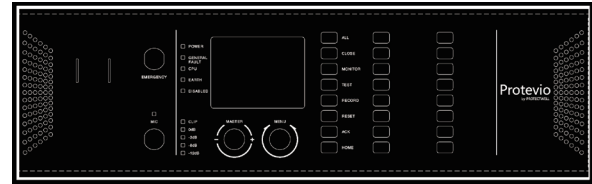


PCU-8000/EN

Master Control Unit

General

PCU-8000/EN Master Control Unit is the central management device of the system, which is used to manage and monitor all devices and perform various operations. PCU-8000/EN is integrated with audio storage, broadcast, zone control, monitor, timing control, fault diagnosis, etc. functions. Built-in 500W digital power amplifier can drive maximum 8 loudspeaker lines to meet requirements for small applications. It can also be connected to zone expanders to increase system capacity for the requirements of large applications as well.



PCU-8000/EN

Features

- Integrated public address system controller.
- Maximum 8 loudspeaker zones can be connected with a maximum power rating of 500W for each speaker line.
- 10 dry contact inputs with supervision and 8 dry contact outputs.
- Built-in 500W Class-D power amplifier.
- Numerous user friendly features to increase operation efficiency: plug and play, record and play, interaction between LCD and buttons, etc.
- Capable of integration with the third party systems, such as fire alarm systems through the dry contact.
- Equipment cost savings by implanting recorder, timer, audio monitor and one-for-all backup amplifier solutions.
- Supports both single and dual channel mode.
- Two auxiliary inputs and one MIC/LINE input.
- Supports external power amplifiers.
- Built-in standard configuration allows the system to be used directly following installation. System functions can also be set via the configuration software.
- Built-in 1GB Flash memory and 4GB SD card, which can be used to store audio files, recording files, configuration data and log files, etc.
- Manages all public address and emergency broadcast devices on the system, providing device system status information and device parameter modification via the LCD screen.
- Flexible power amplifier redundancy. One spare amplifier can back up all amplifiers in the system.
- Complies with EN54-16, CE, CB standards.

Functions

The controller integrates multiple functions such as audio storage, playback, zone control, audio monitoring, scheduled broadcast and fault diagnosis, etc.

AUTOMATIC FAULT DIAGNOSIS

The PROTEVIO system is a fully monitored system with the ability to supervise and report faults related to the main power, backup power, CPU, microphone, amplifiers, speaker circuits and the dry contacts. The fault details will be displayed on the LCD screen and fault logs will be stored in the internal memory.

ALLOW ALL CALLS EVEN WHEN THE CPU MALFUNCTIONS

If the CPU of the PCU-8000/EN fails the PROTEVIO system will still allow the user to make paging announcements (All Call) using the PTT Microphone in case of emergencies.

SCHEDULED BROADCAST WITH BUILT-IN TIMER

PCU-8000/EN has a built-in timer and supports configurable scheduled broadcast without extra timing device.

RECORD AND PLAY

PCU-8000/EN allows users to record the temporary messages into its built-in 1GB memory with the PTT microphone or the call station and broadcast it without configuration. It's a function for operation efficiency improvement, especially for the application such as shopping mall/supermarket where the promotion message needs to be frequently updated.

COST SAVING AMPLIFIER BACKUP SOLUTION

PCU-8000/EN has built-in amplifier automatic switch-over function and allows different amplifier backup configurations to address the needs of different applications. To back up all the amplifiers in the system, a minimum of one standby amplifier is sufficient, which greatly reduces the ownership cost on standby amplifiers.

Technical Specifications

Main power supply: AC 100V-240V 50/60Hz

PCU-8000/EN

Master Control Unit

Backup power supply: 21.5V DC - 28.5V DC

Fuse: T10AH 250V

Power consumption: <740W

PTT Microphone

Sensitivity: -59±3dBV

Frequency response: 100Hz -14KHz, ±3dB

SNR: > 50dB, A-weighted

Auxiliary input

Number: 2

Input sensitivity: 1V(0dBV)

Input impedance: 10 KΩ

Frequency response: 85Hz-18KHz, ±3dB

SNR: >80dB, A-weighted

MIC/LINE Input

Input sensitivity: 5mV/1V, set by DIP switch

Input impedance: 20 KΩ

Frequency response: 80Hz-18KHz, ±3dB

SNR: >80dB, A-weighted

Phantom power output: 24V DC, set by DIP switch

Audio Output

Output channels: CH1, CH2 and record

Output signal: 1V (0dBV)

THD: < 0.1%

Internal Power Amplifier

Max. power output: 500W

Output signal: 100V(CH1A)

Frequency response: 80Hz-18KHz, ±3dB

THD: <0.1%

Power Amplifier Interface

Number: 3 (CH1, CH2 and spare amplifier)

Output signal: 1.4V

THD: <0.1%

Control signal: Self-testing, amplifier fault and power saving control signal

Loudspeaker Interface

Zone Number: 8 (each has A and B output)

Max. load power: 500W

Contact Input / Output

Contact input: 10 contact input interfaces with supervision

Contact output: 8 contact output interfaces (NO、 NC and COM), "Fault" output and "Alarm" output.

Maximum voltage of the outputs: AC 250V/DC 30V

Maximum current of the outputs: 2.5A

Others

DC Power output: 24V/1A

Monitoring loudspeaker: 2W/8Ω

Ethernet interface: 10M/100M

Memory capacity: 1GB Flash Memory, 4GB SD card

Working Conditions

Relative Humidity: < 95%, without condensing

Operating temperature: -10°C~+50°C(14°F to +122°F)

Storage temperature: -40°C~+70°C(-40°F to +158°F)

Specification

Dimension (WxHxD): 482 mm×133.5 mm ×420 mm

Packing dimension (WxHxD): 580 mm×279 mm ×552 mm

Net weight: 14.3Kg

Gross weight: 17.4Kg

Ordering Information

PCU-8000/EN: Master Control Unit