



The **DVS-25/50 Series Voice Evacuation Control Panel (VECP)** contains a state-of-the-art, high efficiency power amplifier for use in life safety applications. The **DVS-25/50 Series** includes features and options which provide outstanding performance and reliability while allowing simple installation. The **DVS-25/50P** can operate stand alone with its integral power supply. While the **DVS-25/50** is used in conjunction with, a UL listed power supply.

### Active Current requirements:

The **DVS-25** requires a maximum current of 1.5 Amps from a 24 VDC power supply.

A fully loaded 50-Watt **DVS-50** will draw 2.8 Amps from the supply.

The built-in power supply of the **DVS-25/50P** will handle **Full** (average and peak) power requirements.

If an external supply is being used, and the current requirements are needed, use the following formula:

$$I = 0.1 + ( 0.054 \times Pout )$$

Where **I** is the active current draw from the 24VDC supply in Amps.

And **Pout** is the total speaker load in Watts.

### Battery requirements:

If the integral power supply is used, the battery selection process is simple, put a pair of **12-Volt 7-AH** sealed lead-acid batteries in the cabinet, connect the wires and you're good-to-go.

This includes all power loads, and all standby time requirements from 24-Hour standby with 5-Minutes of alarm, to 60-Hours and 15-Minutes.

To calculate the exact battery required (if an external power supply is used), use the following formula:

$$C = ( 0.08 \times 24 ) + ( I \times 0.25 )$$

Where **C** is the battery capacity. **I** is the active alarm current calculated from the formula above.

If the external power supply's AC-Fail indicator (NC contacts) aren't used then the standby current in the formula goes from 0.08 to 0.20.

The above formula is for a **24-Hour** standby with **15-Minutes** in alarm, the old VECP standard. For different times, substitute the Standby time for the 24, and the Alarm time for the 0.25 (in hours).

### Note:

Since the NFPA-72 1996 edition, the requirement for the 15-minute alarm may be reduced to 5 minutes.

*“Where. . . used to notify all occupants automatically and simultaneously to evacuate the. . . premises. . .”*

*This change ('96' 3-12.5.2 / '99' 3-8.4.1.3.4.2), benefits the majority of the DVS-25/50 uses.*

The following chart shows the Backup Battery AmpHour requirements for various DVS systems (assuming maximum power), and Standby / Alarm times.

With integral supply(int.supply), external supply (ext.supply), and external supply (ext.no.battsaver) without AC loss sensing

Standby/Alarm Hrs / Mins	DVS-25P	DVS-25	DVS-25	DVS-50P	DVS-50	DVS-50
	int.supply	ext.supply	ext.no.battsaver	int.supply	ext.supply	ext.no.battsaver
24 / 5	2.4	2.1	5.0	2.5	2.2	2.5
24 / 15	2.6	2.4	5.2	2.9	2.7	5.6
60 / 5	5.6	5.0	12.2	5.7	5.1	12.3
60 / 15	5.8	5.2	12.4	6.2	5.6	12.8