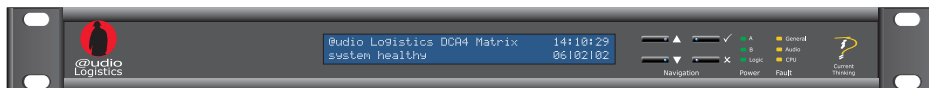




@udio
Logistics

DCA 4

Voice Alarm Matrix



Key Features:

- **Meets or exceeds EN54-16, BS5839pt8:2008**
- **Four local zones, networkable to eighty**
- **Six sounder circuit inputs plus reset**
- **Simplified rack cable management**
- **99 Entry event log**
- **PA and Background music functions integrated**
- **Six high quality messages available**
- **64 Network "virtual contacts"**
- **Comprehensive Service and Engineering functions**
- **Touch Screen front end available**

For most installations, this fixed-function networked voice alarm controller provides the ideal solution. From a single unit covering a few zones, to twenty units networked together forming a distributed 80 zone system, the DCA4's flexibility lends itself to most systems and topologies.

Overview

The DCA4 has four zone outputs, all-call fire microphone ports, a data control port for networking and configuration, high priority microphone ports, two digital message stores (allowing six messages to be held in hardware), a fire alarm interface, low priority zoned microphone ports, and three stereo music inputs.

The front panel LCD and keypad allows the selection of volumes, music sources and full configuration including fire cause and effects, with three levels of password protection; as well as providing access to the 99 entry event log.

In the unlikely event of processor failure the two firemans' inputs can still access the system zones on an "All Call".

Fire Alarm Interface

The fire alarm interface is compliant with BS5839pt8:2008; its six inputs can be directly connected to reverse-monitored sounder circuits. In line with the standards a separate reset line is required to de-latch the message triggers. For complete disaster recovery, the fire alarm should be connected locally to the zones that the matrix controls; secondary causes-and-effects, such as alert messages, can then be distributed around the network using virtual contacts. Built-in synchronisation means clear, intelligible messages even in difficult environments and from multiple sources.

All messages on the matrices are stored as 16 bit Windows .wav format files, simple software is provided to up-load these messages to the Flash memory within the controller, where they are check-summed and continuously monitored.

The fire interface may also be controlled via the serial port on each matrix for greater system integration.

Service and Maintenance

Voice Alarm systems require regular system testing, the DCA4 allows TEST messages to be directed to specific zones, or a WALK TEST can be initiated, saving noise pollution when commissioning systems. There is also an optional service date function which will place the system in fault if the service date is exceeded.

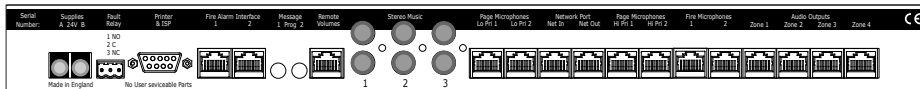
Remote monitoring and logging or email on fault options are also available.

DCA 4

Voice Alarm Matrix



Audio
Logistics



Connections

The use of Cat5 patch leads reduces the build labour on all systems and allows easy colour coding of functions, the power and music inputs use industry standard connectors for ease of replacement.

Technical Specification

Audio Performance

Matrix

Configuration	5x4
THD+N	<0.01%
Bandwidth	40Hz 26KHz +0-3dB

Message store

Stores	2
Memory	16Mb
Sample depth	16bit
THD+N	0.05%
Bandwidth	0.45Fs
Sample Rates	11k025, 16K, 22k05, 32K, 44k1
Messages	3 per store variable length

Outputs

Zones	4
Level	0dBV
Type	Electronically balanced

Fire Alarm Interface

Inputs	7 (6 alarm 1 RESET)
Type	24V opto-isolated sounder type
Connector	RJ45x2 (break out board supplied)
Fault	Relay output, open on Fault

Power Supply

Voltage	18 -36V DC
Current	90mA @24V
Inputs	2 off
Connector	2.1mm DC Power

Standards Compliance

EMC	EN55103-1, EN55103-2
LVD	EN60065
Product Family	EN54-16

Audio Inputs

Fire Microphone	x2
Control Type	Contacts x 4
Connector	RJ45
Supply	24V 100mA
Audio	0dBV Balanced

Low priority Mic

Control Type	Logic x 4
Connector	RJ45
Supply	24V 100mA
Audio	0dBV Balanced

High Priority Mic

Control Type	Logic x 4
Connector	RJ45
Supply	24V 100mA
Audio	0dBV Balanced

Network port

Control Type	RS422
Connector	RJ45
Supply	24V 250mA
Audio	+4dBV Balanced

Music Port

Connector	Stereo Phono
Control	menu

Messages

Control	Network & Fire interface
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Monitor Tone

	22KHz -40dB
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Physical

Height	44.5mm (1u)
Width	483mm (19")
Depth	200mm
Weight	1400 g
Material	Stainless steel, extruded Aluminium
Colour	Natural / Black

All information believed to be correct at time of printing E&OE. Current Thinking operate a policy of continuous improvement; always confirm specification details before purchase.

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