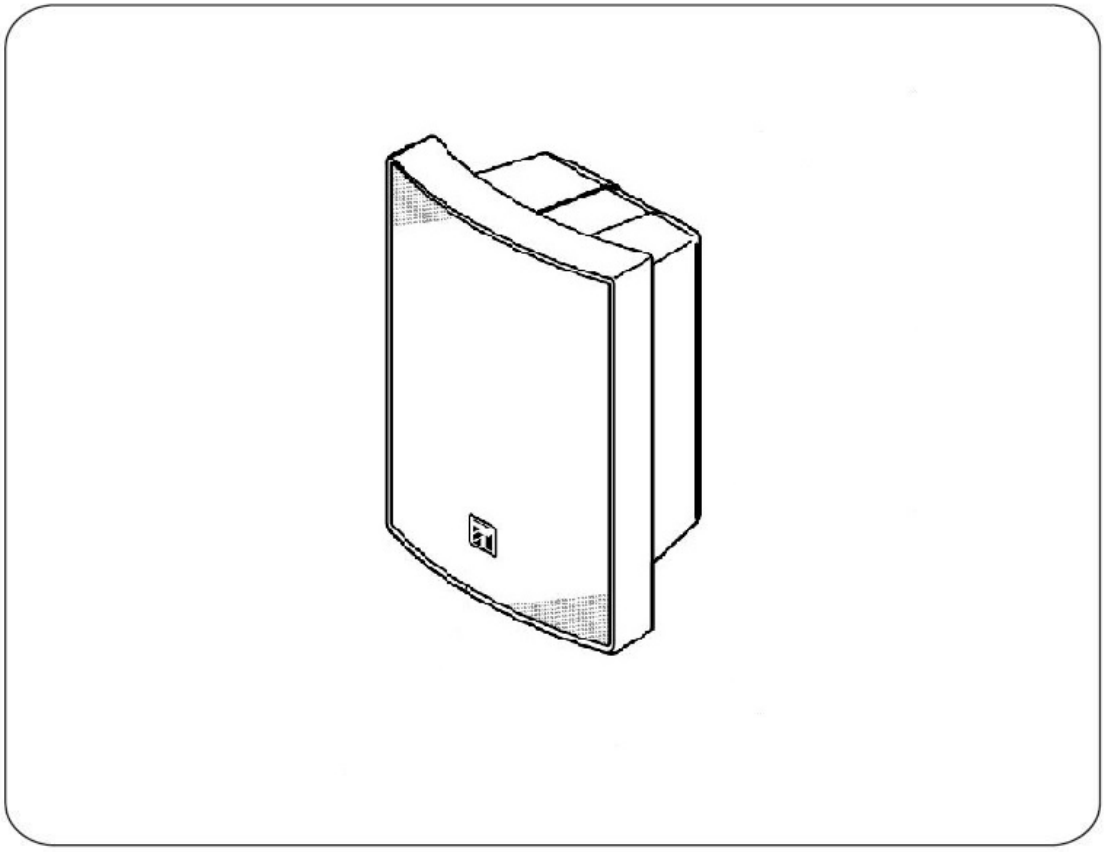
User's Manual

IP Speaker BS-P1030BIP1/WIP1



Thank you for your purchase of IP-1000 TOA products, thank you very much.
Please read the instructions in this manual carefully to ensure that the machine is operated in a long and trouble free manner.

TOA Corporation

Chapter 1

Safety precaution

Chapter 1: safety precaution

Please abide by the warning and the relevant safety tips.

Please take this manual in convenient place after you reading the guide for future reference.

Warning

The sign means there is potential safety hazard, when operate wrong may result in death or serious injury.

The sign is used to remind the user that attached is the important operation and maintenance data.

（1）Avoid getting the equipment wet

Do not make the machine wet or exposed to rain water or other liquid contamination of the environment, or lead to fire or get an electric shock.

（2）Don’t use unspecified voltage.

Using the marked voltage on the machine.

Using more than the logo of voltage could lead to fire or shock.

（3）Don’t scratch the power cord.

Don’t scratch the power cord or cut it.

Simultaneously, keep the power line far way from heated objects, put heavy things on it will lead to fires or electric shock.

Using machine

（1）In case of the anomalies

Please turn off the power supply immediately when finding the abnormal phenomena, please connect with the agency. If you continue to use, it is likely to catch fire or resulted in electric shock.

·The smoke or smell of the machine.

·The inside of the machine is flooded by water or external intrusion.

·Machine falling or machine case damage.

·The power cord damage (wire core is exposed of broken, etc)

·Malfunction (e.g no network connection, no sound etc.)

（2）Do not open the machine internal or modify the machine.

Do not let external substance getting into the equipment

Please do not put any metallic or inflammable objects into the machine, otherwise it may cause fires or electric shock.

（3）Please do not touch it during thundering

To avoid electric shock, please do not touch the machine and the plug during lightning, etc.

（4）Please do not place containers with liquid or small metal objects on machine above.

If containers drop and liquid get into the machine that will likely fires or cause shock.

（5）Do not open the machine internal or modify the machine.

The machine internal contains high voltage parts, once open the cover or modify the machine, it may result in fires or cause shock. All the maintenance and other machine modification should be operated by professional personnel.

（6）Maintenance and the precautions for not using in a long time.

While maintenance, if the machine is not been used for 10 days or more, please turn off power supply switch for safety. If do not comply with this provision, it will likely cause electric shock or fires.

Chapter 2

Products description

Chapter 2: products description

2.1 Summary

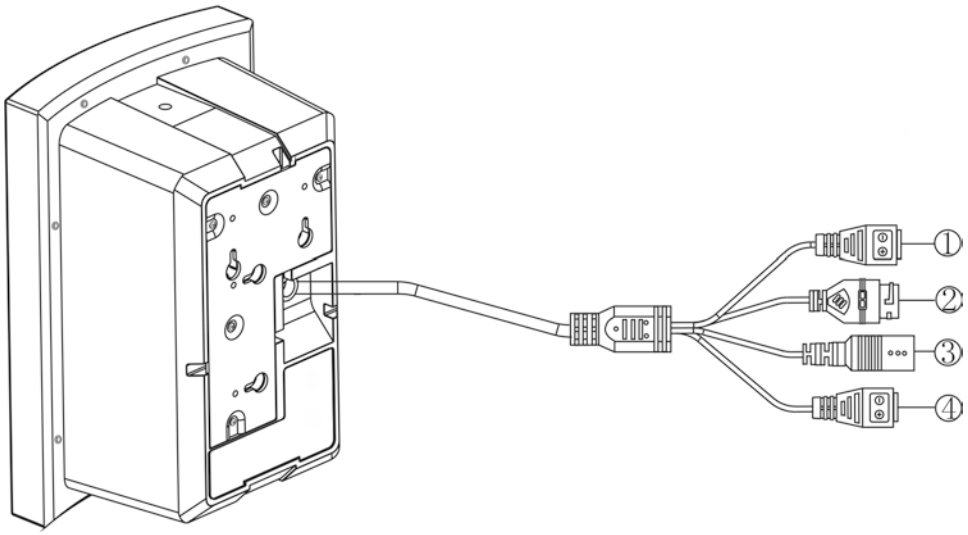
2.1 Summary

BS-P1030BIP1/WIP1 is a IP general speaker which can receive broadcast from other devices or servers, and supports system setting via browser, which has loop detection function to detect horn, and it can select audio sound sources.

- Line input
  Speaker can connect to other audio signal devices for as broadcasting sound source.
- Loop detection
  Speaker has loop detection function showing equipment working status via loop detection.
- Receiving broadcast
  Speaker can receive broadcast from other devices or servers.
- Program timer
  Uploading every day sound source to the server, programming the broadcasting plan, the speaker can automatically broadcasting according to the server configuration plan.
- Working status indicator
  Speaker has working status indicator, which shows the working status via the color and flash of the indicator light.
- System setting via browser
  User can set network parameters, audio parameters, login password modification via browser to realize personalized configuration.

Chapter 2: products description

2.2 Connector description



①Amplifier output connector: connector color is black, specification is 3.81-2P, connecting external speaker, when the speaker receives the broadcasting, the same sound can be heard from the speaker. The Rated impedance:8Ω,the rated output power:30W

The "+" is positive pole of amplifier output, "-" is negative pole of amplifier output.

②Network connector: the specification is RJ-45, inserting cable to connect with server, the network connector with green and orange indicator light, which can indicate the speaker working status.

Working status	**Indicator light**
Cable not connected	Green light flashes slowly, orange light off
Offline	Green light flashes slowly, orange light always on
Free	Green light always on
Receiving broadcast	Green and orange light is flashes quickly

③Power connector: DC24V/2.7A, supplying power for speaker.

④Line in connector: connector color is green, the specification is 3.81-2P, the audio signal of other devices can be accessed as audio sound source.

Rated audio input (unbalance):1Vrms； Max input: 2Vrms； audio input impedance: 10KΩ.

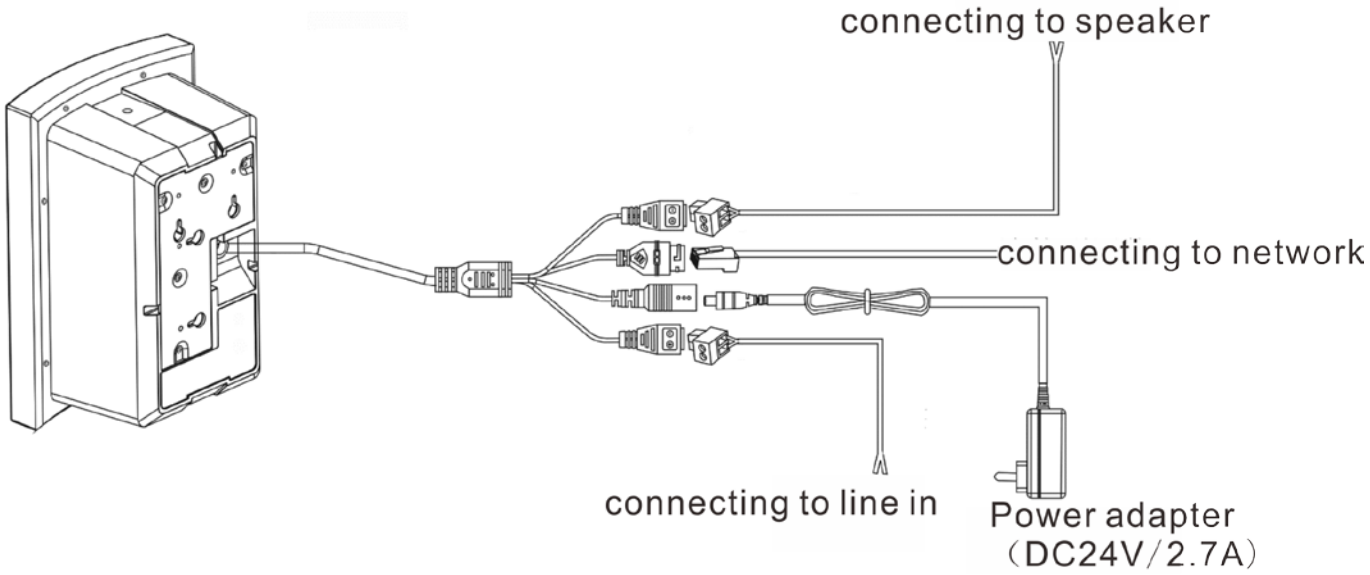
The "+" is the signal end, "-" as a signal to the ground;

The line input sound source as local one, it can interrupt the audio program of network sound source, it needs audio priority configuration in the web page.

Chapter 3

Wiring

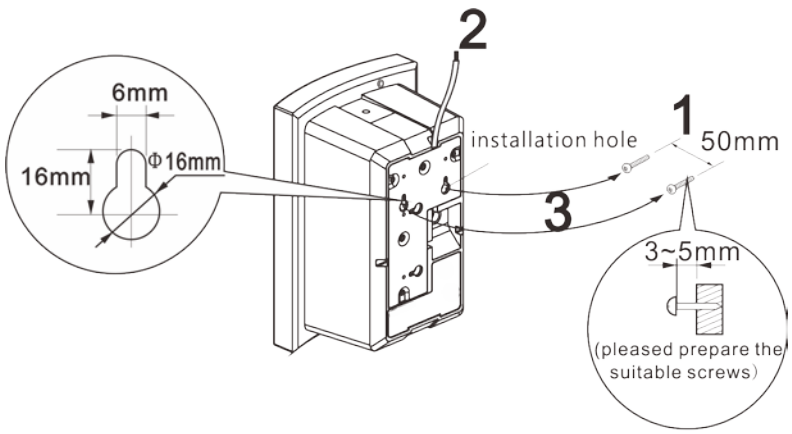
3.1 BS-P1030BIP1/WIP1 Wiring diagram



3.2 Installation description

3.2.1 Wall-mounted installation using screws

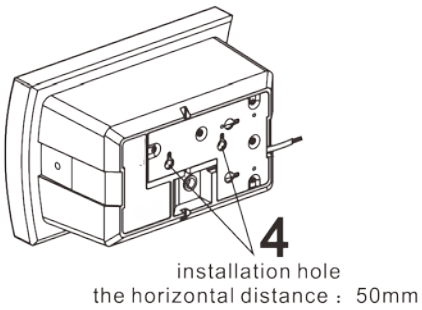
Step 1: selecting the installation location on the wall, putting the two screws into the wall, the distance between the two screws is 50mm and ensuring the screws is higher than the wall 3-5mm.



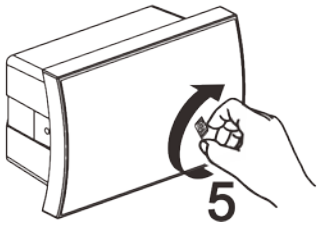
Step 2: connecting the speaker line.

Step 3: The speaker installation hole is aligned with the wall screw, it hangs on the wall surface directly.

Step 4: If installing the speaker horizontally, you can hang on the wall directly by using the horizontally installing hole.



Step 5: when the angle of the network wall speaker and trademark is not consistent, gently pulling up and rotating the trademark to the appropriate location by hand.



Note: the screws are not included in the package, please preparing related screws refer to the size of the installation holes.

3.2.2 Speaker installation by bracket

[Required accessories]

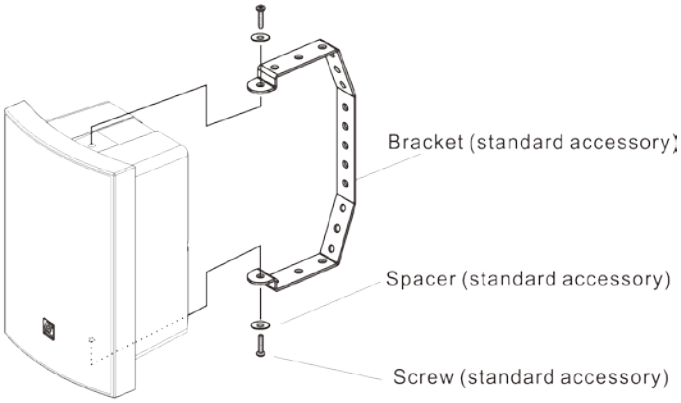
The required parts are included in accessories.

Bracket..... 1

Spacer (M5) 2

Screw（M5*10） 2

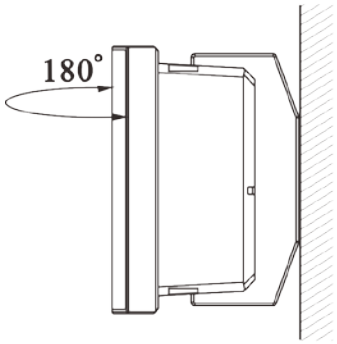
Step 1: installing all the attached bracket, gaskets, and screws on the speaker.



Step 2: selecting the suitable angle and location to install the speaker on the wall.

Note:

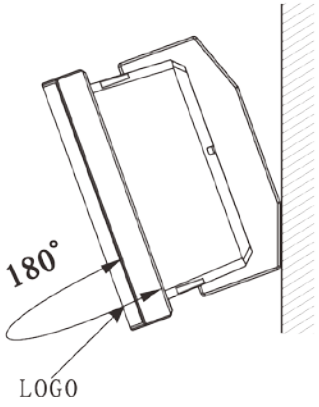
(1) the bracket is also applicable to the level of installation. Loosen the standard screws, speaker can be rotated 180 degrees, adjusted to the proper position, and then tighten the standard screw, make the speaker achieves the best effect of broadcast.



indoor installation methode

(2) For outdoor installation, refer to the picture on the right. The angle between the speaker and the installation surface should be less than or equal to 160 degrees.

(3) When the angle of the speaker and trademark is different, please pull up it gently and turning it to the appropriate location.

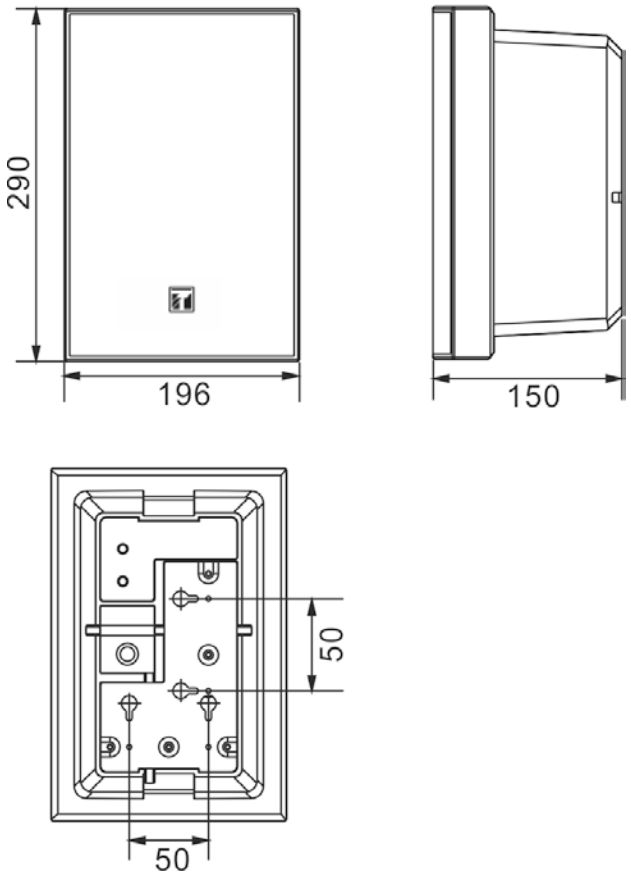


outdoor installation methode
(it's also suitable for indoor)

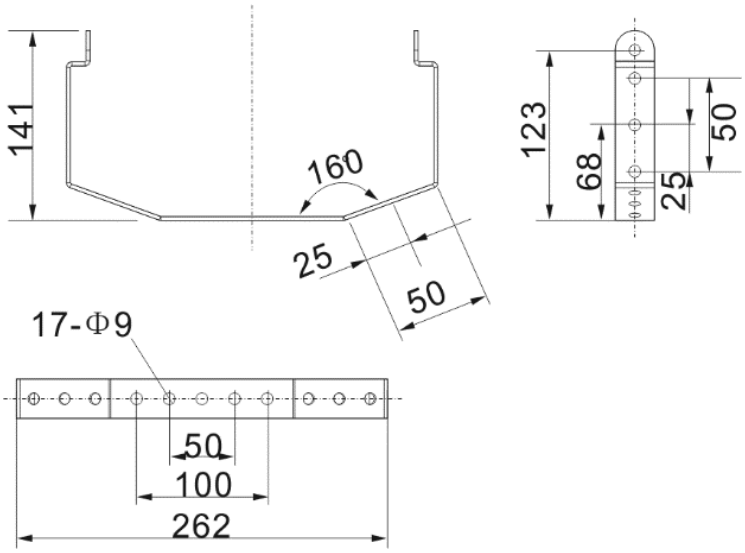
Note: the screws are not included in the package, please preparing related screws refer to the size of the installation holes.

3.3Reference size (unit: mm)

3.3.1 The speaker size



3.3.2 The bracket size

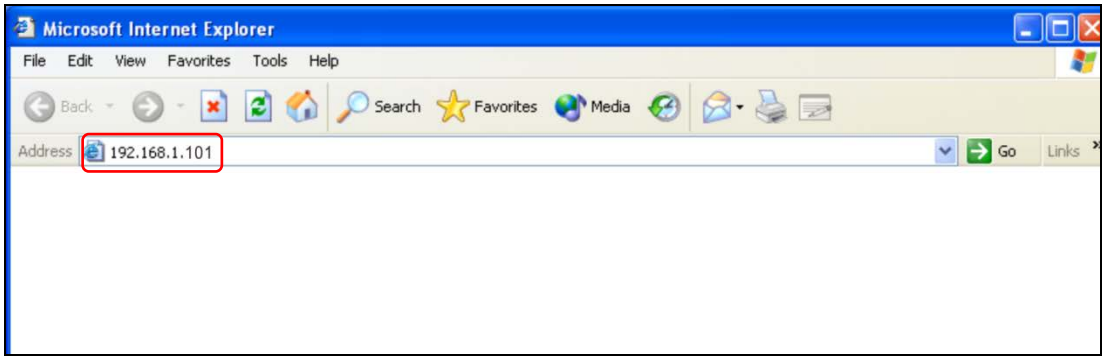


Chapter 4

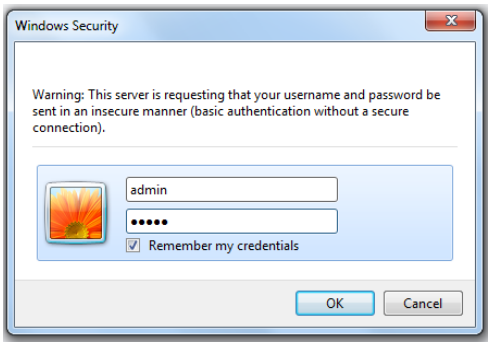
System setting via browser

4.1 Enter into browser

Step 1: Please input: IP address of the speaker (factory defaults is 192.168.1.101), then press Enter.

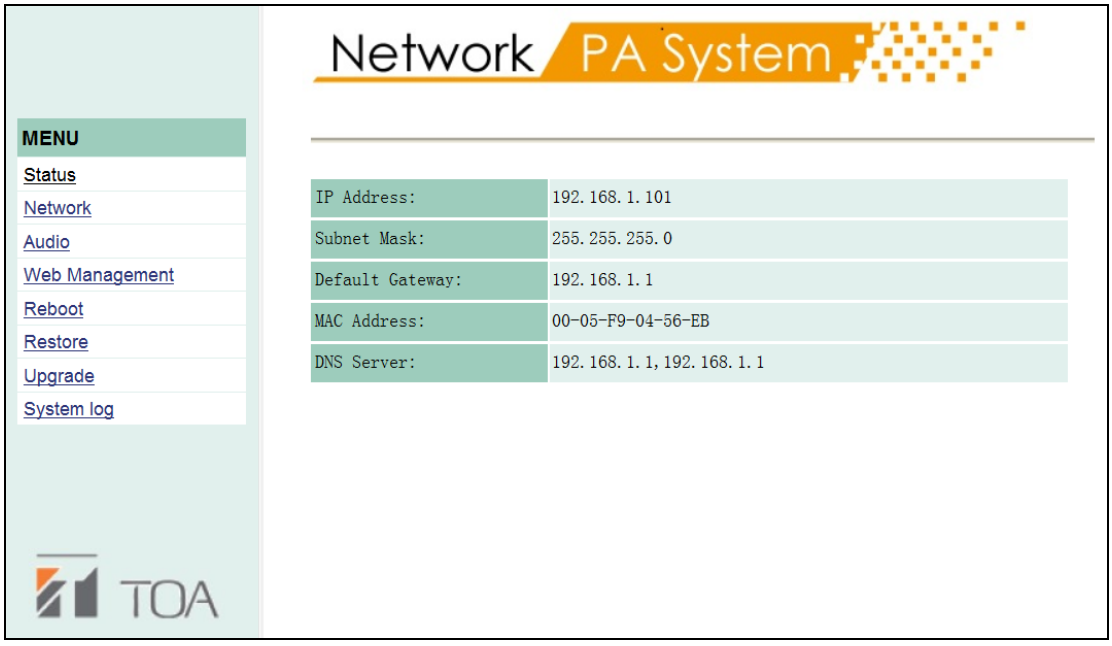


Step 2: Please input the user name and password in the login window of the Web page (the defaults is admin).

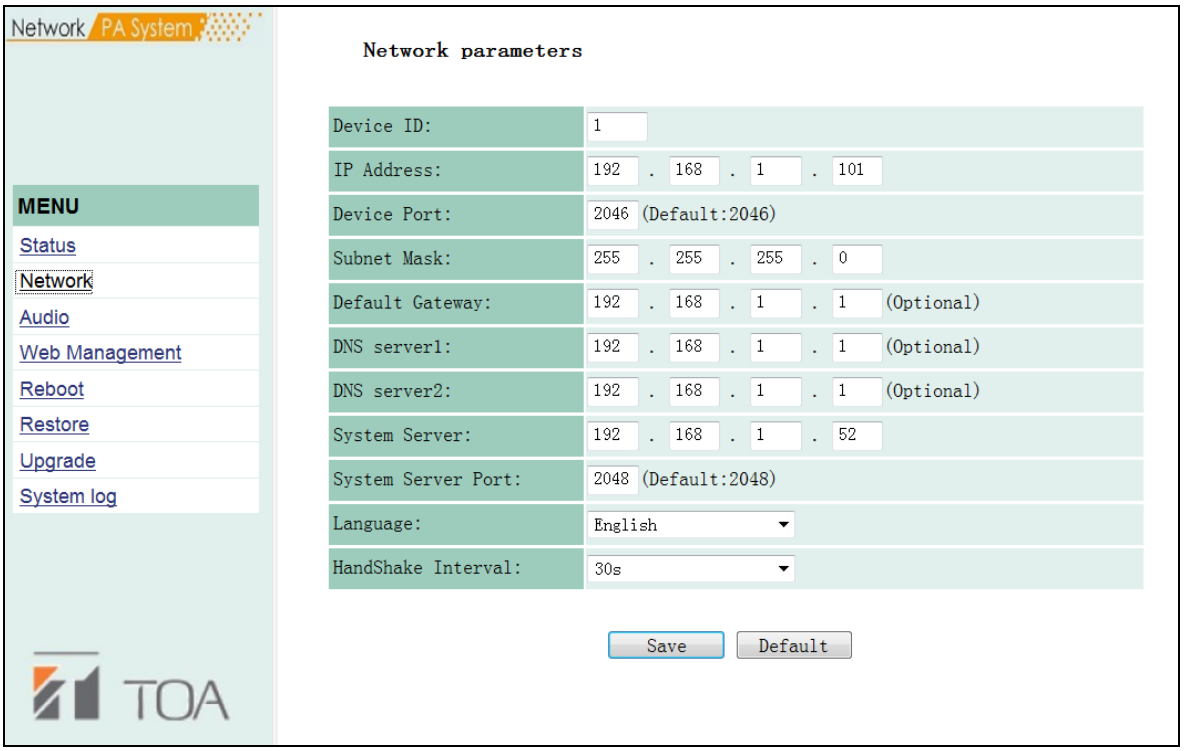


Note: there is different letter of the use name and password.

Step 3: It can enter into the Web page after pressing the Enter.

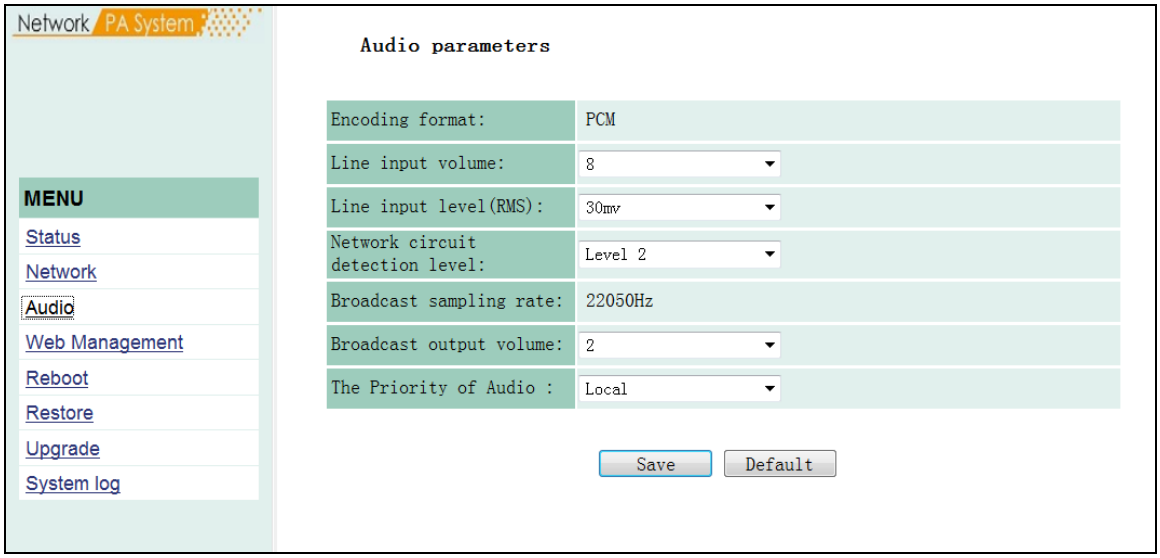


4.2 Network parameters



Device number	Identify the unique number of the speaker and it can't be repeated with other devices or hosts.
IP address	IP address of speaker
Device port	The defaults port number is 2046, please don't modify it if not in specially situation.
Subnet mask	please setting subnet mask(the defaults to :255.255.255.0)
defaults gateway	the gateway of speaker (the factory defaults is :192.168.1.1)
DNS Server 1	The IP of preferred domain interpreter in the speaker's network.
DNS Server 2	The IP of standby domain interpreter in the speaker's network.
System server	IP address of IP broadcast server
System server port	The defaults sever number is 2048, please don't modify it if not in specially situation.
Language	The Web page of the speaker's application segment procedure (Firmware) is support for switchover of English and Chinese, but the Web page of bottom segment procedure (BIOS) isn't support for switchover of English and Chinese.
Handshake interval	Setting the interval time between the speaker and the server.

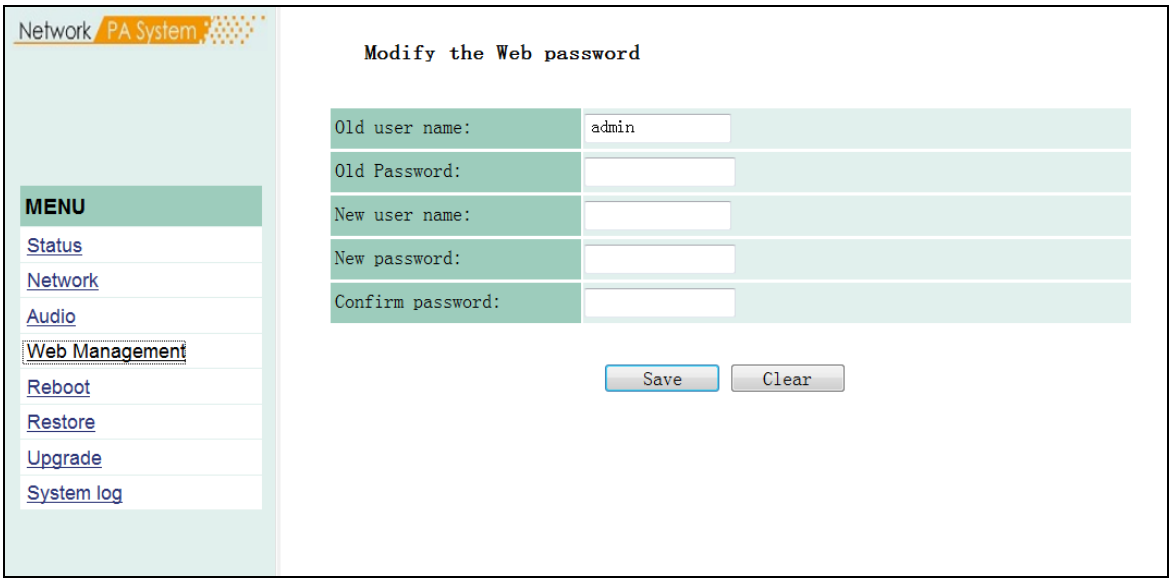
4.3 Audio parameters



Coding mode	Broadcast coding, PCM means no data be compressed, ADPCM means packed data (low network data value).
Line input volume	The volume of audio line input
Line input threshold	In order to avoid output of circuit and sound source noise, when the line input audio range is smaller than the value (line input threshold value), it will turn off the amplifier automatically within 1min. Line input threshold value is divided into to 3 levels, 20mV, 30mV, 50mV respectively, 20mV audio range is the lowest, 50mV audio range is the highest.
Network loop detection threshold	The speaker will detect the voice according to the level of IP loop detection threshold value of the device, when there is no sound output, the server will have pop up display for the fault information. IP circuit detection function can be disabled; The sensitivity of the first level detection is the highest, and the sensitivity of the five stage detection is the lowest.
Broadcasting sampling rate	IP wall-mounted speaker sampling rate in broadcasting
Broadcast output volume	IP wall-mounted speaker total output volume in broadcasting (0~15,level 6 is 0dB)
Audio priority	It can select local and network priority, the defaults is network priority. Network priority: IP broadcast>PTT broadcast>ling input；local priority：line input>IP broadcast>PTT broadcast

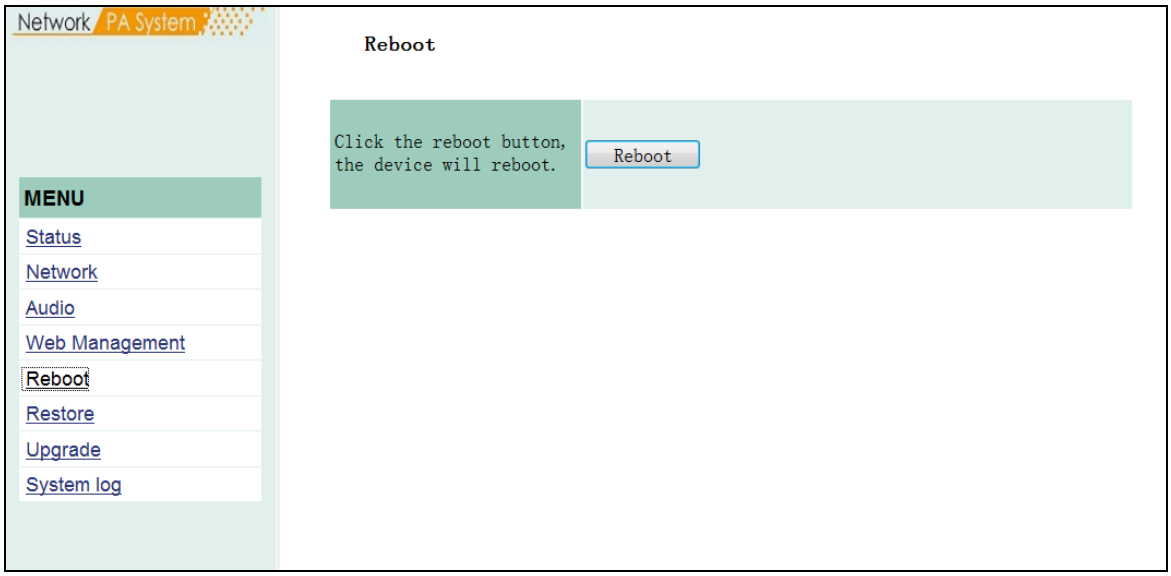
4.4 Web management

You can modify the account number and password in the Web management parameters.



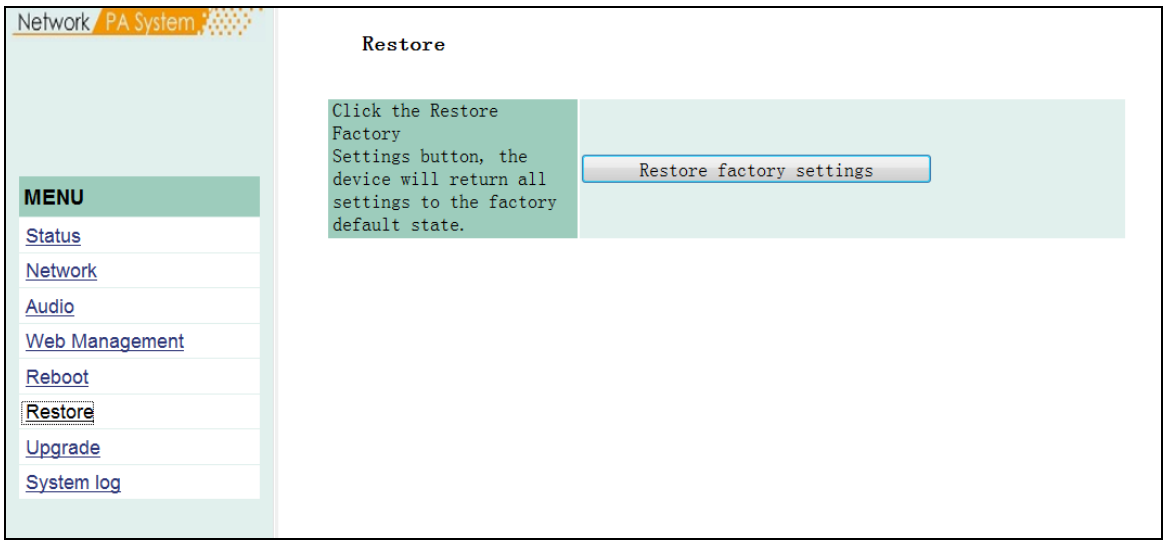
4.5 Restarting device

User can click “restart device” to restart the speaker.



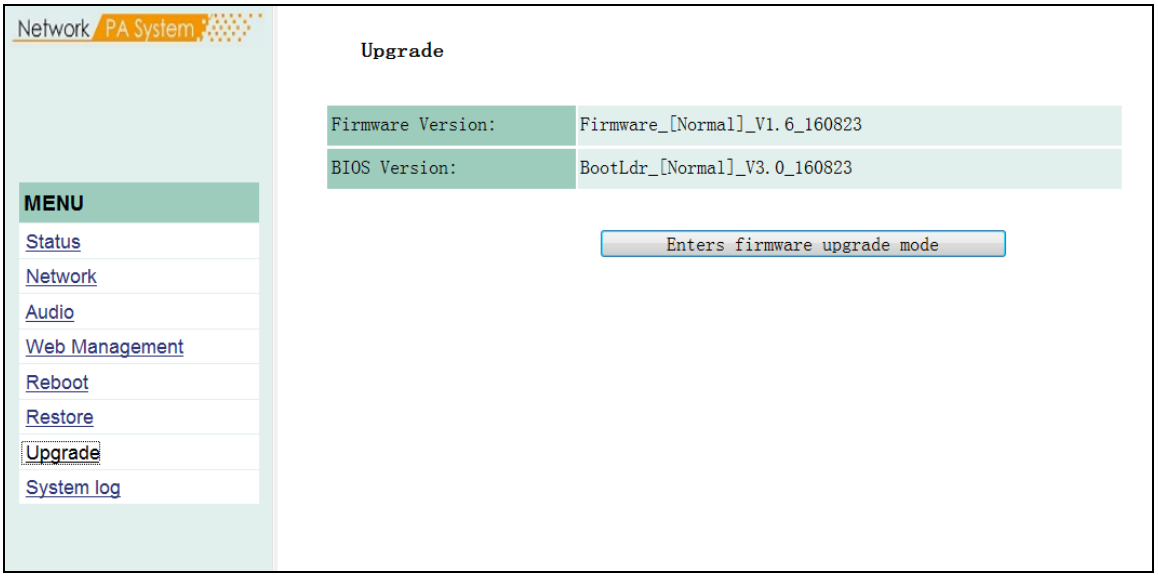
4.6Resetting to defaults

Resetting to defaults: all the parameters will reset to defaults.



4.7 Firmware upgrade

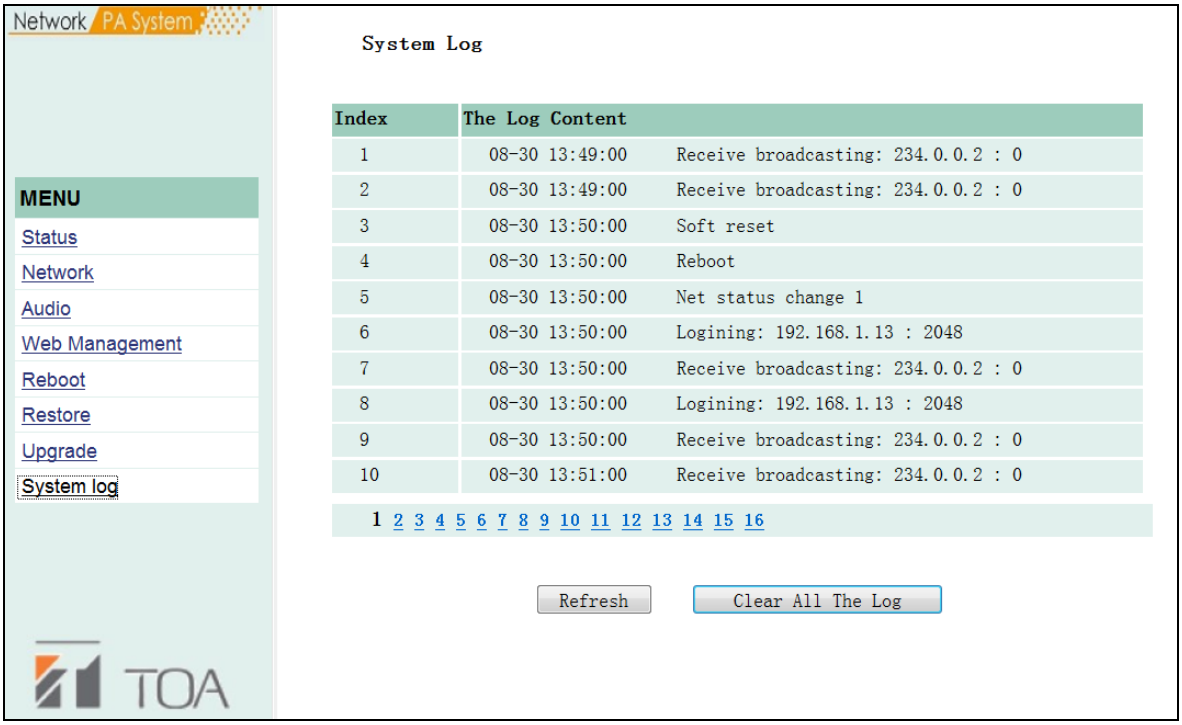
Clicking “into the firmware upgrade mode” to enter the firmware upgrade interface.



Click browse in the upgrade firmware interface, please select the correct upgrade files, click on "upgrade", it will automatically restart after completed the upgrade.

4.8 System log

Browser the log of the speaker in the Web page, click “delete all logs”, all logs can be deleted in the Web page.



Chapter 5

Appendix

Chapter 5: appendix

5.1 Specification

5.1.1 IP Speaker BS-P1030BIP1/WIP1

Model number	BS-P1030BIP1	BS-P1030WIP1
Loudspeaker assembly	4.8”(12cm) full range moving coil mode	
Power	DC24V / 2.7AA	
Power consumption (static power)	1.85W	
Load impedance	8Ω，30W	
SPL （1m/1w）	90dB	
Frequency response	80-20,000Hz	
Input terminal	European standard 2P	
Line input	Range: 1Vrms (Max:2Vrms), unbalance, 10KΩ	
Network I/F	10BASE-T/100BASE-TX,automatic determination	
Network protocol	UDP,ARP,ICMP,HTTP,IGMP	
Working temperature	-20 ℃~+40℃	
Working humidity	Lower than 90%RH(No dew point)	
Appearance	Shell: ABS resin	
Color	Black	White
Accessories	Bracket (1PC) ,retaining screw (2PCS),2P connection terminal (2 PCS), Network port cover (1 set)	

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