



**FIRE·LITE® Alarms**

www.firelite.com

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**MS-5024(E)**  
**Fire Alarm Control Panel**  
**with built-in DACT**

Section: Control/Communicators

**GENERAL**

The **Fire•Lite MS-5024** is a 24-volt, five-zone fire alarm control panel with built-in communicator. The integral communicator transmits event information (alarms, troubles, supervisories, faults, etc.) to a UL listed central station. The MS-5024 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 five channels). Selectable transmission formats allow the MS-5024 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 B (Style 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.
- Two built-in, fully programmable, Form-C relays.
- 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-5024,  
MS-5024E)

**MEA**

131-94-E

**FCC**

1W6USA-20004-AL-E



California  
State Fire  
Marshal

7165-0075:175



**MS-5024**

- 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.
- Extensive built-in transient protection.
- Electronics and operational controls fully enclosed in lockable cabinet capable of housing batteries up to 7 AH.
- 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.

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**ISO 9001**  
**CERTIFIED**  
ENGINEERING & MANUFACTURING

## 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, 1.3 amps.
- 230 VAC, 50 Hz, 0.68 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 58 transmitted events/messages.
- Selectable/deselectable transmissions of 58 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 five 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-5024 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 IDC's 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 Y (Class B) @ 1.5 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 @ 300 mA.
- Non-resettable power @ 300 mA.

**NOTE:** Use of auxiliary power outputs does not de-rate available 3 amps of NAC power.

- Two fully programmable Form-C relays.

## 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:** 14-3/4" high x 12-3/4" wide  
(37.465 cm high x 32.385 cm wide).
- Backbox:** 14-1/2" high x 12-1/2" wide x 3" deep  
(36.83 cm high x 31.75 cm wide x 7.62 cm deep).
- Trim Ring: Part # TR-3-R**  
17-5/8" high x 15-5/8" wide  
(44.7675 cm high x 39.6875 cm wide).

## PRODUCT LINE INFORMATION

### Model Description

- MS-5024** Five-zone, 24-volt, Fire Alarm Control Communicator (includes backbox, transformer, technical manual, and a frame & post operating instruction sheet).
- MS-5024E** Same as above with 230 VAC, 50 Hz transformer (UL listed).
- RZA-5F** Five-zone Remote Annunciator mounts to a single-gang box (*requires ADM-24*).
- ADM-24** Annunciator Driver Module.
- CAC-5F** Class A Converter Module. Converts *all* Class B Initiating Device Circuits (zones) to Class A.
- NACA-2F** Class A Converter module. Converts both Class B Notification Appliance Circuits (NAC) to Class A.
- DP-5024** Internal Dress Panel.
- MCBL-7** DACT phone cord, 7 feet long, (*two required*).
- BB-17F** UL listed battery backbox. Required for batteries over 7 AH.
- TR-3-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-5024

	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)								

### KEY:

- (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.