

SL4050/B12/E

SmartLink Series 12-Line VoIP SIP Phone

SL4050/B2/E

SmartLink Series 2-Line VoIP SIP Phone

Quick Start Guide



CE Important

This is a Class B device and is intended for use in a light industrial or residential environment. It is not intended nor approved for use in an industrial environment.

The Model SL4050 phones are not approved for, and are not intended for, direct connection to the Public Switched Telephone Network (PSTN).



WARNING

- **This device contains no user serviceable parts. The equipment shall be returned to Patton Electronics for repairs, or repaired by qualified service personnel.**
- **The external power adapter shall be a listed Limited Power Source. Ensure that the power cable used meets all applicable standards for the country in which it is to be installed, and that it is connected to a wall outlet which has earth ground. The mains outlet that is utilized to power the device shall be within 10 feet (3 meters) of the device, shall be easily accessible, and protected by a circuit breaker.**
- **Do not work on the system or connect or disconnect cables during periods of lightning activity.**



In accordance with the requirements of council directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE), ensure that at end-of-life you separate this product from other waste and scrap and deliver to the WEEE collection system in your country for recycling.

1.0 Before you begin

The VoIP SIP phone can be set up using the keypad and a web browser, such as Internet Explorer. If you purchased this product to make a VoIP call, you must have either an Ethernet-based Cable or a DSL modem with an active connection to the Internet.

1.1 Check your package contents

The following items are included in the SmartLink 4050/B12 and SmartLink 4050/B2 packaging. Contact your supplier immediately if an item is missing.



SmartLink 4050/B12 VoIP SIP Phone



SmartLink 4050/B2 VoIP SIP Phone



Ethernet cable, 5-foot (1.5-meter), Qty: 1



SmartLink documentation CD-ROM

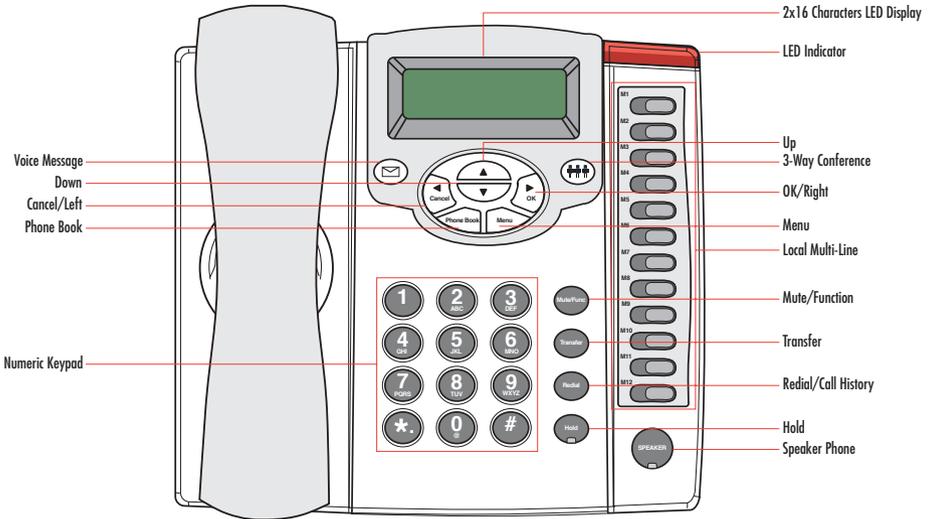


Power Adaptor



Wall/Desk mounting plate

1.2 Overview of the SL4050/B12/E key functions



Item	Description
2 x 16 LCD Display	Displays menu, time, clock, name, phone number, call status
LED Indicator	Indicates that phone is currently in use or ringing
Up	Cycle through the phone menu, adjust volume
3-Way Conference	Enable 3-way conference
OK/Right	Confirm setting change, exit menu, dial, save changes
Menu	Access the phone menu
Mute/Function	Disable user's microphone so that the person on the other line can not hear anything, access the language selection, access the time format
Transfer	Transfer the person you are currently having a conversation to another line
Redial/Call History	Redial last dialed number, access redial menu
Hold	Place the person on the other line on hold, answer call waiting
Speaker Phone	Enable user to use the phone without using the handset
Voice Message	Check voice message
Down	Cycle through the phone menu, adjust volume
Cancel/Left	Deny changes, cancel phone calls, ignore phone calls, backspace
Phone Book	Access the phonebook
Numeric Keypad	Input IP/phone number/alphabet characters
Local Multiline	Switch to different lines

1.3 Overview of the SL4050/B2/E key functions



Item	Description
2 x 16 LCD Display	Displays menu, time, clock, name, phone number, call status
LED Indicator	Indicates that phone is currently in use or ringing
Up	Cycle through the phone menu, adjust volume
3-Way Conference	Enable 3-way conference
OK/Right	Confirm setting change, exit menu, dial, save changes
Menu	Access the phone menu
Mute/Function	Disable user's microphone so that the person on the other line can not hear anything, access the language selection, access the time format
Transfer	Transfer the person you are currently having a conversation to another line
Redial/Call History	Redial last dialed number, access redial menu
Hold	Place the person on the other line on hold, answer call waiting
Speaker Phone	Enable user to use the phone without using the handset
Voice Message	Check voice message
Down	Cycle through the phone menu, adjust volume
Cancel/Left	Deny changes, cancel phone calls, ignore phone calls, backspace
Phone Book	Access the phonebook

1.4 Numeric Keypad Definitions

You can use alphanumeric characters to enter details into the Phone Book, to create text and e-mail messages. The table below shows the characters that you can enter in the different text modes.

Key	Text Mode		Key	Text Mode	
	Normal (ABC)	Numeric (0-9)		Normal (ABC)	Numeric (0-9)
		1		pqrsPQRS	7
	abcABC	2		tuvTUV	8
	defDEF	3		wxyzWXYZ	9
	ghiGHI	4		@ . _ * # () % & + / \$,	0
	jkIJKL	5		.	*
	mnoMNO	6			#

2.0 Installing the VoIP SIP phone



CAUTION

The interconnecting cables shall be acceptable for external use and shall be rated for the proper application with respect to voltage, current, anticipated temperature, flammability, and mechanical serviceability.

1

Plug one end of the Ethernet cable included with the VoIP SIP phone into the WAN port on the SIP phone (see **figure 1** for SL4050/B12/E or **figure 2** on page 8 for SL4050/B2/E). Plug the other end of the cable into the xDSL modem or cable modem (or into an optional router or hub).



WARNING

Do not work on the system or connect or disconnect cables during periods of lightning activity.

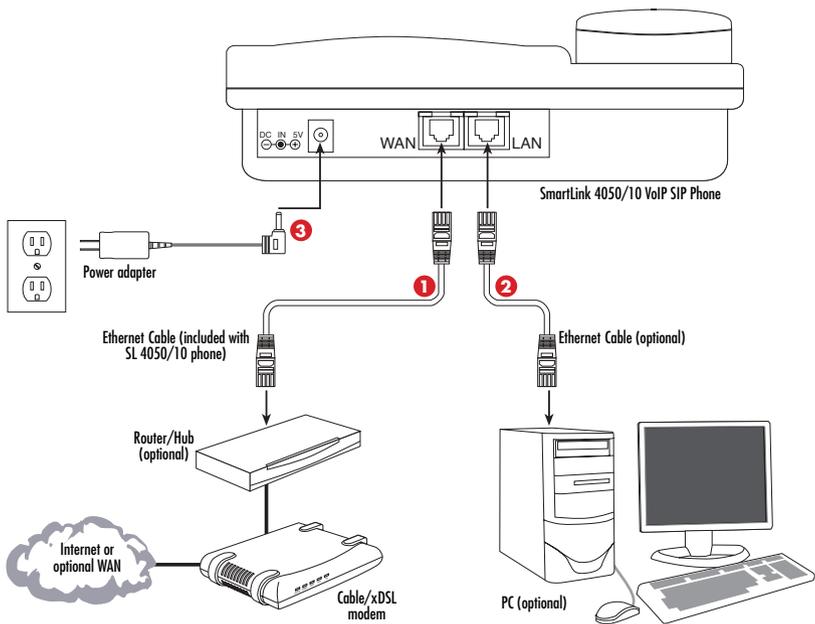


Figure 1. Connecting the SL4050/B12/E SIP Phone

- 2** If you will not be connecting a PC to the phone, go to step 3. Otherwise, connect an Ethernet cable into the LAN port of the SIP phone (see **figure 1** on page 7 for SL4050/B12/E or **figure 2** for SL4050/B2/E). Plug the other end of the cable into the Ethernet port on the PC.

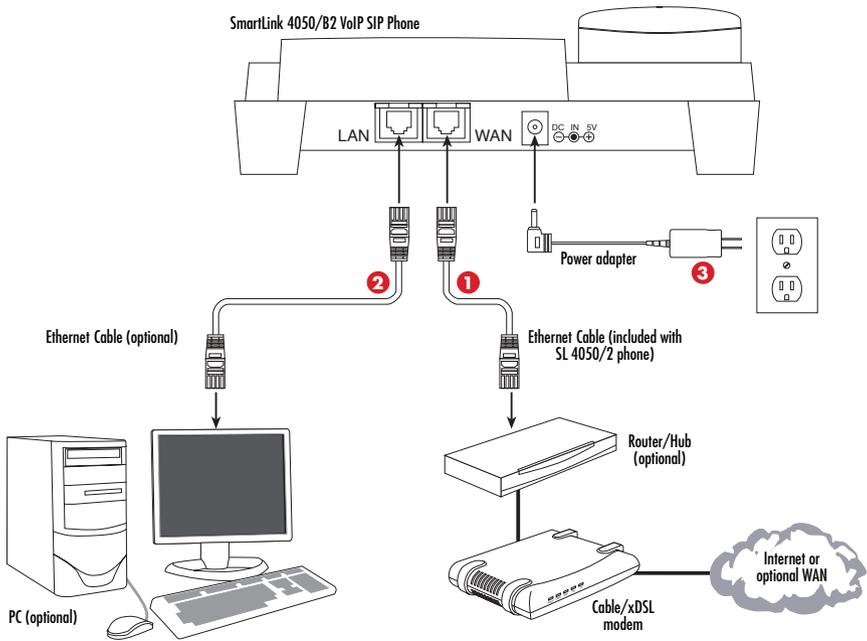


Figure 2. Connecting the SL4050/B2/E SIP Phone

- 3** Plug the power adapter barrel connector into the power connector on the SIP phone (see **figure 1** on page 7 for SL4050/B12/E or **figure 2** for SL4050/B2/E). Plug the other end of the power adapter into an AC electrical outlet.

3.0 Setting up the VoIP SIP phone

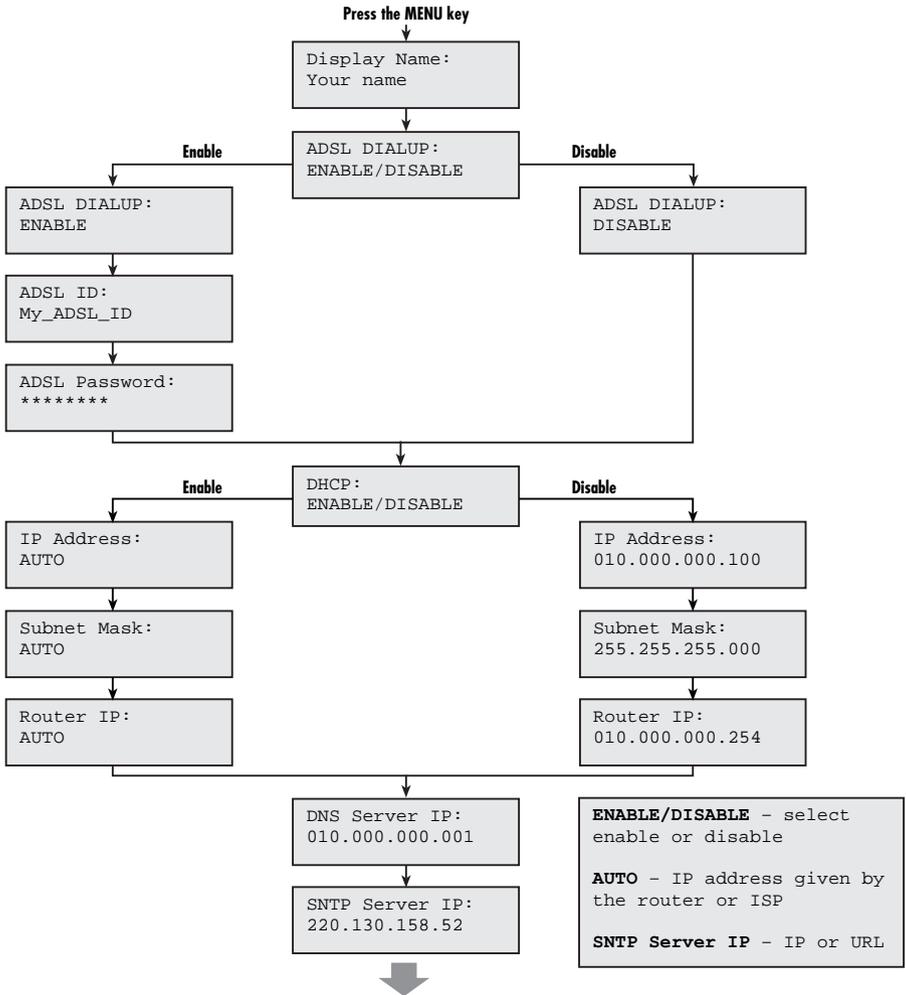


Figure 3. Menu summary, page 1 of 2

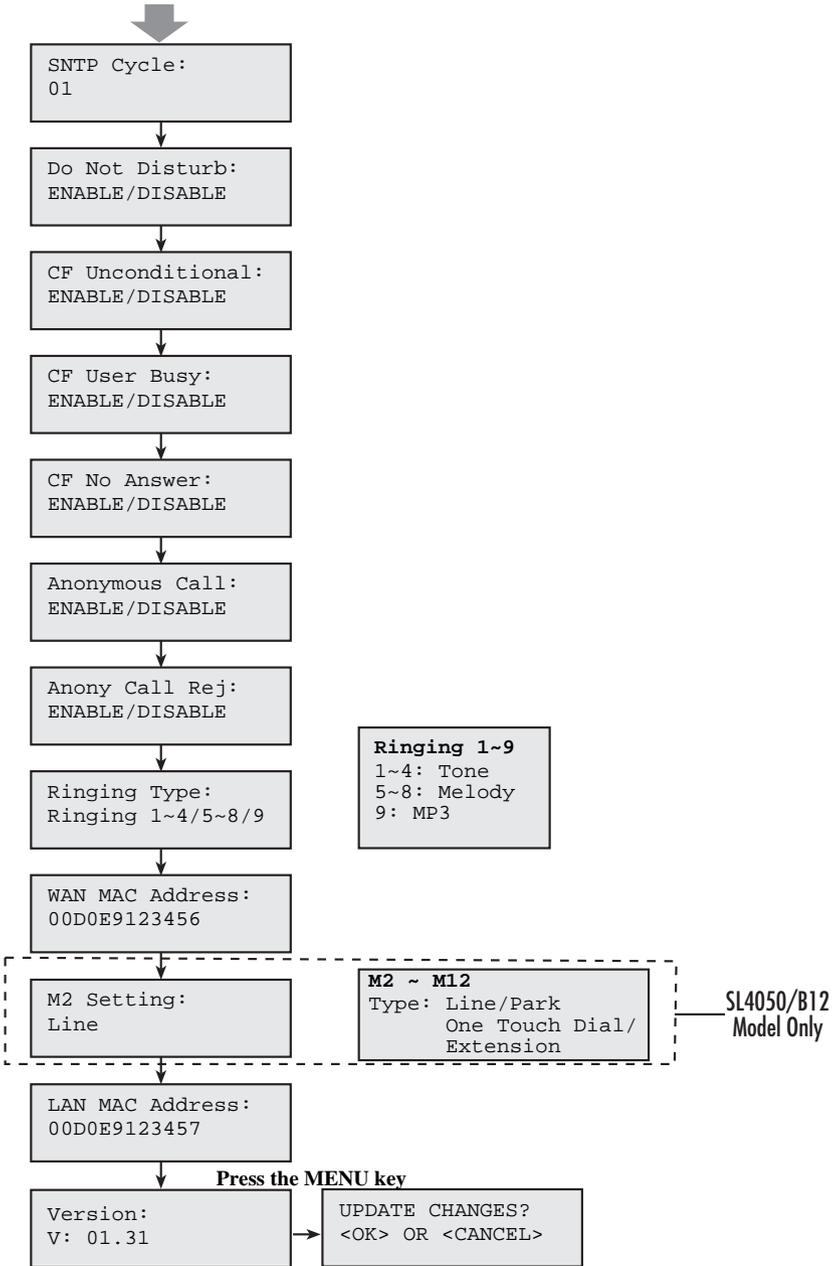


Figure 4. Menu summary, page 2 of 2

4.0 Logging in to the web interface

The configuration menu can be accessed using a web browser.

1. Open a web browser (Internet Explorer, Netscape Navigator, or equivalent).
2. Type in the IP address of the phone followed by: **9999** (for example *http://192.168.1.1:9999*).

Note The IP address is provided by your Internet service provider (ISP). If your ISP supports DHCP, you can obtain the IP address from your phone.

Press  +  to get the IP address. You can also login from the LAN port with *http://192.168.15.1:9999*.

The login window displays (see figure 5).



Figure 5. Login window

3. Enter a **User Name** and **Password**. Leave the user name and password blank if you are installing the phone for the first time.
4. Click **OK**. The following screen displays after logging in:

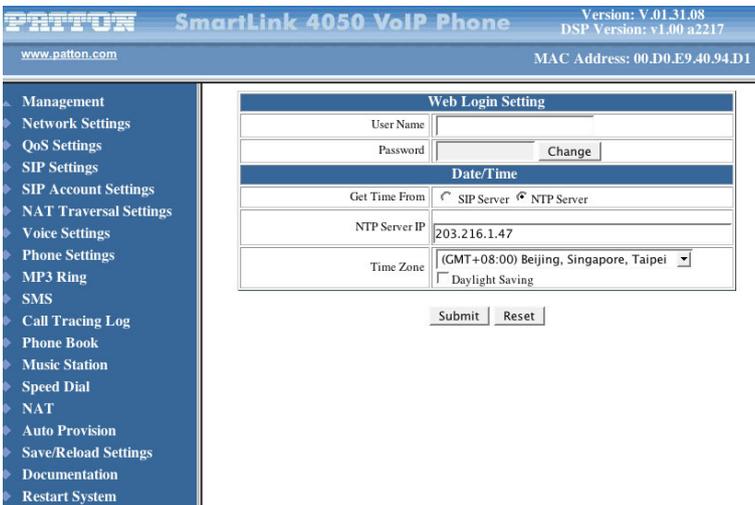


Figure 6. Main window

4.1 Network Settings - DHCP

Click on Dynamic host configuration protocol (DHCP) for IP address information that is obtained automatically from your ISP. The **DNS Server** information is obtained from your ISP.

DHCP / PPPoE / Static IP	
<input type="radio"/> DHCP <input type="radio"/> PPPoE <input type="radio"/> Static IP	
DNS Setting	
DNS Server 1	0.0.0.0
DNS Server 2	0.0.0.0
MAC Address	
WAN MAC	00.A0.BA.03.CB.D6
LAN MAC	00.A0.BA.03.CB.D7
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 7. DHCP configuration window

4.2 Network Settings - PPPoE

Select **PPPoE** if your ISP uses PPPoE. Most DSL users use PPPoE.

DHCP / PPPoE / Static IP	
<input type="radio"/> DHCP <input checked="" type="radio"/> PPPoE <input type="radio"/> Static IP	
PPPoE ID	
PPPoE Password	
DNS Setting	
DNS Server 1	0.0.0.0
DNS Server 2	0.0.0.0
MAC Address	
WAN MAC	00.A0.BA.03.CB.D6
LAN MAC	00.A0.BA.03.CB.D7
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 8. PPPoE configuration window

- **PPPoE ID:** PPPoE ID/username provided by your ISP
- **PPPoE Password:** Password for the PPPoE ID
- **DNS Server 1-2:** DNS address provided by your ISP

4.3 Network Settings - Static IP

Select **Static IP** if all Wide Area Network IP information is provided to you by your ISP.

DHCP / PPPoE / Static IP	
<input type="radio"/> DHCP <input type="radio"/> PPPoE <input checked="" type="radio"/> Static IP	
IP Address	10.10.200.49
Router IP	10.10.1.51
Subnet Mask	255.255.0.0
DNS Setting	
DNS Server 1	0.0.0.0
DNS Server 2	0.0.0.0
MAC Address	
WAN MAC	00.A0.BA.03.CB.D6
LAN MAC	00.A0.BA.03.CB.D7
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Figure 9. Static IP configuration window

- IP Address: IP address assigned to you by your ISP
- Router IP: Router IP address
- Subnet Mask: Subnet mask
- DNS Server 1-2: DNS server address provided by your ISP

Note **RESTART** the system for new settings to take effect after you modify the IP address.

4.4 SIP Settings

Click on **SIP Settings** to display the configuration window (see **figure 10**). Session initiation protocol (SIP) is the most popular VoIP standard. It enables two or more people to make phone calls, share multimedia, and make multimedia conference over the Internet.

Note You should have an administrator set up these settings for you or obtain the information directly from your SIP service provider.

SIP Phone Setting	
SIP Phone Port Number	5060 [1024 - 65535]
Registrar Server	
Registrar Server Domain Name/IP Address	10.10.200.6
Registrar Server Port Number	5060 [1024 - 65535]
Authentication Expire Time	3600 sec. (Default: 3600 sec.) [60 - 9999]
Outbound Proxy Server	
Outbound Proxy Domain Name/IP Address	
Outbound Proxy Port Number	5060 [1024 - 65535]
Send messages via Outbound Proxy	<input checked="" type="radio"/> Disable <input type="radio"/> Enable

Figure 10. SIP Settings window

- **SIP Phone Port Number:** SIP phone listening port
- **Registrar Server Domain Name/IP Address:** Registrar server domain name or IP address.
- **Registrar Server Port Number:** Registrar server listening port
- **Authentication Expire Time:** The time that the SIP registration expires. The phone must send SIP REGISTER to keep the registration at half of the setting time.
- **Outbound Proxy Domain Name/IP Address:** Outbound proxy domain name or IP address.
- **Outbound Proxy Port Number:** Outbound proxy listening port
- **Send messages via Outbound Proxy:** Select *Enable* to send all SIP requests through Outbound Proxy

4.5 SIP Account Settings

Click on **SIP Account Settings** to display the configuration window (see **figure 11**). You can have up to four accounts—that is, the SIP phone can receive calls from up to four different phone numbers.

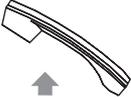
SIP Account Setting	
Default Account	Account 1 ▾
Account 1 Setting	
Account Active	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Display Name	555
SIP User Name	555
Authentication User Name	555
Authentication Password	***
Ring Type	Default ▾
Register Status	Register

Figure 11. SIP Account Settings window

- **Default Account:** When you dial a number, the default account is used to dial. User Name of default account is displayed on the receiver's IP phone.
- **Account Active:** Enable or disable this account.
- **Display Name:** Name displayed on the LCD of called party.
- **SIP User Name:** The number in the URI displayed on the LCD for the caller.
- **Authentication User Name:** User name to log into the SIP server.
- **Authentication Password:** Password to log into the SIP server.
- **Ring Type:** Eight types of tone and melody can be selected for the specified account
- **Register Status:** Displays if the current phone is registered or unregistered with SIP server.

5.0 Making a phone call

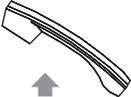
5.1 Dialing an IP address

1. Lift the handset  or press the **SPEAKER**  button.
2. Dial an IP address. For example, to dial *192.168.0.1* press:

3. Press  or wait until the timer expires to dial.

5.2 Dialing a SIP number

Note You must register with a SIP server before using a SIP number.

1. Lift the handset  or press the **SPEAKER**  button.
2. Dial a SIP number. For example, to dial *1866* press:

3. Press  or wait until the timer expires to dial.

6.0 Operating the Internet Radio

1. Press  to turn on the Internet radio.
2. Press  and   to choose a preferred station.
3. Press  to turn off the Internet radio.

6.1 Key Definitions for Internet Radio

Key	Definition	Key	Definition
	Turn on the Internet Radio		Increase / decrease the volume
	Pause / Play		Display the name of the current station
	Turn off the Internet Radio		Tune the Internet Radio to the preferred station
Numerical Keys	The ten numeral keys 0, 1~9 are the quick access keys to the first ten preferred stations on web configuration "Music Station".		

6.2 About Internet Radio

- All the keys related to the Internet Radio are described in the table above. Those key functions will only be available when the phone is hung up. If the phone is hung on, those key functions will back to the original designed which has stated in Page.7.
- When the phone is receiving the incoming call, the Internet Radio function will be turned off automatically.
- When the user picks up the handset or presses "SPEAKER" to make a phone call, the Internet Radio will be also turned off automatically.
- Please turn off the Internet Radio before you do the next steps as below:
 - Use pre-dialing to make a phone call
 - Enter MENU to configure
 - Access Phone Book
 - Adjust the Ringer Volume
- When the user is listening to the Internet Radio, the phone will have the current song and singer's name showing on the screen.

7.0 Additional Information

The complete *SmartLink 4050 Getting Started Guide* is located on the CD-ROM that came with your SIP phone. It can also be downloaded for viewing from www.patton.com.

A.0 Compliance Information

A.1 Compliance

EMC:

- FCC Part 15, Class B
- EN55022, Class B
- EN55024

Safety:

- EN60950-1

PSTN Regulatory Compliance:

- FCC Part 68
- CS-03
- AS/ACIF S004
- AS/ACIF S040

A.2 Radio and TV Interference (FCC Part 15)

This equipment generates and uses radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection from such interference in a commercial installation. However, there is no guarantee that interference will not occur in a particular installation. If the equipment causes interference to radio or television reception, which can be determined by disconnecting the cables, try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, re-orienting the receiving antenna, and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

A.3 CE Declaration of Conformity

We certify that the apparatus identified in this document conforms to the requirements of Council Directive 1999/5/EC on the approximation of the laws of the member states relating to Radio and Telecommunication Terminal Equipment and the mutual recognition of their conformity.

The safety advice in the documentation accompanying this product shall be obeyed. The conformity to the above directive is indicated by the **CE** sign on the device.

A.4 Authorized European Representative

D R M Green, European Compliance Services Limited.
Oakdene House, Oak Road , Watchfield, Swindon, Wilts SN6 8TD, UK

A.5 FCC Part 68 (ACTA) Statement

This equipment complies with Part 68 of FCC rules and the requirements adopted by ACTA. On the bottom side of this equipment is a label that contains-among other information-a product identifier in the format US: AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

The method used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact our company. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

A.6 Industry Canada Notice

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

This Declaration of Conformity means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction. Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above condition may not prevent degradation of service in some situations. Repairs to some certified equipment should be made by an authorized maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the ground connections of the power utility, telephone lines and internal metallic water pipe system, are connected together. This protection may be particularly important in rural areas.

Copyright statement

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The information in this document is subject to change without notice. Patton Electronics assumes no liability for errors that may appear in this document.

Trademarks statement

The term *SmartLink* is a trademark of Patton Electronics Company. All other trademarks presented in this document are the property of their respective owners.

Patton support headquarters in the USA

- Online support: Available at www.patton.com
- E-mail support: E-mail sent to support@patton.com will be answered within 1 business day
- Telephone support: Standard telephone support is available five days a week — from 8:00 am to 5:00 pm EST (1300 to 2200 UTC/GMT) — by calling +1 (301) 975-1007
- Support via VoIP: Contact Patton free of charge by using a VoIP ISP phone to call [sip:support@patton.com](tel:sip:support@patton.com)
- Fax: +1 (253) 663-5693

Alternate Patton support for Europe, Middle East, and Africa (EMEA)

- Telephone support: Standard telephone support is available five days a week — from 8:00 am to 5:00 pm CET (0900 to 1800 UTC/GMT) — by calling +41 (0)31 985 25 55
- Fax: +41 (0)31 985 25 26

Note For additional service and support information, refer to the “Contacting Patton for assistance” chapter of the *SmartLink 4050 Series Getting Started Guide* located on the CD-ROM that came with your SIP phone or available online at www.patton.com.

For additional warranty, trademark, compliance, and technical support information, refer to the *SmartLink 4050 Series Getting Started Guide* located on the CD-ROM that came with your SIP phone or available online at www.patton.com.