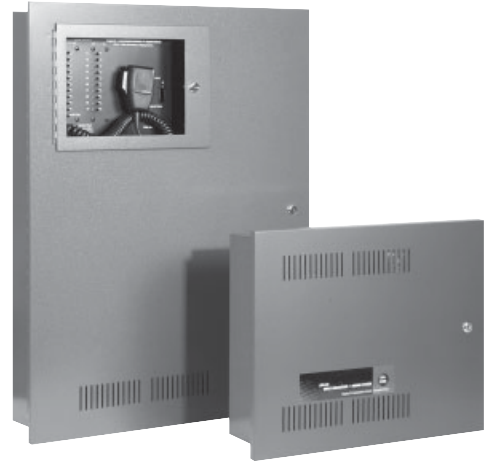


DVS+ Voice Evacuation Control Panels - 50 to 200W



Overview

Effective life safety for many buildings requires improved methods of emergency notification and occupant response. Recognizing this, national, state and local authorities are implementing new requirements for Emergency Voice Alarm systems. Combining audible tones, pre-recorded instructional messages and live voice has proven to enhance occupant awareness, understanding and reaction during an emergency. SigCom's DVS+ EVAC panels are fully equipped, pre-engineered solutions, designed to meet these requirements.

Description

DVS+ panels include all of the functionality and features required to provide a complete notification and emergency response system. Designed to provide life safety during a fire emergency, DVS+ performs equally well for notification and control of other emergency and non-emergency conditions. Using a modular design DVS+ panels can be configured to meet the specific needs of an installation. Modularity allows modification and expansion to suit changing needs within a building or system.

The DVS+ can provide between 50 and 200 Watts of audio power, field selectable for 25/70.7Vrms operation. Automatic amplifier backup can protect any installed amplifier. Audio output power can be distributed over as many as 20 supervised speaker circuits, field programmed for Class A (Style Z) or Class B (Style Y) wiring. Each amplifier incorporates SigCom's Intelligent Overload Protection to avoid panel damage without disconnecting the load and disabling the system.

A supervised reverse polarity circuit (NAC), dry contact input or a serial interface can provide the means for DVS+ activation and control. Alarm signals can be automatically or manually directed to selected speaker circuits or to all circuits simultaneously. Eight selectable tones and 2 standard voice messages can be field configured for type, sequence and duration. A total of 14 messages of 30 second duration can be pre-recorded when the DVS-DM8 board is used. Facilities are provided for dual simultaneous messaging. An integral, supervised (Push-To-Talk) microphone is supplied, with the capability for an optional supervised remote microphone. The DVS+ will accept an auxiliary audio input from a telephone page system or similar source.

Every DVS+ panel is pre-engineered, pre-assembled and fully tested.

Features

- 50 To 200 Watts audio power
- Up to 20 supervised speaker loops
- Class A or B wiring, field selectable
- 25 or 70.7 Vrms, field selectable
- 8 selectable alarm tones
- Up to 14 pre-recorded messages, 30 sec. each
- Dual channel capability
- Remote microphone option
- Integral amplifier back-up option
- Integral auxiliary audio input option
- Intelligent amplifier overload protection
- Modular design flexibility



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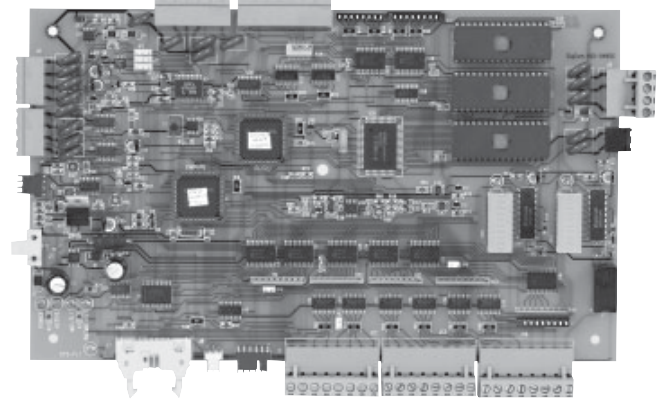
Components

Every DVS+ panel consists of a Controller board, at least one Amplifier module and the enclosure. Optional Zone Board(s) will increase the available speaker circuits. DVS+ may be powered by an integral 24 VDC supply or an external, UL Listed 24 VDC supply.



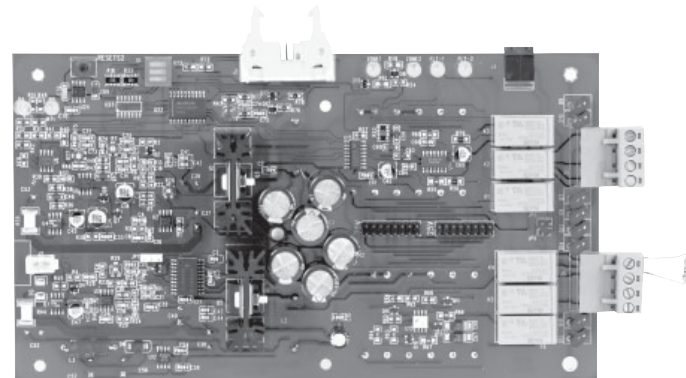
DVS-CM1 Controller Board

The DVS-CM1 Controller Board is the heart of the system, providing control and interface circuits to operate the DVS+ panel. The Controller Board incorporates the primary digital message circuit that generates emergency alarm/alert tones and pre-recorded messages. An integral, supervised local microphone can be used during system standby for normal paging or to override the pre-recorded messaging during alarm. Announcements can be made selectively to individual zones or “ALL CALL”. The DVS-CM1 provides the interfaces for a DVS-DM8 Auxiliary Digital Message Board, an auxiliary audio input and the optional Remote Microphone.



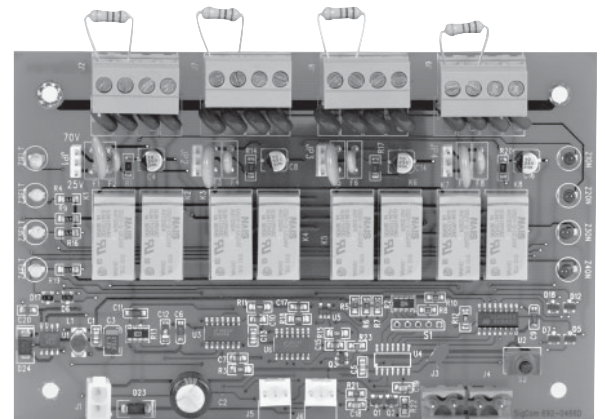
DVS-AM50 Amplifier Module

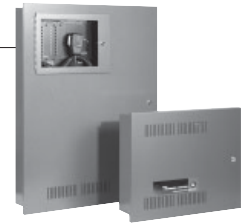
Each DVS-AM50 Amplifier Module is capable of delivering a single 50 Watt output or dual channels of 25W each, 25/70.7 Vrms (programmable). Amplifier outputs can be direct wired (Style Y or Z programmable) to system speakers or multiple zones via DVS-ZM4 Zone Boards. A DVS+ panel can include up to four 50W Amplifier Modules for a total of 200 Watts of audio power. A backup Amplifier can be configured to backup any other amplifier.



DVS-ZM4 Zone Board

DVS-ZM4 Zone Boards connect to DVS-AM50 amplifiers, providing four supervised speaker circuits per board, Style Y or Z, programmable. Multiple Zone Boards can be interfaced with a single 50 Watt output or one 25 Watt output channel, provided the total speaker load does not exceed the rated audio output level. The maximum speaker load per circuit cannot exceed 15W. Speaker circuits are activated by signal from the DVS-CM1 Controller to the corresponding Zone Board(s). Circuits may be selected automatically or manually, individually or by “ALLCALL”.



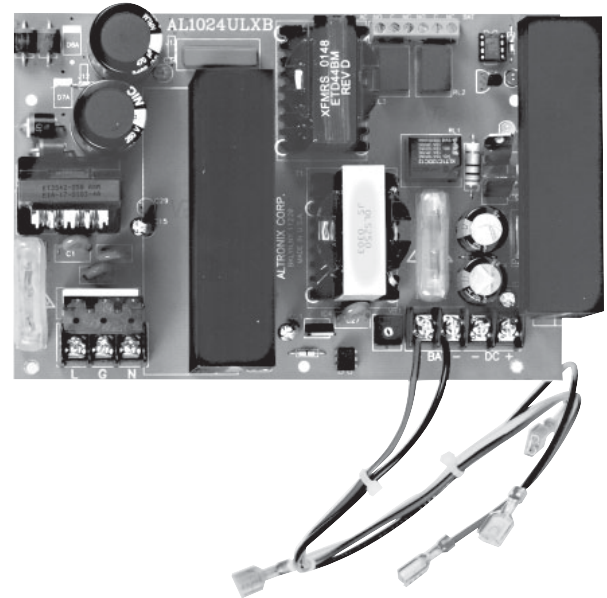


DVS-DM8 Auxiliary Digital Message Board

The Auxiliary Digital Message Board expands the number of available pre-recorded messages, per panel. A total of 7 additional messages can be programmed and selected by external input. Each message can be up to 30 seconds in duration. The DVS-DM8 is required for dual message systems where two messages are to be played simultaneously on different zones.

DVS-PS10 Integral Power Supply/Battery Charger

The DVS-PS10 module mounts within a DVS+ enclosure, for use on all DVS+100 and DVS+150 panels. DVS-PS10 will deliver 8 amp of continuous, filtered and regulated supply current, 10 amp during alarm @ 24 VDC non-power limited output. Short circuit and thermal overload protected. Integral battery charger can be used with sealed lead acid or gel type battery. Switchover from primary power to battery is seamless, with no voltage drop. Maximum battery charge current is 3.6 amp.



PS-10 External Power Supply/Battery Charger

DVS+150 and DVS+200 panels require PS-10 external power supplies. Consult the factory for panel configuration support.

Switches and Indicators

FRONT COVER	INDICATORS	SWITCHES
	GREEN: power	(see DVS-ZS10)
	YELLOW: system fault	
	RED: (a) system active (solid)	
	(b) fault diagnostics (coded)	
	SIGNAL METERS: audio output levels	
BOARDS & MODULES	INDICATORS	SWITCHES
DVS-CM1	YELLOW: local mic fault	RESET: restart after programming
	YELLOW: remote mic fault	
	YELLOW: primary digital message flt	
DVS-AM50	GREEN: power	RESET: clear fault after repair
	YELLOW Z1: speaker circuit 1 fault	
	YELLOW Z2: speaker circuit 2 fault	
	YELLOW AMP 1: fault within amp 1	
	YELLOW AMP 2: fault within amp 2	
	YLW OVERLOAD 1: amp 1 overdrive	
	YLW OVERLOAD 2: amp 2 overdrive	
DVS-ZM4	YELLOW 1-4: speaker circuit(s) fault	
	RED 1-4: speaker circuit(s) active	
DVS-ZS10	WHITE: zone select indicators	ZONE SELECT: select zone active
		ALL CALL: all zones active
DVS-PS10	GREEN: VAC input power status	
	YELLOW: VDC output power status	

Specifications

DVS-PS10 VAC Supply	120 VAC, 60 Hz (DVS-PS10 and DVS-50AM) Minimum wire size 14 AWG, 600V insulation rating
DVS-PS10 DC Supply Voltage	Regulated 24 VDC, UL Listed for 20.4 – 26.4 VDC
DVS-PS10 VDC Output Current	8A continuous, 10A during alarm. Short circuit protected.
DVS-PS10 Battery Backup	Maximum charge current 3.6A. Use sealed lead acid or gel type battery
Audio Output Power	25 Watt per channel, 50 Watt per amplifier
Frequency Response	600 Hz to 3600 Hz
Audio Output Voltage	25 Vrms or 70.7 Vrms, field selectable
Speaker Circuits	Maximum 25 Watt audio load per amplifier output. Maximum 15 Watt audio load per zoned speaker loop. Class A or Class B wiring, field selectable Power Limited, 18 AWG minimum wire size 10K, 1 Watt end of line resistor
Activation Inputs	Polarity Reversing (NAC) 10–30VDC, 10Ma max. Extended NAC output 5A @ 30 VDC Dry Contact input maximum 2mA operating current 10K, 1/4 Watt end of line resistor
Auxiliary Audio Input	1 Vrms maximum audio input level 10K ohm input impedance
Remote Microphone	1 Vrms supervised audio input level 24 VDC power limited
Dimensions	31" H x 24" W x 4.75" D
Listings/Approvals	NFPA Standard 72 National Fire Alarm Code NFPA Standard 101 Life Safety Code UL 864 Control Units for Fire Protective Systems UL 1711 Amplifiers for Fire Protective Systems

Ordering Information

MODEL	DVS+ Emergency Voice Alarm Panels
DVS+ 50	50 Watts, 2 Zones (Style Y/Z), Mic, DMR, PS/BC w/ enclosure
DVS+ 100	100 Watts, 2 Zones (Style Y/Z), Mic, DMR, PS/BC w/ enclosure
DVS+ 150	150 Watts, 2 Zones (Style Y/Z), Mic, DMR, PS/BC w/ enclosure
DVS+ 200	200 Watts, 2 Zones (Style Y/Z), Mic, DMR, PS/BC w/ enclosure
MODEL	Expansion and Option Modules
DVS+ AM50	50 Watt, Dual Channel Amplifier
DVS+ ZM4	4 Zone Audio Output Module (Style Y or Z)
DVS+ DM8	Digital Message Expansion Board
DVS+ PS10	Internal Power Supply/Battery Charger Module
DVS+ RM	Remote Microphone



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