



IP-1000 Series

IP Network Audio Management System

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Communication
alarms and
instructions...

...can be broadcasted with true digital matrix system wirelessly.

IP-1000 Series IP Network Audio Management System

Description

With all equipment connectable to an ordinary IP network, IP-1000 series, the true digital matrix system is expandable to any locations with network access.

The name “IP-1000” is used to highlight its extensive capacity for supporting 1000 IP address in one single system. The vast capacity and flexibility allows easy system expansion beyond conventional system coverage.

What is more, the single management & operation software allows user to make instant broadcast and scheduled announcement through one single computer work station which covers most wanted function in school application.

System Features

- » No dedicated server: Any computer installed with the IP-1000S System Management Software becomes the server and also a workstation of the system. Both setting and operation can be performed in one single computer.
- » Pre-record messages and real time recording provides flexibility in making announcement.
- » Allow interfacing with fire alarm system.
- » IP powered speaker can broadcast messages from both network and local input with priority adjustable in the software
- » IP-1000AF Audio Interface Unit is compact in size and can be mounted to different surfaces with high flexibility.

Maximum System Capacity

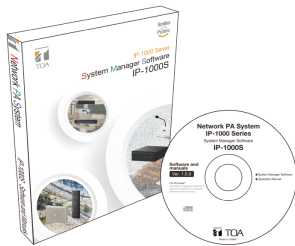
Able to link with 1000 IP Addresses

No limitation on audio channel



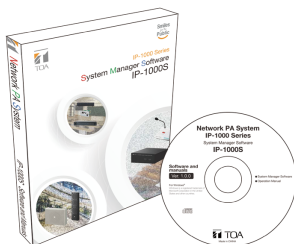
IP-1000 Series System Management Software

IP-1000S



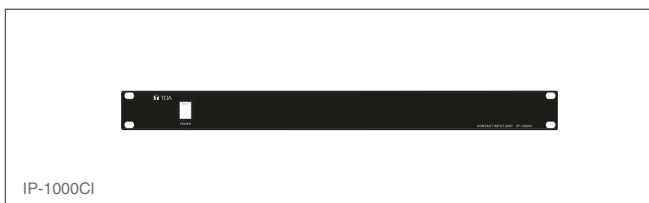
| | |
|--------------|--|
| CPU | Intel Core i3-4150 or above |
| Motherboard | Intel 97 series chipset or above, sound card, 1000Mbps network adaptor |
| RAM | DDR3 4G |
| Display Card | Dedicated display card with 16G or above. With 2 or above video output. Provide VGA, DVI, etc., general output terminal |
| Hard disk | SATA2 7200 rpm or above. 500GB or above |
| Power Source | Power Source: above 300W |
| OS | OS: Windows 7 / 8 / 10 Professional |

IP-1000S1-EA



| | |
|--------------|--|
| CPU | Intel Core i5 Series or above |
| Motherboard | Intel 97 series chipset or above, sound card, 100/1000Mbps network adaptor |
| RAM | DDR3 4G or above |
| Display Card | Dedicated display card with 16G or above. With 2 or above video output. Provide VGA, DVI, etc., general output terminal |
| Hard disk | SATA2 7200 rpm or above. 500GB or above |
| OS | Windows 7 or above, Recommend Windows10 Does not support Windows XP |
| Optional | SIP Device License IP-1K1SL001 |

IP-1000 Series Network Control Input Unit



IP-1000CI

- Receive alarm signal from fire centre and trigger to broadcast warning announcement.

| Specifications | IP-1000CI |
|--------------------------|--|
| PowerSource | 220 V AC, 50Hz |
| Functional Unit Terminal | Alarm output terminal, alarm input terminal, power input terminal, data upgrade terminal, network input terminal |
| Network Protocol | TCP/IP, UDP, ARP, ICMP, IGMP Protocol |
| Network Chip Rate | 10/100Mbps self-adaption |
| Color | Black |
| Dimension | 483(W) x 32(H) x 259(D) mm |
| Weight | 2.9 kg |
| Accessories | 4P connecting terminals (4pcs), 5P connecting terminals (8pcs), power line (3*1.0mm2/1.5m) (1pc) |

IP-1000 Series Compact Audio Interface Unit

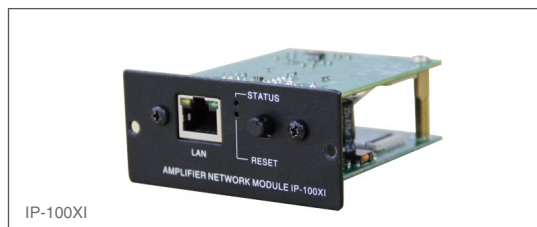


IP-1000AF

- » Can be mounted to different surfaces
- » Able to act as both input and output units in the network system
- » The device can also receive messages from server and other devices for initiating broadcast.
- » Support using browser to change the device setting

| Specifications | IP-1000AF |
|------------------------------|---|
| Power Source | DC 24V |
| Current Consumption | Below 85mA |
| Audio Input | 1V rms (Max: 2V rms), unbalanced 10K Ω |
| Audio Output | 1V rms, unbalanced 600 Ω |
| Frequency Response | LINE IN (Sampling Frequency: 22k): 20Hz -10kHz LINE OUT (MP3/Sampling Frequency: 44k): 40Hz -15kHz |
| Control Contact Input | Open circuit voltage: 24V DC; short circuit current: \leq 5mA |
| Relay | |
| Normally Closed Contact (NC) | Withstand voltage \leq 30V DC, control current \leq 500mA |
| Common Contact (COM) | Withstand voltage \leq 30V DC, control current \leq 500mA |
| Normally Open Contact (NO) | Withstand voltage \leq 30V DC, control current \leq 500mA |
| Network I/F | 10 BASE-T/100 BASE-TX, auto negotiation |
| Network Protocol | UDP, ARP, ICMP, IGMP |
| Operation Temperature | 0°C to +40°C |
| Operation Humidity | Less than 90% RH (no condensation) |
| Dimension (W) x (H) x (D) | 91 x42 x106 mm |
| Accessory | 5P terminal blocks x 1, 4P terminal blocks x1, Plastic foot (10mm*3mm) x4 |

IP-1000 Series Network Module



IP-100XI

- » Allow the amplifier to extent the network function

| Specifications | IP-100XI |
|--------------------------------------|--|
| Power Source | DC 24V |
| Current Consumption | Below 85mA |
| Frequency Response | LINE OUT (MP3/ sampling frequency: 44k): 40Hz -15kHz |
| Amplifier Audio Signal Output | Range: 1V rms, unbalanced 600 Ω |
| Amplifier Muting Control Output | High impedance, max. sink current: 10mA, withstand voltage : 24V DC |
| Amplifier Protection Detection Input | low level, activated, open-circuit voltage: 3.3V |
| Amplifier Fault Detection Input | low level, activated, open-circuit voltage: 3.3V |
| Network I/F | 10 BASE-T/ 100 BASE-TX, auto negotiation |
| Network Protocol | UDP, ARP, CMP, IGMP |
| Operation Temperature | 0°C to +40°C |
| Operation Humidity | Less than 90% RH (no condensation) |
| Dimension | 78 (W) x 35 (H) x 81(D) mm |
| Weight | 0.1 kg |

IP-1000 Series Compact Amplifier



SA-130

SA-130

- » Light weight, compact in size and high efficient design
- » Able to extend network function by using the network module IP-100XI
- » 100V override for easy interface with existing system
- » Ideal for simple, small application

| Specifications | SA-130 |
|---------------------------|---|
| Power Supply | DC 24V (Adapter 2.09A) |
| Output Power | 30W (RMS), 100V (333Ω) |
| Current Consumption | Rated 1.8A or below (Standby mode: 0.1A or below) |
| Audio Input | Mic x1 (-60dB, Φ6.3 PHONE JACK, Phantom power ON/OFF switch and volume control) AUX 1 - 2 (-10dB, Φ3.5 MINI JACK, with volume control) AUX 3 (-10dB, 3 RCA JACK, with volume control) |
| Audio Output | LINE OUT x1 (-10dB, Φ3.5 MINI JACK, Speaker output 100V) |
| Priority | EXT IN > IP > MIC/AUX |
| EXT IN Sensitivity | MIN. → Start broadcast when input signal is greater than 10V MAX. → Start broadcast when input signal is greater than 30V |
| Signal to Noise Ratio | Above 76dB |
| Total Harmonic Distortion | 1% or below |
| Frequency Response | 50Hz - 15k Hz (±3dB) |
| IP-100XI Module | RJ45 connector (Power supply is supplied internally by SA-130) (Optional) |
| LED Indicator | Main Power Supply |
| On/ Off Switch | Main Power Supply |
| Operating Temperature | 0°C - 40°C |
| Operating Humidity | 10 - 90% |
| Finish | Black paint, aluminum panel |
| Dimensions | 210(W)*44(H)*152(D)mm |
| Weight | 1.4kg |
| Accessories | User Manual x1, European Terminal 2P x1, Adapter x1, Power Cord x1, Fittings x2, Screw x4 |

IP-1000 Series Compact Amplifier



AX-0120/0240

AX-0240

- » Can be placed on desktop, wall-mounted or rack-mounted occupying 1 unit space
- » input and output terminals use removable plug which allow easy wire connection
- » Light weight, compact and high efficient design
- » Able to extent network function by applying the amplifier network module IP-100XI
- » Has protection circuit that protects the amplifier from short circuit, overload or abnormal temperature rise by breaking the external connection
- » Protection output circuit allows operators to monitor the equipment status easily
- » Uses balanced connection input

*0 dB = 1V

| Specifications | AX-0240 |
|---------------------------|---|
| Power Source | 220 V AC, 50Hz |
| Amplification System | Class D |
| Power Consumption | 61W (According to EN62368-1 Standard) 296W(rated output) |
| Audio Input | MIC IN: -60dB* 2.2k Ω , electronically-balanced, removable terminal block (3 pins) LINE IN: -10dB* 2.2k Ω , electronically-balanced, removable terminal block (3 pins) |
| Audio Output | SPEAKER OUT: 240W (100V/ 42 Ω), removable terminal block (4P) LINE OUT: 0dB*, 10k Ω , electronically-balanced, removable terminal block(3P) |
| Fault Output | Octocopter output, puncture: DC 35V, control current: below 50mA, removable terminal block (3 pins) |
| Frequency Response | 50Hz - 20kHz \pm 3dB (Line) |
| Total Harmonic Distortion | 1% (LINE:1kHz,1/3 rated output,with audio filter: audio precision AUX-0025 and LPF 20kHz filter) |
| S/N Ratio | MIC: Above 60dB (by audio filter: audio precision AUX-0025 and A-weighted) LINE: Above 80dB (by audio filter: audio precision AUX-0025 and A-weighted) |
| Control | MIC gain control, LINE gain control |
| Indicator | Power LED (green) x 1, Signal LED (green) x 1, Peak LED (red) x 1, Protect output LED (red) x 1 |
| Cooling | Forced air cooling |
| Operation Temperature | -10°C to +40°C |
| Operation Humidity | Below 90% RH (no condensation) |
| Finish | Surface-treated steel plate, black, paint |
| Dimensions (W x H x D) | 210 x 50 x 290 mm |
| Weight | 2.41kg |
| Accessories | Removable terminal block(3 pins) x 4 ; removable terminal block(4 pins) x 1 ; M3x4 screws for mounting brackets x 12 |
| Option | Rack mount bracket MB-15B-BK, MB-15B-J, MB-15B, YA-706, IP-100XI |

IP-1000 Series IP Remote Microphone



IP-101RM

- » Network Touchscreen Control
- » Trigger paging, message playback
- » Monitoring function
- » Intercom function with other IP-101RM

| Specifications | IP-101RM |
|-----------------------|---|
| Power Supply | DC 24V / 1A |
| Power Consumption | ≤20W |
| Graphic Display | 7.0 inch touch screen, resolution 800 x 480 pixels |
| Audio Input | 1 Vrms, unbalance, 10kΩ |
| Audio Output | Unbalance, output power 10mW, 32Ω |
| Monitor Speaker | 8Ω/3W |
| Frequency Response | 20Hz - 16kHz |
| Signal to Noise Ratio | Above 90dB |
| Network I/F | 10BASE-T/100BASE-TX, auto-negotiation |
| Network Protocol | ARP, UDP, TCP/IP, ICMP, IGMP, SIP |
| Operating Temperature | 0°C - 40°C |
| Operating Humidity | Less than 90% RH (no condensation) |
| Dimensions | 254(W)*32.5(H)*134(D)mm |
| Accessories | Adapter(DC24V/1A) x1, Terminal (3.5 - 5P) x1, Microphone Pole (IM-320) x1 |

IP-1000 Series IP-Remote Microphone



- » RM-110: Extension unit with 10 keys with similar functions as IP-100RM remote microphone.
- » Up to 9 sets of RM-110 connected can be linked. Expandable to up to 105 function keys.

IP-100RM / RM-110

- » IR-100RM is a network remote microphone. It can be used for general broadcast and emergency broadcast.
- » The microphone can received messages from server or other devices. It can also distribute these messages to selected zone or all zones.
- » Status LED next to every button allows operator to acquire status of each zone and other operation status at one glimpse.
- » Can support Max. 1000 zoning

*0 dB = 1V

| Specifications | IP-100RM | RM-110 |
|--------------------------------|---|--|
| Power Source | DC24V | - |
| Current Consumption | Below 200mA (single IP-100RM), below 500mA (connected with 9 pieces of RM-110) | Less than 20mA (IP-100RM DC power input) |
| Audio Input | 1V rms (Max: 2V rms), 10k Ω electronically balanced gooseneck microphone | - |
| Audio Output | 1V rms, unbalance 600 Ω or unbalanced, 11.25mW, 32 Ω | - |
| Frequency Response | | |
| LINE IN | (Sampling rate: 22k), 20Hz -10kHz | - |
| LINE OUT (Network broadcast) | (MP3 / sampling rate: 44k), 40Hz - 20kHz | - |
| SPEAKER OUT(Network broadcast) | (MP3/ sampling rate: 44k), 20Hz - 20kHz | - |
| Control Input | Optic coupler shortage input, open voltage DC 5V, maximum shortage current \leq 5mA | - |
| Built-in Monitor Speaker | Maximum output 1W | - |
| Volume control | Microphone volume control, monitor speaker volume control | - |
| Number of Function Keys | 15 on single equipment. Expandable to 105 with 9 sets of RM-210 connected. | 10 |
| Maximum Zoning Support | 1000 | - |
| Network I/F | 10 BASE-T / 100 BASE-TX Auto Negotiation | - |
| Network Protocol | UDP, ARP, ICMP, HTTP, IGMP | - |
| Operation Temperature | 0°C to +40°C | 0 °C to +40°C |
| Operation Humidity | Less than 90% RH (no condensation) | Less than 90% RH (no condensation) |
| Finish | ABS resin, bluish gray | ABS resin, bluish gray (PANTONE 538 or equivalent) |
| Dimensions (W x H x D) | 190 x 76.5 x 215 mm (not included the gooseneck microphone) | 110 x 76.5 x 215 mm |
| Weight | 0.8kg | 0.34kg |
| Accessory | - | Connection cable x1, Joint bracket A x2, Joint bracket B x1, Screw for Joint bracket x12 |

IP-1000 Series IP-Powered Speaker



BS-P678IP1/E
IP Powered Wall Mount Box Speaker/
Wall Mount Box Speaker



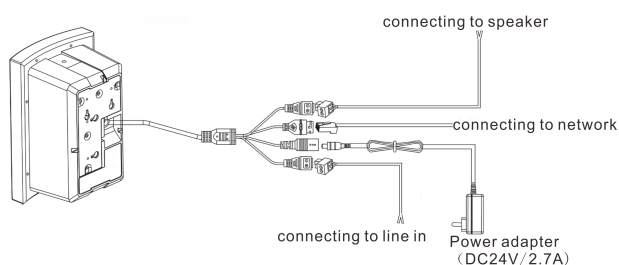
BS-P1030BIP1/WIP1
IP Powered Universal Speaker



TZ-P406BIP1/WIP1
IP Powered Column Speaker

BS-P678IP1/E / BS-P1030BIP1/WIP1 / TZ-P406BIP1/WIP1

- » Can override and incorporate with local PA system without affect the central broadcast.
- » Local line input of IP powered speaker allow the speaker to broadcast messages from both network and local input with different priorities, ideal for classroom application.
- » With built-in amplifier, allow the speaker to chain with one more ordinary speaker to provide larger coverage
- » Allow easy system expansion without difficult wiring and installation work.
- » 3 model of IP-powered speakers fulfil different usage.



| Specifications | BS-P678IP1 | BS-P678E | BS-P1030BIP1/WIP1 | TZ-P406BIP1/WIP1 |
|-----------------------|--|----------|--|---|
| Speaker Unit | 6"(16cm) double cone type | | 5"(12cm)dynamic cone-type, dome tweeter | 4"(10cm) doubt cone type x4, waterproof IP-65 |
| Power Source | DC 24V / 1A | - | DC-24V / 2.7A | DC24 / 2.7A |
| Power Consumption | 1.85 W | - | (Static Power): 1.85W | 1.85 W |
| Impedance | 8Ω 10W | | 8Ω 30W | 4Ω 40W |
| Sensitivity | 94 dB | | 90dB (1W, 1m) | 92 dB (1W, 1m) |
| Frequency Response | 150Hz - 20kHz | | 80Hz - 20kHz | 150Hz -13kHz |
| Input Terminal | European standard 2 pins | | European standard 2 pins | European standard 2 Pins |
| Network Input | 1V rms (Max: 2V rms), unbalanced 10kΩ | - | 1Vrms (Max: 2Vrms), Unbalanced, 10kΩ | 1Vrms (Max:2Vrms), Unbalanced, 10kΩ |
| Network I/F | 10 BASE-T/100BASE-TX, Auto negotiation | - | 10BASE-T/100BASE,Auto Negotiation | 10BASE-T/100BASE-TX, Auto Negotiation |
| Network Protocol | UDP, ARP, HTTP, ICMP, IGMP | - | UDP, ARP, HTTP, ICMP, IGMP | UDP, ARP, HTTP, ICMP, IGMP |
| Operation Temperature | -20°C~+40°C | | 0°C to +40°C | -20°C to +40°C |
| Operation Humidity | Below 90% RH (no condensation) | | Below 90% RH (no condensation) | Below 90% RH (no condensation) |
| Finish | Cabinet: Particle board, off-white Grille: Surface-treated steel plate net, off-white | | Enclosure: ABS resin, black / white color | Enclosure: HIPS, black/white paint Punched Net: Surface-tread steel plate, black/white paint Speaker Bracket: Aluminium die-cast, black paint |
| Dimensions | 250 (W) × 190 (H) × 110 (D) mm | | 196 (W) × 290 (H) × 150 (D) mm | 135 (W) × 498 (H) × 128 (D) mm |
| Accessory | Speaker mounting screw M4*35 x2, 2P terminal blocks x2 | - | Bracket x1, Bracket mounting screw x2, Bracket mounting washer x2, 2P terminal blocks x2 | Speaker bracket x1, Joint bracket x1, Wall bracket x1, Fixing bolt M5*60 x1, Hexagon bolt M6*12 (with plain washer and spring washer) x2, Hexagon M8*15 x1, 2P terminal block x2 |

IP-1000 Series IP PoE Speaker



BS-PE678IP1
IP PoE Box Speaker



PC-PE1868IP1
IP PoE Ceiling Speaker



SC-PE630IP1
IP PoE Horn Speaker

BS-PE678IP1 / PC-PE1868IP1 / SC-PE630IP1

» Quick installation with power over Ethernet

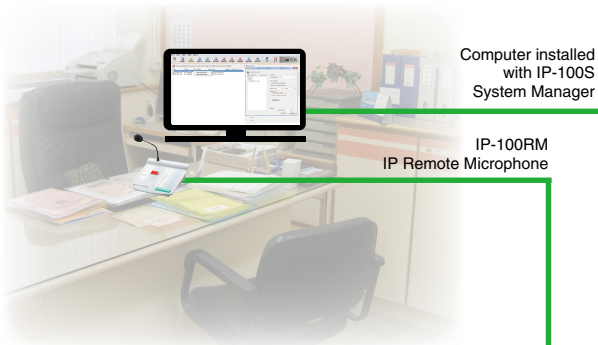
» Flexible system expansion where network connection is available

» Different product options satisfying indoor & outdoor application.

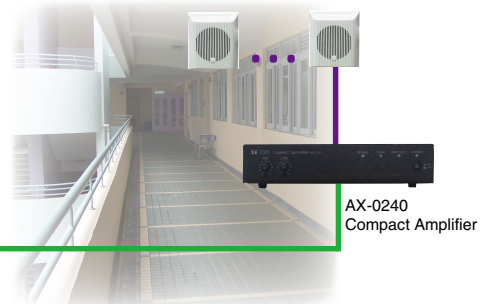
| Specifications | BS-PE678IP1 | PC-PE1868IP1 | SC-PE630IP1 |
|---------------------------------------|---|--|--|
| Speaker Unit | 6" (16cm) double cone type | 5" (12cm) cone type | - |
| Power Source | DC 24V/1A or PoE | | DA 24V/2.7A or PoE |
| Standby Power Consumption | Less than 5W | | |
| Rated Output Consumption (DC Supply) | 2*7W | | 28W/8Ω |
| Rated Output Consumption (PoE Supply) | 2*7W | | 15W/8Ω |
| Sensitivity (1m/ 1W) | 94dB | 90dB | 113dB |
| Frequency Response | 100 - 18,000 Hz | | 300 - 18,000 Hz |
| Dust/ Water Protection | - | | IP65 |
| Network I/F | 10BASE-T/100BASE-TX, auto-negotiation | | |
| Network Protocol | UDP, ARP, ICMP, HTTP, IGMP | | |
| Operation Temperature | -20°C to +50°C | | |
| Operation Humidity | Less than 90% RH (no condensation) | | - |
| Finish | Baffle: HIPS resin, off-white Cabinet: Particle board, off-white Grille: Surface-treated steel plate, off-white | Baffle: ABS resin, off-white Grille: Steel net, off-white (RAL 9010 or equivalent color), paint | Horn flare: Aluminum, off-white Reflector horn & rear cover: ABS resin, off-white Bracket, screws and bolts: Stainless steel |
| Dimensions | 250(W) x 190(H) x 110(D) mm | Φ180 x11(exposed section) + 110(D)mm | 285(W) x 227(H) x 277(D) mm |
| Accessory | Speaker mounting screw M4*35 x2, 4P terminal block x1 | Mounting brackets x1 4P terminal block x1 | 4P terminal block x1 |

IP-1000 Series Typical Solution: School

Principal Room



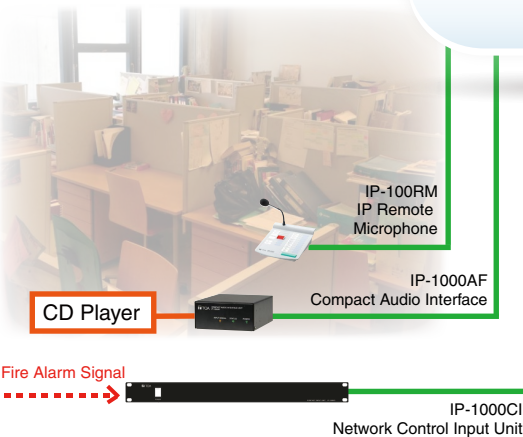
Corridor



Classroom



Teacher Office



Playground



Canteen



- Audio Cable
- CAT5 Cable
- Speaker Cable

Advantages

IP-1000S System Management Software turning ordinary computers in principal room, office and reception into work station allows increasing the number of control point without extra cost and space.

Flexibility does not only come from network connection but also different level of integration with existing conventional equipment.

- IP-1000AF provide means for existing amplifier to go network by converting analogue signals in and out the network.
- IP module, AX series and DA-502H digital amplifier connects existing speakers to network by providing output power from 240W to 500W to meet different requirement.
- IP-speaker not only provide flexibility in installation but also usage by having local input to integrate with local equipment like classroom amplifiers or wireless microphone.



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