SP40S-D



Kingfisher Company, inc.

Features:

- Multi-use applications—The system can function as an evacuation system, an emergency messaging system, and an employee notification system
- Fire code applications—The system is listed under UL 2572 for MNS, UL Standard 864, 9th edition delivering supervised audio and voice messaging with strobes and notification appliance circuits (NAC) for visual alerting
- Economic OSHA applications—The system is OSHA 1910.165 compliant; this means that it <u>does not</u> require reliability inspections every two months, or the required spare parts inventory
- Wide ranging applications—from small to large facilities
- Contact closure message activation
- 40 watts of supervised audio power
- Speaker outputs: 25V or 70.7V power limited
- Connectivity of optional speaker splitter modules
- Dual-tone tone generator with: Code 3 Tone and Slow Whoop for alerting of system trouble.

Description:



KCi's Emergency Communications System (ECS) is an In-Building MNS for fire alarm, emergency communications and voice evacuation with 24 VDC battery back up. Designed for Department of Defense facilities to meet the UFC requirements for automatic alarm audible shutoff after 10 minutes, the SP40S-D includes a 10 minute timeout feature.

The ECS, which meets UL 2572 requirements for MNS, interfaces with a building fire alarm system (FAS) to provide a complete In-Building MNS. An integral part of the fire system, the ECS can control all audio and visual notification appliances for both fire and MNS and reports trouble and supervisory signal through the FAS. Supervised voice speakers controlled by the ECS can be used for both fire and emergency communication applications.

The ECS single channel system is capable of delivering 40 watts of supervised high fidelity audio power and 2 amps of supervised 24 VDC synchronized strobe power. It comes standard with an on-board digital voice messaging system with 8 standard messages, a hand-held microphone for fire messages, power supply/battery charger and numerous additional features. A dedicated MNS microphone (ECS-MIC) will be utilized for live voice messages for emergency communications. The Emergency Communications System is expandable to 5280 watts utilizing the ECS-80/4 (80 watts and 4 amps of strobe power), the ECS-160 (160 watts) or ECS-320 (320 watts) supervised audio power boosters. All models available in 115 VAC or 220 VAC.

Features (continued):

- Audio power can be expanded by connecting to optional audio power boosters
- KFSPB-80/4 80 Watt Supervised Audio Power Booster with 4 Amp
- of Synchronized Strobe Power
- KFSPB-160 160 Watt Supervised Audio Power Booster
- KFSPB-320 320 Watt Supervised Audio Power Booster

Voice Messages

- Complies to NFPA-72 requirements
- Supervised NAC speaker and strobe circuits
- Live microphone override
- 5 digitally pre-recorded MNS voice messages
- 3 digitally pre-recorded fire voice messages
- User selectable pre-tones for fire messages
- Flexible, field-programmable messaging capabilities

Strobe Inputs and Activation

- 2 Amps of 24 VDC supervised strobe power with built-in sync protocol. Power limited.
- Strobe output is selectable for control of sync protocol or non-sync operation
- Strobe terminals have pass thru capability for sync or non-sync operation
- 24 VDC supervised and synchronized strobe power can be expanded to meet the requirements of the installation via connecting to optional KCi power boosters.

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Live & Pre-recorded Message Announcement

- Supplied with 8 pre-recorded emergency messages
- Capable of in-field recording of all messages via 1/8" line level audio input jack
- On board Push-to-Talk Fire Microphone
- Dedicated MNS Microphone

Benefits and Advantages

- One Supervised, Multi-Function, Voice Fire Alarm/ Emergency Communications System
- Interfaces with addressable FAS
- Built in power for visual notification appliances e.g., Strobes
- Expandable for larger system requirements (with optional equipment)
- Controls audio and visual notification appliances for both fire and MNS
- Voice speakers can be used for both fire and emergency communication applications
- Reports trouble and supervisory signal for both the FAS and MNS

System Activation: Audio

- 70V or 25V input from the SPMNS
- 1 Volt input from SP4-RMX

System Activation: Strobe (KFSPB-80/4)

• 8 - 33VDC NAC input connected to the strobe input

Power Supply & Batteries

- Fully supervised patent pending circuitry always in effect
- Power limited circuitry
- Class D amplifiers
- Internal battery charger and power supply
- Required batteries fit inside the enclosure (sold separately)
- KFSPB-320 requires four 12 VDC, 12 AH batteries
- KFSPB-160 and KFSPB-80/4 require two 12 VDC, 12 AH batteries

Outputs

- KFSPB-320 has four 80 watt speaker output circuits
- KFSPB-160 has two 80 watt speaker output circuits
- KFSPB-80/4 has one 80 watt speaker output circuit and two 2 amp strobe circuits (4 amps total)
- Supervised Audio Speaker outputs: 70V or 25V field selectable (all boosters must be either 70 V or 25 V)
- Expansion output (supervised, 24VDC at .5A in alarm condition used for connecting multiple boosters
- DC output (unsupervised for optional splitter power). Each speaker circuit (four for the KFSPB-320, two for the KFSPB-160, one for the KFSPB-80/4) can connect to speaker splitters

Approvals & Compliance

- Approvals: UL 2572 for MNS, UL Standard 864, 9th edition, UL Standard 1711
- OSHA 1910.165 and ADA Compliant

Mechanical Specifications:

| KFSPB-160, KFSPB-80/4: Dimensions: Weight: Finish: Door Lock: | 21" H x 16" W x 6" D (wall mount) 36 lbs. (without batteries) Red exterior enclosure 211 key-lock |
|---|--|
| KFSPB-320: Dimensions: Weight: Finish: Door Lock: | 36" H x 24" W x 6" D (wall mount) 80 lbs. (without batteries) Red exterior enclosure 211 key-lock |
| Technical Specifications: | |
| Powered by: | 120VAC, 3.8A, 60 Hz input |

| Powered by: | KFSPMNS Models 240 VAC, 2.5A, 50-60 Hz |
|--|---|
| Standby current draw: | 120mA per amplifier board |
| Alarm current draw: | 9 Amps per amplifier board KFSPB-80/4 and KFSPB-160 have one amplifier board KFSPB-320 has two amplifier boards |
| System Frequency Response: Signal to Noise Ratio: Dynamic Range: Total Harmonic Distortion: | Voice 400 Hz - 6.5 kHz > 70 dB > 65 dB 2% |

| 98026 | KFSP40S | Emergency Communication Panel, 40 Watt- 120VAC Single-Channel System, 40 Watts Audio Power, 2 Amps Strobe Power, Eight (8) Standard Messages, <u>Red Enclosure</u> . Requires two (2) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
|-------|--------------------|---|
| 98527 | KFSP40S-B | Emergency Communication Panel, 40 Watt- 120VAC Single-Channel System, 40 Watts Audio Power, 2 Amps Strobe Power, Eight (8) Standard Messages, <u>Black Enclosure</u> . Requires two (2) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
| 98537 | KFSP40SE | Emergency Communication Panel, 40 Watt- 220VAC Single-Channel System, 40 Watts Audio Power, 2 Amps Strobe Power, Eight (8) Standard Messages, Red Enclosure. Requires two (2) batteries (purchase separately). Batteries over 12AH require separate enclosure. |
| KCi # | Model # | ECS ACCESSORIES |
| 98351 | KFAM-SP40S- SMK | Message Kit- after-market, standard eight (8) messages |
| 98352 | | Message Kit- after-market, programmed eight (8) messages |
| 98353 | KFAM-SP40S- NBT | Narrowband Signal Tone Kit- after-market |
| 98531 | KFSPB-160 | RED, Audio Power Booster, 160 Watt, 120VAC- 120VAC Supervised Audio Power Booster, Two (2) 80- Watt Circuits, <u>Red Enclosure</u> , Requires two (2) 12V batteries (purchased separately). Batteries over 12A require separate enclosure. |
| 98533 | KFSPB-160E | RED, Audio Power Booster, 160 Watt, 220VAC- 220VAC Supervised Audio Power Booster, Two (2) 80- Watt Circuits, <u>Red Enclosure</u> , Requires two (2) 12V batteries (purchased separately). Batteries over 12A require separate enclosure. |
| 98541 | KFSPB-160E-B | BLACK, Audio Power Booster w/Strobe Power, 160 Watt, 220VAC- 120VAC Supervised Audio Power Booster, Two (2) 80-Watt Circuits, Four (4) Amps Strobe Power (2 Circuits), <u>Black Enclosure</u> , Requires tv (2) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
| 98027 | KFSPB-80/4-R | RED, Audio Power Booster w/Strobe Power, 80 Watt, 120VAC- 120VAC Supervised Audio Power Boost One (1) 80-Watt Circuit, Four (4) Amps Strobe Power (2 - 2 Amp Circuits), <u>Red Enclosure</u> , Requires two (2) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
| 98542 | SPB-80/4E-B | BLACK, Audio Power Booster w/Strobe Power, 80 Watt, 220VAC- 220VAC Supervised Audio Power Boo er, One (1) 80-Watt Circuit, Four (4) Amps Strobe Power (2 - 2 Amp Circuits), <u>Black Enclosure</u> , Requires two (2) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
| 98551 | KFSPB-320-R | RED, Audio Power Booster, 320 Watt, 120 VAC-120 VAC Supervised Audio Power Booster, Four (4) 80-Watt Circuits, <u>Red Enclosure</u> , Requires four (4) 12V batteries (purchased separately). Batteries over 12AH require separate enclosure. |
| 98571 | KFSP4Z-A/B | Audio Splitter - two (2) zone Class A or four (4) zone Class B |
| 98572 | KFSPMB4Z | Mounting Bracket- for 98571 |
| 98573 | KFSPRM | Remote Microphone- red plate |
| 98574 | KFSPRM-B | Remote Microphone- black plate |
| 98575 | KFSP-COA | C.O. Port Adapter |
| 98576 | KFSP4-RMX | Remote Microphone Expansion Module- for connection of up to three (3) 98573 remote microphones |
| 98577 | KFSP4-APS | Addressable Paging Splitter- for access to individual or multiple speaker zones via telephone, and contro selectable paging and background music |
| 98578 | KFSP4-TZC | Telephone Zone Controller- auto programmable, provides telephone paging (all call or selected zones) |
| 98579 | KFTZC-USB | Programming Cable- for telephone zone controller |
| 98580 | KFSP-SVC | Supervised Volume Control- for telephone zone controller |
| 98581 | KPNACIM | Notification Alarm Circuit Interface Module- converts fire alarm control panel NAC voltage output to appro priate signal for activation of emergency communication panel |
| 98582 | KFSP4-LOC-SB | Local Operator Console- surface mount (can be mounted up to 2,000 feet away from emergency commu cation panel) |

| KCi # | Model # | ECS ACCESSORIES |
|-----------|---------------|--|
| 98583 | KFSP4-LOC-FB | Local Operator Console- flush mount (can be mounted up to 2,000 feet away from emergency communica- tion panel) |
| 98584 | KFSP4-LOC-KIT | HVAC Emergency Cutoff Switch Kit- for local operator console |
| 98585 | KFEOLK | End of Line Resistor Kit- 8 Resistors, UL Listed |
| 98586 | KFEOLK-EM | End of Line Resistor Kit- 32 Resistors, UL Listed |
| 74131 | BC1R211 | Battery Cabinet- (24-1/4"H x 24-1/4"W x 8-3/4"D), with 211 lock |
| 74134 | BC1R30 | Battery Cabinet- (24-1/4"H x 24-1/4"W x 8-3/4"D), with CAT-30 lock |
| 99960 | BBS-211 | Backup Battery System, includes Battery Cabinet with (2) 12v 55Ah Batteries, 211 lock |
| 99961 | BBS-30 | Backup Battery System, includes Battery Cabinet with (2) 12v 55Ah Batteries, PK625/Cat 30 lock |
| 98026-DTS | | Specification Data Sheet |

Kingfisher Company, inc., products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Kingfisher Company, inc., standard terms and conditions



Keypad for Voice Message Selection located inside SP40SD Microphone located inside SP40SD