



# DAU 30

## Voice Alarm System



### Key Features:

- **Meets or exceeds EN54-16, BS5839pt8:2008**
- **Dual 30W 100V line outputs**
- **Three emergency messages (Alert, Evacuate, Test)**
- **Simplified rack cable management**
- **Self contained wall enclosure**
- **PA and Background music functions integrated**
- **Emergency microphone input**
- **Fire Interface with silence and common fault output**
- **Silent DC speaker line monitoring**
- **Integrated batteries and charger to EN54-4**

### Overview

The DAU draws the minimum of current in standby conditions, drawing a minuscule 60mA quiescent current; allowing the use of 3.2AH commodity SLA batteries for full compliance with BS5839pt8.

Connection to a fire alarm system could not be simpler; Unity DAU has independent Alert and Evacuate inputs, which can be directly connected to reverse monitored sounder circuits. Once activated the fire alarm signals need to be de-latched by the reset input, for retrofit to systems with relays a protected 24V aux supply is available.

The speaker lines are monitored using a low current DC system, which is continuous, and works with the music playing. Faults reported are open, short and earth leakage. The use of DC monitoring allows all cable types (MICC and soft skin) to be used with the system as well as multiple spurs.

Music sources can be plugged directly into the DAU, and the level of this can be set using a remote DC volume control. When used with a paging microphone, the music "ducks" and restores gently after paging.

### Speaker Monitoring

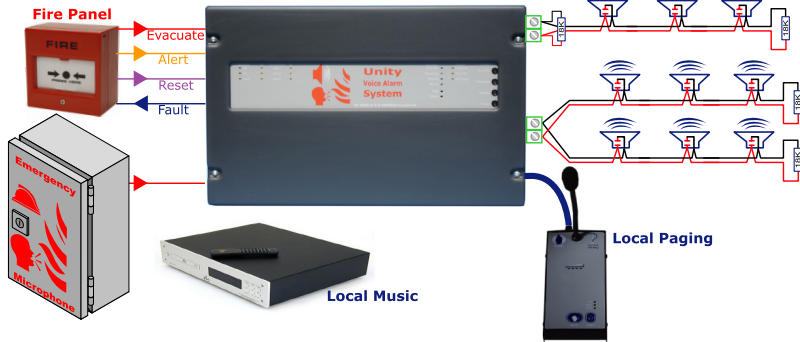
The speaker circuits are DC monitored for simplicity, allowing speaker circuits to be commissioned using a simple multi-meter. Each speaker requires a blocking capacitor, this is typically 1uF 250VDC for ceiling speakers and 2.2uF 250VDC for Horn Speakers.

### Messages

All messages are Windows™ WAV files, and are up loaded to the on board Flash memory using a specially developed PC application and a serial port (including USB types). The unit holds three messages, with a combined playing time of over 65 seconds.

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Unity

### Cables

Cables between the Fire Panel, Emergency Microphone and Speakers must be fire rated for standards compliance.

The system is designed to run with all CWZ rated cables including Mineral Insulated types, for maximum run lengths consult the chart.

Each speaker circuit can have up to two spurs as shown above for maximum flexibility.

The table shows the maximum cable run for each spur to achieve a drop of no more than 1dB as required by BS5839 pt 8.

Cable	Maximum	
	10W	30W
1.5mm Soft Skin	2000	500
2.5mm Soft Skin	4000	1000
1.5mm MICC	900	300
2.5mm MICC	1200	400

### Technical Specification

#### Audio Outputs

Circuits	2 off 30W RMS
Level	100V RMS (+40dBV)
Bandwidth	80Hz to 18KHz
Monitoring	DC end of line
Fault indication	Open, Short, Earth

#### Inputs

##### BGM

Sensitivity	-6dBV to +2dBV
Remote Pot Value	10KΩ

##### PAGE

Sensitivity	-6dBV to +4dBV
Ptt Type	5V to access

##### Fire Interface

Inputs	3 off isolated +12V to +33V (Alert, Evacuate, Reset)
Outputs	1 Relay (open on fault)

##### Fire Microphone

Audio Sensitivity	0dBV Balanced
Control Inputs	Monitored triggers (PTT, MSG1, MSG2, CNCL) 5V active.

#### Power Supply

Mains	230VAC ±10%
Battery	24V nominal
Charger Type	Constant Voltage
Charge Voltage	27.6V
Charge Current	1.1A
Aux Supply	1A
Quiecent Current	440mA (both Channels active) 60mA (Mains off)

#### Standards Compliance

EMC	EN55103-1, EN55103-2
LVD	EN60065
Product Family	EN54-16, EN54-4

#### Physical

Height	220mm
Width	430mm
Depth	120mm
Weight	8.5kg
Material	Zintec Painted, ABS lid
Colour	Light Grey/ Dark Grey

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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