MGCL
Miraloyd Global Consult Limited
Communicate. Connect. Build. Transform.

IP Public Address System Solution for Offices and Industries.

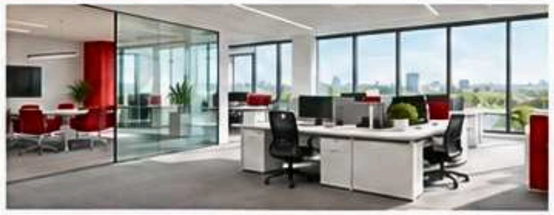
# IP PA
## & Emergency communication system
### For offices, factories and warehouses



Clear announcements across your site,
from daily updates to emergency alerts.




**OFFICE**



**FACTORY**



www.miraloyd.com

OVERVIEW

# Public Announcement System Across Your Whole Site



BUILT FOR INDUSTRY

Manage public address, intercom and emergency alerts from one system. Broadcast to the whole site or selected zones, and control everyday announcements through a clear web interface.

## KEY BENEFITS

- SIP / VoIP architecture
- Announcements from multiple devices
- Emergency alerts
- Communication between sites
- Designed for industrial use
- Paging to selected zones
- Integration with existing systems
- Expansion as your site grows

**IDEAL FOR** Factories, warehouses, industrial plants and production facilities.

WHY astTECS

# Public Announcement System for industrial environments

## Designed for industrial environments



### IP PA expertise

Systems for industrial sites

### AI integration

Connected AI workflows

### ISO certification

Certified company

### 24/7 support

Global technical support

### TEC approval

Manufacturer approval

### GeM listing

Available for procurement

MADE IN INDIA

PAGING AND SCHEDULING

# Paging zones and scheduled messages

## Flexible paging zones

Create zones for production floors, warehouses and other areas. Send a message to one zone or broadcast across the entire facility.

## Live and scheduled messages

Make live announcements or schedule messages for shift changes, safety updates and maintenance reminders.




TARGETED PAGING ACROSS YOUR FACILITY

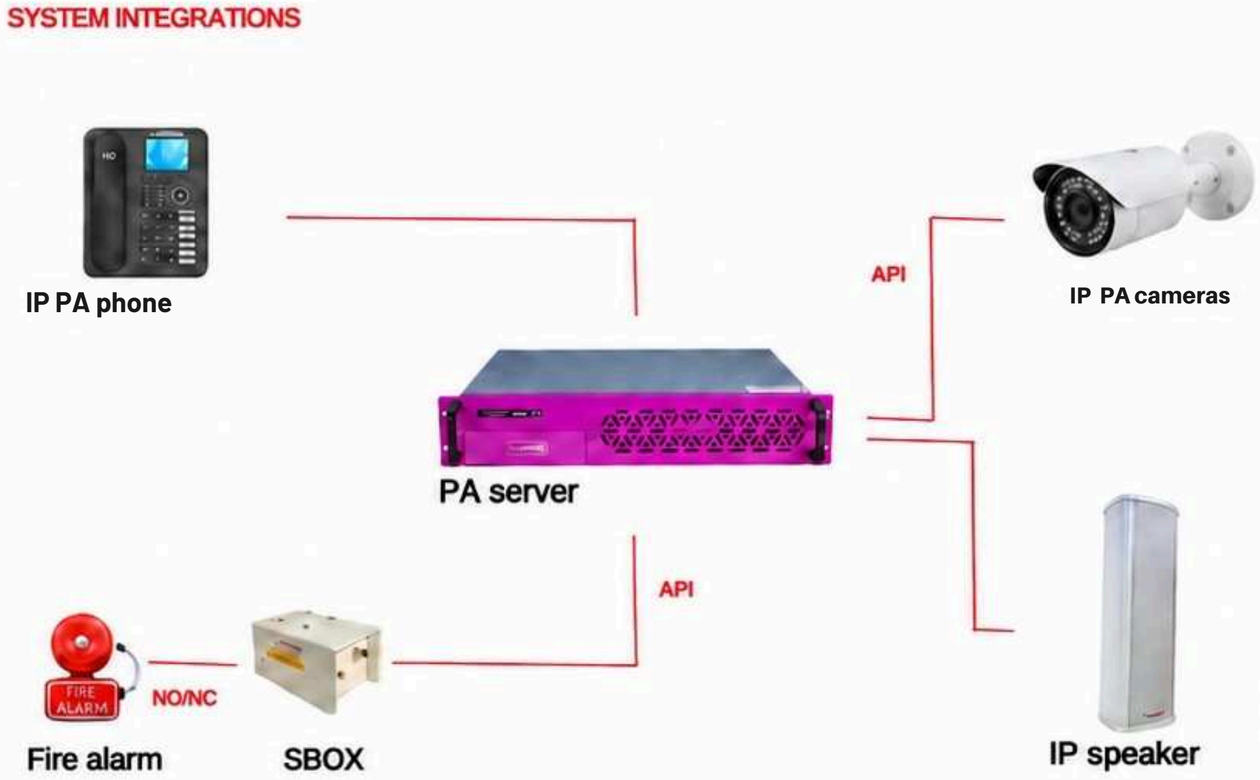
# Fire alarms, cameras and software integration

## Fire alarms and IP cameras

Connect compatible fire alarms and IP cameras so an incident can trigger an announcement.

## Open API integration

Use open APIs to connect third-party software and trigger announcements when needed.



CENTRAL MANAGEMENT

# Central control of announcements and speakers

## Everyday system control

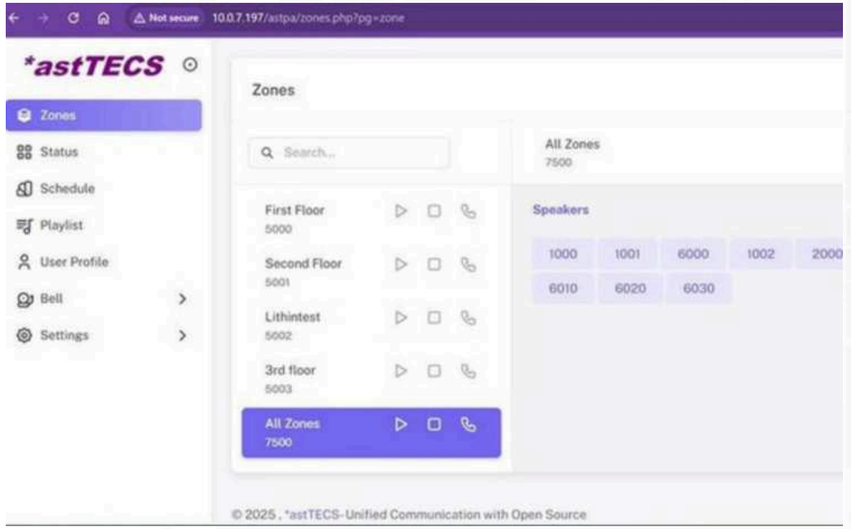
Make announcements, check speaker status and adjust volume from the dashboard.

## Secure, centralised management

Set user permissions and review system activity through event logs.

## One communication platform

Manage IP PBX and public address together, with fewer separate systems to maintain.




**IP PBX + IP PA** — **Calls and announcements together**

SYSTEM ARCHITECTURE

# How the speaker network connects

The PA server links announcement devices and local speaker zones through the LAN.

SERVER ROOM



IP PA server



LAN switch



IP phone



Gooseneck microphone

PC operator interface

ZONE 1

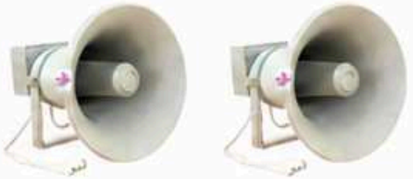




Wall-mounted speakers

ZONE 2





Horn speakers

ZONE 3





Ceiling speakers

SINGLE LOCATION

# A typical installation at one location

At one site, the PA server connects to IP phones and speakers through a PoE switch.




astTECS IP PA server



PoE switch




IP phone



Horn speaker



Ceiling speaker



Wall-mounted speaker

MULTIPLE LOCATIONS

# Announcement across multiple locations

Manage broadcasts from headquarters and send announcements to remote factory sites.

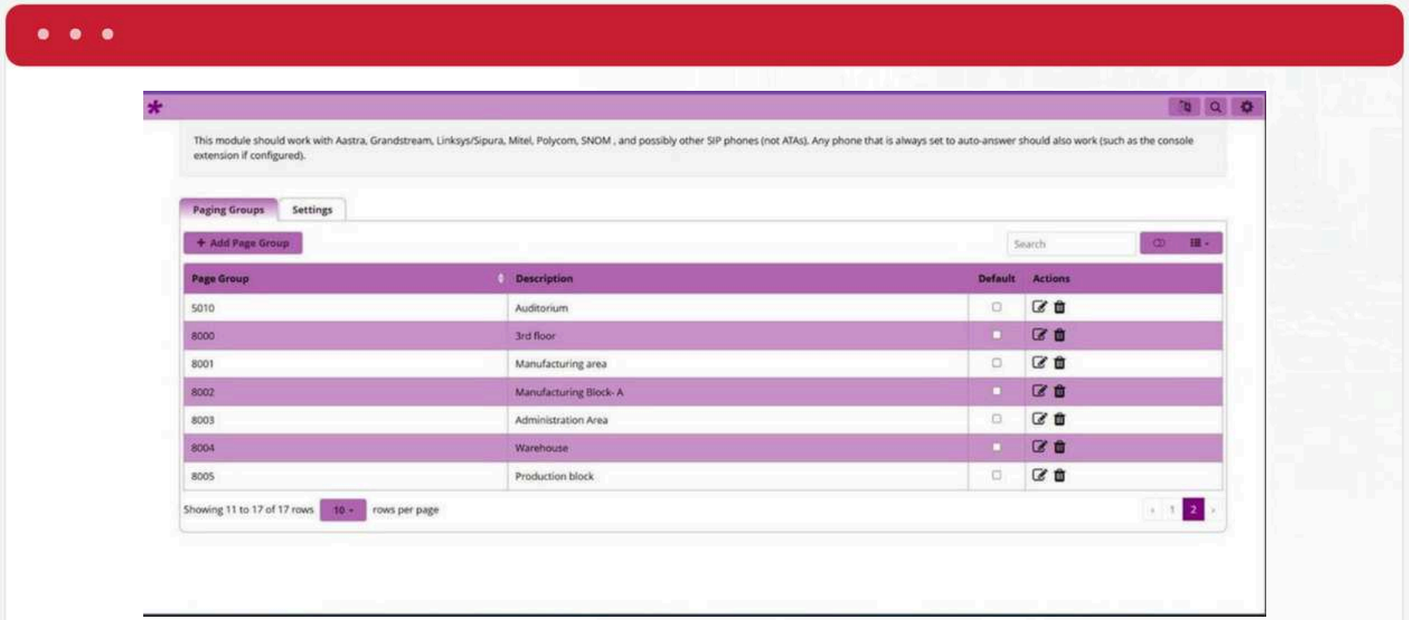


ADMIN INTERFACE

# Speaker and paging zone setup

Add speaker units, create paging zones and assign the devices used for announcements.

- **Add speaker units**
- **Create paging zones**
- **Assign devices to zones**



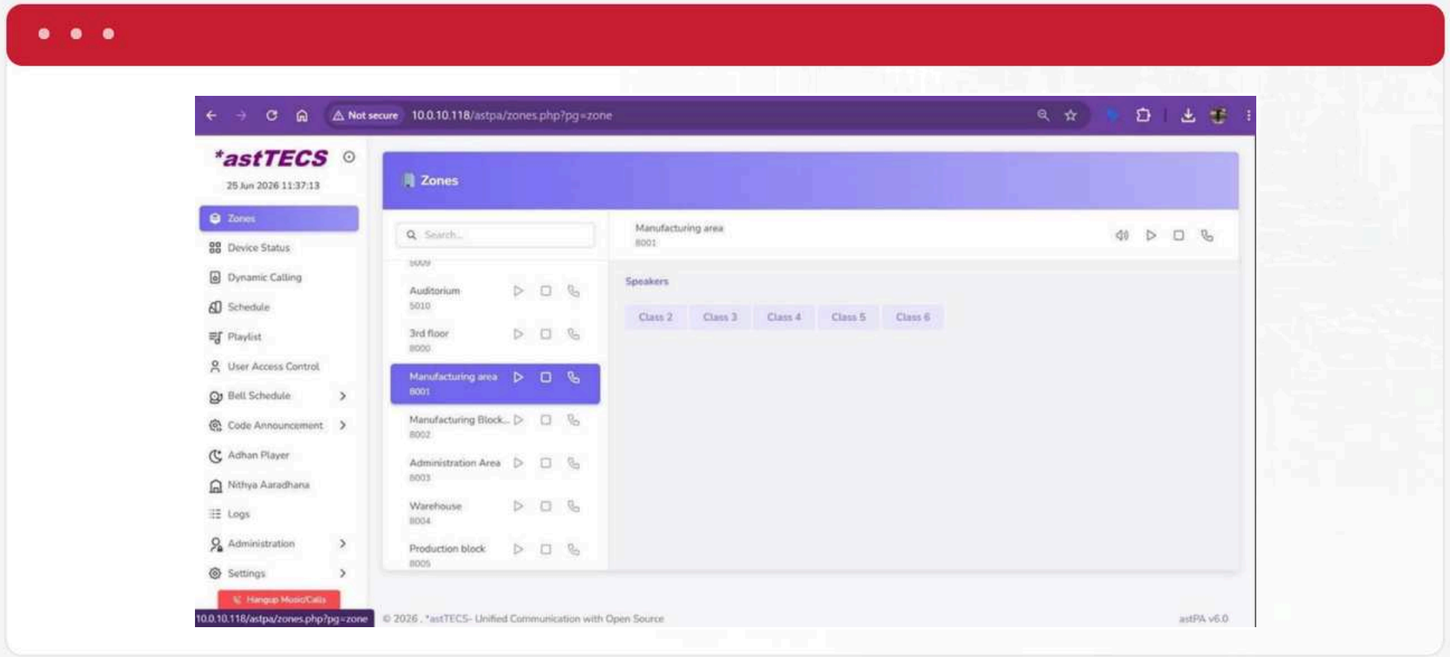

WEB-BASED ADMIN INTERFACE

MANAGER INTERFACE

# Daily announcement and speaker control

Manage routine announcements, message schedules and speaker settings from one interface.

- Shift announcements
- Speaker volume
- Paging by zone
- Scheduled announcements
- Dynamic zone paging
- Playlists
- Device status




WEB-BASED MANAGER INTERFACE

# ANNOUNCEMENT DEVICES



IP PHONE WITH GOOSENECK




PUSH TO TALK




MOBILE PHONE



IP PHONE






PAGING MIC



IP PHONE WITH TOUCH INTERFACE

ANALOGUE INTEGRATION

# SBOX for existing analogue speaker systems

- Connect existing analogue speakers to your IP network.
- Schedule announcements in advance.
- Use analogue and IP speakers in the same system.
- Make announcements from IP phones.




HYBRID IP AND ANALOGUE DEPLOYMENT



SPEAKER PORTFOLIO

# IP speaker models and power options

## Wall-mounted speaker



- 10 W (PoE)
- 15 W (PoE)
- 20 W (PoE)

## Ceiling speaker



- 10 W (PoE)
- 20 W (PoE)

## Horn speaker



- 15 W (PoE)
- 20 W (PoE)
- 30 W (PoE)
- 50 W

AMBIENT NOISE DETECTION

# Automatic volume adjustment in noisy areas

The optional ambient noise feature adjusts speaker volume as background noise rises or falls. This helps keep announcements audible and reduces the need for manual adjustment.



AUTOMATIC VOLUME ADJUSTMENT

## IDEAL ENVIRONMENTS

- Bus stations
- Railway stations
- Government offices
- Public places
- Factories

INTEROPERABILITY

# Integration with existing systems

Connect the PA system to supported telephone, safety and business platforms.

### IP PBX

Cisco / Avaya

### Compatible platforms

Grandstream / 3CX / Fanvil

**IP PA SYSTEM**

Unified communications

### Fire alarms

Connected safety alerts

### AI workflow tools

n8n / LangGraph

### Business systems

CRM / ERP

WHY IP PA

# Why choose an IP PA system




## Built-in PoE

One cable carries power and network data.

## Announcements from different devices

Use a supported phone or paging device to make announcements.

## Paging by zone

Address a single speaker, a selected zone or the entire site.

## Custom announcements

Tailor messages to each department, building or time of day.

## Scheduled messages

Set daily or weekly announcements to run automatically.

## System expansion

Add speakers without rewiring the existing system.

## Remote access

Manage the system through the network.

## System integration

Connect compatible cameras, fire alarms and access control.

## IP PBX and public address

Manage calls and announcements on one platform.

## Independent speakers

A fault in one speaker does not stop the remaining speakers.

# Benefits for factory operations

- Improved worker safety
- More efficient daily operations
- Faster emergency response
- Better team coordination
- Support for industrial safety compliance



AN ANNOUNCEMENT TO KEEP STAFF INFORMED

SERVER MODELS

# Server models and system capacity

## astPA100

**100**

**announcement devices**

**10** **parallel sessions**

- Announcement recording and logs
- Single or multiple sites
- Manager interface
- Administrator interface

## astPA500

**500**

**announcement devices**

**50** **parallel sessions**

- Announcement recording and logs
- Single or multiple sites
- Manager interface
- Administrator interface

## astPA1000

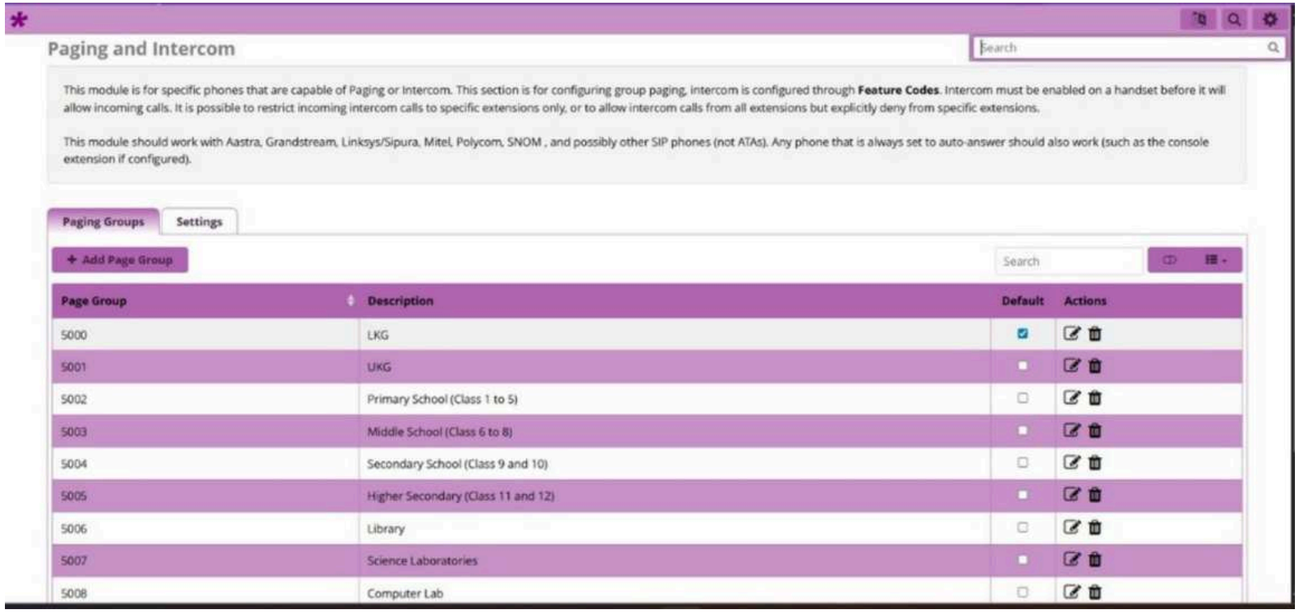
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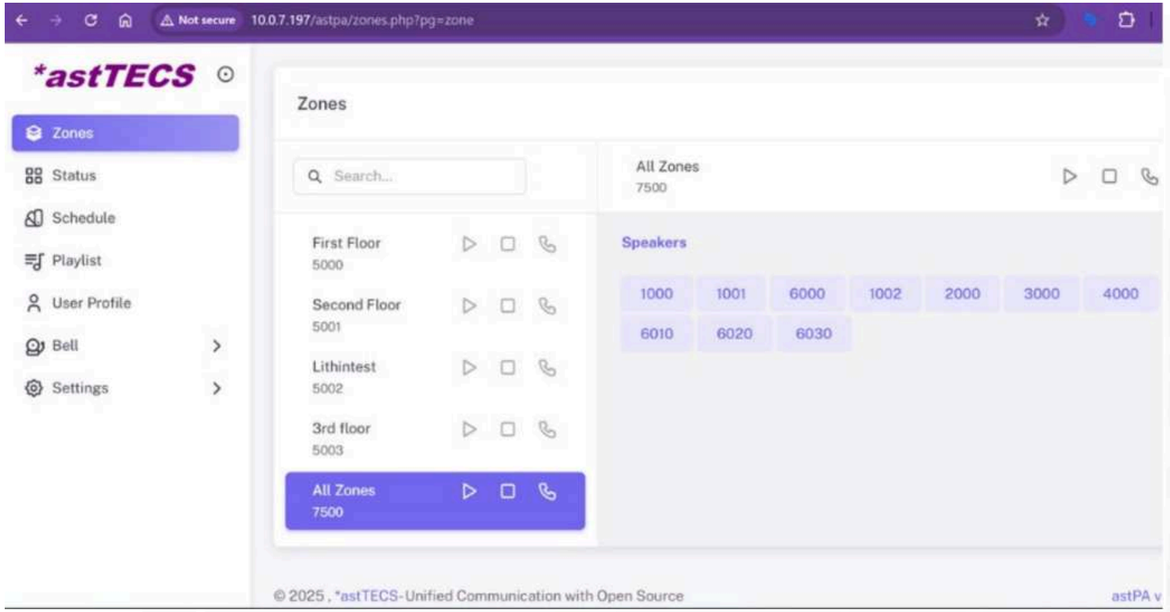
**announcement devices**

**100** **parallel sessions**

- Announcement recording and logs
- Single or multiple sites
- Manager interface
- Administrator interface

# INTERFACES AND HARDWARE






Wall speaker



IPPA SERVER



Horn speaker



Ceiling speaker




SBOX

ABOUT US

# ABOUT MIRALOYD

INTEGRATED TECHNOLOGY SOLUTIONS

**Miraloyd Global Consult Limited** is an integrated technology solutions provider that designs, deploys and supports communication, connectivity, software and IT infrastructure for businesses, institutions and public-sector organisations. Our work helps people communicate better, keeps offices and remote locations connected, supports the development of digital systems and strengthens the IT infrastructure behind everyday operations.

Services include unified communications, internet connectivity, software and digital solutions, cloud and data centre infrastructure, cybersecurity, backup and disaster recovery. We also provide managed IT services and technology consulting.

Communications is a core part of our work. Our services cover cloud and on-premises IP telephony, contact centre solutions, customer engagement platforms and mobile communications. We also provide IVR, voice services, AI-powered communication and collaboration tools.

We provide the networks and infrastructure that keep offices, staff and systems connected. We also develop and integrate software, digital tools and AI solutions to improve business processes and connect the systems an organisation uses.

**COMMUNICATE**

Unified Communications

**CONNECT**

Connectivity& Internet

**BUILD**

Software,Digital & AI

**TRANSFORM**

Cloud,Infrastructure & IT

MGCL
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Communicate. Connect. Build. Transform.

*astTECS®
Unified Communication with Open Source
ISO 9001:2015 CERTIFIED

# GET IN TOUCH


CALL
+234 2092204000 +234 708 101 7608

WHATSAPP MESSAGE
+234 903 509 1159

Website
www.miraloyd.com

Email
enquiry@miraloyd.com