

# OPERATING INSTRUCTIONS

# PRX-320

WATERPROOF PROXIMITY CARDREADER/KEYPAD



4564 Johnston Parkway, Cleveland, Ohio 44128

P. 800 426 9912 F. 216 518 9884

**Sales Inquiries:** [salesupport@emxinc.com](mailto:salesupport@emxinc.com)

**Technical Support:** [technical@emxinc.com](mailto:technical@emxinc.com)

[www.emxinc.com](http://www.emxinc.com)

# Product Overview

The PRX 320 is a card reader / keypad access control with 2000 card users and 8 passcode users. This unit is very easy to program with Batch command.

---

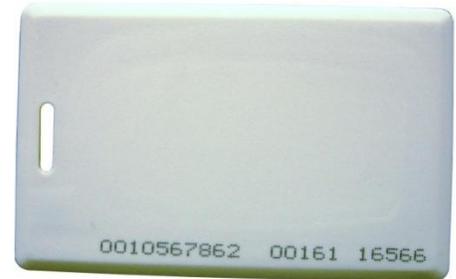
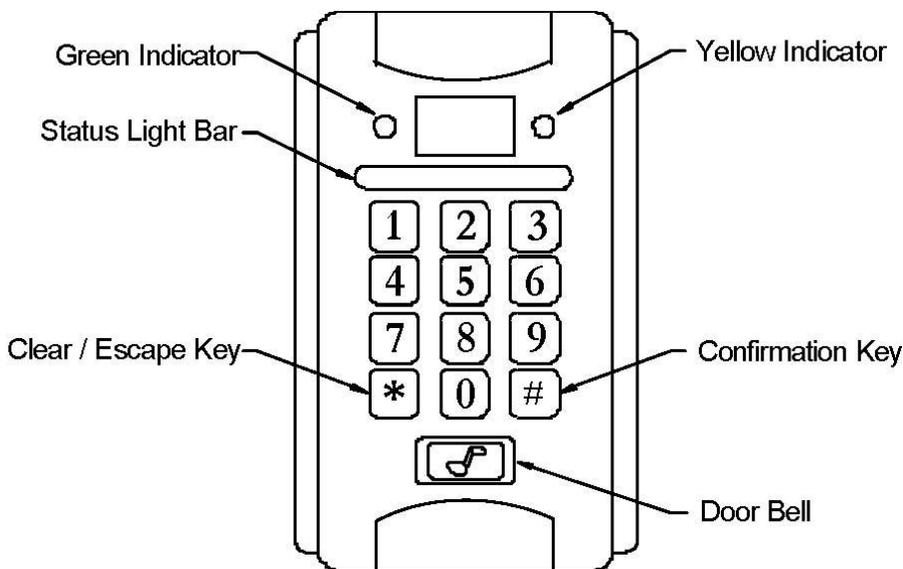
Section	Sub Section	Title	Page
I.		Special Features	1
II.		Front Panel and Proximity Card	1
III.		Installation Procedures	2
IV.		Technical Specifications	2
V.		Electrical Connections	2
VI.		Programming Cards and Functions	3
	1.	Add Proximity Card(s)	3
	2.	Delete Proximity Card(s)	4
	3.	Add / Change User Pass Code	4
	4.	Door Lock Time Setting	4
	5.	Door Access Entry Mode	5
	6.	Batch Registration (Adding Sequential Card Series)	5
	7.	Anti-Tamper Output	6
	8.	Change System Master Code	6
	9.	Delete User Pass Codes	7
	10.	Delete All Proximity Cards	7
	11.	Door Access Using System Code	7
VII.		Mounting Instructions	8
	1.	Steps 1 - 3	8
	2.	Steps 4 - 6	9
	3.	Step 7	10
VIII.		Suggested Wiring Examples	11
	1.	Magnetic Lock Fail Secure	11
	2.	Magnetic Lock Fail Safe	11
	3.	Forced Entry Normally Closed Relay	12
	4.	Forced Entry Normally Open Relay	12
IX.		Notes, Precautions and Accessories	13
		Warranty and Contact Information	Back cover

## I. SPECIAL FEATURES

1. Stand alone operation.
2. Front panel power on indicator.
3. Four door opening modes.
  - ENTRY MODE 1: Enter 4-digit Pass Code only.
  - ENTRY MODE 2: Proximity Card access only.
  - ENTRY MODE 3: Proximity Card plus 4-digit Pass Code.
  - ENTRY MODE 4: Proximity Card or 4-digit Pass Code.
4. Programming Mode is protected by a 4-digit System Pass Code.
5. All Proximity Cards must be registered prior to use.
6. Maximum storage of 2000 cards.
7. Non-volatile memory protects against data loss.

## II. FRONT PANEL and PROXIMITY CARD TYPE

Indicator Lights	Function
Green Status Light:	Flashes to indicate panel key press. On to indicate Programming Mode. Off in Normal Mode.
Yellow Status Light:	Flashes to indicate unsuccessful access. On when alarm is active.
Status Light Bar:	Red - Power on in Normal Mode. Green - Indicates successful access.
Ten Numeric Keys 0-9:	Pass Code Entry and Programming Mode.
# Key:	Confirmation Key
* Key:	Clear or Escape Key



CARX-20

If programming manual batch mode use the last 6 digits of the first group and the lowest numbered card.

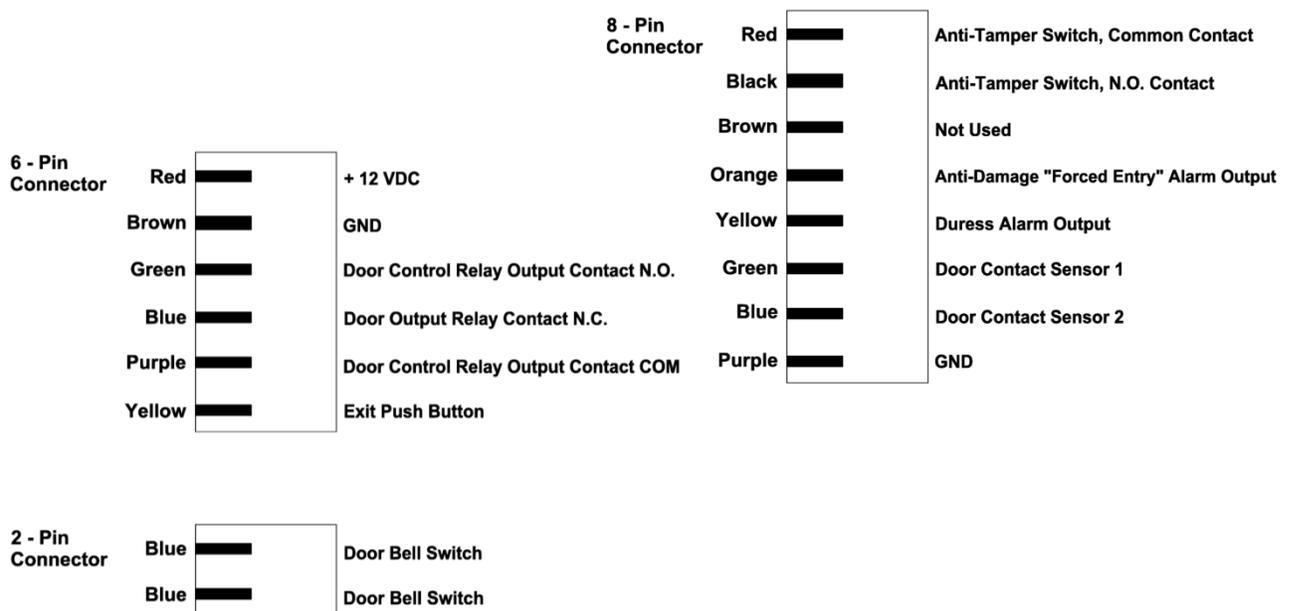
### III. INSTALLATION PROCEDURES

1. Refer to Index for mounting instructions.
2. Do not install Proximity Reader on or near metal objects, this will reduce the effective read range for card access detection.
3. Install the appropriate connector(s) to meet application requirements. See examples on pages 10 and 11.
4. Connect the unit to power.
5. The light status bar should turn red and a single beep will sound. If the unit is not attached to a surface or mounting plate the yellow status light will be on, indicating an alarm condition. The alarm is caused by the anti-tamper switch on the back of the unit.

### IV. TECHNICAL SPECIFICATIONS

Power Supply	12 VDC
Power Supply	+ / - 20%
Current Draw	90mA standby 110mA activated
Housing Material	Grey PVC and Metallic keys
Relay Type	Form C SPST contact rating 3A @ 12VDC / 110 VAC 0.5A @ 24 VDC
Temperature Range	-20°F – 120°F
Connections	8 /6/2 position connectors with 4 inches wire
Activation Indicator	Light bar Red power on normal mode Green on successful activation
Environmental	IP67 Water tight
Range	5 inches
Size	5in x 2.75in x 1.5 in.

### V. CONNECTIONS



## VI. PROGRAMMING CARDS AND FUNCTIONS

Default Factory Pass Code is: 4567.

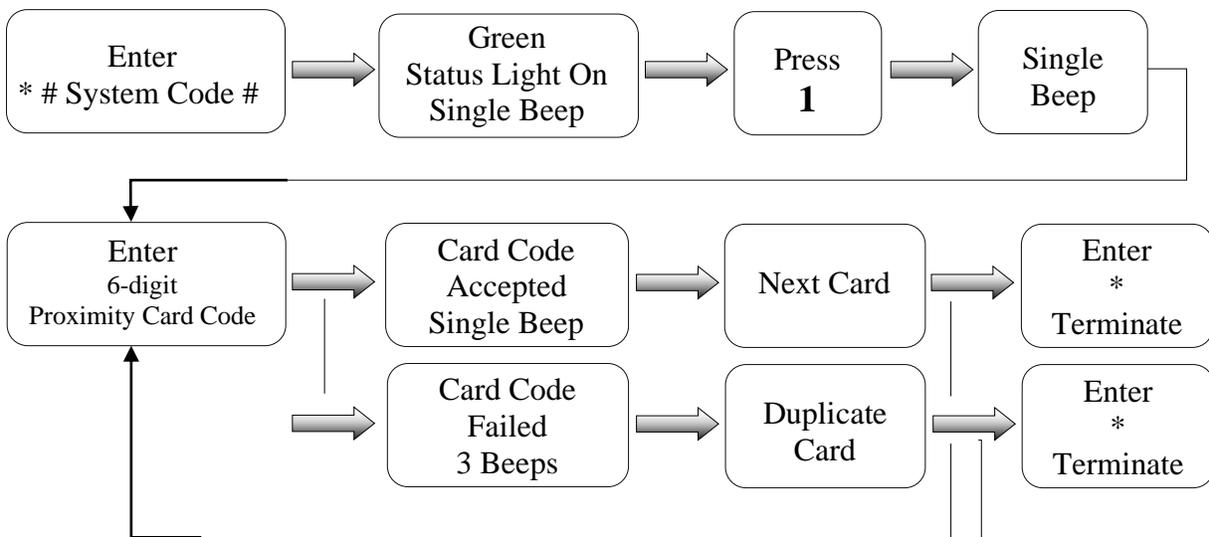
Default Factory Entry mode is: ENTRY MODE 2 (If another Entry Mode is desired proceed to "Function 5" before entering Proximity Cards or Pass Codes).

To enter into Programming Mode, press the following keys in sequence: **\*#4567#**

After the last # is pressed the unit will "Beep" once and the Green status light will be on. The system will exit Programming Mode automatically if no keys are pressed within 20 seconds.

The user can exit Programming Mode at any time by pressing the \* key.

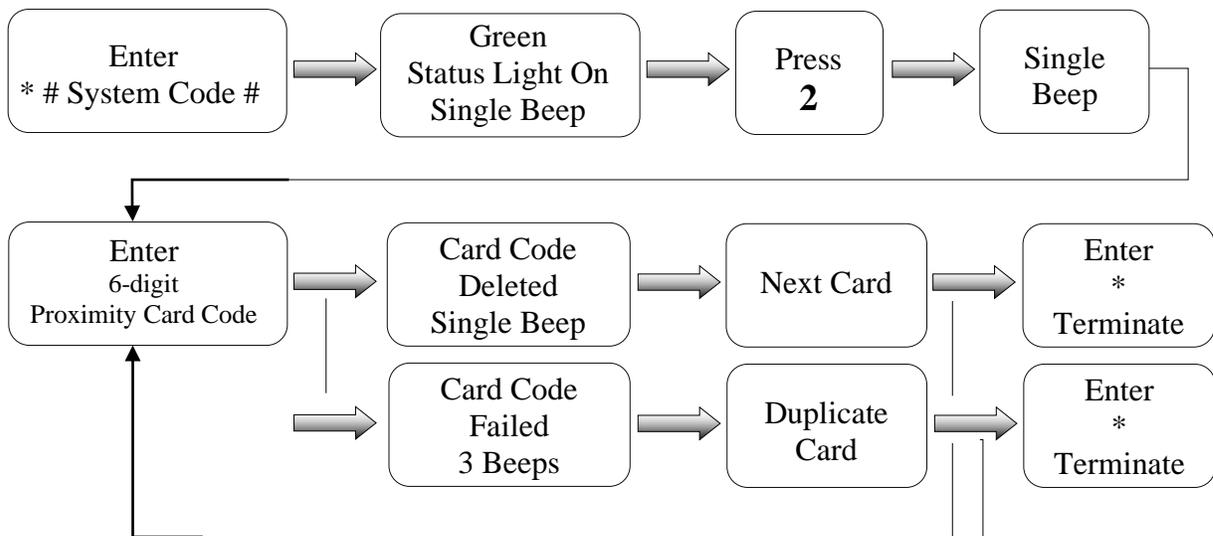
### 1. Adding Proximity Card(s)



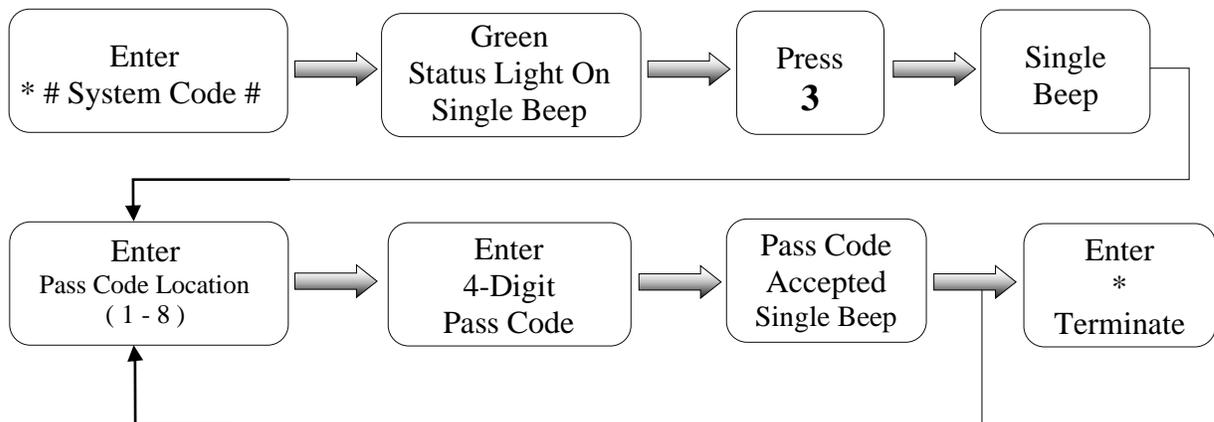
**\* # 4 5 6 7 #**

\*\*\* Placing the proximity card to be entered within the reader's detection range instead of manually entering the 6-Digit Card Code can also register single cards. This feature will only function for individual card entry and not the Batch Registration (Function 6) mode.

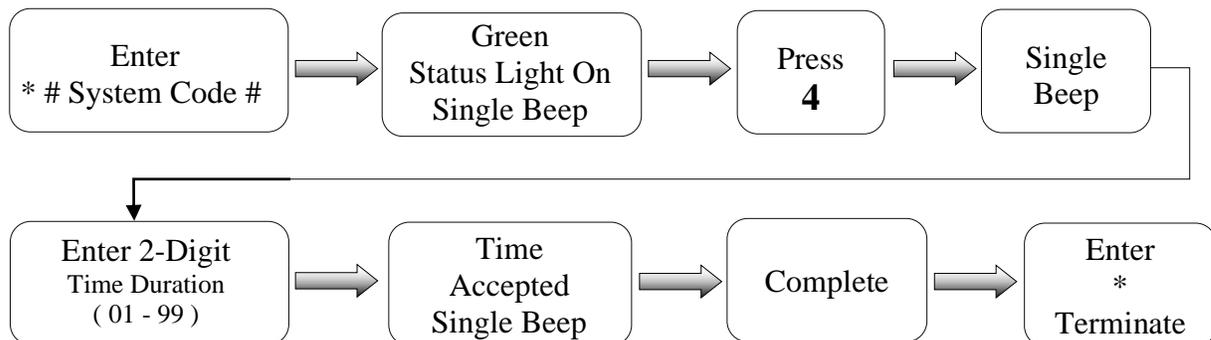
## 2. Delete Proximity Card(s)



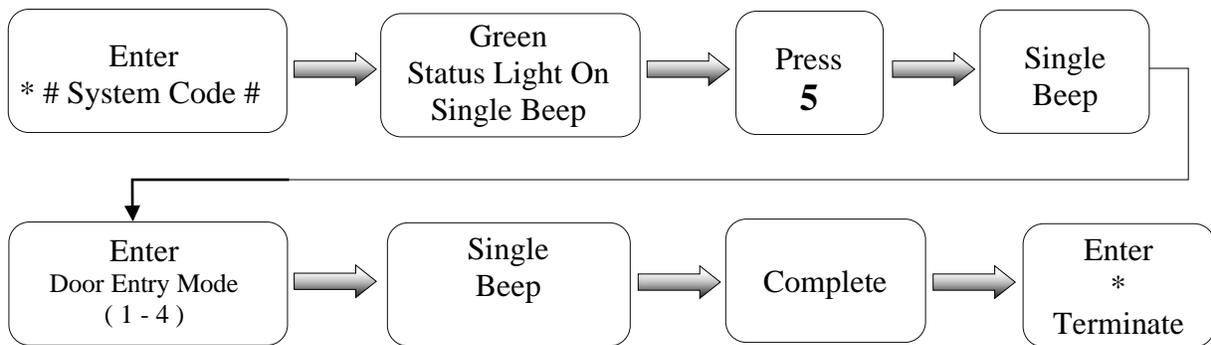
## 3. Add / User Pass Code



## 4. Door Lock Time Setting



## 5. Door Access Entry Mode



**ENTRY MODE 1:** Enter 4-Digit Pass Code only.

(Enter 4-Digit Pass Code for access)

**ENTRY MODE 2:** Proximity Card access only.

(Present Proximity Card for access)

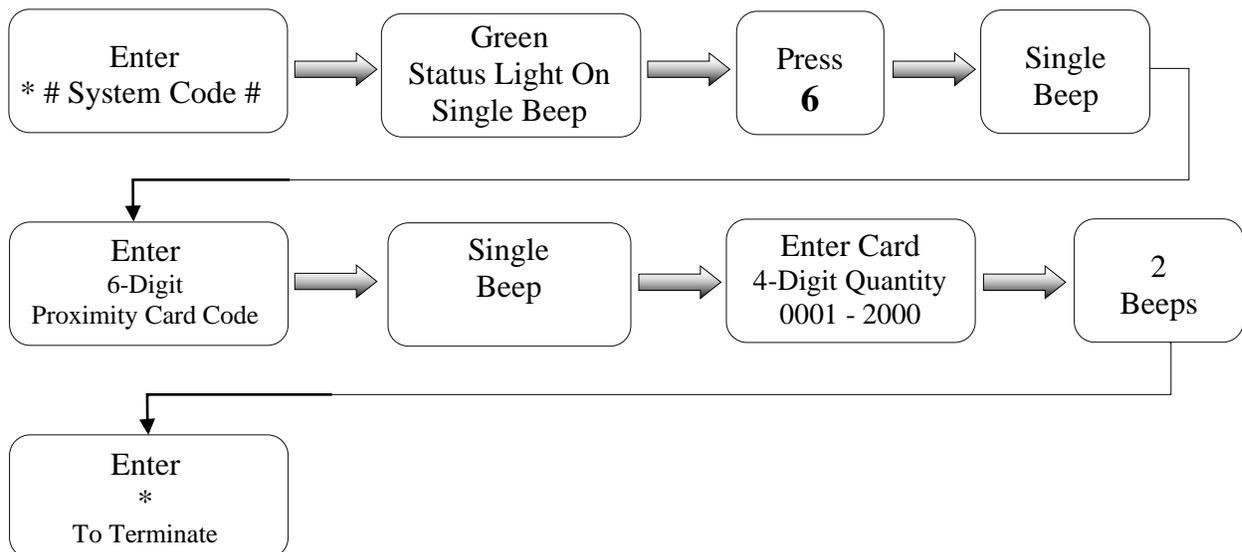
**ENTRY MODE 3:** Proximity Card plus 4-Digit Pass Code

(Present Proximity Card and enter 4-Digit Pass Code within 5 seconds for access)

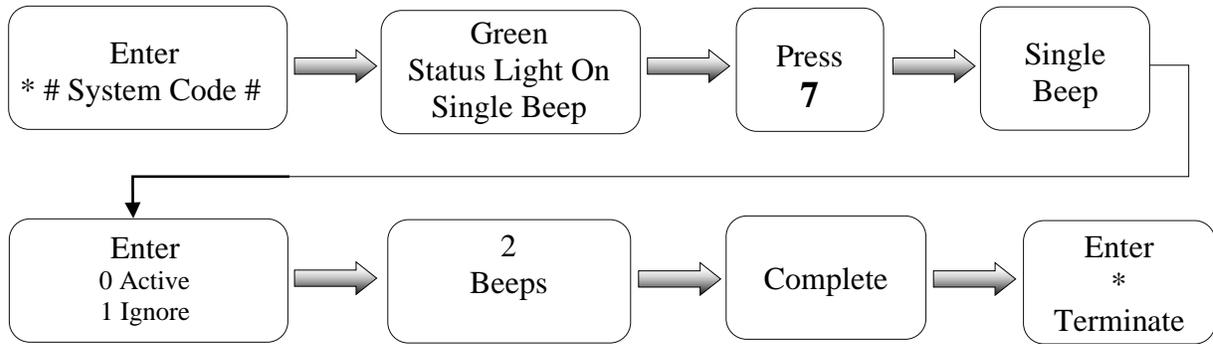
**ENTRY MODE 4:** Proximity Card or 4-Digit Pass Code

(Present Proximity Card or enter 4-Digit Pass Code for access)

## 6. Batch Registration (Adding Sequential Card Series)



## 7. Anti-Tamper Output

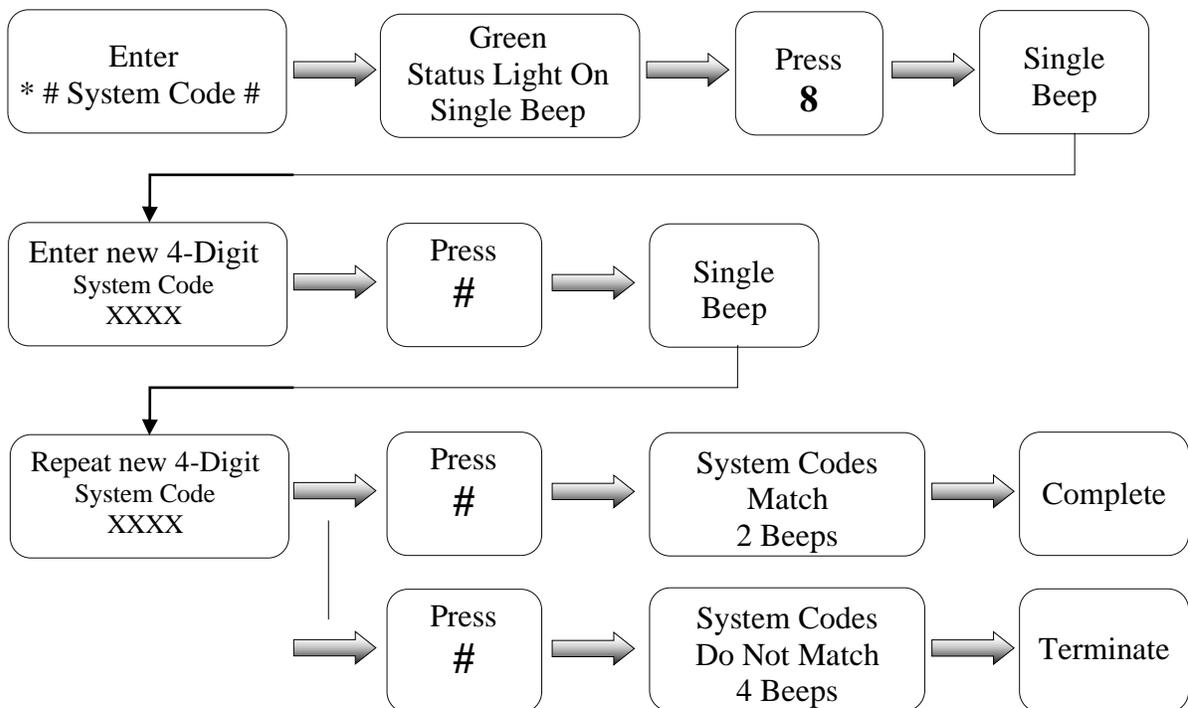


The system has an output dedicated to the detection of "Forced Entry" of the access door (Door Contacts) 8-Pin connector Blue and Green wires.

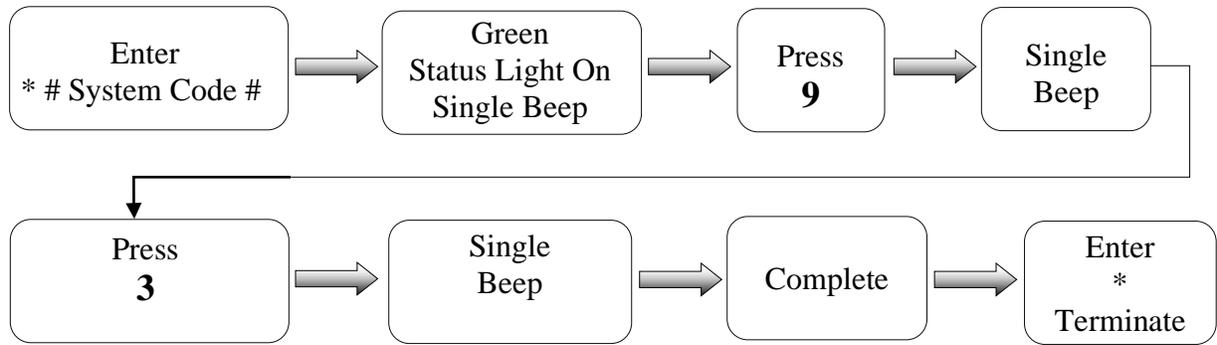
The system also has an output dedicated to the removal from the mounting plate (Tamper Switch). This function can be set to activate the output for forced entry or to ignore forced entry.

The Anti-Tamper switch will always activate the Anti-Tamper output. Enter "0" to activate "Forced Entry" detection. Enter "1" to ignore "Forced Entry" detection.

## 8. Change System Code

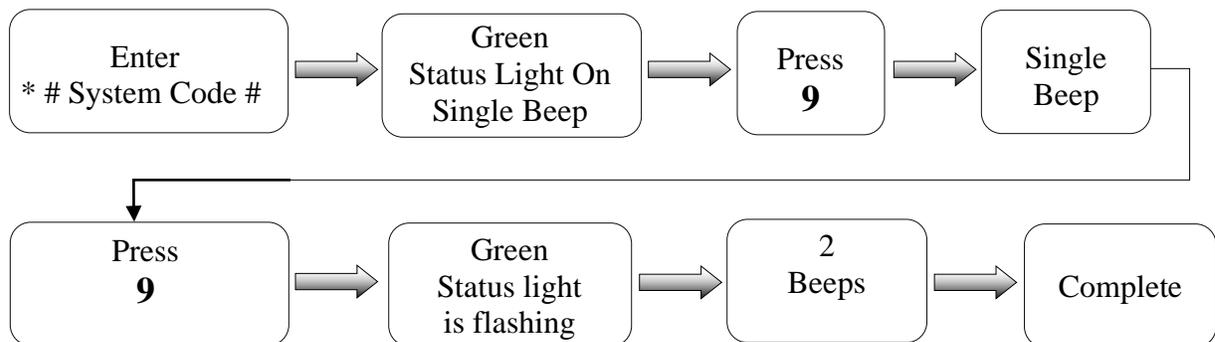


## 9. Delete User Pass Codes



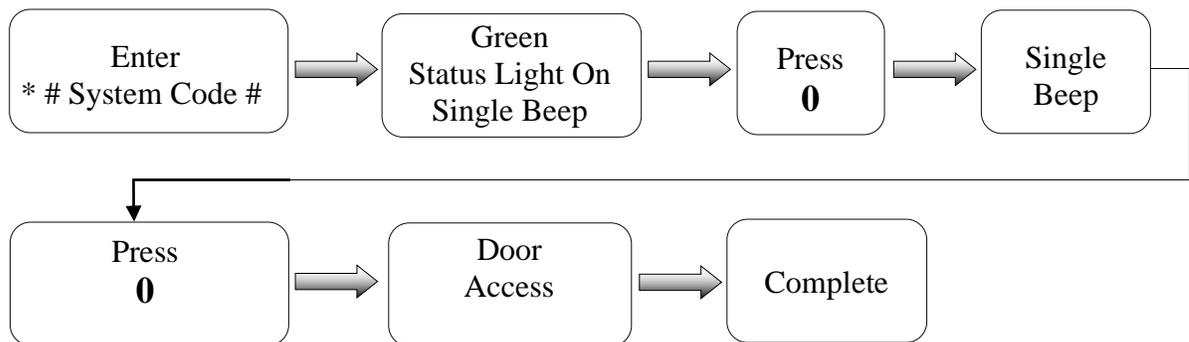
This function will delete **ALL** 8 User Pass Codes

## 10. Delete All Proximity Cards



This function will delete **All** Proximity Cards stored in the system. The Green Status light will flash up to 20 seconds while the function is executing

## 11. Door Access Using System Code

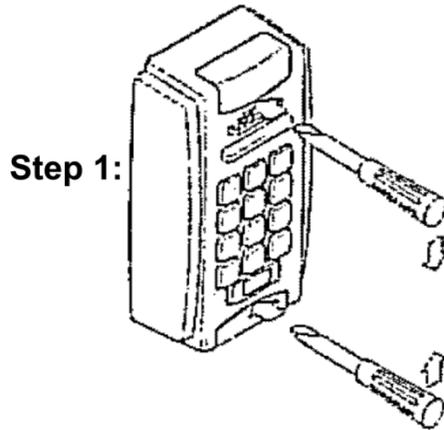


The factory default System Pass Code: **4567**

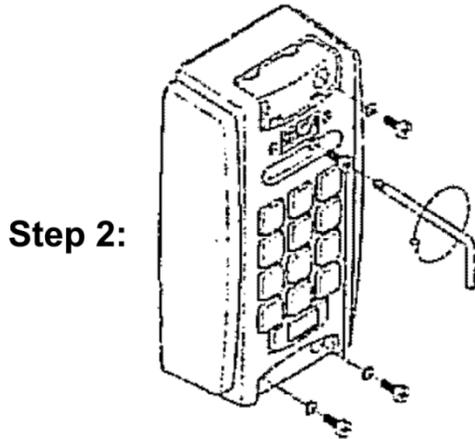
The new 4-Digit System Pass Code value must be entered twice.

## VII. MOUNTING INSTRUCTIONS

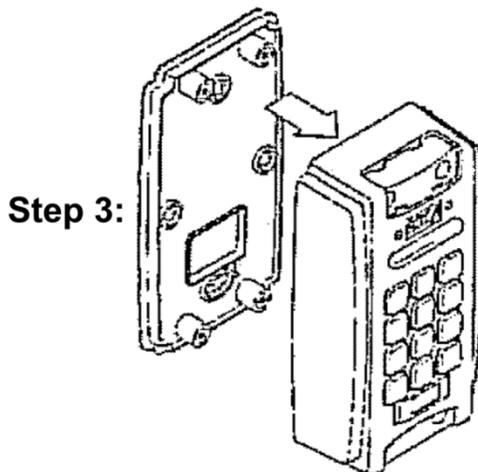
### Mounting Reader



Use screwdriver to open or dismantel the screw covers at the top and bottom of the reader

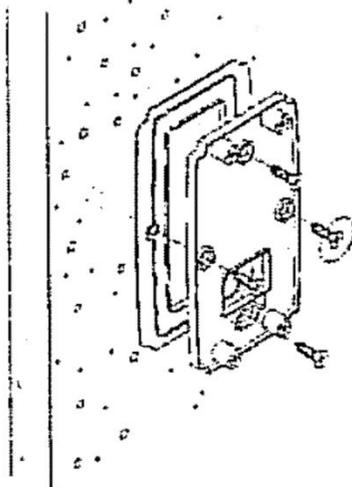


Use enclosed special L-shape tool to remove the tamper resistant screws (4) counter clockwise rotation. Please make sure all (4) O-rings are fitted on the screws when replacing.



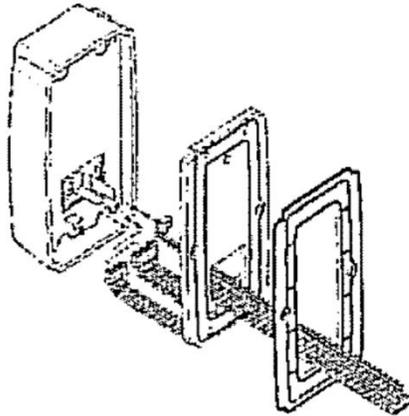
Seperate front cover from the base plate.

**Step: 4**



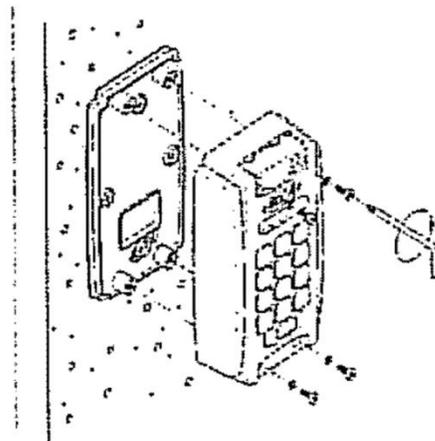
**Screw seal gasket pad with base plate tightly onto to the surface.**

**Step 5**



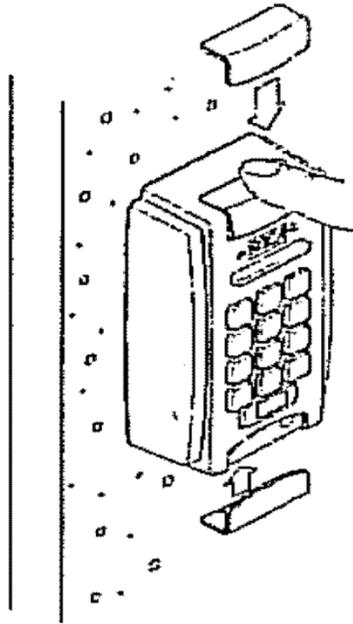
**Link connectors and run wires through the base and seal gasket to the reader**

**Step: 6**



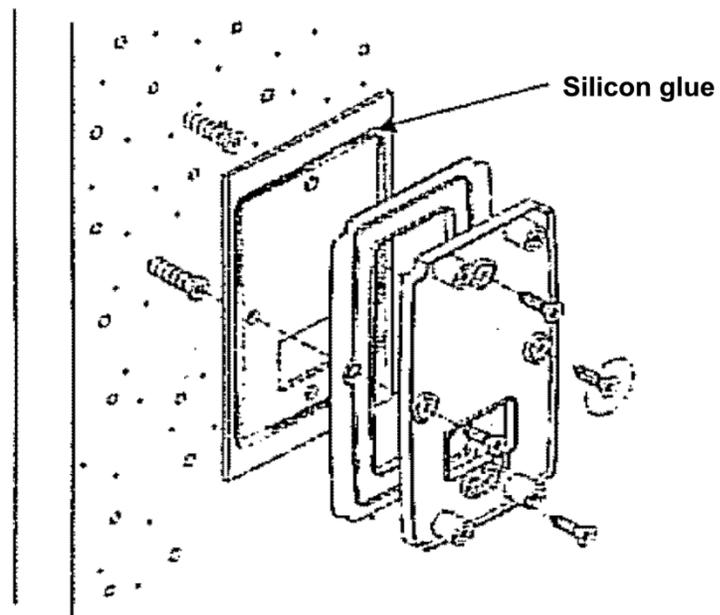
**Place front cover onto base and attach tightly with the (4) screws (make sure all O-rings are mounted on screws)**

Step: 7

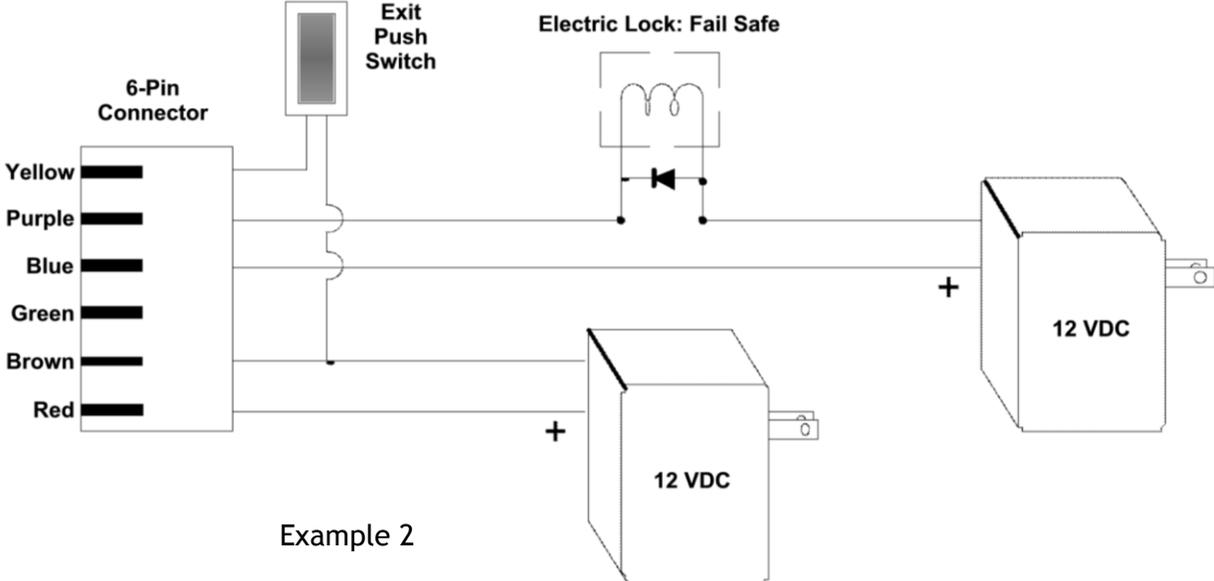
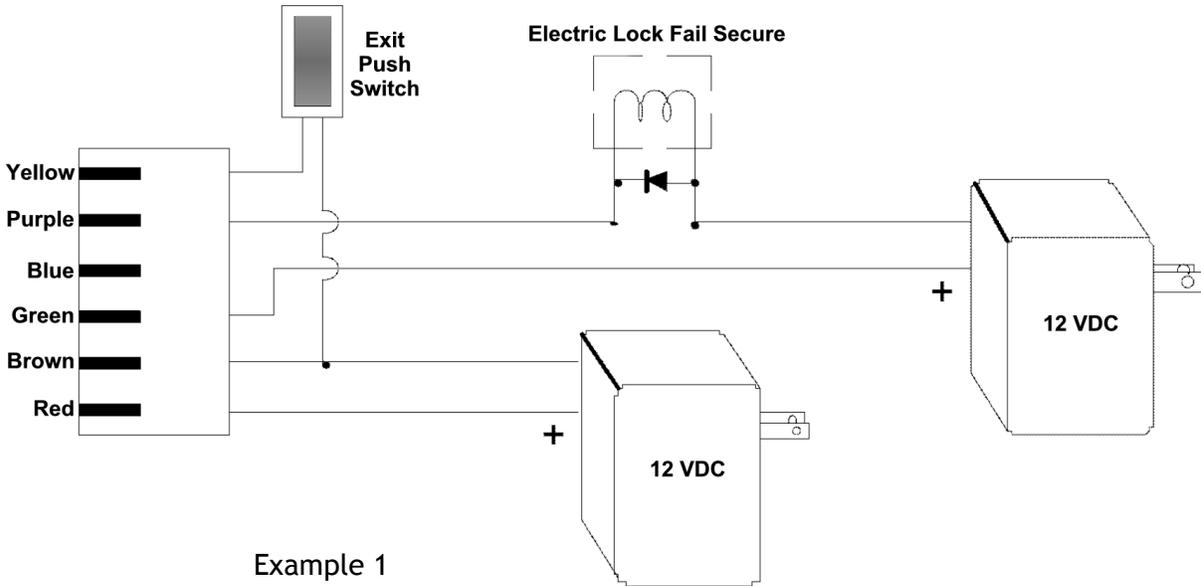


Press screw covers  
top and bottom into  
place

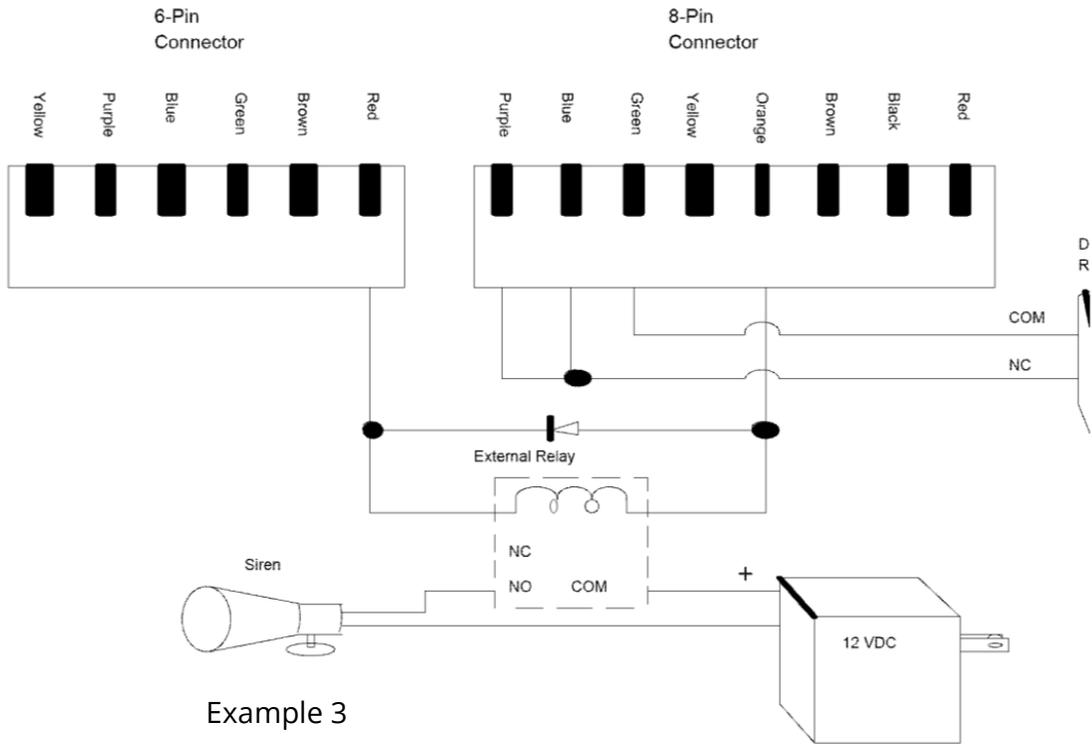
**Attention: When mounting onto rough surface use appropriate size flat acrylic or wooden piece mounted to surface with silicon glue to rough surface first. then mount base and gasket**



# VIII. SUGGESTED WIRING EXAMPLES

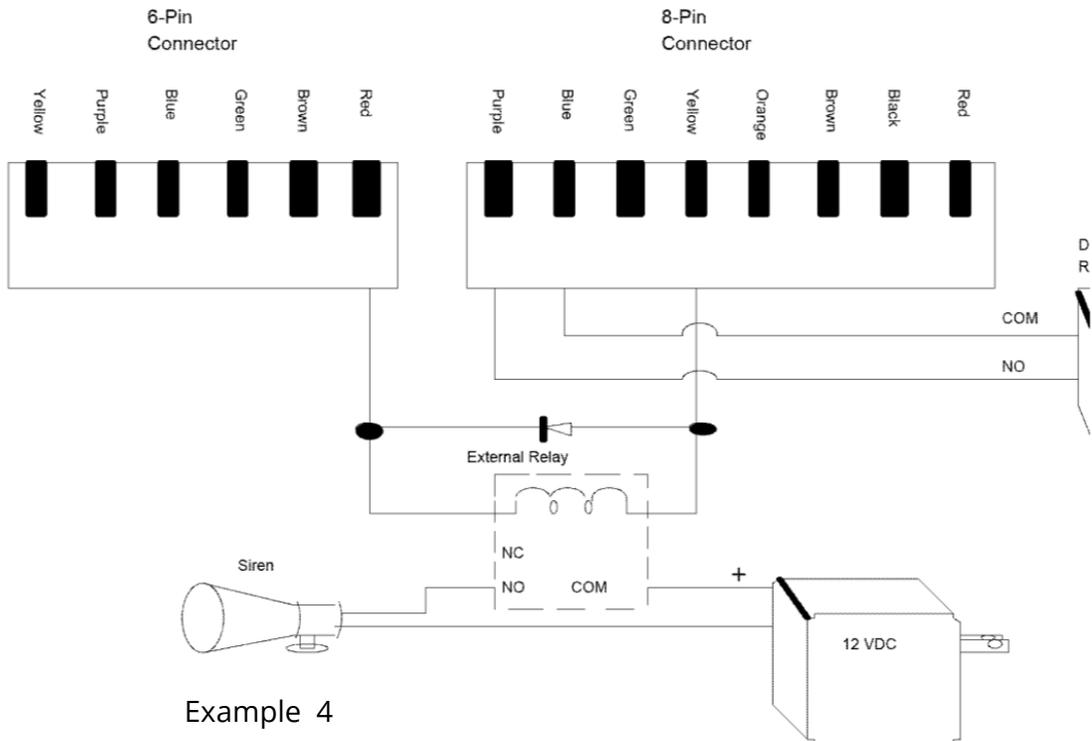


A. Installation of reed switch (normal close), external relay "Forced Entry" (anti-damage)



Example 3

B. Installation of reed switch (normal open), external relay (duress)



Example 4

## IX. Notes, Precautions and Accessories

### Notes:

- 1) The system provides two external relay connection points:
  - a. "Forced Entry" Anti-damage (Tamper switch and door sensor) alarm output connection point. (Orange wire 8 pin connector)
  - b. Duress alarm output connection point. (Yellow wire 8 pin connector)
- 2) If door sensors are connected, be sure to enable Function 7 (Anti-Tamper Output)
- 3) The door sensor (Anti-Tamper Output) will activate if the door is not closed within 30 seconds after a valid card or code access.
- 4) The "Duress" alarm may be activated by pressing the \* key before entering 4-Digit Pass Code
- 5) Alarms can be cleared by entering the Programming Mode, presenting a valid Access Card or entering a valid User Pass Code.

### Precautions:

1. Prior to installation, check voltage and polarity of the power supply to avoid damage to the Proximity Reader.
2. Do not share the power supply of the Proximity Reader with an electric lock.
3. Do not install the Proximity Reader on or near metal objects, this will reduce the effective read range for Access Card detection.
4. Do not attempt any repair or modification of the Proximity Reader.

### Accessories:



PRX320-PAD  
White polypropylene mounting plate



CARX-20  
Reinforced access card

# **EMX** INDUSTRIES, INC.

4564 Johnston Parkway  
Cleveland, Ohio 44128  
United States of America  
[www.emxinc.com](http://www.emxinc.com)

Technical Support: (216) 518-9889  
[technical@emxinc.com](mailto:technical@emxinc.com)

Sales: (216) 518-9888  
Fax: (216) 518-9884  
[salesupport@emxinc.com](mailto:salesupport@emxinc.com)

