



X1 LAB GUIDE

Instructor-Led Training

IDENTIFY DOOR CONTROLLER COMPONENTS

1. Identify the following panel components using the panels in front of you, or the on-screen photo of the X1 Door Controller.

- › Cell Module header
- › PoE Module headers
- › R and L terminals
- › 4-wire connector
- › Operation LEDs
- › Network connection
- › Power terminals
- › In & Out readers
- › Inputs
- › Auxiliary outputs
- › Door relay
- › Wet/Dry jumper

CONNECT A CARD READER

Wiegand

1. Connect the **RED WIRE** (12 V DC) to terminal **R1**
2. Connect the **WHITE WIRE** (Data One) to terminal **W1**
3. Connect the **GREEN WIRE** (Data Zero) to terminal **G1**
4. Connect the **BLACK WIRE** (ground) to terminal **B1**
5. Connect the **ORANGE OR BROWN WIRE** to terminal **LC**

OSDP

1. Connect the **A WIRE** (485 -) to terminal **G1**
2. Connect the **B WIRE** (485 +) to terminal **LC**
3. Connect the **RED WIRE** (DC +) to terminal **R1**
4. Connect the **BLACK WIRE** (DC -) to terminal **B1**

Optional second card reader

1. Connect the **RED WIRE** (12 V DC) to terminal **R2**
2. Connect the **WHITE WIRE** (Data One) to terminal **W2**
3. Connect the **GREEN WIRE** (Data Zero) to terminal **G2**
4. Connect the **BLACK WIRE** (ground) to terminal **B2**
5. Connect the **ORANGE OR BROWN WIRE** to terminal **LC**
6. If using only one reader, it must be connected to reader 1

WIRE THE INPUTS

1. Connect a **DOOR CONTACT** or **DOOR POSITION SWITCH** to terminal **DS**
2. Connect a **MOTION SENSING DEVICE** or a **MECHANICAL SWITCH** to terminal **RX**
3. Connect an **INPUT** that triggers a **RULE** programmed in Virtual Keypad
4. Connect the **GROUND** to terminal **G**

WIRE THE ONBOARD OUTPUTS

1. Connect the **NEGATIVE WIRE** of the device to terminal **O1 & O2**
2. Connect the **POSITIVE WIRE** of the device to

terminal **12V**

CONNECT THE DIODE

1. Connect the **INCLUDED DIODE** as close to the **MAGNETIC LOCK** or **DOOR STRIKE** as possible to prevent inductive kickback

PLACE THE WET/DRY JUMPER

1. Put the **JUMPER** on the **TOP TWO TERMINALS** for **DRY** condition
2. Put the **JUMPER** on the **BOTTOM TWO TERMINALS** for **WET** condition

WIRE THE ELECTRONIC LOCK

Magnetic Lock - Normally Closed and Dry

1. Set **JUMPER** to **DRY**
2. Connect **MAGNETIC LOCK POSITIVE** to terminal **NC**
3. Connect **MAGNETIC LOCK NEGATIVE** to **POWER SUPPLY NEGATIVE**

Magnetic Lock - Normally Closed and Wet

1. Set **JUMPER** to **WET**
2. Connect **MAGNETIC LOCK POSITIVE** to terminal **NC**
3. Connect **MAGNETIC LOCK NEGATIVE** to X1 terminal **B2**

Door Strike - Normally Open and Dry

1. Set **JUMPER** to **DRY**
2. Connect **DOOR STRIKE POSITIVE** to terminal **NO**
3. Connect **DOOR STRIKE NEGATIVE** to **POWER SUPPLY NEGATIVE**

Door Strike - Normally Open and Wet

1. Set **JUMPER** to **WET**
2. Connect **DOOR STRIKE POSITIVE** to terminal **NO**
3. Connect **DOOR STRIKE NEGATIVE** to X1 terminal **B2**

CONNECT COMMUNICATION

Ethernet

1. Connect **ETHERNET CABLE** from the LAN/WAN connection to the X1 PCB **ETHERNET PORT**

Cellular

1. Plug in the included **STANDOFF** into the **DOOR CONTROLLER BOARD**
2. Carefully insert the **ANTENNA CONNECTOR** through the **TOP OF THE ENCLOSURE**
3. Plug the **CELL MODULE** onto the **STANDOFF**
4. Plug the **CELL MODULE** into the **CELL HEADER**
5. Screw on the **CELL MODULE ANTENNA** to the **ANTENNA CONNECTOR** with the washer on the outside of the enclosure

Wi-Fi

1. Connect the **WI-FI ANTENNA CABLE** to the **WI-FI MODULE**
 - › You can connect via an Ethernet or a Wi-Fi connection, but not both at the same time

IDENTIFY OUTPUT MODULE COMPONENTS

1. Identify the following panel components using the panels in front of you, or the on-screen photo of the X1 Output Module.
 - › Address Rotary
 - › Top & Bottom
 - › Output relays
 - › Power LEDs
 - › 4-wire connectors
 - › Output relay LEDs

CONNECT OUTPUT MODULE

1. Address the **ROTARY DIAL** from 1-9
 - › Factory default is 1, additional modules need to be address in sequence
2. Connect the **4-POSITION HARNESS** to the **TOP CONNECTOR** on the output module and the 4-wire connector on the **DOOR CONTROLLER MODULE**
3. Add additional output modules by connecting the **4-POSITION HARNESS** to the **TOP CONNECTOR** on the second output module to the **BOTTOM CONNECTOR** on the first output module
4. To wire for output control, use the 10 terminals on the output module
 - › To wire **NORMALLY OPEN**, connect the wires to **NO AND 1**
 - › To wire **NORMALLY CLOSED**, connect the wires to **NC AND 1**

POWER UP THE CONTROLLER

Input Power

1. Connect **TRANSFORMER WIRES** to terminals **1 & 2**
 - › 12 V - 24 V AC/DC 2 A
 - › Use no more than 70ft of 16 gauge or 40ft of 18 gauge wire between the transformer and the X1 PCB

Battery

1. Connect the **RED BATTERY LEAD** to the **POSITIVE BATTERY TERMINAL**
2. Connect the **BLACK BATTERY LEAD** to the **NEGATIVE BATTERY TERMINAL**
 - › 1.5 Ah (recommended), 9 Ah (max)

CONFIGURE WI-FI SETTINGS

1. Connect to the **X1'S SSID**
 - › If using a phone, use only Wi-Fi and disable mobile data
2. Enter **192.168.1.1** in the URL field
3. In the **WI-FI** options, enter the customer's Wi-Fi network information
4. Select **APPLY**, and the X1 will reset
 - › Once the X1 has reset, it will automatically connect to the customer's network

CONFIGURE NETWORK SETTINGS

1. Connect to the **X1'S SSID**
 - › If using a phone, use only Wi-Fi and disable mobile data
2. Enter **192.168.1.1** in the URL field
3. In the **DHCP** option, make edits to the desired fields
 - › DHCP: This option is turned on by default
 - › Static IP: Turn off DHCP and enter the information in the required fields
4. Select **APPLY**, and the X1 will reset
 - › Once the X1 has reset, it will automatically connect to the customer's network

PROGRAM IN DEALER ADMIN

Sign in to dealer admin

1. Go to the [Dealer Admin](#) login page. Enter your **EMAIL** and **PASSWORD**, then press **SIGN IN**

Add a Customer

1. At **CUSTOMERS**, select the **PLUS** icon
2. Enter the customer's **NAME** and **EMAIL**
3. Enter the customer's **CONTACT INFORMATION** if desired
4. Press **SAVE**

Add X1 Door Controller to a Customer

1. Go to **CUSTOMERS**
2. Select a customer to open the **CUSTOMER SUMMARY**
3. In **SYSTEMS**, select the **PLUS** icon
4. Enter a **NAME** for the door controller
5. In **SYSTEM TYPE**, select **X1**
6. Configure billing address and time options as needed
7. Enter the door controller's **SERIAL NUMBER**
8. Press **SAVE**

Program X1 Door Controller

1. Enter a descriptive **NAME** for the door
2. In **STRIKE TIME**, enter the number of seconds that you want the door to unlock when access is granted
3. In **STRIKE DELAY**, enter the number of minutes that you want to delay the door unlock when access is granted
4. In **READER PROTOCOL**, choose a protocol for this door's readers: **WIEGAND** or **OSDP**
 - › For OSDP readers, configure buzzer and LED options
5. In **AUTHORIZATION**, choose which authorization type can be used to access any of the doors
6. Turn on additional options as needed
7. Press **SAVE**

Add Card Formats

1. In **CARD FORMATS**, select the **PLUS** icon
2. Give the card format a **NAME**
3. Select a card format and configure **FORMAT SETTINGS**

