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MS-5024UD(C/E)

Fire Alarm Control Panel with built-in DACT and remote-site Upload/Download capability

Section: Control/Communicators

GENERAL

The **Fire•Lite MS-5024UD** is a 24-volt, five-zone fire alarm control panel with built-in communicator and remote-site Upload/Download capability. The integral communicator transmits event information (alarms, troubles, supervisories, faults, etc.) to a UL listed central station. The MS-5024UD may be used in a variety of cost-effective applications, including: local fire alarm control panel (communicator disabled), fire alarm control panel/communicator, stand-alone sprinkler supervisory communicator or slave communicator to a UL-listed host fire alarm panel (requires N.O. dry contacts to trigger 5 channels). Selectable transmission formats allow the MS-5024UD to communicate to virtually all central stations.

FEATURES

- Five programmable Initiating Device Circuits (zones). Each zone may be programmed for:
 - ✓ Two-wire smoke detectors.
 - ✓ N.O. contact devices (pull, heat).
 - ✓ Four-wire smoke detectors.
 - ✓ Waterflow operation.
 - ✓ Supervisory operation.
 - ✓ Auto-reset Supervisory operation.
- Two built-in, Class A or B (Style Z or Y) Notification Appliance Circuits (NACs).
- Notification Appliance Circuits may be programmed:
 - ✓ Silenceable.
 - ✓ Non-Silenceable (a strobe circuit can keep flashing after the panel is silenced).
 - ✓ Auto-Silence (Program 5 to 30 minutes).
 - ✓ Silence Inhibit (60 seconds).
 - ✓ Coding (March Time, Temporal, California).
- 3.0 amps of Notification Appliance power, expandable to 5.0 amps (meets the critical power requirements for ADA and UL-1971 devices).
- Two built-in Form-C Alarm and Trouble relays.
- Supervisory and communication fail outputs.
- Dual-line rotary- or Touch-Tone®-dial DACT interfaces to public telephone network (leased phone lines are not required).
- 24-Volt operation.
- Built-in voltmeter measures:
 - ✓ Zone voltage.
 - ✓ Primary AC line voltage.
 - ✓ Battery voltage.
 - ✓ Notification Appliance Circuit(s) voltage.
 - ✓ Resettable 24-volt power.
- Surface Mount Technology (SMT).
- Fully programmable via built-in keypad (no costly external programmers necessary).



S624
(MS-5024UD,
MS-5024UDE)



CS68
(MS-5024UDC)

INDUSTRY CANADA
21325785A

MEA
131-94-E



California State Fire Marshal
7165-0075:169

FCC

1W6USA-74525-AL-E



MS-5024UD

- Complies with NFPA 72-1993 edition (Local, Central Station and Remote Station [DACT only - not polarity reversal] Fire Alarm Systems).
- Reporting formats include:
 - ✓ 3+1, 4+1, 4+2 Standard + Expanded.
 - ✓ 4+1, 4+2, Ademco Express.
- Integral battery charger for up to 60 hours of standby power.
- Fuseless, power-limited technology meets new UL power-limiting requirements, effective May 1, 1995.
- Programmable Alarm Presignal Timer, Alarm Verification Timer and Optional Trouble Reminder.
- Single-person walk test.
- Fire drill function.
- Zone disable capability (software).
- 32-Event history buffer with time and date stamp.
- Accurate real-time clock/calendar.
- Extensive built-in transient protection.
- Electronics and operational controls fully enclosed in a lockable cabinet capable of housing up to 7 AH batteries.
- Optional contact-by-zone module and optional remote annunciator.
- Optional printer interface for on or off-line printing.
- 230 VAC, 50 Hz international version available.

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 Fire•Lite Alarms, One Fire-Lite Place, Northford, Connecticut 06472.

Phone: (800) 627-3473

Toll Free FAX: (877) 699-4105

FAX Back:(888) 388-3299



Remote Site Upload/Download

The MS-5024UD may be downloaded or uploaded, without affecting the system fire protection.

- Download system programming.
- Upload key system information:
 - ✓ Current system status, history and walk test files.
 - ✓ Zone, AC line, NAC 1 and NAC 2, Resettable Power and Battery Voltages.
 - ✓ System Programming.
- Upload or Download within one minute without affecting normal fire panel functions.
- Multiple security techniques.
- Requires **PK-5024UD** programming kit, which works with most Hayes-compatible modems (*consult factory for listing*).

Specifications

- Single PC board design using Surface Mount Technology (SMT).
- Two modular telephone jacks for connection to RJ31X/Modules.

AC Power

- 120 VAC, 50/60 Hz, 2.3 amps.
- 230 VAC, 50 Hz, 1.2 amps ("E" suffix).
- Wire size: minimum 14 AWG with 600-volt insulation.
- Built-in brownout circuitry.
- Built-in voltmeter.

Communicator

- One line-active indicator for each of two phone lines.
- "Kiss-Off" signal LED.
- Dual "low telephone voltage detect" circuitry.
- Programmable event codes per each format.
- Up to 62 transmitted events/messages.
- Selectable/deselectable transmissions of 62 events.
- Five zones may be configured to five channels as a slave communicator (channels are auto-resettable).

Communication Formats

Express formats allow complete transaction to be communicated in under 5 seconds

- 20 PPS, 3+1 standard and expanded.
- 20 PPS, 4+1 standard and expanded.
- 20 PPS, 4+2 standard and expanded.
- 4+1 and 4+2 Ademco Express.

Initiating Device Circuits (zones)

The MS-5024UD includes five programmable Initiating Device Circuits (zones). Circuits 1, 2, 4, and 5 are Style B (Class B). Circuit 3 is Style D (Class A). Use the CAC-5F, Class A converter module, to convert *all* Class B IDCs to Class A.

Each zone may support two-wire smoke detectors. Programming options include:

- Waterflow — Silenceable/Non-Silenceable.
- Supervisory — Standard/Auto-Reset.
- Pull Station.
- Normally Open Contact device.

All circuits are power-limited and also fully supervised. They allow up to 100 ohms of line resistance and allow for use of 12 to 18 AWG wire.

Notification Appliance Circuits

- Two Style Z/Y (Class A/B) @ 2.5 amps each.
- All circuits are fully power-limited and meet the new UL power-limiting requirements, effective May 1, 1995, using fuseless technology.

Auxiliary Outputs

- Resettable four-wire smoke detector power @ 300mA.
- Non-resettable power @ 300 mA.
- Integral Form-C Alarm and Trouble relays.
- Relay drivers for supervisory and communication fail.

CABINET SPECIFICATIONS

The cabinet is red with a dark blue overlay. Knockouts on the top, sides, and back provide ease of wire entry. The cabinet can be surface or semi-flush mounted and is compact in design.

DIMENSIONS: Door: 15-7/32" high x 14-7/32" wide (38.655 cm high x 36.115 cm wide). **Backbox:** 15" high x 14-1/2" wide x 3" deep (38.1 cm high x 36.83 cm wide x 7.62 cm deep). **Trim Ring (Part # TR-1-R):** 18.125" high x 17.62" wide (46.0375 cm high x 44.7548 cm deep)

PRODUCT LINE INFORMATION

Model Description

MS-5024UD Five-zone, 24-volt Fire Alarm Control Communicator (includes backbox, transformer, technical manual, and a frame & post operating instruction sheet).

MS-5024UDC Same as above with ULC listing and DP-5024UD Dress Panel.

MS-5024UDE Same as MS-5024UD with 230 VAC, 50 Hz transformer (UL listed).

XRM-24 120 VAC, 100 VA transformer expands NAC power from 3.0 to 5.0 amps.

RZA-5F Five-zone Remote Annunciator mounts to a single gang box (*requires ADM-24*).

ADM-24 Annunciator Driver Module.

RM-5F Five-zone Relay Module provides contact-by-zone.

CAC-5F Class A Converter Module. Converts *all* Class B Initiating Device Circuits (zones) to Class A.

PRT-24 Printer Interface Module provides an EIA-232 printer output. Includes cable, DB9F and DB25 adapter.

PK-5024UD Upload/Download Utility includes programming software (3.5" IBM-compatible, high-density disks and Instruction Manual).

DP-5024UD Internal Dress Panel (*included when ordering MS-5024UDC*).

MCBL-7 DACT phone cord, 7 feet long, (*two required*).

BB-17F Battery backbox. Required for batteries over 7 AH.

TR-1-R Trim ring.

PS-1242 Battery, 12 volt, 4.2 AH (*two required*).

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

PS-12120 Battery, 12 volt, 12.0 AH (*two required, requires BB-17F backbox*).

PS-12170 Battery, 12 volt, 17.0 AH (*two required, requires BB-17F backbox*).

UL LISTED RECEIVERS compatible with the MS-5024UD

| | Format # (Addresses 16 & 42) | Ademco 685 (1) | Silent Knight 9000 | ITI CS-4000 (3) | FBI CP220FB | Osborne Hoffman Models 1 & 2 | Radionics 6000/6500 (5) | Sescoa 3000R (7) | SurGuard MLR-2 (9) |
|---|------------------------------|-------------------|--------------------------|-----------------------|----------------|---------------------------------------|-------------------------------|------------------------|--------------------------|
| 0 | 4+1 Ademco Express | ✓ | | | ✓ | | | | ✓ |
| 1 | 4+2 Ademco Express | ✓ | | | ✓ | 4 (8) | | | ✓ |
| 2 | 3+1/Standard/1800/2300 | ✓ | ✓ (2) | ✓ | ✓ (4) | ✓ | ✓(5,6) | ✓ | ✓ |
| 3 | 3+1/Expanded/1800/2300 | ✓ | ✓ (2) | ✓ | ✓ (4) | ✓ | | ✓ | ✓ |
| 4 | 3+1/Standard/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| 5 | 3+1/Expanded/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| 6 | 4+1/Standard/1800/2300 | ✓ | ✓ (2) | ✓ | ✓ (4) | ✓ | ✓ (5) | ✓ | ✓ |
| 7 | 4+1/Expanded/1800/2300 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| 8 | 4+1/Standard/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| 9 | 4+1/Expanded/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| A | 4+2/Standard/1800/2300 | ✓ | ✓ (2) | ✓ | ✓ (4) | ✓ | ✓ (5) | ✓ | ✓ |
| B | 4+2/Expanded/1800/2300 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| C | 4+2/Standard/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| D | 4+2/Expanded/1900/1400 | ✓ | ✓ (2) | | ✓ (4) | ✓ | | ✓ | ✓ |
| E | (NOT USED) | | | | | | | | |
| F | (NOT USED) | | | | | | | | |

- (1) With 685-8 Line Card with Rev. 4.4d software.
- (2) With 9002 Line Card Rev. 9035 software or 9032 Line Card with 9326A software.
- (3) Rev. 4.0 software.
- (4) FBI CP220FB Rec-11 Line Card with Rev. 2.6 software and a memory card with Rev. 3.8 software.
- (5) Model 6500 with Rev. 600 software.
- (6) Model 6000 with Rev. 204 software.
- (7) With Rev. B control card at Rev. 1.4 software and Rev. C line card at Rev. 1.5 software.
- (8) Model 2 only.
- (9) Version 1.62 software.