



October 6, 2000

DN-5635 • B-300

# SFP-1024 Fire Alarm Control Panel With Built-In DACT

Section: Conventional Fire Alarm Control Panels

## GENERAL

The NOTIFIER SFP-1024 is a 24-volt, ten-zone fire alarm control panel with a 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. Selectable transmission formats allow the SFP-1024 to communicate to virtually all central stations.

## FEATURES

- Ten programmable Initiating Device Circuits (zones). Each zone may be programmed for:
  - ✓ Two-wire smoke detectors.
  - ✓ Normally open contact devices (pull, heat).
  - ✓ Four-wire smoke detectors.
  - ✓ Waterflow operation (silenceable or nonsilenceable).
  - ✓ Supervisory operation.
  - ✓ Auto-reset supervisory operation.
  - ✓ Remote switch for Reset, Drill, Silence and Acknowledge.
  - ✓ Auto-reset or latching, critical and noncritical process monitoring.
- Zones programmed for process monitoring require a contact closure for activation and can be used to monitor:
  - ✓ Temperature (high/low temp).
  - ✓ Water level.    ✓ Gas detection.    ✓ Loss of air flow.
  - ✓ Refrigeration.    ✓ Tamper (non-fire).    ✓ Open/Close.
- Two built-in, Class B (Style Y) Notification Appliance Circuits (NAC). ✓ Expandable to four. ✓ Class A option.
- 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).
- 6.0 amps notification appliance power meets the critical power requirements for ADA and UL 1971 devices.
- Two built-in, fully programmable, Form-A relays — expandable to four with two 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.
- 230 VAC, 50 Hz international version available.



**MEA**  
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**SFP-1024**

- Surface Mount Technology (SMT).
- Fully programmable via built-in keypad (no costly external programmers necessary).
- Complies with NFPA 72 (Local, Central Station and Remote Station [*DACT only - not polarity reversal*] Fire Alarm Systems).
- Reporting formats include Ademco Contact ID and 14 others.
- Integral battery charger for up to 60 hours of standby power.
- Fuseless, power-limited technology meets UL Power Limiting Requirements effective May 1, 1995.
- Programmable alarm presignal timer, alarm verification timer, and optional trouble reminder.
- Single-person walk test with 256-event walk-test buffer.
- Fire drill function.
- Zone disable capability (software).
- 256-event history buffer with time-and-date stamp, stored in permanent memory.
- Accurate real-time clock/calendar.
- Electronics and operational controls fully enclosed in lockable cabinet capable of housing up to 12 AH batteries.
- Optional LED-10N Remote Annunciators operate off serial, two-wire EIA-485 interface.
- Optional printer interface for on- or off-line printing of:
  - ✓ Text alarm and trouble status with time and date.
  - ✓ History files.    ✓ Program entries.    ✓ Walk Test data.

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 NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118

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## Remote Site Upload/Download

The SFP-1024 may be downloaded or uploaded, without compromising the system fire protection at the protected premises.

- Download system programming.
- Upload key system information:
  - ✓ Current system status, history + walk test files.
  - ✓ Zone, AC line, NAC1, 2, 3 and 4, Resettable Power, Battery Voltages.
  - ✓ System programming.
- Upload or download within one minute without affecting normal fire panel functions.
- Multiple security techniques.
- Requires **PK-1024** programming kit and Hayes-compatible 2400-baud modem.
- Windows® 3.1 and Windows® 95/98 compatible.

## 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: 14 AWG (2.0 mm<sup>2</sup>) 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 100 transmitted events/messages.
- Selectable/deselectable transmissions of 100 events.

## Communication Formats

Express and Ademco Contact ID formats allow complete transaction to be communicated in under five seconds.

- Ademco Contact ID.
- 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 SFP-1024 includes ten programmable Class B Initiating Device Circuits (zones). Use the CAC-10F Class A Converter Module to convert *all* Class B IDC's/NAC's to Class A.

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

- Normally Open Contact devices (pull, heat).
- Four-wire smoke detectors.
- Waterflow (silenceable/non-silenceable) operation.
- Supervisory (standard/auto-reset) operation.
- Remote switch for Reset, Drill, Silence and Acknowledge.
- Critical and Noncritical Process Monitoring (standard/auto-reset).

All circuits are power-limited and fully supervised. They allow up to 100 ohms of line resistance and allow for use of 12 AWG (3.25 mm<sup>2</sup>) to 18 AWG (0.75 mm<sup>2</sup>) wire.

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## Notification Appliance Circuits

- Two Style Y (Class B) @ 3.0 amps each. Use the CAC-10F Class A Converter Module to convert *all* Class B NAC's and IDC's to Class A.
- Option module adds two Style Z (Class A) NACs @ 1.5 amps each.
- All circuits are fully power-limited and meet the UL Power Limiting Requirements effective May 1, 1995, using fuseless technology.

## Auxiliary Outputs

- Resettable four-wire smoke detector power @ 500 mA.
- Nonresettable power @ 500 mA.
- Two fully programmable (activate from Common Alarm, Trouble, Supervisory, Process Monitoring or Comm. Fail) Form-A relays.
- Option module adds two fully programmable (activate from Common Alarm, Trouble, Supervisory, Process Monitoring or Comm. Fail) Form-C relays.

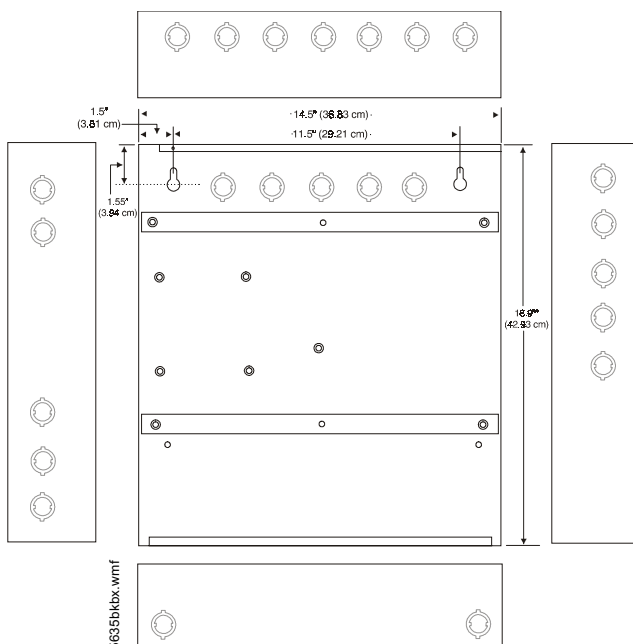
## Compatible Devices, EIA-485 Port

Model	Description
<b>LED-10N</b>	Ten-zone Remote Annunciator. Mounts to 3-gang electrical box. <i>Requires LED-10IM.</i>
<b>AFM-16A</b>	Annunciator Fixed Module, 16 Alarm LEDs, Common Trouble LED. Mounts to 4-gang electrical box.
<b>LDM-32</b>	Graphic Annunciator Interface Module.
<b>ACM-8R</b>	Remote Form-C relay module. Provides eight mappable, Form-C relays driven by EIA-485. <i>Requires ABS-8R.</i>

**NOTE:** For more detailed information on **Compatible EIA-485 Devices** for use with the SFP-1024, please refer to the data sheets for the **LED-10N** (DN-5846), **AFM-16A** (DN-3440), **LDM Series** (DN-551), or **ACM-8R** (DN-3558) data sheets.

## Cabinet Specifications

The cabinet is gray 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. **Door:** 17.11" H x 14.71" W (43.46 cm H x 37.374 cm W). **Backbox (below):** 16.90" H x 14.50" W x 4.50" D (42.93 cm H x 36.83 cm W x 11.748 cm D). **Trim Ring:** 20.020" H x 17.620" W (50.85 cm H x 44.75 cm W).



## PRODUCT LINE INFORMATION

### Model Description

<b>SFP-1024</b>	Ten-zone, 24 volt, Fire Alarm Control Communicator (includes backbox, 2X transformers, 6 Amps of NAC power, technical manual, and a frame & post operating instruction sheet).
<b>SFP-1024E</b>	Same as SFP-1024 with 230 VAC, 50 Hz transformer.
<b>LED-10IM</b>	LED-10N Remote Annunciator Interface Module.
<b>NAC-REM</b>	Notification Appliance (Signal) Circuit, Relay Expander Module. Adds 2 NACs and 2 Form-C Relays.
<b>CAC-10F</b>	Class A Converter Module. Converts Class B Initiating Device Circuits (zones) and standard Notification Appliance Circuits to Class A.

<b>PK-1024</b>	Upload/download utility includes: programming software (Three 3.5" disks, IBM compatible, high density) and instruction manual.
<b>PRT-24</b>	Printer Interface Module. Provides an EIA-232 printer output. Includes cable, DB9F and DB25 adapter.
<b>DP-1024</b>	Internal Dress Panel ( <i>required for Canadian applications</i> ).
<b>ABS-8R</b>	Metal enclosure for mounting ACM-8R module.
<b>MCBL-7</b>	DACT phone cords, 7 ft./2.13 m long, ( <i>two required</i> ).
<b>BB-17</b>	UL listed battery backbox. Required for batteries up to 18 A.H.
<b>PS Series</b>	Batteries. SFP-1024 charging circuit is 7 – 17 AH. Refer to the PS Series data sheet (DN-1109) for ordering information.

The chart below shows UL listed receivers compatible with the SFP-1024:

Format # (Addresses 16 & 42)	Osborne Radionics							
	Ademco 685 (1)	Silent Knight 9000	ITI CS-4000 (3)	FBI CP220FB	Hoffman Models 1 & 2	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	Ademco Contact ID	✓			✓	✓		✓

### 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.

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