

3.3 SK-4224 Board Layout

Figure 3-1 shows the SK-4224 circuit board including location of terminals, connectors, DIP switches, and LEDs.

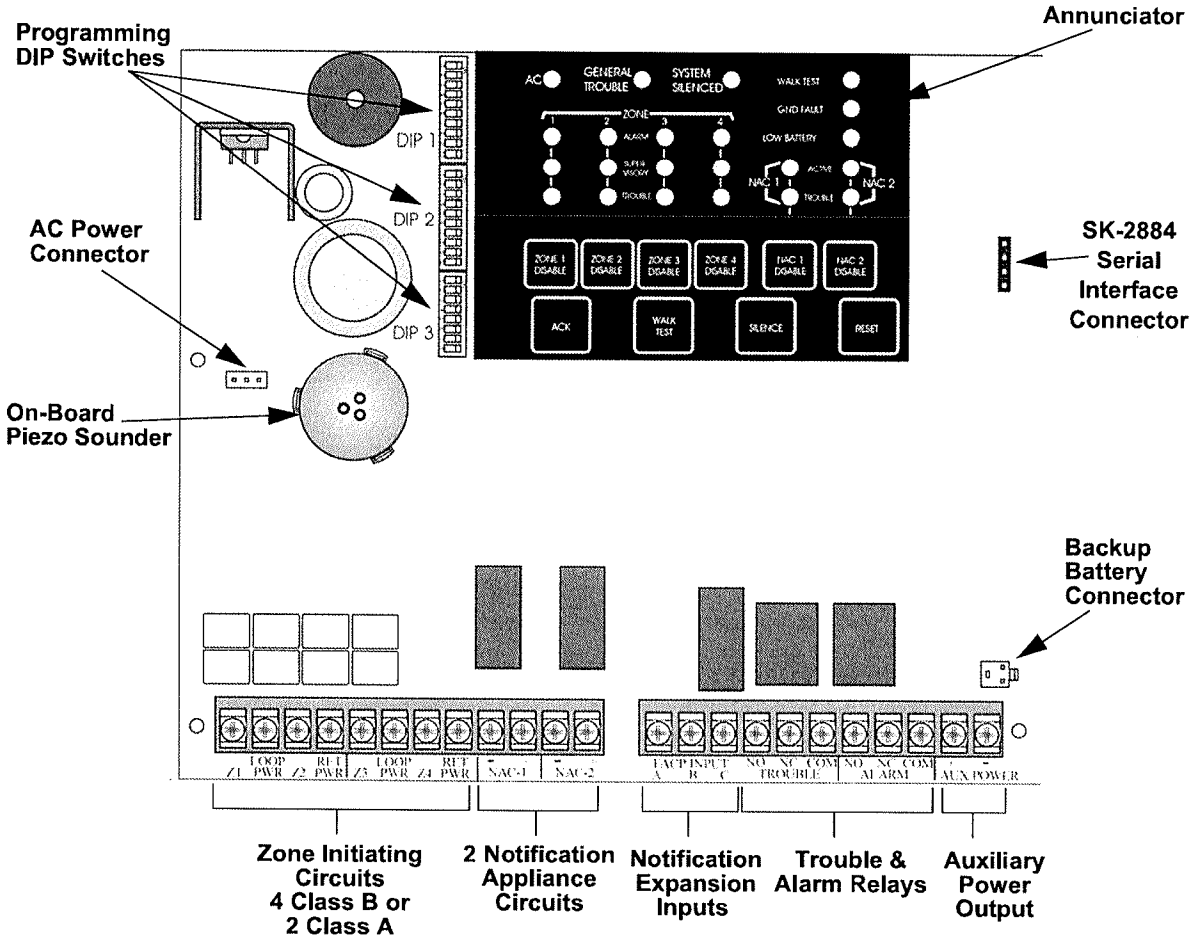


Figure 3-1 Model SK-4224 Layout

Section 7

System Operation

The annunciator on the SK-4224 board is used for all system operation. It contains the switches for enabling silencing, resetting, and so on. The LEDs that indicate system status are also located on the annunciator.

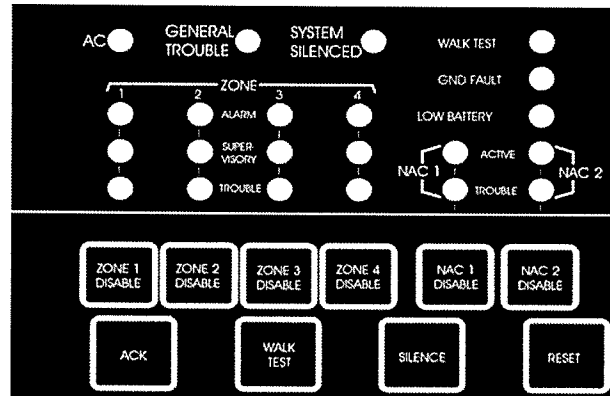


Figure 7-1 On-Board Annunciator

7.1 Meaning of LEDs

The chart below explains the meaning of LEDs on the system board.

Table 7-1: Meaning of LEDs

LED (Color)	Function	Comments
AC (green)	ON = Good AC OFF = Low AC trouble condition and it was acknowledged FLASHING = Unacknowledged AC Low trouble condition	If flashing, press the ACK button to acknowledge the condition.
GENERAL TROUBLE (yellow)	ON = System trouble OFF = System OK FLASHING = At least one serial device is in trouble DOUBLE FLASHING = Two types of serial devices are in trouble.	
WALK TEST (yellow)	ON = Walk test is in progress OFF = Walk test is off. FLASHING = Walk test is on and at least one zone is not ready	Allow approximately 47 seconds between detector tests. In walk, test when a detector is tripped, it will cause an alarm for two seconds, then the control panel will drop power to the loop for seven seconds to reset the detector. Then an additional 38 seconds is needed to restore the detector. If verification is used, the time between detector test will be about 2 minute and 30 seconds.

Table 7-1: Meaning of LEDs

LED (Color)	Function	Comments
GND FAULT (yellow)	ON = Ground fault condition exists and was acknowledged OFF = No fault FLASHING = A ground fault condition detected	If flashing, press the ACK button to acknowledge the condition.
LOW BATTERY (yellow)	ON = Battery low condition that has been acknowledged OFF = Good battery condition FLASHING = Battery low condition	If flashing, press the ACK button to acknowledge the condition.
ZONE 1 Through ZONE 4	ALARM (red) ON = Zone in alarm which has been acknowledged OFF = No Alarm FLASHING = Zone in alarm has not yet been acknowledged	If flashing, press the ACK button to acknowledge the condition.
	SUPERVISORY (yellow) ON = Zone has a supervisory condition which has been acknowledged (self-restoring condition) OFF = No supervisory condition exists FLASHING = Supervisory trouble detected on that zone that has not yet been acknowledged	If flashing, press the ACK button to acknowledge the condition.
	TROUBLE (yellow) ON = Zone has a trouble condition which has been acknowledged OFF = No zone trouble FLASHING = Zone has a trouble condition not yet acknowledged DOUBLE FLASHING = Zone was disabled CLEAN ME FLASHING = Indicates that the smoke detector needs cleaning	If flashing, press the ACK button to acknowledge the condition. A "Clean Me Flash" is a flash with a long LED "on" Time and a short LED "off" time indicating that the smoke detector needs cleaning. Applies only to smoke detectors with the CLEAN ME feature. The "Clean Me" flash starts after the trouble condition has been acknowledge.
NAC 1 and NAC 2	ACTIVE (yellow) ON = NAC is active during an alarm OFF = NAC is not active during alarm	
	TROUBLE (yellow) ON = NAC has a trouble condition and was acknowledged OFF = No trouble condition FLASHING = NAC is in trouble DOUBLE FLASHING = Circuit was disabled	If flashing, press the ACK button to acknowledge the condition.
SYSTEM SILENCED (yellow)	ON = System audible output has been silenced OFF = Nothing silenced FLASHING = Partially silenced	Audible trouble activations will clear automatically when the condition resets. Audible alarm signals have to be manually reset. Note: Silencing an alarm will cause a general trouble condition.

7.2 Operation Keys (Switches)

All system operations are performed from the on-board keys (switches) as described in the chart below.

Table 7-2: Operations and Instructions

Operation	Keystrokes
Disable notification appliance circuit. To re-enable the circuit, press [NAC DISABLE] again.	Press the appropriate [NAC DISABLE] key. The NAC circuit will be disabled and the corresponding TROUBLE LED will Double Flash. This function is not available during an alarm condition.
Disable a zone To re-enable the circuit, press [ZONE DISABLE] again.	Press the appropriate [ZONE DISABLE] key. The zone will be disabled and the corresponding TROUBLE LED will Double Flash. This function is not available during an alarm or supervisory condition.
Begin Walk Test	Press [WALK TEST]. Walk Test LED turns on. Note: Walk test will not activate if the control panel has a trouble, alarm, or supervisory condition.
End Walk Test (The test ends automatically after 10 minutes of no system activity.)	Press [WALK TEST]. NOTE: The Walk Test feature is not operational during an alarm, supervisory or any system trouble condition.
Acknowledge condition (alarm, supervisory, trouble)	Press [ACK]. The corresponding LED will change from blinking to steady for the duration of the condition. Except for CLEAN ME trouble indications.
Silence Panel	Press [SILENCE]. This will silence the on-board PZT and all active NAC circuits that have been configured as "silenceable".
Perform system reset	Press [RESET]. Resets alarms, supervisories, troubles and all LEDs.
Manual Dialer Test.	Press the [ACK] and [SILENCE] buttons at the same time.
Dialer Reset.	Press the [RESET] and [WALK TEST] buttons at the same time.