

FireVAC IV

Emergency Voice Evacuation System

General

The FireVac®IV is a fully automatic combination fire alarm and emergency voice evacuation system. When it is combined with a Gamewell-FCI fire alarm control panel, it provides automatic and manual alarm signaling in compliance with the National Fire Alarm Code, NFPA 72.

The FireVac® IV is ideal for installations requiring voice evacuation in areas such as churches, cafeterias, auditoriums, etc. The power output available from the FireVac® IV is a cost-effective solution to smaller voice evacuation applications such as, assisted living facilities, dormitories, motels, and hotels, etc.

The unit provides 50 Watts of audio power at either 25 V_{RMS} or 70 V_{RMS} (requires the FVIV-X70).

The FireVac® IV offers eight field-selectable tones built-in as well as an internal microphone for voice paging. The system also has three programmable messages. The first and second messages may be changed via software download and can record up to 32 seconds long. The third message can be recorded via the system's own internal microphone and can record up to 49 seconds long.

The FireVac® IV is fully supervised for opens, short circuits, and ground faults on the loudspeaker appliance circuit. The system amplifier is continuously supervised. In addition, the amplifier is protected from damage by the short circuit disconnect feature built into the speaker circuit.

The optional FVIV-ZS provides the capacity to split the available 50 watt power output among four separate, independently activated speaker circuits. Each speaker circuit has its own switch for manual activation as well as an All-Call switch to turn on all four circuits at once. It mounts inside the main FireVac® IV cabinet.

As a further option, the FVIV-RM Remote Microphone station is available in its own cabinet. It can be mounted up to 5,000 feet away and connects to the FireVac®IV over shielded, four conductor, 18 AWG wire.



FireVAC IV

FEATURES & BENEFITS

- Compatible with any UL Listed fire alarm control panel
- Provides 50 watt power output
- 25 or 70.7 (optional) VRMS Class A Powerlimited operation
- Integral message repeater
- Optional FVIV-ZS provides four Style Y or Z (Class A or B) speaker circuits
- Auxiliary audio input
- Eight DIP-switch selectable tones
- ANSI Cadence
- March Code
- California Code
- Steady
- Alert Tone
- Hi-Lo
- ANSI Whoop
- Continuous Whoop

- Form "C" trouble and alarm relay outputs
- Remote microphone module for all-call paging
- Single channel operation

System Operation

The operation of a fire alarm initiating device (i.e. smoke detectors, manual stations, water-flow switches, etc.) connected to the fire alarm control panel will cause either a reverse polarity signal or a dry contact closure to be sent to the FireVac®IV. If the optional FVIV-ZS is installed, the fire alarm control panel will also provide up to four normally open dry contact outputs that will close to activate the appropriate speaker circuit. In response, the FireVac®IV will do the following.

- Sound an alarm tone (DIP switch selectable) over the speaker circuit(s).
- Produce a recorded message that will play in alternation with the selected tone.

Override both tone and pre-recorded message and broadcast voice commands from the local or remote microphones.

The FireVac®IV provides two separate messages that may be field-configured using the optional 7780 Program.

Optional Modules (FVIV-ZS)

Figure 1 shows the optional FVIV-ZS speaker circuit modules.

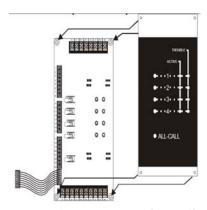


Figure 1 Optional Modules (FVIV-ZS)

The FVIV-ZS provides four separate, individually activated speaker circuits that is an ideal solution for installations that require zoned speaker circuit activation. The FVIV-ZS features a switch for the manual activation of each speaker circuit as well as an addition switch for "All-Call" paging.

The interface with the fire alarm control panel is achieved through normally open relays provided by the main control panel. The FVIV-ZS responds to closures across its input terminals to activate the appropriate speaker circuit.

FVIV-X70

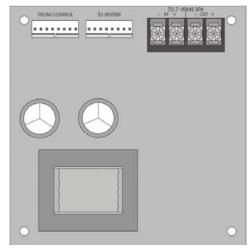


Figure 2 FVIV-X70

The FVIV-X70 optional module is used to convert the standard speaker circuit voltage output from 25 V_{RMS} to 70 V_{RMS} . This voltage output is useful in situations where the speakers' circuits must run for longer distances.

Note: Speakers at $70 \, V_{RMS}$ are not Class A Power-limited and must be separated from Class A Power-limited circuits by at least 1/4 inch.

FVIV-RM

Figure 3 illustrates the FVIV-RM remote microphone station.

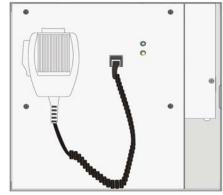


Figure 3 FVIV-RM

The FVIV-RM Remote Microphone Station enhances operation of the system by providing voice paging from a remote location up to 5,000 feet away. Only four wires (shielded, 18 AWG minimum) are required between the FireVac®IV and the FVIV-RM. The FVIV-RM is fully supervised by the FireVac®IV. Simply key the microphone to activate the Fire-Vac®IV in an "ALL-Call" fashion to page over all speakers.

The FVIV-RM is shipped complete with its own cabinet with dimensions of 10.1/4" H x 10.3/8" W x 3.1/8" D.

Ordering Information

150-00026: FireVac®IV, Emergency Voice Evacuation

System, 50 watts "Stand Alone"

150-00027: FVIV-50-ZS, Emergency Voice Evacuation

System, 4-channel, 50 watt total

151-00027: FVIV-RM, Remote Microphone Station

(one per system)

151-00028: FVIV-X70, Line Transformer, converts 25

VRMS speaker circuit(s) to 70 VRMS

151-00023: FVIV-ZS

151-00029: FVIV-B450, Zone Splitter, 4 Speaker

Circuits

200-90002: 7780, Programming Software to download or remove recorded messages

Figure 4 illustrates the FireVAC IV with the FVIV-RM assembly.

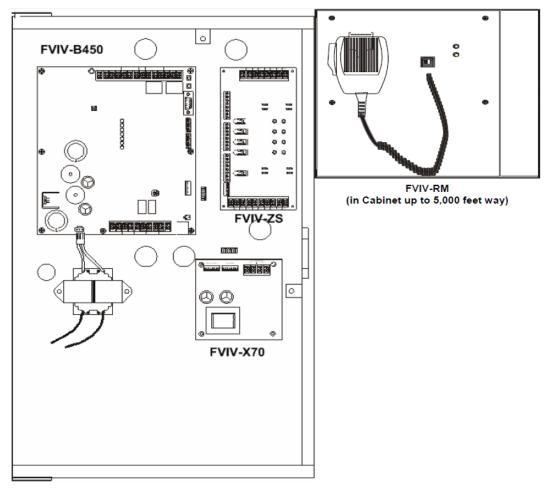


Figure 4 FireVac® IV Assembly

FireVAC IV Technical Specifications

SYSTEM

Operating Voltage: 120 VAC @ 60 Hz, 1.2 amp, or

230 VAC @ 50 Hz, 0.607 amp.*

Operating Temperature: 32° to 120° F (0° to 49° C) Relative Humidity: 10% to 85% at 86° F (30° C),

non-condensing

Note: *When you order, specify voltage requirements.

 Operating Current
 Supervisory
 Alarm

 FireVac IV
 0.140 amp.
 0.490 amp.

 FVIV-ZS
 0.045 amp.
 0.250 amp.

(All circuits active)

FVIV-RM 0.030 amp. 0.030 amp. **FVIV-X70** 0.010 amp. 0.065 amp.

Trouble & Alarm Relays 2.5 A @ 30 VDC resistive

Dimensions: Surface Mount

26 1/4"H x 14 1/2"W x 4"D (67 x 36.3 x 8.8 cm)

Flush Mount: 24 3/4"Hx14 1/2"Wx3 7/16"D

Shipping Weight: 37 lbs. (16.78 kg.)

temperature of 15 - 27°C/60 - 80°F.

TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at 0 $-49^{\circ}\text{C}/32-120^{\circ}\text{F}$ and at a relative humidity $93\%\pm2\%$ RH (non-condensing) at $32^{\circ}\text{C}\pm2^{\circ}\text{C}$ ($90^{\circ}\text{F}\pm3^{\circ}\text{F}$). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room

STANDARDS

The FireVAC IV is designed to comply with the following standard:

UL Standard: 864 9th Edition

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing sta-

UL Listed: S1949 CSFM: 7300-1703:0168 ISO 1000 Certification For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information

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