cellgate

OmniPoint

EPM **Entry Point Module**

> ⚠️ Please ensure Gateway is installed and on-line before you begin the installation.

> ⚠️ Please ensure that account is created and property configured before you begin the installation.

CellGate Support: 972-231-1999, opt. 2

Table of Contents

Overview

The Omnipoint Entry Point Module (EPM) enables wireless communications from one gateway to many EPMs. Different views of the installed EPM are below.

Download CellGate App

To use the Omnipoint device, you must download the CellGate app, which allows you to manage Omnipoint from your smartphone.

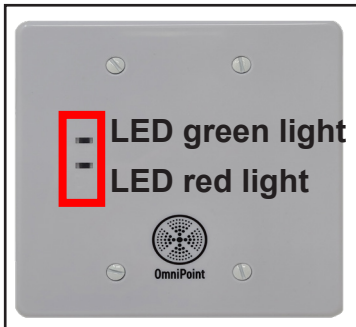For iPhones, scan this QR code to download the CellGate app from the App Store.

For Androids, scan this QR code to download the CellGate app from the Google Play Store.

Alternatively, search for "Cellgate" in the App or Play Store, and download the CellGate app.

EPM Set Up

LED green light
LED red light

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Wiring Instructions

Refer to the definitions below as you set up Omnipoint.

Relevant Terms

Main Power: The main power input for the circuit; 12 V DC or 24 V AC. Omnipoint is not polarity sensitive for incoming power.

Wet Relay Connector: Power is supplied by the main power source. The wet relay outputs the same voltage as input, e.g., 12 V DC in, 12 V DC out *or* 24 V AC in, 24 V AC out.

Dry Relay Connector: A source other than the main power source supplies power. When closed, current flows through the contact. When dry contact is open, no current flows through the contact.

Wiegand Connection: The 26-bit Wiegand circuit reads the user's credentials and determines whether to allow or deny access. Power output is always 12 V DC or 24 V AC.

Input 1: Gate or door status.

Input 2: Gate or door status; includes Request to Exit (REX) built in by default.

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Shipping Contents
Omnipoint with Internal Antenna
Part #: OP EPM DG

Flathead Screws: 4

Shims: 2

Security Screws: 4

13-pin Connector: 1

3-pin Connector: 1

2-pin Connector: 1

Omnipoint EPM: 1

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Main Power
1. 12 VDC or 24 VAC
2. 12 VDC or 24 VAC
Wet Relay
3. Normally Open
4. Common
5. Normally Closed
Dry Relay
6. Normally Open
7. Common
8. Normally Closed
Wiegand
9. 12V+
10. Ground-
11. Green light
12. Red light
13. Data 1
14. Data 0
Dry Input
15. Input 1
16. Common
17. Input 2
18. Common

Shipping Contents

Omnipoint with External Antenna

Part #: OP EPM DG EXT

External antenna: 1

> ⚠ **!** Connect the external antenna *before* you connect the power.

Connector Cable: 1

Flathead Screws: 4

Security Screws: 4

13-pin Connector: 1

Shims: 2

3-pin Connector: 1

2-pin Connector: 1

Omnipoint EPM: 1

Main Power
1: 12 VDC or 24 VAC
2: 12 VDC or 24 VAC

Wet Relay
3: Normally Open
4: Common
5: Normally Closed

Dry Relay
6: Normally Open
7: Common
8: Normally Closed

Wiegand
9: 12V+
10: Ground-
11: Green light
12: Red light
13: Data 1
14: Data 0

Dry Input
15: Input 1
16: Common
17: Input 2
18: Common

OmniPoint

Required Purchase

Outdoor and Indoor External Antenna Installs

You must purchase an external box if you plan to install Omnipoint outdoors or if you install Omnipoint with and external antenna indoors.
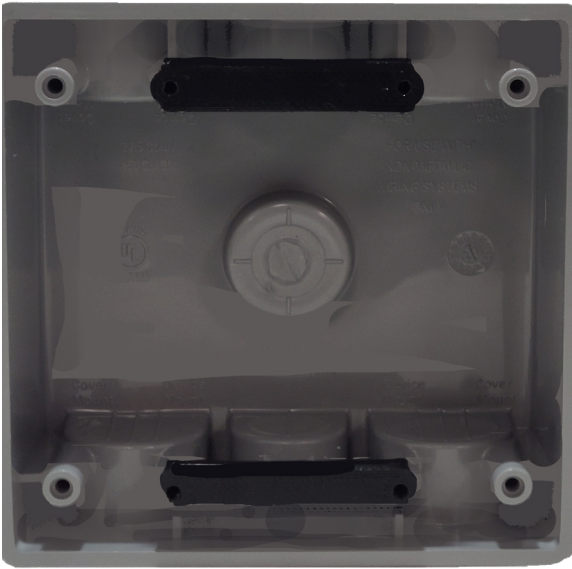
"2-Gang Gray Weatherproof Box with Four 3/4 in. and Three 1/2 in. Holes"
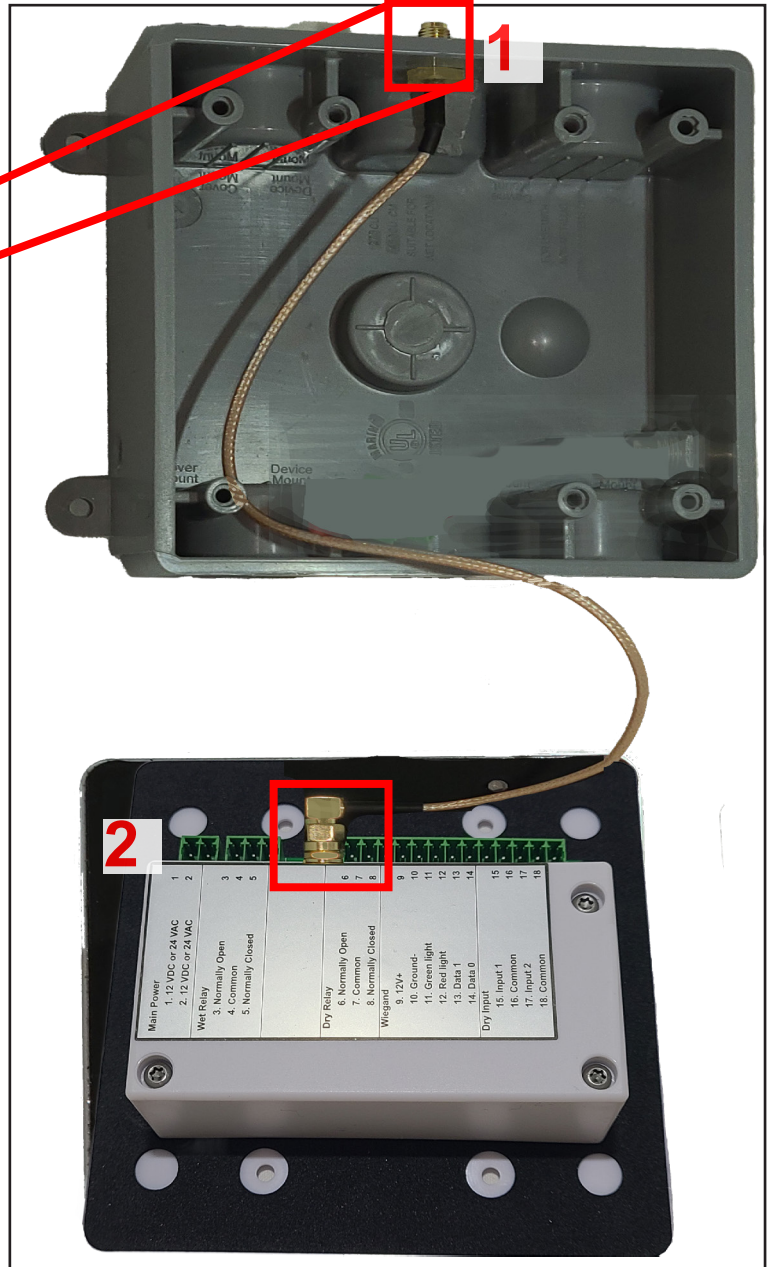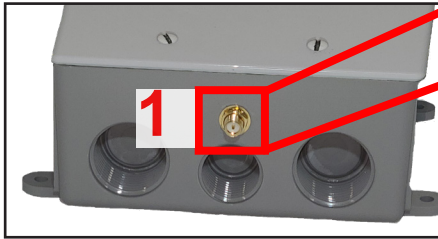
Home Depot Product Information:

- Internet #300851103
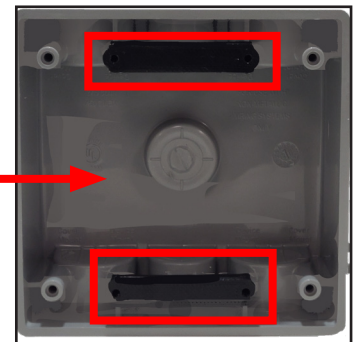- Model #WDB750PG
- Store SKU #497014
- Home Depot Product Link

Outdoor Installation
Omnipoint with External Antenna

1. Attach the cable to the external box.

2. Attach the other end of the cable to the Omnipoint EPM.

3. Attach shims to box to seal box.
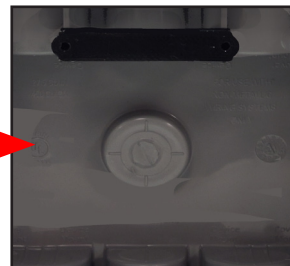
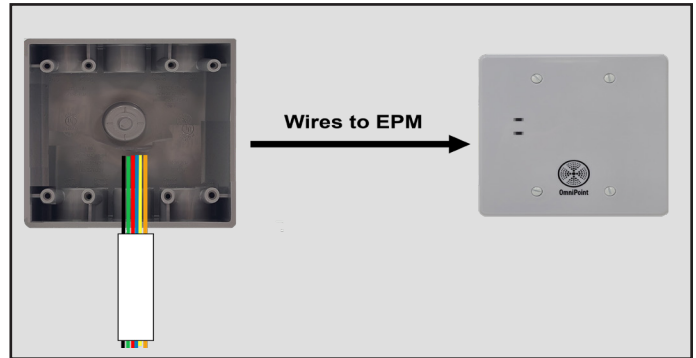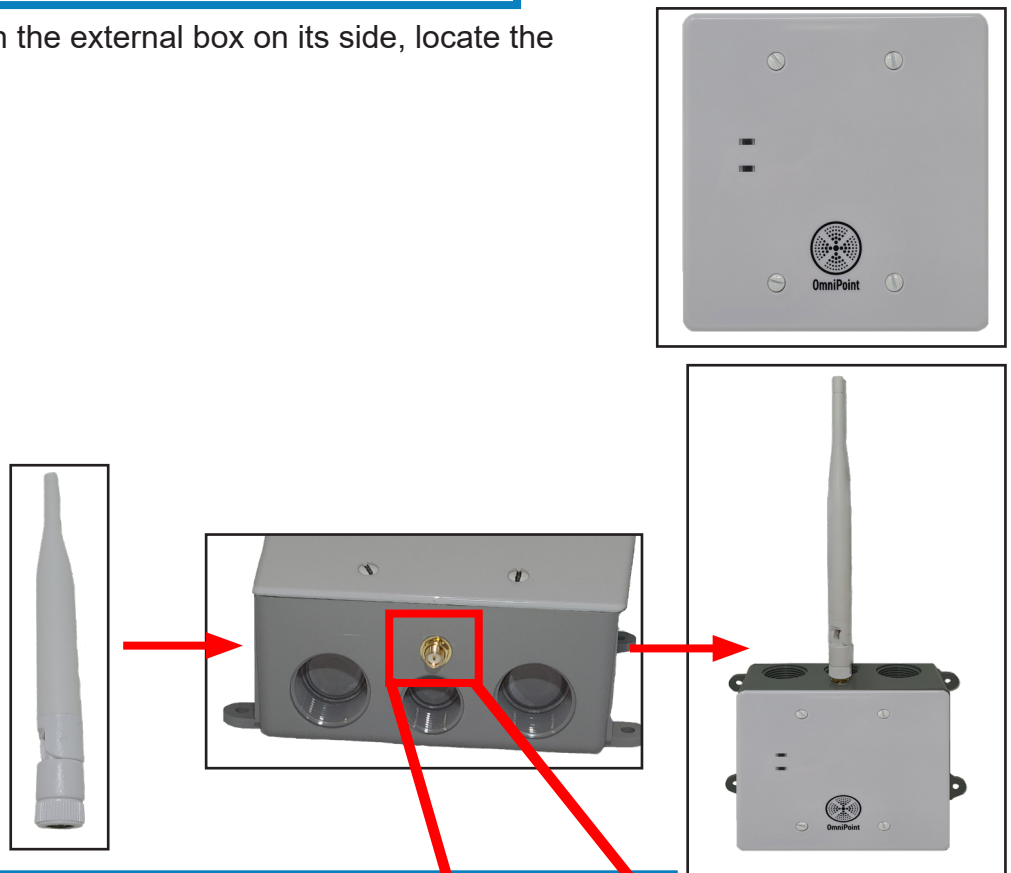4. Run the wires into the double-ganged box and wire the EPM.

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5. Attach the Omnipoint EPM to the external box with either flathead or security screws, based on your preference.

Wires to EPM

NOTE You must weather-proof the antenna and cable connections. ¾ inch conduite fitting recommended.

6. Attach antenna to box. With the external box on its side, locate the antenna stud as pictured.

NOTE To assemble correctly, the nut and washer must be attached at this location on the external box.

! Connect the external antenna *before* you connect the power.

Outdoor Installation

Omnipoint with Internal Antenna

1. Attach shims to box to seal box

2. Run the wires into the double-ganged box and wire the EPM.
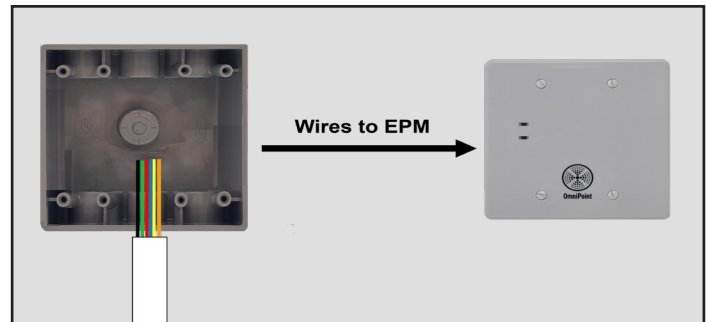
3. Attach the Omnipoint EPM to the external box with either flathead or security screws, based on your preference.

**NOTE** For outdoor installation, properly seal cable connections. ¾ inch conduite fitting recommended.

Indoor Installation

Omnipoint with External Antenna

For an indoor installation with an external antenna, you have several options. You can run cable for antenna up within the wall. You can also mount the box and allow the antenna to remain visible.

1. Attach the cable to the external box.
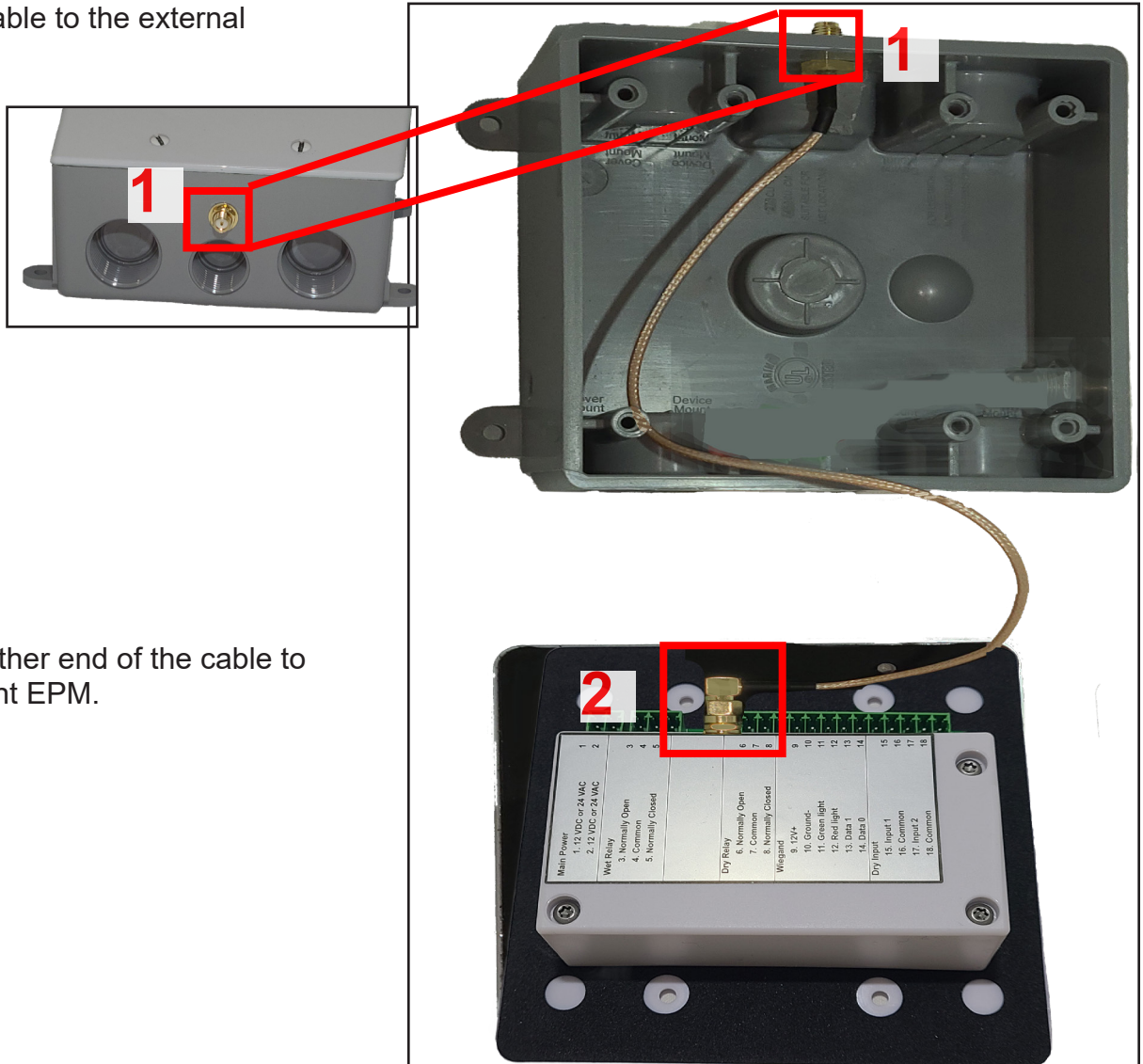
2. Attach the other end of the cable to the Omnipoint EPM.

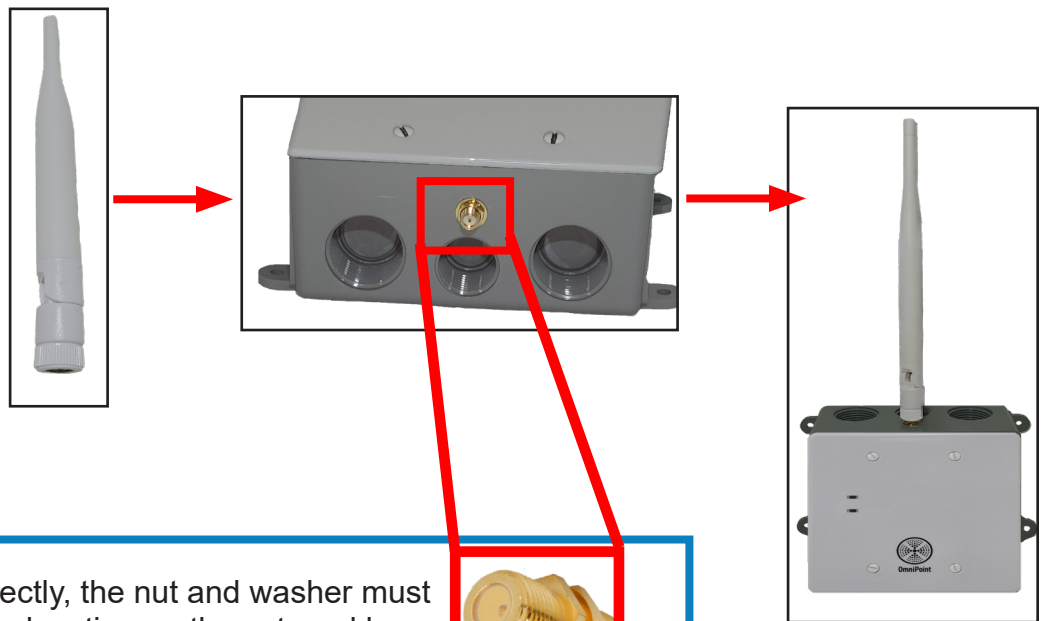3. Run the wires into the double-ganged box and wire the EPM.
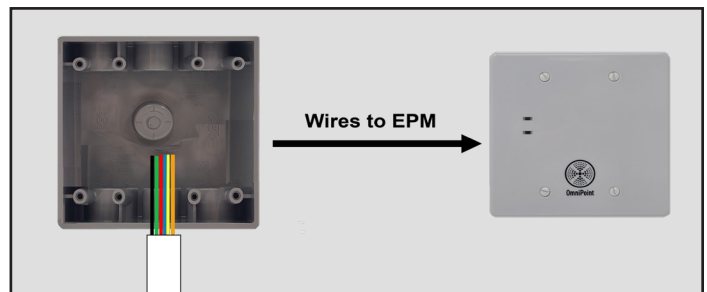
Wires to EPM

4. Attach the Omnipoint EPM to the external box with either flathead or security screws, based on your preference.

5. Attach antenna to box. With the external box on its side, locate the antenna stud as pictured.

NOTE To assemble correctly, the nut and washer must be attached at this location on the external box.

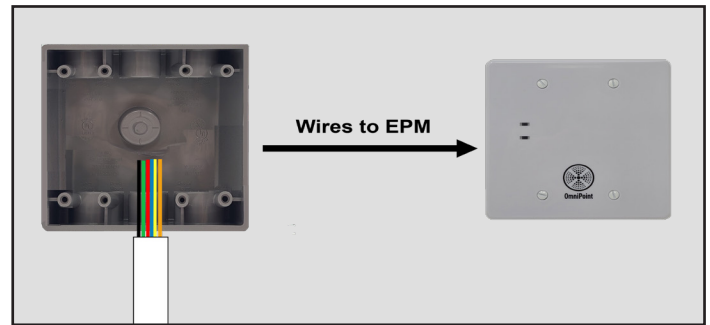⚠ Connect the external antenna **before** you connect the power.

Indoor Installation

Omnipoint with Internal Antenna

Wall Mount

1. Run the wires into the double-ganged box and wire the EPM.

Wires to EPM →

2. Attach front to box with screws.

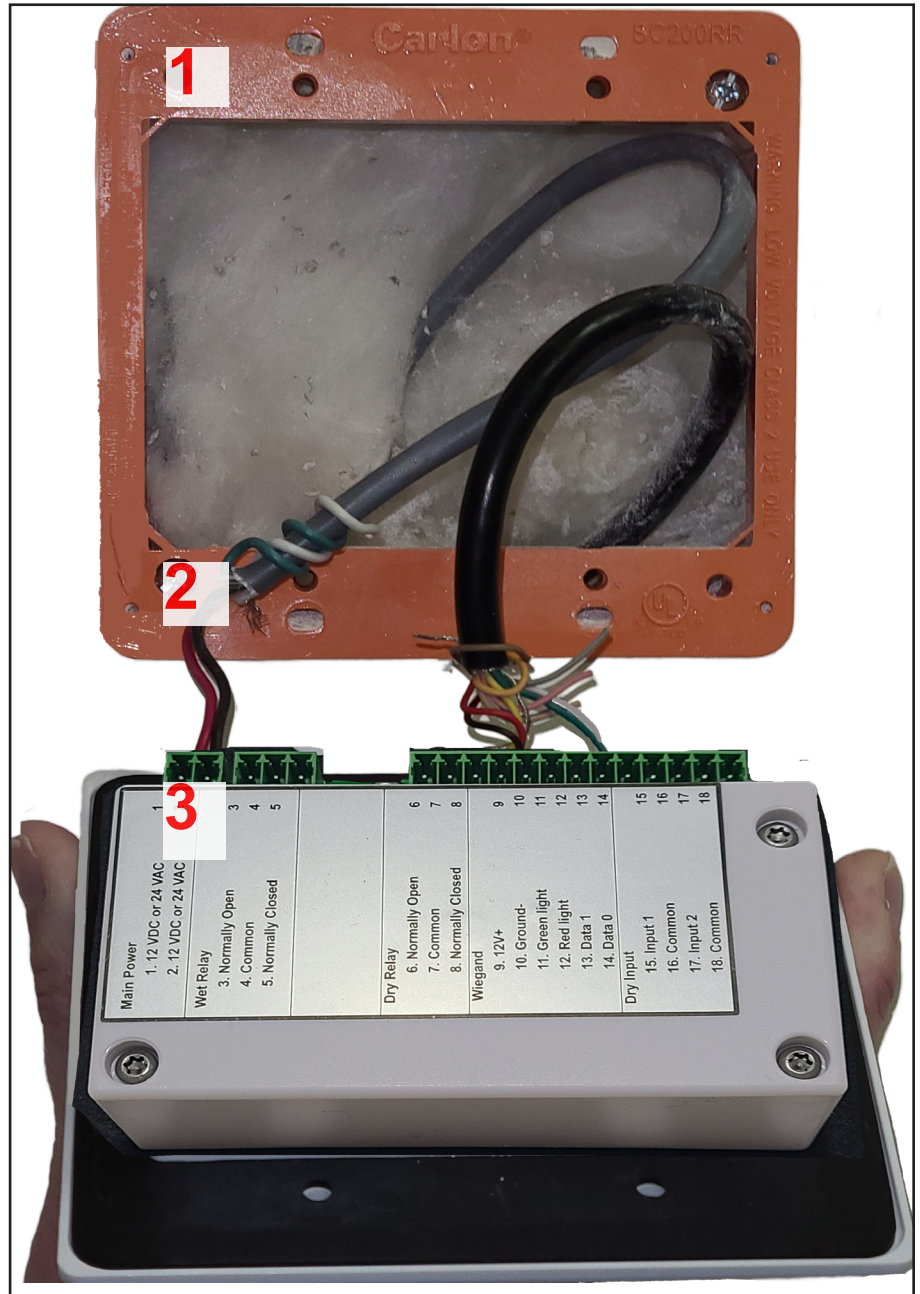| NOTE	¾ inch conduite fitting recommended.

Flush Mount

For indoor installation with internal antenna, you can choose to install the Omnipoint device in the wall or mount the box.

1. Make a hole in the wall for your Omnipoint device.

2. Wire the Omnipoint EPM.

3. Place the Omnipoint device in the wall.

| NOTE | This is a double-ganged wall mount box. |

Wiring Diagram

The parts of the EPM are identified below.
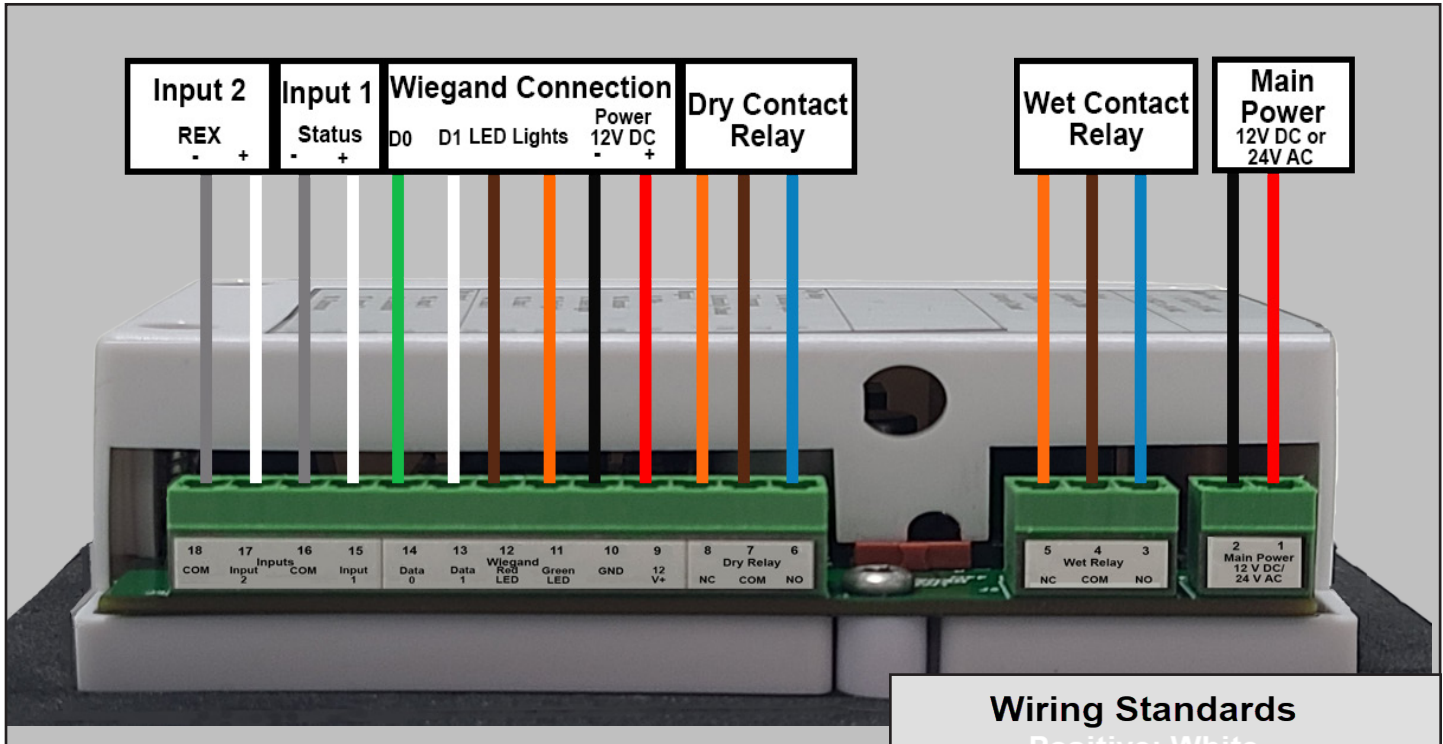
The following are the options on Omnipoint device

- Main Power: 12 V DC or 24 V AC

- Wet Relay:

  - NC: Normally Closed

  - COM: Common

  - NO: Normally Open

- Dry relay:

  - NC: Normally Closed

  - COM: Common

  - NO: Normally Open

- Wiegand inputs:

  - D0 and D1

  - Red and Green LED

  - Ground (GND), 12 V

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

NOTE The Omnipoint device accepts 12 V DC or 24 V AC.

- Input 1

  - Gate or door status

- Input 2

  - Gate or door status

  - Request to exit (REX)

Wet Connection

Requires 12 V Trigger Power

Wet Contact Relay, Normally Open

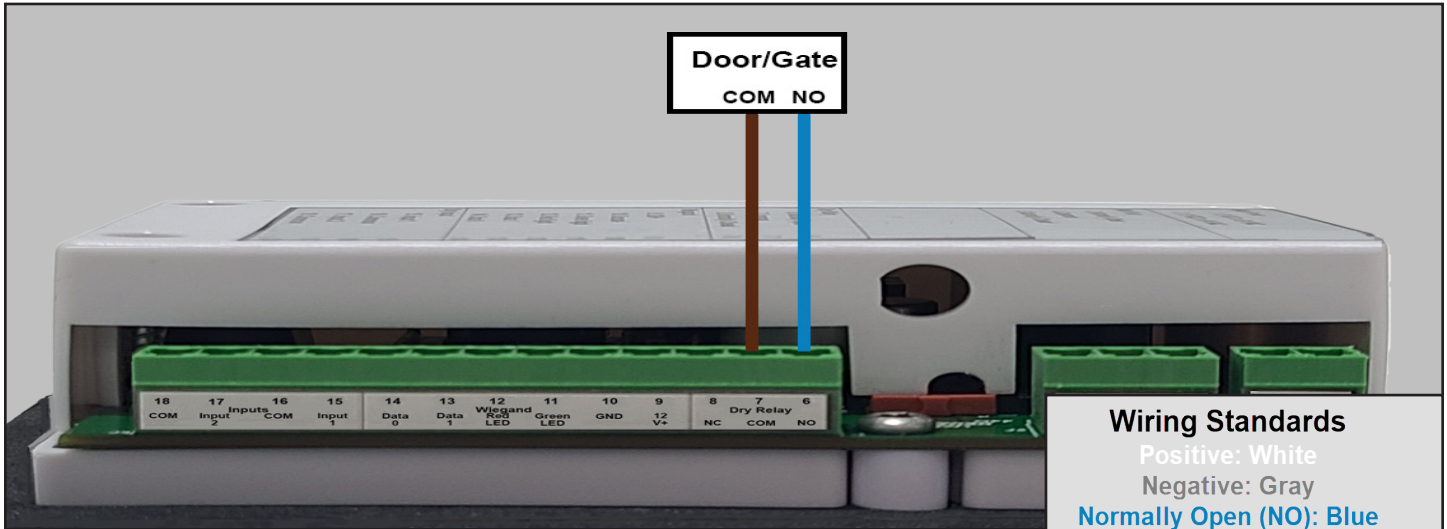Voltage is provided when the relay activates. Outgoing power is determined by main power (12V DC or 24V AC).

Matches Power		Power In
Door/Gate		12V DC or 24V AC
−	+	
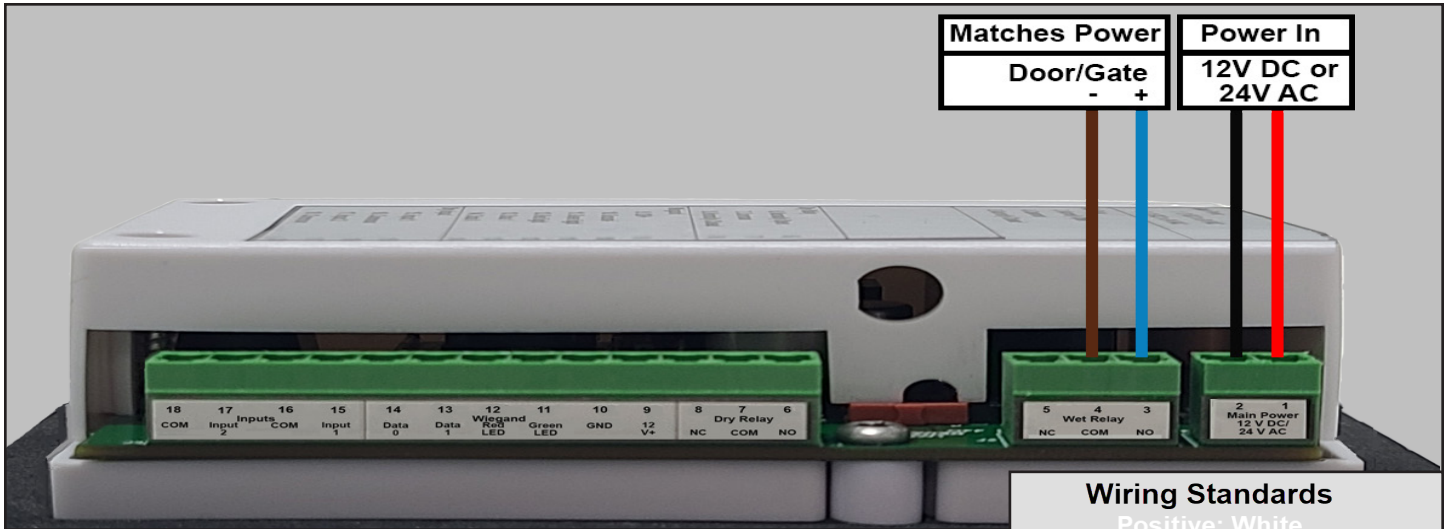
Wiring Standards
Positive: White
Negative: Gray
Normally Open (NO): Blue
Normally Closed (NC): Orange
Common: Brown
Positive Power (when live): Red
Ground: Black
Wiegand 1: White
Wiegand 0: Green

NOTE When active, *sends* voltage that is supplied.

Requires Constant 12 V

Wet Contact Relay, Normally Closed

Voltage is removed when the relay activates. Outgoing power is determined by main power (12V DC or 24V AC).

Matches Power		Power In
Door/Gate		12V DC or 24V AC
+	−	

NOTE When active, *removes* voltage that is supplied.

Dry Contact Relay, Normally Open Dry Contact

Dry Contact, Normally Open

The gate or door receives continuity when the relay is active.

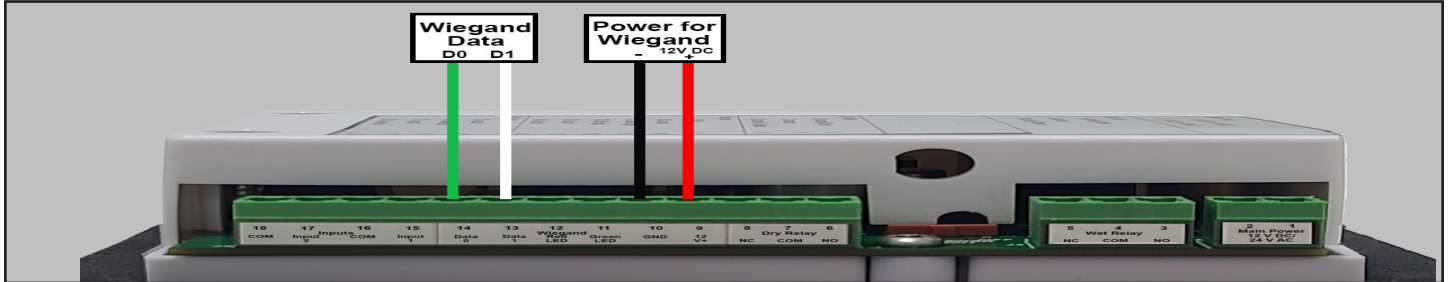**Door/Gate**
COM   NO

NOTE When active, *sends* continuity.

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

Dry Contact Relay, Normally Closed Dry Contact

Dry Contact, Normally Closed

The gate or door receives continuity when the relay is at rest.

Door/Gate
NC COM

NOTE When active, *removes* continuity.

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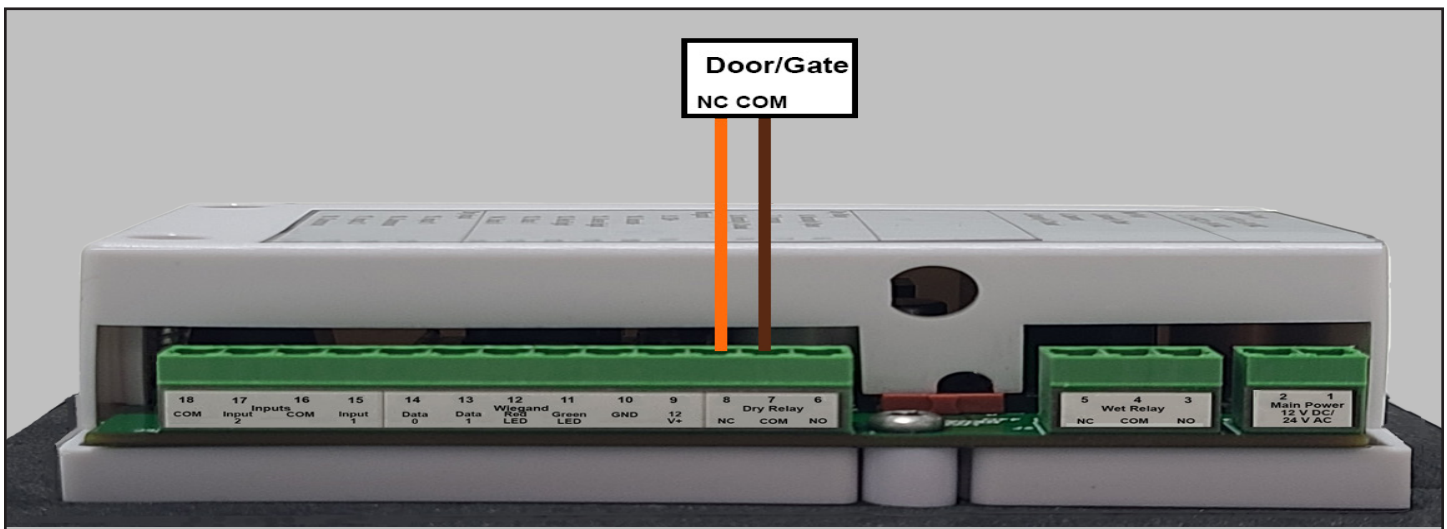
Wiegand Wiring

See below for an example of Wiegand wiring.

NOTE The Wiegand power only provides 12 V DC.

LED Input Wiring

See below for an example of LED input wiring if you are using LED for the Wiegand keypad.

Input Status

Status sensor tells system whether gate/door is open or closed

REX Input Wiring

A Request to Exit device opens the gate/door when continuity is present.

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

LED Signals

The LED lights on the Omnipoint device signal whether and how the device has connected with the server and the Gateway. The green and red LED lights may flash quickly, slowly, or hold steady. See below for a breakdown of the LED lights and what they mean.
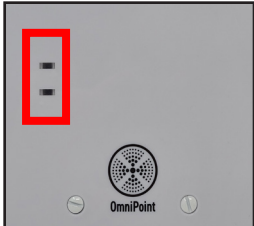
No lights indicate that power is not on; the system is booting up. Please allow 60 seconds for the system to boot up.
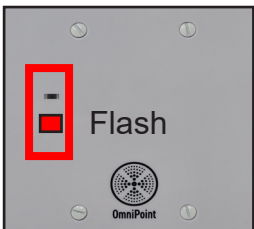
A red flash indicates that the device has *no* connection to the gateway.

A quick green flash indicates the device has *no* connection with the server.
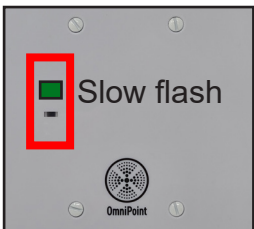
A slow green flash indicates the device has a connection with the server.
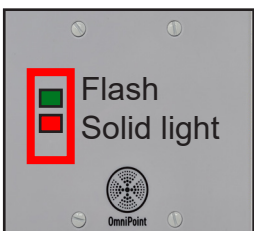
A flashing green light and solid red light indicate you have an active connection and the relay is active.

Download CellGate App

If you have not yet, download the CellGate app to your smartphone. Alternatively, search for "Cellgate" in the App or Play Store, and download the CellGate app.

iPhone

Android

Enrollment on App Side
Registration with Dealer App

1. Open Cellgate Installer Control and login. If you do not have a dealer log in, contact CellGate Customer Support at 1-855-694-2837.
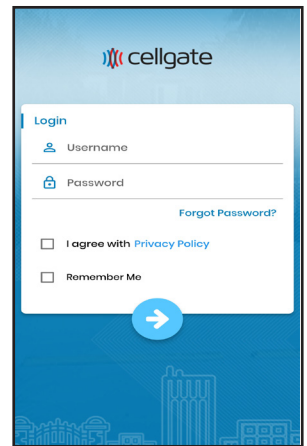
2. Tap **Install a Product**.
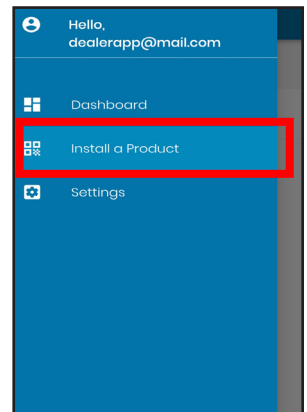
3. Tap **Omnipoint EPM**.
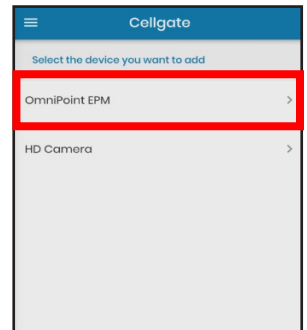
4. Tap **Device Testing**.
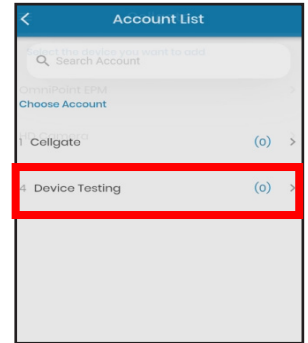
5. Tap the property.

6. Tap **Scan Node Barcode**.
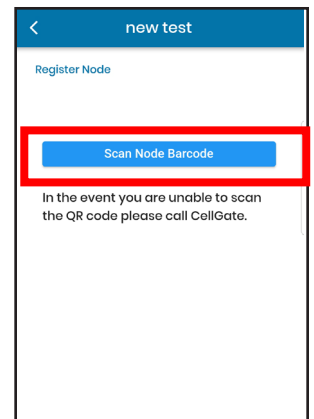
7. Scan the QR code on your phone.

   The QR code is located on the side of your Omnipoint EPM, as shown.

A message displays that the process completed successfully.

8. Tap **Configure & Test**.

Register and Test

1. Verify that your device is functioning properly. Tap **Yes**.

Trigger times are defined below:

• Relay time: the amount of time relay stays open when activated
• Wiegand: how long relay remains active from Wiegand transaction
• Request to exit: how long relay remains open after request to exit

2. Tap **Set Trigger Times**.
3. Tap **Relay** times.
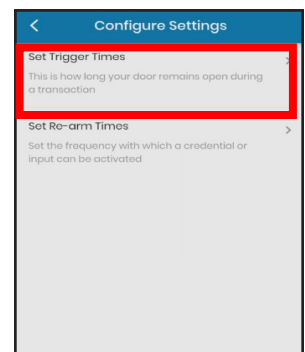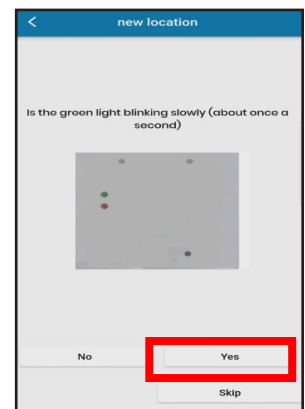
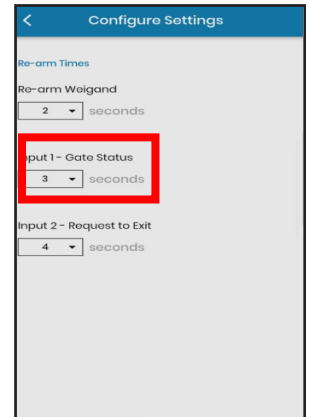4. Scroll through the menu to select the time desired. Tap **OK**.
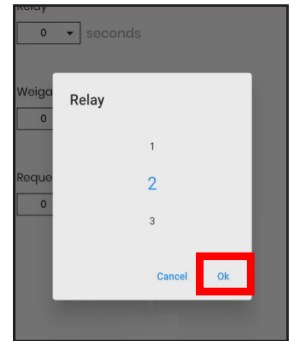

5. Tap *Wiegand* times.
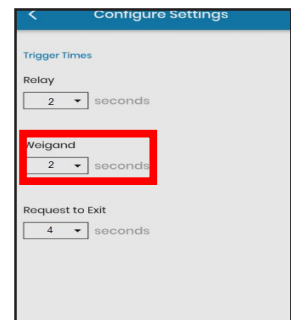
6. Scroll through the menu to select the time desired. Tap **OK**.
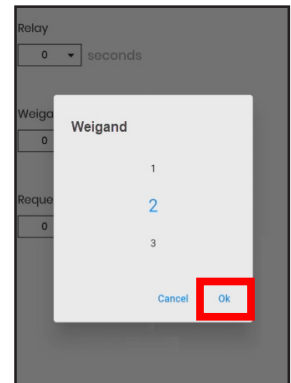
7. Tap *Request to Exit* times.
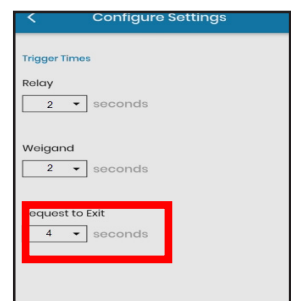
8. Scroll through the menu to select the time desired. Tap **OK**.
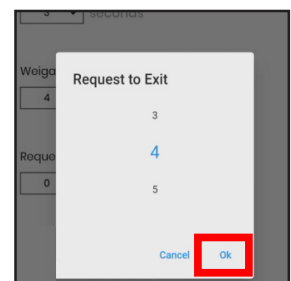
9. Tap **Save**.

10. Tap **Set Re-Arm Times**.

    Re-arm times are defined below:

    • Re-arm Wiegand: how may times the same code can be used within the set number of seconds

    • Input 1: how often the input switches states; how often input 1 changes are logged

    • Input 2: how often the input switches states; how often input 2 changes are logged

11. Tap *Re-arm Wiegand* time.
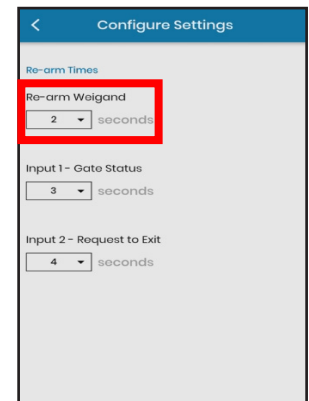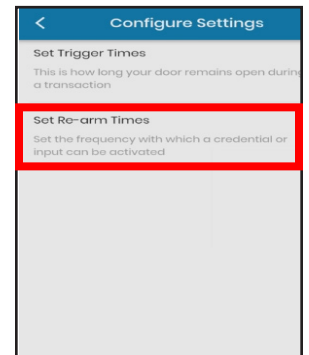
12. Scroll through the menu to select the time desired. Tap **OK**.
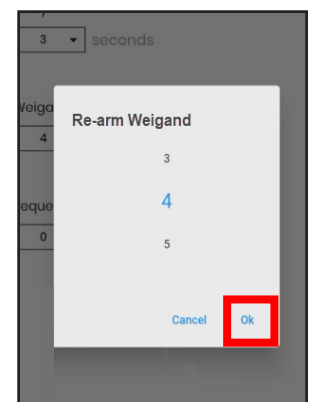
13. Tap *Input 1 - Gate Status*.

14. Scroll through the menu to select the time desired. Tap **OK**.
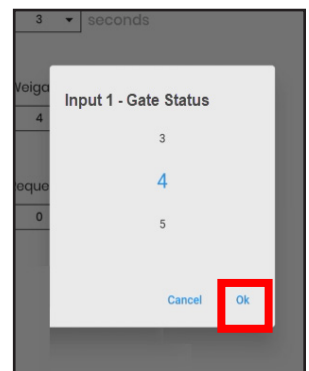
15. Tap *Input 2 - Request to Exit*.

16. Scroll through the menu to select the time desired. Tap **OK**.
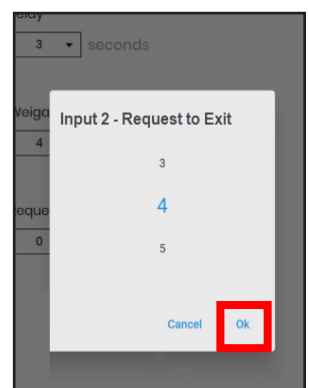
17. Tap **Save**.

18. Tap **Push Changes to Devices**.
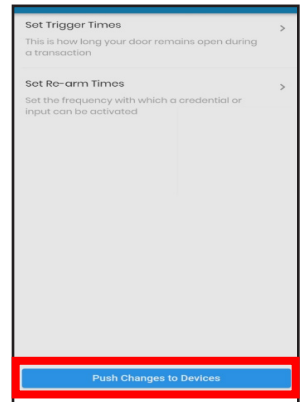
Testing

To complete the install, test your Omnipoint to verify that it works correctly. Follow the workflow below to test each Omnipoint function. If a test fails, troubleshoot that step.
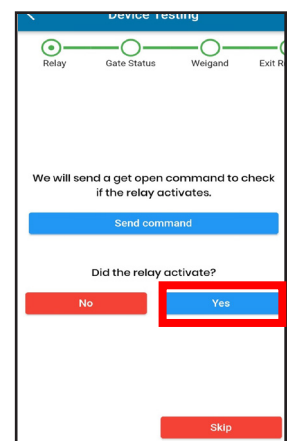
Activate Relay

If the relay activates, the gate or door opens

1. Tap **Send Command** to activate the relay.

2. Tap **Yes** to confirm the command and move to the *Gate Status* screen.

3. Verify the Gate Status. If Omnipoint is working correctly, *Gate Status* displays as either **Opened** or **Closed**.

   A *Gate Status* of **Unknown** indicates the system is not receiving data from the door status sensor.

   If you don't use gate status, click **Skip**.

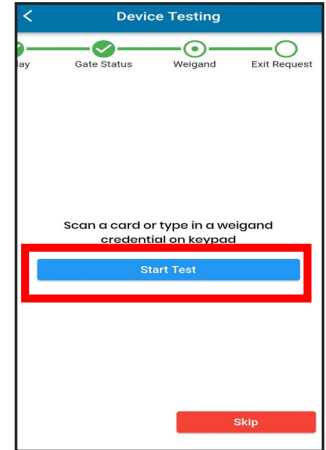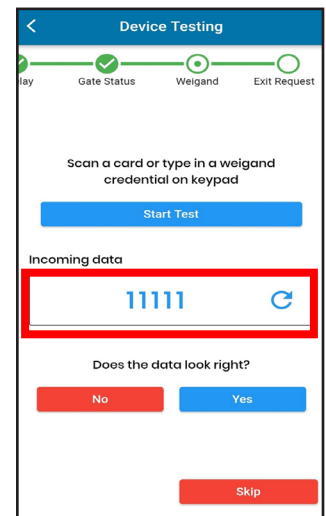4. Tap **Yes** to move to Wiegand testing.

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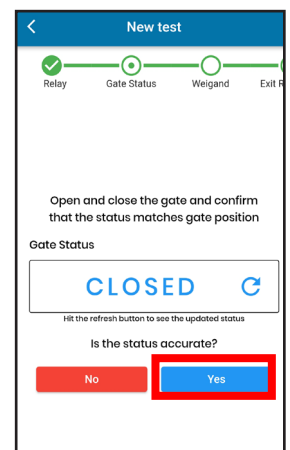
Test Wiegand

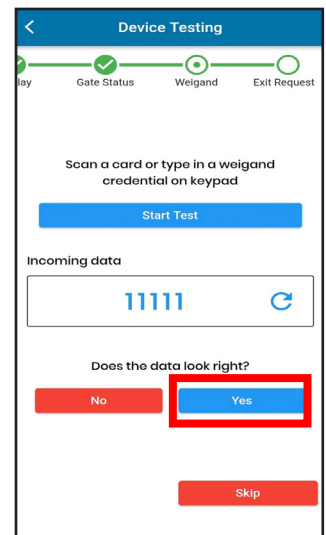In this section, you verify that the Omnipoint device reads Wiegand codes correctly.

1. Tap **Start Test**. To test, scan a RFID card or enter a Wiegand code.

2. Verify that the Wiegand information you entered displays. An incorrect or blank code generally indicates a wiring problem.
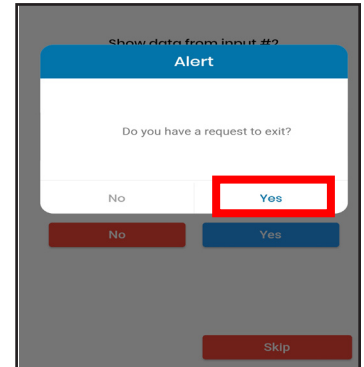
3. Tap **Yes** to test *Exit Request*.

Request to Exit

The app prompts you to send a Request to Exit to verify the process is working correctly.

1. A popup asks if you have a request to exit. Tap **Yes**.

2. Verify the *Gate Status.* Tap **Yes** if the command worked.

    The *Gate Status* should display **Open** or **Closed**. If the *Gate Status* is **Unknown**, the request to exit did not work and the system is not receiving data from the Omnipoint device.
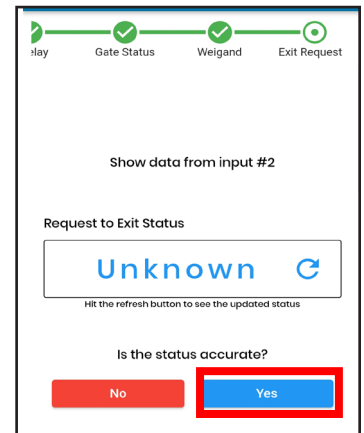
3. If installation is successful, a message displays stating, "Great! Installation setup completed."

    If you want to install another device, tap **Install another device on this property**.

    If you tap **Done**, you are returned to *Account Selection* on the dashboard.
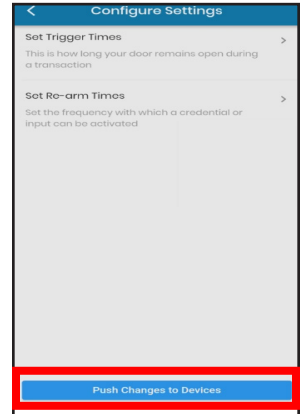
Testing is complete. You can retest a function at any time: navigate to the install location to test again.
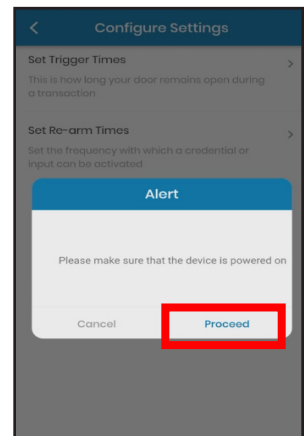
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Troubleshooting Omnipoint

After pushing changes to the Omnipoint device, you may encounter an error in which the device is not communicating.

1. Tap **Push Changes to Devices**.

2. Tap **Proceed** on the alert screen reminding you to ensure the device is powered on.
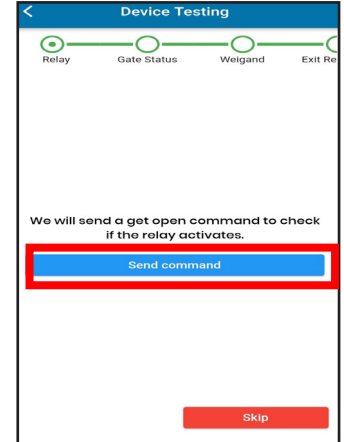
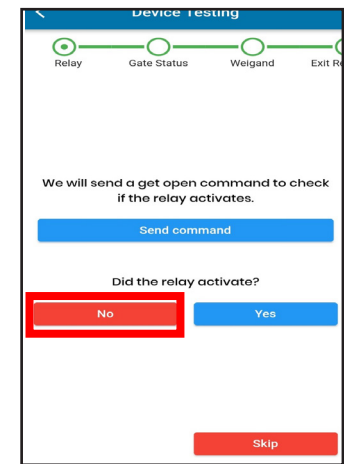| NOTE	This message only displays if the device is off-line.

The app walks you through the testing process. In general, as you test each function, if the function works correctly, you'll select **Yes** in the app. If you select **No**, the app shows you information to help you troubleshoot the problem.
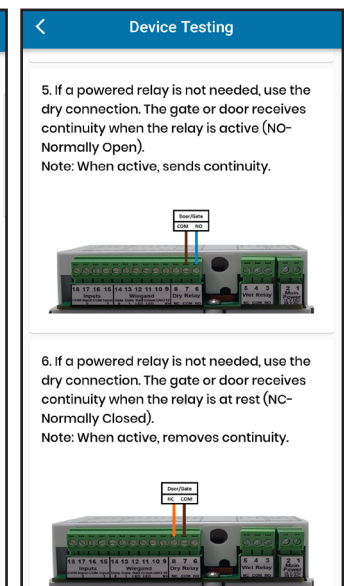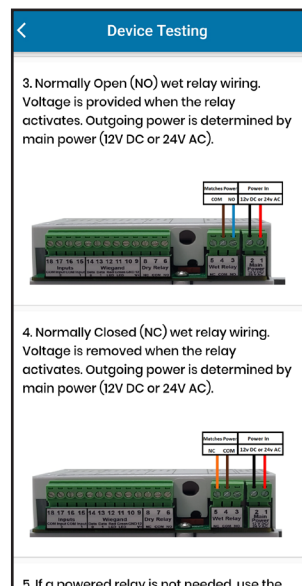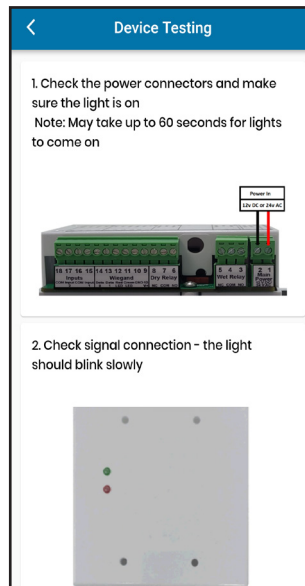
Activate Relay

1. Tap **Send Command** to activate the relay.

2. If the command does not work, tap **No** to open the wiring document. The wiring diagram displays.

3. Refer to the diagram and correct any wiring problems, then retest.

1. Check the power connectors and make sure the light is on
Note: May take up to 60 seconds for lights to come on

2. Check signal connection - the light should blink slowly

3. Normally Open (NO) wet relay wiring. Voltage is provided when the relay activates. Outgoing power is determined by main power (12V DC or 24V AC).
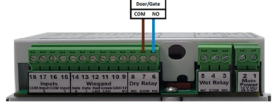
4. Normally Closed (NC) wet relay wiring. Voltage is removed when the relay activates. Outgoing power is determined by main power (12V DC or 24V AC).
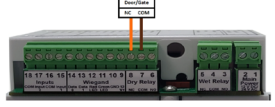
5. If a powered relay is not needed, use the

5. If a powered relay is not needed, use the dry connection. The gate or door receives continuity when the relay is active (NO-Normally Open).
Note: When active, sends continuity.

6. If a powered relay is not needed, use the dry connection. The gate or door receives continuity when the relay is at rest (NC-Normally Closed).
Note: When active, removes continuity.
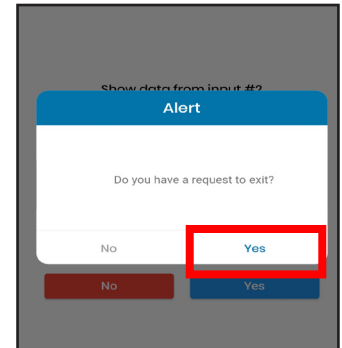
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Wiegand Testing

1. Tap **Start Test** to test the Wiegand device.
2. Verify Wiegand information.

3. If the Wiegand information is incorrect, or if no Wiegand information displays, tap **No**. The Wiegand wiring diagram displays.

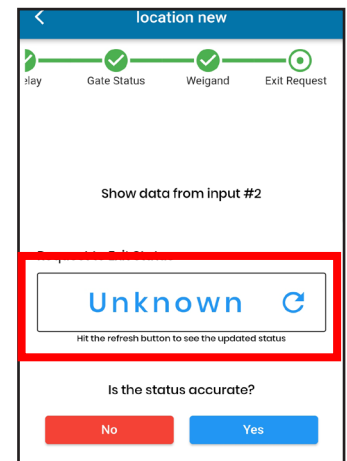4. Refer to this diagram to correct wiring problems and retest.
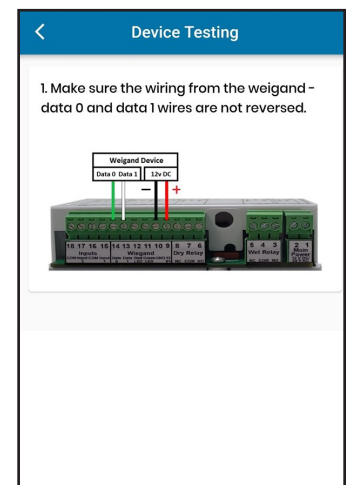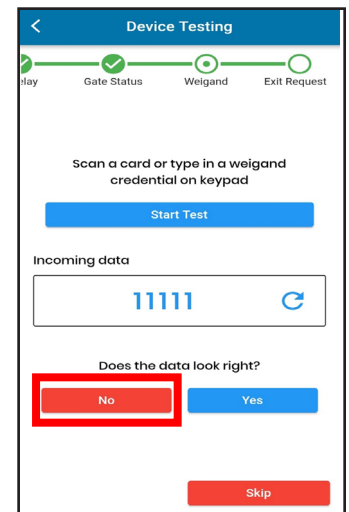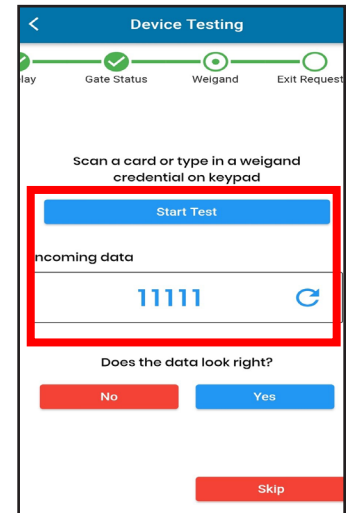
Request to Exit

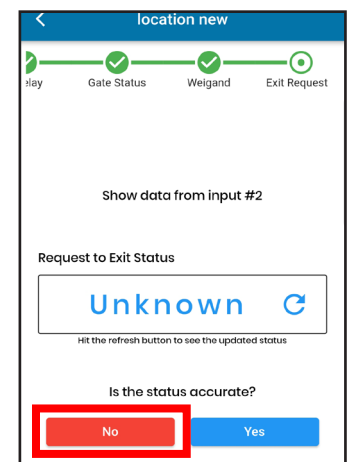1. A popup asks if you have a request to exit. Tap **Yes**.
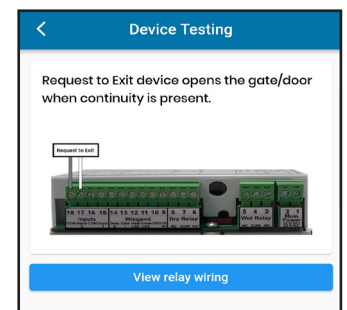

2. Verify *Gate Status*.

   If the *Gate Status* is **Opened** or **Closed**, the request to exit worked. If the *Gate Status* is **Unknown**, the Request to Exit failed.

3. Tap **No**. The Request to Exit wiring diagram displays.

4. Refer to the Request to Exit wiring diagram and correct wiring problems. Retest Request to Exit.

NOTE If you tap **View Relay Wiring**, relay wiring examples display.

NOTE If you tap **View Input Wiring**, input wiring examples display.