

## PSC-012Z

### 12-ZONE INTELLIGENT PA CONTROLLER



### PRODUCT OVERVIEW

PSC-012Z is a centralized 12-zone Public Address controller with a built-in 500W Class-D amplifier. It replaces multiple rack amplifiers and zone routers, reducing system cost, footprint, and wiring effort. The unit supports selective paging to individual or multiple zones, ensuring announcements are delivered only where needed.

The controller includes 6 Volume-Override (VOR) outputs ensuring emergency messages are always audible by automatically switching selected zones to a preset volume. Additionally, 4 Fire/BMS trigger inputs allow the system to receive activation signals from fire panels and building automation systems, triggering stored evacuation messages without operator involvement.

The PSC-012Z accepts multiple input sources such as USB, Bluetooth, paging microphone, and call stations. It also enables local paging through its front-panel PTT microphone without requiring any external station.

### KEY BENEFITS

- **Integrated 500W Class-D Amplifier** - eliminates external amplifiers and reduces rack space.
- **12 Independent Paging Zones** - enables targeted announcements for discreet communication.
- **6 VOR Emergency Override Outputs** - guarantees message audibility during critical events.
- **4 Fire/BMS Digital Trigger Inputs** - activates stored emergency announcements automatically.
- **Multiple Input Options (USB / Bluetooth / Paging Mic / Call Station)** - centralizes BGM and paging control.
- **Standalone Operation with Built-In PTT Mic** - ensures paging even without a call station.
- **Expandable upto 10 Call Stations** - supports large facilities and multi-operator environments.
- **User-Friendly Interface** - simplifies configuration and reduces setup time.

## TECHNICAL SPECIFICATIONS

Parameter	Specification
Power Output	500W @ 100 V RMS & 120 V Peak,
Operating Voltage	230V AC $\pm 10\%$ , 50/60Hz
Zones	12 independently switchable output zone
Zone Control	Selective or multiple zone activation
Audio Input Sources	2 (Internal Audio Player, External Audio Player)
Audio Player	In-built- USB support (MP3, WAV formats), Bluetooth
Emergency Override	6 Priority emergency input
Mic Inputs	Balanced PTT microphone input
Audio Processing	Pre-amplifier and power amplifier stages
Protection	Overload, short-circuit, thermal protection, Speaker protection.
Emergency Voice Storage	Provision upto 32 GB, Upto 99 Tracks
Frequency Response	20Hz - 20kHz $\pm 0.5$ dB
Signal to Noise Ratio	$\geq 90$ dB (A-weighted)
Total Harmonic Distortion	$\leq 0.5\%$ @ 1kHz, 500W
Dampening Factor	$> 200$ @ 1kHz
Cross Talk	$< -80$ dB @ 1 kHz
Input Sensitivity	1.2 RMS for Full output
Input Impedance	10 k $\Omega$
Internal Power Supply	$\pm 70$ V + 24V DC (SMPS)
Efficiency	$> 90\%$ at full load
Current Draw (max)	$\sim 7$ A at full output
Quiescent Current	500 mA
Control Input	5V logic
Connectivity	USB, 3.5 mm RCA connector, Bluetooth
Operating Temperature	$-10^{\circ}\text{C}$ to $55^{\circ}\text{C}$
Storage Temperature	$-40^{\circ}\text{C}$ to $+70^{\circ}\text{C}$
Cooling	Forced air cooling (temp-controlled fan)
Humidity	5% to 90% non-condensing
Chassis	Metal enclosure, rack-mountable (2U)
Dimensions	430mm x 90mm x 400mm (W x H x D)
Weight	Approx 5 kg
Color	Black
External Audio Inputs/Outputs	Audio player In, External Amp Out/In
Certifications	CE, FCC & EN54

The design and specifications are subject to change without notice. The latest product information can be found at [www.triobrics.com](http://www.triobrics.com)