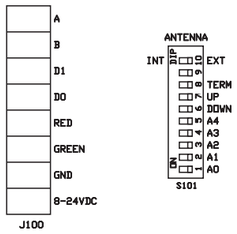
Inputs 1 to 8

Inputs 1 to 8 are general purpose inputs.

Aperio Hub Settings and Connections

- Set DIP switches 1 to 4 on S101 to a unique RS-485 address.
- Set DIP switch 8 on S101 to ON if the Aperio hub is on the end of the RS-485 bus.
- Set DIP switch 6 on S101 to ON for one of the Aperio hubs on the RS-485 network.
- Set DIP switch 7 on S101 to ON for one of the Aperio hubs on the RS-485 network.
- Connect the A terminal on J100 to the positive (+) terminal on the MD-1113.
- Connect the B terminal on J100 to the negative (-) terminal on the MD-1113.
- Connect power (8-24 Vdc, 250 mA) to the GND and 8-24VDC terminals on J100.



Connections

USB. Computer connection for firmware download and configuration.

P3. Connector for MD-1113 Module Board.

P4. Connector for MD-921 IP Module board.

P5, P6. Battery connections.

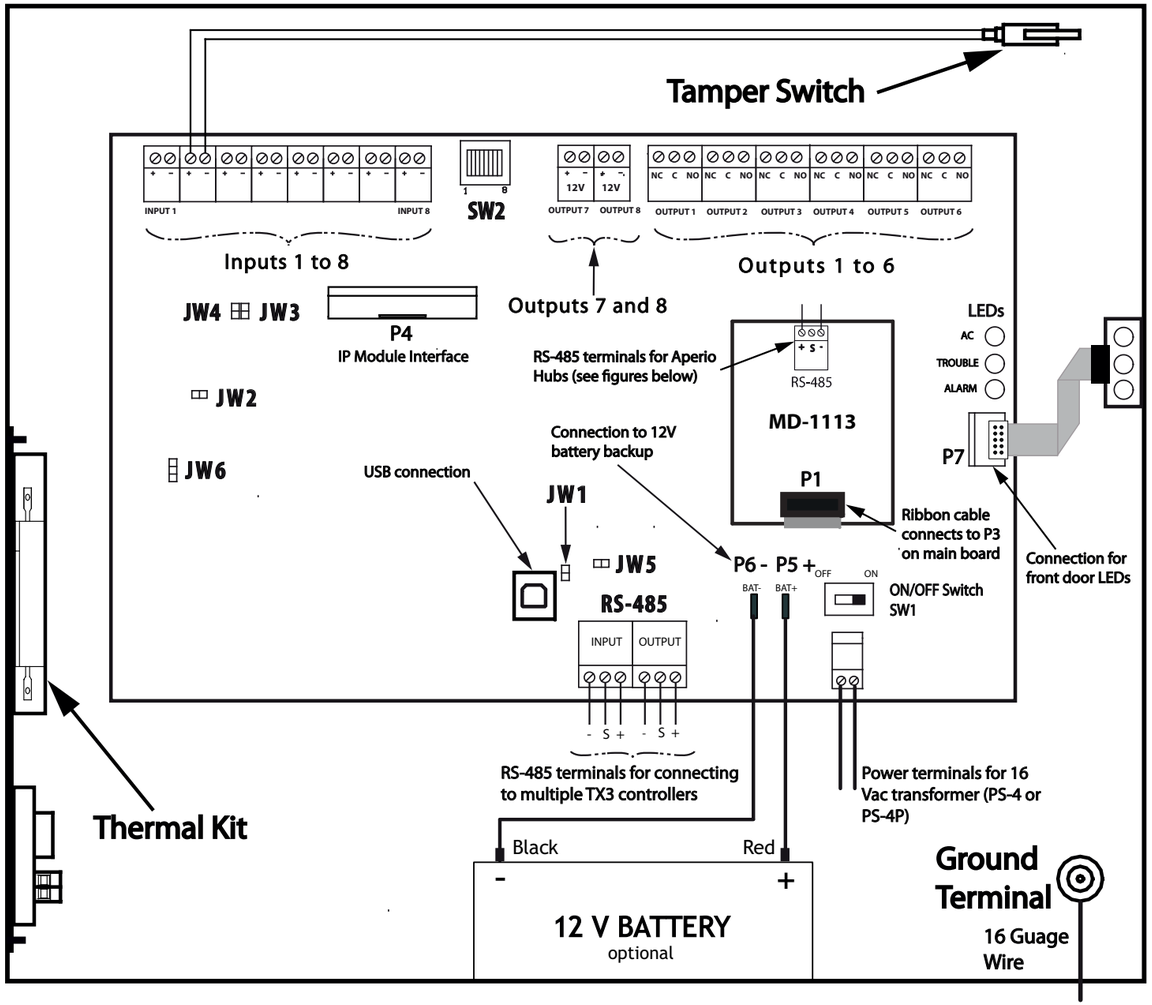
P7. AC, Trouble and Alarm LEDs.

Jumpers

JW1, JW2. Leave open. Short only when updating firmware.

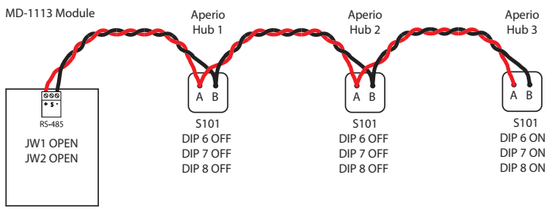
JW3, JW4, JW5. Leave open. Not used.

JW6. JW6 is not used and by default is open.

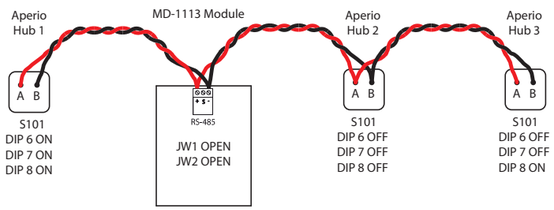


Connecting the Aperio Hubs to the MD-1113 RS-485 Network Terminal

MD-1113 on one end and an Aperio hub on the other end of



Aperio hubs on both ends of RS-485 bus.



Outputs 1 to 6

Outputs 1 to 6 are relay contact programmable normally open (NO) or normally closed (NC) outputs. Any power supply connected to these outputs cannot exceed:

- 125 VAC / 2 A
- 30 VDC / 1 A

Outputs 7 and 8

Outputs 7 and 8 are programmable and provide:

- 12 VDC
- a maximum output of 700 mA each, for a combined total output of 1 A. For example, if output 7 provides 700 mA, then output 8 provides 300 mA.

SW2

SW2 sets the Card Access controller RS-485 network address and determines how the IP module get its IP address (if installed).

- Use DIP switches 1 to 6 to set the RS-485 network address.

- Keep DIP switch 7 at the factory set value
- Set DIP switch 8 OFF to get IP address from DHCP server.
- Set DIP switch 8 ON to get IP address from TX3 Configurator software.

RS-485

The RS-485 connection consists of an input and output terminal. Connect the RS-485 output terminal to the RS-485 input terminal of the next controller.

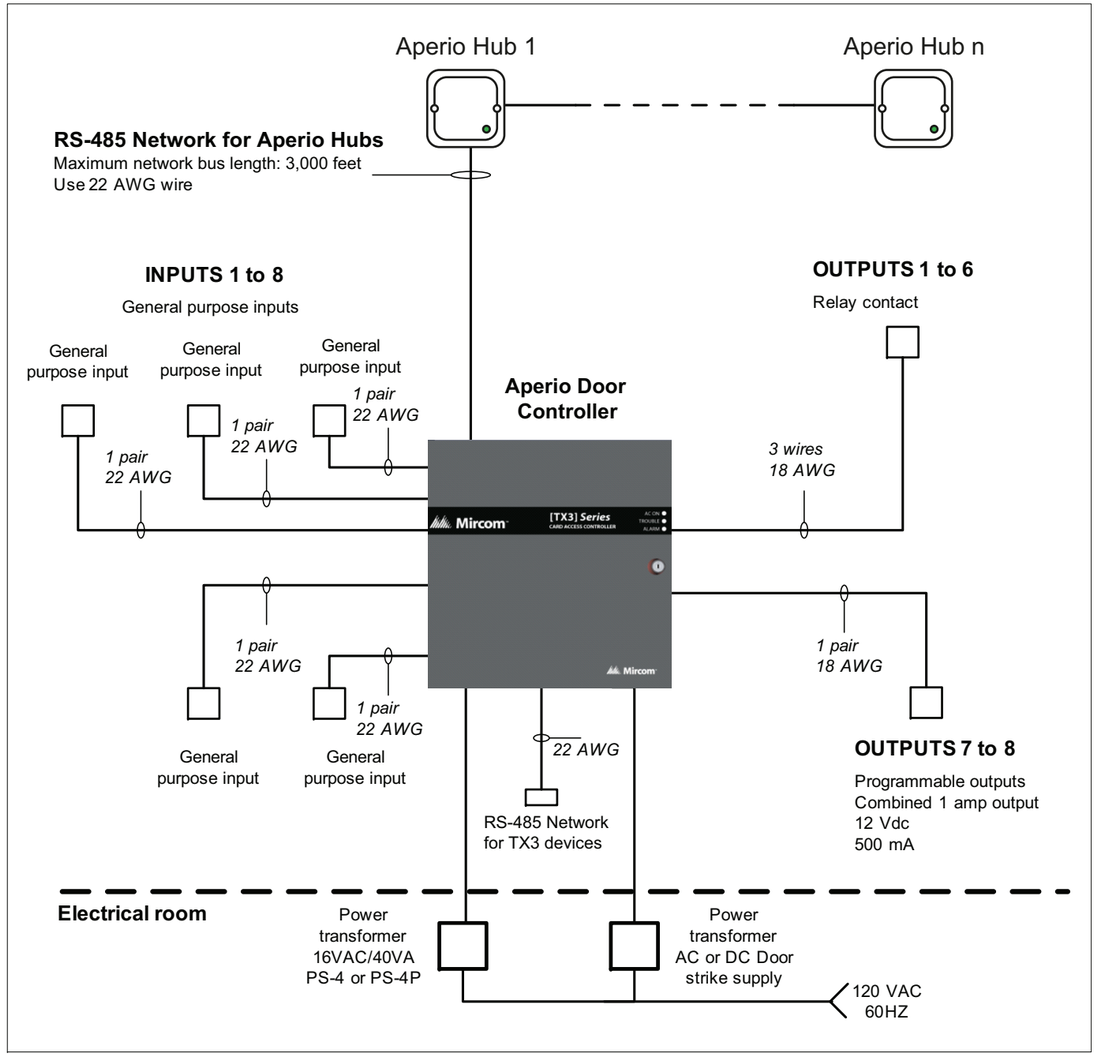
Connect the last controller on the network to the RS-485 input terminal. Refer to LT-980 for end of line resistors to be used on the first and last nodes of network. The RS-485 terminal consists of + (positive), - (negative), and S (Shield) connections.

Ground Terminal

The Card Access system is equipped with a 16 gauge electrical wire attached to the panel chassis Ground Terminal. Do not disconnect this wire.

Attach the end of the supplied wire to a suitable grounding wire 16 gauge or thicker. Attach the other end to the cold water ground.

The following figure shows the various controller connections



Single Panel Wiring

Wiring requirements

- Install all transformers outside the Lobby Control Unit enclosure.
- Unless specified otherwise, all wiring is a maximum length of 1000 ft. The RS-485 wiring maximum length is 4000 ft.
- All units use the PS-4P transformer for the power supply. The door strike power supply depends on the door strike power requirements.

TX3 Aperio™ Door Controller Installation Quick Reference

IMPORTANT

This document is for reference only and does not replace the existing documentation. For more detailed information refer to the documentation on the CD, the USB flash drive, or Mircom website (www.mircom.com).

Installation Prerequisites

- Ensure there is a provision for a ground circuit. The Aperio Door Controller assembly must be grounded by a qualified electrician. An improperly grounded unit can result in equipment malfunction and void the warranty.
- Use the latest Aperio Door Controller System controller firmware. Mircom periodically updates panel firmware and Configurator Software to add features and correct any minor inconsistencies. For information about the latest firmware or software visit the 'Manuals and Downloads' section of the Mircom website at www.mircom.com.

Basic Wiring

1. Turn the controller power switch to OFF.
2. Connect the Aperio hub network bus to the RS-485 terminal on the MD-1113 Module board.
3. Connect any inputs and outputs.
4. Connect the controller supply.
5. Set SW2 to a unique RS-485 network address.
6. Turn the controller power switch to ON (a correctly wired controller will show a green AC LED).

Before Starting the Configuration

Configure the system using the Configurator software using a USB or modem connection. Verify the following:

- Ensure that the controller and all connected devices and components are fully operational.
- Ensure the controller DIP Switches are set with a unique RS-485 network address.
- Ensure the Configurator software is set with the correct controller RS-485 network address.
- Ensure that your PC is set with the correct date and time.

To Start the Configuration

1. Connect the PC to the controller using the USB port or modem connection.
2. Launch the Configurator and select the correct controller you are connecting to (on the basis of name, panel label, panel model, and network address).
3. Click `Connect`. The connection icon appears in the Configurator tool bar.
4. Ensure that the panel is configured with the correct date and time.
5. Configure the Aperio Door Controller using the instructions in the LT-1160 Installation and Operation Manual.