USER MANUAL
DPH-400S/SE

VERSION 1.00

D-Link®

UOIP

Table of Contents

PRODUCT OVERVIEW

Package Contents

- D-Link DPH-400SE (with PoE) or DPH-400S (without PoE) IP Phone Unit
- Handset
- Handset cord
- CD-ROM
- Quick Installation Guide
- Power Adapter
- CAT5 Ethernet Cable
- Wall-mounting screw pack
- Wall-mounting template sheet
- D-Link Warranty Guide

Caution: Using a power supply with a different voltage rating than the one included with the DPH-400S(SE) will cause damage and void the warranty for this product.

System Requirements

- 10/100Mbps Ethernet network environment
- Internet Explorer^{TM} 6.0 or Mozilla Firefox^{TM} 1.0 and above

Introduction

The DPH-400S(SE) IP Phone is an Internet Telephony desktop phone that connects to a digital network rather than the traditional PSTN line. Basically, it needs to be connected to a LAN enterprise network and works as an office phone. Like a traditional office telephone, it can deliver good voice quality and perform a great number of PBX-equivalent call features.

The IP phone can transfer and receive voice via an IP network. Therefore, it can be deployed and connected all over the world among headquarter and remote branch offices. Since it is a stand-alone and "always-on" terminal, there is no need to have any active PC to make it work. The IP Phone is completely stand-alone.

The IP phone comes with a graphic LCD screen, traditional keypad, a navigator key & content-sensitive programmable keys, handset, I/O ports, and a power adapter. It can be installed and placed on a desktop or mounted on the wall.
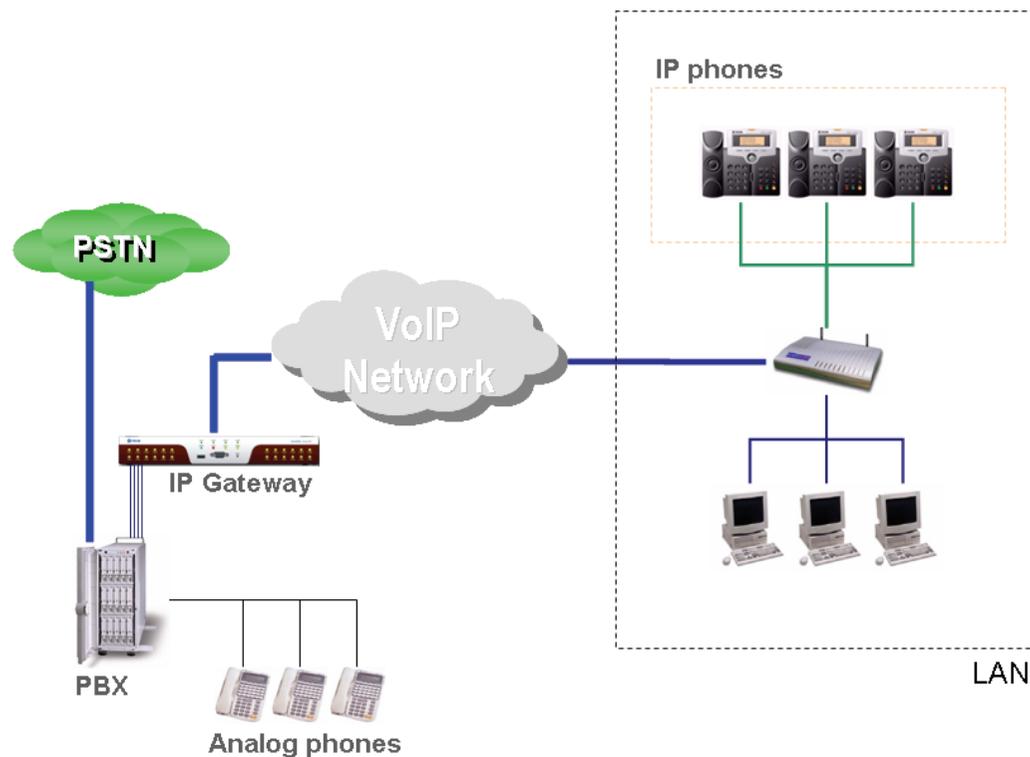
To operate the IP phone, you need to know some conventions that we will mention in this manual. In the following descriptions, we will introduce some terminologies for your understanding.

Line
"Line" in this manual represents how many phone numbers are supported in one phone. A phone can support more than one phone number so that you can subscribe to different VoIP service provider and even make concurrent calls thru each line. Therefore, the IP phone is said to support multiple-line appearance.

Call
"Call" in this manual represents how many simultaneous connections can be made to a single phone number. Each line has a two call limit, meaning you can hold one call and talk to another person in another call on the same line. Therefore, the IP phone is said to support multiple-call appearance.

Register to a server
The phone should be configured before it can perform some basic functions. Although the phone can make a peer-to-peer VoIP call (you have to remember the IP address of the called party), it is desirable to have a centralized server to provide the directory service. This server can be a Soft-switch, an IP-PBX or a simple Server/Proxy. The server has two basic functions. The first is to track active phones and their IP addresses. The second is passing signaling messages between communication parties. In order to make your phone reachable in this VoIP network, your IP phone has to register to the server after booting up, so that when someone dials your phone number, the server knows where you are and informs your IP phone that someone is calling. Refer to the sections **Advanced Operations** or **Configuration** in this manual for detailed information of how to configure the phone to register to server.

Caller ID & User ID
When you receive a call, the caller's phone number is shown on the screen if the caller didn't choose to hide his number and if the network supports the Caller ID feature. The IP Phone will display both the Caller ID and the User ID of the caller if it is available.

Features and Specifications

Main Unit
-Dimension: 210 * 190 * 46 mm
-Plastic material: ABS type
-Supports 30°, 45° and 60° stand angles.
-Can be mounted onto the wall
-Supports detachable handset and curled cord

LAN and PC Ports
-IEEE 802.3 10BaseT / 802.3u 100BaseTx compliant
-Auto-negotiation with link speed and full/half duplex mode
-Auto MDI/MDIX for both downlink and uplink auto-swapping
-Supports QoS IEEE 802.1p voice priority function
-IEEE 802.1q VLAN function

Power Supply
-Input: 5VDC /2000mA power adapter
-5 types of different country /area (optional)

Service Port With A Cover
-Supports 1 serial port
-4-Pin connector (need a particular 4P/DB-9 convert cable, please contact supplier)
-Only for engineering support use

Voice Handling
-Supports multiple Audio Codecs: G.711 a-law/ μ-law, G.729A*, G.723.1* (6.3K/5.3K)
-Supports VAD (Voice Auto Detection) and CNG (Comfort Noise Generation)
-Supports AGC (Automatic Gain Control)
-Volume adjustable for Handset, Headset, Speakerphone and Speakerphone Ring output.
-Support G.165 16ms line Echo Cancellation (AEC).
-Adaptive Jitter Buffering function supported.

-Hands-free talking supported.

[Note]: * These features are optional. Please contact your supplier for purchasing options.

Tone Function:
-DTMF tone generation & detection
-Side tone and good voice quality supported
-Out-band DTMF relay (RFC-2833) support.
-Local tone support (Dial, Ring, Ring back, Busy and related tones)

Environment
The phone you have purchased must not be disposed with household waste. You should return it to your distributor if you need to replace it, or take it to an approved recycling center.

FCC Statement
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause interference to radio communications. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against radio interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at their own expense, will be required to take whatever measures are necessary to correct the interface.

CE Declaration of Conformity
This equipment complies with the requirements relating to electromagnetic compatibility, EN55022 class B for ITE and EN 50082-1. This meets the essential protection requirements of the European Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Hardware Overview

Front View

No	Part Name	Description of function
0	Main unit	The IP Phone main unit
1	Handset top cradle	For the placement of handset (Receiver end)
2	Hook switch	For hang-up and hang-off of handset
3	Cradle latch	To prevent the handset from dropping when it stands at 60° or is wall-mounted.
4	Speaker	For ring and hands free talking
5	Handset bottom cradle	For the placement of handset (Transmitter end)
6	Handset cord port	RJ-9 jack on the left side of the IP phone
7	Headset wire port	RJ-9 jack on the left side of the IP phone
8	Message LED	Blinks red to indicate a new message, an incoming call, or an unregistered account
9	LCD screen	The LCD screen is for displaying your settings, phone number, call status and so forth. It supports 128 x 64 pixels.
10	Soft keys	The keys used for item selection or control on the LCD screen. Each key function depends on its corresponding content displayed on the LCD at that time.
11	Navigator OK key	It is used to confirm a setting or dial a phone number.
12	Navigator Control keys	The four arrows ◄ ► ▲ ▼ are used to move through the items on the LCD screen.
13	1,2,3,4 Number keys	These keys can be used for line selection or programmable features. A green LED is associated with each key to indicate its line/call status.
14	Speaker key	This Speaker key is used to turn on and off the hands-free dial or talk feature. A green LED is associated to indicate its status.

15	Mute key	The Mute key is used to turn on and off voice transmission from the IP phone. The key lights red to indicate that the phone is muted.
16	Headset key	This Headset key is used to activate/de-activate the Headset. A green LED is associated to indicate its status.
17	Transfer key	The Transfer key is used to transfer a call to another IP phone.
	Redial key	The Redial key is used to redial the last dialed number automatically.
	Hold key	The Hold key is used to hold the current call and answer another incoming call. Press it again to release the hold function.
	Message key	The message key is used to access the Voice Mail System for message retrieval.
	Conference key	The Conference key is used to add the current multiple connected phones into a conference. It performs a phone-bridging function.
	Phonebook key	The Phonebook key is used to access the phonebook to call or edit a phone number. After you press the Phonebook key, the phonebook is displayed on the LCD screen of the IP phone.
18	Volume Control key	The Volume Control key is used for volume control. When the phone is idle, the ringer is adjusted. When talking, the Handset/Speaker/Headset output volume is adjusted.
19		**[1], [2]…[9], [*], [0], [#]:** The numeric keypad is used for dialing numbers.
20	**Built-in Microphone**	The built-in microphone is on the front edge of the IP phone.

LEDs and LCD Screen Indicators

LED	Color	Status	Description
Message	Red	Off	No new messages and the phone account is registered
		Blinking	New voice message, an incoming call, or the phone account is unregistered
1,2,3,4 VoIP lines keys	Green	Off	No active line. The phone is on-hook
		Solid	When the line is active (dialing or during a call)
		Blinking	Incoming call while you are engaged in another call
Speaker key	Green	Off	The speaker is not in use
		Solid	While in on-hook dialing mode or hands-free mode
Mute key	Red	Off	The phone is not muted
		Solid	The phone is muted
Headset key	Green	Off	The headset is not in use
		Solid	While in on-hook dialing mode or hands-free mode using a headset
All LEDs for system status	Green	Off	In normal operation mode
		Solid	During system booting
		Blinking	When system booting failed or critical error
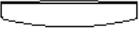
The following figure shows the format of the LCD screen. There are 4 soft keys used to operate the LCD display. The display format will be different for other menus or status settings.

Message Waiting Indication

Date & Time

Lines & Phone numbers indicator

Soft key function

Soft key buttons

DEC 05 MON 11:45
42301
42302
42303
42304
Config   Key1   Key2   Key3
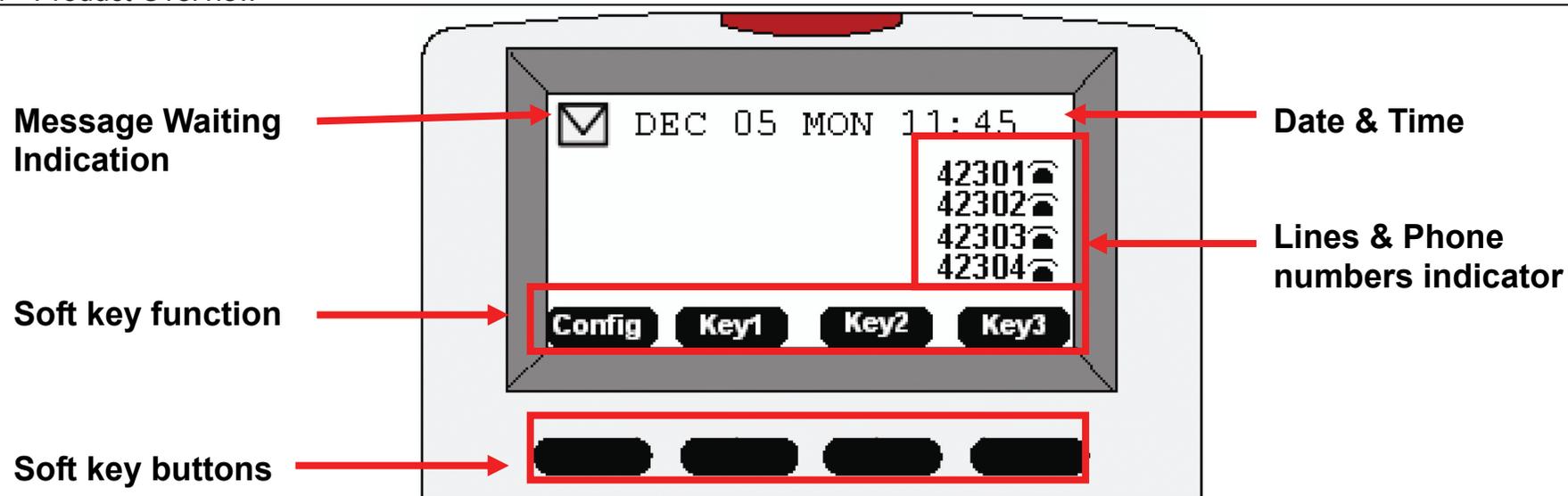
NOTE:
1. When you enable caller ID, the **Display Name** is displayed before the Lines & Phone numbers on the right side of the LCD Screen.
2. When you enable DND, "***DND*** " is displayed instead of the Date & Time on the top of the LCD Screen.
3. When you enable Phone Lock, " **PHONE LOCKED….**" Is displayed on the LCD Screen. You can input user password or administrator password to unlock the phone.

Rear View and Connections
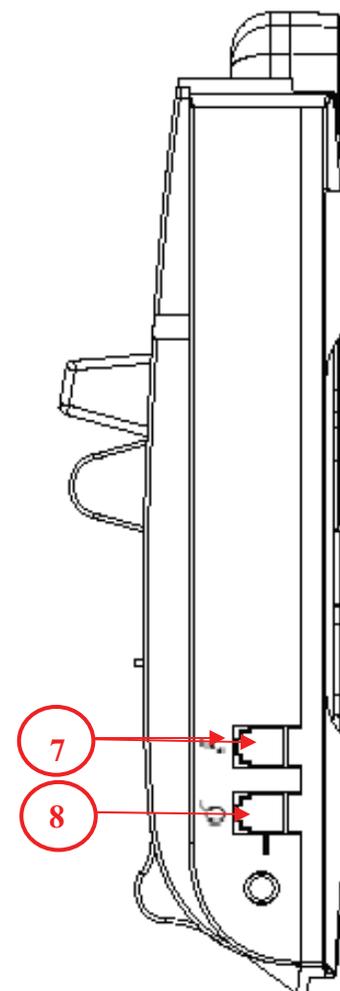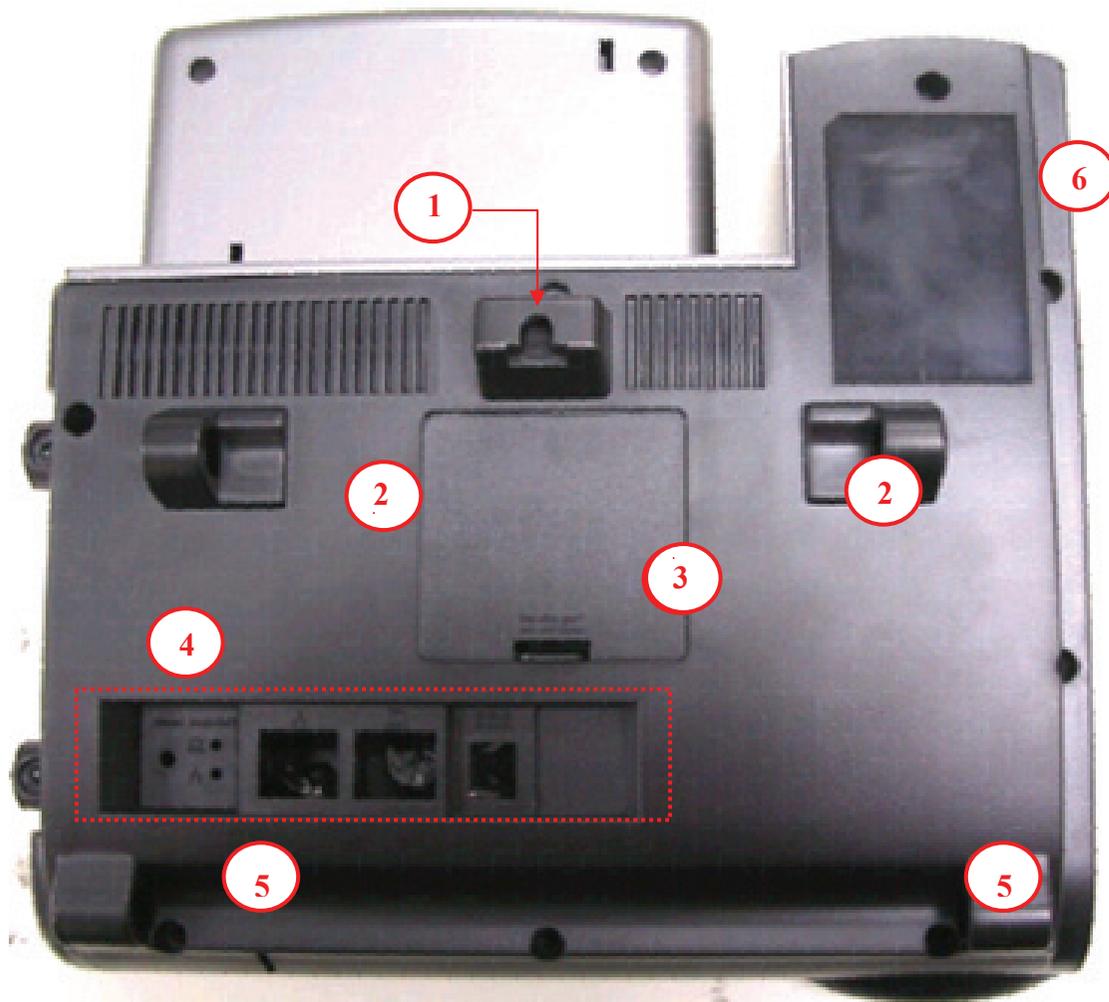
No	Part Name	Description of function
1	**Wall-Mount Hole**	Used to mount the phone on the wall.

2	Stand Hinges	A stand is attached here for supporting the IP phone at different angles. For wall-mounting, please take the stand away.
3	Service door	This is only for engineering use. Inside, there is a console port. Please don't open this if you are a regular user. [Note: To use this port, you need a special converting cable (RJ-45 to DB-9). Please contact your supplier if needed.]
4	Input/Output ports	For installation, please connect the cables here (see the next figure for the details).
5	Base Frame Hinges	The base frame is fixed here. There is no need to disassemble this frame when doing a wall-mount.
6	Product label	Shows product production information, such like Product model, serial number and MAC address.
7	Handset cord port	RJ-9 jack on the left side of IP phone
8	Headset wire port	RJ-9 jack on the left side of IP phone
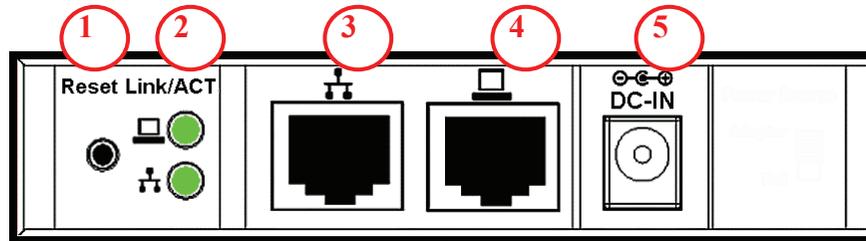
No	Part Name	Description of function
1	Reset button	Resets the phone's settings to the factory default settings.
2	Link/Activity	Indicates the link status of the WAN and LAN ports.
3	LAN port	RJ-45 10/100Mbps Ethernet port for connecting to an IP network
4	PC port	RJ-45 10/100Mbps Ethernet port for connecting to a PC or Notebook
5	Power Jack	If a power source from a power adapter is required, please use the power adaptor supplied in the package (5VDC/2A).

INSTALLATION

Hardware Installation

This section will walk you through the installation process. Before operating the phone, you have to install the phone well into the network.

1. Set up the stand and place the phone on the desk (see steps below).
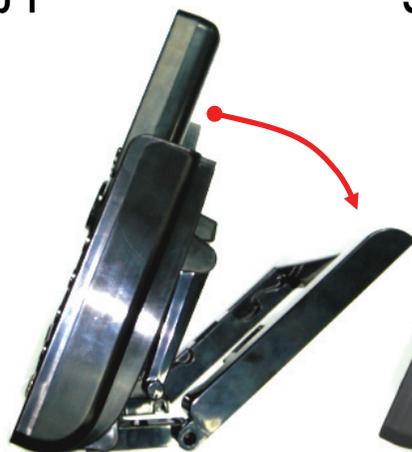
Step 1　　　　　　　**Step 2**　　　　　　　**Step3**
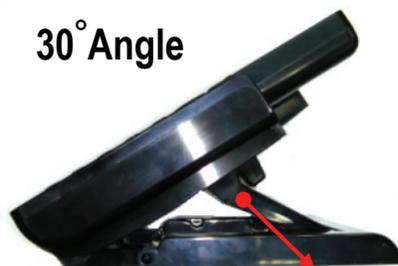
30°Angle　　　　　**45°Angle**　　　　　**60°Angle**
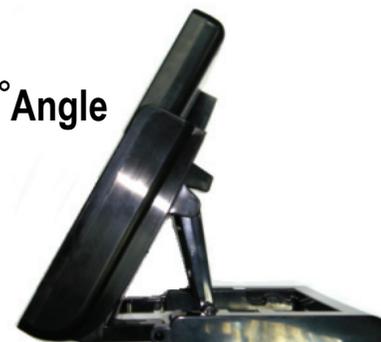
2. Use the handset cord to connect the handset to the handset port on the left side of the phone.

3. Connect the headset to the headset port on the left side of the phone. (optional)

4. Connect an Ethernet cable to the LAN port on the phone and connect the other end to an Ethernet Switch port that is linked to an IP network (see figure above).
5. Connect an Ethernet cable to the PC port on the phone and connect the other end to a Notebook or PC. (optional)
6. Connect the external power adapter to the phone. For the DPH-400SE, if your Ethernet switch supports PoE (Power over Ethernet), the phone can be powered through the LAN port, so there is no need to connect the power adapter.
7. Finally, connect the power adapter to a power outlet.

Configure your IP Phone for Service

You have to configure the phone before operation. Usually the configuration is done by an office administrator, system supplier (such as a System Integrator), or the service provider (such as an ITSP- Internet Telephony Service Provider). If you are a general user, please consult them for support. For the advanced or experienced user, you may refer to the section of this manual about configuration through the web for information on how to configure all the settings of the IP phone.

Now, if the IP phone is already connected to the network and the VoIP service is activated, please follow the following chapters for a guideline on operating the phone.

The menu to configure your IP Phone is as follows:
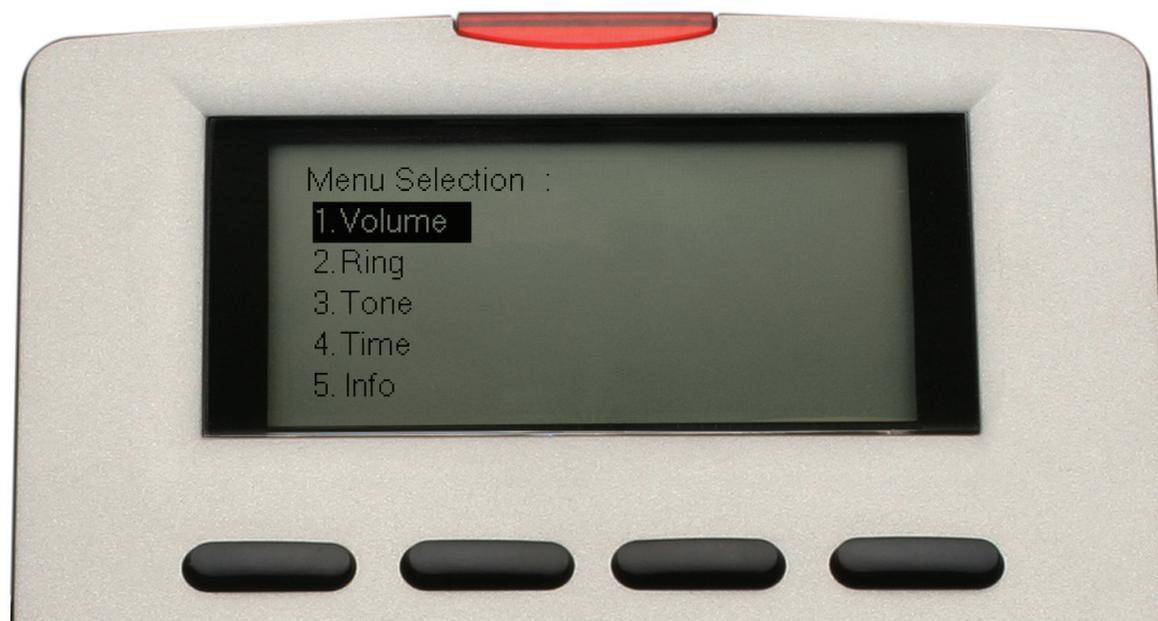
You can navigate through the menu with the navigator control keys ◄ ► ▲ ▼ . The following sections will describe how you can setup your IP Phone through this menu.

GENERAL OPERATIONS

Basic Call Features

Operation		Description
Making a call	Pick up the handset.	Pick up the handset. *You will hear a dial tone.*
		Use the keypad to dial the phone number. Press the OK key ✓ or the **#** key to dial out immediately or wait about 5 seconds for auto-dial. **Note:** You may use the **Backsp** soft key to delete the last digit.
		Hang up the handset when your conversation is over.
Receiving a call		Pick up the handset upon hearing the phone ringing.
		Hang up the handset when your conversation is over.
Last Number Redial		Pick up the handset.
		Press the Redial key. The last dialed number will be automatically redialed.
Mute the transmitter end of the handset		While being engaged in a conversation, you may mute the transmitter end of the handset by pressing the Mute key.
		The Mute key lights red. At this point, you can speak and the other party will not hear anything.
Adjust the voice volume during a conversation		During a conversation, if the voice volume is too low or too high, you may adjust it.
		Press the volume control key to adjust the volume.

Call record

Operation	Description	
Review dialed calls		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
	➔ **Call Record**	Select the item **Call Record** to enter the Call Record menu. Press the OK key to confirm the selection.
	➔**Dialed Calls**	Select the item **Dialed Calls** and confirm with the OK key .
		Use the navigator control keys to review the different dialed calls. You may choose to redial the number (using the **Dial** soft key). Press the **Cancel** soft key to exit the menu. Press the left navigator control key ◀ 2 times to exit the Configuration menu.

Review received calls		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
	➜ **Call Record**	Select the item **Call Record** to enter the Call logs menu. Press the OK key to confirm the selection.
	➜**Received Calls**	Select the item **Received Calls** and confirm with the OK key .
		Use the navigator control keys ▲ ▼ to review the different received calls. You may choose to redial the number if the Caller ID is known (using the **Dial** soft key). Press the **Cancel** soft key to exit the menu. Press the left navigator control key ◀ 2 times to exit the Configuration menu.
Review missed phone calls		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
	➜ **Call Record**	Select the item **Call Record** to enter the Call logs menu. Press the OK key to confirm the selection.

➔Missed Calls		Select the item **Missed Calls** and confirm with the OK key ⊘.
		Use the navigator control keys to review the different missed calls. You may choose to redial the number if the Caller ID is known (using the **Redial** soft key). Press the **Cancel** soft key to exit the menu. Press the left navigator control key ◄ 2 times to exit the Configuration menu.

Viewing Phone Setting Information

You may view all related settings information about the IP Phone through the LCD screen. This can give you, for example, the current network settings of the IP Phone, and the registration status of your ITSP (Internet Telephony Service Provider).

Operation	Description	
View information about the IP Phone		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter any line number (1-4) and confirm with the OK key ⊘.
	➔ Info	Use the navigator control keys to select the item **5.Info** and confirm with the OK key ⊘ to enter the Info menu.
		Use the navigator control keys ▲ ▼ to choose the information you would like to review. Press the left navigator control key ◄ 3 times to exit the Configuration menu.

The following information can be reviewed from the LCD screen of your IP Phone:

- Company
- Model Name
- Firmware Number
- MAC Address
- IP Address
- Subnet Mask
- Default Gateway
- DHCP Status
- DNS Server
- SIP Proxy Server
- SIP Outbound Proxy
- Registrar Server
- Outbound Registrar
- Register Status
- Service Number

ADVANCED OPERATIONS

Network Settings

The default network settings are as follows:
Default IP address / subnet mask: 192.168.1.10 / 255.255.255.0
Default Gateway: 192.168.1.1
Default DNS: 168.95.1.1

If you need to change these default settings, please refer to the following instructions.

Operation	Description	
Setting up a Static IP address		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter any line number (1-4) and confirm with the OK key ✔.
		Use the navigator control keys ▲ ▼ to select the item **18.Admin** and confirm with the OK key ✔. Enter "1234" for the Admin Password and confirm with the OK key ✔. The LCD screen displays the Admin Setting menu.
		Select the item **Network** and then the item **Network Type**.
		Select Static IP. The LCD screen prompts you the enter the IP address of your IP Phone.

		Use the keypad to enter the new IP address of your IP Phone. Pressing the * key will enter a . (dot). Press the OK key ✔ to confirm the entered IP address. **Note:** You may use the **Backsp** soft key to delete the previous character.
	◄	Press the left arrow key 5 times to exit the LCD menu. Select **Yes** and press the OK key ✔ to save the settings.
Setting up a Dynamic IP address (DHCP)		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter any line number (1-4) and confirm with the OK key ✔.
		Use the navigator control keys ▲ ▼ to select the item **18.Admin** and confirm with the OK key ✔. Enter "1234" for the Admin Password and confirm with the OK key ✔. The LCD screen displays the Admin Setting menu.
		Select the item **Network** and then the item **Network Type**.
		Select DHCP. The LCD screen prompts you to select **On** or **Off** for the DHCP feature.
		Select **On** and press the OK key ✔ to confirm.
	◄	Press the left arrow key 5 times to exit the menu. Select **Yes** and press the OK key ✔ to save the settings.
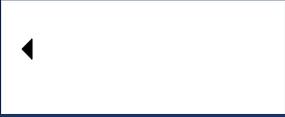
Showing your phone's IP address		Press the **Config** soft key. The LCD screen prompts you to input a line number
		Use the keypad to enter any line number (1-4) and confirm with the OK key.
		Use the navigator control keys to select the item **5.Info** and press the OK key to enter the info menu. The LCD screen will display various information about the IP phone.
	▲ ▼	Press the up or down arrow key to select the information you would like to know. Press the ▼ key 4 times to show the IP address of your IP phone.
	◄	Press the left arrow key 3 times to exit the LCD menu.
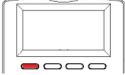
Advanced Call Operations

Operation	Description	
3-way conference call		While being engaged in a conversation, you may invite another party to join using the 3-way conference call feature. To achieve this, hold the call using the Hold button or press the **Hold** soft key to hold the first call.
		Press the down arrow key ▼ to start a second call on this line.
		Use the keypad to dial the phone number. You may also choose a phone number from the phonebook or from your speed dial list. The IP phone will call the other party.

🗣))	You may talk with the transfer target prior to letting them join the conference.
(C_CC)	When you are ready to start the conference, press the Conference key (C_CC) . The LCD screen will show that the two calls are in a conference.

Call hold	🗣	While being engaged in a conversation, you can hold a call.
	☎	Press the Hold key to hold the call.
		L1:(101) 1 42202 HOLD 101 ☎ 102 ☎ 111 ☎ 112 ☎ Resume EndCall
		To resume a held call, simply press the **Resume** soft key or press the Hold key ☎ again.
Call transfer (blind transfer)	If you want to transfer a call to another phone, please follow these steps:	
	🗣 (-(	While engaged in a conversation, press the transfer button (-(. The phone prompts you to enter the phone number to which you would like to transfer the call to.
	1 2 3 4 5 6 7 8 9 * 0 #	Use the keypad to dial the phone number. You can also choose a phone number from the phonebook or from your speed dial list. The call will be transferred automatically to the other party.
	)	You can hang up the phone.
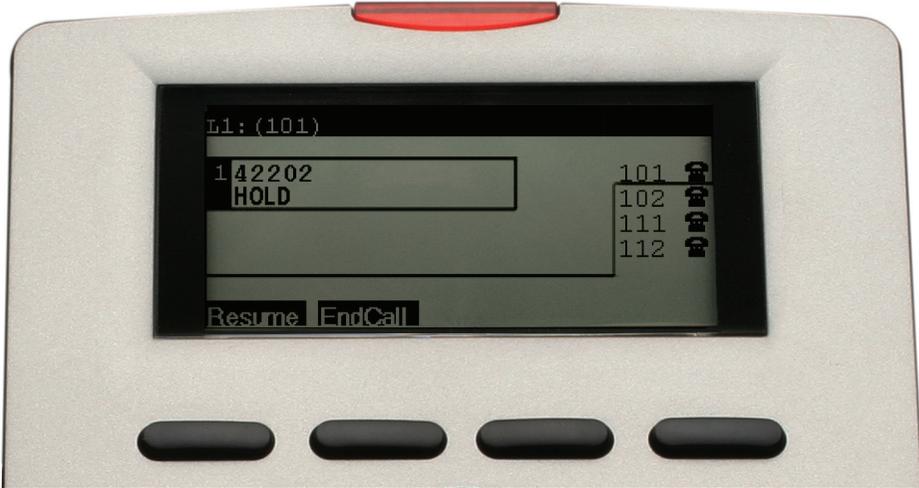
Call transfer (attended transfer)		While engaged in a conversation, hold the call using the Hold button or press the **Hold** soft key.
		Press the down arrow key ▼ to start a second call on this line.
		Dial the transfer target phone number.
		You can talk with the transfer target prior to transferring the call.
		When you are ready to transfer the call, press the transfer key.
		You can hang up the phone.
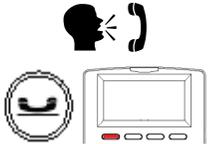
Phonebook

The phonebook feature allows you to store a list of up to 200 phone numbers.

Operation	Description	
Phonebook (add/edit a number)		Press the Phonebook key .
		Press the **Add** soft key to add a new contact into the phonebook.
		If you want to edit an existing number, find the number you would like to edit using the navigator control keys, then press the **Edit** soft key to edit the number.
Phonebook (delete a number)		Press the Phonebook key .
		Find the number you would like to delete, then press the **Del** soft key.
Dial a Phonebook number		Press the Phonebook key .
		Find the number you would like to dial using the navigator control keys, then press the **Dial** soft key to dial the number.

SpeedDial

The SpeedDial feature allows you store a list of 10 phone numbers that you can access easily using a SpeedDial number from 0 to 9

Operation	Description	
SpeedDial (add/edit a number)		Press the **Config** soft key. The LCD screen prompts you to input a line number
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
		Use the navigator control keys to select the item **14.Hot SpeedDial** and press the OK key to enter the SpeedDial settings menu. The LCD screen prompts you to enter a number between 0 and 9.
		You may directly enter the desired number using the keypad or use the navigator control keys to browse all the SpeedDial numbers.
		If you want to add a new number, find an empty position, then press the **Edit** soft key to enter the new number. If you want to edit an existing number, find the number you would like to edit using the navigator control keys, then press the **Edit** soft key to edit the number.

SpeedDial (delete a number)		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
		Use the navigator control keys to select the item **SpeedDial** to enter the SpeedDial settings menu. The LCD screen prompts you to enter a number between 0 and 9.
		You may directly enter the desired number using the keypad or use the navigator control keys to browse all the SpeedDial numbers.
		Find the number you would like to delete, then press the **Del** soft key.
Dial a SpeedDial number		Pick up the handset or press a line button (if you want to dial hands-free).
		Press the **SPD** (SpeedDial) soft key.
		Enter the SpeedDial number you would like to dial using the keypad.

Caller Blocking

The IP Phone provides the function to block calls with a specific Caller ID. You can enter a list of up to 10 Caller IDs.

Operation	Description	
Caller Blocking (add/edit a number)		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
		Use the navigator control keys to select the item **17.Blocking List** to enter the Caller Blocking settings menu. The LCD screen prompts you to enter a number between 0 and 9.
		You may directly enter the desired number using the keypad or use the navigator control keys to browse all the blocked Caller ID numbers.
		If you want to add a new number, find an empty position, then press the **Edit** soft key to enter the new number. If you want to edit an existing number, find the number you would like to edit using the navigator control keys, then press the **Edit** soft key to edit the number.

		Press the **Config** soft key. The LCD screen prompts you to input a line number.
Caller Blocking (delete a number)		Use the keypad to enter a line number (1-4) and confirm with the OK key ✓.
		Use the navigator control keys to select the item **17.Blocking List** to enter the Caller Blocking settings menu. The LCD screen prompts you to enter a number between 0 and 9.
		You may directly enter the desired number using the keypad or use the navigator control keys to browse all the blocked Caller ID numbers.
		Find the number you would like to delete, then press the **Del** soft key.

Line and Phone Management

Operation	Description	
		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key ✓.
Call Forward	 ➔ **Call Forward**	Use the navigator control keys to select the item **8.Call Forward** and press the OK key ✓ to enter the Call Forward menu. Select the next item according to the type of call forward (**Always Forward**, **On Busy Forward**, or **No Answer Forward**) you would like to activate and confirm with the OK key ✓. **Note:** It is possible to activate different kinds of call forward at the same time (for example: No Answer Forward + On Busy Forward)
	 ➔ **Toggle**	Select **Toggle** to turn on or off the call forwarding feature. Select **ON** or **OFF** then press the OK key ✓ to confirm.
	 ➔ **Forward Number**	Select **Forward Number** to enter the phone number you want to forward the calls to. Enter the phone number and confirm with the OK key ✓.
	Note: If you select **No Answer Forward**, you will also be prompted to enter the timeout value (**No Answer Time**) in seconds before redirecting the call to the forward number.	

		You can use this function to automatically answer all incoming calls when you are busy.
Auto Answer		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key.
	➔ Auto Answer	Use the navigator control keys to select the item **9.Auto Answer** and press the OK key to enter the Auto Answer menu.
		Use the ▲ ▼ navigator control keys to turn on or off the Auto Answer feature and confirm with the OK key.
DND		You can enable DND (Do Not Disturb) if you don't want any incoming calls to disturb you. While in DND mode, all incoming calls will get a busy signal when they make a call to this phone number.
		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key.
	➔ DND	Use the navigator control keys to select the item **6.DND** and press the OK key to enter the Do Not Disturb menu.
		Use the ▲ ▼ navigator control keys to turn on or off the DND feature and confirm with the OK key.

		This feature lets you lock the IP Phone. While the phone is locked, no one may use it to make calls. You need to enter your password to unlock the phone.
Phone Lock		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key .
	➔ Phone Lock	Use the navigator control keys to select the item **10.Phone Lock** and press the OK key to enter the Phone Lock menu. Use the navigator control keys to turn the phone lock **On** or **Off**.

Reset to Factory Default Settings

Operation	Description	
Reset phone to default factory settings		Press the **Config** soft key. The LCD screen prompts you to input a line number.
		Use the keypad to enter a line number (1-4) and confirm with the OK key.
	→ Admin	Use the navigator control keys to select the item **18.Admin** to enter the Administration menu. Press the OK key to confirm the selection. The LCD screen prompts you to enter the Admin password.
		Use the keypad to enter the Admin password and confirm by pressing the OK key. The default password is **1234.**
	→ Reset	Select the item **8.Reset**. The LCD screen prompts you to confirm the selection.
		Select **Yes** and confirm by pressing the OK key to reset the settings.

CONFIGURATION
Web-based Configuration

This section will show you how to configure your new D-Link IP Phone using the web-based configuration interface.

The default network settings are the following:

Default IP address/ Subnet mask: 192.168.1.10 / 255.255.255.0

Default Gateway: 192.168.1.1

Default user name of Web: user

Default user password of Web: 1111

.

To acess the phone through a web browser, just enter "http://192.168.1.10" in the address field of the browser. (If you are not sure about the IP address, you can examine the current IP address through the Info menu on the phone's LCD screen.)

Type **"user"** for the User Name and "1111" in the Password field. Otherwise, type **"admin"** for the User Name and "1234" in the Password field. Click on the botton of "OK" to enter the configuration page.

There are two levels of web configuration: one "user" ID level that can view just some portion in the web, and the other "admin" ID level that can view and configure all settings in the web-based configuration interface. To use "admin" ID for login, please contact your administrator, supplier or service provider.

Information

The **INFORMATION** page displays a summary overview of your IP Phone, including the device software version and a summary of your Internet configuration.

Click on the **Reboot** button to reboot the system.

Click on the **Logout** button to logout system and close the browser window.

Setup

This page contains the side-menus Network, System, and Phone. You can click and select these menus in the left column.

NETWORK SETTINGS

Here is the description of each field from the screen:

Field Name	Function
Private Key	Browse Private Key for 802.1X CA.
Personal Cert	Browse Personal Cert for 802.1X CA.
Root Cert	Browse Root Cert for 802.1X CA.
Trusted Cert	Browse Trusted Cert for 802.1X CA.
IP Type	Select how the phone gets an IP address. Use DHCP or static IP.
IP Address	Static IP address.
Subnet Mask	Static Subnet Mask.
Default Gateway	Static Default Gateway.
Primary DNS	Static Primary DNS.
Secondary DNS	Static Secondary DNS.
Third DNS	Static Third DNS.
Time Server	Static Time server.
PPPoE Username	The PPPoE Username.
PPPoE Password	The PPPoE Password.
802.1x Type	Select the type of 802.1x: EAP-MD5, EAP-TLS, or OFF. If you select EAP-MD5, you only need to input the 802.1x Identity and 802.1x Password. If you select EAP-TLS, you need to select the CA and Private key file and upload them to the phone.

802.1X Identity	802.1X Identity in switch
802.1X Password	802.1X Password in switch

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

Note: You have to reboot your phone in order to enable any changed network settings. Please go to the Information page to reboot your Phone.

SYSTEM SETTINGS

Here is the description of each field from the screen:

Administrator Name	The admin name
Administrator Password	The admin password
User Name	The user username
User Password	The user password
Using Log Server	Enable Using Log Server
Log Level	Set Log Level
System Log Address	Enter System Log IP Address
System Log Port	Enter System Log Port
System Language	Set System Language
Auto DST	Automatic daylight saving time flag
Daylight Save Time	Set the Daylight Saving Time
Starts on: Month	Select the Month
Starts on: Day	Select the Day
Starts on: Time	Select the Time
Ends on: Month	Select the Month
Ends on: Day	Select the Day
Ends on: Time	Select the Time
Time Format	Set the Time Format
Time Zone	Set the Time Zone

Click **Save Settings** to save changes in this page.
Click **Cancel** to discard all changes in this page.
Click **Logout** to logout and close the browser window.

PHONE SETTINGS

Here is the description of each field from the screen:

Field Name	Function
Handset Mic	Set the input level of the handset microphone
Handset Speaker	Set the output level of the handset speaker
Speaker Mic	Set the input level of the built-in microphone
Speakerphone	Set the output level of the phone's speaker
Headset Mic	Set the input level of the headset microphone
Headset Speaker	Set the output level of the headset speaker
Ring Tone Volume	Set the output level of the ring
Tone Type	Select the tone type There are 10 types of tones.
Ring Type	Select the ring type There are 10 types of rings.
DTMF Relay	Select the way to send DTMF through in-band or various out-band mechanism.
RFC2833 PayLoad	Set the RFC2833 PayLoad
Enable Auto Answer	Turn on/off auto answer
Enable DND	Turn on/off DND
Enable Echo Canceller	Turn on/off Echo Canceller
Enable VAD+CNG	Turn on/off VAD+CNG
Enable Phone Lock	Lock or unlock the phone
Enable Call Waiting	Turn on/off Call Waiting
Enable CLIP	Turn on/off CLIP
Enable CLIR	Turn on/off CLIR
Enable Hold Reminder	Turn on/off Hold Reminder
Enable Silence Suppression	Turn on/off Silence Suppression

Dial Timeout (sec)	Set the timeout for Dial
No Answer Timeout (sec)	Set the timeout for forward on no answer
Speed Dial Entry	10 speed dial entries. Each entry maps to the numbers 0 through 9.
Line Key	Use the Line Keys to define for line selection or for specified programming features.
Speed Dial String	Set the Speed Dial String if "Line Key" is set to "Speed Dial".

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

EDM SETTINGS

After you connect the DPH-400EDM to DPH-400S(SE), you will be able to see this EMD setting page on the web-based configuration interface. This setting page shows that DPH-400EDM supports a maximum of 22 speed dial settings and 22 feature keys settings. The left column of the DPH-400EDM has 11 keys that can be used for 11 numbers for speed dialing. In addition, you can press the shift key on the bottom left side of the EDM to add another 11 numbers. The right column of the DPH-400EDM has programming keys. You can set the keys to be feature keys like as DND, Phone Lock, and Auto Answer. Also, if your SIP Server supports Asterisk features, the buttons can also be defined as Asterisk feature keys.

Here is the description of each field:

Button Speed Dial	Set speed dial number for EDM button. There are 11 numbers for EDM left column and 11 numbers for EDM left shift column.
Line	Assign the EDM button to a specified line.
EDM Button	Use the right column EDM buttons for programming features. There are 11 items for EDM right column and 11 items for EDM right shift column.
Button Number	Enter the button number if "EDM Button" is set to "Asterisk Feature Key".

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

SW Upgrade

Use the **SW UPGRADE** window to load the latest firmware for the IP Phone.
PHONE SOFTWARE UPDATE
On the software upgrade page, you can upgrade the phone settings via HTTP/TFTP/FTP.

Here is the description of each field from the screen:

Select Firmware	You can download the latest firmware from D-Link's website. Click **Browse** to find the file on your computer. Click **Upload** to load the new firmware to the phone, and wait a moment, don't close the page until the process has completed. **Note:** If you upgrade the phone's firmware using HTTP, no parameters need to be setup in SERVER ITEMS.
Enable Auto Provisioning	Enable Auto Provisioning
Resync On Reset	Resynchronize configuration file on Reset system
Resync Periodic	Resynchronize configuration file periodic time
Profile Directory	Profile directory where the profile located
AES Key	Set the AES Key (the password to decrypt the encrypted configuration file)
Server Type	Set the Server Type, TFTP or FTP
Server IP Address	Enter the Server IP address (for example, 192.168.1.10)
Files Directory	Files directory where the firmware and

	profile are located. Can be empty, if the file is in the top directory of the TFTP/FTP server.
Server User Name	Username of the account on the server
User Password	Password of the account on the server
Software File	Firmware file name

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

Hint: If there are errors when you update the software and the phone doesn't work, please hold the first soft key when rebooting. Then you can see the hint on the LCD screen.
The phone will update the software from 192.168.1.11 after pressing the navigator OK key.

SIP

This page is for the 4 phone lines. You can click and select each line in the left column. The following will use Line1 as an example.
Note: All the SIP-B features need to be enabled in the Sylantro WEB manager. Please refer the guide from Sylantro.

When you click "LINE1" menu, it will display "LINE1 SIP", "LINE1 VOICE", "LINE1 PERSONAL" menus for line1. Click each one to enter the settings for that menu.

Line SIP

SIP Proxy Server	SIP Proxy Server IP Address
Outbound Proxy Server	Outbound Proxy Server IP Address
Server Port	SIP Proxy Server Port
SIP Secondary Proxy Server	SIP Secondary Proxy Server IP Address
SIP Surviving Proxy Server	SIP Surviving Proxy Server IP Address
Registrar Server	Registrar Server IP Address
Registrar Outbound Server	Registrar Outbound Server IP Address
Registrar Server Port	Registrar Server Port
Registrar Expire Time(sec)	Registrar Expire Time （sec）
Phone Number	Phone Number
User Name	User Name
Authorized ID	Authorized ID
Authorized Password	Authorized Password
Enable Caller ID	The called phone will show your display name
Display Name	Display Name
Locating SIP Server	Enable Locating SIP Server

SIP Domain	SIP Domain
End dial on #	End dial on #
Enable CFI	Enable Call Forward Indication function with Sylantro server.
Enable ACD	Enable the Automatic Call Distribute function.
Group ID	ACD group ID
Group Password	ACD group password
Available	Phone makes the ACD agent available or unavailable
Enable BLA	Enable Bridge Line Appearance function with Sylantro server.
BLA Number	Enter the phone number of bridged party.
Optional Header	Optional Header

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

Line Voice

RTP Port	RTP Port
Enable Statistic	Enable Statistic
Statistic Server	Statistic Server IP Address
Statistic Port	Statistic Server Port
Subscribe MWI	Enable Subscribe MWI
Voice Mail Server	Voice Mail Server IP Address
MSG Number	MSG Number
Codec G.7xx	Set Priority of G.7xx
G.7xx Packet Time	Set Packet Time of G.7xx
G.723.1 Bit Rate	Set Bit Rate of G.723.1
NAT TYPE	Set the type of NAT
SIP PING Interval Time(ms)	Set SIP PING Interval Time
STUN Server IP	Set STUN Server IP Address
STUN Server Port	Set STUN Server Port
Extern Router IP	Set Extern Router IP Address
Extern Signal Port	Set Extern Signal Port
Extern RTP Port	Set Extern RTP Port

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

Line Personal

Enable Always Forward; Forward to user@[host]	Turn on/off unconditional forward, the right hand side is where the call will be forwarded to.
Enable On Busy Forward; Forward to user@[host]	Turn on/off the forward on busy function.
Enable No Answer Forward; Forward to user@[host]	Turn on/off the forward on no answer function.
Enable Block Anonymous call	Turn on/off Block Anonymous call
Caller Blocking Entry	You can enter up to 10 numbers to reject their call automatically.
Prefix Entry Type	Prefix Entry Type
Prefix Entry Pattern	Prefix Entry Pattern
Prefix Entry Replace	Prefix Entry Replace
Prefix Entry Setting	If the "Prefix Entry Type" is "replace" mode, the "Prefix Entry Pattern" will be replaced by the "Prefix Entry Replace". If the "Prefix Entry Type" is "Add" mode, the "Prefix Entry Replace" will be added to the "Prefix Entry Pattern". For example, the "Prefix Entry Pattern" is 220 and the "Prefix Entry Replace" is 210. When

	you dial 220 on keyboard, the phone will dial 210 in "replace" mode or 210220 in "Add" mode.
Dial Plan	Set Dial Plan

Click on the **Save Settings** button to save changes in this page.
Click on the **Cancel** button to discard all changes in this page.
Click on the **Logout** button to logout and close the browser window.

NOTE:
Dial plan configuration
The dial plan lets you describe rules for dialing numbers. If a phone number entered by the user matches the dial plan settings, then it will be dialed out immediately without the need to press the # key.

If the dialed number does not match any expression defined in the dial plan, the number will be rejected. You may define one dial plan per line. Please note that the dial plan does not apply to SIP URL dialing.

The following are a description of the syntax used for each pattern:

Symbol	*Description*
0, 1, 2, 3, 4, 5, 6, 7, 8 ,9	Digit symbol
X	Wildcard matching any symbol
***, #, .**	Other keypad symbol
+	0 or more of the preceding symbol or [] expression

[ab]	Symbol **a** or **b**
[a-b]	Any symbol from **a** to **b** (where **a** and **b** are digit symbols. For example, the expression **[2-4]** means any digits between **2** and **4** (included)
|	Either or

For example, the following are valid dial plans:

02XXXXXX   : This dial plan lets you dial any 8-digit number starting with 02.

42XXX|0[23]XXXXXX   : Lets you dial any 5-digit number starting with 42 or any 8-digit number starting with a 0 followed by 2 or 3.

4X+9   : Let's you dial any n-digit number starting with 4 and ending with 9.

Phonebook

This page lets you configure the phonebook of your phone. You can:
- Select the phonebook pages from 1 to 10 in the left column.
- Edit up to 200 entries. Each page only shows 20 entries.
- Dial a phone number directly from the web phonebook.

Here is the description of each field.

Name	Name of your contact
Phone Number	Phone number or SIP URI of your contact
Ring Type	Select the ring type.

Each contact is given a corresponding number. To call your contact, simply click on his/her corresponding number and it will show the following dialog box (for example, if you click on 001 to call the operator, the result will be the following):

Number To Dial:
*0
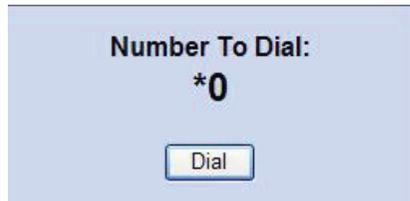
[Dial]

Then press on the "Dial" button in order to start dialing.

Click on the **Save Settings** button to save changes in this page.

Click on the **Logout** button to logout and close the browser window.

TROUBLESHOOTING

This section provides solutions to problems that can occur during the installation and operation of the IP phone. Read the following descriptions if you are having problems.

Problem	Solution
No operation	Check if the power adapter is properly connected. Check if the Ethernet cable is properly connected. If applicable, check if the PoE (Power over Ethernet) switch behind the IP phone is set correctly.
No dial tone	Check if the handset cord is properly connected. Check if the power adapter is properly connected.
LAN connection lost status message	Check if the Ethernet cable is properly connected.
I cannot make a call	Check the status of your SIP registration status or contact your administrator, supplier, or ITSP for more information or assistance.
My IP Phone cannot receive any phone calls	Check if the Ethernet cable is properly connected. Check the status of your SIP registration status, or contact your administrator, supplier, or ITSP for more information or assistance.
I cannot connect to the configuration website of the IP phone	Check if the Ethernet cable is properly connected. Check the IP address of the IP phone. Check if your firewall/NAT settings are correct.