PA CALL STATION / PAGING MICROPHONE

Model: KNPA800miniR
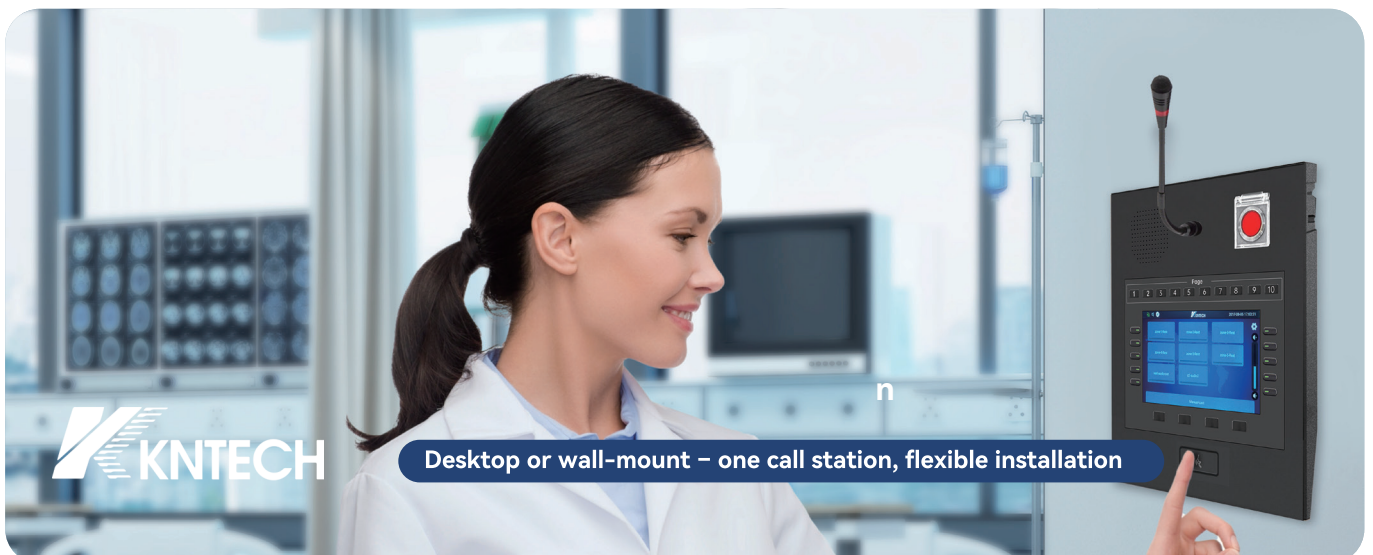
100-zone one-touch paging with a covered red emergency key

With Gooseneck microphone

Front

Rear

Desktop or wall-mount – one call station, flexible installation

KNTECH

■ Key Functional Features & Benefits: Engineered for Mission-Critical Assurance

I. Purpose-Built Design: Uncompromising Reliability Certified for Safety

Engineered for Professional Excellence: Designed exclusively for professional PA applications, ensuring every component is optimized for performance and longevity in demanding environments.

Certified for Absolute Safety: With EN 54-16 and ISO 7240-16 certifications, the KNPA800 meets the most stringent international standards for life safety and voice evacuation systems, giving you verifiable peace of mind.

24/7 Operational Readiness: Built for continuous, round-the-clock operation with intelligent, energy-saving features in standby mode, supporting both your security objectives and your sustainability goals.

II. User-Centric Interface: Sophistication Made Effortless

Intuitive Command:A vibrant 4.3-inch TFT provides a clear, responsive, and intuitive interface. This allows operators to manage complex functions with minimal training, reducing human error during high-pressure situations.

Effortless Zone & Group Selection: Effortlessly configure and select individual zones, pre-defined groups, or initiate an all-call broadcast with just a few taps. The expandable display allows for a clear overview of your entire facility.

At-a-Glance Status Confirmation: Clear, unambiguous visual indicators for power, communication status, and push-to-talk activation provide immediate confirmation that your message is being broadcast as intended.

III. Superior Audio Management: Your Voice, Delivered with Pristine Clarity

Crystal-Clear Vocal Transmission: The professional-grade gooseneck unidirectional microphone is engineered to capture the human voice with exceptional clarity, cutting through ambient noise to ensure every word is intelligible.

Total Audio Control: With adjustable microphone sensitivity, volume control, and software-configurable parametric equalization, you can fine-tune every broadcast to perfectly match the acoustic environment of each zone.

Seamless Integration of Audio Sources: A 3.5mm jack for wireless microphone input provides added flexibility for mobile presenters or special events, seamlessly integrating external audio into your system.

IV. Flexible Broadcasting Capabilities: The Right Message, to the Right People, at the Right Time

Dynamic and Targeted Communication: Empower your team with selective zone, group-zone, and all-call paging options. This allows you to tailor your announcements with surgical precision, ensuring relevance and preventing unnecessary disruption.

Automated and Scheduled Announcements: Leverage advanced scheduling for routine daily, weekly, or monthly broadcasts. Pre-recorded messages can be distributed with precise zone targeting, freeing up operator time and ensuring consistency.

Unyielding Priority for Emergency Alerts: In a critical situation, every second counts. The system's priority-based audio routing ensures that emergency announcements and alerts will instantly and automatically override any lower-priority audio, guaranteeing that life-safety messages are always delivered without fail.

V. Enterprise-Grade Reliability & Integration: A Future-Proof Foundation

Simplified, Cost-Effective Installation: Power over Ethernet (PoE) operation eliminates the need for a separate power supply, simplifying installation and reducing overall deployment costs.

Built-in Network Redundancy: Dual Ethernet ports provide a fail-safe connection, ensuring your call station remains fully operational even in the event of a network hardware failure.

100-key paging console with guarded emergency key: 10 pages × 10 physical paging buttons, 4 function keys, one main paging key and a red emergency key under safety cover to prevent accidental triggering.

Secure and Encrypted Communication: Utilizing AES67 for audio and AES70 for control, all communications are encrypted and authenticated, protecting the integrity of your network and preventing unauthorized access.

■ Specifications

Parameter	Description
Model Information	Digital IP Call Station with Gooseneck Microphone, KNPA800miniR
Performance Specifications	
Power Source	Power over Ethernet (PoE) or line powered from remote PA Power supply box
Power Consumption	24VDC @ 24W
Audio Performance	Frequency Response: 100 Hz - 20 kHz
Sound Quality	Distortion: ≤ 1%
Signal-to-Noise Ratio	≥ 60dB
Audio Processing	Software-configurable Parametric Equalization and Limiting
Microphone Type	Gooseneck Unidirectional Microphone
Polar Pattern	Unidirectional
Audio Input (3.5mm socket)	0 dBV, 600 ohm, balanced for background music input
Monitor Speaker	Internal Built-in speaker with output of 80 dB SPL at 1m
Audio Management & Control	
User Interface	4.3-inch TFT display
Dss Key	100 DSS keys
Chime	Built-in chime with single, dual, and quad-tone options, and a built-in speaker for monitoring

Parameter	Description
Audio Controls	Adjustable microphone sensitivity and volume control with software -configurable parametric equalization and limiting
Activation	Push-to-talk button with indicator light (non-locking optional)
Time Synchronization	Automatic time sync with GPS or local time servers
Network & Integration	
Maximum Cable Distance	Cat 5 for connections within 100m / Fiber + Pair cable for extended range up to 3km
Data Communication	Digital IP connectivity with AES67 audio protocol and AES70 control protocol with encryption
Integration	Compatible with zone selection, group-zone and all-call paging applications
Redundancy & Monitoring	
Power Redundancy	Dual power supply options (PoE or external 24VDC)
Network Redundancy	Dual Ethernet ports for failover protection
System Monitoring	Status indicators for power, failure, and function switching
Physical & Environmental	
Operating Temperature	0°C to +40°C
Operating Humidity	35% to 80% RH (non-condensing)
Housing Material	ABS (Acrylonitrile Butadiene Styrene)
Dimensions	213 (L) x 190 (W) x 76 (H) mm (excluding microphone)
Weight	0.93kg
Compliance	
Certification	Certifed Compliance With EN 54-16 and 1S0 7240-16 Standard, CE Marked / IEC 61082/ IEC 60300 / 1EC 60068 IEC 60050 / IEC 62368 / IEC 60601-1 and IEC 60601-1-2

- **Built-in Chime Tone:** Supports automatic chime tone playback prior to live paging announcements. Chime tone can be enabled/disabled and configured via system settings.

- **Concurrent Live Paging (Non-overlapping Zones):** Supports simultaneous live paging from multiple paging stations. When selected paging zones are non-conflicting (non-overlapping), parallel announcements are delivered concurrently to their respective zones.

- **Zone Conflict Handling (Priority Policy):** When paging requests overlap in zone selection, the system applies a predefined priority / occupancy policy (e.g., override/queue/restriction) to ensure emergency and higher-priority paging takes precedence.

- **BGM & Live Paging Mixing (Ducking):** Background music and live paging can coexist. The system supports mixing and/or automatic BGM (Background Music) attenuation (ducking) during paging to announcements are delivered concurrently to their respective zones.

- **Zone-based Paging with Flexible Zone Selection:** Supports multi-zone selection and quick zone operations, suitable for daily paging and emergency broadcasting applications.

■ More powerful features

1. Product Positioning

- KNPA800miniR is a professional IP Network Paging Console for PAGA/PA systems, designed for SafeArea control rooms and operation centers. It enables zone paging, emergency paging activation, andsystem status monitoring for mission-critical communications.

2. Key Features

- One-touch Emergency Paging: Covered red emergency key with anti-misoperation protection.
- Manual alarm / emergency paging functions: General Alarm / Gas Alarm / All Clear. Zone/ groupselection, All Call and One-touch paging.
- Gooseneck unidirectional microphone with PTT; PTT is momentary (non-locking).
- 4.3" TFT color display for zone selection, call status and fault indication.
- System monitoring: power/communication/fault indication, supports fault acknowledge.

3. Anti-misoperation Protection

- Emergency key protected by flip cover to avoid accidental activation.
- Alarm/emergency activation supports press-and-hold or confirmation pop-up (configurable).
- User privilege control: emergency/alarm operations for authorized users only.

4. Mounting

- Supports Desktop / Wall Mount / Flush (Panel) Mounting.
- Cut-out dimensions and mounting brackets are available (optional).

5. IP Rating

- Front panel protection: IP22 minimum (for indoor control room environment).

6. Microphone & PTT

- Gooseneck unidirectional microphone with PTT button.
- PTT is momentary (non-locking) type; release to stop paging.

7. Display & Indications

- 4.3" TFT display shows zone selection, call status and system information.
- Status indication for power, operation and fault (event indication supported).

8. Cybersecurity Support (IEC 62443 Requirements)

- Supports secure access control: configurable user privilege and password policy.
- Supports minimizing enabled ports/services (system/network managed).
  Works with PAGA controller for encrypted control and prevention of unauthorized access.
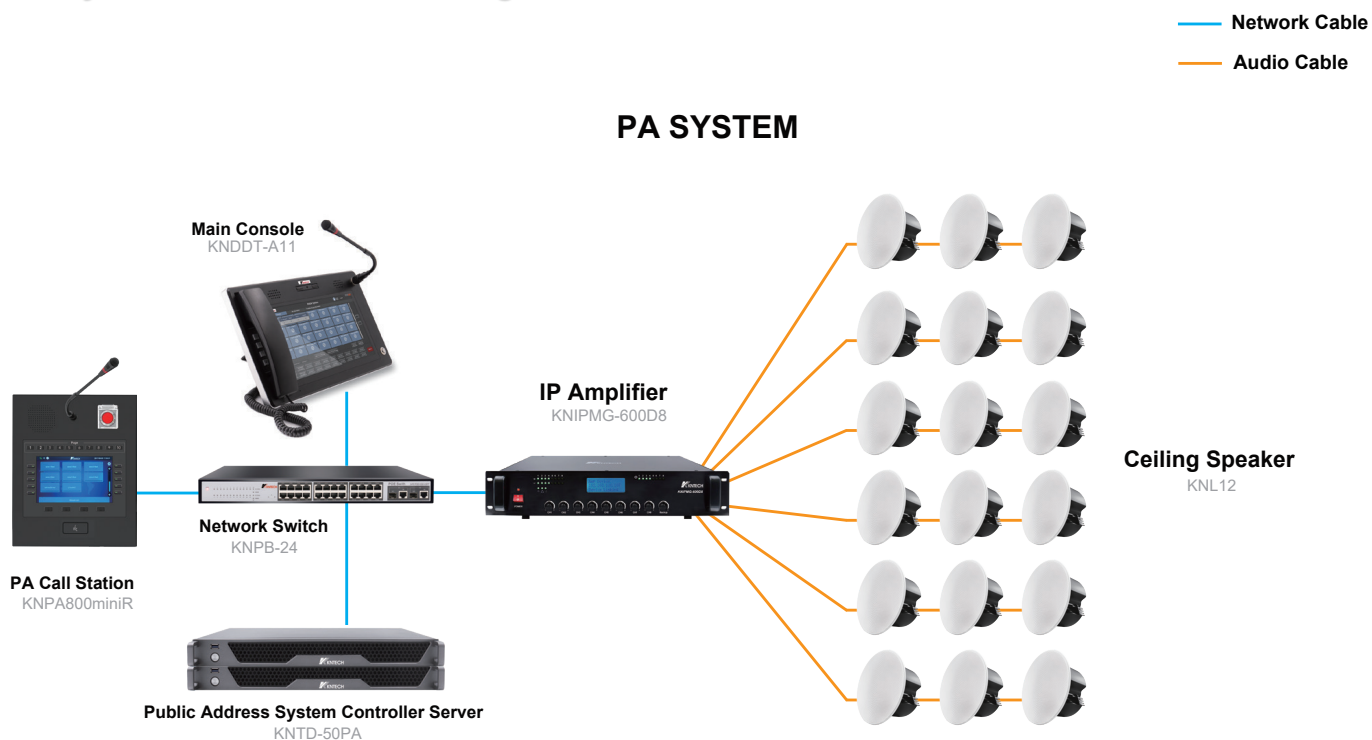
9. Area of Use

- KNPA80ominiR is designed for Safe Area control room applications. For Hazardous Area, please use IECEx/ATEX certified field Paging stations/telephones as required.

10. Alarm Indication

- **Local Alarm Indication**: System status and local alarms (power/communication/fault) are indicatedon the 4.3" TFT with acknowledge/mute support. External Alarm Indication: Via PAGA Controller/Server integration, external alarm inputs/system events (e.g., Fire & Gas/ Alarm /ICSs(Integrated Control & Safety System) are indicated on 4.3" TFT with acknowledge /mute support.

■ System Architecture & Management Interface

— Network Cable
— Audio Cable

PA SYSTEM

Main Console
KNDDT-A11

IP Amplifier
KNIPMG-600D8

Ceiling Speaker
KNL12

Network Switch
KNPB-24

PA Call Station
KNPA800miniR

Public Address System Controller Server
KNTD-50PA

■ Dimensions

Unit: mm

190

213

76

106

Your Partner in Building a Safer, More Connected Future

Choosing the right technology is about more than comparing specifications; it's about choosing a partner you can trust to protect what matters most, with over 20 years of global experience in designing and marketing eauipment for critical infrastructure, we at KNTEcH understand the immense responsibility you carry.

The **KNTECH KNPA800miniR PA Call Station / paging microphone** is the culmination of this experience, engineered not just to provide a solution, but to instill confidence. It represents our unwavering commitment to quality, reliability, and the safety of the people you serve.

Take the first step towards a more secure and efficient communication ecosystem.

Contact us today to schedule a personalized demonstration and discover how the KNPA800miniR can become the intelligent, responsive, and unfailingly clear voice of your operations.