5432DZM

GLOBALCOM® 5400 Series Digital Zone Manager

Features

- 4 Input x 32 Output Zone Manager for 4 banks of 8 Speaker Outputs
- Allows dividing up to 500 W per channel to up to 8 zones via relay switching
- 4 Audio inputs via Dante audio networking (high quality over Ethernet)
- Provides redundant Ethernet ports
- Provides backup amplifier switching
- Fully supervises amplifier and speaker lines
- DSP processing for 4 amplifier channels:
  – Low and high pass filters
  – 7-Band parametric EQ filters
  – Up to 40 milliseconds of delay

Front Panel Features

- Frame Status Indicators:
  – Fault (yellow)
  – Ground Fault (yellow)
  – Power (green)
  – Power Save Mode (yellow)
  – Announce / Alarm (green / red)
- Lamp Test Button
- Indicators for each Amp Channel:
  – Amp Status: Power (green), Fault (yellow) or Alarm Active (red)
  – Backup Amp Engaged (green square)
  – Speaker Line Fault (8 yellow triangles)
  – Speaker Line Active (8 green speaker icons)

General Description

The 5432DZM Digital Zone Manager provides processing and management of up to 32 paging zones assigned from an IED 5400 Announcement Control System. It provides line level audio outputs to a paired four (4) channel amplifier unit. Digital Signal Processing (DSP) is provided on each of the four (4) output channels. This includes: gain control for the paging input, paging routing, automatic ducking of background music, equalization (high pass filters, low pass filters, up to 40 milliseconds of delay, plus up to 7 parametric bands per amplifier channel). The paired amplifier output comes back into the 5432DZM and then is distributed to up to eight (8) speaker line outputs. Each of the 32 speaker lines is supervised. The 5432DZM provides backup amplifier switching by switching groups of eight (8) loudspeaker loads from a primary power amplifier to a backup when a failure is detected. It also contains integrated supervision that monitors each signal path and reports any failures to the 5400ACS. The mainframe requires two (2) rack units (3.5") of vertical space in a 19" equipment rack/cabinet. All cooling is front to back.

Mechanical / Electrical Microphone

- Low-power processor for high reliability and long life with minimal cooling requirements
- Powered from 12-24 VDC power input, such as an EN54-4 power supply
- Requires 2 rack units of 19" rack space

Specifications

Electrical:

Supply Voltage	12-24 VDC @ 54.2 Watts Max
Recommended Operating Conditions	24 VDC @ 2.25 Amps Max
Fault Relay Contact Rating	2 Amps @ 110 VDC Max
Backup Amplifier Inputs	500 Watts Max / Channel
Main Amplifier Inputs	500 Watts Max / Channel
Speaker Outputs	100 Watts Max / Channel
Battery Logic Input	
OFF BATTERY	0.8 VDC Max
ON BATTERY	2 VDC – 3 VDC Max or Open
24V Fault Logic Input	
24 VDC FAULT	0.8 VDC Max
24 VDC GOOD	2 VDC – 3 VDC Max or Open
Amp On/Off Pulse Output	
AMP OFF	-12 VDC @ 0.08 Amps for 0.02 Secs.
AMP ON	+12 VDC @ 0.08 Amps for 0.02 Secs.
Amp Channel Fault Logic Input	
AMP FAULT	0.8 VDC Max
AMP GOOD	2 VDC – 3 VDC Max or Open

Mechanical:

Height	3.47", 2 rack units (8.81 cm)
Width (without rack mount ears)	17.2" (43.7 cm)
Depth	12.25" (31.1 cm)
Recommended Mounting Depth	18" (45.7 cm)
Weight	18.15 lbs. (8.23 kg)

Environmental

Operating Temperature Range	32°F – +104°F (0°C – +40°C)
Storage Temperature Range	-4°F – +158°F (-20°C – +70°C)

Connectors:

Power	2-pin Phoenix, 3.81 mm spacing with locking screws
Redundant Ethernet (2)	Control and Digital Audio (100 Mbps) RJ-45
Form C Fault Relay	3-pin Phoenix, 3.81mm spacing
Amplifier Audio Outputs (4)	3-pin Phoenix, 3.81mm spacing
Amplifier Channel Faults (4)	3-pin Phoenix, 3.81mm spacing
Main Amplifier Inputs (4)	2-pin Phoenix, 5.08mm spacing
Backup Amplifier Inputs (4)	2-pin Phoenix, 5.08mm spacing
Speaker Outputs (32)	2-pin Phoenix, 5.08mm spacing