



# Solutions for Infrastructure

## Railway / Airport



# We supply sound, not equipment.

## That's our corporate philosophy.

Founded 1934 in the Japanese city of Kobe, we can draw upon more than 80 years of experience in researching, developing and selling commercial and professional audio and security equipment.

You will find our systems in thousands of different places, such as schools, concert halls, shopping malls, skyscrapers, airports and sport stadiums. They are not only there to serve the security and surveillance but also for perfect transmission of concerts and music.

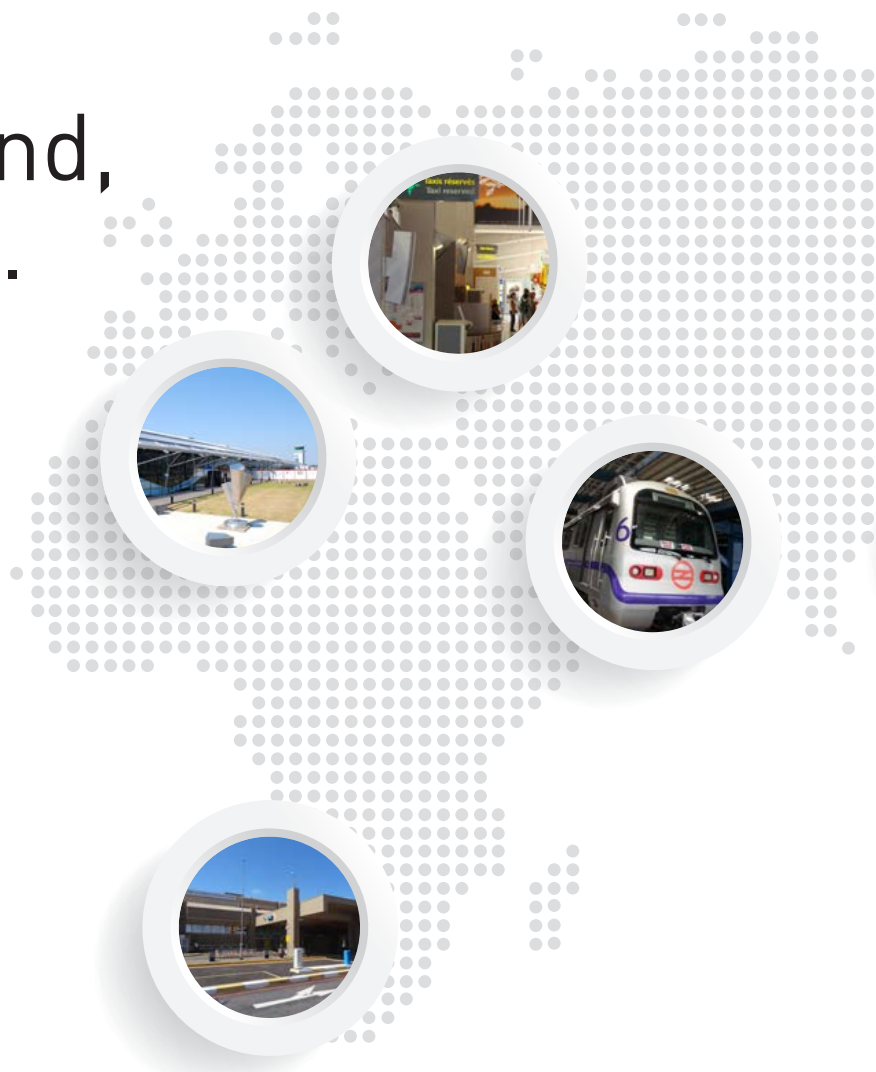
Our pride is that we can use this knowledge to create acoustic sound fields for millions of people to make their lives safer and more pleasant.

Since its founding, TOA has pursued its business based upon a solid Management Philosophy, which are the "Three Confidences". These important basic foundations will carry us into an even brighter and prosperous future.

## Best sound provided with every product.

In every company within the TOA group we utilize the technical expertise and know-how that we have accumulated throughout the years in every aspect of production, from product planning and development right through to sales and management.

We are constantly improving our technological capabilities in areas such as acoustics, graphics and networks, and developing innovative products in order to provide customers with the ultimate in good sound and peace of mind to help make their lives more comfortable.




## Our three confidences

Total confidence  
of our customers in the  
use of all products.

Total confidence  
of our associates in all  
business transactions.

Total confidence of  
our employees in  
all their effort.



## TOA Global network

In line with our slogan “5 TOAs in the world,” we at TOA have divided the markets that we serve into five regions: Japan; the Americas; Europe, the Middle East, and Africa; Asia-Pacific; and China and East Asia. As well as developing technologies and products that ensure a safe, secure, comfortable lifestyle for customers in the diverse markets of these five regions, we are pursuing a proactive overseas sales strategy based on the optimal production and marketing frameworks for each region. We provide the world-class quality expected by customers in more than 120 countries across the globe.



## TOA Solutions for Infrastructure



Railway

The history of TOA's efforts to open up markets in the railway sector dates all the way back to the early 1940s, just over a decade after the company's founding, when our company installed PA systems in a number of Japanese railway stations. In 1972, we began developing, manufacturing, and selling our own automatic announcement systems designed especially for use in railway stations.

Today, we provide a variety of solutions that help to improve passenger service and increase the efficiency of railway station operations, including announcement systems, display equipment, and security cameras for both stations and railway cars. TOA systems have been installed in more than 1,500 railway stations within Japan alone, and in more than 4,500 railway cars worldwide.



Airport

Since first installing intercom systems at Japanese airports in 1978, TOA has been involved in numerous airport development and upgrading projects both within Japan and overseas. Accounting for 97% of the announcement systems installed at Japanese airports, TOA helps to ensure the accurate transmission of information to passengers and the smooth running of airport operations.

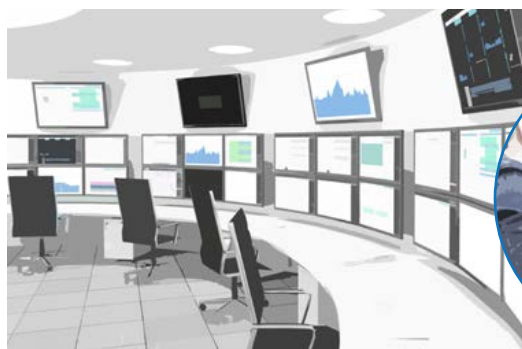
In recent years, TOA's announcement and communication systems have been installed in numerous airports across the globe, including Shanghai Pudong International Airport (China), London Heathrow International Airport (UK), and Soekarno-Hatta International Airport (Indonesia).

# Railway

TOA creates a completely reliable infrastructure environment, with clear announcements at the ideal volume in railway stations and cars, and displays that provide accurate information. We provide a range of solutions to ensure that passengers reach their destinations with peace of mind, in comfort, without fail.



## Operations Control Center



PIS Server



## Station Control Room



Intercom

PA System



Smiles for t

► Different announcements can be broadcast simultaneously



## On-Board Project References



Delhi Metro (RS3)  
India



Bangalore Metro  
India

Washington Metro  
NYCT (R188)  
Athens Metro III  
MRT  
DMRC RS8/RS9

USA  
USA  
Greece  
Singapore  
India

## Railway Project References



Edmonton Light Rail  
Transit  
Canada



Taiwan High Speed  
Rail Stations  
Taiwan

London Waterloo  
Lyon Part Dieu Station  
Tramway Dijon  
Warsaw East/West  
Stations Metrorail Stations  
High-speed railway Station  
Santiago Metro  
KTMB Double Rail Track

UK  
France  
France  
Poland  
South Africa  
China  
Chile  
Malaysia

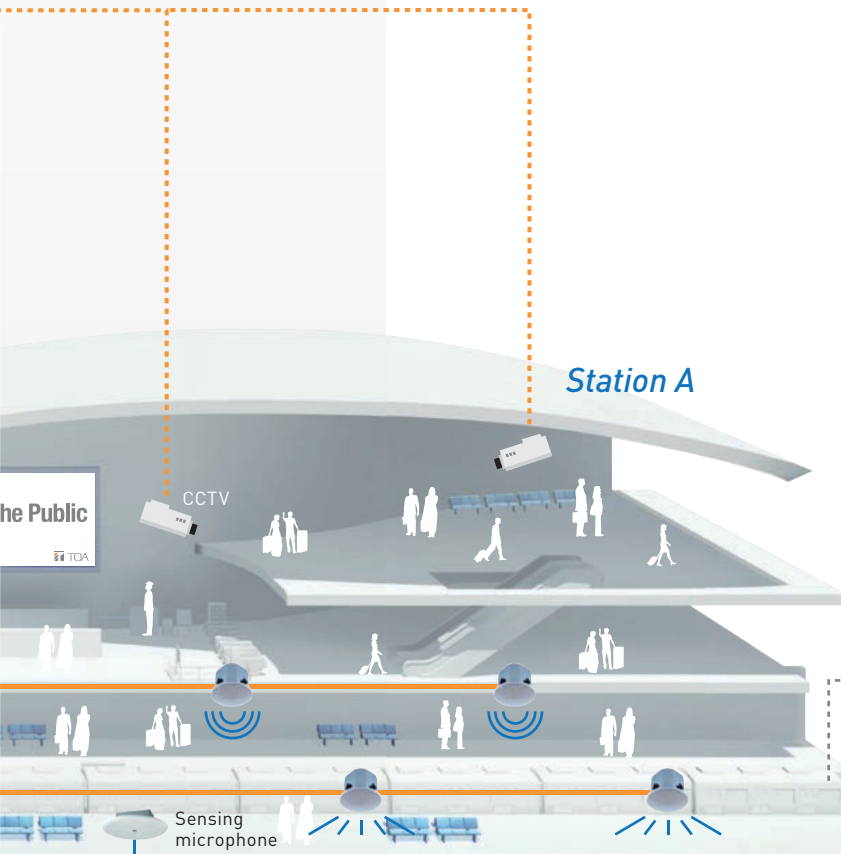
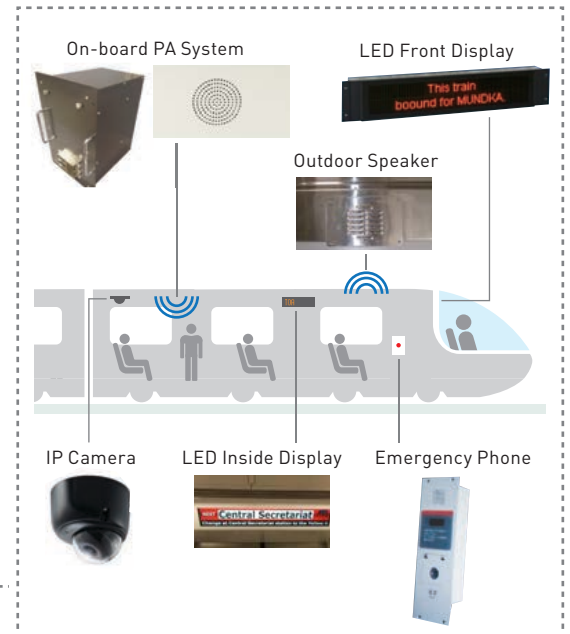
► Automatic announcements in association with the Passenger Information System (PIS)

PA System



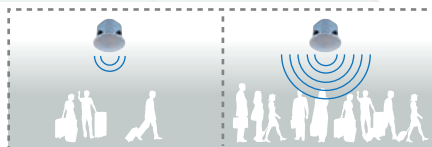
Station B

## On-Board System



### Ambient Noise Control

Automatically adjusts the volume level of announcements in response to fluctuation of ambient noise.



# Airport

Airports require specific announcements to be made in specific areas, to help to guide airport users to where they need to go. Offering the sound systems and engineering capabilities required for safe, reliable passenger transit, we facilitate the accurate transmission of information to passengers and smooth communication between airport staffs.



## ▶▶▶▶ Airport Project References



Shanghai Putong International Airport  
China



Pearson International Airport  
Canada



Stanfield Halifax Airport  
Canada



Greater Moncton International Airport  
Canada



Southend Airport  
UK



Fredericton Airport  
Canada

- Toulouse Blagnac Airport
- Deer Lake Regional Airport
- Narita International Airport
- Tokyo International Airport
- Guangzhou Baiyun International Airport
- Tan Son Nhat International Airport
- Laos International Airport
- Soekarno-Hatta International Airport, Terminal D/E/F
- Taipei Songshan Airport

- France
- Canada
- Japan
- Japan
- China
- Vietnam
- Laos
- Indonesia
- Taiwan



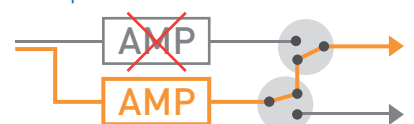
Operation Control Center



Intercom



▶ Amplifier redondant



- ▶ Automatic announcements in association with the Flight Information System (FIS/FIDS)

*May I have your attention, please. Clearwater Airlines flight 838 departing for Paris is now ready for checking.*

- ▶ Different announcements can be broadcast simultaneously

Floor C

FIDS

*Attention, please. Mars Airways, Flight 327 bound for Buenos Aires is now boarding.*

Floor B

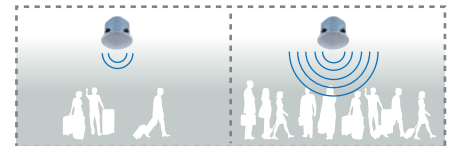
Sensing microphone

Intercom

- ▶ Boarding announcements to targeted area

▶ Ambient Noise Control

Automatically adjusts the volume level of announcements in response to fluctuation of ambient noise.



- ▶ Continuous speaker line surveillance

Floor A

Smoke detector

- ▶ Emergency announcements in accordance with smoke detectors and other warning systems

- ▶ The announcement overrides other announcements and is broadcast at maximum volume.



# High value of Japanese technology in both Hardware and Software

## Quality control on the Factory Floor

TOA uses its very own factories both within Japan and overseas. Numerous engineers from Japan are sent to our overseas production plants to ensure that the state-of-the-art equipment adheres to the same stringent quality control system used in our Japanese production facilities. Furthermore, twice a year members from our Quality Control Division visit overseas production facilities to carry out inspections and make sure that quality standards are being maintained.

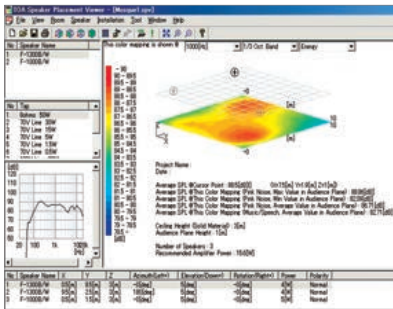
## Compliance with Laws and Regulations

TOA is constantly carrying out tests to ensure that products comply with various regulations and standards around the world: safety regulations including UL, CE, CCC, RoHS, WEEE, EN 54, SASO, and REACH; the standards for each country; and ISO 9001. We do this so that consumers have complete peace of mind when using our quality products.



## State-of-the-Art Equipment

In order to satisfy the legal requirements and conditions of each country, products must pass a large number of stringent tests. By installing various kinds of testing facilities, such as anechoic/echoic chambers and EMC test chambers, and by carrying out in-house testing, TOA has been able to improve its development efficiency.



## TOA Speaker Placement Viewer: Software for Acoustic Simulation

At TOA, we are constantly trying to improve our services and share information with our customers. TOA Speaker Placement Viewer provides an easy way to calculate how many speakers are needed in a room. The software allows virtual placement of TOA Line Array, as well as all TOA Public Address and ProSound speakers.