NOTIFIER®
by Honeywell

December 7, 2005 DN-0001 • B-100

# System 5000
## Fire Alarm Control Panel

Section: Conventional Fire Alarm Control Panels

## GENERAL

The NOTIFIER **System 5000** fire alarm control panel is a multi-zone unit designed for maximum flexibility and ease of installation. The microprocessor control and modular construction enables users to configure the system to meet their precise requirements. Field programmability simplifies initial installation and allows quick updates to meet future needs.

The center of the system is the Central Processor Unit (CPU-5000) module, which monitors and controls up to 15 other modules. The modules may provide conventional (zone) circuits, or addressable/intelligent points, or a mix of conventional and intelligent points.

Internal communications are accomplished over a high-speed serial data bus. Each module on the bus is automatically addressed, supervised and controlled by the CPU-5000.

UL LISTED S635

ULC CS68 CS702

FM APPROVED

MEA 290-91-E

BSA 578-81-SA

City of Chicago

California State Fire Marshal 7165-0028:144 7170-0028:154

City of DENVER


5000.tif

***The System 5000 (shown in CAB-C3 cabinet)***

## FEATURES

- Large conventional system capacity: Up to 120 Style B or Style D (Class B or A) alarm initiating circuits.
- Voice alarm and firefighter's telephone options.
- EIA-485 serial port for high-speed data communication with remote devices such as ACS annunciators and AMG Audio Message Generator. May be used for remote manual control of relays in System 5000 panels as well as remote acknowledge, signal silence, system reset, drill, and evacuate. Annunciate up to 256 points, including intelligent detectors, from one AIM-200 module using LCD-80 display.
- Custom serial annunciators available from several sources using LDM series modules.
- Walk Test feature for single-person test of the system. Includes special zone-change audible indication and zone-trouble indication. ***Any number of zones may be selected for walk test, with remaining zones providing full fire protection.***
- March Time or Temporal Code selectable per output circuit.
- Releasing service capability with selectable time delays, abort circuit, and manual release.
- Multiple hazard releasing capability. Four cross-zone circuits per module.
- Presignal capability with selectable time delays and Positive Alarm Sequence (PAS), per NFPA 72 standards.
- Two-stage Alert/Evacuation option meets Canadian and U.S. requirements.
- Alarm verification, programmable per zone, with automatic discrimination between smoke detectors and contact devices.
- Field programmable with separate access for initial system programming and system program changes (system has automatic default programming to general alarm).
- Multiple passwords and a special programming key are used to ensure the integrity of the field program information.
- All initiating and notification circuits are power limited.
- Optional zone coder hardware (**UZC-256**), positive non-interfering successive.
- Remote "All Call" page option (**RPJ-1**).
- Resound of subsequent alarms, troubles, or supervisory signals, each with a distinct local audible indication.



NOTIFIER® by Honeywell
12 Clintonville Road, Northford, Connecticut 06472

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

Made in the U.S.A.

- Each initiating zone may be programmed for Normal, Waterflow, Supervisory operations, or non-alarm conditions.
- Each circuit is provided with a multifunction switch used for programming, circuit enable/disable, Display Program (Input/Output Map) and manual on/off control of all output circuits.
- Non-Alarm point selection for monitoring of lower-priority, non-fire signals.
- Silence inhibit timer option with selectable times.
- Enhanced real-time memory checking.
- 255-event history log stored in nonvolatile memory.
- Labels may be easily inserted to provide identification of all circuits.
- Removable terminal blocks are provided for ease of installation and service.
- Nonvolatile memory retains program information even with total loss of power. Automatic memory checks verify integrity.
- Optional auxiliary power supplies available to provide additional power for Audible-Visual alarm indicating devices.
- Addressable Intelligent Module (**AIM-200**) for connection of intelligent detectors, addressable pull stations, and addressable relays.
- Auto-silence option (alarm cutout) with selectable times.
- Trouble and alarm reminder option.
- Tornado warning option sounds different code.
- Initiating zones may be programmed to act as Acknowledge, Silence, or Reset controls.
- Optional 80-character liquid crystal display (LCD-80). Includes remote printer interface.
- Networking option.
- California code option.
- Extensive transient protection.

## NFPA STANDARDS

The System 5000 complies with the following standards:

- NFPA 72 Local, Auxiliary, Remote Station, and Proprietary Protective Signaling Systems and Central Station Signaling Systems.

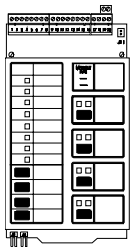
## AGENCY LISTINGS

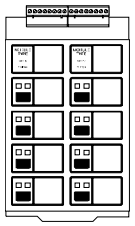
See the first page of this catalog sheet for listing agencies and file numbers. These listings and approvals apply to the basic System 5000 control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be pending. Consult factory for latest listing status.

## PRODUCT LINE INFORMATION

**BE-5000**: Base Equipment for System 5000. Includes CPU-5000, CHS-4 chassis, PK-1 key, labels, BP-3 dress panel, basic cables, manual, and miscellaneous hardware. *Order power supply, cabinet, and circuit modules separately.*

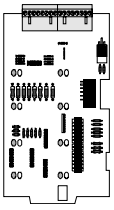
**CPU-5000**: *(at right)* Includes two Notification Appliance Circuits; alarm and trouble relays; remote station and master box transmitters. The CPU communicates with up to 15 modules; any mix of IZM, ICM, CRM, TCM, AIM, (AIM-200 is limited to 10) and VCM.


0001cpu5.wmf

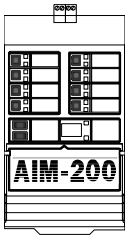

0001izm8.wmf

**IZM-8**: *(at left)* Initiating Zone Module, provides eight Style B (Class B) alarm initiating zones (includes ELRs and slide-in labels).

0678izea.wmf



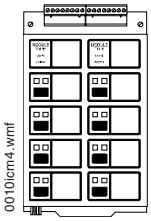
**IZE-A**: *(at right)* Initiating Zone Expander, converts IZM-8 to eight Style D (Class A) alarm initiating zones (maximum of one per IZM-8).

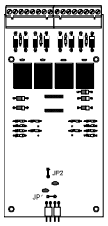


Aim-200.wmf

**AIM-200**: *(at left)* Addressable Intelligent Module for System 5000. Monitors and controls up to 198 devices including ionization, photoelectric, thermal detectors, duct detectors, monitor modules, and control modules. Install in any module slot. Up to 10 AIM-200s may be installed. AIM-200 features detector sensitivity display/adjust, and maintenance alert.

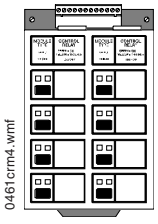
**ICM-4**: *(at right)* Indicating Circuit Module, provides four Style Y or Style Z alarm Notification Appliance Circuits. Maximum signaling current is 3.0 amps per circuit or 6.0 amps per module, subject to power supply limitations (includes auxiliary power harness, ELRs and slide-in labels). Includes ON/OFF controls and ON/OFF LEDs.

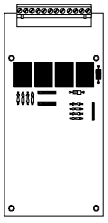

0010icm4.wmf


029ice4.wmf

**ICE-4**: *(at left)* Indicating Circuit Expander, expands ICM-4 to provide a total of eight Style Y or Style Z alarm Notification Appliance Circuits. Circuit ratings are same as ICM-4 (maximum of one per ICM-4). May also be used to add four Notification Appliance Circuits to VCM-4.

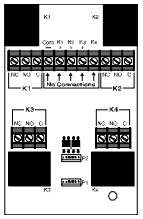
**CRM-4**: *(at right)* Control Relay Module, four Form-C relay contacts, rated at 5.0 A, 120 VAC or 28 VDC (resistive) per circuit. Includes manual ON/OFF controls and LEDs.


0461crm4.wmf


0669cre4.wmf

**CRE-4**: *(at left)* Control Relay Expander, expands CRM-4 to provide a total of eight Form-C relay contacts (maximum of one per CRM-4). May also be connected to add four relays to ICM-4, TCM-2, TCM-4, or VCM-4.

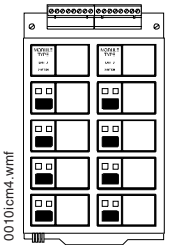
**ARM-4**: *(at right)* Auxiliary Relay Module, four Form-C relays controlled by a relay module (CRM-4 or CRE-4). N.O. contacts rated 20 amps, N.C. contacts rated 10 amps at 125 VAC and 30 VDC (maximum of one for each CRM-4 or CRE-4).



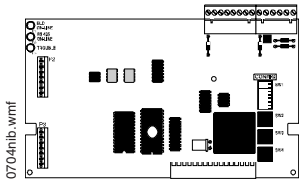
0461arm4.wmf

**TCM-2**: Time Control Module used for single-hazard release and presignal alert/evacuate applications. Release mode includes: single or cross-zone; abort circuit; two solenoid circuits; warning bell circuit with triple-code option; countdown time display. Presignal option includes programmable timer, evacuate, and alert manual controls.

**TCM-4**: *(at right)* Time Control Module used for multiple-hazard releasing service or two-stage alert/evacuation. Release mode provides four independent release circuits each with programmable cross-zone, delay timer, and soak timer. Two-stage alert/evacuate mode provides four independent circuits, meeting Canadian two-stage requirements, with one-minute timer, manual alert, evacuate switches, and alert-hold.

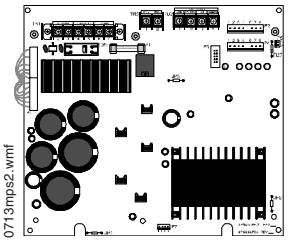

0010icm4.wmf

**NIB-96**: *(at right)* Network Interface Board. Installed to make System 5000 operate as a slave panel. *See NIB-96 data sheet.*

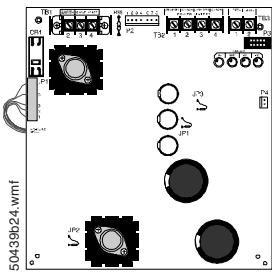

0704nib.wmf

***For Voice and Telephone options**, see VAS-5000 data sheet.*

**MPS-24A**: *(at right)* Supplies the regulated power needed to run a full-size System 5000. Also supplies up to 3.0 amps of regulated notification circuit power, permitting the use of a variety of standard UL-Listed 24 VDC notification appliances. High efficiency, switched regulation technology is used. Up to 1.0 amp of resettable power is available for four-wire smoke detectors. Power limited per UL 864 requirements. Integral charger for 9 to 60 AH lead-acid batteries.

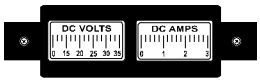

0713mps2.wmf

**MPS-24B**: *(at right)* Supplies the regulated power needed to run a CAB-A3/-A4 sized system plus 2.0 amps of RMS regulated notification circuit power and 200 mA of regulated power for four-wire detectors and annunciators. For supply loading limitations, see manual *(doc. no. 15583)*. Integral charger for 7.0 AH to 12 AH batteries.


50439b24.wmf

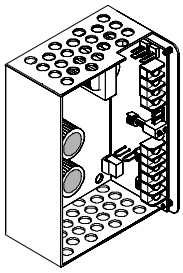
**EFB-1**: Earth fault board for MPS-24B *(not needed for MPS-24A)*. Order if AIM is used and sensitive earth fault detection is required for monitor/control module zones. Not required if monitor/control modules are not used.

**MPM-2**: *(at right)* Main Power Meter kit for MPS-24A only. Includes battery voltage and charging current meters, mounting hardware, and cable.

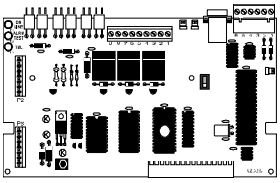


0713mpm2.wmf

**APS-6R**: *(at right)* Auxiliary Power Supply (expander). Provides up to 6.0 amperes of regulated power for compatible notification appliance circuits. Includes battery input and transfer relay, AC circuit breaker, overcurrent protection. Mounts on one of four positions on a CHS-4L or CHS-4 chassis.


5952cov.wmf

**UZC-256**: *(at right)* Programmable Universal Zone Coder provides positive non-interfering successive zone coding. Microprocessor-controlled, field-programmable from IBM-compatible PCs (requires optional programming kit) *See UZC-256 data sheet.*


0704uzc.wmf

**LCD-80**: Liquid Crystal Display mounts in 5000 cabinet or up to 6,000 ft. (1828.8 m) away. Displays up to 256 points, including AIM-200 points. EIA-232 interface for 40- or 80-column printer. Field-programmable via CRT or PC. *See LCD-80 data sheet.*

**ACS**: Annunciator Control Modules ACM-16AT, AEM-16AT, ACM-32A, and AEM-32A. *See ACS data sheet.*

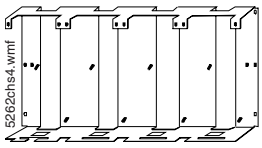
**AFM**: Annunciator Fixed Modules AFM-16A, AFM-16AT, and AFM-32A. *See AFM data sheet.*

**LDM**: Lamp Driver Modules LDM-32, LDM-E32, and LDM-R32. *See LDM data sheet.*

**ACM-8R**: Remote Relay Module with eight Form-C contacts tracking eight zones. Can be located up to 6,000 ft. (1828.8 m) from panel on four wires.

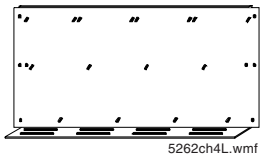
**RPT-485**: Repeats EIA-485 over twisted-pair or converts to fiber-optic medium. *See RPT-485 data sheet.*

**CHS-4**: *(at right)* Chassis for mounting up to four APS-6Rs.

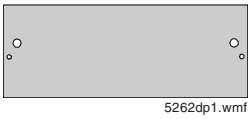

5262chs4.wmf

**CHS-4M**: Expansion Chassis. Mounts up to four modules. Includes CHS-4, MP-1 (Module Dress Panel), and Expander Ribbon Cable.

**CHS-4L**: *(at right)* Low chassis for APS-6R power supplies or VAS-5000 voice components.

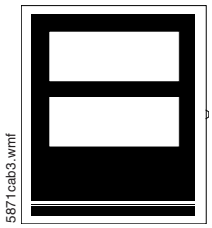

5262ch4L.wmf

**DP-1**: *(at right)* Dress Panel, cover plate for CHS-4 which contains only APS-6R power supplies or AA-30 or AA-120 amplifiers.


5262dp1.wmf

**BM-1**: Blank Module, cover plate for one unused module space.

**CAB-4 Series**: The CAB-4 Series cabinets are fabricated from 16-gauge steel with unique full-front LEXAN®, reverse silk-screened for durability. The cabinet assembly consists of two basic parts: a backbox (SBB-_4), and a locking door (DR-_4) that may hinge right or left. Cabinets are arranged in four sizes, "A" through "D" *("B" [two-tier] is pictured at right)*. A trim ring option is available for semi-flush mounting. *See CAB-4 Series data sheet DN-6857.*




***NOTES ON CABINETS:***

**1)** CAB-4 cabinets are black with LEXAN® window. Red versions are also available *(see DN-6857)*.

**2)** Also compatible with previous cabinet CAB-3 Series *(see DN-3549)*.

**3)** Order backbox (SBB-_4) and door (DR-_4) separately.

**4)** The NOTIFIER System 5000 can be special-ordered in an industry-standard 19" (482.6 mm) rackmount version. Contact NOTIFIER for options and availability.

## CONSTRUCTION

Each module consists of one or two printed circuit cards mounted to a panel with integral tactile feedback membrane switches. Windows in the membrane switch panel allow for viewing of the status LEDs. Slide-in pockets allow the insertion of descriptive labels for the modules (label windows are 0.875" [22.225 mm] H x 0.975" [24.765 mm] W). Each module mounts to a chassis by means of two captive screws. Removable terminal blocks are provided for connection of field wiring.

The MPS series Main Power Supply mounts in the lower-left corner of the enclosure. Space is provided next to the power supply for up to 25 Amp-Hours of sealed electrolyte batteries.

The Central Processor Unit (CPU-5000) module monitors and controls up to fifteen initiating, indicating and control modules, which may be mounted in up to four CHS-4M Chassis Assemblies. APS-6R power supplies may be substituted in module positions, or mounted below a single (non-expanded) module.

A key-locked hinged door enclosure is offered in four sizes. The door is provided with a window that allows for viewing of the modules with the door closed. The door assembly separates from the backbox to allow easy installation, and may be hinged right or left.

## ELECTRICAL SPECIFICATIONS

- Primary input power, 120 volts, 50/60 Hz, 2.4 A maximum (optional supplies and voice amps require additional current).
- Primary input 240 volts, 50/60 Hz as an option. Add "E" to MPS part number *(example: MPS-24AE)*.
- Ground fault detection.
- Low primary AC input power supervision with brownout indication.
- Supervised standby batteries.

## USER MANUALS

Installation, Operation, and Programming Manuals are provided with each System 5000.

## ARCHITECTURAL/ ENGINEERING SPECIFICATIONS

Specifications on the System 5000 are included in NOTIFIER's Speci•Fire™ Windows®-based software utility. Speci•Fire™ leads the operator through point-and-click menus, selecting the appropriate project needs and providing the specification in text format.

---