

Quick Start Guide



Cisco Small Business Pro

Cisco Unified Communications 500 Series Model UC 560

Package Contents

- Cisco Unified Communications 500 Series Model UC 560
- 4 rubber mounting feet for desktop installation
- Ethernet cable (yellow RJ-45 to RJ-45)
- Console cable (light blue RJ-45 to DB9)
- Power cord
- Rack mount kit
- Compact flash memory guard
- Quick Start Guide
- Product CD-ROM

Welcome

Thank you for choosing the Cisco Unified Communications Model 560. The UC 560, part of the Cisco Smart Business Communications System (SBCS), is a unified communications solution for small businesses that provides voice, data, video, and security capabilities for up to 104 employees.

This guide describes how to install the UC 560 hardware and how to connect to the UC 560 and launch the Telephony Setup Wizard provided with Cisco Configuration Assistant (CCA).

Before You Begin

Before you begin the installation, make sure that you have the following:

For Hardware Installation:

- Cisco IP phones
- One or more Power over Ethernet (PoE) switches for connecting IP phones or computers. We recommend that you use Cisco ESW 500 Series switches.

Cables

- Ethernet cables (Category 5 or higher) for connecting IP phones and computers, WAN interfaces, or other devices.
 - One Ethernet cable is included with the UC 560 and one cable is included with each IP phone.
- RJ-11 cable for analog Line (FXO) and Phone (FXS) connections.
- RJ-45 (non-Ethernet) cable for ISDN (BRI) connections.
- RJ-48 cable for ISDN (PRI) T1/E1 connections (only needed if a T1/E1 voice interface card is installed).
 - You can purchase the RJ-45 and RJ-48 cables from your telephony service provider or reseller. The RJ-11 cable can be purchased from any electronics store.
- (Optional) Cable for connecting an external audio device to the
 3.5 mm Music on Hold (MoH) port.
- (Optional) Additional Voice Interface Cards (VIC) to insert in the VIC slots.
- Compact flash memory guard for protecting the compact flash memory slot. Included are two Torx T5 screws and a Torx wrench (size T5) for installing it.
- Mounting brackets and screws for mounting the unit in a 19 -inch rack.

For Software Installation:

- A PC running:
 - Windows Vista Ultimate, or Window XP (Service Pack 1) operating system
 - Microsoft Internet Explorer 6.0 or later
 - Adobe Flash Player with add-on version 10.0.0 or later
- A registered account on Cisco.com. You need this so that you can download the CCA software necessary to configure your UC 560.



We highly recommend that you download Cisco Configuration Assistant (CCA) before you install and configure your UC 560. See Installing Cisco Configuration Assistant, page 15.

UC 560 Default Information

Attribute	Default Setting
IP address	192.168.10.1
Username	cisco
Password	cisco
Voice VLAN (100)	10.1.1.x
Data VLAN (1)	192.168.10.x
Smartports	GigabitEthernet 0/1/0 and 0/1/1 Role: cisco-switch, Native Vlan 1 GigabitEthernet 0/1/2 Role: cisco-desktop, Access Vlan 1

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Getting to Know the UC 560

The UC 560 includes these features:

- 3 10/100/1000 Ethernet L2 expansion ports.
- 4 Line (FXO) ports or 2 ISDN (BRI) ports for Public Switched Telephone Network (PSTN) connections.

The TI/EI model, in addition to the 4 Line (FXO) ports, provides digital T1/E1 connectivity options such as ISDN PRI or CAS connections to the PSTN.

- Music-on-Hold (MoH) audio port.
- 2 Expansion slots for Voice Interface Cards (VICs). The T1E1 model has only 1 open VIC expansion slot.
- 10/100/1000 Ethernet WAN uplink port
- Console port for command-line interface (CLI) access. This port can also be used for connecting to the CLI through a modem.
- Licenses to support 16 users (by default). You can increase the number of users on the system by purchasing and applying additional licenses.

You can connect any Cisco ESW 500 Series switch to the UC 560 to connect phones and data devices. A number of models are available, including PoE and non-PoE versions. For information about the switches, see http://www.cisco.com/go/esw500help.

The UC 560 can be installed in various types of network configurations. For guidance in planning, designing, and deploying the UC 560 in your network, use Cisco Smart Designs.

Cisco Smart Designs are a collection of validated network designs and deployment best practices, that feature simple step-by-step implementation guidance specifically tailored for Small Business Solutions. See http://www.cisco.com/go/partner/smartdesigns.

Front Panel

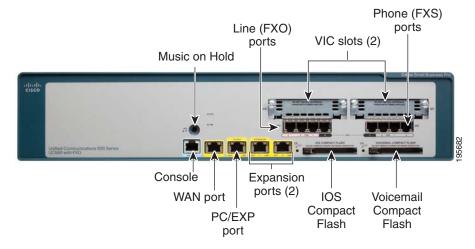
The front panel is where you connect the network devices. The ports on the panel vary depending on the model.

There are three UC 560 Series model numbers:

- UC560-FXO-K9—Base model with 16 user license, 4 Line (FXO) ports, and 2 VIC expansion slots
- UC560-BRI-K9—Base model with 16 user license, 2 Line (BRI) ports, and 2 VIC expansion slots
- UC560-T1E1-K9—Base model with 16 user license, 4 Line (FXO) ports, 1 T1/E1 controller, and 1 VIC expansion slot

This illustration shows the front panel of the FXO model.

Cisco UC 560 with Line (FXO) Ports



Feature	Description
Music-on-Hold (MoH) audio port	Connects to an audio device (such as an MP3 player or radio) to provide streaming audio for music on hold.
Console port	Connects the UC 560 to a console PC to provide access to the CLI. This port can also be used for connecting to the CLI through a modem.
	Recommended for advanced users or for device access recovery purposes.
WAN 10/100/1000 Ethernet port	Provides dedicated WAN (Internet) access. Connects to a DSL router, cable modem, or other WAN connectivity devices
PC 10/100/1000 expansion port (PC/EXP)	LAN port that connects to a laptop or PC used for configuring the UC 560. This port can also be used as an expansion port.
10/100/1000 Expansion ports (2)	Connects to switches that have ports for phones or data devices. (We recommend that you connect the UC 560 to a Cisco ESW 500 Series switch.)
Line (FXO) ports	Connects your phone system to the PSTN. (Only applies to models UC560-FXO-K9 and UC560-T1E1-K9)
	If the power fails, you can still make and receive emergency calls if you have a telephone line connected to the Line (FXO) port 0 and an analog phone connected to the Phone (FXS) port 3, even if the unit is not powered on.
Phone (FXS) ports	Connects directly to an analog telephone, fax machine, or similar device.
ISDN Basic Rate Interface (BRI) ports	Connects the UC 560 to an Integrated Services Digital Network (ISDN). Only applies to model UC560-BRI-K9.
IOS Compact Flash	Storage that contains the UC 560 software image and default configuration values and phone software.
Voicemail Compact Flash	Storage that contains the voicemail software, embedded application software, and stored messages.
(Optional) Two Voice Interface Card (VIC) expansion slots	Provides connectivity to a Public Switched Telephone Network (PSTN) for additional phone ports.

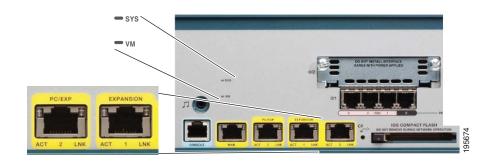
Back Panel

The back panel is where you connect the UC 560 to power. There is no external On/Off power switch on the unit.



LEDs

The LEDs on the front panel of the UC 560 are used for monitoring system activity and performance.



LED	Description
SYS	Indicates that the system has successfully booted and is ready to use. The LED flashes green while the system is booting and then turns solid green when booting is complete.
VM	Indicates that voice mail is active. The LED is solid green when voice mail is active.
WAN, PC/EXP, and EXPANSION Ports	Each port has a right and left LED. The left flashes green when there is activity on the port. The right LED is solid green when the connection is active.
Compact Flash (CF)	Flashes green when the compact flash is accessed. Otherwise, the LED is off.

Installing the UC 560

Before you install the UC 560, review the *Regulatory Compliance and Safety Information for Cisco Unified Communications 500 Series Model UC 560 for Small Business* on your product CD.



Note Only install supported Voice Interface Cards (VICs) into the VIC expansion slot of the UC 560. For a list of these cards, see the Cisco Unified Communications Model UC 560 Platform Hardware Reference Guide.

You can place the unit on a desktop or install it in a rack. If you choose the desktop option, install the four rubber feet (included) on the bottom of the unit place it on a flat surface.



CAUTION The UC 560 is not to be wall mounting because of the weight of the device.

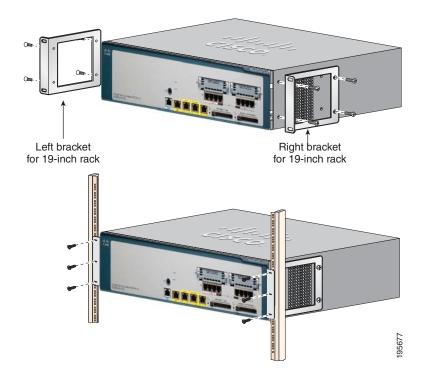
Rack Mounting

You can mount the UC 560 in any standard size, 19-inch (about 48 mm) wide rack. It requires 2 rack units (RU) of space, which is 3.50 inches (9 mm) high.

Placement Tips

- Ambient Temperature—To prevent the device from overheating, do not operate it in an area that exceeds an ambient temperature of 104°F (40°C). Do not block or cover the vents.
- Air Flow—Make sure that there is adequate air flow around the device.
- Mechanical Loading—Check that the device is level and stable to avoid any hazardous conditions.
- Reliable Grounding—Make sure that the unit is grounded and uses suitable electrical supply connections.

- STEP 1 Attach a rack-mount bracket to one side of the chassis with the supplied screws and secure the bracket tightly.
 - Do not overtorque the screws. The recommended torque is 6 to 8 in-lb (0.7 to 0.9 N-m).
- **STEP 2** Follow the same steps to attach the other bracket to the opposite side.
- STEP 3 After the brackets are attached to the unit, use suitable screws to securely attach the brackets to any standard 19-inch rack.



Grounding the Chassis.

The UC 560 chassis must be reliably grounded with a supplementary ground wire to comply with the relevant product safety standards. This supplementary ground is in addition to the ground connection made by the power cord.

For the supplementary ground connection, use size 14 AWG (2 mm) or larger copper wire and an appropriate user-supplied ring terminal with an inner diameter of 1/4 inch (5 to 7 mm).



NOTE The UC 560 is not NEBS-compliant.

To connect the chassis to a reliable earth ground:

- STEP 1 Strip one end of the ground wire to the length required for the ground lug or terminal.
 - For the ground lug, strip approximately 0.75 in. (20 mm).
 - For the user-provided ring terminal, as required.
- STEP 2 Crimp the ground wire to the ground lug or ring terminal, using a crimp tool of the appropriate size.
- STEP 3 Attach the ground lug or ring terminal to the chassis. Tighten the screws to a torque of 8-10 in-lb. (0.9-1.1 N-m).



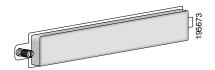
STEP 4 Connect the other end of the ground wire to a known reliable earth ground point. If there is any doubt as to the reliability of the ground point, contact a licensed electrician for assistance.

Installing the Compact Flash Guard

The compact flash (CF) guard provides protection for the compact flash memory.

To install the CF-guard:

- STEP 1 Locate the compact flash slot of the front of the UC 560. See Front Panel, page 5.
- STEP 2 Slip the right tab on the CF-Guard into the slot on the right side of the compact flash opening.
- STEP 3 Place the cover against the surface of the memory slot, aligning the attachment screw on the left side of the CF-Guard with the screw hole in the panel.
- **STEP 4** Tighten the attachment screw on the left side of the CF-guard by using the supplied T5 Torx wrench.





Do not remove the CF-guard when the UC 560 is powered on and running.



Connecting the Equipment

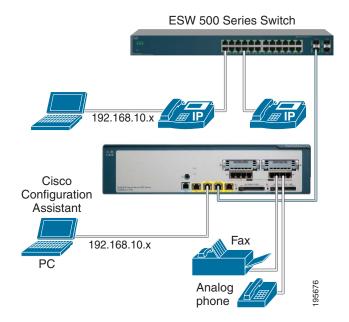
STEP 1 Insert the power cord into the back of the UC 560. Do not connect to power.

STEP 2 Connect the interfaces and devices as described below.

Type of Connection	Description
DSL, cable modem, or broadband network devices.	Connect the supplied Ethernet cable from the device to the WAN port on the front panel of the UC 560. Cisco strongly recommends using Category 5 or better cable.
PSTN analog trunks	Connect an RJ-11 cable to one of the Line (FXO) ports on the front panel of the UC 560. Connect the other end of the cable to a PSTN line or a station interface on a PBX.
Fax machine or analog phone	Connect an RJ-11 cable to one of the Phone (FXS) ports on the front panel of the UC 560. Connect the other end of the cable to the fax machine or phone.
ESW switch	Connect an Ethernet network cable from one of the expansion ports of the UC 560 to one of the uplink ports on the switch.
IP phones and other network devices (such as a wireless access point, IP video cameras, and network attached storage (NAS) devices)	Connect an Ethernet network cable to one of the ports on the ESW switch.
ISDN line ¹ (only applies to model UC560-BRI-K9)	Connect the cable provided by the ISDN provider to one of the Line (BRI) ports on the front panel of the UC 560. Connect the other end of the cable to the ISDN provider equipment.

^{1.} If a T1/EI controller is installed in the VIC slot, connect either a T1/E1 straight-through cable (identical to the Ethernet straight-through cable), or a T1/E1 crossover cable to the controller. Connect the other end of the cable to the ISDN provider equipment. The cable that you use depends on the type of termination on the network interface device (NID), and is the point in which the telephone company network ends and connects with the wiring at the customer site.

STEP 4 Power on the connected devices.



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Verifying the Hardware Installation

To verify the hardware installation, complete the following tasks:

- Check the status of the UC 560 by looking at the LEDs on the front panel See LEDs, page 7.
- Check that the switch is connected is connected to the expansion port.
- To test IP connectivity, launch a Web browser and enter http://192.168.10.1. When the authentication window appears, this means that your system is active.
- Make sure that each connected IP phone displays an internal extension number or a line number, on at least one of the phone line buttons. Verify the phone connectivity by making a call from one phone to another.



Note If you need help resolving a problem, go to the Cisco Small Business Support Community website at: http://www.cisco.com/go/smallbizsupport. For technical documentation and other links, see Suggested Next Steps, page 19 and Where to Go From Here, page 20.

Getting Started with the Configuration

After you install the UC 560, you configure it by using Cisco Configuration Assistant (CCA). CCA is an easy to-use application used to configure, manage, and administer your UC 560 and other devices in the Cisco Smart Business Communications System. It provides everything you need to quickly set up a small office network.



Only use CCA to configure your device. Using the Command-Line Interface (CLI) is not supported.

Installing Cisco Configuration Assistant

To install CCA on your PC:

- STEP 1 Go to this web address to download CCA: http://www.cisco.com/go/configassist.
 - To access the software, you must be a registered user on Cisco.com.
- STEP 2 Click the **Download Software** link in the Support box.
- STEP 3 Enter your Cisco.com Username and Password and click Log In.
- STEP 4 Click Cisco Configuration Assistant. Then select the largest numbered file under Latest Releases (for example, Cisco-configassistant-win-k9-2 1-en.exe).
- STEP 5 Run the installer and follow the prompts. The install wizard will guide you through the installation process.
- **STEP 6** When the setup is complete, click **Finish**.
- **STEP 7** Launch CCA by clicking the CCA icon on your desktop.
 - The **Application Update Check** window appears.
- **STEP 8** Check that you are using the latest version of CCA and install it if required.

Connecting to the UC 560

This section describes how to connect your PC to the UC 560 and how to use CCA to connect to the UC 560.

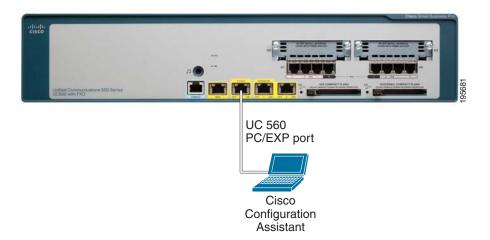
Before you connect your PC, do the following:

- Disable all network interface Cards (NICs) that are not directly connected to the UC 560.
- Turn off any third-party FTP or TFTP services.
- Temporarily disable any software firewalls running on the PC.

To connect to the UC 560:

STEP 1 Connect an Ethernet cable to one of the PC/EXP port the front panel of the UC 560. Connect the other end of the cable to the Ethernet port on your PC.

Verify that the PC is set to use the Dynamic Host Configuration Protocol (DHCP) to obtain its networking parameters (such as IP Address, Subnet Mask, Default Gateway, DNS Server, and so forth).



STEP 2 From CCA, open the **Connect** window and click **Add a New Site**.

This is the preferred way to connect to a Cisco Smart Business Communications System (SBCS).

- **STEP 3** Enter the **name** and **description** for the new customer site.
- STEP 4 From the **Discover Devices** drop-down menu, select **Using a** Starting IP address.

- STEP 5 Enter 192.168.10.1 in the Starting IP Address field.
 - This is the default IP address for the UC 560.
- STEP 6 Click Start.
- STEP 7 When prompted, enter the **username** and **password** for the UC 560 and click **OK**.
 - The default username is **cisco** and the default password is **cisco**. Passwords are case sensitive.
- **STEP 8** If prompted for the login information for a connected ESW switch, enter the switch **username** and **password**. CCA will automatically discover the device.
 - The switch default username is **cisco** and the default password is **cisco**.
- STEP 9 When CCA discovers both the UC 560 and ESW switch (if installed), click OK.

Using the Telephony Setup Wizard

When CCA connects to the UC 560, the **Telephony Setup Wizard** automatically launches. You can also run the Wizard by choosing **Home >Telephony Setup Wizard**. The wizard guides you through the steps needed to configure a basic telephony solution for a Cisco Smart Business Communications System.

Before you begin:

- Gather the information listed in the Welcome window. This is important information about what you must do and know before running the wizard.
- If you are setting up the system for a locale other than US/English, click
 View Localization Instructions and follow the instructions to download and install the language files to your PC.



STEP 1 Click **Next** and follow the prompts to complete the installation.

STEP 2 After the wizard completes:

- Verify Internet connectivity by going to: http://www.cisco.com.
- Test calls to and from the PSTN.
- Test calls to voice mail and Auto Attendant (AA), if configured.
- Verify that the IP phones show the correct date and time.



The Wizard requires that you change the default administrator login and password. Use the new username and password to access and administer the UC 560.

Congratulations! The basic installation of the UC 560 is complete.

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Suggested Next Steps

You are now ready to start using your UC 560. Depending on how you plan to use the UC 560 in your network, here are some suggested next steps to take.

Implementing a Small Business Network Solution

Use Cisco Smart Designs to plan and implement a Small Business network solution.

Cisco Smart Designs are a collection of validated network designs and deployment best practices, that feature simple step-by-step implementation guidance specifically tailored for Small Business Solutions. For more information, see http://www.cisco.com/go/partner/smartdesigns.

Managing your Cisco SBCS Solution

Use CCA to configure, manage, and administer your UC 560 and other devices in your SBCS solution.

For more information, refer to the CCA online help or see the *Cisco Configuration Assistant Smart Business Communications System Administrator Guide* at: http://www.cisco.com/en/US/products/ps7287/tsd_products_support_series_home.html.

See the *Release Notes for Cisco Configuration Assistant* for important information about CCA and any limitations, restrictions, and caveats that apply.

Accessing Product-Specific Feature Documentation

For additional product information for the Cisco Unified Communications 500 Series for Small Business, including Cisco Smart Business Communications System (SBCS) documentation, see http://www.cisco.com/go/sbcs-docs.

Visiting the Cisco Small Business Community Website

Visit the Small Business Support Community website at: http://www.cisco.com/go/smallbizsupport. Here you can find support resources for your product including FAQs, support forums, training and tutorials, Video on Demand (VODs), and additional technical documentation.

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Where to Go From Here

Support		
Cisco Small Business Support Community	http://www.cisco.com/go/smallbizsupport	
Online Technical Support and Documentation (Login Required)	http://www.cisco.com/support	
Phone Support Contacts	http://www.cisco.com/en/US/support/ tsd_cisco_small_business_support_center_contacts .html	
Software Downloads (Login Required)	Go to http://www.cisco.com/public/sw-center/index.shtml and enter the model number in the Software Search box.	
Cisco IP Phones		
Cisco IP Phone SPA 500 Series	http://www.cisco.com/en/US/products/ps9730/index.html	
Cisco IP Phone SPA 525G Deployment Guide	http://www.cisco.com/en/US/docs/voice_ip_comm/ sbcs/deployment_guides/spa525g_phone/ sbcs_spa525g_wireless_deployment_guide.pdf	
Cisco IP Phone Quick User Guides	http://cisco.com/go/sbcs-docs	
Cisco Unified IP Phones 7900 Series	http://www.cisco.com/en/US/products/hw/phones/ps379/	
Cisco Small Business		
Cisco Partner Central for Small Business (Partner Login Required)	http://www.cisco.com/web/partners/sell/smb	
Cisco Small Business Home	http://www.cisco.com/smb	
Marketplace	http://www.cisco.com/go/marketplace	



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