

Two Handset VOIP Phone

Model: D2200-SIP

User Manual





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| 1 | Introduction | | 4 |
|---------------------|--|----|------|
| 1.1 | Hardware Overview | | 4 |
| 1.2 | Software Overview | 6 | |
| 2 | Setup the IP Phone system by using Web Browser | | 6 |
| 2.1 | Login | | 7 |
| 2.2 | System Information | | 7 |
| 2.3 | Speed Dial Settings | 8 | |
| 23.1 | Setting Speed Dial via web page 8 | | |
| 232 | Setting Speed Dial by keyped | | |
| 2.4 | Phone Settings | | 9 |
| 2.4.1 | Call Forward | | 9 |
| 2.4.2 | SNTPSettings | | . 10 |
| 2.4.3 | Volume Settings | 10 | |
| 2.4.4 | Melody Settings | | 11 |
| 2.4.5 | DND Settings | | 11 |
| 2.4.6 | Dial Plan | | 12 |
| 2.4.7 | Call Waiting Settings | | 13 |
| 2.4.8 | Alarm Settings | | 14 |
| 2.5 | Network | | 14 |
| 2.5.1 | WAN Settings | | 14 |
| 2.5.2 | LAN Settings | | 16 |
| 2.5.3 | VLANSettings | | 17 |
| 2.5.4 | DMZ Settings | | 17 |
| 2.5.5 | PPTPSettings | 18 | |
| 256 | LLDP Setrgs | | 18 |
| 2 <u>5</u> .7 19 | Manually set Network Mode of WAN | | |
| 258 | DHCP Optim 66 | | 19 |
| 2.6 | SIPSettings | | 20 |
| 2.6.1 | Service Domain | | 20 |
| 2.6.2 | Port Settings | | 21 |
| 2.6.3 | Codec Settings | 22 | |
| 2.6.4 | Codec ID Settings | | . 23 |
| 2.6.5 | DTMF Settings | | 24 |
| 2.6.6 | STUNSettings | | 24 |
| 2.6.7 | Other Settings | | 24 |
| 2.7 | Others | | 27 |
| 2.7.1 | Config Speed Dial | 27 | |
| 2.7.2 | Auto Config | | 28 |

| 2.7.3 | Advanced Settings | 30 |
|---------|--------------------------|----|
| 2.8 | Update | |
| 2.8.1 | Auto Update | |
| 2.8.2 | Update System | 31 |
| 2.8.3 | Default Settings | 32 |
| 2.9 | System Auth. | 32 |
| 2.10 | Save Change | 33 |
| 3 34 | Copyright and Trademarks | |

1 Introduction

Before using the SIPPhone, some configurations are required to make the IP Phone work properly. The manual will illustrate how to configure the ip phone via web page

1.1 Hardware Overview

Two RJ-45Networking interfaces support 10/100Mps FastEthernet. User can connect WAN port to ADSLor Soft PBX, the LANport to PCcomputer. The default setting of WAN port is a DHCPclient. The IP address of LANport is 192.168.2.1.

One 3.5mm Headset jack is used to connect only Apple Type Headphone with Mic. (User can only control the headset volume by the Volume-Control keys on the top of the phone)

One mute LED, one on-hold LED, one hand-free LED and one LED that combine functions of ringer and message-waiting.

The power is only supplied by switch hubs with POE(Power over Ethernet). There is no any jack for external power adaptor.



1.2 Software Overview

| Network Protocol | Codec |
|---|--|
| z SIP 2 (RFC3261) z IP/TCP/UDP/RTP/SNTP z DHCPClient/PPPoE Client/PPTP Client z LLDP-MED z HTTP Server z DNSClient | z G711 aLaw z G711 uLaw z G722 z G723 z G729 z iLBC |
| Voice Quality | Tone |
| ^z Comfortable noise generator ^z Voice Activity Detector ^z Voice QoS ^z SIPQoS ^z Jitter Buffer | Ring Tone 350Hz/440Hz Dial Tone 400Hz Dial Tone Busy Tone |
| Phone Function | Call Function |
| z Speeddial key z Volume Adjustment z 8 types of ringing melody z Do Not Disturb z Schedule Alarm | z Call Hold z Call Mute z Call Waiting z Call Forward |
| IP Assignment | DTMF |
| z Static IP z DHCP z PPPoE | z RFC2833 z Inband z SIPInfo |
| NATTraversal | Firmware Upgrade |
| z STUN | z TFIP z FIP z HTTP z Local Computer |
| SIP Server | Configuration |
| Up to six SIPaccount Outbound Proxy | z Web Browser |

2 Setup the IP Phone system by using Web Browser

Before configure the IP Phone, Firstly user should press the keys "123*#" keys of IP phone in order to obtain the IP address which is assigned from a DHCPserver. If there is no DHCPservice in local network, please connect computer to the LAN port by using Ethernet cable. Setup the IP address of computer as the same subnet of the LAN port. Inputting <u>http://192.168.2.1</u> (the default LAN IP address of IP Phone) in URLof your web browser, now user can reach the page of Login.

2.1 Login

Pleaseinput the default username and password into the blank fields. The default username of administrator is **superuser**, the default password is **123456**. Thenclick the Login button to login the SIPPhone.

| Login VoIP | | |
|----------------|----------------------------|--|
| Enter your pas | sword to login VOIP server | |
| Username | superuser | |
| Password | ••••• | |
| | Login Clear | |

2.2 System Information

After login the web page, user can see the system information such as model name and firmware version.

In addition, there is a function list in the left hand side. Usercan use mouse to click the function to setup and configure the IP phone.

| Division of Med-Pat | System Information | rolated information |
|---------------------|--------------------|---------------------|
| Speed Dial Settings | Item | Description |
| + Phone Settings | Model Name | D-59 |
| + Sip Settings | Firmware Version | D-59-201202150 |
| + Others | | |
| System Auth. | | |
| Save Change | | |

2.3 Speed Dial Settings

2.3.1 Setting Speed Dial via web page

In Speed Dial Phone List, user can add or delete Speed Dial number. Maximum 10 entries can be setup in Speed Dial Phone List.

To add a phone number into the SpeedDial Phone List, user needs to input position, name, and URL.URL can be phone number or IP address. After finishing, click "Add Phone" button.

To delete a group of preset phone number, first user should select the number by clicking the select button, and then click "Delete Selected" button to delete selected number.

To delete all numbers, simply click "Delete All" button, a dialogue window will pop-up to let you confirm. Click "OK" button to delete all numbers.

Speed Dial Phone List

You could set the speed dial phones in this page.

| Position | Name | URL | Select |
|----------|-----------|----------------|--------|
| 0 | Tom Buehl | 192.168.204.55 | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| | | | |

| Delete Selected | Delete All |
|-----------------|------------|
|-----------------|------------|

| Add New P | hone |
|-----------|----------------|
| Position: | 2 (0~9) |
| Name: | Doug Zagha |
| URL: | 192.168.204.56 |
| Add Phone | Reset |

Reset

2.3.2 Setting Speed Dial by keypad

The pattern for setting SpeedDial is $*73^*$ + position + * + phone number that user wants to add to speed dial list + # key to end the setup.

For example, dialing **73*0*18004813293# can add 18004813293 to position 0. Dialing **73*1*12345678# can add 12345678 to position1. Setting Speed Dial will only be complete after busy tone is heard

2.4 Phone Settings

Phone Settings contains Call Forward, SNTP Settings, Volume Settings, Melody Settings, DND Settings, Dial Plan, Call Waiting Settings and Alarm Settings.

2.4.1 Call Forward

2.4.1.1 All Forward

All incoming call will be forward to the number that is filled. Pleaseinput the name in the name field and the phone number or IP address in the URLfield.

2.4.1.2 Busy Forward

New incoming call will be forwarded to the number that user chose while user is online.

2.4.1.3 No Answer Forward

User can have incoming calls answered by another phone whenever the IP phone is unanswered after several seconds of ring. How long the call will be forwarded is determined by the No Answer Fwd Time Out. Parameter range is from 5 seconds to 30 seconds.

If user wants to disable previous forward settings, choose "Disable" from the drop-down combo box. After finishing the setting, pleaseclick "Apply" button.

Forward Settings

| Forward Type | All Forward | - |
|------------------------|-----------------------------------|------------|
| | Disable | |
| | All Forward | 1 |
| All Fwd No. | Busy Forward No Answer Forward | |
| Busy Fwd No. | | _ |
| No Answer Fwd No. | | |
| No Answer Fwd Time Out | 5 | (5~30 sec) |
| | | |

You could set the forward number of your phone in this page.

2.4.2 SNTP Settings

User can enable SNTPSetting to synchronize the time from an outside Time Server to the IP Phone. Since all time sources over Internet supply GMT time only, user should also set suitable Time Zone from the drop-down combo box. Also, user can disable SNTP and input time to the fields of Local Time manually. Please click the "Apply" button after finishing.

| You could set t | he SNTP servers in this page. | |
|-----------------|---|--|
| SNTP | 🖲 Disable 🧕 Enable | |
| SNTP Server | time.windows.com | |
| Time Zone | (GMT +08:00) Beijing, Chongqing, Hong Kong, Manila, Perth, Singapore, Taipei, Urumq 📼 | |
| Local Time | 2011 : 01 : 01 00 : 00 (Year:Month:Day Hour:Min) | |

2.4.3 Volume Settings

User can setup Handset Volume, Speaker Volume and Ringer Volume here. The higher number is set, the louder output user get. Pleaseclick the "Apply" Button after finishing.

Volume Settings

You could set the volume of your phone in this page.

| Handset Output | 3 | (1~7) |
|----------------|-------|-------|
| Speaker Output | 1 | (1~7) |
| Ringer Volume | 2 | (1~7) |
| | Apply | Reset |

2.4.4 Melody Settings

User can select one of melodies from Ringer Type for ringing tone of incoming call. Pleaseclick the "Apply" button after finishing.

| Ringer Settings | |
|-----------------------|-----------------------------|
| You could set your fa | vorite ringer in this page. |
| Ringer | Off On |
| Ringer Type | ringer 3 👻 |
| | Apply Reset |

2.4.5 DNDSettings

User can setup Do Not Disturb either from a period of time or always on. Callers will hear busy ring tone while one of DND Settings is enabled. Pleaseclick the "Apply" button after finishing.

DND Settings

You could set the do not disturb period of your phone in this page.

◎ Off ◎ On

DND Always

| Of | f | On | |
|----|------------------------|-----------------------|------------|
| 00 | : | 00 | (Hour:mm) |
| 00 |]: | 00 | (Hour:mm) |
| | ● O f ∞ ∞ | ● Off ◎ ∞ : ∞ : | ● Off ◎ On |

2.4.6 Dial Plan

2.4.6.1 Replace Rule

The Dial Plan function provides basic dial number replacement or drop rule. Maximum 4 rules user can apply at a same time. The rules will only be effective when matching digits are located at the beginning of dialed numbers.

Examplefor operation of "replace number by":

| Digits for matching | Operation | Digits for operation |
|---------------------|-------------------|----------------------|
| 852 | replace number by | 1234 |

When user presses85291234567 on the keypad, the IP Phone will send out 123491234567

Example for operation of "drop number":

| Digits for matching | Operation | Digits for operation |
|---------------------|-------------|----------------------|
| 0050 | Drop number | |

When user presses005091234567 on the keypad, the IP Phone will send out 91234567.

2.4.6.2 Dial Now

If user wants to dial some digits at once without waiting for timeout, please input the digits into the field of "Dial Now".

User can set more than one rule in the field by adding "+", e.g. *xx+#xx+11x+xxxxxxx. If the number dialed matches the rule "*xx", e.g. "*11", "*1123". "*11" will be automatically dial out at once no matter there are more digits followed by "*11".

2.4.6.3 Auto Dial Time

The Auto Dial Time instructs IP phone to treat input is completed and send out a call after how many seconds without pressing keypad.

2.4.6.4 Use Pound Key (#) As Send Key

User can enable the pound key (#) as an end signal. It instructs the IP Phone dial out the numbers at once by pressing pound key. For example, 91234567#.

2.4.6.5 Use AsteriskKey(*) For IP Dialing

User can enable the asterisk key (*) as a dot-decimal notation of IP address. After user enabled it, user can direct input IP address by keypad.

2.4.6.6 Dial Tone

For the Dial Tone option, default is dual tone 350Hz/440Hz, it is a standard of North American. The "General" one is 400Hz, it is suitable in Japan and China.

Pleaseclick the "Apply" button after finishing.

Dial Plan

You could the set the dial plan in this page.

| Name | Digits for matching | 1 | Operation | | Digits for operation |
|----------------------|---------------------|----------|------------------|---|----------------------|
| Replace rule 1 | | | disable | - | |
| Replace rule 2 | | | drop number | | |
| Replace rule 3 | | | replace number b | y | |
| Replace rule 4 | | | disable | • | |
| Dial Now | | | | | |
| Auto Dial Time | 5 | (3~9 sec |) | | |
| Use # as send key | No Yes | | | | |
| Use * for IP dialing | ● No ◎ Yes | | | | |
| Dial Tone | 🖲 USA 🔘 General | | | | |
| | Apply | Reset | | | |

2.4.7 Call Waiting Settings

User can enable or disable the call waiting function. Pleaseclick the "Apply" button after finishing.

Call Waiting

You could enable/disable the call waiting settings in this page.

Call Waiting

🖲 Disable 🧕 Enable

Apply Reset

2.4.8 Alarm Settings

User can let the IP phone ring as an alarm at dedicated time schedule. Pleaseclick the "Apply" button after finishing.

| Alarm Settings | | | | |
|------------------------------|-------------------|--|--|--|
| You could set the alarm time | in this page. | | | |
| Alarm | 🖲 Off 🧕 On | | | |
| Alarm Time | 09 : 00 (Hour:mm) | | | |
| Current Time: | 2012-2-29 14:01 | | | |
| | Apply Reset | | | |

2.5 Network

In Network page, user can configure all the network settings and check the network status of IP phone.

2.5.1 WAN Settings

Let user configure all parameters for WAN port. You can set a fixed IP address for the WAN port or configure it to obtain the IP address through either DHCPclient or PPPoE. Youmust choose one of IP Mode which is suitable to your current network environment.

2.5.1.1 Fixed IP Settings

User should input the IP address, the net mask and default gateway which are suitable to current network into the fields.

2.5.1.2 DHCPSettings

When DHCPis set, IP Phone acts as a DHCPclient and obtains all TCP/IP parameters from DHCPserver.

2.5.1.3 **PPPoE Settings**

Simply input the username of PPPoEaccount into the field of ID and the password into the field of Password.Both of them are provided by service provider of user.

2.5.1.4 DNS

User can manually input the IP address of Primary DNS server and Secondary DNS server, or set automatically obtain them from DHCPserver. In general practice, IP address of DNSservers will be automatically assigned in both DHCPand PPPoEmode.

2.5.1.5 Vendor

In some cases, the vendor parameter must be submitted to PPPoEservice provider during login. Should user enable it or not please refer to the user manual that provided by service provider.

WAN Settings

You could configure the WAN settings in this page.

| IP Mode | ◎ Fixed ⑥ DHCP ◎ PPPoE |
|------------------|------------------------|
| FixedIP Settings | |
| IP Address | 192.168.204.66 |
| Net Mask | 255.255.255.0 |
| Default GW | 192.168.204.10 |
| | |
| PPPoE Settings | |
| ID | |
| Password | |
| | |
| DNS | |
| Auto DNS Enable | ● Off ◎ On |
| Primary DNS | 168.95.1.1 |
| Second DNS | 168.95.1.2 |
| | |
| Vendor | |
| Vendor Enable | ◎ Off ◎ On |
| Vendor | |

2.5.1.6 Current Status

It shows the current status of connection, and the current information such as IP address, Netmask, Gateway, MAC address, IP address of Primary DNS and Secondary DNS.

Pleaseclickthe "Apply" button after finishing.

| Current Status: Fixed | |
|-----------------------|-------------------|
| IP: | 192.168.204.066 |
| Mask: | 255.255.255.000 |
| Gateway: | 192.168.204.010 |
| MAC Address: | 2e:2e:d3:9d:31:73 |
| DNS1: | 168.095.001.001 |
| DNS2: | 168.095.001.002 |
| | |
| | Apply Reset |

2.5.2 LAN Settings

Set network parameters for LAN port. user should refer to current network environment to configure the IP phone properly.

2.5.2.1 LAN Mode

Bridge Mode means the WAN port and LAN port are transparent. The IP address of the device which connects to LAN port, will be treated as same to WAN port over Internet. NAT Mode means the IP phone will act as a router, the IP address of LAN port will be translated to the same of WAN port. If user deploy NAT mode, parameters for NAT should be inputted. The LAN port can be disabled by selecting Disable option in LAN Mode.

2.5.2.2 NAT& DHCPServer

The subnet of LAN port and the device that connects to LAN port must be the same and must be different to WAN port. There is a feature of DHCPserver in LAN port, user can enable it for automatically assigning Paddressto the device that connected to LAN port.

| LAN Settings | | |
|------------------------------|-------------------------------|--|
| You could configure t | he LAN settings in this page. | |
| LAN Mode | ⊙ Nat ○ Bridge ○ Disable | |
| Nat | | |
| IP Address | 192. 168. 2. 1 | |
| Net Mask | 255. 255. 255. 0 | |
| DHCP Server | Enable 🗸 | |
| | | |
| IP Pool Start | 10 | |
| IP Pool Start IP Pool End | 10 100 | |

2.5.3 VLAN Settings

User can create independent logical networks within a physical network by deploying VLANenvironment.

2.5.3.1 VID (802.1Q/TAG)

If user enable VLAN Packet, VLAN ID/VLAN TAG should be given for inserting into packet header in order to classify the packets belong to Virtual Local Area Network..

2.5.3.2 User Priority (802.1P)

User can set the frame priority level for different classes of network traffic. Values are from 0 (best effort) to 7 (the highest). The smaller number is set, the lower priority is set.

| You could set the VLAN se | ttings in this page. | |
|---------------------------|----------------------|--------------|
| VLAN Packets | ⊙ Off ◯ On | |
| VID (802.1Q/TAG) | 136 | (0 ~ 4094) |
| User Priority (202 1D) | 0 | $(0 \sim 7)$ |

2.5.4 DMZ Settings

To enable Demilitarized Zone by inputting the DMZ Host IP and Port. After enabled it, the IP phone will act as a DMZ host, external traffic will go through from the WAN port to the host which connected to the LAN Port. For example, IP address of WAN Port is 123.123.0.1, IP address of LAN Port is 192.168.1.1, IP address of the device (DMZ Host) which connected to LAN port is 192.168.1.2, DMZ Port is 90. Internet users can access 192.168.1.2 (DMZ Host) by connecting to 123.123.0.1 port 90.

DMZ Settings

You could configure your demilitarized zone settings in this page.

| DMZ | ● Off ◎ On | |
|-------------|-------------|-------------|
| DMZ Host IP | 192.168.1.1 | |
| DMZ Port | 90 | (1 ~ 65535) |

2.5.5 PPTP Settings

To connect remote VPNserver by point-to-point tunneling protocol. After connected, the subnet of IP phone is equal to the network of remote VPNserver. The IP phone becomes a member of remote network. All data traffic between remote server and IP phone will be encrypted. To enable the PPTPconnection, user should input the user name and password of VPN account of remote server. Please click the "Apply" button after finishing. If the WAN is connected by using PPPoE, user can only obtain the IP address that assigned by PPTPserver by pressing "**47#" while the IP Phone is idle.

| You could set PPTP set | ttings in this page. | |
|------------------------|----------------------|--|
| РРТР | Off On | |
| PPTP Server | vpn.example.com | |
| PPTP Username | tom_buehl | |
| PPTP Password | | |

2.5.6 LLDPSettings

To enable/disable Link Layer Discovery Protocol. User can also set the interval for sending information by IPPhone after enabling it.

LLDP Settings

You could set the LLDP in this page.

| LLDP | Enable 💌 | |
|-----------------|----------|----------------|
| Packet Interval | 120 | (1 ~ 3600 sec) |
| | Apply Re | eset |

2.5.7 Manually set Network Mode of WAN

User can manually set the two kind of network mode of SIPPhone by inputting some digits of keypad.

2.5.7.1 Fixed IP Mode

To press 20120912*# during SIPPhone is idle. SIPPhone will go to reboot and use the fixed IP address that was saved in configuration before.

2.5.7.2 DHCPIP Mode

To press 20120913*# during SIPPhone is idle. SIPPhone will go to reboot and use the DHCPmode.

2.5.8 DHCPOption 66

When user deploys a large number of SIPPhones on network, user can use DHCPOption 66 to automatically instruct the SIPPhone with the provisioning URL.

DHCPServer with Option 66 will instruct individual SIP Phone the URL path of individual configuration file that was stored in TFTPServer during SIPPhone acquires the IP address from it. The configuration file is named by its MAC address. The format of file name is something like 2E2ED39BD26D.xml.

2.6 SIP Settings

In order to let SIP phone work properly, user should setup SIP Service Domain, SIP Port, Codec, Codec ID, DTMF, STUNserver and others. Some information of them user should obtain from SIPservice provider.

2.6.1 Service Domain

User can setup total six SIPaccounts for receiving inbound calls and use the first realm for outbound call.

2.6.1.1 Use Service

To enable or disable the realm.

2.6.1.2 User Number

Extension number or telephone number of SIPaccount.

2.6.1.3 Authorized Name

Username of SIPaccount

2.6.1.4 Password

Password of SIPaccount

2.6.1.5 Proxy IP

IP address of Proxy Server that enables SIP connection to SIP domain. If there is no real proxy server between IP phone and domain, please input the IP address of domain into this field.

2.6.1.6 Domain

IP address of domain who are the service provider for SIPservice or PBXserver that SIPphone will connect to.

2.6.1.7 Outbound Proxy

IP address of Proxy Server that enables outbound call. If there is no additional server for outbound call, user can leave it blank or fill the IP address of domain.

2.6.1.8 SIP Expire Time

How long SIPphone is expired and should renew the registration status.

2.6.1.9 Status

Showregistration status of this realm.

Pleaseclick the "Apply" button after finishing.

Service Domain Settings

You could set information of service domains in this page.

| First Realm | | |
|-----------------|----------------|------------|
| Use Service | Enable 👻 | |
| User Number | 6002 | |
| Authorized Name | 6002 | |
| Password | | |
| Proxy IP | 192.168.204.55 | |
| Domain | 192.168.204.55 | |
| Outbound Proxy | 192.168.204.55 | |
| SIP Expire Time | 300 | (20~65535) |
| Status | Register | |

2.6.2 Port Settings

To change the port for SIPand RTP connection.

2.6.2.1 SIP Port

Default is 5060, user can change to any port number from 100 to 65535

2.6.2.2 RTPPort

Usually from 10000 to 20000, default is 20000, user can change to any port number from 100 to 65535.

Pleaseclick the "Apply" button after finishing.

Port Settings

| SIP Port | 5060 | (100 ~ 65535) |
|----------|-------|---------------|
| RTP Port | 20000 | (100 ~ 65535) |

2.6.3 Codec Settings

2.6.3.1 CodecPriority

Setting for priority of preferred codecs. If first one is unsupported by domain, the second one will be automatically used and so on.

2.6.3.2 RTP Packet Length

To set the millisecond of RTPPacketLength for both codec G711 and G729.

2.6.3.3 iLBC 15K2

To enable or disable ILBCdeploys 15k2 rate.

2.6.3.4 G7235.3K

To enable or disable G723 deploys 5.3K rate.

2.6.3.5 Voice VAD

To enable or disable Voice Activation Detection.

2.6.3.6 Voice CNG

To enable or disable Comfort Noise Generator.

Codec Settings

| Codec Priority | |
|-------------------|-------------|
| Codec Priority 1 | G.729 🔻 |
| Codec Priority 2 | G.711a 👻 |
| Codec Priority 3 | G.711u 👻 |
| Codec Priority 4 | G.723 👻 |
| Codec Priority 5 | ilbc 👻 |
| Codec Priority 6 | G.722 👻 |
| RTP Packet Length | |
| G.711 & G.729 | 20 ms 💌 |
| ilbc 15K2 | |
| iLBC 15K2 | Off On |
| G.723 5.3K | |
| G.723 5.3K | Off On |
| Voice VAD | |
| Voice VAD | Off On |
| Voice CNG | |
| CNG | ◎ Off ◎ On |
| | Apply Reset |

You could set the codec settings in this page.

2.6.4 Codec ID Settings

To change RFC2833event ID. When SIPphone communicate with other SIPdevice, if the codec ID that other SIPdevice deployed is non-standard, problem will occur. User can adjust the codec ID of SIPphone from default to a matching one. Pleaseclick the "Apply" button after finishing.

Codec ID Settings

| Codec Type | ID | Default Value |
|-------------|-----|----------------|
| RFC 2833 ID | 101 | (95~127) 🗹 101 |

2.6.5 DTMFSettings

There are three common standards of DTMF, RFC2833, Inband and SIP Info. User should consult to service provider which one is correct and suitable to setting. Pleaseclick the "Apply" button after finishing.

| DTMF 5 | Settings |
|--------|----------|
|--------|----------|

You could set the DTMF settings in this page.

| DTMF | RFC_2833 Inband_DTMF Send_DTMF_SIP_Info | |
|------------|---|-----------------|
| Delay Time | 100 | (60 ~ 300 msec) |
| | | |

| Apply | Reset |
|-------|-------|
|-------|-------|

2.6.6 STUN Settings

If SIP phone is behind NAT, user should use a STUN server which is outside current local network, to translate the IP address from the private to public. Setup of STUN server allows SIP phone connect to SIP service provider outside current local network. There are some STUN servers which are free of charge over internet. The famous one is stun.xten.com. Please click the "Apply" button after finishing.

| ST | UN | Settings | |
|----|----|----------|--|
| | | Sectings | |

| STUN | 🖲 Off 🔘 On | |
|-------------|---------------|---------------|
| STUN Server | stun.xten.com | |
| STUN Port | 3478 | (100 ~ 65535) |

2.6.7 Other Settings

2.6.7.1 Voice QoS (Diff-Serv)

Voice Quality of Service allows user set the priority of voice packet passthrough the router or firewall which connects to Internet. The higher value is set, the higher priority it gets.

2.6.7.2 SIP QoS (Diff-Serv)

SIPQuality of Service allows user set the priority of SIPpacket passthrough the router or firewall which connects to Internet. The higher value is set, the higher priority it gets.

2.6.7.3 Send Keep Alive Packet

Keeping send UDP packets from SIP phone to domain or any other device that SIP phone connected to, in order to keep the transmission between two devices alive.

2.6.7.4 Keep Alive Period

Time interval that SIPphone sendspacket to domain.

2.6.7.5 Jitter Buffer Max

Maximum millisecond for Jitter Buffer to discard delay packets.

2.6.7.6 AnonymousCall Rejection

Reject any inbound call which does not submit a caller ID.

2.6.7.7 Auto Answer

Automatically answer a call by handsfree.

2.6.7.8 Auto Answer Time Out

How long a call ring until it is automatically answered.

2.6.7.9 Clear redial in 10 min

To clear memory of a stored phone number for redialing after 10 minutes.

Pleaseclick the "Apply" button after finishing.

2.6.7.10 Subscribefor MWI

Subscribe Message Waiting Indicator function from server in according with standard RFC3842. If there is a voice message for registered extension, WMI LEDwill keep on lighting until message is listened.

2.6.7.11 Session Switch

To enable / disable Session Switch Feature which is based onGeneralized Multiprotocal Label Switch (RFC4208)

2.6.7.12 Session Time

To set minimum SessionTime for SessionSwitch.

2.6.7.13 Support 100rel

To enable / disable the module that provides management of Reliability of Provisional Responses.

2.6.7.14 Support Update Method

To enable / disable the update request for session.

2.6.7.15 Rport

To enable / disable support for response-port parameter in header (RFC3581).

2.6.7.16 Use TelURL

To enable / disable URLfor telephone call (RFC2806)

Other Settings

You could set other settings in this page.

| Voice QoS (Diff-Serv) | 40 | (0 ~ 63) |
|--------------------------|------------|----------------|
| SIP QoS (Diff-Serv) | 40 | (0 ~ 63) |
| Send Keep Alives Packet | ⊙ Off ○ On | |
| Keep Alives Period | 60 | (15 ~ 250 sec) |
| Jitter Buffer Max | 150 | (70~250 ms) |
| Anonymous Call Rejection | ⊙ Off ○ On | |
| Auto Answer | ⊙ Off ○ On | |
| Auto Answer Time Out | 5 | (0~10 sec) |
| Clear redial in 10min | ◯ Off ⓒ On | |
| Subscribe for MWI | O Off ⊙ On | |
| Session Switch | Disable 💌 | |
| Session Time (Min=90s) | 1800 | |
| Support 100rel | Disable 💌 | |
| Support Update Method | Disable 💌 | |
| Rport | Enable 💌 | |
| Use Tel URI | Disable 😽 | |
| | Apply Rese | •t |

2.7 Others

User can configure the IP Phone by config file in XML format and store system log of IP phone to a remote server.

2.7.1 Config Speed Dial

To configure SpeedDial by config file via local PC,tftp, ftp or http server. The file name must be "speedbook.xml", any other name will be ignored. Format is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<phonebookrecord xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="speedphonebook.xsd">
<phonebookrecord xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="speedphonebook.xsd">
<phonebookrecord xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
<phonebookindes">
<phonebookindes</p>
<phonebook.xsd">
<phonebookindes>
<phonebookindes>
<phonebookindes>
<phonebookindes>
<phonebookname>
TomBuehl</phonebookname>
<phonebookname>
```

```
</phonebookinfo>
```

<phonebookinfo>

```
<phonebookindex>1</phonebookindex>
```

```
onebookname>Doug Zagha
```

<phonenumber>8002</phonenumber>

```
</phonebookinfo>
```

</phonebookrecord>

User should input IP address of Config Server, Path, Username and Password. To update the config file from server to IP phone, please click "Update" button. To upload the config file from IP phone to server, please click "Upload" button. If update the IP phone from config file in PC,just browse the location of config file in PCand click "Apply" button.

2.7.1.1 ConfigSpeed Dial

To choose one of config method.

2.7.1.2 ConfigSever

The IP address of either HTTPor FTP/TFTPserver.

2.7.1.3 HTTPFile Path

The exact path of config file in HTTPserver.

2.7.1.4 FTPUsername

Username of FTPaccount.

2.7.1.5 FTP Password

Password of FTPaccount.

2.7.1.6 FTPFile Path

The exact path of config file in FTPor TFTPserver.

Speed Dial Configuration

You could enable/disable the config speed dial in this page.

| Config Speed Dial | 🖲 off 🔘 tftp 🔘 ftp 🔘 http | |
|-------------------|---------------------------|-------------------|
| Config Server | | Exp. 60.35.187.30 |
| HTTP File Path | | Exp. /download/ |
| FTP Username | anonymous | |
| FTP Password | | |
| FTP File Path | | Exp. /file/load |
| | Update Upload Reset | |
| Local PC | | |
| | Browse | |
| Apply | | |

2.7.2 Auto Config

To configure the IP phone by config file via local PC, tftp, ftp or http server. User should input IP address of Config Server, Path, Username and Password. To update the config file from server to IP phone, please click "Update" button. To upload the config file from IP phone to server, please click "Upload" button. If update the IP phone from config file in PC, just browse the location of config file in PCand click "Apply" button. The default name of config file that can be recognized is "config.xml".

2.7.2.1 Auto Configuration

To choose one of config method.

2.7.2.2 ConfigSever

The IP address of either HTTPor FTP/TFTPserver.

2.7.2.3 HTTPFile Path

The exact path of config file in HTTPserver.

2.7.2.4 FTPUsername

Username of FTPaccount.

2.7.2.5 FTP Password

Password of FTPaccount.

2.7.2.6 FTPFile Path

The exact path of config file in FTPor TFTPserver.

You could enable/disable the auto configuration settings in this page.

2.7.2.7 Download XML

After input all required information, user can download the config file from server by right click the button of "Download XML". For Firefox user, choose "SaveLink As". For Internet Explorer user, choose "SaveTarget As".

2.7.2.8 Name of configfile with MAC address

IP Phone can be configured by different config file. It lets administrator more easily to manage a group of IP Phoneswith individual setting. If the name of config file in HTTP, FTPor TFTPserver is exact the MAC address of IP Phone, for example, MAC address of IP Phone is 2e:2e:d3:9d:31:72, name of config file is 2e2ed39d3172.xml, user can update the configuration by only clicking "Update" button. IP Phone will follow previous saved setting in the Auto Config page to seek for the config file which is totally matched to its MAC address and then update itself.

Auto Configuration Settings

| Config Server E: HTTP File Path E: FTP Username anonymous FTP Password E: | kp. 60.35.187.30 kp. /download/ |
|---|------------------------------------|
| HTTP File Path Ex FTP Username anonymous FTP Password Ex | kp. /download/ |
| FTP Username anonymous FTP Password | |
| FTP Password | |
| ETD Eile Dath | |
| | kp. /file/load |
| Update Upload Reset | |
| Local PC | |
| Browse | |

Download XML (The right mouse button click on the download button, select 'save target as ')

2.7.3 Advanced Settings

User can write system log of IP phone to a remote Log Server with syslogd running. Pleaseinput the IP address of Log Server, then click "Apply" button.

| Advanced Settings | | | | |
|------------------------|-----------------------------|--|--|--|
| You could change advar | nced settings in this page. | | | |
| System Log Server | | | | |
| System Log Type | None 💌 | | | |
| | Apply Reset | | | |

2.8 Update

2.8.1 Auto Update

The IP phone will automatically update it's firmware by checkingthe firmware version via TFTP,FTPorHTTPafter rebooting. If the number of version file is larger than current version, IP phone will download the update file and upgrade itself. Otherwise, it will do nothing. The update procedure will take about several minutes, please make sure power supply to IP phone won't be interrupted during update.

2.8.1.1 UpgradeMode

To choose one of upgrade method.

2.8.1.2 Upgrade Addr

The IP address of either HTTPor FTP/TFTPserver.

2.8.1.3 FTPUser

Username of FTPaccount.

2.8.1.4 FTP Password

Password of FTPaccount.

2.8.1.5 Update File

The name of firmware file in remote server.

2.8.1.6 FTPFile Path

The exact path of firmware file in TFTPor FTPserver.

2.8.1.7 HTTPFile Path

The exact path of firmware file in HTTPserver.

Auto Update

You must set parameter for Auto Update in this page.

| Upgrade Mode | 🖲 off 🔘 ftp 🔘 tftp 🔘 http | |
|----------------|---------------------------|-----------------|
| Upgrade Addr | 192.168.18.200 | |
| Ftp User | anonymous | |
| Ftp Pwd | | |
| Update File | JX840-0906090.tar.bz2 | |
| FTP File Path | | Exp. /download/ |
| HTTP File Path | | |
| | | |
| | Apply Reset | |

2.8.2 Update System

To manually update the firmware of IP phone via TFTP,FTP,HTTPor local PC.If update the IP phone from firmware file in PC,just browse the location of firmware file in PCand click "Apply" button.

2.8.2.1 UpgradeMode

To choose one of upgrade method.

2.8.2.2 Upgrade Addr

The IP address of either HTTPor FTP/TFTPserver.

2.8.2.3 FTPUser

Username of FTPaccount.

2.8.2.4 FTPPwd

Password of FTPaccount.

2.8.2.5 Update File

The name of firmware file in remote server.

2.8.2.6 FTPFile Path

The exact path of firmware file in TFTPor FTPserver.

2.8.2.7 HTTPFile Path

The exact path of firmware file in HTTPserver

| Update System | | |
|----------------------|-----------------------|-----------------|
| You can update sytem | n in this page. | |
| Upgrade Mode | 🔘 ftp 🔘 tftp 🔘 http | |
| Upgrade Addr | 192.168.18.200 | |
| Ftp User | anonymous | |
| Ftp Pwd | | |
| Update File | JX840-0906090.tar.bz2 | |
| FTP File Path | | Exp. /download/ |
| HTTP File Path | | |
| | Apply Reset | |
| Local PC | | |
| | Browse | |
| Apply | | |

2.8.3 Default Settings

To restore the default setting. Pleaseclick "Apply" button after finishing.

Restore Default Settings

You could click the restore button to restore the factory settings.

Restore default settings: Reboot

2.9 System Auth

To change the user name and password of Super User.

System Authority

You could change the login password in this page.

Super User PWD Confirm Password

| | • | |
|-------|-------|--|
| | | |
| Apply | Reset | |

2.10 Save Change

Some config items should be saved and the IP phone should be rebooted until the setting takes effect. Once user click the link of "Save Change", a page with "Reboot" button will appear to remind user reboot the IP phone.

Save Change

You have to save changes to effect them.

Reboot

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