

- OUTPUT 3**
 Output 3 has identical function as output 2. It is also prepared for other security and access control applications. The output is programmable for momentary or start/stop operation. Version A uses relay output, and Version B & C use transistor output.
Version A: 1 Amp relay dry contacts, with N.O. and N.C. output terminals.
Version B & C: An NPN transistor open collector output. It switches to ground (-) when Code 3 is entered (activates). Transistor ratings: Ic max -- 100mA sink, Vce max -- 12V DC

THE REMOTE KEYPAD UNIT

- DATA (+)**
 This is the communication data bus of the system. It is also the power supply input terminal of the remote keypad unit. Link it up with the "DATA" terminal at the master unit.
- GND (-)**
 The common grounding point of the remote keypad.
- GREEN & RED LEDS**
 Two LED lamps are prepared for free connection in case of alarm status or access control operation indication is required. Each LED is connected with a 1.5K Ohm current limiting resistor.
- VISIBLE AND AUDIBLE INDICATORS**
 The built-in buzzer at remote keypad (or the speaker at the master) and the amber LED generates the following tones and signals for operation status:

STATUS	TONES	LED SIGNALS
1. In programming mode	- - -	ON
2. Successful key entry	1 Beep	1 Flash
3. Successful code entry	2 Beeps	2 Flashes
4. Unsuccessful code entry	5 Beeps	5 Flashes
5. DAP jumper not replaced	Continuous Beeps (speaker)	1 Flash every 2 seconds
6. Standby mode	- - -	1 Flash every 2 seconds

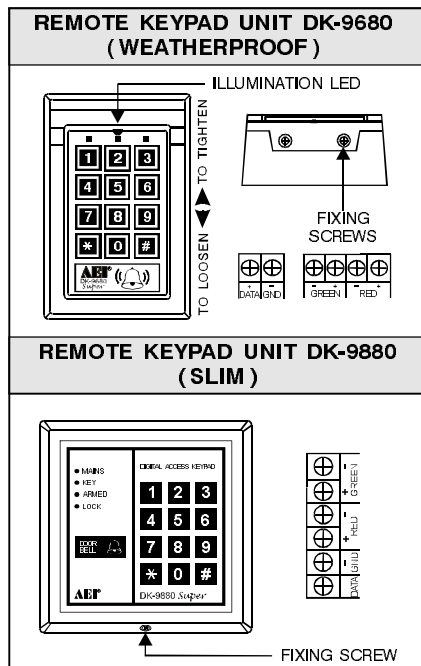
THE DAP JUMPER (DIRECT ACCESS TO PROGRAMMING)

If the Personal Master Code is forgotten, use the DAP jumper to override the forgotten code permitting direct entry into the programming mode. You are required to apply the following procedures precisely:

1. Disconnect power supply.
2. Displace the DAP jumper from OFF to ON position.
3. Reconnect power supply (speaker generates beeps).
4. Put the DAP jumper back to OFF position (this done, the beeps stop).
5. The keypad is in programming mode, ready to receive new data.
6. Enter the new data starting from Section (B) shown in the Summary Chart.

KEYBOARD ILLUMINATION LED (DK-9680), KEY LED (DK-9880)

The LED lights up for 10 seconds when a key button is pressed, which indicates the duration of the allowable time for each digit in code entry. The digit of code entry is invalid when the LED is off.



THE FACTORY-SET DATA -- IMPORTANT NOTE

For the owner's convenience in programming at the first time, the factory has put a Master Code 0000 and the Default Values (listed on page 6) into the keypad. The owner has to put his own unique codes before use. To compromise security, in all cases, the owner should program a Personal Master Code to invalidate the factory-set Master Code.

PROGRAMMING OF THE KEYPAD -- SUMMARY CHART

A) Use The Factory-set Master Code Entry in Programming -- When starts for first time

Entry of Code	Validation	Comments
0000	*	Enter into Programming Mode by the Factory-set Master Code

B) Set System to Single User or Multi User Mode & Refresh with The Default Values -- Installer Programming

Access Keys	Validation	Comments
8900	#	Set system to Single User Mode, clears all the data previously stored and refresh system with the default values
8901	#	Set system to Multi User Mode, clears all the data previously stored and refresh system with the default values

C) Recording of Personal Master Code & User Codes -- User Programming

i) Programming for Single User

Access Keys	Entry of Codes	Validation	Comments
0	4 digits, fixed	#	Personal Master Code & Super User Code
1	4 digits, fixed	#	User Code 1 with Duress & Alarm OFF Code function (Suggest for door strike)
2	4 digits, fixed	#	User Code 2 (Suggest for alarm arm-disarm control)
3	4 digits, fixed	#	User Code 3 (Suggest for other auxiliary access control)

ii) Programming for Multi-Users

Access Keys	User Number	Entry of Codes	Validation	Comments
0		4 to 8 digits	#	Personal Master Code & Super User Code
1	00 to 99	4 to 8 digits	#	100 User Codes in Group 1 with Duress & Alarm OFF Code function (For door Strike)
2	0 to 9	4 to 8 digits	#	10 User Codes in Group 2 (Suggest for alarm arm-disarm control)
3	0 to 9	4 to 8 digits	#	10 User Codes in Group 3 (Suggest for other auxiliary access control)

D) Configuration of Relay Outputs -- Installer Programming

Access Keys	Code Duration	Validation	Comments
40	1 to 999	#	Output 1 in Momentary Mode from 1 to 999 seconds
41		#	Output 1 in Start/Stop Mode without accelerated code
42		#	Output 1 in Start/Stop Mode with accelerated code

50	1 to 999	#	Output 2 in Momentary Mode from 1 to 999 seconds
51		#	Output 2 in Start/Stop Mode without accelerated code
52		#	Output 2 in Start/Stop Mode with accelerated code

60	1 to 999	#	Output 3 in Momentary Mode from 1 to 999 seconds
61		#	Output 3 in Start/Stop Mode without accelerated code
62		#	Output 3 in Start/Stop Mode with accelerated code

E) Personal Safety -- Installer Programming

Access Keys	Number of False Entry	Validation	Comments
70		#	After 10 successive false codes, the keypad locks during 30 seconds
71		#	After 10 successive false codes, the Duress Output switches to ground
72	5 to 10	#	Selectable of 5 to 10 successive false codes, the keypad locks during 15 minutes. The keypad can be reset to release locking with the Master Code at any time during the locking period
76	00	#	Disappearance of all the above securities

F) Door Forced-Open-Alarm & Visitor Announcing -- Installer Programming

Access Keys	Validation	Comments
80	#	Door Forced-Open-Alarm detection is Disabled
81	#	Door Forced-Open-Alarm detection is Enabled
82	#	Visitor announcing chime is given if the User Code in Group 1 is not keyed in first when the door is opened.
83	#	Visitor announcing chime is always given when the door is opened

G) Allowable Door-Left-Open Time for Door-Open-Too-Long Alarm -- Installer Programming

Access Keys	Code Duration	Validation	Comments
9	0	#	The timer is Disabled. Allows the door an infinite time to open for
9	1 to 999	#	Allowable time from 1 to 999 seconds for door open before the Door-Open-Too-Long alarm is triggered

H) Exit Programming Mode

Validation	Comments
*	Keypad exits programming mode and returns to normal operation

SINGLE USER OR MULTI-USERS SELECTION

The keypad consists two sets of application software for owner's selection in user code programming. One is "Single User Code for Each Output" and the other is "Multi-User Codes for Each Output".

The keypad has been set with a Master Code of "0000" and Multi User Mode with the following "Default Values" at the factory. You do not require to make any operation mode change if your selection is Multi-User Mode. However, You have to refresh the system to Single User Mode if it is your selection.

The Factory Set Master Code

0000

The Default Values

401 --- Output 1 is 1 Second Momentary Mode

501 --- Output 2 is 1 Second Momentary Mode

601 --- Output 3 is 1 Second Momentary Mode

70 ----- After 10 Successive False Code, The Keypad Locks During 30 Seconds

80 ----- Door Force-Open-Alarm Detection is Disabled

90 ----- The Door Open-Too-long Timer is Disabled

The Single User Code

The mode of **Single User Code** for each output only allow **ONE** User Code for each output, and it is fixed to 4 digits. This mode is prepared for those people DO NOT like to Press the # for code entry to activate the output. They only press the 4 digits User Code, then, the specific output is activated. Each output has its own code.

The Multi-User Codes

The mode of **Multi-Users** is prepared for setting up a group of user codes for each output. The User Codes can be 4 to 8 digits. To activate the desired output, the user has to press the # key to confirm of code entry in the operation of the Multi-User Code. The following are the number of User Codes available in each group:

- User Codes in Group 1 for Output 1 --- 100 Users
- User Codes in Group 2 for Output 2 --- 10 Users
- User Codes in Group 3 for Output 3 --- 10 Users

Code Entry Limitation for Multi-User Codes

As the system comes with **DURESS** function and the DURESS CODE is setting up by the system automatically with the first digit of the User Code "+2". To prevent the other User Codes fall into the Duress Code, or the Duress Codes fall into other User Codes, the first digit of a "Saved" User code "+2" or "-2" is not allowed for the later User Code entry in programming. The system will refuse those code entries.

For example: An User Code 56789 is saved in the system, then 36789 and 76789 are not allowed as other User Codes.

SET THE SYSTEM TO SINGLE USER MODE

You are required to decide the keypad for Single User or Multi-User Mode in operation. The system can be set for **Single User Mode** with the command code "8900" and stay in that mode unless the system is refreshed for other mode.

MASTER CODE * 8900 # ----- **Single User Mode** (wait 2-3 seconds until the confirmation beeps are heard)

SET THE SYSTEM TO MULTI-USER MODE

The system can be set for **Multi User Mode** with the command code "8901" and stay in that mode unless the system is refreshed for other mode.

MASTER CODE * 8901 # **Multi-User Mode** (wait 2-3 seconds until the confirmation beeps are heard)

REFRESH THE SYSTEM -- CHANGE OF OPERATION MODE

A system was set to **Single User Mode**. It is possible to change it to **Multi-User Mode**; or vice versa. Just refresh the system with the above operation command codes.

A refreshed keypad will reset itself as a fresh unit with the Default Values. **All the programmed data that saved previously are cleared except the Master Code.**

IMPORTANT NOTES:

- 1) Make sure all the **User Codes** and **Master Code** are set to **4 Digits** after the system is refreshed for Single User Mode operation. Otherwise, code entry will not be successful.
- 2) It is necessary to change the Master Code to 4 digits first (if it was more than 4 digits in Multi Users Mode) before refreshing from Multi User Mode to Single User Mode.
- 3) The system takes approximate 2 to 3 seconds to refresh itself for new operation mode after the refresh code is entered. DO NOT enter any code during the system is being refreshed until the 2 confirmation beeps are heard.

PROGRAM AND USE THE KEYPAD -- OPERATION

Once the operation mode is selected - Single User or Multi Users, all the three outputs will operate with that mode.

A) SINGLE USER MODE OPERATION -- An Example

- 1) **Requirement** -- Set the following data into the system:
 - a) Single User Mode Operation
 - b) Change the factory-set Master Code 0000 to a Personal Master Code 3289
 - c) Set User Code 1 in 8321
 - d) Set User Code 2 in 6854
 - e) Set User Code 3 in 9270
 - f) Set Output 1 in Momentary Mode, 1 second
 - g) Set Output 2 in Start / Stop Mode without accelerated code
 - h) Set Output 3 in Start / Stop Mode with accelerated code
 - i) Set the keypad to lock itself during 15 minutes after 10 successive false codes
 - j) Set the keypad with door Forced-Open-Alarm enabled
 - k) Set the allowable time for door left open for 60 seconds before triggering of the door Open-Too-Long alarm

- 2) **Programming** -- Set the above requirement into the keypad:

0000 * ----- Enter to programming mode with the factory-set Master Code
8900 # ----- System has been set for Single User Mode**
0 3289 # ----- 3289 has been saved as the new Personal Master Code
1 8321 # ----- 8321 has been saved as User Code 1, with Duress & Alarm OFF Code functions
2 6854 # ----- 6854 has been saved as User Code 2
3 9270 # ----- 9270 has been saved as User Code 3
40 1 # ----- Output 1 has been set in Momentary Mode, 1 second
51 # ----- Output 2 has been set in Start / Stop Mode without accelerated code
62 # ----- Output 3 has been set in Start / Stop Mode with accelerated code
72 10 # ----- The keypad has been set to lock during 15 minutes after 10 successive false codes
81 # ----- The keypad has been set with door Forced-Open-Alarm enabled
9 60 # ----- The keypad has been set with 60 seconds allowable time for door left open
* ----- Keypad exits programming mode. All the data above are saved and ready for use

- NOTE:** a) **Enter the Single User Mode Command Code "8900" may not be necessary if the keypad was already in Single User Mode.
b) In case of wrong entry during programming, cancel it with # key, or, wait 10 seconds, then re-enter.

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- 3) **Operate The Keypad** -- Taking the data programmed above as reference

- a) To command the output 1, 2 & 3, enter the corresponding codes into the keypad. **Press # is not required.**

8321 ----- Output 1 activates for 1 second
6854 ----- Output 2 starts (or stops)
9270 ----- Output 3 starts (or stops)

- b) The **Duress Code** does not need to program. The keypad determines it automatically by increasing the first digit of the **User Code 1 of Two units**.

For example: The User Code 1 is "1234", then the Duress Code is "3234"; or the User Code 1 is "8321", then the Duress Code is "0321".

To command the Duress Function, enter the Duress Code.

0321 ----- Duress output activates (output switches to ground) & Output 1 activates for 1 second

NOTE:

- i) The Duress Code has double actions. It activates the Duress Output and at the same time activates the Output 1 as like the User Code 1. The Duress Code can always activates or deactivates (in Start / Stop mode) Output 1, but cannot deactivate (reset) the Duress Output. ONLY the User Code 1 can deactivate (reset) the Duress Output.
- ii) All alarms will be stopped, including the door forced-open-alarm and the door open-too-long alarm, when Duress function is in operation.

- c) The **Accelerated Code** is the **First Two Digits** of the User Code. If the User Code 1, 2 or 3 has been programmed in Start/Stop mode with Accelerated Code, it is possible to **activate** the corresponding Output 1, 2 or 3 with only the First Two Digits of the User Code. Deactivating of the corresponding Output 1, 2 or 3 always requires the composition of its own Complete User Code.

In this example, Output 3 has been programmed in Start / Stop Mode with Accelerated Code.

The Complete Code of Code 3: **9270** The Accelerated Code of Code 3: **92**

92 # ----- Output 3 starts

9270 ----- Output 3 stops

- d) Try to put some random false codes to the keypad to test its **Safety**. The keypad considers 4 digits as one code and it generates 5 beeps for each unsuccessful code entry. The keypad locks itself during 15 minutes after 10 successive false codes are entered. Normal operation will be resumed after 15 minutes expired, or, it can be reset with the Master Code during the locking period.

3289 # ----- Locking is reset and keypad resumes normal operation

- e) In this example, the keypad has been programmed with **Door Forced-Open-Alarm** enabled. Try to open the door that is equipped with **Door Sensing Switch**, without the use of **Code 1** or the **Egress Button**. The alarm will activate instantly for 60 seconds. The alarm can be stopped by User Code 1 before the end of the alarm time.

8321 ----- Alarm stops

NOTE: The testing may not be feasible if the door is locked. It is necessary to un-lock the door with the mechanical key before testing.

- f) The **Door Open-Too-Long Alarm** has been enabled in programming. Try to command Output 1 with **Code 1** or the **Egress Button**. Open the door that is equipped with **Door Sensing Switch**, and leave it open for more than 60 seconds (the programmed time). The alarm starts. Close the door, the alarm stops automatically. This feature reminds the owner to close the door in case it is stuck.

- g) The keypad incorporates **Door Chime**. To activate the door chime, just simply press the **BELL** key.

B) MULTI-USER MODE OPERATION -- An Example

- 1) **Requirement** -- Set the following data into the system:

- Multi-User Mode Operation
- Change the factory-set Master Code 0000 to a Personal Master Code 3289
- Set 1st User Code of Group 1 in 8321
- Set 2nd User Code of Group 1 in 11223
- Set 3rd User Code of Group 1 in 33221
- Set 1st User Code of Group 2 in 6854
- Set 2nd User Code of Group 2 in 54321
- Set 1st User Code of Group 3 in 9270
- Set 2nd User Code of Group 3 in 22898
- Set Output 1 in Momentary Mode, 1 second
- Set Output 2 in Start / Stop Mode without accelerated code
- Set Output 3 in Start / Stop Mode with accelerated code
- Set the keypad to lock itself during 15 minutes after 10 successive false codes
- Set the keypad with door Forced-Open-Alarm enabled
- Set the allowable time for door left open for 60 seconds before triggering of the door Open-Too-Long alarm

- 2) **Programming** -- Set the above requirement into the keypad:

0000 * ----- Enter to programming mode with the factory-set Master Code

8901 # ----- System has been set for Multi User Mode**

0 3289 # ----- 3289 has been saved as the new Personal Master Code & Super User Code

1 01 8321 # ----- 8321 has been saved as the 1st User Code of Group 1 with Duress & Alarm OFF Code functions

1 02 11223 # ----- 11223 has been saved as the 2nd User Code of Group 1 with Duress & Alarm OFF Code functions

1 03 33221 # ----- 33221 has been saved as the 3rd User Code of Group 1 with Duress & Alarm OFF Code functions

2 1 6854 # ----- 6854 has been saved as the 1st User Code of Group 2

2 2 54321 # ----- 54321 has been saved as the 2nd User Code of Group 2

3 1 9270 # ----- 9270 has been saved as the 1st User Code of Group 3

3 2 22898 # ----- 22898 has been saved as the 2nd User Code of Group 3

40 1 # ----- Output 1 has been set in Momentary Mode, 1 second

51 # ----- Output 2 has been set in Start / Stop Mode without accelerated code

62 # ----- Output 3 has been set in Start / Stop Mode with accelerated code

72 10 # ----- The keypad has been set to lock during 15 minutes after 10 successive false codes

81 # ----- The keypad has been set with door Forced-Open-Alarm enabled

9 60 # ----- The keypad has been set with 60 seconds allowable time for door left open

* ----- Keypad exits programming mode. All the data above are saved and ready for use

NOTE: a) **Enter the Multi User Mode Command Code "8901" may not be necessary if the keypad was already in Multi User Mode.

b) In case of wrong entry during programming, cancel it with # key, or, wait 10 seconds, then re-enter.

- 3) **Operate The Keypad** -- Taking the data programmed above as reference

- a) To command the output 1, enter any one of the User Codes in Group 1 into the keypad and validate via the # key

8321 # ----- Output 1 activates for 1 second

11223 # ----- Output 1 activates for 1 second

33221 # ----- Output 1 activates for 1 second

- b) To command the output 2, enter any one of the User Codes in Group 2 into the keypad and validate via the # key

6854 # ----- Output 2 starts (or stops)

54321 # ----- Output 2 starts (or stops)

c) To command the output 3, enter any one of the User Codes in Group 3 into the keypad and validate via the # key

9270 # ----- Output 3 starts (or stops)

22898 # ----- Output 3 starts (or stops)

d) The Personal Master Code is also a **Super User Code**. It allows the owner to use Only One Code to operate all the 3 outputs. To command output 1, 2 or 3, enter the Personal Master Code and validate via the # key and the corresponding output number.

3289 #1 ----- Output 1 activates for 1 second

3289 #2 ----- Output 2 starts (or stops)

3289 #3 ----- Output 3 starts (or stops)

e) The **Duress Codes** do not need to program. The keypad determines it automatically by increasing the first digit of the **User Codes Two units**. All the User Codes in Group 1 have Duress Code Function.

For example:	User Codes of Group 1	The Corresponding Duress Codes
	8321	0321
	11223	31223
	33221	53221

To command the Duress Function, enter the Duress Code(s).

0321 # ----- Duress output activates (output switches to ground) & Output 1 activates for 1 second

31223 # ----- Duress output activates (output switches to ground) & Output 1 activates for 1 second

53221 # ----- Duress output activates (output switches to ground) & Output 1 activates for 1 second

NOTE:

i) The Duress Code(s) has double actions. It activates the Duress Output and at the same time activates the Output 1 as like the User Codes of Group 1. The Duress Code(s) can always activates or deactivates (in Start / Stop mode) Output 1, but cannot deactivate (reset) the Duress Output. ONLY the User Codes of Group 1 can deactivate (reset) the Duress Output.

ii) All alarms will be stopped, including the door forced-open-alarm and the door open-too-long alarm, when Duress function is in operation.

f) The **Accelerated Code** is the **First Two Digits** of the User code(s). If the User Code(s) of Group 1, 2 or 3 has been programmed in Start / Stop mode with Accelerated Code, it is possible to **activate** the corresponding Output 1, 2 or 3 with only the First Two Digits of the User Code(s). Deactivating of the corresponding Output 1, 2 or 3 always requires the composition of the Complete User Code(s).

In this example, Output 3 has been programmed in Start / Stop Mode with Accelerated Code.

The Complete Code of 1st User Code of Group 3: **9270** The Accelerated Code is: **92**
2nd User Code of Group 3: **22898** The Accelerated Code is: **22**

92 # ----- Output 3 starts

9270 # ----- Output 3 stops

22 # ----- Output 3 starts

22898 # ----- Output 3 stops

g) Try to put some random false codes to the keypad to test its **Safety**. The keypad generates 5 beeps for each unsuccessful code entry. The keypad locks itself during 15 minutes after 10 successive false codes are entered. Normal operation will be resumed after 15 minutes expired, or, it can be reset with the Master Code during the locking period.

3289 # ----- Locking is reset and keypad resumes normal operation

h) In this example, the keypad has been programmed with **Door Forced-Open-Alarm** enabled. Try to open the door that is equipped with **Door Sensing Switch**, without the use of **Code 1** or the **Egress Button**. The alarm will activate instantly for 60 seconds. The alarm can be stopped by any of the User Codes in Group 1 before the end of the alarm time.

8321 # ----- Alarm stops

NOTE: The testing may not be feasible if the door is locked. It is necessary to un-lock the door with the mechanical key before testing.

i) The **Door Open-Too-Long Alarm** has been enabled in programming. Try to command Output 1 with **Code 1** or the **Egress Button**. Open the door that is equipped with **Door Sensing Switch**, and leave it open for more than 60 seconds (the programmed time). The alarm starts. Close the door, the alarm stops automatically. This feature reminds the owner to close the door in case it is stuck.

j) The keypad incorporates **Door Chime**. To activate the door chime, just simply press the **BELL** key.

C) RE-PROGRAM THE KEYPAD WITH NEW DATA

It is possible to change the current data at anytime, such as change the User Codes, Door Open timing, etc.

1) Make the system in **Programming Mode** first. Enter your Personal Master Code and validate via * key.

3289 * ----- The keypad is in Programming Mode & ready to receive new data

2) After the system is in Programming Mode, you can enter the appropriate "Access Keys" number and put in the new data in the location. Please see the programming "Summary Chart" for details. You can re-program any individual item in the Summary Chart.

3) It is necessary to exit the programming mode and save the new data after programming via the * key

*----- All the new data are saved and the keypad is back to normal operation mode

D) REFRESH THE SYSTEM -- IT IS REQUIRED ONLY FOR CHANGING OPERATION MODE

It is possible to change the current operation mode (Single User or Multi-User Mode) by refreshing the system with the User Mode Command Code (8900 or 8901) and re-program the keypad with new data.

NOTE: All the current data in the system will be cleared **except the Master Code** and save with the Default Values once the system is refreshed.

- 1) To refresh the system, set system in programming mode and then enter the appropriate **User Mode Command Code (8900 or 8901)** and validate via **#** key.

NOTE: The system takes approximate 2 to 3 seconds to refresh itself for the new operation mode. DO NOT enter any data immediately after the validation **#** key is pressed until the 2 confirmation beeps are heard.

3289 * ----- System in programming mode

8900 # ----- System is refreshed for Single User Mode and ready to accept new data after the confirmation beeps

OR

8901 # ----- System is refreshed for Multi User Mode and ready to accept new data after the confirmation beeps

- 2) After the system is refreshed, it is still in Programming Mode. You can consider it as a new keypad power up at the first time and program it with new data. Please see the programming "Summary Chart" for details. You can re-program any individual item in the Summary Chart.

- 3) It is necessary to exit the programming mode and save the new data after programming via the * key

* ----- All the new data are saved and the keypad is back to normal operation mode

E) DELETE USER (MULTI-USER MODE)

If you need to delete a user who has left the company or who no longer has authority to enter the protected area:

- 1) Enter program mode by keying in your Personal Master Code and the * key

3289 * ----- The keypad is now in the programming mode

- 2) Enter the User Number and the # key

If you want to delete User Number 05 from output 1, press 1 05 #

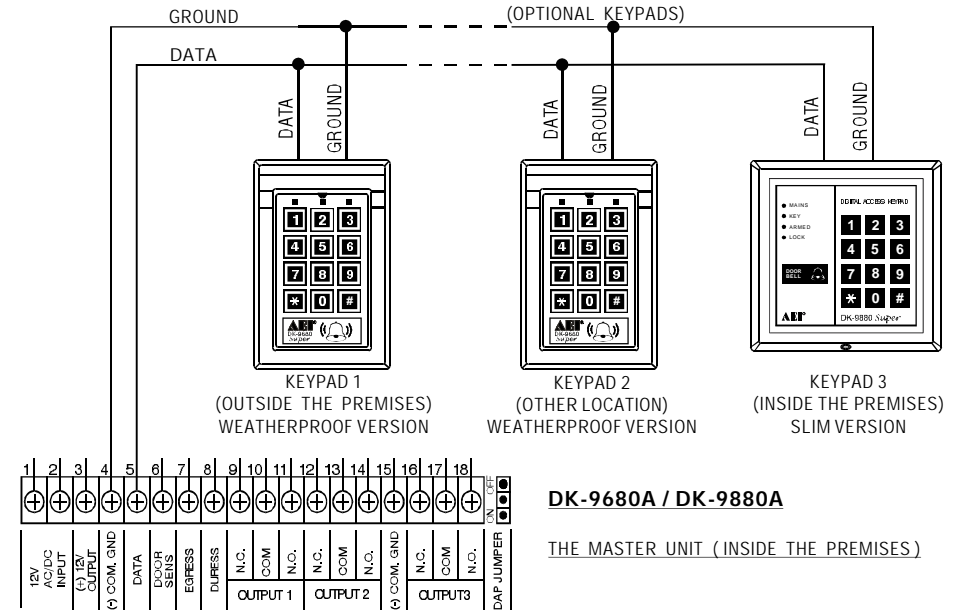
If you want to delete User Number 3 from output 2, press 2 3 #

If you want to delete User Number 2 from output 3, press 3 2 #

- 3) Exit the programming mode by press the * key

CONNECTING THE REMOTE KEYPAD UNIT(S) TO THE MASTER UNIT

The basic DK-9680 / DK-9880 system comes with one Master unit and one Remote Keypad unit. Actually, each master unit allows maximum 3 remote keypad units connecting to it. The DK-9680 / DK-9880 system uses current mode data bus communication, which makes the additional keypad connections very simple, just connecting all the "DATA" and "GND" terminals of the keypad units and the master unit in parallel as the diagram shown below. The keypad units of DK-9680 and DK-9880 can be mixed use with one master unit for multi-station operation.



OPERATION -- All the remote keypad units in the system give identical control function to the master unit in normal operation.

PROGRAMMING -- Any one of the remote keypad units in the system can be used for programming. Once the one has been selected for programming, the other keypads in the system will be disabled until the system exits the programming mode. Any one of the keypad units can be selected as a programming keypad under one of the following conditions:

- 1) When the Personal Master Code has been keyed-in to that keypad unit.
- 2) After use of the DAP jumper enters to programming mode, all the keypad units in the system are prepared for the selection. When the one is first keyed-in with any code, it is considered to be selected as the programming keypad automatically.

THE TAMPER SWITCH OF THE REMOTE KEYPAD UNIT

Each keypad unit employs a tamper switch which is normally depressed. When the keypad unit is separated from the mounting box, it will be released and will make the keypad unit to send an alarm command to the Master to generate alarm output for 60 seconds. The alarm can be stopped by keying-in the User Code 1 before the end of the alarm time.

SPECIFICATIONS

- **Operation Voltage** : 12V AC/DC Nominal , 10-14VAC or 12-16VDC
- **Current Drain** : Version A) 15-150mA; Version B) 15-110mA; Version C) 15-80mA
- **Operation Codes Available** :
 - A) Single User Mode
 - User Code 1, 2 & 3 (Fixed to 4 Digits)
 - Master Code (Fixed to 4 Digits)
 - Duress Code (Fixed to 4 Digits)
 - Accelerated Code (2 Digits)
 - B) Multi User Mode
 - User Codes in Group 1 - 100 Users (4-8 Digits)
 - User Codes in Group 2 - 10 Users (4-8 Digits)
 - User Codes in Group 3 - 10 Users (4-8 Digits)
 - Master Code (4-8 Digits)
 - Super User Code (4-8 digits Plus Output Number)
 - Duress Codes (4-8 Digits)
 - Accelerated Codes (2 Digits)
- **Code Combinations** :
 - A) Single User Mode --- 10,000 for each User Code
 - B) Multi User Mode ----- 111,110,000 for each User Code
- **Relay Output Contacts** : Output 1 -- 5A / 30VDC Max. N.C. & N.O. Dry Contacts, Other Outputs -- 1A / 30VDC Max. N.C. & N.O. Dry Contacts (or NPN open collector output)
- **Duress Output** : 100mA Sink / 12VDC Maximum, Open Collector switches to ground (-)
- **Digit Entry Allowable Time** : 10 seconds, auto refresh
- **Code Entry Allowable Time** : 30 seconds, auto refresh
- **Dimensions** :
 - Master Unit -- 120(W)mm X 87(D)mm X 32.5(H)mm
 - Keypad Unit: (DK-9680) -- 84(W)mm X 41(D)mm X 129(H)mm, Weatherproof Plastic Case
 - (DK-9880) -- 117(W)mm X 21(D)mm X 117(H)mm, Slim Plastic Case
- **Weight** :
 - Master Unit -- 200g net
 - Keypad Unit : (DK-9680) -- 155g net
 - (DK-9880) -- 130g net

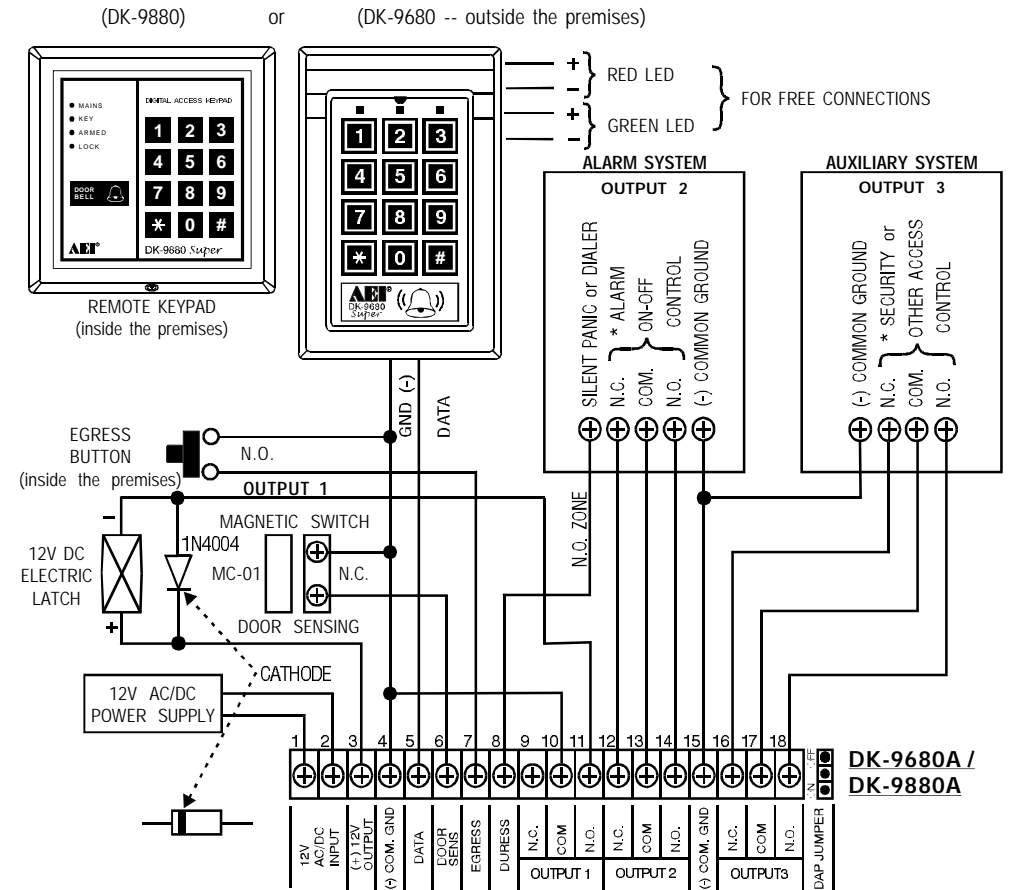
Specifications are subject to change for modification without notice

APPENDIX

- **DRY CONTACT**
A dry contact means that no electricity was connected to it. It is prepared for free connections. Usually the relay output contacts provided in a keypad system are dry contacts.
- **N.C.**
Stands for Normally Closed, the contact is closed circuit at normal status. It is open circuit when activated.
- **N.O.**
Stands for Normally Open, the contact is open circuit at normal status. It is closed circuit when activated.
- **TRANSISTOR OPEN COLLECTOR OUTPUT**
An open collector output is equivalent to a Normally Open (N.O.) contact referring to ground similar to an N.O. relay contact referring to ground. The transistor is normally OFF, and its output switches to ground (-) when activates. The open collector transistor can only provide switching function for small power but it is usually good enough for controlling of an alarm system.

TYPICAL APPLICATION

- Output 1:** Door Strike
- Output 2:** Alarm Control
- Output 3:** Auxiliary Security or Access Control



* Please consult your alarm / security system manual for the selection of N.C. or N.O. for the system ON-OFF control. For those Open Collector Outputs at the DK-9680B / DK-9880B and DK-9680C / DK-9880C, please consider them as N.O. output contacts referring to (-) ground.