

Zone Expander

RK-ZONE8

General

The Honeywell INTEVIO Public Address (PA) system is the ideal solution for single buildings. Its integrated design provides better stability and cost savings, along with an enhanced user experience for improved performance.

Description

The RK-ZONE8 is a zone expansion device controlled by the RK-MCU, which adds 8 speaker zones, 8 monitored contact inputs, and 8 contact outputs to the INTEVIO system. The RK-ZONE8 is used primarily when dual channel audio is required for an application.

Functions

Input/output

The RK-ZONE8 has 8 monitored contact inputs that can be linked with the fire alarm system to trigger alert and evacuation messages. A single line input is provided to connect with an external audio source.

It has 8 contact outputs that can be used to activate external devices. 8 pairs of 100V speaker outputs allow multiple loudspeakers to be connected in parallel. A pair of audio output ports for audio channel 1 and audio channel 2 can be used to connect with third-party power amplifiers or devices. A single 24 VDC output is provided to power external devices.

Automatic fault diagnosis

The zone expander 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. Fault information is displayed on the LED indicators located on the front panel.



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Device operation (All Calls) even if the MCU is unavailable

The external audio source connected to the line input can still be broadcast to all local zones if the controller CPU malfunctions or is unavailable. This feature can reduce system downtime due to CPU failure, and allow safety alert broadcasting during an emergency.

FEATURES AND BENEFITS

- Expands up to 8 zones for the INTEVIO system.
- Supports single & dual audio channel mode.
- Up to 15 RK-ZONE8 devices can be connected on a system.
- Connects up to 4 main power amplifiers and 1 spare power amplifier.
- 500 W output capacity for each zone.
- Supports one-for-all amplifier backup.
- Automatic fault diagnosis.
- A line input can be used in standalone mode or when the controller is unavailable.
- Supports 3-wire and 4-wire volume controllers.
- 8 dry contact inputs with supervision.
- 8 dry contact outputs.
- Single line input, 8 monitored contact inputs, and 8 contact outputs.
- Flexible amplifier backup mode: one backup amplifier can be used to back up all amplifiers on the system.
- Independent volume control for each audio channel.
- Automatic fault detection: main power, backup power, CPU, amplifiers, speaker lines, speaker line grounding, dry contact inputs, and network.
- Dual channel operation to support two audio channels simultaneously.
- Supports up to 8 speaker zones.
- Standalone operation (for PA announcements if the master control unit is unavailable) or in network mode along with the RK-MCU.
- 24 DC output to power external devices, such as volume controller.

RK-ZONE8 Technical Specifications

PARAMETERS	VALUES
MAIN POWER SUPPLY VOLTAGE	AC 100-240V 50/60 Hz
BACKUP POWER SUPPLY VOLTAGE	21.5 VDC-28.5 VDC
POWER CONSUMPTION FUSE	T2AL 250V
RATED POWER	35 W
LINE INPUT	
INPUT SIGNAL	1V (0 dBV)
INPUT IMPEDANCE	10 K Ω
FREQUENCY RESPONSE	80 Hz-18 kHz, \pm 3 dBV
SNR	>80 dB (A-weighted)
AUDIO OUTPUT	
OUTPUT CHANNELS	CH1, CH2
OUTPUT SIGNAL	1V (0 dBV)
THD	<0.1%
POWER AMPLIFIER CONTROL INTERFACE	
CHANNEL NO.	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 CIRCUIT	
OUTPUT CHANNEL NO.	8 (with group A and group B)
MAXIMUM LOUDSPEAKER LOAD	500 W

PARAMETERS	VALUES
CONTACT INPUT/OUTPUT	
CONTACT INPUTS	8 contact input ports with supervision
CONTACT OUTPUTS	8 contact output ports (NO, NC, and COM)
MAX. WORKING VOLTAGE FOR OUTPUTS	AC 250 V/DC 30V
MAX. WORKING CURRENT FOR OUTPUTS	2.5 A
OTHERS	
DC POWER OUTPUT	24V/1 A
OPERATING CONDITIONS	
RELATIVITY HUMIDITY	< 95% without condensing
OPERATING TEMPERATURE	-10°C ~ +55°C (14°F to +131°F)
STORAGE TEMPERATURE	-40°C ~ +70°C (-40°F to +158°F)
WEIGHTS AND DIMENSIONS	
PRODUCT DIMENSION (W*H*D)	482 mm x 88 mm x 407 mm (18.98 in. x 3.46 in. x 16.02 in.)
PACKAGE DIMENSION (W*H*D)	580 mm x 235 mm x 552 mm (22.83 in. x 9.25 in. x 21.73 in.)
NET WEIGHT	16.75 lbs.
GROSS WEIGHT	22.93 lbs.

Note: Honeywell reserves the right, without notification, to make changes in product design and/or specifications.

WARRANTY

2 Years

CERTIFICATIONS AND APPROVALS

CATEGORY	REGION	CERTIFICATION
SAFETY	Europe	CE Certified
SAFETY	Global	CB Certified
SAFETY	North America	UL60065 Certified
EMC	North America	FCC Part 15 Subpart B Certified

ORDERING

DESCRIPTION	MODEL#
8-ZONE EXPANDER	RK-ZONE8

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DO-60987 | 11/17
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