

**Huawei IP Phone eSpace 6870
V100R001C02
User Manual**

Issue 01
Date 2011-09-07

Copyright © Huawei Technologies Co., Ltd. 2011. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions



and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute the warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://www.huawei.com>

Email: support@huawei.com

Contents

1 Safety Precautions.....	1
2 Product Overview	3
2.1 Packing List.....	3
2.2 Features	4
2.3 Hardware specifications	5
2.4 Technical specifications.....	5
3 Installing the eSpace eSpace 6870	8
3.1 Cable Connections of the eSpace 6870	8
3.2 Starting the eSpace 6870	9
3.3 Safety Compliance	9
3.4 Warranty of Quality	9
4 Configuring the eSpace 6870.....	11
4.1 Configuring the Phone Through the Keypad.....	11
4.2 Configuring the Phone Through Web Browser	13
4.2.1 Accessing the Web Configuration Menu	13
4.3 Configuration Page.....	14
4.3.1 Saving the Configuration Changes	17
4.3.2 Rebooting the eSpace 6870 Remotely.....	17
5 Using the eSpace 6870.....	18
5.1 Getting to Know the Keyboard	18
5.2 Instructions of Using the Phone	19
5.2.1 Handset, Speakerphone, and Headset Modes	19
5.2.2 Multiple SIP Accounts and Lines	20
5.2.3 Making a Call.....	20
5.2.4 Answering a Call.....	21
5.2.5 Do-Not-Disturb	21
5.2.6 Call Waiting/Call Holding.....	21
5.2.7 Muting.....	21
5.2.8 Call Transfer.....	22
5.2.9 Three-Way Conference Call	22
5.2.10 Voice Messages	23

5.2.11 Manager and Secretary Function.....	23
5.2.12 BLF Function.....	24
6 Restoring Factory Default Settings	25
7 FAQs	26

1 Safety Precautions

General Requirements

- Before you install and use the device, read these safety precautions carefully and observe them during operation.
- During storage, transportation, and operation of the device, keep the device dry.
- During storage, transportation, and operation of the device, avoid collision and crash of the device.
- Never attempt to dismantle the device by yourself. In case of any fault, contact the appointed maintenance center for repair.
- Without prior written consent, no organization or individual is permitted to make any change to the structure or safety design of the device. Huawei Technologies Co., Ltd. is not liable to any consequences or legal issues due to such changes.
- While using the device, observe all applicable laws, directives and regulations, and respect the legal rights of other people.

Environmental Requirements

- Place the device at a well-ventilated place. Do not dispose the device to direct sunlight.
- Keep the device clean and free of dusts.
- Place the device on a stable platform.
- Do not place any object on top of the device. Otherwise, the device may be too hot during operation. It can even be deformed or damaged by the heavy load.
- Keep at least 10 cm between the device and the closest object for heat dissipation.
- Do not place the device on or near any object that can easily catch fire, such as something made of rubber.
- Keep the device far away from any heat source or bare fire, such as a candle or an electric heater.
- Keep the device far away from any household appliance with strong magnetic field or electromagnetic field, such as a microwave oven or a refrigerator.

Operating Requirements

- Do not let a child operate the device without guidance.
- Do not let a child play with the device or any accessory. Swallowing the accessories may lead to peril.

- Use the accessories provided or authorized by the manufacturer only.
- The power supply of the device shall meet the requirements of the input voltage of the device. Use the provided surge protection power socket only.
- Before plugging or unplugging any cable, shut down the device and disconnect it from the power supply.
- While plugging or unplugging any cable, make sure that your hands are completely dry.
- Do not tread on, pull, or over-bend any cable. Otherwise, the cable may be damaged, leading to malfunction of the device.
- Do not use an old or a damaged power cable.
- During lightning weather, stop using the device and disconnect it from the power supply. Unplug the power plug and the ADSL(Asymmetric Digital Subscriber Line) twisted pair (the radio frequency cable) to avoid lightning strike.
- If the device is not used for a long time, disconnect it from the power supply and unplug the power plug.
- Do not look directly into the optical interface and the laser-transmitting interface on the device, or the infrared transmitting interface on the remote control with your eyes. Otherwise, your eyes may be injured.
- In any of the following cases, stop using the device, disconnect it from the power supply, and unplug the power plug immediately: there is smoke emitted from the device, or there is some abnormal noise or smell. Contact the specified maintenance center for repair.
- Avoid any object (such as metal shavings) from entering the device from the heat dissipation intakes.
- Before connecting any other cable, connect the ground cable of the device first. Do not disconnect the ground cable until you disconnect all other cables.
- Make sure that the three-phase power socket is grounded reliably. The neutral line and the live line shall not be connected inversely.
- Do not scratch or abrade the shell of the device. This may lead to malfunctions of the device. The shed painting material may also lead to skin allergy.

Cleaning Requirements

- Before cleaning the device, stop using it and disconnect it from the power supply.
- Use a piece of soft dry cloth to clean the device.
- Keep the power plug clean and dry. Using a dirty or wet power plug may lead to electric shock or other perils.

2 Product Overview

2.1 Packing List

The following items are included in the eSpace 6870 package. Verify the packing items. Contact your distributor immediately if any one is missing.

Table 2-1 Packing items

Item	Quantity
Main case	1
Handset	1
Coiled handset cord	1
Specialized power adapter	1
Straight-through cable	1
Phone Stand	2
Wall-mount bracket	2
eSpace 6870 Quick Start	1
CD	1
PVC card	2
Paper card	5
Warranty card	1
Certificate of quality	1

Product Picture	Product Overview
	<p>The eSpace 6870 is a next-generation enterprise IP phone. The eSpace 6870 provides rich functions, is easy to use, and supports integrated PoE and HD Voice.</p>

2.2 Features

Table 2-2 Key features of the eSpace 6870

Feature	Description
Open standard compatibility	SIP 2.0, TCP/IP/UDP, RTP/RTC, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record and SRV record), DHCP, PPPoE, TFTP, NTP and Telnet.
High audio quality	Adopting the advanced DSP technology.
Traditional features	Standard voice features including caller ID display, call waiting, call holding, call transferring, call forwarding, call blocking, call rejecting, mute and off-hook autodial.
Advanced functions	<p>Supporting the following functions:</p> <ul style="list-style-type: none"> • Multi-lines • Headset enabled • Backlit graphic LCD • Five navigation keys • Function keys such as call holding, headset mode, call forward, three-party conference, address book, voice message box, do not disturb, and mute • 7multi-purpose keys
Advanced features	<ul style="list-style-type: none"> • Customized ring tones • Download of ring tones • Download of address book in xml format and screensaver files • SRTP voice call encrypted with the Advanced Encryption Standard (AES) • Setting of dialing rule and advance business

Feature	Description
	<p>functions, such as BLF, BroadSoft SCA</p> <ul style="list-style-type: none"> For details of advanced features, see the <i>Huawei IP Phone eSpace 6810&6830&6850&6870 Administrator Guide</i>

2.3 Hardware specifications

Table 2-3 Hardware specifications

Item	Specification
Ethernet ports	Providing two Ethernet ports of 10/100 Mbit/s and full/half duplex Ethernet polarity can be automatically detected.
Graphic LCD display	Pixel: 320x160
Headset port	RJ-9 headset port
LED	LED indicators that can be on in two colors (green and red)
PoE	The build-in automatic detector obtains the PoE that is based on the IEEE 802.3af standard.
Universal switching	Input: 100 V~240 V AC 50Hz or 60Hz
Power adapter	Output: +5V DC, 1200mA, UL certified
Dimension (W × H × D)	251mm x 210mm x 78mm
Weight	1.66kg
Temperature	0 °C to 45 °C
Humidity	10% to 90% (non-condensing)
Compliance	FCC/CE/ROHS

2.4 Technical specifications

Table 2-4 Technical specifications of the eSpace 6870

Item	Specification
Lines	Six straight-through lines.
Supported protocol	Supporting the SIP 2.0, TCP/UDP/IP, HTTP, HTTPS, PPPoE,

Item	Specification
	RTP/RTCP, SRTP by SDES, HTTP, ARP/RARP, ICMP, DNS, DHCP, NTP, TFTP, NTP/SNTP, and SIMPLE/PRESENCE protocols.
	Supporting RFC3903, RFC3856, RFC3863, and RFC4235.
	Supporting RFC 3428.
Function keys	<ul style="list-style-type: none"> • Eleven dedicated keys: Hold, SEND, SPEAKER, Headset Mode, TRNF (transfer), CONF (conference), MUTE/DEL, DND, INTERCOM, Phone Book, and MSG (message). • Five navigation keys. • 7 multi-purpose keys and four soft keys.
Device management	Supporting the upgrade of the NAT-friendly remote software (through TFTP or HTTP) for the devices that are deployed behind the firewall or the NAT.
	Supporting the address book function.
Audio features	Handset, Hands-free, and headset modes in full duplex.
	Advanced DSP.
	Dynamic negotiation of codec and voice payload length.
	HD Voice.
	Supporting the G.723.1 (6.3K or 5.3K), G.729AB, G.711 μ A, G.726-32K, G.722 (broadband), and iLBC CODECs.
	In-band and out-of-band DTMF (in audio, RFC2833, or SIP INFO mode).
	Echo Cancellation.
	Supporting the sidetone cancellation, advanced jitter buffer control, and packet delay and loss concealment.
Telephony features	<p>Intuitive GUI, download of the phone book (XML), voice mail indicator, customized ring tones.</p> <p>Call holding, call transferring (attended/blind), Do-Not-Disturb, call forwarding, call waiting, call waiting mute, redial, call log, volume control, caller ID display, multi-party conference call, dialing with a prefix, off-hook autodial, automatic answer, and dialing.</p>
Network and provisioning	Supporting manual configuration for static network through keyboard and LCD, or by logging in to the Web page. Dynamic network parameters are provided by the DHCP server.
	Supporting NAT traversal by using IETF STUN and symmetric RTP.
	Supporting AES-based IP phone configuration file update. Supporting unified IP phone configuration through the BroadSoft

Item	Specification
	XML Provision server.
	Supporting 802.1x-based network accessing authentication.
	Supporting the IEEE 802.1p/q tagging (VLAN) and Layer 3 QoS protocols.
Software upgrade	Supporting firmware upgrade through TFTP or HTTP and authentication of configuration files before changing.
	Providing the specific URL for users to download configuration files and upgrade files.
Advanced server features	Message waiting indicator light. Supporting DNS SRV query.
Security	Supporting DIGEST authentication and encryption by using MD5, and SRTP.

3 Installing the eSpace eSpace 6870

3.1 Cable Connections of the eSpace 6870

Figure 3-1 Connecting the eSpace 6870

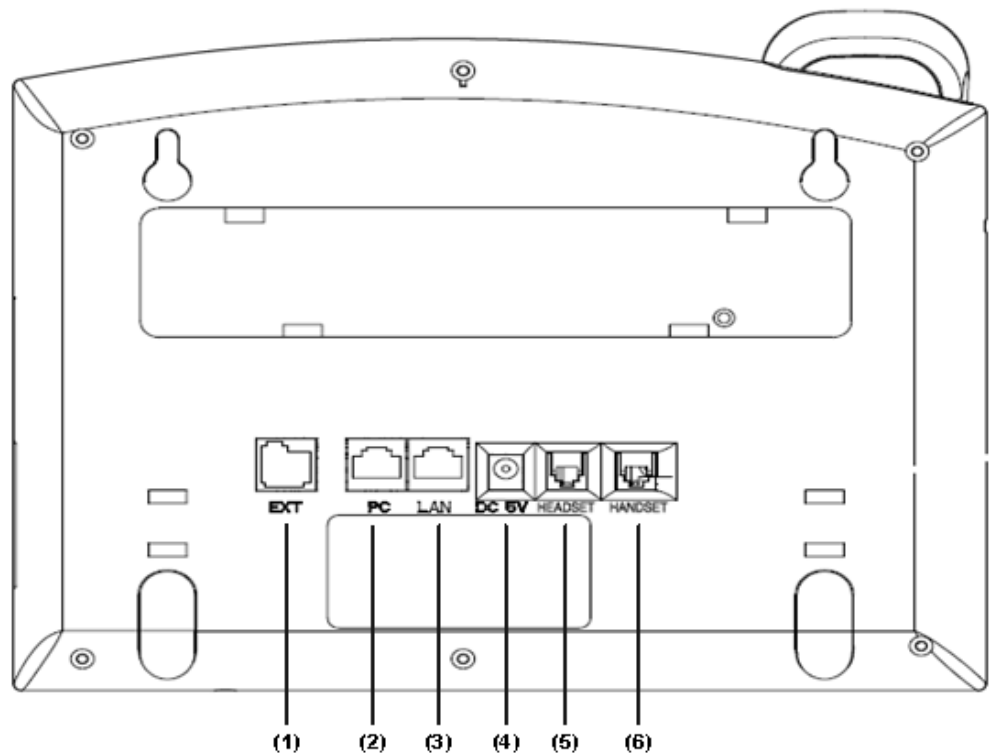


Table 3-1 Description of the connectors

No.	Connector	Description
(1)	EXT port	A port used to connect an expansion board for increasing multi-purpose keys. In this way, you can call a user by pressing one key.
(2)	PC port	The port is the 10/100 Mbit/s RJ-45 PC port. You can use the straight-through cable to connect the PC port. When using the PC phone, you can configure the port. (Optional)
(3)	LAN port	The port is the 10/100 Mbit/s RJ-45 LAN port. You need to use the straight-through cable to connect the LAN port to the Ethernet port. The phone supports PoE (802.3af) power. In this case, you must connect the port to the switch supporting PoE power.
(4)	Power port	5V power port. After the network cable connection is complete, use the special power adapter of the phone to connect the power port and power to switch on the phone.
(5)	Headset port	RJ-9 port. If you want to use the headset for communication, install the headset socket to the port.
(6)	Handset port	RJ-9 port. If you want to use the headset for communication, install the headset socket to the port.

3.2 Starting the eSpace 6870

After the eSpace 6870 is powered on, a progress bar is displayed on its screen. This progress bar disappears after the startup page is accessed.

3.3 Safety Compliance

The eSpace 6870 complies with the Federal Communications Commission (FCC), Confermite Europeenne (CE), and various safety standards. The eSpace 6870 specialized power adapter is compliant with the Underwriter Laboratories (UL) standard. Use only the matching power adapter provided with the package. The manufacturer's warranty does not cover damages to the phone caused by unsupported power adapters.

3.4 Warranty of Quality

If you purchased the eSpace 6870 from a distributor, contact the distributor for replacement, repair, or refund. If you purchased the product directly from Huawei, contact Huawei sales and service representatives for a return materials authorization (RMA) number before you return the product. Huawei reserves the right to remedy the warranty policy without prior notification.



CAUTION

Use a power adapter provided by the eSpace 6870; otherwise, damages can be caused to the products and the manufacturer warranty is void.

4 Configuring the eSpace 6870

4.1 Configuring the Phone Through the Keypad

The phone automatically exits the menu when an incoming call comes or the phone is off-hook. If no keypad operation is performed within one minute, the IP phone automatically displays the standby image.

Table 4-1 Keypad configuration menu

Menu	Configuration Description
Call History	Displays history records of received, dialed, transfered and missed calls.
Status	Displays the network status, account status, software version, MAC address, and hardware version of the phone.
Phone Book	Displays the phone book and related option. <ul style="list-style-type: none">• [New Entry]Add a phone book record. After the fields such as First Name, Last name, Number, and Acct are set or selected, select Confirm Add and press MENU to confirm the operation. Select Cancel & Return and press MENU to cancel the added information and return to the previous menu.• [Download Phonebook]Select Download Phonebook and press MENU. Then the phone downloads the updated phone book from the TFTP or HTTP server. This requires corresponding configuration of the download items of the phone book on the Web page.• [Delete All Entries]Delete all contacts in the phone book.
Preference	Displays the preference submenus of a user. <ul style="list-style-type: none">• [Do Not Disturb]Choose this menu to enable or disable the DND function.• [Ring Tone]Choose this menu to set different ring tones.• [Ring Volume]Press MENU to hear the selected ring volume. Press LEFT or RIGHT to turn up or turn down the volume.• [LCD Contrast]Choose this menu and Press LEFT or RIGHT to set the LCD screen contrast.

Menu	Configuration Description
	<ul style="list-style-type: none"> • [LCD Brightness]Press LEFT or RIGHT to set the LCD brightness of the IP phone in active and idle states. The value ranges from 0 to 8. • [Download SCR XML]Send a request to the HTTP/TFTP server for downloading a screen saver to replace the original one. For details on how to configure this service, see the <i>Huawei IP Phone eSpace 6810&6830&6850&6870 Administrator Guide</i> or contact the administrator. • [Erase Custom SCR]Restore the factory setting for the standby image. • [Display Language]Choose this menu to select the language. • [Time Settings]Set the date and time of the IP phone.
	<p>Press LEFT or select Back to return to the main menu.</p>
Config	<p>Display the configuration submenus.</p> <ul style="list-style-type: none"> • [SIP]Set the SIP server for each account, including Account, SIP proxy, Outbound proxy, SIP user ID, SIP Auth ID, SIP password, SIP transport, and Audio CODECs. • [Upgrade]Configure the firmware server and the file download server. Select either TFTP or HTTP to upgrade the firmware or configure the phone. • [Factory Reset]Type the MAC address on back of the phone. Press OK softkey to restore the factory reset settings. Factory reset clears all configurations and restores the phone to factory settings. • [Layer 2 QoS] Configure the 802.1Q VLAN tag and 802.1P priority.
	<p>Press LEFT or select Back to return to the main menu.</p>
Factory Functions	<p>These items are used for factory testing and not recommended for users.</p> <ul style="list-style-type: none"> • [Audio Loopback]Speak to the handset. If you hear your voice in the handset, your audio works well. Press MENU to exit the mode. • [Diagnostic Mode]All LEDs are on. Press any key on the keypad to display the key name on the LCD. Pick up the handset or press MENU to exit the diagnostic mode.
	<p>Press LEFT or select Back to return to the main menu.</p>
Network	<p>Enable or disable the DHCP protocol. Set the IP address, subnet mask, and gateway address by using the keypad if the static IP mode is selected.</p>
Reboot	<p>Reboot the device.</p>
Exit	<p>Exit the menu.</p>

4.2 Configuring the Phone Through Web Browser

The Web server embedded in the eSpace 6870 responds to the HTTP, HTTPS GET, or POST requests. Embedded HTML pages allow a user to configure the IP phone through any Web browser such as Microsoft Internet Explorer or Mozilla Firefox.

4.2.1 Accessing the Web Configuration Menu

Connect the phone and computer on a reachable network. Do as follows:

Connect the computer to the same hub or switch as the phone is connected to. In absence of a hub/switch (or free ports on the hub/switch), connect the computer directly to the phone by using the PC port on the phone. Make sure that the phone is powered on and displays the IP address.

To access the Web configuration menu of the phone, do as follows:

1. Start the Web browser on your computer.
2. Enter the IP address of the phone in the address box of the browser. If the phone is properly connected to a working Internet. The format of the address is xxx.xxx.xxx.xxx, in which xxx stands for a number from 0-255. You can use this number to access the Web configuration menu. For example, if the phone displays **10.10.10.1**, enter **http://10.10.10.1** in the address box of the browser.
3. Enter the administrator password(the default password is **admin**.) to access the Web configuration menu.

Figure 4-1 Login page



4.3 Configuration Page

This section describes the options of **Status** and **Basic Settings** on the Web configuration page.

The functions available for the end user are as follows:

- **Status:** Display the network status, account status, software version, and MAC address of the phone.
- **Basic Settings:** Basic preferences such as date and time settings.

Figure 4-2 Status page

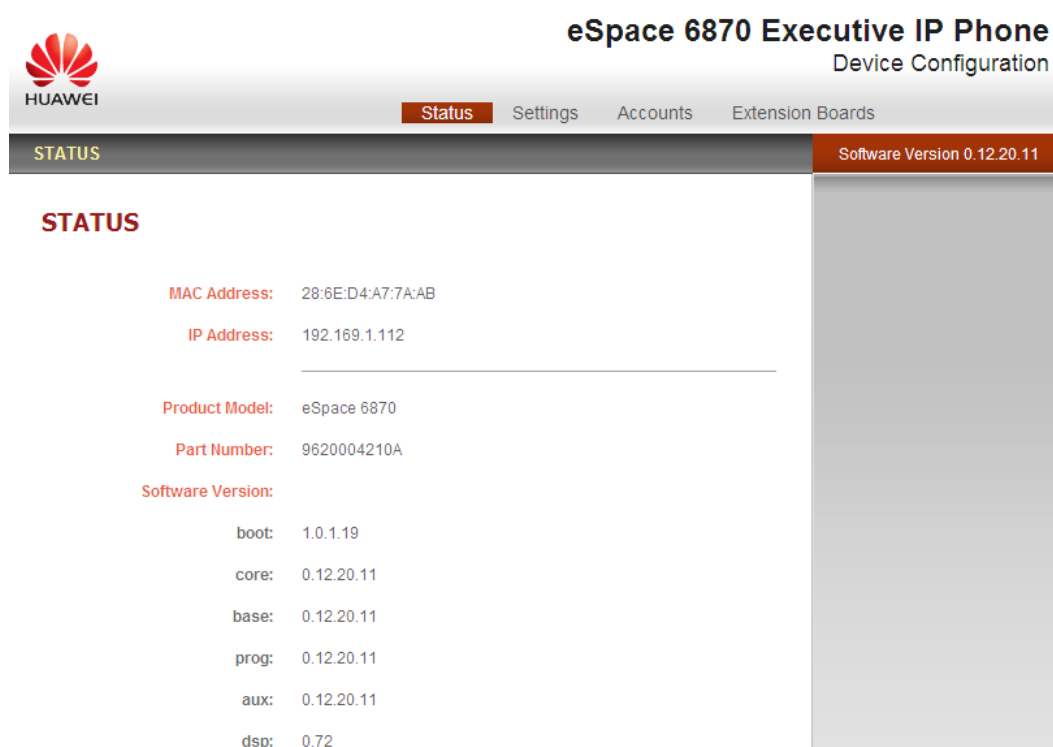


Table 4-2 Device configuration on the Status tab page

Field	Description
MAC Address	The device ID in the hexadecimal format. This is an important ID for service provider to solve problems.
IP Address	The IP address of the eSpace 6870.
Part Number	The code of a product.
Product Model	The product model.
Software Version	Information about the current software version. The value of prog indicates the main version number.
System Up Time	The power-on duration since the last reboot.

Field	Description
System Time	The current time of the system.
Registered	Whether accounts are registered on the related SIP server(s). The eSpace 6870 supports 6 unique SIP accounts.
PPPoE Link Up	Whether the PPPoE connection is enabled when the phone is connected to a DSL modem.

Figure 4-3 Basic setting page

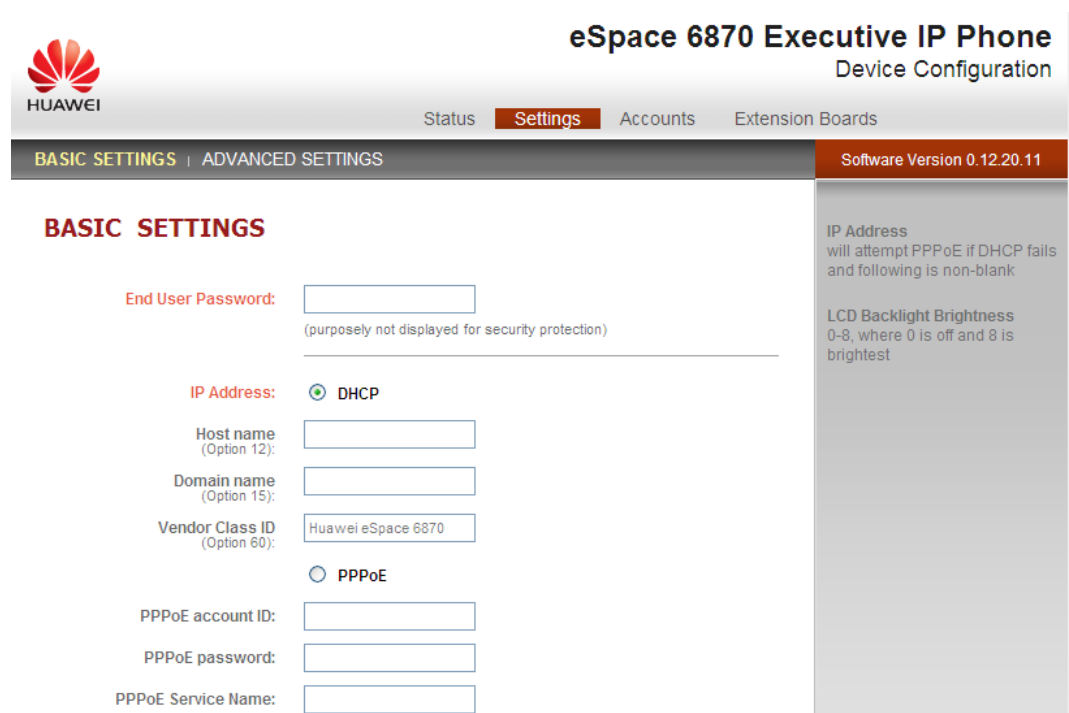



Table 4-3 Description of the basic setting page

Field	Description
End User Password	This parameter allows changing the login password of an end user. This field is case sensitive with a maximum length of 30 characters.
IP Address	The eSpace 6870 operates in two modes: <ul style="list-style-type: none"> DHCP/PPPoE Mode: <ul style="list-style-type: none"> All the field values for the static IP mode are not available even though they are stored in the Flash memory. The eSpace 6870 acquires its IP address from the first DHCP

Field	Description
	<p>server that the eSpace 6870 detects on its LAN. To use the PPPoE feature, set the PPPoE account. The eSpace 6870 establishes a PPPoE session if any of the PPPoE fields are set.</p> <ul style="list-style-type: none"> - Host Name and Domain Name: The special DHCP options that are added to the DHCP Discover and DHCP Request after configuration. - Preferred DNS: The eSpace 6870 uses the DNS server if Preferred DNS is configured. <ul style="list-style-type: none"> • Static IP Mode: Configure all of the following fields: IP address, Subnet Mask, Gateway, Default Router IP address, DNS Server 1 (primary) and DNS Server 2 (secondary).
802.1X mode	<p>This parameter is set to perform the 802.1X authentication when the IP phone is connected to a switch. You can click Disable to disable the authentication function, and click EAP-MD5 to perform the registration authentication.</p> <ul style="list-style-type: none"> • Identify ID used during the 802.1x authentication. • MD5 Password MD5 password used during the 802.1X authentication.
Line Keys	<p>This parameter is set for specifying function modes of line keys. By default, the value of Key Mode is Line, which is used by common lines. If the value of Key Mode is Shared Line, it indicates that the BroadSoft SCA functions are enabled and that accounts scattered in various areas can share the line.</p>
Multi-Purpose Keys	<p>The optional values are Speed Dial, Busy Lamp Field (BLF), Presence Watacher, eventlist BLF, Speed Dial via active account, and Dial DTMF.</p> <p>Each key corresponds to an account, that is, a user number is set for each key.</p>
Time Zone	<p>This parameter controls the date and time display according to the specified time zone. If the DHCP Option 2 is enabled, the DHCP server overrides and centrally controls the setting of Time Zone in the phone. The feature functions on the phone only when you set the NTP server correctly.</p>
LCD Backlight Brightness	<p>This parameter is set for adjusting the LCD brightness of the IP phone in active and idle states. The value ranges from 0 to 8.</p>
LCD Contrast	<p>LCD contrast. The value ranges from 0 to 20.</p>
Time Display Format	<p>The LCD time is displayed in 12-hour or 24-hour format.</p>

Field	Description
Disable in-call DTMF display	The default value is No . If the parameter is set to Yes , the DTMF digits that are pressed during the call will not be displayed on the LCD for security reasons.
Disable Missed Call Backlight	The default value is No . By default, the LCD backlight is on when a missed call exists.
HEADSET Key Mode	Select default answering or dialing mode as the headset mode. When selecting a default mode, press HEADSET to enter the headset dialing status. If you press HEADSET when setting Toggle Headset/Speaker , the headset icon is displayed on the LCD. In this case, press  , you can make a call or answer a call in Headset mode.
Call History Flash Writing	<p>This parameter is set for configuring the duration of recording data of Call History, Phone Book, and Settings on the Web configuration page into flash memory.</p> <ul style="list-style-type: none"> • Write Timeout Write timeout indicates that the duration of flash writing. The range is 30-3600, in seconds. The default value is 300s. • Max Unsaved Log This parameter is set for adjusting the max flash writing items during the recording duration. The range is 0-500. 0 means this option is disabled. <p>Do not change the value optionally. Consult the enterprise administrator before any change.</p>

4.3.1 Saving the Configuration Changes

After changing the settings, click **Update** on the bottom of the page to save the change. If you want to change an item after submitting the setting, click a tab to access the configuration page. Then click **Reboot** to reboot the phone, and all the changes take effect.

4.3.2 Rebooting the eSpace 6870 Remotely

Click **Reboot** in the configuration menu to reboot the eSpace 6870 remotely. Wait 60 seconds to log in again.

5 Using the eSpace 6870




5.1 Getting to Know the Keyboard

Figure 5-1 Getting to know the keypad



Table 5-1 eSpace 6870 keypad

Key	Description
LINEx	<ul style="list-style-type: none">• Six line keys with dual-color LED indicator lights. Each line key supports an independent SIP account.• The six line keys provide the hands-free feature.
TRANSFER	Transfer the current call to another number.
CONF	Set up a three-party conference call for the calling party and called party.
MUTE	Mute the call (the other party cannot hear your voice).
DND	Enable or disable the DND function.

Key	Description
HOLD	Hold the current call, and press the corresponding LINE key to resume the call.
 Message Key	Press the key to receive voice mails or other messages.
 Hands-free Key	Press the key to enter the hands-free mode. Press it again to exit the hands-free mode.
 PhoneBook Key	Press the key to display the phone book and associated items.
SEND	Press the key to send a call after you have dialed phone numbers. NOTE: If you do not press SEND, the number will be sent after a pre-configured time delay. After the phone is off-hook, press the key to redial the last dialed number.
HEADSET	Dial or answer with the headset.
MENU	<ul style="list-style-type: none"> • Enter the keypad configuration MENU mode when the phone is in idle mode. • Use as MENU key to confirm the operation during keypad configuration.
<0>~<9>, <*>, and <#>	Standard phone pad: 10 digits, the corresponding 26 alphanumeric letters, and special characters.
Soft keys 1-4	Four soft keys, which can provide different functions, such as BackSpace and Cancel.
Multi-Purpose Keys	Implement functions of Speed Dial, Busy Lamp Field, Presence Watacher, and Eventlist BLF. You can also configure other functions on the Web page.



 **NOTE**

The operation of pressing **SEND** is effective only in the specified dialing time.

5.2 Instructions of Using the Phone

5.2.1 Handset, Speakerphone, and Headset Modes

You can switch the modes among handset, speakerphone, and headset.

- To switch between the handset and speakerphone modes, press **SPEAKER**, that is, .
- To switch between the handset and headset modes, press **HEADSET**.
- To switch between the speakerphone and headset modes, press **HEADSET** or **SPEAKER**, that is, .

5.2.2 Multiple SIP Accounts and Lines


The eSpace 6870 supports 6 independent SIP accounts. Each SIP account matches with a SIP server, users, and NAT. Each of the two four line keys matches with one SIP account. In off-hook state, when you press the corresponding LINE key or continuously press the same LINE key, the phone will switch among the 6 accounts. If the name of an account is configured, then the name is displayed on the LCD.


For example, set the account name of the two SIP accounts as VoIP 1 and VoIP 2. Ensure that each account is activated and registered. When LINE1 is pressed, you will hear a dial tone and see "VoIP 1" on the LCD. When LINE2 is pressed, you will hear a dial tone and see "VoIP 2" on the LCD.

- To make a call, select the line you wish to use. You can switch lines before dialing any number.
- When the phone is idle, press the corresponding key to answer the incoming call that is designated to an account.
- If the line is occupied, the LED of the next available LINE key blinks to remind you of an incoming call. This feature should be supported by the SIP server.

5.2.3 Making a Call

Dialing

You can use headset and handset or press  to make a phone call.

1. Pick up the handset; or press , or enable the headset. Or press a LINE_x key to activate the speakerphone. The corresponding LED is on.
2. Hear a dial tone. The LED light of the first line (LINE1) LED is on. You can also select another SIP account by pressing the corresponding LINE key.
3. Enter the phone number and press **SEND** or **Dial** soft key.

Redialing

You can press **SEND** or the **Redial** soft key to redial the last dialed phone number. For the redialed number, the phone will use the same SIP account for dialing the last phone number.

Dialing Through the Call History


Call a phone number from the phone's call history. When you dial a call from the history, the phone uses the same SIP account that is used for this call last time.

1. Press **MENU** to access the main menu.
2. Select **Call History** and press **MENU** to confirm.
3. Select **Answered Calls**, **Dialed Calls**, **Missed Calls**, **Transferred Calls** or **Forwarded Calls** depending on your requirements and press **MENU** to confirm.
4. Select a phone number by using arrow keys and press **Dial** soft key to dial the number.


Dialing Through the Phone Book

You can call a number through the phone book.

Each entry in the phone book can be assigned with an individual SIP account. The phone uses the SIP account to make a phone call.

1. Access the phone book by:
 - Pressing **DOWN**.
 - Pressing .
 - Pressing **MENU**. Then select **Phone book** and press **MENU**.
2. Select a phone number by using arrow keys and press **MENU** to confirm.
3. Select **Dial** and press **MENU** to dial the number.

5.2.4 Answering a Call

- An incoming call: The phone rings. The corresponding account LINEx blinks. Pick up the handset, press , enable the headset, or press the blinking LINEx key to answer the call.
- Multiple incoming calls: The call waiting tone is played. The next available line will blink in red. Answer an incoming call by pressing the LINEx key.

5.2.5 Do-Not-Disturb

To block all incoming calls, you can enable the Do-Not-Disturb (DND) function. The phone will not ring when an incoming call comes.

Use either of the following methods to enable DND function:

Method 1: When the phone is in idle mode, press DND to enable the DND function and press DND again to disable the DND function.

Method 2: Toggle the DND function as follows:

1. Press **MENU**.
2. Select **Preference** by pressing the arrow keys, and then press **MENU**.
3. Select **Do Not Disturb** by pressing the arrow keys and press **MENU**.
4. Select **Enable DND** or **Disable DND** and press **MENU**.

5.2.6 Call Waiting/Call Holding

- Hold: Keep a call on hold by pressing **HOLD**.
- Resume: Resume the call by pressing the corresponding LINEx key with a blinking LED.
- Multiple calls: Automatically keep an active call on hold by selecting another available LINEx key or answering another call. If an incoming call comes when all lines are in use, the call waiting tone (discontinuous tone) is displayed.


5.2.7 Muting

To enable or disable the muting function during a call, press **MUTE**. Then **LINEx: MUTE** is displayed on the LCD for the muted call.

5.2.8 Call Transfer

The eSpace 6870 supports both blind and attended (or supervised) transfer:

Blind transfer


1. Pick up the handset; press , or enable the headset by pressing **HEADSET** to establish a conversation.
2. Press **TRANSFER** for a dial tone.
3. Dial the number of a third party and press **SEND** to transfer the active call.

Attended (or supervised) transfer



NOTE

To transfer calls by one account, the other one must be unoccupied.

1. Pick up the handset; press , or enable the headset by pressing **HEADSET** to establish a conversation.
2. Press another available **LINE** key for a dial tone.
3. Dial the number of a third party and press **SEND**.
4. If the call is established, press **TRANSFER** and select the previous **LINE** key, the transfer is finished.
 - If the call is not established, press the previous **LINE** key to return to the previous conversation.
 - If the call is canceled and terminated before the call of the third party is connected, the eSpace rings, indicating that a call is held.




NOTE

To transfer calls across different SIP domains, the VoIP service providers must support this feature.

5.2.9 Three-Way Conference Call

The eSpace can host conference calls and support three-way conference calls.

Initiating a Conference Call

1. Pick up the handset, press , or enable the headset by pressing **HEADSET** to establish a call.
2. Press another available **LINE** key to wait for the dial tone. Dial the phone number of the third party and press **SEND**. If the call is established, press **CONF** to initiate a three-way conference call. If the call is not established, press **LINEx** key to resume the previous call.
3. Press the previous **LINE** key to enable the call to join the conference.

Ending a Conference Call

Press **HOLD** to pause the conference call and put all parties on hold. If you want to speak to an individual party, select the corresponding blinking **LINEx** key.

If the caller hangs up, the other two parties hang up automatically and the conference ends. If either the second party or the third party hangs up, the rest two parties establish the two-way conversation.

If both the second party and the third party hang up, the caller will hang up automatically. In this case, the conference ends.

5.2.10 Voice Messages



NOTE

Each line has a separate voice mail account. Each account requires a voice mail portal number to be configured through the **Voice Mail User ID** field.

The ways to check voice messages are as follows:

- Check each line for waiting tone (discontinuous).

5.2.11 Manager and Secretary Function

After a line of the manager's phone is bound to a line of the secretary's phone, all calls to the manager will be connected to the secretary's phone at the same time. The secretary determines whether to transfer the call to the manager.

Assume that manager A's phone has two lines. LINE 1 is bound to LINE 1 of secretary B's phone, and LINE 2 is a private line. The following describes the manager and secretary function's process.



NOTE

For details on how to configure the manager and secretary service, see the *Huawei IP Phone eSpace 6810&6830&6850&6870 Administrator Guide* or contact the administrator.

1. Customer C calls manager A.
The phone of secretary B rings. The LINE 1 indicator on both manager A's phone and secretary B's phone blinks.
2. Secretary B presses the **LINE1** key and answers the call.
3. Secretary B presses the soft key **SeizeLine** soft key and enters the number of the manager A's private line to call manager A.
The call between secretary B and customer C is held.
4. Manager A presses the **LINE2** key and answers the call from secretary B.
5. Manager A presses the **LINE1** key and talks with customer C.
The call between manager A and secretary B is held. If secretary B hangs up, the call ends.
6. Manager A or customer C hangs up.
The call ends, and the LINE 1 indicator is off.



NOTE

- The eSpace 6870 allows one manager's phone to be bound to a maximum of two secretaries' phones, and one secretary's phone to be bound to a maximum of four managers' phones.
- If two secretaries serve a manager, only one secretary answers the call and transfers it to the manager.

5.2.12 BLF Function

After the BLF function is enabled for eSpace 6870, you can press the corresponding DSS key to check the status of the monitored phone. You can press this key to directly make a call to the specified number.



NOTE

For details on how to configure the BLF service, see the *Huawei IP Phone eSpace 6810&6830&6850&6870 Administrator Guide* or contact the administrator.

A user assigns the BLF function to a DSS key on phone A, and configures phone B as the monitored phone. The mapping between the phone B status and the BLF key on phone A is as follows:

- When phone B is idle, the BLF key is steady green.
- When phone B is ringing, the BLF key is blinking red.
- When phone B is in a conversation, the BLF key is steady on.

6 Restoring Factory Default Settings



CAUTION

Restoring the factory default settings can clear all configuration information about the eSpace . Back up or print all the settings before you restore factory default settings. Huawei is not responsible for parameter loss or failier to connect to your VoIP service provider due to the operation of restoring the factory default settings.

To restore the factory default settings, do as follows:

1. Press **MENU** to access the keypad configuration UI menu, and select **Config**. Press **MENU** to access submenus, and select **Factory Reset**. For details, see [Table 4-1](#).
2. Type the MAC address that is printed on the bottom of the sticker by using the following rules:
 - 0~9: 0~9
 - A: 22 (Press the **2** key twice and **A** is displayed on the LCD.)
 - B: 222
 - C: 2222
 - D: 33 (Press the **3** key twice and **D** is displayed on the LCD.)
 - E: 333
 - F: 3333

For example, if the MAC address is **0018820E3956**, type **00188203333956**. The LCD displays the entered MAC address **0018820E3956**.



NOTE

If digits are duplicate in the MAC address, for example, 22, you need to press **RIGHT** to move the cursor or wait for four seconds for typing another **2**.

3. Press the **OK** soft key.

7

FAQs

Question: What codecs are supported by the eSpace 6870?

Answer: The eSpace 6870 supports a wide range of codecs: G711 a/μ, G729, G723.1, G726-32k, and iLBC.

Question: How many VoIP accounts are supported on the eSpace 6870?

Answer: The eSpace 6870 IP phone supports 6 different SIP (VoIP) accounts. These accounts can be on the same server or different servers of different service providers.

Question: How to reject an incoming call?

Answer: Press **Reject** softkey when receiving an incoming call or press **DND** to enable the DND function when the phone is idle. The call is rejected and forwarded to your voice mailbox if you configure the voice mailbox.