



*Kingfisher Company, inc.*

**SP40S-D**

## 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 does not 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

**Kingfisher Company, inc.** 81 Old Ferry Road - Lowell, MA 01854  
Phone: 978-596-0214 Fax: 978-596-0217 [www.kfci.com](http://www.kfci.com)

## Mechanical Specifications:

### **KFSPB-160, KFSPB-80/4:**

**Dimensions:** 21" H x 16" W x 6" D (wall mount)  
**Weight:** 36 lbs. (without batteries)  
**Finish:** Red exterior enclosure  
**Door Lock:** 211 key-lock

### **KFSPB-320:**

**Dimensions:** 36" H x 24" W x 6" D (wall mount)  
**Weight:** 80 lbs. (without batteries)  
**Finish:** Red exterior enclosure  
**Door Lock:** 211 key-lock

## Technical Specifications:

**Powered by:** 120VAC, 3.8A, 60 Hz input  
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:** Voice 400 Hz - 6.5 kHz

**Signal to Noise Ratio:** > 70 dB

**Dynamic Range:** > 65 dB

**Total Harmonic Distortion:** 2%

## ORDERING INFORMATION

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 (purchased separately). Batteries over 12AH require separate enclosure.
<b>KCi #</b>	<b>Model #</b>	<b>ECS ACCESSORIES</b>
98351	KFAM-SP40S-SMK	Message Kit- after-market, standard eight (8) messages
98352	KFSP40S-PMK	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 12AH 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 12AH 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 two (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 Booster, 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 Booster, 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-B	BLACK, Audio Power Booster, 320 Watt, 120VAC-120VAC Supervised Audio Power Booster, Four (4) 80-Watt Circuits, <u>Black Enclosure</u> . Requires two (2) 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 control of 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 appropriate 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 communication panel)

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98583	KFSP4-LOC-FB	Local Operator Console- flush mount (can be mounted up to 2,000 feet away from emergency communication 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

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Keypad for Voice  
Message Selection  
located inside SP40SD

Microphone located  
inside SP40SD

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