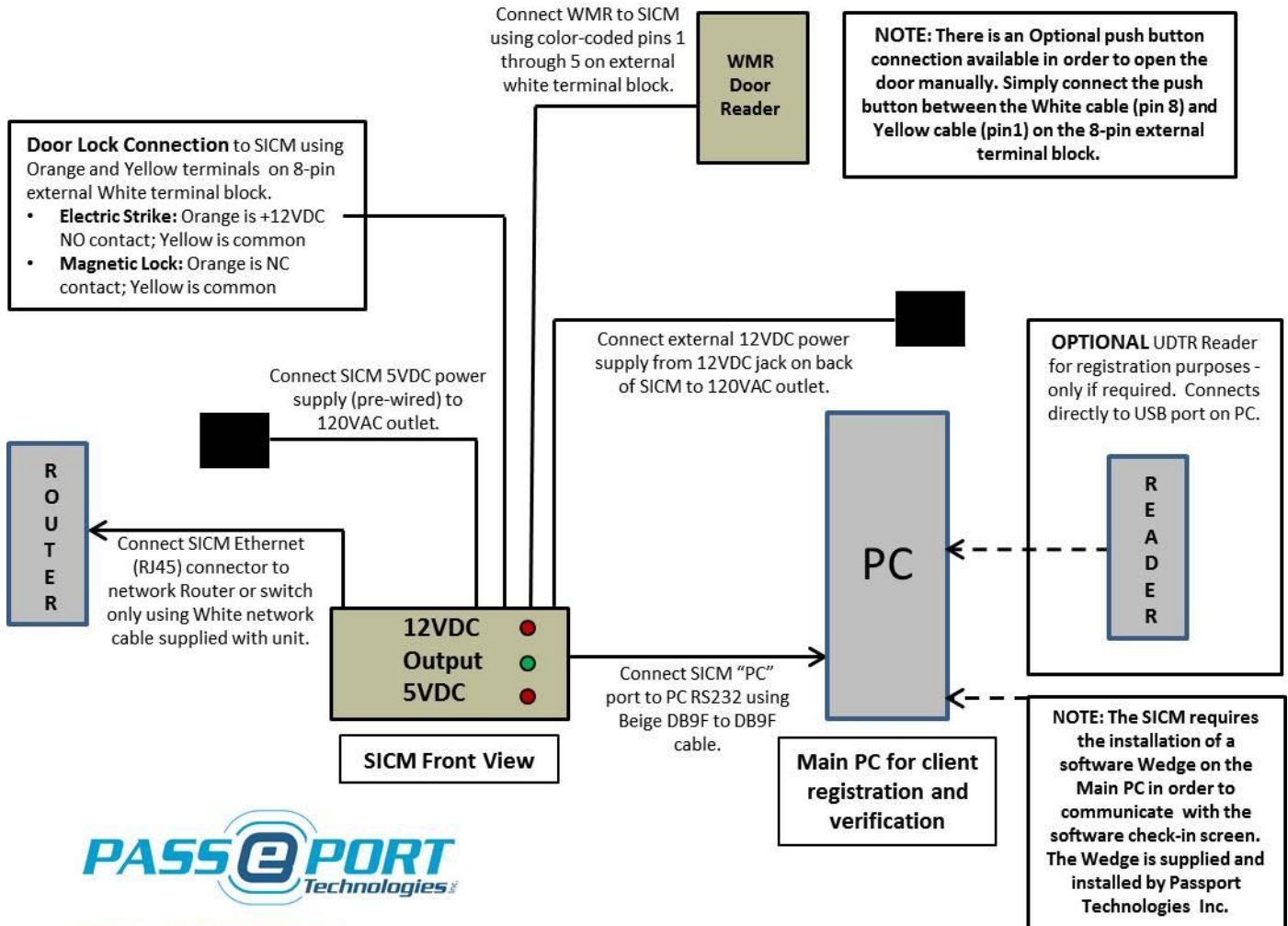
When required and specified prior to order, the SICM offers a second DB9-RS232 serial port available for additional reader connection – Indicated as “READER” on the SICM.

- For systems where a barcode reader is used for access, an additional external RS232 connector is included on the SICM.
- This second DB9 connector (“READER” on side of SICM) is used to connect the barcode reader to the SICM *and not* for connection to the PC.
- If a second barcode reader is required for registration purposes, it must be hooked up directly to the PC. Please be sure to follow the barcode reader manufacturer’s installation instructions.

## 5. Wiring Diagram for Wave Passport Reader Installation

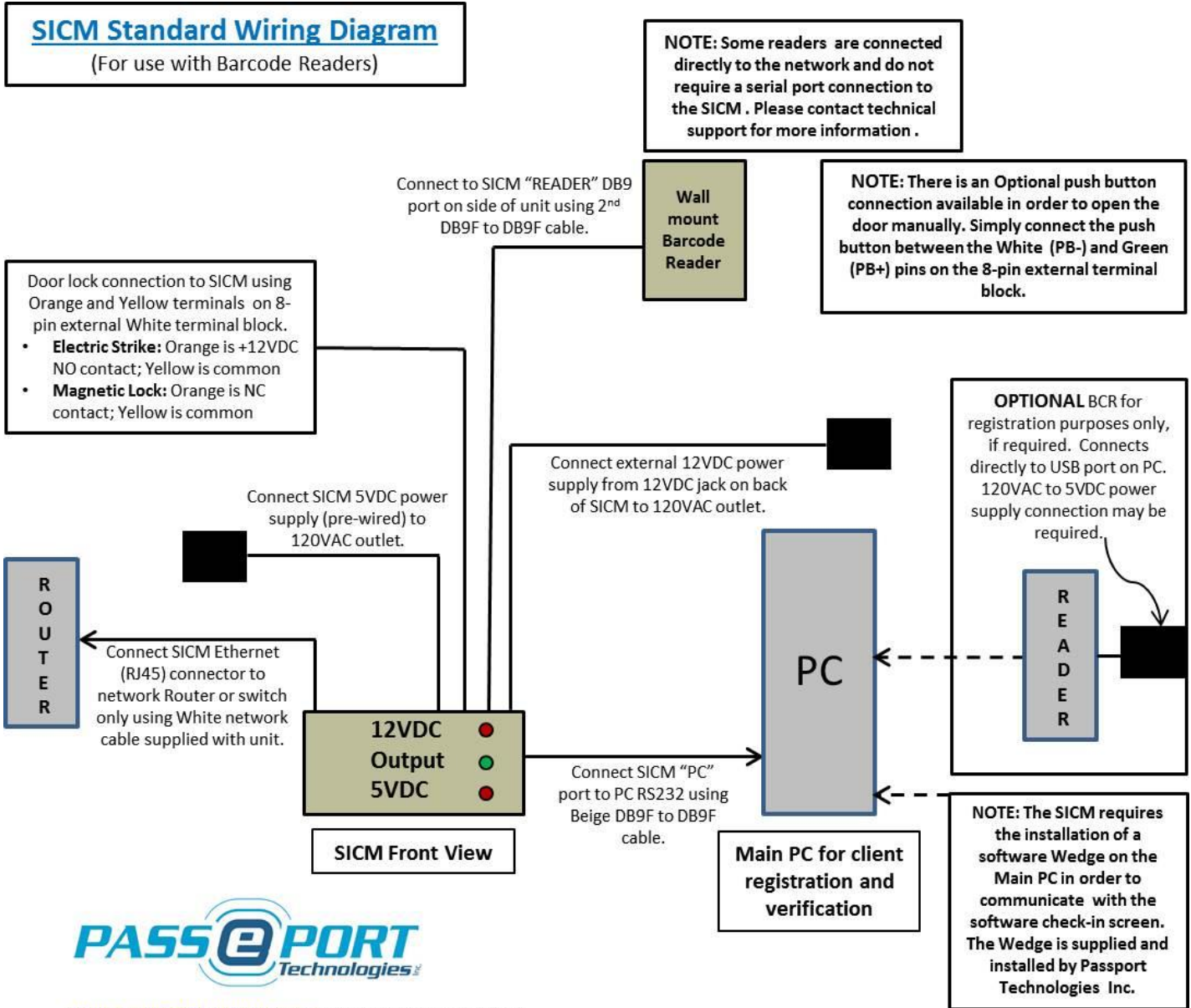
### SICM Wiring Diagram

(For use with Wave Passport Readers)



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## 6. Wiring Diagram for Barcode (or Biometric) Reader Installation







## 7. SICM Configuration

Configuration of the SICM and Main PC to operate with the system.

- ▶ The SICM requires your membership software credentials to validate the memberships. These credentials are supplied by the software provider (or in some cases by the client). Please contact Passport Technologies Inc. to confirm your credentials for the SICM.
- ▶ The installation of a simple communication software (twedge) is required in order to complete the check-in and/or registration process on the Main PC. To install the program and license, Passport Technologies Inc. must connect remotely to the Main PC.
  - The use of Teamviewer.com is recommended for this operation.
  - This will also allow the Passport Technologies support team to access your Main PC and the SICM remotely should troubleshooting be required.

## 8. Passport Technologies Support

Please contact the Passport Technologies Technical Support team for further details or troubleshooting support as required. We will be glad to answer any questions or installation concerns you may have.

Passport Technologies Inc. warrants its products to be free from defect and workmanship for a period of one year from date of delivery. Phone and internet support is included within the warranty period - for Passport Technologies Inc. products only.

Support for external devices such as computers or network connections is available at a reasonable hourly rate if required. Software support is provided by your software provider and is typically included in their monthly fees.

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