

HONEYWELL DA2- SERIES BOWS BUILDING OCCUPANT WARNING SYSTEM

Honeywell DA2-Series is a Grade 3 Sound System for Emergency Purposes (SSEP) certified to AS4428.16. SSEP's or Building Occupant Warning Systems (BOWS) are an important component of a Fire System, as they are used to warn occupants of an emergency event within a building. Main applications for DA2 Series BOWS are commercial and residential buildings, retail centres, educational institutions temporary accommodation (e.g. hostels and hotels) and warehousing.

DA2-Series BOWS utilize digital amplification and tone generation to ensure superior audio quality and improved intelligibility. It has been designed to mobilise people in emergency situations via voice message and evacuation tones. DA2-Series BOWS operate in collaboration with fire detection control and indicating equipment (FDCIE) to provide an efficient Life Safety System.

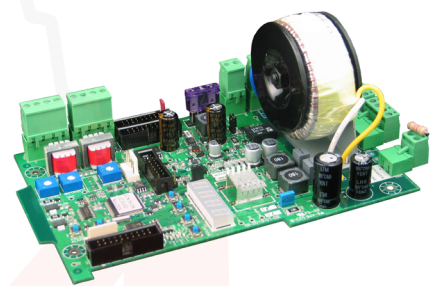
In non-emergency situations, DA2-Series BOWS can also be used for regular PA announcements, such as general-purpose broadcasts or system test messages.

DA2-BOWS gives three different power output options, 30W (DA2-30), 60W (DA2-60) and 120W (DA2-120). A complete system consists of at least one amplifier (DA2-30, DA2-60 or DA2-120) and one Speaker Amplifier Monitoring and Distribution Module (SAM-4). Additional optional components are DA Microphone Kit (DA-DISPF) and Custom Message Module (CMM-2).

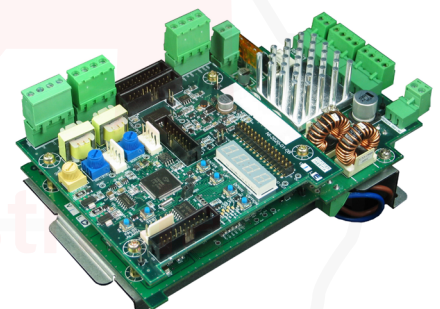
SAM-4 provides monitoring of the integrity of DA2-Series amplifiers and can also be used to distribute four speaker lines to up to 4 areas of a building. It provides separate monitoring to each output line and indicates their fault condition via onboard LEDs and fault relays. Each output can be disabled as required via onboard selection dip switches.

The optional DA-DISPF provides a CB-style microphone for PA announcements.

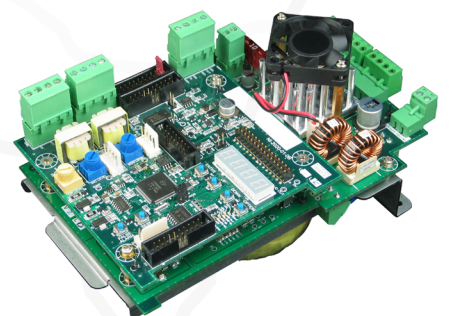
The optional CMM-2 is an expansion board, which adds two additional custom messages to the DA2-Series BOWS. Each custom message can be up to 20 seconds in length and can be recorded through the local PA microphone or another audio source, such as a PC.



DA2-30



DA2-60



DA2-120

FEATURES AND BENEFITS



- Up to 32 supervised speaker lines can be connected via SAM-4 modules (maximum of 8 SAM-4's)
- Separate monitoring of each output line for Short and Open Circuit with a 47K end-of-line resistor and indication of their fault condition via onboard LEDs and fault relays
- Each speaker line can be individually disabled and is isolated so as a S/C or O/C will not affect the other speaker output lines
- Easy to activate PA function, Microphone with 'Push to Talk' (PTT) button
- Quick commissioning, as no STI testing required for PA Microphone



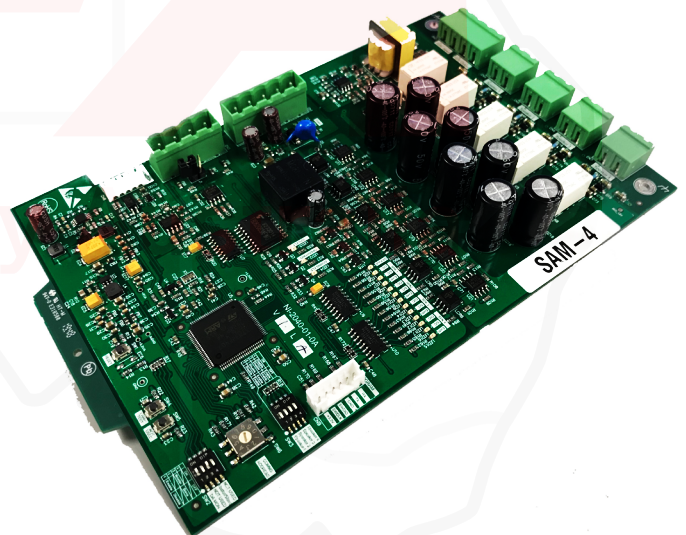
- AS4428.16 certified - Grade 3
- 17 pre-installed tones
- Custom message capability, via optional CMM-2, for on-site recording and storing of 2 custom speech messages
- Additional inputs to initiate Lock-down, Chime, Test and False Alarms speech messages
- Fault monitoring of the 100V output lines for open and short circuit



- High efficiency Class D amplifier designed for superior intelligibility and lower current consumption
- 2-wire connection to all Notifier Fire Alarm Control Panels
- Fault output relay for connection to non-Notifier occupant warning systems
- Background music & PA microphone analogue audio inputs
- Pre-installed test tones for ease of installation
- Master/Slave feature allows to connect up to 8 DA2's allowing for higher power outputs or additional strobe outputs
- Supervised amplifiers through SAM-4



DA-DISPF Microphone Kit

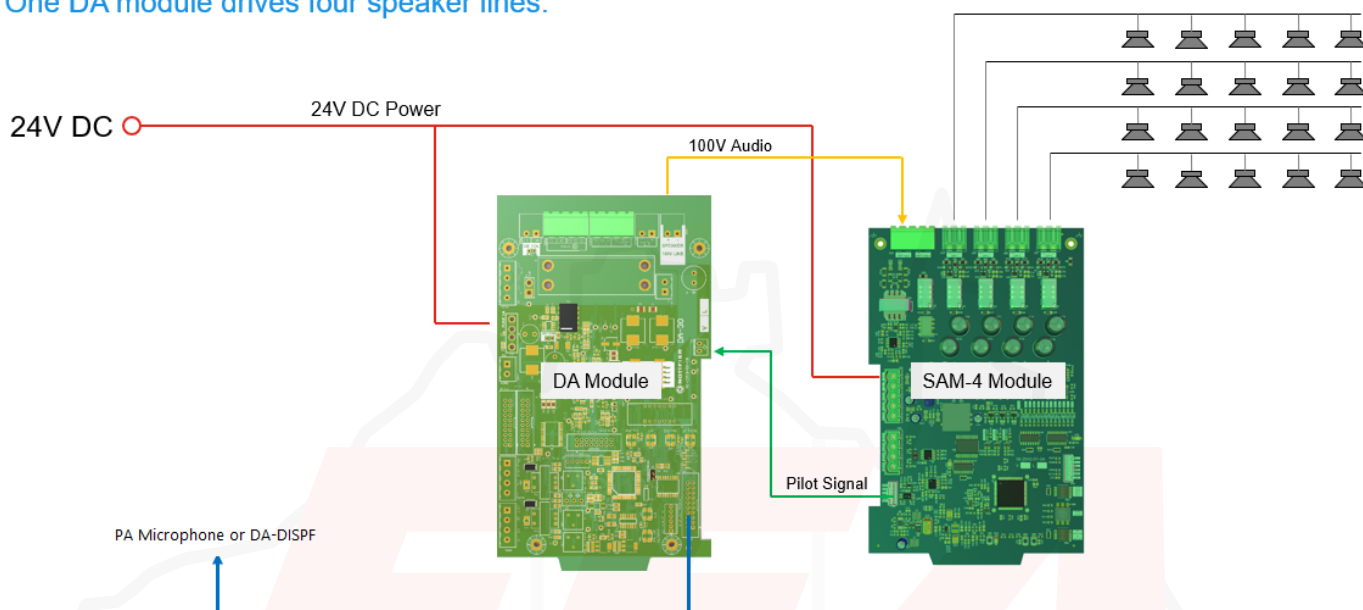


SAM-4

SYSTEM DIAGRAM

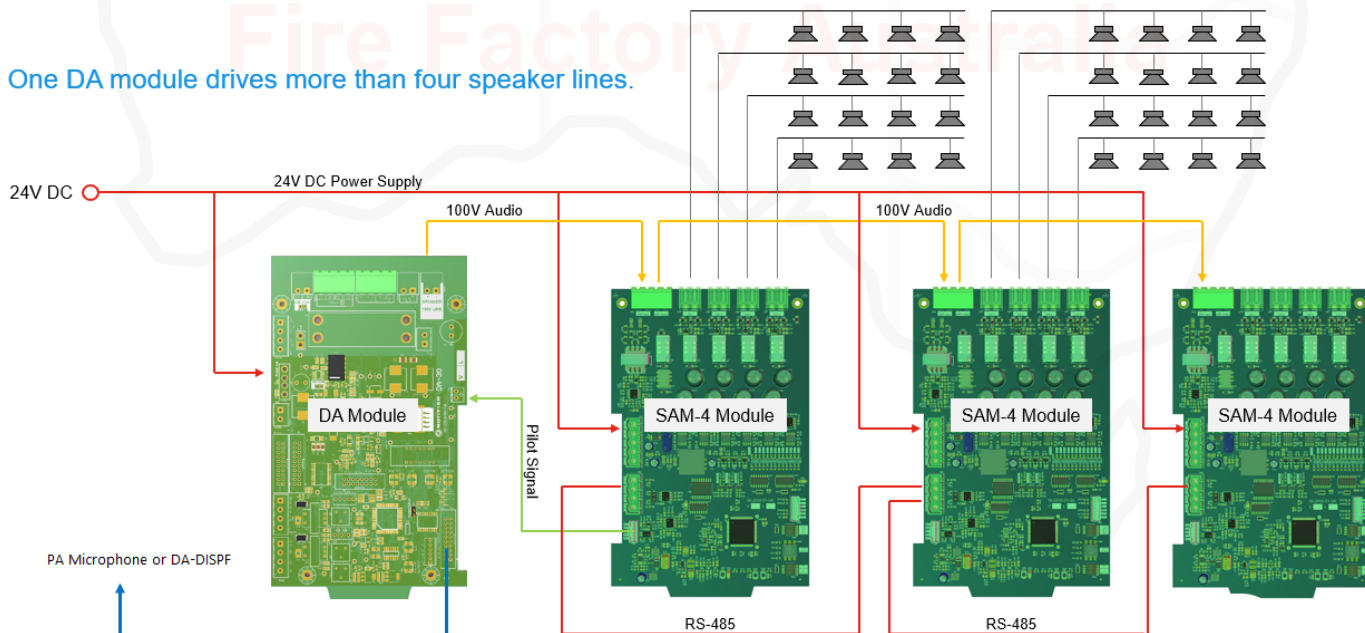
DA2-amplifier with 1x SAM-4 module

One DA module drives four speaker lines.



DA2-amplifier with multiple networked SAM-4 modules

One DA module drives more than four speaker lines.



TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATION

ITEMS	SPECIFICATIONS
STANDBY CURRENT (21.6-30 VDC INPUT SUPPLY VOLTAGE)	DA2-30: 70mA DA2-60: 170mA DA2-120: 180mA
ALARM CURRENT AT RATED OUTPUT ^{1,2}	DA2-30: 1.8A DA2-60: 3.5A DA2-120: 7.0A
OUTPUT VOLTAGE (DA2 ALL MODELS)	100 V _{RMS}

¹-System setup with PA Mic with, Pre-amplifier, full load and EOL connected across speaker terminals. Background music is disabled.

²- Outputting tone #16 with the rated power output down the speaker line activated via the CIE input.

SAM-4

ITEMS	SPECIFICATIONS
SUPPLY VOLTAGE	21.6 VDC TO 30 VDC
CURRENT CONSUMPTION (NORMAL)	37 mA 27.3 VDC
CURRENT CONSUMPTION (MAX)	51mA at 27.3V (All outputs in fault)
RATED AUDIO INPUT (POWER)	120W MAX
RATED AUDIO INPUT (VOLTAGE)	100V Max
RATED AUDIO OUTPUT POWER	100W PER OUTPUT (120W TOTAL)
END OF LINE RESISTOR	47k, 1 Watt

DA-DISPF

Mechanical Specification

ITEMS	SPECIFICATIONS
SIZE	110(W) X 230(H) X 36.2(D) MM

ORDERING INFORMATION

ITEMS	SPECIFICATIONS
DA2-30	30W BOWS amplifier main board c/w interconnect cable, EOL, stand-offs and screws.
DA2-60	60W BOWS amplifier main board c/w interconnect cable, EOL, stand-offs and screws
DA2-120	120W BOWS amplifier main board c/w interconnect cable, EOL, stand-offs and screws.
SAM-4	4-channel Speaker Amplifier Monitoring and Distribution Module module.
CMM-2	Custom Message Module c/w PC connect audio cable
DA-DISPF	DA-PA Microphone Kit on dished metalwork for DA2-SERIES BOWS

PRODUCT LINE INFORMATION

MESSAGE/CHIME LIST

PART NUMBER	DESCRIPTION
00	Blank
01	"Warning, the fire alarm has operated."
02.	"Emergency! Evacuate now!" 3 seconds - Male Voice
03	"Emergency! Evacuate using the nearest fire exit" 4 seconds - Male Voice
04.	"Emergency! Evacuate using the nearest fire exit" 4 seconds - Male Voice
05	"Warning, the fire alarm has operated." Stand by for further instructions" 6 seconds - Female Voice
06	"Emergency! Evacuate as directed" 3 seconds - Female Voice
07	Attention, attention! An emergency exists. Please follow the lock down procedure" 6 seconds - Male Voice
08	"The emergency warning system is being tested" 3 seconds - Male Voice
09	This has been a false alarm. You may return to your normal activity" 4 seconds - Male Voice
10	School bell sound - 3 seconds
11	Custom recording 1 from CMM-2
12	Custom recording 2 from CMM-2

TONES LIST

PART NUMBER	DESCRIPTION
00	Blank
01	Ramping T3
02	T3 - 520Hz
03	T3 - 800Hz
04	T3 - 970Hz
05	Ramping T3 - Reverse
06	T3 - 2860Hz
07	AS2220 Alert tone
08	AS2220 Evacuation tone
09	510Hz/610Hz Alternating
10	800Hz/970Hz Alternating
11	800Hz /970Hz Ramping @ 2Hz
12	800Hz/970Hz Ramping @ 1Hz
13	800Hz/970Hz Ramping @ 0.5Hz
14	420Hz 0.625s on 0.5s off
15	520Hz continuous tone
16	970Hz Continuous - Test tone
17	970Hz 0.5s on 3.5s off

AGENCY LISTINGS AND APPROVALS

The listings and approvals below apply to the devices specified in this document. In some cases, certain devices or applications may not be listed by certain approval agencies, or listing may be in process. Consult NOTIFIER for latest listing status.

- AS ISO 4428.16- Grade 3
- SAI Global License # SMK25312

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This document is not intended for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.



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FUTURE
IS
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WE
MAKE IT**

Honeywell