



# Quick Install Guide

AA1XLPE VPN, AA1XLSM VPN



## Items Included in Kit

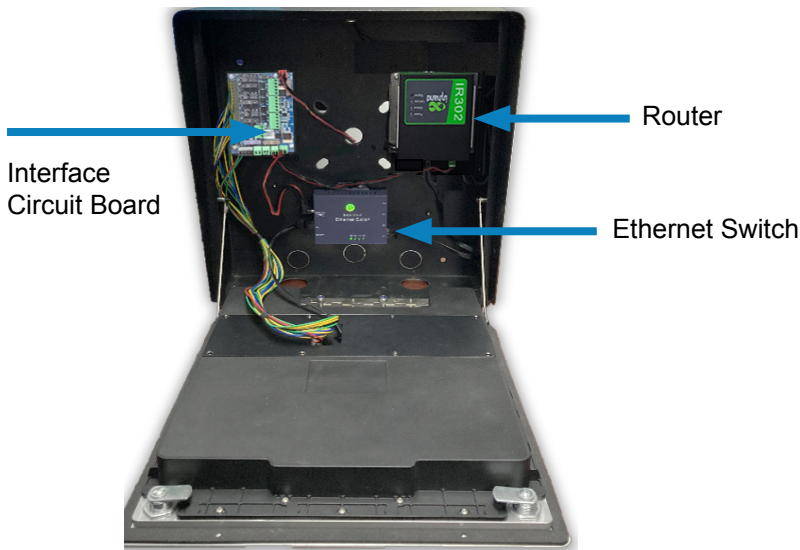
The following items are included in your WXL delivery.

1. Watchman XL Unit
2. 12 Volt DC Power Supply
3. Magnetic Read Switch
4. Keys
5. Nuts X 4
6. Bolts X 4
7. Install Guide
8. Customer Information Packet

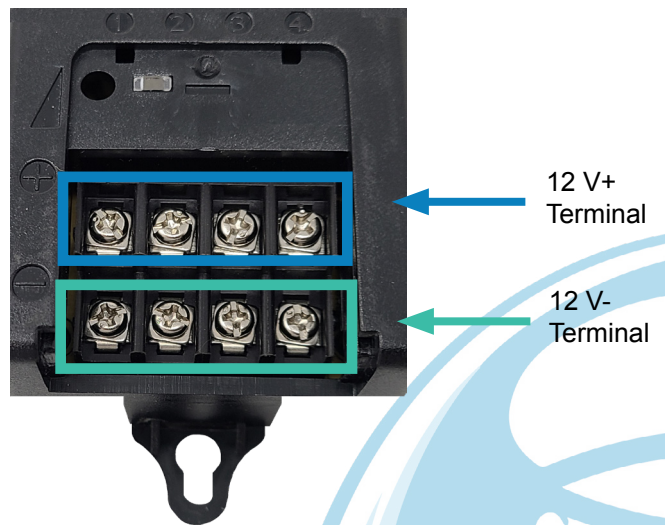
**NOTE** Leave one key with the customer.

## Wiring Examples

### Watchman XL Unit

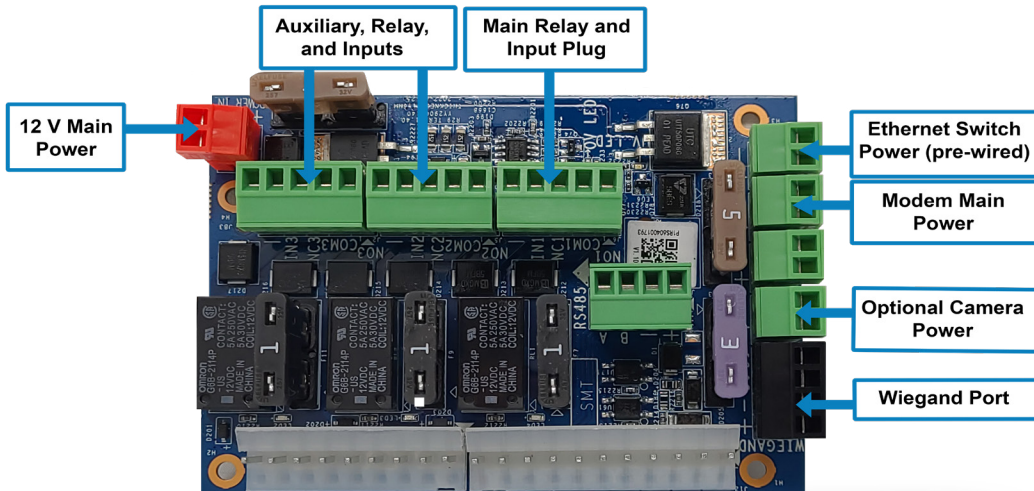


### Power Supply Wiring



**Recommended wiring:** 18/6 shielded for main device, and 18/4 shielded for optional Wiegand devices.

## Interface Circuit Board



If you requested an expansion board, we installed it.

We recommend the following gauges (ga) for each distance:

- 18 ga stranded: up to 25 ft
- 16 ga stranded: up to 50 ft
- 12 ga stranded: up to 60 ft

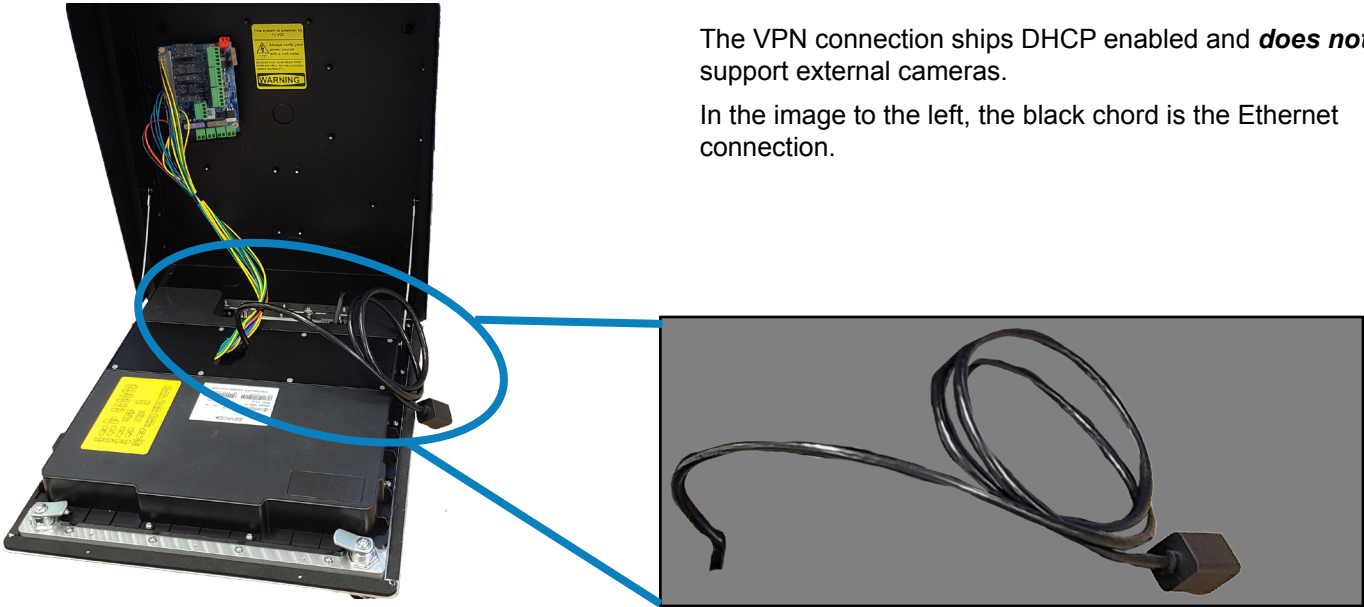


## VPN Connection

**Product Numbers:** AA1XLPE VPN, AA1XLSM VPN

The VPN connection ships DHCP enabled and **does not** support external cameras.

In the image to the left, the black chord is the Ethernet connection.



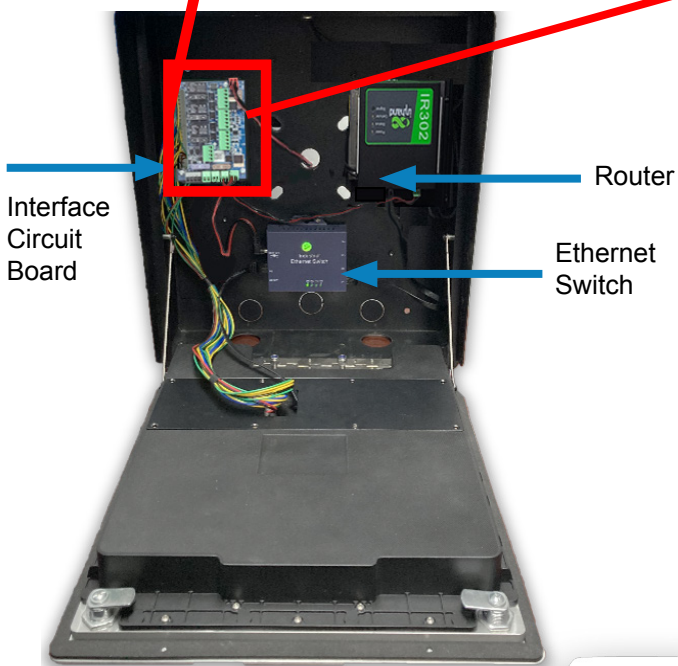
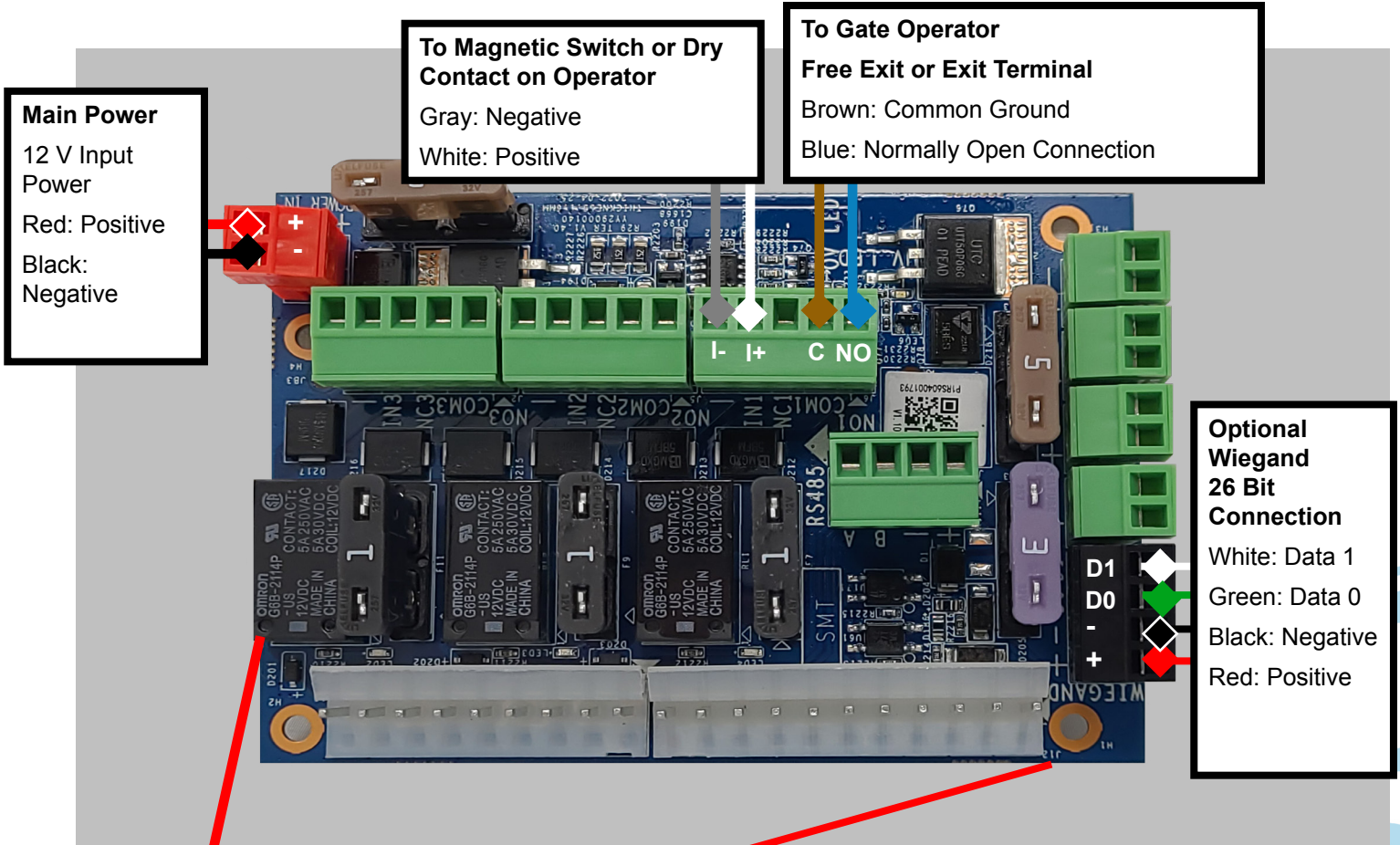
**NOTE** Ethernet connection is **required**.





## Interface Wiring Diagram

Oriented the same as the Watchman install



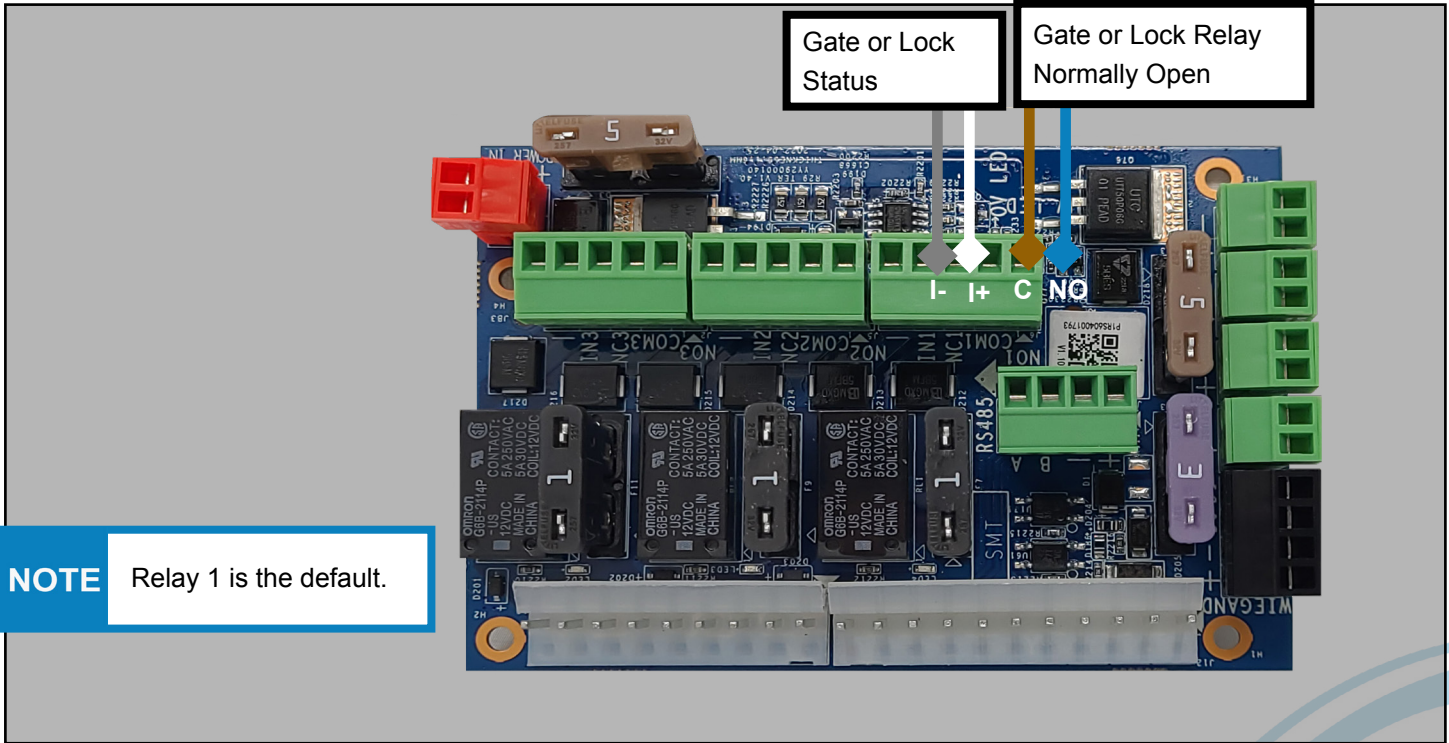
### 6-Wire Instructions - Power and Gate Operator

1. Wire main power from the transformer to the power connector on the circuit board.
2. Connect gate trigger wires from the Normally Open (NO) and Common (C) to the free-exit or exit terminals on the gate operator.
3. Connect the gate status wires on the 6-pin connector on the main relay and input plug to the magnetic switch or a Dry Contact, Normally Closed (NC) relay on the gate operator.
4. If using an optional 26-bit reader (keypad, card reader, RFID, or clicker), wire the device to the Wiegand connection on the interface circuit board.
5. Use Camera Guide if adding optional external camera.
6. Test/activate using the test credentials on the Activation & Test Process document.

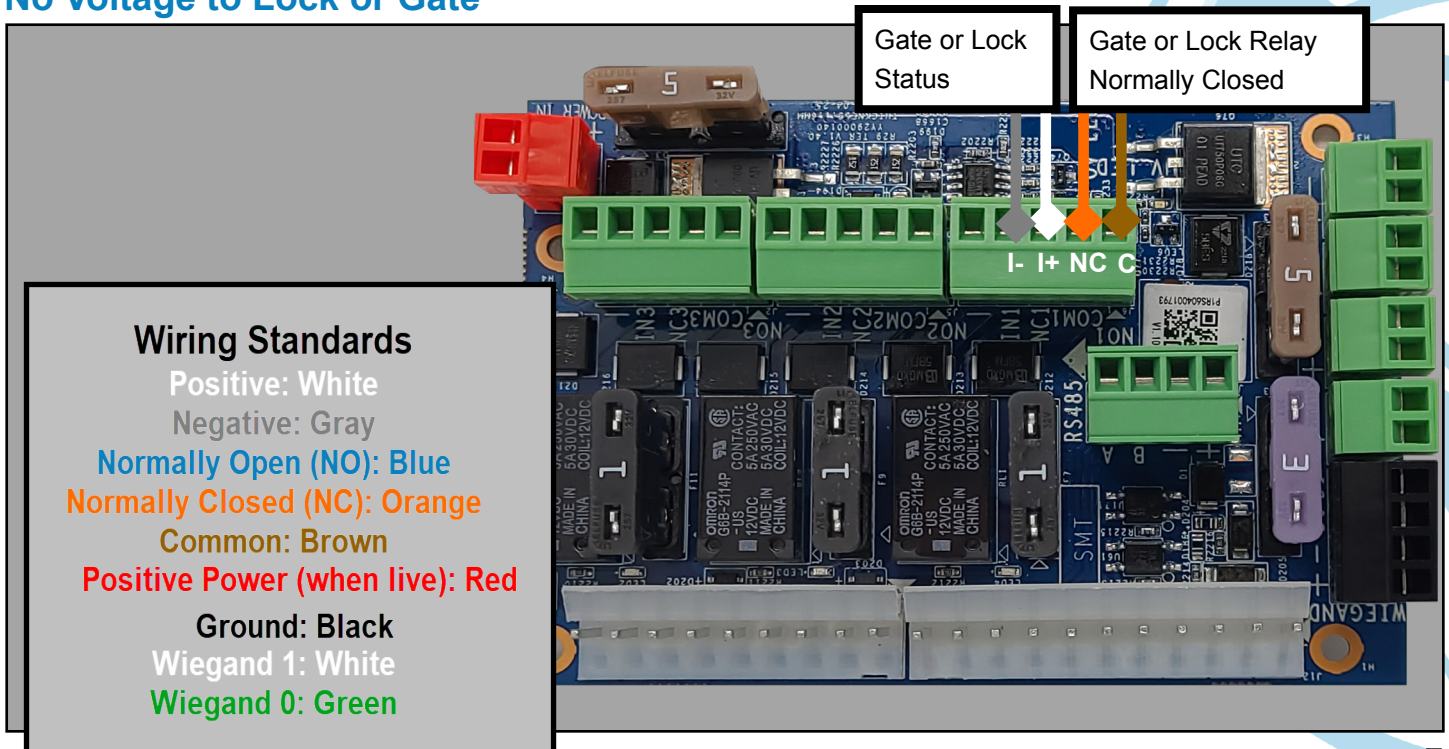




### Dry Contact Relay, Normally Open Dry Contact No Voltage to Lock or Gate



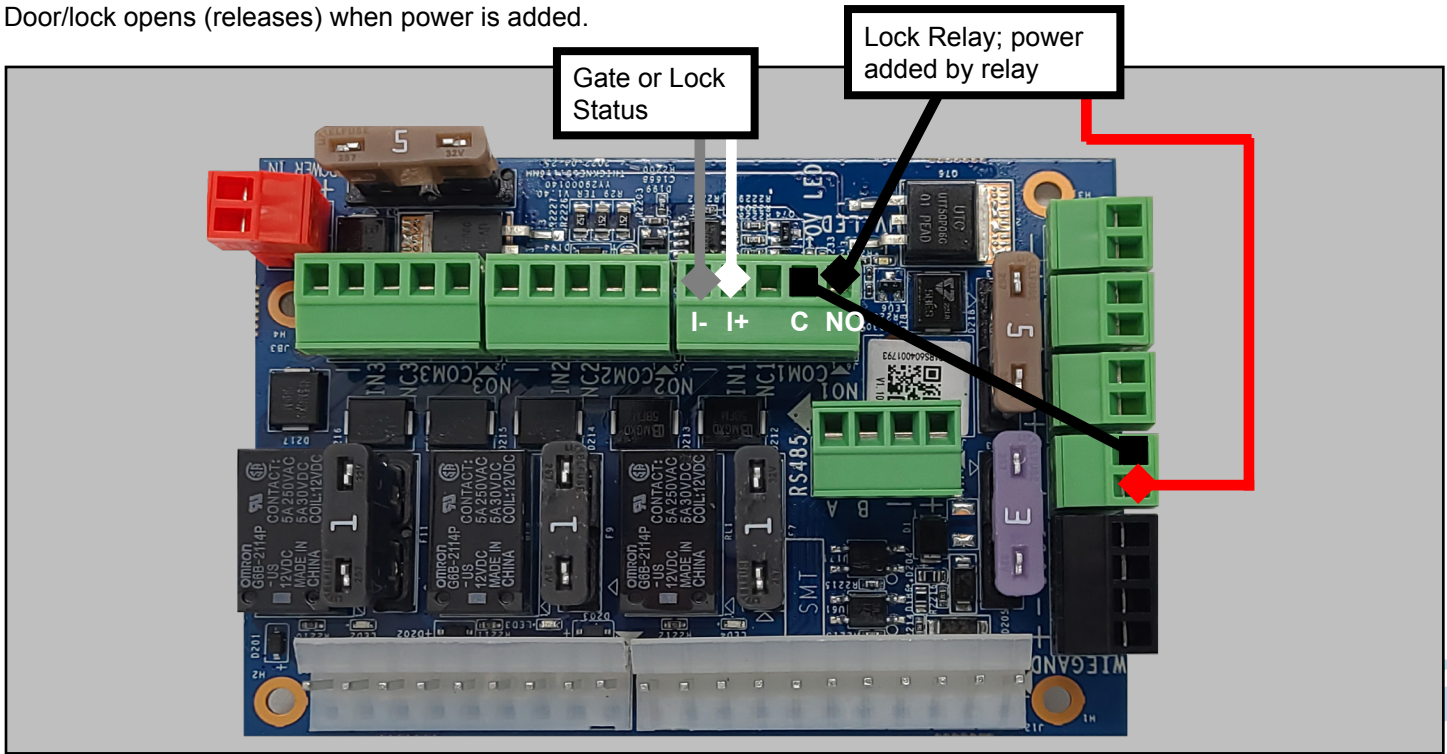
### Dry Contact Relay, Normally Closed Dry Contact No Voltage to Lock or Gate





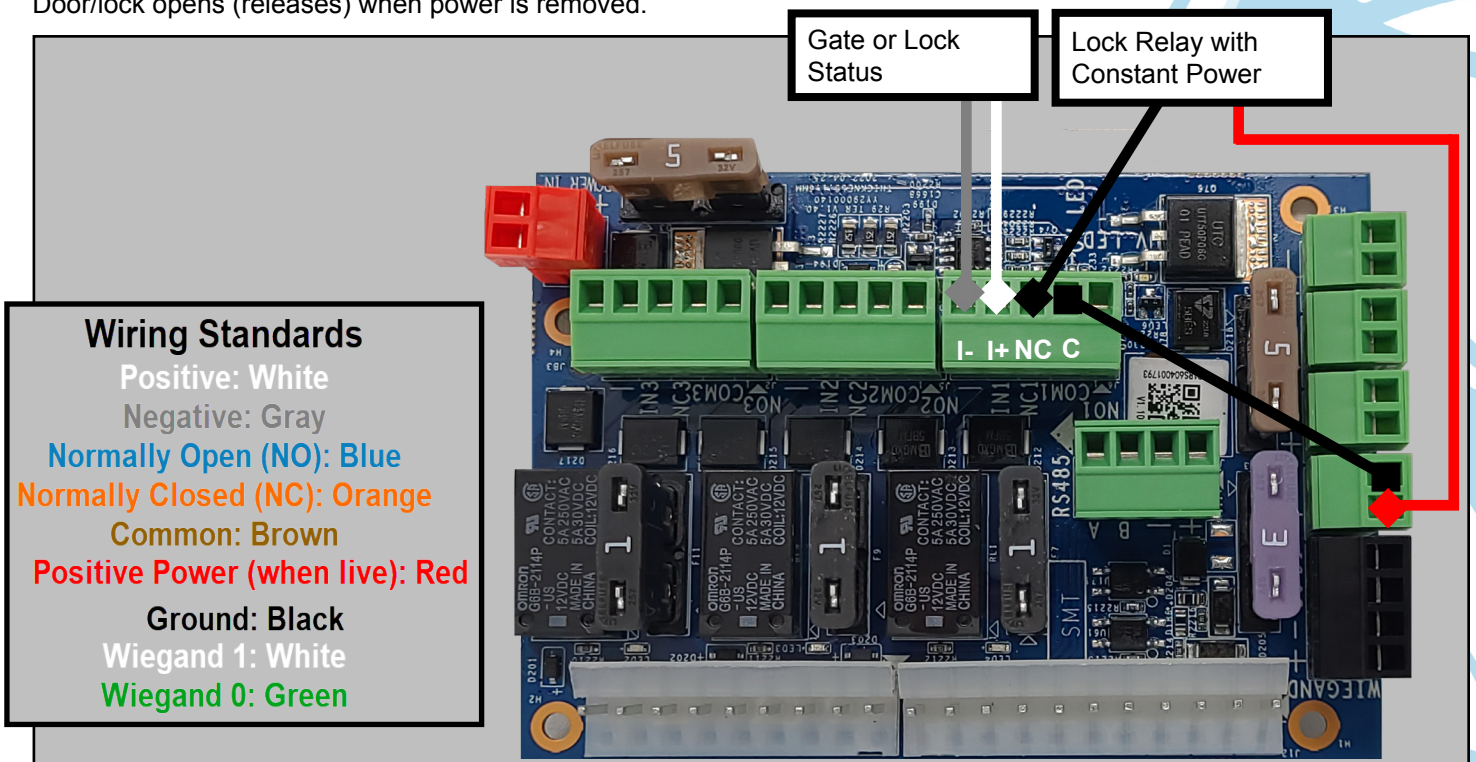
## Lock Requiring Constant 12 V: Wet Contact Relay, Normally Open

Door/lock opens (releases) when power is added.



## Lock Requiring Constant 12 V: Wet Contact Relay, Normally Closed

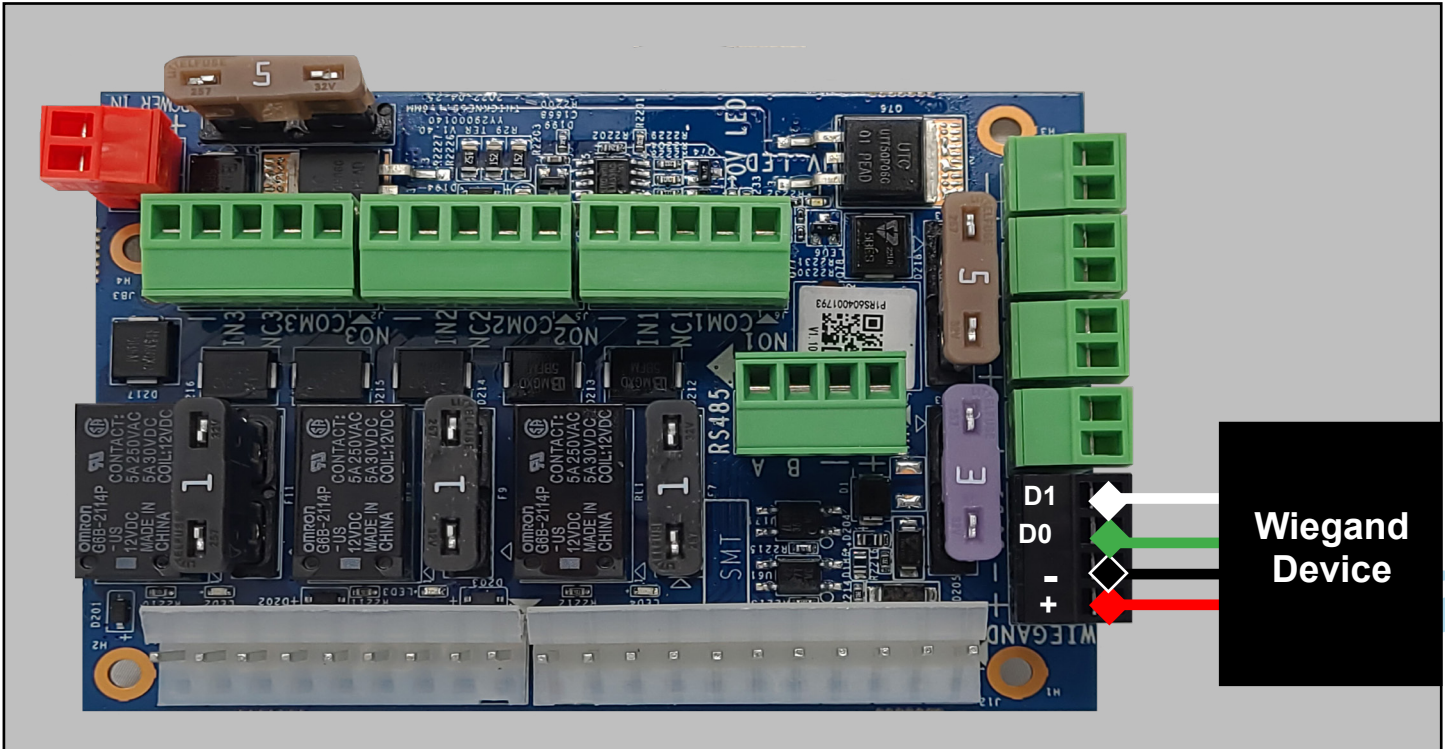
Door/lock opens (releases) when power is removed.







## Wiegand Wiring to Board and Direct to Faceplate, 26 Bit Reader To Interface Board



### Wiring Standards

Positive: White

Negative: Gray

Normally Open (NO): Blue

Normally Closed (NC): Orange

Common: Brown

Positive Power (when live): Red

Ground: Black

Wiegand 1: White

Wiegand 0: Green





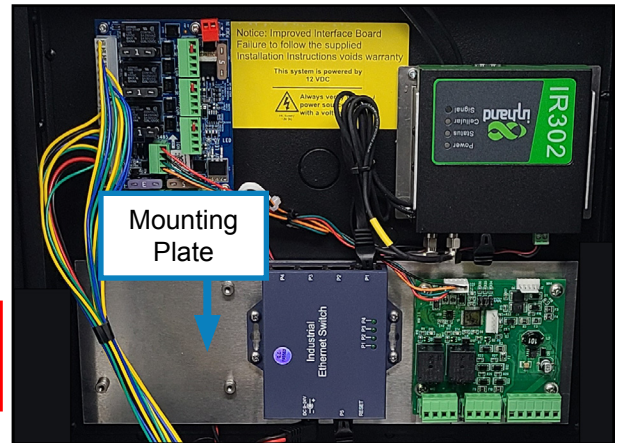
## Expansion Boards

### Install One Expansion Board

The WXL allows the addition of an expansion board.

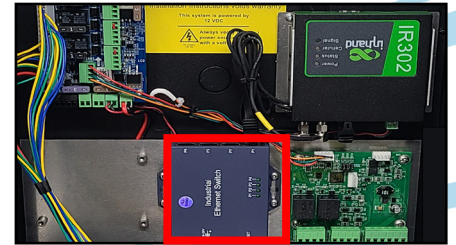
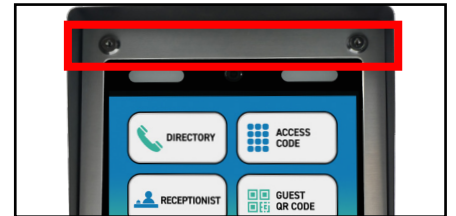
Expansion Board with 6" cable and mounting hardware Part#: CB-WIM 2000

Metal Mounting Plate (with 15-inch cable) Part #: CB-WIM 4000

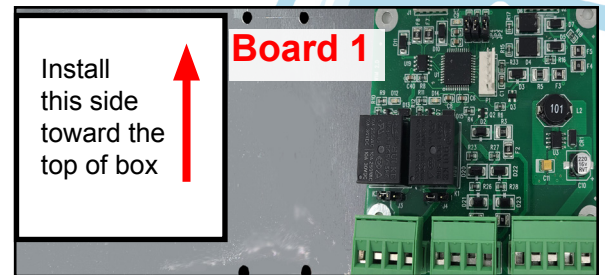
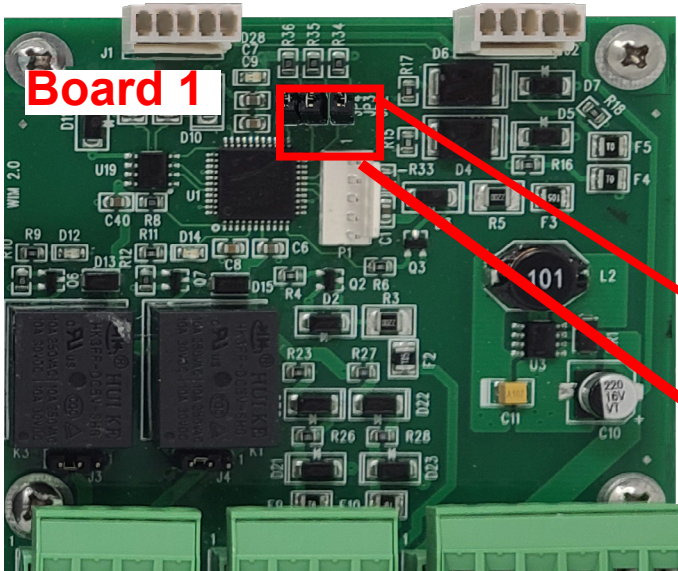


### Installation

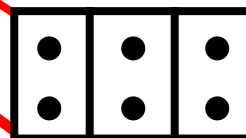
1. Use the key to open the WXL box.  
The Industrial Ethernet Switch is labeled.
2. Unscrew and remove the Ethernet switch. Set the screws aside so you can use them to reattach the plate.
3. Install the mounting plate using the screws from the Ethernet switch.



Expansion Board 1 has jumpers on R36, R35, and R34. Ensure that Board 1 is on the right.



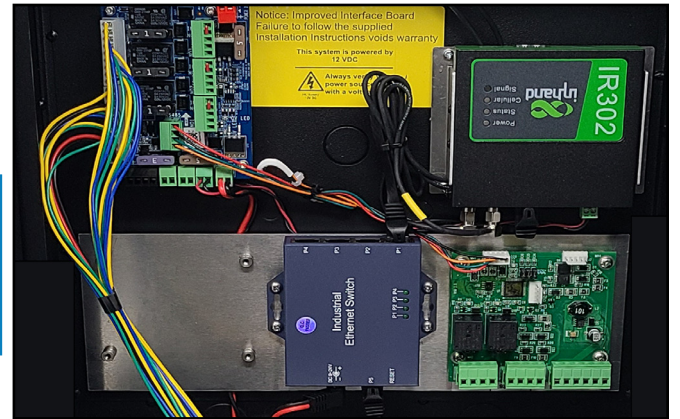
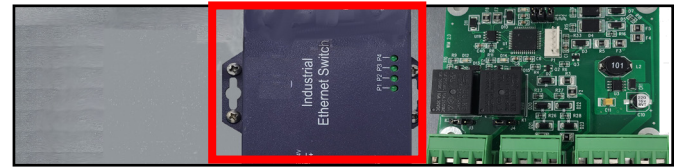
**NOTE** If you've ordered expansion boards, they may be already installed.



**Jumpers: R36, R35, R34**



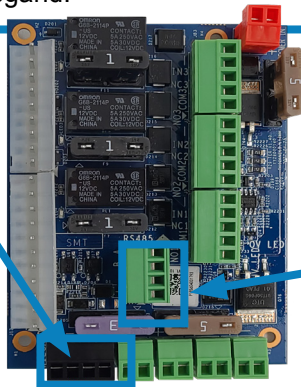
4. Reattach the Ethernet switch, port side-up, in the center of the expansion board using the screws from the shipment.
5. Connect the cables included in the shipment and the Ethernet switch.
6. Connect the expansion board to the RS485 and original WXL circuit board, as shown below. Close the box and reattach it next to the gate. You are now ready to use your WXL.



**NOTE**

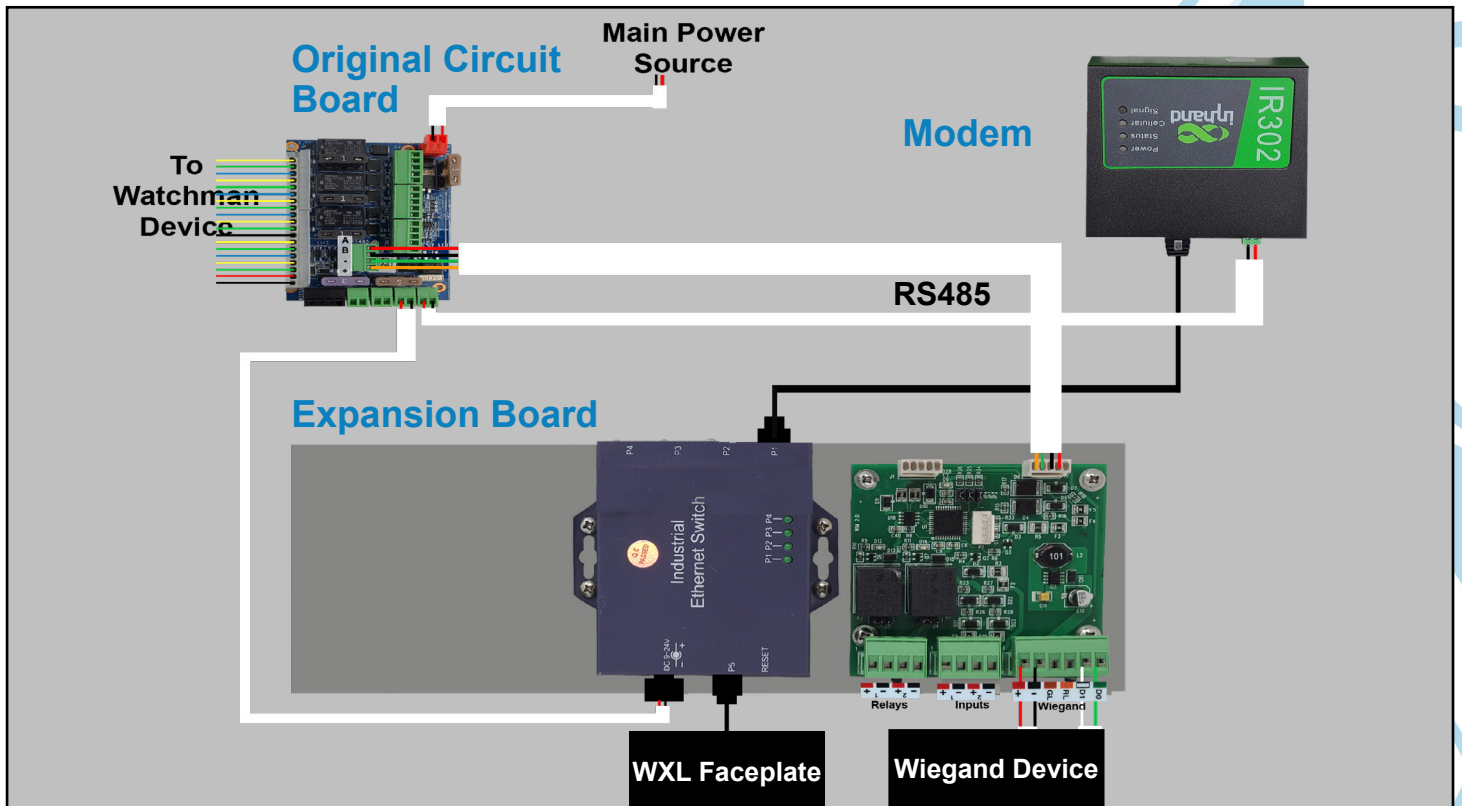
The RS485 is on the right. The internal Wiegand port is on the left.  
**Do not** plug the expansion board into the Wiegand.

Internal Wiegand Port



RS485

**Wiring Diagram: One Board**

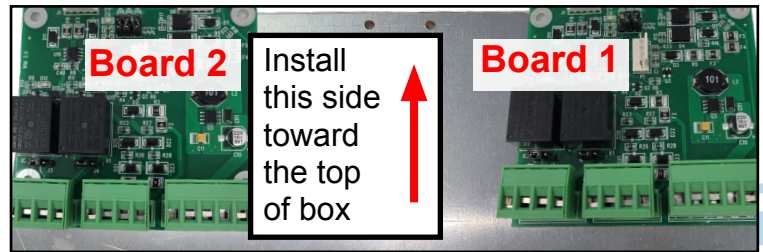
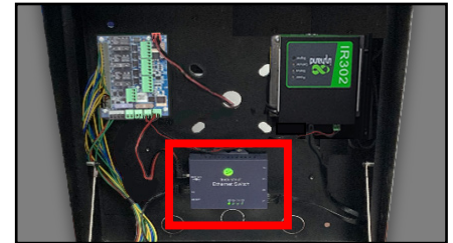
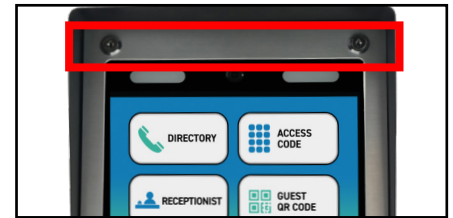




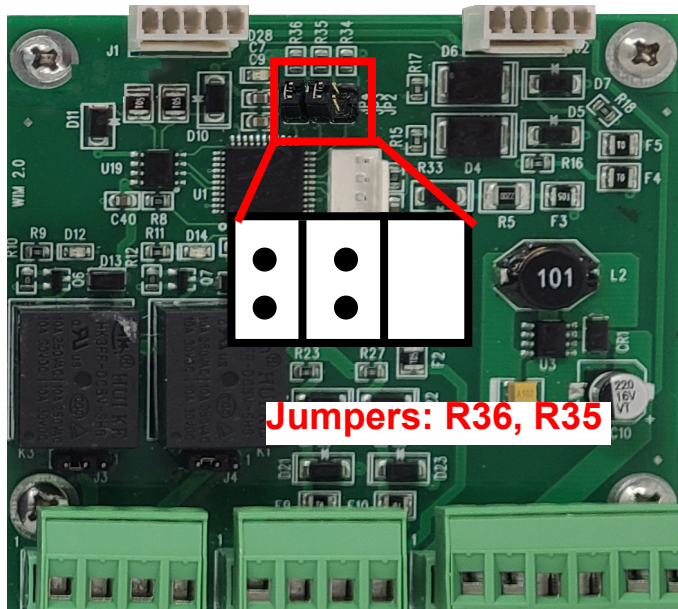


## Add Another Expansion Board

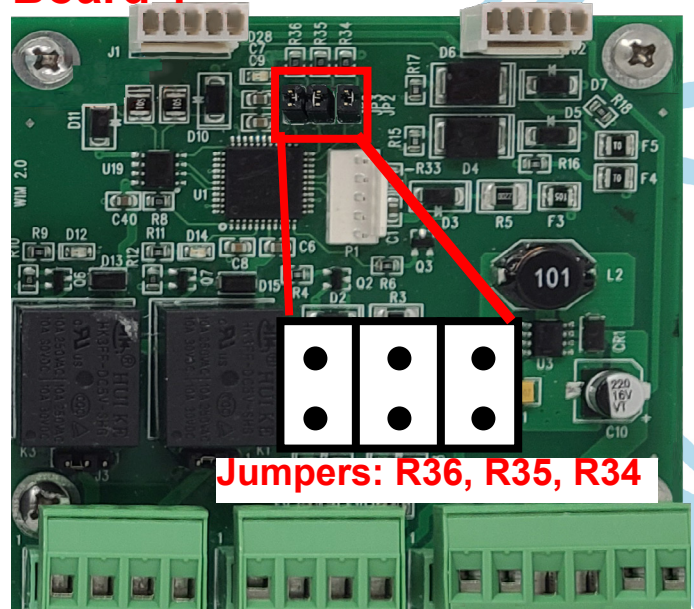
1. Unscrew and remove the Ethernet switch. Set the screws aside so you can use them to reattach the switch.
  2. Ensure that Board 1 is on the right and Board 2 is on the left. Expansion Board 1 has jumpers on R36, R35, and R34.
- Expansion Board 2 has jumpers on R36 and R35 (see below).



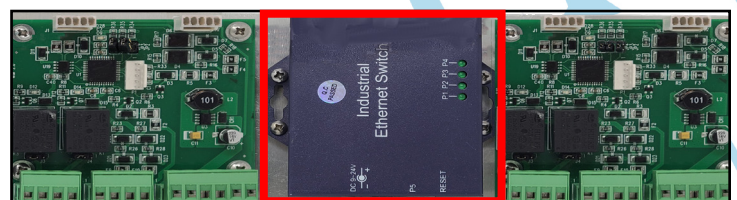
### Board 2



### Board 1



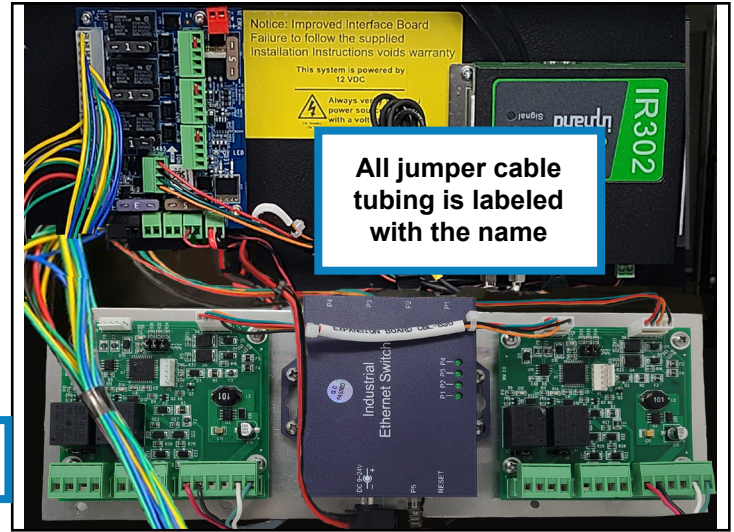
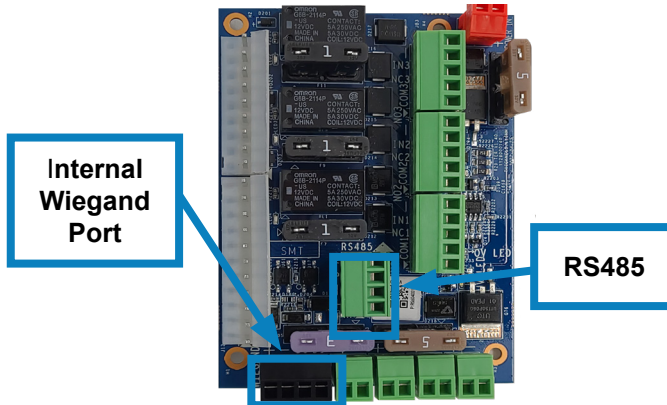
3. Reattach the Ethernet switch, port side-up, in the center of the expansion board.
4. Connect the board with the jumper cables.



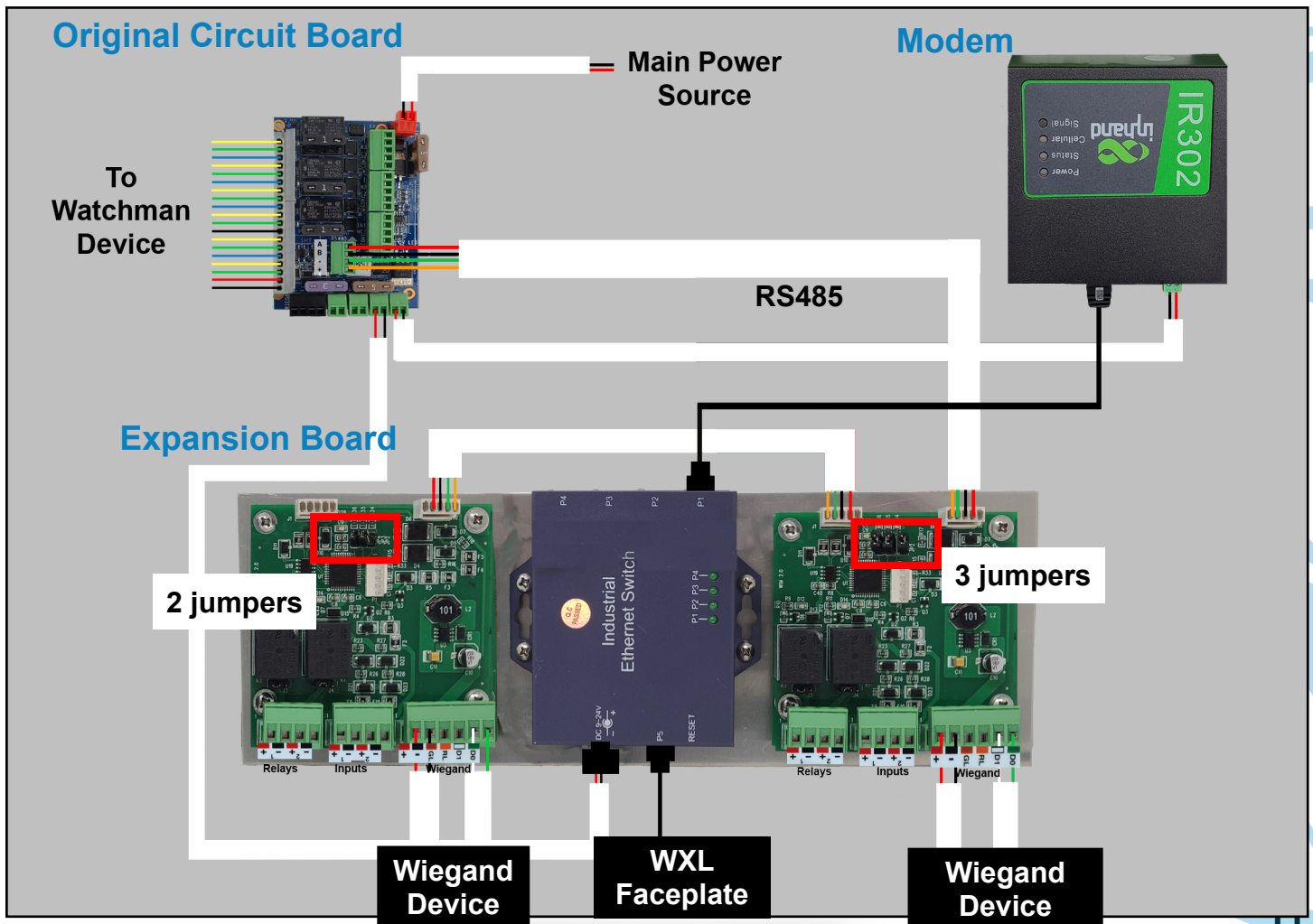




5. Install Expansion Board 2 on the left side of the mounting plate. Check that you have jumpers on R34 and R35. Connect the expansion board to the RS485 and original WXL circuit board, as shown below. Close the box and remount it. You are now ready to use your WXL.



### WXL Layout with Both Expansion Boards Connected

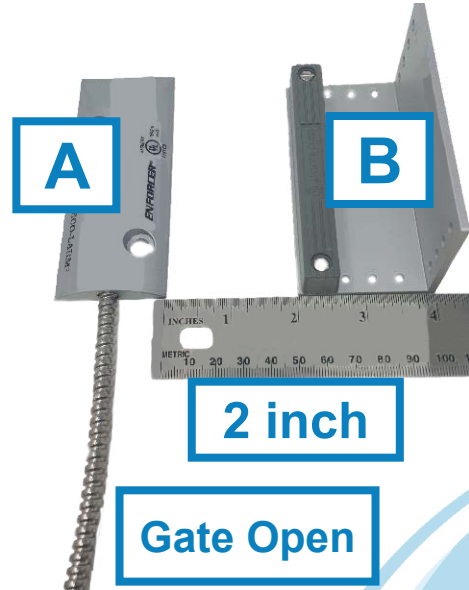
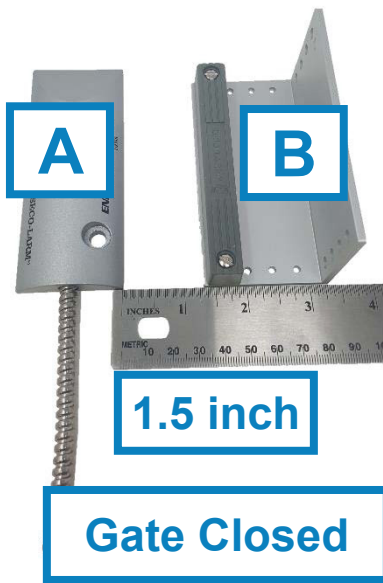




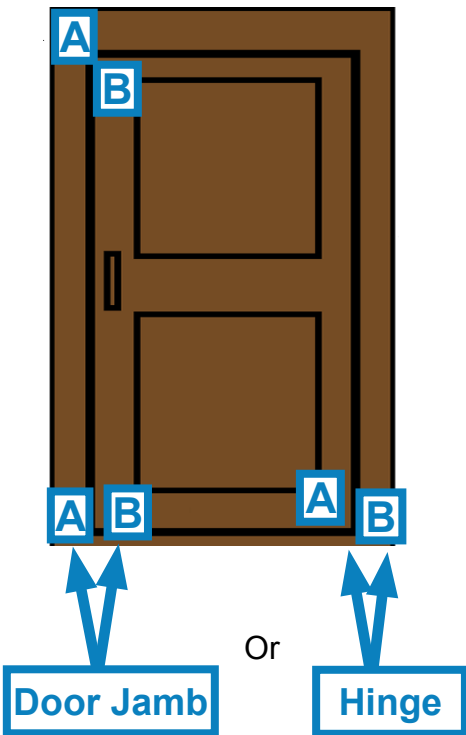
## Magnetic Switch Setup

**NOTE** Gate statuses can be inverted. If needed, please call CellGate to invert.

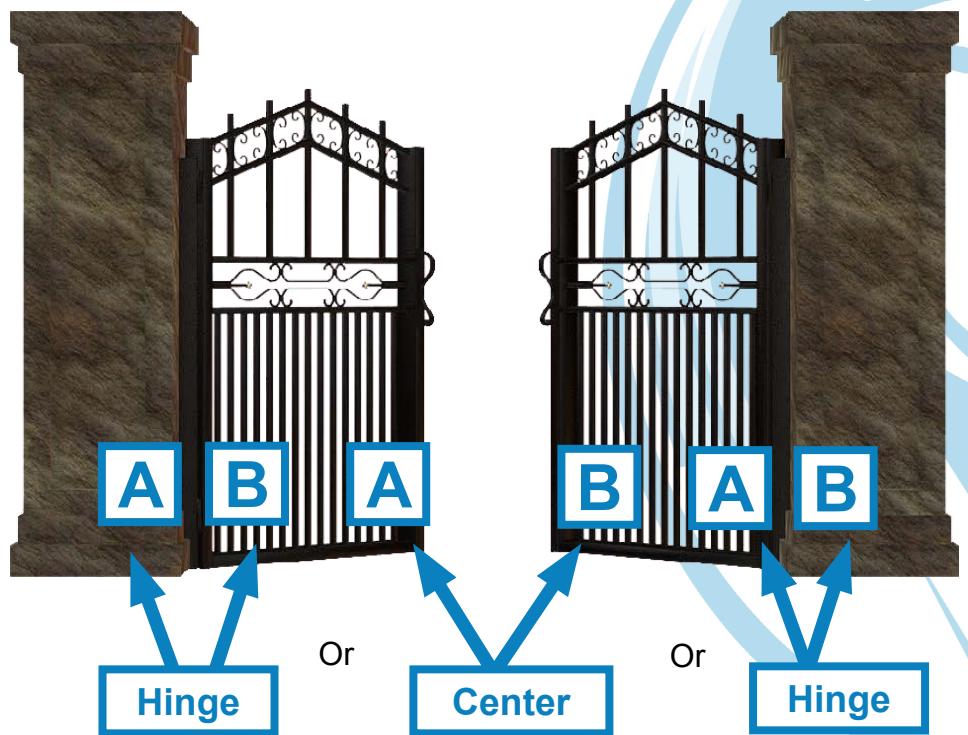
The Mag Switch can be placed anywhere that allows A and B to be pulled at least 2 inches away from each other when the gate is open and within 1.5 inches when the gate is closed.



### Door Wiring



### Gate Setup





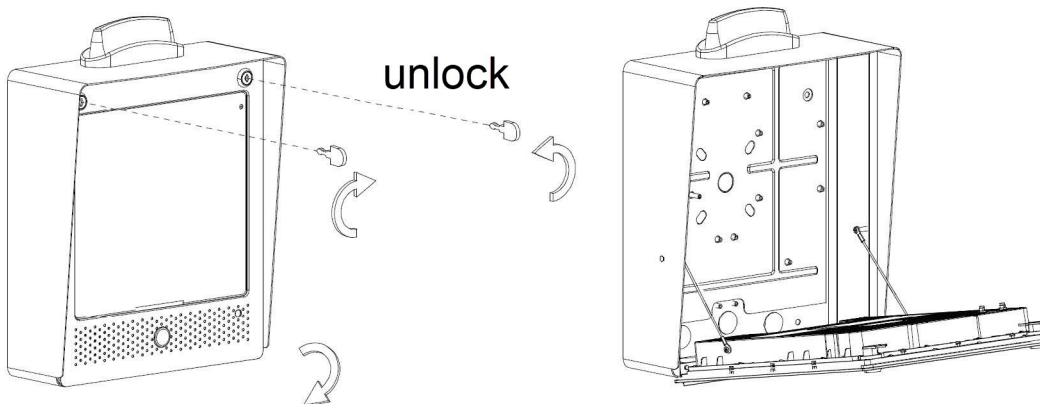
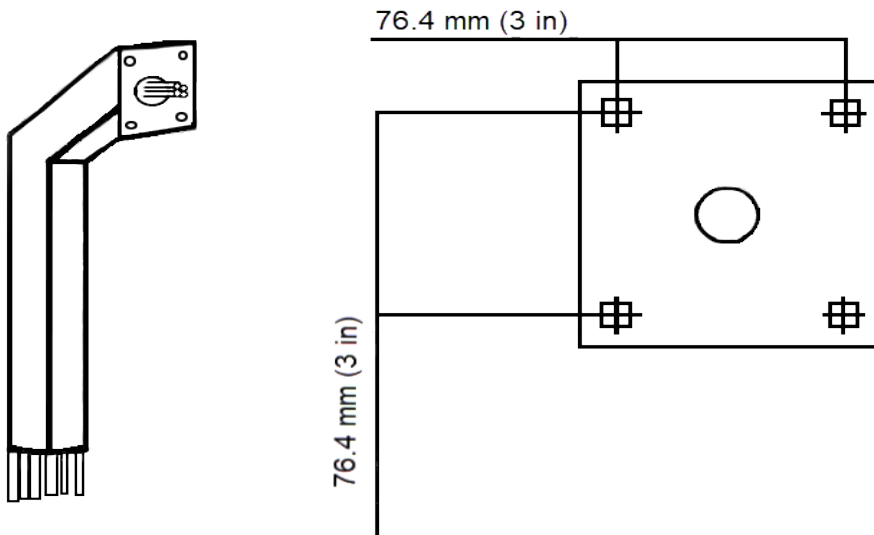
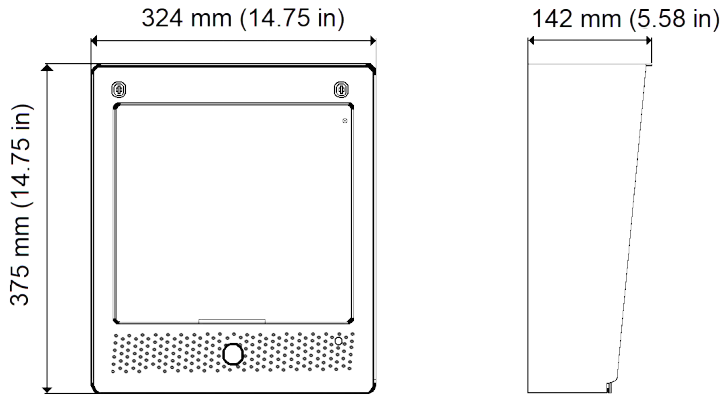
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## Mounting Illustrations

### Mounting to Architectural Post (Standard Pedestal Mount)

Part #: ENC-WFM1005



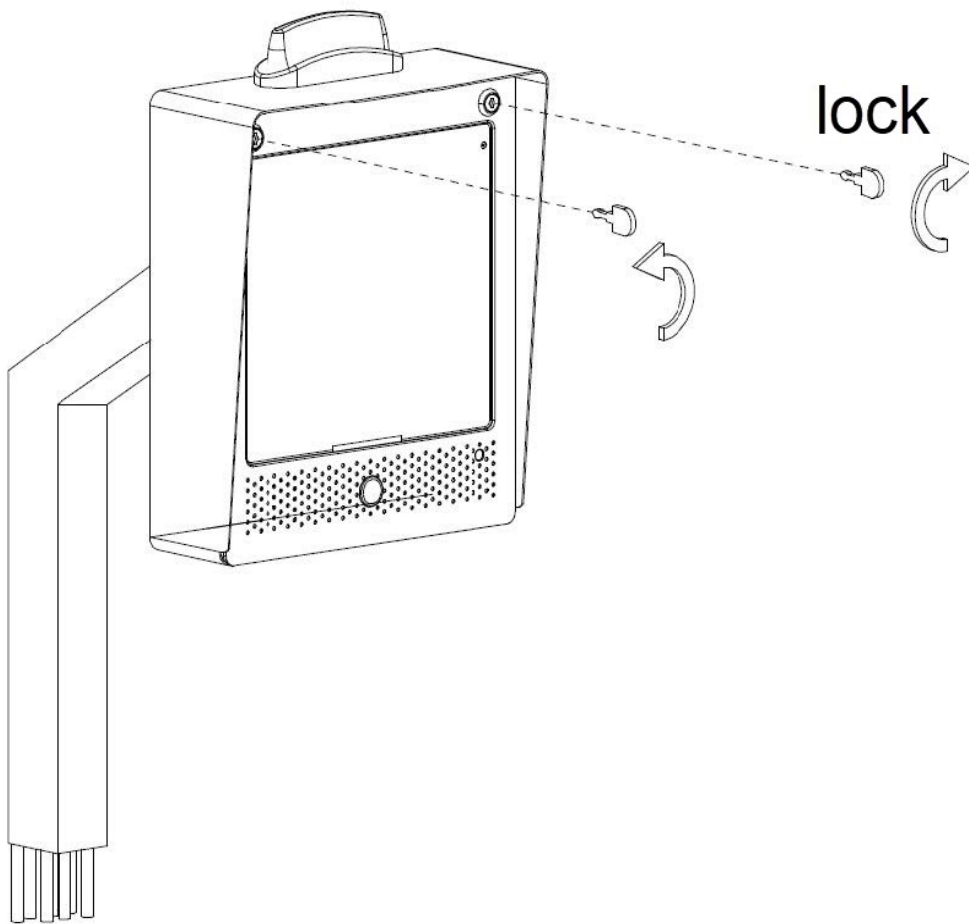
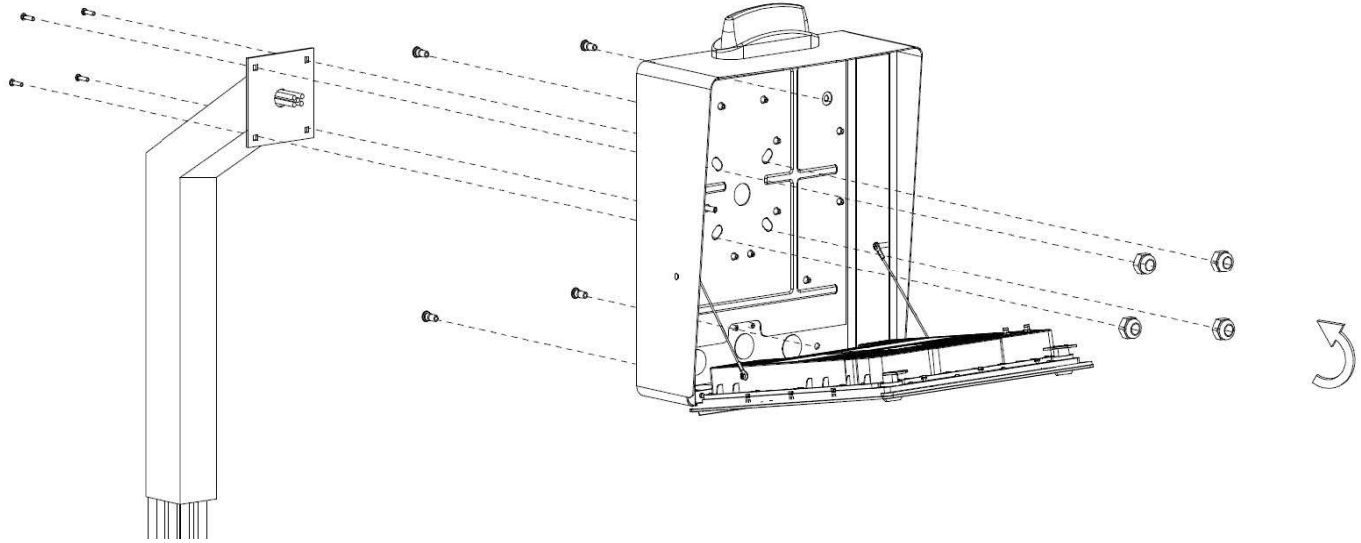




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## Mounting to Architectural Post (Standard Pedestal Mount) (Continued)



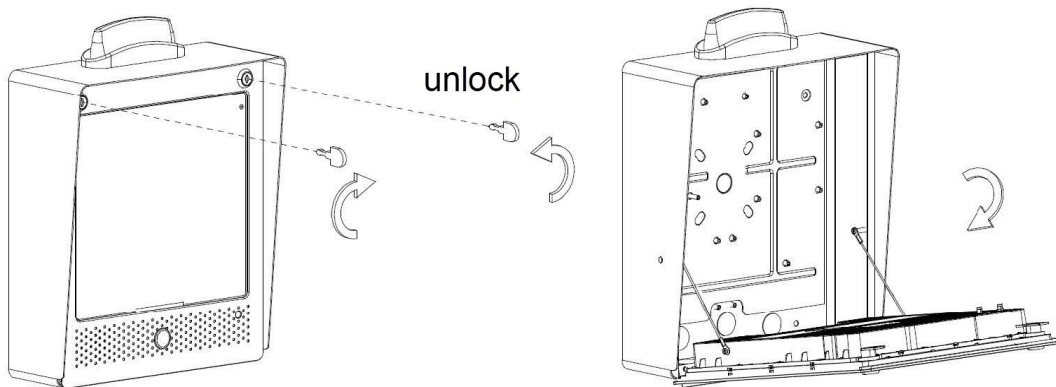
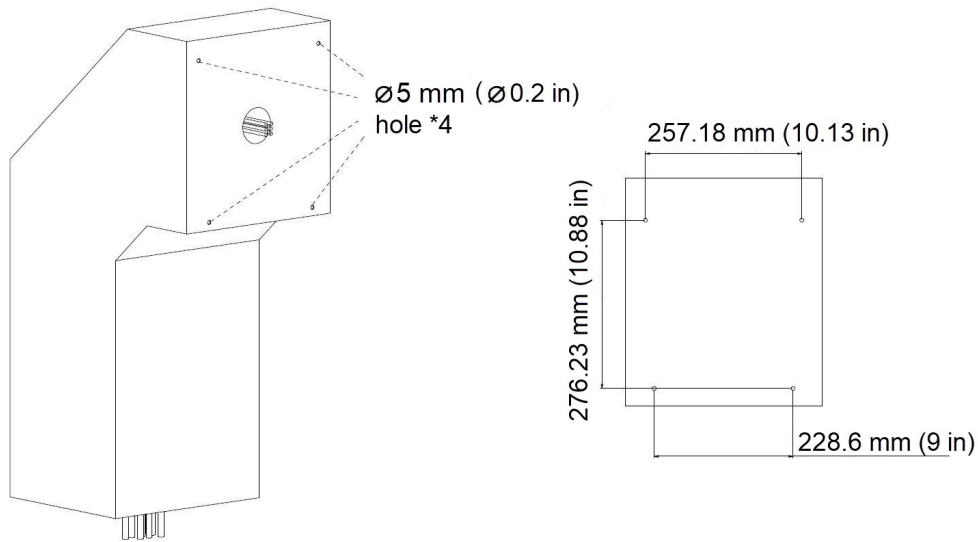
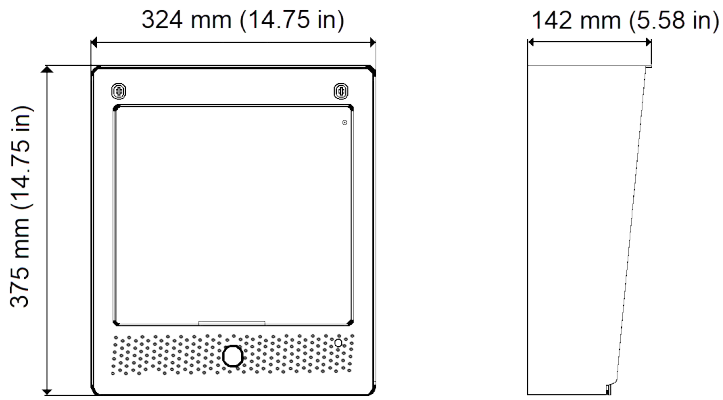


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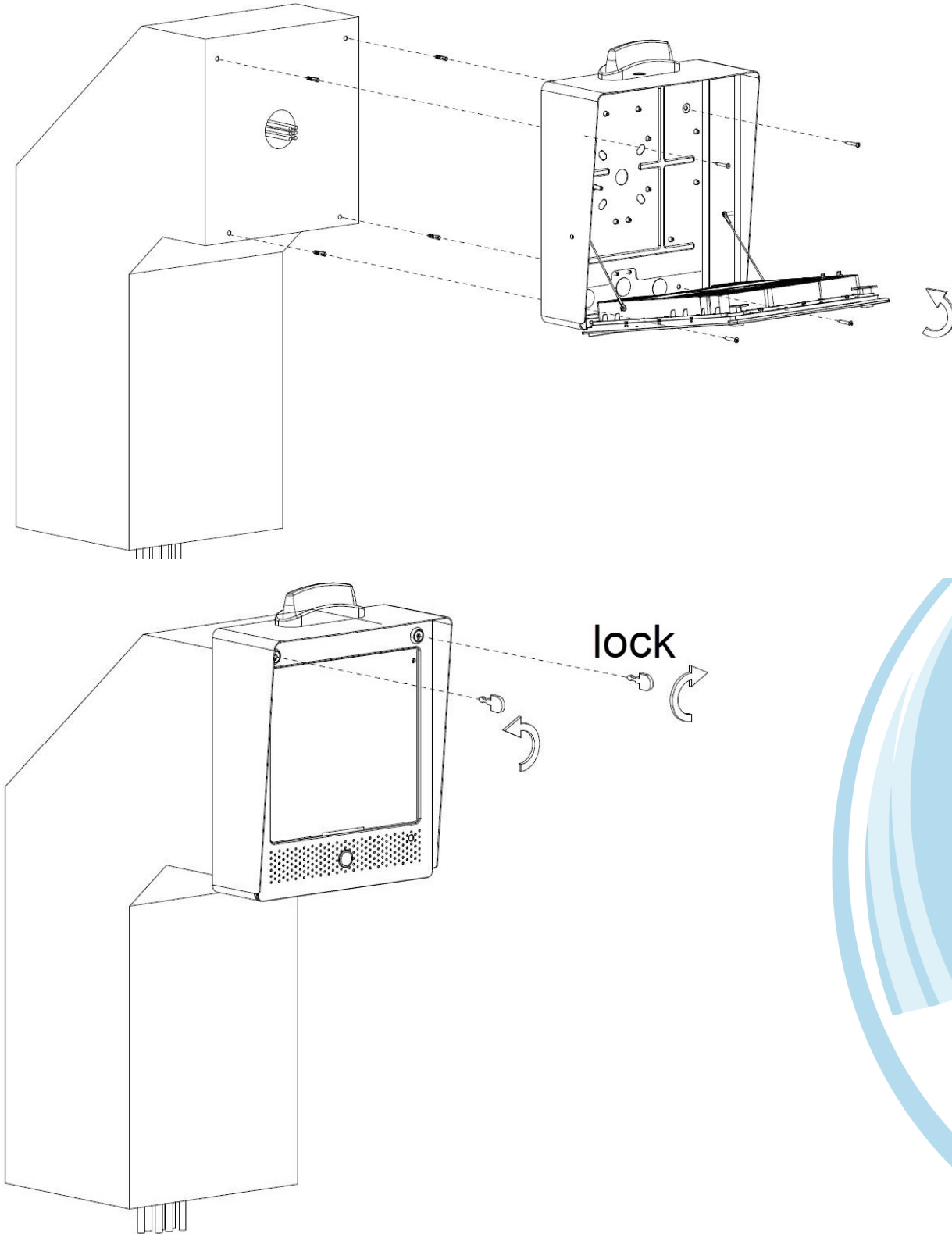
## Mounting to Architectural Post (Type B)

Part #: ENC-WFM1006





## Mounting to Architectural Post (Type B) (Continued)





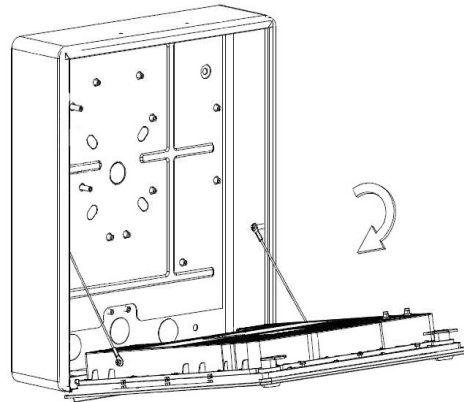
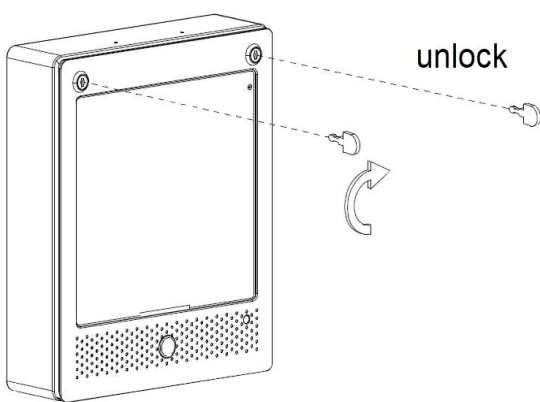
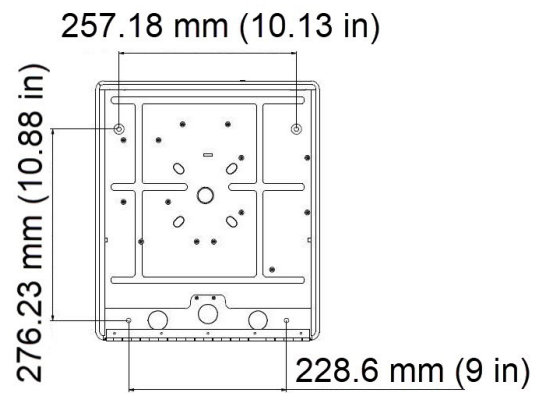
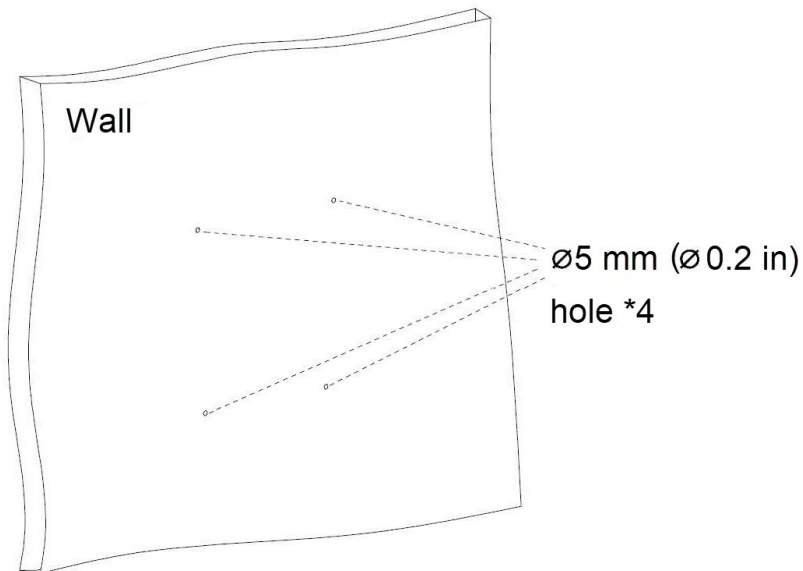
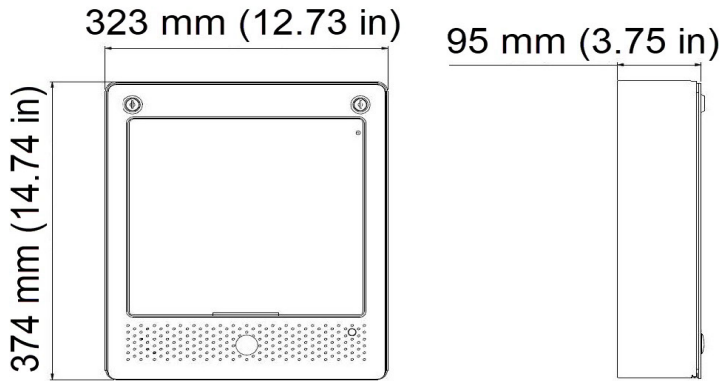


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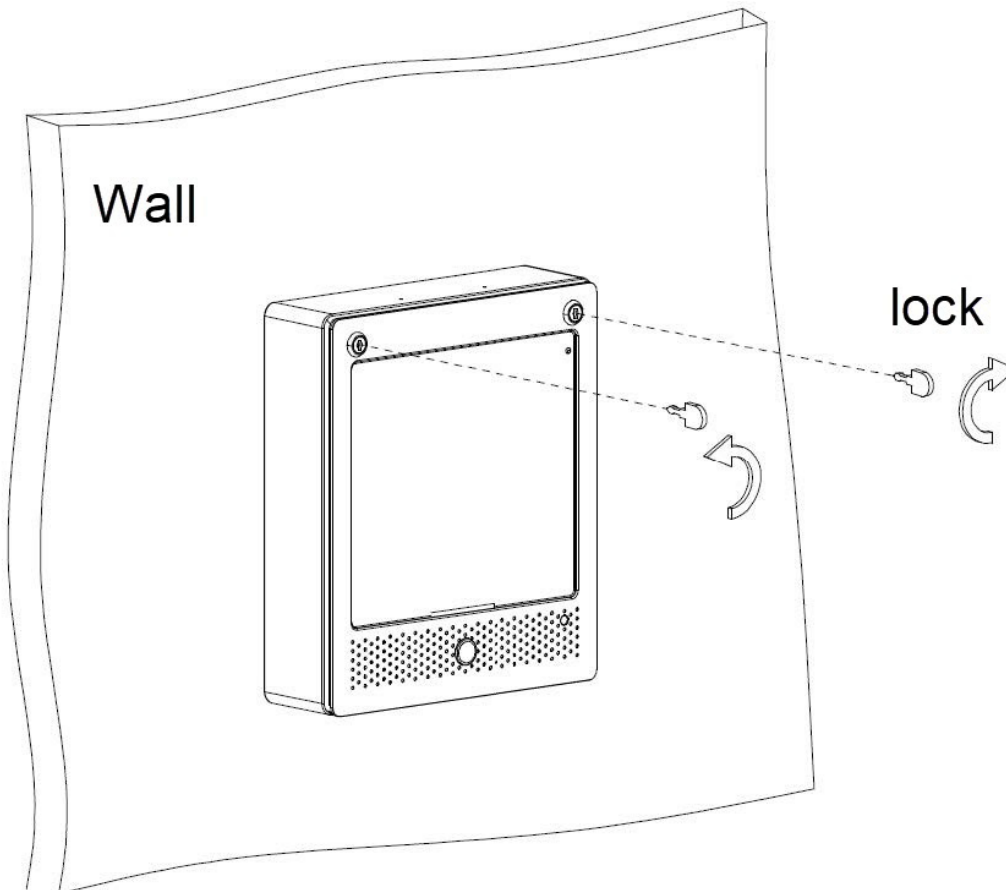
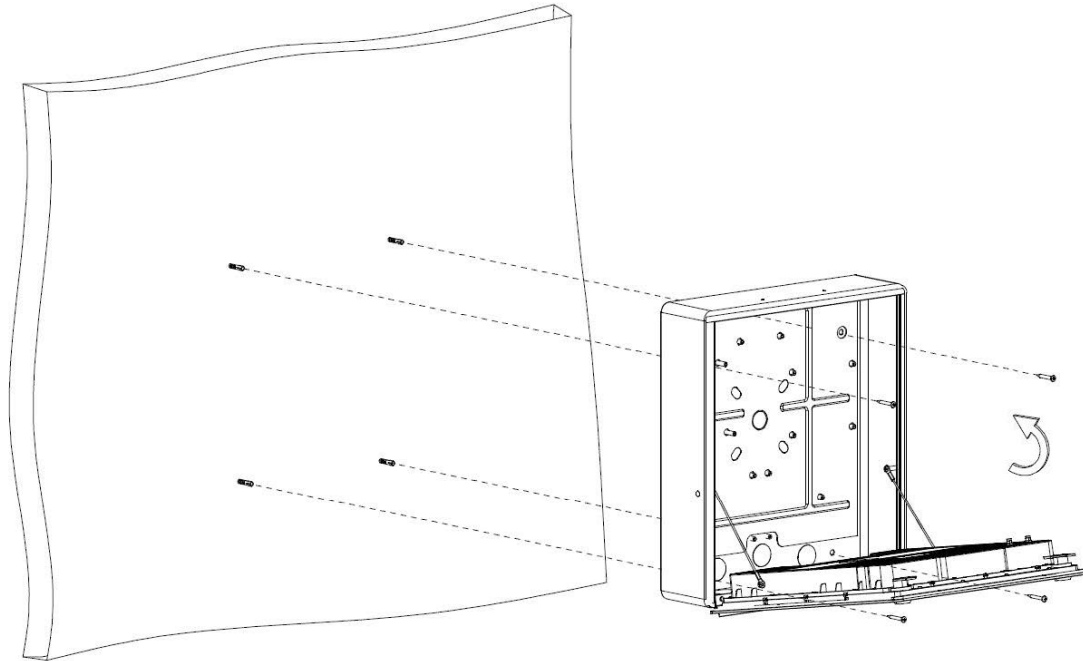
## Mounting to Surface

Part #: AA1XLPE VZN





## Mounting to Surface (Continued)



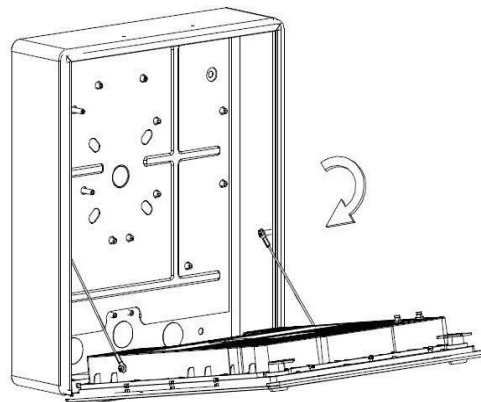
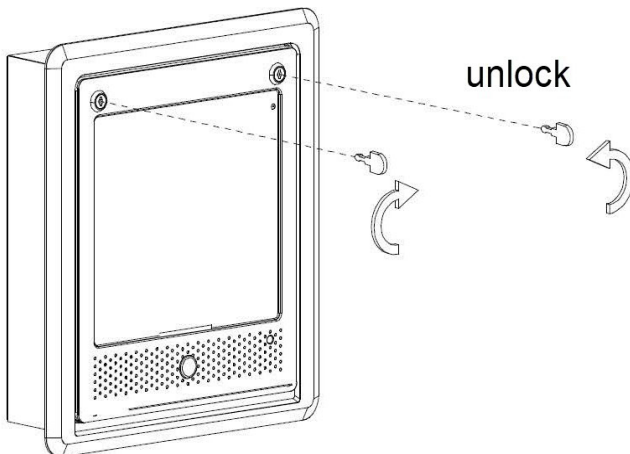
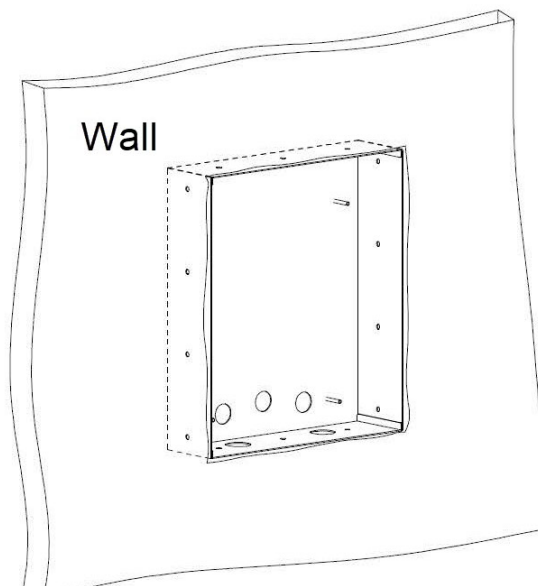
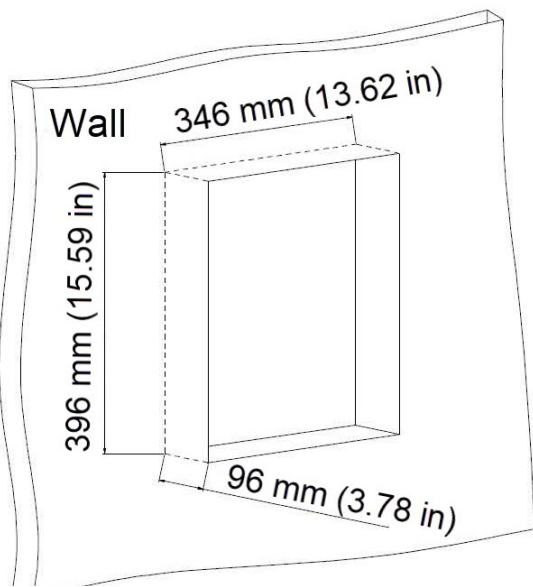
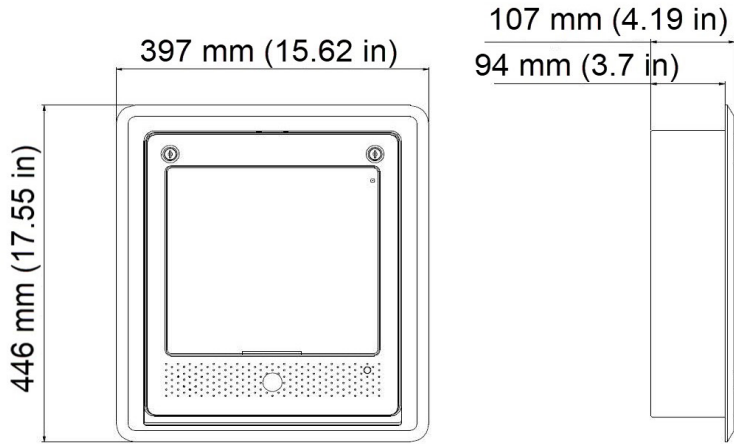


## Flush Mounting

Watchman Part #: AA1XLPE

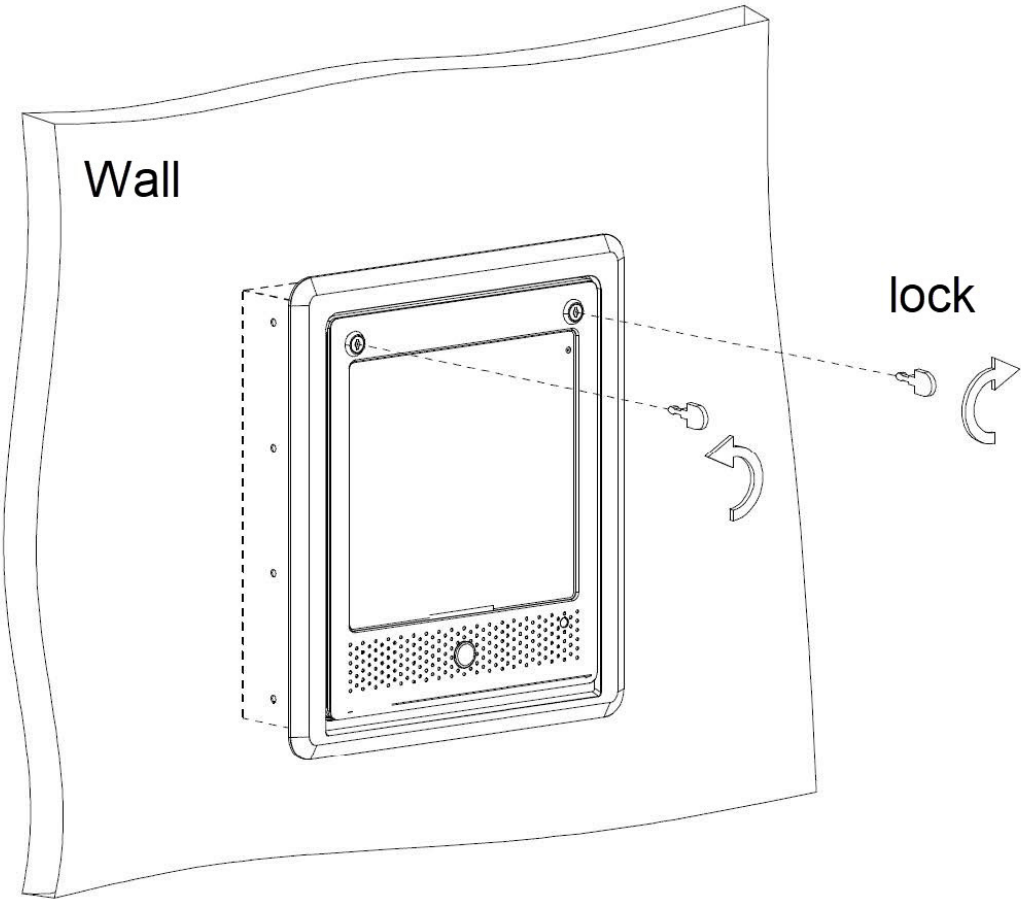
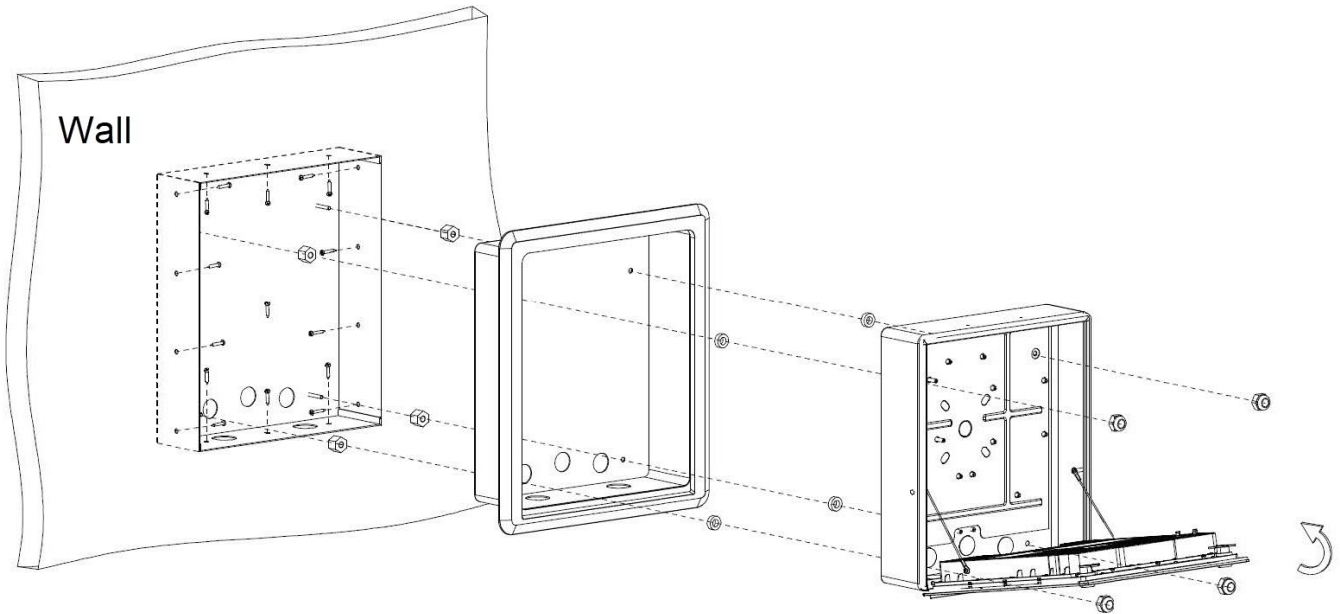
Unit Part #: AA1XLFM, AA1XLFM

Flush Mount Kit Part #: ENC-WFM1003, ENC-WFM1004





### Flush Mounting (continued)

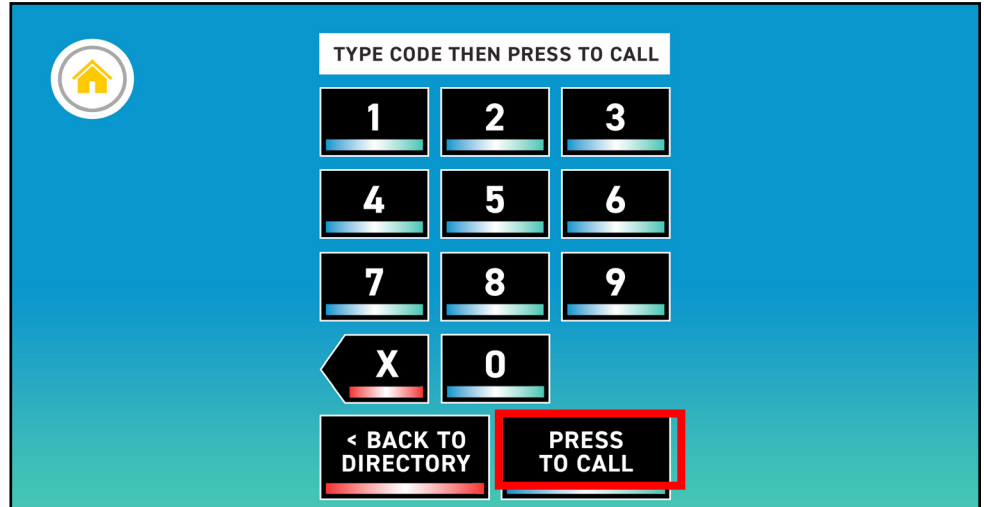




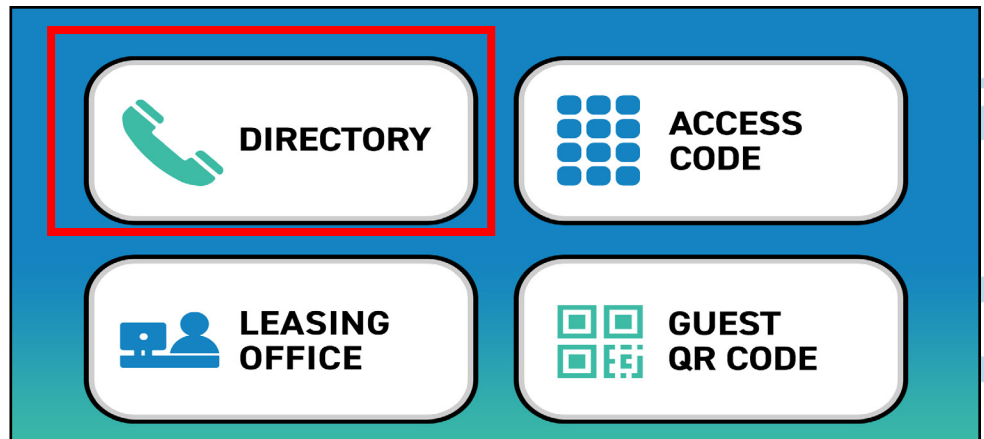


## Testing

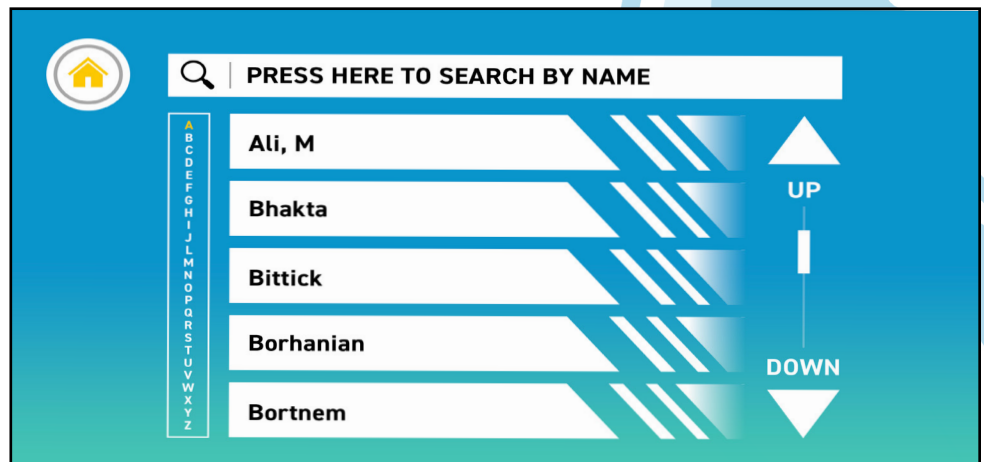
1. Enter the Testing Code, then tap the Enter. The Code activates Relay 1 (the gate should open).



2. From the Home screen, tap **Directory** to open the directory, which lists all callgroups.



3. Tap a callgroup to initiate call. An automated message will play confirming the call was successful.





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## Customer Information

Leave the following items with the Customer:

- Customer Information Packet
- WXL - Key
  - Installer keeps one key and gives one key to the customer

