

**ADDING and/or DELETING PIN NUMBERS
(Plus other simple programming commands)
in My
DK-16 or DK-26 DIGITAL KEYPAD**

A recurring call that we get here at Securitron Technical Support is from end users of our Digital Keypads wishing to add or delete entry codes. This call often comes from someone that has not been instructed on the process. Rest assured this is an easy task to perform. It will be no more difficult than the first time you programmed your VCR to record or the first time you programmed your cell phone.

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SECTION 1 - GETTING STARTED

The first thing you will need to do is identify which model of keypad is in use at your site. The DK-26 keypad is a long narrow (7" x 1-1/2") with two rows of five number buttons (plus a Bell button at the bottom) and can have either a black or satin stainless finish. It will have three small lights at the top of the keypad known as LED's (Light Emitting Diodes). Starting at the left these LED's will be Red, Yellow and Green in color. If your keypad does not have all of these characteristics then you do not have a DK-26. (see Figure 1)

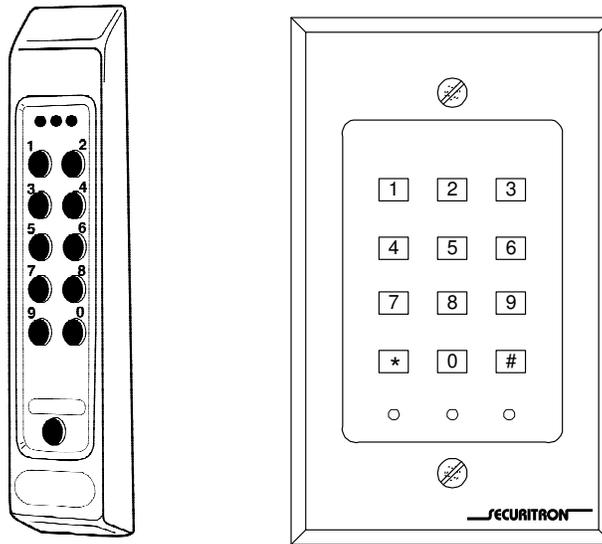


Figure 1 – DK-26 & DK-16 Keypads

The DK-16 is an indoor keypad and is 4-1/2" x 3" in size. Its numbers are laid out in the same configuration as your telephone keypad, i.e., four rows of three buttons. There are three LED's at the bottom of the keypad. Starting at the left these LED's are Red, Yellow and Green. If your keypad does not have all of these characteristics then you do not have a DK-16. (see Figure 1)

The DK-16 and DK-26 are two part units, i.e., there is the keypad and its associated CPU box. This box contains the processor, memory unit, door control relay, etc. In certain circumstances it may be necessary to locate the CPU box for your Digital Keypad to enable the ability to add or delete PIN numbers (user codes). This box is often times located near the door (being controlled) in the above ceiling area (above dropped tile ceiling), but it may also be located in an equipment room or other secure space. To identify the CPU look for a black box 8" x 6" x 2-7/8" in size with a small Securitron label on one corner. You may need to

remove the cover of the CPU to access two push buttons on the internal circuit board. You may also need to verify if your unit is the standard Digital Keypad or the Expanded version. The standard version only has a single printed circuit board. The expanded version will have two printed circuit boards. A main board and then a second board mounted perpendicular to the first and connected to it via a ribbon cable. (see Figure 2)

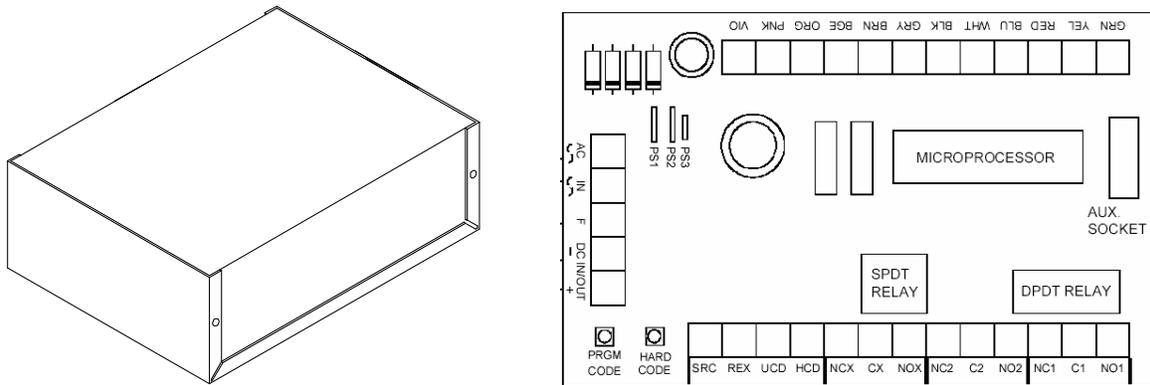


Figure 2 – DK-26 & DK-16 CPU Box & CPU Board

SECTION 2 - WHAT TOOLS WILL I NEED?

Hopefully none! We would suggest that you have available the following items.
 A ladder (in case you have to get above the ceiling tiles).
 A flashlight (to see what you are doing above the ceiling tiles).
 A standard blade and Philips blade screw driver (in case the cover of the CPU box is secured with screws).
 A friend (to possibly go up the ladder while you are entering codes at the keypad).
 A little patience!

SECTION 3 - WHAT ARE THOSE LED’S TELLING ME?

The LED’s located on the keypad will tell you what the system is doing. The LED’s illuminate in various ways while you are entering numbers. Here is a quick listing for reference.

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SOLID YELLOW (not flashing) – Indicates that the Digital Keypad has no codes programmed.

SLOW FLASHING – Indicates that you are in the programming mode for the Hard Code.

RAPID FLASHING – Indicates that you are in the standard programming mode.

RED

SOLID RED – During normal operation this indicates that your door is unlocked. Typically this LED will go out about five seconds after a User Code or a Hard Code is entered. This is usually accompanied by a tone during this period. If it stays on for a much greater period of time or does not ever extinguish then you may want to call us here at Securitron Technical Support for more detailed instruction.

DOUBLE FLASH – Is displayed while in a PROGRAM mode when you are entering codes. It is an indication that the Digital Keypad has accepted your entry.

LONG SINGLE FLASH – Is displayed while in a PROGRAM mode and when you are entering codes. It is an indication that the Digital Keypad did not accept your entry.

QUICK FLASH – This is a function called Echo. The Red LED will come on you're your Digital Keypad is programmed for Reversed Light Logic. Each time you press a key the LED will flash and the sounder should beep. It is the Digital Keypad's way of telling that you have properly pressed that key.

GREEN

Normally the Green LED will only illuminate in the Quick Flash mode, but your Digital Keypad has a programmable feature called Reverse Light Logic. If this feature has been implemented then the Green LED will behave just as the Red LED was described above. If the Reverse Light Logic is turned on, the Red LED will only illuminate in the Quick Flash mode.

SOLID GREEN – During normal operation it indicates that your door is unlocked. Typically this LED will go out about five seconds after a User Code or a Hard Code is entered. This is usually accompanied by a tone during this period. If it stays on for a much greater period of time or does not ever extinguish then you may want to call us here at Securitron Technical Support for more detailed instruction.

DOUBLE FLASH – Is displayed while in the PROGRAM mode when you are entering codes. It is an indication that the Digital Keypad has accepted your entry.

LONG SINGLE FLASH – Is displayed when you are entering codes. It is an indication that the Digital Keypad did not accept your entry.

QUICK FLASH – This is a function called Echo. Each time you press a key the LED will flash and the sounder should beep. It is the Digital Keypad's way of telling that you have properly pressed that key.

SECTION 4 - WHAT IS A PROGRAM CODE, USER CODE OR HARD CODE?

There are three types of numbers or codes that can be stored in your Digital Keypad. They function as described below.

PROGRAM CODE - The program code is your password. It must have between 5 and 7 digits. It does not unlock the door. It is only used to get into programming. The program code is stored in address location 00 on standard DK-16's and DK-26's. It is stored in address location 000 on the expanded version. More on this in the ADD/DELETE section to follow. Initially to program this code requires access to the CPU board. After initial programming the code can be changed from the keypad.

USER CODE – The user codes are codes that actually unlock the door and are probably the ones you will be changing the most (when adding or deleting users). In the standard DK-26 or DK-16 there can be up to 59 individual user codes. In an expanded version of the DK-26 or DK-16 there can be up to 119 individual user codes. A user code can be 2 to 7 digits in length. Each of the user codes is stored in its own individual numbered address. The user code addresses on the standard system begin with 01 and continue through 59. The user code addresses on the expanded versions begin with 001 and continue through 119. More on this in the sections to follow. The user codes can be added or deleted either by accessing the CPU board to initiate programming or preferably by using the program code at the keypad to start the programming sequence.

HARD CODE – The hard code in most systems is simply used as a "fixed code". It is difficult to change on a regular basis, so it typically used in systems where codes are rarely changed. It can only be changed by accessing the CPU board to initiate programming then changing the code at the keypad.

SECTION 5 - ADDING OR CHANGING THE HARD CODE

Before entering any codes – A quick caution regarding code “sub-sets”. Your Digital Keypad will not let you enter a code that is a sub-set of a previously entered code. For example if you already have a code entered such as “1-3-3-5-8” and then attempt to enter “3-3-5” in another address location your Digital Keypad will reject the attempt. The Digital Keypad will indicate this rejection to you by illuminating a long single flash on the Red LED (or the Green LED if Reverse Light Logic is used). (see section **3 - WHAT ARE THOSE LED’S TELLING ME?**) It is advisable to keep a log of your various codes to avoid this problem by denoting which code is stored in which address. We have created a blank form for you and it is available by contacting us here at Securitron Technical Support.

You must first locate the CPU board. On the printed circuit board (see Figure 2) locate the two small buttons located in one corner. Push and hold for one second the push button labeled “Hard Code”. Quickly return to the keypad (as function will time out in thirty seconds). The Yellow LED will be slowly flashing (indicating that you are in the Hard Code program mode. Enter the code that you wish to use. Do not pause between keystrokes. Now wait until the Red LED flashes twice (or possibly green LED if Reverse Light Logic is turned on). Your new Hard Code is now in the Digital Keypad.

SECTION 6 - ADDING OR CHANGING THE PROGRAM CODE

Before entering any codes – A quick caution regarding code “sub-sets”. Your Digital Keypad will not let you enter a code that is a sub-set of a previously entered code. For example if you already have a code entered such as “1-3-3-5-8” and then attempt to enter “3-3-5” in another address location your Digital Keypad will reject the attempt. The Digital Keypad will indicate this rejection to you by illuminating a long single flash on the Red LED (or the Green LED if Reverse Light Logic is used). (see the section **3 - WHAT ARE THOSE LED’S TELLING ME?**) It is advisable to keep a log of your various codes to avoid this problem by denoting which code is stored in which address. We have created a blank form for you and it is available by contacting us here at Securitron Technical Support.

If you do not already have a Program Code in your Digital Keypad you must locate the CPU board. On the printed circuit board (see Figure 2) locate the two small buttons located in one corner. Push and hold for one second the push button labeled “PRMG CODE”. Quickly return to the keypad (as the function will time out in thirty seconds). The Yellow LED will be rapidly flashing (indicating that you are

in the program mode). Enter 00 (or 000 on expanded versions) followed by your 5 to 7 digit Program Code. Do not pause between keystrokes. Wait for the Red LED (or Green LED if the Reverse Light Logic is turned on) to flash twice indicating that your code has been accepted. The Yellow LED will begin rapidly flashing again and if you wish to end programming push the Bell Key on the DK-26 (or push the * or # key on the DK-16).

If you do already have a Program Code in your Digital Keypad and just wish to change the code then all you need to do is enter the Program code on the keypad followed by the Bell Key (or * or # key on the DK-16). The Yellow LED will begin to rapidly flash (indicating that you are in the program mode). Enter 00 (or 000 on expanded versions) followed by your new 5 to 7 digit Program Code. Do not pause between keystrokes. Wait for the Red LED (or Green LED if the Reverse Light Logic is turned on) to flash twice indicating that your code has been accepted. The Yellow LED will begin rapidly flashing again and if you wish to end programming push the Bell Key on the DK-26 (or push the * or # key on the DK-16).

SECTION 7 - ADDING OR CHANGING A USER CODE

Before entering any codes – A quick caution regarding code “sub-sets”. Your Digital Keypad will not let you enter a code that is a sub-set of a previously entered code. For example if you already have a code entered such as “1-3-3-5-8” and then attempt to enter “3-3-5” in another address location your Digital Keypad will reject the attempt. The Digital Keypad will indicate this rejection to you by illuminating a long single flash on the Red LED (or the Green LED if Reverse Light Logic is used). (see the section **3 -WHAT ARE THOSE LED’S TELLING ME?**) It is advisable to keep a log of your various codes to avoid this problem by denoting which code is stored in which address. We have created a blank form for you and it is available by contacting us here at Securitron Technical Support.

If you do not already have a Program Code in your Digital Keypad or don’t remember the one that you have we highly suggest that you enter one now (see above) before adding or changing a User Code. However, it is not absolutely necessary to have a Program Code in order to make the change to your User Codes. If you do not already have a Program Code in your Digital Keypad and simply wish to add or delete a User Code you must locate the CPU board. On the printed circuit board (see Figure 2) locate the two small buttons located in one corner. Push and hold for one second the push button labeled “PRMG CODE”. Quickly return to the keypad (as the function will time out in thirty seconds). The Yellow LED will be rapidly flashing (indicating that you are in the program mode). With the standard DK-16 or DK-26 you can have up to 59 User Codes. The

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Expanded version will have up to 119 codes. They are each stored in their own address. The First address is identified as 01 (001 on expanded versions). The Final Address is 59 (119 on expanded versions). For your first code enter 01 (or 001 on expanded versions) followed by your 2 to 7 digit User Code. Do not pause between keystrokes. Wait for the Red LED (or Green LED if the Reverse Light Logic is turned on) to flash twice indicating that your code has been accepted. The Yellow LED will begin rapidly flashing again. If you wish to add another User Code you can now do so. For example you could enter address 02 (002 on expanded version) and another 2-7 digit User Code. You can continue entering user codes until you reach the maximum for your version. If the Yellow LED is rapidly flashing and you wish to end programming simply push the Bell Key on the DK-26 (or push the * or # key on the DK-16).

If you do already have a Program Code in your Digital Keypad and just wish to change a User code then all you need to do is enter the Program code on the keypad followed by the Bell Key (or * or # key on the DK-16). The Yellow LED will begin rapidly flashing (indicating that you are in the program mode). With the standard DK-16 or DK-26 you can have up to 59 User Codes. The Expanded version will have up to 119 codes. They are each stored in their own address. The First address is identified as 01 (001 on expanded versions). The Final Address is 59 (119 on expanded versions). For your first code enter 01 (or 001 on expanded versions) followed by your 2 to 7 digit User Code. Do not pause between keystrokes. Wait for the Red LED (or Green LED if the Reverse Light Logic is turned on) to flash twice indicating that your code has been accepted. The Yellow LED will begin rapidly flashing again. If you wish to add another User Code you can now do so. For example you could enter address 02 (002 on expanded version) and another 2-7 digit User Code. You can continue entering user codes until you reach the maximum for your version. If the Yellow LED is rapidly flashing and you wish to end programming then simply push the Bell Key on the DK-26 (or push the * or # key on the DK-16).

SECTION 8 - HOW CAN I CLEAR AN INDIVIDUAL CODE NUMBER?

To remove either a Hard Code or Program Code (see section **9 - HOW CAN I CLEAR EVERYTHING AND BEGIN ANEW?**).

REMOVE AN INDIVIDUAL USER CODE – If you wish to remove an individual User Code (when an employee leaves the company for example) there are two ways to accomplish this function. You must first get into programming mode. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad.

Once the Yellow LED begins to flash tap in code 79 followed immediately by the User Code that you wish to remove. Wait until you see the Red LED (Green if you are using Reverse Light Logic) flash twice. This will indicate that you have successfully removed the selected User Code. An alternative to the previous procedure requires that you know which address the User Code that you wish to remove is stored. Again you would enter the programming mode as described above. Enter the address location where this user code is stored (for example: if the code is stored in address 05 then enter 05). Wait until you see the Red LED (Green if you are using Reverse Light Logic) flash twice. This will indicate that you have successfully removed the selected User Code.

SECTION 9 - HOW CAN I CLEAR EVERYTHING AND BEGIN ANEW?

Occasionally we get a request from the customer wishing to clear all codes, so that they can make sure there are no old codes in their system. To remove all user codes, program code, and hard code you will need access to the CPU and the printed circuit board (see Figure 2). Follow the following three steps to remove the codes.

REMOVE HARD CODE – Find the CPU. On the printed circuit board push the button labeled HARD CODE. Return to the keypad (the Yellow LED will be slowly flashing) and push the Bell Key (* or # on the DK-16). The Red LED (Green if you are using Reverse Light Logic) will flash twice indicating that you have successfully removed the Hard Code.

REMOVE PROGRAM CODE – Find the CPU. On the printed circuit board push the button labeled PRGM CODE. Return keypad (the Yellow LED will be rapidly flashing). Put in code 00 for standard DK-26 or DK-16 (code 000 for expanded version) and wait until you see the Red LED (Green if you are using Reverse Light Logic) flash twice. This will indicate that you have successfully removed the Program Code. When the Yellow LED resumes flashing enter code 88 on the keypad to REMOVE ALL USER CODES. Again wait for the double LED flash to indicate successful removal of all user codes. If you have successfully followed the three steps indicated above you will now have a solid Yellow LED indicating that all codes have been removed from your Digital Keypad. To now enter new codes refer to the previous sections on Adding Codes.

SECTION 10 - CHANGING THE DOOR UNLOCK TIME

Your Digital Keypad comes from the factory with a door unlock time of 5 seconds. This can be simply altered by the following sequence. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad. Once the Yellow LED begins to flash tap in code 9 followed immediately by the number of seconds you would like the door to unlock. For example if you want a 9 second unlock time then tap in code 909. For 15 seconds you would tap in 915. Wait a few seconds and the Red LED (Green if you are using Reverse Light Logic) will flash twice indicating that you have successfully changed your unlock time. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Enter one of your User Codes or the Hard Code to verify that the door unlocks for the desired period of time.

SECTION 11 - HOW TO REVERSE THE LED DISPLAY LOGIC

From the factory your Digital Keypad is designed to display a Red LED for the entire duration of the door unlock time. Occasionally we hear from the customer that they would prefer the Green LED to be on while the door is unlocked. This function can be achieved as follows. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad. Once the Yellow LED begins to flash, tap in code 73. Wait a few seconds for the Green LED to flash twice. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Enter one of your User Codes or the Hard Code to verify that when the door unlocks you get the Green LED.

If you wish to return the LED logic to the factory default, enter programming mode (see above) and tap in code 74. Wait a few seconds for the Red LED to flash twice. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Enter one of your User Codes or the Hard Code to verify that when the door unlocks you get the Red LED.

SECTION 12 - HOW TO ALTER THE SOUNDER FUNCTION

TO SILENCE THE SOUNDER - When your Digital Keypad shipped from the factory its sounder was set up to echo each keystroke. In other words each time you depress a key you get a tone to verify acceptance of that keystroke. On occasion a customer will prefer to silence this function when the keypad is located near

someone's desk (so as not to disturb that individual). To completely turn off the sounder perform the following. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad. Once the Yellow LED begins to flash, tap in code 71. Wait a few seconds for the Red LED (Green if using Reverse Light Logic) to flash twice. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Press a couple of keys to verify that the sounder has been silenced.

TO SOUND THE SOUNDER WHILE THE DOOR IS UNLOCKED – You can alternately select to have the sounder emit a tone during the entire time that the door is unlocked. To implement this option follow the following procedure. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad. Once the Yellow LED begins to flash, tap in code 70. Wait a few seconds for the Red LED (Green if using Reverse Light Logic) to flash twice. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Enter one of your User Codes or the Hard Code to verify that when the door unlocks you get the tone for entire unlock duration.

TO RETURN SOUNDER TO FACTORY SETTING – If you wish to return the sounder to the factory default perform the following sequence. Put your Digital Keypad into the Programming mode by either pushing the PRGM CODE push button on the CPU (see figure 2) or by entering your Program Code (See section on Program Code if you do not have one loaded in your Digital Keypad) on the keypad. Once the Yellow LED begins to flash, tap in code 72. Wait a few seconds for the Red LED (Green if using Reverse Light Logic) to flash twice. The Yellow LED will resume flashing. Simply press the Bell Key (or * or # on the DK-16) to end the programming mode. Enter one of your User Codes or the Hard Code to verify that the sounder only echoes the keystrokes.

SECTION 13 - SUMMARY

The above information will give you the basics of operating your Digital Keypad. There are several other functions available, but most of these require a technician to rewire the components. If you need your system to perform a function not listed please contact Securitron Technical Support, and we will work with you to see if it can be implemented.