

Polycom® SoundPoint® IP

Frequently Asked Questions



General Questions on Polycom VoIP

Why Polycom VoIP telephones?

Polycom is a leading independent supplier of standards-based Voice over IP endpoints. We are committed to a full-line of high-quality, easy-to-use, and affordable desktop VoIP phones. Our SoundPoint IP line of desktop phones utilizes Polycom's award-winning Acoustic Clarity Technology to deliver natural, two-way conversations¹. The SoundPoint IP phones provide an easy transition from traditional PBX systems to the world of IP telephony. The SoundPoint IP phones offer investment protection by being software-upgradeable in the field. With support for multiple protocols running on the leading IP PBX and Softswitch vendors' (Technology Partners') solutions, Power over Ethernet, secure provisioning, and access to the latest IP services, including multiple call- and flexible line appearances, presence, and instant messaging, Polycom SoundPoint IP telephones are your future-proof choice for business IP communications.

What is a Technology Partner?

Polycom Technology Partners deliver industry-leading IP telephony servers that provide both traditional phone functionality and advanced features, like unified messaging, conference bridging, collaboration tools, and browsing capabilities. Our strategy is to ensure that our phones are fully interoperable with the Technology Partners' solutions, so that customers can enjoy the benefits of an integrated VoIP solution. For the most current Technology Partner interoperability chart, please visit:
http://forms.polycom.com/audio_files/techpartners.htm.

Why does Polycom work with Technology Partners?

Collaboration with Technology Partners allows Polycom to offer end-to-end IP telephony solutions. Technology Partners provide, either directly or through their own partnerships, IP PBX and Softswitch platforms that complement Polycom's VoIP endpoints to make up complete IP telephony solutions. Because of the complex call signaling that takes place, Polycom engages in most cases at a joint development level to ensure that the combined solution integrates seamlessly. For the most current Technology Partner interoperability chart, please visit:
http://forms.polycom.com/audio_files/techpartners.htm.

Can the phones be used on a non-Partner platform?

In order to ensure interoperability and full business telephony functionality, the SoundPoint IP telephones should be operated in conjunction with Partners' IP PBX (customer premise equipment similar to an existing PBX or Key System) or Softswitch (hosted telephony similar to your current home phone service) solution. Polycom does not recommend using the phones on call server platforms that have not been certified by Polycom.

Will Polycom VoIP phones work with existing PBX or Key Systems?

While many PBX and Key System vendors now provide optional VoIP Gateways that are standards-based, interoperability testing must still be conducted between these systems and the SoundPoint IP to ensure proper operation. Polycom cannot guarantee interoperability with a system that is not provided by one of our Partners.

Which protocol is the best?

There is no one protocol that is better than all the others. Each protocol has different advantages over the others and the choice depends on your business communication needs.

What protocols do Polycom VoIP telephones support?

The SoundPoint IP 300, 301, 500, 501 and 600 support both SIP and MGCP. The SoundPoint IP 601 currently supports only SIP. The SoundPoint IP Expansion Module is protocol agnostic and supports the protocol of the host SoundPoint IP 601 (SIP). The SoundStation® IP 4000 supports SIP.

Does the phone have a different hardware design for each protocol?

No. The SoundPoint IP can support various standards-based protocols by deploying different firmware on the same hardware.

Can I reprogram a SoundPoint IP from SIP to MGCP and vice versa?

No, this cannot be done in the field. Please make sure to order the right SoundPoint IP SKUs, so that they are compatible with the protocol of your call server solution.



¹ The SoundPoint IP 300 / 301 has a monitor-only speakerphone.

Polycom SoundPoint IP Frequently Asked Questions

Where can the telephones be purchased?

The SoundPoint IP phones are available through Polycom Certified Channel Partners – companies that offer network communications solutions. These Channel Partners have met the stringent requirements pertinent to becoming Polycom-certified, which involves training, testing, and making a commitment to support their customers.

The SoundPoint IP Telephones

What telephone models are available?

There are four models in the SoundPoint IP family, including:

- SoundPoint IP 30x, encompassing:
 - SoundPoint IP 301 (SIP and MGCP currently offered in North America, Australia, Japan, and New Zealand)
 - SoundPoint IP 300 (SIP and MGCP; ROW)
- SoundPoint IP 50x, including:
 - SoundPoint IP 501 (SIP and MGCP currently offered in North America, Australia, Japan, and New Zealand only)
 - SoundPoint IP 500 (SIP and MGCP; ROW)
- SoundPoint IP 60x, encompassing:
 - SoundPoint IP 600 (SIP and MGCP; worldwide)
 - SoundPoint IP 601 (SIP; worldwide)
- SoundPoint IP Expansion Module

What are the differences between the SoundPoint IP 300 and 301; SoundPoint IP 500 and 501; SoundPoint IP 600 and 601?

The [SoundPoint IP 300 and 301](#) are both capable of accommodating up to two lines and supporting essential IP telephony features. Both the models include a dual-port 10/100 Mbps Ethernet switch and a monitor-only speakerphone. Although the SoundPoint IP 300 and 301 are similar products, only the SoundPoint IP 301 with its expanded flash memory is capable of supporting HTTPS secure provisioning. The SoundPoint IP 301 is currently available in North America, Australia, and New Zealand, and the SoundPoint IP 300 is marketed in all other countries.

The [SoundPoint IP 500 and 501](#) support up to three telephone lines and offer exceptional sound quality. Both the models have a dual-port 10/100 Mbps Ethernet switch and a full-duplex speakerphone featuring the Polycom Acoustic Clarity Technology. Although the SoundPoint IP 500 and 501 are similar products, only the SoundPoint IP 501 with its expanded flash memory is capable of supporting HTTPS secure provisioning. The SoundPoint IP 501 is currently available in North America, Australia, Japan, and New Zealand, and the SoundPoint IP 500 is marketed in all other countries.

The [SoundPoint IP 600 and 601 SIP](#) are feature-rich desktop IP telephones, designed to support heavy call volume and advanced functionality. The telephones accommodate up to six lines, have a large graphical grayscale LCD, illuminated line and audio state indicators, and built-in Cisco® and IEEE auto-sensing PoE². The telephones support HTTPS secure provisioning and are available worldwide. The advancements in the SoundPoint IP 601 pertain to its capability to support up to 3 SoundPoint IP Expansion Modules and include an IrDA port and advanced powering system.

What features are available on the SoundPoint IP phones?

The SoundPoint IP phones are engineered to provide a high-quality, rich communications experience by delivering superb sound quality, an intuitive user interface, and a rich feature set, including multiple call- and flexible line appearances, three-way local conferencing, presence, instant messaging, and custom ring tones. Features available on SoundPoint IP phones will vary depending on the model and telephony server that the phone is operated with. Please refer to the respective product datasheets and check with your call server platform provider to determine the list of supported features.

Do the phones come in any other color?

No. The only color available is gray.

The SoundPoint IP Expansion Module

What is the SoundPoint IP Expansion Module?

The SoundPoint IP Expansion Module enhances the user interface of the SoundPoint IP 601 with a high-resolution graphical LCD and 14 multifunctional keys that can be automatically configured as a line registration, call appearance, speed-dial, direct station select (DSS), or busy lamp field (BLF³).

A high-performance attendant console based on the SoundPoint IP 601 and up to three SoundPoint IP Expansion Modules provides a productivity-enhancing solution for telephone attendants - receptionists, administrative assistants, and other “power users” who manage and monitor multiple simultaneous telephone calls on a daily basis.

Which SoundPoint IP models support the Expansion Module?

The SoundPoint IP 601 is the only telephone model that supports the SoundPoint IP Expansion Module.

How many Expansion Modules can be attached to the SoundPoint IP 601?

The SoundPoint IP 601 will support up to 3 Expansion Modules.

How are powering and signaling implemented on the SoundPoint IP Expansion Module?

The SoundPoint IP Expansion Module's powering and signaling are provided by the host phone.

How does the SoundPoint IP Expansion Module communicate with the host phone and other attached Expansion Modules?

The communications happen through the host phone's and Expansion Modules' infrared ports.

What does it take to install and configure the SoundPoint IP Expansion Module?

Installation and configuration of the SoundPoint IP Expansion Module are very simple, since both power and signaling are taken from the host SoundPoint IP 601 phone. Just snap the Expansion Module onto the host phone – and it works. No extra wires or power supplies are required. Up to three Expansion Modules may be attached to and detached from an idle SoundPoint IP 601 at any time.

² Cisco Inline Power can be used only to power the SoundPoint IP 601 without an Expansion Module attached to it. IEEE 802.3af or an AC adapter should be used to power the SoundPoint IP 601 with one or more Expansion Modules.

³ Busy Lamp Field (BLF) is a future feature

Hardware Technical FAQ

What are the powering options for SoundPoint IP?

The SoundPoint IP 300 and 301 ship with a standard CAT-5 cable and a wall adapter that plugs into a jack located on the rear of the phone. For Power over Ethernet, an IEEE 802.3af version of the cable is available for purchase. Alternatively, for Cisco Inline Power, an optional network cable is also available. In addition, SKUs with included PoE cable and optional AC adapter can also be ordered.

The SoundPoint IP 500 and 501 ship with a custom network cable that contains a jack that applies power to the unused pairs in a CAT-5 network cable from a supplied wall adapter. For Power over Ethernet, an IEEE 802.3af version of the cable is available for purchase. Alternatively, for Cisco Inline Power, an optional network cable is also available. In addition, SKUs with included PoE cable and optional AC adapter can also be ordered.

The SoundPoint IP 600 and 601 come with a standard CAT-5 cable. The phones ship with a wall adapter that plugs into a jack located on the rear of the phone. Cisco Inline Power² and IEEE 802.3af powering options are both supported by hardware built into the phones (auto-detect).

The SoundPoint IP Expansion Module is powered by the host telephone.

What types of headsets are supported?

SoundPoint IP phones are compatible with amplified headsets REV E. and higher. Direct connect RJ-9 headsets are supported. Please visit <http://www.polycom.com> for a list of tested headsets or refer to your headset vendor for compatibility information.

Why does the handset and headset volume reset on every call?

The handset and headset volumes both reset following each call to comply with FCC requirements and with the recommendations of the Americans with Disabilities Act. This feature can be disabled through a modification to the configuration file.

Is there a hub or switch in the phone?

All SoundPoint IP phones contain a dual-port 10/100 Mbps Ethernet switch.

Can an additional phone be plugged into the second Ethernet port?

Polycom recommends that in order to maintain voice quality, the second Ethernet port be used only with standard PC applications. You should not "daisy chain" phones together.

Software/Firmware Technical FAQ

What Codecs are supported?

All SoundPoint IP phones support G.711μ /A law and G.729a (Annex B.)

Do the phones support custom ring tones?

Custom ring tones or wave file ring tones can be downloaded on some versions of software. Please refer to the Administrator Documentation for the specific type and version of software you have.

Is there a web browser built into the phone?

Polycom does not currently support this capability.

Can the phones support LDAP directories?

Currently there is no support for directories like LDAP. These protocols will likely be supported in the future though some type of translation service to XML or XHTML.

Networking FAQ

How do the phones place calls to the PSTN?

The IP phone call's data packets are routed to a gateway, which then transports that call over to the Public Switched Telephone Network (PSTN). This task is completely transparent to the user.

Do the SoundPoint IP work over broadband connections like cable modems and DSL modems?

To ensure voice quality is maintained, proper network design rules relating to items such as latency, firewalls, bandwidth, and QoS should be applied at all times. As long as proper network design guidelines are followed, the SoundPoint IP will deliver exceptional performance on networks with broadband connections such as cable or DSL.

What features do the telephones provide for QoS?

All the phones in the SoundPoint IP family support Layer 3 Type of Service (TOS) tagging used in WANs. Also, the phones support 802.1 p/Q VLAN and Priority tagging used in LANs. Note: traffic sent to the phone's PC port will not have any QoS tagging applied, but any tagging applied by the PC will pass through the phone unaltered.

Configuration and Upgrade FAQ

How are the phones configured?

Phones are configured through a combination of local settings and configuration files that are loaded to the phone from a boot server.

Does Polycom provide tools to configure the phones?

Polycom provides as part of its firmware releases XML-structured configuration files that can be managed with partner supplied administrative tools or manually edited. We are also working on other methods of managing phones that are in the developmental stages that can be used on a standalone basis or integrated into the partner's administrative tools.

Do the phones have a web server?

Currently, only the SIP version of the SoundPoint IP supports configuration through a Web interface. Future releases of other protocols will also support this capability.

How is the time set on the phones?

SoundPoint IP phones use Simple Network Time Protocol (SNTP) servers to provide accurate time. These servers can be located on the local network or available from various sites on the Internet.

Polycom SoundPoint IP Frequently Asked Questions

What is the Password to access the Set-up?

The User ID and Password will vary depending on what version of software you are running. Please refer to the Administrator Documentation for the specific type and version of software you have.

How are the phones upgraded?

One can upgrade phone software by placing new files onto the boot server and rebooting the phones. The phones download all the configuration files on every reboot and download a small chunk of the .ld files to compare versions. If the version is the same the file is not downloaded, if it is different, the file will be downloaded.

How do users get firmware updates?

Certified Polycom Channel Partners can access updates to the SIP version of software on the Polycom Resource Center at <http://extranet.polycom.com>. In the case of MGCP, firmware is distributed by the Technology Partners through their reseller channel base. Please contact the reseller you purchased your IP telephony solution from if you have any software needs.

Does the boot server need to be available at all times?

An FTP, TFTP, HTTP, or HTTPS boot server must be available anytime a configuration file change or firmware upgrade needs to be performed. The phone will boot from a flash image if the boot server is not available or if there are no new files located on the boot server that need to be loaded to the phone. Polycom recommends that the boot server be available at all times as the phone does upload log files to the boot server that can be useful if troubleshooting is required. To make use of the multi-lingual support available on some versions of software, a server must be available each time the phone boots so that the language dictionary can be downloaded. If the requested language file cannot be downloaded, the phone will default to the factory configured language.

What happens to the phones if there is a power failure during the upgrade process?

The SoundPoint IP phones follow a fail-safe upgrade process where the phone does not delete the previous file image until a new one is successfully saved. A power failure or server outage during an upgrade will not damage the phone.

How does an administrator manage large quantities of phones?

The format and content of the configuration files are such that these files can be customized using administrator tools and used to provision phones upon boot up from an FTP, TFTP, HTTP, or HTTPS boot server. An administrator for a large group of phones can modify the configurations and push the new info to the phones by remotely rebooting the phones. Remote reboot capabilities need to be supported by your IP PBX or IP Softswitch platform. Please contact your reseller for details.

What documentation is available?

Please visit the IP Telephony Documentation section at http://www.polycom.com/resource_center/0,1454,pw-26-482,FF.html for a complete list of available documents including data sheets, family brochure, and quick start guides. Please also check with your reseller for any custom documents developed by the Technology Partner

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