

Section 5.

Control Panel Installation

The major components of the Model 5204 PC board are described in this section. Figure 5-1 shows the 5204 (fuseless) printed circuit board.

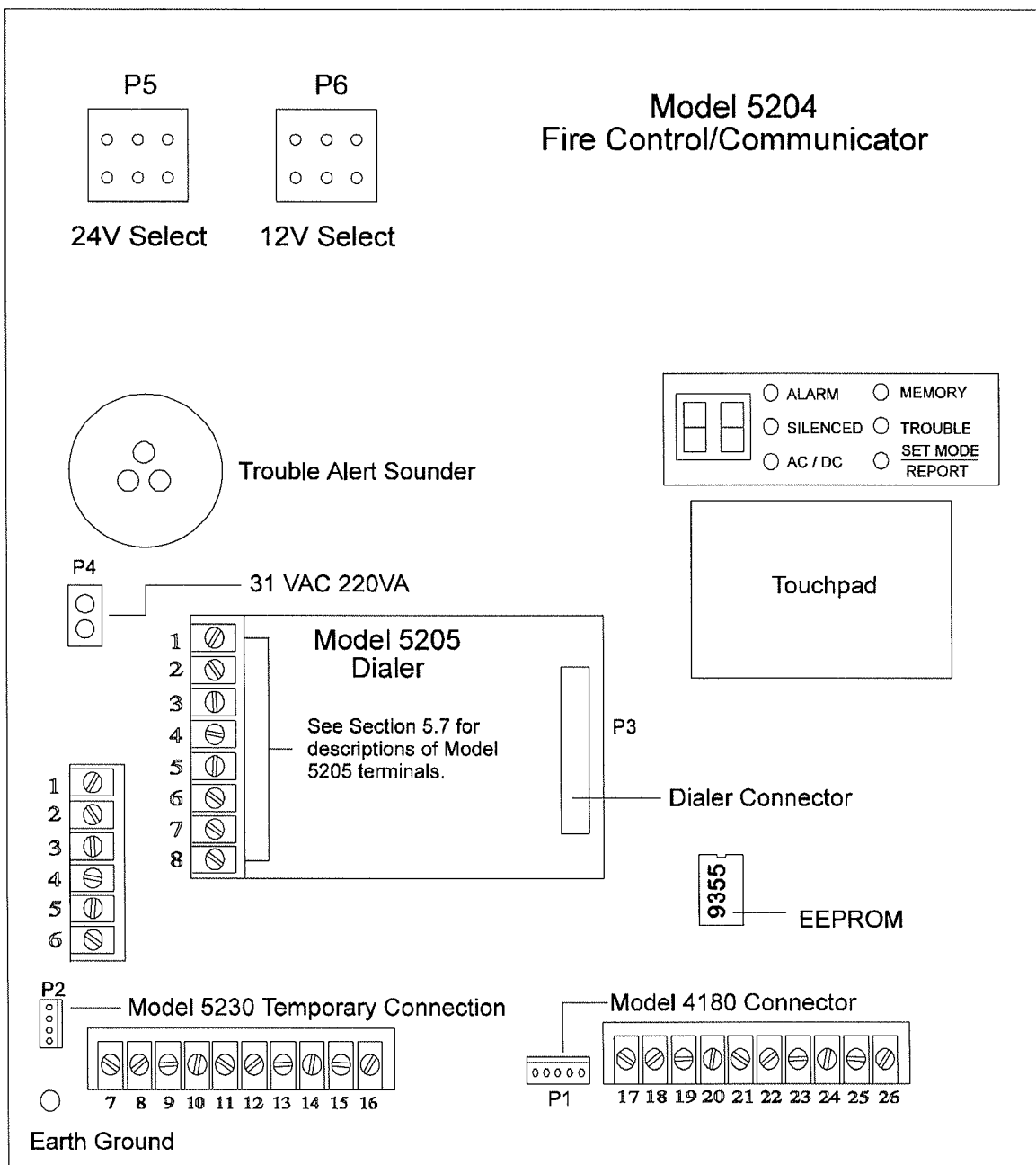


Figure 5-1. Model 5204 Board Assembly

Section 7.

Normal Operation

The optional Model 5230 Remote Annunciator provides annunciation of trouble and alarm conditions, and can be used to program the system. Key functions for both the Model 5230 (Figure 7-1) and the 5204 built-in touchpad (Figure 7-2) are described in Section 7.1. Section 8 explains how to program the 5204 using the Model 5230.

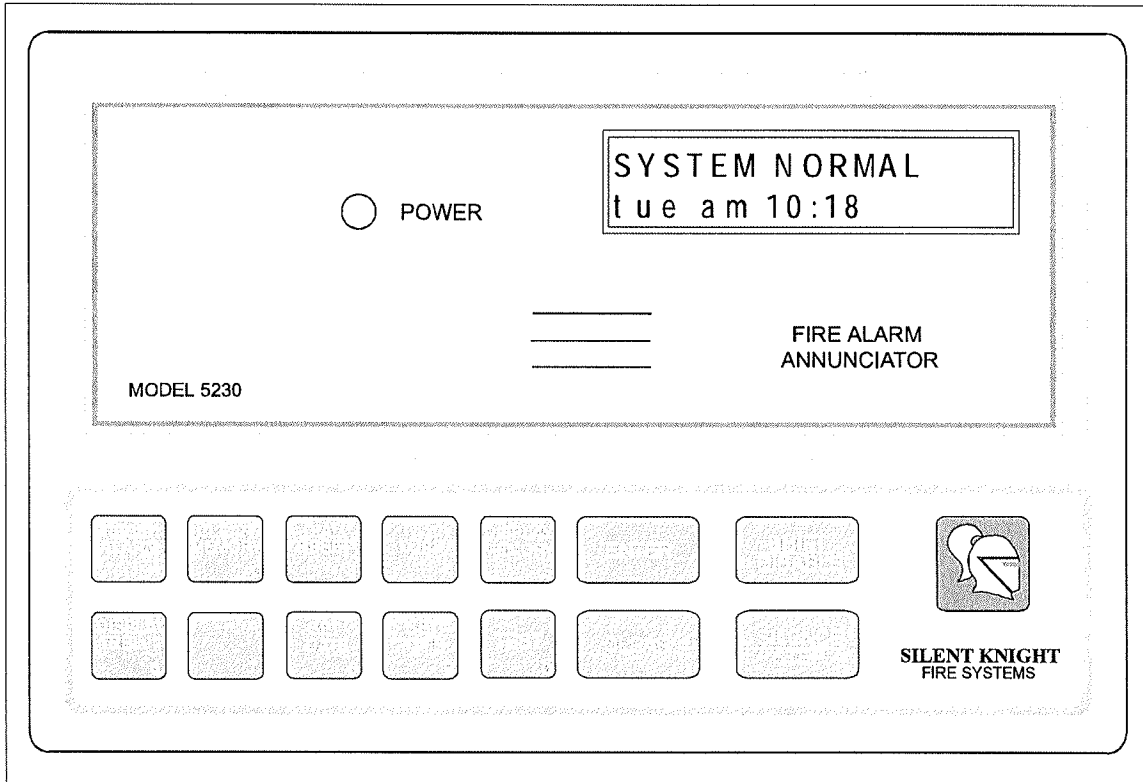


Figure 7-1. Model 5230 Remote Annunciator

The Model 5230 Remote Annunciator has a liquid crystal display (LCD) for displaying English-language messages. If the 5204 is not being programmed, the LCD cycles through all messages that are applicable at the time, showing a different one every 1.5 seconds. Refer to Section 9.3 for more information on troubleshooting messages.

When AC power is being supplied, and the battery is fully charged, the POWER LED glows steadily. If the POWER LED is flashing, the AC power has been removed or the backup battery is low. If neither AC nor battery power is being supplied, the POWER LED is off.

The audio transducer buzzer produces short beeps to annunciate keystrokes. It also emits a long, high-pitched tone to denote a trouble condition or to indicate that an annunciator function has been entered incorrectly (see Section 7.1).

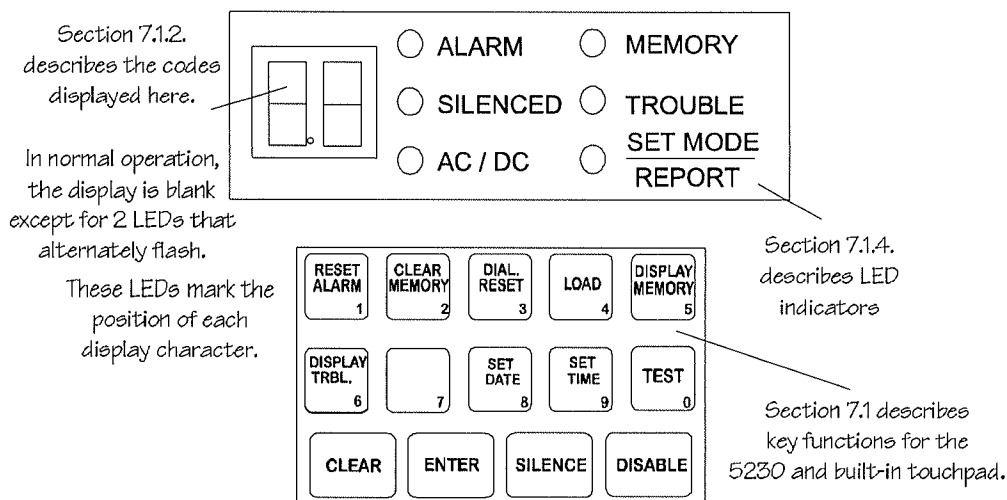


Figure 7-2. Built-in Touchpad

7.1 Built-in Touchpad and Model 5230 Annunciator Operation

To operate the 5204, you must use either the built-in touchpad or the Model 5230 Remote Annunciator. This annunciator functions the same as the internal touchpad except for the **STEP** key. The installer uses this key to step through programming options (see Section 8.3).

Following are the basic operating functions. Note that if no keys are pressed for 15 minutes while in program mode, the system will time out and resume normal operation.

TRY AGAIN

The message **TRY AGAIN** appears on the 5230 display if you do not press any keys for 5 seconds while accessing a function, or, if you attempt to access a function before exiting from another function.

In the following table, Code 0 refers to the installer's code (factory programmed as 5204). Code 1 refers to the operator's code (factory programmed as 1111). These two codes are described in Steps 44 and 45 of Step Programming (Section 8).

Note: A valid operating code is always required when using the 5230.

To:	Press:		Additional Information
	5230 Annunciator	Built-in Touchpad	
Clear	CLEAR	CLEAR	Enables you to start again if you enter the wrong keystrokes. If you enter a function incorrectly on the 5230, the annunciator's PZT buzzer will emit a long, high-pitched tone.
Test the system	0 ENTER + code 0 or 1	0 ENTER	The system will test the 4180 outputs, the built-in touchpad LED display, signaling devices, sirens, and communicator.
Reset alarms (or smoke detectors)	1 ENTER + code 0 or 1	1 ENTER + code 0 or 1	After a smoke alarm has been triggered, this function removes smoke detector power for the programmed length of time (as determined by the smoke detector). This allows the smoke detector to sense new alarm conditions.
<i>When a trouble condition occurs and you reset the alarm, the trouble condition is stored in memory until you <u>clear</u> the alarm memory. If you do not clear the alarm memory, the trouble condition is displayed the next time a trouble condition occurs, implying incorrectly that more than one trouble condition exists.</i>			
Clear alarm memory	2 ENTER + code 0 or 1	2 ENTER	Clears all data out of alarm memory and resets the 4180. (This function removes all memory of alarms.)
Reset the dialer	3 ENTER + code 0	3 ENTER + code 0	Aborts an in-progress call to the central station.
Initiate download	4 ENTER + code 0	4 ENTER + code 0	Starts the downloading process. Exit the DOWNLOADING mode by pressing CLEAR CLEAR .
Display alarm memory	5 ENTER + code 0 or 1	5 ENTER	Displays the current alarm memory. (It is recommended that you clear alarm memory after displaying it.)
Display troubles	6 ENTER + code 0 or 1	6 ENTER	Displays trouble conditions.

Basic operating functions continued on next page.

Basic operating functions continued.

To:	Press:		Additional Information
	5230 Annunciator	Built-in Touchpad	
Silence trouble or alarm conditions	SILENCE + code 0 or 1	SILENCE	Silences signaling devices that are in trouble or alarm. (On-board beeper and local annunciators continue to sound until serviced. See Section 9.1 for more details.)
Fire drill	2 0 ENTER + code 0 or 1 To end a fire drill: SILENCE + code 0 or 1	2 0 ENTER + code 0 To end a fire drill: SILENCE	Causes the system to sound an alarm and report a FIRE TEST.
Set time	9 ENTER	9 ENTER	<i>See explanation below.</i>
<p>The SET MODE LED will turn on and the built-in touchpad display will flash 9- indicating that you are in the SET TIME mode. You must enter six digits for the time. The first digit is the day of the week (see below). The second digit indicates time of day (see below). The last four digits are the actual time. Upon entering the sixth digit, the SET TIME LED will turn off indicating that you have set the time.</p> <p>Day of week: 0 = Sun., 1 = Mon., 2 = Tue., 3 = Wed., 4 = Thu., 5 = Fri., 6 = Sat.</p> <p>Time of Day: 0 = AM, 1 = PM</p> <p>Example: To enter the time of Wed., 4:30 p.m., you would enter the following digits: 3 1 0 4 3 0.</p> <p><i>Note: The 5204 powers up in the SET TIME mode, with 9- showing on the display. If you wish to set the time at this point, it is not necessary to press the 9 ENTER (code) key sequence. Simply key in the appropriate six digits. To exit the SET TIME mode, press ENTER.</i></p>			
Disable/Enable (shunting / unshunting)	(Zone #1-4) + DISABLE + code 1 or 0	(Zone #1-4) + DISABLE + code 1 or 0	Disables a zone (prevents it from responding to an alarm condition) or reactivates a disabled zone. When you disable, a trouble buzzer will sound.

Basic operating functions continued on next page.

Basic operating functions continued.

To:	Press: (5230 Annunciator or Built-in Touchpad)	Additional Information
<p><i>Note 1: If the dialer is busy, modes 22, 25, and 27 are disabled.</i> <i>Note 2: If you are in mode 22, 25, or 27, the dialer is disabled.</i></p>		
Walk test	<p>2 2 ENTER + code 0 (factory programmed as 5204)</p> <p>To exit this mode with the 5230, press STEP STEP CLEAR CLEAR.</p> <p>To exit this mode with the built-in touchpad, press SILENCE SILENCE CLEAR CLEAR.</p>	Enables you to test the system. When you enter this mode, the LCD will indicate that you are in the Walk Test mode. When a zone is violated, the signaling device outputs will become active for approximately 6 seconds.
Zone Troubleshooting mode	<p>2 5 ENTER + code 0</p> <p>To exit this mode with the 5230, press STEP STEP CLEAR CLEAR.</p> <p>To exit this mode with the built-in touchpad, press SILENCE SILENCE CLEAR CLEAR.</p>	Enables you to locate and correct problems. The use of this mode is described in Section 9.2.2.
Step Programming mode	<p>2 7 ENTER + code 0</p> <p>To exit this mode with the 5230, press STEP STEP CLEAR CLEAR.</p> <p>To exit this mode with the built-in touchpad, press SILENCE SILENCE CLEAR CLEAR.</p>	Enables you to program 5204 options stored on the EEPROM. Refer to Section 8.3 for instructions on using mode 27.

7.1.1 Operating Modes

The following table describes which codes can access operating modes during alarms:

Operating Mode		Allowed During Alarm	Code Required	
			On 5230	On Built-in Touchpad
00	System test	No	Code 0 or 1	None
01	Reset alarm	Yes	Code 0 or 1	Code 0 or 1
02	Clear alarm memory	No	Code 0 or 1	None
03	Dialer reset	Yes	Code 0	Code 0
04	Download	No	Code 0	Code 0
05	Display alarm memory	No	Code 0 or 1	None
06	Display troubles	No	Code 0 or 1	None
09	Set time	No	Code 0 or 1	Code 0 or 1
2B	Silence mode	Yes	Code 0 or 1	None
20	Fire drill	No	Code 0 or 1	Code 0 or 1
22	Walk test	No	Code 0	Code 0
27	Program	No	Code 0	Code 0
25	Troubleshooting	No	Code 0	Code 0
E0	Disable/enable zone	Yes	Code 0 or 1	Code 0 or 1

7.1.2 Built-in Touchpad Display Codes

The built-in touchpad display shows the zones in which a trouble or alarm condition is occurring. It also displays two-digit codes that represent a variety of conditions, as an aid in troubleshooting the system. These codes are listed below.

The following table describes the codes that appear on the built-in touchpad:

Display	Explanation
0	Fire drill (with ALARM, ALARM MEMORY, or TROUBLE LED).
1 through 4	Zone numbers (with ALARM, ALARM MEMORY, or TROUBLE LED). A "c" in front of the number indicates a supervisory sprinkler zone.
E0 E7	Indicates trouble with the dialer microprocessor. Indicates trouble with the EEPROM memory.
F0 F1 through F7	5230 annunciator power trouble. Indicates trouble with a particular annunciator.
A1 through A2	Indicates trouble with a particular bell output.
P1	Indicates trouble with the smoke detector power.

Built-in touchpad display codes continued on next page.