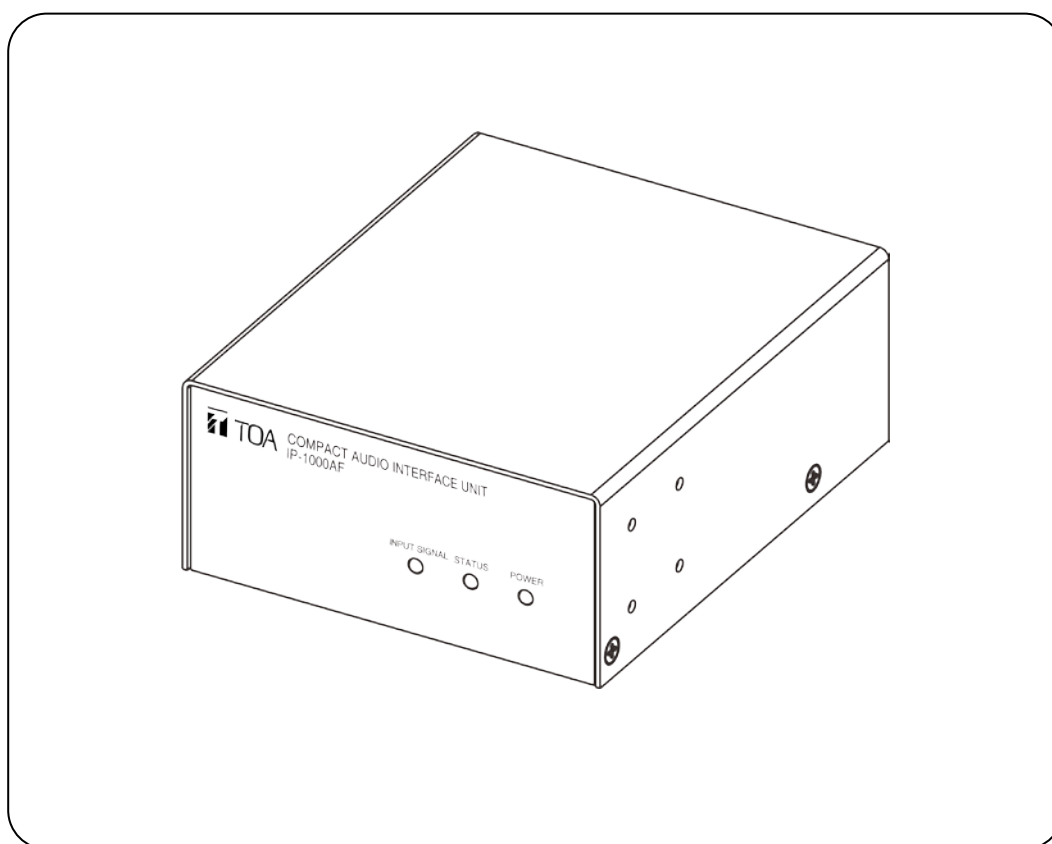


**IP Audio Interface Unit****IP-1000AF**

Thanks for your purchase of TOA products IP-1000 series.

Please read the manual carefully to ensure the machine operating in long time and fault-free.

## ***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 device wet.

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

(2) Do not use unspecified voltage.

Using the marked voltage on the machine.

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

(3) Do not scratch the power cord.

Do not 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 using the equipment, it is likely to catch on 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 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 the machine above.

If containers drop and liquid get into to the machine that will likely catch fires or cause electric 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***

#### 2.1 Summary

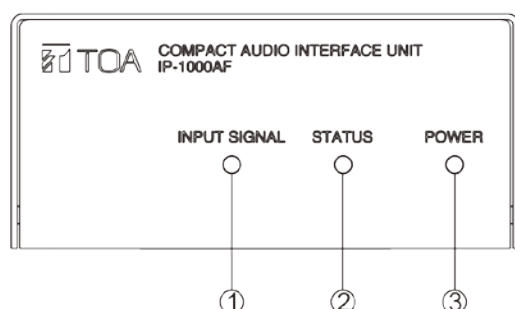
IP-1000AD is an IP audio interface unit, it can broadcast the signal which is received by the audio input interface to other terminals, and it also can receive the broadcast from other terminals and servers. It supports browser system setting.

- ◆ Audio input  
IP audio interface unit can broadcast the signal which is received by the audio input interface to other terminals.
- ◆ Receiving broadcast  
IP audio interface unit can receive the broadcast from other terminals or servers.
- ◆ Timing program broadcasting  
Uploading the everyday music to the server, programming the broadcasting planning, the IP audio interface unit can broadcast the server configuration music automatically.
- ◆ Broadcasting IP  
When the IP audio interface unit in the electricity but without cable, quickly pressing the reset button will automatically broadcasting IP and subnet mask parameters information.
- ◆ System setting via browser  
User can set network and audio parameters, modify login password via browser to realize the customized configuration.
- ◆ Volume control  
IP audio interface unit has volume control knob, it can adjust the input volume in real time.
- ◆ Control input/output  
IP audio interface unit has 1 line control input interface and output interface.  
Control input interface can receive switch value signal from external control input device, and linkage with them (setting by browser).

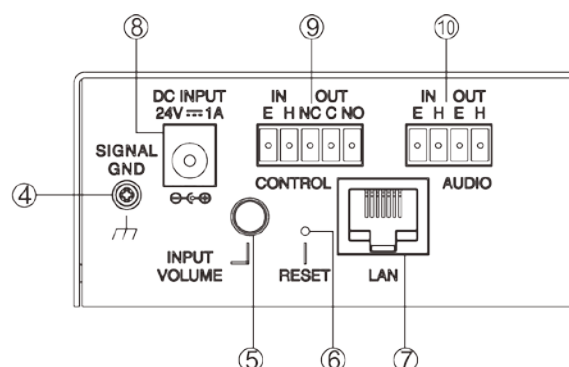
## Chapter 2: Products Description

### 2.2 Interface Description

Front



Back



①INPUT SIGNAL: input indicator light

②STATUS: status indicator light

③POWER: power indicator light

④Grounding switch

⑤INPUT VOLUME: input volume adjusting knob, the input volume adjusting, clockwise direction is increase the volume, counterclockwise is decrease the volume.

⑥RESET: pressing the button to restore the factory default IP (or upgrade firmware )、broadcasting IP.

| Status                                | Operation  |
|---------------------------------------|--|
| Forced to restore the IP address      | Electricity status, pressing the button in 3s                            |
| Forced into the firmware upgrade page | Pressing the button before electricity, and keep it in 5s then loosen it |
| Broadcasting IP                       | Electricity status without network, quickly pressing and then release it |

⑦LAN: network interface

⑧Power interface: DC24V/1A

⑨Control input/output interface

IN: control input interface, E is control input reference place, H is control input interface, when the two pins is short circuit, IP audio interface unit will execute the operation automatically, which is setting by browser.

OUT: control output interface, "NC" is control output normally closed contacts,

"NO" is control output normally open contacts, "C" is control output public contacts.

⑩Audio input/output interface

IN: audio input interface, E is audio input reference place, H is audio signal input ,1Vrms/10KΩ, unbalance.

OUT: audio output interface, E is audio output reference place, H is audio signal output,1Vrms/600Ω, unbalance.

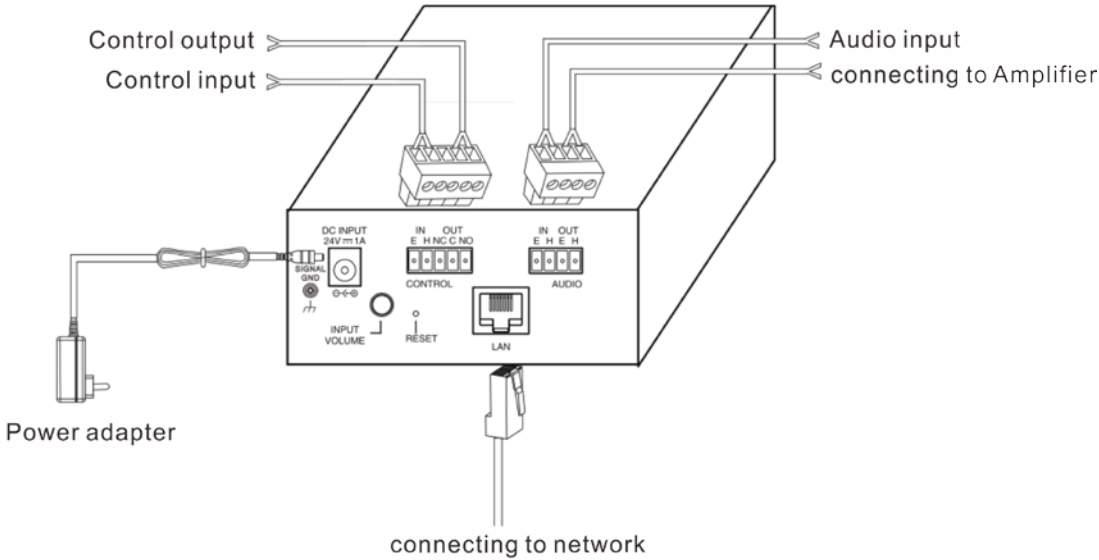
# ***Chapter 3***

---

## ***Wiring***

3.1 Wiring Diagram

3.1 Wiring diagram





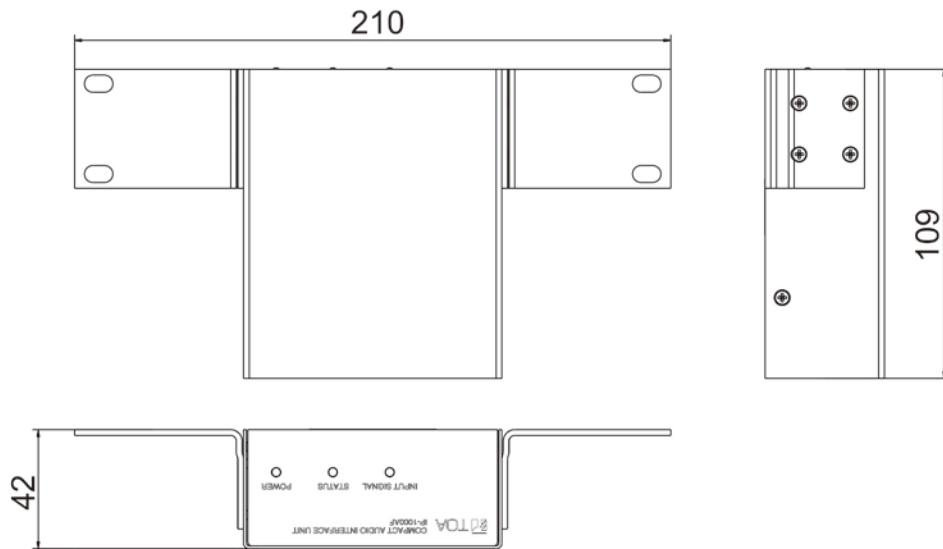
### 3.2 Installation description

#### 3.2 Installation description

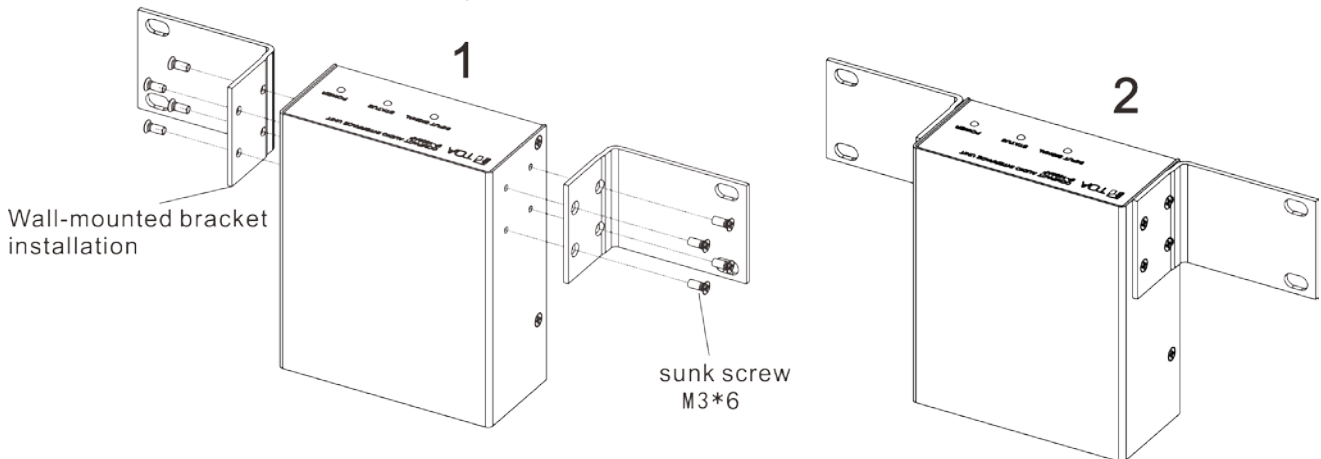
##### 3.2.1 Wall-mounted installation diagram

It is s only for single device installation.

##### 3.2.1.1 Reference size (unit: mm)



##### 3.2.1.2 Please refer to the following picture for installation:



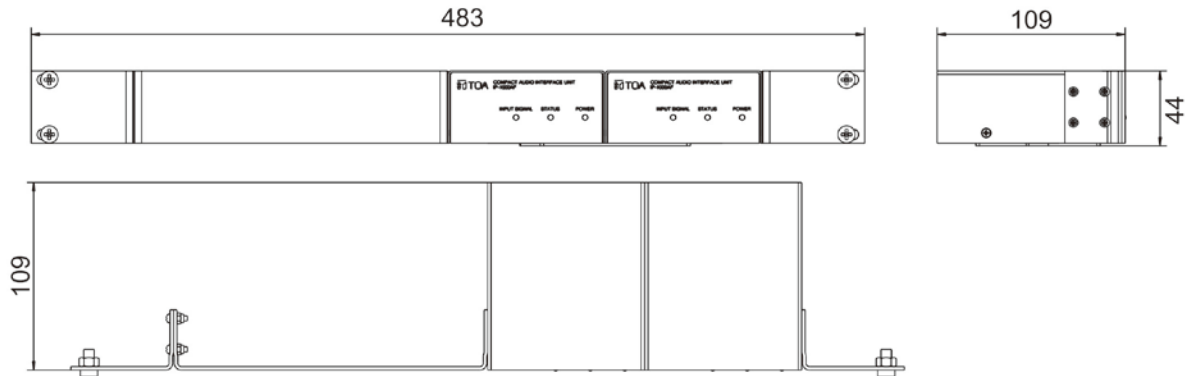
Using the countersunk head screw M3\*6 to fasten the two wall-mounted bracket in the two sides of the device, and then installing the device in a suitable position by screw(non standard) or expansion screw(non standard).

### 3.2 Installation description

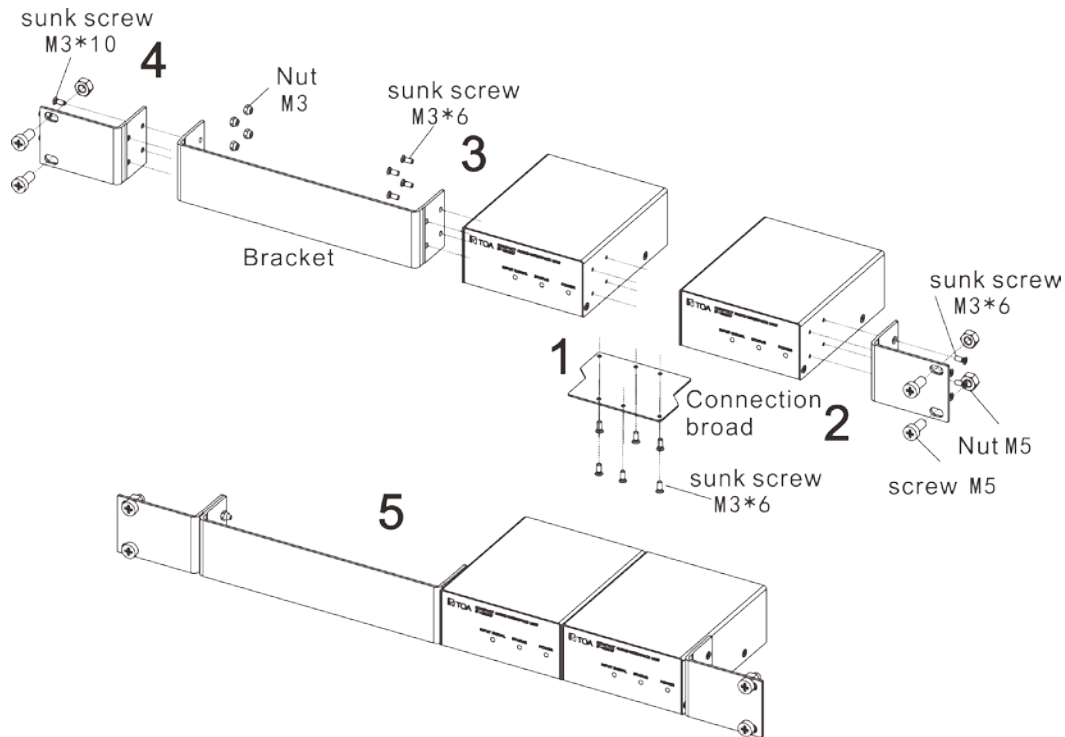
#### 3.2.2 Device cabinet installation diagram (2 sets of IP-1000AF installation)

It is suitable for 2 devices installation, and it need device cabinet installation bracket suite for optional configuration.

##### 3.2.2.1 Reference size (unit: mm)



##### 3.2.2.2 Please refer to the following picture for installation:



Using the half cabinet mounting bracket(MB-IP10B-BK) to fix the two devices as the mentioned method, then using length M5\*12 and above screw to install the devices in the suitable place.

**Note: the screw M5 and nut M5 is not included in the fittings;**

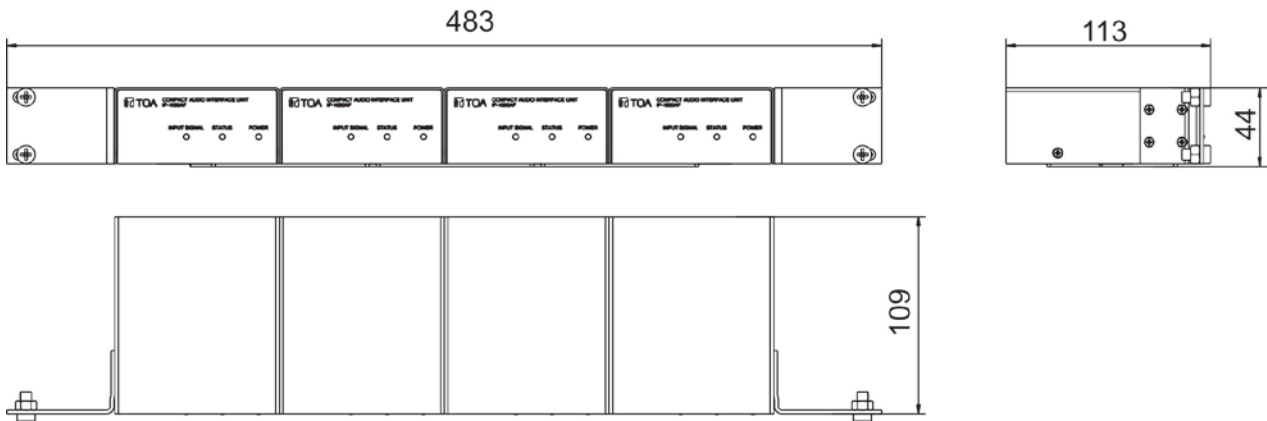
## Chapter 3: Wiring

### 3.2 Installation description

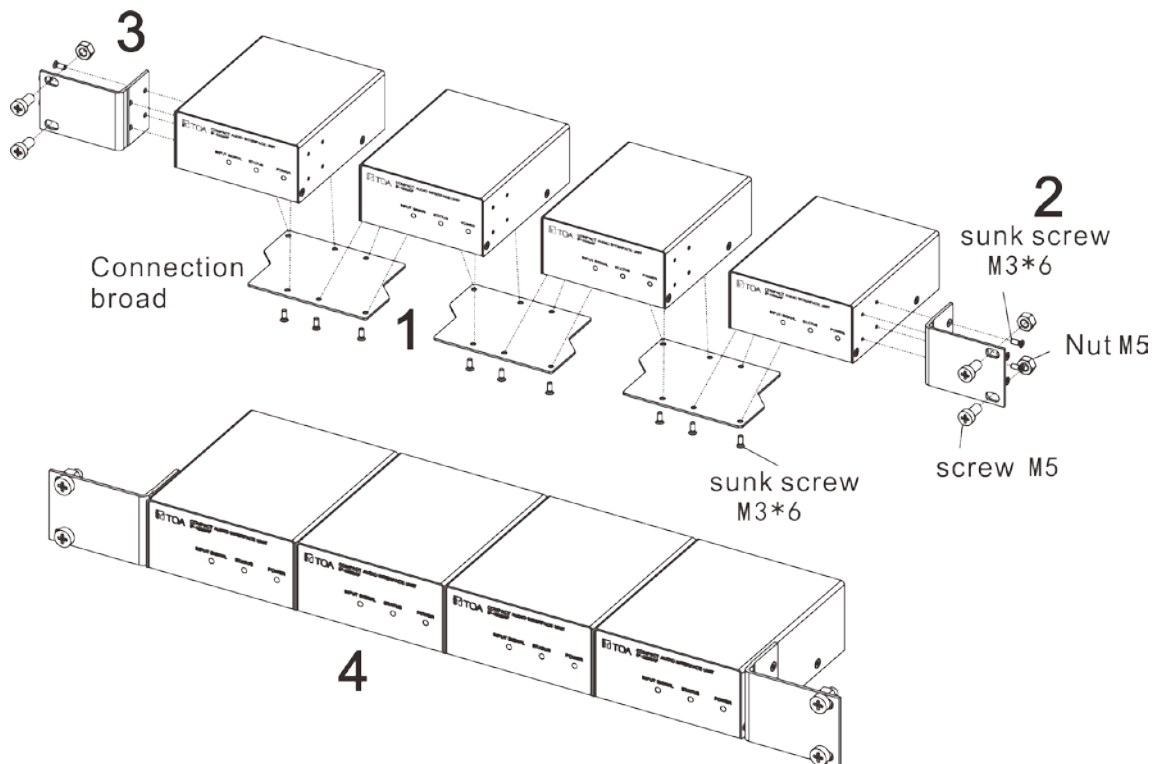
#### 3.2.3 Device box installation diagram (4 sets IP-1000AF installation)

It is suitable for 4 devices installation, and it needs installation bracket suite for optional configuration.

##### 3.2.3.1 Reference size (unit: mm)



##### 3.2.3.2 Please refer to the following picture for installation:



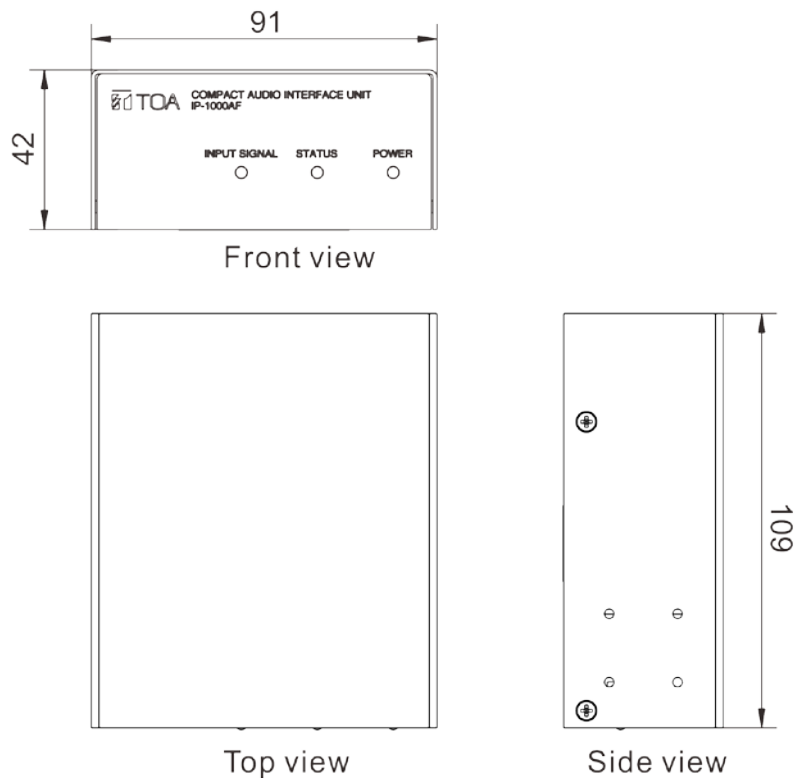
Using the half cabinet mounting bracket(MB-IP10B-BK) to fix the four devices as the mentioned method, then using length M5\*12 and above screw to install the devices in the suitable place.

**Note: the screw M5 and nut M5 is not included in the fittings;**

## Chapter 3: Wiring

### 3.3 Reference size

#### 3.3 Reference size (unit: mm)



Note: the attached floor mat (10\*3) can be pasted on the bottom of the device it is for increasing the device antiskid effect on the desk.

## ***Chapter 4***

---

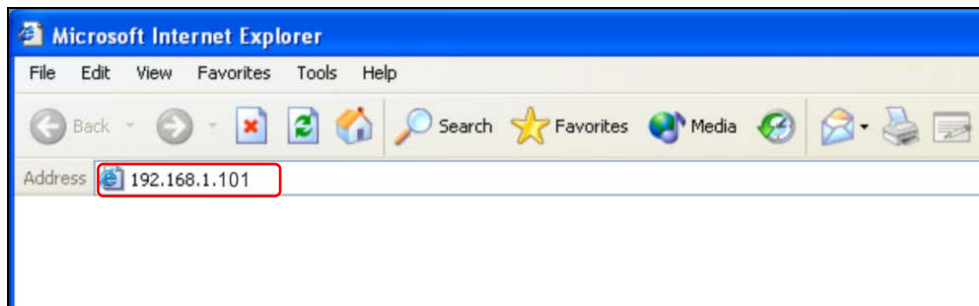
### ***System setting by browser***

## Chapter 4: System setting by browser

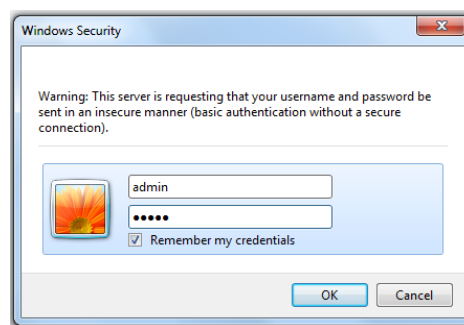
### 4.1 Entering into browser

#### 4.1 Entering into browser

Step 1: Please input IP address of the IP audio interface unit (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 pressed the Enter.

**MENU**

- [Status](#)
- [Network](#)
- [Audio](#)
- [Alarm](#)
- [Web Management](#)
- [Reboot](#)
- [Restore](#)
- [Upgrade](#)
- [System log](#)

## Network PA System

|                  |                                |
|------------------|--------------------------------|
| IP Address:      | 192. 168. 1. 101               |
| Subnet Mask:     | 255. 255. 255. 0               |
| Default Gateway: | 192. 168. 1. 1                 |
| MAC Address:     | 00-05-F9-04-56-E9              |
| DNS Server:      | 192. 168. 1. 1, 192. 168. 1. 1 |

## Chapter 4: System setting by browser

### 4.2 Network parameters

#### 4.2 Network parameters

Network PA System

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### Network parameters

|                     |                              |
|---------------------|------------------------------|
| Device ID:          | 1                            |
| IP Address:         | 192 . 168 . 1 . 101          |
| Device Port:        | 2046 (Default:2046)          |
| Subnet Mask:        | 255 . 255 . 255 . 0          |
| Default Gateway:    | 192 . 168 . 1 . 1 (Optional) |
| DNS server1:        | 192 . 168 . 1 . 1 (Optional) |
| DNS server2:        | 192 . 168 . 1 . 1 (Optional) |
| System Server:      | 192 . 168 . 1 . 13           |
| System Server Port: | 2048 (Default:2048)          |
| Language:           | English                      |
| HandShake Interval: | 30s                          |

[Save](#) [Default](#)

|                    |   |
|--------------------|---|
| Device number      | Identify the unique number of the speaker and it can't be repeated with other terminals or hosts.   |
| IP address         | IP address of IP audio interface unit   |
| 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 the interface unit (the defaults is :192.168.1.1)  |
| DNS Server 1       | The IP of preferred domain interpreter in the interface unit's network.   |
| DNS Server 2       | The IP of standby domain interpreter in the unit'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 unit and the server.  |

## Chapter 4: System setting by browser

### 4.3 Audio parameters

#### 4.3 Audio parameters

Network PA System

**MENU**

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- System log

### Audio parameters

|                          |         |
|--------------------------|---------|
| Encoding format:         | PCM     |
| Line input volume:       | 0       |
| Broadcast sampling rate: | 22050Hz |
| Broadcast output volume: | 11      |

|                            |  |
|----------------------------|--|
| 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(0~15).  |
| Broadcasting sampling rate | IP audio interface unit sampling rate in broadcasting.   |
| Broadcast output volume    | IP audio interface unit output volume in broadcasting (0~15).  |



## Chapter 4: System setting by browser

### 4.4 Firm alarm parameters

#### 4.4 Fire alarm parameters

Network PA System

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alarm parameters

|  |               |
|--|---------------|
| Status:                                | Normally Open |
| Alarm input linkage<br>alarm output:   | Linkage       |
| Alarm output linkage<br>recovery time: | 11            |

Save

Default

|                                       |   |
|---------------------------------------|---|
| Status                                | <p>When control input in the status which isn't trigger the control input interface,, the status decide the alarm way.(open circuit alarm or closed circuit alarm)</p> <p>NO: control input interface is closed to trigger the alarm.</p> <p>OFF: control input interface is disconnected to trigger the alarm.</p> |
| Alarm input linkage<br>alarm output   | <p>When the alarm input is triggered, configure whether linkage alarm output or not.</p>  |
| Alarm output linkage<br>recovery time | <p>The time of alarm output triggering</p> <p>Note: the effective time range is 1-29 S, when setting as 0,that means the alarm output continue linkage.</p>   |

## Chapter 4: System setting by browser

### 4.5 WEB management

#### 4.5 WEB management

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

Network PA System

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**Modify the Web password**

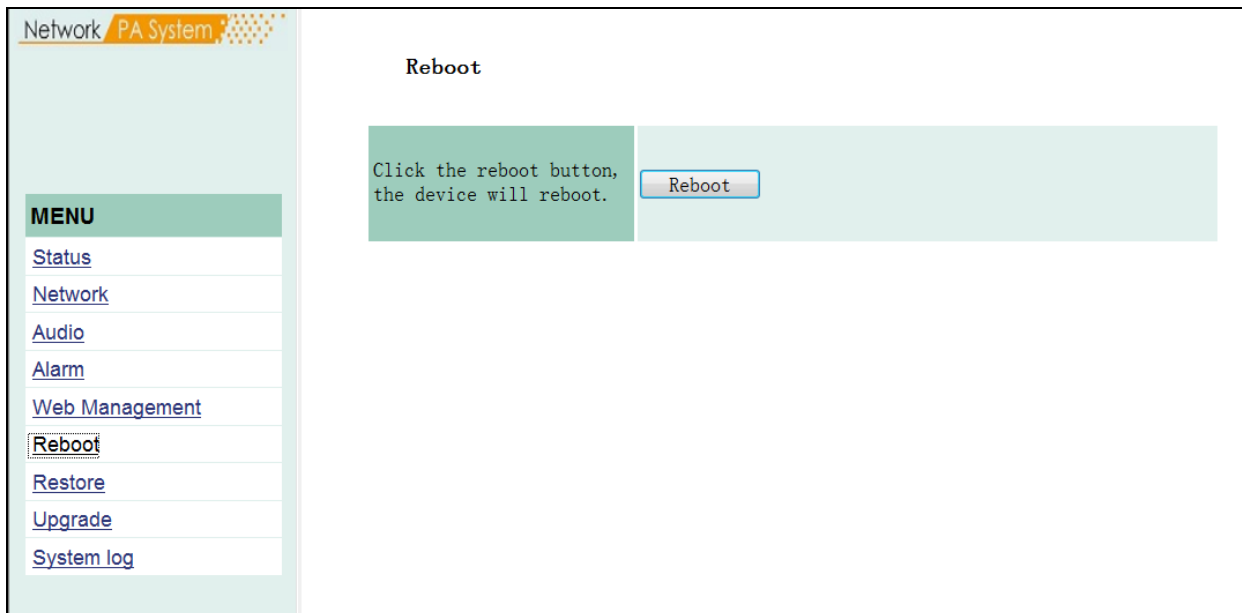
|                   |                                    |
|-------------------|------------------------------------|
| Old user name:    | <input type="text" value="admin"/> |
| Old Password:     | <input type="password"/>           |
| New user name:    | <input type="text"/>               |
| New password:     | <input type="password"/>           |
| Confirm password: | <input type="password"/>           |

## Chapter 4: System setting by browser

### 4.6 Restarting device

#### 4.6 Restarting device

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

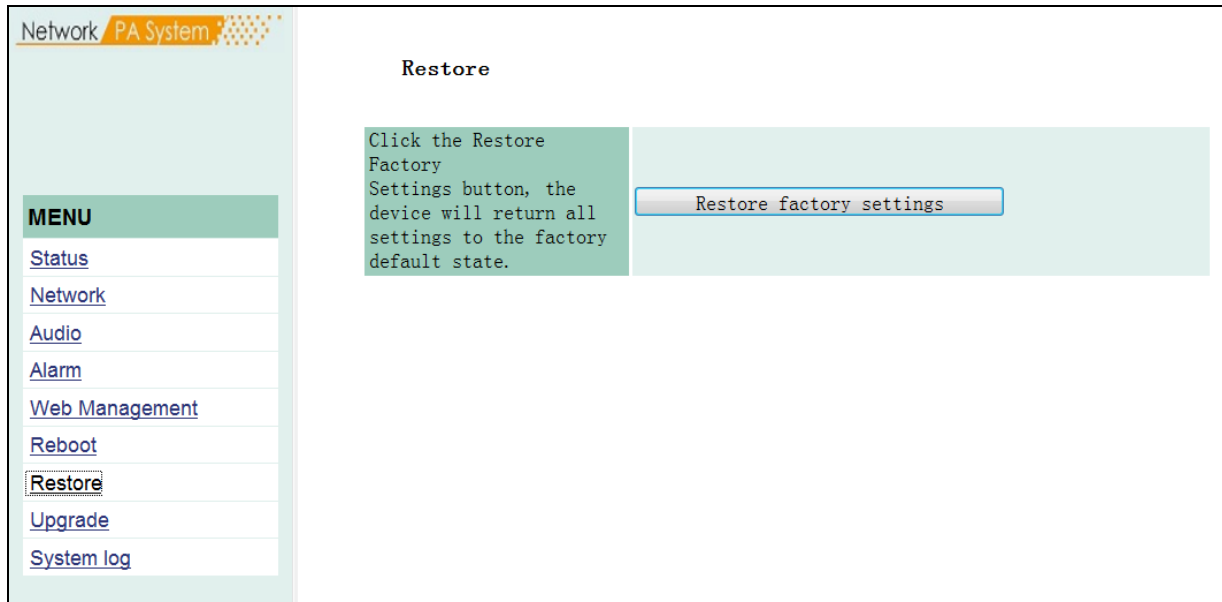


## Chapter 4: System setting by browser

### 4.7 Resetting to defaults

#### 4.7 Resetting to defaults

Resetting defaults: all the parameters will reset to defaults.

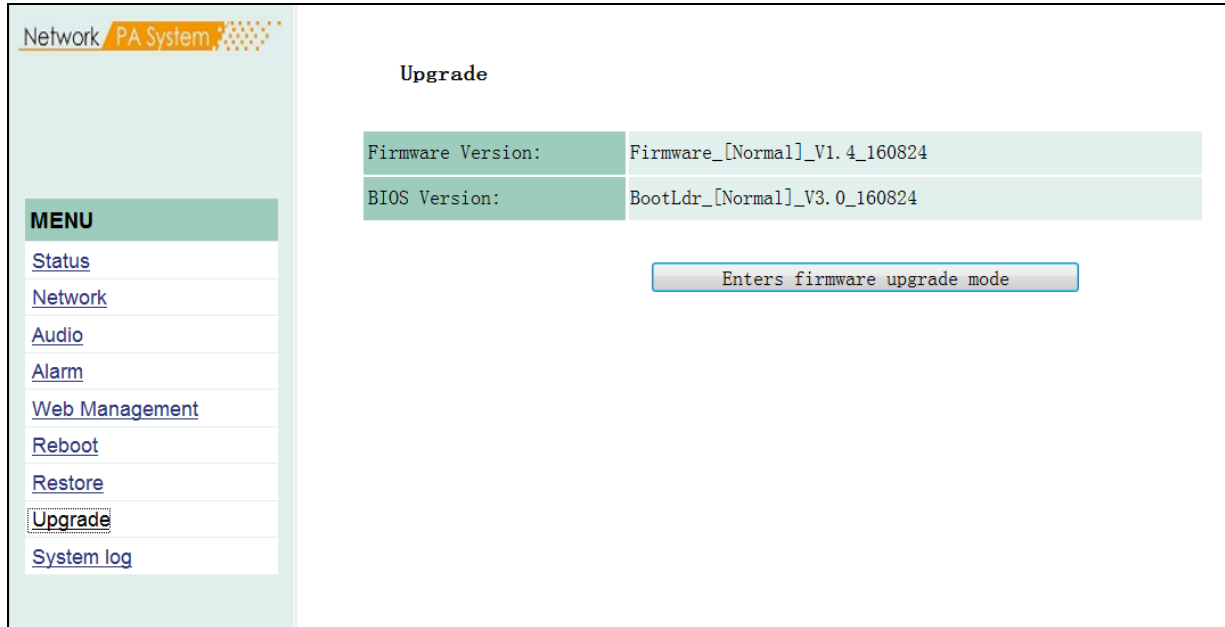


## Chapter 4: System setting by browser

### 4.8 Firmware upgrade

#### 4.8 Firmware upgrade

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



The screenshot displays the 'PA System' web interface. On the left is a 'MENU' sidebar with links: Status, Network, Audio, Alarm, Web Management, Reboot, Restore, Upgrade (highlighted), and System log. The main content area is titled 'Upgrade' and contains a table with current versions:

|                   |                               |
|-------------------|-------------------------------|
| Firmware Version: | Firmware_[Normal]_V1.4_160824 |
| BIOS Version:     | BootLdr_[Normal]_V3.0_160824  |

Below the table is a button labeled 'Enters firmware upgrade mode'.

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

## Chapter 4: System setting by browser

### 4.9 System log

#### 4.9 System log

It can be browsed of the unit log in the Web page, click “delete all logs” can delete all the logs in the Web page.

Network PA System

**MENU**

- Status
- Network
- Audio
- Alarm
- Web Management
- Reboot
- Restore
- Upgrade
- System log**

System Log

| Index | The Log Content                                    |
|-------|--|
| 1     | 08-30 15:26:00 Receive broadcasting: 234.0.0.2 : 0 |
| 2     | 08-30 15:26:00 Receive broadcasting: 234.0.0.2 : 0 |
| 3     | 08-30 15:27:00 Logining: 192.168.1.13 : 2048       |
| 4     | 08-30 15:28:00 Soft reset                          |
| 5     | 08-30 15:28:00 Reboot                              |
| 6     | 08-30 15:28:00 Net status change 1                 |
| 7     | 08-30 15:28:00 Logining: 192.168.1.13 : 2048       |
| 8     | 08-30 15:42:00 Net status change 0                 |
| 9     | 03-04 00:00:00 Reboot                              |
| 10    | 03-04 00:00:00 Net status change 1                 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Refresh

Clear All The Log

***Chapter 5***

---

***Appendix***

## Chapter 5: Appendix

### 5.1 Specification

#### 5.1.1 IP Audio Interface Unit IP-1000AF

|                         |  |
|-------------------------|--|
| Model                   | IP-1000AF  |
| Power                   | DC24V  |
| Power consumption       | Less than 85mA   |
| Audio input             | Range: 1Vrms (Max:2Vrms), unbalanced, impedance 10K $\Omega$   |
| Audio output            | Range: 1Vrms, unbalanced, impedance 600 $\Omega$   |
| Frequency response      | Line input (sampling rates:22K):20~10kHz<br>Line output(mp3/sampling rates:44K):40~15kHz   |
| Control input interface | Open circuit voltage is DC24V, maximum short-circuit electric current $\leq$ 5mA   |
| Relay NC contact        | Control voltage $\leq$ DC30V,control electric current $\leq$ 500mA   |
| Relay COM contact       | Control voltage $\leq$ DC30V,control electric current $\leq$ 500mA   |
| Relay NO contact        | Control voltage $\leq$ DC30V,control electric current $\leq$ 500mA   |
| Network I/F             | 10BASE-T/100BASE-TX,automatically determination  |
| Network protocol        | TCP,UDP,ARP,ICMP,IGMP  |
| Working temperature     | 0 $^{\circ}$ C~+40 $^{\circ}$ C  |
| Working humidity        | Lower than 90%RH(No dew point)   |
| Accessories             | 5P wiring terminal(1PC),4P wiring terminal(1PC),floor mat(10*3)(4PCS)  |
| Optional accessories    | Half device cabinet mounting bracket:MB-IP10B-BK(used for 2 sets of IP-1000AF device cabinet installation)<br>Device cabinet bracket installation:MB-IP10B-J(used for 4 sets of IP-1000AF device cabinet installation) |



