IS-381/IS-382/IS-3840

IP Audio Gateway

User Manual

IS-381

IS-382

IS-3840

PORTech Communications Inc.

Contents

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:

IS-3840	IS-381	IS-382
(1) Host X 1	(1) Host X 1	(1) Host X 1

(2) Ethernet line 2Mx1

(3) Power Adaptor

   (output : DC 24V -- 4A) 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) Ethernet line 2Mx1

(3) Power Adaptor

   (output : DC 12V -- 1A)   X 1

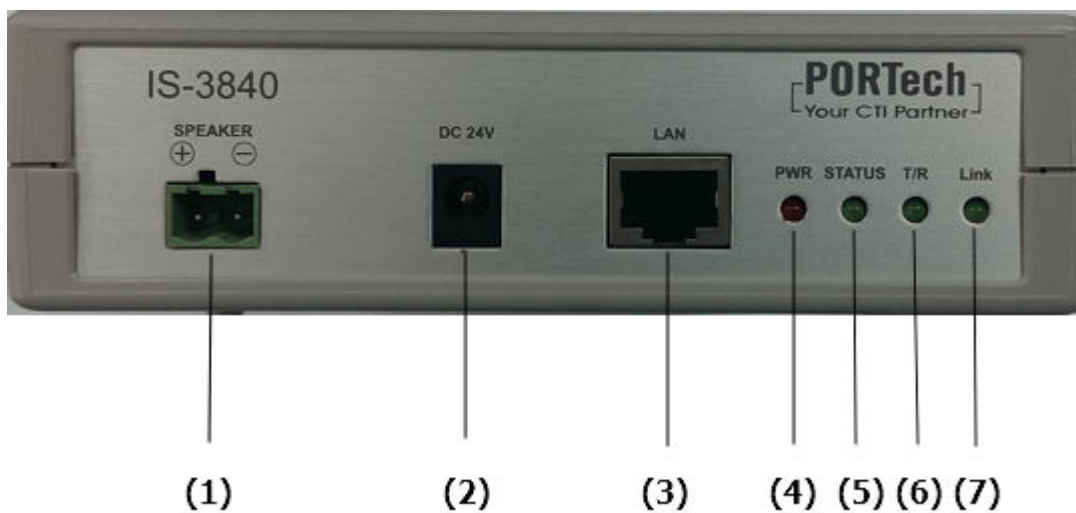(4) 3.5mm (Male) to
RCA(Male) Cable   1.8M x2

3. Main body Size

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

4. Panel Introduction

4.1 IS-3840

(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

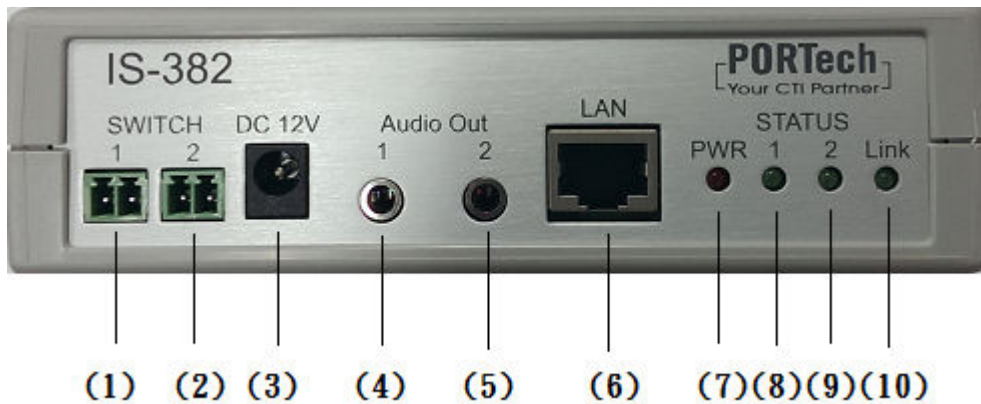   Constantly on: Audio Out 2 has sound output

    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

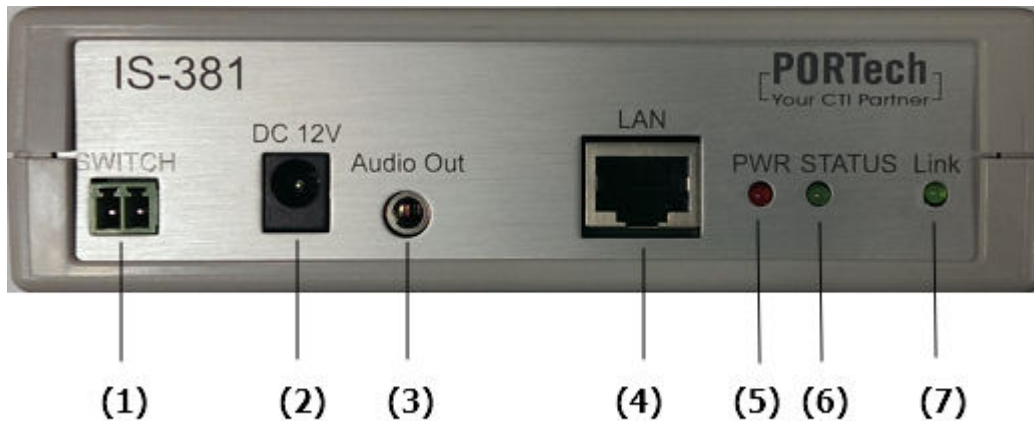**(6)T/R** : network transmission indicator lamp

(7)Link : network connection indicator lamp

4.2　IS-382

(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

4.3 IS-381

(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
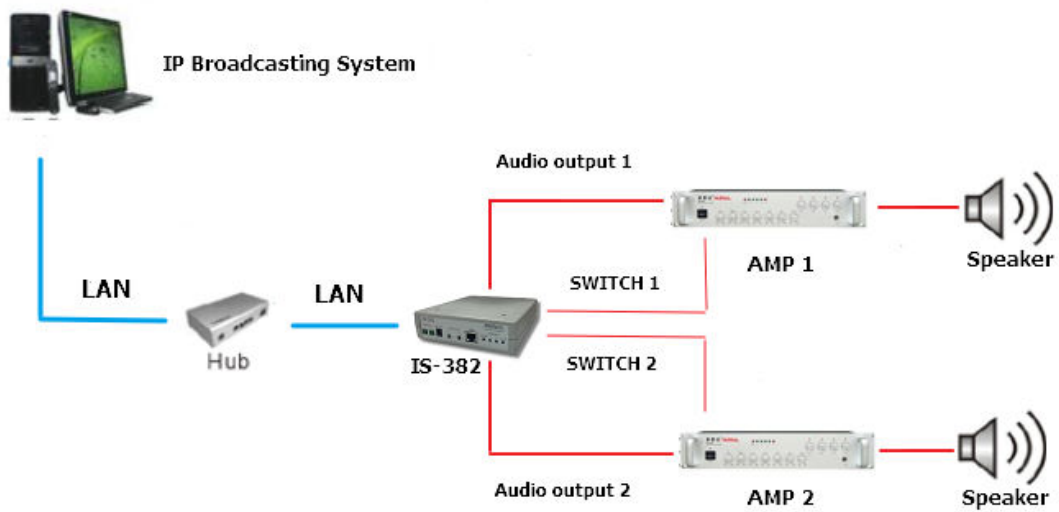
5. Link schematic diagram

5.1 IS-3840
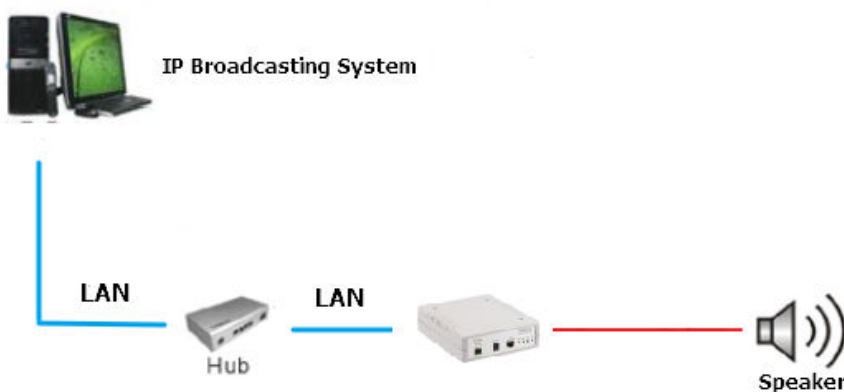
5.2 IS-381
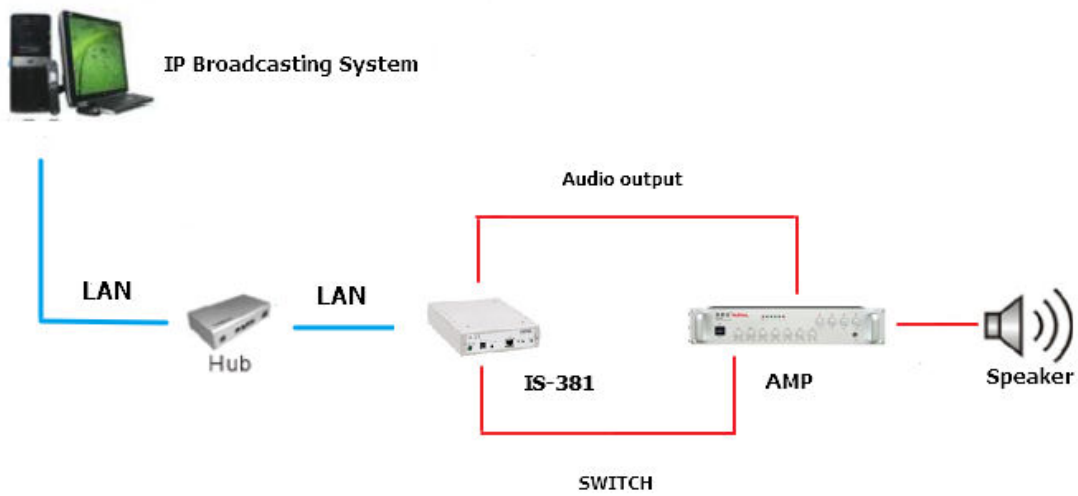
5.3 IS-382

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
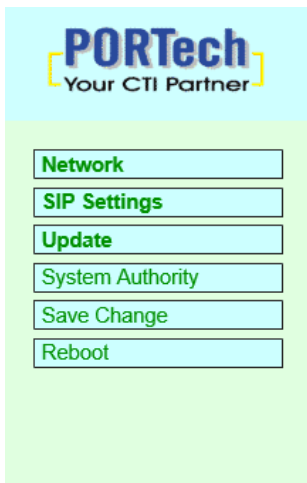of Model Name, Firmware Version and Code Version.

6.1 IS-3840

6.2 IS-381

6.3 IS-382

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.
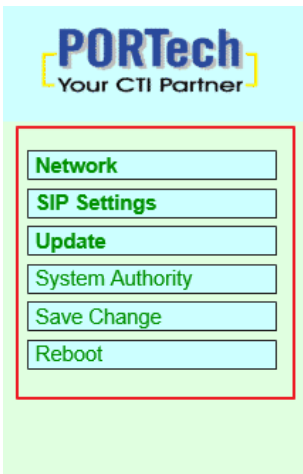
(1)Network：Network provides Status and WAN Setting

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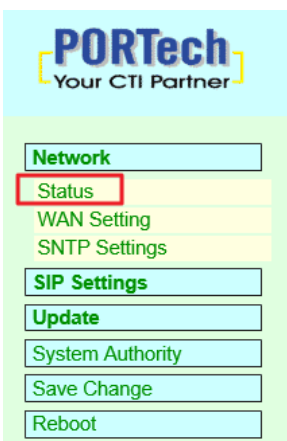
(6)Reboot：Reboot provides the function of rebooting a device.

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).

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 Port Setting (SIP and RTP port setting)

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

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 *

9.3 Codec Setting (voice format setting)

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

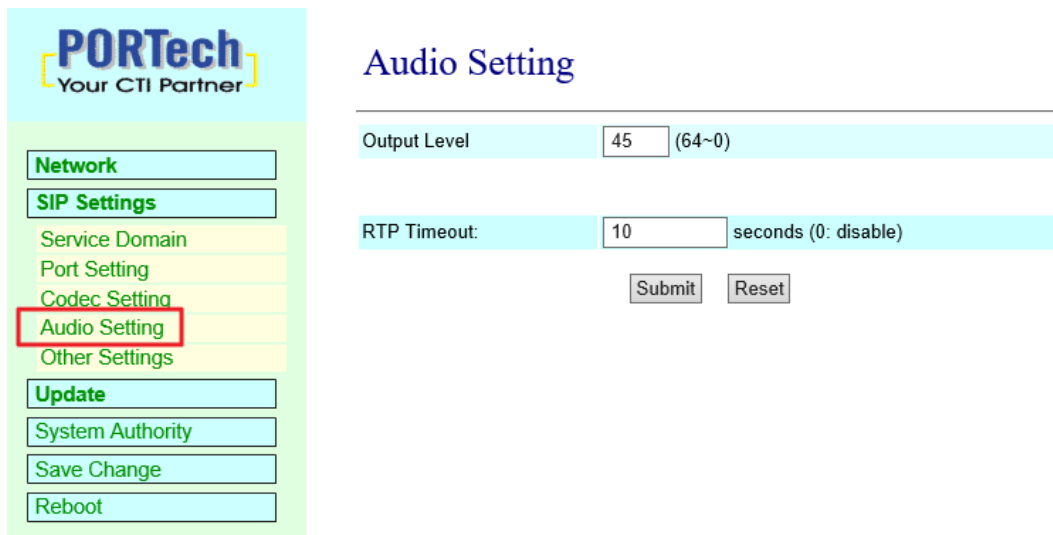| Column	Introduction
Codec Priority	Provide format priority of using voice.
Codec Priority 1	Preset to be G.711 u-law; the first syn-position voice format. Provide No used, G.711u-law, G. 711a-law, G.723，G.279，G.726–16，G.726–24，G.726–32，G.726–40 and so on.
Codec Priority 2	Preset to be G.711 u-law; 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 *

9.4 Audio Setting **(related setting of voice output)**

Provide setting of equipment volume and status

9.4.1 IS-3840

9.4.2 IS-381

9.4.3 IS-382

Column	Introduction
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
ANS Delay	Set answer delay time
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 Other Setting

Other Setting interface provides SIP Expire Time

SIP Expire Time	Preset to be 60; set registration interval; data setting section (30-86400).
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 positon 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).
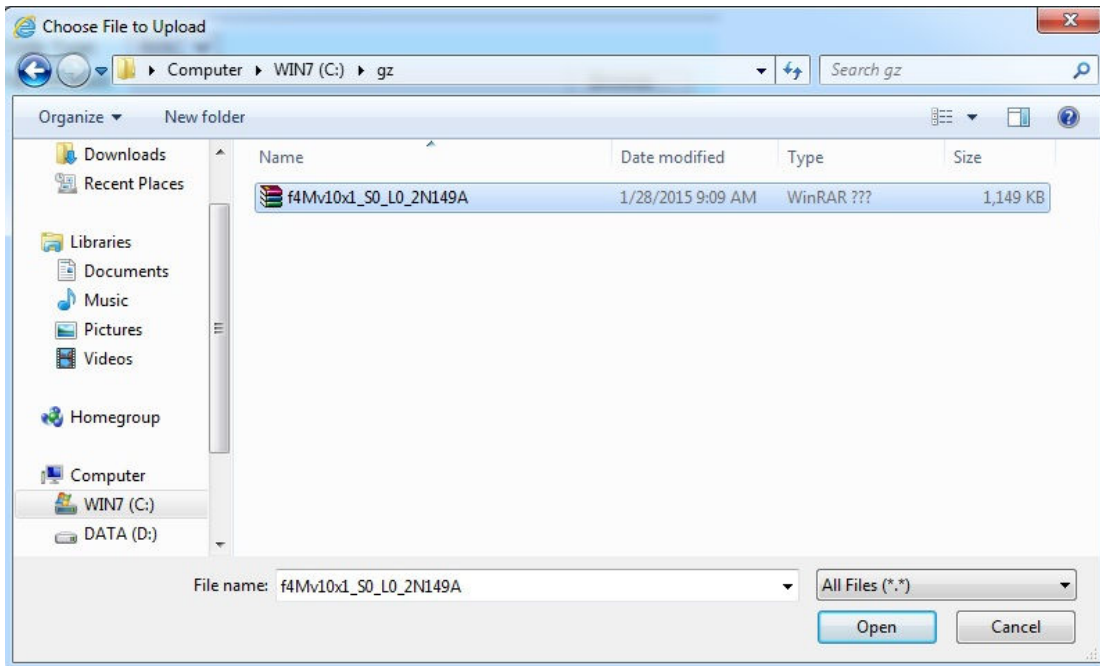
Step 2: enter [select file] interface, to select [gz] file to be updated [for example, VP5110_70105.gz], and then press [open] (as shown in the following picture), to return to the main interface.

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:	RISC ⌄	
File Location:	C:\gz\f4Mv10x1_S0_L0_2N149A.gz	Browse...

Submit   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 ficture).

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

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 *
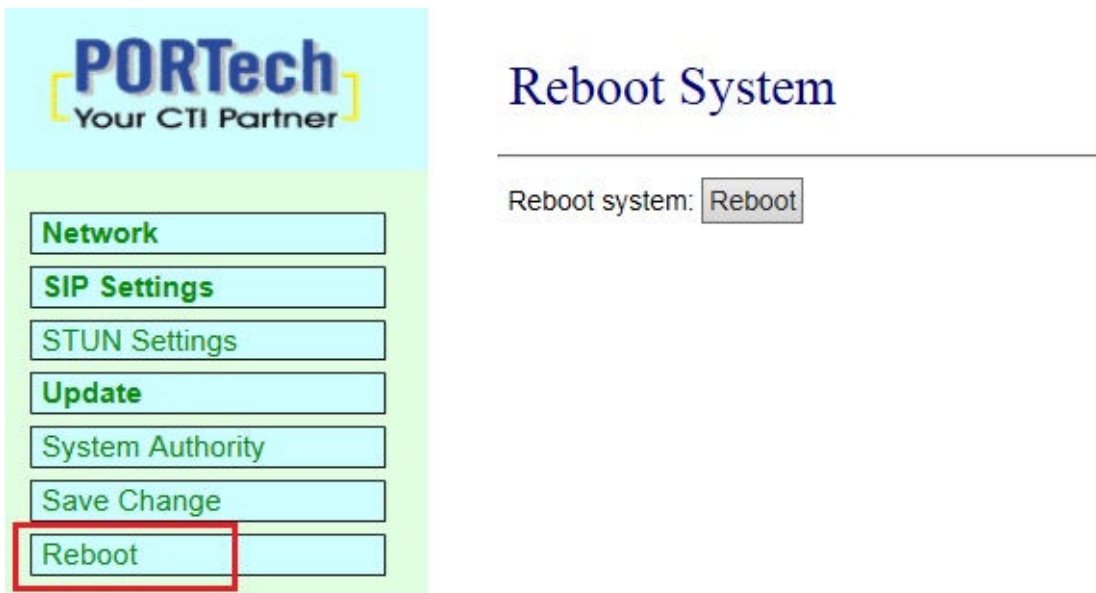
12. Save Change

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: Reboot

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.