ACC-25/50ZST

Zoned System Voice with Telephone Evacuation Control Panel

FIRE·LITE ALARMS by Honeywell

Emergency Voice Evacuation

General

The AUDIO•COMMAND•CENTER•25/50 Zone System with FireFighters Telephone (ACC-25/50ZST) is a state-of-the-art Emergency Voice Evacuation panel (EVAC panel) capable of splitting 25 or 50 watts of audio power and up to eight speaker circuits (i.e., zones). The ACC-25/50ZST includes an ACC-FFT Fire Fighter Telephone Module with keypad which provides indications of phone activation, remote page activation, remote microphone activation and corresponding trouble conditions. Additionally, up to 24 telephone circuits can be annunciated at the ACC-FFT by connecting addressable monitor modules to the optional FPJ-F or RPJ-F Remote Phone Jacks. The ACC-25/50ZST 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 ACC-25/50ZST 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 ACC-25/50ZST cabinet.

The ACC-25/50ZST 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 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.

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 on the MS-9200UDLS, MS-9600LS and MS-9600UDLS Addressable Panels.

A host of field-programming options, including the capability of five custom messages (fire, tornado, evacuation, hazmat, non-fire, multi-language, etc.) make the ACC-25/50ZST the most versatile voice evacuation system available.

Some Suitable Applications:

- Schools
- Theaters
- Auditoriums
- Restaurants
- Dormitories
- Lodging
- Office Buildings
- Factories
- Places of Worship

Features

- Listed to UL Standard 864, 9th edition.
- 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).
- ACC-FFT Fire Fighter Telephone module for control and annunciation of up to 24 remote telephone jacks

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ACC-25/50ZST

- Activation by the FACP using the ACS serial link and/or the five Command (CMD) inputs.
- ACS serial link compatible with all Fire•Lite 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 and AC Power Loss).
- 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 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) control of:
  - 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 and diagnostic LEDs.
- Optional equipment: second amplifier; local playback speaker; remote microphone; paging equipment interface and remote phone jacks.
- 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 jacks.
- 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 ACC-25/50ZST.
- Compatible with ***all*** Fire•Lite FACPs, as well as other manufacturers' panels.

Standard Modules

ACC-AAM25: 25 watt, 25 VRMS Audio Amplifier Module with single Class A or Class B speaker circuit.

ACC-ZPMK: Zone Page Module with keypad

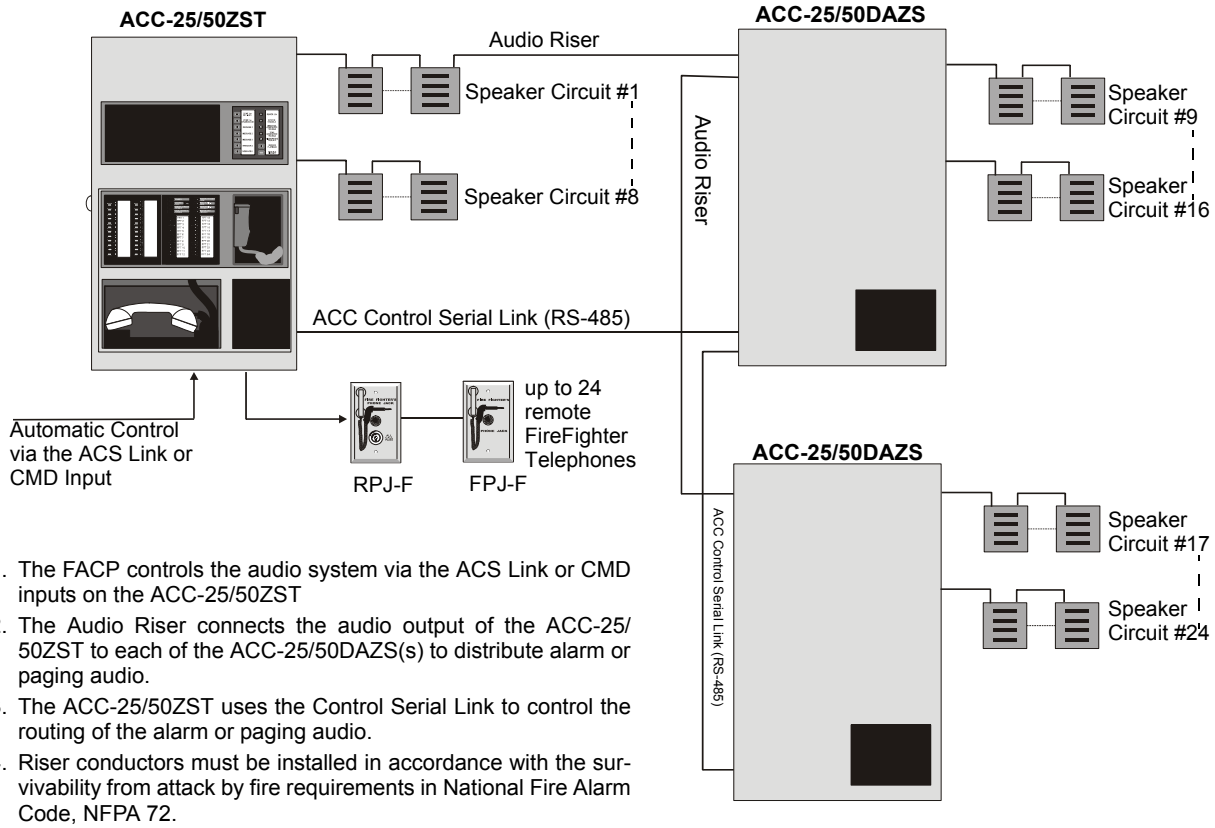
ACC-ZSM: Zone Splitter Module. These modules provide up to eight speaker circuits that may be manually or automatically activated.

ACC-FFT: Fire Fighter Telephone Module with keypad which provides indications of phone activation, remote page activation, remote microphone activation and corresponding trouble conditions.

Optional Modules

ACC-AAM25

- 25 watt, 25 VRMS audio amplifier module.
- Field-programmable for system expansion to 50 watts or as a backup to the primary 25 watt amplifier where required.
- Provides single Class A or Class B speaker circuit.



1. The FACP controls the audio system via the ACS Link or CMD inputs on the ACC-25/50ZST
2. The Audio Riser connects the audio output of the ACC-25/50ZST to each of the ACC-25/50DAZS(s) to distribute alarm or paging audio.
3. The ACC-25/50ZST uses the Control Serial Link to control the routing of the alarm or paging audio.
4. Riser conductors must be installed in accordance with the survivability from attack by fire requirements in National Fire Alarm Code, NFPA 72.

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Audio Command Center Zone System With FireFighter Telephone
Up to 24 Zones @ 150W (max.)

- 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, 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.
- Electrically-isolated, contact-closure trigger input for activation by the paging equipment.

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-RM

- Remote Microphone, includes backbox (only one FC-RM per system)

FC-LPS

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

FPJ-F

- Optional Remote Phone Jack

RPJ-F

- Optional Remote Phone Jack with a keyswitch for remote paging operations.

FHS-F

- Optional Fire Fighter Handset used to communicate over the telephone circuit connected to the ACC-FFT

FHSC-RF

- Optional Fire Fighter Handset Cabinet (recess mount) is used to store five Fire Fighter Handsets (FHS-F)

FHSC-SF

- Optional Fire Fighter Handset Cabinet (surface mount) is used to store five Fire Fighter Handsets (FHS-F)

ACC-FFT Fire Fighter Telephone Module

- Power-limited circuitry
- Remote Phone Circuit Operation: Circuit can be wired Style Y (Class B) or Style Z (Class A)
- Wiring connects Remote Phone Jacks to control panel for phone communication
- Normal Operating Voltage (VRMS): Standby = n/a, Active = 0.2 VRMS
- Normal Operating Voltage (Vdc): Standby = 12 Vdc, Active = 4 Vdc to 0.9 Vdc
- Normal Operating Current (mA): Standby = 1.3 mA, Active = 5 mA
- Supervised circuit wiring.
- End-of-Line Resistor required for Style Y circuit: 4.7K, ½ watt.
- Maximum wiring impedance: 54 ohms.

Remote Phone Jack Keyswitch Operation:

- Maximum wiring impedance: 54 ohms.
- Circuit wired Class B
- Keyswitch enables All-Call Paging by Remote Phone
- Supervised circuit wiring.
- End-of-Line Resistor required: 4.7K, ½ watt

Remote Microphone Operation:

- Provide connection for the optional FC-RM Remote Microphone Module which is used for remote paging capabilities.

NOTE: *For installations that require both the Fire Fighter Telephone and Remote Microphone, the Remote Microphone Module wiring connections are made to the ACC-FFT Fire Fighter Telephone Module.*

Controls and Indicators

LED 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. 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).
10. Remote Handset Page (green LED) - turns on steady to indicate that a remote phone has been connected to the telephone loop and the Remote Phone Jack Keyswitch has been activated for remote paging by phone.
11. Remote Microphone Page (green LED) -turns on steady to indicate active paging from Remote Microphone.
12. Remote Handset Trouble (yellow LED) - turns on steady to indicate that a fault exists on the telephone loop connected to TB1 of the ACC-FFT
13. Local Handset Trouble (yellow LED) - turns on steady to indicate that the local handset has a connection fault
14. Remote Key Trouble (yellow LED) - turns on steady to indicate a remote keyswitch wiring fault (TB2)
15. Remote Microphone Trouble (yellow LED) - turns on steady to indicate a fault on the Remote Microphone wiring or electronics (TB3)
16. FFT 1 through FFT 24 (green LEDs) - LED for each of 24 possible remote phone circuits will turn on if an addressable monitor module has been connected and programmed for activation when a remote phone is plugged into the corresponding Remote Phone Jack.

OTHER SYSTEM LEDS:

Battery Trouble, Charger Trouble, Ground Fault, (ACC-AAM25) Speaker Circuit Trouble, and Amplifier Supervisory.

ACC-FFT FIRE FIGHTER TELEPHONE MODULE

Pushbutton Switches

- Answer Call - tactile pushbutton switch used to connect or disconnect Remote Telephone from panel.

LEDs

- Power (green) - indicates that power is applied to the ACC-FFT Fire Fighter

Telephone module

- Answer Call (green LED) - flashes to indicate that a remote phone has been connected to the phone audio riser. LED turns on steady when Answer/Call Pushbutton is pressed to answer the remote phone call

Product Line Information

ACC-25/50ZST: 25 watt, 25 VRMS, Emergency Voice Evacuation Control Panel (EVAC panel) with ACC-FFT FireFighter Telephone Interface Modules, integral commercial microphone, digital message generator, zone splitter module (ACC-ZSM), zone page module with keypad (ACC-ZPMK), ACC-AAM25, ACC-FFT.

ACC-AAM25: Optional 25 watt, 25 VRMS Audio Amplifier Module with single Class A or Class B speaker circuit.

ACC-EPM: Optional External Page Module.

ACC-FFT: Replacement Telephone Module.

FC-XRM70: Optional 70.7 VRMS Converter Module (one required per amplifier, consult factory for availability).

FPJ-F: Optional Fireman's Phone Jack

RPJ-F: Optional Remote Phone Jack with a keyswitch for remote paging operation.

FHS-F: Optional Fire Fighter Handset

FHSC-RF: Optional Fire Fighter Handset Cabinet (recess mount)

FHSC-SF: Optional Fire Fighter Handset Cabinet (surface mount)

ACC-TR: Trim Ring, Flush mount.

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).

Wiring Requirements

Connecting external system accessories to the ACC-25/50ZST main circuits must be carefully considered to ensure proper operation. It is important to use the correct type of wire, wire gauge and wire run length per each circuit. Refer to the following table to specify wire requirements and limitations.

NOTE: If an SLC loop is to be run in conduit with ACC-25/50ZST Notification Appliance Circuits, the risk of encountering problems can be greatly reduced by using twisted, shielded cable on the SLC and NACs.

CIRCUIT CONNECTIONS		WIRE REQUIREMENTS		
Circuit Type	**Circuit Function**	**Wire Type & Limitations**	**Recommended Maximum Distance (Feet)**	**Wire Gauge**
AC Power TB3 (nonpower-limited)	Primary Power Input to ACC-25/50ZST, AC Voltage	See Note 1	Power Supplied must be: 120 VAC, 60 Hz, 1.5 amps or 240 VAC, 50/60 Hz, 0.75 amps (see Note 1)	Terminals Support 12-18 AWG (see Note 1)
Audio Output ACC-AAM25 Module TB1 and ACC-ZSM Module (power-limited)	Notification Appliance Circuit	See Note 2 Untwisted, unshielded or twisted, shielded	See Note 3	12 - 18 AWG
ACC-ZPMK Module	ACS (EIA-485) Circuit		4,000 feet	12 - 18 AWG
ACC-FFT TB1	Telephone Loop	See Note 2 Untwisted unshielded or twisted, shielded	54Ω maximum impedance	12 - 18 AWG
ACC-FFT TB2	Contact Closure Input Trigger	Untwisted unshielded	54Ω maximum impedance	12 - 18 AWG
ACC-FFT TB3	Remote Microphone Connection (see Note 4)	See Note 4	See Note 4	See Note 4
ACC-EPM Module	External Page Connection			12 - 18 AWG
CMD1 and CMD2 Main Board TB2 and TB5	Triggers ACC-25/50ZST	See Note 1 Untwisted, unshielded or twisted, shielded	Depends on Output (trigger) Circuit 9 - 32 VDC, 1.6 mA for polarity reversal relay must be rated at 0.5 amp, 24 VDC	12 - 18 AWG
CMD3, CMD4 and CMD5 Main Board TB8, TB9 and TB10	Triggers ACC-25/50ZST	See Note 1 Untwisted, unshielded or twisted, shielded	Depends on Output (trigger) Circuit from contact device	12 - 18 AWG
Main Board TB6 Master Command Bus Reverse Polarity (power-limited)	Output Trigger for Multiple ACC-25/50ZST configurations	Untwisted, unshielded	200 ohms maximum	12 - 18 AWG
Trouble Relay Main Board TB1	Trouble Output	Maximum Current 2 amps	Depends on Input Circuit	12 - 18 AWG
AC Loss Relay Main Board TB7	AC Loss Output	Maximum Current 2 amps	Depends on Input Circuit	12 - 18 AWG

1. Refer to NEC Standards.
2. Twisted, shielded wire is recommended for maximum protection against EMI and AFI emissions and susceptibility.
3. Must also meet NFPA 72 Standards for minimum and maximum sound levels.
4. Refer to Remote Microphone Document.

SYSTEM SPECIFICATIONS

System Capacity

- Total Audio Power.....50 Watts
- Speaker Circuits 8
- Remote Telephone Jacks 24
- Audio Message.....60 seconds
- External Audio Inputs 2

Electrical Specifications

Primary (AC) power

- 1.5 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.

Trouble contact rating

- 2.0 A at 30 VDC (resistive), 0.6 A @ 30 VAC (resistive).

Auxiliary power output

- Specific application power: 24 V, 35 mA.

Command input circuits (CMD1 and CMD2)

- Trigger input voltage: 10.5 - 29 VDC.

NOTE: *When programmed for reverse-polarity activation.*

Command input circuits (CMD3, CMD4 and CMD5)

- Activated by contact closures.

Cabinet Specifications

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.

Trim Ring: Outer measurement 21.62" (54.92 cm) high x 18.62" (47.30 cm) wide; inner opening 18.63" (47.31 cm) high x 15.63" (39.69 cm) wide. Has six holes for #8-32 screws, and cutouts for hinges.

Shipping Specifications

Weight: 38.5 lbs. (17.46 kg.)

Temperature and Humidity Ranges

This system meets NFPA requirements for operation at 0 – 49°C/32 – 120°F and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C (90°F ± 3°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 temperature of 15 – 27°C/60 – 80°F.

Agency Listings and Approvals

The listings and approvals below apply to the basic ACC-25/50ZST 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:** S2424
- **CSFM**: 6911-0075:207

Standards and Codes

The ACC-25/50ZST complies with NFPA 101 Life Safety Code, and with the following UL Standards and NFPA 72 Fire Alarm Systems requirements:

– UL 864

– UL 1711

– NFPA 72

ISO 9001 CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

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.

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