

IP Audio Gateway

User Manual



1 port IP Audio Gateway



2 ports IP Audio Gateway



1 port IP Audio Gateway(build in amplifier)

Contents

1. Brief Introduction.....	1
2. Product Package Content:	2
3. Main body Size	2
4. Panel Introduction.....	3
5. Link schematic diagram	6
6. Web picture	7
7. Set the main interface	9
8. Network (Network Environment)	10
8.1 Status (network status)	10
8.2 WAN Setting (WAN network setting).....	11
8.3 .SNTP Setting.....	12
9. SIP Setting.....	13
9.1 Service Domain (broad system server registration setting).....	13
9.2 Filter Table (The IP list that allow to call-in).....	13
9.3 Port Setting (SIP and RTP port setting).....	15
9.4 Codec Setting (voice format setting).....	16
9.5 Audio Setting (related setting of voice output).....	17
9.6 Music Server	20
9.7 Other Setting	221
10. Update.....	222
10.1 New Firmware	222
10.2 Default Setting.....	224
11. System Authority	225
12. Save Change.....	226
13. Reboot.....	226

1. Brief Introduction

A IP broadcast system is composed of a microphone, broadcast software (Windows computer) and network loudspeaker (or audio receiver). The network loudspeaker is connected through internetwork. The broadcast can be in human voice and scheduling. The scheduling broadcast function is to play audio (MP3/WAV) in computer at appointed time, as well as edit group function to conduct group broadcast or multipoint broadcast. The system composition is simple. It is unnecessary to have wiring or purchase an amplifier or player if there is a network environment. The system's host and loudspeaker shall be set. The audio receivers can be installed in the broadcast system, to have network broadcast function.

2. Product Package Content:

1 port IP Audio Gateway
(built in amplifier)

(1) Host X 1



(2) Ethernet line 2Mx1



(3) Power Adaptor
(output : DC 24V -- 4A) X 1



1 port IP Audio Gateway

(1) Host X 1



(2) Ethernet line 2Mx1



(3) Power Adaptor
(output : DC 12V -- 1A) X 1



(4) 3.5mm (Male) to
RCA(Male) Cable 1.8M x1



2 ports IP Audio Gateway

(1) Host X 1



(2) Ethernet line 2Mx1



(3) Power Adaptor
(output : DC 12V -- 1A)
X 1



(4) 3.5mm (Male) to
RCA(Male) Cable 1.8
M x2

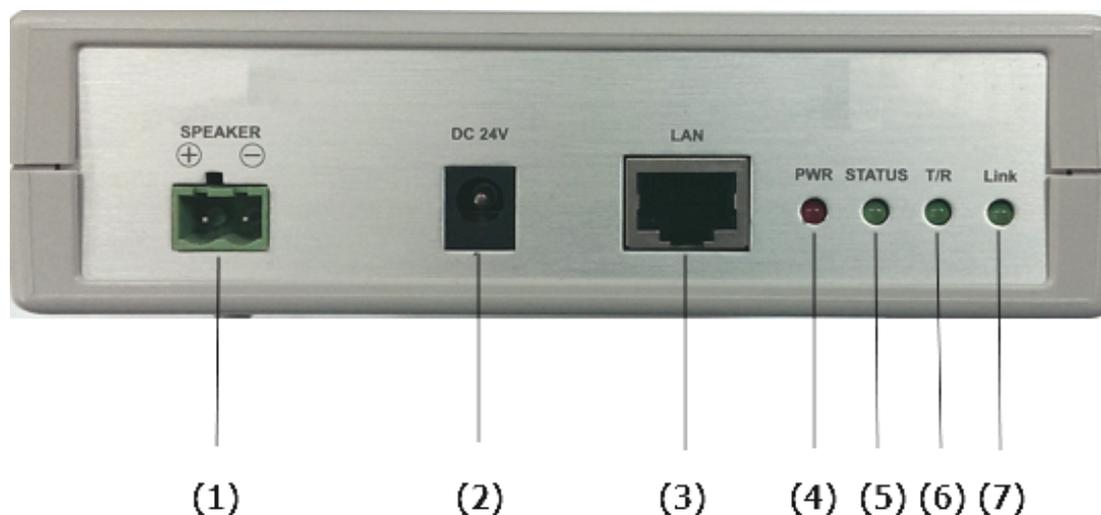


3. Main body Size

(L) 17X (W) 14.5 X (H) 3.9 cm

4. Panel Introduction

4.1 1 port IP Audio Gateway(built in amplifier)



(1)SPEAKER : the contact can be used to connect a loudspeaker with a resistance of 8Ω and a maximum power of 40W

(2)DC 24V : power supply input interface

(3)LAN: network port; insert network line to establish network connection

(4)PWR: power supply indicator lamp

(5)STATUS :indicator lamp of sound output state

Constantly on: Audio Out 2 has sound output

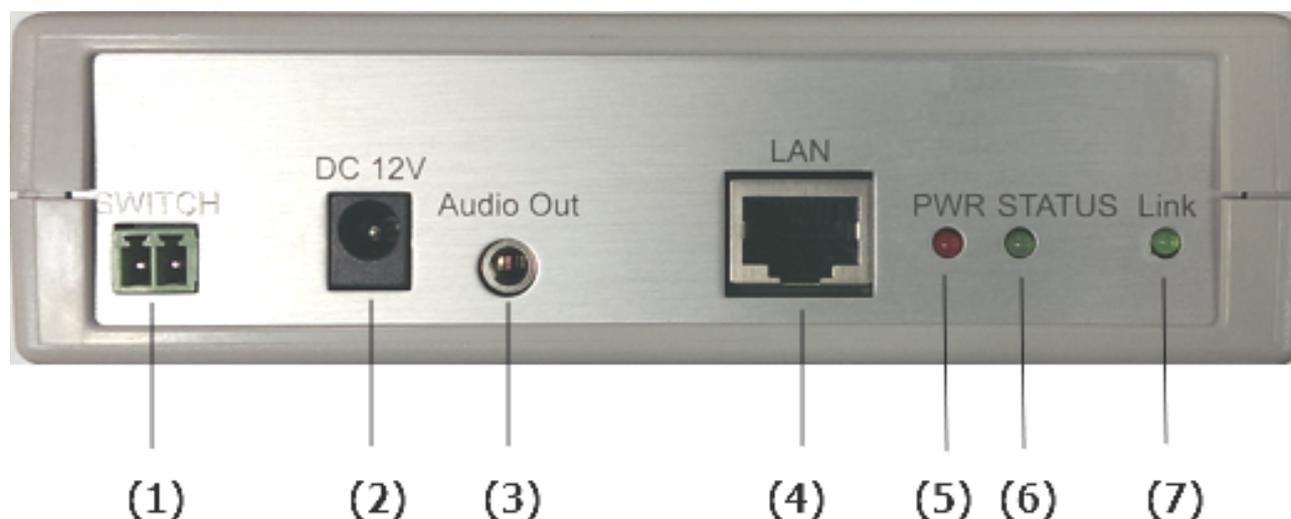
Flash: the broadcast point is successfully registered in the broadcast system server

Off: the broadcast fails in registering in the broadcast system server or no sound is output

(6)T/R : network transmission indicator lamp

(7)Link : network connection indicator lamp

4.2 1 port IP Audio Gateway



(1) SWITCH : can be connected to an amplifier with external start function through the contact.
When Audio outputs the sounds, it can start the amplifier synchronously.

(2) DC 12V: power input port

(3) Audio output : 3.5mm Sound output port

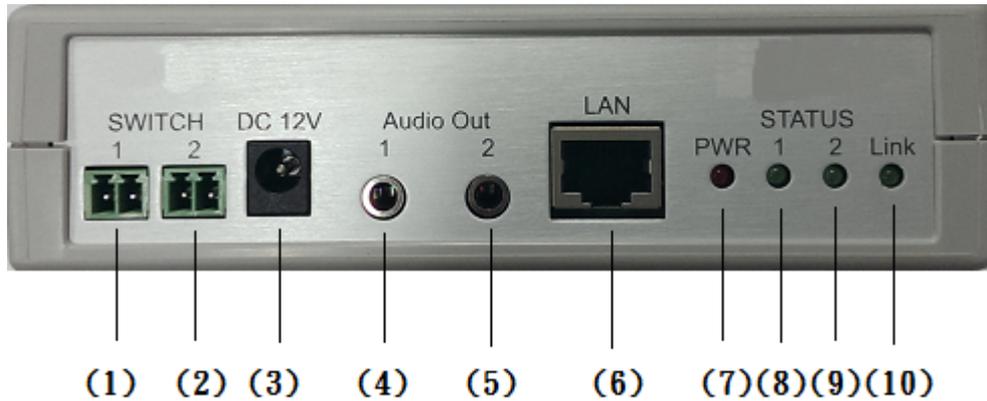
(4) LAN: internet connection port; insert the network cable to establish a network connection

(5) PWR: power indicator

(6) STATUS: sound output status indicator; when the port is outputting sounds, the indicator should be on, otherwise it is off.

(7) Link: network connection indicator

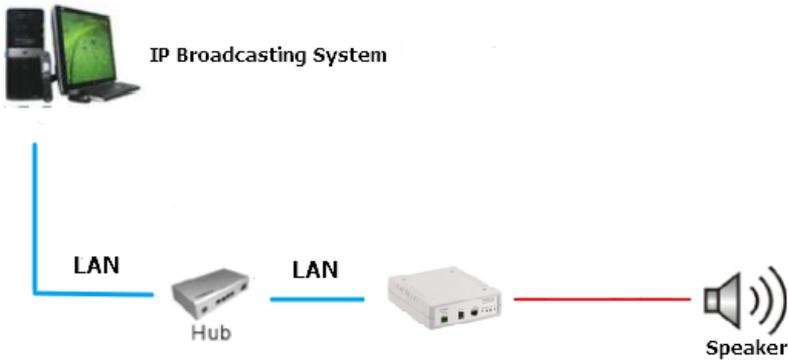
4.3 2 ports IP Audio Gateway



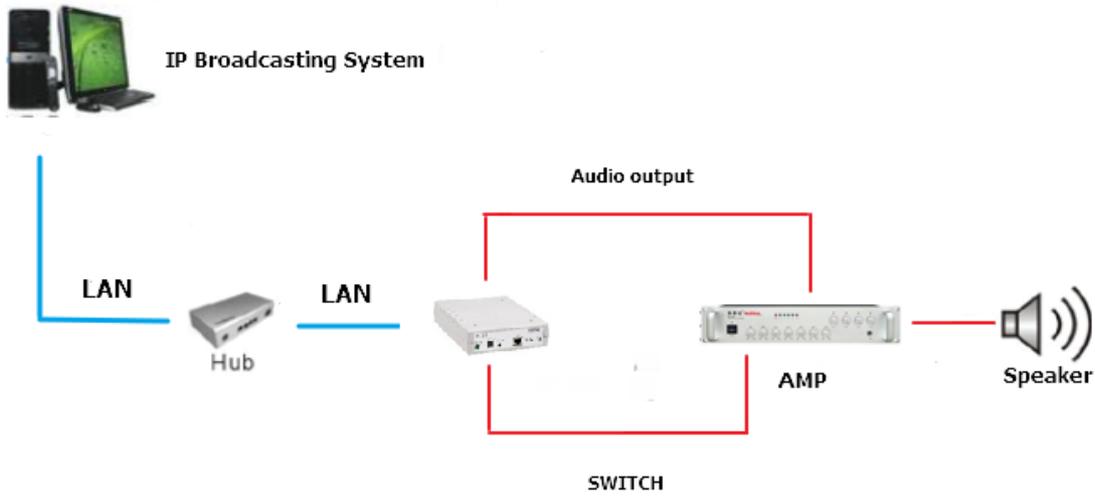
- (1) SWITCH 1: Normally Open 1; can be connected to an amplifier with external start function through the contact. When Audio 1 outputs the sounds, it can start the amplifier synchronously.
- (2) SWITCH 2: Normally Open 2; can be connected to an amplifier with external start function through the contact. When Audio 2 outputs the sounds, it can start the amplifier synchronously.
- (3) DC 12V: power input port
- (4) Audio output 1: 3.5mm Sound output port1
- (5) Audio output 2: 3.5mm Sound output port2
- (6) LAN: internet connection port; insert the network cable to establish a network connection
- (7) PWR: power indicator
- (8) STATUS 1: sound output status indicator; when the port is outputting sounds, the indicator should be on, otherwise it is off.
- (9) STATUS 2 sound output status indicator; when the port is outputting sounds, the indicator should be on, otherwise it is off.
- (10) Link: network connection indicator

5. Link schematic diagram

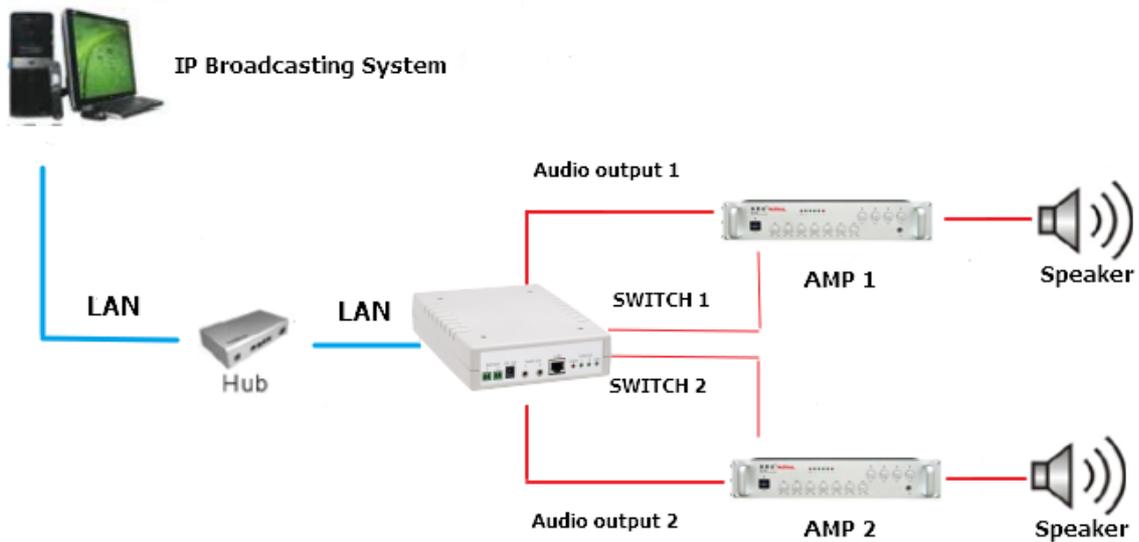
5.1 1 port IP Audio Gateway(built in amplifier)



5.2 1 port IP Audio Gateway



5.3 2 ports IP Audio Gateway



6. Web picture

Step 1: open IE browser (or other browser software), input [http://192.168.0.100]

Step 2: enter [Login WEB] picture, input [Username & Password (defaults: username: voip , Password: 1234)] data, and then click [OK] to enter the equipment management interface after confirming the password is correct (as shown in the following picture).



Step 3: you can see [System Information] interface after entering the system, which provides data of Model Name, Firmware Version and Code Version.

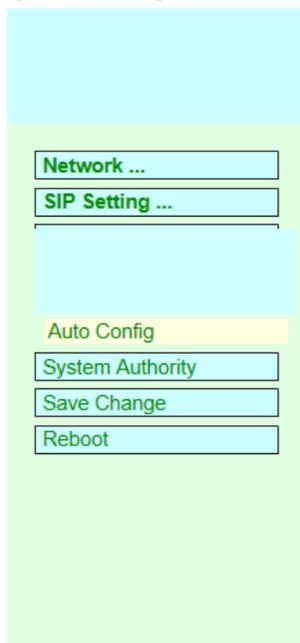
6.1 1 port IP Audio Gateway(build in amplifier)



IP Audio Gateway v1.201

Model Description:	1 port IP Audio Gateway (build in amplifier)
Firmware Version:	Wed Jul 26 11:11:21 2017
Codec Version:	Thu Jul 29 11:15:45 2010

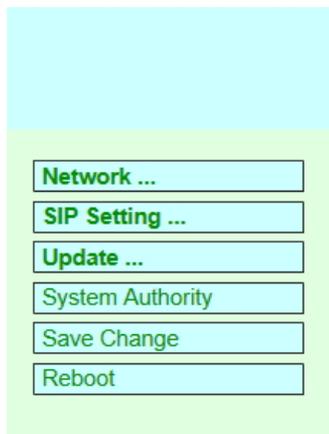
6.2 1 PORT IP AUDIO GATEWAY



IP Audio Gateway v1.201

Model Description:	1 port IP Audio Gateway
Firmware Version:	Wed Jul 26 12:02:53 2017
Codec Version:	Thu Jul 29 11:15:45 2010

6.3 2 PORTS IP AUDIO GATEWAY

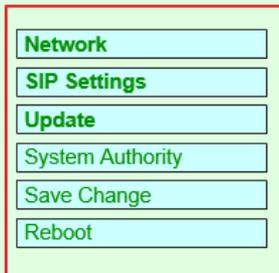


IP Audio Gateway v1.201

Model Description:	2 ports IP Audio Gateway
Firmware Version:	Wed Jul 26 11:50:15 2017
Codec Version:	Thu Jul 29 11:15:45 2010

7. Set the main interface

It provides the following function items: Network, SIP Setting, System Auth, (Account and Password Change), SaveChange, Update and Reboot. Description of function items.



(1)Network : Network provides Status and WAN Setting

(2)SIP Settings : SIP Setting provides Service Domain (SIP registration setting) , Port Setting (SIP and RTP ports setting) , Code Setting (voice format setting) , Audio Setting (loudspeaker volume and sound detection setting) , Other Setting.

(3)Update : Update (firmware updating) provides Firmware (firmware updating) , Default Settings (factory reset).

(4)System Authority : System Auth (Account and Password change) provides change of user's account and password.

(5)Save Change : Save Change provides setting of save change environment.

(6)Reboot : Reboot provides the function of rebooting a device.

8. Network (Network Environment)

8.1 Status (network status)

Network Status (network status) picture shows the date of current network environment status (as shown in the following picture).

Column	Introduction
Master	Show the network environment data of the network port (WAN port)
Type	Show current network connection mode
IP	Show set or gained network address data
Mask	Show set or gained network coding data
Gateway	Show set or gained preset gateway data
MAC	Show MAC position data of the machine

8.2 WAN Setting (WAN network setting)

WAN Setting (WAN network setting) picture provides WAN network connection mode.

WAN Setting	Provide WAN port network environment setting data
IP Type	Preset to be DHCP Client network mode. Provide Fixed IP, DHCP Client (automatically obtain an IP address) and PPPoE mode. Fixed IP: set IP address manually. DHCP Client (automatically obtain an IP address): automatically obtain an IP address. PPPoE (connect PPPoE): adopt PPPoE connection mode.
IP	Show IP address data. Show gained or set IP address data.
Mask	Show subnet mask data. Show gained or set subnet mask address data.
Gateway	Show preset gateway data. Show Show gained or set preset gateway address data.
DNS Server1	Preset to be 168.95.192.1; show gained or set first DNS server's address data; IP or Domain Name can e input
DNS Server2	Preset to be 168.95.1.1; show gained or set second DNS server's address data; IP or Domain Name can e input
MAC	Show MAC position data of the machine
PPPoE Setting	Provide PPPoE connection data
User Name	Set connection account name, in which figures or strings are available
Password	Set connection account password, in which figures or strings are available
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

8.3 SNTP Setting

SNTP Setting picture provides server address and timing time.

Column	Introduction
SNTP	Preset to be On (start); timing function. Turn off timing function when it is set to be Off.
Primary Server	Preset to be time.windows.com; the first syn-position timing server address. Input IP or Domain Name address.
Secondary Server	Preset to be 208.184.49.9; the second syn-position timing server address. Input IP or Domain Name address.
Time Zone	Preset to be GMT + 08:00 (hh:mm); timie zone material.
Sync. Time	Preset to be 1:00:00 (1 day); timing time. Correct the host time every a certain peroid.
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

9. SIP Setting

9.1 Service Domain (broad system server registration setting)

Service Domain (registration setting) picture provides registration account data and state of setting the broadcast system server.

Column	Introduction
Active	Preset to be Off; put the account into use. Put the registration account into use when it is set to be On.
Register Name	Input registration name data. Input digits or string.
Register Password	Input registration password data. Input digits or string.
IPB Server	Input the registration broadcast system's server data. Input IP or Domain Name address.
Status	Show current registration status data. Not Register (failed) , Register (successful).
IBS	If register to IBS system, please tick

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

9.2 Filter Table (The IP list that allow to call-in)

Can set 16pcs IP that allow to call-in.

Normal, user can set your IBS IP. Only IBS system can connect with device and send audio to avoid to unidentified IP to connect and send audio.

Network ...

SIP Setting ...

Service Domain

Filter Table

Port Setting

Codec Setting

Codec ID Settings

Audio Setting

Music Server

Other Settings

Update ...

System Authority

Save Change

Reboot

Filter Table

*: Click Remark or Caller URI data field to entry ...

No.	Remark	Caller URI	SEL
1			<input type="checkbox"/>
2			<input type="checkbox"/>
3			<input type="checkbox"/>
4			<input type="checkbox"/>
5			<input type="checkbox"/>
6			<input type="checkbox"/>
7			<input type="checkbox"/>
8			<input type="checkbox"/>
9			<input type="checkbox"/>
10			<input type="checkbox"/>
11			<input type="checkbox"/>
12			<input type="checkbox"/>
13			<input type="checkbox"/>
14			<input type="checkbox"/>
15			<input type="checkbox"/>
16			<input type="checkbox"/>

Address:

Column	Introduction
Remark	the annotations for this ip
Caller URI	input the ip that allow to call-in. example IBS IP or Music Server IP or IP PBX IP

*if user don't set any ip in table, it mean no filter ip

9.3 Port Setting (SIP and RTP port setting)

Port Setting (SIP and RTP port setting) picture provides setting of SIP and RTP communication port positions.

Ports Setting

SIP Port	5060	(1024-65533)
RTP Port	20000	(1024-65533)

Column	Introduction
SIP Port	Preset to be 5060; set SIP port position.
RTP Port	Preset to be 20000; set RTP port position.
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

*

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

9.4 Codec Setting (voice format setting)

Code Setting (voice format setting) picture provides Codec format priority, RTP package size and VAD function.

Navigation menu:

- Network
- SIP Settings
- Service Domain
- Port Setting
- Codec Setting**
- Audio Setting
- Other Settings
- Update
- System Authority
- Save Change
- Reboot

Codec Setting

Codec Priority	
Codec Priority 1:	G.711 u-law ▾
Codec Priority 2:	G.711 a-law ▾
Codec Priority 3:	Not Used ▾
Codec Priority 4:	Not Used ▾
Codec Priority 5:	Not Used ▾
Codec Priority 6:	Not Used ▾
Codec Priority 7:	Not Used ▾
Codec Priority 8:	Not Used ▾

RTP Packet Length	
G.711 & G.729:	20 ms ▾
G.723:	30 ms ▾

G.723 5.3K	
G.723 5.3K	<input type="radio"/> ON <input checked="" type="radio"/> OFF

Voice VAD	
Voice VAD	<input type="radio"/> ON <input checked="" type="radio"/> OFF

Column	Introduction
Codec Priority	Provide format priority of using voice.
Codec Priority 1	Preset to be G.711 u-law; the first syn-position voice format. Provide No used, G.711u-law, G. 711a-law, G.723 , G.279 , G.726–16 , G.726–24 , G.726–32 , G.726–40 and so on.
Codec Priority 2	Preset to be G.711 u-law; the second syn-position voice format.
Codec Priority 3	Preset to be G.723; the third syn-position voice format.
Codec Priority 4	Preset to be G.729; the fourth syn-position voice format.
Codec Priority 5	Preset to be G.726-16; the fifth syn-position voice format.
Codec Priority 6	Preset to be G.726-24; the sixth syn-position voice format.
Codec Priority 7	Preset to be G.726-32; the seventh syn-position voice format.
Codec Priority 8	Preset to be G.726-40; the eighth syn-position voice format.
RTP Packet Length	Provide data of setting RTP package length
G.711 & G.729	Preset to be 20ms; G,711& G.729 package length Provide 10ms , 20ms , 30ms , 40ms , 50ms , 60ms , 70ms , 80ms , 90ms and other formats.
G.723	Preset to be 30ms; G,723 package length Provide 30ms , 60ms , 90ms and other formats.
G.723 5.3K	Provide data of setting G.726 5.3K
Voice VAD	Preset to be Off; G.723 5.3K function. Start 5.3K when it is set to

	be On.
Voice VAD	Provide data of setting Voice VAD
Voice VAD	Preset to be Off; voice detection function. Use VAD function when it is set to be On.
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

9.5 Audio Setting (related setting of voice output)

Provide setting of equipment volume and status

9.5.1 1 Port IP Audio Gateway(build in amplifier)

Column	Introduction
Message to IBS	Default:ON. Active device to send specific message to IBS System or not.
Recept IBS IP Callin only	Default:OFF.. If only allow IBS IP that can connect this device or not.
Output Level	Preset to be 45; set output volume level of audio 1, maximum is 64 and minimum is 0.
RTP Timeout	Preset to be 10s: it can be set that the machine restores to idle status for a certain period during which the RTP package of the broadcast system server is not received
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

* Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

9.5.2 1 Port IP Audio Gateway

Network ...

SIP Setting ...

Service Domain

Filter Table

Port Setting

Codec Setting

Codec ID Settings

Audio Setting

Music Server

Other Settings

Audio Setting

Message to IBS: ON OFF

Recept IBS IP callin only: ON OFF

Output Level: (64-0)

RTP Timeout: seconds (0: disable)

ANS Delay: seconds (0: disable)

Switch Mode: ON/OFF. Trigger

Column	Introduction
Message to IBS	Default:ON. Active device to send specific message to IBS System or not.
Recept IBS IP Callin only	Default:OFF.. If only allow IBS IP that can connect this device or not.
Output Level	Preset to be 64; set output volume level of audio 1, maximum is 64 and minimum is 0.
RTP Timeout	Preset to be 10s: it can be set that the machine restores to idle status for a certain period during which the RTP package of the broadcast system server is not received
ANS Delay	Set answer delay time
Switch Mode	Default:ON/FF:when device connect,dry contact will be NC, otherwise will be NO. Set as Trigger: when device connect, dry contact will be NC for one second,then change to NO
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

9.5.3 2 Ports IP Audio Gateway

Network ...

SIP Setting ...

Service Domain

Filter Table

Port Setting

Codec Setting

Codec ID Settings

Audio Setting

Music Server

Other Settings

Update ...

System Authority

Save Change

Reboot

Audio Setting

Message to IBS: ON OFF

Recept IBS IP callin only: ON OFF

Output 1 Level: (64~0)

Output 2 Level: (64~0)

RTP Timeout: seconds (0: disable)

ANS Delay: seconds (0: disable)

Switch Mode: ON/OFF. Trigger

Column	Introduction
Message to IBS	Default:ON. Active device to send specific message to IBS System or not.
Recept IBS IP Callin only	Default:OFF.. If only allow IBS IP that can connect this device or not.
Output 1 Level	Preset to be 64; set output volume level of audio 1, maximum is 64 and minimum is 0.
Output 2 Level	Preset to be 64; set output volume level of audio 2, maximum is 64 and minimum is 0.
RTP Timeout	Preset to be 10s: it can be set that the machine restores to idle status for a certain period during which the RTP package of the broadcast system server is not received
ANS Delay	Set answer delay time
Switch Mode	Default:ON/FF:when device connect,dry contact will be NC, otherwise will be NO. Set as Trigger: when device connect, dry contact will be NC for one second,then change to NO
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

9.6 Music Server

Device can connect extra music server. Music server can play MP3/WAV file to device

Music Server

2019-11-25 16:56

Channel	
Active	<input type="radio"/> Yes <input checked="" type="radio"/> No
SID	IS-0165D3-0
Name	<input type="text"/> (site description...)
Server	<input type="text"/>
Status:	Not Registered

submit reset call cut

Column	Introduction
Active	Default:No; active device to connect with music server or not
SID	the identification code that connect to music server
Name	define the display name that connect to music server
Server	set music server's ip and port (default port:6060)
Status	display the staus if register to music server or not.
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

9.7 Other Setting

Other Setting interface provides SIP Expire Time

Other Setting

SIP Expire Time: (30~86400 sec)

Caller Hold: Disconnet Quiet Music

Call waiting: Reject Replace

Ring Only on Call-in: ON OFF

Ring Only Timeout: (1 ~ 9999 sec, 0: forever)

SIP Expire Time	Preset to be 60; set registration interval; data setting section (30-86400).
Caller Hold:	Default:Disconnet ;Suggest to set default
Call waiting	Default:Replace ; Replace : stop current broadcasting and accept next broadcasting Reject : finish current broadcasting and reject next broadcasting schedule
Ring Only on Call-in	Default:OFF ; Set ON: If want to register IP PBX as extension and make as a telephone amplifier,you can set On. When incoming call in ip pbx, device can ring as a telephone amplifier
Ring Only Timeout	if above item set ON. The time out default :30 second (1~9999 sec) . if set 0,device will ring continuity
CutLine	Interrupt present sound output and restore to idle status
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

*** Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically ***

10. Update

10.1 New Firmware

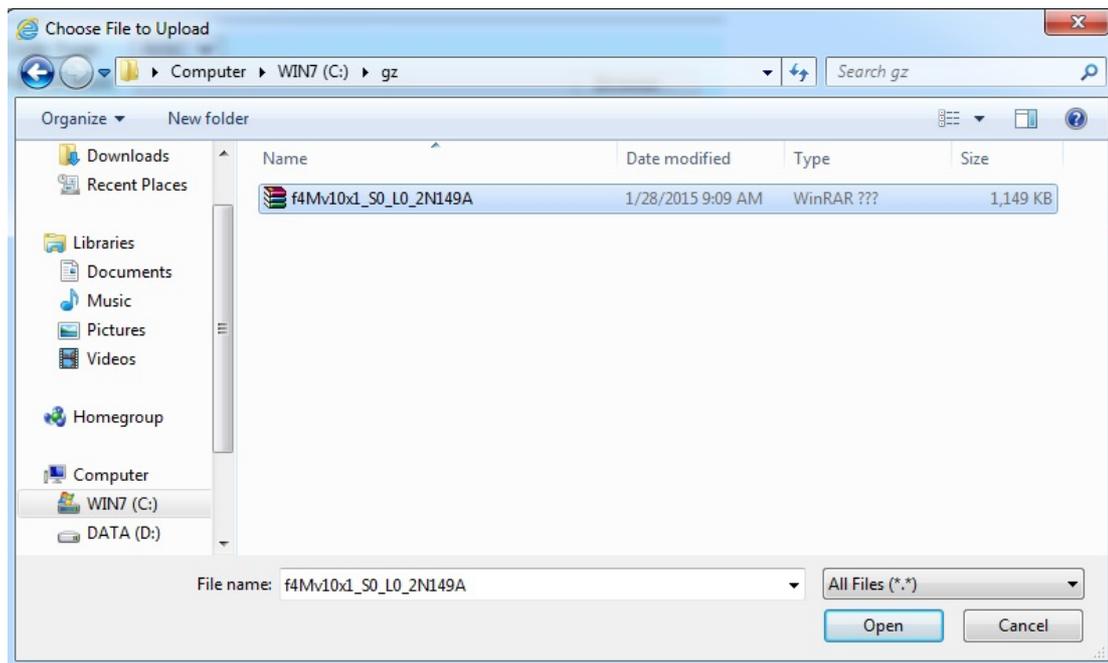
Code Type	Preset to be Risc (.gz). Select the type of documents to be updated. Provide Risc (system firmware. gz) and DSP (DSP firmware. ds) updating modes.
File Location	Input file position or name to be updated or press [Browse] to select file data; version name of the file to be updated.
Submit[key]	Execute storage and change setting.
Reset [key]	Clear input data.

Step 1: click [Updte→New Firmware] on the surface to enter [Update Firmware], to set version to be updated and select Code Type: Risc, then set File Location data, to set [Broswe] key (as shown in the following picture).

Update Firmware

Ver = v1.130, GZ = r4IPA,x1, PCB = IS640.

Step 2: enter [select file] interface, to select [gz] file to be updated [for example, VP5110_70105.gz], and then press [open] (as shown in the following picture), to return to the main interface.



Step 3: back to [Update Firmware], wherein [File Location] has data to be updated if it is confirmed to be correct; please press [Submit] to start updating (as shown in the following picture).

Update Firmware

Ver = v1.130, GZ = r4IPA,x1, PCB = IS640.

Code Type:	<input type="text" value="RISC"/>
File Location:	<input type="text" value="C:\gz\f4Mv10x1_S0_L0_2N149A.gz"/> <input type="button" value="Browse..."/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Step 4: enter [information prompt] picture, showing [please do not pull out power supply equipment at random in version updating, the updating time is about 3 minutes] (as shown in the following picture).

Note Information

Waiting Message

waiting for system updating & rebooting...

Step 5: back to the main interface after firmware updating, please press [reload (F5)]. Conduct other settings.

10.2 Default Setting

Restore Default Setting provides data content of all change setting (not containing data in Network) to restore default setting value; the system will automatically restart.



Column	Introduction
Restore [key]	Remove all change setting data to restore default setting.

Step 1: click [Update→Default Setting] in the main interface to enter [Restore Default Settings].

Please press [Restore] to restore default, to clear all settings and restart the equipment automatically (as shown in the following figure).

Restore Default Settings

Restore default settings:

Step 2: enter the informatoin prompt interface to finish clear setting and restart the system, please wait (as shown in the following picture).

Note Information

Booting

Please wait for a moment while rebooting ...

Step 3: back to the main interface after starting up, please press [reload (F5)] Conduct other settings.

11. System Authority

Set system authority

Column	Introduction
New username	Input the new user's data Input digits or string.
New password	Input new password Input digits or string.
Confirmed password	Input and confirm password Input digits or string.
Submit [key]	Execute storage and change setting.
Reset [key]	Clear input data.

Press [submit] to finish storage setting after changing the data to be adjusted, and select the main menu's [SaveChange], to execute storage change setting, the system will restart automatically *

12. Save Change

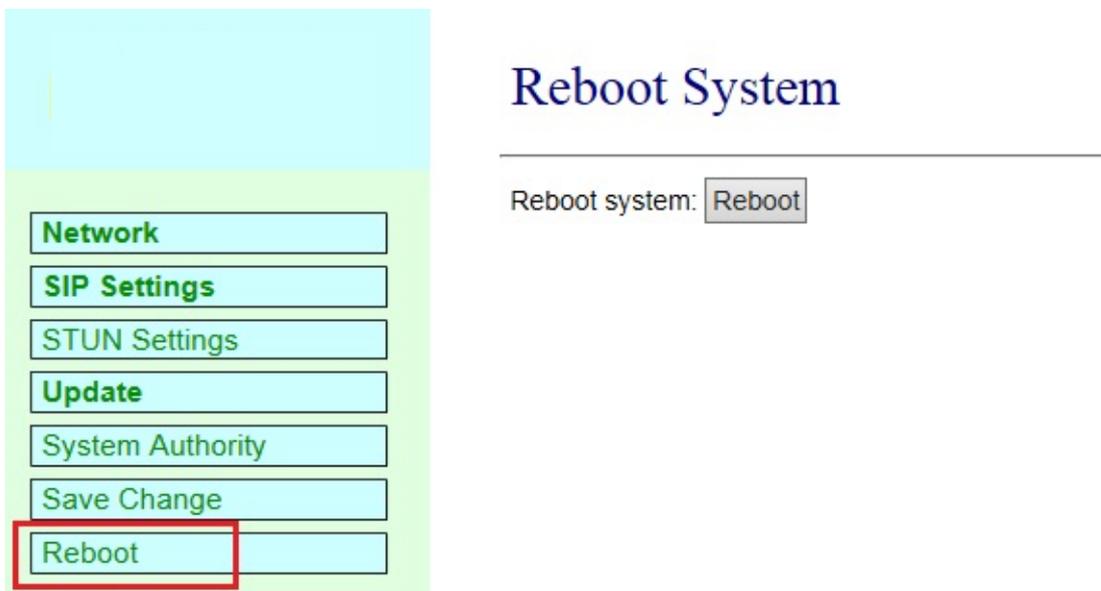
Save Changes provides save changes setting and restart system automatically.



Column	Introduction
Save [key]	Execute storage and change setting.

13. Reboot

Reboot System interface provides manual reboot.



Step 1: click [Reboot] in the main interface to enter [Reboot System] and then press [Reboot] to reboot the system (as shown in the following picture).

Reboot System

Reboot system:

Column	Introduction
Reboot [key]	Reboot the equipment

Step 2: enter the information prompt interface, showing that the system is rebooting, please wait (as shown in the following picture); do not pull out power supply equipment at random at the moment.

Note Information

Booting

Please wait for a moment while rebooting ...

Step 3: back to the main interface after starting up, please press [reload (F5)] to conduct other environment settings.