GWACC

Audio Command Center

Voice Evacuation Control Panel



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Description

Gamewell's **Audio Command Center (GWACC)** is a state-of-the-art, single- or dual-circuit (25 watts each) Emergency Voice Evacuation Control Panel (EVAC). It is expandable to 50 watts. The GWACC provides the ability to record five field-programmable messages (up to 60 seconds total message duration) with an integral commercial-grade emergency communications microphone or from an external audio source. Significant technological enhancements set the GWACC apart from other EVAC panels — these include full supervision in both active (alarm or music) and standby conditions, supervision of amplifier outputs, field wiring, message generator, all tone generators, and the microphone. The integral power supply is capable of charging up to 18 AH batteries, which can be housed in the GWACC cabinet.

The GWACC is suitable for use as an adjunct (slave or stand-alone) to most UL-Listed Fire Alarm Control Panels (FACPs). An optional 25 watt, 25 VRMS audio amplifier is available for system expansion to 50 watts (providing dual 25-watt speaker circuits) or as a secondary amplifier in jurisdictions requiring such backup. A 70.7 VRMS converter is also available for independently converting amplifiers to meet retrofit needs.

A host of field-programming options, including the capability of five custom messages (fire, tornado, evacuation, hazmat, non-fire, multi-language, etc.) make the GWACC the most versatile voice evacuation system available. Some suitable applications for the GWACC include schools, auditoriums, dormitories, theatres, restaurants, places of worship, lodging, office buildings, and factories.

Standard Features

- Integral 25 watt, 25 VRMS audio amplifier with single Style Z (Class A) or Style Y (Class B) speaker circuit (expandable to 50 watts using the **ACC-AAM25**).
- Modular design for max.system flexibility.
- Five Command Input Circuits (CMD) are available for activation by an FACP.
- Two command input circuits can be field-programmed for activation by a Notification Appliance Circuit (NAC) or contact closure.
- Three command input circuits activate on contact closure.
- Manual deactivation of speaker zones.
- ***Command inputs allow*:**
  - One 60-second message.
  - Two 30-second messages.
  - Three 20-second messages.
  - Four 15-second messages.
  - Five 12-second messages.
- Microphone time-out feature.
- Nineteen different system & diagnostic LEDs.
- Two Form-C trouble relays (System & AC Power Loss).
- *Optional equipment:* second amplifier; local playback speaker; and remote microphone.
- Integral digital message generator with standard, factory-prerecorded emergency evacuation message.
- Custom messages are field recordable, without the addition of add-on modules, using the integral microphone or audio input jack.
- Digital message may be field-selected for 3, 4, 6, 8, or infinite repeat.
- Built-in alert tone generators with steady, slow whoop, high/low, or chime tone capability.
- Field-selectable lead-in/trailing tone selection.
- Alert tone selection may be field-programmed to conform with ANSI S3.41 Audible Emergency Evacuation Signal (Temporal Pattern), per NFPA.
- Speaker zone control via CMD inputs/keypad.
- Dual-optically-isolated, trigger input circuits are independently field-programmable for activation by polarity reversal (host FACP NAC) or dry-contact closure.
- Zone 1 switch-programmable for All-Call operation.
- Integral diagnostic LEDs include: Power, System Trouble, Microphone Trouble, Message Generator Trouble, Tone Generator Trouble, Amplifier Fault, and others.
- Independent Form-C trouble relay allows FACP to monitor voice system while in active (alarm) state.
- Integral piezo provides local audible indication for troubles. All outputs are power-limited.
- Fully supervised in *Standby* and *Active* states, including integral microphone, amplifier output, message generator, speaker wiring, and tone generators.
- Independent amplifier supervision: current limit, audio level, short circuit protection.
- Auxiliary power output provides local power for addressable control modules when used to activate the GWACC.
- Compatible with all Gamewell FACPs, as well as other manufacturers' panels.
- Background music capability (requires AHJ approval) with total output power per amplifier reduced to 20 watts.

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A 150-Year Tradition

A Honeywell Company

Controls and Indicators

1. Power On *(green)*.
2. System Trouble *(yellow)*.
3. Message Generator Trouble *(yellow)*.
4. Tone Generator Trouble *(yellow)*.
5. Microphone Trouble *(yellow)*.
6. Record/Playback *(green)*.
7. Zone 1 (*green* = Active, *yellow* = Manual Deactivation).
8. Zone 2 (*green* = Active, *yellow* = Manual Deactivation).

Other System LEDs: Battery Trouble, Charger Trouble, Ground Fault, Speaker Circuit Trouble, and Amplifier Supervisory.

Ordering Information

GWACC	25 watt, 25 VRMS, emergency Voice Evacuation Control Panel (VECP) with integral commercial microphone, digital message generator, and single-/dual-channel Class A or Class B speaker circuit.
ACC-AAM25	Optional 25 watt, 25 VRMS Audio Amplifier Module with single Class A or Class B speaker circuit.
FC-XRM70	Optional 70.7 VRMS Converter Module *(one required per amplifier, consult factory for availability)*.
FC-RM	Optional Remote Microphone, includes backbox *(only one FC-RM per system)*.
FC-LPS	Optional Local Playback Speaker.
BAT-1270	Battery, 12 volt, 7.0 AH *(two required)*.
BAT-12120	Battery, 12 volt, 12.0 AH *(two required)*.
BAT-12180	Battery, 12 volt, 18.0 AH *(two required)*.

Module Features

ACC-AAM25

- **25 watt, 25 VRMS audio amplifier module.**
- Field-programmable for system expansion to 50 watts (providing dual 25-watt speaker circuits) or as a backup to the primary 25-watt amplifier where required.
- Provides single Class A or Class B speaker circuit.
- Utilizes plug-in-style terminal blocks for ease of service and maintenance.
- Fully supervised and power-limited.
- Diagnostic LEDs include: yellow "trouble" LED (cable fault, 70 VRMS fault, amp fault) and green "amp functional" LED.

FC-XRM70

- Converts 25 VRMS audio outputs to 70.7 VRMS for retrofit applications.
- Plugs directly on ACC-AAM25 module(s), allowing independent conversion to 70.7 VRMS.

FC-LPS

- Provides local digital message playback for user review of field-recorded custom messages.

Specifications

Electrical specifications

Command input circuits (CMD1 and CMD2):
Trigger input voltage 10.5 — 29 VDC. ***NOTE:*** *When programmed for reverse-polarity activation.*

Trouble contact rating: 2.0 A at 30 VDC (resistive), 0.6 A @ 125 VAC (resistive).

Auxiliary power output: Specific application power 24 V, 35 mA.

Primary (AC) power: 1.6 A maximum @ 120 VAC, 50/60 Hz.

Secondary power (battery) charging circuit:

- Supports lead-acid batteries only.
- Float-charge voltage: 27.6 V.
- Maximum charge current: 800 mA.
- Maximum battery charging capacity: 18 AH.

Cabinet dimensions

Door: 26.174" (66.482 cm) high x 15.780" (40.081 cm) wide x 1.125" (2.858 cm) deep. ***Backbox:*** 26.0" (66.040 cm) high x 15.5" (39.370 cm) wide x 4.75" (12.065 cm) deep, depth includes door.

Standards and Codes

The GWACC complies with the following standards: NFPA 72 National Fire Alarm Code; NFPA 101 Life Safety Code; UL 864 Standard for Control Units for Fire Alarm Systems; and UL 1711 Standard for Amplifiers for Fire Alarm Systems.

Application Examples

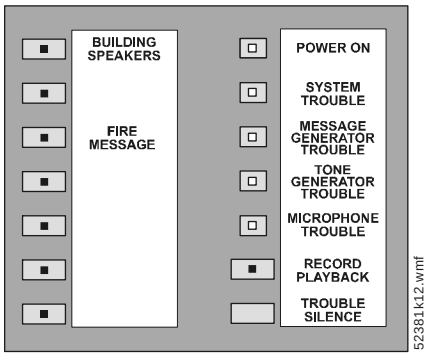
The GWACC is a voice evacuation control panel which can be used, with a variety of FACPs, to provide emergency audio messages. Two typical application examples follow.

One Speaker Circuit

Single output zone, single input circuit *(see Figure 1)*. A very basic application consists of one GWACC with one amplifier and a single speaker circuit. This configuration is suitable for small facilities requiring no more than 25 watts of output power. A single fire evacuation message will be generated during an alarm condition from the host FACP, or can be manually generated with a message push-button.

In this application example, the NAC from the host FACP is connected to CMD1. The CMD1 "out" terminals are then terminated with an end-of-line resistor for the FACP's Style Y NAC, or the terminals are wired back to the host FACP for a Style Z NAC. S3 DIP switches "1", "2", and "3" are set to OFF; this selection sends a 60-second message to the speaker circuit when the CMD1 input is activated. The S5 DIP switch "5" is set to OFF; this selection activates the CMD1 input by a reverse-polarity condition. CMD3, CMD4, and CMD5 inputs require end-of-line resistors.

In this application example, the system may also be **manually activated** from the keypad. Press the Building Speakers push-button, then press the Fire Message push-button. Alternately, use the microphone to make an announcement.



Keypad Example

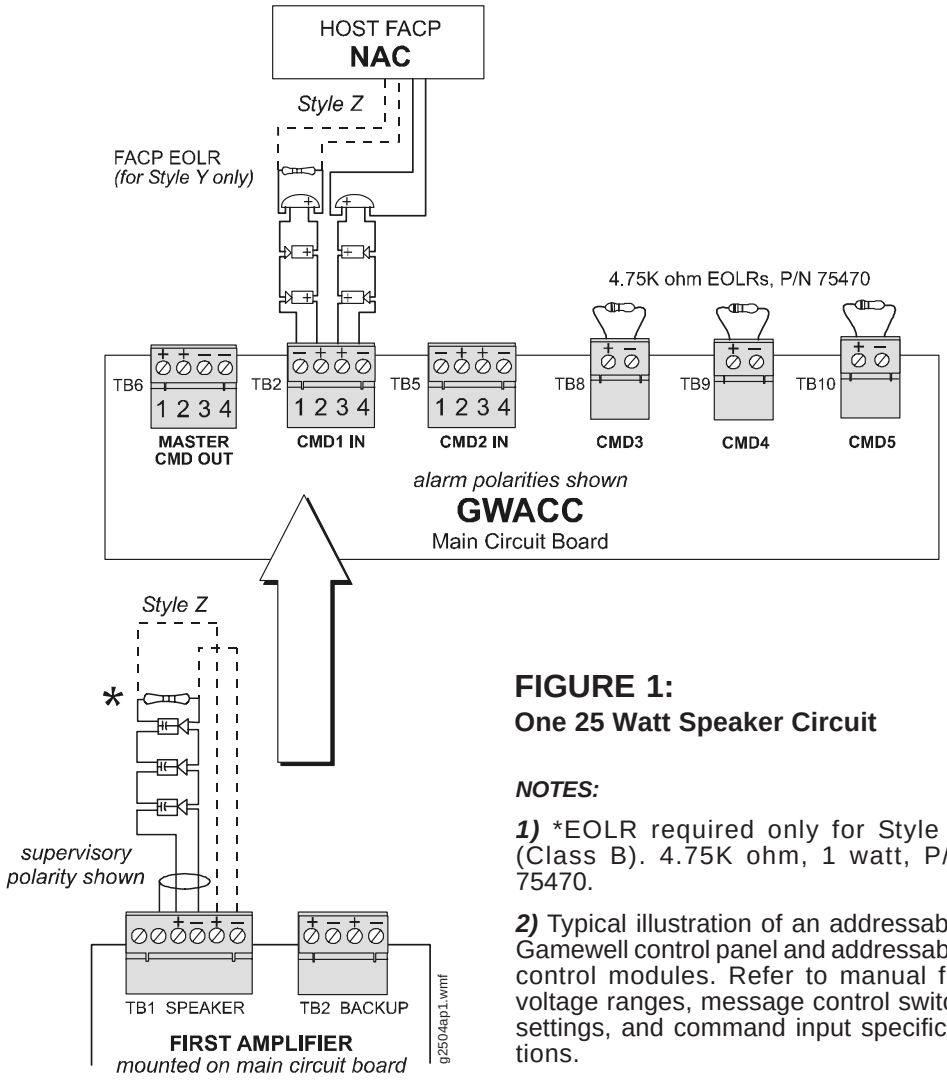


FIGURE 1:
One 25 Watt Speaker Circuit

NOTES:

1) *EOLR required only for Style Y (Class B). 4.75K ohm, 1 watt, P/N 75470.

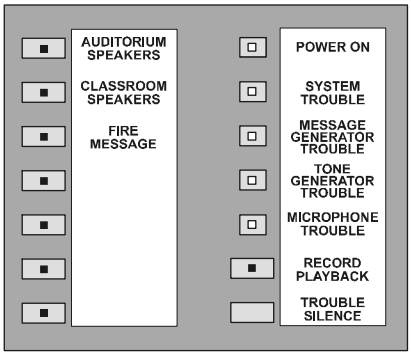
2) Typical illustration of an addressable Gamewell control panel and addressable control modules. Refer to manual for voltage ranges, message control switch settings, and command input specifications.

Two Speaker Circuits

Dual output zone, dual input circuit — tone/voice message *(see Figure 2)*. This application example consists of one GWACC with two speaker circuits and requires the installation of a second amplifier. This configuration is suitable for small facilities requiring no more than 50 watts of output power and a 60-second fire evacuation message.

In this application example, the addressable FACP directs tone or voice messages to either of the speaker circuits via the control modules connected to the CMD1 and CMD2 inputs. S3 DIP switches "1", "2", and "3" are set to OFF; this selection configures CMD1/CMD2 to direct the Fire Message to the Auditorium Speakers or Classroom Speakers. The S5 DIP switches "5" and "6" are set to ON; these contact closures activate CMD1 (switch "5") and CMD2 (switch "6") inputs.

In this application example, the system may also be **manually activated** from the keypad. Press the Auditorium Speakers and/or Classroom Speakers push-button(s), then press the Fire Message push-button. Alternately, use the microphone to make an announcement. To **manually deactivate** a speaker circuit, press the activated (illuminated) output zone push-button.



Keypad Example

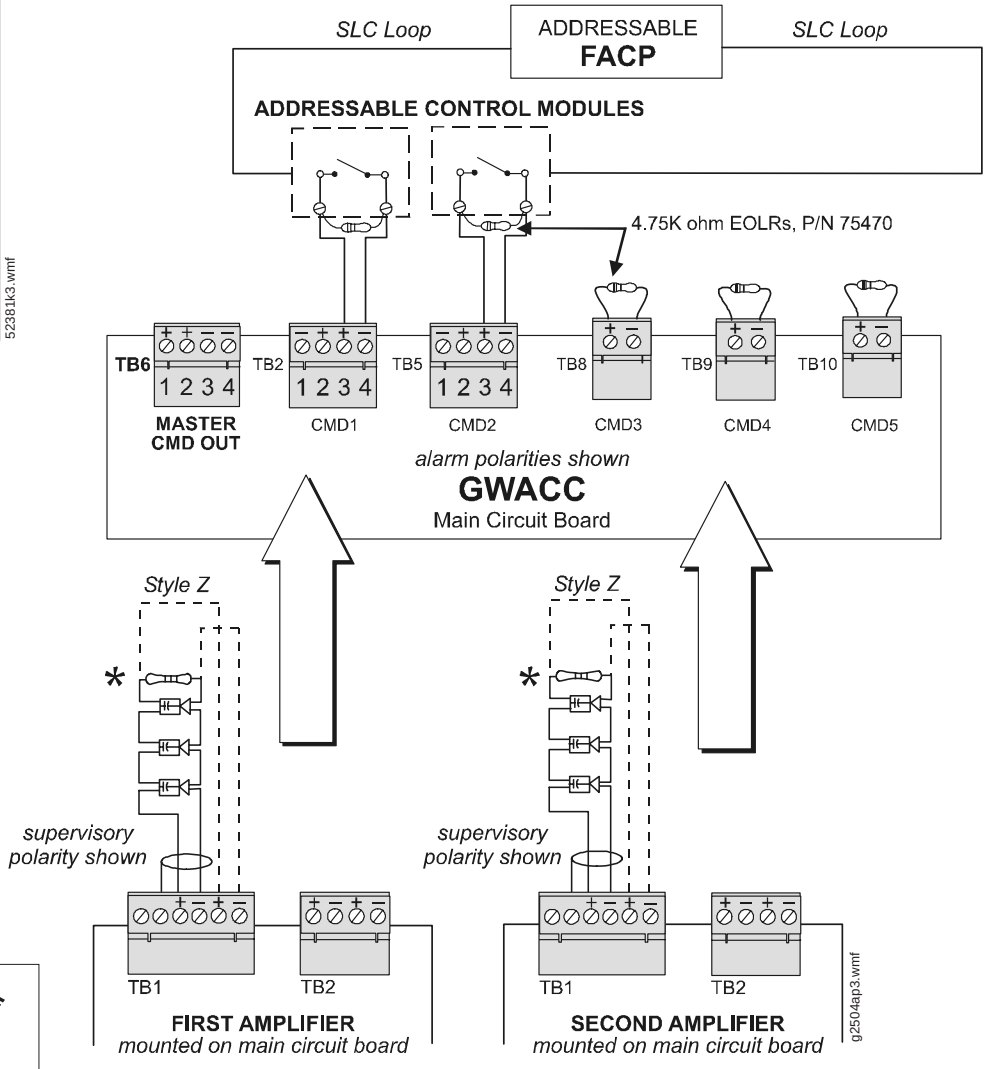


FIGURE 2:

Two Speaker Circuits, Dual Output Zone, Dual Input Circuit

NOTES:

1) *EOLR required only for Style Y (Class B). 4.75K ohm, 1 watt, P/N 75470.

2) Typical illustration of an addressable Gamewell control panel and addressable control modules. Refer to manual for voltage ranges, message control switch settings, and command input specifications.

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Gamewell-FCI
12 Clintonville Road
Northford, CT 06472
Phone: 203-484-7161
Fax: 203-484-7118
www.gamewell-fci.com

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