)))(((cellgate

WATCHMAN®
Your Virtual Security Guard

W450 Series
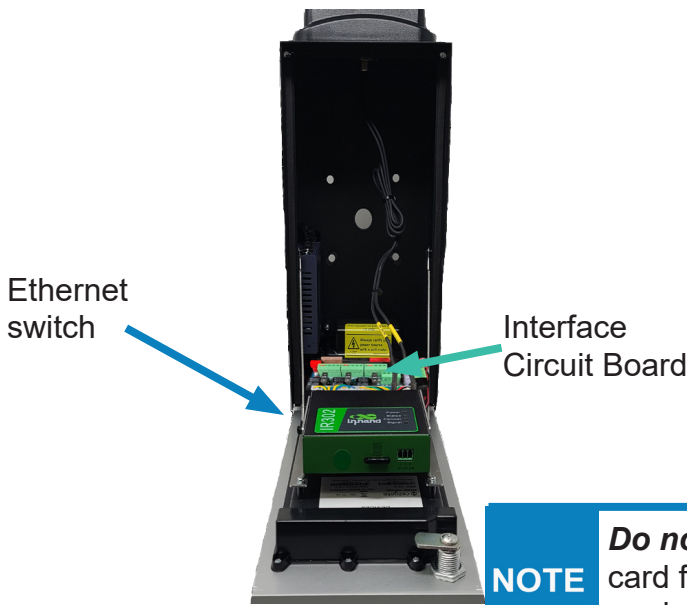
Quick Install Guide

AA1WPE ATT, AA1WPE VZN

Items Included in Kit

1. Watchman EVO Unit
2. 12 Volt DC Power Supply
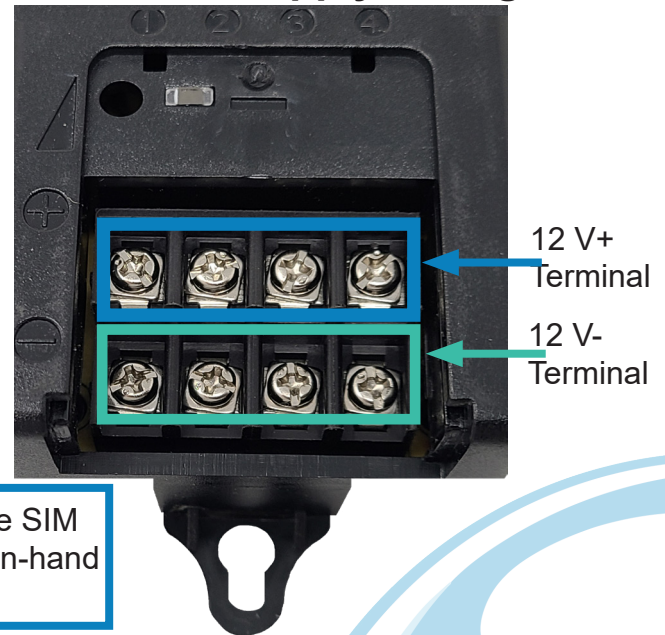3. Magnetic Read Switch
4. Keys
5. Nuts **X 4**

NOTE Leave one key with the customer.

6. Bolts **X 4**
7. Quick Install Guide
8. Activation & Test Process
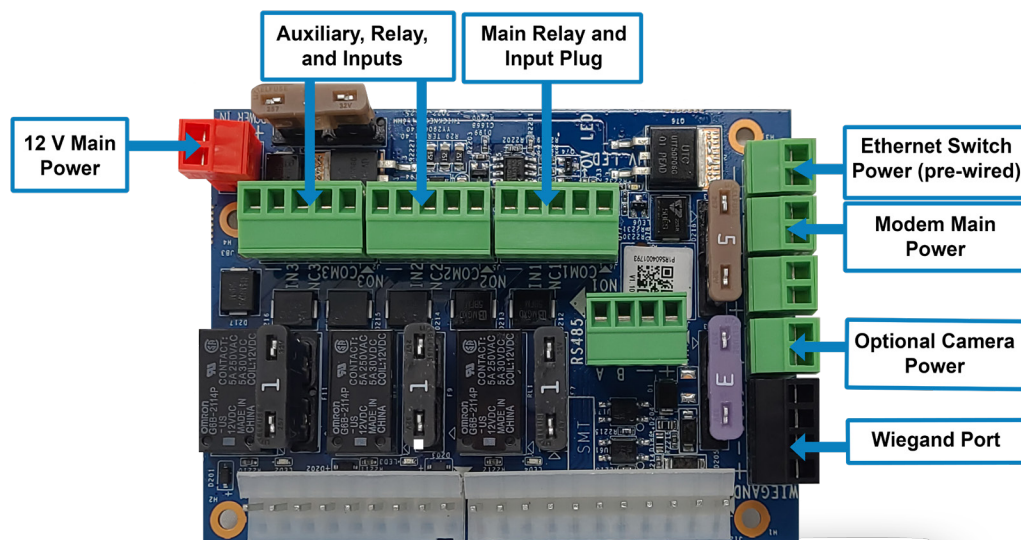9. Customer Information Packet

Watchman EVO Unit

Ethernet switch

Interface Circuit Board

NOTE *Do not* remove SIM card from the in-hand modem.

Power Supply Wiring

12 V+ Terminal

12 V- Terminal

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

Interface Circuit Board (Oriented the same as the Watchman install)

Auxiliary, Relay, and Inputs

Main Relay and Input Plug

12 V Main Power

Ethernet Switch Power (pre-wired)

Modem Main Power

Optional Camera Power

Wiegand Port

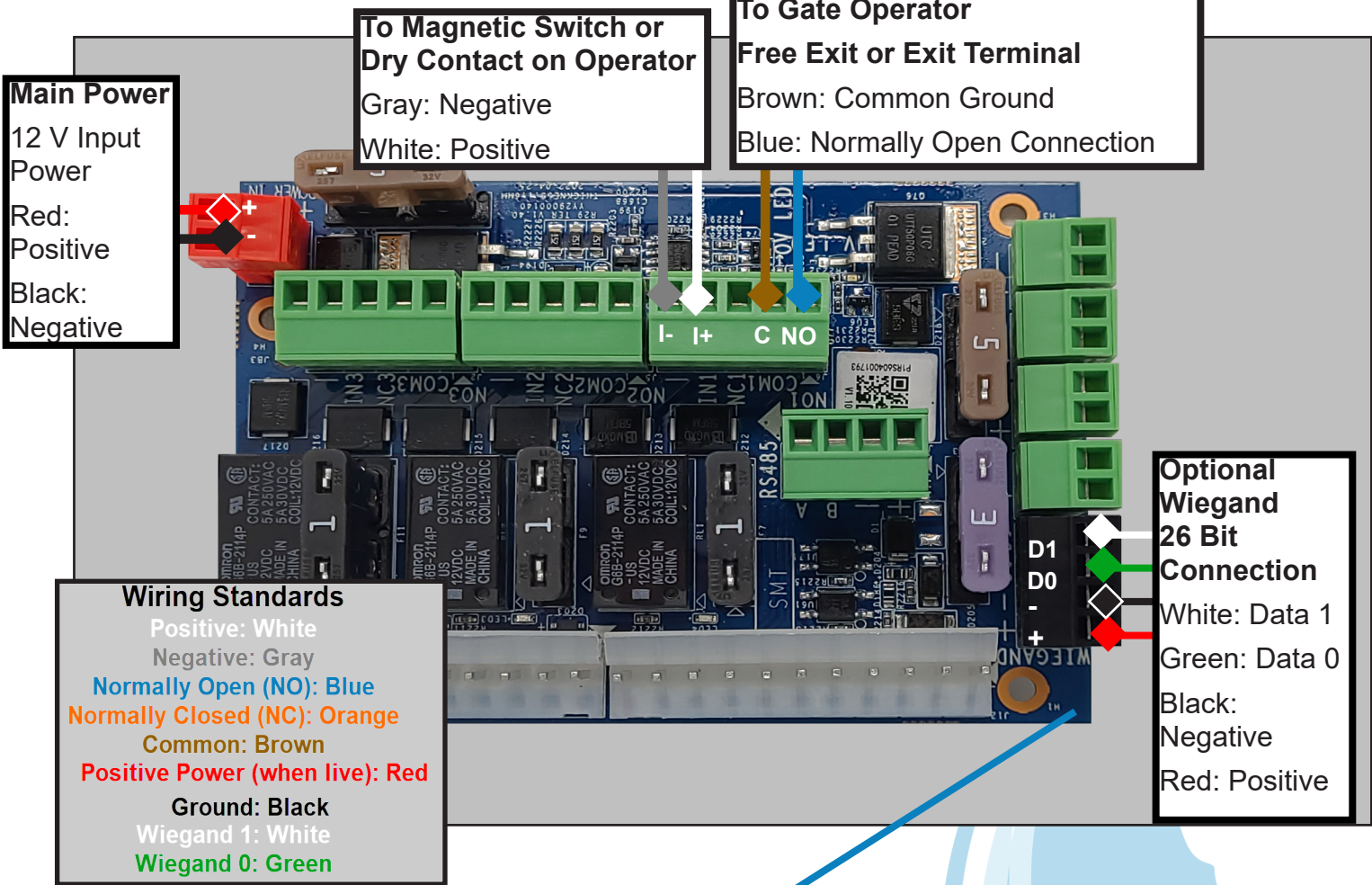The circuit board is oriented the same as the Watchman install.

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

2

Interface Wiring Diagram
Oriented the same as the Watchman install

> ⚠ The supplied diode must be used for all magnetic lock installations, or the warranty is voided.

To Magnetic Switch or Dry Contact on Operator
Gray: Negative
White: Positive

To Gate Operator
Free Exit or Exit Terminal
Brown: Common Ground
Blue: Normally Open Connection

Main Power
12 V Input Power
Red: Positive
Black: Negative

Optional Wiegand 26 Bit Connection
White: Data 1
Green: Data 0
Black: Negative
Red: Positive

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
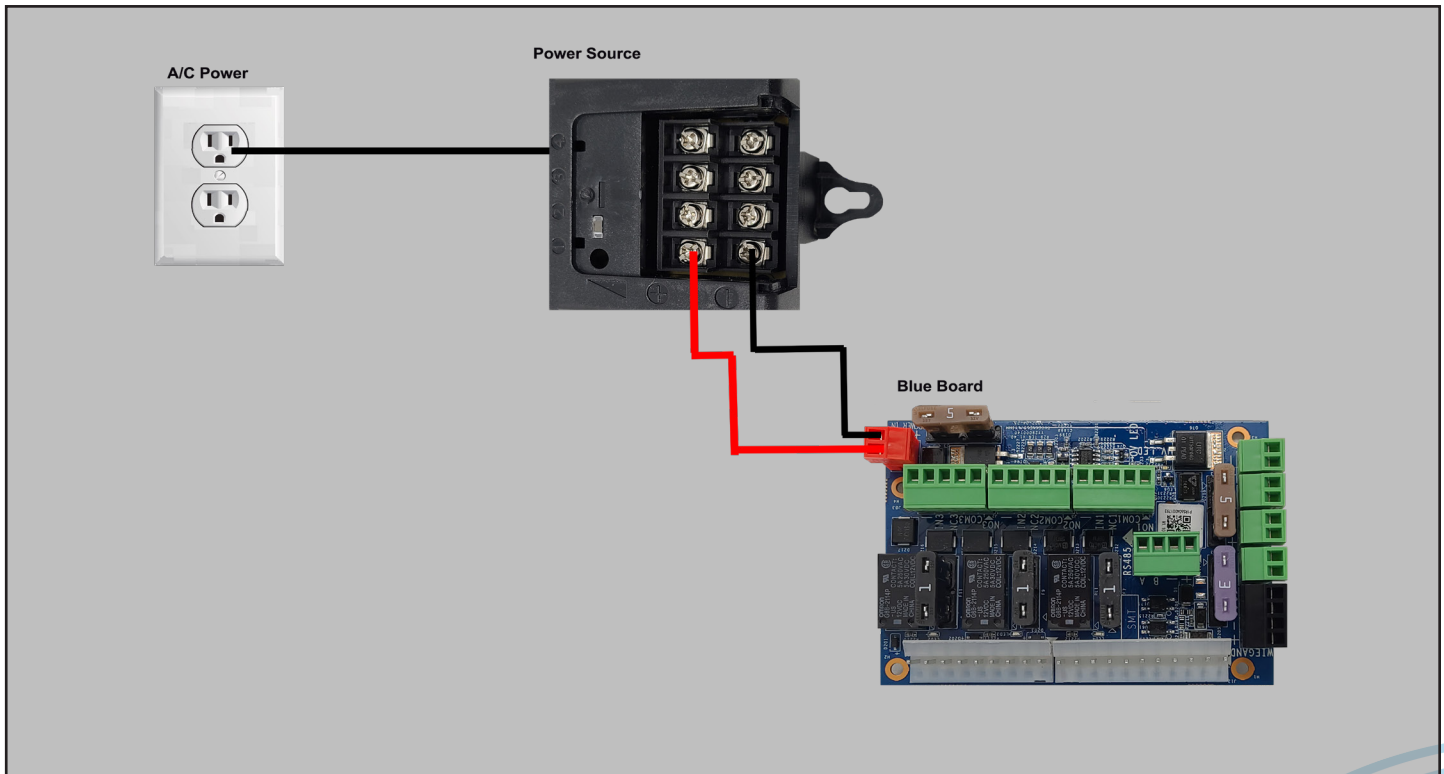Wiegand 0: Green

6-Wire Installation Instructions

1. Wire main power from transformer to the power connector on 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. Activate using test credentials on the Activation & Test Process document.
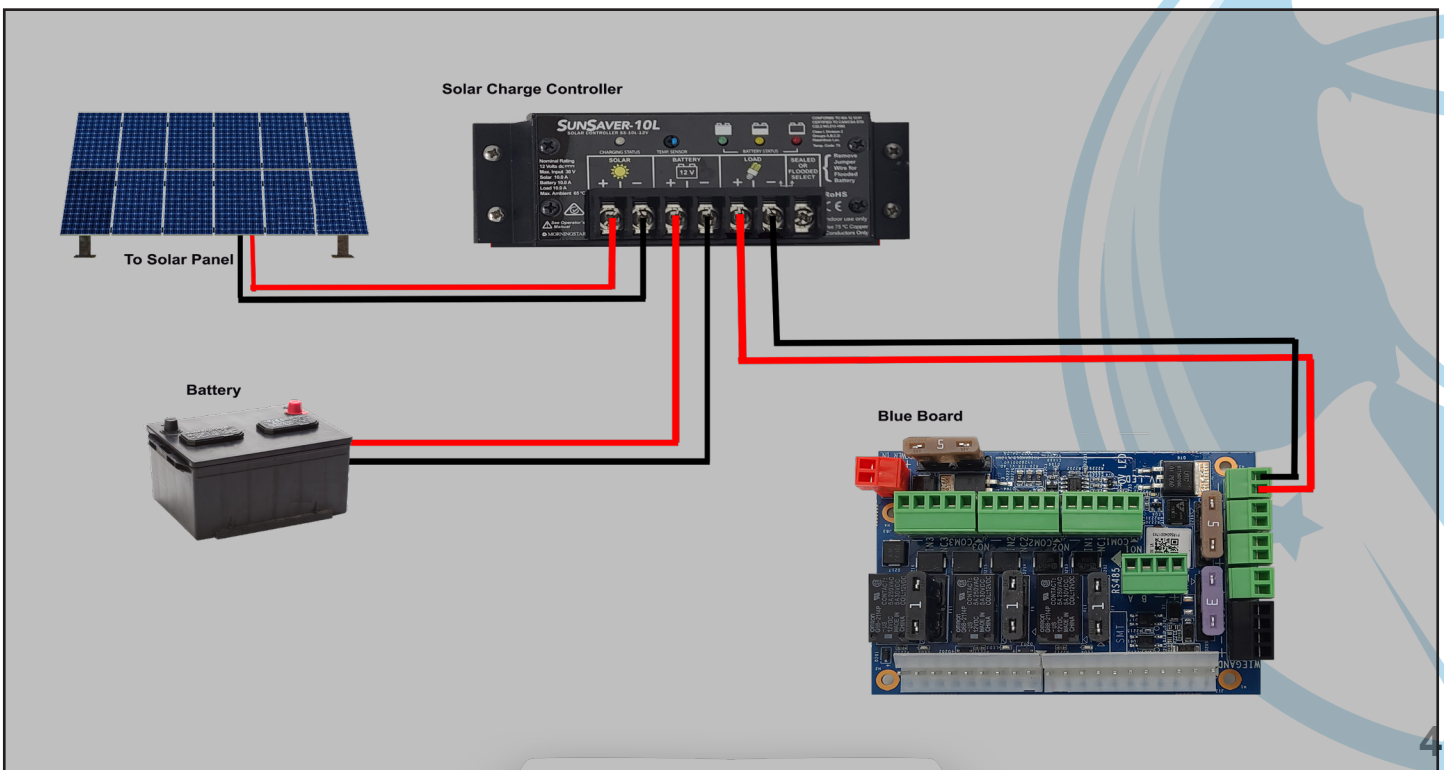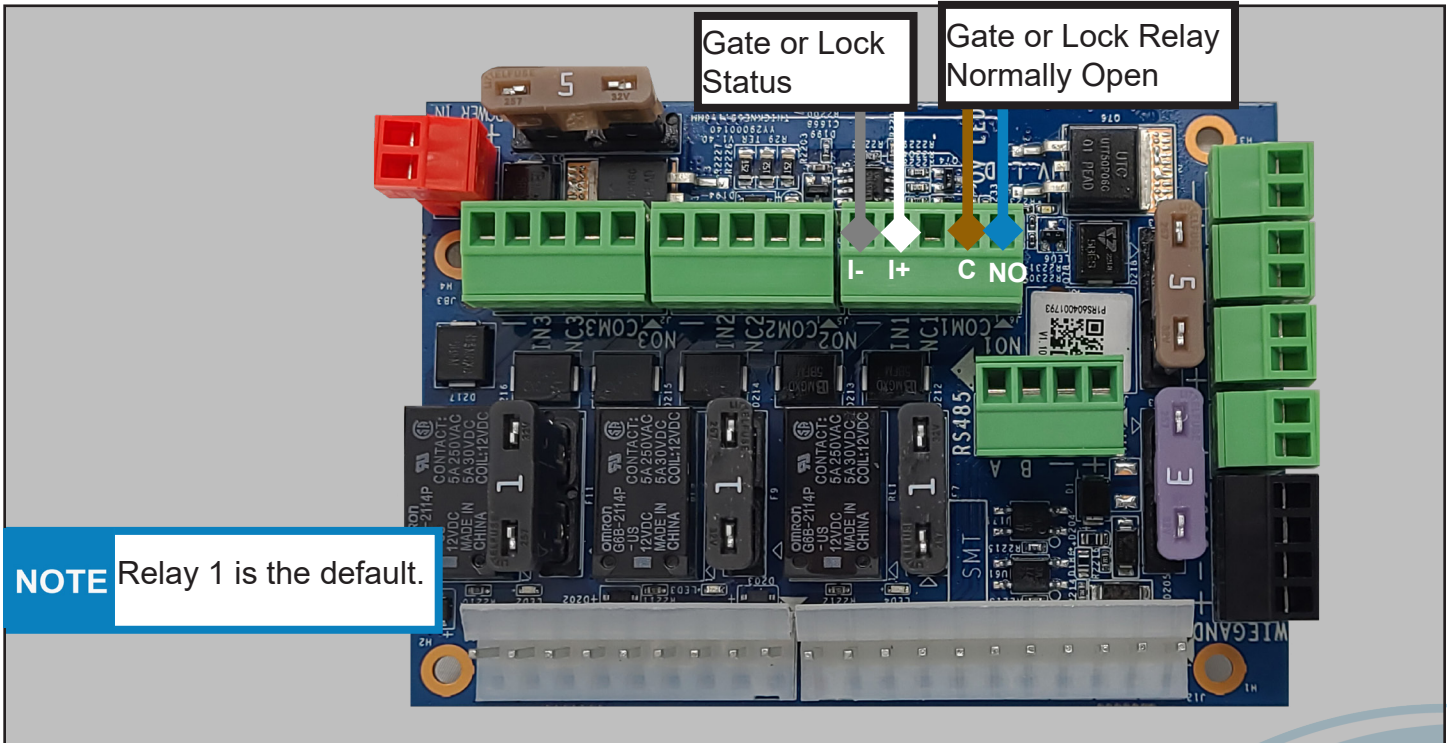
Wiring with Transformer

A/C Power

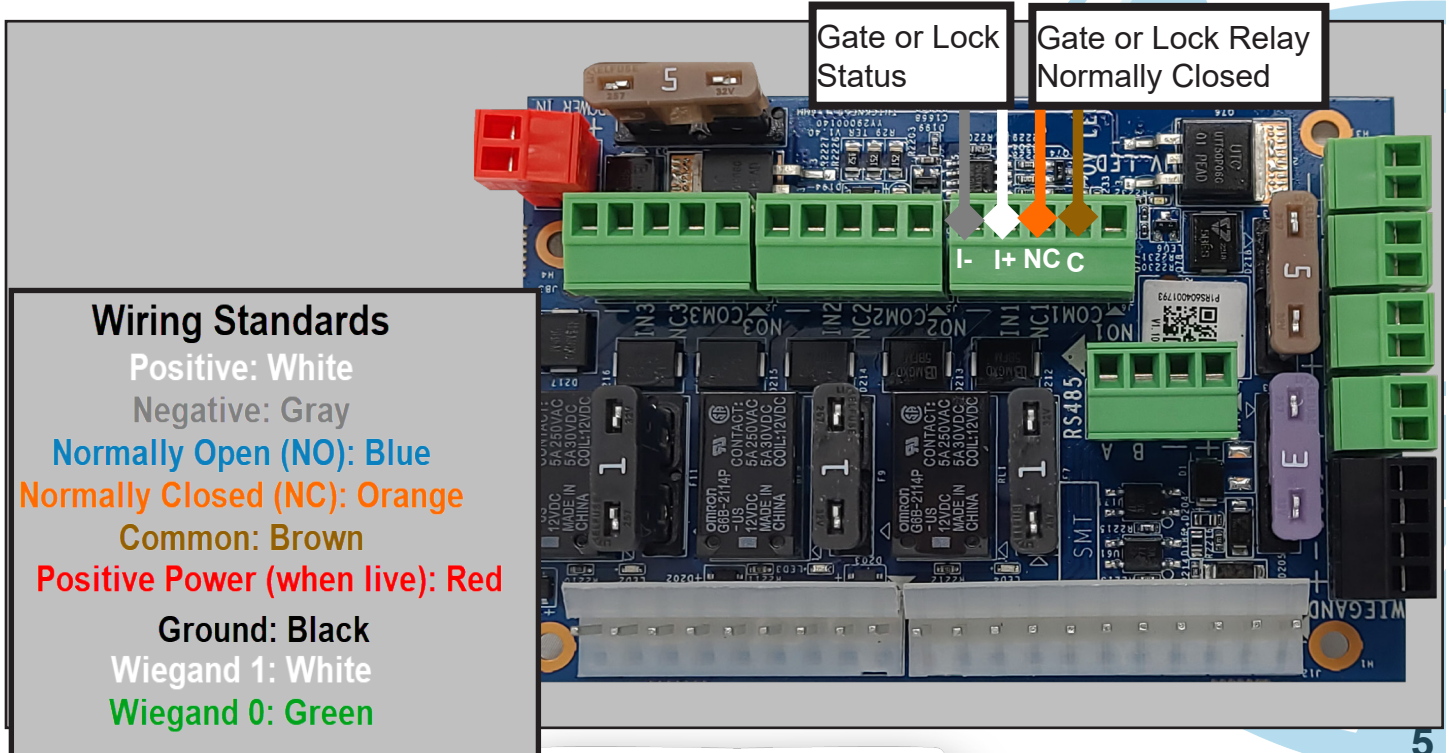**Power Source**

Blue Board

Wiring for Solar Power

Solar Charge Controller

SUNSAVER-10L

To Solar Panel

Battery

Blue Board

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

Gate or Lock Status

Gate or Lock Relay Normally Open

I- I+ C NO

NOTE Relay 1 is the default.

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

Gate or Lock Status

Gate or Lock Relay Normally Closed

I- I+ NC C

Wiring Standards
Positive: White
Negative: Gray
Normally Open (NO): Blue
Normally Closed (NC): Orange
Common: Brown
Positive Power (when live): Red
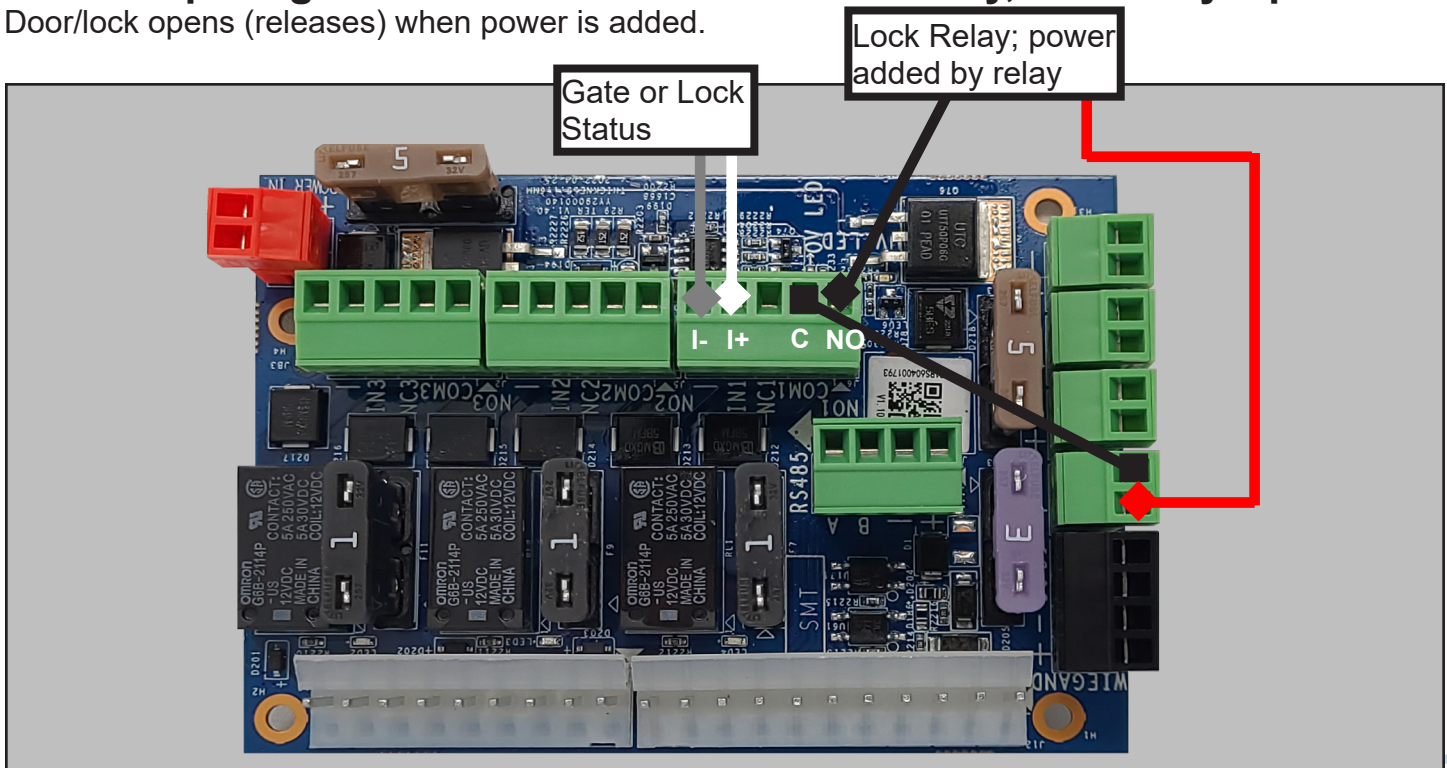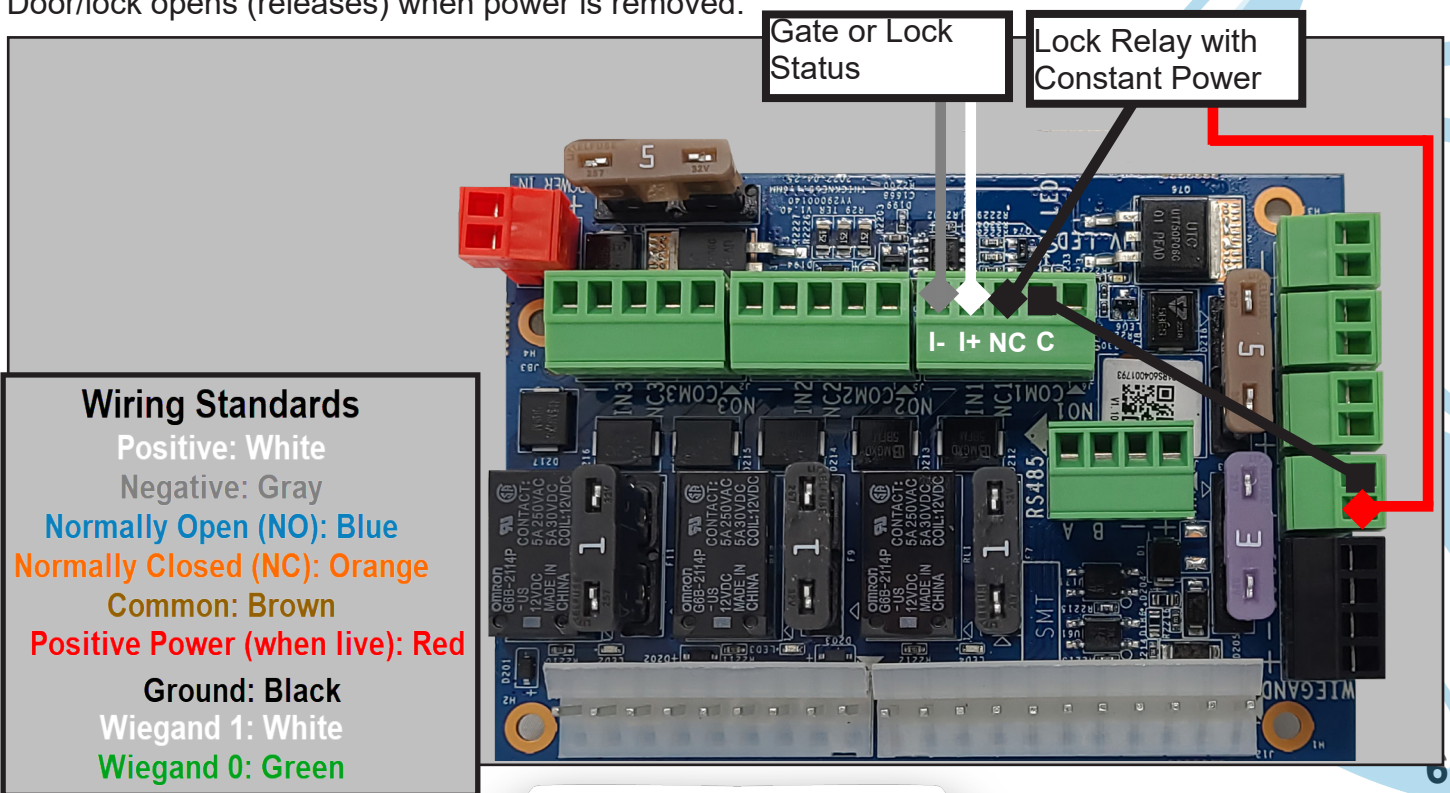**Ground: Black**
Wiegand 1: White
Wiegand 0: Green

Lock Requiring Constant 12 V: Wet Contact Relay, Normally Open
Door/lock opens (releases) when power is added.

Gate or Lock Status

Lock Relay; power added by relay

I- I+   C NO

Lock Requiring Constant 12 V: Wet Contact Relay, Normally Closed
Door/lock opens (releases) when power is removed.

Gate or Lock Status

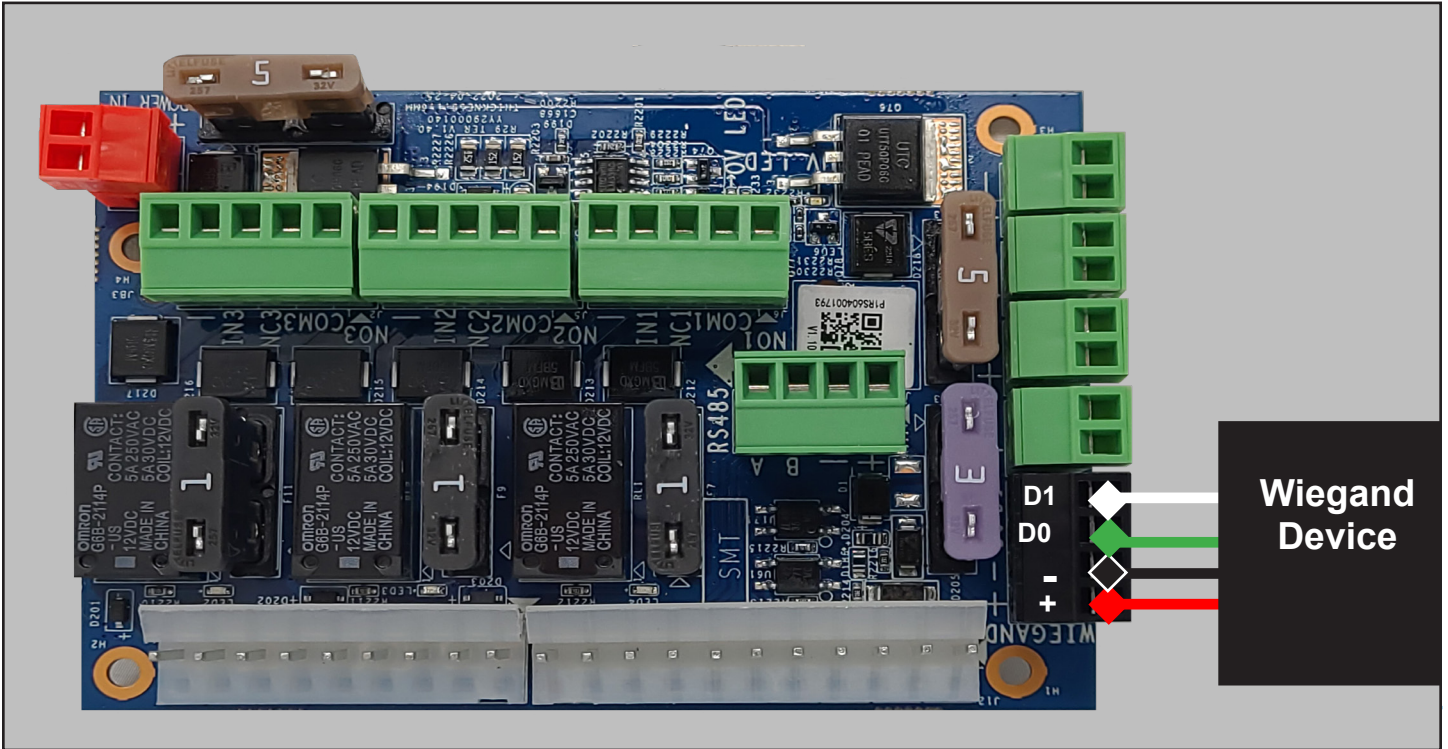Lock Relay with Constant Power

I- I+ NC C

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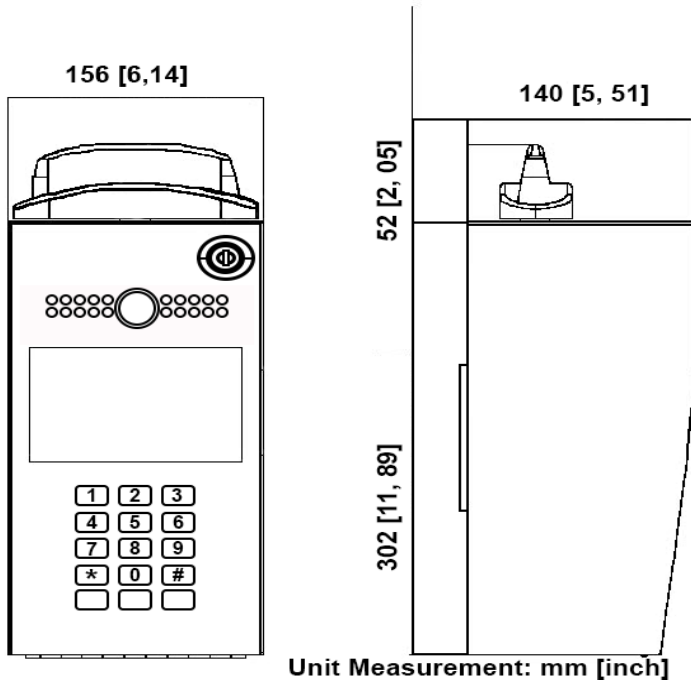
Wiegand Wiring to Board and Direct to Faceplate, 26 Bit Reader
To Interface Board

Magnetic Switch Wiring

156 [6,14]

140 [5, 51]

52 [2, 05]

302 [11, 89]

Unit Measurement: mm [inch]

Mounting to Standard Pedestal Mount

76.4 mm [3.0 in]

76.4 mm [3.0 in]

Unit measurement: mm [inch]

Mounting to Standard Pedestal Mount (continued)