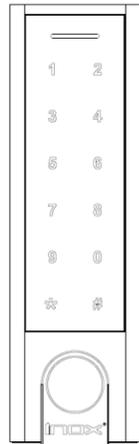


**User Manual**



**Access Controller / Reader**

This product is intended to be installed in accordance with the installation wiring diagram, mechanical assembly drawings provided with each product, the local authority having jurisdiction (AHJ) and the National Electric Code, NFPA 70. When installed in fail secure mode, the local authority shall be consulted with regard to the use of possible panic hardware to allow emergency exit from the secure area.

PM-ISCONTROLLER  
V20220825

**Introduction**

The device is a single door multifunction standalone access controller or a Wiegand output reader. It uses Atmel MCU assuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life. The device supports 1,000 users (988 common users + 2 panic users + 10 visitor users). All user data can be transferred from one to another. It supports multi access modes in card access, PIN access, card + PIN access, or multi cards/PINs access. It has extra features including block enrollment, interlock, Wiegand input & output interface, and more.

Two Versions Optional:  
The device with Bluetooth function is optional  
The device with big user capacity is optional

**Features:**

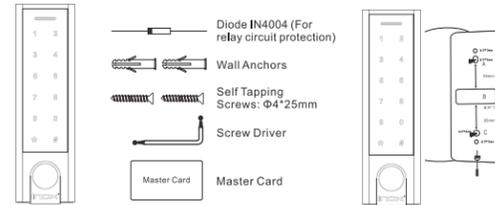
- Touch Key
- Metal case, anti-vandal
- Waterproof, conforms to IP66
- One relay with 988 common users + 2 panic users + 10 visitor users
- PIN length: 4~6 digits

**Specifications**

<b>Operating Voltage</b>	<b>12~28V AC/DC</b>
Working Current	<150mA
Idle Current	<60mA
<b>Proximity Card Reader</b>	<b>1EM or Mifare</b>
Radio Technology	125KHz / 13.56MHz
Read Range	2~6 cm
<b>Wiring Connections</b>	Relay Output, Exit Button, Alarm, Door Contact, Wiegand Input, Wiegand Output
<b>Relay</b>	<b>One (NO, NC, Common)</b>
Adjustable Output Time	0-99 seconds (5 seconds default)
Lock Output Load	2 AMP Maximum

**Installation**

- Remove the back cover from the unit
- Drill 2 holes (A,C) on the wall for the screws and one hole for the cable
- Knock the supplied rubber bungs to the screw holes (A,C)
- Fix the back cover firmly on the wall with 4 flat head screws
- Thread the cable through the cable hole (B)
- Attach the unit to the back cover



**Wiring**

Wire Color	Function	Notes
Basic Standalone Wiring		
Red	AC&DC	12-28V AC/DC Regulated Power Input
Black	AC&DC	12-28V AC/DC Regulated Power Input
Grey & Black	GND	Negative Pole
Blue & Black	Relay NO	Normally Open Relay Output (install diode provided)
White & Black	Relay Common	Common Connection for Relay Output
Green & Black	Relay NC	Normally Closed Relay Output (install diode provided)
Yellow	OPEN	Request to EXIT (REX) Input
Advanced Input and Output Features		
Grey	Alarm Output	Negative contact for Alarm
Brown	Contact Input	Door/Gate Contact Input

**Sound and Light Indication**

Operation Status	LED	Buzzer
Stand by	Red light bright	-
Enter into programming mode	Red light shines	One beep
In the programming mode	Orange light bright	One beep
Operation error	-	Three beep
Exit from the programming mode	Red light bright	One beep
Open lock	Green light bright	One beep
Alarm	Red light shines quickly	Beeps

**Basic Configuration.....  
Enter and Exit Program Mode**

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

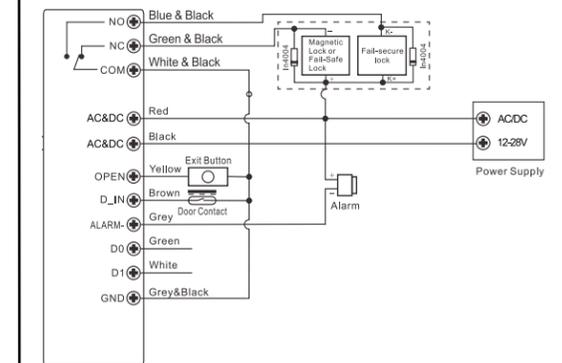
**Set Master Code**

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

**Standalone Mode**

The device can work as Standalone Access Control for single door. (Factory default mode - 7 7 #)

**Connection Diagram / Common Power Supply**



Attention: A 1N4004 or equivalent diode installation is needed when using a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)

**Programming**

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Add Card User	
Using Auto ID <i>Allows the device to assign Card to next available user ID number</i>	1(read card) / (Input 8/10/17 digits card number)# The cards can be added continuously
Add PIN User	
Using Auto ID <i>Allows the device to assign PIN to next available User ID number</i>	1 (PIN) # The PINs can be added continuously
Exit	*

*Tips for PIN Security (Only valid for 6 digits PIN): For higher security we allow you to hide your correct PIN with other numbers up to a max of 10 digit.  
Example PIN: 123434. You could use \*(123434)\* or \*(123434)*

**Change PIN Users**  
(PIN length: 4 ~6 digits except 8888)

Programming Step	Keystroke Combination
NOTE: Below is done outside programming mode, users can undertake this themselves	
Change PIN	*(User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #
Change PIN of Card + PIN access mode (There will auto allocate PIN (8888) to cards when adding)	*(User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #

**Delete Users**

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Delete User - By Card / PIN	2 (Read Card)/(Input PIN)# The users can be deleted continuously
OR Delete User - By ID number OR Delete User - By Card number OR Delete ALL Users	(User ID) # (Input 8/10/17 Digit Card Number) # (Master Code) #
Enter Program Mode	*

**Programming**

**Set Relay Configuration**  
The relay configuration sets the behavior of the output relay on activation.

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Pulse Mode	3 (1~99)# (factory default) The relay time is 1-99 seconds (Default is 5 seconds)
OR	
Toggle Mode	3 0 # Sets the relay to ON/OFF Toggle mode
Enter Program Mode	*

**Set Access Mode**

For Multi user access mode, the interval time of reading can not exceed 5 seconds, or else, the device will exit to standby automatically.

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

**Set Strike-out Alarm**

The strike-out alarm will engage after 10 failed entry attempts (Factory 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.

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Strike-Out OFF	6 0 # (factory default)
Strike-Out ON	6 1 # Access will be denied for 10 minutes (Exit button is still workable)
Strike-Out ON (Alarm) Set Alarm Time	6 2 # 5 (0-3)# (factory default is 1 minute) Enter Master Code # or Master Card or valid user card/PIN to silence
Enter Program Mode	*

**Set Door Open Detection**  
**Door Open Too Long (DOTL) Detection**

When use with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door. The beep can be stopped by closing the door, master users or valid users, or else, it will continue to beep the same time with the alarm time set.

**Door Forced Open Detection**

When use with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened by force, the inside buzzer and external alarm (if there is) will be both operate, they can be stopped by master users or valid users, or else, it will continue to sound the same time with the alarm time sets.

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Disable Door Open Detection	6 3 # (factory default)
Enable Door Open Detection	6 4 #
Set Alarm Time	5 (0-3)# (factory default is 1 minute)
Enter Program Mode	*

The function of Set Alarm Time also apply for anti-tamper alarm.

**Set Audible and Visual Response**

Programming Step	Keystroke Combination
Enter Program Mode	*(Master Code)#
Disable Sounds Enable Sound	7 0 # 7 1 # (factory default)
LED Always OFF LED Always ON	7 2 # 7 3 # (factory default)
Keypad Backlit Always OFF Keypad Backlit Always ON Keypad Backlit Automatic OFF	7 4 # 7 5 # 7 6 # (factory default) Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)
Enter Program Mode	*

**Master Card Usage**

Using Master Card to add and delete user	
Add Card / PIN Users	Input (Master Card) Input (Card) or (PIN) Repeat step 2 for additional users Input (Master Card) again
Delete Card / PIN Users	Input (Master Card Twice within 5 seconds) Input (Card) or (PIN) Repeat step 2 for additional users Input (Master Card) again

**Users Operation & Reset to Factory Default**

- Open the door: Read valid user card or input valid user PIN #
- Remove alarm: Enter Master Code # or Master Card or valid user card / PIN

To reset to factory default & Add Master Card  
Power off, press the Exit Button, hold it and power on, there will be two beeps, then release the exit button, the LED light turns into yellow, then read any 125KHZ EM card / 13.56MHZ Mifare card, the LED will turn into red, means reset to factory default successfully. Of the card reading, it is the Master Card.

**Remarks:**

- If no Master Card added, must press the Exit Button for at least 5 seconds before release. (This will make the previous registered Master Card invalid)
- Reset to factory default, the user's information is still retained.

**Attention**

Install a 1N4004 or equivalent diode is needed when use a common power supply, or the reader might be damaged. (1N4004 is included in the packing)