

Model 5207 Fire Alarm Control Panel With Digital Communicator, and exclusive Accu-Zone®

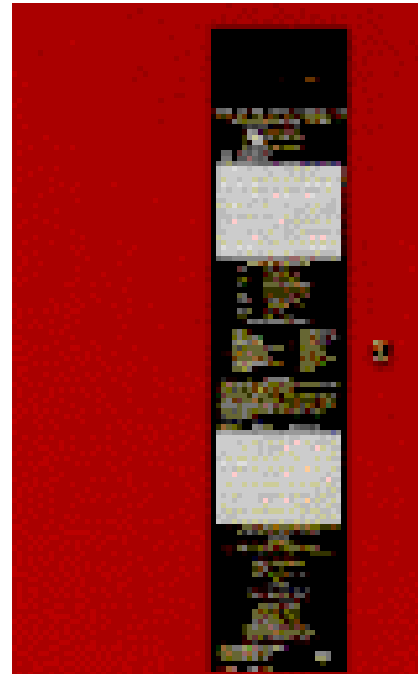
FEATURES:

- Eight zones, 6 Style A (class B) and 2 Style D (class A). 8 Expander Zones are Style A (class B). Zones are interchangeable using the Model 7181 Zone Converter.
- UL, FM, MEA (BSA), CFM Listed and Approved.
- Event memory.
- Fuseless design can reduce service time.
- Field selectable, 12 or 24 VDC power supply.
- Six amp current output at 12 volts, five amps at 24 volts.
- Compatible with 2- and 4- wire smoke detectors as well as water flow and sounding devices.
- ANSI Cadence Pattern Output.
- Four programmable (Style Y) supervised signal circuits, including steady, pulse and temporal.
- Programmable smoke verification, pre-alarm delay, and cross-zoning can minimize false alarms.
- Four general purpose relays (Form C 24 volts at 2.5 amps resistive).
- Built-in approved digital communicator with UL required priority reporting.
- Flexible programming capabilities including up/downloading and use of remote annunciator. No "desktop" programmer required.
- Accu-Zone® diagnostics facilitate local and remote troubleshooting.
- Individual zone Walk Test.

DESCRIPTION:

The Model 5207 is an all-in-one fuseless local fire evacuation control panel and digital communicator designed for applications requiring manual fire alarm, automatic fire alarm and water flow for sprinkler system supervision. The basic unit offers fire alarm for one to eight zones, expandable to 16 with the optional 5210 expansion module. It is compatible with both two- and four-wire smoke detectors. Compact, easy to install and service, it delivers the features you'd expect to find in fire systems costing much more.

During normal operation, the 5207 constantly checks smoke and other sensing devices for fire conditions. It also conducts system checks to determine if any troubles,



5207

or system problems, exist. If the 5207 encounters a fire or trouble condition, it sends a report to a central monitoring station (if applicable), and, typically, sounds an audible/visual warning in the local area.

The 5207's microprocessor constantly runs programs to check inputs and carry out other routine functions. If the program ever stops running, a watchdog circuit will detect it and reset microprocessors to resume normal operations.

The Model 5207 conducts an automatic self-test every 24 hours—at a time you select—and sends a report to the central station (if applicable).

Other features of the system include English-language remote annunciation simplifying "Step Programming" of custom options. Remote downloading of system configurations can eliminate the expense of sending out a service technician for reprogramming. System provides a built-in fire drill procedure. The exclusive Accu-Zone® feature measures and displays zone voltages, so you can set up and test the system without separate testing equipment. Fuseless circuit board design eliminates one of the most likely causes for service calls.

PROGRAMMING



5521

On-site programming is available through the optional Model 5521 Desktop Programmer or through any remote annunciator.

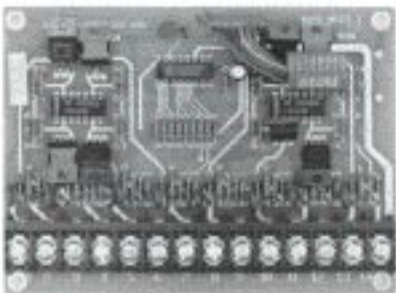
Remote programming can be accomplished through the use of 5521 programmer and 5530 modem, or through the use of an IBM or compatible personal computer and the Model 5541 Downloading Software (requires the Model 5530 Downloading Modem).

More than 60 programmable options are available for customizing system configurations and end-user features, including zone type (fire, panic, tamper, sprinkler, water, heat, cold, local); zone options (pre-alarm delayed, smoke verification delayed, zone disable); and zone location descriptions. Programmable dialer options include total number of reporting attempts, Touch-Tone® or rotary dialing, one or two telephone lines. Several time delay features, including number of seconds to alarm in pre-alarm, smoke delay conditions, number of hours before loss of AC hours report, and 24-hour test time, can be programmed.

ZONE EXPANSION

The optional Model 5210 Zone Expander doubles the number of zones available to the 5207 from 8 to 16. The 5210 adds eight additional style A (class B) zones to the 5207, enabling use of both two- and four-wire smoke detectors.

Voltage Ranges: Using 24-VDC power: 17.8-27.4 VDC.
Using 12-VDC power: 8.5-11.8 VDC.



5210

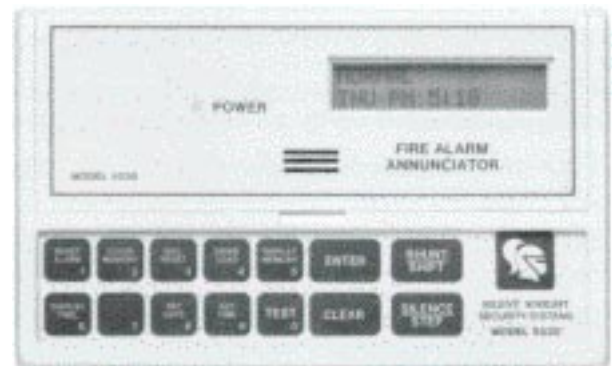
ANNUNCIATION

The 5207 includes an annunciator inside the cabinet. Its six LEDs (for alarm, trouble, silenced, AC/low battery, event memory, time set/reporting) are visible without opening the cabinet. The annunciator allows for easy operation of all functions. It features dual seven-segment display and 14 uniquely assigned function keys. Keys are: ENTER, CLEAR, SILENCE, SHUNT and 0-9 used for ALARM RESET, CLEAR ALARM MEMORY, DIALER RESET, REQUEST DOWNLOAD, DISPLAY MEMORY, TEST, DISPLAY TROUBLES, SET DATE and SET TIME.

Remote annunciation is available through the Model 5230. This four-wire, 16-zone remote annunciator is easy to operate. Its fourteen function keys can perform the same operations as the main system annunciator, including silencing, resetting, and displaying of alarms, troubles and alarm memory. Use of access codes prevents unwanted tampering. In addition the Model 5230 can be used to program all programmable options for both the local control and digital communicator.

Features include LCD display, backlighting, English-language annunciation.

Up to seven 5230s can be attached to one 5207. Standby current draw per 5230 is 60 mA, alarm current is 120 mA.



5230

COMMUNICATIONS/REPORTING

The 5207 is equipped with a UL listed digital dialer which has the ability to seize the telephone line(s) to report alarms and troubles to a central station. It can supervise the telephone lines and activate a trouble-alert if a line failure is sustained for 45 seconds or longer. Other communications/reporting features include: Built-in ring detector; re-try if communication failed; fail-to-communicate output; one or two phone lines option; up to four phone number capability (plus computer phone for downloading); Touch-Tone® and rotary compatible.

The 5207 is compatible with all major reporting formats including SIA (security industry standard), SK, FSK, SK 4/2, Radionics BFSK. Format selectable by account number.

SPECIFICATIONS

ELECTRICAL SPECIFICATIONS:

- Primary AC: 120 VRMS at 60 HZ, 2A
- Total Accessory Load: 5A at 24 VDC
6A at 12 VDC

INDICATOR LIGHTS:

- AC/DC POWER (Green) - On when system is running on AC power; flashes when using DC.
- ALARM (Red) - On for supervisory alarm; flashes for fire alarm.
- TROUBLE (Yellow) - On when trouble condition exists.
- SILENCED (Yellow) - On when alarm or trouble has been silenced but not yet cleared.
- EVENT MEMORY (Yellow) - On when an alarm condition has been reset.
- SET MODE/REPORT (Yellow) - On when system is in test or program mode, including Date/Time set mode. Flashes when system is reporting.

MECHANICAL SPECIFICATIONS:

- Dimensions: 16 in. W x 26.4 in. H x 4 in. D
(40.6cm W x 67cm H x 10.2cm D)
- Weight: 25 lbs. (11.4 kg.)
- Color: Red

TELEPHONE REQUIREMENTS:

- FCC Registration No.: AC6USA-65475-AL-E
- Type of Jack: RJ31X (2 required)

APPROVALS:

- UL Listed
- FM Approved
- CFM Approved
- New York City MEA (formerly BSA)
- NFPA
 - Central Station Reporting
 - Local Protective Signaling System
 - City Box
 - Polarity Reversal
 - Proprietary Protective Signaling System

OPTIONAL ACCESSORIES

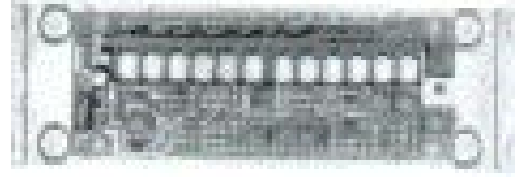
Model 4180 Status Display Module

Provides 16 outputs to give alarm and trouble conditions by zone. Two units can be connected to annunciate all 16 zones on a 5207 control. Can be used to drive LED or graphic annunciators. (Non-supervised)



Model 7181 Fire Zone Converter

Converts Style A zones to Style D and vice versa.



5220 Direct Connect Module

Used for City Box and polarity reversing direct wire applications.



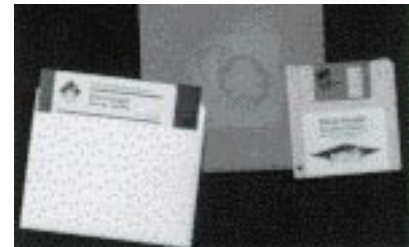
5530 Downloading Modem

SIA format modem for remote programming of 5207.



5541 Downloading Software

For remote programming with IBM PC and compatible computers. Can be used with 5207. Requires 5530 modem. Software/modem package may be ordered as a 5561.



5260 Printer Interface

Allows connection of a standard computer printer to provide a printed record of 5207 system activity. Simple plug-in connection. (Printer not supplied.)



ARCHITECT/ENGINEER SPECIFICATIONS

The contractor shall provide a complete electrically supervised fire alarm and communications system. The system shall contain a fire alarm control/communicator and panel to supervise and operate heat and smoke detection devices, alarm signal devices, visual annunciators and an integral digital communicator to transmit fire alarm and supervisory signals to a central station. The control/communicator shall be UL Listed or FM approved for use under NFPA 71, 72A, 72B, 72C and 72D standards. It shall provide power and control for eight supervised detection zones, four supervised alarm signal circuits and a dual digital communicator. The control/communicator shall be expandable to sixteen supervised detection zones and shall be able to communicate to a central station in SIA, SK FSK1, SK 4/2 or Radionics BFSK formats. The control/communicator shall be Model 5207 or approved equal.

There shall be two Style D and six Style A detection zones. They shall accommodate heat detectors, products of combustion detectors, manual pull stations, sprinkler flow switches and gate valve supervisory switches intermixed as desired and permitted by NFPA 71, 72A, 72B, 72C, and 72D. Products of combustion detection may be either two- or four-wire and shall be cross listed by UL for use on the system. The detection zones shall be programmed to (1) be cross zoned so that two individual zones must sense products of combustion, (2) automatically reset a detector to verify that smoke exists, (3) see a single detector in alarm—before the alarm is sounded and a signal is transmitted to the central station.

There shall be four 1 amp supervised (Style Y) alarm signal circuits. They shall cause the bells/horns to ring steady/pulsing/temporal throughout the premises until reset or silenced. Two 1 amp outputs can be combined to provide one 2 amp output.

The control shall be equipped with four auxiliary relays that

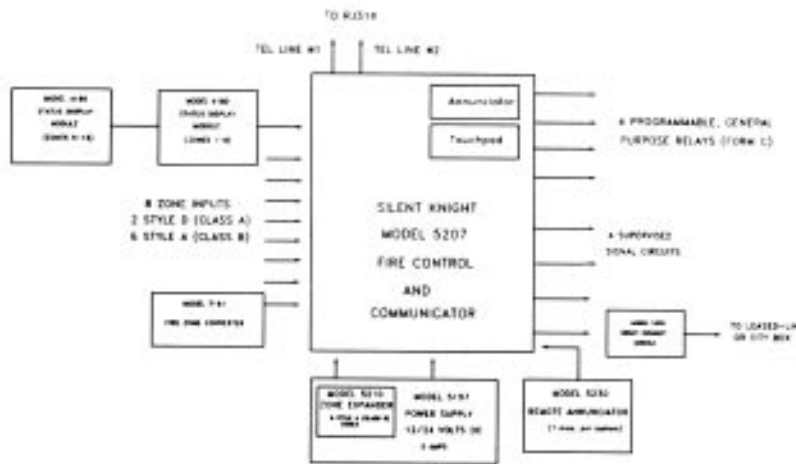
shall be programmed to operate on (1) pre-alarm, (2) tamper alarm, (3) special alarm, (4) fire alarm, (5) trouble, (6) no-silence, (7) alarm by specific zone (1-16). The relays shall remain energized until the panel is silence reset or the trouble condition is cleared, unless "no-silence" is selected.

The control/communicator shall have an integral annunciator to indicate sequentially zones in alarm, zones in trouble, and system functions. LEDs shall augment the display to make clear to an operator the system status. An integral touchpad shall be provided to operate, set up, and interrogate the system. Vital operations such as alarm silencing or reset shall be simple and obvious to an operator. Authorization pass codes may or may not be used.

The control/communicator shall have the capability to supervise two telephone lines, seize the phone line, and send the alarm signal on one or both lines without the addition of any more equipment. It shall sound a local trouble signal if the telephone service is interrupted for longer than 45 seconds and it shall transmit a signal indicating the loss of phone line service to the central station over the remaining phone line. A signal shall also be transmitted indicating the restoration of phone service. The control/communicator shall be able to report the loss of either phone line without regard to which phone line failed first. If both lines fail, a local signal shall sound.

The control/communicator shall have the ability to send a test signal to the central station every 24 hours. The test signal shall be able to be transmitted at a specific time of day or night by setting a program within the panel.

The alarm signals transmitted to the central station shall indicate which of the eight zones is in alarm and which zones are in trouble, depending on which format is used. Restoral from alarm or trouble shall also be transmitted by zone. The control/communicator shall be capable of communicating to Silent Knight, Radionics or Ademco central station receivers.



MODEL 5207 BLOCK DIAGRAM - TYPICAL INSTALLATION