# GWACCZ

## Zoned Audio Command Center

## Voice Evacuation Control Panel



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## Description

Gamewell's **Zoned Audio Command Center** (**GWACCZ**) is a state-of-the-art Emergency Voice Evacuation Panel (EVAC) capable of splitting 25 or 50 watts of audio power into up to eight speaker circuits (i.e., zones). The GWACCZ 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 GWACCZ apart from other EVAC panels — these include full supervision in both active alarm 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 GWACCZ cabinet.

The GWACCZ 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 V$_{RMS}$ audio amplifier is available for system expansion to 50 watts or as a secondary amplifier in jurisdictions requiring such backup. A 70.7 V$_{RMS}$ converter is also available for independently converting amplifiers to meet retrofit needs.

The Zone Splitter Module (**ACC-ZSM**) divides the output of the Audio Amplifier Module(s) (**ACC-AAM25**) into up to eight speaker circuits (i.e., zones). The Zone Page Module with Keypad (**ACC-ZPMK**) provides full manual control of the speaker circuits, status indication of each of the speaker circuits, and automatic control by the FACP via the ACS serial link connection.

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

## Controls and Indicators

1. Power On *(green).*

## Standard Features

- 25 watts of audio power can be divided into eight Style Y (Class B) or four Style Z (Class A) speaker circuits (zones), utilizing the zone splitter module (ACC-ZSM).
- Full manual control of all audio zones provided by zone page module with keypad (ACC-ZPMK).
- Activation by the FACP using the ACS serial link and/or the five Command (CMD) inputs.
- ACS serial link compatible with all Gamewell FACPs, depending on function. FACP automatically directs the voice message to each or all audio zones.
- Paging by zone or All-Call.
- Full status indication (normal, active, fault) of each speaker circuit.
- Fault indication via ACS serial link and/or the two Form-C trouble relays (System & AC Power Loss).
- Integral 25 watt, 25 V$_{RMS}$ 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 maximum system flexibility and ease-of-service.
- Two command input circuits can be independently field-programmed for activation by a Notification Appliance Circuit (NAC) or contact closure.
- Three command input circuits activate on contact closure.
- ACS link or Command Input (CMD) allow: one 60-second message; two 30-second messages; three 20-second messages; four 15-second messages; or five 12-second messages.
- Microphone time-out feature.
- Nineteen different system and diagnostic LEDs.
- Two Form-C trouble relays (System/AC Power Loss).
- *Optional equipment:* second amplifier; local playback speaker; remote microphone; and paging equipment interface.
- Integral digital message generator with standard, factory-prerecorded emergency evacuation message.
- Custom messages are field recordable, without the addition of costly add-on modules, utilizing the integral microphone or the 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 ACS serial link, CMD inputs or keypad.
- Dual-optically-isolated, trigger input circuits are independently field-programmable for activation by polarity reversal (host FACP NAC) or dry-contact closure.
- Integral diagnostic LEDs include: Power, System Trouble, Microphone Trouble, Message Generator Trouble, Tone Generator Trouble, Amplifier Fault, and others.
- ACS serial link or independent Form-C trouble relay allows FACP to monitor voice system while in active (alarm) state.
- Integral piezo provides local audible indication for troubles.
- 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.
- All outputs are power-limited.
- Auxiliary power output provides local power for addressable control modules when used to activate the GWACCZ.
- Compatible with all Gamewell FACPs, as well as other manufacturers' panels.

**Gamewell**

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2. System Trouble *(yellow)*.

3. Message Generator Trouble *(yellow)*.

4. Tone Generator Trouble *(yellow)*.

5. Microphone Trouble *(yellow)*.

6. Record/Playback *(green)*.

7. All-Call *(green = Active)*.

8. Audio ON/OFF *(green = Active, yellow = Manual Deactivation)*.

9. Status of each speaker zone *(green = Active, yellow = Manual Deactivation or Fault)*.

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

# Ordering Information

| | |
|---|---|
| **GWACCZ** | 25 watt, 25 V$_{RMS}$, emergency Voice Evacuation Control Panel (VECP) with integral commercial microphone, digital message generator, zone-splitter module (**ACC-ZSM**), zone page module with keypad (**ACC-ZPMK**). |
| **ACC-AAM25** | Optional 25 watt, 25 V$_{RMS}$ Audio Amplifier Module with single Class A or Class B speaker circuit. |
| **ACC-EPM** | Optional External Page Module. |
| **FC-XRM70** | Optional 70.7 V$_{RMS}$ 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 V$_{RMS}$ 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 V$_{RMS}$ fault, amp fault) and green "amp functional" LED.

### ACC-EPM
- Provides interface to non-fire paging equipment for non-emergency paging applications.
- Provides plug-in-style terminal blocks for ease of service and maintenance.
- Transformer-isolated, 600-ohm audio connection to paging equipment.

### FC-XRM70
- Converts 25 V$_{RMS}$ audio outputs to 70.7 V$_{RMS}$ for retrofit applications.
- Plugs directly on ACC-AAM25 module(s), allowing independent conversion to 70.7V$_{RMS}$.

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

## Specifications

### Electrical specifications
*Command input circuits(CMD1andCMD2):*
**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.

## Listings
Listings and approvals below apply to the basic GWACCZ voice evacuation control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: file S521.

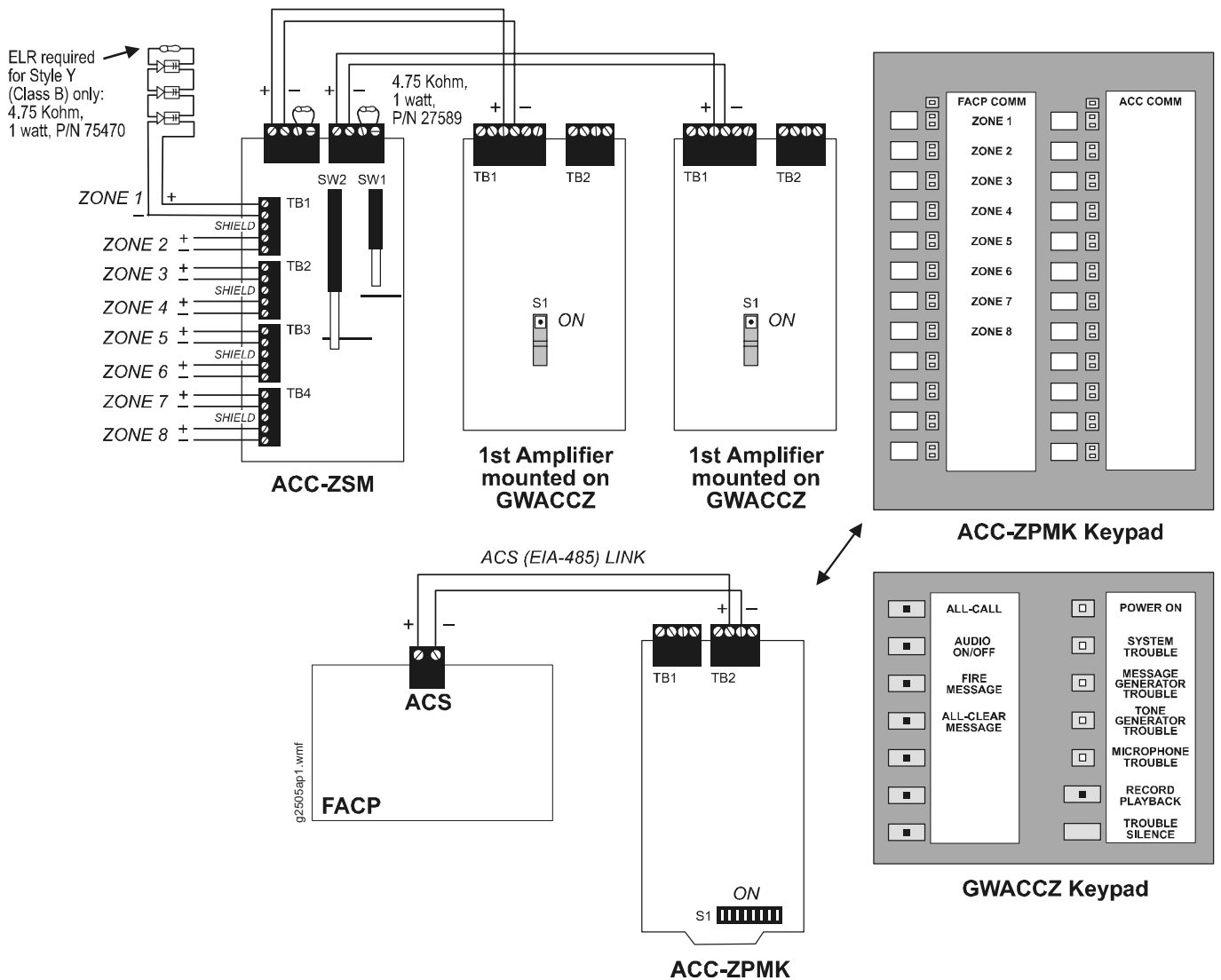# Application Example: 50-watt zone splitting, eight speaker circuits

*50 watts total power with automatic control via ACS link from the FACP — see diagram below.*

This application of the GWACCZ configures the zone splitter module (ACC-ZSM) to divide 50 watts of audio from two audio amplifiers (ACC-AAM25) into four speaker circuits each. The FACP uses the ACS link connected to the zone page module with keypad (ACC-ZPMK) for automatic activation of the speaker zones and for alarm activation.

*Configuration switches are set as follows:*

• ACC-ZSM SW1 set to "AAM1 & AAM2" and SW2 to "Class B" to place speaker circuits 1 – 4 on AAM1 and speaker circuits 5 – 8 on AAM2, configured for Style Y (Class B) wiring.

• ACC-ZPMK DIP switch S1 set for communication with software version 2.x (1 = ON, 2 = OFF, 3 = OFF).

• GWACCZ main circuit board DIP switch S3 set for single zone mode, All-Call and two messages (1 = ON, 2 = OFF, 3 = OFF).

The FACP can **automatically activate** the Fire Evacuation Message and any combination of the eight speaker zones. For speaker circuit **manual deactivation**, press the activated zone pushbutton on the ACC-ZPMK keypad. For **manual activation**, press either of the Message push-buttons, then select the Zone pushbutton on the ACC-ZPMK keypad. For **All-Call Paging**, press the All-Call pushbutton on the main panel keypad, then key the microphone to make an announcement.

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