



July 12, 2000

DN-3783 • A-105

# AFP-200 Analog Fire Panel

Section: Intelligent Fire Alarm Control Panels

## GENERAL

The AFP-200 is a compact, cost-effective, intelligent fire alarm control with a capacity of 301 individually identified and controlled points and an extensive list of powerful features. The AFP-200 provides capabilities that exceed most large intelligent systems, at a cost comparable to conventional control panels.

## FEATURES

- 198 intelligent device capacity (99 analog detectors and 99 monitor/control modules). Style 4, 6, or 7.
- Overall 301 point capability (198 intelligent points, 4 programmable NAC circuits, 99 programmable relays).
- Network ready (reference **NOTI•FIRE•NET™** and **NAM-232 catalog sheets** for more information).
- **Intelligent features:**
  - ✓ Manual sensitivity adjustment.
  - ✓ Day/Night automatic sensitivity adjustment.
  - ✓ Drift compensation (U.S. Patent Pending) meets UL requirements as a calibrated test instrument.
  - ✓ Auto detector test (meets NFPA 72).
  - ✓ Maintenance alert (two separate algorithms).
  - ✓ Pre-alarm (AWACS™ U. S. Patent Pending).
  - ✓ Activate local sounder base on pre-alarm.
  - ✓ LED blink control for sleeping areas.
  - ✓ Automatic device type check.
- **Releasing features:**
  - ✓ Four independent hazards.
  - ✓ Sophisticated cross-zone (three options)
  - ✓ Delay timer and Discharge timers (adjustable).
  - ✓ Abort (four options).
- Optional DACT, with AC fail delay.
- LCD-80 remote display/control.
- ACS annunciators (EIA-485), including LDM custom.
- Printer interface (80-column and 40-column printers).
- 5.0 A usable regulated output power, plus 6.0 A expander (maximum 8.0 A to panel circuits).
- 80-character LCD display, backlit.
- Real-time clock, with European format option.
- History file with 650-event capacity in nonvolatile memory. Includes non-erasable shadow history.
- Waterflow or supervisory selection per point.
- Alarm Verification selection per point, with tally.
- Walk Test reports two devices set to same address.
- Positive Alarm Sequence (PAS) Presignal per NFPA 72.
- Silence inhibit and Auto Silence timer options.
- March time/temporal/California code for bell circuits.
- Field-programmable on panel or on PC, with user-defined passwords, plus Autoprogram feature.
- UL listed modem interface allows remote/off-site system integration.



**LISTED**  
S635

**U.S. Coast Guard**  
161.002/23/1



CS118



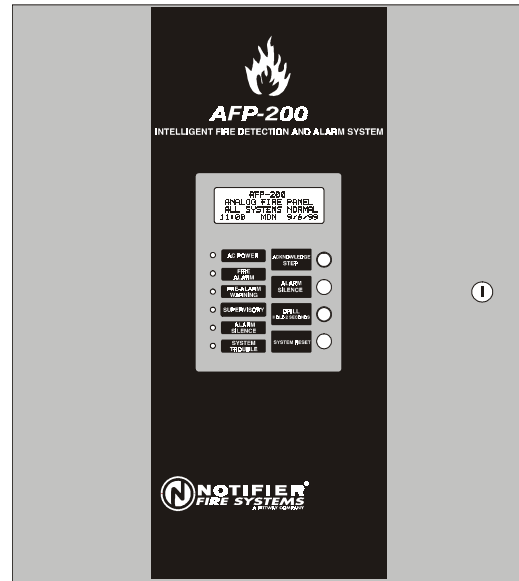
94/60004 (E1)



California  
State Fire  
Marshal  
7165-0028:164



**Approved**



**The AFP-200**

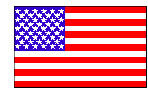
- MMX-2 two-wire detector interface provides compatibility with many non-NOTIFIER detectors for retrofit applications (consult factory for latest compatibility listings).
- Dual-rate charger for up to 90 hours of standby power.
- Two-Stage option for notification circuits (Canada).
- Tornado Warning activates different notification circuit code.
- Non-alarm points for lower priority functions.
- Remote ACK/Silence/Reset/Drill via MMX modules.
- Automatic time control functions, with holiday exceptions.
- Rapid poll algorithm for manual stations. Responds in < 2 seconds.
- Operates with untwisted, unshielded wire (up to 1,000 ft./304.8 m) for retrofit applications (U. S. Patent 5, 210, 523).
- UL listed for Fire Signaling per Standard 864 & NFPA 72.
- UL listed for Burglary applications per Standard 1076.
- UL listed for Releasing per NFPA 12, 12A, 12B, 13, 15, 16.
- UL listed for Critical Process Monitoring.
- FM approved for Agent Release and Preaction/Deluge.
- Approved for marine applications by U.S. Coast Guard and Lloyd's Register of shipping.

**NOTI•FIRE•NET™** is a trademark of NOTIFIER, 1994.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118

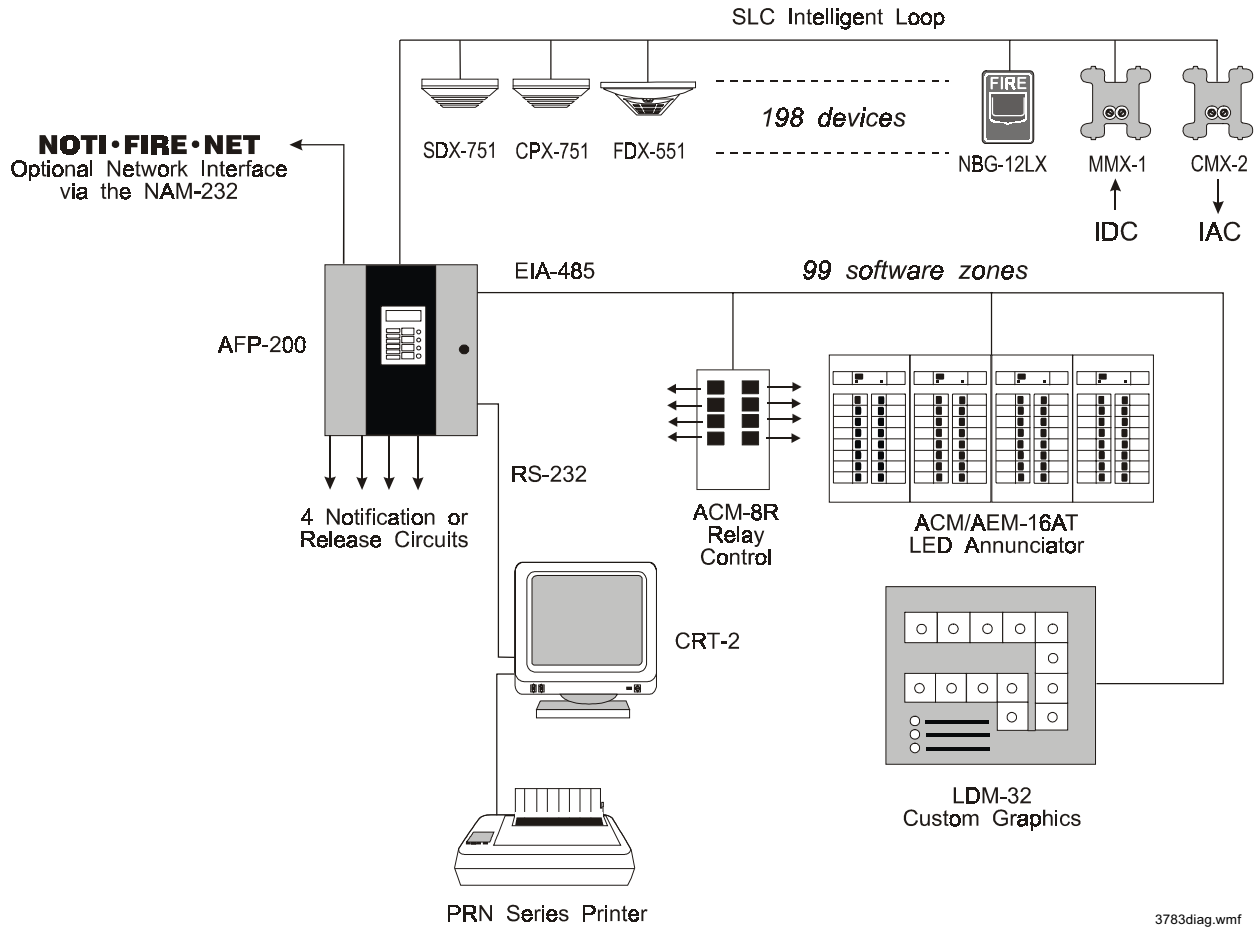


One Fire-Lite Place, Northford, Connecticut 06472

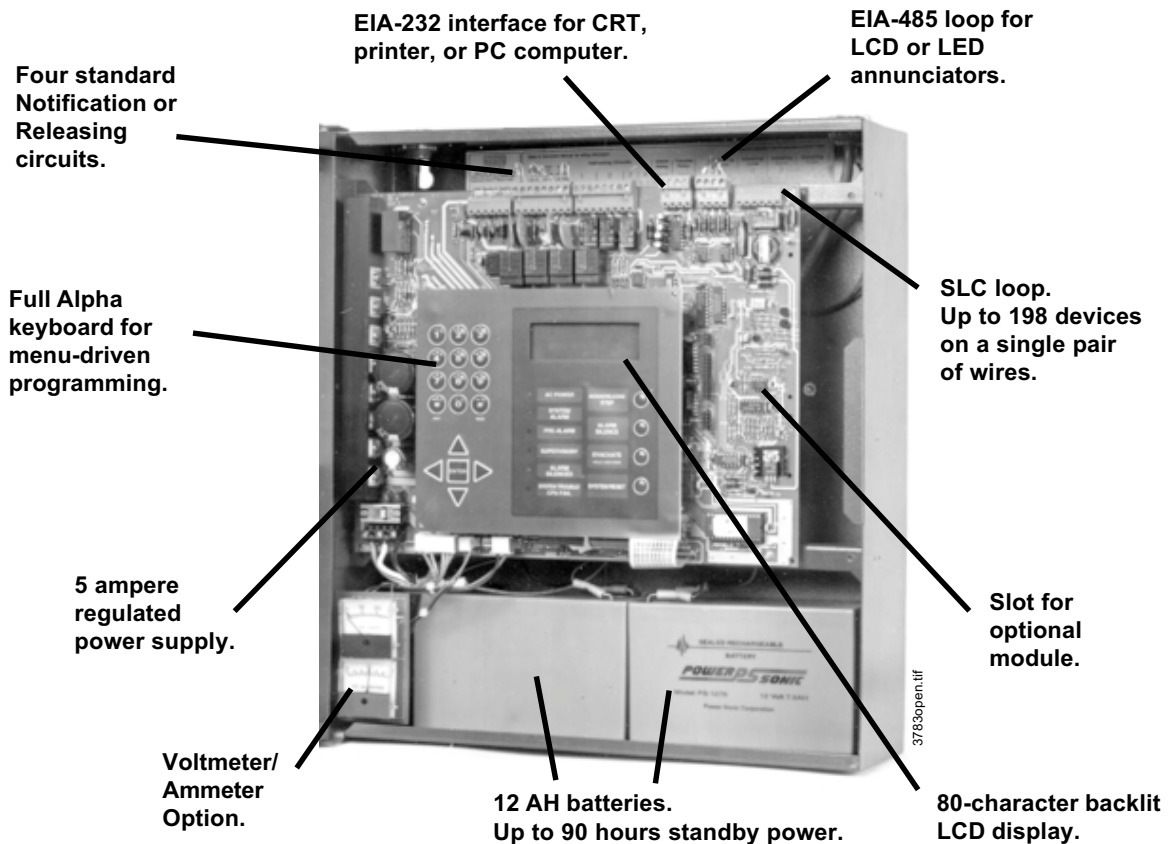


Made in the U.S.A.

# SYSTEM BLOCK DIAGRAM



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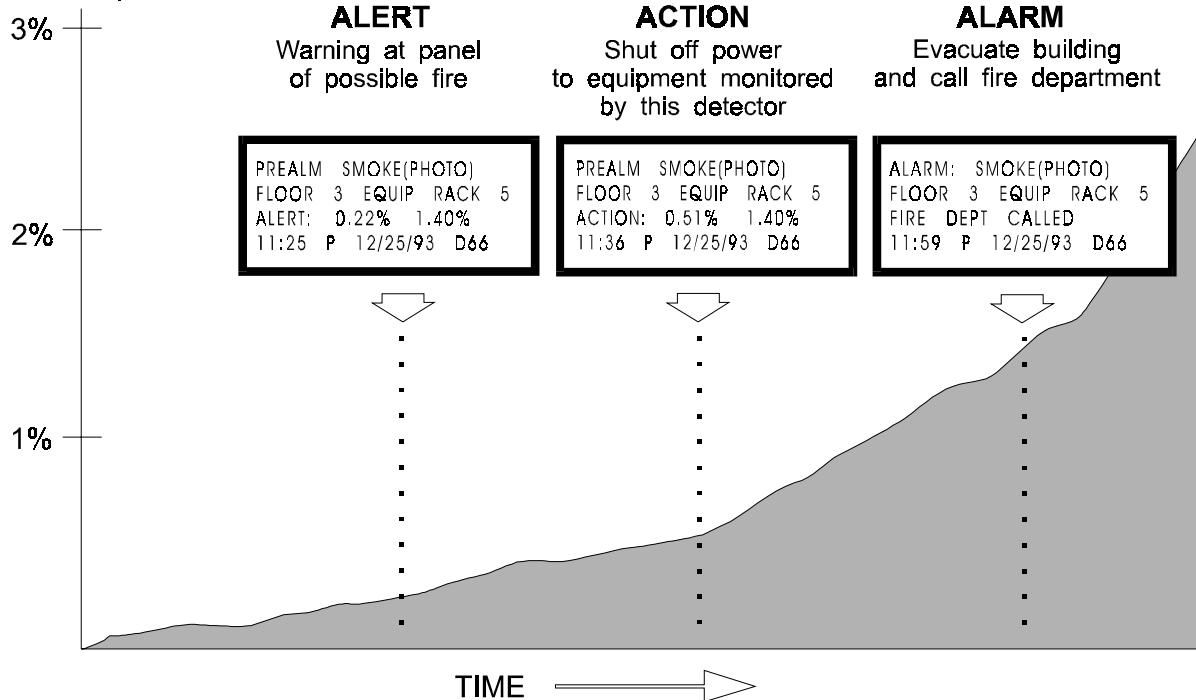


3783open.tif

# AWACS™ Advance Warning Addressable Combustion Sensing (U.S. Patent Pending)

SMOKE OBSCURATION

% per foot



**ALERT** and **ACTION** levels are completely adjustable in the field to suit the cleanliness and stability of the environment. **ALARM** levels are field adjustable to one of three levels within the UL permitted range. **ACTION** levels latch and may be used to perform control functions. **ALERT** levels self-restore and may be used to activate a local sounder base before general **ALARM** evacuation.

## FIELD PROGRAMMING — 3 WAYS

### 1. AUTO-PROGRAM

The AFP-200 identifies all devices that are connected, determines the type of device, and loads default values (general alarm) into nonvolatile memory. This is completed in less than 30 seconds.

### 2. ON-LINE EDIT

While still providing fire protection, the AFP-200 program may be completely edited from the front keypad. Menu trees permit easy change of any parameter without referral to the programming manual. Recall, increment and edit function speeds entry of alphanumeric labels. New program check routine catches common errors.

### 3. OFF-LINE PC: VeriFire-200

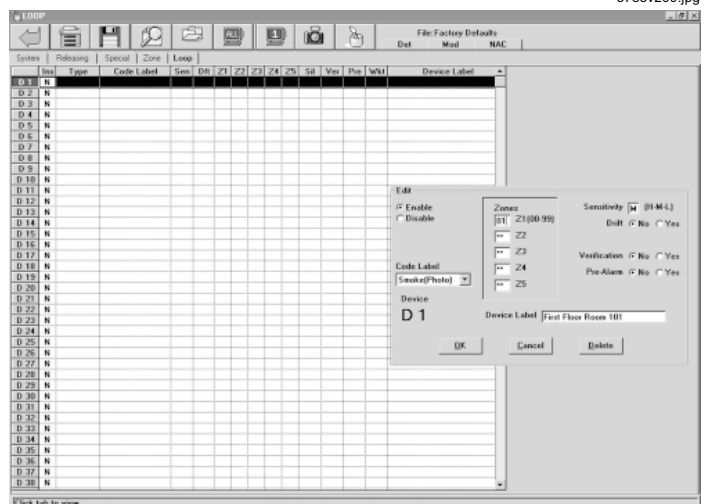
The complete AFP-200 program may be created in an off-line PC-compatible computer with a Windows®-based utility, then loaded into the AFP-200 EIA-232 port. The program may also be off-loaded to a PC at any time. High-speed data transfer completes upload or download in less than one minute. The PC program may also be used to access remote AFP-200 systems over dial-up phone lines, providing detail status information and history file search/sort.

**AUTOPROGRAM  
PLEASE WAIT**

1.

0 = CLR 1 = AUTO 2 = POINT  
3 = PASSWD 4 = MESSAGE  
5 = ZONES 6 = SPL ZONES  
7 = SYS 8 = CHECK

2.



3.

## AGENCY LISTINGS AND APPROVALS

See page 1 for listing agencies and file numbers. These listings and approvals apply to the basic AFP-200 control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

## SPECIFICATIONS

- Primary input power, 120 VAC, 50/60 Hz, 3.0 Amps.
- Total Internal 24 VDC Power - 5.0 A (total shared power).
  - ✓ High-ripple regulated power: 1.5 A (suitable for EIA-485 devices, except ACM-8R); 1.0 A maximum standby.
  - ✓ Non-resettable power: 500 mA.
  - ✓ Four-wire smoke detector power: 500 mA.
  - ✓ Four built-in notification circuits:
    - NAC Circuit 1: 2.25 A.
    - NAC Circuits 2-4: 2.25 A (shared total).

**NOTE:** with optional APS-6R Power Supply NAC circuits 3 & 4 are expanded to 3.0 A (8.0 A total power).

- Battery charger range: 7 AH - 18 AH.
- Charge high rate: 29.1 V. Float rate: 27.0 V.
- Relay contact rating: 2.0 A @ 30 VDC.
- Cabinet dimensions: 16.125" (40.9575 cm) high x 14.5" (36.83 cm) wide x 5.5" (13.97 cm) deep.

## SYSTEM CAPACITY

- Total programmable input/output points: 301
- Intelligent detectors: 99
- Addressable monitor/control modules: 99
- Programmable NAC circuits in panel: 4
- Programmable software zones: 99
- Programmable remote relay/annunciator points: 99
- LCD-80 annunciators per system: 4
- ACS annunciators per system: 10

## CONTROLS AND INDICATORS

**6 LED indicators:** AC Power; Fire Alarm; Pre-Alarm; Supervisory/Security; Alarm Silenced; System Trouble.

**21 Membrane Switch Controls:** Acknowledge/Step; Silence; Evacuate; System Reset; 12-key Alpha pad; 4 cursor keys; Enter.

**LCD Display:** 80 characters (4 x 20) with long-life LED backlight.

## COMPATIBLE INTELLIGENT DEVICES

- CPX-751:** Low-profile ionization detector.
- SDX-751:** Low-profile photoelectric detector.
- SDX-551TH:** Photoelectric with thermal element.
- HPX-751:** HARSH™ Hostile Area photoelectric detector.
- FDX-551:** Fixed thermal (heat) sensor.
- FDX-551R:** Fixed and rate-of-rise thermal sensor.
- CPX-551DUCT:** Ionization smoke detector (*for duct use only*).
- SDX-551DUCT:** Photoelectric smoke detector (*duct use only*).
- B710LP:** Detector base, low profile.
- B224RB:** Intelligent relay base, low profile (*low-profile only*).
- B224BI:** Intelligent isolator base, low profile (*low-profile only*).
- B710HD:** HARSH™ detector base (*HARSH™ only*).
- BX501:** Detector base, classic (*SDX-551TH, FDX-551/R only*).
- B501BH:** Sounder base (*classic or low-profile*).
- BH501BHT:** Sounder base with temporal sounder (*classic or low-profile*).
- B524RB:** Intelligent relay base (*SDX-551TH, FDX-551/R only*).
- B524BI:** Intelligent isolator base (*SDX-551TH, FDX-551/R only*).
- B501:** Detector base, flangeless (*classic or low-profile*).
- DHX-501:** Duct housing with alarm relay.
- DHX-502:** Duct housing without alarm relay.

*continued next column...*

**MMX-1:** Monitor module.

**MMX-2:** Two-wire detector monitor module.

**MMX-101:** Miniature monitor module.

**CMX-2:** Control module.

**NBG-12LX:** Advanced manual fire alarm station, addressable.

**BGX-101L:** Classic manual fire alarm station, addressable.

**ISO-X:** Isolator module.

**XP5 Series:** Transponders (*see data sheet DN-6625*).

## COMPATIBLE DEVICES, EIA-232 Port (see data sheets)

**PRN Series:** 80-column printer.

**VS4095/S2:** Printer, 40 column, 24 volts. Mounted in external backbox (*order from Keltron, Inc.*).

**CRT-2:** Video display terminal.

**NAM-232:** Network Interface Module to **NOTI•FIRE•NET** wire or fiber models.

## COMPATIBLE DEVICES, RS-485 Port (see data sheets)

**ACS Series:** Remote Serial Annunciator/Control systems.

**LCD-80:** Remote LCD display.

**LDM Series:** Remote custom graphic driver modules.

**ACM-8R:** Remote relay module. Eight Form-C relays.

**NIB-96:** Network Interface Board.

**RPT-485:** Series Repeater, isolator and/or fiber-optic modem.

**UDACT:** Universal Digital Communicator.

## PRODUCT LINE INFORMATION

**BEAFP-200G:** Basic AFP-200 equipment kit. Includes main board with display and keypad, door, hardware and manual. Backbox (SBB-4X or SBB-4XR) ordered separately.

**BEAFP-200R:** Same as BEAFP-200G, but with red door.

**BEAFP-200GE:** Same as BEAFP-200G but 230 VAC.

**BEAFP-200RE:** Same as BEAFP-200R but 230 VAC.

**SBB-4X:** AFP-200 backbox (no door), gray.

**SBB-4XR:** AFP-200 backbox (no door), red.

**CAB-AM:** Heavy-duty outer enclosure. Required for marine agency approved applications.

**4XTM:** Plug-in Transmitter Module. Provides municipal box and remote station connection.

**RTM-8:** Plug-in Relay Transmitter Module. Provides eight Form-C relays, plus transmitter.

**4XMM:** Ammeter/Voltmeter.

**TR-4XG:** Gray Trim Ring for semi-flush mounting (TR-4XR for red).

**DP-AFP200:** Full-length dead-front panel (*required for Canadian applications*).

**PS-1270:** Battery, 12 volt, 7.0 AH, (*two required*).

**PS-12120:** Battery, 12 volt, 12.0 AH, (*two required*).

**PS-12180:** Battery, 12 volt, 18.0 AH (*two required*).

**APS-6R:** 6.0 A expansion supply (*requires BB-17*).

**BB-17:** Battery box, required for PS-12180, or if APS-6R is used.

**411 Series:** Digital Alarm Communicator/Transmitter.

**VeriFire-200:** Programming kit for PC. Includes diskette, cable, and instructions.

**ROM-AFP200SP:** Spanish language kit. Includes software IC, manual, and labels.

## ARCHITECTURAL/ ENGINEERING SPECIFICATIONS

Specifications are available on CD-ROM with NOTIFIER's **Speci•Fire™** software. Contact NOTIFIER for details.