INOXSmart

ISK-B300

Installation Manual & User Guide

Smart All-Inclusive
Access Control Unit

PM-ISK-UM
V05032023

ISK-B300 Installation Manual and User Guide

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Introduction

The ISK-B300 is a Smart All-Inclusive Access Control Device that supports multiple credential technologies including high-frequency RFIDs, secured cloud-generated passcodes and mobile user credentials.

- Integrates with cloud-connected wireless communication technology
- Provides intuitive and convenient smartphone access management
- Combines all functionalities of a controller, reader, monitor and user management system

Specifications

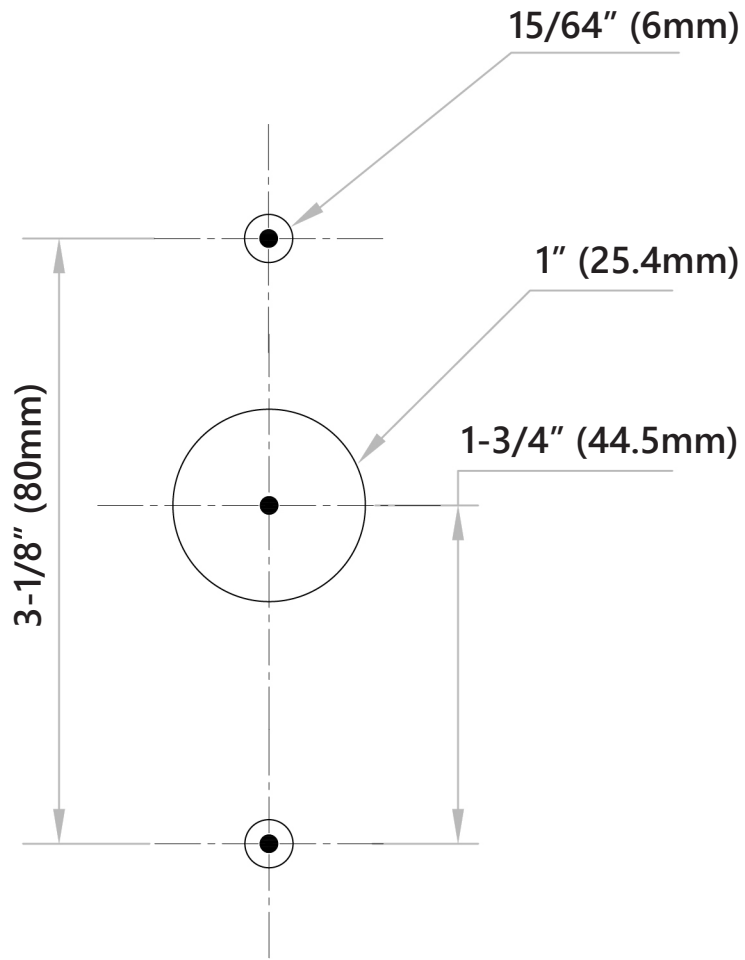
- Type: Back Lit Digital Touchscreen
- Style: Mullion
- Frequency: 13.56MHz / 125KHz
- Input Voltage: 12/24 V DC
- RF Output: 13.56MHz or 125KHz (reader) – 26-Bit Wiegand
- Read Interface: EM / MIFARE
- Read Range: ~3/4" – 2-1/2"
- Working Current: < 80mA (12v) ~ < 40mA (24v)
- Standby Current: < 30mA (12v) ~ < 20mA (24v)
- Passcode/PIN Length: 4 – 8 digits
- User Capacity: 2000 – RF 1000 and Passcode 1000
- Working Humidity: 0% to 98%
- Working Temperature: -20°F to 140°F
- Water Resistant: IP66

Features

- All-inclusive device: Reader, Controller, Keypad, and Monitor
- Multi-credential support: Passcodes, RFID FOB/Card/Wristband, and Smart Phone
- Remote Access and Management via Wi-Fi and Low Energy Bluetooth
- Cloud-based APP with a simple yet robust hierarchy of user roles
- Customizable permissions and levels for managing e-keys, users, and devices
- Passage Mode: Enjoy free access during scheduled periods
- Privacy Mode: Keep privacy and security when needed
- Real-time Audit trail and backup email
- Door position sensor for monitoring open/closed status
- Latchbolt or Deadbolt Monitoring Sensor for monitoring locking status
- Modern, water-resistant indoor/outdoor touchscreen keypad with IP66 rating

Template for ISK-B300 Smart Keypad

Tear Here to Use Template



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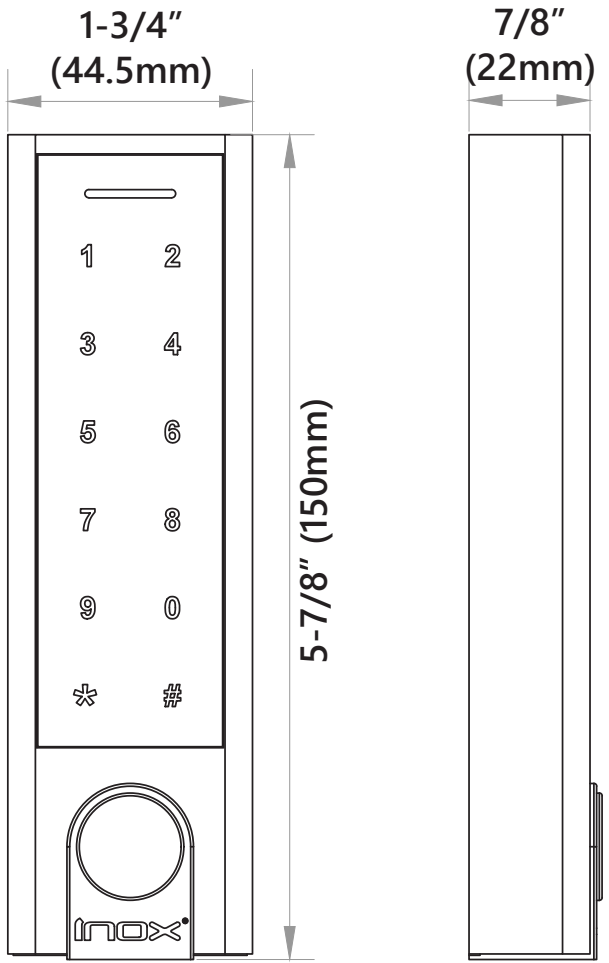
blank for removal with ISK-B300
Installation Template

Dimensions



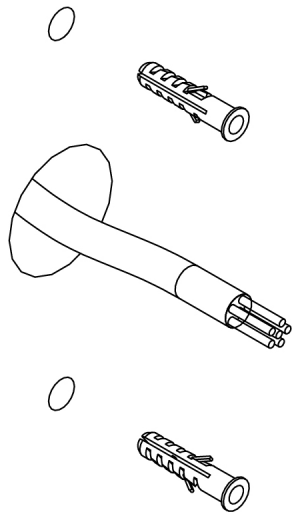
STEP 1

Installation Instructions

Prep the mounting location by drilling holes as shown in the template.

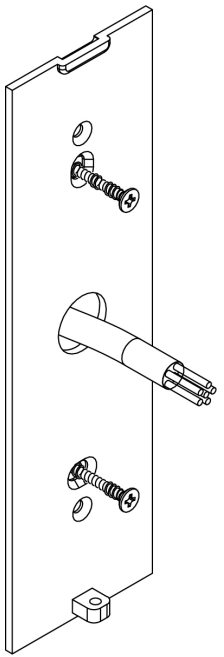
STEP 2

Installation Instructions



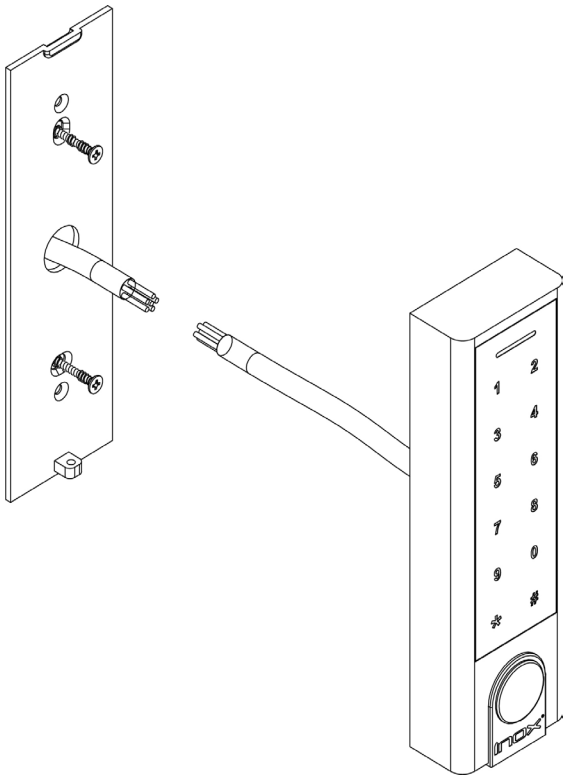
Install anchors and pull connecting device wires through the center hole.

STEP 3 Installation Instructions



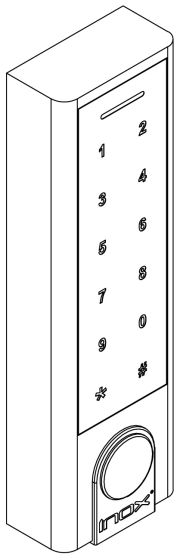
Install screws to mount the sub-plate.

STEP 4 Installation Instructions



Following the wiring diagram for your device, connect the wires from the locking device with the ISK-B300. Keep any unused wires isolated and protected.

STEP 5 Installation Instructions



Use the tool provided to fix the smart controller to the sub-plate by installing the tamper resistant screw into the bottom of the unit.

Colored Wire and Function Chart

Wire Color	Function	Notes
Basic Standalone Wiring		
Red	DC+	12-24VDC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	Relay NO	Normally Open Relay Output (install diode provided)
White	Relay Common	Common Connection for Relay Output
Brown	Relay NC	Normally Closed Relay Output (install diode provided)
Orange	REX/Open	Request to Exit (REX) Input
Pass-Through Wiring (Wiegand Reader or Controller)		
Green/Black	Data 0	Wiegand Output (Pass-Through) Data 0
White/Black	Data 1	Wiegand Output (Pass-Through) Data 1
Advanced Input and Output Features		
Grey	Alarm Output	Negative Contact for Alarm
Yellow	DPS Input	Door/Gate Contact Input (Normally Closed)
Green	DBM Input	Deadbolt Open Detection Input

Device Category 1: Description and Wiring Diagram

The ISK-B300 Smart Access Controller can be connected to Electromagnetic locking devices as EL (Fail Safe) or EU (Fail Secure). These include but are not limited to:

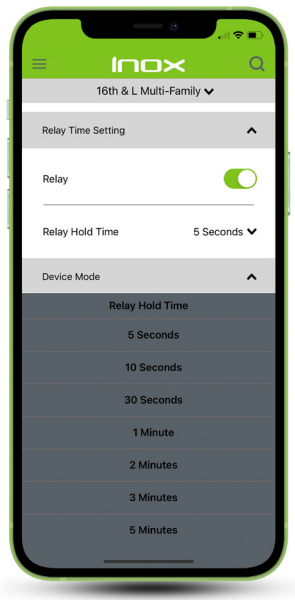
- Electrified Mortise Locks
- Electrified Cylindrical Locks
- Electric Strikes
- Electrified Exit Trims
- Maglocks

1. Connect Power to the devices and power supply with the correct voltage.

2. Connect the Common and Normally Open (NO) or Normally Closed (NC) with the devices.

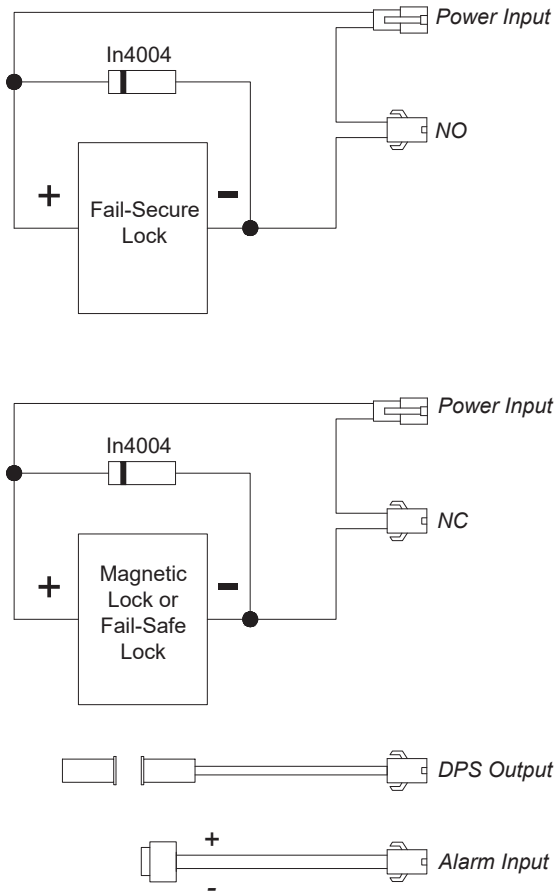
3. For Electrically-Unlocked (EU)/Fail Secure devices, connect NO and Common lines.

4. For Electrically-Locked (EL)/Fail Safe devices, connect NC and Common lines.

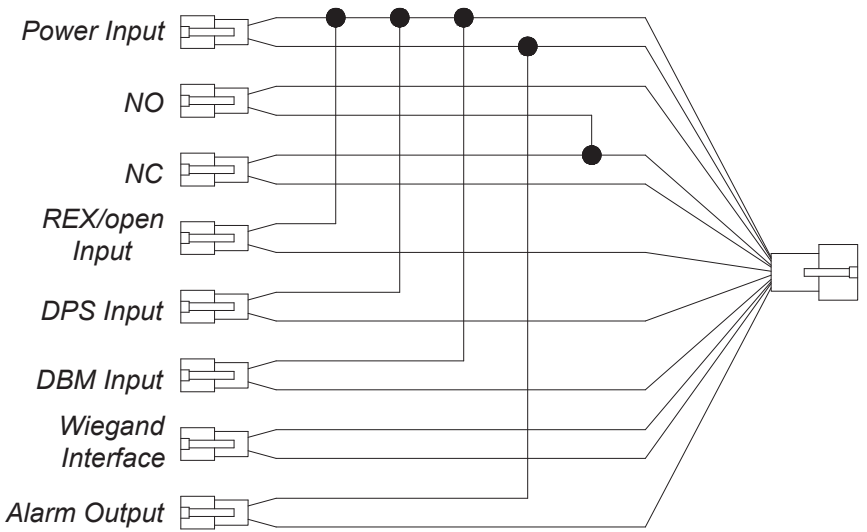


The default timing on the closing circuits is 5 seconds. In the Smart Mode, this timing is adjustable from 5 seconds to 5 minutes using the Smart APP in Device Settings.

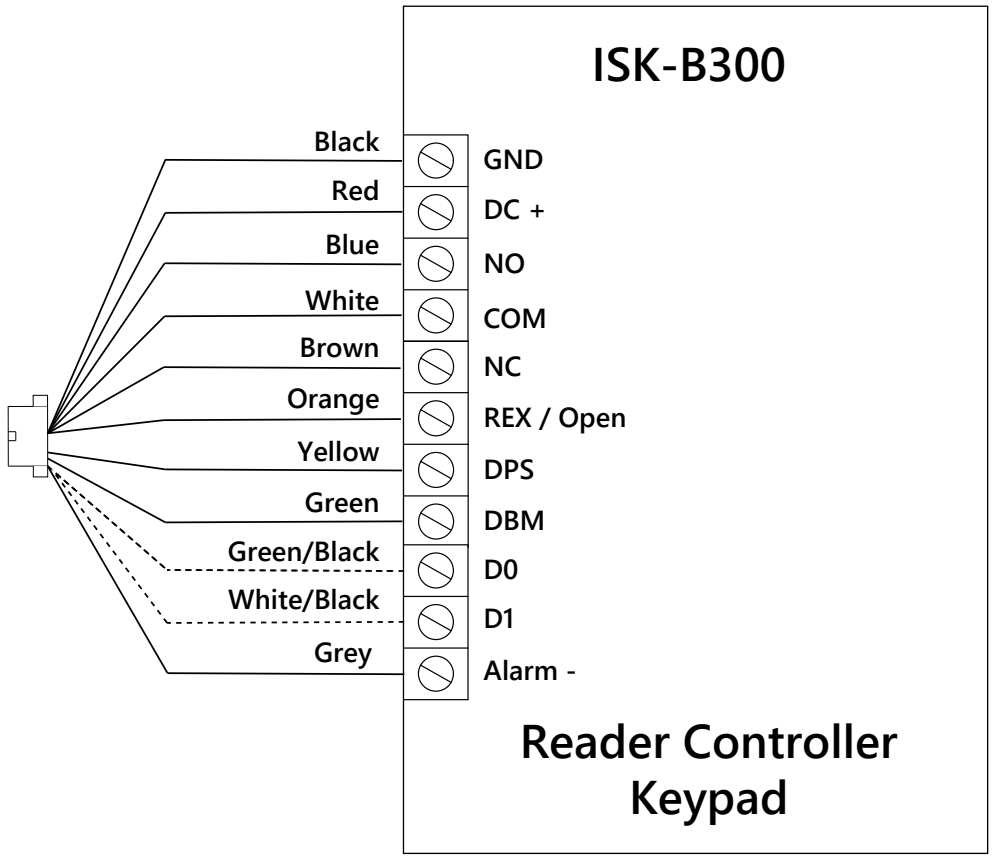
Category 1 Wiring



Category 1 Wiring (Cont.)



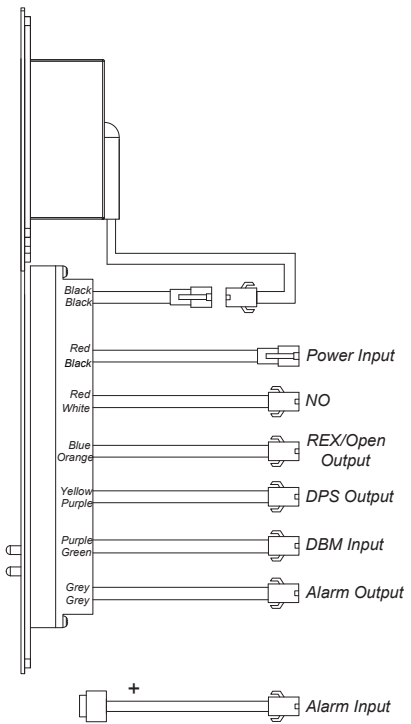
Category 1 Wiring (Cont.)



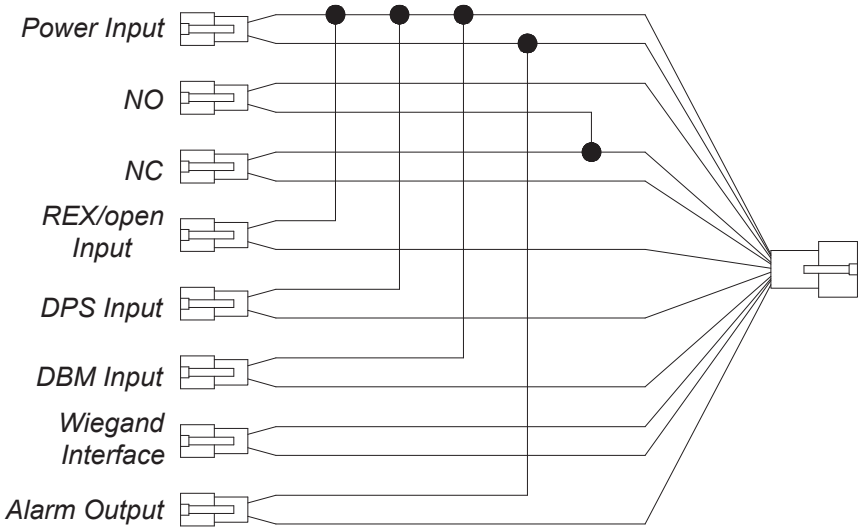
Device Category 2: Description and Wiring Diagram

- Motor-driven Mortise Lock, i.e. INOX PD9700
- Motorize Latch Retraction Exit Device, i.e. INOX ED93-QLR
- Motorize Latch Retraction Mortise Lock

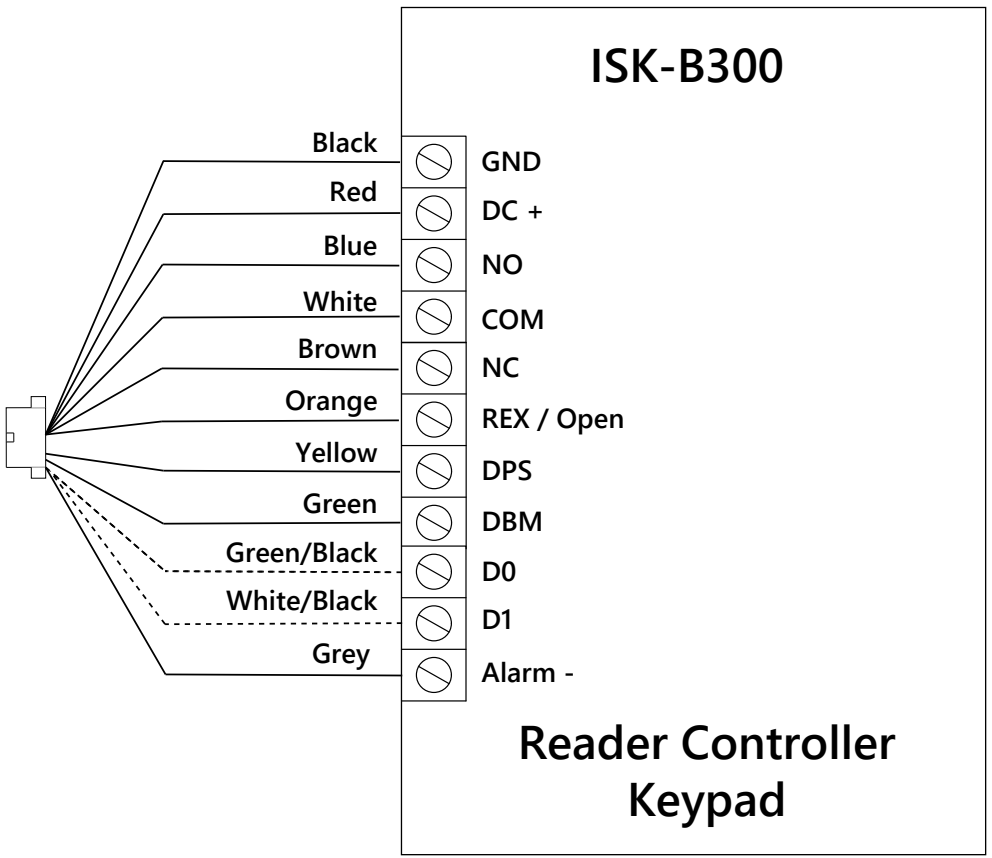
Category 2 Wiring



Category 2 Wiring (Cont.)



Category 2 Wiring (Cont.)



Operational Details

Operating Voltage	**12~24VDC**
Working Current	≤150mA
Idle Current	≤60mA
Proximity Card Reader	**EM / EM + Mifare**
Radio Technology	125KHz / 125KHz + 13.56MHz
Read Range	2~6cm
PIN Length	**4-8 Digits**
Wiring Connections	**Relay Output, Exit Button, Alarm, Door Contact, Wiegand Input, Weigand Output**
Relay	**One (NO, NC, Common)**
Adjustable Relay Output Time	0-99 Seconds (5 Seconds Default)
Lock Output Load	2 Amp Maximum
Wiegand Interface	**EM Card: Wiegand 26~44 bits input & output** **Mifare Card: Wiegand 26~44 bits, 56 bits, 58 bits input and output** (Factory Default: Wiegan 26 bits for EM card, Wiegand 34 bits for Mifare card)
Environment	**Meets IP66**
Operating Temperature	(-40°F~140°F)
Operating Humidity	0%RH~98%RH
Physical	**Zinc-Alloy**
Color	Black
Dimensions	148mmL x 43.5mmW x 22mmD
Unit Weight	330g
Shipping Weight	405g

Basic Programming

Sound and Light Indication

Operation Status	LED	Buzzer
Standby	Solid red light	--
Enter Program Mode	Flashing red light	One beep
In Program Mode	Solid orange light	One beep
Operation error	--	Three beeps
Exit Program Mode	Flashing red light	One beep
Unlocked	Solid green light	One beep
Alarm	Flashing red light	Continuous beeping

Basic Configuration

Programming Step	Keystroke Combination
Enter Program Mode	* **(Master Code)** # (Factory default is 123456)
Enter Program Mode	*

Set Master Code

Programming Step	Keystroke Combination
1. Enter Program Mode	* **(Master Code)** #
2. Update Master Code	**0 (New Master Code) # (Repeat New Master Code) #** (Master Code is any 6 digits)
3. Exit Program Mode	*

Set the Working Mode

The device has 3 working modes to choose from: Standalone Mode, Smart Mode, and Wiegand Reader Mode (factory default is Standalone Mode / Smart Mode).

Programming Step	Keystroke Combination
1. Enter Program Mode	* **(Master Code)** #
2. Standalone / Smart Mode OR 2. Wiegand Reader Mode	**7 7 # (Factory Default)** **7 8 #**
3. Exit Program Mode	*

Simplified Local Programming

Simplified Instruction	
Function Description	**Operation**
To Enter Program Mode:	* **(Master Code)** # (Factory default is 123456) - then perform additional operations below
Change the Master Code	**0-(New Code)-#-(Repeat New Code)-#** (code: 6 digits)
Add a Card User	**1-(Read Card)-#** (can add cards continuously)
Add a PIN User	**1-(PIN)-#** (the PIN is any 4-6 digits except 8888 which is reserved)
Delete User	2-(Read Card)-# or 2-(PIN)-#
Exit Program Mode	*

How to Unlock the Door

Card User	Read Card
PIN User	Input PIN

Tips for PIN Security

For higher security, we allow you to hide your correct PIN with other numbers before or after up to a maximum of 10 digits.
Example:
If your PIN is 123456, you can enter **123456** or ****123456
(* can be any number from 0-9)

Delete Users

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Delete User by Card / PIN OR 2. Delete ALL Users	**2-(Read Card) / (Input PIN)-#** (Users can be deleted continuously) **2-(Master Code)-#**
3. Exit Program Mode	*

Set Access Mode

For multi-user Access Mode, each entry cannot exceed five seconds, or the device will exit to Standby Mode automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Card Access OR 2. PIN Access OR 2. Card + PIN Access OR 2. Card or PIN Access	**4 0 #** **4 1 #** **4 2 #** **4 3 #**
3. Exit Program Mode	*

Set Strike-out Alarm

The strike-out alarm will engage after 10 failed entry attempts (factory setting is OFF). It can be set to deny access for 10 minutes after engaging, or disengage only after entering a valid card/PIN or Master Code / card.

Unpair the Device from the INOX App

Once the ISK-B300 is paired with an opening on the INOX Smart App, it cannot be paired with a different opening unless it is unpaired first.
To Unpair:
*** (Master Code) # - 9 - (Master Code) #**

Smart Initialization

DPS may be added to Electro Magnetic Locking Devices (Category 1)
DPS & DBM may be added to Motor Driven Locking Devices (Category 2)

Open Door Detection (DPS - Door Position Sensor)

When the lock is used with an optional magnetic contact or built-in magnetic contact and the door is opened normally and remains open for more than one minute, the inside buzzer will sound automatically as a reminder to close the door. The buzzer will stop if the door is closed, or if valid credentials are used. Otherwise the buzzer will continue to sound for the programmed alarm time.

DBM - Deadbolt Monitoring Detection

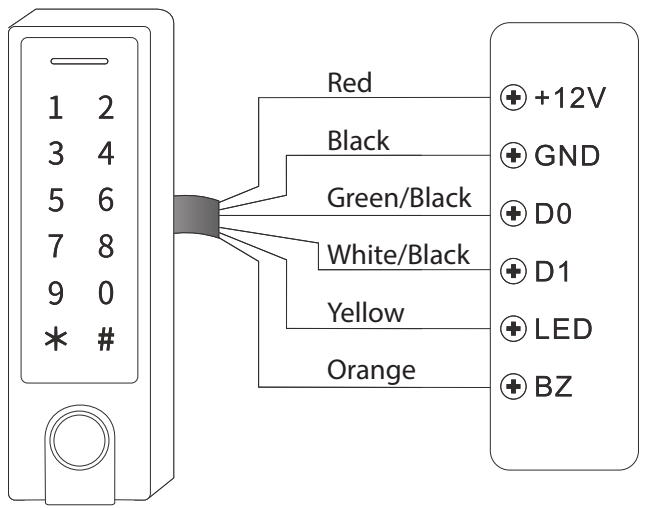
When the lock is used with an optional magnetic contact or built-in magnetic contact and the door is opened by force, the inside buzzer and the external alarm (if installed) will sound automatically. They will stop if valid credentials are used. Otherwise the buzzer and alarm will continue to sound for the programmed alarm time.

Programming Step	Keystroke Combination
1. Enter Program Mode	*** (Master Code) #**
2. Disable DPS Detection OR 2. Enable DPS Detection OR 2. Disable DBM Detection OR 2. Enable DBM Detection	**6 3 #** **6 4 #** **6 5 #** (factory default) **6 6 #**
3. Set Alarm Time	**5 (0-180) #** (factory default is 60 seconds)
4. Exit Program Mode	*

Wiegand Reader Mode

The device can work as a Standard Wiegand Reader connected to a third-party controller (**7 8 #**).

Connection Diagram

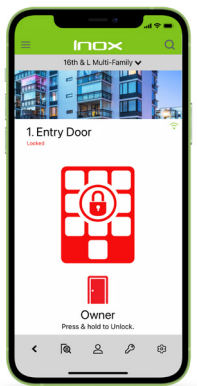


Notes:
When set to Wiegand Reader Mode, most settings in Controller Mode are inactive, and the Yellow and Orange wires are redefined as below:

- Yellow Wire: Green LED light control
- Orange Wire: Buzzer control

If you need to connect the Yellow / Orange wires:
When the input voltage for LED is low, the LED will turn green. When the input voltage for the Buzzer is low, it will sound.

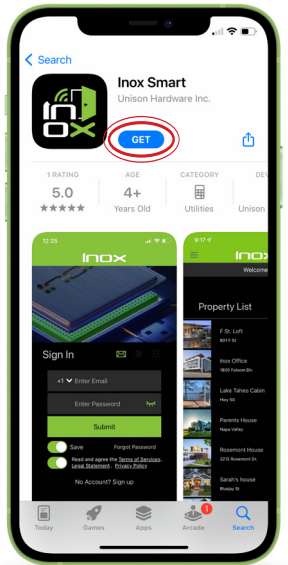
Downloading and Setting Up the INOX Smart App



Use the QR code below for additional support, or visit

InoxSmart.com

1 **Downloading and Setting Up the INOX Smart App**



From the Apple or Google Play Store, download the app “INOX Smart.”

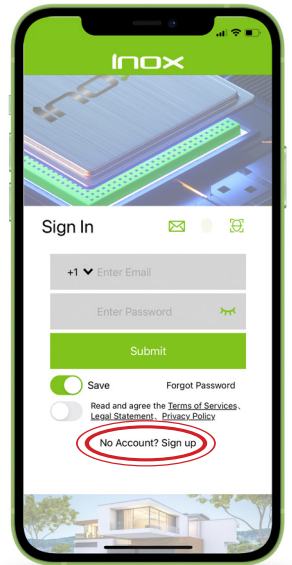
Download on the App Store

GET IT ON Google Play

2 **Downloading and Setting Up the INOX Smart App**

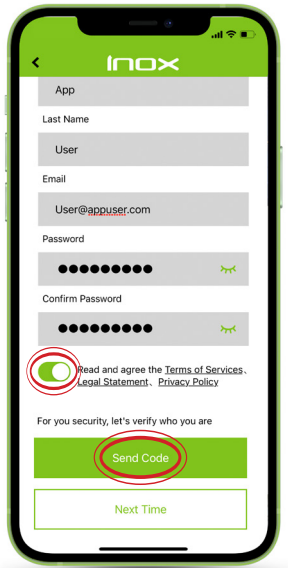
Open the App on your Smart device.

3 **Downloading and Setting Up the INOX Smart App**



At the first screen, tap “No Account? Sign up.”

4 Downloading and Setting Up the INOX Smart App



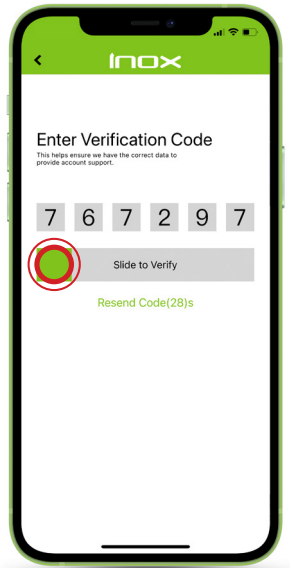
Fill in Name, Email, and Password fields, and accept the Terms of Service, Legal Statement and Privacy Policy by activating the toggle.

Selecting the green “Send Code” button will send a Registration Verification code to your email address.

5 Downloading and Setting Up the INOX Smart App

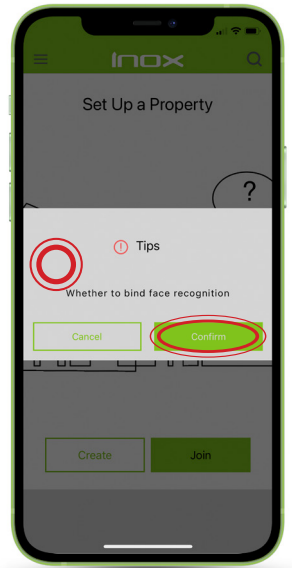
Locate the email that contains your registration verification code.

6 Downloading and Setting Up the INOX Smart App



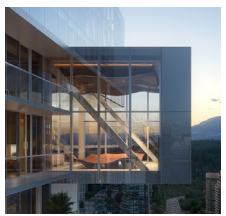
Enter this code on the next screen and slide the green button to the right to verify.

7 Downloading and Setting Up the INOX Smart App



If enabled, your Smart device may ask if you want to use Face ID or Touch ID as credentials to verify App access.

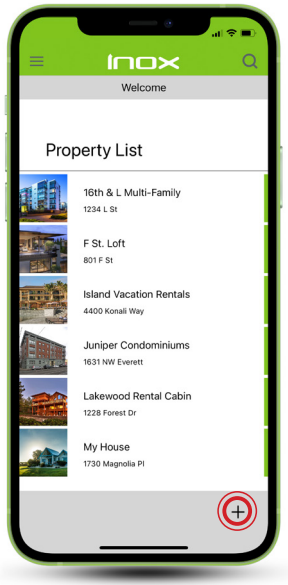
Adding a Property to the App



Use the QR code below for additional support, or visit

InoxSmart.com

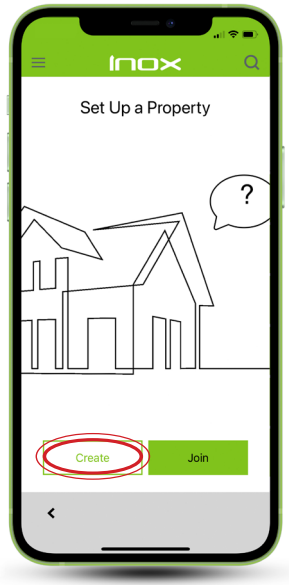
1 Adding a Property to the App



These instructions cover the procedures for creating a new property in the INOX Smart App. For instructions on how to join an existing property, see the FAQs at InoxSmart.com.

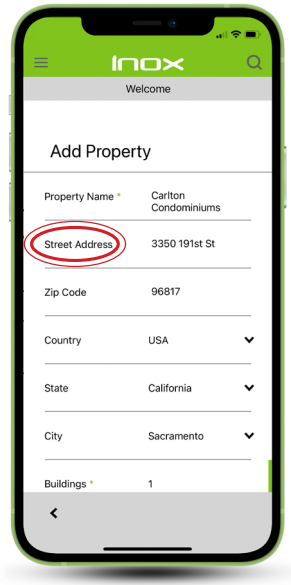
To add a new property, tap the "+" icon in the lower right corner of the Property screen.

2 Adding a Property to the App



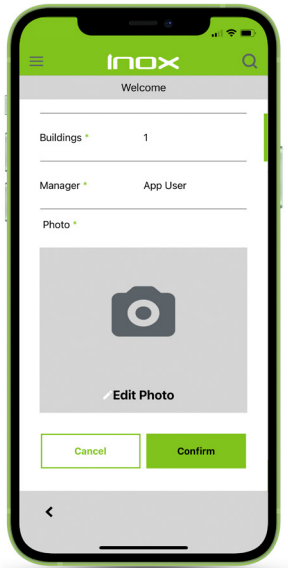
To create a new property, select the Create button at the bottom of the Set Up a Property screen.

3 Adding a Property to the App



Fill in the property information, including address and number of buildings. To edit the number of buildings, slide the Buildings option to the left.

4 Adding a Property to the App



The INOX Smart App requires a photo for each property. Tap on Edit Photo to access the photo screen.

5 Adding a Property to the App

Tap the Camera icon to access your camera or photo gallery.

You may also choose a stock photo provided by the App.

Tap Confirm.

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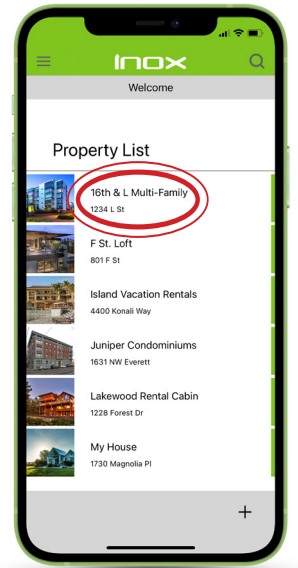
Adding a Door to the App

Use the QR code below for additional support, or visit

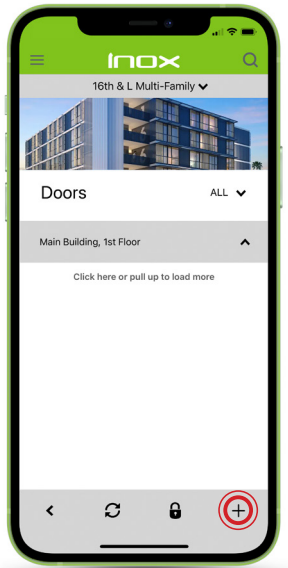
InoxSmart.com

1 Adding a Door to the App



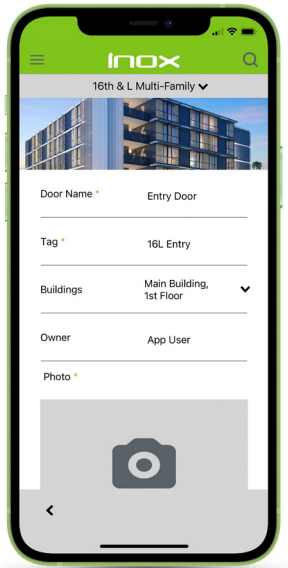
Doors are added to specific properties. Tap on the property to select.

2 Adding a Door to the App



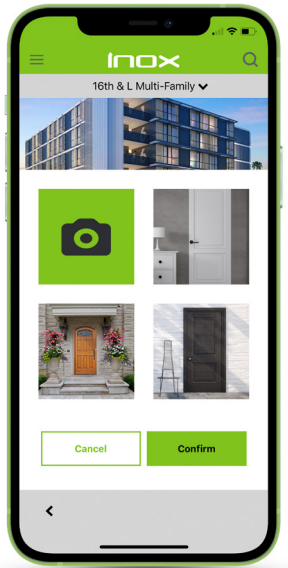
To add a door, tap the "+" icon in the lower right corner of the Doors screen.

3 Adding a Door to the App



Fill in identifying information about the door. The INOX Smart App requires a photo for each door. Tap on the Edit Photo box to access the photo screen.

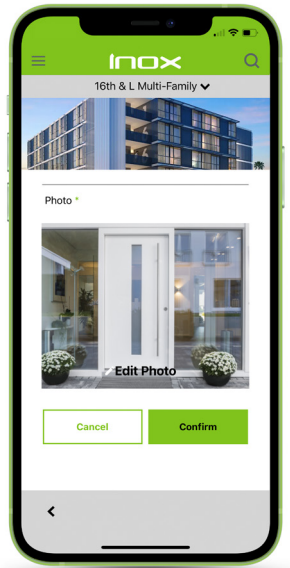
4 Adding a Door to the App



Tap the Camera icon to access your camera or photo gallery. You may also choose a stock photo provided by the App.

Tap Confirm.

5 Adding a Door to the App



The photo will be added to the door information.

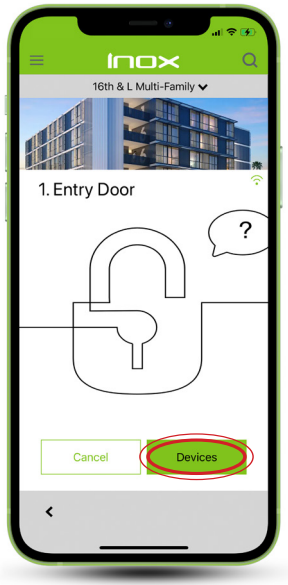
Tap Confirm to add the door.

Pairing an ISK Access Control Keypad with the INOX Smart App

Use the QR code below for additional support, or visit

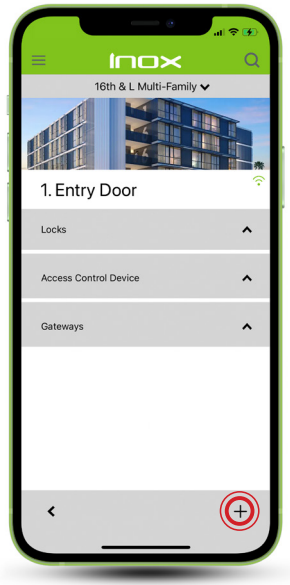
InoxSmart.com

1 Pairing an ISK Access Control Keypad with the INOX Smart App



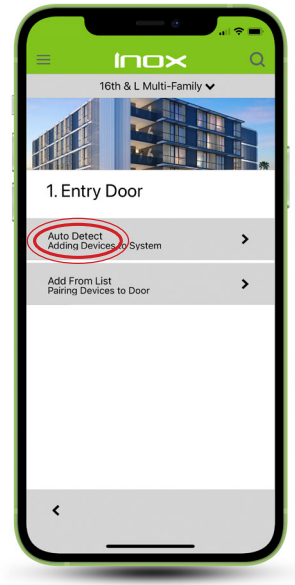
From the Lock Screen, tap the Devices button in the bottom right corner of the screen.

2 Pairing an ISK Access Control Keypad with the INOX Smart App



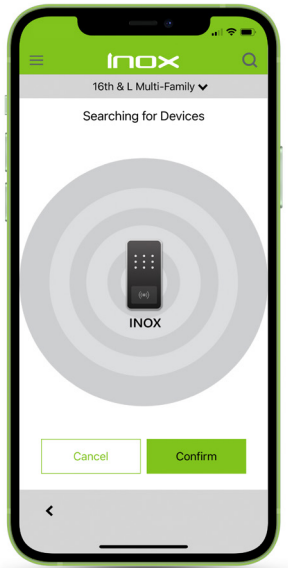
To add a device, tap the "+" icon in the bottom right corner of the screen.

3 Pairing an ISK Access Control Keypad with the INOX Smart App



Choose "Auto Detect" to search for available locking devices.

4 Pairing an ISK Access Control Keypad with the INOX Smart App



The screen will automatically populate with all available locking devices that are within Bluetooth range of the smartphone or gateway.

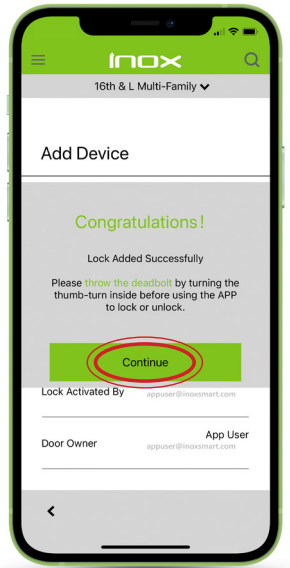
If no devices are available, this screen will remain blank.

5 Pairing an ISK Access Control Keypad with the INOX Smart App

Tap the lock that you would like to pair with the App. A green check mark will appear next to your selection.

Tap Confirm.

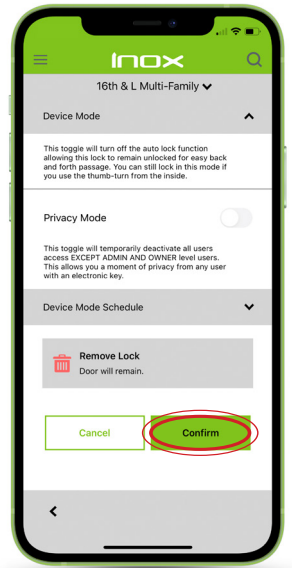
6 Pairing an ISK Access Control Keypad with the INOX Smart App



Remember to throw the deadbolt before using the App to unlock the door.

Tap Continue.

7 Pairing an ISK Access Control Keypad with the INOX Smart App

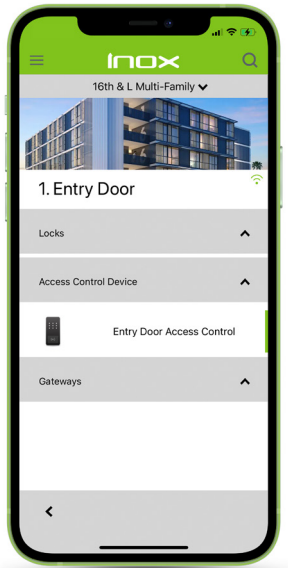


On the Add Device screen, rename the lock by tapping on the name.

Edit any other relevant information, including Auto Lock, Privacy Mode, or Passage Mode settings.

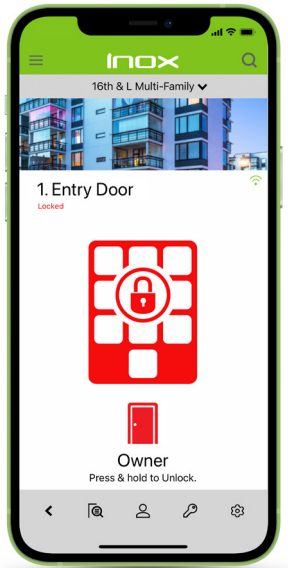
Scroll to the bottom of the screen and tap Confirm.

8 Pairing an ISK Access Control Keypad with the INOX Smart App



The Access Control unit will appear in the list of devices that are paired with the App for this door.

9 Pairing an ISK Access Control Keypad with the INOX Smart App



To control the lock, return to the lock screen. Tap and hold on the central lock icon for 2 to 3 seconds.

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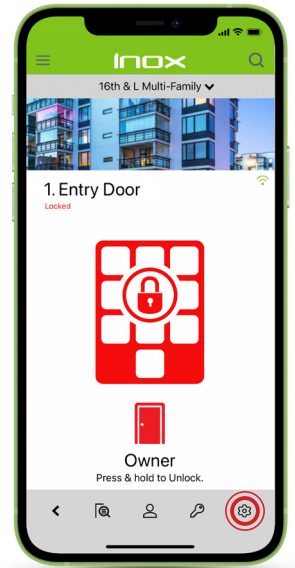
Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway

Use the QR code below for additional support, or visit

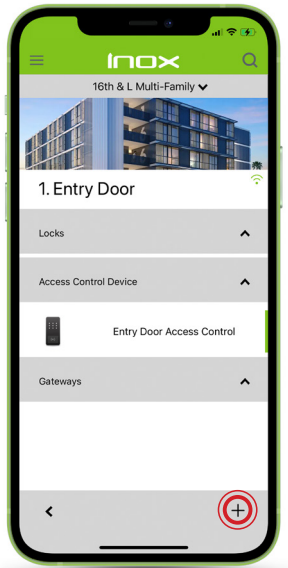
InoxSmart.com

1 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



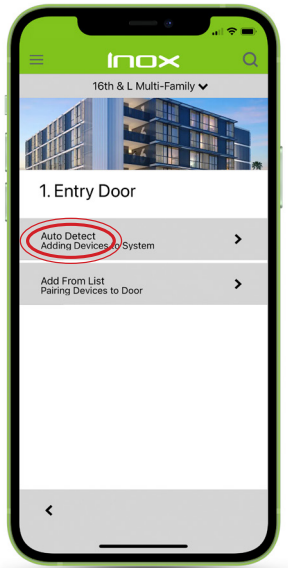
From the Lock Screen, tap the Settings icon in the bottom right corner of the screen.

2 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



To add a gateway, tap the "+" icon in the bottom right corner of the screen.

3 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



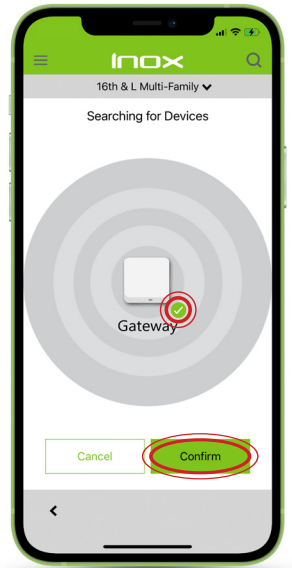
Choose "Auto Detect" to search for available devices.

4 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway

The screen will automatically populate with all available devices that are within Bluetooth range.

If no devices are available, this screen will remain blank.

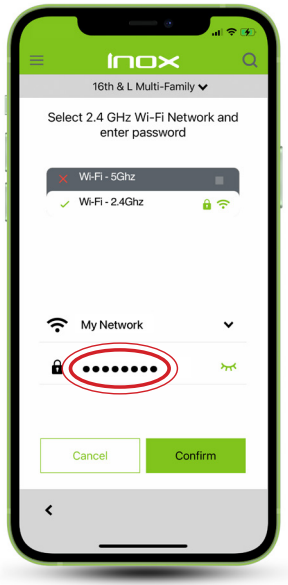
5 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



Tap the gateway that you would like to pair with the access control device. A green check mark will appear next to your selection.

Tap Confirm.

6 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway

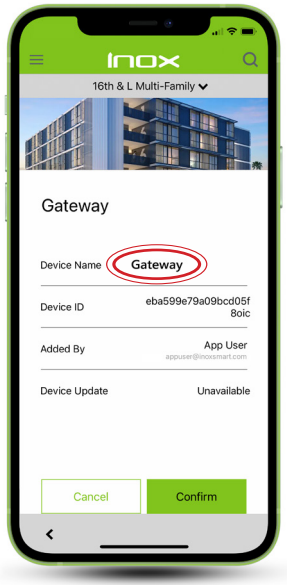


Select the 2.4Ghz network that will connect the gateway to the Internet.

Note: The gateway is not compatible with 5Ghz networks.

Enter your Wi-Fi password and tap Confirm to connect the gateway to the Wi-Fi network.

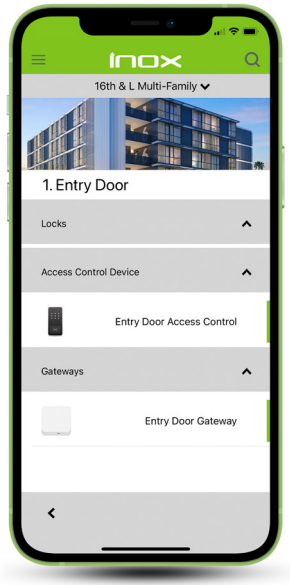
7 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



Enter a name for the gateway in the Device Name field. If there is a firmware update available, the Device Update field will show “Available.” Tap the word “Available” to update the firmware.

Tap Confirm to complete the pairing process.

8 Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



The gateway will appear in the list of devices that are paired with the App for this door.

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INOX® 6 Wayne Court, Sacramento, CA 95829, USA
Tel: +1 916.388.1888 Fax: +1 916.388.8322 Email: sales@unisonhardware.com