VDOT-MNS-100BAS

100 WATT VOICE EVACUATION PANEL - 4 SPEAKER CIRCUIT

Description

The Velocity VDOT-MNS-100BAS is a modular, voice evacuation system ideally suited as an extension to an existing fire alarm system.

The VDOT- MNS-100BAS accommodates virtually any host alarm system, integrating as quickly and easily as a single #primary connection to a NAC output from the FACP. Many of the pre-set configurations will provide a complete voice evacuation capability right out of the box. Additional activation is by a single supervised input from a dry contact closure.

Numerous audio inputs are provided for maximum control flexibility and system access. A supervised remote microphone input is provided for central placement for emergency personnel.

A high priority supervised audio input is provided that overrides lower priority activations. The system also provides a 25 VRMS speaker-level input to allow power booster operation (see below). An additional non-supervised audio input provided; this lowest- priority input can be used for paging or background music as application needs dictate.

A highly efficient, Class D, 100 Watt digital audio power amplifier drives four selectable power-limited speaker circuits in the standard configuration. All speaker circuits are continuously supervised, even while activated. Each speaker can be configured for Class A or B wiring without loss of speaker circuits. Amplifier output voltage is 25 VRMS standard.

An optional transformer can be configured for 70 VRMS output for longer speaker runs with low signal loss.

An audio power boost option is also available for additional output power in multiples of 100 Watts.

The MNS-100BAS provides simple field programming of a variety of its features. These can be as simple as its response to contact closure inputs, or to the setting of internal SIP switch banks. It meets the stringent requirements of NFPA 72, UL864 9th edition, and UFC 4-021-01.

Applications

The power supply, battery back-up and charger are provided internally to the VDOT-MNS-100BAS. LED indicators are provided for POWER (green), ACTIVE (red), and SYSTEM FAULT (yellow).



The VDOT-MNS-100BAS is housed in a 14-3/16”W x 18-5/8”H x 4”D surface or semi-flush mounted painted steel enclosure. Available options for the MNS-100BAS include a remote microphone, a 70 VRMS transformer, common alarm and trouble.

Features

- 100 Watt, highley efficient Class D digital audio amplifier
- 4 Speaker Circuits (Class A or B wiring)
- Reverse polarity supervised FACP-NAC primary input
- Supervised dry contact primary activation input
- 2 Standard messages preloaded, ready to go
- Prioritise contact closure activation inputs
- Remote microphone input
- Aux audio inputs for paging, background music and
- remote system control.

Other Optimal Accessories

VDOT-70V-XMFR	70 Volt Transformer Kit
VDOT-MNS-REL	Common Alarm and Trouble 3-Relay Card
VDOT-MNS-APB	Auido Power Booster
VDOT-DVS-RM/B	Supervised Remote Microphone

NOT TO BE USED FOR INSTALLATION PURPOSES.
Velocity reserves the right to make changes at any time without notice in prices, colours, materials, components, equipment, specifications and models and also to discontinue models.

Description of Other Optional Accessories

70 VRMS Speaker Output

Compensate for audio power loss due to long speaker runs by installing the VDOT-MNS-70V-XFMR 70 Volt Transformer. The transformer is contained in a small external cabinet that connects to the VDOT-MNS-100BAS. All speaker circuits maintain active supervision and provide full output power. For more information, refer to the VDOT-MNS-70V-XFMR data sheet.)

Common Alarm and Trouble Relays

The VDOT-MNS-3-REL 3-Relay Card provides 3 Form-C relay contact outputs to signal external devices in the system.
The three outputs are typically used as Active and Trouble indicators, with the third used for other applications.
(For more information, refer to the VDOT-MNS-3-REL data sheet.)

Audio Power Booster

Need more power?
The VDOT-MNS-100APB Audio Power Booster panel can be added to act as a supervised remote 100 Watt power amplifier with its own 4 speaker outputs. As many VDOT-MNS-100APB cabinets may be connected to the VDOT-MNS-100BAS as needed to provide full facility coverage. In this configuration, the supervised audio input accepts a 25 VRMS typical speaker-level input, and broadcasts it to its speaker outputs. (For more information, refer to the VDOT-MNS-100APB data sheet.)

Specifications

Standard Configuration; no options installed. For specifications on options, please refer to their individual data sheets. Specifications are subject to change without notice due to product improvements.

Interface	
Inputs	
Primary Activation Supervised	1; reverse polarity NAC; 9-30 VDC,10 mA; steady, non-coded, or 1; supervised dry contact closure rated for 24 VDC, 10 mA
Secondary activation	8; dry contact closure rated for 24VDC, 10 mA
Auxiliary Audio	600 to 3600 Hz freq. response 1; supervised, with override priority (control station), 1 VRMS audio input 1; unsupervised, lowest priority (paging and background music), 1 VRMS audio input Audio
Remote Microphone	1; 1 VRMS audio input; power-limited 24 VDC, 100 Ohms max line resistance
External control/comm.	RS-232/RS-485, selectable
Outputs	
Audio	100 W; 25 VRMS (70 VRMS Optional)
Speaker circuits	1; power-limited to 60 W 3; power-limited to 25 W each; total power not exceeding 100W 10KOhm 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 VAC, 60 Hz; 5 A nominal
Internal Power Supply	24 VDC regulated
Extrenal Power Supply	24 VDC regulated; listed for Fire Alarm Use
Internal Battery Backup	
Capacity	10 A-Hr
Standby Mode	24 hours
Alarm Mode	15 minutes
Recharge Time	48 Hours
Installation	surface or semi-flush mount; between 16” O.C. studs;
Enclosure	Indoor 18-5/8 ”h x 14-3/16 ”w x 4”d; painted steel
Temperature Range	32°F to 120°F (0°C to 9°C)
Humidity	90% maximum, non-codensing;
Approvals / Listings	ETL Listed for UL864 9th Edition (Control Units and Accessories for Fire Alarm Systems) and UL 1711 4th Edition (Amplifiers for Fire Protective Systems)

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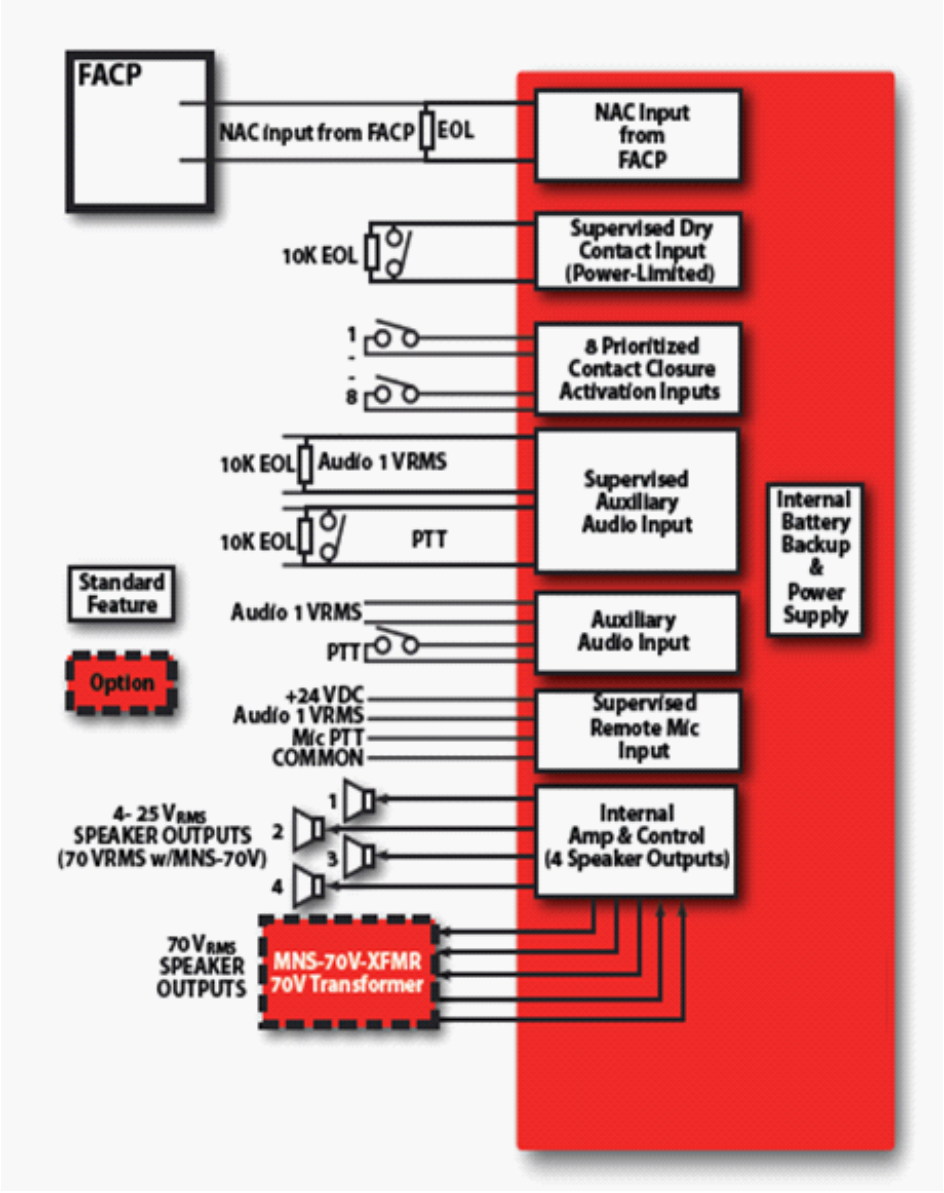
Panel Layout



All specifications are subject to change without any notice.
For more information, contact with VELOCITY.

Velocity
DETECTION OVER TIME

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