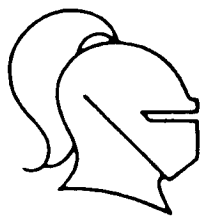
SERIES 5000 ENTRY SYSTEM

INSTALLATION MANUAL

SILENT KNIGHT
SECURITY SYSTEMS
DIVISION OF WAYCROSSE, INC.



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PN 150242 2/86

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IMPORTANT NOTICE

Due to wide variations in telephone company exchange switching equipment, Silent Knight can no longer guarantee that the 5000 Series Apartment Entry Equipment will function properly when used to decode the digit "6" from rotary (dial type) telephones. For those exchanges where the rotary phones will not work, each apartment must have a Touch Tone telephone.

IMPORTANT: Silent Knight products should be tested every month (under no circumstances less than every three months) to insure complete and proper operation and proper input and output connections.

LIMITED WARRANTY

Silent Knight Security Systems warrants that the products of its manufacture shall be free from defects in materials or workmanship for one year from the date of invoice if such goods have been properly installed, are subject to normal proper use, and have not been modified in any manner whatsoever. Upon return of the defective product to the nearest Silent Knight dealer, Silent Knight will, at its sole discretion, either repair or replace, at no cost to the customer, such goods as may be of defective material or workmanship. Customers outside the United States are to return products to their distributor for repair.

SILENT KNIGHT SECURITY SYSTEMS SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM LOSS OF PROPERTY OR OTHER DAMAGE OR LOSSES OWING TO THE FAILURE OF SILENT KNIGHT SECURITY SYSTMS PRODUCTS BEYOND THE COST OF REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCTS

SILENT KNIGHT SECURITY SYSTEMS MAKES NO WARRANTY OF FITNESS OR MERCHANTABILITY AND NO OTHER WARRANTY, ORAL OR WRITTEN, EXPRESS OR IMPLIED, BEYOND THE ONE YEAR WARRANTY EXPRESSLY SPECIFIED HEREIN

BEFORE CONNECTING THIS DEVICE

A. The telephone company must be notified and provided with the following information.

1. Manufacturer (Silent Knight Security Systems)
2. Model Number - 5070/5071
3. F.C.C. Registration - AC69R-70397-MT-E
4. Ringer Equivalence - 0.0B
5. Type of Jack (to be installed by the telephone company) RJ11X

NOTE: The telephone company must also be notified if this device is perminently disconnected.

B. This device may not be directly connected to coin telephone or partly line service.

C. The telephone company, under certain circumstances may temporarily discontinue service and/or make changes in its facilities and services which may affect the operation of this device; however, the telephone company is required to give adaquate notice in writing of such changes or interruptions.

D. This device cannot be adjusted or repaired in the field; in case of trouble with the device, notify the installing company or contact Silent Knight for a return authorization number.

Silent Knight Security Systems
1700 Freeway Blvd. North
Minneapolis, MN 55430

SERIES 5000 ENTERY SECURITY SYSTEM INTRODUCTION

The Silent Knight Models 5070/5071 and 5060/5061 remote satellites make up a family of entry security systems designed to provide access control. They supervise entry in the following ways:

A. Visitor access, activated remotely through phone lines by tenant.

B. Tenant access, activated directly from keypad by code.

C. Postal access, activated by a postal lock.

D. Auxiliary door access, activated directly from keypad by code.

OPERATION

A. VISITOR ACCESS OPERATION

Visitors desiring access to the building locate the Tenant Code next to the name of the tenant they wish to visit. When "Enter Apt. #" is indicated by the LCD display, they enter the code on the keypad. The tenant is automatically dialed. After the visitor has spoken with the tenant, the tenant can remotely activate the door strike by pressing or dialing a "6" on his/her phone. The tenant may also hang up the 5070/5071 by pressing or dialing a "9".

B. TENANT ACCESS OPERATION

The tenant can operate the doorstrike while in the lobby directly from the keypad. First push "CLEAR", then enter the door access code provided by the caretaker. If the code is valid, the doorstrike will open, otherwise an ERROR will be indicated. If 3 errors in a row occur, the ALARM output is activated for 2.5 seconds to discourage tampering.

C. POSTAL ACCESS OPERATION

Turning the postal key in the lock will automatically open the door. The mail carrier then has access to the mail boxes inside the building.

D. AUXILIARY DOOR ACCESS OPERATION

An Auxiliary door may be used in such places as enterances to swimming pools. The Auxiliary door is set up during programming to be active during certain hours of the day. It may only be activated from a 5060 or 5061 during the time that the door is Enabled. The tenant must press "ENTER" then enter the door access code provided by the caretaker.

POWER REQUIREMENTS

The Model 5070/5071 is powered from a U.L. Listed Class II, 16.5V 45VA transformer that plugs directly into 120V 60 Hz wall outlet. This transformer provides power for the 5070/5071 main unit and charging current for the 12V backup battery. In the event of power outage, the 12V battery will provide enough current to run the system for a maximum of 2 hours. The actual time will depend on how much the system is used. Even if the battery becomes completely depleted, it will not be necessary to reprogram because the numbers are stored in non-volatile EEPROM memory.

5070/5071 CIRCUIT BOARD DESCRIPTION

Figure 1 shows a representation of the printed circuit board of the 5070 main module. This printed circuit board contains

the switches, LCD display, keypad, and potentiometers required to run the system. The components are described in the following paragraphs.

A. KEYPAD AND LCD DISPLAY

The LCD display is used for prompting the user and reflecting the numbers pressed on the keypad. When the user sees that the correct data is displayed, pushing the "ENTER" key will enter the data into memory.

B. MAIN CONTROL BOARD

The main control board contains all the circuitry for charging the standby battery, dialing, and controlling a maximum of four 5060/5061 remotes.

5060/5061 CIRCUIT BOARD DESCRIPTION

Figure 2 shows a representation of the printed circuit board of the 5060 remote module. This printed circuit board contains the lights, keypad, and potentiometer required to turn on, adjust, and run the system. These components are described in the following paragraphs.

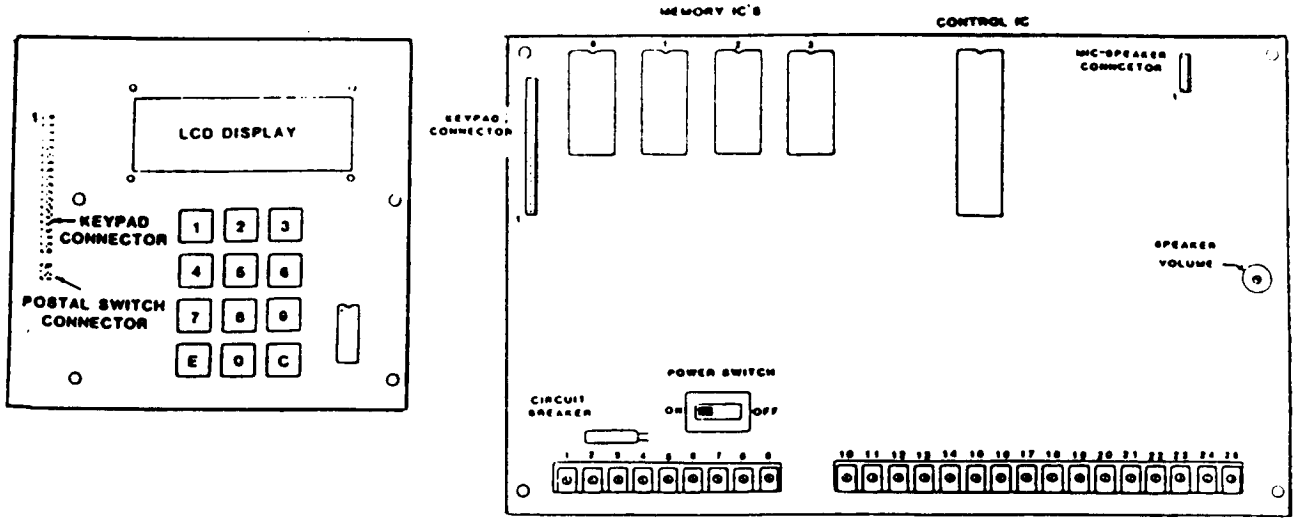
A. KEYPAD AND LIGHTS

The keypad is used to enter apartment and door access codes. Six lights are seen on the outside panel during normal operation. They provide the following information to a building tenant or visitor.

1. ENTER APT #
2. TIME'S UP (call lasted too long)
3. ERROR (incorrect data entered)
4. SYSTEM IN USE (please wait)
5. DOOR IS OPEN
6. AUXILIARY (if off, auxiliary door cannot be opened)

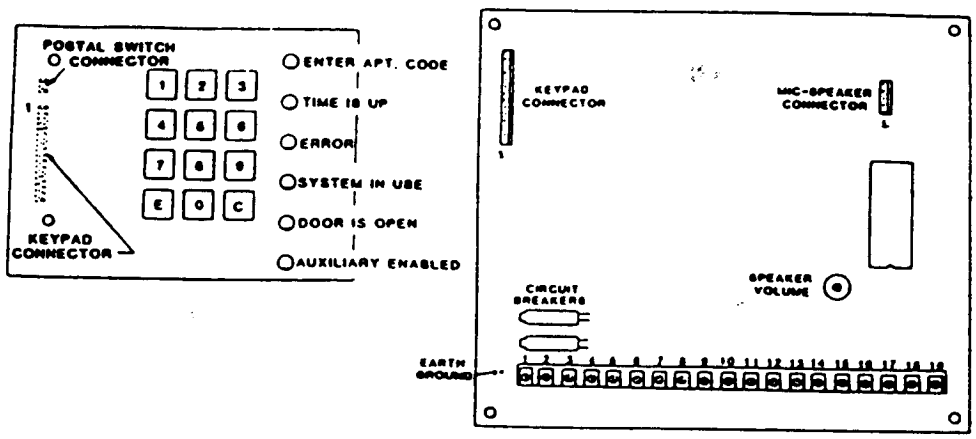
B. MAIN CONTROL BOARD

The 5060 main control board contains all the circuitry required to interface with the 5070 master unit. This board also contains the remote speaker volume potentiometer



5070 PC BOARDS

FIGURE 1



5060 PC BOARDS

FIGURE 2

TRANSIENT PROTECTION

TRANSIENT SURGE PROTECTORS

A. EARTH GROUND

1. Transient protectors will only work if the 5070 is correctly earth grounded.

2. To verify that the AC outlet, that the 5070 will be powered from, is earth grounded, follow the steps below.

a. Measure the AC voltage between the center ground post and each side of the outlet. There must be identical voltages between the ground post receptacle and one side of the outlet, and from that side of the outlet to the other.

b. If these voltages are not correct, the outlet does not have a proper earth ground. Ground the outlet by running a wire to a good ground. The wire should be of equal or greater diameter to the wires used to feed the outlet. It may be necessary to have a licensed electrician ground the outlet.

B. THE AC LINE

The AC lines are the most common source of transient/lightning damage in electronics.

1. The Model 9220 transformer can only be installed in a grounded receptacle (three prong type). Before connecting

verify that the center ground post receptacle of the AC outlet, to which the transformer will be connected , is grounded to earth ground.

2. The Model 7890 protector consists of two bipolar transient suppressors with lugs at its connecting points. When properly installed with shielded two conductor cable, it will filter the AC output of the Class II transformer Model Number 9220. It reduces transient voltages frequently present on the power lines--caused by lightning and other sources--to manageable levels.

C. MODEL 7890 AND 9220 INSTALLATION

1. With the transformer unplugged, connect the ends of the transient suppressor to the two AC screws of the transformer. Connect the common end of the transient suppressor to the screw marked GRD between the two AC screws. See Figure 3.

2. Connect the shielded cable as shown; the black and white wires to the AC output screws and the shielded to the GRD screw.

CAUTION: BE SURE THAT THE SHIELD CONDUCTOR CANNOT COME IN CONTACT WITH THE AC OUTPUT SCREWS!!!

3. Connect the other end of the shielded cable to the entry system. The black and white wires to the AC input (screw terminals 1 and 2) and the shield to the earth ground (screw terminal 3).

4. Plug in the transformer and securely fasten the mounting tab to the center mounting screw on the AC cover.

CAUTION: To reduce the risk of electrical shock, disconnect the power from the receptacle before installing or removing the unit. When removing the receptacle cover screw, the cover may fall across the plug pins and the receptacle may become displaced.

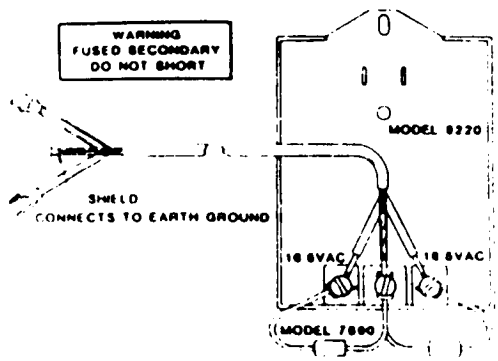
D. TELEPHONE LINE

1. The 5070 has metal oxide varistors on the printed circuit board to protect it from transients. Additional protection is usually not required.

2. In areas where lightning frequently occurs, install a Model 7870 transient protector on the phone lines.

7890 INSTALLATION

FIGURE 3



A. MOUNTING INSTRUCTIONS

1. PRECAUTIONS

a. Avoid installing the 5070/5060 hands free unit in high noise environments such as a noisy lobby or outside where there is much traffic or airplane noise. **DO NOT** mount 5000 series units in locations subject to high temperatures, such as over lobby heaters. The operating temperature range should be between -10 C to +50 C or +14 F to +120 F.

b. The 5000 series entry system is not designed for use outdoors. The system circuitry will operate normally in the temperature range listed above. If installation requires the unit to be installed outdoors, proper measures must be taken to protect it from the elements (rain, humidity, direct sunlight etc.).

2. FLUSH MOUNT

a. In order to flush mount the unit, the wall must be at least 3 1/2 inches thick. Make a hole in the wall near a stud at the desired location. This hole should be 11 1/4" wide and 11" high.

b. If the studs are farther apart than the width required, attach some shims to the stud inside the wall so that the shims and the first stud are the right width.

c. Screw the front part of the mounting bracket to the stud on one side and the shims on the other.

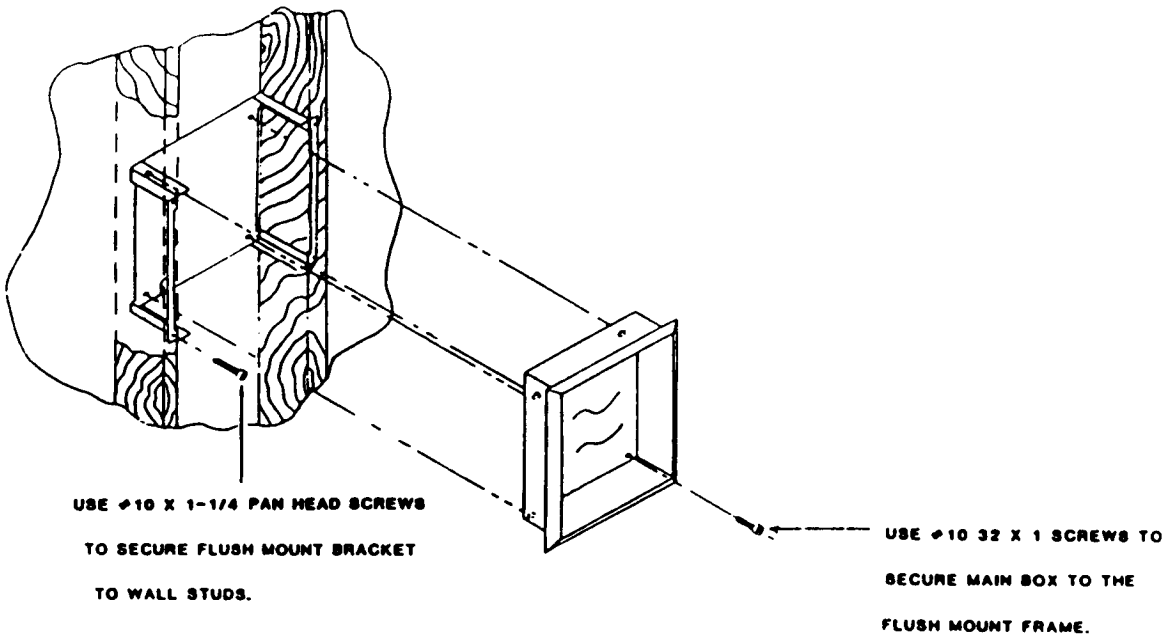
d. Slide the unit into the bracket and screw in place through the four holes in the back of the box. See Figure 4.

3. SURFACE MOUNT

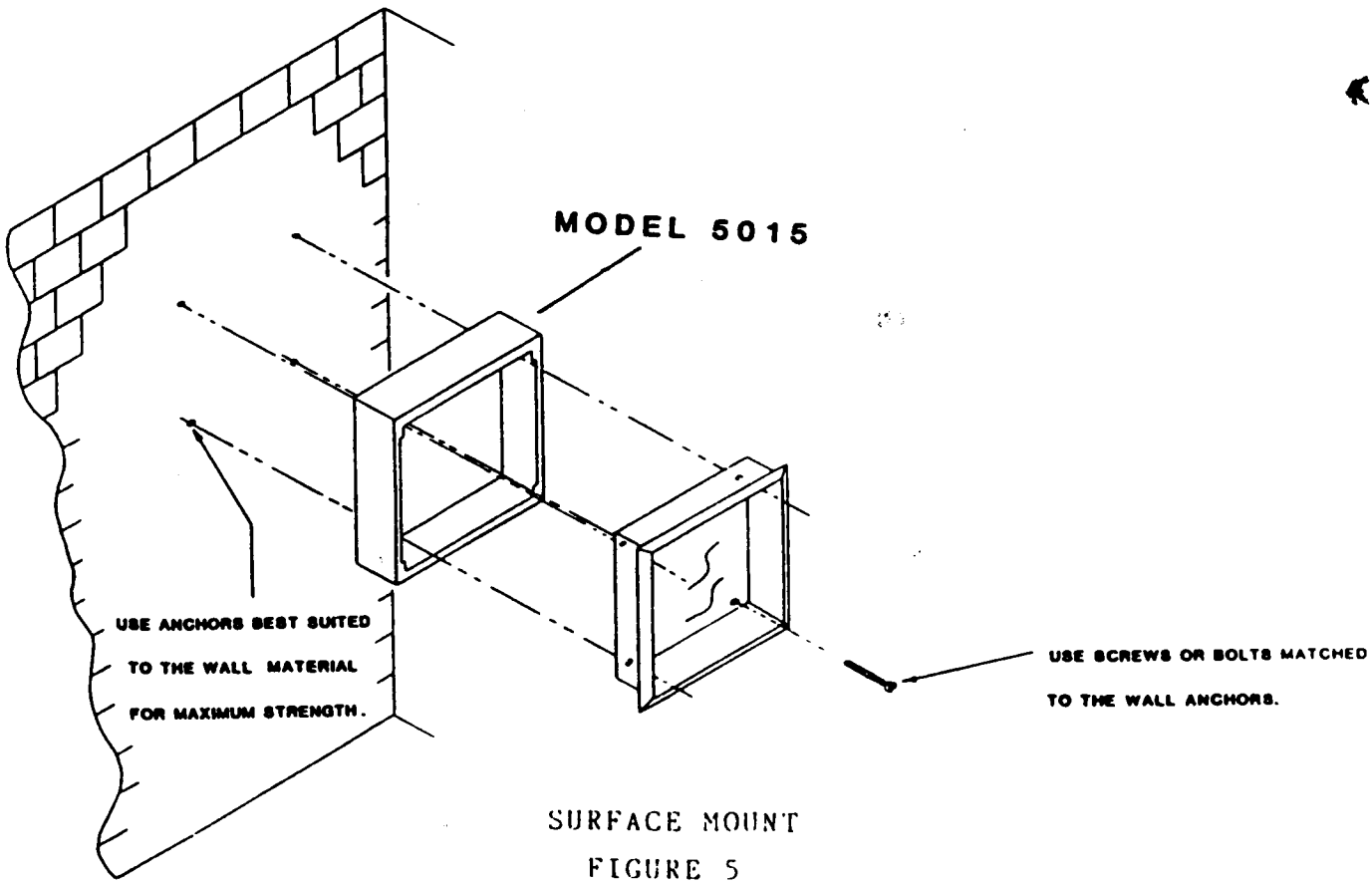
a. Make a cardboard template to locate the hole positions. When mounting on interior walls, use appropriate screw anchors in plaster. When mounting on concrete, especially where moisture is present, attach a piece of 3/4 inch plywood to the concrete surface.

b. Slide the unit into the wall adapter.

c. Mount to the wall through the 4 holes in the back of the box. See Figure 5.



FLUSH MOUNT
FIGURE 4



SURFACE MOUNT
FIGURE 5

B. 5070/5071 MAIN UNIT HOOK-UP PROCEDURE

1. TURN OFF THE POWER SWITCH ON THE PC BOARD

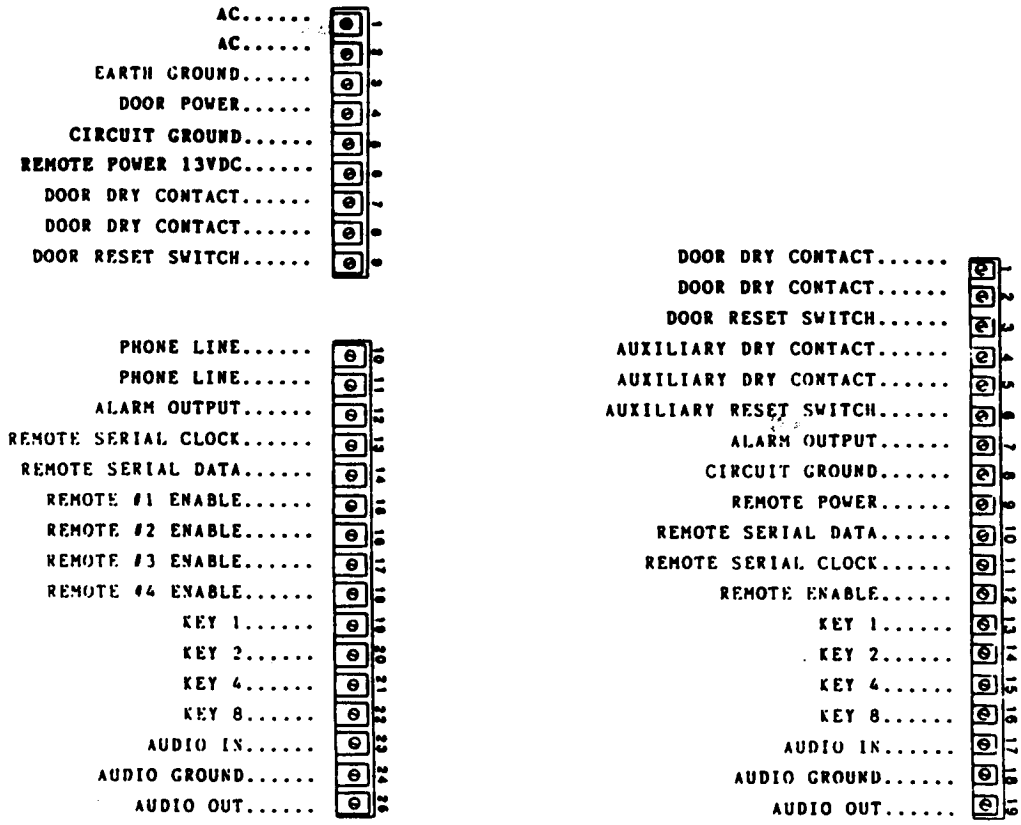
a. See Figure 6 for screw terminal description.

2. MOUNT THE TRANSFORMER (Model 9220 16.5V 45VA)

a. Wire the transformer to terminals 1 and 2 on the 5070/5071 printed circuit board. Use 16 GA or larger diameter shielded wire. Ground the shield as shown in Figure 7.

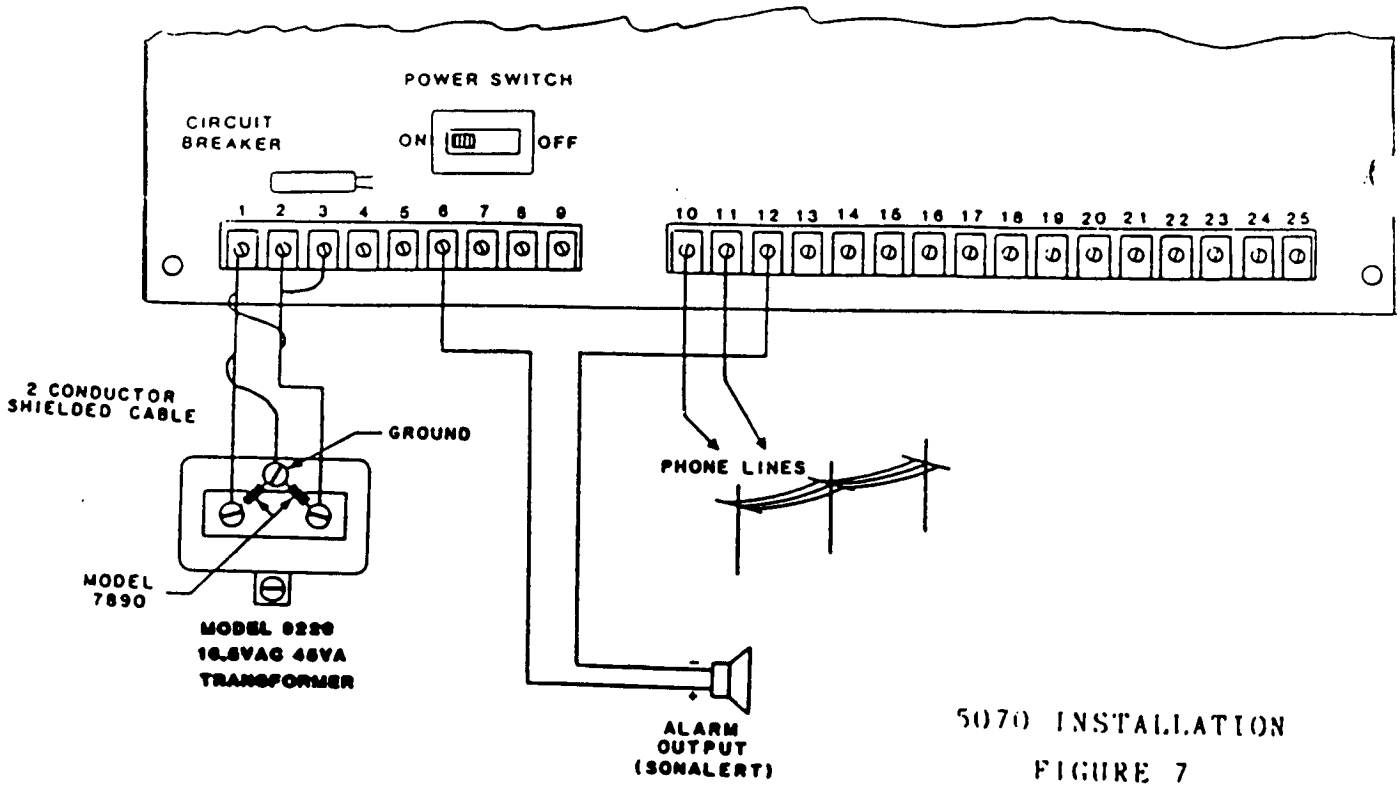
b. Read and follow the Model 7890 instructions on page 6.

c. Connect EARTH GROUND to terminal 3 on the printed circuit board.



TERMINAL DESCRIPTION

FIGURE 6



5070 INSTALLATION

FIGURE 7

3. INSTALL DOOR STRIKE

1. Install the electric doorstrike in the door frame.

TERMINAL POWER SPECIFICATIONS

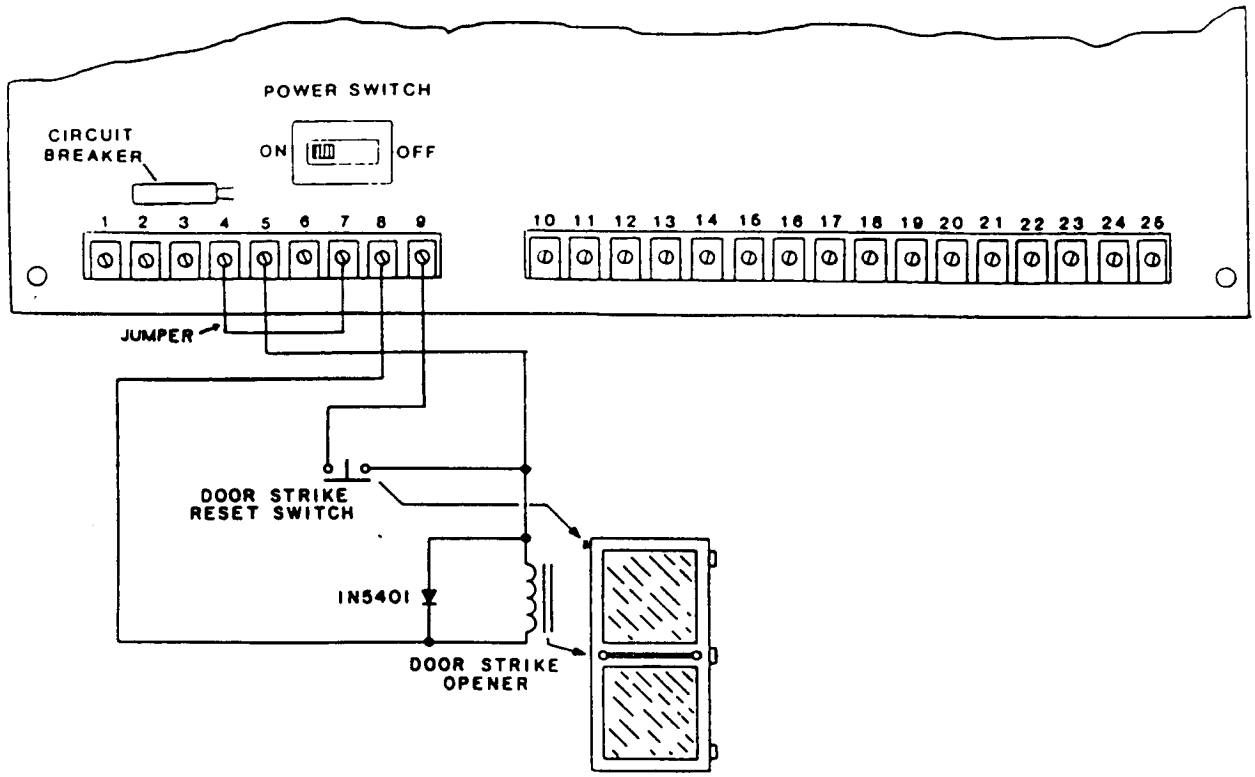
TERMINAL 4.....12VDC @ 2.75A MAX
TERMINAL 7 & 8.....18VAC @ 3A....24VDC @ 3A MAX

2. DC OPERATION

If the doorstrike will be powered from the DC power on the PC board, place a jumper from Terminal 4 to 7. Connect the doorstrike between Terminal 8 and 5. See Figure 8. ONLY ONE doorstrike per system should be installed this way. Any additional doorstrikes should be AC driven.

NOTE: Always install a reverse bias diode across the DC doorstrike coil to suppress arcing and electrical noise.

Each 5070/71 panel comes supplied with a 1N5401 diode for this purpose. This will save wear on the strike and prevent noise spikes from finding their way back to the PC board. The Maximum allowable current to operate a DC doorstrike is 2.75ma.



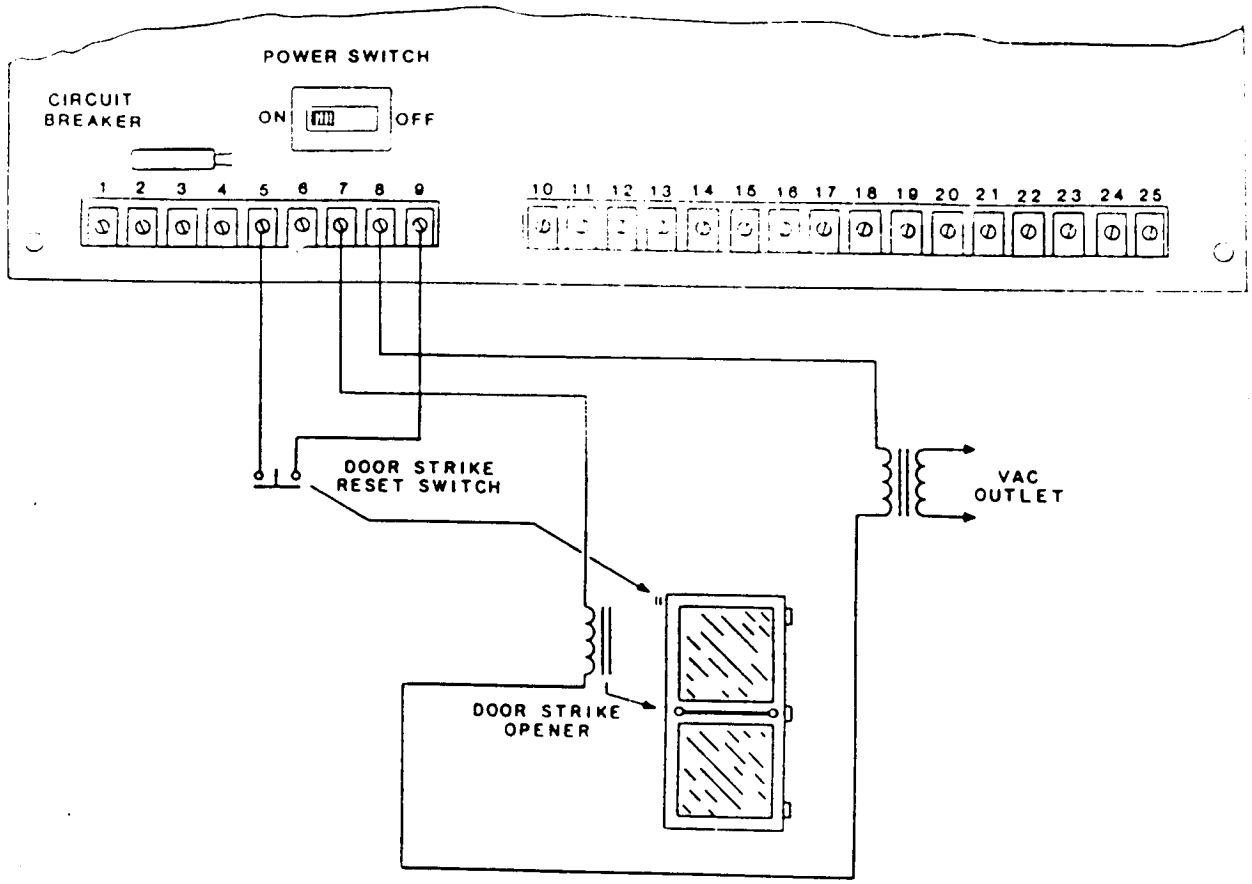
5070 DC DOORSTRIKE
FIGURE 8

3. AC OPERATION

If more than one doorstrike is to be used, the doorstrikes should be powered by AC transformers. DO NOT use the AC transformer that powers the 5070/71 panel. Use an AC transformer of sufficient rating. See Figure 9 for hookup procedure. DO NOT install a reverse bias diode across the coil as you would for DC operation.

4. DOORSTRIKE RESET SWITCH

If the door will have a magnetic contact to automatically relock the door, wire the contact to terminals 9 and 5. The contacts must be open when the magnet is next to it. See Figure 8 or 9.



5070 AC DOORSTRIKE
FIGURE 9

4. HOOK UP THE PHONE LINES

1. The 5000 series entry system requires a telephone jack type RJ11X or W to be installed by the phone company.

2. Wire the phone lines to Terminals 10 and 11 on the PC board

3. When using the 5070 with Ground Start systems, install a 12VDC SPST as shown in Figure 10. Select the ground start option when programming the 5070.

5. INSTALL MAIL CARRIER'S LOCK (optional, supplied by post office)

1. Remove the hole plug and install the lock on the posts provided on the inside of the door. Use #8-32 nuts with lock washers to secure the postal lock.

2. Adjust the push button switch so that the button is completely out when mail carrier's key is turned in the lock.

3. If the mail carrier's lock will not be used, either make sure the push button switch is always depressed, or

disconnect the two wires connecting the PC board with the switch.

6. INSTALL ALARM (optional)

The 5070 is designed to drive a Sonalert when the door access codes are being tampered with. Wire the Sonalert to terminals 6 and 12 as shown in Figure 7. (100ma max out)

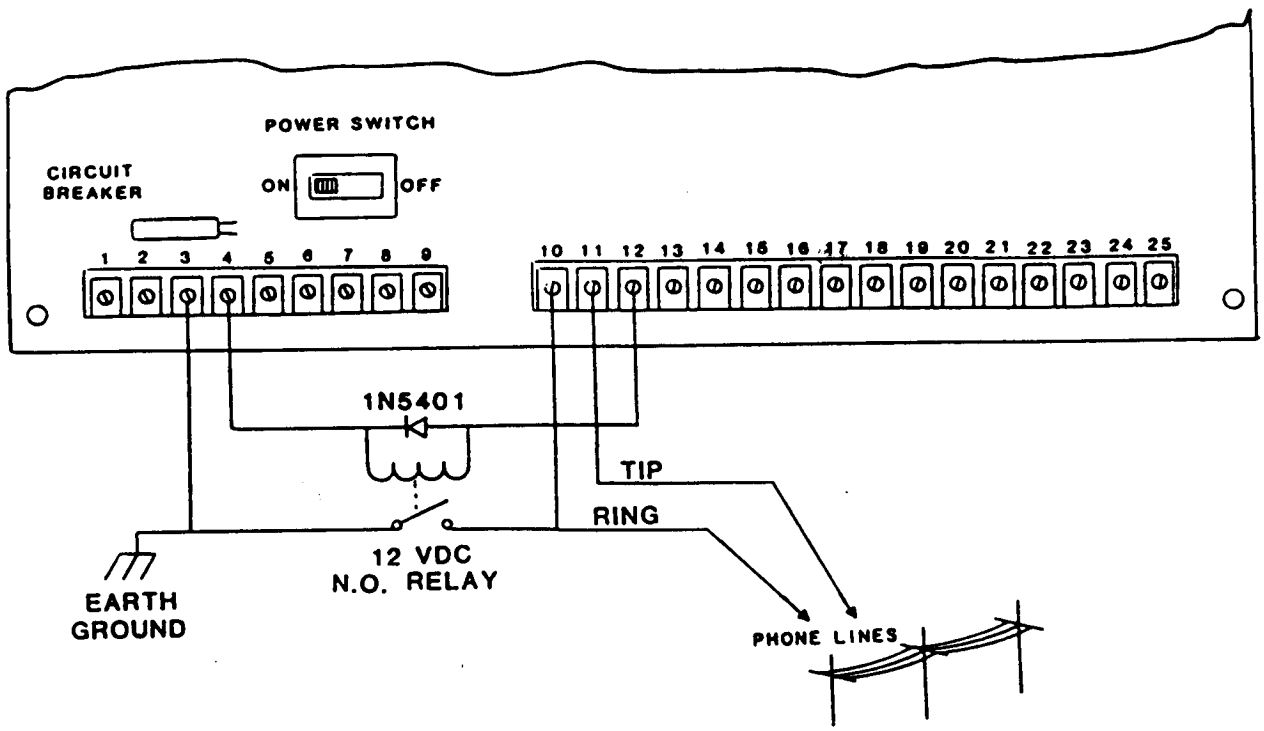
NOTE: If the 5070 is used with a ground start telephone system, this output is used to control the ground start relay and CANNOT be used as an alarm output.

7. CONNECT THE BATTERY (Model 6912)

1. Connect the BLACK cable to the minus (-) terminal of the battery. STOP!! Make sure that the black lead IS NOT attached to the plus (+) RED terminal of the battery.

2. Connect the RED cable to the RED terminal of the 12V battery.

3. If the transformer is connected, the battery will charge automatically with the DC power switch ON or OFF.



GROUND START SYSTEMS
FIGURE 10

C. 5060/61 REMOTE SATELLITE HOOK-UP PROCEDURE

1. TURN OFF THE POWER SWITCH on the 5070/71 PC board.

2. HOOK UP THE AC DOORSTRIKES

a. Install the electric doorstrike(s) in door(s).

b. Using an AC transformer of sufficient rating for each doorstrike, make the doorstrike and transformer connections shown in Figure 11.

3. INSTALL THE MAIL CARRIER'S LOCK (optional, supplied by the post office)

a. Remove the hole plug and install on the posts provided on the inside of the door. Use #8-32 nuts and lock washers to secure the postal lock.

b. Adjust the push button switch so that the button is completely out when the mail carrier's key is turned in the lock.

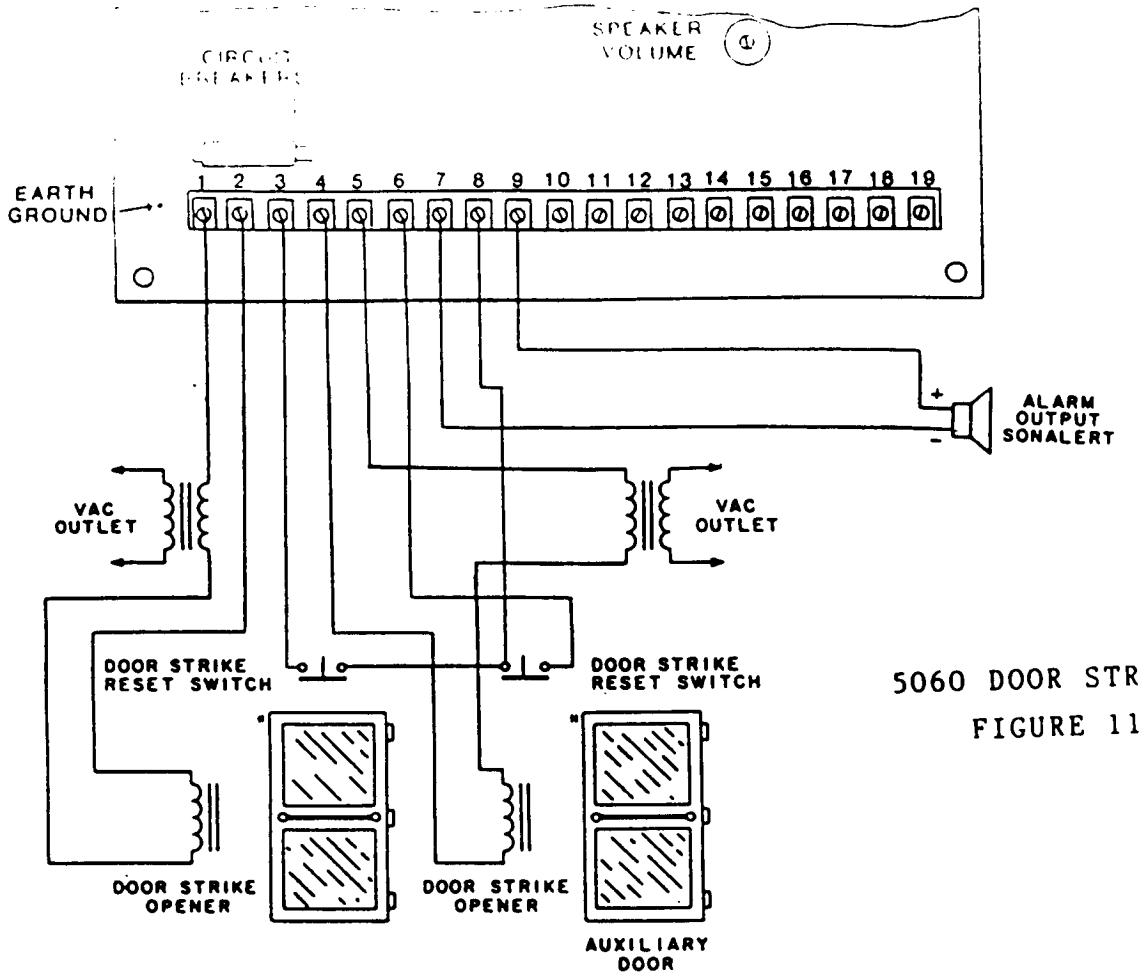
c. If the mail carrier's lock will not be used, either make sure the push button switch is always depressed, or disconnect the two wires connecting the switch to the PC board.

4. INSTALL THE ALARM

The 5060 is designed to drive a Sonalert when the door access codes are tampered with. Wire the Sonalert between terminal 9 and 7 on the PC board. See Figure 11. (100ma max out)

5. HOOK UP TO MAIN UNIT

Wire all the connections from the 5070/71 main unit to the terminals on the 5060/61 PC board as shown in Figure 12. To assure the best audio sound and prevent malfunctions due to static electricity, SHIELDED TWISTED PAIRS SHOULD BE USED for the audio connections. See Figure 13 for proper wire gauge.



5060 DOOR STRIKES

FIGURE 11

MEMORY EXPANSION

Figure 1 shows the configuration of the memory chips on the 5070/71 PC board. The 5070/71 comes shipped with EEPROM chip #0 already installed. This chip gives the system 339 tenant capability. Each additional EEPROM chip expands the memory by 339 apartments. To order additional EEPROM memory chips (SK# 005091) for the 5070/71, contact the factory at 1-800-328-0103.

To add memory to the system you must turn off the DC power switch.

Since the 5070/71 comes from the factory with EEPROM #0 already installed, the next EEPROM chip must be inserted in position 1 as indicated in Figure 1. Likewise, the third EEPROM chip must be inserted into position 2 and so forth to a maximum of four chips and 1356 tenant codes.

NOTE: The chips must be inserted carefully so that none of the legs get bent. If you bend any of the legs, they may be straightened with apair of flat-sided pliers. Be sure that the notch of each chip is towards the top of the PC board as shown in Figure 1.

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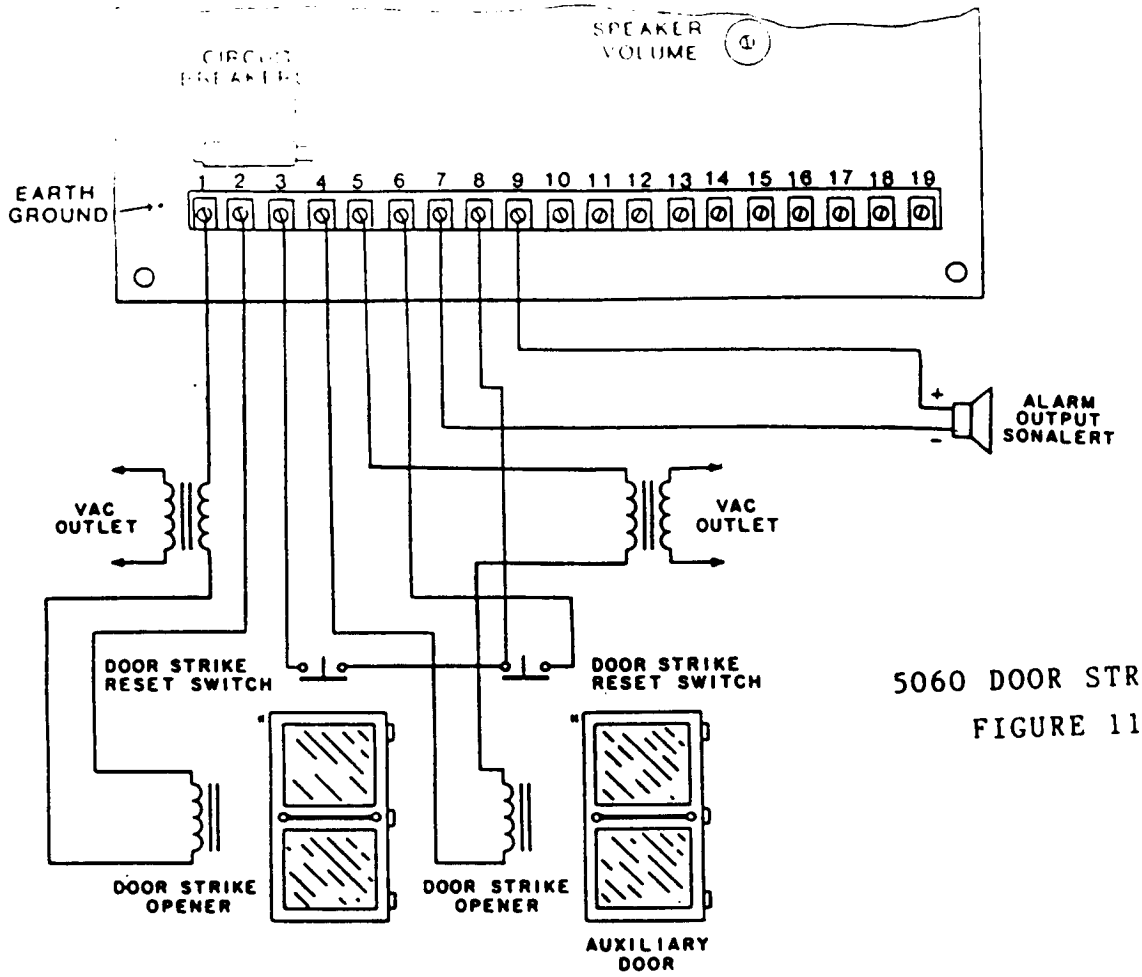

5060 DOOR STRIKES

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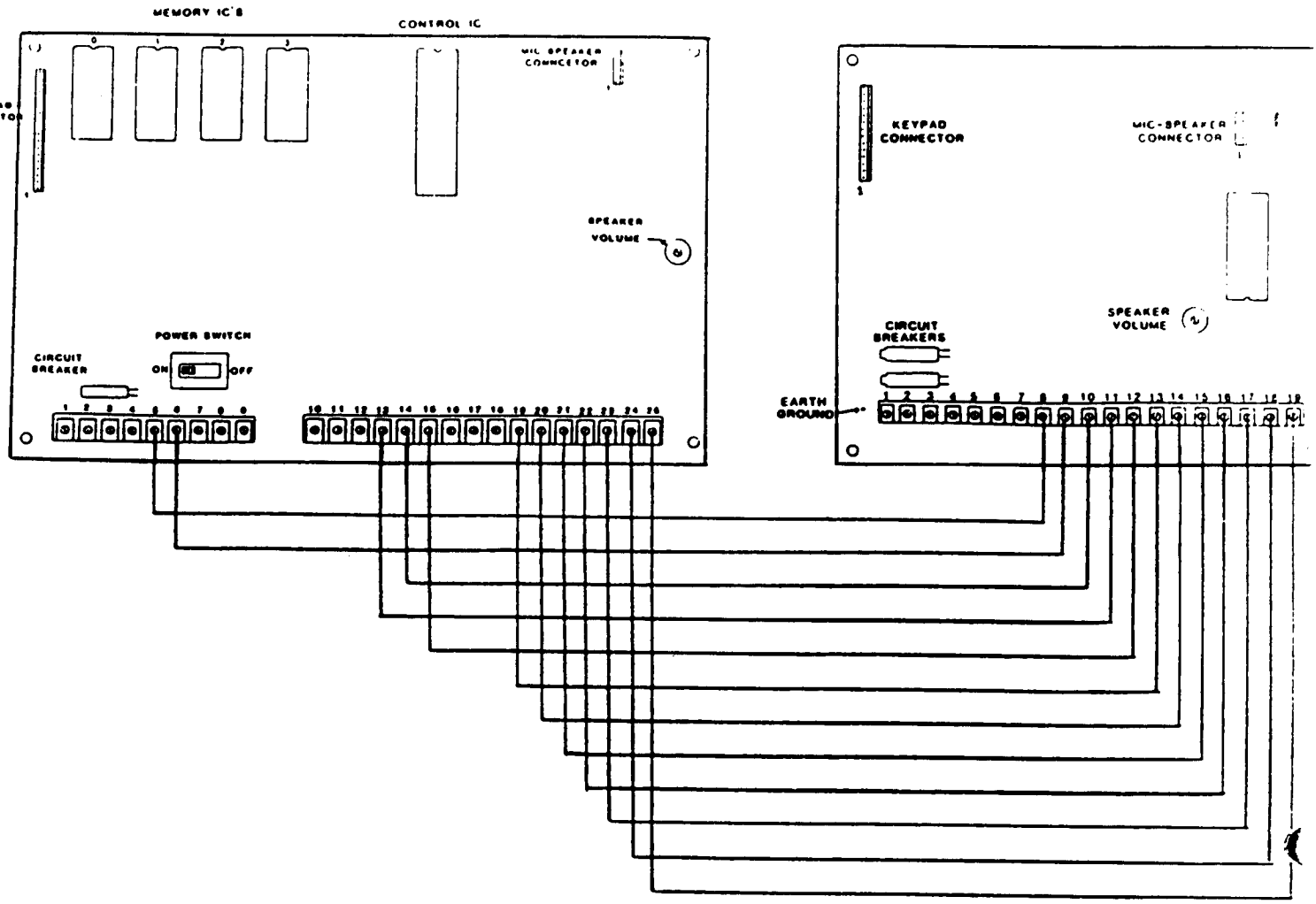


5070/5071 TERMINAL #	DESCRIPTION	5060/5061 TERMINAL #
5	Ground	8
6	DC Power	9
14	SERIAL DATA	10
13	SERIAL CLOCK	11
15	REMOTE #1	12
16	REMOTE #2	12
17	REMOTE #3	12
18	REMOTE #4	12
19	KEY 1	13
20	KEY 2	14
21	KEY 4	15
22	KEY 8	16
23	AUDIO IN	17
24	AUDIO GROUND	18
25	AUDIO OUT	19

5070/71 TO 5060/61 WIRING

FIGURE 12

PROGRAMMING PROCEDURE FOR THE 5070/71

A. PUT THE SYSTEM INTO THE PROGRAMMING MODE. If the 5070 has been previously programmed and the access code is known, then use method #2 to enter the programming mode.

1. Turn OFF the power switch. Press and hold the "0" digit on the keypad while turning the power switch back on.

2. Press "ENTER", the LCD will indicate "ACCESS #", press digit "0" followed by the 6 digit access code.

B. PROGRAMMING SEQUENCE

1. When the programming mode is entered, the LCD display will show "ACCESS # 123456" (123456 is the access code programmed at the factory). If you wish to change the access code press "CLEAR". Enter the new 6 digit code and press "ENTER".

2. The LCD display will show "ROTARY" (yes/no). If "NO" is selected the 5070 will dial Touch Tone. Any digit key will toggle the yes/no option. Press "ENTER" after the desired option is selected.

3. The LCD display will show "SPEAKER ON" (yes/no). If "NO" is selected the speaker will be OFF until dialing is completed. Any digit will toggle the yes/no option. Press "ENTER" after the desired option is selected.

4. The LCD display will show "GROUND START" (yes/no). If "YES" is selected, the ALARM output may be used to operate a ground start system. Any digit key will toggle the yes/no option. Press "ENTER" after the desired option is selected.

5. The LCD display will show "ENT BEFORE 6" (yes/no). If "YES" is selected the visitor will be required to press "ENTER" before the tenant can open the door with the digit 6. Any digit key will toggle the yes/no option. Press "ENTER" after the desired option has been selected.

6. The LCD display will show "FAST 6" (yes/no). If the tone burst remains ON when the digit 6 is held, select "NO". If the tone burst does not remain on when the digit 6 is held, the FAST 6 option must be selected for proper operation. Any digit key will toggle the yes/no option. Press "ENTER" after the desired option is selected.

7. The LCD display will show "APT # LENGTH" (1-4). This is the number of digits used in the apartment directory.

One to four digits can be used. Press "ENTER" after the selection is made.

NOTE: If four digits are selected, apartment #1 would be entered as 0001 and this number would appear on the directory.

8. The LCD display will show "CALL LENGTH" (1-255). This is the time between when the system is finished dialing and when it automatically hangs up. A call length of 45 to 75 seconds is usually sufficient. The maximum time is 255 seconds. Press "ENTER" after the desired time is selected.

9. The LCD display will show "DOOR TIME" (1-255). This is the length of time (in seconds) that the door relay will be active. The maximum time is 255 seconds. Normally for a system located close to the door, a door activation time of 10 seconds is sufficient. However, if the door is further away, or if the door has magnetic contacts for relocking the door after it closes, a longer door time may be used. Press "ENTER" after the door time has been selected.

Programming of the system options is now complete. The next programming sequence is for entering apartment information. When all programming is completed, press "CLEAR" twice to exit the programming mode.

NOTE: If a mistake is made while entering data, press "CLEAR" once and re-enter the correct data.

10. The LCD display will show "0000 APT # ". Enter the code that appears next to the tenants name on the directory. The number of digits in this code must be the same as the number of digits selected for the APT # LENGTH (step 7). Press "ENTER" after the desired code has been entered.

11. The LCD display will show "DOOR ACCESS" (yes/no). If "YES" is selected the tenant can use the last four digits of his/her phone # to open the door from the lobby. Pressing any digit key will toggle the yes/no option. Press "ENTER" after the desired option is selected.

12. The LCD display will show "PHONE # - ". Enter the tenants phone # here. Press "ENTER" after the correct phone # has been entered.

13. The LCD display will now show you the memory location where that APT # was saved. The first digit on the LEFT side of the display is the chip # (0-3). The next three digits are the location in that chip (0-338). The number on the RIGHT is the APT.#. Press "ENTER" to go back to step 10 to continue entering apartment information or press "CLEAR" twice to exit the programming mode.

C. CHECKING OR CHANGING PROGRAMMED OPTIONS

1. Put the 5070 into the program mode. This can be done by pressing "ENTER", digit "0", the 6 digit access code, and then "ENTER". See programming procedure for more information on how to enter the programming sequence.

2. To change the options simply enter the new data then press "ENTER" to save the data. The 5070 will advance to the next option and display the data.

3. To check the options simply press "ENTER" to sequence through the programming steps. The options will not be changed. Pressing "CLEAR" twice at any time will exit the programming mode.

D. CHECKING OR CHANGING APARTMENT INFORMATION

1. Put the 5070 into the programming mode by pressing "ENTER", digit "5", the six digit access code, and then "ENTER". Doing this will allow you to enter the programming mode at STEP 10 (see programming procedure for more information).

2. To see which APT #'s have been used, press "ENTER" to step through the memory. The number on the LEFT of the display is the memory location. The number on the RIGHT is the APT.# at that location.

3. To change the DOOR ACCESS or the PHONE #, enter the APT.# then press "ENTER". The DOOR ACCESS may be changed or press "ENTER" to advance to the PHONE #. Press "CLEAR", the new phone number, then "ENTER".

4. To delete an APT.# , enter the APT.#, press "ENTER", the display will show "DOOR ACCESS" (yes/no). Press "ENTER", the display will show the phone number. Press "ENTER", the display will show the memory location and the APT.#. Press "CLEAR" then "ENTER", the APT.# and PHONE # will be deleted.

E. SETTING REAL TIME AND AUXILIARY ENABLE/DISABLE

1. To set the REAL TIME press "ENTER", digit "6", the six digit access code, then "ENTER". The LCD display will show "TIME ". enter the correct time.

NOTE: Time is represented in a 24 hour manner. Hours (1-24) and seconds (0-59).

Press "ENTER" when you have entered the correct time.

2. The LCD display will show "ENABLED ". The time that is entered here will be the time that the AUXILIARY door will be automatically enabled and tenants may use their

code to activate the second doorstrike. Press "ENTER" after you have entered this time.

3. The LCD display will show "DISABLED ". The time that is entered here will be the time when the AUXILIARY door is disabled and tenants will no longer be able to open the second doorstrike.

NOTE: If you choose not to use this option, set the ENABLE and DISABLE times to the same value.

Press "ENTER" when you have entered the desired time. Press "CLEAR" twice to exit this mode.

5000 SERIES FIELD TEST

FIELD TEST PROCEDURE FOR THE 5070/71 MAIN PANEL

A. TEST DOORSTRIKE OPERATION

1. Press "CLEAR". The LCD display will show "DOOR CODE".

2. Enter a valid door access code.

3. The doorstrike will open. The LCD display will show "DOOR IS OPEN" while the doorstrike is activated.

B. TEST DIALING OPERATION

1. Press the correct code for the tenant that you wish to call. The 5070 will dial automatically.

2. When the person answers, identify yourself. Tell them to press or dial a "6" on their telephone. If they have a Touch Tone phone, tell them to keep the button depressed for 1 to 2 seconds.

NOTE: Both the tenant and the visitor will here a short warning beep 15 seconds before the system hangs up.

FIELD TEST PROCEDURE FOR THE 5060/61 REMOTE SATALITE

A. TEST OPERATION OF FIRST DOORSTRIKE

1. Press "CLEAR".

2. Enter a valid door access code. The doorstrike will open. The DOOR IS OPEN light will come on while the doorstrike is activated.

B. TEST AUXILIARY DOOR STRIKE

1. Make sure the AUXILIARY light is ON before proceding to the next step. If it is not ON, go to the 5070 main unit and ENABLE the AUXILIARY door in the following manner.

Press "ENTER", digit "3", the six digit access code, then "ENTER". The display will show "ENABLED". Repeating this procedure will DISABLE the AUXILIARY door.

2. Press "ENTER"

3. Enter any valid door access code. The doorstrike will open and the DOOR IS OPEN light will come on as long as the doorstrike is activated.

C. TEST DIALING OPERATION

1. Enter the correct code for the number you wish to dial.

2. When the person answers, identify yourself. Tell them to press or dial a "6" on their telephone. If they have a Touch Tone phone, tell them to keep the key depressed for 1 to 2 seconds.

ACCESS CODE

THE SIX DIGIT ACCESS CODE

A. THE ACCESS #

The six digit access number plus a "CONTROL DIGIT" can be used to change the operating mode of the entry system. The access code can only be used at the master unit (5070). The following format must be used.

1. Press "ENTER". The display shows "ACCESS # ".

2. Enter the control digit followed by the six digit access code then press "ENTER".

B. OPERATING MODES

1. Control digit "0" allows you to enter the programming mode as described in the section "PROGRAMMING PROCEDURE FOR THE 5070/71". Press "CLEAR" to exit this mode.

2. Control digit "1" allows you to activate door relay #1. If remotes are being used, door relay #1 on the remotes will also be activated.

3. Control digit "2" allows you to activate the auxiliary door relay at any time.

4. Control digit "3" allows you to enable or disable the auxiliary door relay.

5. Control digit "4" will cause the display to show "CLEAR MEMORY". If "ENTER" is pressed, the memory of the 5070 will be cleared and all apartment information will be lost.

If you do not wish to clear the memory, press any other key to exit this mode.

6. Control digit "5" allows you enter the programming sequence at step 10. Press "CLEAR" twice to exit this mode.

7. Control digit "6" allows you to set the real time and the auxiliary enable/disable times.

8. Control digit "7" will show you the software revision level in the 5070.

9. Control digit "8" will allow you to use the 5070 as a normal telephone. The 5070 can dial a maximum of 16 digits in this mode. The CALL LENGHT time does not effect the 5070 in this mode.

a. Enter the telephone number to be called

b. Press "ENTER". The 5070 will dial the number.

c. Press "CLEAR" when you wish to hang up or exit this mode.

AVOIDING PROBLEMS

A. Telephones without "Reverse Polarity Protection" will not operate the system 50% of the time. The telephone company will correct this problem when contacted. Telephones manufactured before 1975 may be affected (Tone type phones only).

B. Telephone systems using a "concentrator" will not generate a large enough "pulse" to be decoded when using Rotary telephones. If this situation occurs, contact the telephone company to see if a concentrator is being used.

C. NEVER install a satellite more than 250 feet away from the master unit. The resistance of the wire can cause a large voltage drop after 250 feet. always install satellites in accordance with Figure 13. A wire size table is provide

in Figure 13.

D. NEVER connect satellite wires when power is supplied to the master unit. If an attempt is made to install a satellite with "hot" wires, it is possible to damage the equipment.

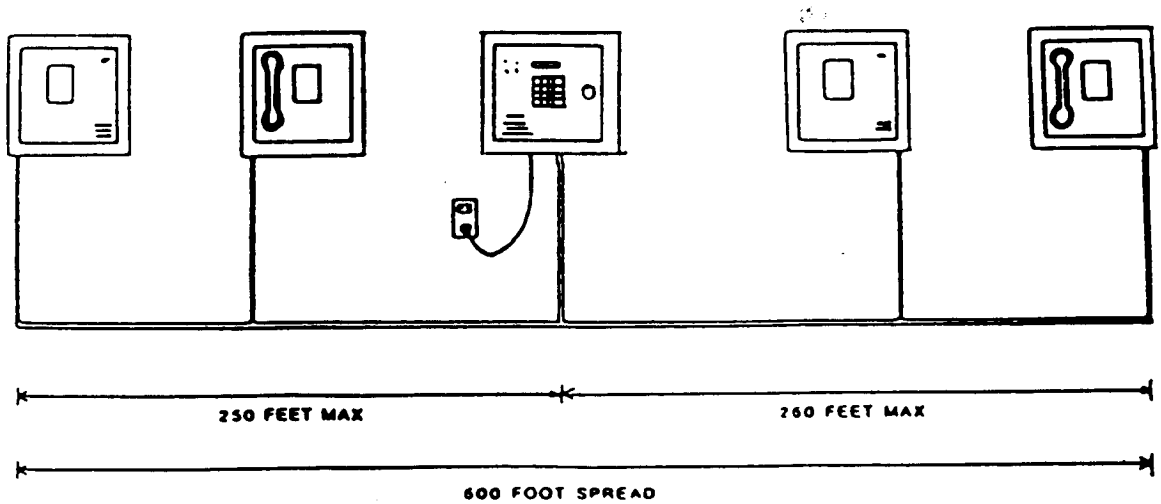
E. If the 5000 system seem to function normally but a minor problem exists, contact Silent Knight to insure that your software is up to date. Silent Knight makes minor software updates from time to time to insure proper operation with a variety of telephone systems. As we learn of difficulties that someone is having, we sometimes change the software to enable the 5000 system to work with the variance in the phone systems. The software is located in the control IC on the master unit. See Figure 1.

F. DO NOT share the telephone lines when using the 5000 system. The 5000 system must have its own line.

G. The 5000 system does not operate with telephone systems that require more than 7 digits to be dialed.

H. Figure 13 represents the 5000 system used in its maximum configuration. Note that the master unit is at the hub or center of the system. THIS IS IMPORTANT! The master battery charging voltage should be 13.6VDC. All connections made between the master and its satellites must be tight. Any loose connections WILL cause problems. Any splices made should be soldered not crimped.

If frequent or lengthy power outages are expected, it would be wise to install an additional 12V battery backup to increase the time the system will operate without AC power.



* FOUR SATELLITES MAX.

5070/5060 INSTALLATION
FIGURE 13

WIRE LENGTH	WIRE SIZE
0 TO 50 FEET	18 GA.
50 TO 100 FEET	16 GA.
100 TO 250 FEET	14 GA.
250 FEET MAX.	

POWER LINE AC OR DC WIRE SIZE TABLE

ERROR MESSAGES

A. # TO BIG

When a number is entered during programming that is larger than allowed, this message will be displayed. Press "CLEAR" and re-enter the number.

B. MEMORY FULL

If all memory locations have been filled and more data is entered, this message will be displayed.

C. BAD PROM

The 5070 verifies data as it is saved in the EEPROM memory. If the data can not be verified, the BAD PROM message will be displayed.

D. ERROR

This error message indicates that an incorrect APT # or Door Code has been entered. Press "CLEAR" and re-enter the number.

MODEL 5095 INSTRUCTION STICKERS

These stickers can be placed on the tenants phone to aid them in using the system. Order them from Silent Knight.