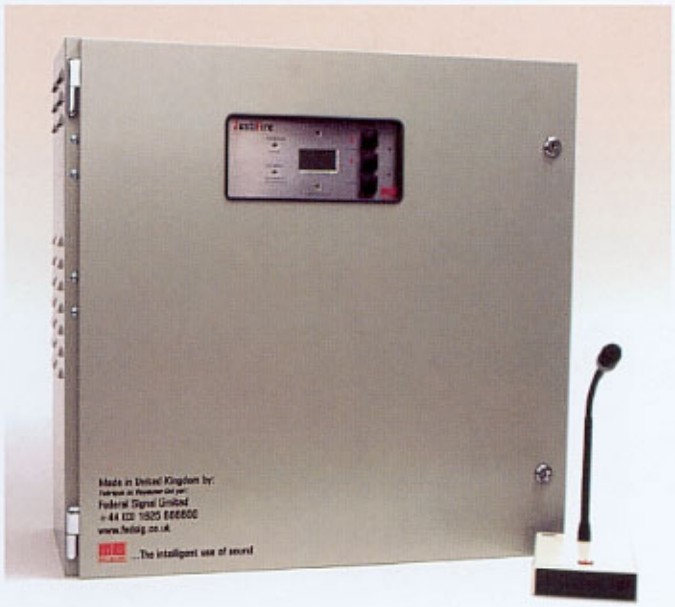
MILLBANK JustiFire

Single channel, 4-Zone Voice Alarm and Evacuation System



Features

- Proven software package
- Designed for BS5839: Pt.8 and BS EN 60849 compliance
- Four zone, single channel
- 4 analogue inputs for 0dB or 100V line
- 4 message stores
- Modular design
- 85% efficient 250W class-D amplifiers
- Silent DC monitoring of loudspeakers circuits
- CE compliant

JustiFire is the ultimate compact and cost effective solution for single channel, four-zone broadcast BS5839 part 8, and BS EN 60849 compliant voice alarm systems.

One of the major problems with small size PA/VA systems is the heat generated by the amplifiers, which eventually reduces the batteries life. The JustiFire overcomes this problem with the use of the new Millbank Class-D amplifier, allowing significant savings on maintenance costs.

Another key feature is the LED/LCD display panel which shows the system status and provides access to the event log.

As the extension of an existing Public Address System, JustiFire has the ability to monitor its audio inputs. With its silent DC monitoring of the loudspeaker circuits it provides 100% line fault detection.

JustiFire is another Millbank modular product designed to make servicing fast and easy.

These features, together with the fact that JustiFire requires very little installation space, combine to deliver major cost benefits and advantages for end-users.

Applications

• Small office blocks • Warehouses • Factories • Retail units • ....

Architects' and Engineers' Specification

Integrated Voice Alarm and Evacuation System for BS5839: Pt.8 and BS EN 60849 compliance. Wall mounted in a compact enclosure. Includes: 250W maximum load, single channel, 4 zone coverage, 4 internal message stores (40s per message), silent loudspeaker circuit DC monitoring, 4 analogue audio inputs (0dBm or 100V line), 4 alarm inputs plus common de-latch.

JustiFire

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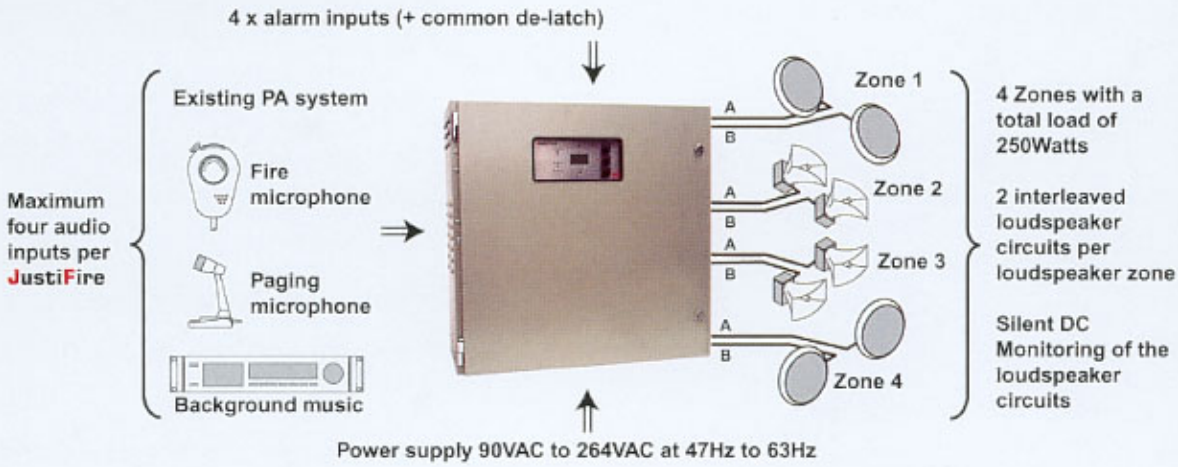
Typical JustiFire PA/VA installation



Brief specifications

- For BS5839: part 8 compliant systems
- Digital Signal Processor for signal switching, filters, levels and signal generators
- Programmable cascade priority for all paging and alarm inputs
- Dry contact output for remote fault status reporting
- Silent and continous DC monitoring of loudspeaker circuits to detect open circuit, short circuit and earth leakage
- Front panel Liquid Crystal Display showing system status, fault display and event log
- Non volatile log of maintenance and fault events
- Keypad to allow system interrogation and fault accept/ clearing.
- Power supply: 90VAC to 264VAC at a frequency of 47Hz to 63Hz
- Compact single wall mounted enclosure

Alarm input main features

- 4 x Alarm inputs plus common de-latch
- Selectable as dry contact inputs or voltage reversal with optional End Of Line resistor for fire panel use
- Each input triggers a digital stored voice message, up to 40 seconds long (speech 6kHz bandwidth)
- 4 x message stores with programmable priority and chime
- Voice messages can be one-shot, continuous, or intermittently repeating

Audio output main features

- Class D amplifiers (84% to 89% efficiency) for a maximum load of 250W with integral battery.
- Four zone coverage A & B interleaved
- Total Harmonic Distortion lower than 1% overall (at 1kHz)

Audio input main features

- 4 x galvanically isolated analogue inputs
- Any input can be configured for 0dB (line level) or 100V line connection
- Input 1 is the default fireman's microphone and therefore has first priority.
- Inputs 2 to 4 have programmable cascade priority
- All inputs have programmable chime, selectable surveillance modes (30Hz, 20kHz or Wide Band)
- Each input has press-to-talk (PTT) access and can be programmed to be normally open or normally closed
- Up to 100mA at 24VDC available to power microphone stations
- "Access available" outputs based on system usage and priorities
- "Talk now" output

Included Features

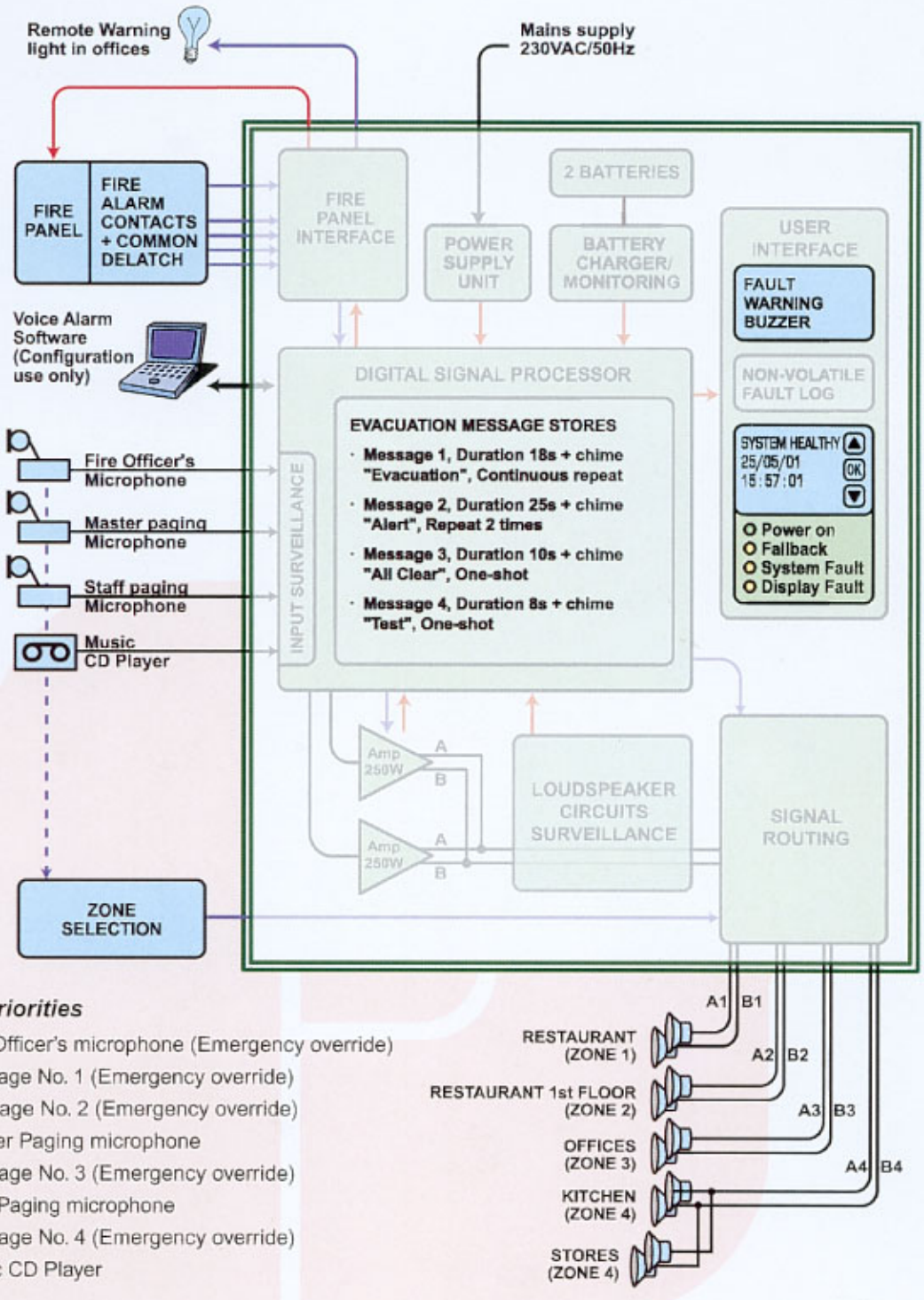
- Hot-standby amplifier
- System configured with Windows compatible software
- Modular design: all components can be removed and replaced on-site.
- The two integrated batteries allow the system to be on standby for 24 hours and then 30 minutes at full power (BS5839 Pt.8 requirement)

CE compliance is met when products are used in accordance with the relevant user guide

In the interests of product improvement we reserve the right to change specification or design without prior notice

JustiFire Application

Typical Restaurant Installation



Signal Priorities

P1 • Fire Officer's microphone (Emergency override)
P2 • Message No. 1 (Emergency override)
P3 • Message No. 2 (Emergency override)
P4 • Master Paging microphone
P5 • Message No. 3 (Emergency override)
P6 • Staff Paging microphone
P7 • Message No. 4 (Emergency override)
P8 • Music CD Player

JustiFire was designed according to British Standard BS 5839 part 8 and European Standard BS EN 60849.
Under no circumstances the use of Justifire alone gives a system full compliance to BS 5839 or BS EN 60849.

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APPROVAL CERTIFICATE NUMBER 033077

JustiFire Schematics

Single channel, 4-Zone Voice Alarm and Evacuation System

Power Supply
- 90VAC-264VAC at 47HZ-63Hz

Alarm Outputs
- 2 emergency volt-free contact outputs
- 2 volt-free contact outputs to report a fault to Fire Panel within 100 seconds

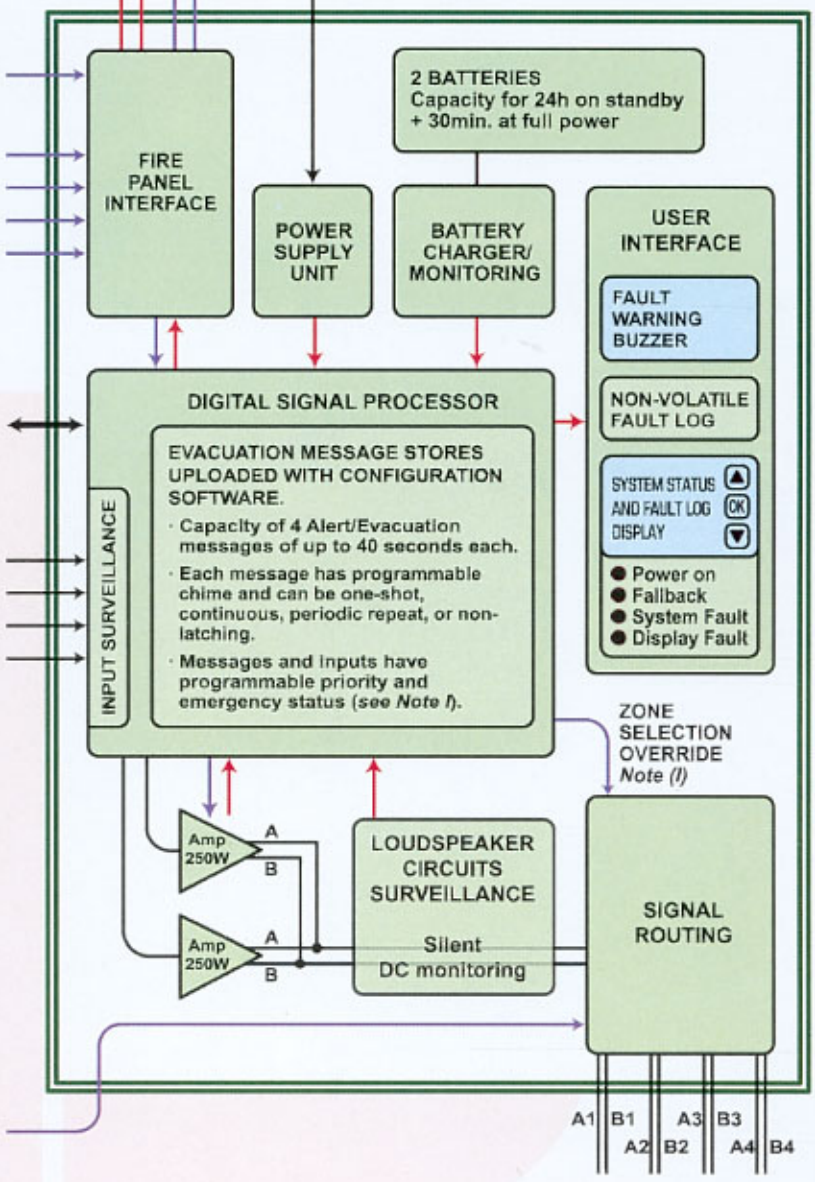
Alarm Inputs
- 1 common delatch input
- 4 alarm inputs selectable as dry contact inputs or voltage reversal with optional end of line resistor for Fire Panel Use. Each input triggers broadcast of one of the four Alert/Evacuation messages.

Configuration
- 1 Port for Voice Alarm configuration software (RS232)

Signal Inputs
- 4 galvanically isolated audio inputs with programmable Normally Open or Normally Closed Press-To-Talk (PTT) access.
- By convention input 1 is the Fire Officer's Microphone and has priority over all inputs and messages.
- All audio inputs have programmable chime and surveillance modes (30Hz, 20kHz or Wide Band)
- Any input can be hardware configured for 0dB (line level) or 100V line connection (VOX required)
- Up to 100mA at 24VDC is available to power microphone stations

Zone Selection
- 4 zone selection inputs

User Interface
- 1 Port for fault log download to PC
- 3 levels of user intervention:
  1) Read faults (General Public)
  2) Passcode protected Accept/ Clear faults (System user)
  3) Hardware protected system configuration (Maintenance)
- Date, Time and Passcode are set via user interface display



Miscellaneous
- Overall Total Harmonic Distortion of less than 1% at 1kHz
- Dimensions (H x W x D): 650mm x 600mm x 255mm
- Weight including batteries: 70kg

Notes
I) Emergency audio signals are automatically broadcast to all zones

Audio Outputs
- Capacity of 4 Zones
- Each zone with interleaved A and B loudspeaker circuits.
- Each loudspeaker must be fitted with a DC blocking capacitor.
- Maximum total load of 250 Watts