

Description

Sigcom's DAPB-100 is a distributed audio power booster that provides an additional 100 watts of audio output power to any new or existing voice evacuation system. The DAPB-100 is designed to work with any manufacturer's voice evacuation control panel including Sigcom's VECP series. Each DAPB-100 also provides an additional four Class A or Class B 25 V_{RMS} supervised speaker circuits with an option for 70 V_{RMS} with addition of a supplemental transformer.

Applications

Each DAPB-100 distributed audio power booster is designed for the upgrade or expansion of existing voice evacuation systems to add 100 watts audio power and 4 speaker circuits without replacing the system. It is also designed for new systems. The DAPB-100 is a self-contained appliance that can be installed near the voice panel or remotely in order to reduce wiring demands on the voice evacuation control panel. Multiple DAPB-100 boosters can be connected together in applications requiring additional audio power. The DAPB-100 amplifies the audio signals from the existing speaker circuits throughout a building, campus, military base or any other facility when additional audio power is required. Typical applications include places of assembly such as schools, theatres, places of worship, office buildings, restaurants, and dormitories.

Operation

DAPB-100 is extremely easy to add to a new or existing fire alarm/voice evacuation system and interfaces directly with both the voice evacuation control panel and any addressable or conventional FACP as needed. The DAPB-100 has its own power supply with built-in battery charger. The audio input is provided by connection to an existing 25 V_{rms} or 70 V_{rms} speaker circuit. For activation, the DAPB-100 connects to a standard reverse polarity NAC circuit and/or a supervised dry contact trigger.



Typical Applications

Expand New and Existing Voice Evacuation Systems

- Schools
- Theaters
- Places of Worship
- Healthcare Facilities
- Military Facilities
- Office Buildings
- Factories
- Restaurants
- Dormitories

Features

- Designed to add 100 Watts audio power to any voice evacuation system
- Simple out of the box operation
- 100 Watt high efficiency Class D digital amplifier
- Activated with 24 VDC polarity reversing NAC circuit and/or dry-contact
- Includes 4 fully supervised speaker circuits (Class A or B)
- Supports 25 V_{rms} speaker circuits and option for 70 V_{rms}
- Built in UL listed power supply with backup battery charger
- Listed for UL 864 9th Edition - Control Units and Accessories for Fire Alarm Systems
- Listed for UL 1711- Amplifiers for Fire Protective Systems

DAPB-100 Specifications

Standard Configuration; no options installed.

Specifications are subject to change without notice due to product improvements.

Interface

Inputs

| | |
|------------|---|
| Activation | Voltage, Polarity Reversal, Supervised, 9-30V _{DC} or Contact Closure, Supervised, 10K EOLR |
| Audio | 25 V _{RMS} Speaker Circuit 25K Impedance, 0.025 W loading or 70 V _{RMS} Speaker Circuit 70K Impedance, 0.07 W loading |

Outputs

| | |
|------------------|---|
| Audio | 100 W; 25 V _{RMS} (70 V _{RMS} Optional) |
| Speaker circuits | 1; power-limited to 60 W 3; power-limited to 25 W each with total power not exceeding 100 W 10 K Ohm EOLR continuously monitored |

Indicators

| | |
|---------------|--|
| LED | power (green) active (red) system fault (yellow) |
| LED bar graph | audio level; yellow 4-segment |

Power Supply

| | |
|-----------------------|---|
| Primary Power | 120 V _{AC} , 60 Hz; 5 A nominal |
| Internal Power Supply | 24 V _{DC} regulated |
| External Power Supply | 24 V _{DC} regulated; Listed for Fire Alarm Use |

Battery Backup – Standby Power

Use 24 V_{DC}, 10 AH battery for 24 hour normal operation and 15 minute operation in alarm with loss of primary AC power
Use larger capacity battery for longer operation with loss of primary AC power

Installation

surface or semi-flush mount;
between 16" O.C. studs

Enclosure

18⁵/₈"h x 14³/₁₆"w x 4"d; painted steel

Temperature Range

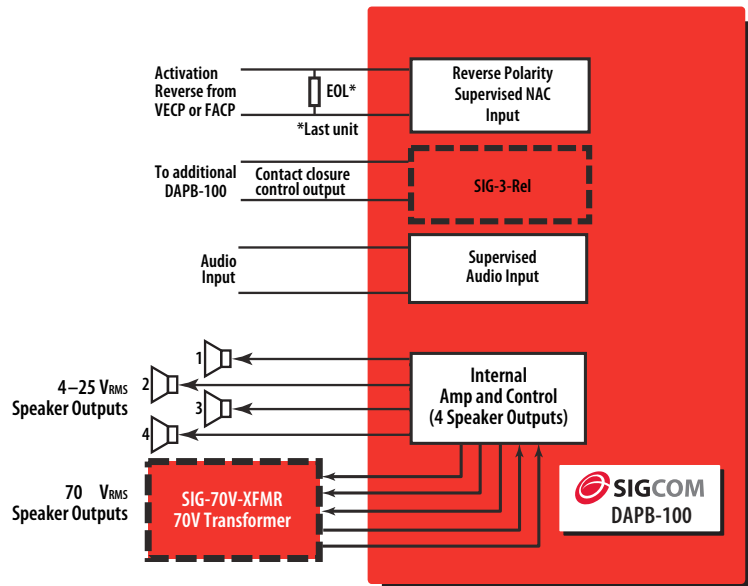
32°F to 120°F (0°C to 49°C)

Humidity

90% maximum, non-condensing

Approvals/Listings

ETL Listed for UL 864 9th Edition (Control Units and Accessories for Fire Alarm Systems) and UL 1711 4th Edition (Amplifiers for Fire Protective Systems)



Ordering Information

| Model | Description |
|--------------|--|
| DAPB-100 | Distributed Audio Power Booster - 100 Watts, 4 Speaker Circuits and Power Supply |
| SIG-3-REL | Common Alarm and Trouble output module - 3-Relay Card |
| SIG-70V-XFMR | 70 Volt Transformer – provides four 70 V _{RMS} speaker circuits |



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