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MEA



ISO Certified
9001 Management
System

General Description

The HS-3030 is a sophisticated microprocessor-based Fire Alarm Control Panel. It has the capability to network with multiple HS-3030 and annunciators to suit the various needs of residential, commercial, industrial and institutional applications. The HS-3030 fire panel provides capability for up to 24 input circuits, 4 general purpose form "C" relays, 3 system operated relays (for Alarm, Trouble and Supervisory indication), 8 class B (style Y) or 4 class A (style Z) output bell circuits and 2 auxiliary power outputs. Input circuit modules are available for conventional or addressable inputs in class A (styles D or 6) or class B (styles B or 4).

Field Programming

The HS-3030 panel's database can be downloaded or optional uploaded in the field from a computer connected to service terminal using Network Plus software. All information is stored in non-volatile flash memory.

Networking

The HS-3030 can be networked to multiple HS-3030s, 3100s, and 3200 annunciators to provide additional input circuits, relays, bells and LEDs. One HS-3030 is designated the master panel for the network. All other HS-3030 panels will operate independently if communications with the master panel is lost.

Features

- UL/FM/CSFM #7165-0476:110 Listed
- Sophisticated Capabilities yet Simple to Operate
- Conventional and Addressable Detection Circuits
- Two Stage Alarm Capability
- One Person System Test Capability
- Field Programmable via Computer, download, and optional upload of database
- History Log Approximately 1000 Events
- Separate LED for Alarm, Supervisory, and Trouble Indication for Each Zone
- LCD Supertwist Backlit 80 Character (4 x 20) Display
- Ground Fault Indication by Input Circuit
- Software Definable Conventional Input Circuits



Sprinkler Supervision

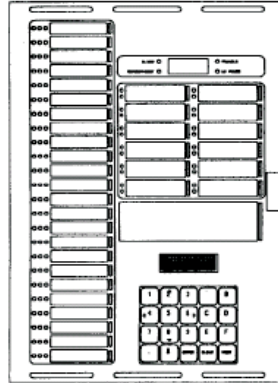
- Optional Conventional Input Circuits Class B (Style B) or Class A (Style D) Available by Special Order
- Input Circuits Programmable for N.O. or N.C. Contacts Class B (Style Y) or Optional Class A (Style Z) Bell Circuits Available by Special Order
- DCLR (Style 7) Network Communication Option
- Detector Sensitivity Adjustments, Manually
- Maintenance Alert for Dirty Sensors
- Day/Night Sensitivity Adjustments, Automatic
- Built in Printer Available

Ordering Information

Model Number	Part Number	Description
HS-3030AB	345-1281	Basic control unit package, (8) Addressable class "B" (style 4)
HS-3030AA	345-0397	Basic control unit package, (4) Addressable class "A" (style 6)
HS-3238	345-0433	Conventional input circuit module, (8) software selectable 10 or 80mA Class B
HS-3338	345-0434	Conventional input circuit module, 4 circuits, "Class A" (Style D), 80mA
HS-3039	345-0284	Addressable input circuit module, 8 circuits, "Class B" (Style 4)
HS-3139	345-0407	Addressable input circuit module, 4 circuits, "Class A" (Style 6)
HS-3130	345-0285	Network Communication Module
HS-3109-3	345-559	Communications Module
HS-3140	222-0046	80 character LCD Annunciator w/Back Box & front cover
HS-3035	345-0378	Replacement Power Supply Board
HS3644	222-0064	Remote Annunciator

HS-3030 Inner Door

The system controls and visual indications are contained on the Mother Board, which also contains the system processor, programming port, printer port, and nonvolatile memory for system firmware. Custom software is installed on the main board for functions such as function relays, zone LED annunciation, and custom zone and device messages. The HS-3030 consist of 12 system switches ("Hot Keys"), and a 20 position alpha-numeric keypad. The 12 system switches are factory defined for operations such as acknowledge, signal silence, and system reset. The 20 position keypad is used for technical functions, system/detector maintenance, history recall, device bypass, and manual operation of addressable output modules, relay modules, and bell circuits.



Additional Features

- Totally Software Driven
- Display of Real Time
- Power Limited Circuits
- Passcode Protection
- System Alarm, Trouble, and Supervisory LEDs
- Signal Silence Inhibit
- Alarm Verification by Zone or Device
- System Alarm, Supervisory, and Trouble Relays
- Communication Ports for Expansion, Network, Printer
- Remote Alarm, Supervisory, and Troubl
- Annunciation
- Addressable & Conventional Input Modules
- Custom Labels Per Zone
- Bell Coding by Device

Display

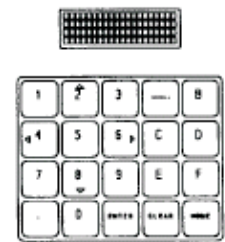
The visual display consists of a series of LEDs for common system indication of power, alarm, supervisory, and trouble. An LED clock display is provided to display a real time. The flashing colon on the clock

provides visual indication of system processor operation.

An 80 character supertwist backlit LCD alphanumeric

display is provided for address location of addressable devices, zone indication for conventional input circuits, display of history files, first/last device in alarm, custom messages, etc. It is possible to assign custom alpha-numeric messages on a per zone basis for either conventional or addressable devices. The keypad can be used to scroll through the display. The keypad and the display are also used for maintenance functions, such as testing, etc. Individual LEDs are provided to display alarm, supervisory, and trouble conditions by zone. The HS-3030 contains 24 sets of zone indicating LEDs. The LEDs will flash when activated, then go to steady when acknowledged. The trouble LEDs will indicate both open circuit and ground fault. The LCD display is used to determine the exact nature of the current system status. Addressable input circuits have the capability of being configured to map individual detectors or groups of detectors to turn-on specific zone indicating lamps.

Addressable devices are also indicated on the LCD display, which provides device number, addressable input circuit number, and custom message.





Input Circuits

The HS-3030 motherboard has the capacity for up to three input circuit modules, not all modules need to be installed. Module 1 - Can only be conventional, 8 "class B" (style B) circuits using the card HS-3238 or 4 "class A" (style D) circuits using the card HS-3338. Module 2 - Can be one of the two conventional cards or it can be addressable, 8 class B (style 4) circuits using the card HS-3039 or 4 class A (style 6) circuits using the card HS-3139. Module 3 - Can be one of the two conventional cards or it can be addressable, 8 class B (style 4) circuits using the card HS-3039 or 4 class A (style 6) circuits using the card HS-3139.

Output Circuits

The HS-3030 includes 8 class B (style Y) or optional 4 class A (style Z) supervised bell circuits, 4 general purpose Form "C" relays, 3 system Form "C" relays and 2 auxiliary power outputs.

Terminal Board

All input and output wires are terminated on the terminal board, this allows separation from the main control board for ease in servicing.

Communication Ports

The HS-3030 has 6 communication ports available: Port 1 - Is out going to the network (proprietary) Port 2 - Is in coming from the network (proprietary) Networking allows multiple panels (Control and/or Annunciator) to be connected together. Port 3 - (RS232) Can be connected to the Hs3644 Annunciator, GRID Computer Graphics or HSRT-2000 Radio Transmitter. Port 4 - Service Terminal (RS232) Allows downloading and optional uploading of databases, and maintenance access terminal window. Port 5 - Printer Interface (IBM/Centronics) A 25 pin parallel printer port providing an interface to any standard parallel printer. Port 6 - Printer Interface (RS232) A serial printer port providing an interface for the optional factory install serial printer.

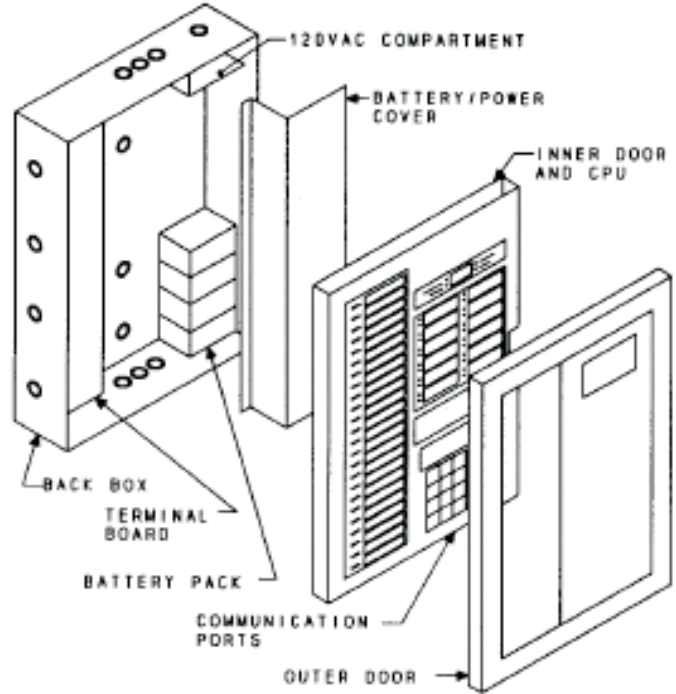
Power Supply

The HS-3035 power supply is rated at 10 amp unregulated DC power. Complete with 2 amp battery charger and battery supervisory circuit. The supervisory circuit simulates a load condition approximately every 90 seconds to ensure that the battery is capable of handling the load requirements upon loss of AC power.



Enclosure

The enclosure for HS-3030 consists of a back box complete with power supply, inner door assembly with main board, and outer door assembly. The back box and door assemblies are fabricated from 1/16" steel. The front door includes tempered glass window, hinge, and lock assembly. The back box provides necessary "knock out" type openings for conduit entry. The enclosure dimensions are 14-1/2" Wide x 20-1/2" High Deep. The inner door assembly is 14" Wide x 20" High x 1" Deep. Space for battery set is 4" x 7-1/2" x 3".



Technical Data							
Input Circuits	<u>Conventional (24)</u>	<u>Addressable (16)</u>	<u>Bell Circuits (8)</u>	Conventional			
Voltage	20-28VDC	20-28VDC	Supervisory Current	1.0mA			
Supervisory Current:			Alarm Current	1 amp standard			
Contact Devices	10mA	N.A.	Voltage	24VDC (Unfiltered)			
Smoke Detectors	10mA	N.A.	End of Line Device	10 K W Resistor			
Alarm Current:			Note: The control Panel is limited to 8 A total bell current				
Contact Devices	10mA	N.A.	Auxiliary Power Output (2)	150mA			
Smoke Detectors	80mA max	N.A.					
Max. No. of Devices	50 (Smoke Detectors)	99 Detectors/ 99 Modules (System Sensor)					
Compatible Devices	Hochiki, Apollo, System Sensor	System Sensor	<u>System Relays (3)</u>	1.0 A @ 30VDC and .5 A @ 120VAC			
End of Line Resistor:			Alarm, Supervisory, Trouble				
Contact Circuit	470 W Resistor	N.A.					
Smoke Detectors	3.9 K Ω	N.A.	<u>General Purpose Relays (4)</u>	2.0 A @ 30VDC and .6 A @ 120 VAC			
Combination Smoke and Contact	3.9 K Ω	N.A.					
Total Line Resistance	200 Ω	40 Ω	<u>Battery Capacity</u>				
Total Line Capacitance	N.A.	.5 μF	Optional	10Ah, 25Ah, 40Ah			
T-Tapping	NO	YES Style 4 Only	Maximum	48Ah			
Wire Type	N.A.	Twisted Pair	<u>HS-3109 Communications Board</u>				
Capacitance	N.A.	18 pF/ft	<u>Model</u>	<u>Wire Type</u>	<u>Wire Gauge</u>	<u>Distance</u>	
Resistance	N.A.	4.1 μ/m'	HS-3109-3	Twisted Pair	22-28 AWG	33,000 ft.	
Jacket	N.A.	Non-Shielded					
AWG	14 to 22	14 to 18					
Velocity of Propagation	N.A.	Not less than 65%					

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice.