



# DPH-70 Modem IP Phone User's Guide

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RECYCLABLE

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## 1 Overview

DPH-70 is a two-in-one phone, allows Internet and PSTN phone calls. It is a dial-up Internet (IP) telephone, operates using Session Initialization Protocol (SIP) and H.323 protocol. It allows you to make inexpensive long distance (STD and ISD) calls on dial-up Internet connection.

It, also, works as a normal PSTN phone. It looks and feels like a normal PSTN phone. A DIAL-UP button differentiates an Internet phone call.



DPH-70 needs to be configured once and there is no need to configure it again unless there is change in Internet access or calling card information.

DPH-70 is a standard based device and works with any Internet Service Provider (ISP) and VoIP (Internet telephone) service provider. It plays user-friendly status messages and configuration messages in a language of your choice.

DPH-70 has a user-friendly dialing option whereby you just dial the number. It will try many times and ring back when the called party answers the call.

DPH-70 software can be upgraded over the Internet for new features and functions.

### Features

- Two-in-one device supports Internet and PSTN phone calls.
- Standard based device, works with all Internet Service Provider (ISP), VoIP service providers, and PC based soft phones.

- Easy to use set-up, guided by voice prompts in local language.
- Intelligent selection of codec (G.723 or G.729A) based on Internet connection speed.
- Excellent voice quality and low end-to-end delay using low latency adaptive jitter buffer, silence suppression, and comfort noise generation techniques.
- User-friendly hands-free dialing method.
- Make multiple calls without connecting to the Internet each time.
- Call transfer, last number redial, and adjustable speaker volume control.
- Password protection to your valuable configuration information.
- Remote software update support.

## 1.1 Acronyms

LED	Light Emitting Diode
IP	Internet Protocol
ISP	Internet Service Provider
PPP	Point-to-Point Protocol
PSTN	Public Switched Telephone Network
RTP	Real Time Protocol
SIP	Session Initiation Protocol
TFTP	Trivial File Transfer Protocol
VOIP	Voice Over Internet Protocol, same as Internet Telephony

## 1.2 Definitions

**Idle State:** DPH-70 is said to be in idle state when the speaker is off, LEDs are off and handset is on Hook.

**Configuration state:** DPH-70 goes to configuration state to edit and verify the configuration information.

**Receive state:** DPH-70 goes to this state to receive calls from other phones. In this state, phone is always connected to Internet.

**Speaker Mode:** You can dial a phone number in hands free mode and listen to call progress messages.

**Handset Mode:** You can lift the handset any time to listen. If the speaker is on while lifting, it is turned off automatically.

## 2 Unpacking and Installation

Open the shipping carton and carefully remove all items. In addition to this User's Guide, make sure you have received all of the following items:

- Modem IP phone, DPH-70
- One telephone cable (RJ-11)
- Handset
- Handset cord
- Power adapter
- Warranty card

If any item appears to be missing or damaged, please contact your local reseller.



### 2.1 System Requirements

You will need the following to use DPH-70.

- AC power outlet (230V, 50Hz)
- Local telephone line connection
- Access to dial-up Internet connection (via ISP) that is PPP compatible
- Account with a VoIP (Internet Telephone) service provider

### 2.2 Installation

1. Connect the handset to DPH-70 with handset cord.
2. Plug one end of telephone cable (RJ-11) into the LINE port on the rear panel of DPH-70 and the other end into a working telephone wall jack.
3. Plug the AC power adaptor provided into an AC outlet and insert the power cord into the connector marked "AC" on the rear panel of the DPH-70.
4. Lift the handset and listen for the dial tone that indicates the DPH-70 has been installed properly. If you do not hear a dial tone, check that the power adaptor is plugged into a live electrical outlet and that the power cord is pushed securely into the connector.
5. Now DPH-70 is ready for basic configuration as described in the next section.

*Warning: DPH-70 needs Internet access and Internet calling card information to make Internet phone calls. However, it can make normal PSTN phone calls without any configuration.*

### 3 Getting Started

After installation, DPH-70 is ready for configuration. You need to enter Internet Service Provider (ISP) and Calling Card information to make and receive Internet phone calls. However, it can make normal PSTN phone calls without any configuration. Refer to *Appendix A* to know how to enter alphanumeric and special characters required for user name and password.

*Warning: DPH-70 identifies end of each parameter by '#'. Please terminate each parameter entry by pressing '#' key. For example, to enter the password as '123' you should press '123#'.*

#### 3.1.1 ISP Information

Following Internet Service Provider (ISP) account information is required for dial-up Internet connection. Refer to your Internet Service Provider's card for this information.

- *Internet Access Telephone Number*
- *User Name*
- *Password*

To enter these parameters, follow the steps below. DPH-70 voice menu guides you through the configuration process.

1. Enter '\*123\*#' to enter the configuration menu.
2. Enter the configuration password. The default password is '12345'.
3. Enter '11', to edit the ISP parameters. It plays "Please enter the ISP phone number and terminate by '#' button".
4. Enter the Internet access phone number and terminate by pressing '#' button. During entry, it echoes the character pressed.
5. After the termination, it plays back the value, as "You entered xxxx, press '1' to accept, '2' to re-enter. Press '1' to accept the entered parameter. If you want to re-enter the parameter, press '2'.
6. Follow the voice menu to enter ISP User Name and password. After ISP configuration, phone plays the main menu.
7. Enter '5' to save the ISP information.

#### 3.1.2 VoIP Calling Card Information

Following VoIP (Internet Telephone) calling card information is required for Internet phone connection. The VoIP service provider will provide these parameters. Refer your calling card for these parameters. After entering the calling card parameters, your Internet phone number will be same as user ID.

- *User ID*
- *Password or PIN*

To enter these parameters, follow the steps below and the voice menu from DPH-70.

1. Enter '\*123\*#' to enter the configuration menu.
2. Enter the configuration password. The default password is '12345'.
3. Enter '21', to edit the VoIP calling card parameters. It plays "Please enter the calling card user ID and terminate by '#' button".
4. Enter the calling card User ID and terminate by pressing '#' button. During entry, it echoes the character pressed.
5. After the termination, it plays back the value, as "You entered xxxx, press '1' to accept, '2' to re-enter. Press '1' to accept the entered parameter. If you want to re-enter the parameter, press '2'.

6. Follow the voice menu to enter the calling card password. After calling card password configuration, phone plays "Please enter the password". This is required only to configure the VoIP server address. The default password is 'abcd'. If password is not known, press '#' to come to main menu.
7. Enter '5' to save the calling card information.

After these basic configurations, DPH-70 is ready to make and receive Internet phone calls as described in the next section.

## 4 Internet Phone Calls

After basic configuration, DPH-70 allows you to make and receive Internet phone calls as described in this section. DIAL-UP button distinguishes the Internet phone call from normal PSTN phone call. To make Internet phone call press DIAL-UP button followed by destination telephone number. It supports a user-friendly dialing method as described below.

*Warning: You need to have Internet access information and VoIP calling card information configured in DPH-70 to make and receive Internet calls.*

### 4.1 Receiving Internet call

DPH-70 needs to be connected to VoIP server to receive Internet phone calls. This is called RECEIVE state. DIAL-UP button enables and disables this state and the corresponding Dial Up LED indicate whether the DPH-70 is in receive state.

When you press the DIAL-UP button, DPH-70 connects to Internet and VoIP (Internet Telephone) Service Provider. During this connection process, DPH-70 will play progress tone and blink the DIAL-UP LED. After connecting to the VoIP server, it will turn on the DIAL-UP LED and stop progress tone. It stays connected to Internet for 15 minutes or until you cancel it by pressing the DIAL-UP button again.

During this connection process if anything fails, dph-70 will disconnect modem, turn off Dial Up LED, plays an error message, and then goes to idle state. If the Internet access line is busy it will retry 4 times before giving up.

*Warning: In RECEIVE state, DPH-70 is connected to the Internet and you will be charged for Internet access. Do not leave the phone in RECEIVE mode unless you are expecting an Internet phone call.*

### 4.2 Making Internet call

#### 4.2.1 Normal dialing

Like conventional phone, lift the handset, press DIAL-UP button and dial the other party phone number followed by '#' key. For example, you press 'dial-up12345#' to call 12345 through the Internet. The DIAL-UP button tells the DPH-70 to connect to Internet.

DPH-70 plays progress tone and establishes call with the called party. You will hear ringing tone if the called phone is free and reachable. When the called party attends the call, you can talk to him. If anything goes wrong you will hear appropriate error messages. Please refer to *Appendix B: Troubleshooting* for more information about the error messages.

During the process of establishing Internet call, DPH-70 connects to the Internet and then, connects to the VoIP service provider. This may take some time unlike normal phone.

*Warning: DPH-70 identifies end of phone number by '#'. Please terminate phone number entry into DPH-70 by pressing '#' key. If you don't press any key for more than 5 sec, DPH-70 identifies it as end of phone number.*

### 4.2.2 Multiple Calls

RECEIVE state allows you to make multiple Internet calls without connecting to the Internet each time. You press DIAL-UP to go to RECEIVE state, please refer to a section on "Receiving Internet Calls" for more detail.

In this mode, you just dial the phone number followed by '#'. Since DPH-70 is already connected to Internet, you do not press the DIAL-UP button before dialing a number. For example, you press '12345#' to dial 12345 through Internet. It remains in call receive state after the end of each call. Please note that you cannot make normal PSTN call while DPH-70 is in RECEIVE state.

*Warning: In RECEIVE state, DPH-70 is connected to the Internet and you will be charged for Internet access. Do not leave the phone in RECEIVE mode unless you are expecting an Internet phone call.*

### 4.2.3 Special Dialing

Dial-up connection sometime takes time to connect to the Internet depending on the Internet access line availability and network congestion. Your DPH-70 is designed with a user-friendly dialing method to help you in such situations.

You dial in hands free mode. **Press speaker button, the speaker will be turned ON. Then** press DIAL-UP button and dial a number followed by '#' without lifting the handset. DPH-70 will establish Internet call with the called party and play ring back tone. However, if the Internet access line is busy, dph-70 will retry 5 times before giving up.

During the process of establishing the Internet call, DPH-70 will play different call progress tones (like progress, ring back, or error tone) and blink the speaker LED. Once the other party lifts the handset, it establishes the Internet call and turns on the speaker LED. Remember that you can listen to call progress tones in hands free but you have to use the handset to talk to the other party.

*Warning: DPH-70 identifies end of phone number by '#'. Please terminate phone number entry into DPH-70 by pressing '#' key. If you don't press any key for more than 5 sec, DPH-70 identifies it as end of phone number.*

## 4.3 Internet Call Transfer

SIP signaling protocol in DPH-70 supports call transfer feature. This feature is not available in H.323 signaling protocol.

This feature allows the user to transfer an Internet phone call to another phone connected to the Internet. To transfer the call, you flash the hook for a short period and dial the destination number followed by '#'. The destination number will ring and on off-hook the call transfer will be complete.

## 5 PSTN Phone Calls

DPH-70 can make and receive normal PSTN phone calls. When DPH-70 is not connected to the Internet through the DIAL-UP button (RECEIVE state), it is known to be in idle state. In this state it works as a normal phone, making and receiving PSTN phone calls. This feature does not need any configuration.

### 5.1 Making PSTN call

To make an outgoing call, go off hook and dial the destination number, followed by #. For example, you press 12345# to call 12345 through PSTN network. It plays various call progress tone as in normal phone and plays ring back tone if the called party is free. DPH-70 establishes the call on called party attending the call.

~~To make PSTN call in pulse mode, press SHIFT key and dial the phone number. For example, press <SHIFT> 12345# to dial 12345 in pulse mode.~~

The dialing mode of PSTN number depends upon configuration of ISP number. If ISP number is configured with & (for BLIND DIALING), PSTN number is also dialed in blind mode, and if ISP number is configured with \$ (for PULSE MODE DIALING), PSTN number is also dialed in pulse mode. (Please refer section [錯誤! 找不到參照來源](#) ).

DPH-70 has special supports for operation behind an EPABX. For example, you may have to dial 9 to get external dial tone and then dial the destination number. In this scenario, first dial '9#' to dial to EPABX and get external dial tone, then dial the destination number.

*Warning: DPH-70 identifies end of phone number by '#'. Please terminate phone number entry by pressing '#' key. If you don't press any key for more than 5 sec, DPH-70 identifies it as end of phone number.*

### 5.2 Receiving PSTN call

DPH-70 can receive any normal PSTN phone call when DPH-70 is not connected to the Internet through the DIAL-UP button. It rings on incoming call and establishes call on off hook. Either party can disconnect the call by going on hook.

### 5.3 Transferring PSTN call

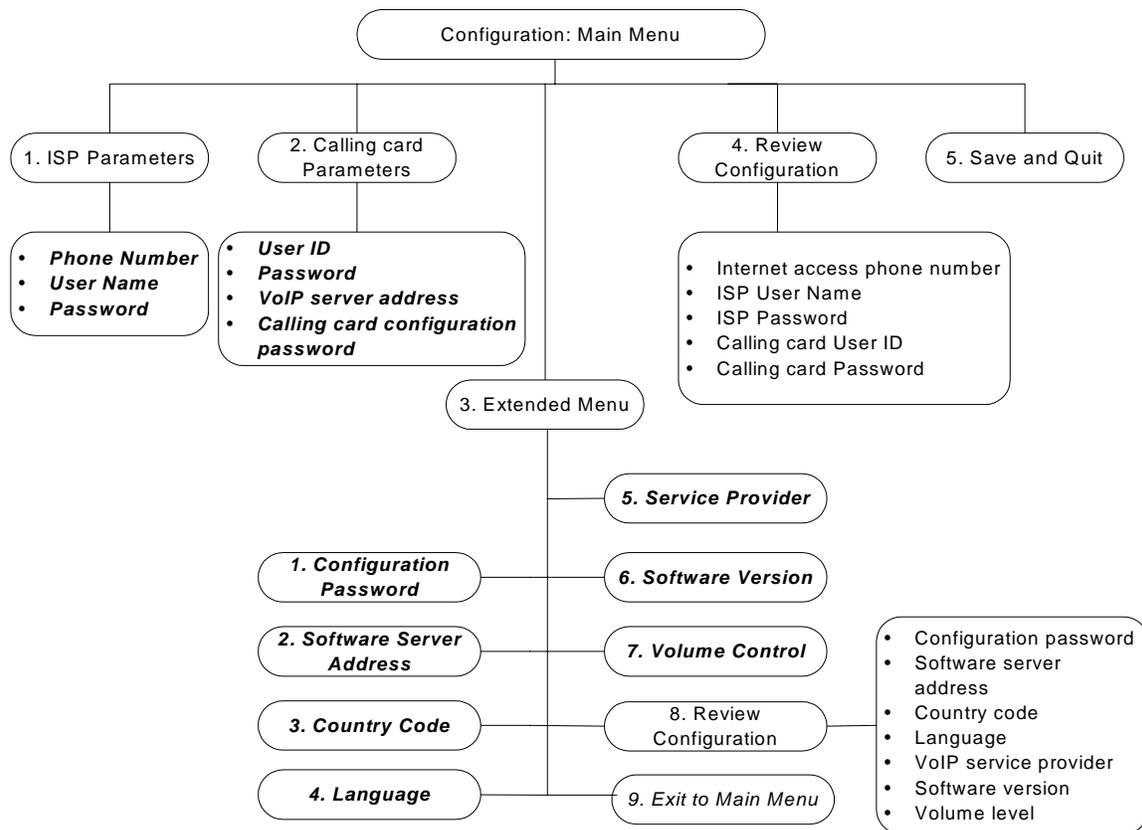
This feature allows the user to transfer a PSTN phone call to any PSTN phone. To transfer the call, you flash the hook for a short period and dial the destination number followed by '#'. The destination number will ring and on off-hook the call transfer will be complete.

## 6 DPH-70 Configuration

DPH-70 voice menu helps you through the configuration process. You can enter the configuration menu by pressing the key sequence '\*123\*' and terminate with a hash (#) key when DPH-70 is in idle state.

DPH-70 will ask for password on entering configuration menu. Since the configuration information contains valuable information it is password protected. If you don't remember your password, you can reset DPH-70 to default password as described in *Loading factory defaults*. The default password is '12345'.

**Warning:** DPH-70 identifies end of a parameter by '#'. Please terminate each parameter entry into DPH-70 by pressing '#' key.



DPH-70 configuration menu is shown above. It has five options in the main menu and seven options in the extended menu. Each of them is described below. The configurable parameters are shown in **bold** letters. DPH-70 plays the current value of each parameter and allows you to edit or skip to next parameter. After entering a parameters value, it plays it back for verification.

After password verification, DPH-70 will play the main menu as below.

“Press  
 ‘1’ to enter ISP parameters,  
 ‘2’ to enter calling card parameters,  
 ‘3’ to enter extended menu,

'4' to review configuration parameters,  
'5' to save & quit

Note:

- If power goes off while you are configuring, the phone will work with the previous saved parameters.
- If you idle more than 90 seconds, dph-70 will accept the keys entered and go to next state.
- If you leave the phone without completing the configuration it will go back to idle state without saving the parameters.

## 6.1 ISP Parameters

DPH-70 needs to connect to the Internet to make Internet phone calls. The following information should be configured in DPH-70 to connect to the Internet and make calls. The user will get this information while subscribing to Internet Service Provider (ISP). Please note that DPH-70 will not work without this information.

### ISP Phone Number

This is the phone number to which DPH-70 will dial-up to connect to the Internet. The Internet access phone number can be maximum 20 digits. If you enter more digits and try to save, you will hear a prompt "The parameter you have entered is incorrect, Press '1' to edit, '2' to skip". Press '1' or '2' appropriately.

DPH-70 normally dials out with DTMF tones. However, if Internet access phone number is configured to start with a '\$', then the phone dials out in pulse mode.

DPH-70 supports a mode called blind dialing mode. In this mode, DPH-70 won't look for dial tone on line before dialing the ISP number. User can enter '&' (Ampersand) as first character in ISP Phone number (or as second character if first character is '\$' for pulse mode dialing) for dialing ISP number in blind mode.

*Warning: In blind dial mode DPH-70 won't prompt any error messages related to line conditions.*

DPH-70 has special supports for operation behind an EPABX. In some scenarios, you may have to introduce a delay after dialing external access number or wait for secondary dial tone. A '.' (dot) in phone number will introduce a delay and a '\_' (under-score) will look for secondary dial tone. For example, 9.6788341 will introduce a small delay after dialing 9, before dialing other digits.

### ISP User Name

The user name identifies the user to Internet Service Provider (ISP). It can have a mix of digits, lower and upper case letters, and special characters. The user name can have a maximum of 30 characters. Please refer to Appendix A: Procedure for entering alphanumeric and special characters to enter special characters.

### ISP Password

The password used for verifying the user to Internet Service Provider (ISP). It can have a mix of digits, lower and lower case letters, and special characters. It can have a maximum of 30 characters. Please refer to Appendix A: Procedure for entering alphanumeric and special characters to enter special characters.

## 6.2 Calling Card Parameters

The following information is required for DPH-70 to make and receive Internet phone calls. The user will get this information from the VoIP (Internet Telephone) service provider. Please note that DPH-70 will not work before configuring this information.

### Calling Card User ID

This is the Internet phone number or user ID assigned to you. It can have a maximum of 30 characters. This information is required to verify the calling card user identity to the VoIP (Internet Telephone) Service Provider.

### Calling Card Password

This information is required to verify the calling card user identity to the VoIP (Internet Telephone) Service Provider. It can have a maximum of 30 characters.

### VoIP Server Address

This is the IP address where VoIP (Internet Telephone) Server is running. It can be a valid IP address like 198.62.73.101 or a valid domain name like sip.dlink.com. The domain name can have a maximum of 30 characters, including 'dots'. Default server address is sip.cityonlines.com.

VoIP server address is of the form xxx.xxx.xxx.xxx where xxx is between 0 and 255. If the entered number is invalid, phone prompts with a message " The parameter you have entered is incorrect, Press '1' to edit, '2' to skip".

### Calling Card configuration Password

This is the password for accessing and configuring the calling card information. It can have maximum of 30 characters. Default is "abcd". The user is advised to change this value. If you forget this password, reset the phone to factory values and configure the phone again.

## 6.3 Review Configuration

This option plays current information for all parameters in main menu as

"ISP Phone number is xxxx,  
ISP User name is xxxx,  
ISP Password is xxxx,  
Calling Card user ID is xxxx,  
Calling Card password is xxxx"

After playing this message, it prompts with the main menu.

## 6.4 Save and Exit

This option saves all the information entered in the configuration and exits from configuration option. You can leave the configuration without saving the information by replacing the handset or switching the speaker off.

## 6.5 Extended Menu

### 6.5.1 Configuration Password

Internet access and calling card parameters are valuable information and it can be misused. Thus, DPH-70 has password protection to enter the configuration module. It can have maximum of 30 characters. Default is "12345". The user is advised to change this value. If you forget this password, reset the phone to factory values and configure the phone again.

### 6.5.2 Software server address

This is the IP address of software server from where the latest DPH-70 software can be downloaded. It can be a valid IP address like 198.62.73.101 or a valid domain name like dph70.cityonlines.com. The domain name can have maximum of 30 characters, including 'dots'. Default server address is dph70.cityonlines.com (or 202.62.83.106).

### 6.5.3 Country Code

Following is a list of countries supported with their respective codes

**Table 1 Country Codes**

<b>Country</b>	<b>Code</b>
Brazil	0
China	1
India	2
Korea	3
Malaysia	4
Mexico	5
South Africa	6
Taiwan	7
USA	8
Australia	9
Austria	10
Belgium	11
Denmark	12
Finland	13
France	14
Germany	15
Ireland	16
Italy	17
Japan	18
Netherlands	19
Norway	20
Poland	21
Portugal	22
Singapore	23
Spain	24
Sweden	25
Switzerland	26
UK	27
Others	28

If you enter a value other than the listed, the phone prompts with a message "The parameter you have entered is incorrect, Press '1' to edit, '2' to skip". Choose appropriately.

Based on the country code selection, the various tones and modem software will vary. Default country code is 2 (India). If you change it to some other country than yours, the phone may not be able to make calls and you will hear some error message. So please be sure to select the correct country code.

#### 6.5.4 Language Support

DPH-70 plays voice prompts in many languages. Following is the list of languages supported with their respective codes.

**Table 2 Languages**

<b>Language</b>	<b>Code</b>
Default	0
English	1
Hindi	2

If you enter other than the listed value, the phone prompts with a message "The parameter you have entered is incorrect, Press '1' to edit, '2' to skip". Choose appropriately.

If you change the language code, please do a software upgrade as described in *Upgrading Software* section.

#### 6.5.5 VoIP Service Provider

DPH-70 works with many service providers. Following is the list of service providers supported with their respective codes.

**Table 3 Service Providers**

<b>Service Provider</b>	<b>Code</b>
Default	0
VSNL	1
SatyamOnLine	2
Pioneer Online	3

If you enter other than the listed value, the phone prompts with a message "The parameter you have entered is incorrect, Press '1' to edit, '2' to skip". Choose appropriately.

If you change the service provider code, please do a software upgrade as described in *Upgrading Software* section.

#### 6.5.6 Software version number

This option plays the current software version in DPH-70. It will change if you download newer version of software from Internet.

#### 6.5.7 Volume Control

The volume level can vary depending on the VoIP gateway of your VoIP service provider. This option allows configuration of volume levels for Internet (VoIP) and PSTN calls. DPH-70 has separate volume control for Internet and PSTN calls. You can select a level in the range of 1 – 5 to adjust the volume level. The default values are 3 for VoIP calls and 3 for PSTN calls.

### **6.5.8 Review Configuration**

This option plays current information for all parameters in extended menu as

“Configuration password is x  
Software server address is x  
Country Code is x  
Language selected is x  
VoIP Service provider is X  
Current software version is x  
VoIP volume level is x  
PSTN volume level is x”

After playing this message, it prompts with the extended menu.

### **6.5.9 Exit to main menu**

This option takes you to the main menu. You need to save the information entered in extended menu by selecting 'Save and Exit' in main menu.

## 7 Additional Features

### 7.1 Upgrading Software

DPH-70 has a facility to upgrade the software, remotely through the Internet at no cost to you. Software can be downloaded when the phone is in RECEIVE state or when not in use.

On pressing '\*456\*#', the phone connects to the Internet and downloads the software. During the download process, DPH-70 will play progress tone and blink the SHIFT LED. After successful download, the phone restarts with the newer software. Due to some reason if download fails, the phone will continue working with the earlier software. You can check the current software version through configuration menu.

D-Link will release latest DPH-70 software in its website at <http://www.dlink.co.in> along with the server IP address from where the latest software can be downloaded. This information is required to be entered into DPH-70 through the configuration menu.

Note: On pressing '\*456\*#', DPH-70 will ask for confirmation.

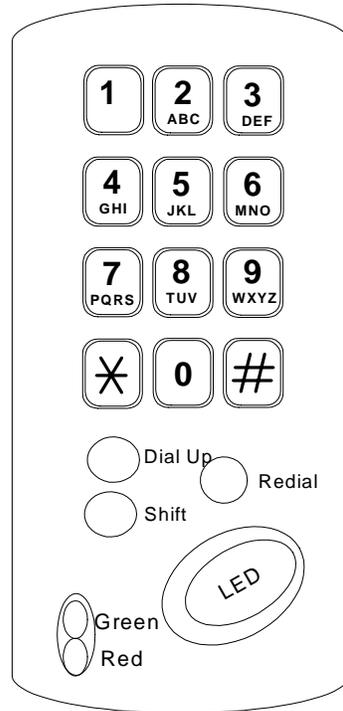
### 7.2 Loading factory defaults

If it is required to reset DPH-70 and start with default configuration parameters, you can do so by pressing '\*789\*#' while DPH-70 is in idle state. The phone restarts in few seconds with the default parameters. Default configuration password is '12345'. The phone needs to be configured again for Internet access and calling card information before it can be used.

Note: On pressing '\*789\*#', DPH-70 will ask for confirmation.

## 8 Appendix A: Procedure for entering alphanumeric and special characters

The section describes how to enter digits, upper and lower case alphabets, and special characters using the DPH-70 keypad shown below.



### 8.1 Entering Digits

- Press any digit key once to enter the corresponding digit.

Example: To enter 4, press key 4 once.

### 8.2 Entering Small Letters

- Press a digit key twice to enter the first character written on that key.
- Press thrice to enter the second character written on that key.
- Press four times to enter the third character written on that key.
- Press five times to enter the fourth character written on that key.
- If the key is pressed more than above mentioned times, it accepts the last letter written on that key.

Examples: To enter a, press key 2 two times.  
To enter e, press key 3 three times.  
To enter z, press key 9 five times.

NOTE: Press the appropriate key firmly, specified number of times, in quick succession to enter alphabets.

### 8.3 Entering Capital Letters

You need to press a SHIFT button and a digit key, specified number of times, to enter the capital letters marked on digit keys. SHIFT LED turns on after SHIFT button is pressed and turns off after the digit key is pressed.

- Press a SHIFT button and then the digit key, the following number of times to enter the capital letters.
  - Twice to enter the capital of the first letter written on that key.
  - Thrice to enter the capital of the second letter written on that key.
  - Four times to enter the capital of the third letter written on that key.
  - Five times to enter the capital of the fourth letter written on that key.
- If the key is pressed once after SHIFT button is pressed, it accepts the corresponding digit.
- If the key is pressed more than above mentioned times after the SHIFT button is pressed, it accepts as a last capital letter written on that key.

Examples: To enter A, press SHIFT followed by key 2 two times.  
 To enter E, press SHIFT followed by key 3 three times.  
 To enter Z, press SHIFT followed by key 9 five times.

NOTE: Press the appropriate key firmly, specified number of times, in quick succession to enter alphabets.

### 8.4 Entering Special Characters

Press DIAL UP button and then press the corresponding key mentioned in table below to enter special characters. DIAL UP LED turns on after pressing the DIAL UP button and turns off after accepting a special character.

Special Character	Description	Key To be pressed
	"Backspace"	0
@	"At "	1
.	"Dot"	2
-	"Hyphen"	3
_	"Underscore"	4
\$	"Dollar"	5
&	"Ampersand"	6
/	"Slash"	7
:	"Colon"	8
#	"Hash"	9

Note: Backspace can be used to delete the unwanted character. It will delete the last entered character.

Examples: To enter @, press DIAL UP followed by key 1.  
 To enter ., press DIAL UP followed by key 2.  
 To delete the last character, press DIAL UP followed by key 0.

## 9 Appendix B: Troubleshooting

DPH-70 can play the following error messages at different error conditions. These messages aid in troubleshooting any error conditions.

### **All outgoing calls are PSTN calls. It does not dial in Internet mode.**

To make a call in Internet mode, you have to press DIAL-UP button first. Please refer to the user manual for more details. If you don't press DIAL-UP, DPH-70 will dial out in PSTN mode.

### **“Please configure the phone and try again”**

This message is played if you try to use DPH-70 without configuring important parameters. You need to configure the Internet Service Provider (ISP) access parameters and VoIP (Internet Telephone) calling card parameters to use the phone.

### **“Please check the phone line and try again”**

This message is played if DPH-70 is not connected to the phone line properly. Please check the phone line connection and try again. Test the phone line with a normal phone if it persists.

If DPH-70 is behind EPBX you may have to program DPH-70 to look for secondary dial tone or introduce a delay. Please refer to configuration section for more information.

### **“Password entered is incorrect. Try again”**

If invalid password is entered to access configuration state, this message is played.

### **“The ISP line is busy, please call after some time”**

This message is played when the Internet access line is busy. This may happen during peak hours.

### **“The ISP server is not responding”**

It is played when the Internet access modem is not responding properly. If this happens please check the Internet access phone number and country code in configuration menu. If you call Internet access phone number from a phone you will hear modem noise.

### **“ISP connection could not be established, try later”**

It is played when Internet access server is down. Please contact the ISP customer service or try again after some time.

### **“Please check your ISP parameters and try again”**

This message is played when the configured ISP user name and password is incorrect. Please verify the ISP user name and password.

### **“Bad phone line, Please contact customer support”**

It indicates that your phone line may not connect to the Internet at sufficient speed to establish Internet phone calls. Please try another phone line or contact customer support.

**“Please check your calling card parameters and try again”**

This message is played when the configured calling card information is incorrect. Please verify the calling card parameters. This may also be due to VoIP server not responding or no balance in your calling card account or wrong VoIP server IP address.

**“The number you have dialed is not locatable, please check the number”**

This message is played when the called phone number does not exist or not ready to receive calls.

**“The number you have called is busy, please call after some time”**

This message is played when the called phone is busy.

**“Incorrect value. Press ‘1’ to edit, ‘2’ to skip”**

This message is played when invalid information is entered as part of configuration.

**Fast error tone for a short period while disconnection phone**

This error tone is played while the modem disconnects from the Internet. This process takes a short time and the phone is inaccessible during this period.

## 10 Appendix C: DPH-70 Product Specifications

### General

Product Feature	Description
Model	DPH-70A1
VoIP signaling protocol	H.323 Version 2 or SIP (RFC2543)
Data Modem Standard	V.34
Power Adapter	9V 1000mA AC Adapter (180-260V AC).
Power consumption	5W max.

### Hardware Specifications

Product Feature	Description		
One Port for Telephone line connection	RJ11		
	The Smart DAA Interface feature that reliably operates without drawing power from the line		
	Remarks	Color	Timing
Dial Up LED	Indicates if the phone is in receive state or not	Green	Steady
Shift LED	Used in configuration to enter upper case letters	Red	Steady
Speaker LED	Indicates if speaker is on or off.	Red	Steady
Speaker button	Press this button to turn on and off the speaker for hands-free dialing.		
Shift button	Used for entering upper case letters during configuration state.		
Dial Up button	Tells the phone to connect to Internet while making an internet phone call. Puts the phone ready to receive IP phone calls or to make multiple calls.		
Redial button	Redials the last dialed number.		
Number Keys	<p><b>0 to 9, #, *:</b> These are normal number keys and can be used for dialing or entering digits.</p> <p><b>Alphanumeric</b> Alphanumeric and special characters can also be entered through keypad.</p>		
Speaker Volume Adjustment	Speaker volume can be adjusted using this facility.		
Handset Volume Adjustment	This can be used for adjusting the volume switch on the handset		

## Software Specifications

Voice Codec	G.723.1 is available for modem connection speeds of 16.8 Kbps or above.
	G.729A/AB is available for modem connection speeds of 24 Kbps or above.
Voice activity detection, Silence suppression, Comfort noise generation	Algorithms minimize the bandwidth requirements.
Internet protocol	IP (RFC0791) TCP (RFC0793) UDP (RFC0768) RTP/RTCP (RFC1889, RFC1890) SDP (RFC2327)
PPP	(RFC1661) To connect to ISP via dial-up connection.
TFTP	Trivial File Transfer Protocol is used for firmware download.
Reset to factory defaults	After pressing a factory reset key sequence, the phone restarts with all default parameters. The access sequence is '*789*#'.
Configuration using Keypad	Digits, Special characters and all letters can be entered.
User authentication	Password protection for configuration menu.
Configuration password	Default password is '12345'.
Calling card configuration password	Default password is 'abcd'. <a href="#">If password is not known, press '#' to come to main menu.</a>
Configuration menu	Access code is '*123*'.
Software upgrade	Access code is '*456*'.
Factory reset	Access code is '*789*'.
VoIP call volume level	Default is 3
PSTN call volume level	Default is 3
VoIP server address	Default is sip.cityonlines.com (or 202.62.83.106)
Software server address	Default is dph70.cityonlines.com (or 202.62.83.106)

## Safety / EMI Specifications

Standards Compliance	FCC Class B part 15 and part 68
Operating Temperature	0 °C to 50 °C
Storage Temperature	-10 °C to 60 °C
Humidity Range	5% to 95% Non-condensing
Dimensions	52 (H) x 206 (L) x 103 mm (without handset)
Weight	800gms

<b>Registration Card</b>
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**Registration Card**

Print, type or use block letters.

Your name: Mr./Ms \_\_\_\_\_

Organization: \_\_\_\_\_ Dept. \_\_\_\_\_

Your title at organization: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Organization's full address: \_\_\_\_\_

Country: \_\_\_\_\_ Date of purchase (Month/Day/Year) : \_\_\_\_\_

Product Model	Product Serial No.	* Product installed in type of computer (e.g., Compaq 486)	* Product installed in computer serial No.

(\* Applies to adapters only)

Product was purchased from:

Reseller's name: \_\_\_\_\_ Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Reseller's full address: \_\_\_\_\_

Answers to the following questions help us to support your product:

1. Where and how will the product primarily be used?

Home  Office  Travel  Company Business  Home Business  Personal Use

2. How many employees work at installation site?

1 employee  2-9  10-49  50-99  100-499  500-999  1000 or more

3. What network protocol(s) does your organization use ?

XNS/IPX  TCP/IP  DECnet  Others \_\_\_\_\_

4. What network operating system(s) does your organization use ?

D-Link LANsmart  Novell NetWare  NetWare Lite  SCO Unix/Xenix  PC NFS  3Com 3+Open  Banyan Vines

DECnet Pathwork  Windows NT  Windows NTAS  Windows '95  Others \_\_\_\_\_

5. What network management program does your organization use ?

D-View HP OpenView/Windows HP OpenView/Unix SunNet Manager Novell NMS NetView 6000

Others \_\_\_\_\_

6. What network medium/media does your organization use ?

Fiber-optics Thick coax Ethernet Thin coax Ethernet 10BASE-T UTP/STP 100BASE-TX 100BASE-T4

100VGAnyLAN Others \_\_\_\_\_

7. What applications are used on your network?

Desktop publishing Spreadsheet Word processing CAD/CAM Database management Accounting

Others \_\_\_\_\_

8. What category best describes your company?

Aerospace Engineering Education Finance Hospital Legal Insurance/Real Estate

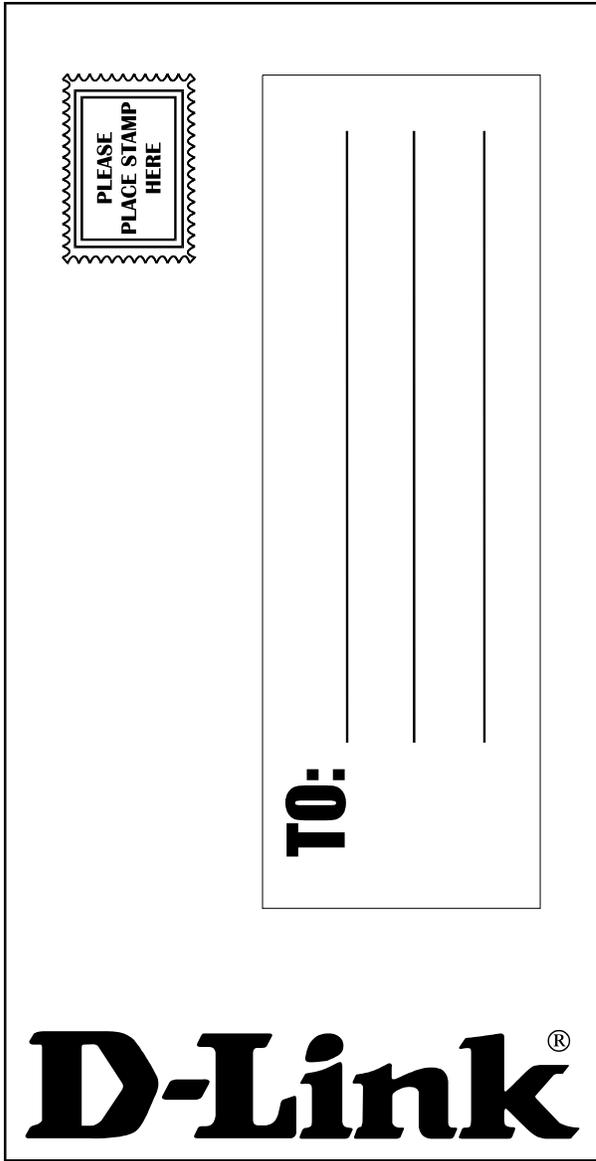
Manufacturing Retail/Chainstore/Wholesale Government VAR System house/company

Transportation/Utilities/Communication Other \_\_\_\_\_

9. Would you recommend your D-Link product to a friend?

Yes No Don't know yet

10. Your comments on this product? \_\_\_\_\_



## Revision History

Originator	Comments	Manual Revision	S/W Revision
Victor	First release	1.0	1.0 (SIP)
Aravindan	Added configurable volume control	1.01	2.24 (SIP)
Aravindan	Modified volume range to 5, removed '*' for delay in ISP number, * for pulse dialing, and default values for servers.	1.02	2.30 (SIP)
Achuth	Added calling card configuration password	1.03	2.36 (SIP) 1.31 (H.323)
Rahul	Corrected description of access to calling card configuration menu.	1.04	2.36 (SIP) 1.31 (H.323)
Rahul	Added pulse dialing in PSTN, Blind dialing support and Password protection of VoIP server address.	1.05	1.51 (H.323)
Achuth	Added # special character support	1.06	2.50(SIP) 1.61(H.323)
Achuth	Added new country codes, blind mode and pulse mode support in PSTN as in VoIP case	1.07	2.60(SIP) 1.61(H.323)

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