

AUDIO EXPANDER & INTEGRATION GATEWAY

Model: KNJB-PA09Box / KNJB-PA09BoxT *

The Bridge to Universal Control

* the KNJB-PA09BoxT model features an integrated Telephone



WHEN ISOLATION THREATENS CONTROL. WE ENSURE SEAMLESS INTEGRATION

In any large-scale facility, true operational command comes from the seamless integration of all systems. Your Public Address system cannot exist in a vacuum. It must communicate intelligently with life-safety systems, building management platforms, and third-party audio sources. The challenge has always been achieving this integration with absolute reliability and without compromise.

Imagine a single, intelligent nexus that acts as the master translator for your entire facility. A gateway that flawlessly bridges your core KNTech PA system with critical third-party infrastructure, from fire alarm control panels to external music sources and telephone networks. A device that ensures every signal, every trigger, and every audio stream is managed with precision and delivered with clarity.

This is the promise of the **KNTech KNJB-PA09Box Series**. It is more than an interface; it is the central hub for system interoperability, engineered to unify your technologies and empower you with complete, centralized control.

■ Key Functional Features & Benefits: Engineered for Seamless Integration

I. Universal Connectivity & Control



Pristine, Multi-Source Audio Integration: Seamlessly incorporate up to 10 channels of external, high-definition (24-bit, 48 kHz) audio into your PA system. This allows for the flawless broadcast of everything from high-quality background music (e.g., from a Mac Mini or media player) to critical audio from specialized third-party equipment, ensuring a rich and versatile auditory environment.



Intelligent Third-Party System Triggering: The gateway features 10 dry contact inputs and 10 dry contact outputs, alongside Modbus (TCP/RTU) protocol support. This provides a robust and reliable bridge to essential building systems. Its most critical application is linking to a fire protection system, allowing fire alarm triggers to automatically route emergency announcements with the highest priority, ensuring compliance and passenger safety.



Telephone System Integration (KNJB-PA09BoxT): The specialized “T” model provides a direct interface to third-party telephone systems. This enables authorized personnel to make live public address announcements directly from a telephone handset, adding a vital layer of flexibility and accessibility for emergency and operational communication.

II. Centralized & Flexible Management



Intuitive Web-Based Configuration: Eliminate complex programming and on-site adjustments. A simple and powerful Web GUI gives your engineers complete control over the entire device. Configure network settings, manage audio routing, and define control logic from a centralized and secure interface.



Dynamic Input-to-Zone Routing: You have complete freedom to decide where every signal goes. The web interface allows you to freely select and configure the output zone for each of the 10 audio and 10 dry contact inputs. This empowers you to create highly customized and adaptive communication scenarios tailored to your facility's specific operational needs.



Clear, At-a-Glance Status Monitoring: Front-panel LED indicators for all 10 channels, plus power and network status, provide immediate visual confirmation of the system's operational state. This simplifies diagnostics and gives operators the confidence that all connections are active and functioning correctly.

III. Carrier-Grade Reliability & Performance



Engineered for 24/7/365 Uptime: In critical systems, reliability is not optional. The KNJB-PA09Box is designed with a Mean Time Between Failures (MTBF) of over 100,000 hours, ensuring it performs as a trusted and durable component of your infrastructure.



Built for Demanding Environments: Your technical rooms can be harsh environments. With a wide operating temperature range of -25°C to 75°C and a robust metal chassis, this gateway is built to withstand the rigors of continuous operation in any equipment rack.



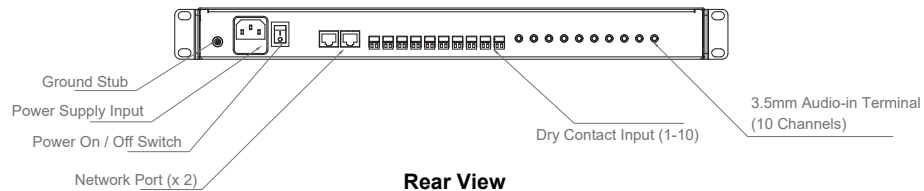
Non-Volatile Memory: Configurations are your system's intelligence. All programming and configuration settings are stored in non-volatile flash memory, guaranteeing that your custom settings are securely retained even through power cycles and ensuring immediate operational readiness upon restart.

■ Specifications

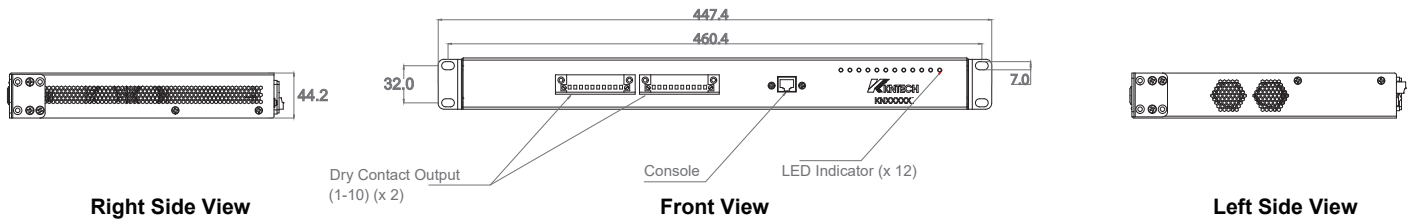
Parameter	Description
Model	<ul style="list-style-type: none"> ■ KNJB-PA09Box: Audio & Dry Contact Integration Gateway ■ KNJB-PA09BoxT: Adds Telephone System Interface Module
Audio & Control Interfaces	
Audio Inputs	10 x High-Definition Channels (24-bit, 48 kHz) via 3.5mm terminal
Dry Contact Inputs	10 x Dry Contact Input Groups
Dry Contact Outputs	10 x Dry Contact Output Groups
Control Protocols	Supports MODBUS (RTU / TCP) and Dry Contact for third-party system control
Network & Integration	
Ethernet Type	100Base - TX Ethernet
Network Ports	2 x RJ45 Connectors (for Cat5e or better)
Network Protocols	Audio-over-IP, DHCP, Static IP
Configuration	Full programming and configuration via secure Web GUI
System Memory	Non-volatile flash memory for configuration retention
Performance & Reliability	
MTBF	> 100,000 hours
MTTR	< 2 hours
Physical & Environmental	
Operating Temperature	-25°C to + 75°C
Power Supply	AC 110V ~ 240V (Internal) * Optional DC 12V input (Max 24W)
Case Material	Durable Steel / Metal Alloy
Status Indicators	12 Front-Panel LEDs for Power, System Status, and Channel Activity
Dimensions (W x D x H)	477.4 x 260 x 44.2 mm
Mounting	Rack-mounted: 19in, 1U

■ Dimension

Unit in mm



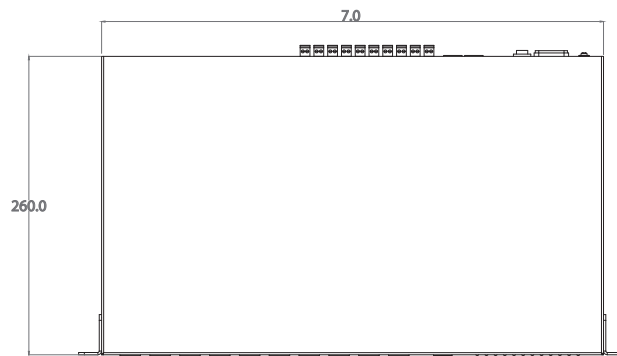
Rear View



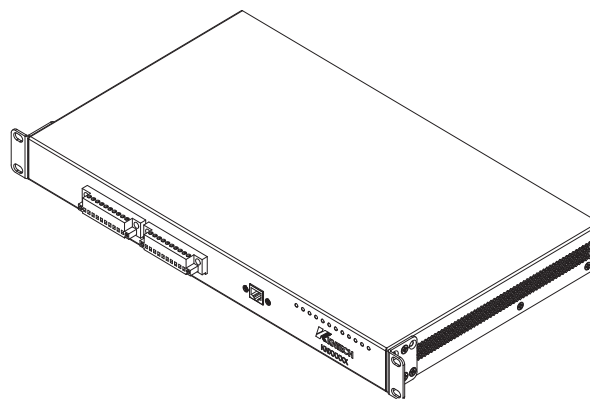
Right Side View

Front View

Left Side View



Top View



Isometric View

Your Partner in Building a Safer, More Connected Future

Choosing the right technology is about more than just specifications; it's about choosing a partner you can trust. With over 20 years of global experience in equipment design and marketing, we understand the unique challenges and stringent requirements of large-scale public and private sector projects.

The **KNTech KNJB-PA09Box Series** is the culmination of this experience, engineered to provide not just a solution, but confidence. It is a commitment to quality, reliability, and the seamless integration of the systems you depend on.

Take the first step towards a fully integrated and efficient communication ecosystem.

Contact us today to discuss your specific integration needs.

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