

SILENT KNIGHT
MODEL 4721
AREA CONTROL SOFTWARE
INSTRUCTION MANUAL
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1 INTRODUCTION

The Model 4721 is a control software enhancement for the 4720 that permits the users to arm, disarm, and bypass (shunt) only selected areas. Each access code (0-99) can be assigned to one of 16 groups. Each group is then assigned control over certain areas. (Groups may control from 1 to 8 different areas.) Users can then control their areas from any keystation.

Up to 80 zones may be used with this Area Control software and these zones may be divided into a maximum of 8 areas. When 8 areas are used, each area will contain 2 Internal zones and up to 8 Expansion zones, for a total of 10 zones per area. When fewer areas are used, each area will contain more zones.

IMPORTANT: Do NOT pre-wire the zones. Zones fall into areas according to a fixed pattern based on the total number of areas. DO NOT use this software to make a split control (multiple systems). Although the zones are split into areas, delay times and alarm outputs are common to all areas.

NOTE: Some of the digital keystations are being replaced by newer models. The Model 4430 is being replaced by the Model 4433, the Model 4530 by the Model 4533, the Model 4550 by the Model 4553, and the Model 4560 by the Model 4563. Models 4220, 4230 and 4540 have been discontinued.

On the newer keystations, the **NOT READY** key has been renamed the **STATUS** key, and the **SHUNT** key has been renamed the **BYPASS** key. Throughout this manual, the old model numbers and key names are shown in parentheses after the new model numbers and key names.

2 MODEL 4721 SOFTWARE INSTALLATION

Area Control is installed in a 4720 Control/Communicator by replacing the 4720 Control micro (4792) with the 4721 Area Control micro (4794).

Before replacing your software, check the list below against the model numbers you are currently using. Make sure that the software revision date is the same or later than the dates shown below.

<u>CHIP/MODEL #</u>	<u>REV. DATE (or later)</u>
4721 AREA CTRL (4794)	Rev. D (890519)
4720 DIALER (4793)	Rev. C (890818)*
4110 ZONE EXPANDER	880901
4120 ZONE EXPANDER	880901
4130 ZONE EXPANDER	880901
5255 PRINTER	870601
5520 PROGRAMMER	880706
5540 SOFTWARE DISKS	880706
9000	870801

*NOTE: Some Dialer chips have no paper label. These chips are usable, regardless of the date code printed directly on the chip. (This is the manufacturer's date code, which has nothing to do with the software revision date.)

If you are using any of the models listed above and you need to update the software, contact the Silent Knight Technical Services Department.

SOFTWARE REMOVAL AND INSERTION

Before you remove the 4720 CTRL Micro (4792) from its socket, note which way the notched end is facing.

Use either the PROM puller supplied with your programmer or a small, flat-blade screwdriver to lever the 4720 CTRL Micro (4792) gently out of its socket. Slip the screwdriver under one end of the PROM and pry up slightly, then place the screwdriver under the other end and finish removal.

Replace the Micro with the new chip labeled 4721 AREA CONTROL. To insert it into the 4720 PC board, carefully press the EEPROM back into its socket, with the notched end facing the same way the old EEPROM was facing before you removed it.

3 MODEL 4721 PROGRAMMING RESTRICTIONS

The features and options listed below may not be used with the Model 4721 Area Control Software.

1. Keystation Model 4203 (4200)
2. Mechanical Keypad
3. Keystations with 7-Segment displays
4. Door Supervision
5. High Security Code
6. Automatic (timed) Open
7. Hourly Test
8. Programming of the Model 4150 from a keystation.
9. Chime to PZT
10. Closing Report Ringback
11. Split Bypassing (Shunting)
12. Code 2 (Secondary codes are always enabled)

4 MODEL 4721 PROGRAMMING

The 4721 may be programmed using the same programming forms as the 4720. Most of the options that are available for the 4720 are also available for the 4721 except the restrictions listed above.

4.1 SPECIAL PROGRAMMING

Before programming SYSTEM OPTIONS, you should go to the INTERNAL ZONES menu and select AREA MODE. This will cause the 5520 to display special 4721 options which do not apply to the standard 4720.

INTERNAL ZONES - The first option for the Internal Zones is ZONING MODE. Use the arrow keys to select AREA MODE and press **ENTER**.

The next option is # OF AREAS. Select the number of areas to be controlled (2-8). Selecting (1) for this option defeats the purpose of Area Control.

IMPORTANT: DO NOT wire the zone loops until you have determined the area configuration.

Refer to the chart below to determine which zones will be contained in each area.

	ZONE#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20...	
8 AREAS	AREA#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4...	
7 AREAS	AREA#	1	2	3	4	5	6	7	11	2	3	4	5	6	7	1	1	2	3	4...		
6 AREAS	AREA#	1	2	3	4	5	6	12	1	2	3	4	5	6	1	2	1	2	3	4...		
5 AREAS	AREA#	1	2	3	4	5	123	1	2	3	4	5	1	2	3	1	2	3	4...			
4 AREAS	AREA#	1	2	3	4	1234	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4...
3 AREAS	AREA#	1	2	3	123	12	1	2	3	1	2	3	1	2	3	1	2	3	1...			
2 AREAS	AREA#	1	2	12	12	12	1	2	1	2	1	2	1	2	1	2	1	2	1	2...		

NOTE: The pattern repeats every 8 zones, all the way to zone 80.

EXAMPLE 1: When all 8 areas are used, area #1 will control zones 1, 9, 17, 25, 33, 41, 49, 57, 65, and 73.

EXAMPLE 2: When 4 areas are used, area #1 will control zones 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 73, and 77.

NOTE: When programming for zone expanders, the "Last Internal Zone" must be either 0, 8, or 16.

SYSTEM OPTIONS - You MUST select BYPASS (SHUNT) CODE; otherwise anyone can bypass all of the areas (the areas for group #0) when the system is disarmed.

Beginning with revision 880707, there are several new options:

SPLIT LEDs: Causes each keystation to display ARMED and READY LEDs only for the area in which it is located (keystation ID# is the same as area#).

SHOW ARMED AREAS: When not using split LEDs, causes each keystation to display the armed status of all areas.

AUTO CLOSE & AREAS TO CLOSE: The 4721 can now do automatic closing by area.

HOLDUP OUTPUT & ARMED LED: The Model 4180 will output "DURESS/HOLDUP" instead of "READY", and will output "ALL-ARMED" instead of "ANY-ARMED". When not using SPLIT LEDs, the ARMED LEDs will light only if all areas are armed.

4.2 ACCESS WINDOWS

IMPORTANT DEFINITIONS -

CODE - A user definable sequence of numbers (3 to 6 digits) that allows users access to the system.

GROUP - A collection of codes that will be able to control identical areas.

AREA - A collection of zones that will be controlled by a certain group or groups.

First decide which codes will be assigned to which groups (16 groups max.).

NORM GRP CODE #0 - Enter the group # that code 0 will be associated with. If you are not using time windows, there is no need to enter the SPEC GROUPS. Repeat this process for all of the codes that will be used. If you are using time windows, **DO NOT assign any codes to group #1 since Window #1 is NEVER valid.**

EXAMPLE: Each code used must be assigned a group # (0-15). Each group will then be assigned an area or areas which they can control. If you wish to assign code #0 to group #5, simply press the digit **5** and press **ENTER**. The LCD will prompt you with "NORM GRP CODE #1".

One example of how a few of the codes may be assigned to groups is shown below.

GROUP THAT CODES ARE ASSIGNED TO

NORM GRP CODE #0 - 0
NORM GRP CODE #1 - 0
NORM GRP CODE #2 - 1
NORM GRP CODE #3 - 1
NORM GRP CODE #4 - 2

NOTE: When you have entered the last group #, press **SHIFT** **STEP** followed by the **SKIP** key.

AREAS TO CLOSE: If using AUTO CLOSE or REPORT OT/CT (late-to-close), select the areas which should be closed at the end of the closing window.

AREAS FOR GRP #0: Enter all of the areas that GROUP #0 will control. Repeat this process for all of the groups being used. If you are using less than 8 areas, DO NOT assign the unused areas to any group.

When entering the areas for each group, the programmer's LCD display will show:
"AREAS FOR GRP #0
____"

EXAMPLE: Now that you have assigned all of the codes to specific groups, you must assign areas for each group to control. For this example we will assume that 3 areas are to be used and the 16 internal zones of the panel are to be used. To assign group #0 to areas 1, 2, and 3, simply press the digits 1, 2, and 3, then press **ENTER**.

Before you press **ENTER** the LCD will show:

"AREAS FOR GRP #0
123____"

Referring to the table in section 4.1, read across the line that begins "3 AREAS". You will note that area #1 contains zones 1, 4, 7, 9, 12, and 15. Area #2 contains zones 2, 5, 8, 10, 13, and 16. Area #3 contains zones 3, 6, 11, and 14. Therefore, users in group #0 control all 3 areas--i.e., all 16 zones.

The following shows how the first 3 groups might be assigned to a 3-Area system.

AREAS FOR GRP #0 123----
AREAS FOR GRP #1 1-----
AREAS FOR GRP #2 -2-----

This allows group #0 access to areas 1 and 2 plus its own unique area 3. Group #1 has access to area #1 only and group #2 has access to area #2 only.

Why are there groups? There is not sufficient room in the EEPROM to store the area patterns for each code. The group # is used as a pointer into the table of area patterns.

4.3 MESSAGES

Change the message **"PERIMETER"** to **"PARTIAL"**. This will be displayed when only part of the system is armed.

If using the SPLIT LEDs option, change the message **"COMPLETE"** to a message of your choice, such as the name of the business. This message will be displayed at all keystations. The **ARMED** and **READY** LEDs will indicate the status of the particular area.

4.4 LOCATIONS - AREA NAMES

Select a name for each area being used (15 characters max.). **You must name all 8 areas.** This may require you to enter a name for an area that is not used. For Example, if using 4 areas, area 1 and 5 must be given the same name. Likewise, area 2 and 6 should be given the same name and so on.

Assume that 3 areas are being used. The EEPROM form would look like the list shown below.

LOCATION AREA #1 - OFFICE
LOCATION AREA #2 - SHOP
LOCATION AREA #3 - GARAGE
LOCATION AREA #4 - OFFICE
LOCATION AREA #5 - SHOP
LOCATION AREA #6 - GARAGE
LOCATION AREA #7 - OFFICE
LOCATION AREA #8 - SHOP

The list below shows which areas must be given the same name if less than 8 areas are used.

7 AREAS - Area 1 and 8
6 AREAS - Area 1 and 7, area 2 and 8
5 AREAS - Area 1 and 6, area 2 and 7, area 3 and 8
4 AREAS - Area 1 and 5, area 2 and 6, area 3 and 7, area 4 and 8
3 AREAS - Areas 1, 4, and 7 - areas 2, 5, and 8 - areas 3 and 6
2 AREAS - Areas 1, 3, 5, and 7 - areas 2, 4, 6, and 8

Fill out the following charts before programming. Circle the desired areas.
 Total number of areas (2-8): _____

USER NAME	CODE #	SECRET CODE	GROUP #	AREAS
Installer	0	_____	—	1 2 3 4 5 6 7 8
_____	1	_____	—	1 2 3 4 5 6 7 8
_____	2	_____	—	1 2 3 4 5 6 7 8
_____	3	_____	—	1 2 3 4 5 6 7 8
_____	4	_____	—	1 2 3 4 5 6 7 8
_____	5	_____	—	1 2 3 4 5 6 7 8
_____	6	_____	—	1 2 3 4 5 6 7 8
_____	7	_____	—	1 2 3 4 5 6 7 8
_____	8	_____	—	1 2 3 4 5 6 7 8
_____	9	_____	—	1 2 3 4 5 6 7 8
_____	10	_____	—	1 2 3 4 5 6 7 8
.....
_____	99	_____	—	1 2 3 4 5 6 7 8

GROUP #	AREAS	
0	1 2 3 4 5 6 7 8	(Typically all areas for group 0)
1	1 2 3 4 5 6 7 8	
2	1 2 3 4 5 6 7 8	
3	1 2 3 4 5 6 7 8	
4	1 2 3 4 5 6 7 8	(Do not select areas greater than the total number of areas.)
5	1 2 3 4 5 6 7 8	
6	1 2 3 4 5 6 7 8	
7	1 2 3 4 5 6 7 8	
8	1 2 3 4 5 6 7 8	
9	1 2 3 4 5 6 7 8	
10	1 2 3 4 5 6 7 8	
11	1 2 3 4 5 6 7 8	
12	1 2 3 4 5 6 7 8	
13	1 2 3 4 5 6 7 8	
14	1 2 3 4 5 6 7 8	
15	1 2 3 4 5 6 7 8	

of areas (Cross out all except one column under AREA #.)
 2 3 4 5 6 7 8

AREA #	NAME #	AREA NAME	ZONES
1 1 1 1 1 1 1	1	_____	1, 9, 17, 25, 33, 41, 49, 57, 65, 73
2 2 2 2 2 2 2	2	_____	2, 10, 18, 26, 34, 42, 50, 58, 66, 74
1 3 3 3 3 3 3	3	_____	3, 11, 19, 27, 35, 43, 51, 59, 67, 75
2 1 4 4 4 4 4	4	_____	4, 12, 20, 28, 36, 44, 52, 60, 68, 76
1 2 1 5 5 5 5	5	_____	5, 13, 21, 29, 37, 45, 53, 61, 69, 77
2 3 2 1 6 6 6	6	_____	6, 14, 22, 30, 38, 46, 54, 62, 70, 78
1 1 3 2 1 7 7	7	_____	7, 15, 23, 31, 39, 47, 55, 63, 71, 79
2 2 4 3 2 1 8	8	_____	8, 16, 24, 32, 40, 48, 56, 64, 72, 80

5 AREA CONTROL REPORTING

If OPEN/CLOSE reporting is enabled, the system will report the user ID and the status of each **AREA**. Only the SIA (SEIA) and FSK2 formats have the ability to report by **AREA**.

NOTE 1: Only the areas that have changed status are reported.

NOTE 2: An OPEN/CLOSE ID without any areas indicates that all areas are in the same state, unless you selected the REPORT ALL AREAS option.

EXAMPLE 1: CLOSE ID 14
CLOSE AREA 4
CLOSE AREA 5

This message indicates that code #14 has armed areas 4 and 5.

EXAMPLE 2: CLOSE ID 1

This message indicates that code #1 has armed all of the areas.

EXAMPLE 3: OPEN ID 2
OPEN AREA 6

This message indicates that code #2 disarmed area 6.

EXAMPLE 4: CLOSE ID 1
OPEN AREA 5
CLOSE AREA 6

If a user does a combination of opens and closes such as in Example 3.5, the report comes in as a Closing by ID# X.

EXAMPLE 5: OPEN ID 1

Since no areas were reported, code #1 has disarmed ALL of the areas.

6 ADDITIONAL FEATURES

Terminal 15 of the 4720 will be active low for any intrusion alarm.

Terminal 16 of the 4720 will be active low for any fire alarm.

When using the Model 4180, the first 8 outputs will show which areas are armed, instead of showing the Alarms for zones 1-8.

Beginning with revision 880707, the Model 4180 will output "DURESS/HOLDUP" instead of "READY", and will output "ALL-ARMED" instead of "ANY-ARMED".

7 AREA CONTROL OPERATION

This section applies to normal area control operation, when the SPLIT LEDs option is NOT selected.

7.1 NORMAL DISPLAY

The **READY** LED shows if all areas are ready.

NOT READY status can be seen by pressing **STATUS** (**NOT READY**); the LCD will show the area name and the zone location of each bad zone.

The **BYPASS** (SHUNT) and **TROUBLE** displays will show the Zone # ONLY. The area name will not be displayed.

The **ARMED** LED is ON if all areas are armed. The LCD will show "**ARMED COMPLETE**" if all areas are armed, or "**ARMED PARTIAL**" if only some areas are armed, or "**ARMED 123—**" if the SHOW ARMED AREAS option was selected.

7.2 ARMING/DISARMING/BYPASSING (SHUNTING)

In order to arm, disarm, or bypass, you must first enter your code to activate AREA Mode. The display will then show the status of each area in your group (one at a time).

7.2.1 ARMING

Enter your code. The LCD will show the status of your area (or the first of several areas).

If the area shown is **READY**, you may press **1** to arm it, or **2** to arm ALL of the areas that you control, or **TEST** to skip to the next area.

If you pressed **1**, the status will change to **ARMED**; press **TEST** to advance to the next area.

If you pressed **2**, and all of your areas were **READY**, then the LCD will revert to the normal "**ARMED**" display (no need to advance to the next area).

If some of the areas were **NOT READY**, the LCD will show "**TRY AGAIN**", and you must do one of the following:

- A. Make the zone(s) **READY**.
- B. Bypass the zone(s).
- C. Arm around that area.

NOTE: You must re-enter your code before doing B or C.

If the area shown is **NOT READY**, press **STATUS** to see the bad zones in that area. You must then do one of the following:

- A. Make the zone(s) **READY**.
- B. Bypass (shunt) the zone(s).
- C. Skip that area by pressing **TEST**.

7.2.2 BYPASSING (SHUNTING)

The full features of bypassing and unbypassing individual zones cannot be accessed while in the AREA Mode. You must be in the NORMAL Mode. Only bypassing of bad zones can be done while in the AREA Mode. If Force Arming is selected, then the bad zone(s) in your area(s) will automatically bypass when you arm.

If Force Arming is NOT selected, then you can bypass bad zones in your areas as follows:

Press **TEST** until the **NOT READY** area is displayed.

Press **STATUS** (**NOT READY**) to see the zone number of the bad zone(s).

Enter the zone number and press **BYPASS**

Repeat if there are more bad zones. You may arm the area after it becomes **READY** by pressing **1**.

If the LCD display shows "**RESTRICTED ZONE**" when you are trying to bypass, this indicates that the zone is not programmed as **BYPASSABLE** or that you are trying to bypass a zone that does not belong to the areas that have been assigned to your code.

IMPORTANT: **AUTO-UNBYPASS** will not unbypass internal zones that are **NOT READY** at the time of disarming; therefore, **FORCE-ARM** and **AUTO-UNBYPASS** should not be used unless the internal zones are made **NOT BYPASSABLE**.

7.2.3 DISARMING

Enter your code. If the area shown is armed, you may press **1** to disarm that area, or **0** to disarm all of the areas in your group, or **TEST** to skip to the next area.

AREA MODE OPERATION SUMMARY

Enter code to activate AREA Mode.
Press **1** to toggle the status of the area shown.
Press **2** to arm all areas in your group.
Press **0** to disarm all areas in your group.
Press **TEST** to skip to the next area.
Press **CLEAR** to exit AREA Mode.

Aside from AREA MODE OPERATION for arming and disarming areas, operation is the same as with the standard 4720, with the following two exceptions: RESETTING ALARMS and DIALER TEST.

7.3 RESETTING ALARMS

Enter your code. Press **0** to disarm. The sirens will stop, and the smoke detectors will reset if there was a FIRE alarm.

NOTE: When disarming from alarm, all areas assigned to your code will be disarmed.

7.4 DIALER TEST

Because of the dual use of the **TEST** key, you must press **0**, **TEST**, then enter your code.

7.5 SPLIT LEDs OPTION

NOTE: This section applies only when the SPLIT LEDs option is selected.

The SPLIT LEDs option causes each keystation to show **ARMED** and **READY** LEDs only for the area in which it is located. The LCD is no longer used to display ARMED/READY status; it shows a message of your choice.

The stations in each area only show the not ready and bypassed (shunted) status of zones in that area. If desired, a separate station (not associated with one area) can be used to show the status of all zones.

If a code has access to multiple areas, operation is like that of the normal area control (see section 7.2). If a code has access only to one area, then it can be used to arm or disarm from the station in that area only.

Although the **ARMED** and **READY** LEDs are split, the time delays and alarm outputs are not split; therefore, you should not use the 4721 to make a split system.

A list of the features of the SPLIT LEDs option follows:

The keystation ID must match the area # that it is in; i.e., station #1 shows area 1, #2 shows area 2, etc.

If you want supervised stations, then you can only have 1 station per area. If you don't supervise them, you can give several stations the same ID.

You can use station numbers 1 through the number of areas. station #9 will show **READY & ARMED** LEDs for the whole system.

All other station IDs will show invalid LEDs, but the LCDs will work.

The **READY** LED will show the **READY** status of one area.

The **ARMED** LED will show the **ARMED** status of one area.

The LCD will normally show a message of your choice. (Change the **COMPLETE** message when programming.)

The **NOT READY** and **BYPASS (SHUNT)** displays will show only zones in your area, but the **ALARM MEMORY** display will show all areas, because your code will reset an alarm in any area, not just your own. The alarm memory will clear when someone arms any area.

Codes that control only one area can only arm/disarm from that area, or from the common station (ID#9). Operation is like a standard 4720--you do not use AREA Mode Access.

Because the other system features are not split, pay attention to the following restrictions:

Do not use Interior Zones because the **INTERIOR** LED influences all areas.

Do not use the Instant feature for the same reason.

Do not use Chime Zones because they would be heard at all speakers.

Do not use Exit Warning Tone - Exit tone will sound at all stations, but only if all areas are armed.

Entry Time Display has priority over Exit Time Display.

Automatic Bell Test will sound only if all areas are armed.

Alarms can be reset from any area, and alarm memory can be cleared from any area.

7.6 SPLIT LEDs OPERATION INSTRUCTIONS

For users who control one area only (same as standard 4720 operation):

ARMING: If the **READY** LED is on; enter your code; the area will arm.
If the **READY** LED is off; press **(STATUS)** (**(NOT READY)**) to display the faulted zones. Correct the zones before arming.

BYPASSING: Press the zone number, then press **(BYPASS)** (**(SHUNT)**). If the LCD
(SHUNTING) shows **ENTER CODE**, then enter your code. Press **(BYPASS)** to display the shunted zones.

DISARMING: If the **ARMED** LED is on: Enter your code; the area will disarm.

RESET ALARM: Enter your code; all alarms will reset and your area will disarm. Press **<ALARM MEMORY>** to review the alarms.

8 LIMITATIONS

The Model 4721 Area Control Software is not a split system since all functions are not completely split by areas or zones. Its purpose is to be used in an alarm system in which limited access is available to certain areas of the system while other areas remain armed. The area control system allows each person to access certain areas, and can prevent them from entering other areas.

The Model 4721 Area Control Software was not designed to provide independent alarm systems for separate businesses that are operating under the same roof.

8.1 FUNCTIONS SHARED BY ALL AREAS AND ZONES

EXIT/ENTRY TIMES

The EXIT, ENTRY1 and ENTRY2 functions all use the same timer. If a second exit or entry delay is activated while the control is already doing a delay, the delay may be prolonged or shortened if the new delay is different. This happens because the shared timer is reset at each new entry or exit event. To prevent shortening the delay, the ENTRY2 feature should not be used.

If the control is timing an entry into one area and an exit from another, the LCD will only display the entry (seconds to alarm). If all areas are armed, exit warning tones will be emitted in all areas. If at least one area is unarmed, no exit warning tone will be emitted.

An already armed area can also be rearmed (give a 2 command to arm all remaining areas after some areas already have been armed). This will cause another exit delay but it will not report the closing of that area.

INSTANT KEY

Use caution with this function, as this key disables the time delay in all areas.

CHIME KEY

Door chime will be heard from all internal speakers when a chime zone is violated.

INTERIOR KEY

This key controls any zone in any area that is programmed as an interior zone. Do not select expansion zones as interior zones. If an expansion zone should be selected as an interior zone, this will prevent the interior from being enabled when the expansion zone is in a not ready state and other areas are armed.

ALARM CONDITIONS

Alarms are sounded at all interior speakers and displayed at all LCD displays. Alarm bell/siren outputs can be reset by any access code regardless of keystation or area assignment.

This system will also report open reset conditions, if used, regardless of the code used. This will even occur if the alarm came from an area that has not been assigned to that access code.

TROUBLE CONDITIONS

Trouble conditions will be sounded and displayed at all keystations in all areas. Troubles can be silenced from any keystation. If a zone expander device trouble should happen (X-bus trouble, unplugged, microprocessor failure), when the expander is in a NOT READY condition, the NOT READY areas cannot be armed and the not ready display will not work.

BYPASSING (SHUNTING)

If an expansion zone is not ready when starting the walk test, the zone will bypass automatically and not be testable. To correct this situation, exit the WALK TEST Mode, make the zone ready and enter the WALK TEST Mode again.

If you use the DELAYED BYPASS option for reporting bypassed zones, expansion zones will delay by area (report as each area is armed), but internal zones will delay until all areas are armed.

If you bypass an expansion zone during entry delay, it will not go into alarm when the entry time runs out. If you bypass an internal zone during entry delay, it will go into alarm if entry time runs out and the control has been disarmed.

8.2 MISCELLANEOUS FUNCTIONS

BELL TEST

Bell test at arming will only occur if all areas are armed.

PROGRAM MODES

PROGRAM Modes (SET DATE, SET TIME, WALK TEST, ACCESS CODES, etc.) can only be accessed when all areas are disarmed.

TIME WINDOWS

Codes 0 and 1 are valid at any time. The Model 5520 and Model 5540 show access time options for them, but they are ignored. This occurs since the codes must work on "closed" days.

AUTO CLOSE

This does not automatically turn on interior zones.

SPLIT LED OPTION

When using the split LED option where each keystation is assigned to its area only, using its ID numbers, a master keystation can be used to arm/disarm any area.

The keypad ID of the master keystation must be set to 9 regardless of the number of areas in the system. When using the master keystation, the user must enter his or her code, then **2** to arm or **0** to disarm. At their individual stations, simply entering the code will result in arming or disarming.

8.3 SPECIAL NOTES

These items are of special interest because they could prevent an alarm from occurring or permit access to an unauthorized area during delay times. Since time delays are shared, all exit delay zones in all areas are delayed when any area is armed.

An access code holder could theoretically arm his or her area and then use the time delay period to break into another area. Zone expanders will abort entry if another area is armed or disarmed during the delay. This means that expansion time delay zones might not detect an alarm at the end of the entry delay. The solution to this problem is to use time delay in internal zones only, if this is possible.

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