Velocity | Schlage Wireless Locks
Tech Configuration Guide

July 17, 2025
Rev. 1

Introduction

Velocity 3.8 or newer versions includes support for Allegion's Schlage wireless lock systems. Velocity's advanced feature sets enable wireless doors to have a similar level of security as their wired counterparts. This document summarizes how to wire Mx-1 controllers with the PIM400-485 or ENGAGE GWE gateway and configure Velocity software to add wireless locks.

Description of Solution

Schlage has multiple gateways and wireless locks with different feature sets.

Velocity supports:

- AD Series locks communicating through a PIM400 wireless gateway.
- NDEB and LEB Series locks communicating through a GWE Gateway (in RSI Mode).
    - *Note: NDE and LE locks are discontinued but should continue to function if already installed.*

The Mx-1 Controllers, as part of the Allegion integration, supports 2 types of gateways (PIM 400 and ENGAGE Gateway GWE) and 3 locks (AD, NDEB, and LEB series locks). Connections from Mx-1 controllers to the gateway must be over the RS485 OSDP port and follow the RSI protocol to communicate with the gateway. Gateways will follow the addressed polling architecture, where the Mx-1 controller is the primary and the connected gateways are downstream with unique RS485 addresses associated with each gateway.

Tech Tip: *Mx-1's can support up to 8 wireless locks. Contact your Hirsch RSM to coordinate a site visit with the Allegion sales engineer to identify wireless lock compatibility and part numbers.*

Schlage Gateway Information

- The PIM400 gateway only supports AD400 series locks.
    - Linking and configuring AD Locks with a PIM400-485 gateway requires Schlage utility software (SUS) installed on the Handheld Device (HHD) or supported Android phones with the Schlage USB programming cable. For more information on the PIM400 and AD series locks, please refer to Allegion documentation.

- The ENGAGE Gateway (GWE) gateway supports NDEB & LEB series locks.
    - Linking and configuring NDEB and LEB locks with an ENGAGE gateway requires the ENGAGE mobile app (available for Android and iOS) for gateway configuration and linking with locks. For more information on the ENGAGE gateway and NDEB & LEB series locks, please refer to Allegion documentation.

Wiring Information

PIM400 and ENGAGE Gateway wiring with Mx-1

This section applies to both PIM400 and ENGAGE GWE gateways.
IMPORTANT: The following wiring instructions apply ONLY to the Hirsch Mx-1 Controller.

2-Wire Mode

- By default, the PIM400 and GWE Gateways ship from the factory in 2-wire mode. To confirm, two jumpers on the back of the gateway in the area marked *2 Wire* and *4 Wire* **MUST** be inserted (See RED box in diagrams below).

Data Connection

- Connect the ***Data A+*** pin from the Mx-1's OSDP/RS-485 port to the ***Tx-*** pin on the GWE gateway or ***TDA-*** pin on the PIM400 gateway (See GREEN box in diagrams).
- Connect the ***Data B-*** pin from the Mx-1's OSDP/RS-485 port to the ***Rx+*** pin on the GWE gateway or ***RDB+*** pin on the PIM400 gateway (See GREEN box in diagrams).

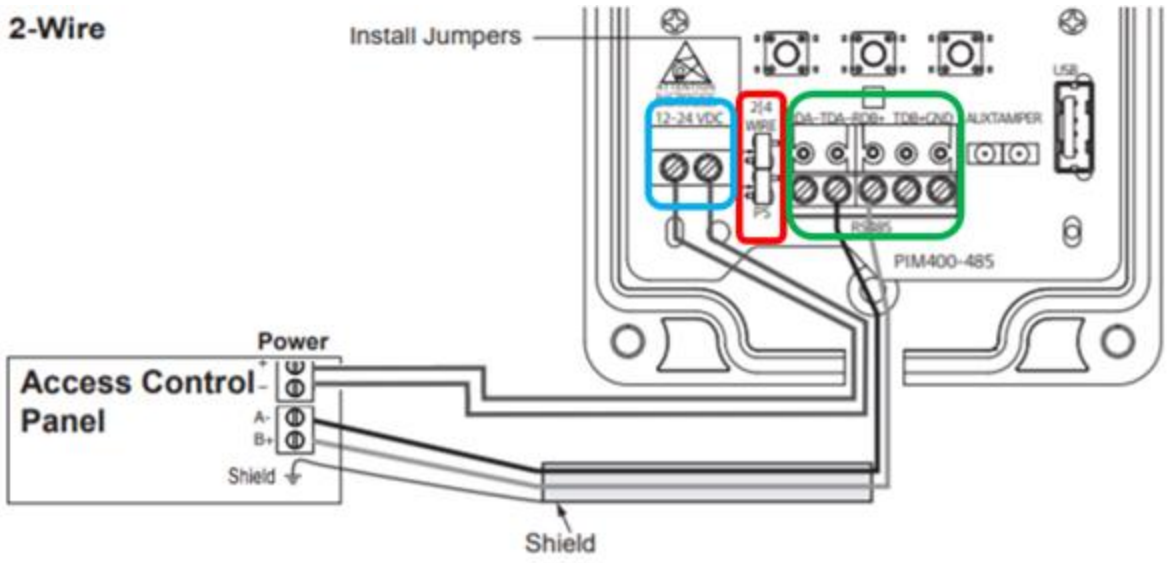
Power Connection

- Connect the ***Ground*** pin from the Mx-1's OSDP/RS485 port to the ***Negative*** (-) 12-24VDC pin on the PIM/GWE gateway (See BLUE box in diagrams).
- Connect the ***Power*** pin from the Mx-1's OSDP/RS-485 port to the ***Positive*** (+) 12-24VDC pin on the PIM/GWE gateway (See BLUE box in diagrams).

Shield Connection

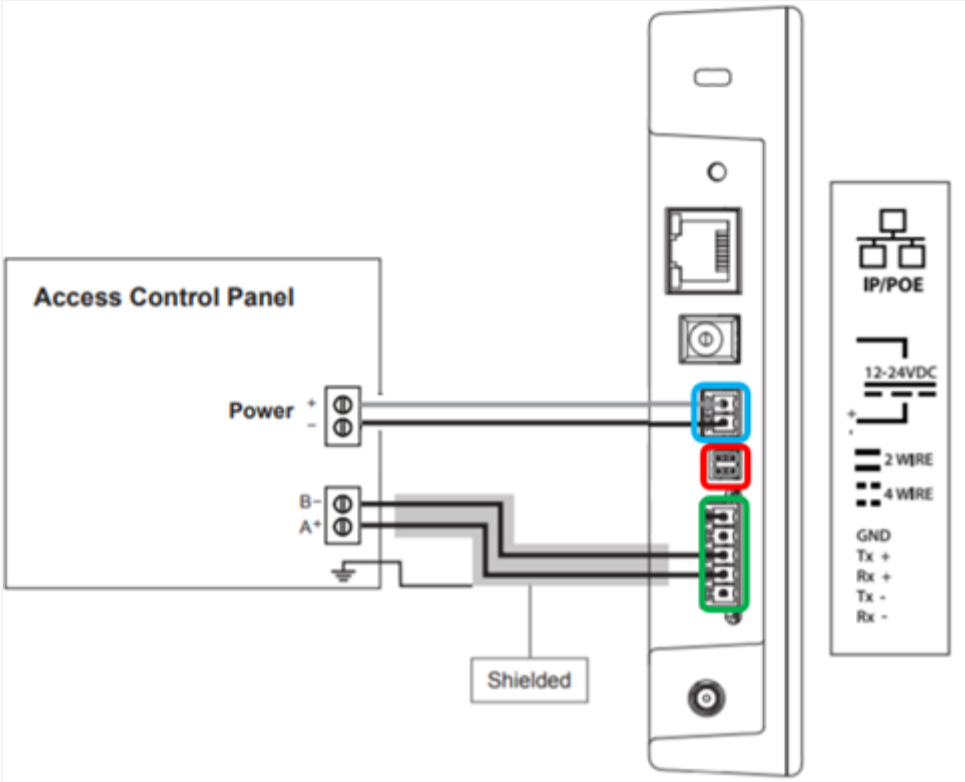
- If the cabling being used is shielded, connect the shield to the *Shield* Connection on the Mx-1 OSDP/RS-485 port only.

PIM400 Wiring Diagram



2-Wire Diagram for PIM400 Hub

GWE Gateway Wiring Diagram



2-Wire Diagram for GWE Gateway

Power Considerations

Additional Power Information for Allegion Gateways

When gateways are powered *by* *OSDP/RS485 Port:*

- When using multiple gateway architecture that is linked from a single Mx-1 OSDP/RS485 port, the maximum number of PIM400 or ENGAGE GWE that can be powered by the Mx-1 OSDP/RS485 port is **3** which may be reduced to 1 or 2 depending on wire gauge and run length. External power may be required when using 3 gateways on a single Mx-1.

When gateways are powered by *external power supply:*

- When using multiple gateway architecture that is linked from a single Mx-1 OSDP/RS485 port, the maximum number of PIM400 or ENGAGE GWE supported by the Mx-1 OSDP/RS485 port is **8**.

Linking Locks to a Schlage Gateway

After successfully powering the Gateway with the Mx-1 or external power supply, the wireless locks being installed MUST be linked to the appropriate gateway BEFORE they can get set up to work with Velocity.

IMPORTANT NOTE: Velocity software does NOT support the ability to link locks to Schlage Gateways. Locks must be configured, calibrated and linked to their specific gateway BEFORE being set up to work with Velocity.

Hirsch recommends working with a Certified Allegion Integrator or Dealer for optimal performance and proper operation of Schlage wireless locks. For more information on Schlage hardware, please use the reference links below:

For AD Series Locks:
Please refer to the support links below:
- AD-400 Electronic Wireless Lock Resource Page

Linking locks requires the Allegion SUS-A cable:
- Schlage SUS-A Cable Guide

For NDEB and LEB Series Locks:
Please refer to the support links below:
- ENGAGE Gateway Resource Page
- NDE Wireless Locks
- LEB Wireless Locks

Linking NDEB and LEB locks with the ENGAGE GWE Gateway requires the Schlage ENGAGE Mobile App, available through Apple's App Store for iOS or the Google Play Store for Android.

IMPORTANT NOTE**:** To be able to add gateways, locks or to configure settings on Schlage hardware through the ENGAGE mobile app, the user MUST have an Administrator or Manager level account. Please contact the site administrator or the Certified Integrator for more information.

Gateway Addressing

Configuring addresses on the Schlage gateways requires the Handheld Device for the PIM400-485 or the ENGAGE mobile app (iOS or Android) for the ENGAGE GWE Gateway. Please refer to Allegion documentation for more information on configuring the PIM400 or ENGAGE GWE Gateways.

Tech Tip: *Gateway addressing by default is 0, Velocity requires the address to be set to* ***1.*** *The default wireless lock address for linking is 0, Velocity requires the first linked lock to be set to* ***1.***

Required Firmware Versions for Schlage Wireless Lock Hardware	
PIM400 Gateway	v2.28.2 or Newer
GWE Gateway	1.53.18 or Newer
AD400	2.48.2 or Newer
NDEB	2.11.29 or Newer
LEB	1.6.69 or Newer

Configuring Mx-1 and Schlage wireless locks in Velocity

After wiring and linking the wireless locks to their gateway, Velocity software needs to be configured to recognize and communicate with the wireless lock gateway.

Adding an Mx-1-W Controller

To add an Mx-1-W controller to Velocity, first an Mx-1 controller must be added to the hardware tree.

IMPORTANT NOTE: Velocity REQUIRES an Mx-1-W License for each Mx-1 controller that will be used for wireless locks.

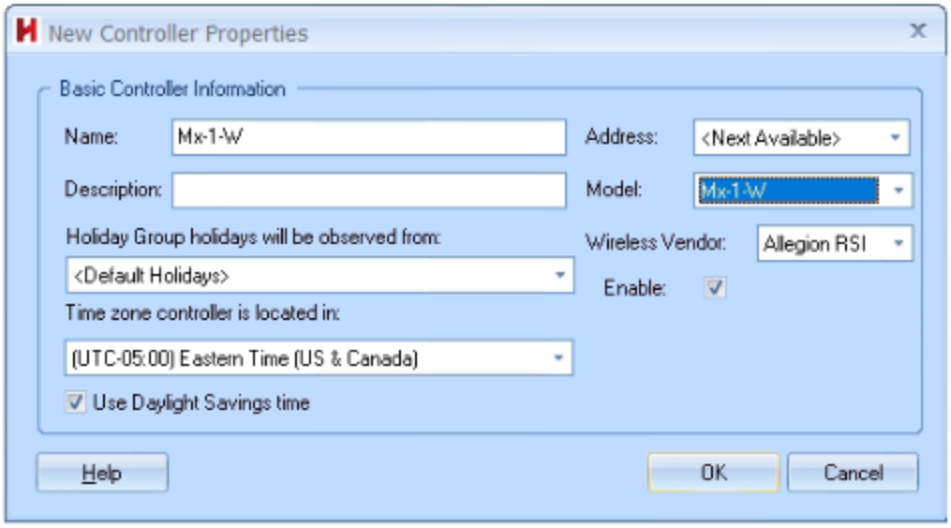
- Open Velocity and select the *Administration* Tab.
  - Expand the *DIGI*TRAC Configuration* folder and then open the *XNET* folder.
    - Select Add New XNET Port
    - Select a Name for the XNET Port
    - Select the *Network Type* that matches the desired configuration
    - Select XNET 3 under the *Protocol* section
      - If the Mx-1 being configured is on the same subnet as the Velocity Server:
        - Insert the *IP Address*, *IP Port*, *Subnet Mask* and *Default Gateway* values specified for this controller. If this information is not available, please consult your Network Administrator for this information.
        - Confirm the *Reset Encryption* and *enable this Port* options.
      - If the Mx-1 being configured is NOT on the same subnet as the Velocity Server:
        - Refer to the SNIB3 Quick Installation Guide for more information on how to configure the SNIB3 using the SNIB Configuration Tool. SNIB3 Reference page.
    - Once all options and fields are complete, click OK.

- Select the newly created XNET Port
  - Double click *Add New XBox*
  - Name the XBox
  - Select the desired Address, Messages per poll and Logoff time options.
  - Check the *Enable this XBox*

- Select the newly created XBox
  - Double click *Add New Controller*
    - Name the controller
    - Add a description (optional)
    - Select the address of the controller or allow Velocity to apply the next available address.
    - Under the *Model* drop down menu, select **Mx-1-W**

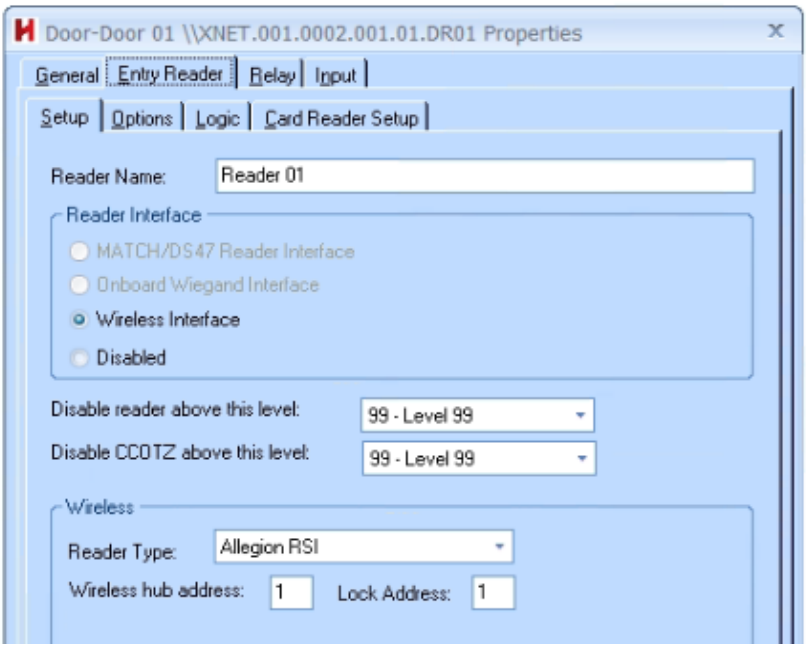
IMPORTANT NOTE: Velocity REQUIRES an Mx-1-W License for each Mx-1-W controller that will be used for wireless locks.

- Under the *Wireless Vendor* drop down menu, select ***Allegion RSI*** based on the wireless lock hardware being deployed.

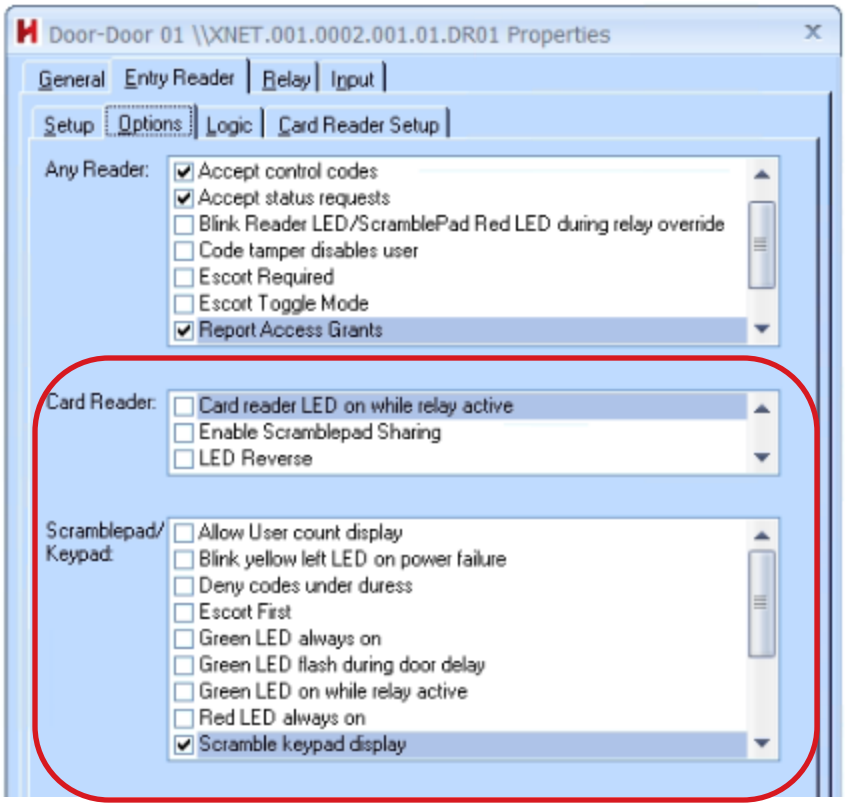


- After applying the configuration for the Mx-1-W, click OK.

- Select and expand the newly created controller and double click the *Doors* folder
  - Select *Door 1*, right-click and select *Properties*
  - Click the *Entry Reader* tab, select Wireless Interface and the Wireless option box will appear, then select Reader Type to Allegion RSI
  - Set the Wireless hub address: 1 | Lock Address: 1



IMPORTANT NOTE: Not all features are supported under the Options tab, see screenshot below:



Features currently unsupported for Wireless Locks

Tech Tip: *If you have more than one lock on the Mx-1, repeat the door configuration steps for each wireless lock **linked** to the gateway(s) that are connected to the OSDP/RS485 Port on the Mx-1-W.*

Technical Support Contact Information:

+1 888-809-8880 | support@hirschsecure.com | https://www.hirschsecure.com/support