

# User/Installation Manual



## PROX 2000 II MODEL 23-213(I)



Your "PARTNER" in Access Control

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

## AAS 2Year Limited Warranty

### What item(s) this warranty applies to:

American Access Systems "PROX 2000 II (23-XXXX series)" access controls.

### What is covered:

Any defect in materials or workmanship.

### For how long:

Two years from date of purchase.

### What we will do:

If your AAS product is defective and returned within 2 years of the date of purchase, we will repair it or, at our option, replace it at no charge to you. If we repair your AAS product, we may use new or reconditioned parts. If we choose to replace your AAS product, we may replace it with a new or reconditioned one of the same or similar design. The repair or replacement will be warranted for (a) 90 days or (b) the remainder of the original two year warranty period, whichever is longer.

### Limitations:

Implied warranties, including those of fitness for a particular purpose and merchant ability (an unwritten warranty that the product is fit for ordinary use), are limited to two years from date of purchase. We will not pay for loss of time, inconvenience, loss of use of your AAS product, service calls, or property damage caused by your AAS product or its failure to work, or any other incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

### What we ask you to do:

To get warranty service for your AAS product, you must provide proof of the date of purchase. Contact the original dealer or installer of the product and return your AAS product along with the receipt to them. If you have problems locating the dealer or installer contact American Access Systems at (303) 7999757 and we will direct you to an authorized dealer or distributor of American Access Systems products. If you ship your AAS product, you must prepay all shipping costs. We suggest that you retain your original packing material in the event you need to ship your AAS product. On return, include your name, address, phone number, proof of date of purchase, and a brief description of the operating problem.

### What this warranty does not cover:

This warranty does not cover defects resulting from accidents, damage while in transit, alterations, unauthorized repair, failure to follow instructions, misuse, fire, flood, lightning, or acts of God. Nor do we warrant your AAS product to be compatible with any particular external device or peripheral. If your warranty has expired on your AAS product or if your product is NOT covered contact your dealer or installer for advice on whether we will repair your AAS product and other repair information, including estimated repair costs and other charges. We, at our option, may replace rather than repair your AAS product with a new or similar design if the damage to the unit is severe or extensive.

This warranty is the only one we give on this product, and it sets forth all our responsibilities regarding your AAS product. There are no other express warranties.

### State Law rights:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



SECURITY BRANDS INC

1675 West Yale Ave.  
Englewood, CO 80110

phone: 303-799-9757

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# PARTS CHECKLIST

Enclosed with this box you should have the following items.

Qty	Description
1	Post Mount Station
1	16.5 VAC 20VA Transformer

If any of the above items are missing from this box, contact American Access Systems

## Tools Needed For Basic Installation

- Wire strippers
- Wire cutters
- Digital or Analog multi-meter



**TECHNICAL/CUSTOMER SUPPORT**  
**1-303-799-9757 OR**  
**TECHSUPPORT@SECURITYBRANDSINC.COM**

## BEFORE PROCEEDING

To take full advantage of the 24 month limited warranty, you must be registered with American Access Systems. Please read the enclosed warranty statement, (pg 2), fill out the warranty registration card provided and send it to:



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## INTRODUCTION

Your new PROX 2000 II unit is a high quality, programmable, commercial digital key control station. The unit incorporates an interface for two remote wiegand card readers as well as an interface for a serial printer. The PROX 2000 II unit also employs a history buffer which stores up to 1000 transactions. A true Anti-passback feature is also provided for the end user. The unit incorporates 2 relays on the circuit board. The relay outputs can be programmed in 1 of 2 ways:

\* All PROXIMITY CARDS entered into the system will operate relay A (Default setting).

\* All PROXIMITY CARDS entered on PROX 1 will operate relay A, and all cards entered on PROX 2 will operate relay B (SPLIT RELAY FEATURE).

The relay output times are user selectable from 1 to 99 seconds and provide a normally open (N/O) and normally closed (N/C) output. Make sure to read and understand all instructions before proceeding with each step.

### STEP 1-MOUNTING THE SLAVE UNITS

#### Mounting the unit to your own pedestal

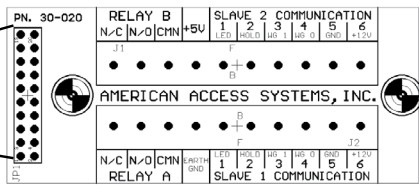
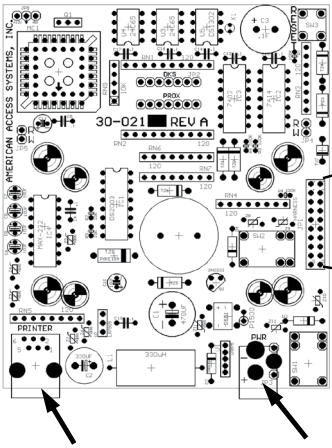
Your slave units come with a square mounting flange found in the bottom of the box along with four carriage bolts and four hex nuts. The square mounting flange may be welded to your pedestal and the flange bolt pattern will align with the back of the unit. Place the unit up to the flange and insert the carriage bolts from the back side. Secure the unit to the flange by tightening down the hex nuts with a 7/16" socket.

#### Mounting the unit to an AAS gooseneck (18001) or double height (18003)pedestal

Locate the four carriage bolts and four hex nuts found inside the unit box. Place the unit up to the pedestal flange and insert the four carriage bolts from the backside. Secure the unit to the pedestal using the four hex nuts and a 7/16" socket. The extra square mounting flange may be discarded.



# STEP 2-SYSTEM CONNECTIONS HOOKUP STEPS



COMMUNICATIONS & RELAYS

PRINTER

POWER HOOKUP

(A). Make all your prox slave connections BEFORE you apply power to the master unit. To connect power to your new post mount unit plug the transformer into an outlet and connect the other end to the power plug on main circuit board.

(B). Connect the device(s) to be controlled to the appropriate terminal(s).

(C). Double check your connections. When you are sure you have the unit hooked up correctly, apply power to the unit. If this is the first time power up, the unit will perform some self diagnostics and setup the memory. The unit will flash the LED's several times while it is performing the first time setup. If everything goes O.K., you will hear a GOOD BEEP from the unit. If the unit does not perform as above, quickly turn off power to the unit and contact American Access Systems.

**NOTE: THE UNIT WILL ONLY PERFORM THE SELF DIAGNOSTICS AND MEMORY SETUP THE FIRST TIME IT IS POWERED UP. FROM THERE ON OUT THE UNIT WILL SOUND A GOOD BEEP IMMEDIATELY AFTER POWER IS APPLIED.**



## USING A SLAVE WITH THE PROX 2000 II

The prox 23-213 communicates with one additional slave proximity reader utilizing wiegand technology. . Please see instruction manual included with the 23-013.

**Note: Connect additional Proximity Reader to Slave 2 Communications only.**

**Note: Do not run your gate control wires in the same shielded cable as your slave communication wires.**

There are two holes on the back of the unit which are for slave communication wires and gate control wires. Run your wires through the holes and under the circuit board and then make your connections on the communications and relays board. Try to unwrap the foil shield as little as possible to keep as much EMI away from the board as possible. Be careful that the foil shield does not short out the circuit board. Also be careful that when you close the unit that pressure is not put on the circuit board, and that none of your wires are hitting the reset button.

Slave connections are to be made on the Communications and Relays board. For slave 1 and slave 2 there are numbers labeled 1 thru 6. These numbers correspond to standard wiegand color codes in this way. USE THESE COLORS FROM THE WIEGAND DEVICE AND ATTACH THEM TO THEIR NUMBER ON THE COMMUNICATION AND RELAY BOARD.

NUMBER	WIRE NAME	WIRE COLOR CODE
1	LED	BROWN
2	HOLD	BLUE
3	DATA 1	WHITE
4	DATA 0	GREEN
5	GROUND	BLACK
6	+12 VOLTS	RED

## USING A PRINTER WITH THE PROX 2000 II

The PROX 2000 II incorporates an RS-232 serial interface on board for connection to a AAS 21-047 or 21-045 printer in order to print out recorded transactions. The transactions may be printed as they occur or the contents of the history buffer may be dumped out to the printer. Note: A standard serial printer WILL NOT work with the 23-206.

### Connecting the printer

**CABLE TYPE:** 22 gauge, 6 conductor, shielded (BELDEN #9931 or equivalent)

**MAX DISTANCE:** 50 feet (\*) SEE BELOW

Keep the cable run at least 1 foot away from high voltage, transformers, florescence lights, etc. An interface cable, (63-034), is required to link the PROX 2000 II to the printer. Plug one end into the printer receptacle located on the backside of the printer. Plug the other end into the RJ45 jack on the back of the PROX 2000 II Unit.

### Printer Setup

The PROX 2000 II unit default configuration communicates with a printer at 9600 bps, 8 bits, no parity, CR valid. The baud rate settings on the PROX 2000 II can be changed through software (see programming Series 400). The baud rate choices are 9600(default), 4800, 2400, and 1200. To test the printer, load the printer with paper, plug the printer in, make sure the printer is on line and simply place a card to the reader.

### ACCESS & FUNCTION CODES

**NOTE: SINCE THE PROX 2000 II SYSTEM IS BASED ON WIEGAND TECHNOLOGY, ALL CARDS USED BY THE SYSTEM MUST RESIDE BETWEEN 0 AND 2000. AN ENTRY OF A CARD NUMBER OF 0 OR A NUMBER HIGHER THAN 2000 WILL RESULT IN AN ERROR.**

Depending on which model you have, your unit may be programmed with multiple access cards. The maximum number of access cards that can be programmed into the unit is reflected in the model number (eg. 23-1000 = 1000 access codes). There are two different types of cards; ACCESS CARDS & FUNCTION CARDS. Access cards are standard user cards for gaining access onto or into a restricted area. Function cards are assigned a specific function. The function cards and their descriptions are as follows.

# FUNCTION CODES

FUNCTION CODE	DESCRIPTION
"Master Code"	This is a 4 digit programmable code between 0000 and 9999 used for gaining access to the program mode. The factory default is " 1 2 5 1".
"Relay A Latch Card"	This is a user programmable card(s) used to lock down (or unlock) relay A. This code will be used to hold open a gate or door connected to relay A.
"Relay B Latch Card"	This is a user programmable card(s) used to lock down (or unlock) relay B. This code will be used to hold open a gate or door connected to relay B.
"Sleep Card"	This is a programmable card(s) that is used to toggle the unit in and out of the sleep mode. In the sleep mode all codes are disabled with the exception of the MANAGERS CARDS. When the "SLEEP CARD" is placed up to the reader again, the unit will wake up.
"APB Master Code"	This is a programmable card(s) that is used to toggle the unit in and out of the sleep mode. In the sleep mode all codes are disabled with the exception of the MANAGERS CARDS. When the "SLEEP CARD" is placed up to the reader again, the unit will wake up.
"Second Relay Card"	This is a programmable card(s) used to momentarily activate relay B
"Managers Cards"	This is a programmable card(s) used to gain access onto the property. This card(s) will activate the appropriate relay regardless of the sleep state of the unit.

## GOODBEEPS, ERRORBEEPS, & QUICKBEEPS

Your unit will beep each time a key is pressed. The "\*" key serves as the clear key and a double beep will be heard when this key is pressed. A "GOODBEEP" is represented by an oscillating high tone. An "ERRORBEEP" is represented by a single low tone. A "QUICKBEEP" is a series of 5 quick high beeps in succession.

## THE RED & YELLOW LED'S

Two different colored LED's are mounted in the face of the unit. The RED LED will light during the duration of the relay(s) activation period. The YELLOW LED will light while the unit is in the program mode. During memory clear or setup both LED's will flash. The RED LED will also be lit when you enter a submode and the feature is already enabled.

## RESETTING THE UNIT

Your PROX 2000 II unit provides two different types of resets, a UNIT RESET, and a MASTER RESET. A MASTER RESET should be utilized in the event that you lose or forget your master code or if the unit is locked in the sleep, lockA, or lockB mode. When a MASTER RESET is performed, only the master code will be changed. A UNIT RESET is provided should it ever become necessary to reset the unit back to the initial factory state. After a UNIT RESET has been performed the unit will erase all ACCESS & FUNCTION codes from memory and the master code will be set back to the factory default of 1 2 5 1.

## MASTER RESET

Follow these steps precisely. If you make an entry error, the unit will ERROR and you will have to start over.

- (1). Disconnect power from the master board
- (2). Reconnect power to the board while holding down the RESET BUTTON
- (3). Release the reset button and enter \* \* \* from the keypad.

The unit will issue a GOODBEEP and the master code will be set back to 1 2 5 1. If the unit was locked in the sleep, lockA, or lockB mode, the unit will be released and returned to the idle state.

## UNIT RESET

**(!!! WARNING: ALL ACCESS & FUNCTION CODES WILL BE DELETED FROM MEMORY !!!)**

Follow these steps precisely. If you make an entry error, the unit will ERROR and you will have to start over.

- (1). Disconnect power from the master board
- (2). Reconnect power to the board while holding down the RESET BUTTON.
- (3). Release the reset button and enter # \* # from the keypad.
- (4). Enter the MASTER CODE from the keypad. (The unit will go into an endless cycle of beeps).
- (5). Disconnect & Reconnect power to the unit. (The unit will go through the "FIRST TIME POWER UP" sequence (See "HOOKUP STEPS", page 5, step C).

## THE IDLE MODE

The idle mode is the normal mode of operation. When in this mode the unit sits and waits for data from the keypad. In this mode you will have approximately 3 seconds between key presses. If this time is exceeded you will receive an ERROR.

## THE PROGRAM MODE

The program mode is the mode of operation in which you will enter, delete, or change your codes or set specific features of the unit. The program mode is accessed by entering the "MASTER CODE" from the MASTER unit. You will receive a QUICKBEEP and the yellow LED will come on indicating that you are in the program mode. In this mode you will have approximately 30 seconds between key presses. If this time is exceeded, you will receive an ERROR and be exited from the program mode.

## THE \* AND # KEYS

The \* and # keys serve specific functions while in the idle or program mode. The \* key is always the clear key and a double beep will be heard when depressed. You should use this key if you make an entry error. The # key also serves as a clear key in the idle mode. In the program mode however, it serves as the exit key and will at any time, when depressed, exit you from the program mode.



# PROGRAMMING

A person desiring access to the program mode will enter the present MASTER CODE. If the master code is valid the yellow LED will come on and the individual will be prompted with a QUICKBEEP to enter a 3 digit number corresponding to a SUBMODE. There are 4 groups of SUBMODES. Group 100 is for PROGRAMMING CODES, group 200 is for DELETING CODES, group 300 is MISCELLANEOUS SETTINGS and GROUP 400 is PRINT FUNCTIONS. There are a total of 26 different submodes to choose from. They are as follows:

## GROUP 100 SUBMODES (PROGRAMMING CODES)

SUBMODE	DESCRIPTION
100	Program Access Cards (Block Format)
101	Program Managers Card(s) (Block Format)
102	Program Sleep Card(s) (Block Format)
103	Program Relay A Latch Card(s) (Block Format)
104	Program Relay B Latch Card(s) (Block Format)
105	Program Relay B Card(s) (Block Format)
106	Set System Facility Code (3 max.)
108	Change System Master Code
109	Change Quick Entry Master Code
110	Change Quick Delete Master Code

## GROUP 200 SUBMODES (DELETING CODES)

SUBMODE	DESCRIPTION
200	Delete Card(s) (Block Format)
299	Clear APB status

## GROUP 300 SUBMODES (MISCELLANEOUS)

SUBMODE	DESCRIPTION
300	Set Relay A Output Time (1/2 to 99 seconds)
301	Set Relay B Output Time (1/2 to 99 seconds)
302	Set Clock Time (Military Format)
303	Set Clock Date
307	Toggle Split Relay On/Off
308	Toggle AntiPassBack On/Off
309	Quiet Mode

## GROUP 400 SUBMODES (PRINT FUNCTIONS)

SUBMODE	DESCRIPTION
400	Print Audit Trail (Entire Contents of History Buffer)
401	Print Out All Current Access Cards
402	Print Audit Trail on Specific Card
403	Set Printer Baud Rate
404	Red Printing on Invalid Cards (For AAS idp562 Citizen Printer Only)
405	Print Out Current Unit Configuration (Prints out Status of Split Relay, APB, Current Baud Rate, All Manager's and Second Relay Cards)
499	Clear Entire History Buffer

# GROUP 100 (PROGRAMMING CODES)

## “100”

### SUBMODE 100 (PROGRAM ACCESS CARDS) (BLOCK FORMAT)

**HELPFUL HINT: PAGE 18 IN THIS MANUAL IS AN ACCESS CARD LOG SHEET WHICH MAY BE PHOTO-COPIED FOR KEEPING TRACK OF ALL CARDS IN THE SYSTEM.**

**DESCRIPTION:** Access cards are cards given out to end users to gain access onto the property. The number of access cards you may program into the unit is reflected in the corresponding model number of the unit. Each time an access card is entered into the system, the card number, date, and time are logged into the history buffer. If you are interfacing a slave reader(s) to the system and the “SPLIT RELAY” feature (see submode 307) is enabled then all access cards entered from the master and slave 1 will activate relay A and all access cards entered from slave 2 will activate relay B. From the factory all access cards will activate relay A. Access cards are not accessible while in the SLEEP MODE (see submode 102).

**To program in new access cards enter the 4 digit “MASTER CODE” followed by submode “100” then enter the “STARTING CARD NUMBER” followed by the “ENDING CARD NUMBER” you wish to program into the unit.**

(MASTER CODE) + 100 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

NOTE: EXAMPLES ARE USING FACTORY DEFAULT MASTER CODE OF 1251

EXAMPLE: TO VALIDATE CARDS 20 THRU 155

1251 + 100 + 0020 +0155

EXAMPLE: TO VALIDATE A SINGLE CARD, SAY CARD NUMBER 27.

1251 + 100 + 0027 +0027

**REMEMBER: FOR THESE CARDS TO WORK YOU NEED TO PUT THE FACILITY CODE IN THE SYSTEM. SEE SUBMODE 106.**

When memory is completely filled you will not be able to enter this SubMode and will receive an ERROR if entry is attempted.

## “QUICK ENTRY MODE”

**DESCRIPTION:** Quick entry mode is another way to program in individual access cards. The factory default QUICK ENTRY MASTER CODE is 1 2 5 2. (To change the quick entry master code see sub-mode 109).

**To program in access cards enter the 4 digit “ QUICK ENTRY MASTER CODE” followed by the “CARD NUMBER” you wish to program in followed by the next “CARD NUMBER” and so on until you are finished and then press the # key to exit.**

(QUICK ENTRY MASTER CODE) + (CARD NUMBER) + (CARD NUMBER)... # TO EXIT

EXAMPLE: PROGRAM IN ACCESS CARDS NUMBERS 23, 178, 1375, 6, 1910

1252 + 0023 + 0178 + 1375 + 0006 + 1910 + #

**REMEMBER: FOR THESE CARDS TO WORK YOU NEED TO PUT THE FACILITY CODE IN THE SYSTEM. SEE SUBMODE 106.**

## “101”

### SUBMODE 101 (PROGRAM MANAGERS CARDS) (BLOCK FORMAT)

**DESCRIPTION:** Managers cards are given out to individuals to gain access onto the property regardless of the SLEEP STATE (see submode 102) of the unit. Each time a managers card is used, the manager card number, date, and time are logged into the history buffer. If you are interfacing slave readers to the system and the “SPLIT RELAY” feature (see submode 307) is enabled, all managers cards entered from the master or slave 1 will activate relay A and all managers cards entered from slave 2 will activate relay B. From the factory all managers cards will activate relay A.

**To program in managers cards enter the 4 digit “MASTER CODE” followed by submode “101” then the “STARTING CARD NUMBER” followed by the “ENDING CARD NUMBER” you wish to program into the unit.**

(MASTER CODE) + 101 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

NOTE: EXAMPLES ARE USING FACTORY DEFAULT MASTER CODE OF 1251

EXAMPLE: TO VALIDATE CARDS 20 THRU 155

1251 + 101 + 0020 +0155

EXAMPLE: TO VALIDATE A SINGLE CARD, SAY CARD NUMBER 27.

1251 + 101 + 0027 +0027

## “102”

### SUBMODE 102 (PROGRAM SLEEP CARD(S)) (BLOCK FORMAT)

DESCRIPTION: The SLEEP MODE is the mode of operation in which the unit shuts down and goes to sleep. Only MANAGERS CARDS are accepted into the system in this mode. The SLEEP CARD is accepted into the system from either of the 2 slaves. Each time the SLEEP CARD is entered, the sleep card #, date, and time are logged into the history buffer and the unit toggles in and out of the SLEEP MODE.

To program in a new sleep card enter the 4 digit “MASTER CODE” on the master unit, followed by submode “102” then enter the “STARTING CARD NUMBER” and then the “ENDING CARD NUMBER” you wish to program into the unit.

NOTE: EXAMPLES ARE USING FACTORY DEFAULT MASTER CODE OF 1251

(MASTER CODE) + 102 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

EXAMPLE: TO VALIDATE A SINGLE CARD, CARD NUMBER 14.

1251 + 101 + 0027 +0027

EXAMPLE: TO VALIDATE CARDS 28 THRU 30

1251 + 102 + 0028 +0030

## “103”

### SUBMODE 103 (PROGRAM LATCH A CARD(S)) (BLOCK FORMAT)

DESCRIPTION: The LATCH A CARD(S) is used to toggle the output state of relay A. In most cases this card will be used to hold a gate or door open. This card is accepted into the system from either of the slaves. Each time the LATCH A CARD is entered, the latch A card number, date, and time are logged into the history buffer and the unit toggles the output state of relay A. This code is not accessible while the unit is in the SLEEP MODE (see submode 102).

NOTE: IN ORDER TO UTILIZE THIS FUNCTION IN A GATE OPERATOR, THE OPERATOR MUST INCORPORATE AN “OPEN OVERRIDE CIRCUIT”.

To program in a new latch A card(s) enter the 4 digit “MASTER CODE” followed by submode “103” then enter the “STARTING CARD NUMBER” and then the “ENDING CARD NUMBER” you wish to program into the unit.

(MASTER CODE) + 103 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

EXAMPLE: TO VALIDATE A SINGLE CARD, CARD NUMBER 14.

1251 + 103 + 0014 + 0014

## “104”

### SUBMODE 104 (PROGRAM LATCH B CARD(S)) (BLOCK FORMAT)

DESCRIPTION: The LATCH B CARD is used to toggle the output state of relay B. In most cases this card will be used to hold a gate or door open. This card is accepted into the system from either of the 2 slaves. Each time the LATCH B card is entered the latch B card, date, and time are logged into the history buffer and the unit toggles the output state of relay B. This card is not accessible while the unit is in the SLEEP MODE (see submode 102).

NOTE: IN ORDER TO UTILIZE THIS FUNCTION IN A GATE OPERATOR, THE OPERATOR MUST INCORPORATE AN “OPEN OVERRIDE CIRCUIT”.

To program in a new latch B card(s) enter the 4 digit “MASTER CODE” followed by submode “104” then enter the “STARTING CARD NUMBER” and then the “ENDING CARD NUMBER” you wish to program into the unit.

(MASTER CODE) + 104 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

EXAMPLE: TO VALIDATE A SINGLE CARD, CARD NUMBER 14.

1251 + 104 + 0014 + 0014

## “105”

### SUBMODE 105 (PROGRAM RELAY B CARD(S)) (BLOCK FORMAT)

DESCRIPTION: Relay B cards are used to activate relay B. Each time a relay B card is entered into the system, the relay B card number, date, and time are logged into the history buffer. These cards are not accessible if the unit is in the SLEEP MODE (see submode 102).

To program in relay B cards enter the 4 digit “MASTER CODE” followed by submode “105” followed by the “STARTING CARD NUMBER” and then the “ENDING CARD NUMBER” you wish to program into the unit.

(MASTER CODE) + 105 + (STARTING CARD NUMBER) + (ENDING CARD NUMBER)

EXAMPLE: TO VALIDATE CARD NUMBERS 1157 THRU 1170 PRESS:

1251 + 105 + 1157 + 1170

## “106”

### SUBMODE 106 (SET SYSTEM FACILITY CODE(S))

DESCRIPTION: The facility code must be set, for any of your cards to work with the system. The facility code can usually be found on the back of your cards. The PROX 2000 can handle a maximum of 3 facility codes.

**Note: The facility codes for the unit must reside between 0 and 255.**

To program in your facility code(s) simply press in your 4 digit “MASTER CODE” followed by submode “106” followed by your 3 digit facility code, you can continue to enter facility codes until you have entered the maximum of 3. If you have less than 3, then when you are done press # to exit.

(MASTER CODE) + 106 + ( 3 DIGIT FACILITY CODE) + ( 3 DIGIT FACILITY CODE)..... # TO EXIT

EXAMPLE: PUT IN FACILITY CODES 115 AND 4.

1251 + 106 + 115 + 004 + # TO EXIT

**NOTE: ANOTHER WAY TO PROGRAM IN YOUR FACILITY CODE IS TO PUT IN YOUR MASTER CODE FOLLOWED BY 106 THEN TOUCH ONE OF YOUR ACCESS CARDS TO THE READER THREE TIMES(BEFORE THE UNIT TIMES OUT, THIS IS PROBABLY A TWO PERSON JOB)**

## “108”

### SUBMODE 108 (PROGRAM MASTER CODE)

DESCRIPTION: The master code is used to gain access to the program mode. The factory default master code is 1251. The master code is only accepted into the system from the master unit. The master code cannot be deleted from memory, only changed. The master code is not accessible while in the sleep mode (see submode 102).

To program in a new master code enter the 4 digit “MASTER CODE” followed by submode “108” then the “NEW MASTER CODE” you wish to program into the unit.

( MASTER CODE) + 108 + (NEW MASTER CODE)

The unit will respond with a GOODBEEP after acceptance of the new master code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key and reenter the correct data. Should you receive an ERROR after you enter a new master code, you must select a different one as it is already in use by the system.

**NOTE: IF YOU FORGET OR LOSE YOU MASTER CODE SEE THE “MASTER RESET” SECTION ON PAGE 8.**

## “109”

### SUBMODE 109 (CHANGE QUICK ENTRY MASTER CODE)

DESCRIPTION: The quick entry master code is used to enter the program mode and program individual access cards. The factory default quick entry master code is 1252. The quick entry master code is only accepted into the system from the master unit. The quick entry master code cannot be deleted from memory, only changed. The quick entry master code is not accessible while in the sleep mode (see submode 102).

To program in a new quick entry master code enter the 4 digit “MASTER CODE” followed by submode “109” then the “NEW QUICK ENTRY MASTER CODE” you wish to program into the unit.

( MASTER CODE) + 109 + (NEW QUICK ENTRY MASTER CODE)

The unit will respond with a GOODBEEP after acceptance of the new quick entry master code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key.

## “110”

### SUBMODE 110 (CHANGE QUICK DELETE MASTER CODE)

DESCRIPTION: The quick delete master code is used to enter the program mode and delete individual access cards. The factory default quick delete master code is 1253. The quick delete master code is only accepted into the system from the master unit. The quick delete master code cannot be deleted from memory, only changed. The quick delete master code is not accessible while in the sleep mode (see submode 102).

To program in a new quick delete master code enter the 4 digit “MASTER CODE” followed by submode “110” then the “NEW QUICK DELETE MASTER CODE” you wish to program into the unit.

( MASTER CODE) + 110 + (NEW QUICK DELETE MASTER CODE)

The unit will respond with a GOODBEEP after acceptance of the new quick delete master code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key.

## GROUP 200 (DELETING CARDS)

### “200”

#### SubMode 200 (DELETE CARDS) (BLOCK FORMAT)

To delete a card(s) from memory, enter the 4 digit “MASTER CODE” followed by submode “200” followed by the “BEGINNING CARD NUMBER” and the “ENDING CARD NUMBER” to be deleted.

(MASTER CODE) + 200 + (BEGINNING CARD NUMBER) + (ENDING CARD NUMBER)

EXAMPLE: TO DELETE CARDS 120 THRU 155

1251 + 200 + 0120 +0155

EXAMPLE: TO DELETE A SINGLE CARD, SAY CARD NUMBER 38.

1251 + 200 + 0038 +0038

### “QUICK DELETE MODE”

DESCRIPTION: Quick delete mode is another way to delete individual access cards from the system. The factory default QUICK DELETE MASTER CODE is 1 2 5 3. (To change the quick delete master code see sub-mode 110.

To delete access cards enter the 4 digit “ QUICK DELETE MASTER CODE” followed by the “CARD NUMBER” you wish to delete followed by the next “CARD NUMBER” and so on until you are finished and then press the # key to exit.

(QUICK DELETE MASTER CODE) + (CARD NUMBER) + (CARD NUMBER)... # TO EXIT

EXAMPLE: DELETE ACCESS CARD NUMBER 95

1253 + 0095 + #

### “299”

#### SubMode 299 (CLEAR APB STATUS)

DESCRIPTION: This sub-mode is useful if a mistake is made and the Anti-PassBack status of all cards needs to be reset.

To erase the APB status of all cards in memory, enter the 4 digit “MASTER CODE” followed by submode “299” and then reenter the 4 digit “MASTER CODE”. (MASTER CODE) + 299 + (MASTER CODE)

The LED's will flash on and off while the memory is being cleared and the unit will respond with a GOODBEEP when finished. An ERROR will occur and the unit will exit the program mode if the second master code is incorrect.

## GROUP 300 (MISCELLANEOUS)

### “300”

#### SubMode 300 (SET RELAY A OUTPUT TIME)

DESCRIPTION: The output time of relay A can be set anywhere from 1/2 to 99 seconds. The factory default is 1/2 second. In most cases this is adequate for gate operators. However, with door strikes and maglocks a longer output time may be desired.

To set the output time of relay A in seconds enter the 4 digit “MASTER CODE” followed by submode “300” and then a 2 digit number corresponding to the number of seconds.

(MASTER CODE) + 300 + (SECONDS)

The unit will respond with a GOODBEEP and exit from the program mode once the seconds for relay B has been accepted. If you enter 00 for seconds the output time is set to 1/2 second. Should you make an entry error, simply press the \* key and reenter the correct data.

### “301”

#### SubMode 301 (SET RELAY B OUTPUT TIME)

DESCRIPTION: The output time of relay B can be set anywhere from 1/2 to 99 seconds. The factory default is 1/2 second. In most cases this is adequate for gate operators. However, with door strikes and maglocks a longer output time may be desired.

To set the output time of relay B in seconds enter the 4 digit “MASTER CODE” followed by submode “301” and then a 2 digit number corresponding to the number of seconds.

(MASTER CODE) + 301 + (SECONDS)

The unit will respond with a GOODBEEP and exit from the program mode once the seconds for relay B has been accepted. If you enter 00 for seconds the output time is set 1/2 second. Should you make an entry error, simply press the \* key and reenter the correct data.

## “302”

### SubMode 302 (SET CLOCK TIME)

To set the clock time enter the 4 digit “MASTER CODE” followed by submode “302” then the “HOURS” and “MINUTES” of the day in military format.

(MASTER CODE) + 302 + (HOURS) + (MINUTES)

Example: 8:23 a.m. = “08” + “23”

5:00 p.m. = “17” + “00”

The unit will respond with a GOODBEEP and exit from the program mode after the TIME has been accepted into the unit. Should you make an entry error, simply press the \* key and reenter the correct data.

## “303”

### SubMode 303 (SET CLOCK DATE)

DESCRIPTION: The PROX 2000 II unit incorporates an on board 365 day a year calendar and also adjusts for LEAP YEAR. Years can be entered up to 2025.

To set the clock date enter the 4 digit “MASTER CODE” followed by submode “303” then the “MONTH” and “DAY” and “YEAR”.

(MASTER CODE) + 303 + (MONTH) + (DAY) + (YEAR)

Example: 06/20/95 = “06” + “20” + “95

04/08/2003 = “04” + “08” + “03”

The unit will respond with a GOODBEEP and exit from the program mode after the DATE has been accepted into the unit. Should you make an entry error, simply press the \* key and reenter the correct data.

## “307”

### SubMode 307 (TOGGLE SPLIT RELAY ON/OFF)

NOTE: From the factory, SPLIT RELAY is disabled.

DESCRIPTION: The split relay feature is desirable when an entry and exit gate exist with a master/slave operating on two different outputs. When this feature is enabled all access cards entered from slave 1 will activate relay A and all access cards entered from slave 2 will activate relay B.

To toggle the SPLIT RELAY feature on and off enter the 4 digit “MASTER CODE” followed by submode “307”. At this time the unit will respond with 2 beeps if the split relay feature is disabled. If you wish to toggle the state, reenter the 4 digit “MASTER CODE” other wise press # to exit.

(MASTER CODE) + 307(\*) + (MASTER CODE)

(\*) 1 BEEP AND RED LED ON = FEATURE ENABLED

(\*) 2 BEEPS AND RED LED OFF = FEATURE DISABLED

Should you make an entry error, simply press the \* key and reenter the correct data. An ERROR will occur and the unit will exit the program mode if the second master code is incorrect.

## “308”

### SubMode 308 (TOGGLE ANTI-PASSBACK ON/OFF)

NOTE: From the factory, APB is disabled.

ABOUT APB: Antipassback is used to keep end users from passing their cards back allowing other users to gain access onto the property. The PROX 2000 II unit incorporates a true AntiPassBack feature in which an end user enters his entry card from slave 1 and then MUST enter it from slave 2 to exit. If the card is reentered again from slave 1, it will be logged as an error and access will be denied. From the initial entry of the code, the APB status of that code is logged into the system and each time the code must be entered from the opposite keypad.

To toggle the ANTI-PASSBACK feature on, enter the 4 digit “MASTER CODE” followed by submode “308”. At this time the unit will respond with 2 BEEPS and the red LED will be off if the antipassback feature is disabled. If you wish to toggle the state, enter a 4 digit “APB MASTER CODE”.

(MASTER CODE) + 308(\*) + (APB MASTER CODE)

(\*) 1 BEEP AND RED LED ON = FEATURE ENABLED

(\*) 2 BEEPS AND RED LED OFF = FEATURE DISABLED

Example: 1251 + 308 + ?????

Should you make an entry error, simply press the \* key and reenter the correct data, or press the # and start over.

An easy way to check if the APB feature is enabled or not is to press (MASTER CODE) +308 and check if the red LED is on or off. If it's on, the submode is enabled. Then press the # key to exit.

To disable Anti-passback press:

(MASTER CODE) + 308 + (MASTER CODE)

APB MASTER CODE DESCRIPTION: The APB master code is used to erase the APB status of a certain code in the system. In some instances it may become necessary to perform this operation if a mistake was made by an end user and the APB status needs to be reset. When this code is entered, the APB status of a code will be erased from memory. This code is not accessible while in the sleep mode (see submode 103).

To clear APB status of a specific code:

(APB MASTER CODE) + (SPECIFIC ACCESS CODE)

Example: To clear the status of code 1234 press: (APB MASTER CODE) + 1234

To clear APB status of all codes: see sub-mode 299.

## “309”

SubMode 309 (QUIET MODE)

NOTE: From the factory, QUIET MODE is enabled.

DESCRIPTION: If you want to hear the good or bad beeps at your desk when an access code is entered at the slave keypad you can disable the quiet mode. This sub-mode can be toggled on or off by pressing:

(MASTER CODE) + 309(\*) + (MASTER CODE)

(\*) 1 BEEP AND RED LED ON = FEATURE ENABLED

(\*) 2 BEEP AND RED LED OFF = FEATURE DISABLED

## “400”

SubMode 400 (PRINT AUDIT TRAIL)

NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO INVOKE THIS SUBMODE.

DESCRIPTION: The PROX 2000 II is capable of storing up to 1000 transactions in its history buffer. Once the unit reaches 1000 transactions the unit will roll over and overwrite the first transaction unless the buffer is cleared (see submode 499).

To print out the history buffer enter the 4 digit “MASTER CODE” followed by submode “400”.

(MASTER CODE) + 400

The unit will continually print out all transactions from first transaction to last. Should you make an entry error, simply press the \* key and reenter the correct data. Once the unit has finished it will respond with a GOODBEEP and exit from the program mode. To halt printing simply turn the printer off.

## “401”

SubMode 401 (PRINT OUT ALL CURRENT ACCESS CARDS)

NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO USE THIS SUBMODE.

DESCRIPTION: This sub-mode is used to print out all access cards in the system.

To print out all access cards enter the 4 digit “MASTER CODE” followed by submode “401”.

(MASTER CODE) + 401

## “402”

SubMode 402 (PRINT AUDIT TRAIL ON SPECIFIC CARD)

NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO INVOKE THIS SUBMODE.

DESCRIPTION: This sub-mode is used to print out the audit trail (history) of a specific card. The unit goes through the 1000 code history buffer and finds when the specific card has been used and prints the times and dates.

To print out the history of a specific card enter the 4 digit “MASTER CODE” followed by submode “402” followed by the “SPECIFIC CARD”.

(MASTER CODE) + 402 + (SPECIFIC CODE)

Example: To print out the history of code 1315 enter:

“MASTER CODE” + 402 + 1315

## “403”

### SubMode 403 (SET PRINTER BAUD RATE)

The default baud rate is 9600. To program in a different baud rate choose from these 4 choices and put in the number 1 thru 4.

(MASTER CODE) + 403 + (1,2,3 OR 4)

Example: To change to 2400 baud:

“MASTER CODE” + 403 + 3

## “404”

### SubMode 404 (RED PRINTING ON INVALID CODES)

This option is only available if you are using an AAS idp562 citizen printer. The option will print out every invalid code in red. This feature is disabled by default. To toggle this feature on or off press:

(MASTER CODE) + 404(\*) + (MASTER CODE)

(\*) 1 BEEP AND RED LED ON = FEATURE ENABLED

(\*) 2 BEEP AND RED LED OFF = FEATURE DISABLED

## “405”

### SubMode 405 (PRINT OUT CURRENT UNIT CONFIGURATION)

This is a very convenient way to see what is the PROX 2000 II current configuration. This will print out the status of Split Relay, APB, Quiet Mode, and red printing. To print out the configuration press:

(MASTER CODE) + 405

## “499”

### SubMode 499 (CLEAR HISTORY BUFFER)

To clear the entire contents of the history buffer enter the 4 digit “MASTER CODE” followed by submode “499” and then reenter the 4 digit “MASTER CODE”.

(MASTER CODE) + 499 + (MASTER CODE)

The LED's will flash on and off and respond with a GOODBEEP when finished. Should you make an entry error, simply press the \* key and reenter the correct data.

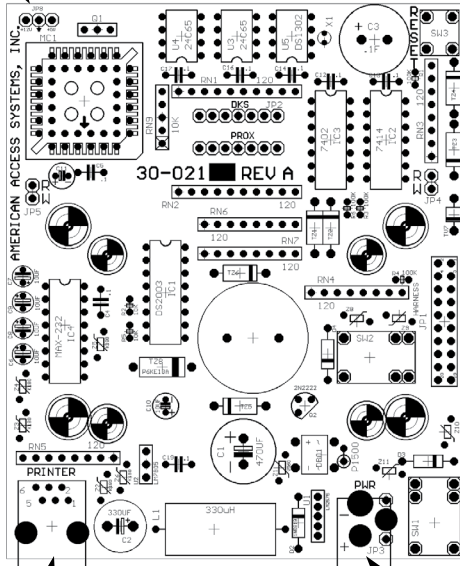




# MASTER BOARD

CONNECTION FOR 12 VOLT BULB

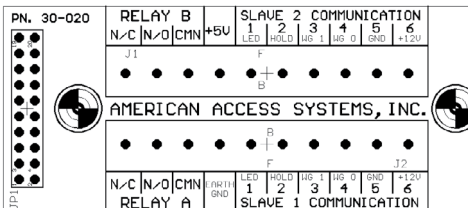
RESET  
BUTTON



CONNECTOR FOR  
COMMUNICATIONS  
AND RELAYS BOARD

PRINTER

POWER  
TRANSFORMER PLUG-IN



SEE PAGE 6 WIEGAND  
COLOR CODES FOR  
SLAVE INTERFACE

# COMMUNICATIONS AND RELAYS BOARD



# CUSTOMER SERVICE AND TECH SUPPORT

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Customer service is available free of charge. Hours are 8:00 a.m. to 4:30 p.m. MST. If you call, please have your Model and Serial Number to help our Technicians assist you.

E-Mail: [customerservice@securitybrandsinc.com](mailto:customerservice@securitybrandsinc.com)

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E-Mail: [techsupport@securitybrandsinc.com](mailto:techsupport@securitybrandsinc.com)



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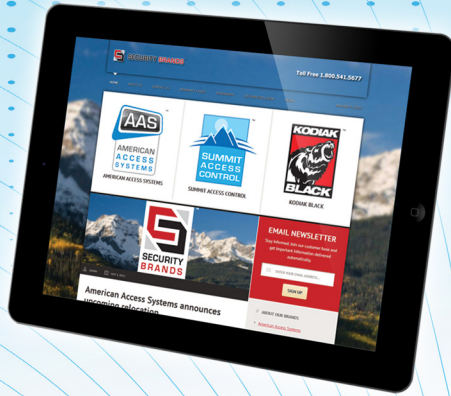
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