

# **Distributed Audio Power Booster**

**DAPB-100** Devices

### **Description**

The 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 the VECP series. Each DAPB-100 also provides an additional four Class A or Class B 25 Vrms supervised speaker circuits with an option for 70 Vrms with addition of a supplemental transformer.

#### **Application**

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 selfcontained 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 DABP-100 has its own power supply with built-in battery charger. The audio input is provided by connection to an existing 25 Vrms or 70 Vrms speaker circuit. For activation, the DAPB-100 connects to a standard reverse polarity NAC circuit and/or a supervised dry contact trigger.



#### **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 Vrms speaker circuits and option for 70 Vrms
- 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

## **Typical Applications**

#### **Expand New and Existing Voice Evacuation Systems**

- Schools
- Healthcare Facilities
- **Factories**

- Theaters
- Military Facilities
- Restaurants
- Places of Worship
- Office Buildings
- **Dormitories**

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Represented by:



# **Distributed Audio Power Booster**

**DAPB-100** 

### Devices

#### **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-

30Vdc

or

Contact Closure, Supervised, 10K EOLR

Audio 25 Vrms Speaker Circuit

25K Impedance, 0.025 W loading

70 Vrms Speaker Circuit

70K Impedance, 0.07 W loading

Outputs

Audio 100 W; 25 Vrms (70 Vrms Optional)

Speaker Circuit 1; power-limited to 60 W

3; power-limited to 25 W each

audio level; yellow 4-segment

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 Power Supply

Primary Power 120 Vac, 60 Hz; 5 A nominal

Internal Power 24 Vdc regulated

Supply

External Power 24 Vdc regulated; Listed for Fire Alarm Use

#### Battery Backup - Standby Power

Use 24 Vdc, 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 18 5/8"h x 14 3/16"w x 4"d; painted

steel

Temperature Range

Humidity Approvals/ Listings

90% maximum, non-condensing ETL Listed for UL 864 9th Edition

(Control Units and Accessories for

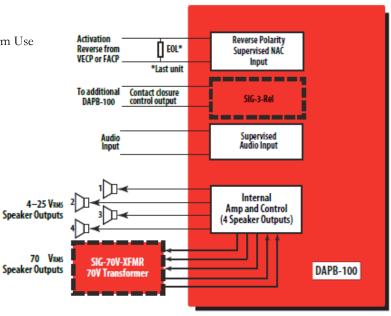
Fire Alarm

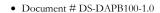
Systems) and UL 1711 4th Edition

(Amplifiers

for Fire Protective Systems)

32°F to 120°F (0°C to 49°C)





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