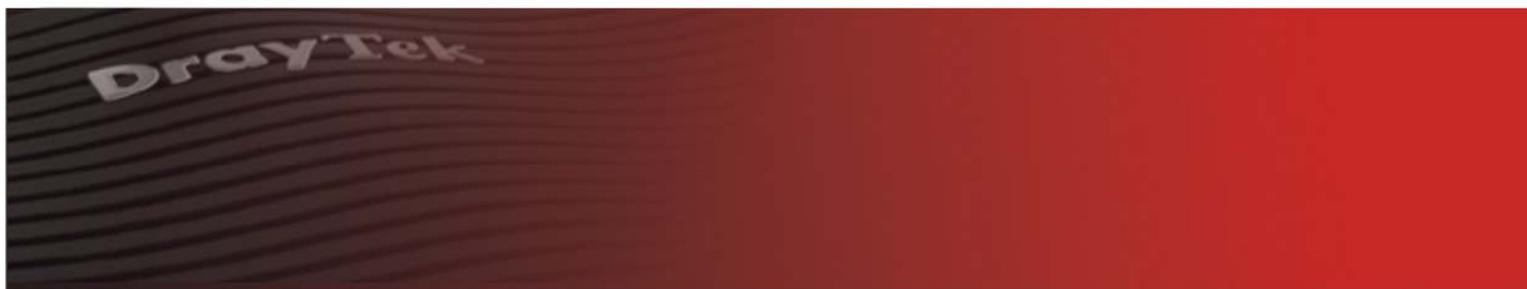# DrayTek

VigorPhone 350

IP Phone

Your reliable networking solutions partner

User's Guide

V1.1

VigorPhone 350
User's Guide

Version: 1.1

Date: 28/06/2010

Copyright Information

Safety Instructions and Approval

Safety Instructions

- Read the installation guide thoroughly before you set up the device.
- The router is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the router yourself.
- Do not place the device in a damp or humid place, e.g. a bathroom.
- The device should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.
- Do not expose the device to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.
- Do not deploy the cable for LAN connection outdoor to prevent electronic shock hazards.
- Keep the package out of reach of children.
- When you want to dispose of the device, please follow local regulations on conservation of the environment.

Warranty

We warrant to the original end user (purchaser) that the device will be free from any defects in workmanship or materials for a period of two (1) years from the date of purchase from the dealer. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labor, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions. The warranty does not cover the bundled or licensed software of other vendors. Defects which do not significantly affect the usability of the product will not be covered by the warranty. We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

Be a Registered Owner

Web registration is preferred. You can register your device via http://www.draytek.com.

Firmware & Tools Updates

Due to the continuous evolution of DrayTek technology, all devices will be regularly upgraded. Please consult the DrayTek web site for more information on newest firmware, tools and documents.

http://www.draytek.com

Regulatory Information

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 use 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 form that to which the receiver is connected.

● Consult the dealer or an experienced radio/TV technician for help.

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 may accept any interference received, including interference that may cause undesired operation.

Please visit http://www.draytek.com/user/AboutRegulatory.php.

CE Notice (European Union)

The symbol indicates compliance of this equipment to the EMC Directive and the Low Voltage Directive of the European Union. These markings indicate that this system meets the following technical standards:

● EN 55022 — "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment."

● EN 55024 — "Information technology equipment - Immunity characteristics - Limits and methods of measurement."

● EN 61000-3-2 — "Electromagnetic compatibility (EMC) - Part 3: Limits - Section 2: Limits for harmonic current emissions (Equipment input current up to and including 16 A per phase)."

● EN 61000-3-3 — "Electromagnetic compatibility (EMC) -Part 3: Limits - Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to and including 16 A."

● EN 60950 — "Safety of Information Technology Equipment."

Table of Contents

Chapter 1 Overview

VigorPhone enables you to make phone calls through the IP network instead of calling through a tradition local PSTN line.

It is workable with VigorIPPBX series for auto provision capability. To manage various calling purposes, VigorPhone supports multi-sip registration with different accounts (up to 10) and support G.722 codec for promoting voice quality. The simple WEB UI based configuration allows you to operate VigorIPPBX with ease.

Read this user manual carefully to learn how to operate this product and take advantage of its features.

1.1 Package Contents

When unpacking the VoIP phone, ensure all the following items are present and undamaged. If anything appears to be missing or broken, contact your dealer for a replacement.
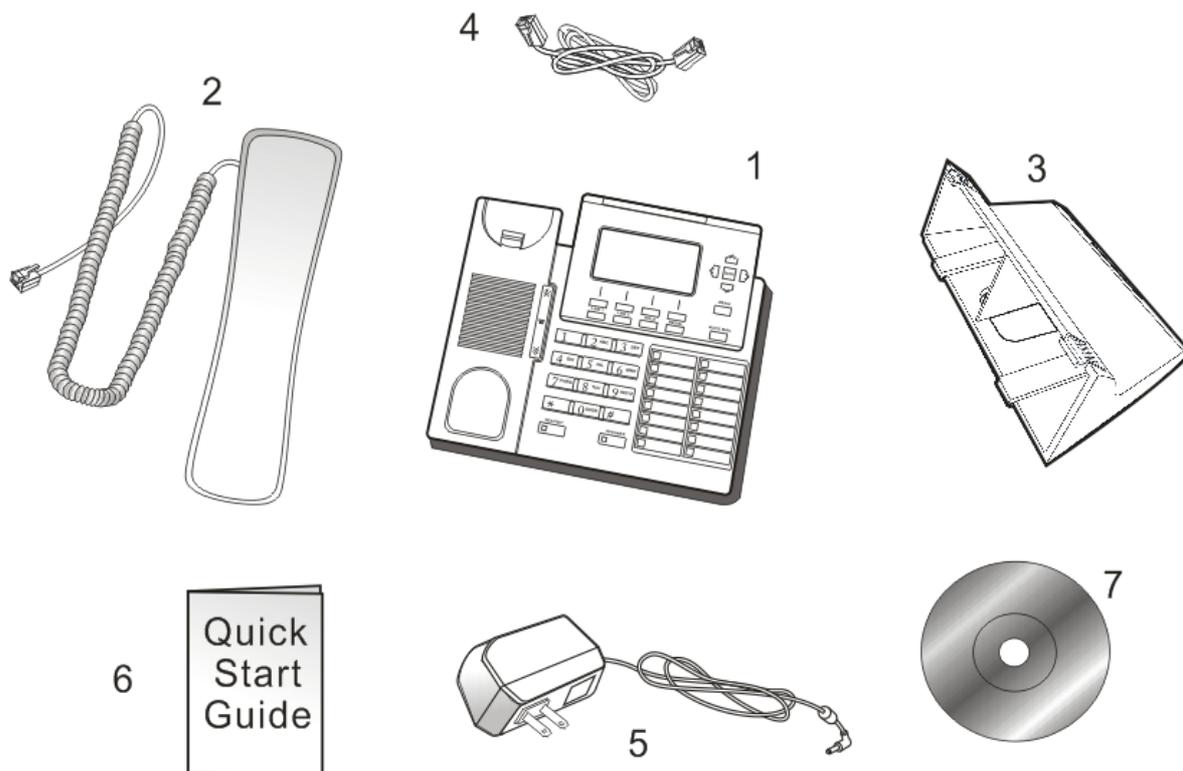
1. IP Phone (main body)	1 pc
2. Handset	1 pc
3. Phone Stand /Bracket	1 pc
4. Network Cable	1 pc
5. AC Adapter	1 pc
6. Quick Start Guide	1 pc
7. CD (Documentation)	1 pc

1.2 Product Description

This VoIP Phone features based on SIP (RFC 3261). Please familiarize yourself with the functions of the VoIP phone.

1.2.1 Front View

Item	Name	Description
1	Incoming call indicator	A red light indicates an incoming call.
2	Display screen	Displays calls and status information.
3	4-way Navigation keys	Press to scroll through lists and menus on the display.
4	ENTER key	Press to enter a menu.
5	MENU	Press to enter the menu options or exit to standby mode.
6	VOICE MAIL	Press to listen to voice mail messages. Steady red lights on means there is a new voice message.
7	Memory keys with LED indicators (Speed dial \BLF)	Press any of the keys to speed dial the preset contact number. By enable BLF (Busy Lamp Field) to a specify SIP server, each key enables indication of line status from a SIP server. There are three status that BLF lights on: ❖ Steady green lights when the line is not in use and registered to SIP server. ❖ Steady red lights when the line is busy. ❖ Blink red lights when the line is ringing
8	SPEAKER	Activates the speakerphone to allow hands free conversations.
9	Alphanumerical keys	Press these keys to enter phone numbers and texts.
10	Headset	Press to activate a call using external headset.

11	**Soft Keys**	
	Icom (Intercom)	Press the button and the extension number you want to dial. The call will be automatically established with the other end.
	Missed	Press to view missed calls information.
	DND(Do Not Disturb)	Press to block all incoming calls.
	P.book(Phone Book)	Press to access the personal phonebook directory.
	Trans.(Transfer)	Press to transfer a call.
	Conf.(Conference)	Press to initiate a conference call.
	Schdl.(Schedule)	Press to create, view, edit, or delete schedule.
	Select	Press to apply setting.
	Edit	To edit the selected item.
	Back	To go back to the previous level.
	Save	Save the related information.
	Apply	To save and apply changes.
	Info.(Information)	Press to view settings of the selected option.
	Function Keys	
	LINE 1 / LINE 2	There are two LINEs buttons in this IP Phone. Each line represented a SIP call for the following status: - The line is not used the line stays no lights. - Dialing a call, the selected line key lights on steady green If a call has sent Green lights off and turns on steady red light. * When an existing call has been put on hold, the represented Line lights blanking green.
	HOLD	Press to put an active call on hold.
	REDIAL	Press to call from call history dialed Calls.
12	Volume control keys	Press to increase or decrease the volume of the ringer tone or talking volume in handset, handset, or speakerphone.

1.2.2 Back View
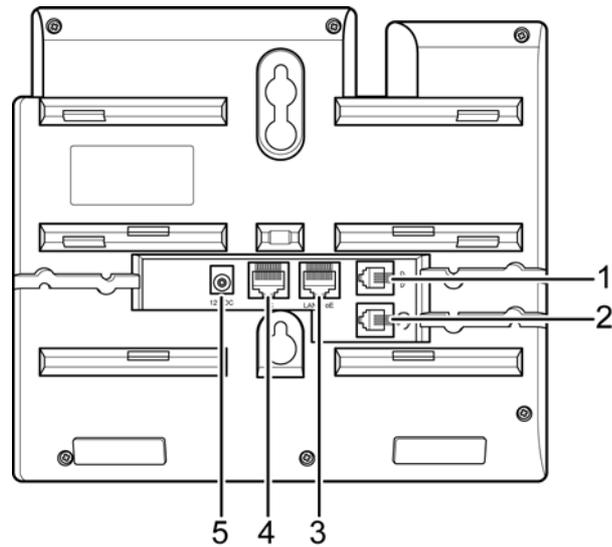
Item	Name	Description
1	Handset Jack	Connects to the phone. RJ-9
2	Headset Jack	Connects to an external headset.RJ-9
3	LAN/ PoE Port	Connects to LAN cable. 10/100Mbps RJ-45 port for LAN (uplink) connection. If you are using Power over Ethernet (PoE), the power to the phone is supplied when you connect the Ethernet cable. Draws power from either spare line or signal line.
4	PC Port	Connects to PC. 10/100Mbps RJ-45 port for PC (downlink) connection.
5	Power Jack	Connects to AC power adapter. 12V DC power port.

1.3 Setting Up the Phone

The following illustration shows how to connect the VoIP phone to power, LAN, WAN, and the handset or a headset.
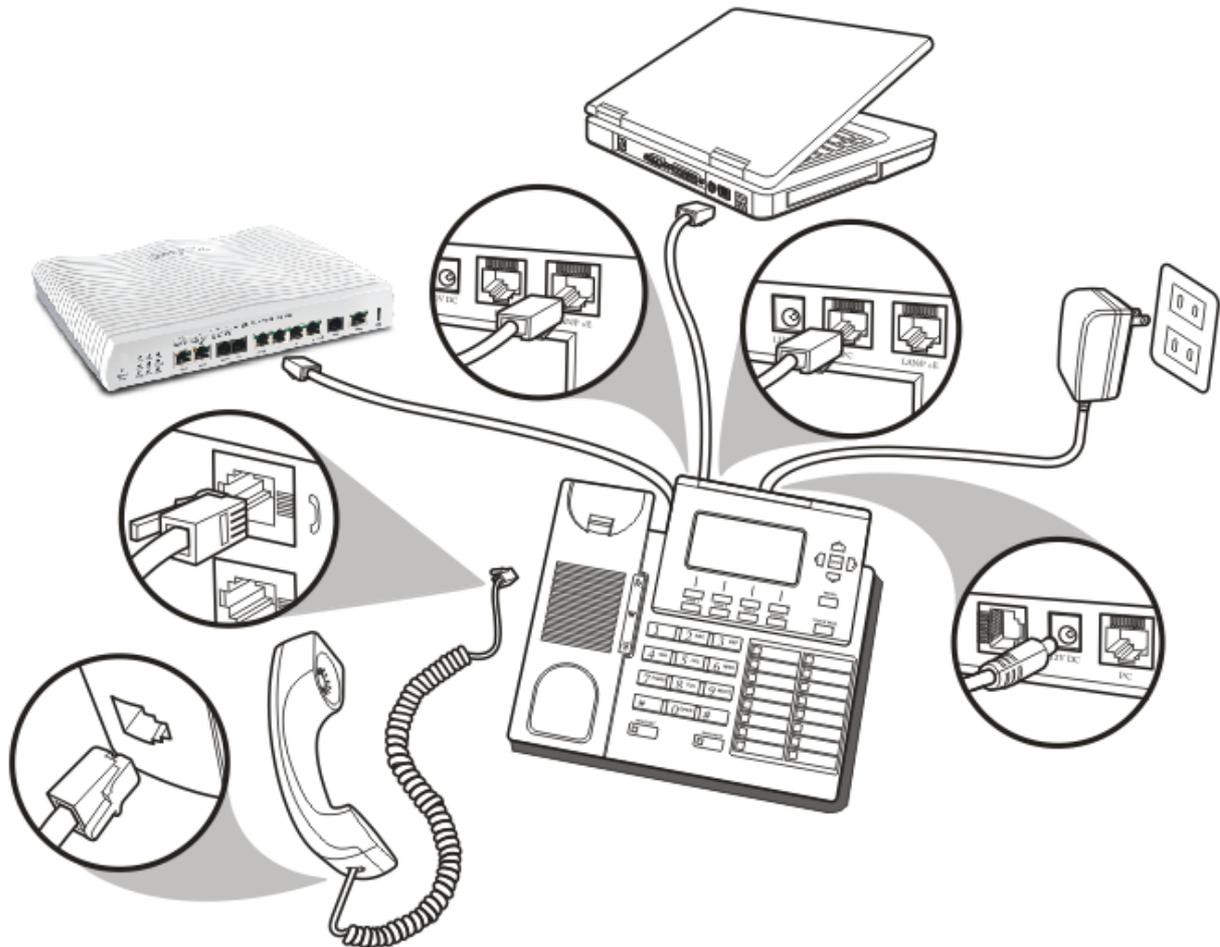
This page is left blank.

Chapter 2 Display Screen Configuration

The menu directory enables you to setup the product configuration from Phone Settings, VoIP settings, and Network settings. Follow these steps to access the menu and the menu items.

1. Press the **Menu** key to access the menu.

2. Scroll through the main menu options using the 4-way navigation keys and press the **Enter** key to view the submenu.

3. Repeat the previous step to browse through the menu items, submenus, and options.

4. Press the **Back** soft key to cancel your selection and go back to the previous level of the menu.

5. To choose a menu setting, press the **Enter** key.

Entering to the areas **Phone Settings**, **General SIP Settings**, **SIP Accounts** and **Network** submenus.

NOTE: Default login-in timeout 2:00.

When you access the menu, the display screen shows the menu options and the soft key. There are four soft key located under the display screen. Soft key items vary depending on the menu options.

For example, the illustration below shows the main menu options and two available soft key, **Select** and **Back**.
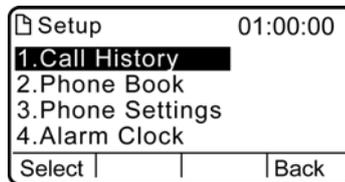
2.1 Call History

The VoIP phone stores information about all calls made or received.
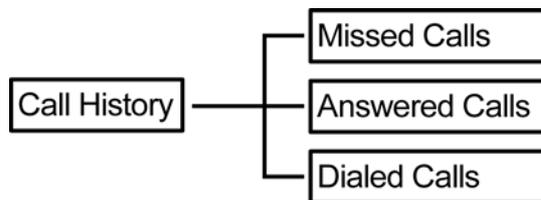
NOTE: *The lists are stored from the newest to oldest entries. The oldest entries are deleted as new entries are added. The maximum entry for each item is 200 records.*

2.1.1 Missed Calls

The **Missed Calls** list consists of the calls that are not answered. You can choose to dial, save, or delete or see details of a single missed call from the missed call logs. For quick access to missed calls, simply press the **Missed** soft key from the main menu. Select a call from the list by pressing the up/ down navigation keys and choose a soft key option.

Use the soft keys to do the following functions:

- **Dial**: Dial the number of the selected call.
- **Save**: Save the related information about the call.
- **Detail**: Press to view a call details or enter to submenu **Delete** to erase a record.
- **Back**: Press to go back to the previous level: **Call History** submenu.

2.1.2 Answered Calls

The **Answered Calls** list consists of the most recent numbers answered. You can choose to dial, save, or delete or see details of a single entry from the answered call logs. Select a call from the list by pressing the navigation up/ down keys and choose a soft key option.

Use the soft keys to do the following functions:

- **Dial**: Dial the number of the selected call.
- **Save**: Save the related information about the call.
- **Detail**: Press to view a call details or enter to submenu **Delete** to erase a record.
- **Back**: Press to go back to the previous level: **Call History** submenu.

2.1.3 Dialed Calls

The **Dialed Calls** list consists of the most recent numbers dialed. You can choose to save, dial or view a single entry from the dialed call logs. Select a call from the dialed history by pressing the up/ down navigation keys and choose a soft key option.

Use the soft keys to do the following functions:

- **Dial**: Dial the number of the selected call.
- **Save**: Save the related information about the call.
- **Detail**: Press to view a call details or enter to submenu **Delete** to erase a record.
- **Back**: Press to go back to the previous level: **Call History** submenu.

2.2 Phone Book

The phone book feature enables you to view and create entries for your contacts and edit their contact information.

> **NOTE:** *The lists are stored from the newest to oldest entries. The oldest entries are deleted as new entries are added. The maximum entry for each item is 200 records.*

2.2.1 Creating a New Entry

To create a new entry, follow the steps below:

1. Press **New**.

2. Type the name of the new contact.

3. Input the number of the new contact.

4. Press navigation down key to input Domain address or press **Edit** to choose Domain of the contact's IP address.

5. Press the **Save** soft key to save the new contact's information.

> **NOTE:** *There are three options in "Domain" field:*
> *a. Empty: VoIP Phone will deliver dial the number into the current selected SIP profile.*
> *b. User Define: Entering SIP domain manually.*
> *c. Select an existing SIP profile.*

2.2.2 Modifying or Deleting a Contact

To modify contact information, follow the steps below:

1. Select the contact to modify or delete.

2. Press **Detail** then select **Edit** to modify or select **Delete** to erase the current record.

Use the soft keys to do the following functions:

- **Dial**: Dial the number of the selected contact.

- **New**: Create a new contact and save the contact information: name, number and domain name.

- **Detail**: Press to view contact information or enter to submenu **Edit**/**Delete** to modify/erase a record.

- **Back**: Press to go back to the previous level: **Main Menu**.

2.3 Phone Settings

Phone Settings allows you to set up phone features such as call forwarding, speed dialing, and more.
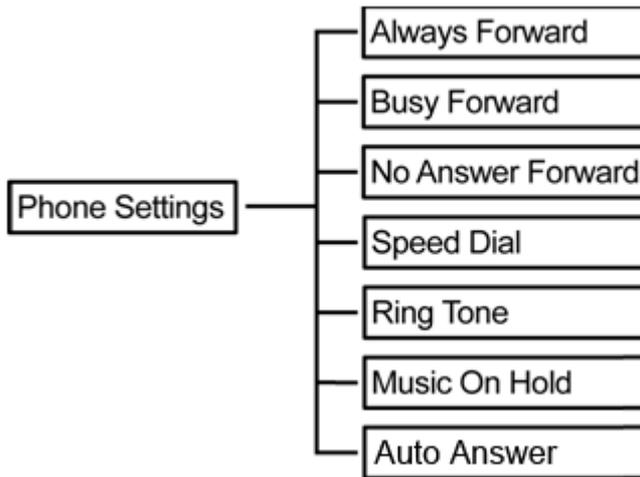
2.3.1 Always Forward

Always Forward allows you to set the account number to which all incoming calls are to be forwarded. This function requires you to input the following:

- **Number**: The phone number to forward all incoming calls.
- **Account**: This refers to the SIP account number.

Use the soft key to delete, clear, and save entries or to go back the previous menu.

Once you have completed "Number" and "Account" settings, using "Edit" to enable "Always Forward".

2.3.2 Busy Forward

Busy Forward allows you to set the account number to which incoming calls are to be forwarded when the line is busy. This function requires you to input the following:

- **Number**: The phone number to forward incoming calls.
- **Account**: This refers to the SIP account number.

Use the soft key to delete, clear, and save entries or to go back the previous menu.

Once you have completed "Number" and "Account" settings, using "Edit" to enable "Busy Forward".

2.3.3 No Answer Forward

No Answer Forward allows you to forward the phone number and a specific SIP account when no answered for a period of time. This function requires you to input the following:

- **Number**: The phone number to forward incoming calls.
- **Account**: This refers to the SIP account number.
- **Timeout**: This refers to a period of time (10 sec ~ 50 sec) without answering the call.

Use the soft key to delete, clear, edit and save entries or to go back the previous menu.

Once you have completed "Number", "Account", and "Timeout" settings, using "Edit" to enable "No Answer Forward".

2.3.4 Speed Dial / BLF (Busy Lamp Field)

Speed Dial: Allows you to enter an index code, press a button to place a call (rather than dialing the number manually).

BLF: Allows you to monitor the line status (in-use/idle/busy) of a phone line associated with a speed-dial button.

You can assign 16 speed dial or BLF up-to hotkeys to this VoIP phone. Select one of the memory keys you want to assign speed dial number, Press **Select** soft key. To assign speed dial, you are required to input the following:

- **Number**: The phone number to assign speed dial.
- **Account**: This refers to the SIP profile created in this VoIP Phone.
- **Speed Dial/BLF**: Select "Speed Dial" or "BLF" mode.

Once you have completed "Number" and "Account" settings, using "Edit" to select "Speed Dial" or "BLF".

Use the soft key to do the following functions:

- **Delete**: Press to delete a character value.
- **Clear**: Press to clear the entire value.
- **Save**: Press to save speed dial settings.
- **Back**: Press to go back to the previous level: **Speed Dial** submenu.
- **Edit**: Press to modify the selected setting.

2.3.5 Ring Tone

The VoIP phone provides 3 ring tone types. You can select the ring tone type according to your preference. You can also upload the ring tones you like from the web.

To set the ring tone type, do the following:

1. Use the up and down navigation keys to select the ring tone you prefer, and then press the **Select** soft key to confirm your selection.
2. Press the **Save** soft key to save your settings.

To adjust the ring tone's volume, simply press the upper/bottom end of the volume control key to increase/decrease the ring tone volume.

2.3.6 Music On Hold

The **Music on Hold** function enables the VoIP phone to play music when a caller is placed on hold.

- **Disable**: Select to disable this function.
- **Enable**: Select to enable this function.

Press the **Save** soft key to save Music On Hold settings.

When you enable the **Music On Hold** function, next time you receive a second call, press the **Hold** soft key to attend to the new call, and the first caller will listen to the music while waiting for you to answer.

2.3.7 Auto Answer

When **Auto Answer** is enabled, VigorPhone 350 will automatically answer the incoming call in speakerphone mode.

- **Disable**: Select to disable this function.
- **Enable**: Select to enable this function.

Press the **Save** soft key to save the settings.

2.4 Alarm Clock

The Alarm Clock submenu allows you to set the phone to sound an alarm at a specific time.

2.4.1 Alarm Time

Specify the time for the alarm to sound. Use the soft keys to do the following functions:

- **On / Off**: Press to turn alarm on or off.
- **Edit**: Press to edit the alarm time.
- **Apply**: Press to save and apply settings.
- **Back**: Press to go back to the previous level: **Main Menu**.

2.4.2 Repeat

Setting Repeat **On** enables the alarm to sound everyday at the specified time. Use the soft keys to do the following functions:

- **On / Off**: Press to set repeat on or off.
- **Apply**: Press to save and apply settings.
- **Back**: Press to go back to the previous level: **Main Menu**.

2.5 Calendar

Use the Calendar function to plan your schedules. This function allows you to let the phone remind you through a ring at the scheduled time. You can use the navigation keys or the **Goto** soft key to select a date on the calendar.

Use the soft key to do the following functions:

- **Schdl.**: Press to create, view, edit, or delete schedule.
- **New**: Press to create a new schedule.
- **Goto**: Press to enter and go to a specific date.
- **Back**: Press to go back to the previous level: **Main Menu**.

2.5.1 Viewing the Schedule List

1. Select the date on which you want to view the schedule list.
2. Press the **Schdl.** soft key, you will see the schedule list set for the selected date.
3. Use the soft key to do the following functions:

- **New**: Press to create a new schedule.
- **Detail**: Press to view the selected schedule. When the schedule is displayed on the screen, you can edit and delete the schedule using the soft key.
- **Back**: Press to go back to the previous level: **Calendar** submenu.

2.5.2 Setting up Schedules

You can make schedules/notes in the phone as your daily reminder. Follow the steps below:

1. Select the date to setup schedule.

---

2. Press the **New** soft key.

3. Use the soft keys to do the following functions:

- **Edit**: To edit the selected item.

- **Apply**: To save and apply changes.

- **Back**: To go back to the previous level: **Calendar** submenu.

You will see an alarm clock sign ⏰ appearing on the bottom right corner of the phone screen to denote set schedule.

2.6 System Settings

System Settings enables you to configure the phone system.
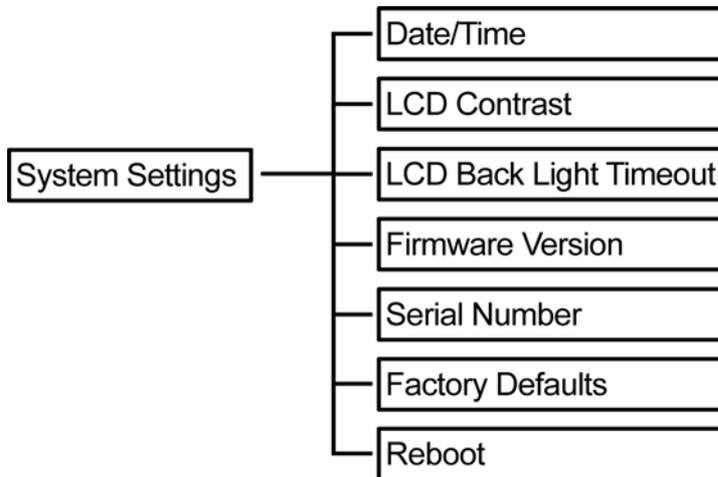
2.6.1 Date/ Time

The system default is retrieving Date/ Time information from **NTP** server when it connects to Internet.

To manually set the date and time:

1. Go to **Network, NTP & Time Settings**.

2. Disable **NTP**.

For more information of Date/Time setting, you may go to Page 35 "Network & Time Settings."

2.6.2 LCD Contrast

To setup the LCD Contrast does the following:

1. Choose the level of the contrast from 0 to 5.

2. **Select** : Press to apply level. **Save**: Press to save settings.

2.6.3 LCD Back Light Timeout

To setup the LCD Back Light Timeout does the following:

1. Choose the Timeout from 10 to 60 seconds.

2. **Select**: Press to apply second. **Save**: Press to save settings.

2.6.4 Firmware Version

Firmware Version functions allows you to view the current firmware version on the display screen.

2.6.5 Serial Number

Serial Number function allows you to view the serial number of your VoIP phone.

2.6.6 Factory Default

Select to restore settings into factory default values.

2.6.7 Reboot

Use this option to reboot the system. A warning message appears on the display, select: **Yes**: to reboot; **No**: to cancel reboot.

2.7 General SIP Settings

General SIP Settings allows you setup the code priority, ports frame size, signaling and voice precedence.
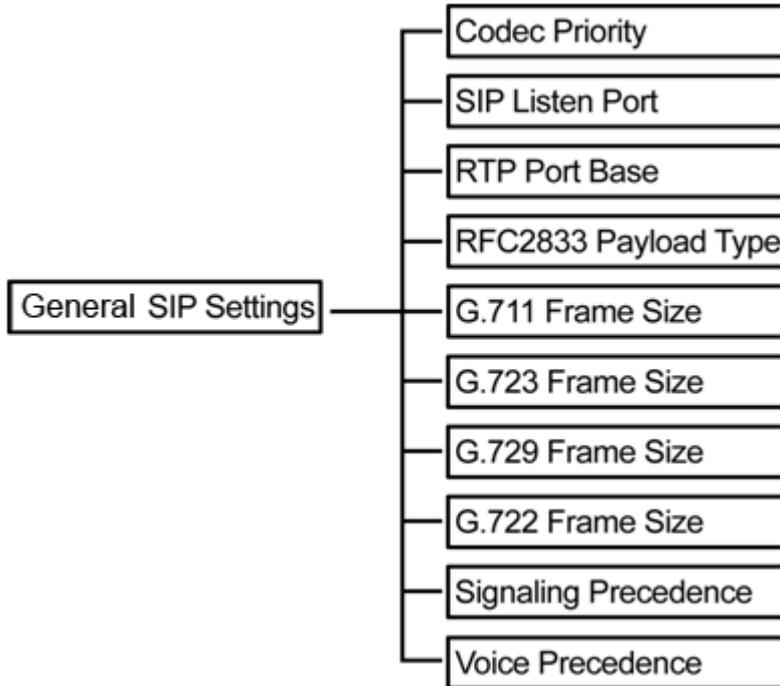
2.7.1 Codec Priority

This function allows you to set Codec priority and Codec types in SDP. This VoIP phone has enabled four Codec as following: G.711 u-law/G.711 a-law, G.723.1, G.729, G.722. There are four priority levels can be set in different order, "First Priority", "Second Priority", "Third Priority", and "Fourth Priority" or "Disable".

> **NOTE:**
> *a. Due to the codec limitation, only G.723/G.729 codec can be available when G.722 codec is not selected. Please reboot the VoIP Phone after making changes in Codec Priority.*
> *b. When disable all the codec priority, the SDP will automatically use G.711 codec as the default codec.*

2.7.2 SIP Listen Port

This function allows you to set the port number of user-agent where it receives SIP messages. The default value is 5060.

2.7.3 RTP Port Base

This parameter defines the local RTP-RTCP port base use to listen and transmit. The default value is 10000.

2.7.4 RFC2833 Payload Type

This parameter defines RFC2833. The default value is 101.

2.7.5 G.711 Frame Size

This function allows you to select the G.711 frame size. Options are: 20, 30, 40, 50, 60, 80 ms.

2.7.6 G.723 Frame Size

This function allows you to select the G.723 frame size. Options are: 30, 60, 90, 120, 150, 180 ms.

2.7.7 G.729 Frame Size

This function allows you to select the G.729 frame size. Options are: 20, 30, 40, 50, 60, 80 ms.

2.7.8 G.722 Frame Size

This function allows you to select the G.722 frame size. Options are: 20, 30, 40, 50, 60, 80 ms.

2.7.9 Signaling Precedence

This function allows you to select 0~5 priority level.

2.7.10 Voice Precedence

This function allows you to select 0~5 priority level.

The following soft keys are displayed on the screen when entering Globe SIP settings:

- **Delete**: Press to delete a character value.
- **Clear**: Press to clear the entire value.
- **Edit**: Press to edit the selected submenu option.
- **Save**: Press to save the specified SIP Listen Port.
- **Apply**: Press to save and apply Global SIP settings.
- **Back**: Press to go back to the previous level: **Main Menu**.

2.8 SIP Accounts

You can configure settings for up to ten SIP accounts with different SIP proxy. You will be able to make calls only after your SIP account is activated.

To configure an SIP account setting from the phone:

1. Select one of the ten SIP accounts to display the submenu. The following items are required:
    - **Registration:** Enable / disable this account.
    - **Registration ID:** Input SIP ID
    - **Display name:** Input the user name. The user name will be used for LCD SIP Profile name.
    - **Password:** Input the register password.
    - **Registration Server:** Input the domain server address. (You may press the pound key # to switch the input method from ABC text mode to 123 numeric mode. Use the * key to input dots"." in the address.)
    - **Expire time:** User can set the SIP expire time.

- **DTMF Type**: Input the DTMF type options: In-Band DTMF, Out-of-Band DTMF (RFC2833), and SIP INFO (RFC2976).

- **Authentication Name:** Input the Authentication Name used for authentication. It can be identical to or different from SIP Registration ID.

- **Proxy Server:** Input the proxy server address.

- **Voice Mail:** Input the access code base on requirement of your service provider.
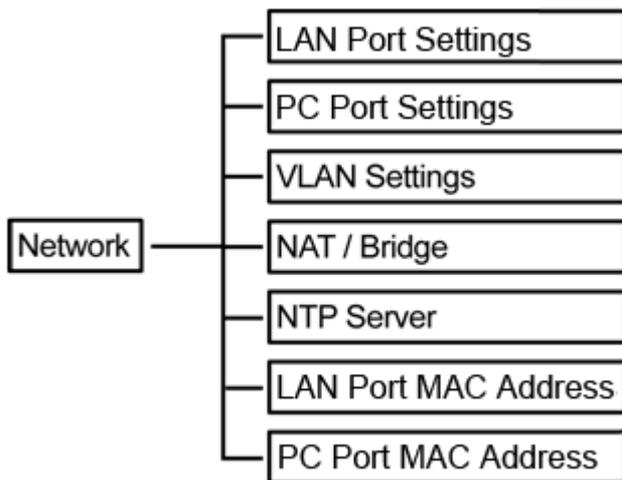
*Note: All information except **Username** will be provided by your ITSP or MIS.*

2. Press the **Edit** soft key to go into each option and make the required change.

3. Press the **Save** soft key to save your settings.

If you have more than one SIP account, repeat steps 1 to 3 to register settings for other SIP accounts.

2.9 Network

The Network option allows you to setup your LAN Port, PC Port, VLAN, NAT/Bridge, NTP Server and MAC Address.

```
                        ┌─ LAN Port Settings
                        ├─ PC Port Settings
                        ├─ VLAN Settings
        Network ────────┼─ NAT / Bridge
                        ├─ NTP Server
                        ├─ LAN Port MAC Address
                        └─ PC Port MAC Address
```

2.9.1 LAN Port Settings

This VoIP phone supports three different types of connections: Static IP, PPPoE, and DHCP.

To setup LAN Port:

1. Select the type of connection, by pressing the **Edit** soft key.

2. Select type of connection. Static IP, PPPoE, and DHCP.

3. Press the **Save** soft key to save settings.

Once you have completed select type of connection, press **Select** to enter Static IP or PPPoE information.

2.9.2 PC Port Settings

To configure the PC Port settings, use the soft keys to access the submenu options and perform necessary functions.

LAN settings have the following submenu options:

IP Address

Select this option to modify the IP address.

Net Mask

Select this option to modify the Net mask.

DHCP Server

Select this option to modify the settings and enable/ disable DHCP server.

To configure the DHCP server settings, the following items are required: **Lease Time**, **Domain Name**, **Primary DNS**, **and Secondary DNS**.

2.9.3 VLAN Settings

To configure the VLAN settings, use the soft keys to access the submenu options and perform necessary functions.

VLAN settings have the following submenu options:

Activation

Select this option to enable/ disable VLAN connection.

Identifier

Select this option to set up VLAN settings ID.

Priority

Select this option to set the priority level (0-7).

2.9.4 NAT / Bridge

This VoIP phone supports NAT/ Bridge setting.

To enable the NAT or bridge function, do the following:

1. Select **NAT** or **Bridge**.

2. Press the **Select** soft key to choose between **NAT** or **Bridge** mode. Press the **Save** soft key to save your settings.

2.9.5 NTP Server

The Network Time Protocol (NTP) is a protocol for distributing the Coordinated Universal Time (UTC) by means of synchronizing the clocks of computer systems over packet-switched, variable-latency data networks.

This VoIP Phone supports getting date & time from NTP server or enters date & time manually. To configure the NTP Server settings, use the soft keys to access the submenu options and perform necessary functions. NTP Server settings have the following submenu options:

NTP

Select this option to enable/ disable NTP server connection.

Primary Server

Select this option to set the primary server.

Secondary Server

Select this option to set the secondary server.

From the NTP Server submenu:

- Press the **Select** soft key to select from a list of servers to assign as primary/secondary server.

- Press the **Edit** soft key to input the server address manually.

Time Zone

Select this option to select time zone settings from a list.

Location

Select this option to select location from a list.

2.9.6 LAN Port MAC Address

You can configure the LAN Port MAC Address settings from the VoIP phone.

1.   Select **LAN Port MAC Address**, and then press the **Edit** soft key.

2.   Input the LAN Port MAC address manually.

3.   Press the **Save** soft key to save your setting.

2.9.7 PC Port MAC Address

You can configure the PC Port MAC Address settings from the VoIP phone.

1.   Select **PC Port MAC Address**, and then press the **Edit** soft key.

2.   Input the PC Port MAC address manually.

3.   Press the **Save** soft key to save your setting.

NOTE: To activate the MAC address, please reboot VoIP Phone manually.

Chapter 3 Web Configuration

This chapter contains important information to help you configure the settings for your VoIP phone from the web browser.

If your VoIP phone is using factory default, it sets LAN/PoE port as DHCP client and enable Bridge mode for PC port. To access the web configuration menu, do the following:

1. Connect one end of the Ethernet cable provided to the **LAN/PoE** port of your phone to your router with DHCP service enable.

2. Connect one end of the network cable to the PC port of your phone, connecting to your personal computer.

3. Plug in the power of the VoIP phone. Select the **Menu** soft key.

4. Select **Network, LAN Port Settings**, and then press the **Info** soft key.

You should be able to see the IP address displayed on the LCD screen.

Open your browser (such as Internet Explorer, Firefox, etc.) and type in the web address of the phone. For example, if the IP address you obtain in step 4 above is 192.168.1.2, enter the web address: http://192.168.1.2.

The Web login front page is displayed. Enter the user name and the password and click **Login**. The administrator's user name is "**admin**", and no password is needed.
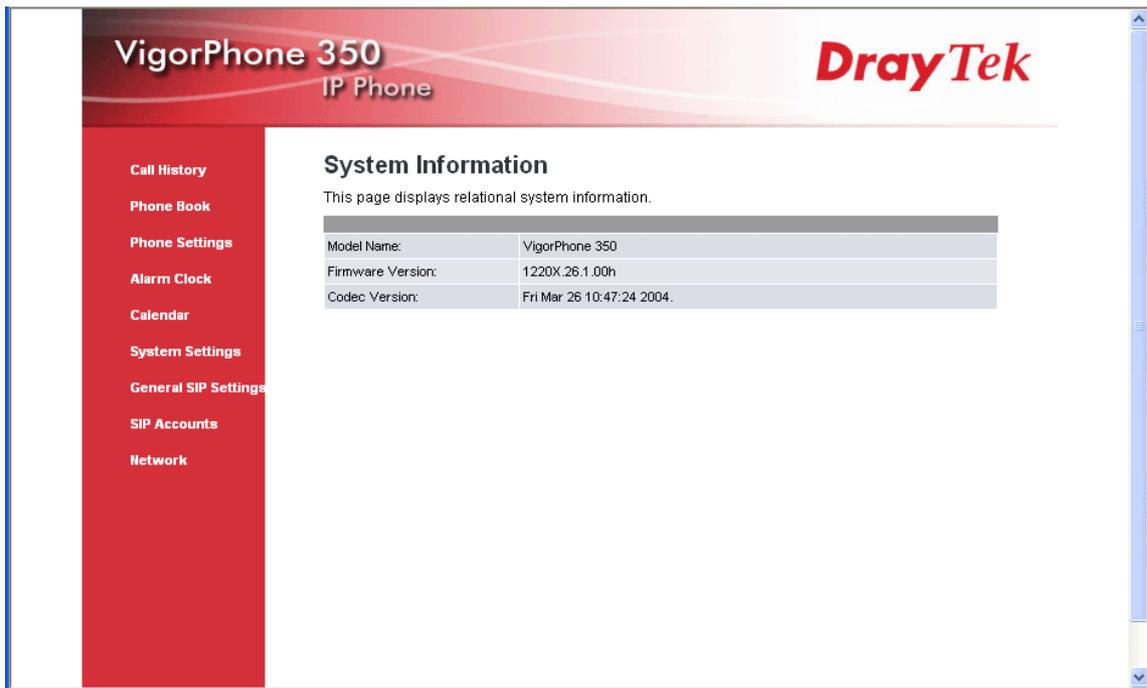
After you login, move the cursor over the menu items on the left navigation bar to access the dropdown menus.

3.1 Call History

To check the call history from the web browser, do the following:

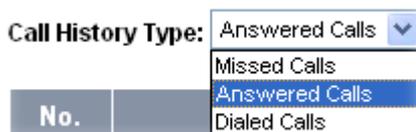1. Click **Call History**. The following screen will be displayed.

2. If you intend to check the dialed calls, select Call History Type as **Dialed Calls**. Choose **Answered Calls** in Call History Type if you need to check the history of answered calls. Choose **Missed Calls** to see the records of calls that you didn't answer.

3. Select the page you want to display. The details of phone number, call time and duration of the each call record will then be shown.

4. To remove certain Call History, click in the Delete box of the corresponding option, and then click **OK** button.

5. To remove all Call History, click Reset Call History.

3.2 Phone Book

The phone book menu allows you to add, edit or delete any phone entry from the web browser.

To configure the phone book settings, do the following:

1. Click **Phone Book**. The following screen will be displayed.

2. Select the page number that you want to view from the **Phone Book Page** option, and then the web page will display all the phone book information for the selected phone book page.

3. To remove a certain phone entry, click in the **Select** box of the entry number that you want to remove, and then click **Delete Selected** button.

4. To remove all contact entries in the phone book, click **Delete All** button.

5. To add a phone entry, input the contact information of all the required fields (name, number and domain) of **Add Phone** section.

6. To edit a phone entry, click in the number column of the phone entry, and edit the option(s) you want to change in the **Edit Phone** section.

7. Click **OK** to confirm your settings or **Cancel** to cancel.

3.3 Phone Settings

The phone settings menu provides a number of options to configure your phone, such as call forwarding, date and time, ringer, voice mail settings and so on. Read this section to adjust the settings to suit your own needs.

3.3.1 Call Forward

To configure **Call Forward** settings through the web browser, do the following:

1. Click **Phone Settings**>>**Call Forward.** The following screen will be displayed.

Always:	To forward all incoming calls, enter the phone number and a specific SIP account in the Always field.
Busy:	To forward incoming calls when the phone is busy, enter the phone number and a specific SIP account in the **busy** field.
No Answer:	No Answer Forward allows you to forward the phone number and a specific SIP account when no answered for a period of time. Select **Ringing Timeout** to set a period of forward time (10 sec ~ 50 sec) without answering the call.

2. To activate the Call Forward, select **Enable** of the corresponding option.

3. To delete Always Forward, Busy Forward or No Answer Forward setting, check in the **Delete** box.

4. Click **OK** to save your settings or **Cancel** to cancel.

3.3.2 Speed Dial

To configure speed dial settings through the web browser, do the following:

1. Click **Phone Book**>>**Speed Dial**. The following screen will be displayed.

Speed Dial

This page allows you to set speed dial settings.

Mkey	Type	Number	Account	Delete
1	SpeedDial ▼		8522516 ▼	☐
2	SpeedDial / BLF		8522516 ▼	☐
3	SpeedDial ▼		8522516 ▼	☐
4	SpeedDial ▼		8522516 ▼	☐
5	SpeedDial ▼		8522516 ▼	☐
6	SpeedDial ▼		8522516 ▼	☐
7	SpeedDial ▼		8522516 ▼	☐
8	SpeedDial ▼		8522516 ▼	☐
9	SpeedDial ▼		8522516 ▼	☐
10	SpeedDial ▼		8522516 ▼	☐
11	SpeedDial ▼		8522516 ▼	☐
12	SpeedDial ▼		8522516 ▼	☐
13	SpeedDial ▼		8522516 ▼	☐
14	SpeedDial ▼		8522516 ▼	☐
15	SpeedDial ▼		8522516 ▼	☐
16	SpeedDial ▼		8522516 ▼	☐

[OK] [Cancel] [Delete All]

2. Add the numbers that you want to set as speed dial/BLF, and select an existing SIP profile (account).

3. To delete a speed dial/BLF number, click the **Delete** box of the corresponding number.

4. Click **OK** to save your settings, **Delete All** to delete all speed dial numbers/BLF or **Cancel** to cancel.

3.3.3 Ring Tone

To configure ring tone settings through the web browser, do the following:

1. Click **Phone Settings**>>**Ring Tone**.

2. Choose **Set** to enable the ring tone. Select the **Ringtone Name** from the drop-down box according to your preference.

3. Choose the **Music On Hold** settings: select **Enable** to enable music on hold, or **Disable** to disable it.

4. Click **OK** to save your settings or **Cancel** to cancel.

To upload a new ring tone from your personal computer drive, do the following:

1. Choose **Upload** to enter the ring tone upload setting page.

2. Input the **Ring Tone Name.**

3. Click the **Browse** button to select the location of the new ring tone file that you want to set.

4. Click **OK** to save your settings or **Cancel** to cancel.

NOTE: This VoIP Phone can only accept "PCM unsigned 8 bit mono" ring tone format (e.g., .wav) and the file size should keep within 200kb.

To remove a ringer, do the following:

1. Choose **Delete** to display all the ringers currently stored in the phone.

Ring Tone

This page allows you to set,delete or upload favorite ring tone for this device.

Ring Tone Action:	◯ Set ◯ Upload ⊙ Delete	
ID	Ring Tone Name	Select

[OK] [Cancel]

2. Check the Select box of the ring tone that you want to remove.

3. Click **OK** to save your settings or **Cancel** to cancel.

3.3.4 Digit Map

You can use this setting to modify the method used to filter the phone numbers. A digit map gives the unit a map to determine when a complete number has been entered and should be passed to the SIP server for resolution into an IP address. With the flexible dial plan provided by the phone, user can easily implement the following functions:

- Replace, delete or add prefix/ postfix of the dialed number.
- Place the call to different SIP servers according to the prefix/ postfix

To configure individual dial plan setting through the web browser, do the following:

1. Click **Phone Settings**>>**Digit Map**. The following screen will be displayed.

Digit Map

This page allows you to add, edit or delete digit map rule.

Digit Map Page: none ▾   Dialing Timeout: 4 ▾

No.	Active	Abbr. Code	Add Prefix/Postfix	Remove Prefix/Postfix	Account	Select

[Add]

Type	Active	Effective Length	Add Prefix
General Rule	No data	No data	No data

[Edit]

> **NOTE:** The "**Dialing Timeout** " is the mechanism that set a timer for sending out dialing digits automatically after the last entry for a period of time without press "#" key. Select from 1-10 seconds.

2. Click **Add** to add a new dial plan. The following screen will be displayed.

Digit Map

This page allows you to create a new digit map for this device.

Add Digit Map	
NO.	1
Active	Disable
Abbr. Code	
Length Detected	03
Account	none
Add Prefix/Postfix	No
Remove Prefix/Postfix	No

OK   Cancel

3. Select **Enable** in **Active** field to activate the setting of the dial plan numbered 1.

4. Input all the information required for the following parameters:

Abbr. Code:	Set abbreviation digits to screen dialing numbers one by one from the beginning. If it matches abbreviation digits, then this dialing rule will be executed. For example, set **Abbr. Code** as "3". It means any number dial from "3" will be followed this dialing plan.
Length Detected:	Set detecting length. Once the length has matched, VoIP phone will send out digits immediately. Select from 03-20 digits in length through the drop-down list.
Account:	Select a SIP account for this dialing plan.
Add Prefix/ Postfix:	Add the set prefix or postfix to match dialed number.
Remove Prefix/ Postfix:	Remove the prefix or postfix to match dialed number.

5. Click **OK** to save your settings or **Cancel** to cancel.

To configure General Rule setting through the web browser, do the following:

1. Click **Edit** to add a new general dial plan rule. The following screen will be displayed.

Digit Map

This page allows you to edit general rule for this device.

Edit General Rule	
Active	Disable
Effective Length	01
Add Prefix	

OK   Cancel

2. Select **Enable/Disable** to activate/deactivate general Rule.

3. Select Effective Length to detect the entry digits match length. If matches the entry digits then add prefix in front of entered.

4. Entering Prefix digits to matched length dialed number.

3.3.5 Voice Settings

You can configure the tone frequency and cadence in voice settings menu. The voice setting is only accessible through the web browser. Do the following:

1. Click **Phone Settings**>>**Voice Settings**. The following screen will be displayed.

Voice Settings

This page allows you to configure voice setting for this device.

Play Dial Tone Frequency	350 - 440
Play RingBack Tone Frequency	440 - 480
Play Busytone Frequency	480 - 620
Play RingBack Tone cadence	1440 ms On - 920 ms Off
Play Busytone cadence	240 ms On - 240 ms Off
Side Tone Switch	Disable
Handset Digital In Gain	Level 10
Handset Analog In Gain	Level 10
Handset Out Gain	Level 10
Speak Out Gain	Level 10
Mic Digital In Gain	Level 10
Mic Analog In Gain	Level 10
Headset Digital In Gain	Level 10
Headset Analog In Gain	Level 10
Headset Out Gain	Level 10

OK   Cancel

2. The following options are available:

Play Dial Tone Frequency: Set the dial tone frequency range when you pick up the handset.

Play RingBack Tone Frequency: Set the ring tone you hear before the recipient of your call picks up and answers your call.

Play Busytone Frequency: Set the busy tone frequency range when the number you dial is busy.

Play RingBack Tone cadence: Set the ring back tone cadence range you hear before the recipient of your call picks up and answers your call.

Play Busytone cadence: Set the busy tone cadence range when your line is busy.

Side Tone Switch: Select whether to **Enable** / **Disable** side tone switch.

Handset Digital In Gain: Set the volume sent in from a digital handset from Level 1-20. Default is Level 10.

Handset Analog in Gain: Set the volume sent in from an analog handset from Level 1-20. Default is Level 10.

Handset Out Gain: Set the volume sent out from the handset from Level 1-20. Default is Level 10.

Speak Out Gain:	Set the volume sent out from the microphone from Level 1-20. Default is Level 10.
Mic Digital In Gain:	Set the volume sent in from a digital microphone from Level 1-20. Default is Level 10.
Mic Analog in Gain:	Set the volume sent in from an analog microphone from Level 1-20. Default is Level 10.
Headset Digital In Gain:	Set the volume sent in from a digital headset from Level 1-20. Default is Level 10.
Headset Analog In Gain:	Set the volume sent in from an analog headset from Level 1-20. Default is Level 10.
Headset Out Gain:	Set the volume sent out from the headset microphone from Level 1-20. Default is Level 10.

Frequencies should be configured with known values to avoid uncomfortable high pitch sounds.

3. Click **OK** to save your settings or **Cancel** to cancel.

3.4 Alarm Clock

The Alarm Clock menu allows you to set the alarm of your VoIP phone through the web browser.

To activate alarm clock, do the following:

1. Click **Alarm Clock**. The following screen will be displayed.

Alarm Clock

This page allows you to set alarm clock for this device.

Active	Alarm Time	Repeat
ON ▾	14 : 00	OFF ▾

OK   Cancel

2. Select **On** from the Active field.

3. Input the alarm time.

4. Select Repeat field option:

- **On:** to sound the alarm everyday at the specified time.

- **Off:** to disable the repeat function, the alarm will only sound at the specified time.

3.5 Calendar

The Calendar menu allows you to set the calendar and set schedules of your VoIP phone through the web browser.

To set the calendar, do the following:

1. Click **Calendar**. The following screen will be displayed.

Calendar

This page allows you to set calendar for this device.

Date: 2009 / 02 / 13 Friday [Calendar]

NO.	Time	Message	Type	Period	Select

[Add] [Delete] [Delete all]

2. Input the date on the **Date** field or click **Calendar** to select date from the calendar.

To create a new schedule:

1. Click **Add**. The following screen will be displayed.

Calendar

This page allows you to set calendar for this device.

DATE: 2009 / 01 / 22 Thursday

NO.	Time	Message	Type	Period
1	16 : 26		Reminder ▾	Once ▾

[OK] [Cancel]

2. Input the following information:

Time:	Time to set the alarm.
Message:	Message or description.
Type:	Select the type of schedule, options are: **Reminder**, **Date**, **Meeting**, **Birthday**, **Phone Call**, **Recorder** and **Other**.
Period:	Select whether the schedule is **Once**, **Daily, Weekly** and **Monthly**. Select **Once** to schedule a one time event; alarm will sound only on the specified date and time. Select **Daily** to schedule an everyday event, the alarm will sound everyday on the specified time.

3. Click **OK** to save your settings or **Cancel** to cancel.

To edit an existing schedule:

1. Click the number of the corresponding schedule to edit. The following screen will be displayed.

Calendar

This page allows you to set calendar for this device.

Date: 2009 / 01 / 22 Thursday

NO.	Time	Message	Type	Period
1	16 : 59	Rest	Recorder ▼	Once ▼

[OK] [Cancel]

2. Modify the necessary information.

3. Click:

   OK: Save your settings and go back to Calendar main menu.

   Cancel: Cancel changes and go back to Calendar main menu.

To delete a schedule:

1. Check the **Select** box of the corresponding item to delete. To delete all items, click **Delete all**.

2. Click **Delete**.

3.6 System Settings

System settings menu allows you to configure settings, upgrade firmware, backup, recover and reset settings.

System Settings
- Firmware Upgrade
- Backup & Restore
- Administrator Password
- Factory Default
- Reboot
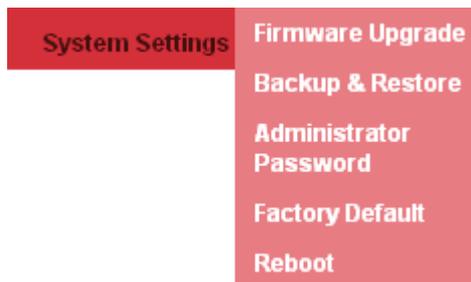
3.6.1 Firmware Upgrade

You can upgrade the firmware only through the web browser. Do the following:

1. Click **System Settings**>>**Firmware Upgrade**. The following screen will be displayed.

Firmware Upgrade

This page allows you to upgrade newest firmware for this device.

Firmware Upgrade	
File Location:	[ ] [Browse..]

[OK] [Cancel]

2. Click **Browse** to select the file location of the newest firmware.

3. Click **OK** to execute the firmware upgrade or **Cancel** to cancel.

> **Note:** If your VigorPhone 350 Firmware Version is 12202.26.1.04 or after, please refer to Appendix A for upgrade.
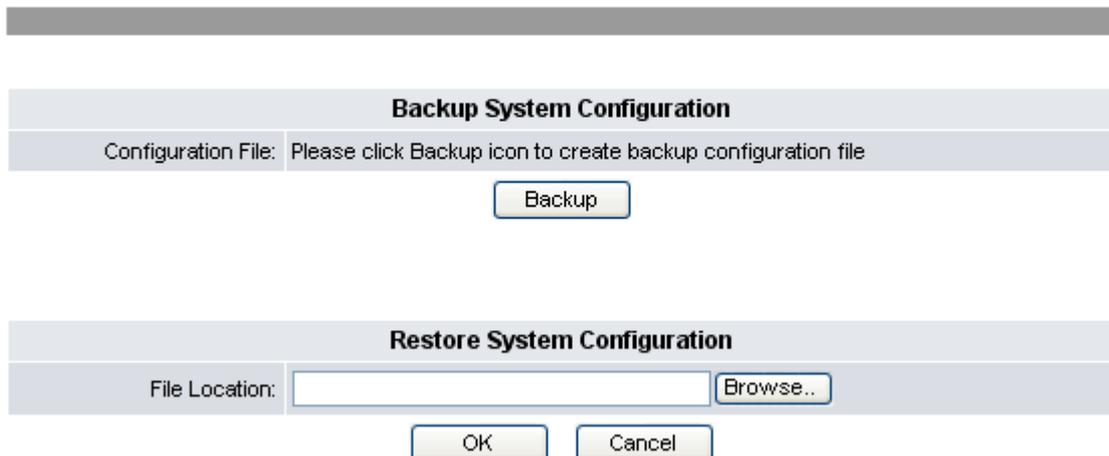
3.6.2 Backup & Recover Setting

You can backup or recover the VoIP Phone configuration into a file to your PC. The setting is only accessible through the web browser. Do the following:

1. Click **System Settings**>>**Backup & Recover**. The following screen will be displayed.

Backup & Restore

This page allows you to backup or restore the system configuration.

Backup System Configuration	
Configuration File:	Please click Backup icon to create backup configuration file

[Backup]

Restore System Configuration	
File Location:	[ ] [Browse..]

[OK] [Cancel]

2. Click **Backup** button in the **Backup System Configuration** section to create the configuration files. And click the file name to save the configuration file into your PC.

3. The section of **Recover System Configuration** is used to restore the system configuration from a previously saved configuration file. Click **Browse** button to select a backup file from the PC.

4. Click **OK** to execute restoring system configuration.

5. After file upload is completed, the system will reboot.

3.6.3 Administrator Password

The system authority menu is only accessible through the web browser.

To change the user name and password, do the following:

1. Click **System Settings>>Administrator Password**. The following screen will be displayed.

2. Enter the new username and the new password. Enter the new password again in the **Confirm Password** field to confirm.

3. Click **OK** to save your settings or **Cancel** to cancel.

3.6.4 Factory Default

You can reset all the settings on the VoIP phone to restore factory default settings.

1. Click **System Settings>>Factory Default**. The following screen will be displayed.

2. Click **OK**.

3. A confirmation message appears. Click **OK** to proceed with reset. The system will automatically reboot.

3.6.5 Reboot

To reboot the VoIP phone manually, do the following:

1. Click **System Settings>>Reboot**. The following screen will be displayed.

Reboot System

This page allows you to reboot the system.

Reboot system: [OK]

2. Click **OK**.

3. A confirmation message will appear, click **OK** to proceed with reboot. Click **Cancel** to cancel reboot.

3.7 General SIP Settings

The General SIP settings allow you to configure the port and codec priority and signal or voice precedence settings.

General SIP Settin | **Port Settings**
Codec Settings
Other Settings

3.7.1 Port Setting

This setting menu is only accessible through the web browser.

To configure the port setting, do the following:

1. Click **General SIP Settings**>>**Port Settings**. The following screen will be displayed.

Port Settings

This page allows you to set port number for this device.

SIP Port: 5060 (10~65533)

RTP Port: 10000 (10~65533)

[OK] [Cancel]

2. Enter the SIP Port number and the RTP Port number provided by your ITSP or MIS.

3. Click **OK** to confirm your settings or **Cancel** to cancel.

> *Note: You need not modify the Port Settings unless otherwise requested.*

3.7.2 Codec Setting

You can also configure the Codec priority, and RTP packet length through the web browser.

To configure Codec settings from the web browser, do the following:

1. Click **General SIP Settings**>>**Codec Settings**. The following screen will be displayed.

Codec Settings

This page allows you to set codec settings for this device.

Codec Priority

First Priority:	G.711 u-law ▼
Second Priority:	G.711 a-law ▼
Third Priority:	G.729 ▼
Fourth Priority:	G.723 ▼

RTP Packet Length

G.711 Frame Size:	20 ms ▼
G.723 Frame Size:	30 ms ▼
G.729 Frame Size:	20 ms ▼
G.722 Frame Size:	20 ms ▼

[OK] [Cancel]

2. Select the item you want to change and a drop-down box will display the available options.
   G.711 u-law/G.711 a-law, G.723.1, G.729, G.722.

> **NOTE1:**
> a. Due to the codec limitation, only G.723/G.729 codec can be available when G.722 codec is not selected.
> b. When disable all the codec priority, the SDP will automatically use G.711 codec as the default codec.

3. Click **OK** to confirm your settings or **Cancel** to restore default value.

4. Once updating "Codec Priority", it requires reboot the phone to make settings take affect.

3.7.3 Other Settings

To set other Global SIP settings through the web browser, do the following:

1. Click **Global SIP Settings**>>**Other Settings**. The following screen will be displayed.

Other Settings

This page allows you to set other settings for this device.

Signaling Precedence(ToS)	0(Routing)
Voice Precedence(ToS)	0(Routing)
RFC2833 Payload Type:	101 (96~127)

[OK] [Cancel]

2. Select the **Signaling Precedence (ToS)** from the options: 0 (Routing), 1 (Priority), 2 (Immediate), 3 (Flash), 4 (Flash Override), and 5 (CRITIC/ECP).

3. Select the **Voice Precedence (ToS)** from the options: 0 (Routing), 1 (Priority), 2 (Immediate), 3 (Flash), 4 (Flash Override), and 5 (CRITIC/ECP).

4. Enter settings for **RFC2833 Payload Type** between 95-255. Default value is 101.

5. Click **OK** to confirm your settings or **Cancel** to cancel.

3.8 SIP Accounts

To configure the SIP account setting from the web browser, click **SIP Accounts**. The following screen will be displayed.

SIP Accounts

This page allows you to set SIP account for this device.

SIP Accounts

ID	Username	Registration Server	Status	Registration	Select
1	8522516	iptel.org	registered	Enable	☐
2	99205102	ubsip.ublink.org		Enable	☐
3			OFF	Disable	☐
4			OFF	Disable	☐
5			OFF	Disable	☐
6			OFF	Disable	☐
7			OFF	Disable	☐
8			OFF	Disable	☐
9			OFF	Disable	☐
10			OFF	Disable	☐

[Delete]

To delete an SIP account, do the following:

1. Click the **Select** box of the corresponding item to delete.

2. Click **Delete** button.

To edit an SIP account setting, do the following:

1. Click the underlined **ID** number. The following screen will be displayed.

SIP Account Settings

This page allows you to set SIP account for this device.

SIP Account 1	
Registration:	⊙ Enable ○ Disable
Registration ID:	8522516
Display	8522516
Password:	••••
Registration Server:	iptel.org
Expire Time:	60
DTMF Type:	SIP Info
Authentication Name:	8522516
Proxy Server:	iptel.org
Realm Address:	
Voice Mail:	
Ping Before Register:	Disable
Send KeepAlive:	○ On ⊙ Off
MWI:	Disable
Overlap dial:	Disable
Status:	registered

[OK]   [Cancel]

2. Choose **Enable** for **Registration** to activate the account. Next, enter the information provided by your ITSP or MIS in each field.

The following options are available:

Registration:	Enable / disable this account.
Registration ID:	Input the registration ID.
Display	Input the user name.

Password:	Input the password.
Registration Server:	Input the domain server address.
Expire time:	User can set the timeout duration for registration request.
DTMF Type:	Input the DTMF type options: RFC2833, SIP Info, Nortel Info, and In Band.
Authentication Name:	Input the authentication name.
Proxy Server:	Input the proxy server address.
Realm Address:	Input the domain name.
Voice Mail:	Input the voice mail speed dial number.
Ping before register:	Disable/Enable. The setting is used to ping another device on the Internet from the VoIP phone to make sure the Internet connection works properly.
Send KeepAlive:	On/Off. Typically enabled to instruct the phone to send SIP keep-alive messages for maintaining a "pinhole" in the user's firewall through which SIP messages can pass.
MWI:	Disable/Enable. When this setting is enabled, the LED on the top of the phone set will blink when there is voice message left by the incoming call.
Overlap dial:	Disable/Enable. This function is to change your custom of phone dialing. The usual way of dialing out is to pick up the handset and dial the number directly. However, the way to dial VoIP phone call is to pick up the handset, dial the number and 1) wait for timeout or 2) press "#" to send out the number, or 3) press the Dial button on IPPhone. If you enable this function, the way of dialing VoIP phone will be the same as general analog phone. That is, simply dial the number and no need to wait or press any other button. **Note:** the IP-PBX also needs to turn on this feature.
Status:	Displays the status of the SIP Account. "ON" means registered, "OFF" means un-registered.

3. Click **OK** to confirm your settings or **Cancel** to cancel.

> *NOTE: You can register up to ten SIP accounts. However, you will always call out with the first account number registered.*

3.9 Network

Network menu allows you to view and setup LAN Port, PC Port, NTP and Time settings, IP mapping, and routing table settings.

3.9.1 Status

You can view the WAN and LAN information from the **Status** submenu.

Click **Network**>>**Status**. The following screen will be displayed.

3.9.2 LAN Port Settings

To configure IP settings through the web browser, do the following:

Click **Network**>>**LAN Port Settings**. The following screen will be displayed.

LAN Port Settings

This page allows you to configure LAN settings for your local network connection or Internet connection.

LAN Port Settings

IP Type:	⦿ Static IP ◯ DHCP Client ◯ PPPoE
IP Address:	0.0.0.0
Netmask:	0.0.0.0
Gateway:	0.0.0.0
Primary DNS:	168.95.1.1
Secondary DNS:	168.95.192.1
Mac Address:	00:0e:43:c0:01:5e

PPPoE Setting

Username:	
Password:	
Keep Alive Mode:	Ping DNS1
Remote IP:	0.0.0.0

VLAN Setting

Activation:	◯ Enable ⦿ Disable
Identifier:	0 (0~4094)
Priority:	0 (0~7)

OK   Cancel

IP Type:	There are IP Types for you to choose. Select the one you need and fill in the required information.
IP Address:	Enter the IP address.
Netmask:	Enter Net mask.
Gateway:	Enter the Gateway IP.
Primary DNS:	Enter the primary DNS server.
Secondary DNS:	Enter the secondary DNS server. Network connects to this server in case the primary DNS server is not available.
Mac Address:	Enter the Mac address.
Username:	Enter user name.
Password:	Enter the password of PPPoE settings.

Keep Alive Mode:	Select option, **Ping DNS1** or **Ping Remote IP**.
Remote IP:	Enter remote IP address.
Activation:	Select **On** for activating VLAN setting.
Identifier/Priority:	The Identifier and Priority fields are enabled for user input. Enter the necessary information.

Click **OK** to save your settings or **Reset** to cancel.

3.9.3 PC Port Settings

To configure LAN settings and DHCP server setting from the web browser, click **Network**>>**PC Port Settings**. The following screen will be displayed.

PC Port Settings

This page allows you to configure PC Port settings for your computer connection.

⦿ NAT Mode ◯ Bridge Mode

PC Port Settings

IP Address:	192.168.123.1
Netmask:	255.255.255.0
Mac Address:	00:0e:43:c0:02:02

DHCP Server

DHCP Server:	◯ Enable ⦿ Disable
Start IP:	50
End IP:	100
Lease	2880 (minutes)
Domain Name:	
Primary DNS:	168.95.1.1
Secondary DNS:	168.95.192.1

[OK] [Cancel]

To configure PC Port settings, do the following:

1. Select a suitable mode, options are:

NAT:	This will enable PC port Setting required fields for user input. Enter **IP address, Netmask,** and **Mac address**.
Bridge:	Configure PC port mode using Bridge settings.

2. If **NAT** is selected, you can activate DHCP Server settings. The required information are as follows:

DHCP Server:	Select whether to enable/disable DHCP server.
Start IP:	Input Start IP address.

End IP:	Input End IP address.
Lease:	Input lease time in minutes.
Domain Name:	Input domain name.
Primary DNS:	Input the primary DNS server.
Secondary DNS:	Input the secondary DNS server.

3. Click **OK** to save your settings or **Cancel** to cancel.

3.9.4 NTP & Time Settings

The NTP & Time Setting enables you to configure the date and time of the VoIP phone manually or synchronize the clock with the NTP (Network Time Protocol) server, and specify the time zone you are in. The NTP function should be disabled if you want to set the date and time manually.

To access NTP & Time settings, click **Network**>>**NTP Settings.** The following screen will be displayed.

NTP & Time Settings

This page allows you to set NTP server and time settings for this device.

NTP :	⊙ Enable ○ Disable
Primary Server:	ntp.ucsd.edu Select: ntp.ucsd.edu[US]
Secondary Server:	clock.nc.fukuoka-u.ac.jp Select: clock.nc.fukuoka-u.ac.jp[JP]
Location:	GMT (+8:00) Taipei
Daylight Saving:	⊙ Off ○ Auto ○ Always
Sync. Time:	0 : 12 (dd:hh)
Set System Time:	2009 : 01 : 22 : 17 : 02 (YY:MM:DD:hh:mm)

[OK]   [Cancel]

To synchronize clock with the NTP server:

1. Choose **Enable** to enable NTP and enter the server information provided by your ITSP or MIS.

2. Select the time zone you are in.

3. Set up the synchronization time and system time.

4. Click **OK** to save your settings or **Cancel** to cancel.

To configure date and time manually:

1. Choose **Disable** to disable NTP.

2. Enter the date and time manually on the **Set System Time** fields.

3. Click **OK** to save your settings or **Cancel** to cancel.

3.9.5 IP Mapping

To set the IP mapping for hosts, click **Network>>IP Mapping**. The following screen will be displayed.

IP Mapping

This page allows you to set IP Mapping for hostnames.

No.	Hostname	IP	Select

[Delete Selected] [Delete All]

Add

Hostname: [   ]

IP: [   ]

[OK] [Cancel]

To add a new hostname, do the following:

1. In the **Add** section, enter the information for **Hostname**, and **IP** field.

2. Click **OK** to save your settings, the added IP is displayed on the list, or **Cancel** to cancel.

To edit a hostname, do the following:

1. Click the underlined number of the corresponding hostname.

2. Edit the necessary information.

3. Click OK to save your settings or **Cancel** to clear information back to original settings, or **Cancel** to cancel edit function and go back to IP Mapping main window.

To delete a hostname, do the following:

1. Click the **Select** box of the corresponding hostname to delete.

2. Click **Delete Selected** to delete the checked item or click **Delete All** to delete all hostnames.

3.9.6 Routing Table

You can set routing table through the web browser. To do this, click **Network>>Routing Table**. The following screen will be displayed.

Routing Table

This page allows you to set routing table for this device.

No.	IP	Netmask	Gateway	Interface	Select

[Delete Selected]   [Delete All]

Add

IP: 192.168.1.25   Netmask: 255.255.255.0   Gateway: 192.168.1.50   Interface: PC Port

[OK]   [Cancel]

To add a new routing table, do the following:

1. In the **Add** section, enter the information for **IP** address, **Netmask**, and **Gateway** field.
2. Select the **Interface**, options are: **LAN Port**, **PC Port**, and **Bridge**.
3. Click **OK** to save your settings, the added routing table is displayed on the list, or **Cancel** to cancel.

To edit a routing table, do the following:

1. Click the underlined number of the corresponding hostname.
2. Edit the necessary information.
3. Click **OK** to save your settings or **Cancel** to reset information back to original settings, or **Cancel** to cancel edit function and go back to IP Mapping main window.

To delete a routing table, do the following:

1. Click the **Select** box of the corresponding routing table to delete.
2. Click **Delete Selected** to delete the checked item or click **Delete All** to delete all routing tables.

Chapter 4 Operation

4.1 Answering a Call

An incoming call is indicated by a ringing tone and a red light on the incoming call indicator. You can answer the call by doing one of the followings:

1. Pick up the **handset** to answer the call.

2. Press the **Speaker** key on the phone to answer the call.

3. Press the **Line 1 / Line 2** on the phone to answer the call.

> **NOTE:** *You may also set "Auto Answer" to pick first in progress call automatically.*

4.2 Making a Call

4.2.1 Dialing with the Keypad

1. Enter the telephone number with the alphanumerical keypad, as shown below. If you enter an incorrect digit, press the **Delete/Clear** soft key to erase the incorrect digit.

2. After entering the number you want to call, press the **#** key to force dialing or wait for 4 seconds before the number is dialed automatically.

> **NOTE:** *You may change waiting time from "Web Configuration" → "Dial Plan" → "Dialing Timeout". See page 20 for more information.*

4.2.2 Looking up a Number from the Phone Book

You can call your contacts using the contact information stored in the phone book. To make a call to a person from the phone book, follow the steps below:

1. Press the **Menu** key to display the menu options.

2. Select **Phone Book** and press the **Enter** key to display your phone book.

3. Scroll through the list until you find the contact you want to call.

4. Select the name you want to make the call, and press the **Dial** soft key or pickup handset/headset to make the call.

4.2.3 Making a Call to an IP Address

You can also make a call to an IP address by inputting the IP address with the keypad. (For example: 192*168*1*100)

4.2.4 Making a Call to SIP Server

In order to make a SIP call, the phone must be registered to a SIP server. If there is more than one account registered, you can use 4-way Navigation keys "up" or "down" to select an account first.

4.2.5 Speed/BLF (Busy Lamp Field)

You can use the speed dial hotkeys, located on the right side of the phone, to configure the most commonly dialed numbers. Use the function to dial a number quickly, instead of keying in a complete number.

To call a number using speed dialing, press the speed dial memory hotkey (1~16) that has been assigned to the phone number from the numeric keypad.

4.2.6 Dialing to Multiple SIP Accounts

This Phone allows two simultaneously SIP calls at the same time. You can use line buttons (LINE 1 and LINE 2) to make/receive/switch two calls. Each line button has a LED back light to help user identify line status.

- Green light means "dialing" status

- Red light means "occupied / Ring" status

- Green light blinking means "Hold" Status

For example:

First Call: Dialing by LINE1 button or using handset/headset or speaker.

Second Call: Dialing by LINE2 button or press "Hold" key to put the first call on hold.

Each of the line buttons (LINE 1 or LINE 2) is represented with a virtual SIP channel. By default, outgoing call uses the first VoIP account. You can switch to another account by pressing the navigation key up and down.

For example:
Configure ACCOUNT1 and ACCOUNT 2 with Registration ID as "VoIP1", "VoIP2" respectively and ensure that they are active and registered. If the first VoIP1 is selected, all calls will go through VoIP1.

4.2.7 Redialing a Number

To quickly dial a number that you have dialed recently, do one the following:

1. Press the Redial key on the phone. The LCD displays dialed numbers in call history.

2. To dial the number, press the **Dial** soft key or pickup handset/headset to make the call.

4.3 Call Options

While a call is in progress, a number of additional options are available.

4.3.1 Using the Speaker Phone

For hands free operation, you can use the built-in speaker to talk on the phone. To use the speakerphone, follow the steps as following:

1. While talking on the phone, press the **Speaker** key on the bottom side of the phone to enable the Speakerphone function.

2. Press **Speaker** key again to terminate the call.

4.3.2 Putting a Call on Hold

You may want to put a call on hold temporarily while doing some work or attending to a second incoming or outgoing call.

To put a call on hold, do one of the following:

1. Press the Hold soft key on the phone to put the call on hold.

2. When you receive a second call, press the next available LINE key to attend to the new call, and the first call will be put on hold automatically.

4.3.3 Conducting a Three‑Way Conference Call

To initiate a three‑way conference call, follow the steps below:

1. Call the first participant of the conference call as described in **Making a Call**.

2. Put the first participant on hold as described in **Putting a Call on Hold**.

3. Call the extension number of the second participant of the call.

4. Press the **Conference** soft key on the phone to include all participants in the call.

5. To end the three‑way conference call, simply hand up the call directly

Each line button has a LED back light to help user identify line status as follows:

- Green light means "dialing" status

- Red light means "occupied / Ring" also "two lines light in Red when Conference" status.

- Green light blinking means "Hold" Status

4.3.4 Transferring a Call

To transfer a call to another phone number, follow the steps below based on ways IP PBX or ITSP perform:

1. Attend Transfer

   While a call is in progress, press the Trans or Hold button on the phone. Dial the number to which you want to transfer the call. Once the call established, you can speak to the callee then hang up the phone to transfer the call.

2. Un-Attend Transfer

   While a call is in progress, press the Trans or Hold soft key on the phone. Dial the number to which you want to transfer the call and then hang up the phone to transfer the call.

4.3.5 Using the Intercom Function

1. Press the **Icom** soft key on the phone, and then dial the extension number of the number you desire to talk to.

2. After the call is connected, you may start talking. The person you called will hear your voice and talk to you directly.

3. Press **Speaker/Headset or hand off** to end the call.

4.3.6 Blocking All Calls Using the DND Function

The **DND (Do not Disturb)** feature allows you to reject and block all incoming calls without ringing your phone.
To activate the DND function, follow the steps below:

1. Press the **DND** soft key on the phone. A "DoNotDisturb" message is displayed on the screen.

2. Press the **DND** soft key again to disable the DND function.

4.3.7 Checking Voice Messages

Press **Voice Mail** button to access voice mail. If the **Voice Mail** button lights red, it indicates that you have at least one new message left in your voicemail box.

NOTE: If there is more than one SIP profile in this phone, use NAVI key "up" "down" to select different SIP profile voice mail boxes. To enable Voice mail feature, please check with service provider for more information.

Appendix A Upgrade VigorPhone 350

If the VigorPhone 350 Firmware Version is 12202.26.1.04 or after, please follow the steps below to upgrade the firmware.

1. Install firmware upgrading tool, **Router tools** to your computer. Please download it through the following link. http://www.draytek.com/user/SupportDLUtility.php

2. Connect your computer to the VigorPhone 350 PC port, and configure static IP (see below) in your computer:

    IP address: 192.168.1.10

    Subnet Mask: 255.255.255.0

    Gateway: 192.168.1.1

3. Make sure the cable between the computer and VigorPhone 350 is connected firmly. Then unplug the power cable from VigorPhone 350 (power off).

4. Press and hold **ENTER** and **MENU** buttons in the VigorPhone 350 panel. Then plug in the power cable to VigorPhone 350 and release the **ENTER** and **MENU** buttons.

5. The LCM on VigorPhone 350 will show **AUTO UPGRADE Wait for Image.** If it does not show such message, please check the cable connection between VigorPhone 350 and computer, and repeat step 4.

6. Open DrayTek **Firmware upgrade utility**.

7. Type 192.168.1.2 in the field of router IP; select the firmware file that you want to update; then click **SEND.**
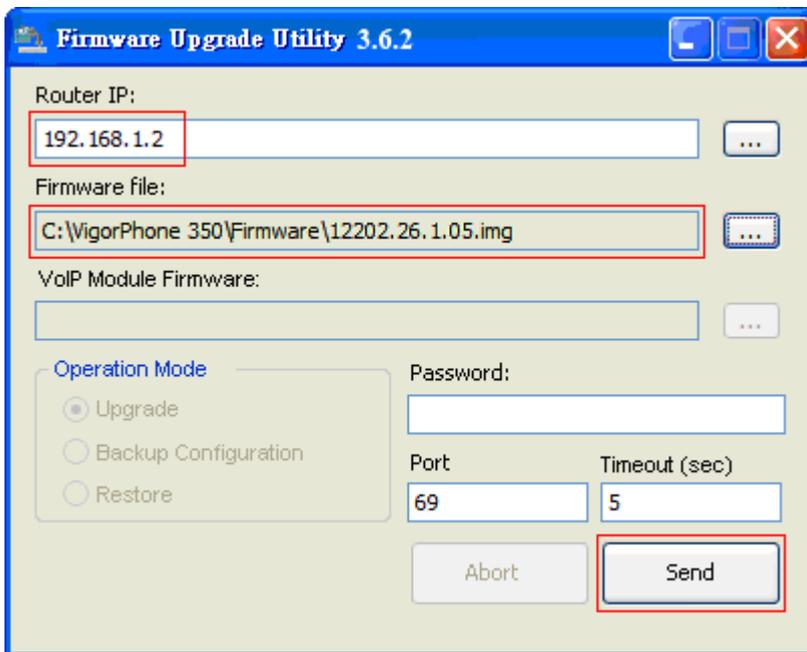
8. When you press **SEND,** VigorPhone 350 LCM will show **AUTO UPGRADE Upgrade rootfs** after few seconds. Then it will show **AUTO UPGRADE Upgrade kernel → AUTO UPGRADE Upgrade Phone →AUTO UPGRADE Upgrade Successful boot**.

9. When the LCD shows **AUTO UPGRADE Upgrade Successful boot**, VigorPhone 350 will reboot automatically to finish the upgrading procedure.

10. Update steps is completed, you can connect the VigorPhone 350 LAN port to IPPBX to use VigorPhone 350.

Note: If the VigorPhone 350 Firmware Version is 12202.26.1.03 or before, please update it to 12202.26.1.04 via VigorPhone 350 webpage before upgrading to 12202.26.1.05 or later.