Quick Install Guide

ΛNΛVIO I/O Controller

For Unified Intercom Reader

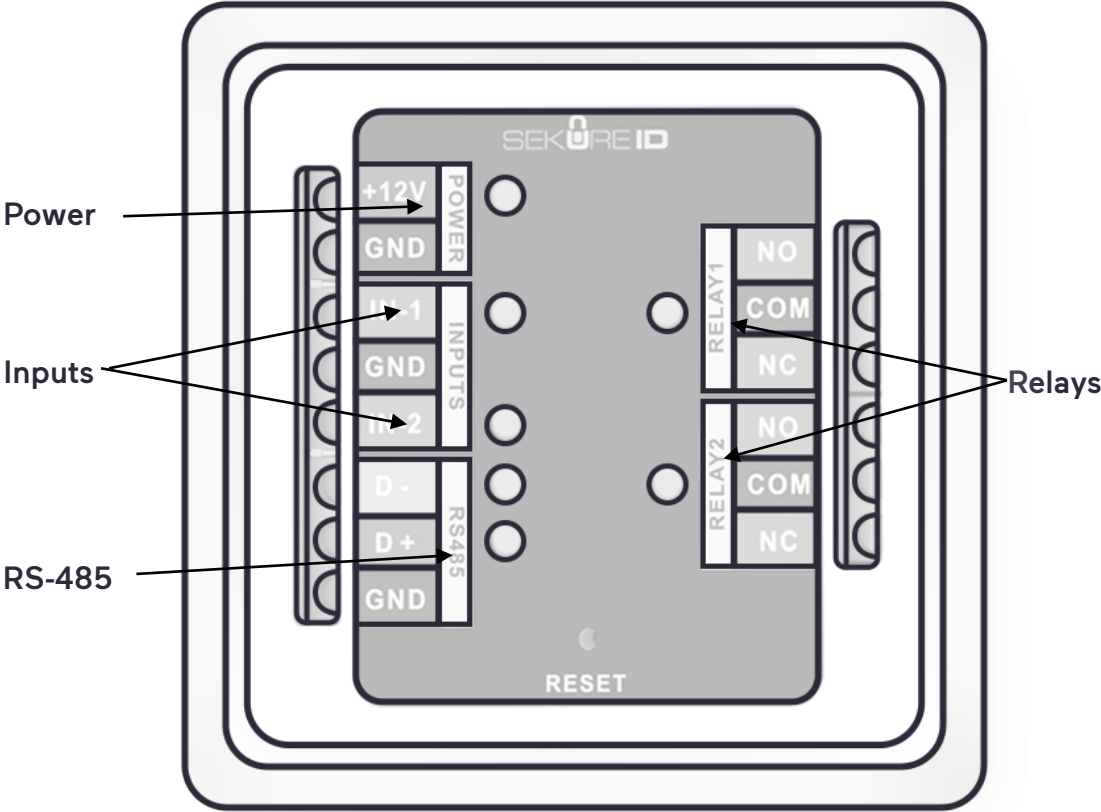## VA-IOC01

VICON
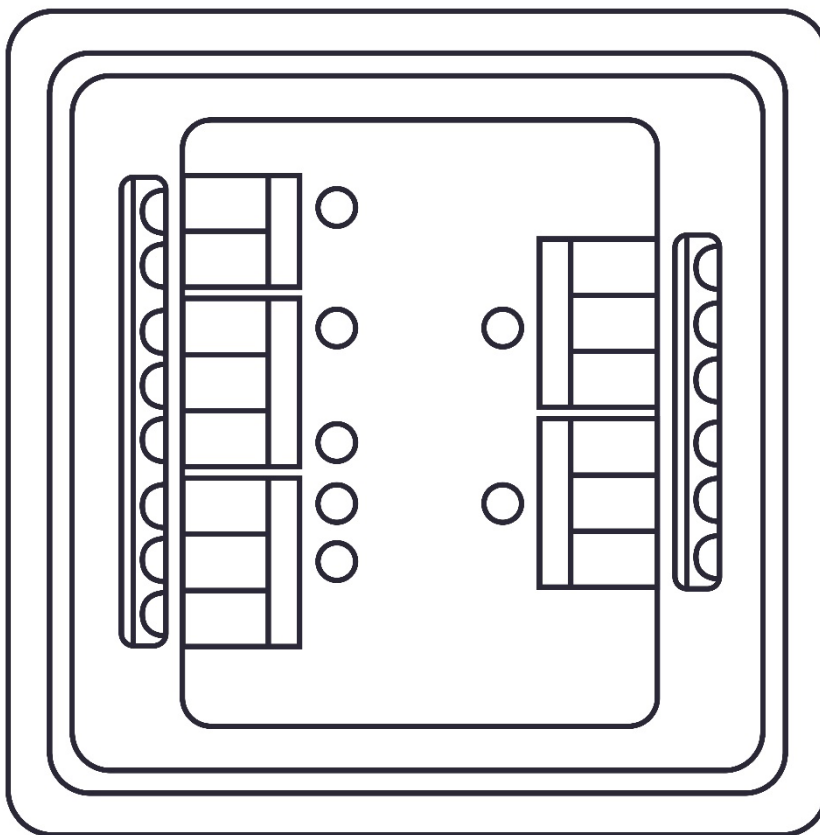
TABLE OF CONTENTS

1. PRODUCT OVERVIEW

Indicator LEDs: Refer to table that follows.

Power

Inputs

RS-485

Relays

+12V
GND
IN-1
GND
IN-2
D -
D +
GND

POWER
INPUTS
RS485

SEKURE ID

NO
COM
NC
NO
COM
NC

RELAY1
RELAY2

RESET

CONTROLLER CONNECTIONS OVERVIEW

STATUS COLOR LEDS

None
Controller is off, not getting power or source is damaged.

Blinking Red
Power indicator. Blinking intermittently: Controller is booting up.

Blinking steadily: Controller is ready to pair with the UIR.

Solid Red
Controller is powered and paired to the UIR.

Blinking Blue

COM indicator. 2 faint blinks: Controller has detected an UIR and is ready to establish communications.

Blinking steadily: Controller successfully established communication to the reader and is paired.

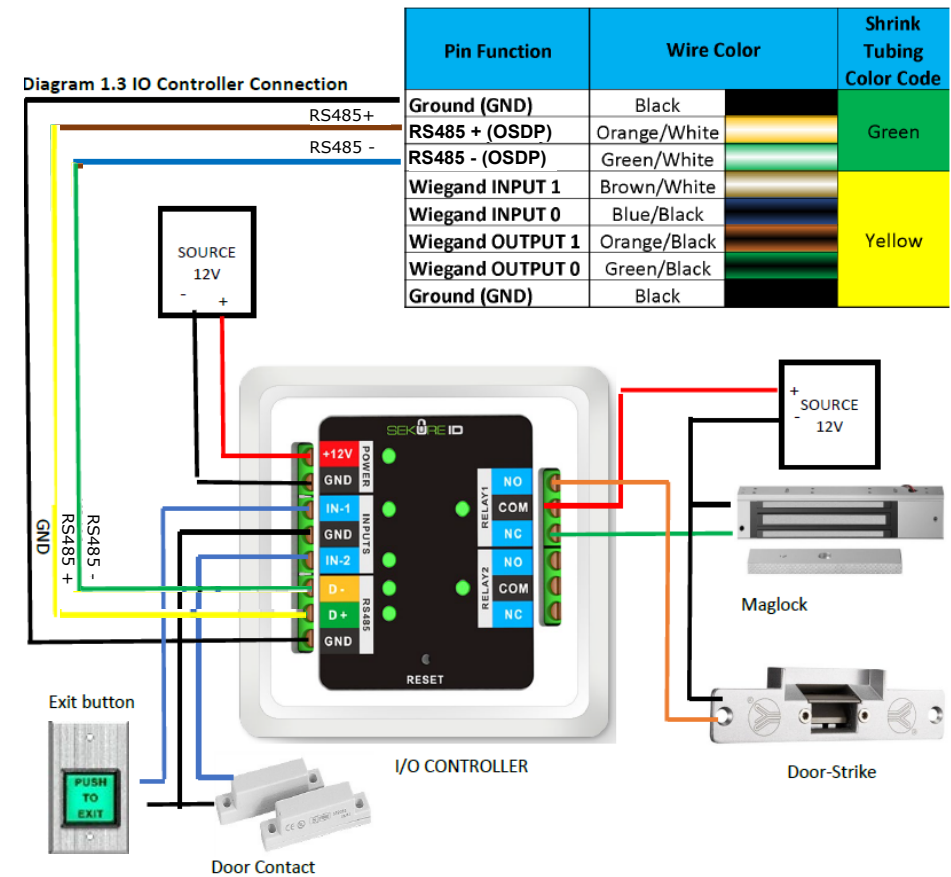**Solid Blue**
Controller is receiving a command from the UIR.

Solid Green
Inputs and Relay Indicators. Controller opened a relay or enabled an input.
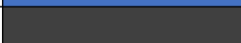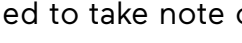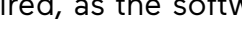
2. INSTALLATION AND WIRING

System Overview

Pin Function	Wire Color	Shrink Tubing Color Code
Ground (GND)	Black	
RS485 + (OSDP)	Orange/White	Green
RS485 - (OSDP)	Green/White	
Wiegand INPUT 1	Brown/White	
Wiegand INPUT 0	Blue/Black	
Wiegand OUTPUT 1	Orange/Black	Yellow
Wiegand OUTPUT 0	Green/Black	
Ground (GND)	Black	

Diagram 1.3 IO Controller Connection

RS485+

RS485 -

SOURCE 12V

SOURCE 12V

+12V
GND
IN-1
GND
IN-2
D -
D +
GND

POWER

INPUTS

RS485

RELAY1
NO
COM
NC

RELAY2
NO
COM
NC

RESET

GND

RS485 -

RS485 +

Maglock

Exit button

PUSH TO EXIT

Door Contact

I/O CONTROLLER

Door-Strike

Wiring

Wiring Table

Wire color		Name	Description	Connection
Orange / Red		NO	Relay Normally Open	Lock
Brown / Red		COM	Relay Common	Lock
Blue / Yellow		NC	Relay Normally Closed	Lock
Green / Yellow		IN1	Input 1	REX / Exit Button
Brown / Yellow		GND	Ground	REX / Exit Button
White		IN2	Input 2	Door Contact
Orange / White		RS485 +	RS485 / OSDP	Secure I/O, 3rd-Party Controller
Green / White		RS485 -	RS485 / OSDP	Secure I/O, 3rd-Party Controller
Black		GND	RS485 / OSDP	Secure I/O, 3rd-Party Controller
Brown / White		WD-IN 1	Wiegand Input 1	3rd Party Reader
Blue / Black		WD-IN 0	Wiegand Input 0	3rd Party Reader
Black		GND	Ground	3rd Party Reader / Controller
Orange / Black		WD-OUT 1	Wiegand Output 1	3rd Party Controller
Green / Black		WD-OUT 0	Wiegand Output 0	3rd Party Controller

It is recommended to take note of the serial numbers of both devices to keep track of how they are paired, as the software does not indicate that.

Wire the Controller to the Reader through the RS-485.

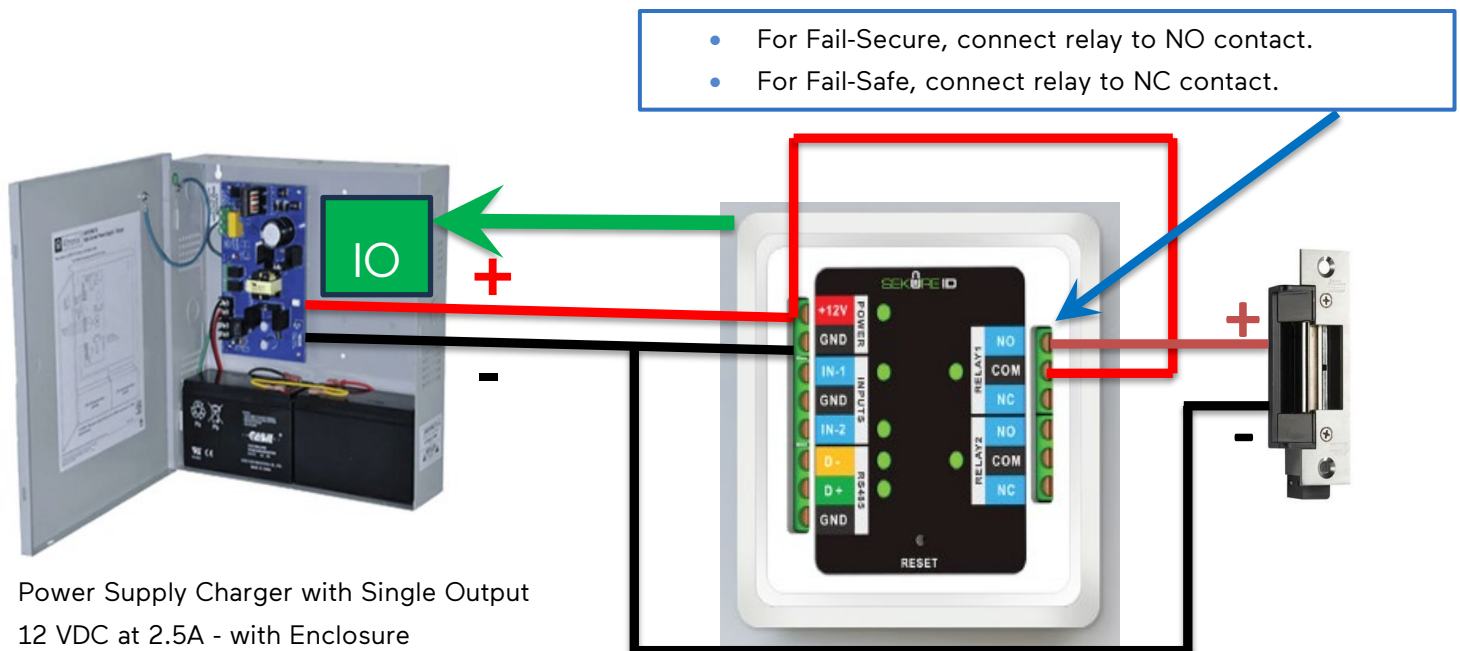| Orange / White		RS485 +	RS485 / OSDP	Secure I/O, 3rd-Party Controller
Green / White		RS485 -	RS485 / OSDP	Secure I/O, 3rd-Party Controller
Black		GND	RS485 / OSDP	Secure I/O, 3rd-Party Controller

RS485 -
RS485 +
Ground
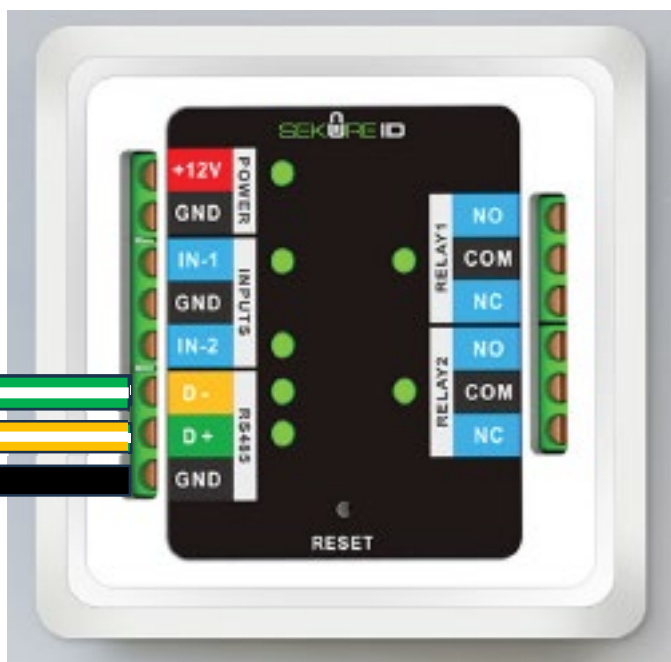
Wiring the Power Supply

1. A power supply for the Secure IO and Door Strike should be sourced by the installer with sufficient power for both devices.

    -   The Secure I/O requires 100 mA

    -   Door Strike per its specification

2. It is recommended that the Secure IO device be housed within the Power Supply enclosure.

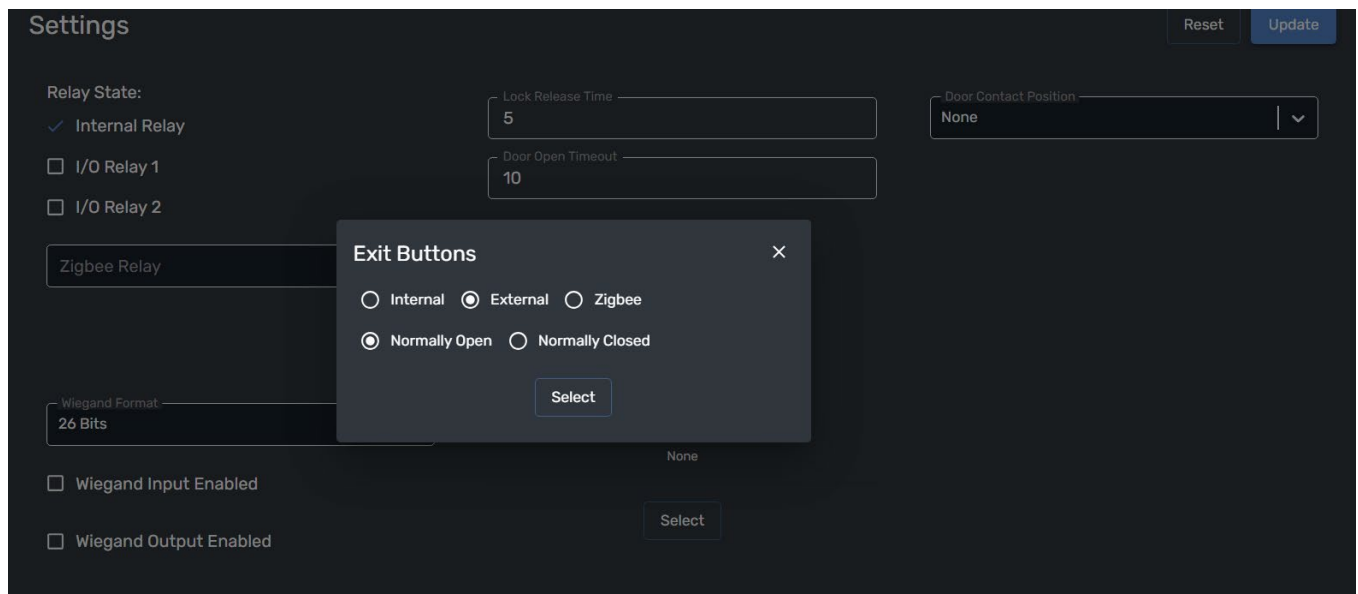   An example of a power supply is shown below:

-   For Fail-Secure, connect relay to NO contact.
-   For Fail-Safe, connect relay to NC contact.

Power Supply Charger with Single Output
12 VDC at 2.5A - with Enclosure

3. CONTROLLER PAIRING

The Controller must be paired to a Reader. Once paired, the controller will only work with that device and is tagged with that specific serial number.

An admin can access the Anavio Control Software and follow these steps:

1. Go to the Doors menu and select the door (the Reader to pair with the controller).

2. Go to Settings (in the Doors menu) and select the option that applies (I/O Relay and External Button or Door Contact) to this installation. Activating any of them initiates the pairing process once both devices are connected.

3. Use a pin to push the Reset button for three (3) seconds; the Controller starts blinking.

4. The Controller reboots and the red power light begins blinking, indicating it is ready to pair.

5. Connect the Reader and wait for it to boot; the Controller should make 2 weak blinks, indicating that the connections were done properly and a reader is transmitting.

6. Perform an attempt to access the Reader to begin the first communication negotiation to the Controller; this first attempt will be unsuccessful, as the Controller does not accept this first attempt for security reasons. This causes all the I/Os to blink once.

7. Reboot both devices and they will be paired and ready to operate together.

8. After pairing the Controller, the power light goes from blinking red to solid red and the blue RS-485 indicators blink occasionally, indicating the pairing process is complete and the Reader is transmitting.

NOTE: The Controller cannot be connected to any other device after this unless the entire process is run again with another Reader.

24-Hour Technical Support:
800-34-VICON (800-348-4266)
UK: 44/(0) 1489-566300
Toll Free: 800-645-9116

T: 631-952-2288
F: 631-951-2288

vicon-security.com