## Protectwell Solution

## PEX-8/EN

### Zone Expander

#### General

PEX-8/EN is the zone extension device to expand the number of loudspeaker lines and interfaces. PEX-8/EN can provide the interfaces for 16 loudspeaker lines (corresponding to 8 zones), 8 dry contact inputs and 8 dry contacts. External power amplifiers must be connected to drive all the loudspeakers.

## PEX-8/EN Features

- Expands up to 8 zones for the PROTEVIO system.
- Up to 15 PEX-8/EN devices can be connected on a system.
- Connects up to 4 main power amplifiers and 1 spare power amplifier.
- · Supports one-for-all amplifier backup.
- · Automatic fault diagnosis.
- 24DC output, to power external devices such as volume controller.
- Supports 3-wire and 4- wire volume controllers.
- Single line input, 8 monitored contact inputs and 8 contact outputs.
- · Independent volume control for each audio channel.
- Supports single & dual audio channel mode.
- Automatic fault detection: main power, backup power, CPU, amplifiers, speaker lines, speaker line grounding, dry contact inputs and network.
- 500W output capacity for each zone.
- Standalone operation (for PA announcements if the master control unit is unavailable) or in network mode along with the PCU-8000/EN.
- Complies with EN54-16, CE, CB standards.

#### **Functions**

#### INPUT/OUTPUT

PEX-8/EN has 8 monitored contact inputs that can be linked with the fire alarm system to trigger alert and evacuation messages when fire happens. 1 line input is provided to connect with an internal audio source.

PEX-8/EN also has 8 contact outputs that can be used to activate external devices. It has 8 pairs of 100V speaker outputs where each one allows multiple loudspeakers to be connected in parallel. Two audio output ports for audio channel 1 and audio channel 2 can be used to connect with 3rd party power amplifiers or devices. One 24VDC output is provided to power external device.

#### AUTOMATIC FAULT DIAGNOSIS

RK-ZONE8 has an automatic fault diagnosis function to supervise various types of faults such as main power, backup power, CPU, power

amplifier, speaker circuits, dry contact inputs, communication line, etc. All the fault information will be shown on the LED indicators on the front panel.

### ALL CALLS POSSIBLE EVEN IF THE CONTRILLER CPU FAILS

The external audio source connected to the line input can still be delivered to all the local zones when the controller CPU malfunctions. This function can reduce the system downtime due CPU failure and increase the safety level during emergency.

#### **Technical Specifications**

Main power supply: AC 100-240V, 50/60Hz Backup power supply: 21.5V DC - 28.5V DC

Fuse: T2AL 250V

Power consumption: 35W

Line Input

Input signal: 1V(0dBV)Input impedance:  $10 \text{ K}\Omega$ 

Frequency response: 80Hz-18KHz, ±3dB

 $\textbf{SNR:} > \! 80 \text{dB, A-weighted}$ 

Audio Output

Output channels: CH1, CH2
Output signal: 1V (0dBV)

**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 energy-saving

signal

SE-200319-C



# PEX-8/EN Zone Expander

Loudspeaker Interface

**Zone number:** 8, each zone has 2 speaker line (A and B).

Max. load power: 500W Power consumption: 35W

Contact Input / Output

**Dry contact input:** 8 dry contact inputs with supervision **Contact output:** 8 dry contact output (NO、NC and COM) **Maximum voltage of the outputs:** AC 250V/DC 30V

Maximum current of the outputs: 2.5A

Others

DC Power output: 24V/1A

**Working Conditions** 

Relative humidity: < 95%, without condensing

Operating temperature:  $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}(14^{\circ}\text{F to } +131^{\circ}\text{F})$ Storage temperature:  $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}(-40^{\circ}\text{F to } +158^{\circ}\text{F})$ 

Specification

Dimension (WxHxD): 482 mm×88 mm ×407 mm

Packing dimension (W\*H\*D): 580mm×235mm ×552mm

Net weight: 7.9Kg Gross weight: 10.7Kg

#### **Ordering Information**

PEX-8/EN:Zone Expander