# 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
- → Operation LEDs
- Auxiliary outputs

- ▶ PoE Module headers
- Network connection
- → Door relay

- Dand Ltown
- Power terminals
- Wet/Dry jumper

- R and L terminals
- In & Out readers
- → 4-wire connector
- → Inputs

# **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
- 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

- Connect a DOOR CONTACT or DOOR POSITION SWITCH to terminal DS
- 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

- 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

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

# PLACE THE WET/DRY JUMPER

- Put the JUMPER on the TOP TWO TERMINALS for DRY condition
- 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
- 4. Connect POWER SUPPLY POSITIVE to terminal C

### Magnetic Lock - Normally Closed and Wet

- 1. Set JUMPER to WET
- 2. Connect MAGNETIC LOCK POSITIVE to terminal NC
- 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**
- 4. Connect POWER SUPPLY POSITIVE to terminal C

## Door Strike - Normally Open and Wet

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

# **CONNECT COMMUNICATION**

#### **Ethernet**

 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
- Screw on the CELL MODULE ANTENNA to the ANTENNA CONNECTOR with the washer on the

outside of the enclosure

#### Wi-Fi

- 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

- 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
- Connect the 4-POSITION HARNESS to the TOP CONNECTOR on the output module and the 4-wire connector on the DOOR CONTROLLER MODULE
- 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**

- 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
- 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

 Go to the <u>Dealer Admin</u> 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
- Enter the customer's CONTACT INFORMATION if desired
- 4. Press **SAVE**

#### Add X1 Door Controller to a Customer

- 1. Go to CUSTOMERS
- 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
- 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
- Select a card format and configure FORMAT SETTINGS

4. Press **SAVE** 

#### Add X1 Output Module

- 1. Go to **SYSTEM INFORMATION**
- 2. Under **OUTPUTS**, select the **PLUS** icon
- 3. Select the X1 that the output module is connected to
- 4. For **OUTPUT NAME**, use a descriptive **NAME** for the output expansion module's location
- For each **RELAY**, name each output that you intend to use
  - Unnamed outputs will not be programmed
- 6. Press SAVE

#### **Enable Video Services**

- 1. In VIDEO SERVICES, select the PLUS icon
- 2. Select the types of cameras or NVR's that you want to enable on the door controller
- 3. Select any third-party applications that you want to enable on the door controller
  - This allows users to sign in to their services from Virtual Keypad
- 4. Press SAVE
- 5. Back on the **SYSTEM INFORMATION** page, select the number of cameras and storage space you require or choose the number of doorbells that you want to add to the door controller

#### Add an App User

- 1. Go to CUSTOMERS
- 2. Select a customer to open the **CUSTOMER SUMMARY**
- 3. In the APP USERS section, select the PLUS icon
- 4. For a user that doesn't have a Virtual Keypad account, select **NEW**
- 5. For a user that already has an account select **EXISTING**
- 6. For a new user, enter their EMAIL ADDRESS
- 7. For an existing user, start typing to **SEARCH** for their email and **SELECT** it from the list
- Set the user's authority level to either
   ADMINISTRATOR to manage multiple door controllers or STANDARD to manage a single door controller
- 9. For a new user, enter their FIRST and LAST NAME
- If you don't want to generate a random password for the user, clear CREATE RANDOM PASSWORD then manually enter one
- 11. If you want to email the user video clips, select **EMAIL VIDEO CLIPS**
- 12. Select systems and permissions for the user
- 13. Press SAVE

#### Login As Customer

- Select LOGIN AS CUSTOMER to log in to Virtual Keypad
  - This adds you to the door controller as a temporary app user with admin privileges without the capability to view video. Your temporary app user expires and is automatically removed from the door controller after 1 hour.
- 2. Go to GROUPS
- 3. Select the PLUS icon
- Select the name placeholder and enter a descriptive NAME for the group
- 5. In **DOORS**, add the doors that you want group members to have authority to access
- 6. In **FLOORS**, add the floors that you want groups members to have authority to access
- 7. In **ACCESS SCHEDULES**, choose when group members can access the assigned doors
- 8. Select permissions for group members
- 9. Select **SAVE**
- 10. Go to USERS
- 11. Select the user you want to attach the group to
- 12. Select the group you want the user to have
- 13. Select **SAVE**

# TEST THE DOOR CONTROLLER

- 1. Make sure the **READER'S LEDS** and the **DOOR CONTROLLER'S POWER LED** is on
- 2. If connected to Wi-Fi, the WI-FI LED is on solid
- 3. If connected to network, the **NETWORK PORT LIGHT** is blinking
- 4. If using an output module, **EACH LED** is on when the relay is on and off when the relay is off

## **QUESTIONS**

What else would you like to learn about the X1?

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