ENTRYPROX

USER MANUAL

4045-905, Rev. C.4

September 2016
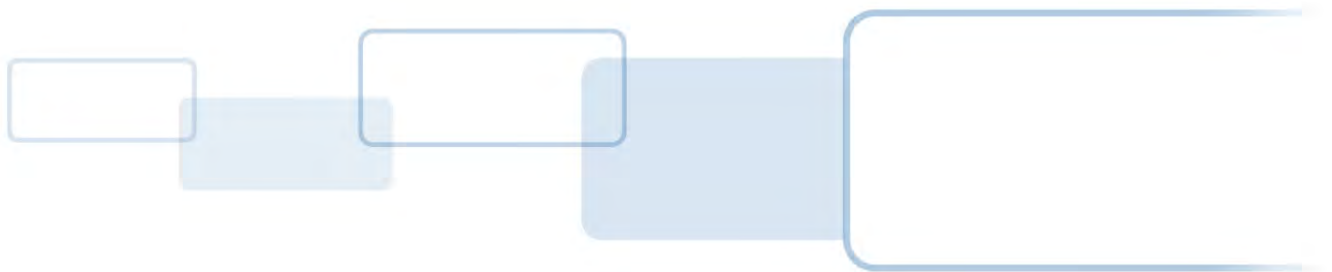
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Revision History

Date	Description	Version
September 2016	Removed references to PDAs and DCD/DTDs, which are no longer supported.	C.4
March 2014	Added French translation of warning statement.	C.3
February 2007	Reformatted, added correct IP statement	C.2
August 2006	Error correction in EntryProx User Guide 4045-905 C.0 - page 33, add ".com" to hidcorp URL	C.1
May 2006	Added PDA support for logging data.	C.0

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Contents

1   Introduction

This User Manual provides information and instructions for installing, wiring, and programming the EntryProx™ unit.

IMPORTANT: READ BEFORE PROGRAMMING THE ENTRYPROX UNIT

- **Keep a User List** – When programming cards and PIN codes into your EntryProx, record each User Location, Card Number, PIN Code and the Name of the User. Use the blank form in *Appendix: A: Users Chart for Record Keeping* as a photocopy master.

- **Change the Master Code** – Change the Master Code from the factory default (User Location 1, PIN Code: 1234) to a new code (1 – 6 digits). Programming commands will not work until the default Master Code is changed. Keep a record of the new code in a safe place.

- **Program the New Master Code into Location 0** – Once this is done, the default Master Code in User Location 1 can now be reprogrammed for normal access control use.
  Note: The Rev C EntryProx no longer reserves User Location 1 for the Master Code.

- **If the Master Code is Lost:**

    End Users: Contact your dealer –A service call is required.

    Dealers: Call HID Global Technical Support.

- **Consider a Secure Installation** - For exterior doors or other high-risk locations, a secure installation is recommended.

2   Product Overview

The EntryProx unit provides card and keypad access control for a single entrance. The unit can be installed in a standard one-stage configuration or a secure two-stage (remote) configuration. (Secure installation will be card-only.)

To gain access to the controlled door, the user presents their card to the reader and/or enters their PIN code into the keypad. The unit searches its memory for that card or PIN code. If the unit finds the card or PIN code, it unlocks the door or performs some other action that has been programmed for that user.

The EntryProx unit is compatible with all HID proximity access cards or key tags encoded with up to 37 bits of data. All programming options are performed using the controller keypad. Manual or batch card/tag programming via the keypad can be completed for 26-bit format only. A batch of cards or tags encoded in any format can be sequentially presented to the reader by entering a single keypad command.

2.1   Unit Capacity

The EntryProx unit can accommodate up to 2,000 users. Each user is assigned to a User Location (numbered 1 – 2000), which can have a card/key tag, a PIN code, or both a card/key tag and a PIN code. User Location 0 is reserved for the Master Code (used for programming, only).

2.2   Transactions

A maximum of 1,000 transactions can be stored in the EntryProx unit. Each transaction includes the time, the date, the User Location and the event. When maximum capacity is reached, the oldest transactions are overwritten.

2.3   Pre-Programming the Unit Before Installation

Dealers and installers are advised to pre-program the unit at their offices before installing it at the site. Simply connect it to a 12VDC source, follow configuration and card enrollment instructions at the end of this guide, and disconnect the unit. Programming will be retained in memory. You will spend less time at the site, and by being familiar with programming, will be able to train the end user more effectively.

2.4 Specifications

Category	Requirement
Environmental	
Operating Temperature	–31˚F to 150˚F (-35˚C to 66˚C) @ 30 VDC
Operating Humidity	5 to 95% relative humidity, non-condensing
Electrical	
Power Supply/Current Requirements	10 - 15V DC, linear, filtered and regulated power supply recommended 150 mA for the EntryProx unit only. Additional capacity or separate supply required for locking device or peripherals.
Mechanical	
Height	5.25 in (13.3 cm)
Width	2.75 in (7 cm)
Depth	1.625 in (4.1 cm)
Relay Outputs	
Main Relay, Aux Relay	Form C (switches up to 1A inductive load, 2A resistive @ 30VDC)
Sounder	4000 Hz, defeatable
LEDs	Bi-Color (red/green) Amber Infrared

2.5 Default Settings

The EntryProx unit is shipped with the following default settings.

Parameter	Default Setting
Master Code (User Location 1) Code must be changed before programming the unit.	1234*
Main Relay energizes for	5 seconds
Audible Keypress Feedback	ON
Local Propped Door Sounder activates after	30 seconds
Local Forced Door Sounder activates immediately for	10 seconds
Data Output Port	Infrared (IR) port

3 Installation

You can install the EntryProx unit by using a standard installation method or a secure installation method. Both installation methods require that you mount the EntryProx unit to a wall or glass surface.

3.1 Assembly Parts

Before you install the EntryProx, be sure that you have the correct factory and installer supplied parts listed and illustrated below.

A. Controller Keypad Unit	I. Silicone Rubber Cushion
B. Controller Keypad Backplate	J. Self-Adhering Pads
C. Cable Assemblies	K. 2-pin Jumper[1]
D. Antenna Backplate	L. Filler Piece
E. Antenna Housing	M. Lithium "Coin Cell" Battery[2, 3]
F. Blank Label	N. Cover screws – hex and tamper[2]
G. Mounting Screws	O. Hex wrench[2]
H. Press to Exit Label	

[1] Pre-installed on main board connector P2, pins 5 & 6.
[2] Not shown in the following figure.
[3] **Caution: Replace Battery with Panasonic BR1225 only. Use of another battery may present a risk of fire or explosion. Battery may explode if mistreated. DO NOT recharge, disassemble or dispose of battery in fire.**

Factory Supplied Parts
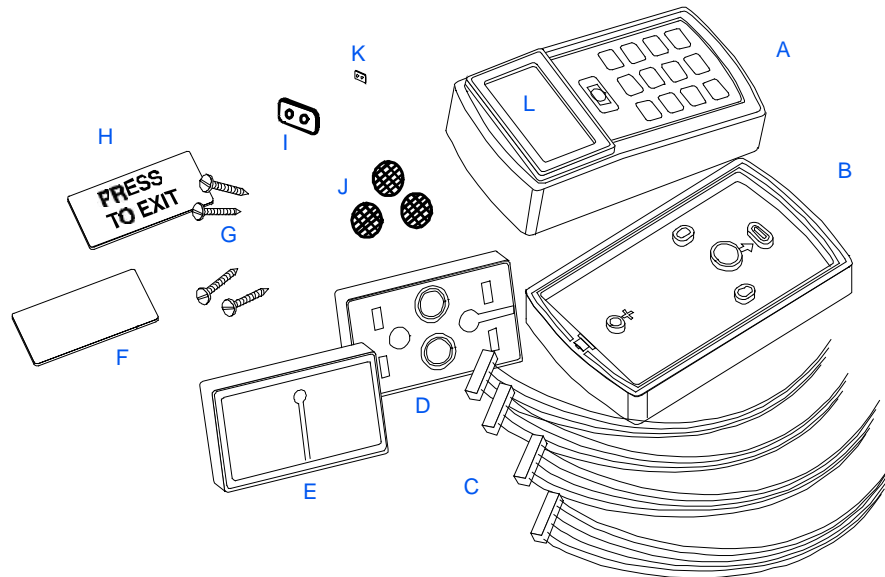
3.2 Installed Supplied Parts List

- Appropriate DC power supply (10-15VDC, linear type)
- Appropriate separate power supply for door locking unit
- Appropriate electrical tools
- Recommended remote antenna cable ALPHA 1294C (22AWG)
- Wiegand interface cable ALPHA 1295C (22AWG) (only if using a separate Wiegand access control panel)
- Power supply cable (18AWG - 22AWG)
- Door locking unit cable (18AWG - 22AWG)
- Door monitor cable (18AWG - 22AWG)
- Request to Exit cable (ALPHA 2421C 18AWG or ALPHA 1292C 22AWG) (only if using remote switch)
- Optional tamper screw bit (only if tamper screw is used)
- Ademco® 945T or PR-20451 magnet and reed switch or equivalent (for UL 294 compliance)

CAUTION: Replace Battery with Panasonic BR1225 only. Use of another battery may present a risk of fire or explosion. Battery may explode if mistreated. Do not recharge, disassemble or dispose of battery in fire.

Attention: Remplacer la batterie avec Panasonic BR1225 seulement. Utilisation d'une autre batterie peut présenter un risque d'incendie ou d'explosion. La pile peut exploser si elle est mal. Ne pas recharger, démonter ou jeter les piles dans le feu.

4 Mounting

If you mount the EntryProx unit to a wall, you can install an electrical junction box to hold the unit and the wires in place. The mounting hole cutouts on the backplate line up with the screw holes on a standard junction box.

If you mount the EntryProx unit to a glass surface, DO NOT remove the wire exits on the backplate. Remove the appropriate wire exit cutouts located on each side of the controller keypad case.

CAUTION: If your installation must comply with the UL 294 Standard for Access Control, see *Section 4.3: Controlled Keypad Wiring.*

4.1 Precautions for Outdoor Installations

Water damage is a key cause of unit malfunction, causing corrosion or short circuits. When mounting the unit in an area that will be exposed to rain or moisture, take the following precautionary measures:

1. Use silicone to seal wire runs and mounting holes (antenna is already sealed).
2. DO NOT seal the cover and base together. Water that enters the case must be allowed to run out at the bottom.
3. Bend the wires to form a drip loop before they enter the case. This will prevent water from following the wires into the case.

4.2 Beginning EntryProx Installation

To mount the EntryProx unit, perform these instructions, referring to the following figures:

1. Remove the hex screw located at the bottom of the EntryProx unit.
2. Disconnect the backplate of the EntryProx unit from the controller keypad.
3. Remove the wire exits and mounting hole cutouts from the backplate.
4. Pull the wires through the backplate.
5. Attach the backplate to a wall or glass surface using the mounting screws or the self-adhesive fasteners.

Removing Wiring Exits and Mounting Holes
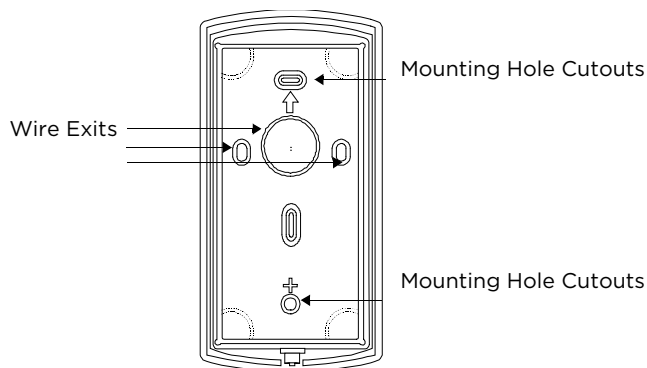
Pulling Wires through the Backplate
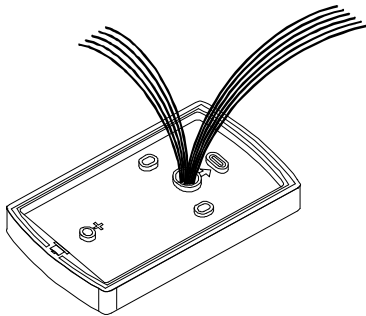
4.3 Controller Keypad Wiring – Standard Installation

In a standard installation, the antenna housing remains installed in the controller keypad, and the complete unit is installed outside of the secured area. This is appropriate for interior doors or "low-risk" exterior installations.

CAUTION: For compliance with the UL294 Standard for access control, additional installation requirements must be met. See *Section 4.7: Installation and Compliance for UL 294* .

To wire the EntryProx unit for a standard installation, refer to perform these steps, referring to the following figure for clarification.

1. Touch a grounded object BEFORE touching the main circuit board to guard against possible static discharges.
2. Remove the main circuit board by pushing outward on the two spring tabs in the direction shown in the following figure.
3. Lift the main circuit board.
4. Make the wiring connections for the door locking devices, the power supply, and the alarm inputs and outputs. See *Section 5: Wiring* for appropriate wiring diagrams.
5. Reattach the main circuit board to the controller keypad unit.
6. Attach the controller keypad unit to the mounted backplate and secure the EntryProx unit with a hex screw or tamper screw.

CAUTION: A ribbon cable holds the main circuit board to the controller keypad board. DO NOT CUT OR REMOVE this cable from its connector.

Removing the Circuit Board
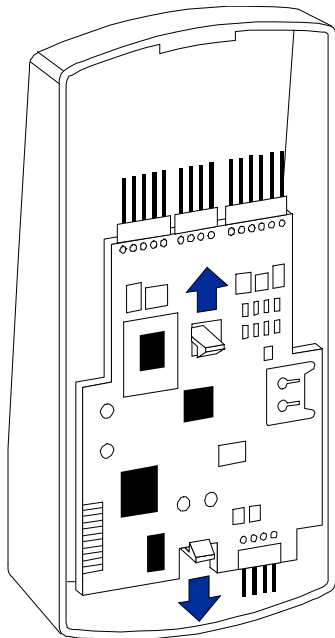
4.4 Controller Keypad Wiring – Secure Installation

In a secure installation, the waterproof antenna housing is removed from the controller keypad and mounted outside of a secured area. The control unit is installed inside the secured area. The blank filler piece is then inserted into the controller keypad in its place.

Note: This is appropriate for exterior doors or medium-to-high risk locations.

To wire the EntryProx unit for a secure installation, refer to the following two figures as applicable and perform these instructions.

1. Touch a grounded object before touching the main circuit board to guard against possible static discharges.
2. Remove the main circuit board by pushing outward on the two spring tabs in the direction shown in the figure in *Section 4.3: Controller Keypad Wiring.*
3. Lift the main circuit board.
4. Unplug the four-pin cable assembly from connector P4 on the main circuit board.
5. Release the antenna housing from the controller keypad by pressing inward on the four securing tabs.

Removing the P4 Connector

P4 Connector Cable Assembly
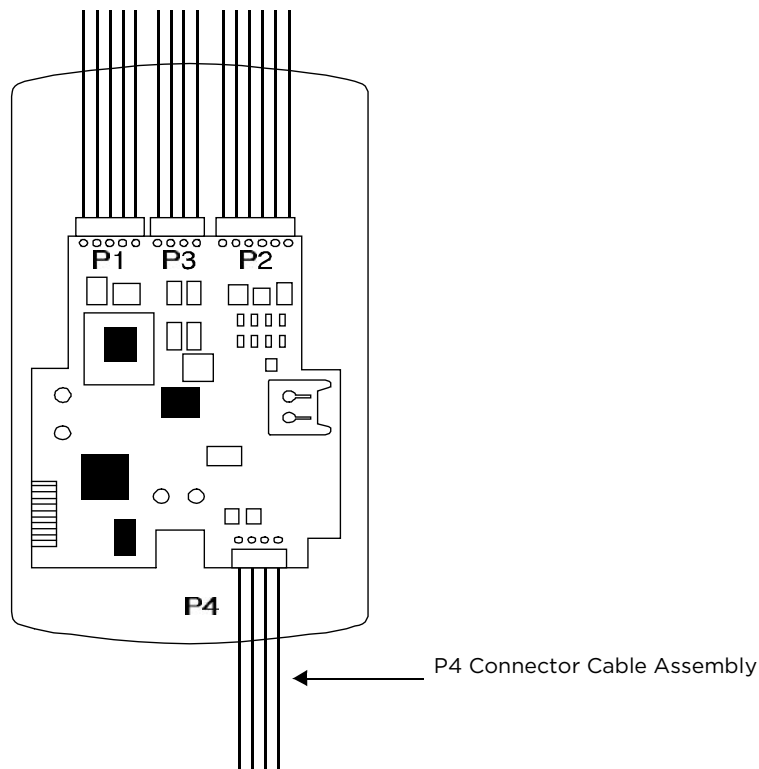
6. Remove the antenna housing from the controller keypad by pushing forward as shown in the following figure.

Removing the Antenna Housing
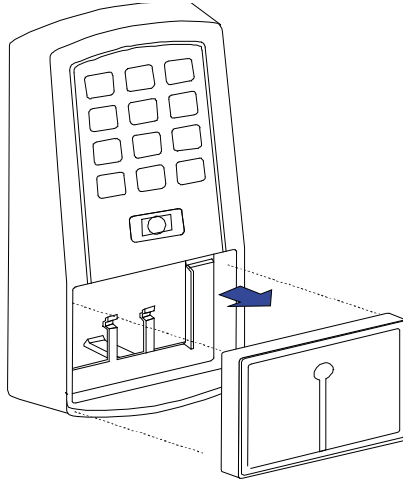
7. Insert the extra 10-inch antenna cable assembly into connector P4.

8. Splice in additional antenna cable Alpha 1174C (22AWG) up to a maximum of 10 feet.

    Note: The Alpha 1174C antenna cable is not supplied with the EntryProx unit.

9. Make the wiring connections for the Request to Exit switch, the door locking devices, the power supply, and the alarm inputs and outputs. See *Section 5: Wiring* for wiring diagrams.

10. Reattach the main circuit board to the controller keypad unit.

11. Insert the blank filler piece into the controller keypad unit.

12. Attach the controller keypad unit to the mounted backplate and secure the EntryProx unit with a hex screw or tamper screw.

13. Run the additional antenna cable to the antenna housing location.

14. Mount and wire the antenna housing

4.5 Antenna Housing – Secure Installation

Mount and wire the antenna housing no more than 10 feet away from the controller keypad unit.

To mount and wire the antenna housing, refer to the following two figures as applicable and follow these instructions.

1. Pull the additional antenna cable through the antenna housing's backplate cable holes.

Mounting the Antenna Backplate

Cable Holes

Moisture Release Holes
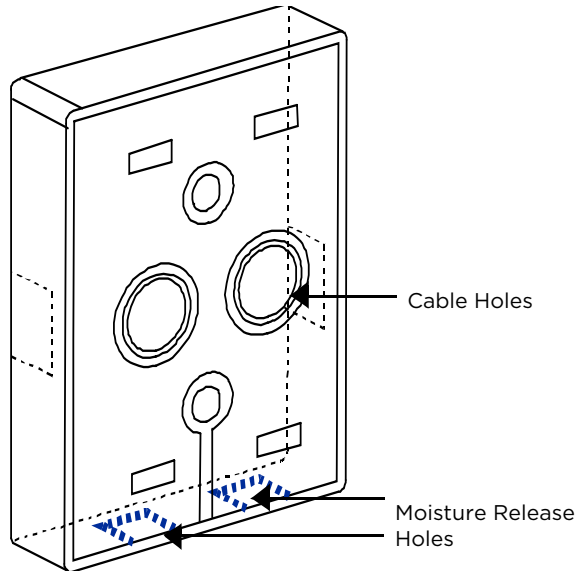
2. Position and secure the antenna backplate to the mounting surface so that the two moisture release holes are on the bottom.
3. Cut the plastic connector off the antenna cable assembly.
4. Splice in the additional antenna cable. Be careful to match the wire colors to the proper pin connectors on the 10-inch antenna cable assembly.
5. Attach the antenna housing to the backplate by inserting the four securing tabs into the backplate.
6. Seal the wire holes with silicone.

4.6 Standard Filler or Secure Filler as Request to Exit Label Installation

The filler piece replaces the antenna housing on the controller keypad when you use the high security installation.

4.6.1 Standard Installation

To use the filler piece:

1. Insert the filler piece into the opening on the controller keypad.
2. Apply the blank label.

Attaching the Antenna Housing
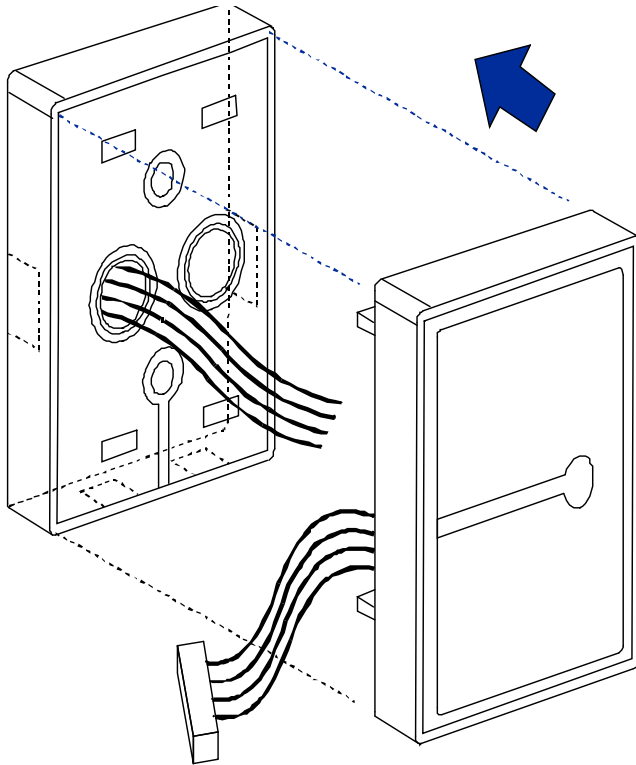
4.6.2 Secure Installation

To use the filler piece as a Request to Exit switch:

1. Remove the two plastic side tabs on the filler piece.
2. Insert the silicone rubber cushion over the two alignment pins on the switch activator.
3. Apply the **Press to Exit** label to the filler piece.
4. Insert the filler piece into the opening on the controller keypad.
5. Refer to the following figure to make the wiring connections to the cable assembly if you are using a door contact.
6. Set the internal **Request to Exit** button **ON**, using programming Command 30, option 7. See *Section 10: Programming Commands*.

Filler Piece and Request to Exit Switch
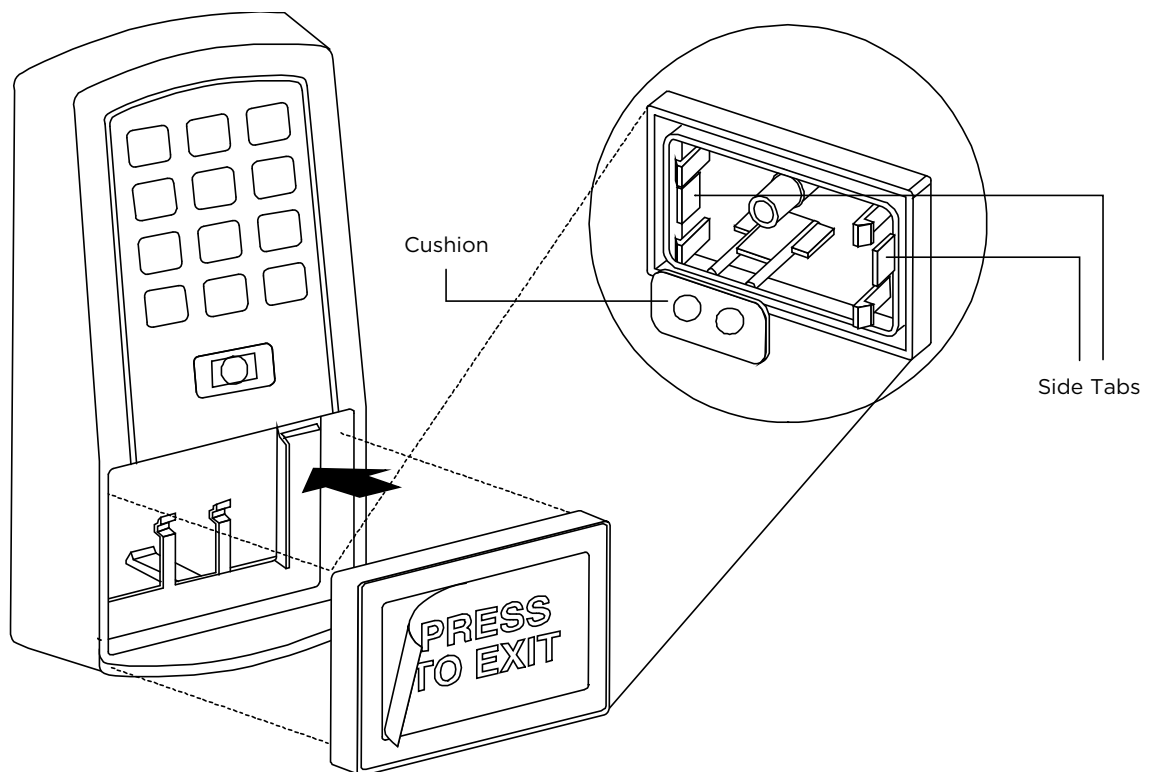
4.7 Installation and Compliance for UL 294

The EntryProx Model 4045CGNU0 complies with the UL294 Standard for access control units in a standard, wall-mount installation, when installed to the following specifications:

- Electric locking mechanisms may only be connected to the NO contacts of the Main Relay. Locking devices requiring an NC connection may only be used in conjunction with an interposing relay mounted inside the secure area and connected to the NO contacts of the Main Relay.

- The recommended or equivalent **shielded** wiring must be used for the following applications:

Application	Cable
Request to Exit input cable	Alpha 1292C (22AWG) or 2421C (18AWG)
Wiegand data output cable	Alpha 1295C (22AWG)
Antenna cable extension	Alpha 1294C (22AWG)

- The cable shield drain wires must be grounded at the reader end by connection to P1, Pin 4 (DC Power configurations recommended below) by connection to P1, Pin 4 (DC Power Ground) using appropriate wire nuts or crimp fittings.

- Tamper Switch must be installed in one of the configurations recommended below, and connected to an intrusion alarm system. See the figure in *Section 4.9: Wall Mounting* for switch and magnet locations)

4.8 Metal or Plastic Single Gang J-Box

1. Use an Ademco 945T magnet and reed switch (or equivalent) with foam-backed adhesive tape.

2. Clip the screw mounting tabs from both the magnet and reed switch using pliers or a wire cutter.

3. Remove the backing sheet from the tape on the magnet and stick the magnet to the plastic spacer, which is factory-installed to the back of the Keypad board in location A, as shown in the figure in *Section 4.9: Wall Mounting.*

4. Stick the reed switch on the inside of the long side of the J-box in the upper right-hand corner, using the adhesive tape. The switch should be flush with the edge of the J-box.

4.9 Wall Mounting

1. Use an Ademco PR-20451 magnet and reed switch (or equivalent) with foam-backed adhesive tape.
2. Remove the backing sheet from the tape on the magnet and stick the tape to the **plastic spacer,** which is factory-installed to the back of the Keypad board at location B as shown in the figure in *Section 4.9: Wall Mounting*.
3. Drill a 3/8 inch hole in the wall behind the magnet location, feed the switch wire through the wall and press the switch into place.

Tamper Switch Installation (shown from the back with the base removed)

Magnet B

Magnet A

Keypad Electronics Board

Batt.

Main Electronics Board
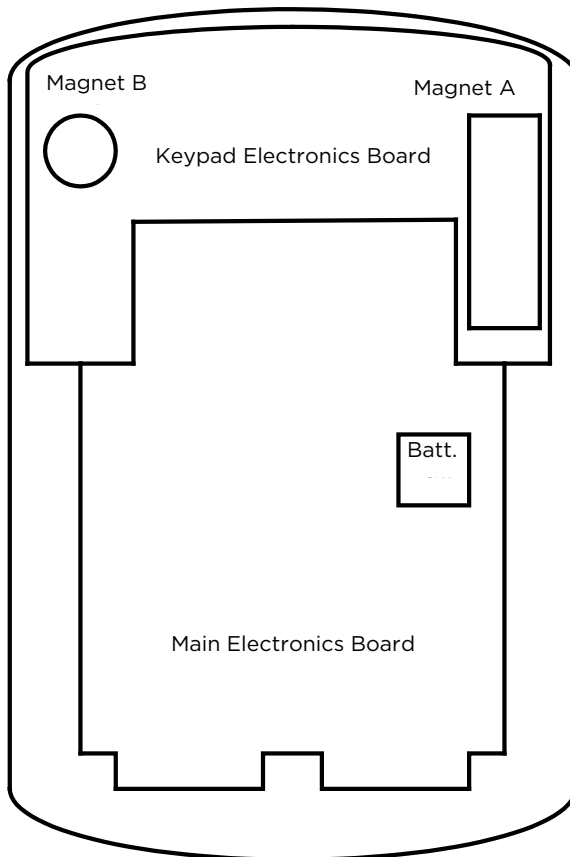
5 Wiring

The following figure illustrates the location and description of the four pin connectors on the main circuit board and its use. Connector P5 is not used.

Pin Locator Diagram
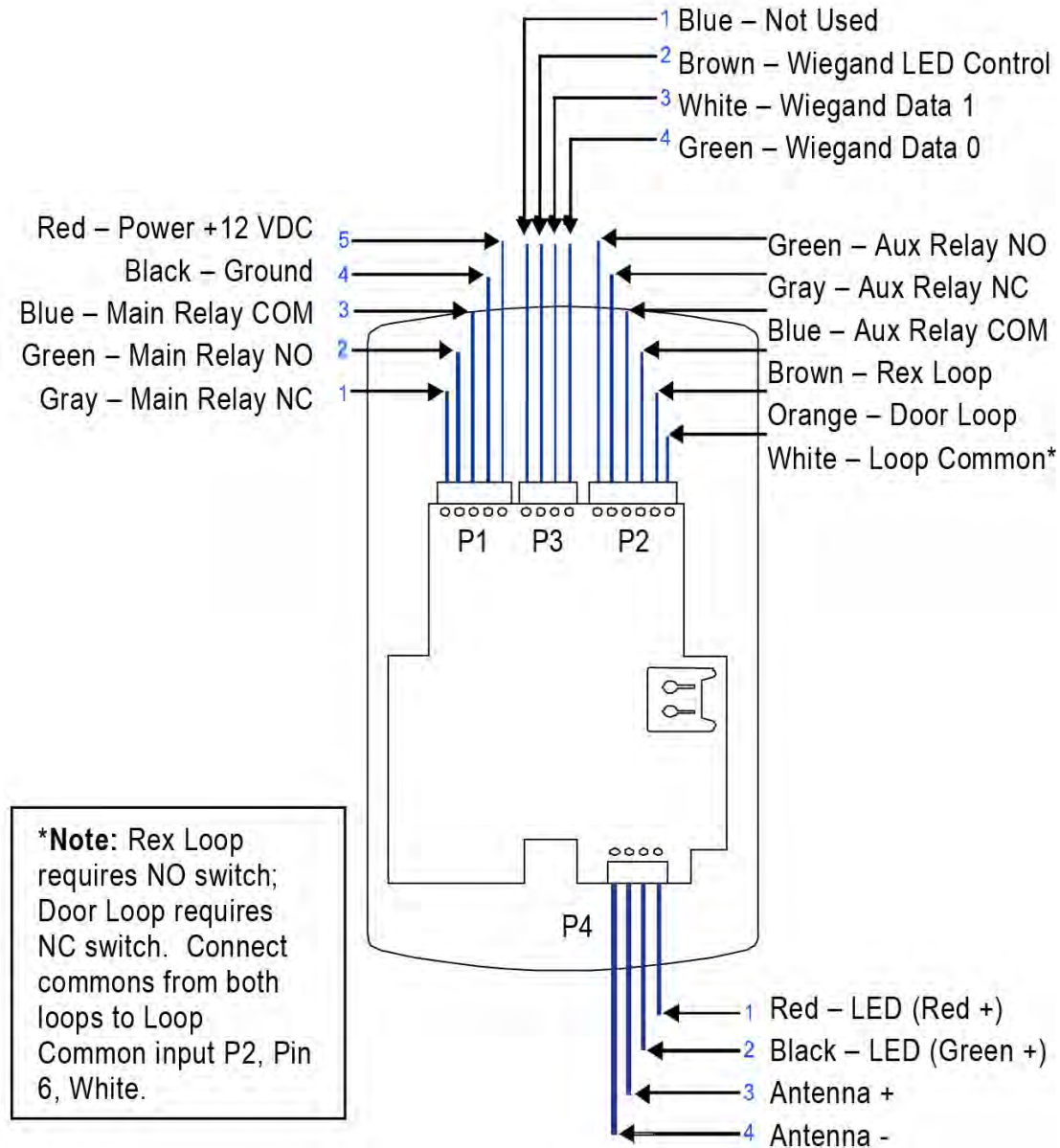
The main relay for the door-locking device is wired to connector P1 on the EntryProx main circuit board.

5.1 Gate Actuator

You can make the wire connections for a gate actuator by connecting the Blue (C) wire and the Green (N/O) wire directly to the input.

Note: If you connect a gate actuator, DO NOT connect a power supply to the relay.

5.2   Auxiliary Relay

The EntryProx unit has an auxiliary relay feature that allows for customized alarm programming. Pins 1, 2, and 3 on the P2 connector can be wired for one of the following alarm outputs:

- Alarm shunt
- Forced or propped door

The alarm shunt operation allows you to use the auxiliary relay to bypass a door contact that is monitored by a separate alarm system. If the entry or exit is controlled by the EntryProx unit, an intrusion alarm will not be generated if the door is opened using an access card or PIN number, or by pressing the REX button.

The forced or propped door alarm allows you to use the auxiliary relay to provide a local warning, such as an audible or visual indicator if:

- A door is opened without using an access card or PIN number at the EntryProx unit.
- A door is legitimately opened but is held open too long.

Note: The auxiliary relay audible and visual indicators and the door open times can be programmed. See *Section 10: Programming Commands* for more information.

5.3   Request to Exit Input

When the EntryProx Request to Exit (REX) input receives a momentary switch closure, it engages the main relay for the programmed access time. It can be connected to a wall-mounted exit button, to a push button under a reception desk, or to the relay output of a passive infrared motion detector mounted above the door on the secure side. The Request to Exit input activates the alarm shunt to prevent false alarms when personnel use the controlled door to exit the secured area. The Transaction Log records all Request to Exit usages for monitoring purposes.

Locate connector P2 on the main circuit board and remove the 2-pin jumper installed on pins 5 and 6.

Notes:

- If you do not use a door contact, you need to twist the white and orange wires together or the REX input will not function properly.
- The door contact must be closed for the Request to Exit feature to work properly

6 Programming

IMPORTANT: READ BEFORE PROGRAMMING THE ENTRYPROX UNIT

- **Keep a User List** - When programming cards and PIN codes into your EntryProx, record each User Location, Card Number, PIN Code and the Name of the User. Use the blank form in *Appendix: A: Users Chart for Record Keeping* as a photocopy master.

- **Program the New Master Code into Location 0** - Once this is done, the default Master Code in User Location 1 can be reprogrammed for normal access control use. Write the new code down and keep it in a safe place.
  Note: Changing the Master Code is required for Rev C EntryProx before any programming can be done. In addition, the User Location 1 is no longer reserved for the Master Code and can be reprogrammed for any User Type.

- **If the Master Code Is Lost:**

  End Users: Contact your dealer – A service call is required.

  Dealers: Call HID Global Technical Support. The proper hex key or security tool will be need to be used at the customer site.

- **Consider a Secure Installation** - For exterior doors or other high-risk locations, a secure installation is recommended.

6.1 Programming Command Sequences

Command sequences are simply a series of keypad entries to add cards and PINs or change operating characteristics of the EntryProx unit. There are three basic steps to programming EntryProx, using the Keypad on the control unit:

1. Place the unit in programming mode:

   Press **99 # Master Code** *

2. Enter a Command Sequence:

   Press a 2-digit command number to enter cards/PINs or specify parameters by pressing keys in various sequences

3. Exit programming mode:

   Press ***** to exit

6.2 LED Indication during Program Mode

A slow blinking yellow LED indicates that the unit is in program mode.

When the yellow LED stops blinking and is OFF completely, the unit is no longer in program mode.

A steady yellow LED indicates an error condition where:

1. You are trying to enter a card or PIN which is already stored in another User Location
2. You have pressed the wrong key in a command sequence

   Press * to clear the error condition, then enter a new code or PIN, or re-enter the command sequence as required.

   Note: If the unit does not go into program mode, contact your dealer or HID Technical Support.

6.3 Changing the Master Code

The EntryProx cannot be programmed before you change the master code. This feature prevents users from leaving the default code in the unit; thereby preventing unauthorized programming and tampering. The steps are:

1. Enter programming mode using the default master code in User Location 1:

   Press: **99 # 1234 ***

2. Enter a new master code into User Location 0:

   Press: **50 # 1 # 0000 # new master code * new master code ***
   Note: Code can be 1 – 6 digits. This PIN is mirrored to User Location 1.

3. Enter a new code into User Location 1. See *Section 7: Card/PIN Programming Sequences*.

4. Press * to exit program mode.

You can now program any user type into User Location 1, or you can simply delete it. User Location 0 is not an access code – it is only used to enter programming mode. Although it is not recommended, you can also program the same PIN used in User Location 0 as an access code in another location – it is the only code not checked for duplication.

It is also possible to change the master code and leave the master code in user location 1, however, this is not recommended, because the master code can be accidentally overwritten.

6.4 Preparing to Program Card

Before programming cards, determine the answers to the following questions:

Question: How many cards do I have to enroll?

Answer: If you have more than 50-75, you may want to batch enroll them. If you have fewer, you may want to program one at a time.

Question: How are the cards encoded: What is the bit format, ID numbers and Facility Code?

Answer: If you have sequentially numbered cards with 26-bit format and the same Facility Code, you can batch-enroll them from the keypad. Otherwise you must program them individually or batch-enroll by sequentially placing the cards in front of the reader.

Note: If you add new 26-bit cards manually (via the keypad), the Facility Code must be entered into the unit first. For the programming sequence used to enter the 3-digit Facility Code. See *Section 10: Programming Commands*, item 32.

6.5 PIN Code/Card Programming Basics

PIN codes and card numbers can be programmed manually via the keypad. Cards can also be programmed by presentation to the reader at the correct point in the command sequence.

When adding or modifying PIN codes or cards, the user enters a two-digit command, then specifies three or four data values:

- User type
- Location
- Keypad-PIN and/or card

6.6 User Locations

These are the locations in the unit's memory where Card and/or PIN User data is stored. EntryProx User Locations are numbered 1 – 2000. User Location 0 is reserved for the Master Code, used for programming – **Cards or PINs for normal access cannot be entered into User Location 0.**

6.7 User Types

User Types determine what happens when a user presents their card/PIN to the reader. A User Location can be programmed as one of four specific user types:

Toggle latch strike (0) For this user-type, when the Card is presented (or PIN is entered) the door opens for an indefinite period, until the card / code is reentered or another toggle code is entered (this is useful for deliveries, for example).

Normal access (1) This is the default user type, when the Card is presented (or PIN is entered) the door opens for the duration of the Main Relay time.

Download Log (2) Obsolete. No longer supported.

Note: The log is only downloaded and displayed, not erased.

Lockout (3) For this user-type, the keypad "freezes," disallowing all other codes, plus the door remains in the current state. During a lockout state, card access does not continue to work. If it is locked, it remains locked. If it is unlocked, it remains unlocked until another Lockout code is entered, releasing it from Lockout mode.

Note: Reserve this user-type for a supervisor or override function.

6.8 PIN Codes, Cards, and Combinations

A User Location can be programmed with one of the four PIN code/card combinations listed below using the programming Commands in parentheses:

(1) PIN Code only (Command 50)

(2) PIN Code AND Card (Command 50 plus present card to proximity reader)

(3) Card Only (Command 50 or Command 51)

(4) PIN Code OR Card (Command 52)

Note: No User Location can have the same card and/or access PIN code as another User Location.

6.9 Entering User PIN Codes

EntryProx user PIN codes consist of a minimum of one digit and a maximum of six digits. Note that a leading "0" is considered a digit, and that the 5-digit code 12345 is different from the six-digit code 012345. Attempting to enter a user PIN code into memory that is already stored in a different user location causes the yellow LED to stop blinking and remain steadily lit. If this occurs, try entering a different user code. Repeating digits in the same code is acceptable (ex: 121122).

7 Card/PIN Programming Sequences

The following command sequences are the most commonly used for programming user data into the EntryProx.

7.1 Programming PIN and Card

To program a user for both Code AND Card:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad

   Press: **50 # user-type # user location # keypad PIN**

   * keypad PIN * <present card>

3. Press ***** to exit program mode.

   Here is an example with a master code of **2468** and programming user 2 with PIN **1111**:

   Press **99#2468***

   Press **50#1#2#1111*1111***

   <present card>

   Press *****

   Remember to write an entry in your user list:

   "User:2 Type:1 PIN:1111 Card:0056 Name: John Doe"

7.2 Quick Programming PINs or Cards

A "quick program" feature allows user data entry with minimal keystrokes. No command number is required. This feature programs either a card or a PIN, **not** a combination, and it automatically selects a "Normal" user access type. Just enter the user's location and the PIN (or present card):

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad, for Code Quick Enroll

   Press: user location **# PIN * PIN ***
   OR for Card Quick Enroll press: **user location # **** <present card>

3. Press ***** to exit program mode.

User Types - Reminder			
0-Toggle	1-Normal	2-Download	3-Lockout

7.3 Programming PIN Code Only Use

To program PIN Code operation with Command 50, use the following program sequence:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad

   Press: **50 # user-type # user location # keypad PIN**

   ***** keypad PIN ***

3. Press ***** to exit program mode.

7.4 Programming CARD Only Use

To program Card only use with Command 50, simply omit the keypad PIN values from the sequence:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad

   Press: **50 # user-type # user location # ****

   <present card>

3. Press ***** to exit program mode.

7.5 Programming Code or Card

To program a user for either Code OR Card:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad

   Press: **52 # user-type # user location # keypad PIN**

   ***** keypad PIN *** <present card>

3. Press ***** to exit program mode.

7.6 Batch Load Cards By Keypad Entry

Command 56 allows you to batch load multiple, sequential 26-bit HID cards into the EntryProx unit. Up to 2000 users can be added at one time. Cards need not be presented to the reader. Requirements are:

- Cards must all have the same Facility Code
- Cards must be sequentially numbered
- The Facility Code must be programmed into the unit before any batch loading. See *Section 10: Programming Commands*, Command 32, for the procedure.

Note: The Facility Code cannot be changed at a later time.

Cards with multiple Facility Codes or many numbering gaps must be entered by presentation to the reader, using Command 53.

If the Batch Loading conditions can be met:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad

   Press: **56 #** (total number of cards to be added) **#**

   (starting user location) **# card number ***

   repeat card number *

3. Press * to exit program mode.

7.7 Batch Load By Presentation

Use Command 53 to program a batch of cards into consecutive User Locations by specifying the starting User Location, then presenting cards or tags to the reader. Use any card format up to 37 bits. All cards are programmed alike and users are "card only." Card enrollment stops once the current user location exceeds 2000, or if you press any key to abort. **Keep a written record as you program cards**.

Existing data in the User Locations being programmed is overwritten, unless you present a card that is already programmed into the EntryProx, in which case an error is generated. To clear the error, press the * key; then continue presenting cards.

To batch load by presentation, follow this procedure:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

User Types - Reminder			
0-Toggle	1-Normal	2-Download	3-Lockout

2. On the EntryProx keypad

   Press: **53 # user type # start location # **** <present card> <present card>

   <present card>...

3. Press * to exit program mode.

7.8 Deleting Users

To delete a user from the EntryProx, you must know the User Location in which the information is stored.

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad,

   Press: **user location #****

3. Press ***** to exit program mode.

7.9 Block Delete Users

Use Command 58 to delete all cards/PINs in a block of User Locations. The yellow LED will blink rapidly during the deletion process. It can take several seconds to delete large blocks of users. **Note:** Entering a starting user location or number of locations which exceeds 2000 will generate a programming error.

To block delete user locations, follow this procedure:

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. On the EntryProx keypad.

   Press: **8 # start location # start location # number of locations * number of locations***

3. Press ***** to exit program mode.

8   Changing Operating Parameters

Many users will use the EntryProx with the factory default operating parameters. The following commands include some of the most commonly customized parameters. For further refinements on EntryProx operation, review the options shown in *Section 10: Programming Commands*.

8.1   Changing the Main Relay Time

The main relay time applies to all users 1-2000. The factory default main relay time is five (5) seconds. Main relay time can be set from one to ninety-nine seconds in one-second increments using Command 11.

1.   Place the EntryProx unit in program mode.

     Press: **99 # Master Code ***

2.   Enter the new main relay time, in seconds (from 1 to 99). For example, to enter 10 seconds

     Press: **11 # 10 # 0 # ****

3.   Press ***** to exit program mode

8.2   Invalid PIN Lockout

Command 30, Option 18 allows you to enable or disable the Invalid PIN Lockout (IPL) feature. This feature prevents unauthorized persons from gaining entry by guessing PIN codes or Master Codes. When a preset number of invalid entries is exceeded (set by using Command 32 – option 4, default is 5) the EntryProx will either trigger the Forced Door output, or the keypad will be disabled for a user-configurable time period (select the action, using Command 30, option 19, and then set lockout time by using Command 32 – 5).

The invalid PIN code count is reset to zero by any of the following:

▪   Entering a valid keypad PIN

▪   Presenting a programmed Prox card

▪   Entering a valid [99 # Master code*] sequence

▪   The expiration of the keypad timer

The Invalid PIN Lockout function disables all keypad PIN entries with the exception of the [99 # Master Code*] sequence for the duration of the lockout.

To clear an active timed Invalid PIN Lockout do any of the following:

▪   Disconnect power to the system

▪   Present a valid Prox card programmed as "Card Only" or "Card OR Code"

▪   Enter the [99 # Master Code *] sequence

Note: If an invalid [99# Master Code*] is entered as part of the sequence to clear the IPL, a subsequent good [99# Master Code*] sequence will not cancel the current lockout.

8.3 Resetting the Master Cod and System Defaults Only

Command 40 erases everything from the EntryProx memory except the user list and transaction log and restores the default settings. This is useful if the EntryProx unit has experienced programming problems, or if you wish to delete earlier programming.

When you do this command the following rules apply:

- If user #0 has not been programmed and user #1 is programmed then user #0 is erased and user #1 is set to default (1234).
- If user #0 has been programmed and user #1 has not been modified, user #0 and user #1 are set to default data (1234).
- If user #0 has been programmed and user #1 has been modified, user #0 is set to default (1234) and user #1 is not changed.

Note: You must change the master code after performing this command.

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. Press: **40 # 00000 # 00000 # ****

3. Press * to exit program mode

8.4 Erasing Entire Memory/Resetting System Defaults

Command 46 deletes everything from the EntryProx memory including the user list but not the transaction log and restores the default settings. This is used as a last resort if you need to erase a specific user and could not retrieve the Programmed User List. After performing this command the master code must be reprogrammed.

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. Press: **46 # 00000 # 00000 # ****

3. Press * to exit program mode.

8.5 Turning KeyPress Audible Feedback On/Off

The Keypress Audible Feedback command enables the sounder to beep once for each key press. This feature provides an audible acknowledgment that a particular key was pressed hard enough for the unit to understand. The factory-shipped default setting is ON, but it can be toggled ON and OFF as desired using command 30.

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. To enable this feature

   Press: **30 # 0 # 1 # ****

3. To disable this feature

   Press: **30 # 0 # 0 # ****

4. Press * to exit program mode

8.6 Turning Keypress Visual Feedback On/Off

The keypress visual feedback feature lights the LED once for each key press. This feature provides a visual acknowledgment that a particular key was pressed hard enough for the unit to understand. The factory-shipped default setting is ON, but it can be toggled ON and OFF as desired.

1. Place the EntryProx unit in program mode.

   Press: **99 # Master Code ***

2. To enable this feature

   Press: **30 # 1 # 1 # ****

3. To disable this feature

   Press: **30 # 1 # 0 # ****

4. Press ***** to exit program mode

8.7 Auto Entry Enable

This function is not recommended for use, as it lowers the overall security of the unit and affects programming sequences ending with the * key. It is set with the 30# command (Set/Clear Standard Options). When this feature is enabled, any PIN code the same length as the master code does not require the * key. Leave this feature in the default mode, which is OFF.

9 Wiegand Mode

If you program the EntryProx unit to operate in Wiegand mode with a separate access control panel, the following features are not accessible:

- The EntryProx unit does not control door lock or unlocking operations.
- The EntryProx unit is not able to store codes in memory.
- The main and auxiliary relay functions are turned off.
- The door monitor and Request to Exit inputs are disabled.

For more information on programming the EntryProx unit for Wiegand operation, please contact your local distributor.

9.1 PIN Code Output In Wiegand Mode

The system transmits keypad PINs while operating in Wiegand mode by processing any digit sequence terminated with the [*] key as 26-bit Wiegand data. The current Facility Code (set using Code 32 - 2) will be used. Entering any PIN over 65535 will cause an error condition and no data will be sent.

Note: It may not be possible for some panels to perform Card and Code operation (requiring both) to gain access, because keypad data is sent in a card data format. If your panel cannot accept and interpret 26-bit format as PIN data, be sure to configure the user at the PC host software by entering the code into the CARD data field for that user, not the keypad PIN number field.

9.2 LED Control Options for Wiegand Mode

The combined programming for Options 30#9 – 30#12 and the Wiegand LED Control line affect the LED display in Wiegand mode. The following table shows how the LED will behave when the LED control line is open (normal) or grounded (asserted by the access control panel).

See the following section for more on option programming.

Opt 9	O	O	O	1	1	1	1	1	1
Opt 10	-	-	-	O	O	O	1	1	1
Opt 11	O	1	1	O	1	1	O	1	1
Opt 12	-	O	1	-	O	1	-	O	1
Led Ctl Open			G			G	R	R	Y
Led Ctl Gnd		G		R	Y	R		G	

LED Color Key: G – Green   **R** – Red   **Y** – Yellow

10 Programming Commands

Read the following table before completing programming of your EntryProx unit; it describes various programming commands and how to execute them. As with the previously described commands, you must first press 99 # (Master Code) * to enter programming mode, enter the desired command sequence, and then press * to exit programming mode. "Ref" number is for reference only, not to provide an ordered sequence of commands.

Ref	Option	Press	Details
1	Enter program mode	99 # (Master Code) *	Yellow LED blinks slowly
2	Program new master code into user location 0	50 # 1 # 0000 # master code * master code *	Example: 4321 master code (50 # 1 # 0000 # 4321 * 4321 *)
3	Set main relay time	11 # tt # 0 # **	tt = 1 - 99 seconds
4	Set AUX relay output	15 # output mode # 0 # **	Output Modes: 0 = disabled, 1 = shunt, 2 = forced door, 3 = propped door
5	Delete users	User Location # **	Example: To delete user 100, press: 100#**
6	Download a transaction Log	70 # 0 # 0 # **	Obsolete. No longer supported.
7	Set/clear standard option	30 # option # s/c # **	See the following Option numbers and descriptions.
†† If Option 30# 14# is enabled, this sets the time that a card must be removed from the RF field before it can be re-read. If option 30#14# is disabled, this sets the time between successive readouts, used in either standalone or Wiegand mode.			

Option Number/Description		Set/Clear
0: Audio keypress feature		0 = OFF/1 = ON
1: Visual keypress feature		0 = OFF/1 = ON
2: Auto entry enable		0 = OFF/1 = ON (Recommend OFF)
3: Stand-alone/Wiegand operation		0 = standalone/1=Wiegand
4: Facility code access (26-bit cards only)		0 = OFF/1 = ON
Note: This disables the "toggle" card function.		
5: Forced door audio alert		0 = OFF/ 1 = ON
6: Propped door audio alert		0 = OFF/1 = ON
7: Internal Request to Exit switch		0 = OFF/1 = ON
8: US/EU Daylight Savings rollover dates		0 Y US/1 = European
9: Wiegand red LED enable		0 = OFF/1 = ON
10: Wiegand red LED active state		0 = LOW/1 = HIGH
11: Wiegand green LED enable		0 = OFF/ 1 = ON
12: Wiegand green LED active		0 = LOW/1 = HIGH
13: Automatic Daylight Savings Time change		0 = OFF/ 1 = ON
14: Prox card antipassback select		0 = OFF / 1= ON (prevents multiple card reads in Wiegand mode)
18: Invalid PIN lockout select		0 = OFF / 1= ON
19: Invalid PIN lockout action		0 = TIMED LOCKOUT / 1 = Forced Door Output

Ref	Option	Press	Details
8	Download programmed user list	25 # 0 # 0# **	Obsolete. No longer supported.
9	Download programmed user list (starting at a certain user)	25 # 0 # start user # **	Obsolete. No longer supported.

Ref	Option	Press	Details
10	Change Wiegand & Miscellaneous parameters	32 # parameter # value # **	Parameter/Value 0, Wiegand pulse width, default=8, 160μs, (1=20μs), range= 1- 255 1, Wiegand interpulse spacing, default=32, 640μs, (1=20μs), range=1-255 2, Facility Code/0-225 (default = 1) (26-bit cards only) verify! 3, Process card timer 2 – 240 in ¼ second increments, defaults to 4 – 1 second†† 4, Invalid PIN lockout threshold 1 –50 attempts (defaults to 5) 5, Invalid PIN lockout duration 1 – 255 in 5 second increments (defaults to 60 - 5 minutes)
11	Set system time	41 # hhmm # 0 # **	hhmm = hour/minute, 24-hr format
12	Set system date	42 # mmddyy # dow # **	mmddyy = month, day, year; dow = day of week, where 1 = Sunday
13	Set door number	43 # nnnn # 0 # **	nnnn = door number (for downloaded reports)
14	Set propped door time (this sets delay time for both the Aux Relay and local sounder)	44 # ttt # 0 # **	ttt = propped door time, to nearest 10's seconds, entered as 10 -990; default = 30 seconds
15	Set forced door time (this sets active time for both the Aux Relay and local sounder)	45 # ttt # 0 # **	ttt = forced door time, to nearest 10's seconds, entered as 10 - 990; default = 10 seconds
16	Delete memory except user list and restore system defaults (also see command 46)	40 # 00000 # 00000 # **	
17	Delete all memory and reset system defaults	46 # 00000 # 00000 # **	
18	Program user: Code ONLY **Note:** You can program the four types of users shown to the right	50 # user-type # user location # code * repeat code *	User Types: 0 - Toggle/latch strike 1 - Normal Access 2 - Log Download 3 - Lockout
19	Program user: Code AND Card	50 # user-type # user location # code * repeat code * <present card>	
20	Program user: Card ONLY	50 # user-type # user location # * * <present card>	
20A	Program new master code into user location 0	50 # 1 # 0000 # master code * master code *	
21	Program card user manually: Card Only (26-bit cards ONLY)	51 # user-type # user location # card ID * card ID *	The card ID appears on the card (Facility Code must be entered first; see 32 # 2 # command)

Ref	Option	Press	Details
22	Program user: Code OR Card	52 # user-type # user location # code* repeat code * <present card>	
23	Program a group of consecutive users by presenting cards	53 # user type # start location # ** <present card> <present card> <present card> …	Programs card-only users. Stops at user location 2000, or press any key to abort. Erases existing programming. If an existing card is presented, an error will occur – press * to resume
24	Perform batch entry of users: Card only (26-bit cards ONLY)	56 # total count # starting user location # starting card ID * starting card ID *	The card ID appears on the card; (Facility Code must be entered first; see 32 # 2 # command)
25	Block Delete Users	58 # start user # start user # number of users * number of users *	Yellow LED blinks rapidly; allow several seconds for large blocks of users. Cannot delete: master user, more than 2000 users, or user location greater than 2000.
26	Quick Enroll Card	User Location # * * <present card>	
27	Download Transaction Log via IR port	70 # 0 # 0 # **	Obsolete. No longer supported.
28	Set transaction log mask (set/clear event logging)	73 # event # set/ clear # **	Prevent specified transactions from being logged. Set =0 (prevent) Clear = 1 (restore) See the following Code - Transaction Event list.
		Code – Transaction Event 01 – Access Denied 02 – Program Denied 04 – Request to Exit 05 – Door Ajar 06 – Door Closed 07 – Forced Door 10 – Invalid PIN Lockout 12 – Facility Code Access 16 – Obsolete. No longer supported. 17 – Access 20 – Toggle ON 21 – Toggle OFF 24 – Lockout ON 25 – Lockout OFF 27 – Mismatch 29 – Program Mode started 30 – Log erased	
29	Reset transaction Log	76 # 00000 # 00000 # **	
30	To exit Program mode	* (after final command)	Yellow LED stops flashing

11 LED/Sounder Status Indications

LED or Sounder	Visual/Audible Condition	Description
Yellow LED	Slow blink	Unit is in Program mode
	Rapid blink	Verify mode is active (checking that the last two values in sequence match)
	Steady	Program error; to clear, press *
	Very rapid blink	Memory (EEPROM) erase is in progress commands 40/46, 58 loop-back)
Bi-Color LED	Steady red	Strike is locked
	Steady green	Strike is energized (timed or latched)
	Slow blinking green	Obsolete. No longer supported.
	Solid green with red flicker	Strike toggle is unlocked and used lockout active
	Red/green alternating	Awaiting second form of ID during "Card AND Code" access attempt
	Red blink	User lockout is active and strike locked; red LED drops out for 100 ms every second; normal users cannot change the state of the relay. This also indicates Invalid Pin Lockout.
Sounder	Short beep (100 ms) every 2 seconds	Propped door is active
	Sounder 1/2 second on, 1/2 second off	Forced door is active
	3 rapid beeps after code is entered or card is presented	Code or Card is not found
	3 slow beeps (250 ms), then a single beep	Self-test is complete
	1 single beep	Valid card access

Appendix: A Users Chart for Record Keeping

Note: Do not write on this page. Use it as a photocopy master and follow the applicable recommendations:

- Make the number of copies required to record all programmed users.
- Write the specified information in the appropriate spaces.
- Place the users' charts in a binder and keep it in a secure location.

User Location	Type	Code	Card	AND	OR	Last Name	First Name	Other