FIRE CONTROL INSTRUMENTS

by Honeywell

7200 SERIES

MULTIPROCESSOR-BASED
ANALOG/FCINET®/HARD-WIRE
FIRE ALARM CONTROL

UL LISTED

FM APPROVED

DESCRIPTION

The Fire Control Instruments 7200 Series Analog/FCINET®/Hardwire Fire Alarm Control is multiprocessor-based and designed for commercial, industrial, proprietary, central station and institutional applications. The 7200 Series may be configured as an analog/addressable, point identified system where individual identification of initiating devices and control points are required, a conventional hard-wired, zone-identified system, or combination of both. It meets the requirements of NFPA Standard 72, and is suitable for releasing device service.

The 7200 Series is field programmable to perform a wide variety of functions. Inherently power limited, it can accommodate 15 units of one type with a maximum total combination of 30 units. Units are available in a wide range of configurations.

Designed around multiprocessors that provide and control all system functions, the 7200 Series has a powerful software structure that affords true "distributed processing" of all system components. The system can accommodate module placement at either a central location, or up to fifteen (15) remote locations via the FCINET® communications to provide multiplex system features.

The FCI Listed Integrated Sensitivity Testing (LIST) program meets all NFPA 72 requirements for testing and monitoring of sensor sensitivity.

The 7200 Series control has been tested for extraordinary ambient conditions with 6,000 volt transient immunity circuits.

OPTIONAL FEATURES

FireVac®7200 Distributed Fire Alarm/ Voice Evacuation System Operation

80-Character Alpha-numeric Display

Listed Integral Sensitivity Testing meets NFPA 72 Testing Requirements

Drift Compensation Overcomes Effects of Aging or Environment on Sensor Sensitivity

"Dirty" and "Very Dirty" Sensor Indications

Day/Night Sensor Sensitivity Setting

Class A, Style 6/7 or Class B, Style 4 Signaling Line Circuits

Selectable Analog Sensor Alarm Verification

Individually Programmable Control and Power Relays

Switching Technology Power Supply

Interface with FireVac®III Emergency Voice Evacuation System

Releasing Device Unit with Abort Timer

FEATURES

UL Listed to Standard 864, Category UOJZ

FCINET® (FCI Communication Network) Control/Remote Signaling Line Circuits

Inherently Power Limited per UL 864

ADAC® Degrade Operation

Suitable for Releasing Device Service

Two Field Programmable Modes:

- **Front Panel/Auto-configuration**
- **Computer**

Programming Diagnostic Center

Non-volatile Data Storage

Distributed Processing

RS-232 Serial Output

Walk Test Feature

500 Event History Log

Class A, Style D or Class B, Style B Initiating Zone Circuits

Class A, Style Z or Class B, Style Y Individually Programmable Notification Appliance Circuits

Alarm Verification

Dual Rate Charger

Enhanced Transient Protection

Field Expandable

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An ISO 9001 Certified Company

9020-0271 Rev. H

OPERATING SYSTEM

The operating system resides in an EPROM (Erasable Programmable Read Only Memory). The system's functional program, which is defined by the user, is stored in an EEPROM (Electrically Erasable And Programmable Read Only Memory), and may be programmed by either front panel switches or via a uniquely "User Friendly" computer program. Both forms of storage are non-volatile.

The system features a 500-event History Log.

SYSTEM CONTROL UNIT

The main System Control Unit (SCU) serves as a basic information and control center for standard operator functions.

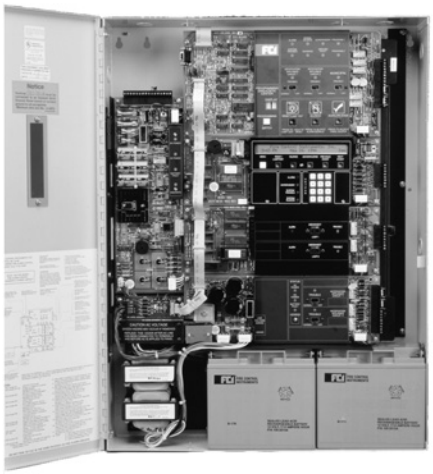
A self-contained Programming Diagnostic Center with a two-digit, 7-segment LED digital display provides system operation, programming and internal trouble shooting features. An RS-232 port provides supervised output to a remote printer or video terminal.

The power supply contains a dual rate charger. The transformerless Switching Power Supply Unit (SPSU/V) can maintain sealed lead-acid batteries up to 55 amp/hr capacity.

AUXILIARY DEGRADE ALARM CIRCUIT (ADAC®)

The 7200 Series control features Auxiliary Degrade Alarm Circuit (ADAC®) degrade operation. In the event of main processor failure, the "DEGRADE" LED will light. In the event an alarm is received, each subordinate processor is capable of operating a general alarm program.

In the event of multiple or all processor failure, the ADAC® mode will operate the system in a general alarm configuration.



ALARM VERIFICATION

The Alarm Verification feature is programmable for all smoke sensors, analog or conventional. This allows smoke sensors that are installed in environments prone to nuisance or unwanted alarms to operate as follows: In the event the sensor alarms, a distinctive alarm verification message will be displayed for 25 seconds. The circuit or device will then automatically reset. The system will then remain in the verification mode for a period of approximately 85 seconds. If the sensor or any other sensor on the same circuit alarms within this period, a system alarm will occur. If no alarm occurs within this period, the system will return to normal condition.

WALK TEST

The Walk Test feature is performed on a signaling line circuit, or zone basis and enables testing of the system by a single individual. During this test, the act of placing a device in alarm will cause four pulses on the notification appliance circuits, operation of a supervisory switch will cause three pulses, while removal or disconnection of an initiating device will cause two pulses. The events will be recorded on a printer, if one is installed.

SELECTIVE ALARM SOUNDING

The notification appliance circuits on the SCU, DSU and DIU units can be individually programmed to activate on alarm, trouble, or supervisory signal from a specific addressable module/sensor, hardwired zone or zones, and sound non-code, temporal pattern, march time or fixed code signals. Cross-zoning and "Ring by Zone" operation are readily accomplished.

OPTIONAL UNITS - ANALOG

The optional Keyboard Display Unit (KDU) features an 80-character alphanumeric display and 12-key keypad to enhance and simplify system operation by the user. It may be remotely located. The Keyboard Display Unit, Local, (KDU-L) is intended for mounting in the control cabinet only, and also provides an interface for remote units.

The Analog Loop Unit (ALU) provides two (2) signaling line circuits, wired Class A or B, Styles 4, 6 or 7. Each circuit can address 197 points (99 analog sensors or modules; 98 monitor and/or control points. ALU units configured with the Field Configuration Program 5.2 or later do not require twisted pair wire and will operate on "straight lay" wire.

The Distributed Intelligent Unit (DIU) is remotely located and duplicates many of the functions of the System Control Unit (SCU).

DRIFT COMPENSATION

The 7200 Series continuously monitors the sensitivity of all installed analog smoke sensors to measure any change in their sensitivity due to the environment. The drift compensation software overcomes effects of aging or environment on sensor sensitivity giving a dependable alarm threshold. "Dirty" and "Very Dirty" indicators are activated when a sensor drifts beyond acceptable limits. Sensors can automatically change sensitivity with time of day to be "matched" to their real-life environment.

Drift compensation also meets the sensitivity testing requirements of NFPA 72.

LISTED INTEGRATED SENSITIVITY TEST (L.I.S.T)

Each analog smoke sensor is automatically tested by the system software a minimum of three (3) times per day. The test is a recognized functional test of the ion sensor chamber and photocell of the photoelectronic sensor and meets the sensitivity and maintenance testing requirements of NFPA 72. This test will give a "Test Failed" indication and identify the individual sensor if it fails the test.

Remote Keyboard Display Unit (KDU)

OPTIONAL UNITS-HARDWIRED

Optional hardwired units include a Quad Zone Unit (QZU), with four (4) Style D (Class "A") or Style B (Class "B") initiating zone circuits, an Eight Zone Unit (EZU), with eight Style B (Class "B") initiating zone circuits, an Eight Zone Daughter board (EZD) which gives Style D (Class "A") capability and LED annunciator output to the EZU, and an Eight Zone Annunciator board (EZA) which gives LED annunciator output to the EZU unit.

Alarm verification is available in the QZU and EZU units via software programming.

OPTIONAL AUXILIARY UNITS

Additional optional units include a Quad Relay Unit (QRU) and High Current Relay Unit (HRU), each containing four (4) individually programmable relays, each relay equipped with "OFF-AUTO-ON" user switch and status LED. The relays in these units can also be individually programmed to energize either on alarm, trouble, or supervisory output from specific addresses/zones.

A Dual Signal Unit (DSU) is available with a self-contained auxiliary power supply and two individually programmable notification appliance circuits.

A Zone Coder Unit (ZCU) provides Positive, Non-interfering and Successive (PNIS) coding output and offers a choice of optional relay operation upon completion of various rounds of the first code.

The Remote Annunciator Unit (RAU) offers thirty two (32) supervised LED or incandescent lamp annunciator points and provision for remote switches. The RAU mounts inside the remote annunciator. The RAU-FV unit is designed to interface with the FireVac® III Emergency Voice Evacuation System.

The Panel Bus Adapter, (PBA) provides transient protection for any remotely located units. Only one adapter is required per 7200 Series system.

APPROVALS

UL	S1869 per UL864
FM	0W6A5.AY
CSFM	7165-0694:174
NYC	MEA 62-93-E

OPERATING CHARACTERISTICS

Operating temperature	32 to 120° F (0 to 49° C)
Relative humidity	85% (non-condensing)

DIMENSIONS

CAB-A‡	19 3/8" High, 15" Wide, 4" Deep (49.23 x 38.1 x 10.16 cm)
CAB-B	28" High, 21" Wide, 4" Deep (71.12 x 53.34 x 10.16 cm)
CAB-C	38" High, 21" Wide, 4" Deep 96.52 x 53.34 x 10.16 cm)
CAB-D	38" High, 30" Wide, 6" Deep (96.52 x 76.2 x 15.24 cm)

NOTE: ‡ CAB-A (Not ULC Listed) is intended for use only with SPSU, KDU/KDU-L, and ALU or DIU units.

ORDERING INFORMATION

Model		Description
Beige	**Red**	
TR-1B	TR-1R	Semi-Flush Trim Ring (CAB-A)
TR-2B	TR-2R	Semi-Flush Trim Ring, (CAB-B)
TR-3B	TR-3R	Semi-Flush Trim Ring, (CAB-C)
RHBS	RHRS	Remote KDU housing, surface mount
RHBF	RHRF	Remote KDU housing, flush mount

TECHNICAL AND ORDERING INFORMATION

Model	Supv. Current	Alarm Current	Description
SPSU-V	.010 A	.015 A	Switching Power Supply Unit, Vertical
SPSU‡	.010 A	.015 A	Switching Power Supply Unit
SCU	.050 A	.260 A	System Control Unit
QZU-L	.027 A	.062 A	Quad Zone Unit
EZU-L	.045 A	.086 A	Eight Zone Unit
EZD-L	.002 A	.009 A	Eight Zone Daughter board, (For Class A wiring)
EZA-L	.002 A	.009 A	Eight Zone Annunciator board
ALU	.065 A	.085 A	Analog Loop Unit
DIU	.017 A	.072 A	Distributed Intelligent Unit
KDU	.060 A	.065 A	Keyboard Display Unit
KDU-L	.060 A	.065 A	Keyboard Display Unit, Local (For replacement only)
QRU-EOL	.004 A	.023 A	Quad Relay Unit/FCINET® Style 6 EOL
HRU	.004 A	.034 A	High-current Relay Unit
DSU	.025 A	.075 A	Dual Signal Unit with two (2) notification appliance circuits and auxiliary power supply. (Order XFMR transformer separately)
ZCU	.001 A	.037 A	Zone Coder Unit
RAU	.018 A	.007 A*	
		.075 A**	Remote Annunciator Unit
RAU-FV	.018 A	.040 A†	FireVac®III/7200 Series Interface Unit
ATU	.014 A	.030 A	Abort Timer Unit
RDU	.065 A	.085 A	Releasing Device Unit
PBA	——	——	Panel Bus Adapter

* per LED
** per incandescent lamp
† add .002 amp./ckt.
‡ For use in CAB-A only.