

American Access Systems, Inc.

7079 South Jordan Road / Unit 6

Englewood, CO 80112

TECH: (303) 799-9757

SALES: 800-541-5677

FAX: (303) 799-9756

**AMERICAN ACCESS SYSTEMS, INC.**



**DKS II**

**with Advantage RCG Technology**

**INSTALLATION & PROGRAMMING  
INSTRUCTIONS**

**MODELS:**

**24-100(D), 24-500(D),  
24-1000(D), 24-2000(D)**

## AAS 2-Year Limited Warranty

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

American Access Systems "ADVANTAGE DKS II (24-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) 799-9757 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, 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:

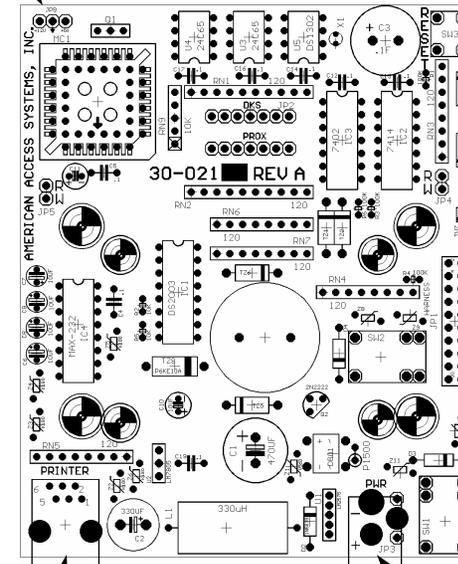
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

AMERICAN ACCESS SYSTEMS, INC.  
7079 SOUTH JORDAN ROAD / UNIT 6  
ENGLEWOOD, CO. 80112  
PH: (303) 799-9757  
FAX: (303) 799-9756

## MASTER BOARD

CONNECTION FOR 12 VOLT BULB

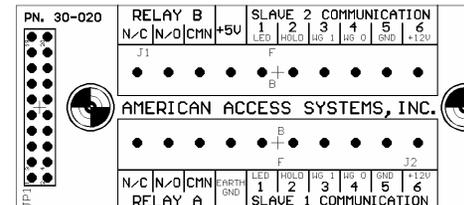
RESET  
BUTTON



CONNECTOR FOR  
COMMUNICATIONS  
AND RELAYS BOARD

PRINTER

POWER  
TRANSFORMER PLUG-IN



SEE PAGE 6 WIEGAND  
COLOR CODES FOR  
SLAVE INTERFACE

## COMMUNICATIONS AND RELAYS BOARD



**BEFORE PROCEEDING**

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

American Access Systems, Inc.  
Warranty Registration  
7079 South Jordan Road / Unit 5  
Englewood, Co. 80112

**INTRODUCTION**

Your new ADVANTAGE DKS II unit is a high quality, programmable, commercial digital key control station. The unit incorporates an interface for two remote wiegand keypads as well as an interface for a serial printer. The ADVANTAGE DKS II unit also employs a random code generator (RCG) and 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 ACCESS CODES entered into the system will operate relay A (Default setting).
- \* When **SPLIT RELAY FEATURE** is enabled, all codes entered from the master or slave 1 will activate relay A, and all codes entered on slave 2 will activate relay B.

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.

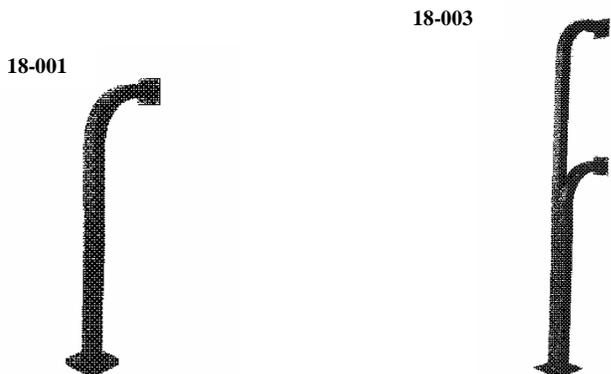
**STEP 1-MOUNTING THE SLAVE UNITS**

**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 (18-001) or double height (18-003)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.



**“404”**

**Sub-Mode 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”**

**Sub-Mode 405 (PRINT OUT CURRENT UNIT CONFIGURATION)**

This is a very convenient way to see what is the ADVANTAGE RCG current configuration. This will print out the status of 3 Strikes Your Out, Split Relay, APB, Quiet Mode, Latch A Code, Latch B Code, Sleep Code, Manager’s Codes, and Second Relay Codes. To print out the configuration press:

(MASTER CODE) + 405

**“499”**

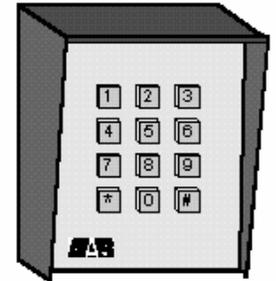
**Sub-Mode 499 (CLEAR HISTORY BUFFER)**

To clear the entire contents of the history buffer enter the 5 digit "MASTER CODE" followed by sub-mode "499" and then re-enter the 5 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 re-enter the correct data.

**STEP 2-SYSTEM CONNECTIONS**  
**HOOKUP STEPS**



**“309”**

**Sub-Mode 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”**

**Sub-Mode 400 (PRINT AUDIT TRAIL)**

**NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO INVOKE THIS SUB-MODE.**

DESCRIPTION: The ADVANTAGE RCG 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 sub-mode 499).

To print out the history buffer enter the 5 digit "MASTER CODE" followed by sub-mode "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 re-enter 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”**

**Sub-Mode 401 (PRINT OUT ALL CURRENT ACCESS CODES)**

**NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO USE THIS SUB-MODE.**

DESCRIPTION: This sub-mode is used to print out all access codes in the system either entered by hand or randomly generated.

NOTE: To print out manager and relay B codes see sub-mode "405".

To print out all access codes enter the 5 digit "MASTER CODE" followed by sub-mode "401".

(MASTER CODE) + 401

**“402”**

**Sub-Mode 402 (PRINT AUDIT TRAIL ON SPECIFIC CODE)**

**NOTE: THE UNIT MUST BE INTERFACED TO A PRINTER TO INVOKE THIS SUB-MODE.**

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

To print out the history of a specific code enter the 5 digit "MASTER CODE" followed by sub-mode "402" followed by the "SPECIFIC CODE".

(MASTER CODE) + 402 + (SPECIFIC CODE)

e.g. To print out the history of code 13156 enter:

“MASTER CODE” + 402 + 13156

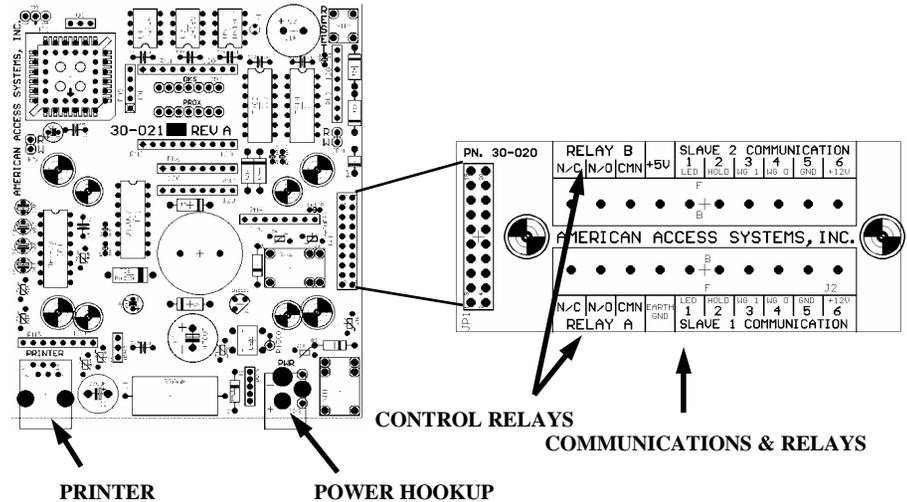
**“403”**

**Sub-Mode 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)
- 1 - 9600 baud
- 2 - 4800 baud
- 3 - 2400 baud
- 4 - 1200 baud

e.g. To change to 2400 baud: “MASTER CODE” + 403 + 3



(A). Make all your slave connections BEFORE you apply power to the unit (See Page 6). To connect power to your new desk unit plug the wall transformer into an outlet and insert the other end in the back of the unit.

(B). Connect the device(s) to be controlled to the appropriate terminal(s)(Relay A or B) on the Communications and Relays Board.

(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 ADVANTAGE DKS II**

**WIRE RECOMMENDATIONS:** 6 CONDUCTOR, 22 GAUGE, TWISTED SHIELDED CABLE  
The ADVANTAGE DKS II communicates with two 12-000 slave keypads utilizing weigand technology.

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 weigand color codes in this way. USE THESE COLORS FROM THE SLAVE AND ATTACH THEM TO THEIR NUMBER ON THE COMMUNICATION AND RELAY BOARD.

MASTER TERMINAL	WIRE NAME	SLAVE HARNESS
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 ADVANTAGE DKS II**

The ADVANTAGE DKS II incorporates an RS-232 serial interface on board for connection to a serial 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.

**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, (63-030), is required to link the advantage DKS II to the printer. Plug one end into the printer receptacle located on the underside of the printer. Plug the other end into the RJ45 jack on the back of the ADVANTAGE DKS II Unit. **Caution: Do not plug printer phone cable into RJ12 Port labeled CASH on the OM-200 Printer.**

**Printer Setup**

The ADVANTAGE DKS II unit default configuration communicates with a printer at 9600 bps, 8 bits, no parity, CR valid. The baud rate settings on the ADVANTAGE DKS 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 enter any 5 digit code less than 65535 from the keypad.

**IF USING OUR OM—200 PRINTER ALL DIP SWITCHES ARE OFF EXCEPT #2,#3 & # 7**

**ACCESS & FUNCTION CODES**

NOTE: SINCE THE ADVANTAGE RCG SYSTEM IS BASED ON WEIGAND TECHNOLOGY,

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

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

**“307”**

**Sub-Mode 307 (TOGGLE SPLIT RELAY ON/OFF)**

**NOTE: From the factory, SPLIT RELAY is disabled. Also if using only one slave connect it to the SLAVE 2 terminals.**

**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 codes entered from the master unit and slave 1 will activate relay A and all access codes entered from slave 2 will activate relay B.*

**To toggle the SPLIT RELAY feature on and off enter the 5 digit "MASTER CODE" followed by sub-mode "307". At this time the unit will respond with a QUICK BEEP if the split relay feature is enabled. If you wish to toggle the state, re-enter the 5 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 re-enter the correct data. An ERROR will occur and the unit will exit the program mode if the second master code is incorrect.

**“308”**

**Sub-Mode 308 (TOGGLE ANTI-PASSBACK ON/OFF)**

**NOTE: From the factory, APB is disabled.**

**ABOUT APB:** Anti-passback is used to keep end users from passing their codes back allowing other users to gain access onto the property. The ADVANTAGE DKS II unit incorporates a true Anti-passback feature in which an end user enters his entry code from the master unit or slave 1 and then MUST enter it from slave 2 to exit. If the code is re-entered again from the master unit or slave 1, it will be logged as an error and access will be denied. The same applies to the slave unit. 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 5 digit "MASTER CODE" followed by sub-mode "308". At this time the unit will respond with 2 BEEPS and the red LED will be off if the anti-passback feature is disabled. If you wish to toggle the state, enter a 5 digit “APB MASTER CODE” between 0 and 65535 followed by the “NUMBER OF SLAVES” connected to the system.**

(MASTER CODE) + 308(\*) + (APB MASTER CODE) + (NUMBER OF SLAVES)

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

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

e.g. 01251 + 308 + ????? + 2

Should you make an entry error, simply press the \* key and re-enter 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, or all the codes. 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 sub-mode 103).*

*To clear APB status of a specific code:*

(APB MASTER CODE) + (SPECIFIC ACCESS CODE)

*Example: To clear the status of code 12345 press: (APB MASTER CODE) + 12345*

*To clear APB status of all codes:*

(APB MASTER CODE) + (MASTER CODE)

## “304”

### Sub-Mode 304 (ERASE MEMORY AND FILL WITH RANDOM CODES)

DESCRIPTION: *The ADVANTAGE DKS II unit incorporates an RCG (Random Code Generator). This sub-mode will delete all current access codes and fill the memory with randomly generated codes. This sub-mode will not affect managers codes, sleep code, latch codes, relay B codes.*

To start the RCG enter the 5 digit "MASTER CODE" followed by sub-mode "304" followed again by the master code.

(MASTER CODE) + 304 + (MASTER CODE)

eg. 01251 + 304 + 01251

THE UNIT LED'S WILL START FLASHING AS IT'S GENERATING CODES. WHEN IT IS FINISHED THE LED'S WILL STOP AND THE UNIT WILL GIVE A GOOD BEEP. NOTE: THIS WILL TAKE A FEW MINUTES. FOR A 2000 CODE UNIT THIS CAN TAKE AS LONG AS 20 MINUTES. AFTER THE UNIT IS THROUGH GENERATING CODES SEE SUB-MODE 401 TO PRINT OUT THE ACCESS CODES THAT WERE GENERATED.

## “305”

### Sub-Mode 305 (GENERATE SPECIFIC NUMBER OF RANDOM CODES)

DESCRIPTION: *The ADVANTAGE DKS II unit incorporates an RCG (Random Code Generator). This sub-mode will leave the current access codes in the system and will generate a specific number of codes that the user specifies. This sub-mode will not affect managers codes, sleep code, latch codes, relay B codes.*

To start the RCG enter the 5 digit "MASTER CODE" followed by sub-mode "305" followed by the number of codes to be generated.

(MASTER CODE) + 305 + (NUMBER OF CODES TO BE GENERATED)

eg. 75 codes for model 24-100 & 24-500: 01251 + 305 + 075

eg. 75 codes for model 24-1000 & 24-2000: 01251 + 305 + 0075

eg. 3 codes for model 24-100 & 24-500: 01251 + 305 + 003

eg. 3 codes for model 24-1000 & 24-2000: 01251 + 305 + 0003

THE UNIT LED'S WILL START FLASHING AS IT'S GENERATING CODES. WHEN IT IS FINISHED THE LED'S WILL STOP AND THE UNIT WILL GIVE A GOOD BEEP. NOTE: THIS COULD TAKE A FEW MINUTES DEPENDING ON THE NUMBER OF CODES TO BE GENERATED. AFTER THE UNIT IS THROUGH GENERATING CODES IT WILL PRINT OUT THE NUMBER OF CODES GENERATED (EG. 75 CODES CREATED). IF YOU TRY TO GENERATE SAY 75 CODES BUT THERE IS ONLY 71 SPACES LEFT IN MEMORY, THE UNIT WILL GENERATE 71 CODES AND PRINT OUT "71 RANDOM CODES CREATED". IF MEMORY IS FULL WHEN YOU TRY TO GENERATE CODES, THE UNIT WILL PRINT "\*\*\*MEMORY FULL\*\*\*". SEE SUB-MODE 401 TO PRINT OUT THE ACCESS CODES THAT WERE GENERATED.

## “306”

### Sub-Mode 306 (TOGGLE 3 STRIKES ON/OFF)

NOTE: From the factory, 3 strikes is disabled.

DESCRIPTION: *This feature is desirable to keep unwanted persons from successively entering codes until they "hit" a programmed access code. By selecting this function you enable a 1 1/2 minute lock out time if 3 incorrect codes are entered successively within a 3 minute period. When this occurs, the LED's will flash and a high pitched alarm will be generated from the unit for 30 seconds. The unit will then shut down for 1 minute.*

To toggle the 3 STRIKES feature on and off enter the 5 digit "MASTER CODE" followed by sub-mode "306". At this time the unit will respond with a QUICK BEEP if the 3 strikes is currently enabled. If you wish to toggle the state, re-enter the 5 digit "MASTER CODE" other wise press # to exit.

(MASTER CODE) + 306(\*) + (MASTER CODE)

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

**ALL CODES USED BY THE SYSTEM MUST RESIDE BETWEEN 0 AND 65535. AN ENTRY OF A HIGHER NUMBER WILL RESULT IN AN ERROR.**

Depending on which model you have, your unit may be programmed with multiple (5 digit ) access codes. The maximum number of access codes that can be programmed into the unit is reflected in the model number (eg. 24-100 = 100 access codes). There are two different types of codes; ACCESS CODES & FUNCTION CODES. Access codes are standard user codes for gaining access onto or into a restricted area. Function codes are assigned a specific function. The function codes and their descriptions are as follows.

## FUNCTION CODES

### FUNCTION CODE

### DESCRIPTION

"Master Code" This is a 5 digit programmable code between 00000 and 65535 used for gaining access to the program mode. The factory default is "0 1 2 5 1".

"Relay A Latch Code" This is a 5 digit programmable code between 00000 and 65535 used to lock down relay A. This code will be used to hold open a gate or door connected to relay A.

"Relay B Latch Code" This is a 5 digit programmable code between 00000 and 65535 used to toggle relay B. This code will be used to hold open a gate or door connected to relay B.

"Sleep Code" This is a 5 digit programmable code between 00000 and 65535 used to put the unit to sleep. In the sleep mode all codes are disabled with the exception of the MANAGERS CODES. When the "SLEEP CODE" is re-entered again the unit will wake up.

"APB code" This is a 5 digit programmable code between 00000 and 65535 used to clear the anti-passback status of specific or all codes in memory.

"Second Relay Code" This is a 5 digit programmable code between 00000 and 65535 used to momentarily activate relay B. A maximum of 5 codes may be assigned for the 24-100 & 24-500, and a maximum of 10 codes for the 24-1000 & 24-2000.

"Managers Codes" This is a 5 digit programmable code between 00000 and 65535 used to gain access onto the property. This code will activate the appropriate relay regardless of the sleep state of the unit. A maximum of 15 codes may be assigned for the 24-100 & 24-500, and a maximum of 30 codes for the 24-1000 & 24-2000

### 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.

### RESETTING THE UNIT

Your ADVANTAGE DKS 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 0 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 0 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 SUB-MODE. There are 4 groups of SUB-MODES. 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 sub-modes to choose from. They are as follows:

## **--GROUP 300 (MISCELLANEOUS)--**

### **“300”**

#### **Sub-Mode 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 5 digit "MASTER CODE" followed by sub-mode "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 re-enter the correct data.

### **“301”**

#### **Sub-Mode 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 5 digit "MASTER CODE" followed by sub-mode "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 to 1/2 second. Should you make an entry error, simply press the \* key and re-enter the correct data.

### **“302”**

#### **Sub-Mode 302 (SET CLOCK TIME)**

**To set the clock time enter the 5 digit "MASTER CODE" followed by sub-mode "302" then the "HOURS" and "MINUTES" of the day in military format.**

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

eg. 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 re-enter the correct data.

### **“303”**

#### **Sub-Mode 303 (SET CLOCK DATE)**

DESCRIPTION: *The ADVANTAGE DKS 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 5 digit "MASTER CODE" followed by sub-mode "303" then the "MONTH" and "DAY" and "YEAR".**

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

eg. 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 re-enter the correct data.

"105" then the "NEW LATCH B CODE" you wish to program into the unit.

(PRESENT MASTER CODE) + 105 + (LATCH B CODE)

The unit will respond with a GOODBEEP after acceptance of the new latch B code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new latch B code, you must select a different one as it is already in use by the system.

### “106”

#### SUB-MODE 106 (PROGRAM RELAY B CODES)

DESCRIPTION: Relay B codes are used to activate relay B. Each time a relay B code is entered into the system, the relay B code, date, and time are logged into the history buffer. A maximum of 5 relay B codes may be programmed for a 24-100 & 24-500 and a maximum 10 relay B codes for a 24-1000 & 24-2000. These codes are not accessible if the unit is in the SLEEP MODE (see sub-mode 103).

To program in relay B codes enter the 5 digit "MASTER CODE" followed by sub-mode "106" then each 5 digit "RELAY B CODES" you wish to program into the unit.

(MASTER CODE) + 106 + (RELAY B CODE) + (RELAY B CODE) etc...(# to exit)

You may continue entering relay B codes until the unit reaches it's maximum code capacity or the # is pressed. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new relay B code, you must select another as it is already in use by the system. The unit will respond with a GOODBEEP after acceptance of each new relay B code. You will automatically be exited from the program mode when the RELAY B MEMORY is filled. If the RELAY B MEMORY is full you will not be able to enter this Sub-Mode and will receive an ERROR if entry is attempted.

## --GROUP 200 (DELETING CODES)--

### “200”

#### Sub-Mode 200 (DELETE CODES)

To delete any code from memory, with the exception of the MASTER CODE, enter the 5 digit "MASTER CODE" followed by sub-mode "200" and then the code to be deleted.

(MASTER CODE) + 200 + (CODE TO BE DELETED) + (NEXT CODE TO BE DELETED) etc...(# to exit)

You may continue deleting codes in a successive manner. When you are finished press # to exit. Should you make an entry error, simply press the \* key and re-enter the correct data. Should you receive an ERROR after you enter a code to be deleted, the code was not found in memory and the unit will wait for you to enter another code to be deleted. The unit will respond with a GOODBEEP after each successful deletion.

### “299”

!!!! WARNING ALL CODES WILL BE DELETED !!!!

#### Sub-Mode 299 (CLEAR MEMORY)

To erase all codes from memory, (except the master code), enter the 5 digit "MASTER CODE" followed by sub-mode "299" and then re-enter the 5 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. Should you make an entry error, simply press the \* key and re-enter the correct data. An ERROR will occur and the unit will exit the program mode if the second master code is incorrect.

## GROUP 100 SUBMODES (PROGRAMMING CODES)

SUB-MODE	DESCRIPTION
100	Program Access Codes
101	Program Managers Codes (15 Max 100 & 500: 30 Max 1000 & 2000)
102	Change System Master Code
103	Program Sleep Code
104	Program Latch Code Relay A
105	Program Latch Code Relay B
106	Program Relay B Codes (5 Max 100 & 500: 10 Max 1000 & 2000)

## GROUP 200 SUBMODES (DELETING CODES)

200	Delete Codes
299	Clear Memory

## GROUP 300 SUBMODES (MISCELLANEOUS)

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
304	Erase Memory and Fill with Random Codes
305	Generate Specific Number of Random Codes
306	Toggle 3 Strikes On/Off
307	Toggle Split Relay On/Off
308	Toggle AntiPassBack On/Off
309	Quiet Mode

## --GROUP 100 (PROGRAMMING CODES)--

### “100”

#### SUB-MODE 100 (PROGRAM ACCESS CODES)

HELPFUL HINT: REMEMBER, IF YOU DO NOT WANT TO COME UP WITH CODES YOURSELF

## GROUP 400 SUBMODES (PRINT FUNCTIONS)

400	Print Audit Trail (Entire Contents of History Buffer)
401	Print Out All Current Access Codes
402	Print Audit Trail on Specific Code
403	Set Printer Baud Rate
404	Red Printing on Invalid Codes (For AAS idp562 Citizen Printer Only)
405	Print Out Current Unit Configuration (Prints out Status of 3 Strikes, Split Relay, APB, Current Baud Rate, All Manager's and Second Relay Codes)
499	Clear Entire History Buffer

THIS UNIT CONTAINS AN RCG FEATURE (RANDOM CODE GENERATION) SEE SUBMODE 304

AND 305. KEEP IN MIND YOUR NEW CODES MUST BE LESS THAN 65535 AND NOT ALREADY IN USE BY THE SYSTEM. PAGE 18 IN THIS MANUAL IS AN ACCESS CODE LOG SHEET WHICH MAY BE PHOTO-COPIED FOR KEEPING TRACK OF ALL CODES IN THE SYSTEM.

**DESCRIPTION:** Access codes are codes given out to end users to gain access onto the property. The number of access codes you may program into the unit is reflected in the corresponding model number of the unit. Each time an access code is entered into the system, the code, date, and time are logged into the history buffer. If you are interfacing a slave keypad(s) to the system and the "SPLIT RELAY" feature (see sub-mode 307) is enabled then all access codes entered from the master and slave 1 will activate relay A and all access codes entered from slave 2 will activate relay B. From the factory all access codes will activate relay A. Access codes are not accessible while in the SLEEP MODE (see sub-mode 103).

**To program in new access codes enter the 5 digit "MASTER CODE" followed by sub-mode "100" then enter each 5 digit "ACCESS CODE" you wish to program into the unit.**

(MASTER CODE) + 100 + (ACCESS CODE) + (ACCESS CODE) etc...(# to exit)

You may continue entering access codes until either the memory is filled or the # is pressed. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new access code, you must select a different one as it is already in use by the system. The unit will respond with a GOODBEEP after acceptance of each new access code. You will automatically be exited from the program mode when the access code memory is filled. When memory is completely filled you will not be able to enter this Sub-Mode and will receive an ERROR if entry is attempted.

## “101”

### SUB-MODE 101 (PROGRAM MANAGERS CODES)

**DESCRIPTION:** Managers codes are given out to individuals to gain access onto the property regardless of the SLEEP STATE (see sub-mode 103) of the unit. Each time a managers code is entered into the system, the manager code, date, and time are logged into the history buffer. A maximum of 15 managers codes for the 24-100 & 24-500 and 30 manager codes for the 24-1000 & 24-2000 may be programmed into the unit. If you are interfacing a slave keypad(s) to the system and the "SPLIT RELAY" feature (see sub-mode 307) is enabled, all managers codes entered from the master and slave 1 will activate relay A and all managers codes entered from slave 2 will activate relay B. From the factory all managers codes will activate relay A.

**To program in managers codes enter the 5 digit "MASTER CODE" followed by sub-mode "101" then each 5 digit "MANAGERS CODE" you wish to program into the unit.**

(MASTER CODE) + 101 + (MANAGERS CODE) + (MANAGERS CODE) etc...(# to exit)

You may continue entering managers codes until the unit holds a total of 15 managers codes for a 24-100 & 24-500, 30 manager codes for the 24-1000 & 24-2000 or the # is pressed. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new managers code, you must select another as it is already in use by the system. The unit will respond with a GOODBEEP after acceptance of each new managers code. You will automatically be exited from the program mode when the MANAGER MEMORY is filled. If the MANAGER MEMORY is full you will not be able to enter this Sub-Mode and will receive an ERROR if entry is attempted.

## “102”

### SUB-MODE 102 (PROGRAM MASTER CODE)

**DESCRIPTION:** The master code is used to gain access to the program mode. The factory default master code is 01251. 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 sub-mode 103).

**To program in a new master code enter the PRESENT 5 digit "MASTER CODE" followed by sub-mode "102" then the "NEW MASTER CODE" you wish to program into the unit.**

(PRESENT MASTER CODE) + 102 + (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 re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. 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.

## “103”

### SUB-MODE 103 (PROGRAM SLEEP CODE)

**DESCRIPTION:** The SLEEP MODE is the mode of operation in which the unit shuts down and goes to sleep. Only MANAGERS CODES are accepted into the system in this mode. The SLEEP CODE is accepted into the system from the master unit or either slave. Each time the SLEEP CODE is entered the sleep code, 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 code enter the 5 digit "MASTER CODE" on the master unit, followed by sub-mode "103" then the "NEW SLEEP CODE" you wish to program into the unit.**

(PRESENT MASTER CODE) + 103 + (SLEEP CODE)

The unit will respond with a GOODBEEP after acceptance of the new sleep code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new sleep code, you must select a different one as it is already in use by the system.

## “104”

### SUB-MODE 104 (PROGRAM LATCH A CODE)

**DESCRIPTION:** The LATCH A CODE is used to toggle the output state of relay A. In most cases this code will be used to hold a gate or door open. This code is accepted into the system from the master unit or the slaves. Each time the LATCH A code is entered the latch A code, 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 sub-mode 103).

**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 code enter the 5 digit "MASTER CODE" followed by sub-mode "104" then the "NEW LATCH A CODE" you wish to program into the unit.**

(PRESENT MASTER CODE) + 104 + (LATCH A CODE)

The unit will respond with a GOODBEEP after acceptance of the new latch A code and you will automatically be exited from the program mode. Should you make an entry error, simply press the \* key and re-enter the correct data. You may select any 5 digit code less than 6 5 5 3 5 that is not already in use. Should you receive an ERROR after you enter a new latch A code, you must select a different one as it is already in use by the system.

## “105”

### SUB-MODE 105 (PROGRAM LATCH B CODE)

**DESCRIPTION:** The LATCH B CODE is used to toggle the output state of relay B. In most cases this code will be used to hold a gate or door open. This code is accepted into the system from the master unit or the slaves. Each time the LATCH B code is entered the latch B code, date, and time are logged into the history buffer and the unit toggles the output state of relay B. This code is not accessible while the unit is in the SLEEP MODE (see sub-mode 103).

**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 code enter the 5 digit "MASTER CODE" followed by sub-mode**