# **AM-50 Series Amplifiers**

50 Watt Digital Amplifiers

# General

The Gamewell-FCI, AM-50 Series amplifiers are a 50 watt, digital, switching power amplifier. The following lists the two types of AM-50 Series amplifiers that may be ordered.

- The AM-50-25 amplifier produces 25  $\mathrm{V}_{\mathrm{RMS}}$  audio output.
- The AM-50-70 amplifier produces  $70.7V_{RMS}$  audio output.

The amplifiers are components of the following E3 Series® Systems.

- E3 Series Expandable Emergency Evacuation System
- E3 Series Combined Fire and Mass Notification System
- E3 Series Broadband Voice Evacuation System

Each AM-50 Series amplifier provides two speaker circuits that can be wired Style Y (Class "B") or Style Z (Class "A"). The terminal connections can accommodate up to 12 AWG, twisted-pair, shielded wire. Both speaker circuits produce a combined total of 50 watts of power. The 50 watts of power can be divided between the two integral Class A/B speaker circuits. The two speaker circuits may be individually activated and supervised by an INI-VGX Transponder Voice Gateway.

The AM-50 Series amplifier can be programmed to broadcast sixteen messages generated from its local INI-VGX Voice Gateway. In addition, the AM-50 Series amplifiers produce superior clarity for intelligible LIVE voice paging.

When the selected System Sensor, speakers are used with the Manufacturer's 520 Hz audiophile, the E3 Series® System is compliant with UL Standard 464 Low Frequency requirements.

## Installation

As many as four AM-50 Series amplifiers can be installed in the following cabinets when supervised and controlled by an INI-VGX Voice Gateway.

• Cabinet B, INX CAB-B • Cabinet C, INX-CAB-C • Cabinet D, INX-CAB-D

### WARNING: AM-50 Series Amplifiers Node Restriction:

The INI-VGX can support up to four AM-50 Series amplifiers with the same output voltage. However, you cannot wire an AM-50-25 amplifier and an AM-50-70 amplifier to the same INI-VGX Voice Gateway Node between the four amplifiers, max. of 150 watts are allowed.

The AM-50 Series amplifiers can be installed using the AM-50 Extender Plate whenever the E3 Series control panel is used in conjunction with the Autonomous Control Unit (ACU) of the E3 Series Combined Fire and Mass Notification System.

# FEATURES & BENEFITS

- Listed under UL® Standard 864, 9th Edition
- Listed under UL Standard UL2572 for Mass Notification
- Complies with UL Standard 464 for 520 Hz Low Frequency
- Provides digital, switching amplifier technology
  - Produces 50 watts of digital power
- Includes 2 speaker circuits, wired Style Y (Class B) or Style Z (Class A)
- Up to 4 AM-50 Series amplifiers with the same output voltage can be controlled by the INI-VGX voice gateway

AM-50-25



AM-50-70



# AM-50 Series Amplifiers Technical Specifications

#### SPECIFICATIONS

#### AM-50-25 Amplifier

**Operating Voltage:** 27.3 to 20.4 VDC **Operating Current:** 0.086 amp normal standby **Alarm Current:** 2.206 amp max. alarm @ 50 Watt **Audio Output:** 50 watts max. @ 25 V<sub>RMS</sub>

#### AM-50-70 Amplifier

**Operating Voltage:** 27.3 to 20.4 VDC **Operating Current:** 0.049 amp normal standby **Alarm Current:** 2.30 amp max. alarm @ 50 watt

Audio Output: 50 watts max.  $\circledast$  70.7  $V_{RMS}$ 

#### AM-50 Series Amplifiers

Relative Humidity: 0 to 93% max., (non-condensing) at 90° F (32° C)

Operating Temperature: 32° to 120° F (0° to 49° C)

Dimensions: 7 1/2" W x 3 1/2" H x 1 1/4" D (19 W x 9 H x 3 D cm)

#### **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.

## **Ordering Information**

**1100-0456:** AM-50,  $25V_{RMS}$  audio output, 50 watt amplifier

AM-50-70: AM-50, 70.7V\_{RMS} audio output, 50 watt amplifier

#### STANDARDS

The AM-50 Series amplifiers are designed to comply with the following standards:

UL Standards: 864 9th Edition

2572 for Mass Notification 464 Low Frequency

#### 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 status.

UL Listed: S1869

FM Approved: 3017416

MEA Approved, Fire Dept. of New York: COA# 6077 CSFM: 7165-1703-0125

**City of Chicago:** Class 1, Class 2, High Rise **City of Denver Approved** 

ISO 9001 Certification

For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewellfci.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-todate and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

#### For more information

Learn more about Gamewell-FCI's AM-50 Series Amplifiers and other products available by visiting www.Gamewell-FCI.com

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