

# PAEDUIO Public Address System



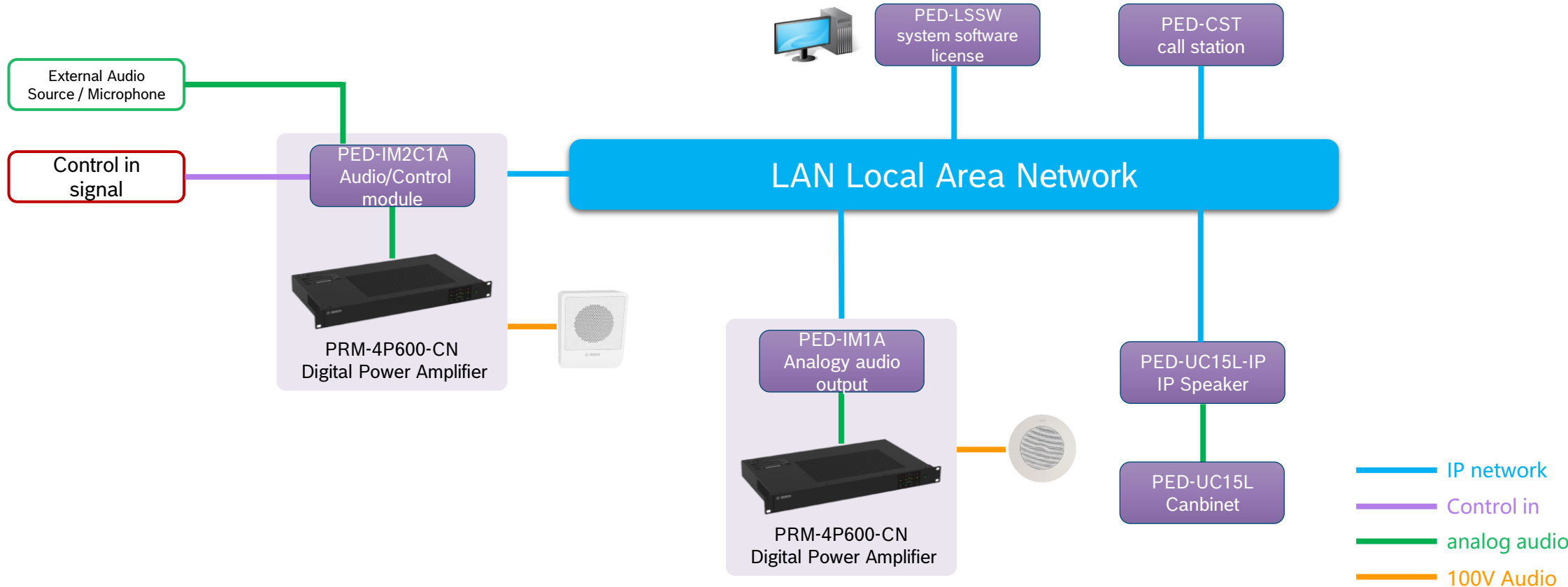
# PAEDUIO PUBLIC ADDRESS SYSTEM

- PAEDUIO™ /'paɪdiəʊ/
- "An IP PA system optimized for education applications based on network audio technology to meet the needs of mid-market applications."



# PAEDUIO Public Address System

## SYSTEM ARCHITECTURE DIAGRAM



# PAEDUIO Public Address System

## COMPONENTS



# Call station

## - INDUSTRIAL DESIGN

- Similar industrial design of PAVIRO call stations
- Push to Talk buttons, retaining physical keys
- Red emergency call button
- 7-inch full-color capacitive touch screen
- Bosch Standard Gooseneck Microphone



# Call station

## - CONNECTORS

- PoE Network port
- Local Audio Input (Line)



# Call station

## - FUNCTION AND OPERATION

- Pre-recorded message call
- Live call
- Emergency message call
- Real-time monitoring
- Fault notification
- Authentication Login (PIN code)
- Access control



# Call station - GUI





# Call station

## - GUI

- Similar GUI design and operation logic of PRAESENSA APAS.
- Example - Pre-recorded message:



- Step-by-step operation navigation bar to guide the user know the current operation
- **[UX Design]** Color Scheme Based on Visual Theory with Clearly Distinguished Primaries and Seconds

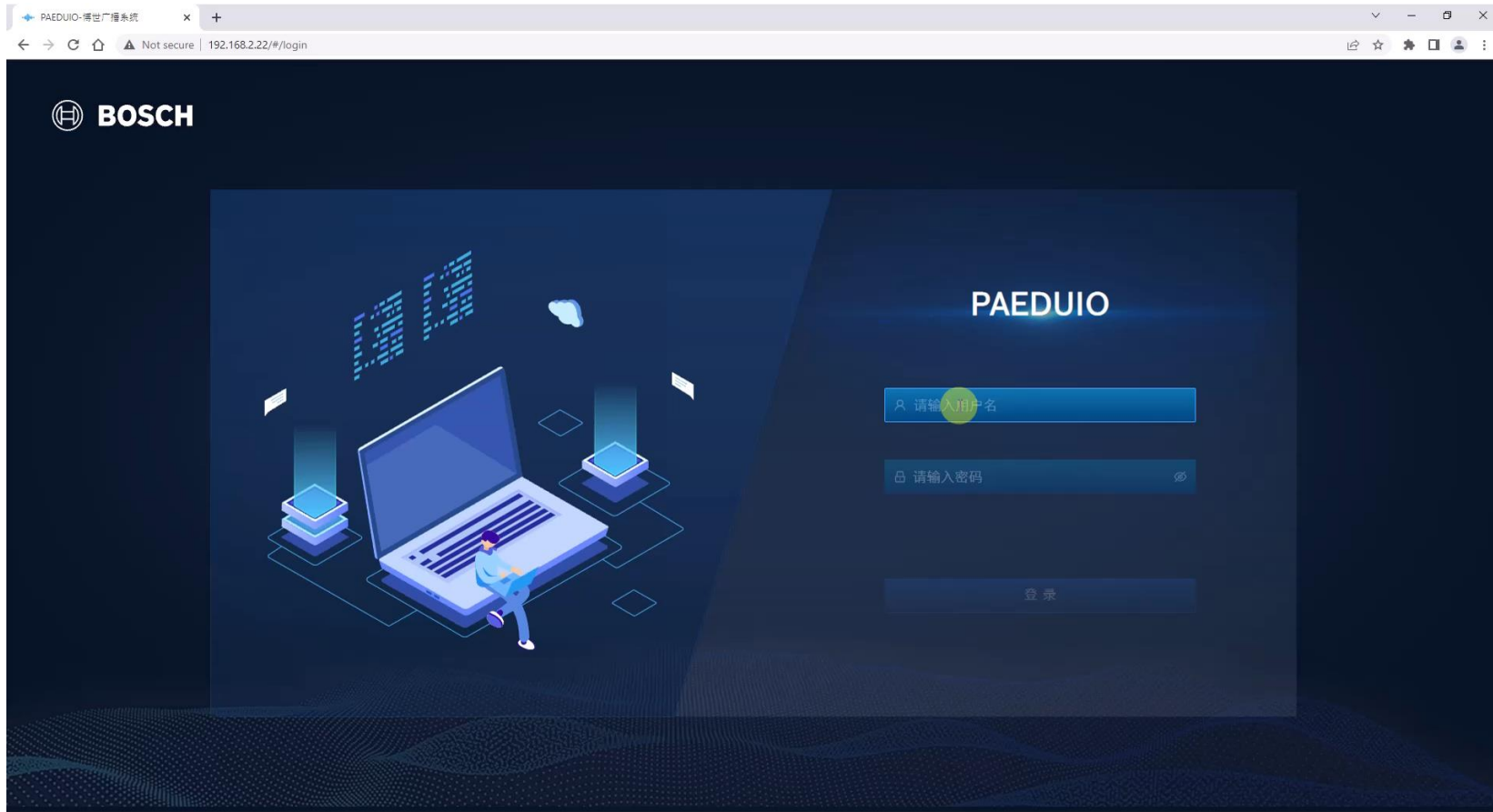
# PAEDUIO Public Address System

## COMPONENTS



PED-LSSW system software licenses

# PAEDUIO Public Address System OPERATION DEMONSTRATION





# PAEDUIO

请输入用户名

请输入密码

登录

# System software

## - GUI

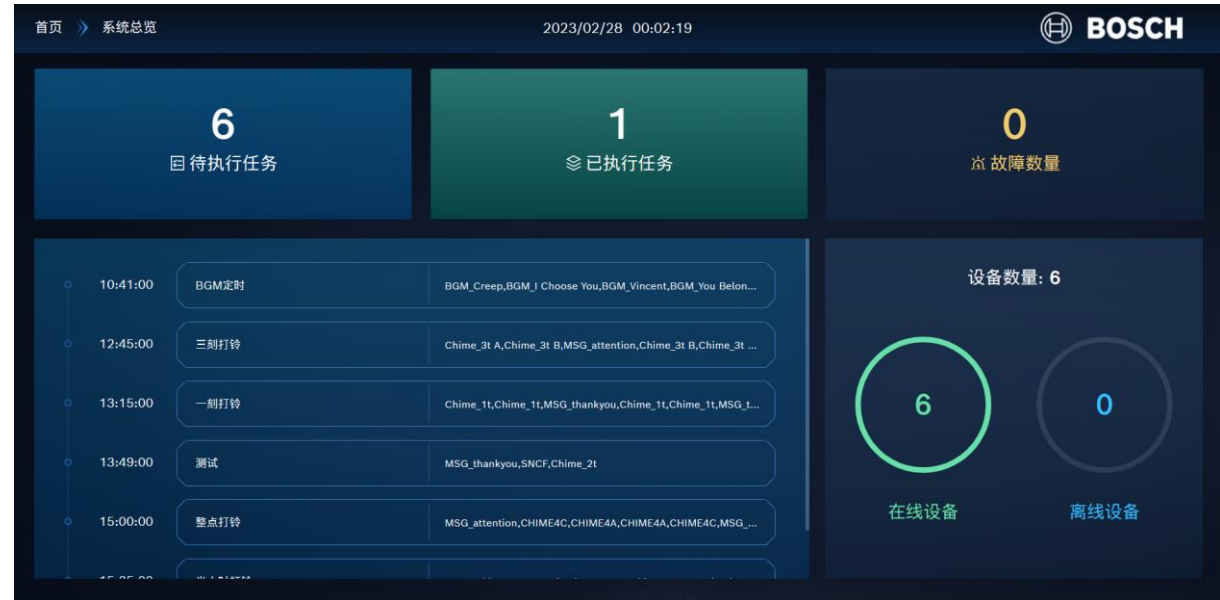
- B/S architecture:
  - System software running in the background as a Windows service
  - User login to the client via web browser



# System software

## - FUNCTION AND OPERATION

- System Overview dashboard
- Pre-recorded message call, scheduled call, zone monitoring, system logs
- User management, multi-level access control
- Device management, status monitoring, firmware upgrades
- Backup and restoration of system configuration
- Exam mode and self-test mode



# system software

## - CONFIGURATION TOOL

### Standalone Windows application

- Unified management platform for PAEDUIO IP devices  
(No need to log in to the device's web configuration interface one by one)
- Configure parameters such as device name, server IP, device IP, etc.
- Support batch modification
- Access rights control to ensure system security:
  - devices in factory default state, can be configured without verification;
  - configured devices, you need to connect to the server to verify the administrator



产品序号	设备名称	IP地址	子网掩码	网关IP	服务器IP	MAC地址
	理型站#1	192.168.8.14	255.255.255.0	192.168.8.117	192.168.8.117	C8-AA-55-11-BE-B3
4055592333700010001	网络直连#2	192.168.1.102	255.255.255.0	192.168.1.1	192.168.8.117	C8-AA-55-11-BE-B4
4055592333700010003	网络直连#1	192.168.8.15	255.255.255.0	192.168.8.117	192.168.8.117	C8-AA-55-11-BE-B6
405592133700040001	控制接口模块#1	192.168.8.19	255.255.255.0	192.168.8.117	192.168.8.117	C8-AA-55-11-BE-B8
405592133700040004	控制接口模块#2	192.168.1.105	255.255.255.0	192.168.1.1	192.168.8.117	C8-AA-55-11-BE-BB
405592233700030001	音频输出模块#1	192.168.8.20	255.255.255.0	192.168.8.117	192.168.8.117	C8-AA-55-11-BE-BC

# PAEDUIO Public Address System

## COMPONENTS



PED-IM2C1A  
Audio/Control  
module



PED-IM1A  
audio output module



# IP module

## - Audio/Control module

- 1 Audio Input (Line)  
1 Audio Output (Line)
- 2 control inputs (dry contact)  
2 control outputs (relays, normally closed/normally open)
- Frequency Response: 100Hz~18kHz
- Sampling rate: 44.1kHz
- Audio format: MP3/PCM
- PoE



# IP module

## - Audio/Control module

- Function:
  - Encodes analog audio into IP network
  - Decodes audio over IP and could output to amplifier
  - Dry contact control input to external system
  - Relay control output, override for volume control



# IP module

## - audio output module

- 1 Audio Output (Line)
- Frequency Response: 100Hz~18kHz
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- Audio format: MP3/PCM
- PoE



# IP module

## - audio output module

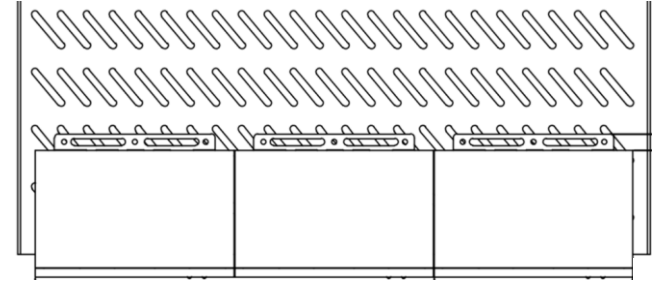
- Function:
  - Decodes audio over IP and could output to amplifier



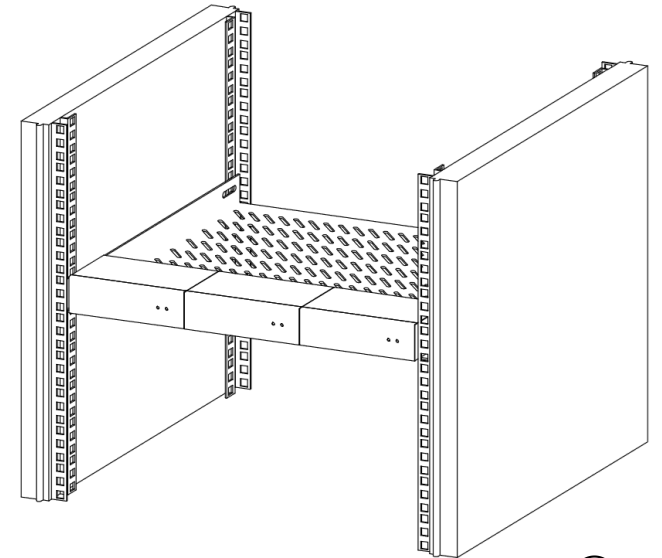
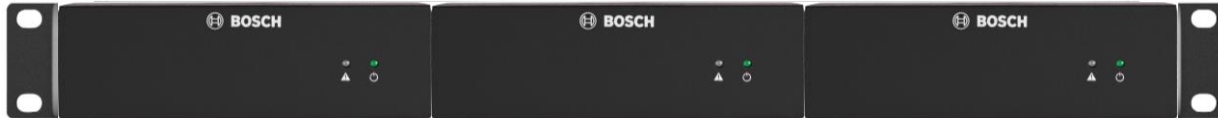
# IP module

## - Installation

- Rack tray mounting



- 1/3 of 19" (1U height) mount three side by side:



# PAEDUIO Public Address System COMPONENTS

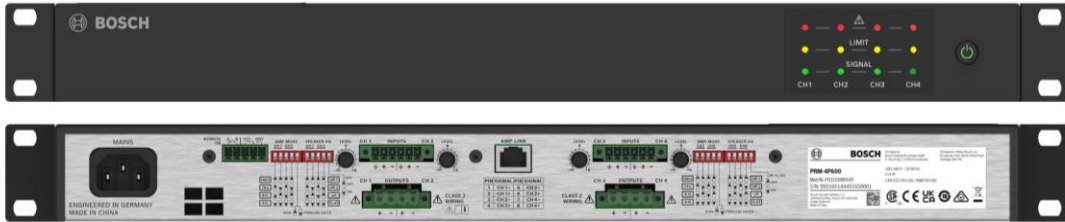


PRM-4P600-CN 4-Channel Digital Amplifier

# Power amplifier

## - Multi-Channel Digital Amplifier

- PRM-4P600-CN
  - 4 channels
  - **powerTANK** Total power 600W



- End of 2023
  - 2 channels
  - **powerTANK** Total power 600W



# Power amplifier

## - More Amplifiers

- PLENA range power Amplifiers
- PLENA easy range Mixing Amplifiers

LBB 1930/20, LBB 1930/20,  
LBB 1930/20功率放大器



PLE-1P120-EU, PLE-1P240-EU  
单通道功率放大器



PLE-1MA  
单分区混音放大器



PLE-1ME  
经济型单分区混音放大器



PLE-2MA  
两分区混音放大器





# PAEDUIO Public Address System

## COMPONENTS

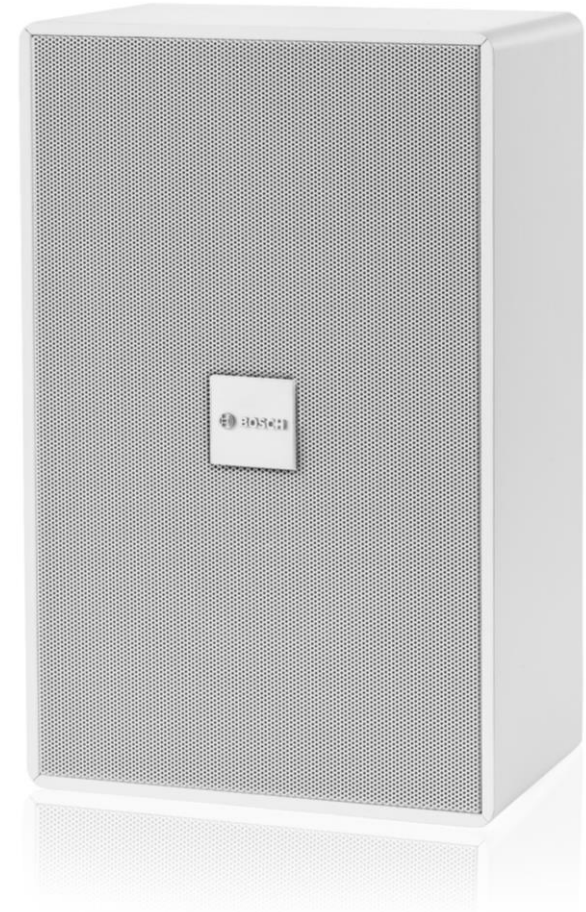


PED-UC15L-IP  
IP Speakers

# IP Speaker

## - Technical specifications

- 15W, 8 Ohms
- Maximum sound pressure level: 99dB
- Frequency Response: 95Hz~19.5kHz
- Built-in amplifier: 15W x 2



# IP Speaker

## - Connectors

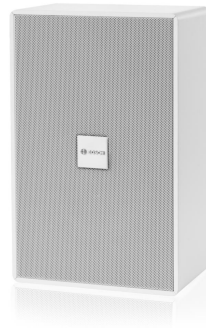
- IP Network for audio/control
- 2 local Audio Inputs (Line)
- 1 high priority audio input (100V for exam mode)
- 1 x Output for slave cabinet (8Ω/15W)



# IP Speaker

## - Connectors

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- ✓ Ringing / PA speakers
- ✓ Multimedia teaching sound reinforcement box
- ✓ Examination PA speakers

Avoiding Duplicate deployments

# IP Speaker

## - Installation

- Wall mounting (portrait or landscape)
- 24VDC power supply



# PAEDUIO Public Address System

## PRODUCT MODEL

CTN	Description
PED-LSSW	System Software License (USB Dongle)
PED-CST	Call station
PED-IM2C1A	IP Module, 2x2 Control, 1x1 Audio
PED-IM1A	IP Module, 1x Audio Output
PED-UC15L-IP	15W Speaker, IP
PED-UC15L	15W Speaker
PRM-4P600-CN	Digital amplifier, 600W, 4 channels



# PAEDUIO Public Address System Applications



# Applications

## Education / local audio

“Teachers are able to play the audio of their lessons in the classroom and use wireless microphones for sound reinforcement.”

-- Teachers





# Applications

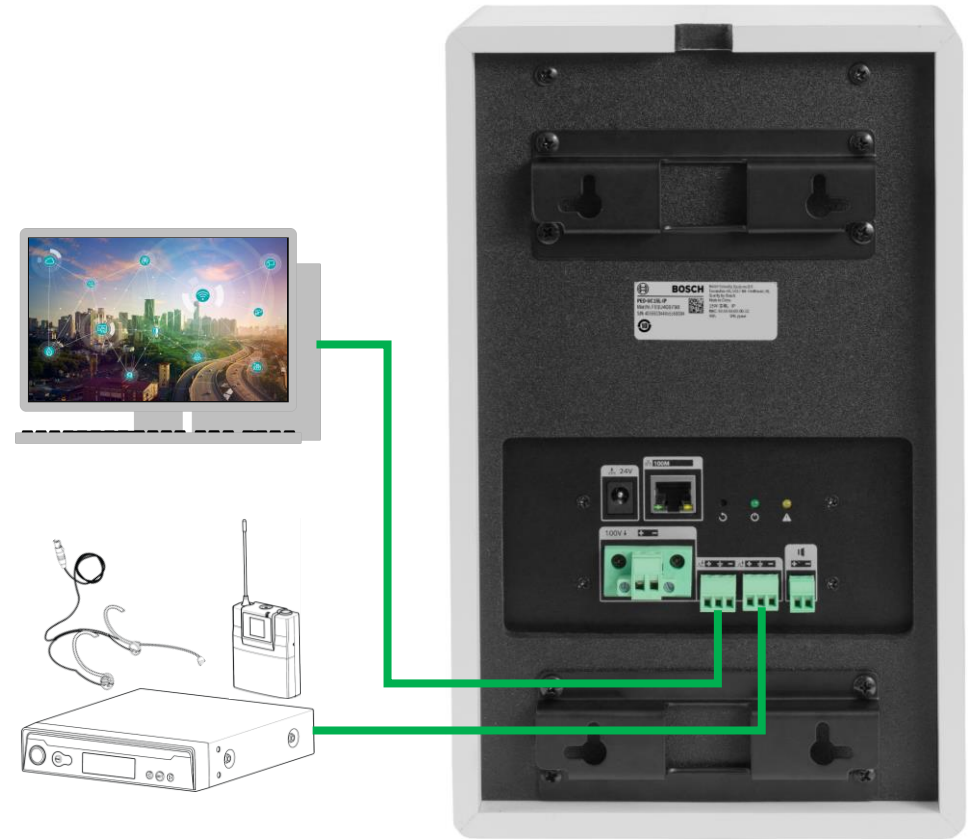
## Education / local audio

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### PAEDUIO's solution - local audio input:

- The IP Speaker has two local audio inputs, which can be connected to the teaching computer and wireless microphone at the same time, and output after mixing;
- When live call happens, the local audio signal will be temporarily override and will automatically resume when the announcement is over;



# Applications

## Education / exam mode

"PA system of the campus is IP based, what should I do in case of network problems when the school conducts the important English listening test? Does the PA equipment in the examination center have a redundancy method to support when the network doesn't work? "

-- Head of Equipment Section



# Applications

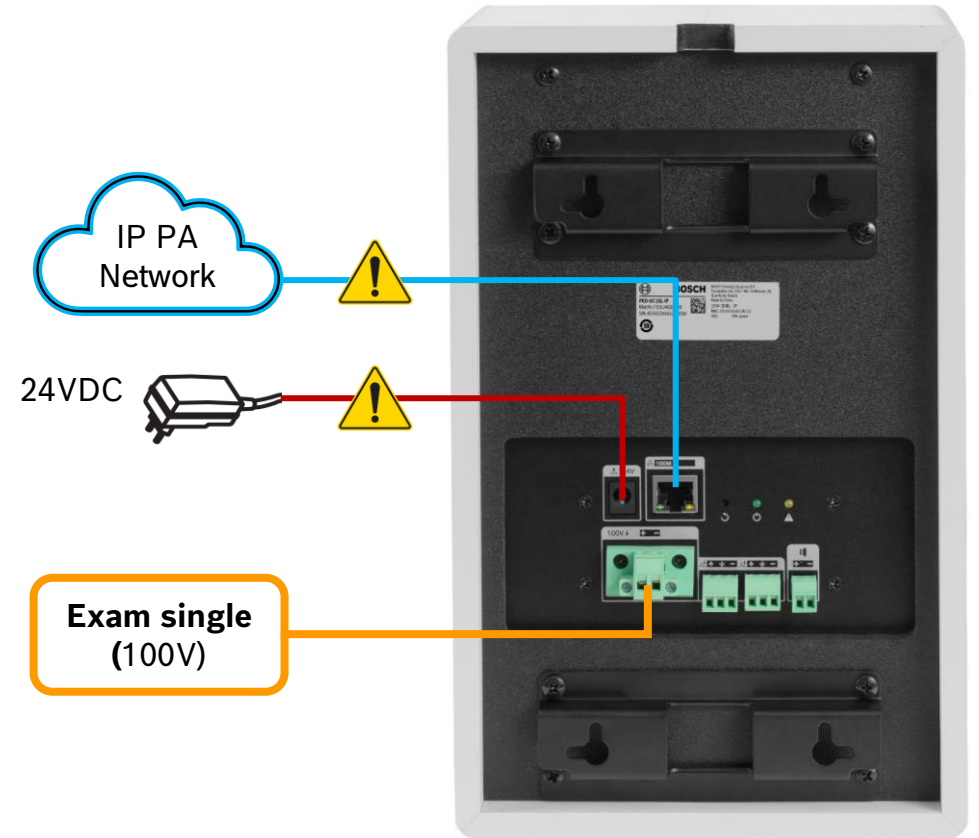
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### PAEDUIO Solutions - Exam:

- The IP Speaker has a 100V audio input for connection to another analog PA system (network independent);
- When "Exam Mode" is enabled, the IP Speaker switches the signal source to 100V input and starts playing the exam content;
- At this time, even if the IP speaker is disconnected from the network and power supply, it will not interrupt the normal playback of the exam content;



# Applications

## Education / schedule announcements

The schools have various types of schedule announcements every day, such as flag raising, bell ringing, exercises, etc., which require pre-programmed tasks and take into account the different time periods in different seasons."

-- Director of Academic Affairs



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### PAEDUIO Solution – schedule tasks:

- Setting up a scheduled task (accurate to the second);
- Multiple scheduled tasks can be combined into a single scheduled program which could be enable/disable by user (e.g. summer program and winter program);
- System overview dashboard allows users to visualize the pending and executed schedule tasks of today;



# Applications

## Commercial buildings / monitor

This large shopping mall has different business calls every day, including announcements, promotions, reminders and so on. In the PA control room, operators need to monitor the dedicated zones in real time to check whether the announcement is released in correct content."

-- System integrators



# Applications

## Commercial buildings / monitor

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-- System integrators

### PAEDUIO solutions - IP Speakers

- With B/S architecture, we can use web browser on the client to select zone and start monitoring
- Connect PC audio to IP speakers for control room monitoring



# Applications

## Hospital / fixed zone call station

"Nurse station on each floor in a hospital need to have a call station to call for for selected zone. In order to save the the system cost, the call station of some nurse station only require to cover the neighboring area. A fixed zone call station will be enough."

-- System integrators





# Applications

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-- System integrators

### PAEDUIO solutions - IP call stations:

- The standard IP call station provides a GUI which has a 7-inch touch screen to select zone and start a prerecorded announcements or live call.



# Applications

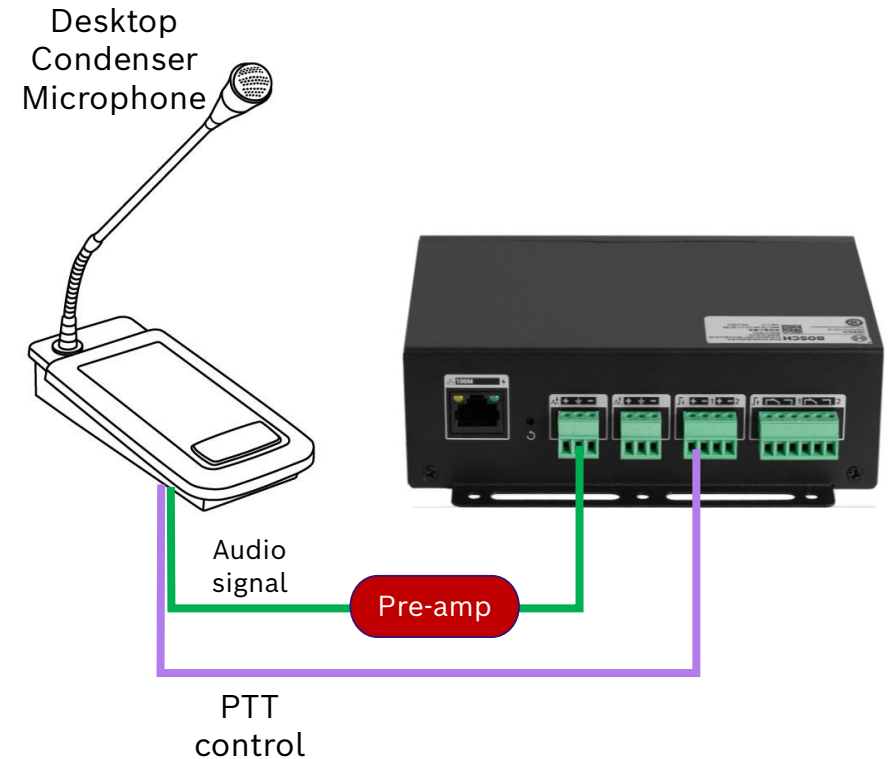
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### PAEDUIO solutions – fixed zone call stations:

- Use a analog call station, connected to the system via an audio/control interface, to make push-to-talk live call to pre-configured zones  
(\* a preamplifier will be required for microphone)



# Applications

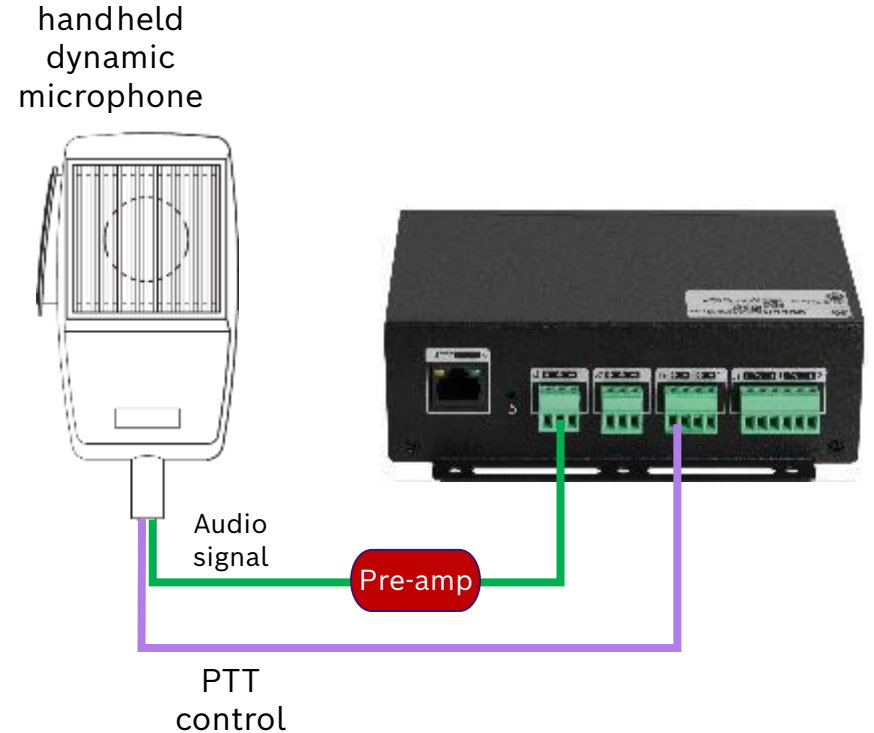
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# PAEDUIO Public Address System

## Summarize



Flexible IP Architecture and Components

Innovative power-sharing technology, energy efficient

Design based on user experience

Optimized hardware and software for education application