Datasheet

PAS-NMA550-4Z | Network Multi-Zone Mixer Amplifier 550 Watt



Key features

- Integrated digital Class-D 550W amplifier with four independently controlled output zones for targeted broadcasting.
- 2U rack design with 4.3-inch TFT color LCD, control knob, IR remote compatibility, and status indicators.
- Server-independent timed broadcasting via internal clock chip with programs on a local SD card.
- Built-in microphone and speaker enabling two-way intercom functionality.
- Comprehensive protection: Over-Current, Short-Circuit, Overload, and Thermal Protection.
- Relay I/O ports for integration with third-party fire alarm systems.

Product Overview

Macsys PAS-NMA550-4Z is a multi-zone IP mixer amplifier designed for versatile applications such as supermarkets, office buildings, and schools. It combines a pre-amplifier with independent bass and treble controls, allowing per-channel sound shaping.

Equipped with a digital Class-D 550W amplifier, it supports both 100V and 8–16Ω loudspeakers, offering four independently controlled output zones for flexible area coverage. Server-independent timed broadcasting is enabled through an internal clock chip, with programs stored on a local SD card. A built-in microphone and speaker provide reliable two-way intercom functionality.

The amplifier features a 2U rack-mount design with a 4.3-inch TFT color LCD, control knob, and IR remote compatibility. It includes comprehensive protection mechanisms, while an automatic fan cooling system activates above 55°C to ensure reliable long-term operation.

For connectivity, the PAS-NMA550-4Z supports 10/100 RJ45 networking with HTTP, TCP/IP, UDP, ARP, ICMP, and IGMP protocols, managed via a web interface or Config tool for simplified deployment. Additionally, relay I/O integration enables seamless connection with third-party fire alarm systems.

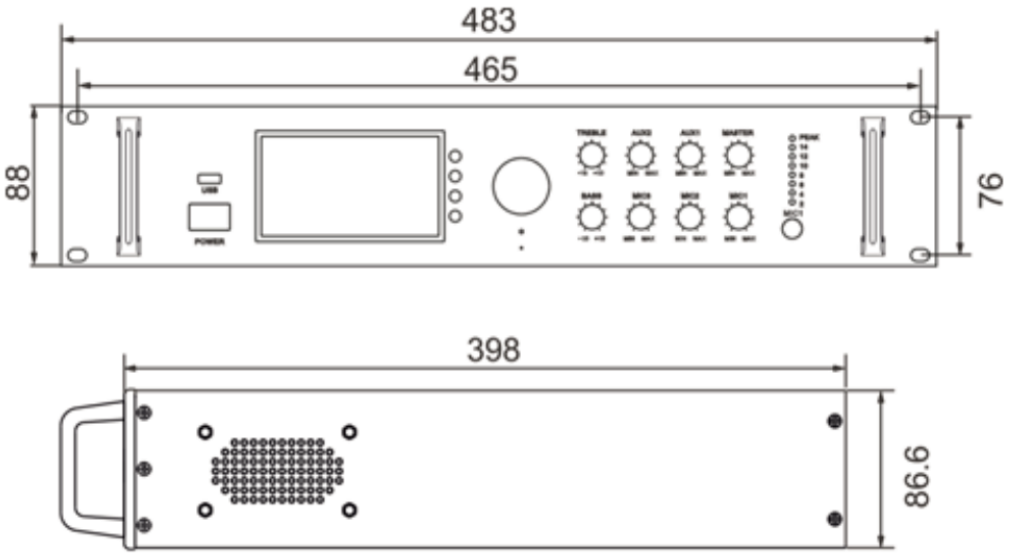
Techinical Specification

Featues	Detail
Audio Parameters	
Amplifier class and power	Integrated digital Class-D 550W amplifier
Speaker compatibility	100V and 8-16 Ω loudspeakers
Output zones	Four independently controlled output zones
Protection circuitry	Over-Current Protection, Short-Circuit Protection, Overload Protection, Thermal Protection
Form factor	2U rack design
Display and controls	4.3-inch TFT color LCD screen and control knob; infrared remote control compatibility; multiple status indicator lights
Built-in functions	Pre-amplifier; bass and treble controls; automatic cooling system; built-in microphone and speaker for two-way intercom
Timed broadcasting	Internal clock chip for timed broadcasting; programs uploaded to a local SD card; server-independent timed broadcasting
Local storage	SD card for program storage
Third-party integration	Relay I/O port for integration with third-party fire alarm systems
Network interface	10BASE-T/100BASE-TX RJ45
Network protocols	HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Configuration methods	Web Interface or Config Tool
Audio codecs	MP2, MP3, PCM, ADPCM
S/N ratio	Mic Input 01: ≥65dB, Mic Input 02/03: ≥80dB, Aux Input 01/02: ≥82dB
Sampling and bit rate	8kHz~44.1kHz, 16bit, 8kbps~320kbps
THD	≤0.5% at 1kHz, 1/2 rated output
Frequency response	Mic Input 01: 80Hz~14kHz; Mic Input 02/03: 60Hz~16kHz; Aux Input 01/02: 60Hz~16kHz
Front panel controls	Power switch and indicator; LED screen; function selection button; single-button coding rotation knob; built-in MIC; remote receiver module; TREBLE knob; AUX2 knob; AUX1 knob; MASTER knob; BASS knob; MIC1 knob; MIC2 knob; MIC3 knob; MIC1 input; PEAK area

Techinical Specification

Featues	Detail
Rear panel interfaces	MIC 2, MIC 3; Network input port; SD card insert port; AUX 1, AUX 2 line input; AUX line output; Relay output 01/02; Relay input 01/02/03; Speaker Output (100V,80~16Ω); Multi-Zone Speaker Output (100V); Cooling fan; AC220V power input; Fuse; GND
Line output impedance range	600Ω-10KΩ (legacy amplifier)
Relay outputs	3-Pin Pluggable Terminal Block (3.81mm Pitch, AWG 26-16), Normally Open (NO) or Normally Closed (NC) Dry Contact
Relay inputs	2-Pin Pluggable Terminal Block (3.81mm Pitch, AWG 26-16), Normally Open (NO) Dry Contact
Speaker outputs	2-Pin Screw Terminal Block for 100V constant-voltage passive speakers; 2-Pin Screw Terminal Block for 8Ω constant-resistance passive speakers (total impedance between 8Ω~16Ω)
Multi-zone outputs	5-Pin Screw Terminal Block for 100V constant-voltage passive speakers with zoning options
Accessories	2×6-Pin Pluggable Terminal Block Connector (3.81mm Pitch, AWG 26-16); 4×Flat Head Screw & Washer; 1×Power Cord
Power supply	AC 220V, 50Hz
Rated output	550W
Power consumption	≤650W
Heat dissipation	Automatic start of the built-in fan when the temperature of the radiator exceeds 55°C, forced air cooling from front to back.
Mounting method	2U Rack-Mounted
Installation environment	Dry Indoor Locations Only
Operating temperature	-10°C~+50°C (14°F~122°F)
Operating humidity	≤90% RH non-condensing
Front panel material	Aluminum Alloy
Housing material	Surface-Treated Steel Plate
Color	Black
Product dimensions	483x430x88mm
Product weight	7.5KG
Certification	CE, ROHS Compliance

Dimension



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