

Cisco Unified IP Phone 7940G

As the market leader in true IP telephony, Cisco® continues to deliver unsurpassed end-to-end data and voice-over-IP (VoIP) solutions, offering the most complete, stylish, fully featured IP phone portfolio to enterprise and small to medium-sized customers. Cisco Unified IP phones provide unmatched levels of integrated business functions and converged communications features beyond today's conventional voice systems.

The Cisco Unified IP phone products include phones with large pixel-based displays to bring productivity-enhancing applications to the phones, as well as customization options that can be modified as needs change, and provide inline power support over Ethernet. The Cisco Unified IP Phone 7940G (Figure 1) is multiprotocol-enabled to support Session Initiated Protocol (SIP), Media Gateway Control Protocol (MGCP), as well as the Cisco Unified CallManager Skinny Client Control Protocol (SCCP).

Figure 1. Cisco Unified IP Phone 7940G



An important offering in the IP phone portfolio, the Cisco Unified IP Phone 7940G addresses the communications needs of a transaction-type worker. It provides two programmable line and feature keys, plus a high-quality speakerphone. The Cisco Unified IP Phone 7940G also has four dynamic soft keys that guide users through call features and functions. A built-in headset port and an integrated Ethernet switch are standard with the Cisco Unified IP Phone 7940G. The phone also includes audio controls for the full-duplex speakerphone, handset, and headset. This phone also features a large, pixel-based LCD display that provides information such as date and time, calling party name, calling party number, and digits dialed. Figure 2 shows the icon buttons on the phone, with word overlay in English included in the documentation package with each phone.

Figure 2. Cisco Unified IP Phone 7940G Icons



The graphic capability of the display allows for the inclusion of such features as Extensible Markup Language (XML) and future features. The Cisco Unified IP Phone 7940G is multiprotocol-capable (SCCP, SIP, and MGCP).

Features

The Cisco Unified IP Phone 7940G is dynamic and designed to grow with system capabilities. Features will keep pace with new changes through software updates to the phone flash memory. The phone provides many accessibility methods according to user preference. Various methods or paths include buttons, soft keys, a navigation key, and direct access with the use of corresponding "ghost" digits. Each of the following features will have expanded capabilities in the future:

Messages

The Messages key offers direct access to voicemail. In the near future voicemail speech-to-text readout will be available on the display (Figure 3).

Figure 3. Messages Key



Directories

The Cisco Unified IP Phone 7940G identifies incoming messages and categorizes them for users on the screen, allowing users to quickly and effectively return calls using direct dial-back capability.

The corporate directory integrates with the Lightweight Directory Access Protocol (LDAP3) standard directory (Figure 4).

Figure 4. Directories Key



Settings

The Settings feature key allows the user to adjust display contrast and select from a large number of unique ringer sounds, volume settings for all audio such as ringer, handset, headset, and

speaker. Network configuration preferences can also be set up. (Network configuration is usually set up by the system administrator.) Configuration can be either automatic or manually set up for Dynamic Host Control Protocol (DHCP), Trivial File Transfer Protocol (TFTP), Cisco Unified CallManagers, and backup Cisco Unified CallManagers.

A huge advantage is the ability for no hands on moves and changes. Users can just pick up the phone and move to the new location anywhere on their network. No system administration is required (Figure 5).

Figure 5. Settings Key



Services

The Cisco Unified IP Phone 7940G allows users to quickly access diverse information such as weather, stocks, quote of the day, or any Web-based information using XML to provide a portal to an ever-growing world of features and information (Figure 6).

Figure 6. Services Key



Help

The online help feature gives users information about the phone keys, buttons, and features. The pixel display allows for greater flexibility of features and significantly expands the information viewed when using features such as Services, Information, Messages, and Directory. For example, the Directory button can show local and server-based directory information (Figure 7).

Figure 7. Help Key



The Cisco Unified IP Phone 7940G features high-quality, speakerphone technology. It also includes an easy-to-use speaker on/off button and microphone mute buttons. These buttons are lit when active (Figure 8).

Figure 8. Speaker and Mute Buttons



The internal Cisco two-port Ethernet switch allows for a direct connection to a 10/100BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the phone and a co-located PC. The system administrator can designate separate VLANs (802.1Q) for the PC and Cisco IP phones, providing improved security and reliability of voice and data traffic.

A dedicated headset port eliminates the need for a separate amplifier when using a headset, allowing the handset to remain in its cradle and thereby making headset use simpler. The convenient volume control button on the phone provides for easy decibel-level adjustments for the speakerphone, handset, headset, and ringer. The handset is hearing aid-compatible (HAC) and meets FCC loudness requirements for Americans with Disabilities Act (ADA). Section 508

loudness requirements can be achieved using industry-standard inline handset amplifiers such as Walker Equipment W-10 or CE-100 amplifiers.

The dial pad is also ADA-compliant.

The footstand of the Cisco Unified IP Phone 7940G is adjustable from flat to 60 degrees to provide optimum display viewing and comfortable use of all buttons and keys. The footstand is keyed to match standard wall jack configurations for wall mounting. Two optional wall-mount brackets are also offered.

The Cisco Unified IP Phone 7940G can also receive power down the LAN from any of the Cisco Inline Power-capable blades and boxes.

For added security, the audible dual tone multifrequency (DTMF) tones are masked when the speakerphone mode is used.

Other Cisco Unified IP Phone 7940G features include:

- 24+ user-adjustable ring tones
- A HAC handset (meets ADA requirements) and HAC compliance for magnetic coupling to approved HAC hearing aids
- G.711 and G.729a audio compression
- H.323 and Microsoft NetMeeting compatibility
- An IP address assignment—DHCP client or statically configured
- Comfort noise generation and voice activity detection (VAD) programming on a system basis

The phone also includes the following settings:

- Display contrast
- Ring type
- Network configuration
- Call status

Specifications

- Firmware changes downloaded from Cisco Unified CallManager and Cisco.com
- Dimensions: 8 x 10.5 x 6 in. (20.32 x 26.67 x 15.24 cm) (H x W x D)
- Phone weight: 3.5 lb (1.6 kg)
- Polycarbonate acrylonitrile butadiene styrene (PABS) plastic in textured dark gray color with silver bezel
- 48 VDC required, supplied locally at the desktop using an optional AC-to-DC power supply (CP-PWR-CUBE-3=)
- Requires ordering one of the AC country cords listed in the following section.

AC Country Power Cords

CP-PWR-CORD-AP= (Asia Pacific)

CP-PWR-CORD-AR= (Argentina)

CP-PWR-CORD-AU= (Australia)

CP-PWR-CORD-CE= (Central Europe)

CP-PWR-CORD-JP= (Japan)

CP-PWR-CORD-NA= (North America)

CP-PWR-CORD-SW= (Switzerland)

CP-PWR-CORD-UK= (United Kingdom)

Temperature

Operating temperature: 32 to 104°F (0 to 40°C)

Relative humidity: 10 to 95 percent (noncondensing)

Storage temperature: 14 to 140°F (–10 to 60°C)

Certification

Regulatory Compliance

- CE Marking

Safety

- Underwriters Laboratories (UL) 60950
- Canadian Standards Association (CSA) C22.2 No. 60950

Electromagnetic Compatibility (EMC)

- Federal Communications Commission (FCC) Part 15 (CFR 47) Class B
- ICES-003 Class B
- EN55022 Class B
- CISPR22 Class B
- AS/NZ 3548 Class B
- VCCI Class B
- EN55024
- EN 50082-1
- EN 61000-3-2
- EN 61000-3-3

Telecom

- FCC Part 68 (CFR47) HAC
- IC CS-03

Ordering Information

Table 1 gives ordering Information for Cisco Unified IP Phone 7940G.

Table 1. Ordering Information for Cisco Unified IP Phone 7940G

Part Number	Description
CP-7940G	Cisco Unified IP Phone 7940G
CP-7940G=	Cisco Unified IP Phone 7940G, spare
CP-7940G-CH1	Cisco Unified IP Phone 7940G, channel with license

Note: All Cisco Unified IP phones require the purchase of a phone technology license, regardless of call protocol being used.

Accessories Ordering Information

Optional wall-mount kits are available in both locking and nonlocking versions; their part numbers follow:

- CP-LCKNGWALLMOUNT=
- CP-WALLMOUNTKIT=

Warranty

Cisco Unified IP phones are covered by a Cisco standard 1-year replacement warranty.

Cisco Unified IP Communications Services and Support

Cisco Unified IP Communications services and support reduce the cost, time, and complexity associated with implementing a converged network. Cisco and its partners have designed and deployed some of today's largest and most complex IP communications networks—meaning that they understand how to integrate an IP communications solution into your network.

Cisco design tools and best practices ensure the solution best fits your business needs from the start, eliminating costly redesigns and downtime. Cisco proven methods ensure a sound implementation that will deliver the functions and features you expect—on time. Support services include remote network operations, network management tools to administer the converged application and network infrastructure, and technical support services.

Through these services, your organization benefits from the experience gained by Cisco and its partners. Taking advantage of this valuable experience, you can create and maintain a resilient converged network that will meet your business needs today—and in the future.