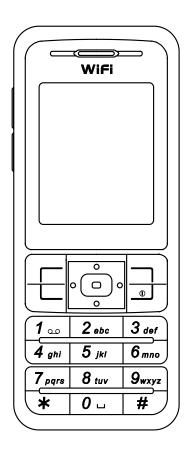
# IEEE 802.11b/g VoIP Phone



User's Manual Nov. 2006

## Chapter 1 Getting Started

### 1.1 Reading this Manual

Thank you for purchasing this VoIP phone. To operate accordingly your new phone, carefully read this user's manual first. Screen displays and illustrations in this user's manual are designed to help you to operate all the steps directly and precisely.

**Note!** For information about your internet phone service, refer to the materials provided by your Internet phone service provider.

### 1.2 Package Contents

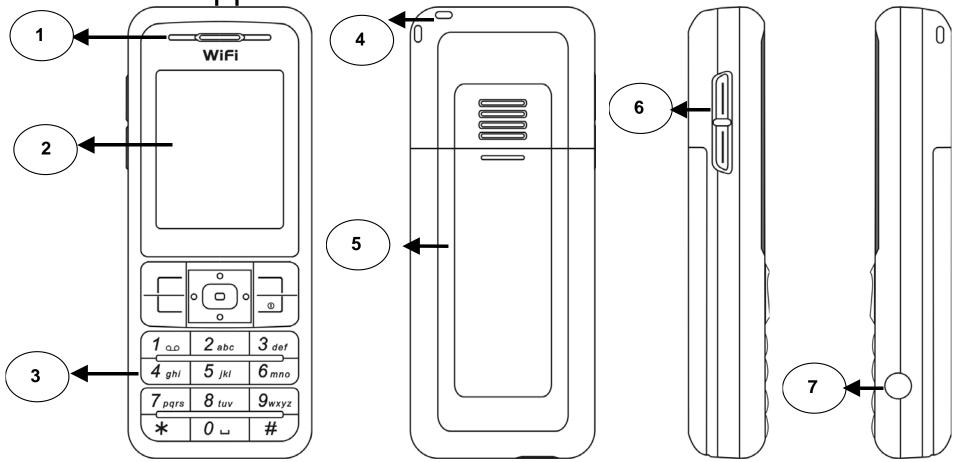
- One 802.11b/g VoWLAN handset
- One Li-ion battery
- One Setup CD-ROM with user's manual. (optional)
- One power adapter or mini-USB cable. (optional)
- One Charging Cradle. (optional)

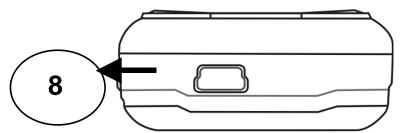
### 1.3 Care and Maintenance

- Keep your phone and accessories away from dusty, wet or dirty areas.
- Don't put your phone or accessories in extremely hot or cold areas.
- Don't use harsh chemicals, cleaning solvents, or strong detergents to clean your phone or accessories.

# Chapter 2 Phone Features

2.1 Overall Appearance





<u>1</u>	Earphone	5.	Battery
2.	Screen	6.	Volume adjustment keys
3.	Keypads	7.	Earphone slot
4.	Strap eyelet	8.	Data cable slot

### 2.2 Overall Features

- Slim candybar type
- IEEE 802.11b/g WLAN and Embedded 2.4GHz Antenna
- G.711a , G.711u, G.729a CODEC support
- SIP v2 signaling protocol, RFC-3261
- 1.8" 128 x 160 (65k-colour) TFT LCD
- Keypad with backlight
- Side key for volume control
- Li-ion, 900 mAh Nominal
- Phone Book & Speed Dial
- Polyphonic Ring Tone

- New Call Screen --- Mute, Hold, Second call, Conference, Swap, Transfer, Handsfree and Recording.
- RF and battery level indication
- Web-based user management console
- WLAN Site Survey to ease AP search
- Supports detail Call Log
- Supports Speed-Dial setup
- Supports WEP(64/128-bit), WPA and WPA2 security for WLAN

### 2.3 Product Specification

Item	Description
CPU	➤ BRCM1161
Flash Memory	32MB NAND Flash
SRAM Memory	➤ 32MB
Data/power Recharge Port	➤ USB 1.1
Wireless LAN Standard Compliance	➤ IEEE802.11b/g 2.4GHz
Wireless Frequency Range	Approx. 2.400~2.484GHz
Output Power(Average Power)	Max. 18.62dBm @802.11g
Output Fower(Average Fower)	Max. 16.71dBm @802.11b
Data Transmission Rate	> 1, 2, 5.5, 11Mbps up to 54Mbps
WLAN Network Architecture Type	Infrastructure
LCD	1.8" Colorful LCD, 128x160 pixel, 65k

Item	Description
	colors
Antenna Type	Embedded antenna
Battery	➤ Li-ion 900 mAh
Power Supply	External power adapter or mini-USB cable
Dimension	> 17mm (T) x 44mm (W) x 106mm (H)
Weight	Approx. 100g

## 2.4 WLAN Application

Place a Call via "SIP Proxy Server"

Use your new Wi-Fi phone to make and receive VoIP telephone calls when you are within range of a wireless Internet Telephony Service Provider (ITSP). You do not need to know if the recipient's connection type is an IP, cellular or landline based service. Your Wi-Fi phone can call any landline or mobile telephone that a traditional PSTN telephone can connect to as well as the IP telephone network. Calls received from IP telephones works exactly as you would expect from the traditional telephone service.

- Your Wi-Fi phone registers with a SIP proxy server in the following circumstances:
  - (1) Your connection uses an IP Telephony Service.
  - (2) Your connection is based in a corporate VoIP environment.

## Chapter 3 Installing and Using the VoIP Phone

## 3.1 Charging Your VoIP Phone's Battery

New battery is shipped partially charged. Before you can use your phone, you need to install and charge the battery.

Note! For the first time usage, it is recommended to charge the battery for at least 8 hours.

- 1. Make sure the battery is installed properly.
- 2. Ways to charge the battery:
  - Plug the power adapter between the data cable slot on the bottom of the phone and the socket.
  - Locate your VoIP phone on the cradle and plug the other end into a standard electrical outlet.
  - Use mini-USB cable to charge through your notebook or related device.
- 3. You see a charging indicator on the LCD screen.
- 4. When the battery charging indicator remains solid blue, the battery is fully charged and ready for use.



### 3.2 Setting Up Your VoIP Phone

Before you begin, make sure you have an active internet connection and the account information provided by your internet phone service provider.

- 1. Press to power on the phone.
- 2. It is necessary to enter your password when your phone is set as "Phone Protection". Use the keypad to enter the password. Default password is user.

#### **Entering English mode**

- When inputting the text in English, press the key labeled with the character you prefer:
   Once for the first character;
- -Twice for the second character and so on...

This method is so-called Multi-tap typing.

For example, you have to press the **5** key twice display the character "**K**", the **3** key five times to display the character "**e**" and the **6** key five times again to display "**n**".

- The cursor moves to the right when you press a different key. When entering the same letter twice or a different letter on the same key, just wait for a few seconds for the cursor to move to the right automatically, and then select the next letter.
- You can insert a space between words/letters by pressing the **0** key.
- Refer to the chart below for detailed information about the characters available:
- $0 \rightarrow \text{space}$
- 1 → "'[]<>(){}
- 2 → ABCabc
- $3 \rightarrow \mathsf{DEFdef}$

```
4 → GHlghi
5 → JKLjkl
6 → MNOmno
7 → PQRSpqrs
8 → TUVtuv
9 → WXYZwxyz
* → * . + - / , : ; = ?!
# → # @ $ % & \^_`| ~
```

- 3. When you are finished entering the password, press to save it.
- 4. If you do not need to enter a password, then press » Menu.
- 5. Scroll to *Profile*, then press » **Profile**.
- 6. Scroll to SIP Account, then press > Select to enter the SIP Account menu.
- 7. Press **> Option**, then press **> Select** to edit the default SIP account.
- 8. From the Edit menu, highlight each setting your service provider requires you to change, then press **Select** to change the setting. When you are finished changing a setting, press to save the changes.
- 9. If you need to change a setting that does not appear on the Edit screen scroll to Advance, then press » **Select** to enter the Advanced menu.
- 10. Highlight each setting your service provider requires you to change, then press » Select to

change the setting. When you are finished changing the setting, press to save your changes.

11. When you are finished making changes in the advanced settings menu, press **Back** until

- you return to the *Profile* menu.

  12. Highlight *Network Profile*, then press » **Select** to enter the Network Profile menu.
- 13. Highlight the network profile that matches the type of security you're using for your wireless network and press **> Option** to enter the Profile Options menu. If you do not have security enabled on your wireless network, highlight *OPEN*.
- 14. Press > Select to edit the network profile.
- 15. Highlight *Wireless Settings*, then press » **Select** to enter the Wireless Settings menu.
- 16. Highlight *ESSID*, then press » **Select** to enter the ESSID menu.
- 17. Highlight *Site Survey*, then press **Select** to scan for your wireless network. You see a list of wireless networks in range of the phone. Highlight your wireless network's ESSID name in the list, then press to select it.
- 18. If you don't see your wireless network's ESSID name in the list, your wireless network may not be set to broadcast its ESSID name. To enter the ESSID name manually, press **Back** to return to the *ESSID* menu, highlight *New ESSID*, then press to edit the ESSID name.
- 19. Press » Back until you return to the Wireless Settings menu.
- 20. Highlight Security, then press to enter the Security menu.

- 21. Highlight the type of security you have enabled on your wireless network, press to select it. Then change the settings to match your wireless network. If you don't have security enabled on your wireless network, select *OPEN*.
- 22. When you are finished selecting wireless security settings, press **Back** to return to the *Edit* menu.
- 23. Highlight *Account Choice* and press » **Select** to enter the Account Choice menu.
- 24. Press to assign the <u>default SIP</u> account to the current network profile.
- 25. Highlight *On*, then press to activate the SIP account.
- 26. Press » Back until you return to standby mode.

## Chapter 4 Configuring the VoIP Phone

## 4.1 Standby Mode

A variety of information is displayed on standby mode. Refer to the table below for a list of icons that indicate on the home screen and their definitions:

Icon	Description
	Signal Strength
الن	Indicates the received signal strength. The greater the number of
	bars, the better the signal
G	Message
<b>2</b>	When you have received new messages.
<i>∞</i> . ₄∎	In Call / Call Forward
<b>€</b> ″/ <del>"</del> "	When you are on the phone or forward the call.
<u>~</u>	Network Encryption
720	When you have set for network encryption.
* *	SIP Registered/ Not Registered
🗃 / 🚰	When you have (not) registered to SIP server.
💖 / 🏖 / 🕾 / 🕸	Ring Mode (Silent/Ring/Vibrate/Ring+Vibrate)
en	Alarm
SR.	Pops up when you set an alarm to ring at a specified time.
•	Battery Level
(III	Indicates the level of the battery. The more bars you see, the more

power you have remaining.

*Note!* You can also view a summary of the phone's current status by pressing » Status.

### 4.2 Main Menu

Press » **Menu** in standby mode to enter the main menu. Refer to the sections below for information on the options available in the main menu.

#### **Phonebook**

• The phonebook can store and display up to 100 entries. To view details of an entry, highlight the entry and press. To call the contact, press > Call.

A list of options available in the Phonebook:

Option	Description	
Search	Search for an entry by name.	
Edit	Edit the currently selected entry.	
Delete	Delete the currently selected entry.	
New	Add a new entry.	

### **Call Log**

Your VoIP phone keeps a record of the calls you've recently missed, dialed, and received.

A list of options available in the Call Log:

	<u> </u>
0.011.00	Description
Option	Description
Option	Dood i plion

Missed Calls	Displays a list of calls you've recently missed.	
Dialed Calls	Displays a list of calls you've recently dialed.	
Received Calls	Displays a list of calls you've recently received.	
Delete All	Remove all call records.	

- To get more information about a call in your call log, highlight the call, then press to display date and time information for the call.
- Options available in the Missed Calls, Dialed Calls and Receive Calls menus:

Option	Description
Save	Add additional information about a caller and save the contact
	information to your Phonebook.
Del Record	Remove the current caller from the call log.
Del All	Remove all of the calls in the call list you're viewing.
Missed/Dialed/Received	, , , , , , , , , , , , , , , , , , ,

#### E-mail

Your VoIP phone's built-in e-mail client enables you to send and receive messages using your POP3 e-mail account.

#### **Configuring Your E-mail Account**

- 1. In standby mode, press » Menu» E-mail» New. (if the e-mail account is not configured.)
- 2. Enter the information provided by your e-mail service.
- 3. When you have finished configuring your e-mail account information, press **Back Option**.

- 4. Press. OK to activate the e-mail account.
- 5. Press » Back to see E-mail menu.

Using the E-mail Client
Options available in the E-mail menu:

Option	Description
Write New	Compose a new e-mail message, press . Enter a <b>Subject</b> , the
	Recipients, and Content of the message. When you finish editing,
	select <b>Send Mail</b> or <b>Save to Draft</b> to store the message to the draft
	folder.
	While editing proce to switch the input method (ABC or
	While editing, press  to switch the input method (ABC or
D .	<b>0-9</b> ).
Receive	Receive new e-mail messages.
	A pop-up message "Receive Mails?" indicates on the screen,
	press OK then you can receive new mails.
Inbox	Access e-mail messages you've received. To read a message,
	highlight the message you want to read, then press to read it.
	While viewing the message, press » <b>Option</b> to select the following
	options:
	✓ Reply: enables you to quickly reply to e-mail messages.
	✓ Reply with Log: enables you to quickly reply to e-mail

	<ul> <li>messages with a history of the original E-mail.</li> <li>✓ Forward: enables you to quickly edit and send e-mail to other contacts or save it as a draft.</li> <li>✓ Delete: enables you to remove the current message from your Inbox.</li> <li>✓ Clear Inbox: enables you to remove all of the e-mail messages in your Inbox.</li> </ul>
Outbox	Access e-mail messages you've sent. To read a message, highlight the message you want to read, then press to read it. While viewing the message, press <b>Option</b> to select the following options:   Edit: enables you to edit a sent message and send it to other contacts or save it as a draft.  Delete: enables you to remove the current message from your Outbox.  Clear Outbox: enables you to remove all of the e-mail messages in your Outbox.
Draft	Access e-mail messages you've stored as drafts. To view a draft, highlight the message you want to read, then press to view it. While viewing the message, press <b>Option</b> to select the following options:  ✓ Edit: enables you to edit a sent message and send it to other

	contacts or save it as a draft.  ✓ Delete: enables you to remove the current message from your Draft folder.  ✓ Clear Outbox: enables you to remove all of the e-mail messages in your Draft folder.
Account Settings	Enables you to activate, edit and delete your e-mail account settings. (Account Name/ Your Name / Mail Address / Reply Address / POP3 Address / POP3 Port / POP3 User ID / SMTP Address / SMTP Port / SMTP User ID / Signature / Reserve Mail)

### **Speed Dial**

The speed dial menu enables you to assign up to nine phone numbers you frequently call to the number keys on the phone. Follow the steps below to assign a contact to your Speed Dial list.

- 1. Press » Menu» Speed Dial»
- 2. Highlight the number you would like to assign a contact's phone number to.
- 3. Press **> Option** to view the contacts in your Phonebook.
- 4. Highlight the contact you want to assign to the speed dial location, then press
- 5. Press » Back until you return to the main Speed Dial menu.

#### **Profile**

The Profile menu enables you to make changes to your SIP accounts, network profiles, roaming options, profile password, or configure your VoIP phone using Secure Setup.

#### **Network Profile**

The Network Profile menu enables you to assign up to six wireless access points for your VoIP

phone to link to. To check the details of a profile, press . To edit a profile, highlight the network profile you would like to edit, then press **Option**.

Available options are as below:

Option	Description
Edit	Edit the current network profile.
Rename	Change the current network profile's name.
Delete	Delete the current network profile.
Auto Detect	Activate or deactivate the current network profile.
Move	Move the current network profile up or down in the network profile list. The VoIP phone will try to connect to all of the access points, in the order they appear in the network profile list, until it is able to make a connection.

#### **Editing a Network Profile**

The Edit menu enables you to edit the currently selected network profile.

Options available in the Edit menu:

Option	Description
Preview	View a summary of the current network profile.
Wireless Settings	Edit wireless network settings. Press » Select:
	✓ <b>ESSID</b> : enables you to enter your wireless network's ESSID
	name or perform a site survey to view wireless networks in

	range of your VoIP phone.  ✓ Data Rate: enables you to specify the data rate of your wireless network. If you don't know the data rate, select Auto.  ✓ Security: enables you to select wireless security settings to match your network.
IP Settings	Select from the following IP modes:  ✓ Fixed IP: enables you to manually enter IP settings for your network.  ✓ DHCP: enables you to use DHCP to acquire IP settings for your network.  ✓ PPPoE: enables you to use PPPoE to acquire IP settings for your network.
Account Choice	Assign a SIP account to a network profile.
NAT Settings	Set STUN server options: Press

### **SIP Account**

The SIP Account menu enables you to assign up to six SIP accounts to your VoIP phone. To view

the details of an account, press . To edit a SIP account, highlight the account you would like to edit, press . **Option**, then press . **Select** to edit the account.

Options available in the Edit menu:

Option	Description
Preview	View a summary of the current SIP account.
Phone Number	Enter your Internet phone number.
Auth. ID	Enter your Internet phone service account's authorization id.
Auth. Password	Enter your Internet phone service account's authorization password.
SIP Domain	Enter the address of your Internet phone service provider's SIP domain.
Proxy Address	Enter the address of your Internet phone service provider's proxy server.
Advanced	<ul> <li>Make advanced changes to the SIP Account. Press » Select:</li> <li>✓ Proxy Port: The port number of SIP server.</li> <li>✓ Outbound Address: Outbound proxy address.</li> <li>✓ Outbound Port: Outbound proxy port.</li> <li>✓ Local Port: Local port number.</li> <li>✓ Reg. Timer(sec): Registration refreshing interval.</li> <li>✓ Codec: Compressed audio format.</li> <li>✓ Pkt Time(ms): Audio transmitting interval.</li> <li>✓ OutofBand DTMF: The working of out-of-band dual-tone multifrequency.</li> </ul>

#### Roaming

The Roaming menu enables you to set specific parameters for roaming from wireless access point to another.

Options available in the Roaming menu:

Option	Description
Roam Metric	Specify an RSSI (Received Signal Strength Indication) value to
	begin a roaming scan.
Roam Delta	Specify the RSSI threshold for target access points to join.
Nprobes	Specify the number of probes per channel to send when scanning.
Active Time	Specify the amount of time spent on each channel when scanning.
Home Time	Specify the amount of time spent on the home channel between
	scans.

#### **Secure Setup**

The Secure Setup menu enables you to configure your VoIP Phone's wireless network settings with the push of a button.

When you see "Run Secure Easy Setup?" message appear on the screen, press OK

### **Settings**

Use the Settings menu to make changes to select regional settings, set the date and time, and personalize your phone.

Options available in the Settings menu:

#### Language

The Language menu enables you to set your VoIP phone's display language. To change the

language, highlight the language you would like the phone to use, then press to store your setting.

#### Clock

The Clock menu enables you to set your VoIP phone's time and date settings.

Options available in the Clock menu:

Option	Description	
Time	Set the time displayed on your VoIP 's standby mode.	
Date	Set the date displayed on your VoIP 's standby mode.	
Time Format	Set the time's display format to 12-Hour or 24-Hour format.	
Date Format	Set the date's display format to 'YY/MM/DD or MM/DD/'YY format.	
Timezone	Set your local timezone.	
Daylight Savings	Activate or deactivate automatic Daylight Savings time adjustment.	
Network Time	Activate or deactivate the phone from updating the time from an	
	NTP server.	

#### **Alarm Clock**

The Alarm Clock enables you to set an alarm on at a specified time. The alarm clock can also be set Once, Daily or Weekly.

Options available in the Alarm Clock menu:

Option	Description
Alarm Time	Set the time you want the alarm to activate.

Mode	Set the alarm to activate Once, Daily, or Weekly.
Melody	Set what tune the alarm will make.

Call Settings
The Call Settings menu enables you to change all call related setting on your VoIP phone.
Options available in the Call Settings menu:

Option	Description
Call Waiting	Activate or deactivate call waiting.
Call Forward	Make changes to call forward settings. Press » Select
	✓ Forward Number: enables you to enter a number to forward calls to.
	✓ Forward All: enables you to forward all calls.
	✓ No Answer: enables you to forward missed calls.
	✓ Busy: enables you to forward calls when your phone is busy.
	✓ Cancel All: enables you to cancel all forwarding options.
Block Caller ID	Activate or deactivate caller ID blocking.
Refuse Private	Block incoming calls from callers with a private caller ID.
Beep Notification	Activate or deactivate the beep awareness at the 50 seconds for every minute interval.
Hold Transfer	This feature allows you to transfer your call via <b>SIP</b> server or <b>DTMF</b>
Tiola Hallstel	Flash.
Regional Tone	This feature enables you to set specific call progressing tone, either
	Japan or North America.

#### **Speed Dial**

The Speed Dial menu enables you to change the way your VoIP phone's speed dial function works. You can select *Disable* to disable speed dial, *Ask* to see a confirmation screen before the phone dials a contact, or *Dial* immediately dial a contact.

#### **Sound Settings**

The Sound Settings enables you to adjust your VoIP phone's speaker volume, ringer settings, warning and power on/off tones.

Options available in the Sound Settings menu:

Option	Description
Speaker Volume	Set your VoIP phone's speaker volume.
Ring Tone	Set your VoIP phone's ring tone and volume. Press > Select
	<ul> <li>Melody: enables you to set the VoIP phone's ring tone.</li> <li>Ring Volume: enables you to adjust your VoIP phone's ringer volume.</li> </ul>
Ring Mode	Set your VoIP phone's ring mode to <b>Silent</b> , <b>Ring</b> , <b>Vibrate</b> , or <b>Ring+Vibrator</b> .
Warning Tone	Activate or deactivate your VoIP phone's warning tones.
On/Off Tone	Activate or deactivate your VoIP phone's powering on/off tones.

#### **Display Settings**

The Display Settings menu enables you to customize your VoIP phone's display. Options available in the Display Settings menu:

<u> </u>	1 7 0	
Option	Description	
Oblion	Describuon	

Wallpaper	Change the picture displayed on the standby mode.	
Greeting	Change the message displayed on the standby mode.	
LCD Off Time	Change the amount of time it takes for your VoIP phone to turn off its LCD when then phone is not use.	
LCD Brightness	Change the brightness of the LCD screen.	
Config. Tip	Activate or deactivate configuration tips.	

### Keypad

The Keypad menu enables you to customize your VoIP phone's keypad settings. Options available in the Keypad menu:

Option	Description
Key Lock	Lock your VoIP phone's keypad. Press » OK.
Key Tone	Activate or deactivate your VoIP phone's key tones.
Key Tone Volume	Change the volume of the key tone.
Key Backlight	Activate or deactivate your VoIP phone's key backlight.

#### **User Data**

The User Data enables you to customize your VoIP phone's files.

Options available in the User Data menu:

Option	Description
Wallpaper	Wallpaper can be uploaded to your VoIP phone.
Melody	Melodies can be uploaded to your VoIP phone.
Voice Recorder	Calls can be saved as voice memo for your VoIP phone.

### Passwd. Settings

The User Data enables you to customize your VoIP phone's files.

Options available in the Passwd. Settings menu:

Option	Description
Passwd. Protect	Protect the usage of your VoIP phone.
Passwd. Change	Change the password of your VoIP phone.

#### **Tools**

Use the Tools menu to view information about your VoIP phone and network status. Options available in the Tools menu:

Option	Description
Signal Quality	View signal status information for the wireless access point you're
	connected to.
Site Survey	Perform a site survey of all the wireless access points in range of
	your VoIP phone.
Statistics	View your VoIP phone's network and codec statistics. Press »
	Select:
	✓ IP Statistics: enables you to check network packets statistics.
	✓ RTP/RTCP: enables you to check Real-Time Transport
	Protocol (RTP) and Real Time Control Protocol.
	✓ Encoding: enables you to check encoding statistics.
	✓ Decoding: enables you to check decoding statistics.

Battery	Check your VoIP phone's battery level.
Ping	Ping an IP address or domain.
Version	Your VoIP phone's software version.
Back to Default	Reset all of your VoIP phone's settings back to their factory
	defaults.
Restart	Soft reset your VoIP phone.

## Chapter 5 Using the Web-Based Utility

• The web-based utility on your PC enables you to view, change, or edit the most commonly used features of your VoIP phone.

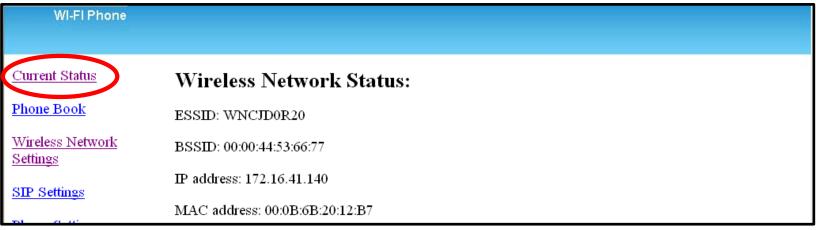
### 5.1 Accessing the Web-Based Utility

- 1. To start, it is necessary to have your VoIP phone's IP address. In standby, press > Status > Phone Status > IP Address. If you use a Static IP, the address will stay the same. If you use a DHCP, the IP address may change every time you turn on the phone.
- 2. On your PC that is linked to the same network as the phone, launch Internet Explorer. In the Address field, enter » http:// IP Address where the IP address is the VoIP phone's IP address that you obtained in step 1. Press » Enter.
- 3. The VoIP phone login screen is displayed. Enter **> User Name** and **Password > Submit**. You will log in to the **Wireless Network Status** screen and can select any of the tabs to add or change phone settings' information.

**Note!** The default **User Name** is **admin** and the **Password** is **admin**, but may change if you have an ITSP.

#### **Current Status**

By selecting *Current Status*, you will view your VoIP phone's linkage status: **ESSID**, **BSSID**, **IP** address and **MAC** address are indicated.



#### **Phone Book**

Note! The Phone Book stores and displays up to 100 contacts.

#### **Phone Book List**

Access a list of all contacts and numbers. To edit a contact, press the contact's **Name**. To add a new entry, press **New**. Press **Clear All** to remove all entries from the phone.



#### **Phone Book Edit**

In the Phone Book Edit screen, the following optional information are listed:

Option	Description	
Name	The contact's name.	
E-mail	The e-mail address for the contact.	
Ring Tone	Stores a specific ring tone for the contact.	
Number 1-5	Stores up to five different phone numbers for the contact.	
Speed Dial 1-5	Sets speed dial numbers for each number. The phone holds 9 speed dial numbers.	
Type Choice 1-5	Set the type either Generic, Mobile, Office, Home or Fax for each number.	

### **Wireless Network Settings**

Click **Configure**, the Wireless Network Settings options are listed. Enter the Network Profile Name, ESSID, Data Rate of the router, Security, IP Setting and NAT Setting.



#### **Data Rate**

Options include: Auto, 1Mb/s, 2Mb/s, 5.5Mb/s, 6Mb/s, 9Mb/s, 11Mb/s, 12Mb/s, 18Mb/s, 24Mb/s, 36Mb/s, 48Mb/s or 54Mb/s.

#### **Security**

You can select the type of Security settings you want to use, including **OPEN**, or one of several **WEP** or **WPA/WPA2** options.

#### **IP Setting**

Options include: DHCP, Fixed IP or PPPoE.

#### **NAT Setting**

For the NAT Setting you can **Disable** the NAT Solution or select **STUN** server options.

#### Certification

Enter the Certification setting, including **CA Cert**., **User Cert**. and **Private Key**. The correspondent information can be uploaded.

#### **SIP Account Choice**

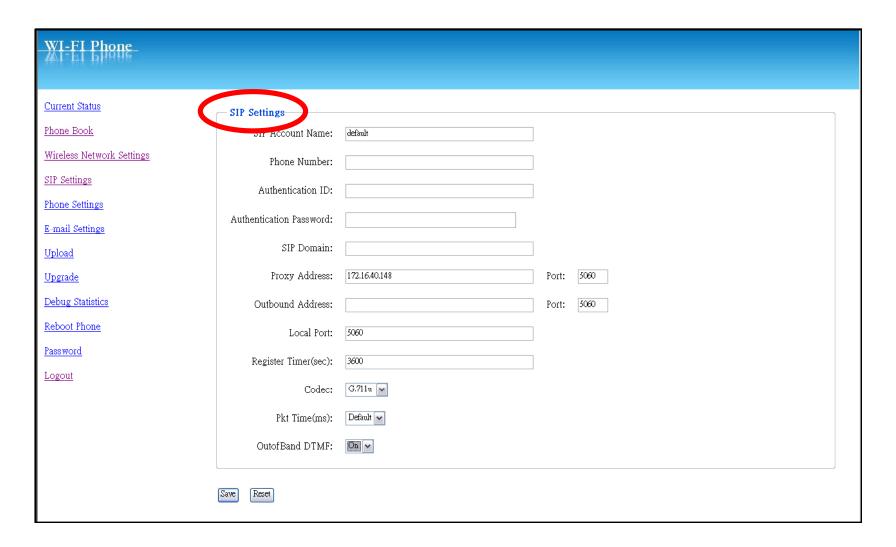
SIP Account Choice can be selected on this screen. Click **Commit Changes** to configure the accounts. The following items are listed:

Option	Description
SIP Account Name	Enter the correspondent name.
Phone Number	Enter the correspondent numbers.

Authentication ID	Enter the correspondent identification.	
Authentication Password	Enter the correspondent password.	
SIP Domain	Enter the SIP domain address	
Local Port	Enter the local port number.	
Proxy Address	Enter the proxy address.	
Outbound Address	The outbound proxy address.	
Register Timer(sec)	Refers to Registration refreshing interval.	
Codec	Compressed audio format. You can set either Auto, G.711u or G.711a.	
Pkt Time(ms)	The Audio transmitting interval. You can set either Default, 20,30,40,50,60,70 or 80	
OutofBand DTMF	The working of out-of-band dual-tone multifrequency. You can either set Off or On.	

### **SIP Settings**

Six SIP accounts can be set for your VoIP phone. The SIP Account List option displays first. When you Configure, the SIP Setting screen displays. You can add, change or edit the SIP Account Name, Phone Number, Authentication ID, Authentication Password, SIP Domain, Proxy Address, Outbound Address, Local Port and Register Timer(sec). You can also select Codec options, Pkt Time(ms) (in milliseconds) and OutBand DTMF (On/Off).



### **Phone Settings**

Adjust the phone's Clock, Call, Sound and Display Settings. Also set the Phone Protection.

### Clock

Option	Description
Time Zone	Set your local time zone.
Daylight Savings	Check to enable or uncheck to disable automatic Daylight Savings time adjustment.
Network Time	Set On or Off the phone from updating the time from an NTP server.

Call Settings

Option	Description
Call Waiting	Check to activate Call Waiting, uncheck to deactivate.
Forward Number	Enter a phone number or IP address to forward your calls to.
Forward All	Check to send all incoming calls to the Forward Number.
No Answer	Check to send calls to Forward Number when there is no answer
	on the VoIP phone.
Busy	Check to forward calls when your phone is busy.
Block Caller ID	Select On to block caller id's that you previously set up in the VoIP
	phone menu.
Refuse Private	Select On to refuse calls that display Private Call as the user ID.
Beep Notification	Activate or deactivate the beep notification feature.
Regional Tone	Set the regional tone setting to North America or Japan.
Hold Transfer	Select SIP or DTMF Flash as the way used to transfer calls.

**Sound Settings** 

Option	Description	
Speaker Volume	Set the VoIP phone's speaker volume.	
Ring Volume	Set the VoIP phone's ring volume.	
Start Tone	Check to activate the VoIP phone's power on tone.	
Alarm Melody	Set the VoIP phone's alarm melody.	
Warning Tone	Check to activate the VoIP phone's warning tone, such as low battery.	
Ring Mode	Set the VoIP phone's ring mode to Silent, Ring, Vibrate, or Ring + Vibrate.	
Shutdown Tone	Check to activate the VoIP phone's power off tone.	
Melody	Select one of the preset ring tone melodies.	

**Display Settings** 

Option	Description
LCD Off Time	Change the amount of time it takes for the VoIP phone to turn off its
	LCD when the phone is not in use.
Wallpaper	Change the picture displayed in standby.

#### **Phone Protection**

Check the **Protect Phone Admin Access** box to deactivate the phone from being used by other SIP providers.

### **E-mail Settings**

Your VoIP phone built-in e-mail client enables you to send and receive messages using your POP3 account.

This screen enables you to adjust your e-mail account list. Five different e-mail accounts can be created. From the list, click **Configure** to set up a new account. You can also remove or activate an existing e-mail account.

Option	Details
Account Setting	Account Name
	Your Name
	Mail Address
POP3 Setting	POP3 Address
(To find out these settings	POP3 User ID
check the specific e-mail program's instructions)	POP3 Password
	POP3 Port (default: 110)
SMTP Setting	SMTP Address
(The outgoing server)	SMTP User ID
	SMTP Password
	SMTP Port (default: 25)
Additional Settings	Reply Address
	Reserve Mail
	(to keep a copy of the mail on the remove POP3 server)
	Signature

Click **Save** to add this entry to your e-mail account list. Click **Reset** to cancel the settings. Click **E-mail** tab to return to the main E-mail screen.

### **Upload**

This screen enables you to **Upload** and **Preview** (either **Play** or **Show**) the **Melody** and **Wallpaper**.

Click **Delete** (one by one) or **Delete All** to remove the melody and the wallpaper.

### **Upgrade**

Software information

Option	Description
Active	View the <b>Active</b> software application.
Inactive	View the <b>Inactive</b> software application.
New Image	Select a <b>New</b> software <b>Image</b> by typing the address, or click
_	Browse and locate the image.

#### **Debug Statistics**

This screen enables you to view **Wireless Network Status**, **WL Information**, **RTP Stats**, **PVE Stats** and **PVE State**.

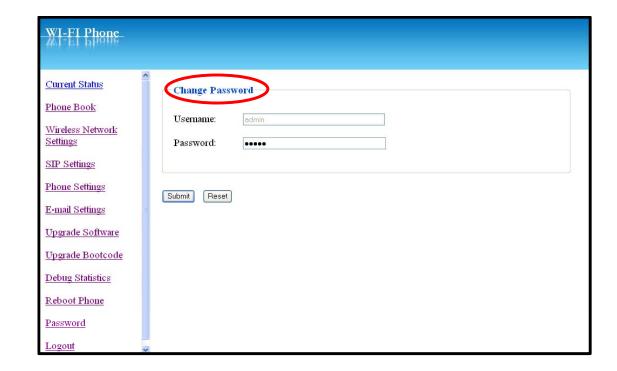
#### **Reboot Phone**

After upgrading software it is necessary to re-power on the phone to activate all new settings.



### **Password**

This screen enables you to change the password information of your VoIP phone. Enter the new **Username** and/or **Password** for the VoIP phone. Click **Submit** to immediately change the password, or click **Reset** to cancel the setting.



## Chapter 6 Troubleshooting

#### 1. What is Wi Fi?

Wi-Fi<sup>®</sup> is a registered certification mark of the Wi-Fi Alliance. Wi Fi stands for Wireless Fidelity. It is a way to get Internet access and is used to define any of the wireless technology in the IEEE802.11 specification, such as 802.11a, 802.11b and 802.11g. The Wi-Fi Alliance is the body responsible for promoting the term and its association with various wireless technology standards.

#### 2. What do I need to access Wi Fi?

You need a Wi Fi device (a computer, PDA or this mobile phone) that has Wi Fi connectivity already working. You need to operate this device in any location which 802.11 wireless service is available, such as a Wi Fi hotspot. You may need to contact the wireless service provider for details of the Wi Fi settings, such as the network name, IP address or security codes.

#### 3. How do I find a Wi Fi hotspot?

Check the website at http://www.wi-fihotspotlist.com/ to find hotspots in more than 50 countries.

- 4. What if unable to register with the SIP server?
- Make sure the Internet and the SIP proxy server are reachable.
- Make sure the SIP account and the password are correct.

#### 5. Which Codec Should I Choose?

As which codec choice is depending on what codec is supported on both end of the VoIP host. Generally a codec with low bandwidth consumption and high voice quality is a good codec.

### 6. How do I know that the call quality is good?

Technology advances in IP telephony transportation have made Internet calling as good as or better than normal PSTN connections. This is mostly effective for high speed Broadband connections, whereas dial up services have some way to go before delivering the quality of PSTN calling.

#### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **IMPORTANT NOTE:**

#### Federal Communication Commission (FCC) Radiation Exposure Statement

This EUT is compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.