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MS-4412B & 4424B(C/E)

4-Zone, Class B,
Fire Alarm Control Panels

Section: Conventional

GENERAL

The **MicroScan-4412B** and **4424B** are 12-volt and 24-volt, four-zone, Class B Fire Alarm Control Panels. Compact and cost-effective, the 4XB Series panels are powerful, offering a variety of options designed to meet almost any low-end application, including: Local, Auxiliary, Remote Station and Proprietary Fire Alarm Systems.



California
State Fire
Marshal

7165-0075:161
(MS-4424B)

7165-0075:163
(MS-4412B)

MEA

FEATURES

Initiating Device Circuits (IDC's)

- Four Style B (Class B).
 - Zones 1 & 2: General Alarm Operation.
 - Zone 3: General Alarm or Waterflow Operation.
 - Zone 4: General Alarm or Supervisory Operation.
- Disable/Enable control per IDC.
- End-of-Line Resistor:
 - MS-4412B - 2.2K, 1/2-watt (#R-2.2K, UL listed).
 - MS-4424B - 4.7K, 1/2-watt (#71252, UL listed).
- Maximum loop resistance: MS-4412B 100 ohms.
MS-4424B 200 ohms.

Notification Appliance Circuits (NAC's)

- Two Style Y (Class B) @ 1.5 amps each.
- Disable/Enable control per NAC.
- Alarm and trouble resound.
- Programmable Silence Inhibit capability.
- End-of-Line Resistor:
 - MS-4412B - 2.2K, 1/2-watt (#R-2.2K UL listed).
 - MS-4424B - 4.7K, 1/2-watt (#71252 UL listed).
- Maximum allowable voltage drop due to wiring: 2 VDC.
- 2.25 amps of notification appliance power.

Auxiliary Outputs

- Resettable four-wire smoke detector power @ 200 mA.
- Non-resettable power @ 200 mA (subtract from four-wire smoke power).

NOTE: Use of above auxiliary power outputs does not de-rate available 2.25 amps of NAC power.

- Integral Form-C alarm and trouble relays.

Programming and Software

- Programmable Alarm Verification with discrimination between smoke detectors and contact devices.
- Last Event Recall feature traps unverified alarms or intermittent troubles.
- One-man Walk Test feature with zone change indication and zone trouble indication.

Power and Batteries

- Fuseless, power-limited technology meets UL power-limiting requirements, effective May 1, 1995, on all circuits (excludes optional municipal box output).



MS-4424B

- Integral battery charger capable of charging up to 15.0 AH batteries (batteries larger than 7.0 AH require use of **BB-17F** battery box).
- Battery/earth fault supervision.

Other System Features

- Meets the requirements of NFPA 72 (Local, Auxiliary, Remote Station, and Proprietary Fire Alarm Systems).
- Extensive transient protection.

Mechanicals

- Electronics and operational controls fully enclosed in lockable cabinet capable of housing up to 7.0 AH batteries.
- **DP-4424B** dead-front dress panel option (included with ULC Canadian product).
- Optional **TR-2-R** trim ring for semi-flush mounting between 16" (40.64 cm) center studs.
- Slide-in labels for zone identification.

Fire-Lite® Alarms is a Honeywell company.

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.

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS



Options

- Relay-by-zone capability with optional **4412ZM** (12 V) or **4XZMF** (24 V) modules.
- Local energy or remote station connection with optional **4412TM** (12 V) or **4XTMF** (24 V) modules.
- Optional **RZA-4XF** remote annunciator mounts to single-gang box and requires **4412LM** (12 V) or **4XLMF** (24 V) LED driver modules.

CONTROLS AND INDICATORS

Membrane Switch Controls

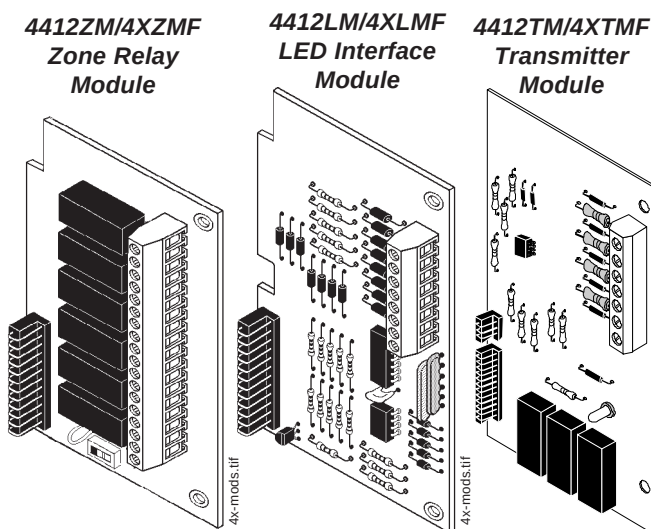
- "A.C. POWER".
- "SYSTEM ALARM".
- "RELEASE".
- "SUPERVISORY".
- "SYSTEM TROUBLE".
- "CIRCUIT TROUBLE".
- "ALARM SILENCED".
- "POWER TROUBLE".

LED Indicators

- "Tone Silence" to silence tone.
- "Alarm Silence" to silence alarm.
- "Alarm Activate" to sound alarm.
- "Reset" for control and detectors.

SPECIFICATIONS

- **Primary input power:** **MS-4412B, MS-4424B(C):** 120 VAC, 60 Hz, 1.2 A; **MS-4424BE:** 230 VAC, 50 Hz, 0.6 A (optional).
- **Wire size:** minimum 14 AWG (2.00 mm²) with 600 V insulation.
- **Total 24 V system power:** 2.45 amps.
- **Standard notification appliance circuits:** 2 (Style Y).
- **Notification appliance power:** 2.25 amps.
- **Maximum current per NAC:** 1.5 amps.
- **Resettable four-wire smoke detector power:** @ 200 mA (subtract from total 24 V system power).
- **Non-resettable power :** @ 200 mA (subtract from four-wire smoke power).
- **Battery charger range:** 7 AH - 15 AH (BB-17F battery cabinet for 12 AH batteries).
- **Charger float rate:** **MS-4412B** 13.8 V, 1.5 amps.
MS-4424B 27.6 V, 1.5 amps.



- **Control panel alarm and trouble relay contact ratings:**
2.0 amps @ 30 VDC (resistive).
0.5 amps @ 30 VAC (resistive).

CABINET SPECIFICATIONS

Door: 14.218" (36.113 cm) high x 14.718" (37.383 cm) wide x 0.675" (1.714 cm) deep.

Backbox: 14.0" (35.56 cm) high x 14.5" (36.83 cm) wide x 3.0" (7.62 cm) deep.

PRODUCT LINE INFORMATION

- MS-4412B** Four-zone, Class B, 12 VDC FACP.
- MS-4424B** Four-zone, Class B, 24 VDC FACP.
- MS-4424BC** Same as above with ULC listing and DP-4424B dead-front panel.
- MS-4424BE** Same as MS-4424B with 230 VAC, 50 Hz transformer (UL listed).
- RZA-4XF** Remote zone annunciator (*requires 4412LM or 4XLMF*).
- 4412LM** Remote annunciator driver for RZA-4XF (*for 4412B*).
- 4XLMF** Remote annunciator driver for RZA-4XF (*for 4424B*).
- 4412TM** Remote station output or municipal box connection (*for 4412B*).
- 4XTMF** Remote station output or municipal box connection (*for 4424B*).
- 4412ZM** Relay module, four relays-by-zone, alarm/trouble contacts (*for 4412B*).
- 4XZMF** Relay module, four relays-by-zone, alarm/trouble contacts (*for 4424B*).
- 2ZDS** Two-zone Disconnect Switch — provides mechanical zone disconnect.
- RP-3.3K** Reverse Polarity Kit — required for City of Chicago applications.
- DP-4424B** Full-length internal Dead-front Panel (*included with "C" suffix models*).
- TR-2-R** Trim Ring — semi-flush mounting.
- BB-17F** Battery Box, required to mount PS-12120 batteries.
- BAT-1270** 7 AH, 12 V gell cell battery.
- BAT-12120** 12 AH, 12 V gell cell battery (*requires use of Fire•Lite BB-17F battery box*). 4x-mods.tif4xtm-is.wmf4x-mods.tif• One-man Walk Test feature with zone change indication and zone trouble indication.

MS-4412BRB Replacement board for MS-4412B (US).

MS-4412BCRB Replacement board for MS-4412BC (Canada).

MS-4424BCRB Replacement board for (US and Canadian) panels MS-4424B and MS-4424BC.