



2023 NEW PRODUCTS GUIDE



We supply sound,
not equipment.

Conferencing

Intercom

Network
Audio

Mixers

Amplifier

Speakers

Life Safety

Microphones

The TOA Advantage



TOA is a thought leader and technology trailblazer offering commercial audio solutions that span multiple vertical markets from Corporate AV to Life Safety. TOA offers the widest array of products and solutions of any audio manufacturer serving the US market. From intercom to performance line array speakers TOA can offer the entire audio solution for any application. Our value far exceeds just products and solutions, however. TOA offers exceptional value to dealers and end-users alike by supporting projects from beginning planning stages to end-user system adoption. Such value-adds include free design services, site surveys, remote programming, expert technical support, and product/system training.

TOA strives to be a partner with our customers to offer the best possible solutions, with the best quality products, at the most competitive price. Our challenge to you is: give us the opportunity to partner with you on your next project. You'll be glad you did!

Experience

- Over 80 years of experience
- World leader in commercial & professional audio products
- World renowned installations

Quality

- All audio products have a five-year warranty
- Reliable and durable: best MTBF in the industry

Selection

- Broadest range of products in the commercial audio industry

Warehouse

- Centrally located warehouse for minimum delivery time to any destination

Customer Service

- Expert technical support team
- Expert engineering for free design services
- Extensive representation across the country
- Customized trainings
- Certifications for engineered products
- Project registration

Commitment

- Competitively priced quality products and solutions with excellent customer service

TOA Free Design Services

As one of the many ways TOA provides added value to our customers, we offer Free Design Services to consulting engineers, dealers and end users. Houses of worship, schools, corporate campuses, correctional facilities, sports complexes, retail establishments, restaurants/bars, transportation hubs, healthcare facilities, performance venues, government buildings, and military facilities are just a sample of the types of systems we design.

What we may need from you: (1) blueprints or floor plans in AutoCAD or .pdf; (2) system functionality requirements; (3) coverage areas; and (4) budget. With your information TOA will provide you a complete audio system design, normally within three to five business days. As an added bonus your project may qualify for project registration. Ask your TOA Sales Manager for details.

We look forward to working with you on your next project!

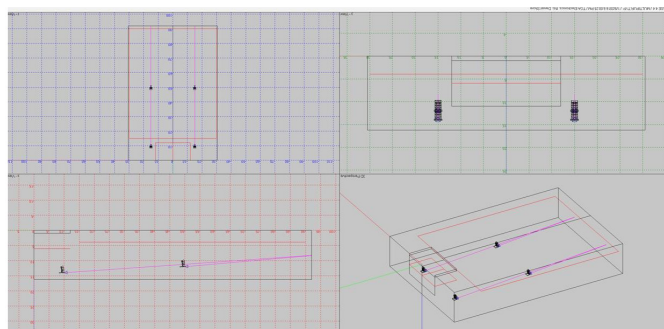
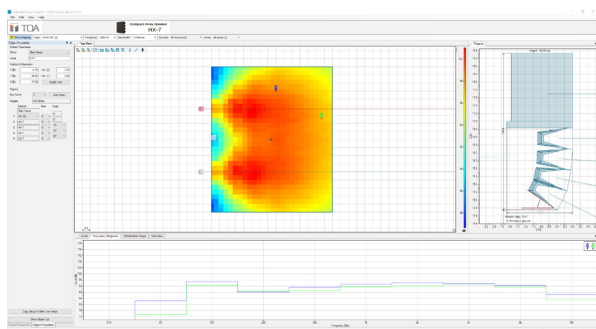
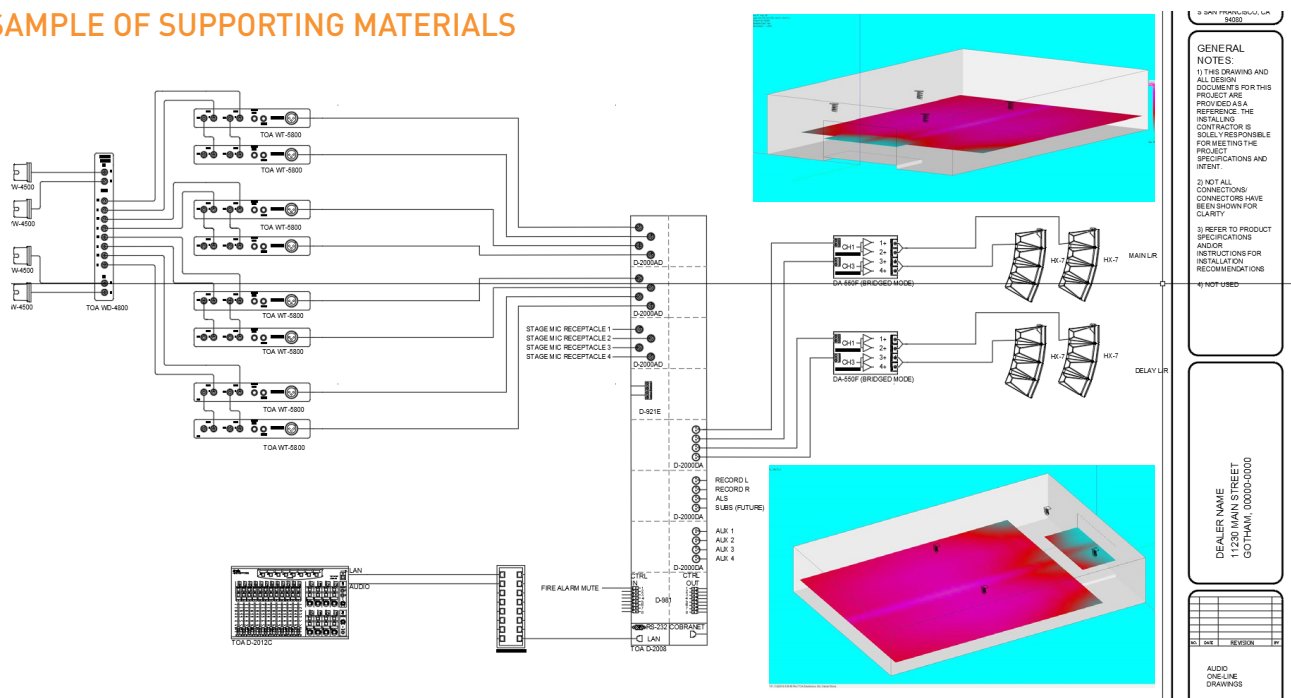
BENEFITS OF FREE DESIGN SERVICES

- Normal turnaround in 3-5 business days
- Bill of materials and quote referral
- One-line diagrams
- Speaker allocation
- 3D modeling of direct sound
- Programming & commissioning services
- Scope of work

BENEFITS OF PROJECT REGISTRATION

- Potential discounts to assist with securing projects
- Timely shipments and minimized backorder time
- Partnership development with TOA staff
- Factory direct design and consultation
- Expert technical support
- Product and system training
- Strict confidentiality

SAMPLE OF SUPPORTING MATERIALS



LENUBIO

Integrated Audio Collaboration System with DSP

The LENUBIO Integrated Audio Collaboration System is the latest cutting edge meetingIO Series product by TOA Electronics. As a professional steerable microphone array system with integrated stereo soundbar LENUBIO is the perfect all-in-one conferencing solution for small to medium size conference spaces with great return on investment. Built-in AEC (Acoustic Echo Cancellation), ANC (Ambient Noise Cancellation), and EQ maximize performance making collaboration between remote sites a very natural experience. Connectivity includes USB ports for direct integration with computers and webcams, Bluetooth, codec input/ output, stereo audio inputs/outputs, and contact inputs/outputs. LED indicators identify and track the presenter's location in addition to showing mute status, and microphone gain level. It is truly real-time beam steering illuminated. Easy installation is made possible with included mounting hardware. Available in black and white, the unit is powered via Ultra PoE or the included power supply.



REAL-TIME BEAM STEERING ILLUMINATED

Seven LED indicators behind the front grille illuminate to visually track presenter location, display microphone gain level, and show microphone mute status.

GUI FOR EASY SETUP AND CONTROL

The browser interface is available to make adjustments to parameter settings such as mixer volume controls, audio processing, LED indicator management, control I/O, presets, and voice tracking field adjustments for coverage within a 20 foot range.

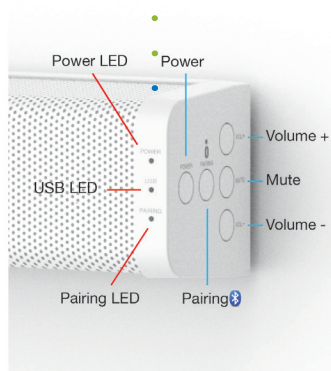


KEY BENEFITS

- LENUBIO creates the most natural communication available for team collaboration between remote locations. With the integrated array mic and sound positioned below the display participants talk with each other just as they would in normal conversation.
- For impromptu meetings, a smartphone can be quickly paired with LENUBIO via Bluetooth connectivity for exceptionally clear communication. Presentations become impactful with the professional grade high-quality audio delivered via the powerful onboard stereo speakers. A powered subwoofer can easily be added using the line level output.

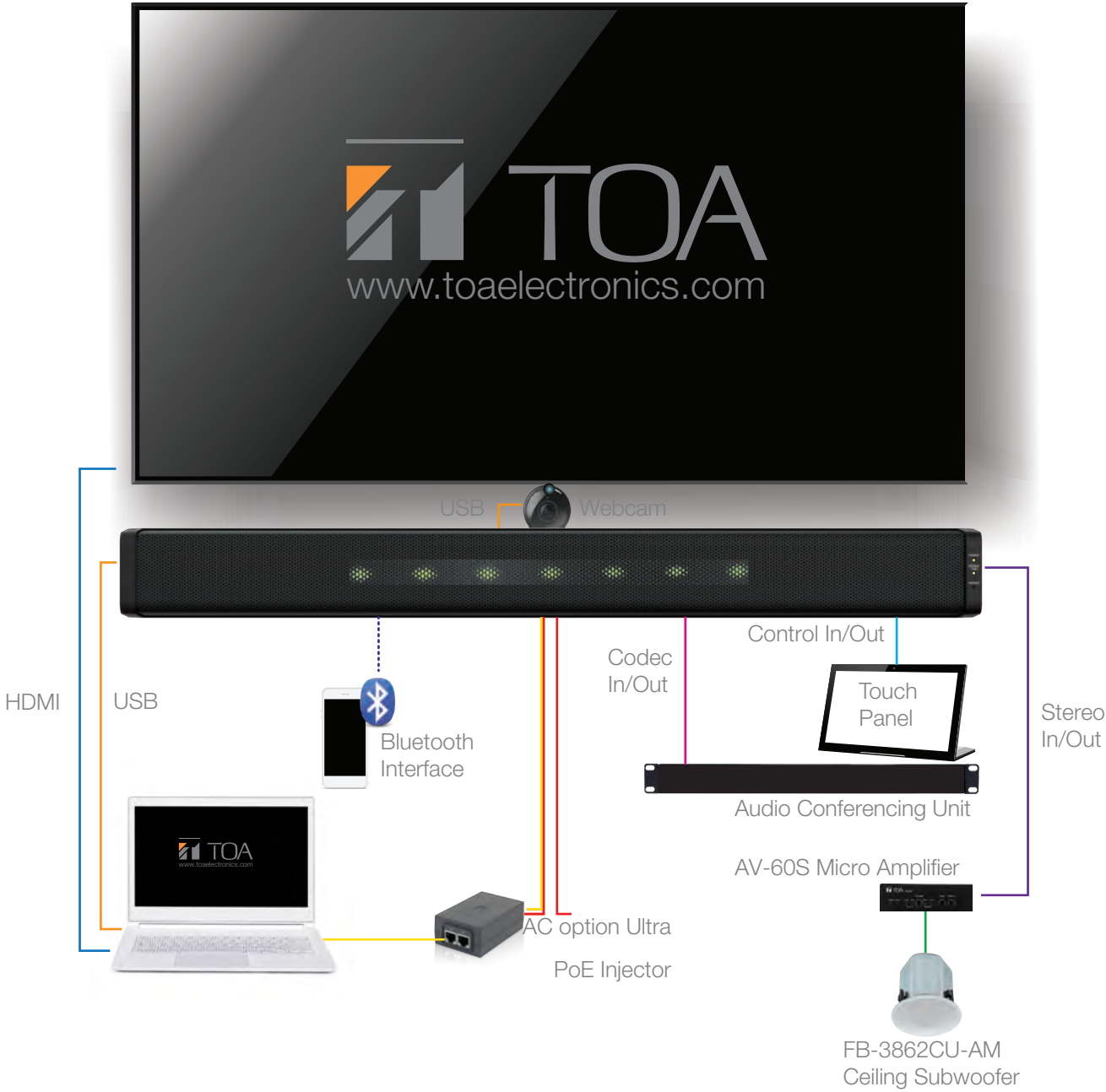
KEY FEATURES

- TOA's beam steering array microphone technology
- Integrated DSP functions including Acoustic Echo Cancellation and Ambient Noise Control
- Bluetooth interface for smartphones
- Built-in USB Hub for webcam integration
- Stereo soundbar with stereo inputs/outputs
- Codec input/output and Contact Closure inputs/outputs
- GUI provides intuitive control via browser
- Included mounting hardware for easy installation





LENUBIO SYSTEM DIAGRAM



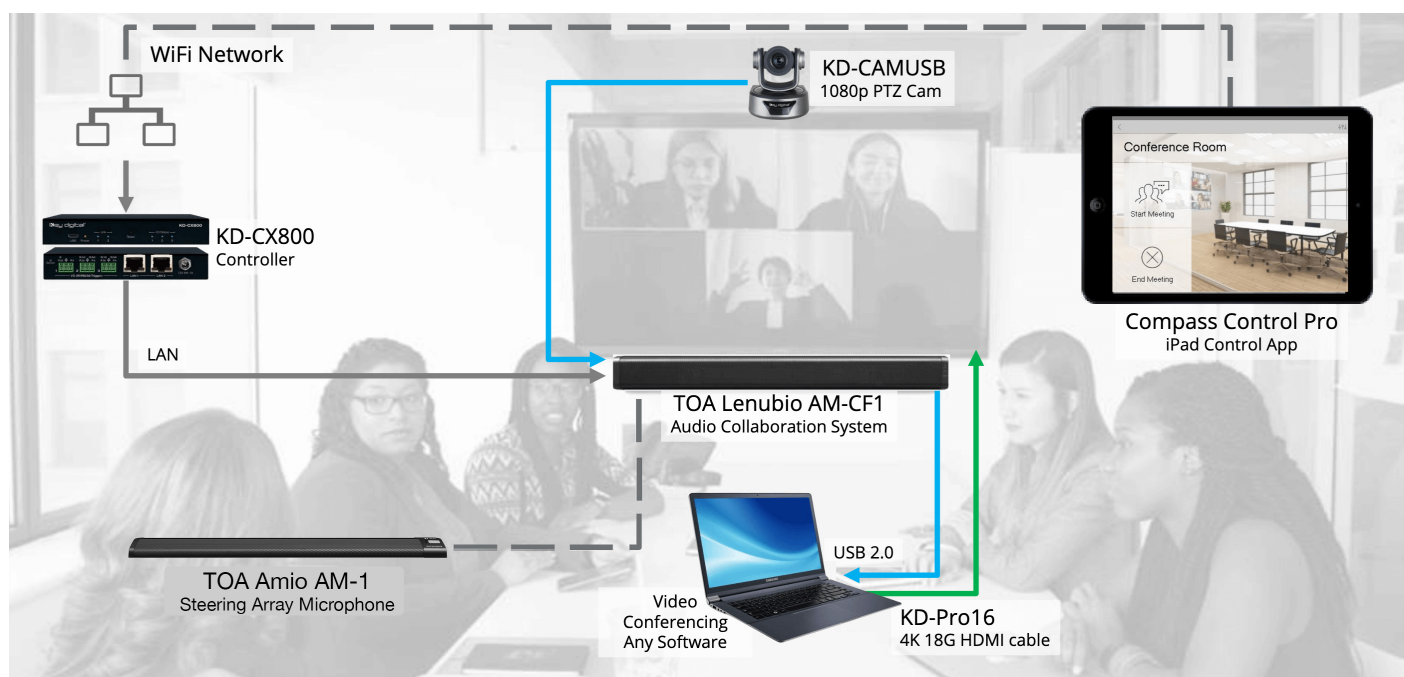
LE'CAM'BIO

Integrated Audio Collaboration System with DSP + KD-CAMUSB

In keeping with TOA's history of collaboration with companies that provide additional features that benefit our customers, TOA and Key Digital have collaborated to produce an original and exceptional combination of technologies to provide a simpler interface based on use of our technologies. The output from the LENUBIO contains x,y coordinates of the first arrival of sound. This information is put to use by the Key Digital system to automatically steer the camera to the correct presenter. Speed of motion is controllable.

Purchase of a Key Digital Camera system with your LENUBIO will give you a state of the art conferencing solution. The newest firmware for the LENUBIO allows a second microphone to be added to the Far End send without affecting the Near End audio. Use of our AM-1 microphone in that situation, expands the application of the LENUBIO to much larger rooms, which will benefit greatly from the automatic camera control

LE'CAM'BIO SYSTEM EXAMPLE



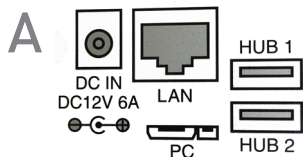
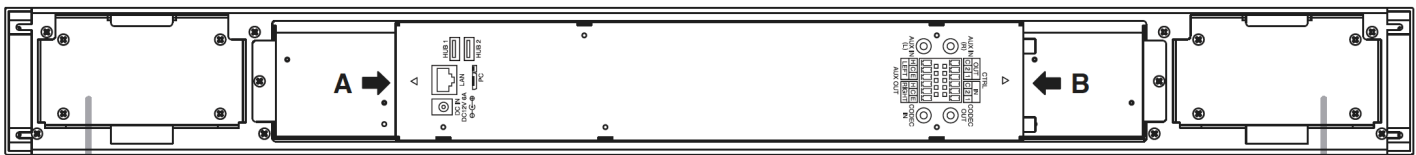
Example Includes:
≤ 5m / 16ft USB & HDMI
cable length from Display



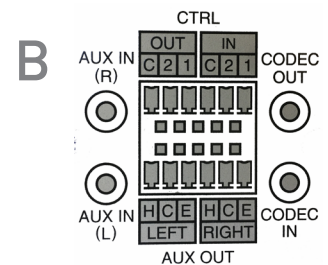
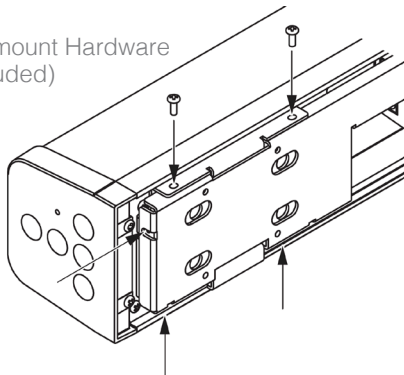
Specification

		AM-CF1B (Black)	AM-CF1W (White)
Power Source		12 V DC (supplied from the specified AC adapter) or 52 V DC (supplied from the specified PoE extender)	
Current Consumption		Under 3.5 A	
Inputs		USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1 micro-B port Bluetooth: 2 channels, Codec: 1 channel, RCA pin jack, -10 dB*1, 10 kΩ, unbalanced type AUX: 2 channels, RCA pin jack, -10 dB*1, 10 kΩ, unbalanced type	
Outputs		USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1 micro-B port Bluetooth: 2 channels Codec: 1 channel, RCA pin jack, -10 dB*1, 600 Ω, unbalanced type AUX: 2 channels, removable terminal block (6 pins), 4 dB*2, 600 Ω, balanced (electronically-balanced) type Internal speaker: 2-way × 2 (woofer × 2, tweeter × 1)	
Control Inputs		2 inputs, removable terminal block (6 pins), no-voltage make contact	
Control Outputs		2 outputs, removable terminal block (6 pins), no-voltage make contact, relay contact output	
Network I/F		10BASE-T/100BASE-TX, RJ-45	
Array Microphone		Unidirectional electret condenser type	
Frequency Characteristics		20 Hz – 20 kHz (AUX IN – AUX OUT)	
Operation Section		Power switch, Bluetooth pairing, Mute, Volume Up/Down	
Indicators		Power (blue/green/orange/red), USB connection (green), Bluetooth (blue), Multifunction (green/red)	
Operating Temperature Range		0 – 40°C	
Operating Humidity Range		90% RH or less (no condensation)	
Finish	Body	Surface-treated aluminium plate, black, 30 % gloss	Surface-treated aluminium plate, white (RAL 9003 equivalent), 30 % gloss
	Punched Net	Surface-treated steel plate, black, 30 % gloss	Surface-treated steel plate, white (RAL 9003 equivalent), 30 % gloss
	Side Cover	ABS resin, black	ABS resin, white
Dimensions		799 (w) x 83.2 (h) x 85.5 (d) mm (31.46" x 3.28" x 3.37")	
Weight		4.6 kg (10.14 lb)	

CONNECTIONS



Wallmount Hardware
(included)



TS-820 / TS-920 Series Infrared Wireless Conference System

Installation could not be easier thanks to TOA's tested and proven wireless infrared system. IR transmission, coupled with TOA audio quality provides a robust wireless conference system that can be adapted to fit any size room.



Easy to Manage system

Conferencing

Intercom

Network
Audio

Mixers

Amplifier

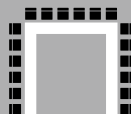
Speakers

Life Safety

Microphones

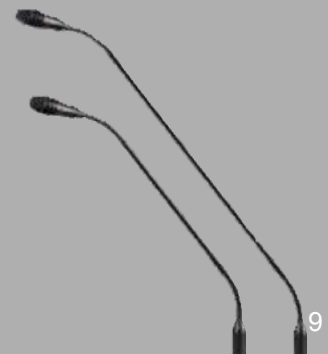
Wireless Units for System Flexibility

Wireless feature makes the system
ideal for any conference room layout.

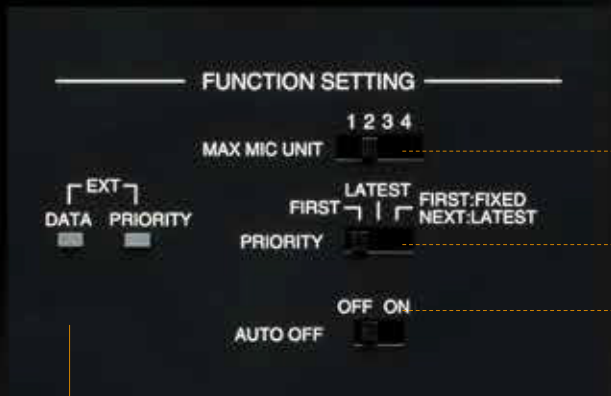
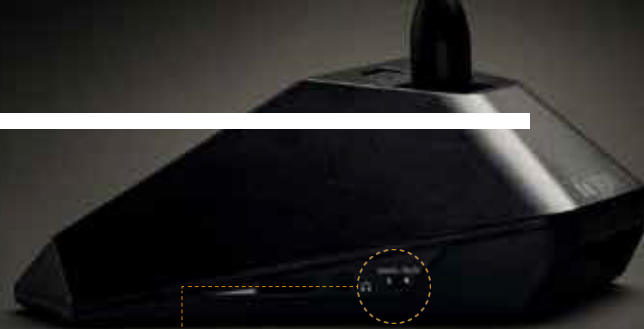


Selectable Microphones

Long or short microphones can be
used depending on requirements.



Key Functions



- 1 Selectable number of open microphones
- 2 Three microphone operating modes
- 3 Mic auto-off function automatically turns off the mic after 30-second silence

- 4 2-language conference capability
*TS-920 Series only



- 5 3-choice voting function for quick voting and vote counting
*TS-920 Series only



Built-in audio recording

Conference can be recorded in mp3 format on a widely available USB drives or internal memory.

*When TS-920RC is used.



*Image is for illustration purposes only.



External Control

Available remote control protocol enables conference control by custom-made software as well as integration with other devices such as cameras.



RS-232C

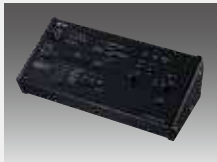


USB



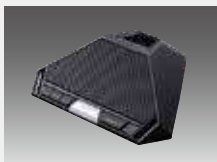
System Configuration / Components

TS-920 Series



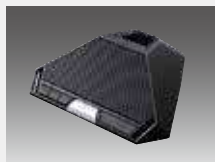
TS-920RC Central Unit with recording function

- System Controller
- Up to 192 conference unit controllable
- 2 x Mic In (Main/Sub), 3 x Aux In (Main/Sub/Main and Sub) Line Out, Rec Out, Headphone monitor out, EQ in/out
- Function setting – Number of open microphones, Auto mic-off function, Microphone priority selector, Feedback suppressor
- Recording capability to USB and internal memory
- Voting result indicator
- Rack-mountable with optional MB-TS920 bracket



TS-921 Chairman Unit

- Chairman unit for basic discussion
- Priority button
- Equipped with voting function
- 0.2W monitor speaker
- Audio monitoring switch (Main or Sub)
- 2 headphone jacks with individual volume control
- Approx. 10 hours continuous operation with the use of optional rechargeable lithium-ion battery



TS-922 Delegate Unit

- Delegate unit for basic discussion
- Equipped with voting function
- 0.2W monitor speaker
- Audio monitoring switch (Main or Sub)
- 2 headphone jacks with individual volume control
- Approx. 10 hours continuous operation with the use of optional rechargeable lithium-ion battery

Common Components (TS-820/920 Series)



TS-923 Microphone

- Gooseneck microphone with two flexible sections
- Unidirectional electret condenser microphone
- LED mic status indicator
- XLR-4-32 connector
- Sensitivity: -37 dB (1 kHz, 0 dB = 1 V / PA)
- Frequency response: 100 Hz - 13 kHz
- Length: 470 mm (1.54 ft)



TS-924 Microphone (Long)

- Gooseneck microphone with two flexible sections
- Unidirectional electret condenser microphone
- LED mic status indicator
- XLR-4-32 connector
- Sensitivity: -37 dB (1 kHz, 0 dB = 1 V / PA)
- Frequency response: 100 Hz - 13 kHz
- Length: 620 mm (2.03 ft)



TS-905 Infrared Transmitter/Receiver

- IR communication link between the Central Unit and Chairman/ Delegate Unit
- Variety of mounting methods: ceiling, wall and microphone stand
- Designed for low ceiling applications, e.g. ceiling height 2.5 - 4.5 m (8.2 - 14.76ft)

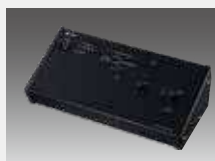
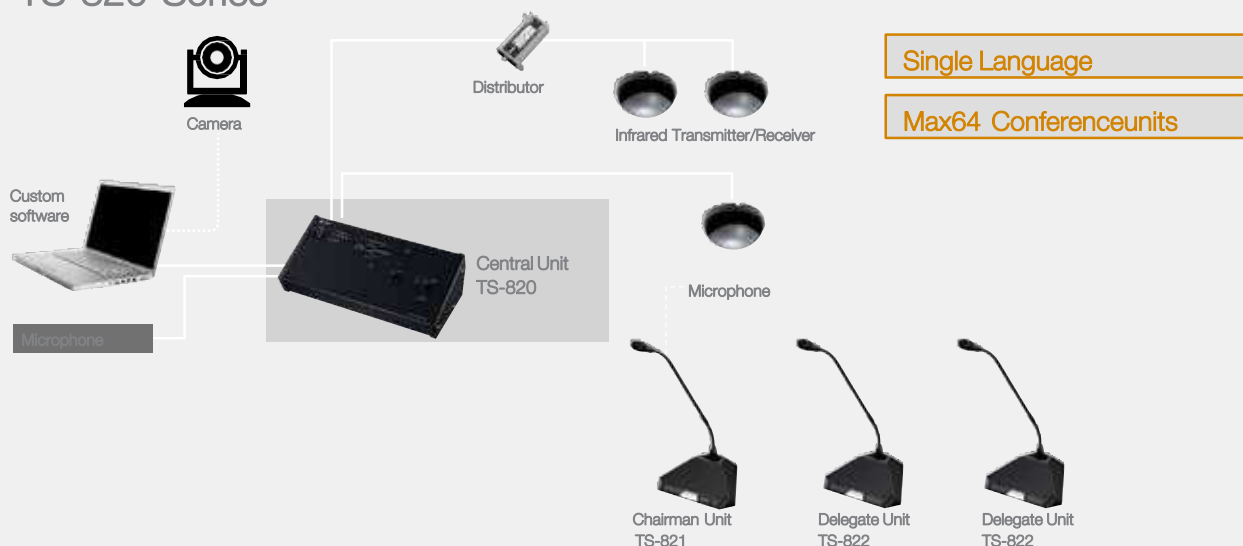


TS-907 Infrared Transmitter/Receiver

- IR communication link between the Central Unit and Chairman/ Delegate Unit
- Variety of mounting methods: ceiling, wall and microphone stand
- Designed for high ceiling applications, e.g. ceiling height 5.0 - 7.0m (16.4 - 22.97ft)

Infrared Wireless Conference System / TS-820/TS920 Series

TS-820 Series



TS-820 Central Unit

- Main unit of the system
- Up to 64 conference units controllable
- Mic In, Aux In, Line Out, Rec Out, Headphone monitor out, EQ in/out
- Function setting – Number of open microphones, Auto mic-off function, Microphone priority selector, Feedback suppressor
- Rack-mountable with optional MB-TS920 bracket



TS-821 Chairman Unit

- Chairman unit for basic discussion
- Priority button
- 0.2W monitor speaker
- 2 headphone jacks with individual volume control
- Approx. 10 hours continuous operation with the use of optional rechargeable lithium-ion battery



TS-822 Delegate Unit

- Delegate unit for basic discussion
- 0.2W monitor speaker
- 2 headphone jacks with individual volume control
- Approx. 10 hours continuous operation with the use of optional rechargeable lithium-ion battery



YW-1022 Distributor

- Expands the number of Infrared Transmitter/ Receiver units that can be used on a system
- For 2-branch distribution



YW-1024 Distributor

- Expands the number of Infrared Transmitter/ Receiver units that can be used on a system
- For 4-branch distribution



BP-900A Rechargeable Lithium-ion Battery

- Designed for use with the Chairman/Delegate Units
- Nominal Voltage: 7.2 VDC
- Weight: 95 g



BC-900/ BC-920 Battery Charger

- Dedicated battery charger for the BP-900A
- Permits up to 8 batteries to be simultaneously charged within up to 5 hours
- Finish: Steel, black, paint
- Weight: 1.2 kg



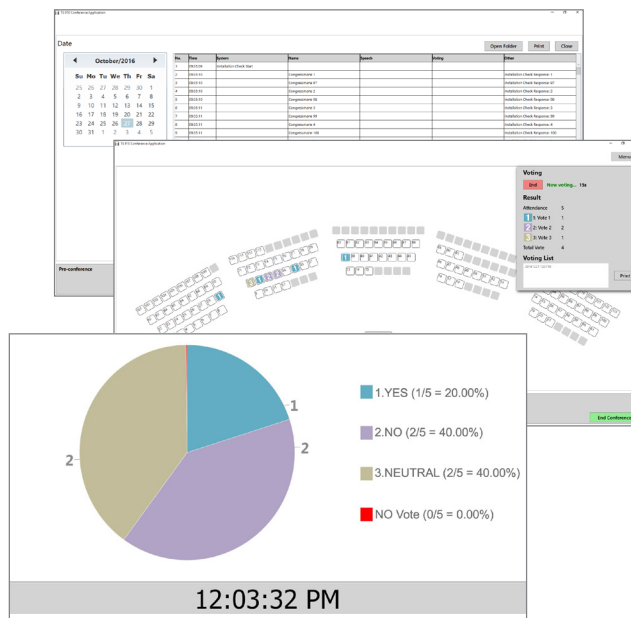
MB-TS920 Rack Mounting Bracket

- For use with TS-820 and TS-920RC

TS-VS Conferencing Management & Voting Software

The TS-VS Conferencing Management and Voting Software is a Windows-based software which provides real-time monitoring and control functionalities for the TOA TS-820 & TS-920 Series Conference System. With its customizable GUI, users are able to configure the layout of the software to match their seating plan and name attendees as needed. Together with the use of the software, the TS-820 & TS-920 Conference System can seamlessly integrate with CCTV and Card Access systems.

The TS-820 & TS-920 Series Conference System permits both infrared and wired systems to be used in combination to overcome aesthetic and practical challenges. There is no radio interference and all communications stay within the coverage area of the IR transceivers. It offers exceptional sound quality, efficient communication for any type of conference, and is suitable for either permanent installations or more mobile applications.



KEY FEATURES

- Ability to monitor and control up to 192 conference units
- Up to 4 speakers can talk simultaneously
- All speaking control can be done using this software
- Real-time monitoring of speaking status and battery status for all conference units
- Remote gain adjustments for chairman and delegate units
- Management of voting results
- Storage of operation logs
- Multi-screen display ability
- Pie chart voting results can be displayed via external monitor
- Integration with CCTV system for monitoring of the conference room and speakers
- Integration with Card Access system for enabling and disabling stations
- Security encryption
- Built-in FBS for feedback elimination



NF-2S Window Intercom System

World-class small and lightweight design



Smooth & Natural Conversation

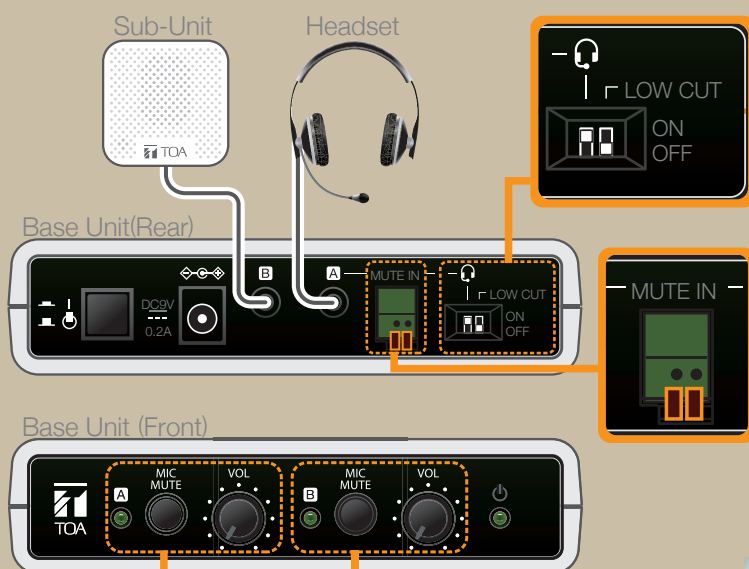
Equipped with simultaneous two-way conversation function, the NF-2S supports your conversation with stable sound and high quality speech intelligibility, which does not cut-off mid-sentence.

Compact Design & Simple Installation

Sub-Units are lightweight and equipped with magnets, so it can easily stick together on the acrylic partition without brackets or any other metal fitting. The simple design ensures it blend in with any work places.

Additional Options

The use of a headset can enhance hearing clarity. Ideal for situations where clearer conversations is essential.



A headset* and an external switch* can be connected if preferable

* These products are not included



Depending on the volume of the customer's voice, the operator can easily adjust the volume by using the volume control function.



The mute function can be used when there is a need for confirmation between staff members while dealing with customers.

NF-2S is able to detect human voices, even in a noisy environment so the conversation will not be affected.

Specification

NF-2S Base Unit x1 Sub-Unit x2 Dedicated cable x2



Base Unit

Dimensions:
127(W) x 30(H) x 137(D) mm
Weight: 225g



Sub-Unit

Dimensions:
60(W) x 60(H) x 22.5(D) mm
Weight: 65g
Attachment method:
Magnets

Options

NF-CS1 (For expansion)
Distributor x1
Sub-Unit x1
Dedicated cable (2m) x2



YR-NF5S
Dedicated cable (5m) x1



Suitable for many type of applications with many configurations

Set-up can be changed freely to suit the situation NF-2S is being used. (Max 3 x 3)

NF-2S



NF-2S + NF-CS1



NF-2S + NF-CS1 x4 (Max)



N-SP80 Series SIP/Onvif* Intercom

TOA's N-SP80 Series SIP Intercom System offers flexible audio and video communications using standard SIP and Onvif protocols. It is compatible with a variety of SIP servers. The N-SP80 Series can work as a Peer-to-Peer mode stand-alone system, or it can be integrated with TOA's N-8000 IP Intercom system via N-8000SG SIP Gateway.

The N-SP80 Series SIP Intercom Station employs the Session Initiation Protocol to enable both audio and video communication. Compatible with the G.722 audio codec, the N-SP80 supports high-quality audio and video transmission. It is ideal for installing at a building entrance, carpark gate, or other points of entry.

*The N-SP80VS1 is ONVIF Profile S Compatible



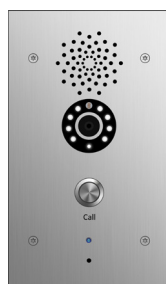
*A smart product that's easy to set up.
The N-SP80 opens up the world of access control.*

KEY FEATURES

- SIP-based intercom stations
- Supports G.711a, G.711 μ , G.722, G.729 audio codecs for high-quality conversation
- Integrates with TOA N-8000 Intercom via N-8000SG SIP Gateway
- System configuration and setting via web browser
- Unlimited number of stations are connectable in one system using peer-to-peer mode
- N-SP80MS1 provides video conference capability
- Multi-cast transmission enables paging to multiple zones
- Compatible with a variety of SIP servers (Cisco, Avaya, Asterisk and Genetec)*¹
- Two independent contact relay outputs on each door station
- Two tamper-switch inputs on each door station
- Network video streaming and recording by a NVR using Onvif protocol
- Secondary SIP server for server redundancy
- Detects server disconnection
- Flexible ringtone setting

*The N-SP80VS1 is ONVIF Profile S Compatible

*¹All company names mentioned above are trademarks or registered trademarks of their respective owners.



N-SP80MS1 SIP Multimedia Station

- Video monitoring on 7-inch 16x9 touch screen
- Handset or hands-free conversations
- Intuitive operation with programmable keys
- Compatible with Onvif protocol
- Android-based for easy customization
- PoE or local power

N-SP80VS1 Outdoor/Indoor SIP Video Door Station

- Built-in AEC (Acoustic Echo Canceller) enables full-duplex communication
- Photo Sensitive Sensor detects brightness
- IR LEDs help to capture video even in dark environments
- Two control relay outputs
- Two tamper-switch inputs
- Resolution up to 1080p

N-SP80AS1 Outdoor/Indoor SIP Audio Door Station

- Built-in AEC (Acoustic Echo Canceller) enables full-duplex communication
- Full-duplex communication
- Two control relay outputs
- Two tamper-switch inputs
- IP54-grade water/dust proof construction
- Mounts in 4-gang electrical box (YC-400)

SIP/Onvif Intercom*/N-SP80 Series

KEY BENEFITS

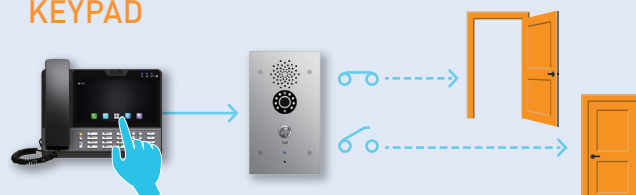
*The N-SP80VS1 is ONVIF Profile S Compatible

SUPPORTS PEER-TO-PEER COMMUNICATION

Build a system with stations only—no need for a SIP server.

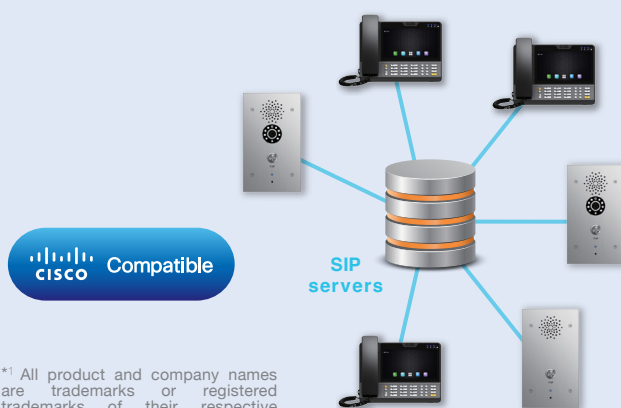


DOORS UNLOCKED FROM MASTER STATION KEYPAD



COMPATIBLE A VARIETY OF SIP SERVERS

Where an SIP server is already in place, adding an N-SP80 station is easy. It's compatible with Cisco CUCM, Asterisk and Genetec Sipelia.*¹



*¹ All product and company names are trademarks or registered trademarks of their respective owners.

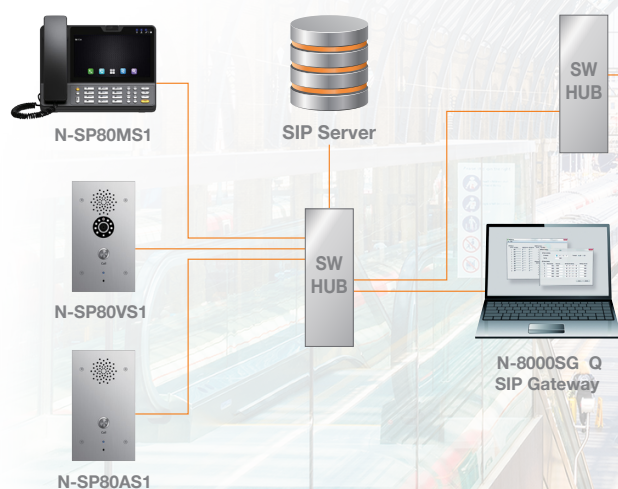
CAN BE PART OF A SCALABLE SYSTEM

The N-SP80VS1 SIP Video Door Station complies with ONVIF Profile S, so it can be integrated with third-party systems.

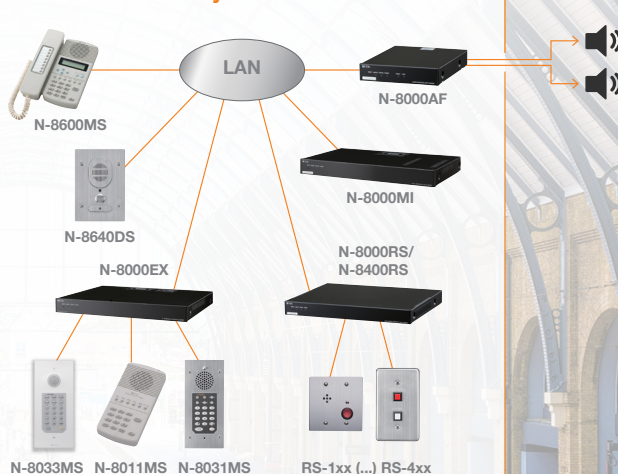


System Examples

The N-SP80MS1 can be used in tandem with TOA's N-8000 to deliver public announcements and support access control. Adding the optional N-8000SG allows you to add a video access control function to an existing N-8000 Series intercom.



N-8000 IP Intercom System

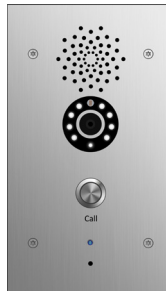




*The N-SP80VS1 is ONVIF Profile S Compatible

Specifications

	N-SP80MS1
Power Source	Power supply device that complies with IEEE 802.3af standard or 12V DC with optional AC adapter
Graphic Display	7-inch capacitive touch screen TFT LCD, 800 x 480 pixels, 16:9 wide screen aspect ratio
Camera	2 mega pixels CMOS camera, free rotation
Network Protocol	SIP RFC3261, TCP/UDP/IP, PPPOE, RTP/RTCP
Operation System	Android 4.2
Voice Codec	G.711A/μ, G.723, G.729a/b, G.722, iLBC, AMR-NB, AMR-WB, OPUS
Video Codec	H.263, H.264
DTMF Modes	Inband, RFC2833, SIP INFO
Audio Features	VAD, CNG, Echo Canceller G.165/G.168
Network Interface	Dual switched 10/100Mbps port, optional PoE
Wi-Fi	IEEE 802.11 b/g/n
External Interface	USB 2.0, 3.5mm headset jack, HDMI
IP assignment	Static IP, DHCP, PPPoE
Management	LCD Menu Configuration, TR069, WebUI
Dimensions (W x H x D)	230 × 218 × 93.7 mm / 9.06" × 8.58" × 3.69"



Specifications

	N-SP80VS1	N-SP80AS1
Power Source	Power supply device that complies with IEEE 802.3af standard or 12V DC with optional AC adapter	
Camera	2 mega pixels	-
Resolution	Up to 1080p	-
Button	1 panic button; 1 reset button (on board)	
Microphone	1 integrated microphone, IP67	
Speaker	2 Watt, IP66	
Input Relay	2 input relays for alarm	
Output Relay	2 output relays for door opener	
Call Indication	1 RGB LED (colors: red, green, blue)	
Power Input	12V DC input	
Power Consumption	Less than 12W	
Dust/Water Protection	IP54	
Operating Temperature	-20 °C to +55 °C (-4 °F to +131 °F)	
Installation	Flush-mounted, Fits in Clipsal 164/4 back box	
Finish	316 grade stainless steel	
Dimensions	PCB: 74 x 140 mm / 2.91" x 5.51" With flush-mount kit (W x H x D) : 120 x 210 x 61 mm / 4.72" x 8.27" x 2.4"	
Options	YC-400: 3-gang backbox; YC-831HSW: 3-gang heated backbox with tamper switch (notification)	
Power Source	Power supply device that complies with IEEE 802.3af standard or 12V DC with optional AC adapter	

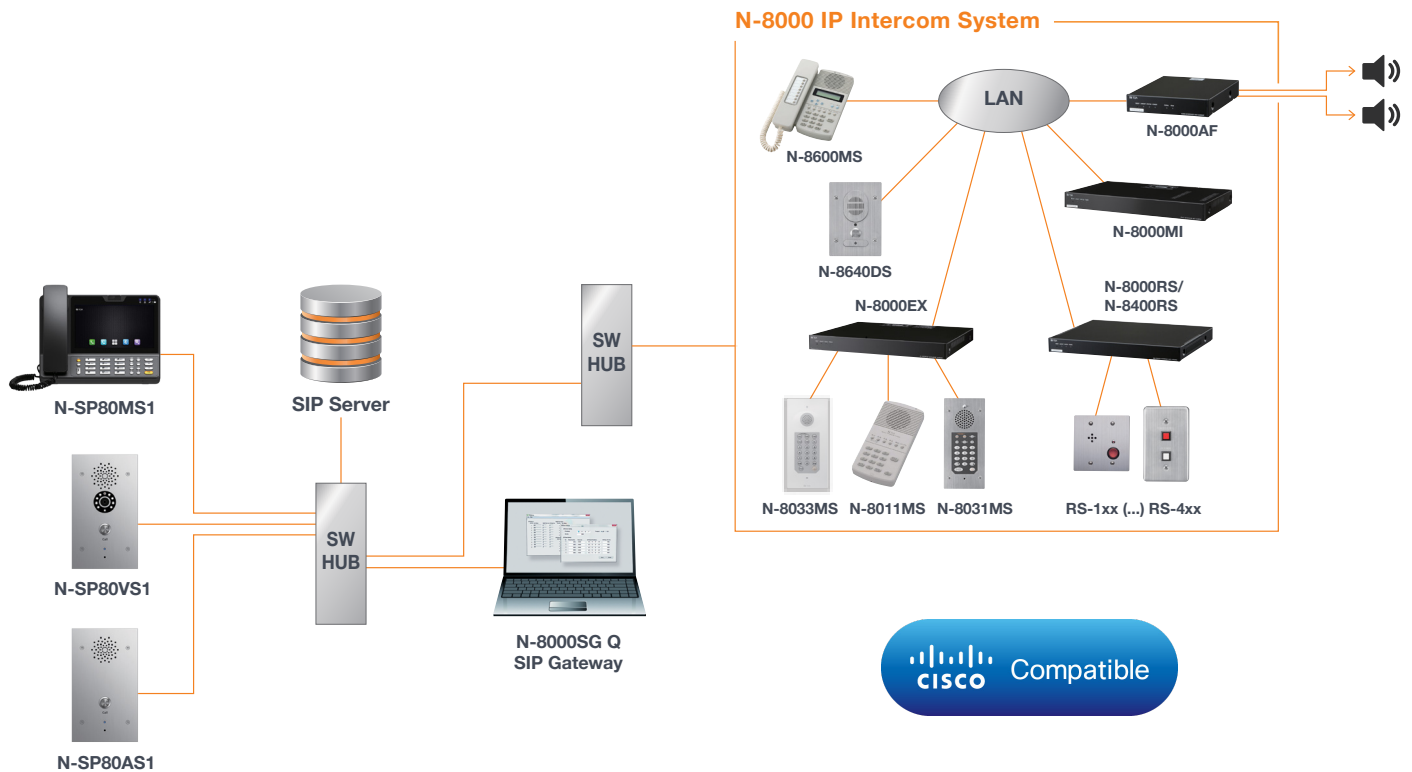
N-8000SG SIP Gateway Interface Software



Solution Partner

The N-8000SG SIP Gateway is a CISCO CERTIFIED interface to the N-8000 IP Packet Intercom System. The N-8000SG acts as an endpoint (SIP Extension) to an existing SIP server, providing paging, duplex communication and relay control between up to five SIP ports (i.e. voice paths) and any master station or remote station on an N-8000 system. The N-8000SG can access up to 192 paging zones and/or 3,056 remote stations/masters.

It supports five simultaneous conversations (voice paths) per license. Multiple N-8000SG licenses may be used on the same N-8000 system. The N-8000SG supports full duplex communication (with IP and 2-wire master stations) and half duplex communication with sub-stations. The N-8000 system can provide analog audio inputs and outputs, contact closure inputs and outputs, and remote station interfaces anywhere on a LAN or WAN. Any master or remote station can access the N-8000SG to ring any extension on the SIP system.



Features

- Connects to VoIP phone system as SIP extension
- Provides a SIP server to the N-8000 IP Packet Intercom System (5 lines)
- Call and transfer from N-8000 to SIP systems and vice versa
- Allows five separate 2-way conversations between the phone system and any master or sub-station on an N-8000 System
- Ability to initiate pages and access door remote control features

License (USB Dongle)

- Allows remote control of sub-station contact closures from the phone system
- Can page up to 192 separate zones
- Zones can include any master or sub-station or analog audio output on the N-8000 system
- Zones can be grouped as needed
- Audio conversion from N-8000 to SIP system and vice versa
- N-8000 uses G.722, fs=16kHz/8kHz; SIP uses G.711 u-law
- Operating System- Win10 Professional 64-bit



Genetec Technology Alliance Partner

Genetec™ Security Center* offers customers a unified intuitive interface to simplify operations with core systems including access control, video surveillance, and automatic number plate recognition (ANPR). The SIP-enabled communications management module available in Security Center is called Sipelia*, and enables seamless SIP-based communications between operators and intercom devices deployed throughout the customer's organization. Sipelia offers customers full communications management capabilities and facilitates the incorporation of intercom and communications into any security strategy.



* All product and company names are trademarks or registered trademarks of their respective owners.

IP-A1 Series IP Audio Solutions

More than meets the eye

All of these features are on board...



IP-A1 series is a group of sophisticated IP audio endpoint devices. Although it looks like a simple speaker or an I/F box, it is capable of many more features than its appearance suggests, and at a minimum, performs as a simple one speaker PA system while multiple devices can also be managed as one controlled PA system.

01 What is IP-A1?

IP-A1 series consists of a variety of IP audio endpoints, which can be used as an independent audio system or a fully integrated audio communication system to be configured and operated in conjunction with external systems and platforms such as security video monitoring, access control, digital signage or fire alarm systems.



Common Key Features

Audio File Storage

MP3/WAV
80MB

Standard Protocols

SIP, Onvif
Multicast

Audio Management

Priority
&
Volume

Easy Configuration

Browser UI
&
Software

Integration Friendly

HTTP API
&
Contact In/Out

*Onvif is a registered trademark of ONVIF Inc.

Audio communication system design can be much simpler and more flexible with the IP-A1 series

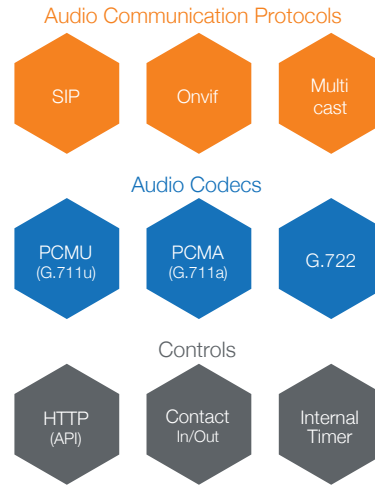
02 Why IP-A1?

Integration-friendly

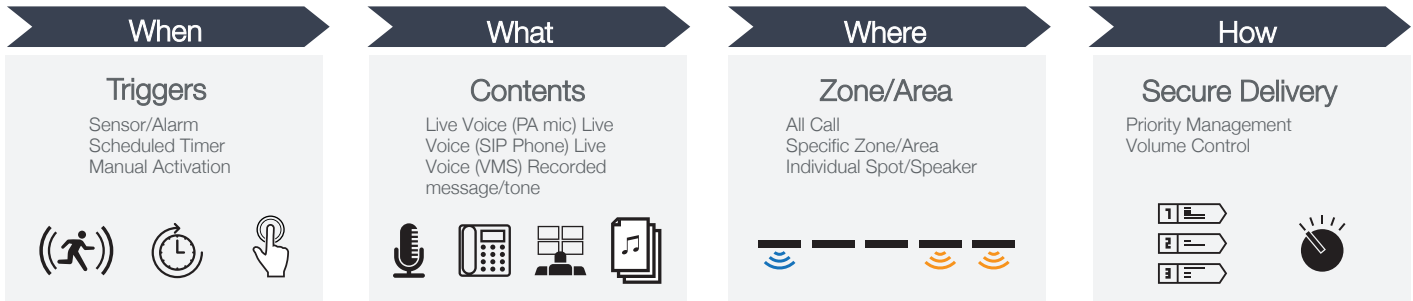
IP-A1 series IP endpoints use common industry standard protocols for audio communication and control. Adherence to these standards helps when designing or installing integrated systems by communicating with external devices and platforms such as SIP phone, security VMS (Video Management Software), Access Control or Sensing systems. Easily adding endpoints to a system allows the system to reach the next level of performance.



IP-A1 can be the easiest "piece" to add to your project to fulfill the requirements of your project



Key Elements of Audio Communications



IP-A1 series is designed to handle these elements flexibly for meeting every single project requirements.

Server-less & Scalable

The IP-A1 series does not require a dedicated server for its operation. The simplest PA system can be established with a single endpoint device such as IP Horn Speaker, while a building-wide or even community-wide audio communication systems can also be configured.



Server



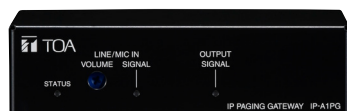
Spot Accouncement



Large-scale Broadcast

IP Audio Solutions / IP-A1 Series

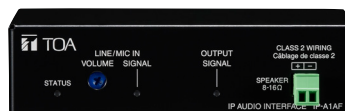
03 Lineup



Transmitter

IP Paging Gateway
IP-A1PG

- Convert SIP audio, ONVIF Audio Backchannel, internal audio files or local audio source into Multicast streaming
- System mute function to mute all broadcasts made by every single IP-A1 series devices within the same network
- 1 local audio input (LINE/MIC selectable, phantom power On/Off)
- 4 control inputs and 1 control output
- HTTP commands (receive/send)
- Audio file storage (20 files, total 80MB, WAV/MP3)
- PoE powered



Receiver

IP Audio Interface
IP-A1AF

- Receive SIP audio, ONVIF Audio Backchannel and Multicast
- Local broadcast using internal audio files or local audio source 1
- audio input (LINE/MIC selectable, phantom power On/Off) 8W
- (PoE)/15W(PoE+) built-in amplifier, 1 LINE audio output 2 control
- inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3)
- Playback programs (Repeat, Weekly Timer)
- PoE/PoE+ powered



Receiver

IP Ceiling Speaker
IP-A1PC238

- 16cm (6") cone-type speaker for in-ceiling installations Receive
- SIP audio, ONVIF Audio Backchannel and Multicast Local
- broadcast using internal audio files
- 8W built-in amplifier
- 2 control inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3) Playback
- programs (Repeat, Weekly Timer)
- PoE powered



Receiver

IP Horn Speaker
IP-A1SC15

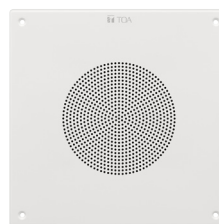
- 124dB (PoE+ powered) with IP66 rating for outdoor installations
- Receive SIP audio, ONVIF Audio Backchannel and Multicast Local
- broadcast using internal audio files
- 8W (PoE)/15W(PoE+) built-in amplifier
- 2 control inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3)
- Playback programs (Repeat, Weekly Timer)
- PoE/PoE+ powered



Receiver

IP Ceiling Mount Speaker
IP-A1PC580R

- 20cm (8") dual cone-type speaker with metal construction
- Receive SIP audio, ONVIF Audio Backchannel and Multicast
- Local broadcast using internal audio files
- 1 audio input (LINE/MIC selectable, phantom power On/Off) 8W
- built-in amplifier, 1 LINE audio output
- 2 control inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3) Playback
- programs (Repeat, Weekly Timer)
- PoE powered



Receiver

IP Square Speaker
IP-A1PC580S

- 20cm (8") dual cone-type speaker with metal construction
- Receive SIP audio, ONVIF Audio Backchannel and Multicast
- Local broadcast using internal audio files
- 1 audio input (LINE/MIC selectable, phantom power On/Off) 8W
- built-in amplifier, 1 LINE audio output
- 2 control inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3) Playback
- programs (Repeat, Weekly Timer)
- PoE powered



Microphones

Life Safety

Speakers

Amplifier

Mixers

Network
Audio

Intercom

Conferencing

M-8080D Digital Matrix Mixer system: One system to rule them all.

The M-8080D Digital Matrix Mixer system is dedicated to music, paging, discussion and zone management solutions for commercial audio applications. Easy to use and to implement, M-8080D offers state-of-the-art signal processing in a cost-effective package.

Mixers

M-8080D offers a choice of I/O options making it an excellent choice for stand-alone applications. The system uses fixed architecture for quick and straightforward operation. The intuitive GUI utilizes a familiar hardware-like layout to enable fast programming and rapid hardware implementation



FEATURES

- M-8080D offers state-of-the-art signal processing in a cost effective package
- A large choice of I/O options in order to cover most of applications
- **Audio I/O:**
- Standard: 8 analog IN / 8 analog OUT on rear panel ports of M-8080D.
- Optional: 4 AES audio inputs and 4 AES audio output via remote devices analog I/O.
- Max. System I/O: 12 x 12.
- PC M-8080D System Control: Settings can be memorized for easy duplication or modification
- TCP/IP for LAN control
- Cabling: CAT 5e (or better) cable to connect the remote controllers
- **Remote Devices:**
- M-8080D offers a large choice of devices for volume adjustment, paging management, routing and I/O modules.
- **DSP Functions:**
- Input: Ducker, Gain/Phase, Cross-over, Gate/Expander, 5 band EQ, Delay, Limiter / Compressor.
- Matrix, Feedback Cancel.
- Output: Mixer, Crossover, Gain/Phase, 8 band EQ, Delay, Limiter / Compressor

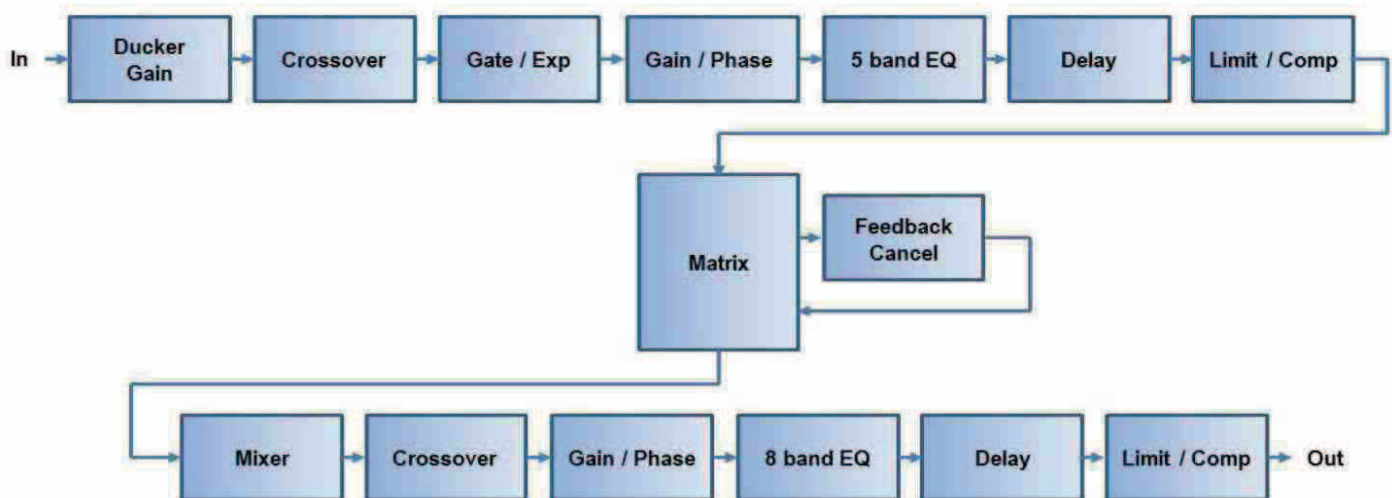
APPLICATIONS

- Sports Facilities
- Healthcare
- Education
- Retail Store
- Restaurant / Bar
- Gym
- Mall
- Hotel
- Museum
- Multi-purpose hall
- Gymnasium
- Conference rooms

AT A GLANCE

- M-8080D series is dedicated to music, paging, discussion and zone management solutions
- M-8080D series includes a digital Mixer Unit that is supported by remote controllers, remote Audio I/O controllers and a remote Paging Microphone.
- M-8080D offers software driven state-of-the-art signal processing in a cost effective package
- Audio I/O:
 - » 8 analog input and output
 - » 4 digital input and output (expandable via remote devices of M-8080D Series)
 - » Max. System I/O: 12 x 12.

DSP FUNCTIONS



APPLICATIONS

- Education
- Sports Complexes
- Multi-Purpose Hall
- Gymnasium
- Conference Rooms
- Healthcare Facilities
- Retail Store
- Restaurant / Bar
- Factories
- Mall
- Hotel
- Museum



System Components / M-8080D Digital Matrix Mixer System

8X8 DIGITAL MATRIX MIXER



M-8080D

REMOTE AUDIO CONTROL PANEL



M-800RC/B

REMOTE AUDIO CONTROL PANEL WITH AUDIO OUT



M-802RC/B

REMOTE AUDIO INPUT OUTPUT PANEL



M-822IO/B

REMOTE MICROPHONE



M-800RM

REMOTE AUDIO CONTROL PANEL WITH TOUCH DISPLAY

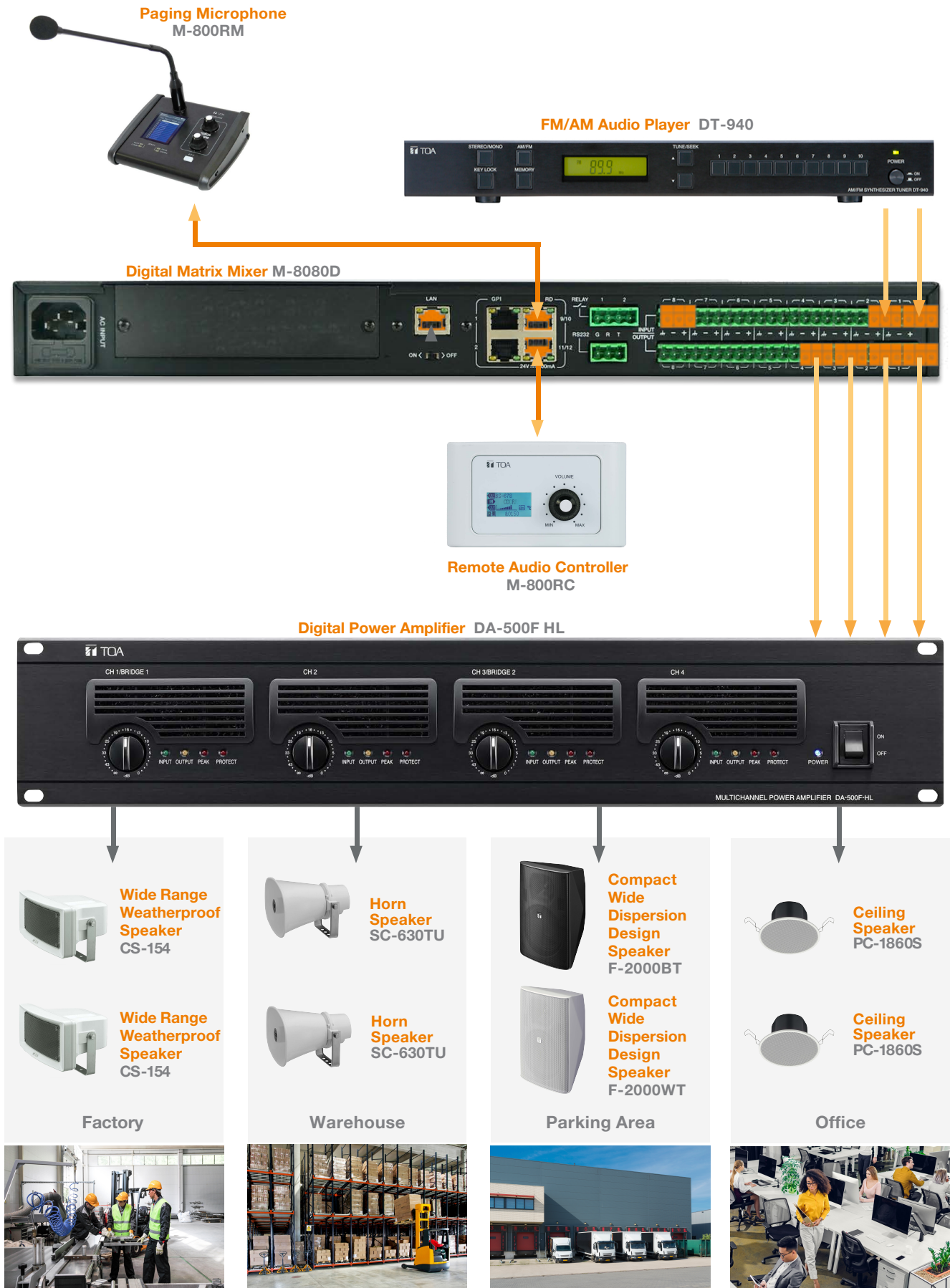


M-800RCT/B

EXTENSION MODULE 4 PORTS



M-804EX



M-8080D Series / Mixer Unit / M-8080D



M-8080D

- 8 analog input and 8 analog output
- 4 digital input and 4 digital output
- DSP functionalities EQ, Compressor, Delay and more
- Easy and quick operation
- Intuitive GUI via PC
- Extended remote controller options

SPECIFICATIONS	M-8080D
Power source	100 - 240 V AC, 50 / 60 Hz
Phantom power	+48 VDC, switchable, Inputs 1 - 8
Frequency response	20 Hz - 20 kHz (±3 dB)
Power consumption	40W
S/N ratio	>105 dB (A weighted)
Display	LCD Screen: Displays device information: name, firmware version, ID, communication status
Indicator	LEDs: Input: Analog Signal (Green) x8, Analog Peak (Red) x8, RD signal (Green) x4, RD Peak (Red) x4 Output: Analog Signal (Green) x8, Analog Peak (Red) x8, RD signal(Green) x4, RD Peak (Red) x4 Status: Fault (Red) x1, Comm (Green) x1, Power (Blue) x1
Crosstalk	>79 dB
Inputs	AUDIO INPUT: 1-8: -48 to 0dBv, 6.8 kΩ, electronic balanced, removable terminal block (3 pins x8)
Outputs	AUDIO OUTPUT: 1-8: 0dBv, 1.8 kΩ Maximum output 20 dBu(7.75V), electronic balanced, removable terminal block (3 pins x 8) CONTROL INPUT: GPI 1 - 2: no-voltage contact input, open voltage: 1.5V DC, short-circuit current: Under 3 mA, RJ45 Connector x 2
Controls	CONTROL OUTPUT: Relay 1 - 2: withstand voltage: 24V DC, control current: Under 500 mA, removable terminal block (4 pins) RD port: RD 9 - 12: transmits and receives AES3 digital audio plus control data. Connect remote devices such as M-822IO, M-800RC, M-802RC, M-800RCT and M-800RM, maximum cable length is 100 meters, RJ45 Connector x 2
Signal processing	Equalizer / Filter, Gate, Compressor, Ducker Feedback Compression (FBC), Auto Mixer, Delay
Equalizer / Filter	5 band EQ (LPF and HPF) for IN and 8 band EQ (LPF and HPF) for OUT Parametric Equalizer: 19.7 - 20,160 HZ, range: ±18 dB, Q: 0.4 - 128, Type: peak/low/high
Compressor	Threshold: -30 to +20 dB in 1 dB steps Ratio: 1:1, 1.21, 1.3:1, 1.5:1, 1.7:1, 2.0:1, 2.2:1, 2.3:1, 2.5:1, 3.0:1, 3.5:1, 4.0:1, 4.5:1, 5.0:1, 5.5:1, 6.0:1, 6.5:1, 7.0:1, 7.5:1, 8.0:1, 8.5:1, 9.0:1, 9.5:1, 10.0:1, limit Attack: 10 -150 ms Release: 10 ms - 1 s
Feedback compression (FBC)	Mode: Speech / Music, Filter release: fast / mid / low, FBC type: dynamic Filters / static Filters
Auto Mixer	Activation: 10 ms - 6 s
Delay	0 - 1361.2916 ms
Ducker	Level: 0-15, Threshold: -80 to 0 dB in 1 dB steps Depth -60 to 0 dB in 1 dB steps, Activation: 10 ms - 6 s
Matrix	8 x 8 12 x 12 (Expandable via optional equipment)
Operating temperature	0°C to + 40°C (32°F to 104°F)
Finish	Panel: Aluminum black, Case: Surface-treated steel plate, black paint
Dimensions	483 W x 44.2 H x 259 D mm (19.02" W x 1.74" H x 10.18" D)
Weight	4.2 kg



M-804EX

M-804EX

- 1 digital port In (from M-8080D)
- 1 digital port Out for audio plus control
- 3 digital port Out for control only
- 24V DC power supply

SPECIFICATIONS	M-804EX
Power source	24 V DC (Powered by M-8080D or DC24 external power supply.)
Indicator	RD IN (Green) RD exp audio (Green) RD exp control (Green) x3 Power (Red)
Inputs	RD IN: Transmits and receives AES3 digital audio plus control data Connect to M-8080D, RJ45 connector
Outputs	RD EXP: Port 1: transmits and receives AES3 digital audio and control data Connect to M-822IO, M-800RC, M-800RCT, M802RC or M-800RM, RJ45 connector Port 2 - 4: transmits and receives control data connect to M-800RC or M-800RCT, RJ45 connector maximum cable length 100 meters in total from M-8080D RD port to last controller
Operating temperature	0°C to + 40°C (32°F to 104°F)
Finish	Panel: Aluminum, black Case: Surface-treated steel plate, black paint
Dimensions	196.2 W x 44.2 H x 133 D mm (7.72" W x 1.74" H x 5.24" D)
Weight	0.92 kg

M-8080D Series / Remote Microphone / **M-800RM**



M-800RM

M-800RM

- Up to 12 different zones
- LCD screen
- Zone selector with volume control
- Push-to-talk gooseneck microphone
- Status and communication indicators
- USB port to load Chimes sound file
- RD port, for connection to M-8080D
- 100m cable length

SPECIFICATIONS	M-800RM
Power source	24 V DC (Powered by M-8080D or M-804EX)
Gooseneck Microphone	Unidirectional electret condenser microphone
Frequency response	20 Hz - 20 kHz (±3 dB)
Audio output	0 dBV, electronic balanced, RJ45 Connector
USB port:	Load WAV files for chimes sound
Volume Control	Microphone volume control and all zone selector
Zone Selector	Can address 1 to 64 different zones
Display	LCD Screen: Displays device information: ID, volume, zone selector
Indicator	LEDs: Input signal (Green) x1, Input Peak (Red) x1, Busy (Red), Communication (Green) x1
Directivity	Unidirectional
Operating temperature	0°C to + 40°C (32°F to 104°F)
Finish	Case: Surface-treated steel plate, painted black
Dimensions	176 W x 61.8H x 162.4 D mm (6.93" W x 2.43" H x 6.40"D) gooseneck mic excluded
Weight	0.8 kg



M-800RCT



M-800RCTB

M-800RCT/B

- 4.3" touch screen
- Input/Output signal routing
- Volume control
- Preset Control
- Direct power supply by network cable
- LCD screen with output level display
- RD port IN, for connection to M-8080D
- RD port LINK for daisy chain connection
- 100m CAT5e cable length

SPECIFICATIONS

	M-800RCT/B
Power source	24 V DC (Powered by M-8080D or M-804EX or external)
Display	Touch LCD Screen Displays device information: ID, Volume, communication status, system
Inputs	RD In: Transmits and receives AES3 digital audio plus control data Connect to M-8080D, M-804EX, M-800RC, M-800RCT for daisy chain, RJ45 connector
Outputs	RD EXP: Transmits and receives control data Connect to M-800RC or M-800RCT, RJ45 connector
Controls	Volume / Routing / Presets
Operating temperature	0°C to +40°C (32° F to 104° F)
Finish	Panel: Polycarbonate + ABS resin, white or black
Dimensions	150 W x 115 H x 28 D mm (5.9" W x 4.53" H x 1.1" D)
Weight	0.28 kg

M-8080D Series / Remote Audio Controller / M-800RC / M-802RC



M-800RC



M-802RC



M-800RCB



M-802RCB

M-800RC/B

- Input/Output signal routing
- Volume control
- Direct power supply by network cable
- LCD screen with output level display
- RD port IN, for connection to M-8080D
- RD port LINK for daisy chain connection
- 100m CAT5e cable length

M-802RC/B

- Input/Output signal routing
- Volume control
- Direct power supply by network cable
- 2 analog outputs
- LCD screen with output level display
- RD port IN, for connection to M-8080D
- RD port LINK for daisy chain connection
- 100m CAT5e cable length

SPECIFICATIONS	M-800RC	M-802RC
Power source	24 V DC (Powered by M-8080D or M-804EX or external)	
Frequency response	-	20 Hz - 20 kHz
Total Harmonic Distortion	-	< 0.01 %
S/N ratio	-	>105 dB (A weighted)
Display	LCD Screen Displays device information: ID, Volume, communication status	
Crosstalk	-	>79 dB
Inputs	RD In: Transmits and receives AES3 digital audio plus control data Connect to M-8080D, M-804EX, M-800RC, M-800RCT for daisy chain, RJ45 connector	
Outputs	RD EXP: Transmits and receives control data Connect to M-800RC or M-800RCT, RJ45 connector	Audio Output: Line output 1 - 2: 0 dBV, 1.8 kΩ, Maximum output 20dBu (7.75V), electronic balanced, screw terminal (3 pins x2)
Controls	Volume / Routing	
Operating temperature	0°C to +40°C (32° F to 104° F)	
Finish	Polycarbonate + ABS resin, white or black	Polycarbonate + ABS resin, white or black
Dimensions	147 W x 86 H x 65 D mm (5.79" W x 3.39" H x 2.56"D)	
Weight	0.3 kg	

M-8080D Series / Audio Input Output Module / **M-822IO**



M-822IO



M-822IOB

M-822IO/B

- Built-in A/D and D/A converter
- 2 analog inputs (MIC/ stereo line)
- 2 analog outputs
- Phantom Power
- Input Sensitivity
- Direct power supply by network cable
- RD port IN, for connection to M-8080D
- 100m CAT5e cable length

SPECIFICATIONS

	M-822IO/B
Power source	24 V DC (Powered by M-8080D or M-804EX or external)
Phantom power	+48 VDC, switchable , MIC input
Frequency response	20 Hz - 20 kHz
Total Harmonic Distortion	< 0.01 %
S/N ratio	>105 dB (A weighted)
Indicator	LED Audio Input: Signal (Green) x2, Peak (Red) x2 LED Audio Output: Signal (Green) x2, Peak (Red) x2
Crosstalk	>79 dB
Inputs	RD In: Transmits and receives AES3 digital audio plus control data Connect to M-8080D, M-804EX, M-800RC, M-800RCT for daisy chain, RJ45 connector Audio input MIC Input: -48 dBV, 5.1 kΩ, electronic balanced, XLR connector Line input A-B: 0 dBV, 5.1 kΩ, unbalanced, RCA pin jack
Outputs	RD EXP: Transmits and receives control data Connect to M-800RC or M-800RCT, RJ45 connector Audio Output Line output 1 - 2: 0 dBV, 1.8 kΩ , Maximum output 20 dBu (7.75V), electronic balanced, screw terminal (3 pins x2)
Controls	Volume / Routing
Operating temperature	0°C to +40°C (32° F to 104° F)
Finish	Panel: Polycarbonate + ABS resin, white or black
Dimensions	147 W x 86 H x 52 D mm (5.79" W x 3.39" H x 2.05" D)
Weight	0.3 kg

MW-41BT

Audio Interface with USB and Bluetooth



BX-41F
Flush Mount



BX-41S
Surface Mount

Sleek and elegant, second generation audio input panel with enhanced connectivity

MW-41BT is TOA's second generation of audio input panels. It is equipped with Microphone, Aux (3.5mm), USB and Bluetooth inputs, and one mono line-level output. The in-wall design and modern appearance make it ideal for adding multiple inputs to any available analog audio input. The microphone input has the highest priority over the other inputs. Any active input is lowered by 20dB when a microphone signal is detected. The panel fits in a standard 2-Gang electrical box (not included), and it requires a power supply (included). Optional flush mount or surface mount lockboxes are available for the panel.

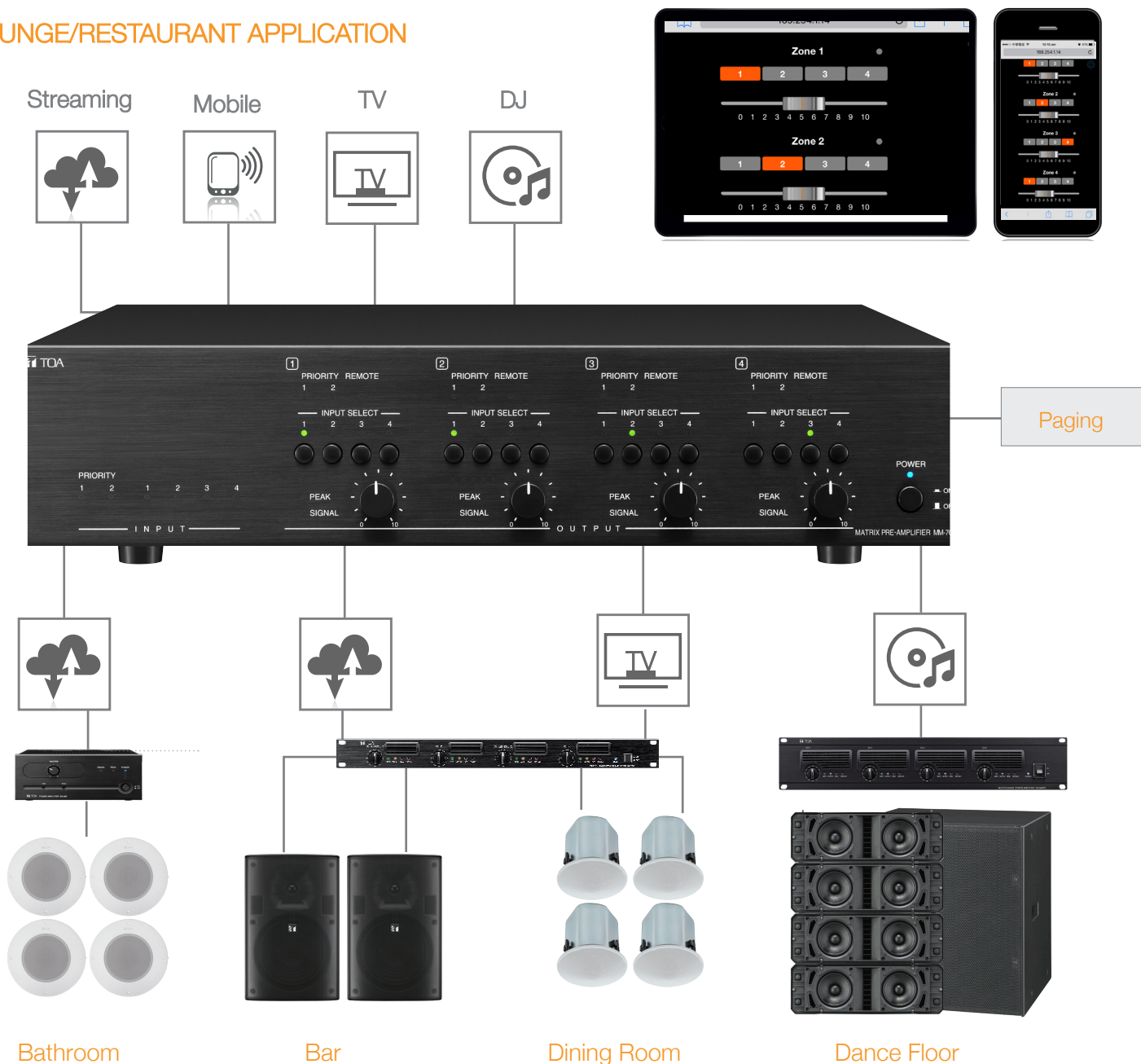
- Microphone and line level inputs
- 24V Phantom Power on the Mic input USB
- input (compatible with MP3 and WAV)
- Bluetooth® input
- Optional flush mount lockbox
- Balanced line output
- Input Selection Button Volume
- Control
- Priority on the Mic input Optional
- Surface mount lockbox

SPECIFICATIONS	MW-41BT
Power Source	100-240V AC 50/60Hz
Power Consumption	3W
Audio Input	MIC input: -60 dBv, 2.2 kΩ, electronic balanced, female XLR Connector AUD input: -10 dBv, 10 kΩ, unbalanced, stereo 3.5mm (1/8") mini-jack USB input: Audio formats: MP3, WAV Format: FAT16, FAT32, Max. 32GB Bluetooth input : Ver. 5.0, Max. 10m
Audio Output	0 dBv, 10 kΩ, electronic balanced, RJ45 connector
Frequency Response	20 - 20,000 Hz, ±3 dB
Total Harmonic Distortion	< 0.1%
S/N Ratio	>90dB (A weighted)
Phantom Power	+24 VDC, switchable, MIC input
Indicators	Power (Blue) x1, MIC (Blue) x1, AUX (Blue) x1, USB (Blue) x1, Bluetooth (Blue) x1
Operating Temperature	0°C to +40°C (32°F to 104°F)
Operating Humidity	90% RH or less (no condensation)
Finish	Panel: Aluminum, Sandblasting, Silver Decorative Sheet: Acrylic, Black
Dimensions	120 (W) x 120 (H) x 40.2 (D) mm (4.72" x 4.72" x 1.58")
Weight	0.2 kg (0.44lbs)
Accessories	AC Power adapter...1, Remote control...1, Box mounting screw (6-32UNC)...4 RJ45 Conversion socket...1
Options	Optional flush mount lockbox (BX-41F), surface mount lockbox (BX-41S)

MM-700F 6x4 Matrix Mixer with DSP

The MM-700F is a four-channel matrix/preamp with analog control of digital processing. No PC is required to set up and operate this versatile unit. Enhanced functionality is tailored to both background music and paging applications. Matrix and DSP settings can be made simply, without the need for a computer. Time spent on installation and system tuning is greatly reduced. The paging function has two-levels of priority: (1) manual activation or (2) automatic (vox) activation. The MM-700F is ideally suited for establishments where different background music sources are required for different zones, or where staff paging announcements are selectively directed to one area such as a restaurant or sales area. The optional WP-700 provides volume control and source selection for up to four zones. The MM-700F may be controlled via browser by any computer or smart device.

LOUNGE/RESTAURANT APPLICATION



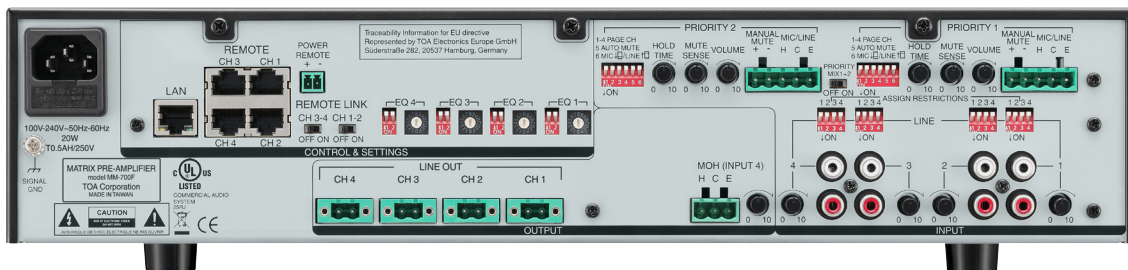
KEY FEATURES

- 4 BGM/Audio source selection on each output
- 2 levels of priority paging/mute functions
- DSP preset EQ selection
- WP-700 zone source/volume control available
- 4 BGM and 2 priority MIC/LINE inputs with matrix routing to 4 line outputs
- 2 priority inputs with different priority level for paging or other audio source to override stereo line inputs
- Each priority input has input gain level, mute sensitivity and mute hold time adjustments.
- Independent DSP preset selection per each channel and 50Hz HPF for speaker protections
- DSP preset selections include general EQs, TOA speaker EQs and X-over settings to be used with subwoofers
- Up to 4 wall mount remote control, WP-700 can be connected to control the line input selection and output volume
- 100-240V universal power supply

OPTIONS

WP-700 Wall Panel Remote

Wall mount remote control, WP-700 can be connected via CAT-5 straight LAN cable to control the line input selection and output volume of each output



Specifications

		MM-700F
Power Source		100 - 240V AC, 50/60Hz
Power Consumption		9 W or less
Frequency Response		20Hz - 20 kHz (-3 dB / + 1 dB)
Total Harmonic Distortion		1% or less, at 1kHz, rated output
Certifications		cULus 60065, EN60065, EN55032, EN55020, FCC part15 class A
Input	Priority 1-2:	Mic -60 dB/Line -10 dB* selectable, 2.2 kΩ, electronically-balanced, removable terminal block
	Line In 1-4:	-10 dB*, 10 kΩ, unbalanced, 2 RCA jacks (Stereo summing)
	Line Out 1-4:	0 dB*, 600 Ω, unbalanced, removable terminal block
Output	MOH:	0 dB*, 600 Ω, transformer balanced, removable terminal block
DSP Preset		16 presets in 4 banks (64) at each output channel, selectable
S/N Ratio		Mic: 60 dB* or more, Line: 75 dB* or more (A-weighted)
Muting		Manual mute / Automatic mute
Mute Hold Time		50ms - 10 seconds, adjustable
Priority Level		PRIORITY 1 > PRIORITY 2 > LINE 1-4
Control	Power:	ON/OFF switch, Power remote terminal
	Priority 1-2:	MIC/LINE selector switch, Gain control, Assign switch, Auto mute switch, Mute sense control, Manual mute terminal, Mute hold time control, Priority mix switch
	Line In 1-4:	Gain control, Assign restriction switch
	Output 1-4:	LINE IN 1-4 selector switch, Output gain control, DSP bank selector switch, DSP preset selector switch
	Remote 1-4:	Remote control connector (RJ-45), Remote link switch
Operating Temperature		0 °C to 40 °C degree / 32 °F to 104 °F
Operating Humidity		35% to 80%RH (no condensation)
Finish		Panel: Aluminum, hair line, black; Case: Steel plate, black, paint
Dimension		420 (W) x 107.6 (H) x 350 (D) mm / 16.54" x 4.24" x 13.78"
Weight		5.7 kg / 12.3 lbs
Included Accessories		Power cord (2m/5.65ft) x1, Removable terminal plug (5 pins x 2, 3 pins x 1, 2 pins x 4); Rack mounting bracket x 2, Bracket mounting screws x 4, User manual x 1
Option		WP-700 Wall Panel Remote

MA-725F 6x4 Matrix Mixer Amplifier

TOA's MA-725F matrix amplifier is an all-in-one solution for multi-zone applications combining a 6x4 audio matrix, DSP, and four channels of Class-D amplification in one chassis (250Wx4 @70V/100V). It is equipped with four independent line inputs, and 2 MIC/LINE priority inputs. Each output has independent DSP preset adjustments and individual source selection. The system is controlled via front panel, WP-700 remote source and volume controller, browser with computer or smart device. The MA-725F is the perfect choice for quick and easy installations requiring quality sound,, intuitive operation, and flexible source to zone control.



KEY FEATURES

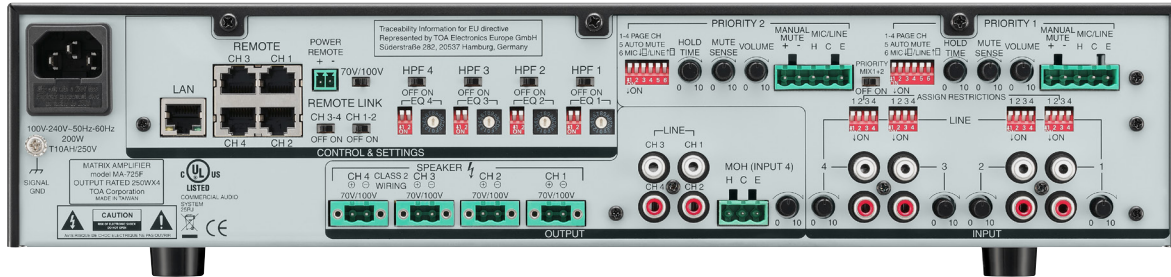
- 4 stereo line and 2 priority MIC/LINE inputs with matrix routing to 4 amplifie outputs
- 2 priority inputs with different priority level for paging or other audio source to override stereo line inputs
- Each priority input has input gain level, mute sensitivity and mute hold time adjustments
- 4 channels of 250W Class-D amplifier a 70V/100V
- Browser-based smart device control

- Independent DSP preset selection per each channel and 50Hz HPF for speaker protections
- DSP preset selections include general EQs, TOA speaker EQs and X-over settings to be used with subwoofers
- Each output channel also has auxiliary line output to deliver audio to other audio systems for scale expansions
- Up to 4 wall mount remote control, WP-700 can be connected to control the line input selection and output volume
- 100-240V universal power supply

OPTION

- WP-700 Wall Panel Remote
- Wall mount remote control, WP-700 can be connected via CAT-5 straight LAN cable to control the line input selection and output volume of each output





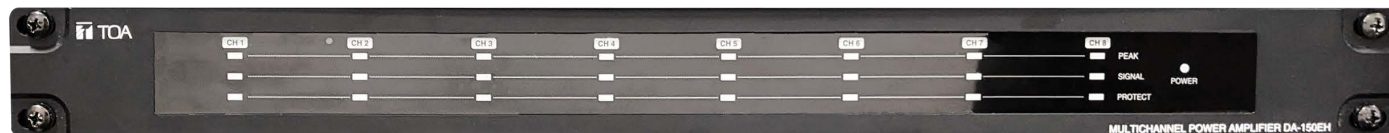
*0dB=1V

Specifications

Specifications		MA-725F
Power Source		100 - 240V AC, 50/60Hz
Power Consumption		1350 W (rated output), 200 W (based on cULus standards), 42.5 W (idle), 22 W or less (stand-by)
Frequency Response		20Hz - 20 kHz (-3 dB / + 1 dB, LPF OFF)
Total Harmonic Distortion		1% or less, at 1kHz, rated output
Certifications		cULus 60065, EN60065, EN55032, EN55020, FCC part15 class A
Input	Priority 1-2:	Mic -60 dB/Line -10 dB* selectable, 2.2 k Ω , electronically-balanced, removable terminal block
	Line In 1-4:	-10 dB*, 10 k Ω , unbalanced, 2 RCA jacks (Stereo summing) 70
	Speaker 1-4:	V (20 Ω), 100 V (40 Ω), removable terminal block
Output	Line Out 1-4:	0 dB*, 600 Ω , unbalanced, RCA jack
	MOH:	0 dB*, 600 Ω , transformer balanced, removable terminal block
DSP Preset		16 presets in 4 banks at each output channel, selectable Mic:
S/N Ratio		60 dB* or more, Line: 75 dB* or more (A-weighted) Manual
Muting		mute / Automatic mute
Mute Hold Time		50ms - 10 seconds, adjustable
Priority Level		PRIORITY 1 > PRIORITY 2 > LINE 1-4
Control	Power:	ON/OFF switch, Power remote terminal
	Priority 1-2:	MIC/LINE selector switch, Gain control, Assign switch, Auto mute switch, Mute sense control, Manual mute terminal, Mute hold time control, Priority mix switch
	Line In 1-4:	Gain control, Assign restriction switch
	Output 1-4:	LINE IN 1-4 selector switch, Output gain control, 70V/100V selector switch, HPF switch, DSP bank selector switch, DSP preset selector switch
	Remote 1-4:	Remote control connector (RJ-45), Remote link switch
Operating Temperature		0°C to 40°C degree (32°F to 104°F)
Operating Humidity		35% to 80%RH (no condensation)
Finish		Panel: Aluminum, hair line, black; Case: Steel plate, black, paint
Dimension		420 (W) x 107.6 (H) x 350 (D) mm (16.54" x 4.24" x 13.78") 7.6
Weight		kg (16.7 lbs)
Included Accessories		Power cord (2m (5.65ft)) x1, Removable terminal plug (5 pins x 2, 3 pins x 1, 2 pins x 4); Rack mounting bracket x 2, Bracket mounting screws x 4, User manual x 1
Option		WP-700 Wall Panel Remote



DA-150EH-AM Multichannel Power Amplifier



Multi-zone capable and powerful for all market sound application

- 8-Channel Class-D amplifier
- 150W per channel
- Individual channel attenuators accessible from rear of amplifier
- Low power consumption and light weight
- Electronically-balanced inputs
- Built-in protection circuitry



TOA's DA-150EH-AM Multichannel Power Amplifier features high power handling capabilities and commercial-grade durability. It has a rated output of 150 W x 8 channels (100/70V line output). It covers larger scale sound system applications where background/foreground music distributions and/or voice announcements are required in multi-zone. It can be mounted in an EIA standard equipment rack. This lightweight and compact amplifier, offers 8 channel Class D power with 150W per channel.

- 8-Channel Class-D amplifier
- 150W per channel
- Separate volume control for each channel
- Low power consumption and light weight
- Electronically-balanced inputs
- Built-in protection circuitry

SPECIFICATIONS	DA-150EH-AM
Power Source	110-120 V AC, 50/60 Hz
Amplification System	Digital class D
Power Consumption	1000 W
Input	8 circuits, 0 dBV (1 V) (input level control in maximum position), 20 k Ω , electronically-balanced, removable terminal block (3 pins)
Rated Output	8 channels: 150 W x 8 (66.7 Ω (100 V)/33 Ω (70 V))100/70 V DIP switch x 8 removable terminal block (2 pins)
Frequency Response	50 - 20,000 Hz (± 3 dB)
Total Harmonic Distortion	< 0.1%
S/N Ratio	> 95 dB (A-weighted)
Crosstalk	> 70 dB (A-weighted)
Protection Circuit	Short circuit, open circuit, thermal, excessive input, ultrasonic and RF
Indicators	Signal(green) x 8, Peak(red) x 8, Protect(red) x 8, Power(green) x 1
Cooling	Forced air cooling
Operating Temperature	0°C to +40°C (32 °F to 104 °F)
Operating Humidity	Under 90% RH (no condensation)
Finish	Panel: aluminum, black, alumite, Case: plated steel sheet
Dimensions	483 (W) x 44 (H) x 360 (D) mm (19" x 1.7" x 14.2")
Weight	7.3 kg (16.09 lbs)
Accessory	Power cord (2 m) ...1, Removable terminal plug (3 pins) ...8, Removable terminal plug (2 pins) ...8

Courthouses & Medical Centres



Government & Hospitals



Corporate & Commercial



Voice Evacuation & Mass Notification



Theatres & Halls



Hospitality & Retail



Sports Complexes



A-800D Series Digital Mixer Amplifier

TOA mixer amplifiers have gained the trust of customers in the U.S. for over 45 years.



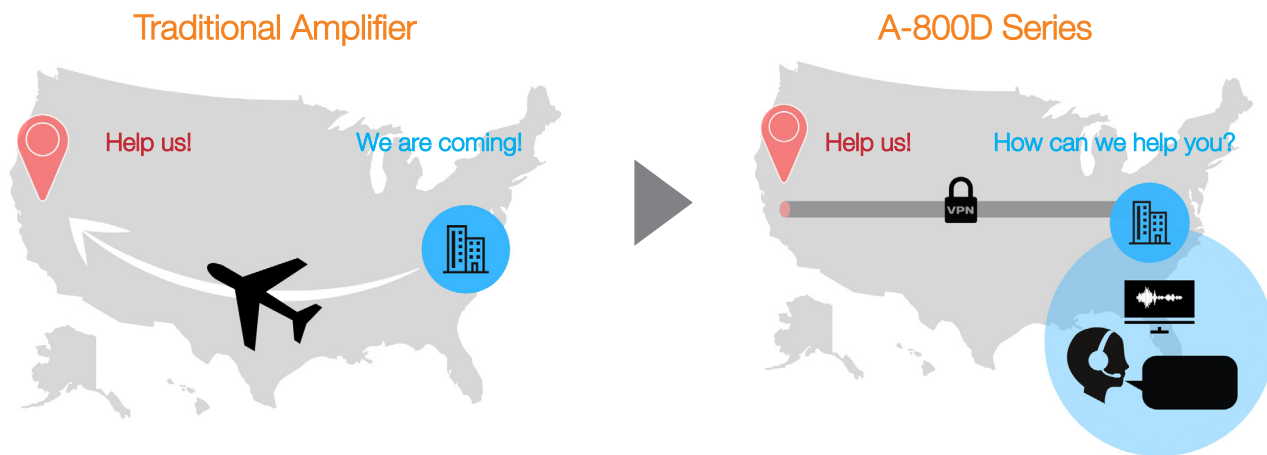
OVERVIEW

TOA's new mixer amplifier provides maximum flexibility with up to eight inputs and up to 480 W of power. Browser based control and monitoring from anywhere reduces your time troubleshooting and adjusting systems. Onboard DSP, a sleek new appearance, MOH output, two available 900 series module slots and TOA's legendary quality and reliability makes this a perfect fit for background and foreground music, paging, and noise masking applications.

KEY BENEFITS

1. Remote Troubleshooting

A web browser interface allows you to view input and output levels and amplifier status from your office location. A quick check of the downloadable log files can verify the need to dispatch a technician.



2. Remote Control

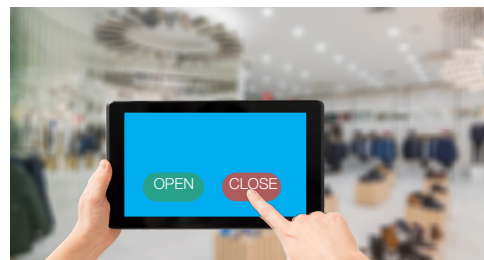
Use a password protected web browser or 3rd party control system to adjust levels, EQ, dynamics, input priority, Speaker EQ, feedback suppression, and more. Additionally, volume control can be accessed via remote GUI access.

>> Volume adjustment on site



* GUI Remote control volume access.

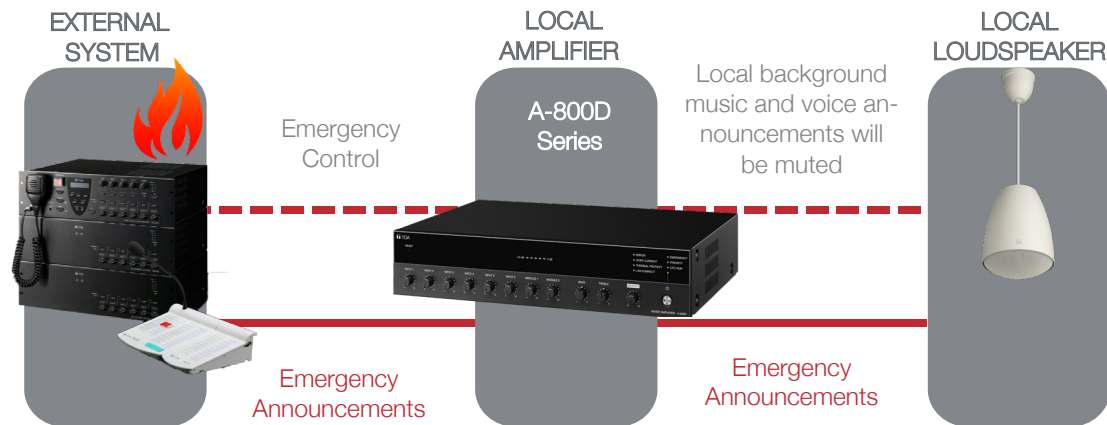
> Open/close the shop at a touch



* IP protocols are available to develop unified user interface including sound system, air conditioning system, and lighting system.

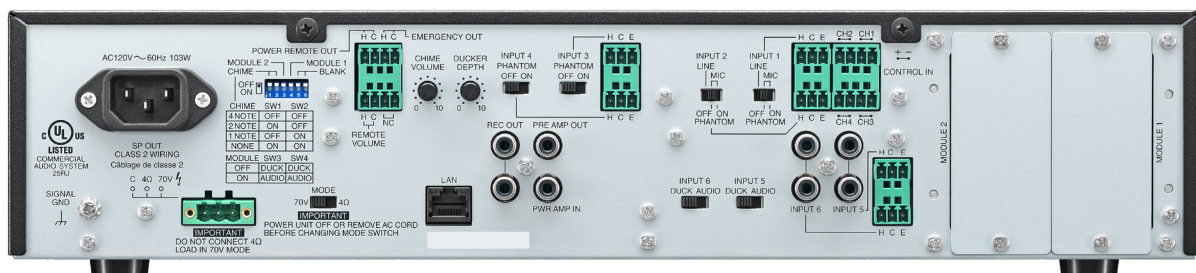
3. Emergency Voice Announcement

Integrate an external notification system to mute or override local sound. When the unit is set to override local sound, the broadcast is made at maximum level, regardless of system settings.



4. Flexible Input

Select from the wide variety of TOA 900 series input modules, including our SP-11N VoIP phone paging module, our NM-01 noise masking module, or our WTU-M9800 wireless tuner module.



KEY FEATURES

- » TOA Class D amplifiers for maximum efficiency
- » Auto Gain Control for microphone inputs
- » Onboard DSP
 - » Dynamic Feedback Filters
 - » Speaker EQ (3 bands of parametric EQ) Input tone controls
- » Assignable input priorities
- » Built-in defeatable pre-announce chime
- » Log Data
- » IP protocol available

WEB BROWSER INTERFACE

Connect the A-800D Mixer Amplifier to a network to access the onboard browser interface. Static or DHCP address assignment may be used. Browser Interface allows access to:

- » Account ID (Username and Password) settings
- » System status, including real time display of input and output levels
- » System log
- » Firmware updates
- » Input priority settings
- » Speaker EQ

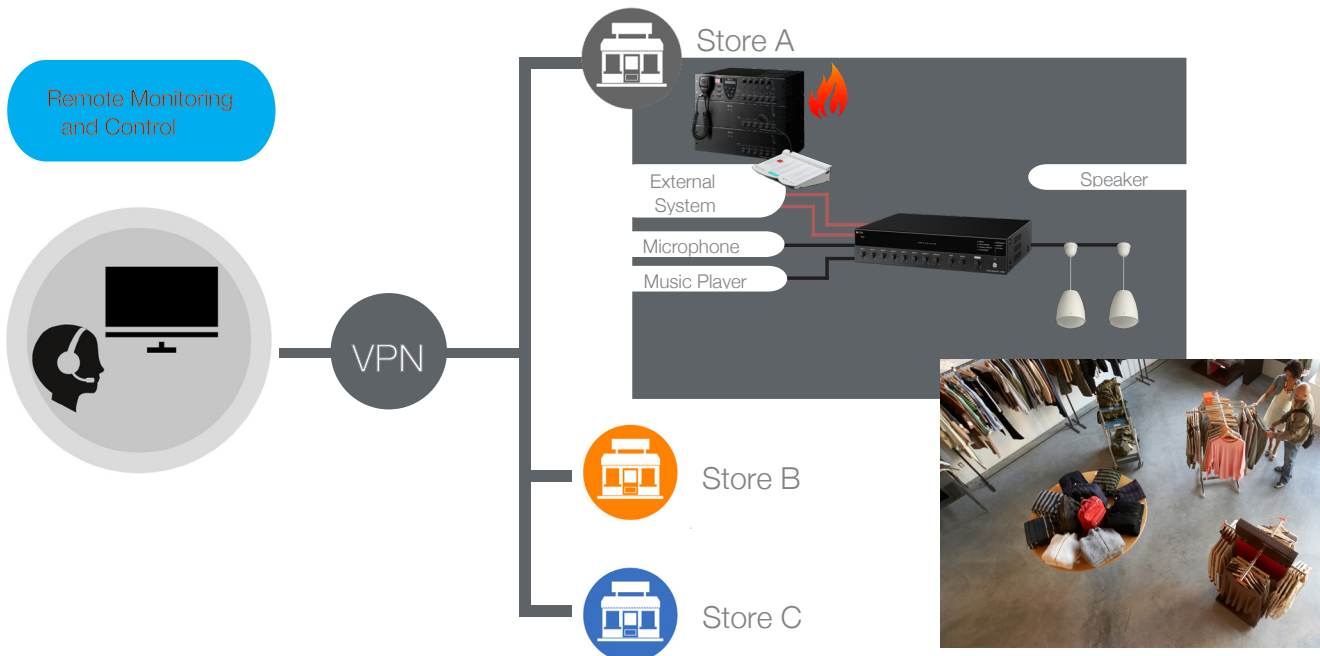


• System requirements

PC running Windows 10 (64-bit)

Supported browsers: Microsoft Internet Explorer™*, Microsoft Edge™*, Google Chrome™*, and Mozilla Firefox™*

APPLICATION | Retail Chain Stores



Notes:

- Microsoft Windows, Microsoft Edge, and Microsoft Explorer are registered trademarks of Microsoft Corporation.
- Google Chrome is a registered trademark of Google LLC.
- Mozilla and Firefox are registered trademarks of the Mozilla Foundation.

Module Selection Chart

	Description	3 Screw Terminals	Female XLR	Male XLR	1/4" Phone Jack	RCA Jack	Dual RCA Jacks	5 Screw Terminals
Mic Input Modules	Mic/Line Input with Mute Send/Receive, High/Low Filters	ML-11T						
	Standard with High/Low Cut Filters, Phantom	M-01S T	M-01F	M-01M	M-01P			
	Mute-Receive with High/Low Cut Filters, Phantom	M-11S T						
	Mute-Send with High/Low Cut Filters, Phantom	M-41S						
	Compressor with High/Low Cut Filters, Phantom	M-61S T	M-61F					
	Remote Volume Control with High/Low Cut Filters, Phantom							M-21S
Line Input Modules	Mic/Line Input with Mute Send/Receive, High/Low Filters	ML-11T						
	Standard, no special features or adjustments	B-01S T L-01S T U-01S T	B-01F L-01F U-01F		U-01P	U-01R		
	Standard with High/Low Cut Filters, Phantom	U-03S T					U-03R	
	Standard with Mute-Receive	B-11S T L-11S T						
	Standard with Mute-Receive, Gain	U-11S T				U-11R		
	Mute-Receive with High/Low Cut Filters, Gain	U-13S					U-13R	
	Mute-Receive with Variable Mute Depth, Gain	U-12S T						
	Mute-Send	B-41S L-41S T						
	Mute-Send with High/Low Cut Filters	U-43S					U-43R	
	Remote Volume Control with Gain							B-21S U-21S
	Compressor with Gain	U-61S T						
	Dual Input Priority with Auto Gain Control, Gain						U-14R	
Special Function Modules	Line Output with Gain	T-01S T						
	Line Input with Gain, Music-On-Hold (MOH) Output							T-02S
	Line Input with Gain, Music-On-Hold (MOH) Output, Mute-Receive							T-12S
	1 kHz Sine Wave Test Tone with Gain	S-01S T						
	Buzzer/Yelp Signal Tone with Gain	S-02S T						
	Switch-selectable Tones (4) with Gain	S-04S T						
	Noise Masking						NM-01	
	VoIP Phone Paging SIP Supported	SP-11N AM						
	Equalizer for F-121C/CU2 Speakers						E-03R	
	Remote Master Volume Control (VCA)	V-01S						

*WTU-M9800 Wireless Tuner Module is also available

APPEARANCE



SPECIFICATIONS

MODEL	A-812D	A-824D	A-848D
Power Source	120 V AC, 60 Hz		
Rated Output	120 W	240 W	480 W
Power/Current Consumption	170 W (rated output), 46 W (based on UL62368) 200 mA or less (when power switch is OFF)	317 W (rated output), 62 W (based on UL62368) 200 mA or less (when power switch is OFF)	621 W (rated output), 103 W (based on UL62368) 200 mA or less (when power switch is OFF)
Frequency Response	50 Hz to 20 kHz \pm 3 dB (1/8 rated output)		
Distortion	1 % or less at 1 kHz, rated power (20 kHz LPF (AUX-0025))		
Tone Control	Bass: \pm 10 dB at 100 Hz, Treble: \pm 10 dB at 10 kHz		
Signal to Noise Ratio	88 dB or more (Master volume: min) 76 dB or more (Master volume: max) 55 dB or more (INPUT 1 to 6) (A-weighted)		
Audio Input			
INPUT 1, 2	-60 dB* (MIC)/-20 dB* (LINE) selectable, 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins) Note: MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable).		
INPUT 3, 4	-60 dB*, 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins) Note: Equipped with phantom power (24 V DC, ON/OFF switchable).		
INPUT 5, 6	MIC/LINE selectable MIC: -60 dB* , 600 Ω , electronically-balanced, removable terminal block (3.81 mm, 3 pins) LINE: -20 dB*, 10 k Ω , unbalanced, RCA pin jack x 2		
MODULE 1, 2	-20 dB*, 10 k Ω		
Power Amplifier Input	0 dB*, 600 Ω , unbalanced, RCA pin jack (An equalizer or other signal processor connectable between PRE AMP OUT and PWR AMP IN terminals.)		
Input Bus			
INPUT 1 to 4	AUDIO		
INPUT 5, 6	AUDIO/DUCK selectable		
MODULE 1, 2	AUDIO/DUCK selectable		
Audio Output			
SPEAKER OUT	High impedance: 70 V line/42 Ω / Low impedance 4 to 16 Ω selectable	High impedance: 70 V line/21 Ω / Low impedance 4 to 16 Ω selectable	High impedance: 70 V line/10 Ω / Low impedance 4 to 16 Ω selectable
	Removable terminal block (5.00 mm, 3 pins)		
REC OUT	0 dB *, 600 Ω , unbalanced, RCA pin jack x 2		
PRE AMP OUT	0 dB *, 600 Ω , unbalanced, RCA pin jack		
Control Input	4 channels, no-voltage make contact input, open voltage: 35 V DC or less, Short-circuit current: 10 mA or less, removable terminal block (3.81 mm, 4 pins) REMOTE VOLUME: No-voltage make contact input, open voltage: 35 V DC or less, Short circuit current: 10 mA or less, removable terminal block (3.81 mm, 4 pins)		
Control Out put	POWER REMOTE: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (3.50 mm, 4 pins) EMERGENCY OUT: Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (3.50 mm, 4 pins)		
Indicators	LED level meter, Power indicator, Network connection confirmation indicator, Priority broadcast indicator, Emergency broadcast indicator, Thermal protection indicator, Over-current protection indicator, CPU running indicator, Error indi- cator		
Operating Temperature	-10 to +40 $^{\circ}$ C (14 to 104 $^{\circ}$ F)		
Operating Humidity	85 % RH or less (no condensation)		
Finish	Panel: ABS resign, black Case: Surface-treated steel plate, black, paint		
Dimensions	420 (w) x 96.1 (h) x 313.1 (d) mm or 16,54" x 3.78" x 12.33"		
Weight	5.2 kg or 11.46 lb		5.4 kg or 11.9 lb
Options	Input transformer: IT-450, Perforated panel: PF-013B		

* 0 dB = 1 V

Note: The design and specifications are subject to change without notice for improvement.

CS-761 Series

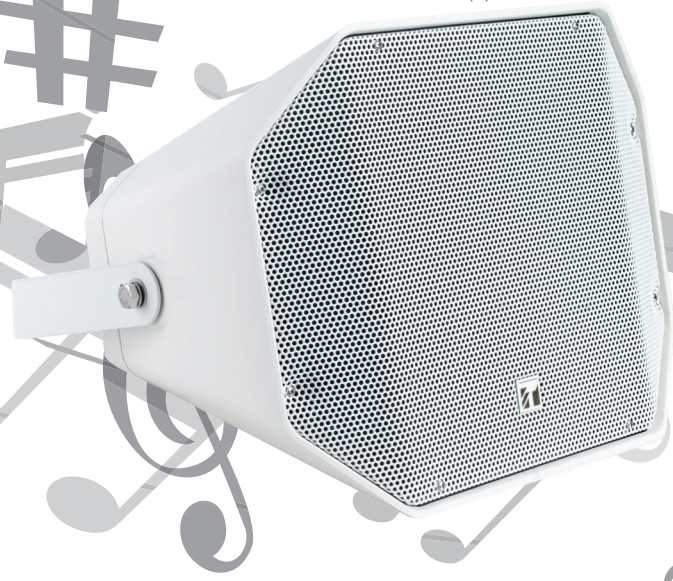
2-Way Coaxial Speaker 60W

CS-761 is a 2-way coaxial speaker system designed for high efficiency, high power input handling capacity, and is a highly intelligible speaker suited for public address announcements and BGM application in an outdoor environment.



Bringing you high sound quality for both speech and music applications in outdoor environments

Suited to voice announcement and music distribution applications.



CS-761B
Black



CS-761W
White

Key Benefits & Features

Excellent Speech and BGM Clarity

2-way coaxial speaker construction with 16 cm cone speaker and 2.5 cm tweeter enabling highly intelligible broadcasts that can be used for music.

High-powered 60 W rated input enabling high-quality broadcast in a wide area.

Wide frequency response 100 Hz - 20 kHz allowing various audio applications.

Purpose built for outdoor applications

IP66 rating: Ideal for outdoor applications within the rated operating temperature specifications. Special paint coat prevents color degradation, ensuring long-lasting exterior condition.

Various mounting brackets available as accessories allowing flexibility of mounting the speaker to walls, ceilings, columns or poles.

Rotary switch provides ease access to tap settings

Sophisticated design

An elegant enclosure suitable for any installation requirements, available in black and white finishes, complementing a venue's color scheme.



Frequency Characteristic Comparison

The bass range is cut naturally, and the sound pressure level is high up in the treble range, making it possible to broadcast more clearly, even in outdoors environments when compared to other speakers.



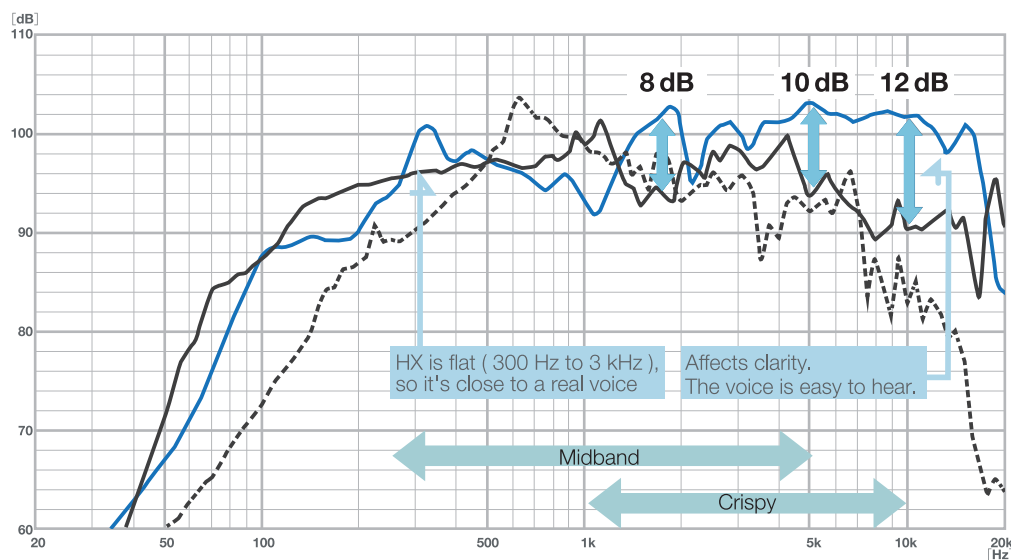
CS-761



CS-303



HX-5



Comparison image

CS-761



Conventional Horn Speaker



Applications Examples



When used in a indoor swimming pool application, the bracket may corrode due to aging.

Appearance



Safety

Fireproof speaker cable can be wired through the rear of the case.



Specifications

	CS-761B	CS-761W
Rated Input	60 W	
Rated Impedance	100 V line: 170 Ω (60 W), 330 Ω (30 W), 670 Ω (15W), 1.3 kΩ (7.5 W) 70 V line: 83 Ω (60 W), 170 Ω (30 W), 330 Ω (15W), 670 Ω (7.5 W)	
Sensitivity	100 dB (1 W, 1 m) (1 kHz - 10 kHz, pink noise)	
Frequency Response	100 Hz - 20 kHz	
Speaker Component	Low frequency: 16 cm (6") cone-type, High frequency: 2.5 cm (1") tweeter	
Directivity Angle	Horizontal: 90°, Vertical: 80°	
Operating Temperature	-10°C to +50°C (14°F to 122°F)	
Dust/Water Protection	IP66	
Connection	Speaker cable (Hot: Black, Com: White)	
Finish	Enclosure: ABS resin, black (RAL 9011 equivalent), paint Punched net: Steel plate, black (RAL 9011 equivalent), paint Bracket: Stainless steel, black (RAL 9011 equivalent), powder coating	Enclosure: ABS resin, white (RAL 9010 equivalent), paint Punched net: Steel plate, white (RAL 9010 equivalent), paint Bracket: Stainless steel, white (RAL 9010 equivalent), powder coating
Dimensions	388 (W) X 310 (H) x 367 (D) mm (15.28" x 12.2" x 14.45")	
Weight	7.6 kg (16.75 lb)	
Option	Speaker mount bracket: SP-201 Pole band: YS-60B Speaker stand: ST-34B	

Note: In the case of an indoor swimming pool application, it is advisable that the site is well ventilated, otherwise the bracket may deteriorate due to corrosion, eventually causing the speaker to fall which may result in personal injury.

HA-1010-AMQ Long Range Compact Horn Array Speaker

Intercom

The TOA Long Range Slim Array Speaker is made up of multiple horn speakers positioned in a vertical array. It is designed for long-throw, outdoor applications, providing greater “reach” than that of multiple conventional horn speakers grouped together. Narrowly focused vertical directivity allows high SPL to be delivered at greater distances while controlling levels closer to the source.

Mixers

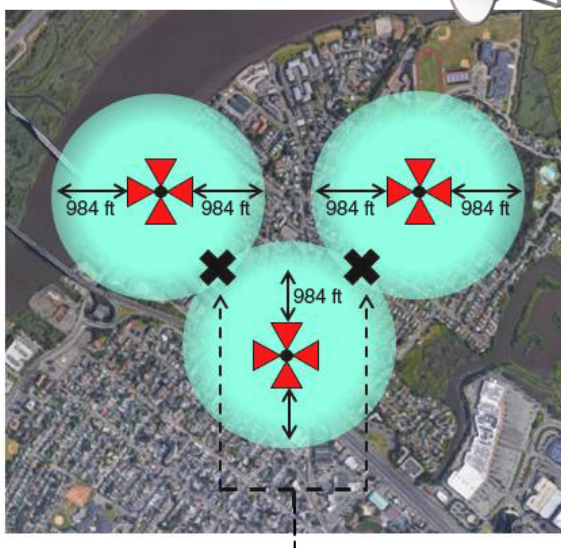
The HA-1010-AMQ speaker array's dispersion pattern of 90°H x 15°V provides wide coverage as well. The HA-1010-AMQ provides 70V taps at 30 and 60 watts, allowing proper power settings in almost any application. Best used for Mass Notification and Voice Message announcements in outdoor areas, including parking lots, parks & recreation areas, hotel & resort grounds, sports arenas, military facilities and transportation terminals.



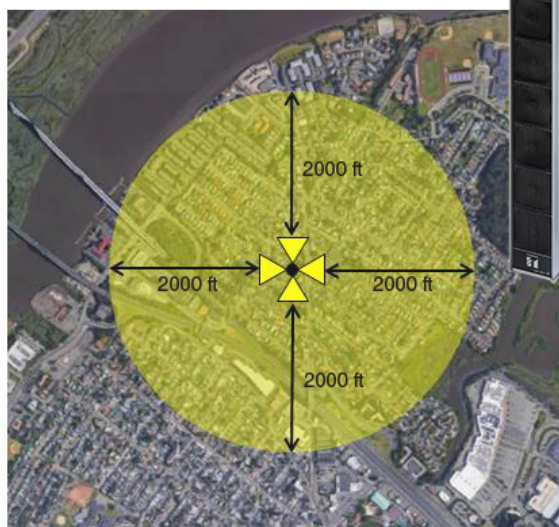
HA-1010-AMQ



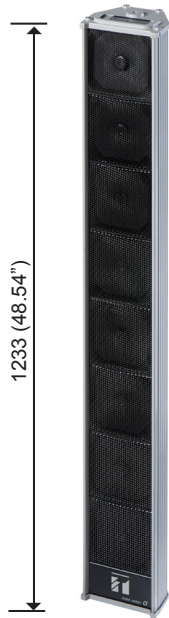
Traditional horns



HA-1010



sound overlap occurs



Recommended Accessory

EQ Box

EQ-0101A-AMQ



Specification	HA-1010-AMQ
Rated Input	60W
Rated Impedance	83 (60W), 170 (30W) : 70V, 170 Ω (60W) : 100V
Sound Pressure Level	114 dB (1W, 1m)
Max. Sound Pressure Level	132 dB (60W, 1m)
Frequency Response	350 Hz - 7 kHz
Directivity Angle	Horizontal: 90° (2kHz), Vertical: 15° (2kHz)
Speaker Component	Horn speaker unit x 8
Water Protection	IP 66
Operating Temperature	-20 °C to +55 °C
Finish	Case, Panel: Aluminum, salt-resistant, paint, grey Front Grille: Aluminum, black Bracket: Stainless steel (SUS 304), paint, grey
Dimensions	6.57" (w) x 48.54" (h) x 5.53" (d) [167 x 1233 x 140.5 mm]
Weight	29.76lb (13.5kg)
Accessories Required	Installation nut (M10)... 4, Washer (M10)... 8, Spring Washer (M10)... 4, Mounting Bracket... 2, Bolt M8 x 20... 2 Washer (M8)... 4, Spring Washer (M8)... 2

Note: A drain hole is provided on the speaker cable side of the cabinet. Make sure that its speaker cable side faces down. The speaker must be installed upright or facing down.
Installing the speaker in any other position may render the drain hole ineffective, eventually leading to an electrical failure or other damage.

ER-1000A-BT Personal PA System

The ER-1000A-BT is a wearable, easy-to-operate, personal PA system attached to a waistband, with the capability of delivering both clear and powerful sound.

The lightweight body of the main unit, features a slight curvature in its design, and fits perfectly on your waist. This product is suited for various situations such as guided tours, sport classes, directing traffic and other security-and-safety-related applications, as well as attracting prospective customers at shows and storefronts.



✓ **530 g** in weight^{*1}

✓ approx. **100 m** audible range^{*2}

✓ **8 hours** continuous voice operation^{*3}

APPLICATIONS



Tour Guide



Classroom



Exhibition



Traffic Control

KEY FEATURES

Highly Intelligible Sound

With the ER-1000A-BT, your voice will reach your audience clearly, even in a noisy or crowded place. It can prove especially useful when wearing a mask. The built-in digital amplifier and an optimized frequency for speech, produces high intelligible sound.

Fit for Prolonged Use

A unique curved design and an adjustable waistband ensures the stability of hands-free use. In addition, the 530 g ultra-light body ensures prolonged usage.

Audio Player Connectable

An AUX input terminal allows public address announcements to be made with your favorite music.

Bluetooth Connection

The ER-1000A-BT can play audio by pairing a compatible Bluetooth device via smartphone or audio player.

Easy to Operate

The large, rotary style volume control and independent power on/off switch, simplifies the complexity of handling, so you to speak naturally without looking down.

Built-In Pouch

Carry accessories like an audio player or extra batteries for the main unit, in the waistband's built-in pouch.

Versatile Wear

The ER-1000A-BT has the ability to be set on either side of the body, and still provide the same audio performance. In the event you feel tired, feel free to switch the unit to the other side.



Personal PA Speaker/ ER-1000A-BT

SPECIFICATIONS

	ER-1000A-BT
Power Source	Alkaline battery (LR6): 6 pieces (9 V DC) or 4 pieces*1 (6 V DC) Rechargeable nickel metal hydride (NiMH) battery (HR15/51): 6 pieces (7.2 V DC) or 4 pieces*1 (4.8 V DC)
Output	6 W (rated) and 10 W (max) when 6 AA batteries (9 V DC) are used. 3 W (rated) and 4 W (max) when 4 AA batteries*1 (6 V DC) are used.
Audible Range*2	Voice operation: Approx. 100 m (328.08 ft) (when 6 alkaline batteries or NiMH batteries are used) Approx. 80 m (262.47 ft) (when 4*1 alkaline batteries or NiMH batteries are used)
Battery Life	Voice operation*3 Approx. 8 hours (when 6 or 4*1 alkaline batteries are used) Approx. 7 hours (when 6 or 4*1 NiMH batteries are used) AUX stereo input operation (music reproduction)*4: Approx. 9 hours (when 6 or 4*1 alkaline batteries are used) Approx. 9 hours (when 6 or 4*1 NiMH batteries are used)
Frequency Response	300 Hz – 14 kHz (deviation: –26 dB)
Headset Microphone	Ear-on type, electret condenser microphone, sensitivity: –47 dB (0 dB = 1 V/1 Pa, 1 kHz) cord length: 1.3m (4.27ft), 3.5mm (1/8") mini-plug (monaural), with headband and windscreen.
Input	MIC : –30 dB*5, 3 kΩ, 3.5mm (1/8") monaural mini-jack, phantom power supply. AUX*6 : –10 dB*5, 2 kΩ, 3.5mm (1/8") stereo mini-jack (supporting monaural applications*7)
Communication Method	Bluetooth Ver.4.2
Output Power	Bluetooth Class 2
Bluetooth Operating Range	10 m (32.81 ft)
Protocol	A2DP
Codec	SBC
Belt Length	55 – 120 cm (1.8 – 3.94 ft)*8
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Finish	Front case: ABS resin, black Rear case: ABS resin, gray Grille: Surface-treated steel plate, black, paint Belt: Elastic rubber, black
Dimensions	133 (W) x 96 (H) x 222 (D) mm (5.24" x 3.78" x 8.74") (belt excluded)
Weight	Main PA unit (belt included, batteries excluded): 480 g (1.06 lb) Headset microphone: 50 g (0.11 lb)
Accessory	Headset microphone (with headband and wind screen) x 1 Belt (attached to the main PA unit) x 1, Battery spacer x 2

*1 When the supplied battery spacers are used.

*2 Transmission range is measured on a quiet street with the Personal PA loaded with fresh batteries. Range varies depending on surrounding environmental conditions, such as battery consumption, ambient noise levels, wind direction and obstacles.
Reference standard: JEITA (Japan Electronics and Information Technology Industries Association) TT-4501D

*3 Battery life during voice output usage represents the period of time when the Personal PA is continuously used with the volume control set to a position that does not cause feedback.

Reference standard: JEITA (Japan Electronics and Information Technology Industries Association) TT-4501D

*4 Battery life during AUX stereo input represents a value actually measured when music is continuously reproduced with a commercial audio player connected to the auxiliary (AUX) input terminal. It varies depending on the connected external equipment's volume output or the type of music source.

*5 0 dB = 1 V

*6 Adjust the volume of the auxiliary (AUX) input at the connected external device.

*7 Volume during monaural operation is smaller than during stereo operation.

*8 The 120 cm (3.94 ft) length is when the Belt is stretched out to its maximum extent.

When worn, consider a Belt length of 100 cm (3.28 ft) (of waist size when clothes are worn) as a rule-of-thumb standard.

Note: Prepare batteries separately, as they are not supplied with the product.

FB-3862CU Ceiling Subwoofer

The FB-3862CU is a high-performance flush-mount ceiling subwoofer assembly for low frequency enhancement of distributed loudspeaker systems. A 60W 70/100V transformer is included, and the bandpass design eliminates the need for a bi-amplified system. The 8-Ohm bypass allows for applications using electronic crossovers and dedicated low impedance power amplifiers. The FB-3862CU subwoofer rounds out TOA's F-Series premier speaker line to offer a full spectrum sonic experience suitable for retail environments, restaurants, lounges, conference rooms, and any application where music or video content require high quality sound.



SPECIFICATIONS	FB-3862CU
Enclosure	Bandpass
Rated Input	60W (70/100V)
Power Handling Capacity	100W RMS 200W Peak
Impedance	70V line- 60W/30W/15W/7.5W/3.8W/1.9W with 8 Ω bypass
Sensitivity	91dB 1W/1m
Frequency Response	47-200 Hz (-10dB)
Speaker Component	8" driver with oiled paper cone and foam surround
Certifications	UL2043/UL1480A. Baffle meets UL 94-V0 flammability rating. RoHS
Mounting Hole	350mm diameter
Input Terminal	Phoenix-type with parallel outputs (max 12AWG stranded cable)
Recommended Cable	Max 12AWG stranded unshielded twisted pair (jacket per code)
Finish	White
Dimensions	383 mm diameter x 326.5 mm height (15.08" x 12.85")
Weight	6.45 kg (14.22 lbs.)
Included Accessories	Steel support ring (C-ring), qty 2 steel support rails, speaker hole template, operation manual
Optional Accessories	Support and safety cables (load rated chain or load rated aircraft cable)

TOA BIM Speaker Data



We are pleased to announce that TOA has released BIM data for TOA speakers!

Building Information Management is an intelligent 3D model-based process allowing architecture, engineering, and construction (AEC) professionals the insight and tools to efficiently plan, design construct, and manage buildings and infrastructure.

BIM has grown in popularity and in response, TOA has begun to provide Revit models for all speaker products. Each compatible file contains detailed product specifications, including wattage and weight values embedded for overall calculations. This support material permits project stakeholders to analyze & explore speaker design options and create visualizations to get an accurate idea of how the overall design and functionality of all components will come together before being built!

DESIGN YOUR PROJECTS WITH TOA SPEAKERS!

Download BIM data (Revit family files) for TOA products.

[BIM data download website]

https://www.sound-toa.com/rfa_form.html

[BIM Data with Balloon]

<https://www.sound-toa.com/toa-bim-data-with-balloon.html>

TOAlert an EverAlert System



One system to manage your critical communication.

Keep critical communications clear and timely during threats. Automatic or custom messages instantly inform everyone how to stay safe. Integrate with other building systems like fire alarms, P.A., lockdown and even weather alerts.



Synchronized Clocks

Ensure everyone is on the same, precise time with synchronized clocks. Features such as countdown timers and buzzers keep meetings, classes, and shift changes running smoothly.

Digital Signage and Messaging

Improve your building's communication with clear, instant messages. Customize messages and use audio/visual cues to keep everyone informed — even by department or by room.

Emergency Notifications

Keep critical communications clear and timely during threats. Automatic or custom messages instantly inform everyone how to stay safe. Integrate with other building systems like fire alarms, P.A., lockdown and even weather alerts.



EverAlert Dynamic Display



EverAlert Dynamic Display, part number EADV2

Specifications

Dimensions: master shipping carton, 2 displays	38" L, 8.38" W, 18.5"H	Output voltage from power supply	12VDC
Weight: master shipping carton, two display	37lbs	Energy efficiency	Level VI
Weight: single (device only)	8lbs	Power Consumption	8lbs
Dimensions: single (device only)	20.81" L, 1.38" W, 12.56"H	Certifications	RoHS, CE/FCC, PSU w/UL
Dimensions: display screen diagonal	21.5"		
Lighting: screen	LCD with LED backlight		
Resolution: display screen	1920 x 1080		
Mounting formats	Landscape (horizontal) or portrait (vertical)		
Internal speakers	2 each at 2W		
USB 2.0 ports	2		
External speaker output jack	3.5mm		
Wired LAN connectivity	10/100M, RJ45 connector		
Wireless LAN connectivity	802.11b/g/n (2.4GHz)		
USB provisioning	USB drive with AES encryption		
Wired provisioning	LAN/DHCP Web portal on network connection		
Time synchronization support	2 static IP or DNS pool SNTP servers		
Clock battery backup for power outages	CR1220 lithium		
Maximum relative humidity	85%		
Operating temperature	0°C - 40°C		
Input voltage to power supply	100-240VAC, 50/60Hz		

FEATURES

- Smart 22" class HD screen with built-in speakers
- EverAlert supports a virtually unlimited number of displays
- Display functions in either landscape or portrait orientation
- Communicates to the inCloud Management
- Portal through wired Ethernet or Wi-Fi network
- Resumes normal operation without intervention after a temporary power interruption
- Operator adjustable or scheduled screen brightness
- VESA mounting for easy installation
- Optional) Custom mounting bracket with power supply holder
- Scheduled sleep mode for energy conservation
- 1 year warranty

EverAlert System

EverAlert Dynamic View



EverAlert Dynamic View, part number EABOX

Specifications

Dimensions, (device only)	7.8" L X 3.75" H X 0.75"W	Wired provisioning	LAN/DHCP Web portal on network connection
Weight (device only)	1.1 lbs		
Dimensions, master shipping carton, one Dynamic View	11.25"L X 3"H X 9.25"W	Time synchronization support	2 static IP or DNS pool SNTP servers
Weight, master shipping carton, one Dynamic View	2.64 lbs	Clock battery backup for power outages	CR1220 lithium
Resolution, display screen	1920 x 1080	Relative humidity	85% maximum, non-condensing
Displayed format	Landscape (horizontal)	Operating temperature	32 °F - 104 °F
Displayed format	2	Input voltage to power supply	100-240VAC, 50/60Hz
External speaker output jack	3.5mm	Output voltage from power	12VDC
Wired LAN connectivity	10/100M, RJ45 connector	Energy efficiency	Level VI
Wireless LAN connectivity	802.11b/g/n (2.4GHz)connector	Power consumption	9.5W (average), 14.5W (maximum)
USB provisioning	USB drive with AES encryption	Certifications	RoHS, CE/FCC, PSU with UL

FEATURES

- HDMI connection to TV/monitors
- EverAlert daily messaging, emergency notifications, and synchronized clock
- Supports HD, large-format resolutions
- Landscape display orientation
- Communicates to the inCloud Management
- Portal through wired Ethernet or Wi-Fi network
- Wired LAN and wireless LAN connectivity
- Slim profile for easy mountin
- 1 year warranty

EverAlert Integrator



EverAlert Integrator, part number EAIV3

An EverAlert Integrator bridges communication between the EverAlert system and other building alarm systems.

The Integrator contains two general-purpose inputs that connect to contact closure switches. Typically, the Integrator is connected to an alarm panel that, when triggered, will show an alarm message on all active EverAlert Displays and send a text or email to key personnel.

Multiple Integrators can be used with an EverAlert system to increase the number of alarms utilized.

Specifications

Wired LAN connectivity	10/100M, RJ45 connector
Monitored switch style	Normally-open dry contact
Monitored switch wiring length	25ft maximum
Number of monitored switches	2 per Integrator
Number of output switches	2 per Integrator
Number of Integrators per EverAlert system	5 Integrators per system
Input voltage to power supply	100-240VAC, 50/60Hz
Output voltage from power	9VDC

FEATURES

- Integrate with third party systems for automatic alerting, such as fire and lockdown
- Normally-open (dry contact) inputs for fast, reliable integrations
- Integrators can be configured to monitor fire alarm panels, switches, or any other normally open switches used for emergency alarm purposes
- 1 year warranty

N-8000 Series IP Network Intercom System



N-8000 IP Multi-functional Master Station, TOA part number N-8600M

*For full product details, visit www.toaelectronics.com/products/intercom-systems/n-8000-series

Specifications

Dimensions, (excluding cord)	8.19"L x 2.78"H x 5.83"W	Indication	Status lamp
Weight (device only)	1.7 lbs	Installation Method	Desk/Surface mounted master station (When mounting to the wall, use the optional YC-280.)
Audio Frequency Range	300 Hz - 7 kHz	Operating temperature	32°F – 122°F
Speech Method	Hands-free or handset conversation	Operating Humidity	90% RH or less (no condensation)
Displayed format	Speaker: 5.7 cm (2.24) cone-type Microphone: Omni-directional electret condenser microphone	Power source	Power supply device that complies with IEEE802.3af standard or 12 V DC (supplied from the AC adapter (option))
Handset	Receive path: Dynamic type, Send path: Electret condenser microphone	Power consumption	AC adapter (12 V DC): 2.5 W PoE (48 V DC): 3 W
Headset Terminal	Speaker: 150 Ω, ϕ3.5 mm (0.14) mini jack" Microphone: -49 dB*, ϕ3.5 mm (0.14) mini jack"	Finish	CD (for PC setting, maintenance)
External Speaker Terminal	Maximum output 0.5 W, 8 Ω, screwless connector (2 pins)	Accessory	RoHS, CE/FCC, PSU with UL
Display	LCD: Alphanumeric characters (16 characters x 2 lines)	Option	Wall mounting bracket: YC-280, AC adapter: AD-1210P, AD-1215P

FEATURES

- System configuration by LAN with intuitive software
- Master-to-Master and Master-to-Sub station communication
- Choice of four wiring configurations: CAT5, 2-core shielded cables, 2 wires or 4 wires
- Integration with access control, voice alarm, CCTV and other such systems
- Time correction
- Operation and stream logs
- System diagnosis

VM-3000 Series

Voice Evacuation & Mass Notification System



VM-3000 Voice Alarm System Amplifier, TOA part number VM-3240VA AMQ

*For full product details, visit www.toaelectronics.com/products/voice-evacuation-and-mass-notification-systems/vm-3000-series-voice-evacuation-system

Specifications

Dimensions	18.98"L x 5.22"H x 16.98"W
Weight (device only)	36.38 lbs
Distortion	Under 0.7% (at rated output, 1 kHz)
Audio Input/Output Characteristic	Sampling frequency 48 kHz A/D D/A CONVERTER: 24 BIT
Frequency Response	50 Hz – 20 kHz, ± 3 dB (at 1/3 rated output), 800 Hz – 2.8 kHz (according to UL2572); 400 Hz – 4 kHz (according to CAN/ULC- S576)
Network I/F	10BASE-T/100BASE-TX (selectable by automatic nego- tiation), RJ45 female connec- tor; Maximum distance: 100 m between this unit and a switching hub; Link cable: Category 5 Shielded Twisted- Pair straight cable (CAT5-STP)
UL Certified	22 V DC Special Application, Maximum feeding current 0.3 A (for RM-200M only)

Option

DS Link	Input transformer: IT-450 Connecting the VX-2000DS, RJ45 female connector; Link cable: Category 5 Shielded Twisted-Pair
Operating temperature	32°F – 122°F
Operating Humidity	5% to 95% RH or less (no condensation)
Power source	120 V AC, 60 Hz
Power consumption	690 VA (at rated output), 260 W (According to UL60065), 63 W (at no signal)
Finish	Panel: Aluminum, hair-line, black; Case: Surface-treated steel plate, black, paint
Accessories	AC power cord (2m) \times 1, Emer- gency microphone \times 1, Plastic foot \times 4, Plastic foot mounting screw \times 4, Removable terminal plug (14 pins) \times 3, Removable terminal plug (16 pins) \times 1, Link cable (3m) \times 2, Setting software (CD) \times 1
Option	UL 2572

FEATURES

- Max. 4 MIC/LINE inputs per VM-3240VA
- 2 BGM inputs
- Up to 4 remote per VM-3240VA microphones connectable (max. 2 Fireman's Microphones)
- Max. 60 assignable speaker zone outputs (6 zones per amplifier)
- Volume setting possible for each zone
- Digital audio processed & controlled
- Full digital audio mixing (DSP)
- Built-in high quality electronic voice message Intuitive configuration
- Zone setting, priority setting, failure detection setting by dedicated PC software
- LCD display of current status and configuration setting of system units

D5000 Digital Wireless System

The TOA D5000 Series provides unprecedented speech clarity for delivering a quality listening experience to audiences in any speaking scenario. Experience for yourself the clarity, ease and safety of this wireless solution, whether for the classroom, office meeting rooms, banquet halls, courthouses, or multipurpose halls.



KEY FEATURES

- TOA's proprietary digital audio processing ensures optimal sound quality and intelligibility for speech applications
- Up to 32 simultaneous channels *Region dependent
- 15 compatible channels per 6 MHz, 20 compatible channels per 8 MHz TV channel
- Proprietary encryption settings to prevent data leakage
- Approx. 100 m operating range (line of sight)
- Dedicated maintenance software enables visual monitoring of any jam radio waves or changes to incoming radio waves
- Signal stability is assured using the digital diversity method
- Control of peripherals is possible using contact output

Digital Wireless Receiver
WT-D5800



Digital Handheld Transmitter
WM-D5200



Beltpack Transmitter
WM-D5300



- Frequency channel scan
- Feedback suppression
- Built-in optimized preset equalization in microphones
- Detectable antenna
- Audio mixing with cascading voice input connectivity
- Antenna mixing with cascading antenna connectivity
- Intuitive LCD display

- Lightweight body
- 1 AA alkaline battery provides up to 8 hours of continuous use
- Selectable microphones sensitivity
- Selectable transmission output (1 mW/ 10 mW)
- 3-step battery life indicator
- Built-in antenna

- Ultra slim and lightweight body
- 1 AA alkaline battery provides up to 8 hours of continuous use
- Selectable microphones sensitivity
- Selectable transmission output (1 mW/ 10 mW)
- 3-step battery life indicator

System components

Lavalier Microphone
YP-M5300



- Unidirectional electret condenser microphone element
- Connector for ø3.5 mini-plug

Lavalier Microphone
YP-M5310



- Omnidirectional electret condenser microphone element
- Connector for ø3.5 mini-plug

Headworn Microphone
WH-4000H



- Unidirectional electret condenser microphone

Headworn Microphone
WH-4000A



- Unidirectional electret condenser microphone
- Ideal for sports applications

Digital Wireless Receiver

WT-D5800



Specifications

	WT-D5800
Power Source	AC Mains (supplied AC adapter must be used)
Current Consumption	350 mA (13.5 V)
Receiving Frequency	576 MHz to 606 MHz
Channel Selectable	160 selectable frequencies
Receiving System	Double super-heterodyne
Diversity system	Space diversity (digital diversity)
Mixing Output	MIC/LINE (selectable): -60 dB* (MIC)/-20 dB* (LINE), 600 Ω phone jack (unbalanced), 600 Ω XLR-3-32 type connector (balanced)
Mixing Input	-20 dB*, 10 kΩ, unbalanced, phone jack
Antenna Input	75 Ω, BNC (phantom powering for antenna), 9 V DC, 30 mA (max)
Antenna Output	75 Ω, BNC (Gain 0 dB)
Contact Output	1 channel, no-voltage make contact output, withstand voltage: 30V DC, control current 0.5 A max terminal block (2 pins)
Receiving Sensitivity	24 dBμV or less (Bit error rate: 1E-5 or less)
Antenna Input Attenuator	0 dB/-10 dB switchable
Indicator	Audio (5 steps), RF (5 steps), ANT A/B, Audio (peak), Battery alarm
Frequency Response	50 Hz to 12 kHz
Total Harmonic Distortion	0.5 % or less
Function	Frequencies scanning, Feedback suppressor, Equalizer (optimizing each compatible microphone)
ID Selectable	10 patterns
Operating Temperature	14 °F to 122 °F (-10 °C to +50 °C)
Operating Humidity	30% to 85 %RH (no condensation)
Finish	Resin, black
Dimensions	8.27"(W) x 1.73"(H) x 8.34"(D) (210 x 44 x 211.9 mm) (except antenna)
Weight	1.61 lbs. (730 g)
Accessory	AC adapter x 1, Whip antenna x 2, Rubber foot x 4
Option	Rack mounting bracket kit: MB-WT3 (for rack mounting one WT-D5800 unit) MB-WT4 (for rack mounting two WT-D5800 units)

* 0 dB = 1V

Digital Handheld Transmitter

WM-D5200



Digital Beltpack Transmitter

WM-D5300



Specifications

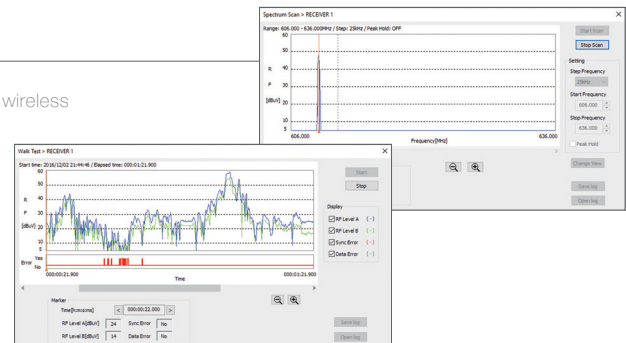
	WM-D5200	WM-D5300
Microphone Element	Electret condenser unit: Unidirectional	-
Modulation type	-	FSK
Frequency Range	-	576 MHz to 606 MHz
Channel Selectable	-	160 channels (The number of channels may differ from country to country.)
RF Carrier Power	-	Less than 50 mW
Maximum Input Level	132 dB SPL (Sensitivity: L)/ 122 dB SPL (Sensitivity: H)	-18 dB* (Sensitivity: L)/ -28 dB* (Sensitivity: H)
Audio Frequency Response	-	100 Hz - 12 kHz
Antenna	Built-in type	Lambda/4 whip antenna
Dynamic Range	Typ. 90 dB (when used with WT-D5800)	-
ID Selectable	-	10 patterns
Battery	-	AA Alkaline dry cell battery
Battery Life	-	Approx. 8 hours
Operating Temperature	-	14 °F to 122 °F (-10 °C to +50 °C) (except battery)
Operating Humidity	-	30% to 85 %RH (no condensation)
Finish	Body: ABS resin, black, coating Head: steel, black, paint	Body: ABS resin, black, paint
Dimensions	ø1.85" x 9.43" (ø47 x 239.5 mm)	2.44"(W) x 7.28"(H) x 0.75"(D) (62 x 185 x 19 mm)
Weight	0.49 lbs. (220 g) (with battery)	0.2 lbs. (90 g) (with battery)
Accessory	Storage case x 1, Screw driver x 1, Microphone holder x 1	Storage case x 1, Screw driver x 1
Option	-	Unidirectional lavalier microphone: YP-M5300 Omnidirectional lavalier microphone: YP-M5310 Headset microphone: WH-4000A, WH-4000H

* 0 dB = 1V

Maintenance Software

Maintenance Software, which supports setup and better operation of D5000 digital wireless system, is available on TOA DATA LIBRARY (www.toa-products.com/international/)

- Simultaneous status check of up to 16 receivers.
- Walk-Test function allows you to check the antennas' reception level in the entire room where the microphone is used.
- Channel Scan displays unused frequency channels.
- Spectrum Scan visualizes the level and frequency of undesired signals in the specified frequency range



Wall Mount Antenna

YW-4500



Antenna Distributor

WD-5800



WTU-M9800 900/9000 Series Input Module

The TOA Wireless Tuner Module WTU-M9800 provides a truly integrated wireless microphone solution for any TOA product that accepts a 900 series input module.



Features

- > PLL synthesizer-controlled double super-heterodyne diversity tuner.
- > Use with any 5000 series hand-held or belt-pack transmitter
- > Use up to two tuners in a 900 or 9000 series without an external power supply.
- > Up to 16 channels (depending on your location).
- > Save on installation costs, rack space, and shelf space.
- > BNC connectors for local antennas (included) or remote mounted antennas.

Specifications	WTU-M9800
Power Requirement	Internal power supply mode : 24 V DC (Up to two WTU-M9800 can be YW-4500 Q powered from the mixer's internal power supply.) External power supply mode : 12 - 24 V DC
Current Consumption	100mA
Receiving Frequency	506 - 538 MHz (*1), UHF
Receiving System	Double super-heterodyne
Receiving Sensitivity	S/N <80dB (20 dBμV input, 40kHz deviation)
Contact Output	1 channel, normally open relay rate to 30V DC max, no-voltage make contact output, withstand voltage: 30 V DC, control current 0.5 A max
Antenna Input	75Ω, BNC connector with 9V DC / 30mA power (phantom power for YW-4500 series powered antenna 9V DC, 30mA max)
Diversity System	16 selectable channels
Channel	100-12 kHz, ±3 dB
Frequency Response	-10°C +50°C (14°F to 122°F)
Operation Temperature	35 (W) X 78 (H) X 90.8 (D) mm (1.38" X 3.07" X 3.57")
Dimensions	Max. 92g (0.21lbs.)
Optional Accessories	External power supply AD-246 US

EM-380 Gooseneck Microphone

The EM-380 is a uniquely shaped and high quality condenser microphone designed for use in lecture halls, house of worship and paging applications. Phantom power or battery power option selectable on microphone



Specifications	EM-380
Element	Condenser Microphone
Polar Pattern	Cardioid
Rated Impedance	750Ω, Balanced
Rated Sensitivity	-41dB (1 kHz 0dB=1V/Pa)
Power Source	3V DC (2 x "AA" batteries) or Phantom power (9 - 52V)
Frequency Response	50 Hz - 16,000 HZ
Output Connector	XLR-3-32 Equivalent
Operating Temperature	0 oC - 40 oC (32oF - 104 oF)
Finish	Stand Mic: ABS Resin, Black, Paint Mic Shaft: Copper alloy, Black, Paint
Dimensions	110 (W) x 145 (D) x 532 (H) mm (4.3" x 5.7" x 20.9")
Weight	550g (exclude batteries)
Accessory	Windscreen x 1, XLR to Phone Jack Cable (7.5m) x 1

Note: batteries are not supplied with the unit

