

# **INSTALLATION INSTRUCTIONS**

**AV-8000  
AV-6000  
AV-4000  
DIGI-KEY-III**

**ALSO USED FOR  
AV-3000 AV-3000-UL  
AV-3100E PAS-1/WC**



**acron  
corporation**

# GENERAL DESCRIPTION DK-III

The Digi-Key III is an E.E. Prom Digital Arming Station that provides full system control and displays full system status from one or more convenient locations. *Read and become familiar with the information contained in the DK-III User's Manual before proceeding with the installation instructions.*

The material in this publication is for information purposes only and is subject to change without notice. Acron Corporation assumes no responsibility for any error which may appear in this publication.

## INSTALLATION INSTRUCTIONS CONNECTING THE DK-III TO THE AVENGER

**CAUTION:** Connections must be made with all power removed.

Connect the DK-III to the Avenger as outlined below.

DK-III	AV-4000	AV-6000	AV-8000	AV-3000 AV-3000-UL AV-3100E
RED LEAD	TERM 8	TERM 8	TERM 10	TERM 9
BLACK LEAD	TERM 9	TERM 4	TERM 8	TERM 12
BLUE LEAD	TERM 10	TERM 10	TERM 12	TERM 11
YELLOW LEAD	TERM 11	TERM 9	TERM 11	TERM 10

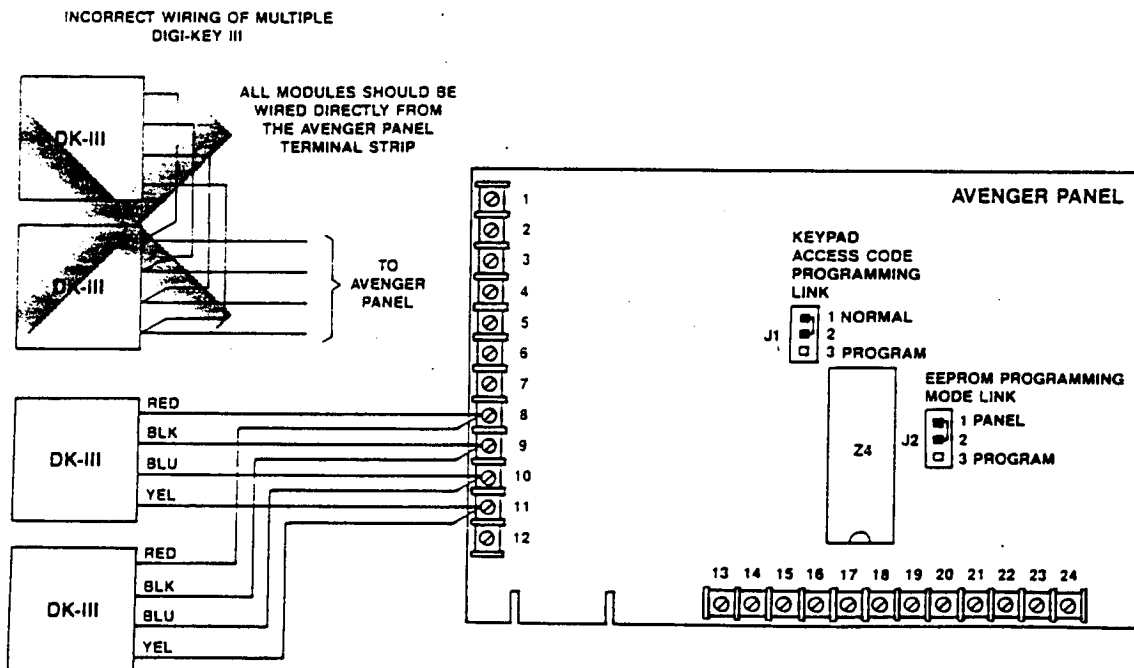


FIGURE 1

# PROGRAMMING INSTRUCTIONS

## FACTORY PROGRAMMED VALUES

ALL DK-III's ARE INITIALLY FACTORY PROGRAMMED AS FOLLOWS:

- A. Single Premise operation.
- B. Primary Access Code of 123.
- C. All Burg Zones enabled for by-passing.
- D. Secondary Access Codes — Unprogrammed.
- E. Zone LEDS — Enabled.
- F. Product Code for use with AV-6000/8000.

## PRODUCT CODE

In order to program a new primary access code when old code is not known the DK-III must have been initialized with the correct Product Code. If the DK-III is to be used with the AV-8000, enter 

#	ENTRI	★	MODE	9	FA	0	I/O	9	FA	1	#	ENTRI
---	-------	---	------	---	----	---	-----	---	----	---	---	-------

 to allow initial primary code programming. After completing, enter 

#	ENTRI	★	MODE	9	FA	0	I/O	9	FA	0	I/O	#	ENTRI
---	-------	---	------	---	----	---	-----	---	----	---	-----	---	-------

. If primary code is unknown or forgotten, this procedure must be repeated.

If the DK-III is to be used with the AV-6000 enter the following key sequence:

#	ENTRI	★	MODE	9	FA	0	I/O	9	FA	1	#	ENTRI
---	-------	---	------	---	----	---	-----	---	----	---	---	-------

If the DK-III is to be used with any other Acron Panel enter the following key sequence:

#	ENTRI	★	MODE	9	FA	0	I/O	9	FA	0	I/O	#	ENTRI
---	-------	---	------	---	----	---	-----	---	----	---	-----	---	-------

## CHANGING ARM/DISARM CODE

Preferred method is reprogramming from the keypad, consult DK-III User's manual see page 5.

## PROGRAMMING ACCESS CODES

Primary and Secondary Code programming and reprogramming are described in the User's Manual see page 5.

## INSTALLER PROGRAMMING MODES ABBREVIATED ARMING-SELECTING/ DIS-SELECTING

Abbreviated arming allows the customer to arm the system by using only 1 to 3 digits of the Access code. Assume user 2 wished to have single digit abbreviated arming. Use the following key sequence:

A	A	A	★	MODE	1	★	MODE	2	TEST	1	#	ENTRI
PRIMARY ACCESS CODE			MODE SEQUENCE			(N)			(D)			

To deselect abbreviated arming use the following key sequence:

A	A	A	★	MODE	1	★	MODE	N	#	ENTRI
PRIMARY ACCESS CODE			MODE SEQUENCE							

**NOTE:** A = PRIMARY ACCESS CODE  
N = USER NUMBER  
D = THE NUMBER OF DIGITS (1-3) TO WHICH THE ACCESS CODE WILL BE ABBREVIATED.

## EMERGENCY CODES (AV-4000)

There are four emergency conditions that can be initiated from the DK-III keypad. These are initiated by simultaneously pressing key pairs which selectively cause an alarm on the AV-4000 panel as follows:

DEPRESSING	INITIATES ZONE		
<table border="1"><tr><td>1</td></tr></table> and <table border="1"><tr><td>3</td></tr></table>	1	3	5 (Smoke Reset)
1			
3			
<table border="1"><tr><td>4</td></tr></table> and <table border="1"><tr><td>6</td></tr></table>	4	6	8 (same as Duress)
4			
6			
<table border="1"><tr><td>7</td></tr></table> CP and <table border="1"><tr><td>9</td></tr></table> FA	7	9	2
7			
9			
<table border="1"><tr><td>★</td></tr></table> MODE and <table border="1"><tr><td>#</td></tr></table> ENTRI	★	#	1
★			
#			

The above triggered zones should be 24-Hour Zones that have been programmed for FIRE, AUDIBLE PANIC OR SILENT PANIC. Memory location 80 on the AV-4000 programming worksheet must be programmed to enable reporting these zones.

## EMERGENCY CODES (AV-6000/ AV-8000)

There are five emergency conditions that can be initiated from the DK-III keypad. Four are initiated by simultaneously pressing key pairs, plus Duress. These five 24 Hour reporting zones are available in addition to the eight E.O.L. supervised panel initiated zones. Refer to AV-6000 or AV-8000 instal-

lation Instruction "Memory Locations 99 through 103" for details.

### KEYPAD AUDIBLE FEEDBACK SELECTING/DESELECTING

The miniature sounding device within the DK-III will "beep" whenever a key is pressed. This assures the user that the microcomputer inside the Digi-Key has sensed the key stroke. For security reasons, the four special emergency codes initiated by two key combinations are silent.

If desired, the audible feedback feature can be deselected by entering the following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>4</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	

Deselecting this feature will not effect normal operation of the sounder during the pre-alert or at any other time it would normally turn on.

Audible feedback can be selected by repeating key sequence.

The sounder can be completely disabled by entering the following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>5</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	

### ANNUNCIATOR/CHIME FEATURE SELECTING/DESELECTING

Any audible burglary zone can be programmed to activate the mini sounder briefly to announce that a door (typically) has opened or closed during the disarmed period. Used in the single premise mode this feature can be programmed by zone at each individual Digi-Key desired. To select enter the following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>3</u>	<u>Z</u> <u>Z</u> <u>Z</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	Z = ZONE NUMBER(S) DESIRED	

To deselect enter the following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>3</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	

### INDIVIDUAL ARMED LEDS ENABLING

DK-III's are shipped from the factory with all individual armed LEDs enabled. Selecting specific LEDs that you wish to enable is accomplished by entering the following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>1</u>	<u>Z</u> <u>Z</u> <u>Z</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	Z = ZONE LED(S) DESIRED	

### ENABLING BYPASS ZONES MODE SEQUENCE

The DK-III has been designed to allow the user to bypass selected burglary zones. The installer may wish to restrict the user from bypassing certain zones especially in the Multi-Premise mode. This can be accomplished by programming allowable bypass zones as follows.

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>2</u>	<u>Z</u> <u>Z</u> <u>Z</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	ENABLED BYPASS ZONES	

(AAA is the Access Code), (Z=Bypass Zone).

EXAMPLE: Assume we wish to allow the user to bypass zone 2, 3, and 5. Use following key sequence:

<u>A</u> <u>A</u> <u>A</u>	<u>★</u> <u>8</u> <u>★</u> <u>2</u>	<u>2</u> <u>3</u> <u>5</u>	<u>#</u> <u>ENTR</u>
PRIMARY ACCESS CODE	MODE SEQUENCE	ENABLED BYPASS ZONES	

The user will now only be able to bypass zones 2, 3, 5.

**NOTE: 24 Hour Audible or Silent Zones  
CAN NOT BE BYPASSED.**

**NOTE:** If more than one DK-III is used, each unit must be programmed individually. Each DK-III may be programmed to enable bypassing of different burglary zones.

## SELECTING/DESELECTING MULTI-PREMISE OPERATION MODE SEQUENCE

The DK-III leaves the factory with the Multi-Premise mode not selected. To select, use the following key sequence:

<b>A</b>	<b>A</b>	<b>A</b>	<b>★</b>	<b>8</b>	<b>★</b>	<b>7</b>	<b>#</b>
PRIMARY ACCESS CODE			MODE SEQUENCE				ENTRI

eselect repeat key sequence.

Multi-Premise operation allows two or more users to share the same control panel, however each user will only be able to utilize and control selected zones on individual DK-III arming stations.

In the conventional mode, zone bypassing and mode changing can be accomplished (see User's Manual). In multi-premise operation only zone bypassing can be accomplished. Modes are fixed. Instant, Force Arming and Test can not be selected. Zone(s) selected for Delay can not be changed to Instant.

Under certain circumstances the Forced Arming feature is automatically initiated. If an alarm condition occurs and the violated zone remains violated during disarming, the system will be Force Armed.

**MULTI-PREMISE PROGRAMMING EXAMPLE:** User (A) is assigned zones 1-4 and user (B) is assigned zones 5-8 in their respective protected areas. Select Multi-Premise Mode and Access Code for both keypads.

Enable bypass zones 1-4 on keypad A.  
Enable bypass zones 5-8 on keypad B.  
System is now ready for Multi-Premise Operation.

## ATION OF MULTI-PREMISE MODE

Both users can arm their respective zones as in the Conventional Mode, but both users must use the bypass method to remove any or all zones from their protected (armed) status.

It should be noted that the Entrance/Exit Delays are re-established making areas protected by Entrance/Exit Delays vulnerable to access from other users. However, this risk can be eliminated in high security situations by using Instant zones in these areas. In the Multi-Premise mode the ready and arm LEDs do not light.

## PROGRAMMING MODE AV-4000

Both the panel and the DK-III keypad must be placed in the "program" mode in order to program the AV-4000. Mode Link J2 on the AV-4000 should be in the "program" position. Setting the DK-III in the programming mode is accomplished by the following key sequence:

<b>A</b>	<b>A</b>	<b>A</b>	<b>★</b>	<b>8</b>	<b>★</b>	<b>9</b>	<b>#</b>
PRIMARY ACCESS CODE			MODE SEQUENCE				ENTRI

When programming is complete return the DK-III to the "Panel" mode by simultaneously depressing the **★** and **#** keys and return Mode Link J2 on the AV-4000 to the "Panel" position.

## PROGRAMMING MODE AV-6000, AV-8000

Both the panel and the DK-III must be placed in the "PROGRAM" mode in order to program the AV-6000 and AV-8000. This is accomplished by the following key sequence:

Put the DK-III in the programming mode first by entering the following key sequence:

<b>A</b>	<b>A</b>	<b>A</b>	<b>★</b>	<b>8</b>	<b>★</b>	<b>9</b>	<b>#</b>
PRIMARY ACCESS CODE			MODE SEQUENCE				ENTRI

Then put the AV-6000/AV-8000 into the programming mode from the DK-III by entering the following keys sequence:

<b>#</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>#</b>
MODE SEQUENCE						ENTRI

Press **4** and **6** simultaneously to return AV-6000/AV-8000 to "PANEL" mode.  
Press **★** and **ENTR** simultaneously to return DK-III to "PANEL" mode.

**NOTE:** Failure to return both AV-6000/AV-8000 and DK-III to the panel mode will result in improper operation. If this occurs reprogram DK-III to the program mode and repeat above in proper sequence.

## DIGI-KEY III

Installation and operation of the Digi-Key III as defined in the "Installation Instructions AV-8000, AV-6000 and AV-4000 Digi-Key III" booklet applies when using the Digi-Key III for other Acron panels with two exceptions as outlined below.

## I. EMERGENCY CODES

There are four emergency conditions that can be initiated from the DK-III keypad. These are initiated by simultaneously pressing key pairs which selectively cause an alarm on the AV-3000, AV-3000-UL, AV-3100E and PAS-1/WC panels as follows:

DEPRESSING		INITIATES PIN #	
		AVENGER	PAS-1/WC
1	and 3	V17	V3
4	and 6	V18 & Duress	V4 & Duress
7 CP	and 9 FA	V15	V1
★ MODE	and # ENTR	V16	V2

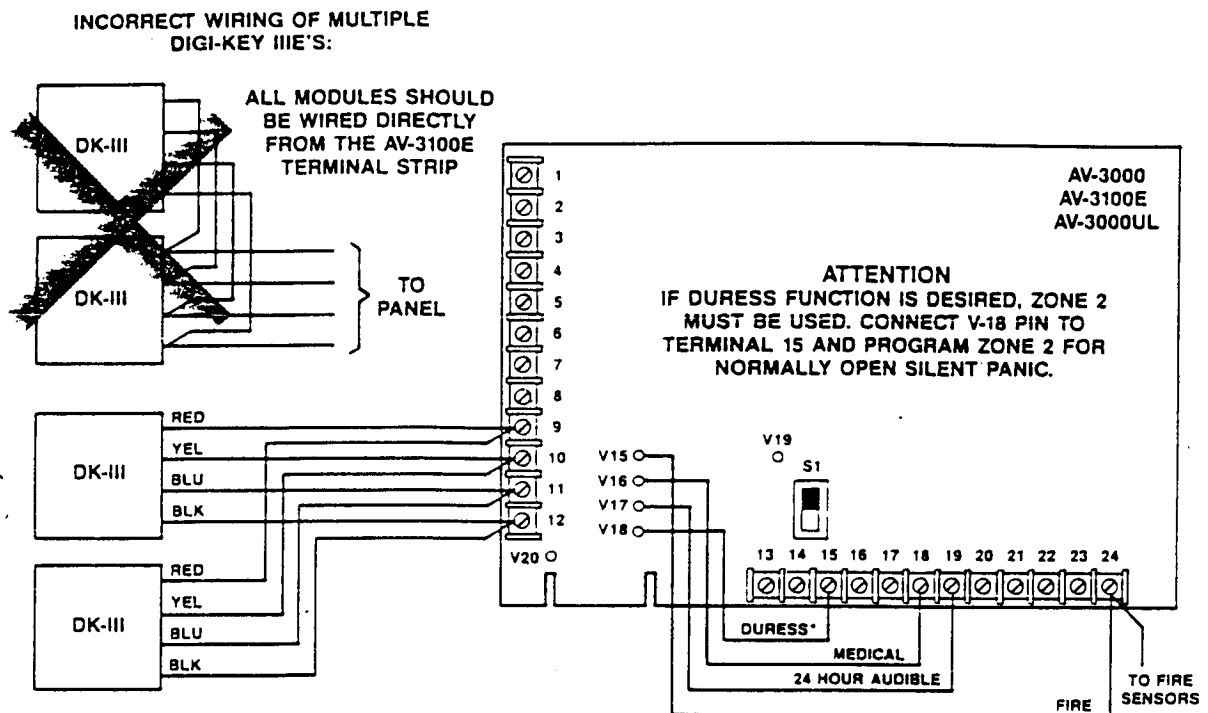
The above triggered zones should be 24 Hour Zones that have been programmed for FIRE, AUDIBLE PANIC or SILENT PANIC.

**NOTES:**

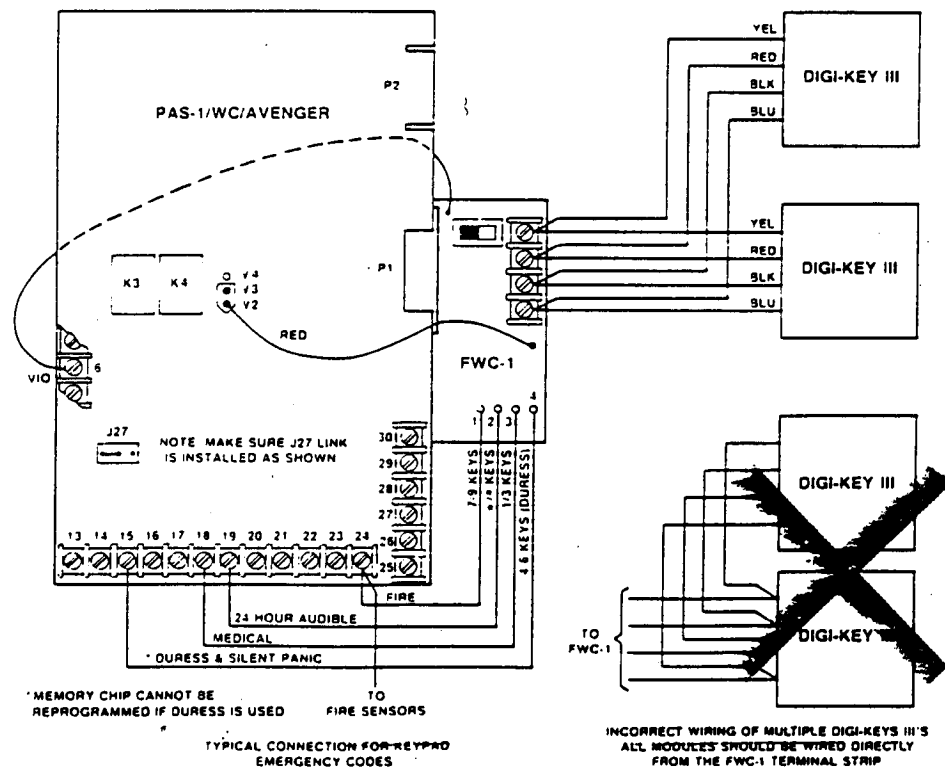
This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

## 2. CONNECTING DK-III TO PANEL

CONNECTING DIGI-KEY TO AV-3000, AV-3000-UL and AV-3100E:



CONNECTING DIGI-KEY TO PAS-1/WC:



IN THESE EXAMPLES FOR KEYPAD EMERGENCY CODES.  
ZONE 2 IS SILENT PANIC, ZONES 4 & 5 ARE AUDIBLE PANIC  
AND ZONE 8 IS FIRE.

# DK-III INSTALLERS KEYPAD REFERENCE GUIDE

FUNCTION	MODE SEQUENCE	KEY SEQUENCE
ABBREVIATED ARMING. SET	A A A  1	N D  ENTR
ABBREVIATED ARMING. CLEAR	A A A  1	N  ENTR
ENABLE ZONE LEDs	A A A  8  1	Z Z Z  ENTR
ENABLE ZONE BYPASS	A A A  8  2 TEST	Z Z Z  ENTR
ENABLE ZONE ANNUN./CHIME	A A A  8  3	Z Z Z  ENTR
AUD. FEEDBACK SEL/DESELECT	A A A  8  4  ENTR	N/A
SOUNDER SELECT/DESELECT	A A A  8  5  ENTR	N/A
MULTI/SINGLE PREMISE SEL/DESEL.	A A A  8  7 CP  ENTR	N/A
ENTER PROGRAM MODE KEYPAD	A A A  8  9 FA  ENTR	N/A
ENTER PROGRAM MODE PANEL †	ENTR 1 2 TEST 3 4 5  ENTR	N/A
EXIT PROGRAM MODE PANEL †	SIMULTANEOUSLY PRESS 4 & 6	N/A
EXIT PROGRAM MODE KEYPAD	SIMULTANEOUSLY PRESS  MODE &  ENTR	N/A
PRODUCT CODE AV-6000/8000***	ENTR  MODE 9 FA I/O 9 FA 1  ENTR	N/A
PRODUCT CODE OTHERS	ENTR  MODE 9 FA I/O 9 FA I/O  ENTR	N/A
PRIMARY ACCESS CODE CHANGE*  OD	A A A  MODE 7 CP	NEW A A A  ENTR
SECONDARY ACC CODE SET**	A A A  MODE 7 CP  MODE	N S S S  ENTR
SECONDARY ACC CODE CLEAR	A A A  MODE 7 CP  MODE	N  ENTR

See DK-III Installation Instructions.

- \* = Factory Programmed for 1, 2, 3
- \*\* = Cleared at Factory
- \*\*\* = Factory Programmed
- † = For AV-6000 / 8000 Only
- AAA = Primary Access Code (From 3 to 6 digits)

- SSS = Secondary Access Code (From 3 to 6 digits)
- ZZZ = Zone(s) enabled for bypass, annunciator/chime or individual armed LEDs.
- N = User Number.
- D = Number of digits (1-3) selected for abbreviated arming.

## SPECIFICATIONS:

Voltage: 8-16 Vdc

Current Consumption Typically 80mA

Temperature Operation Range: 35°F to 135°F

Environment: For Indoor Use Only

Dimensions: 5.5" x 4.75" x .937"

Shipping weight: 8 oz.

FOR TECHNICAL ASSISTANCE CALL:

800-631-2144

IN N.J. (201) 364-7200