Fire•Lite Alarms

www.firelite.com

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).

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

INDUSTRY CANADA
21325785A

California State Fire Marshal
7165-0075:169

FCC
1W6USA-74525-AL-E

MEA
131-94-E

FM APPROVED

MS-5024UD

- Complies with NFPA 72 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.
- 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.

ISO 9001 CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

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-CD** 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 UL power-limiting requirements, 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

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-CD Upload/Download Utility includes programming software (Windows™ compatible CD 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.

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

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

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

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

5024UDRB Replacement Mother Board.

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	✔			✔	✔ (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.