Cisco IP Phone 7914 Expansion Module

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2 Installing the 7914 Expansion Module
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1 Introduction to the Cisco IP Phone 7914 Expansion Module

The Cisco IP Phone 7914 Expansion Module attaches to your Cisco IP Phone 7960, adding 14 line appearances and/or speed dial numbers to your phone. You can attach one or two Expansion Modules to your IP Phone. When you use two Expansion Modules, you have 28 additional line appearances and/or speed dial numbers, or a total of 34 line appearances and/or speed dial numbers.

2 Installing the 7914 Expansion Module

You can attach one or two 7914 Expansion Modules to your IP Phone. Read all of the topics in this section to safely install your 7914 Expansion Module.

• Before You Begin
• Installing the 7914 Expansion Module
Before You Begin

Before you begin installing your 7914 Expansion Module, read all of the following topics in this section:

- Package List
- Footstand Kits
- Additional Equipment
- Safety Notices

Package List

Make sure that you have received all of the following parts in your package:

- One Cisco IP Phone 7914 Expansion Module
- One RS 232 cable
- One Quick Start Guide
- One Warranty Card

Footstand Kits

In addition to the package list items, you will also need a Footstand Kit (separate orderable item). If you are attaching one 7914 Expansion Module, you need to have the single Footstand Kit. If you are attaching two 7914 Expansion Modules, you need to have the double Footstand Kit. The Footstand Kit contains:

- One support bar (single with one thumb screw, or double with two thumb screws)
- One footstand
**Additional Equipment**

You will also need to have the following equipment.

- Small flat head screwdriver—for use during the installation
- Power supply unit—depending on how many Expansion Modules you are installing and how your Cisco IP Phone 7960 is powered, you will require power supply unit(s) as follows:

| Power over the Ethernet to your Cisco IP Phone 7960 | With one or two Expansion Modules, you need a power supply unit (separate orderable item). |
| Local power to your Cisco IP Phone 7960 | With one Expansion Module, no power supply unit needed. With two Expansion Modules, you need a power supply unit (separate orderable item). |

**Note**

Use of a non-Cisco certified power supply unit may not work and will void the 7914 Expansion Module product warranty.

**Safety Notices**

These are the safety considerations for using the 7914 Expansion Module. Read these notices before you install or use the 7914 Expansion Module. For translated warnings, see the *Cisco IP Phone Administration Guide for Cisco CallManager*.

**Warning**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.
Warning: Read the installation instructions before you connect the system to its power source.

Warning: Ultimate disposal of this product should be handled according to all national laws and regulations.

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

Warning: To avoid electric shock, do not connect safety extra low voltage (SELV) circuits to telephone network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports use RJ-45 connectors. Use caution when connecting cables.

The following warnings apply when you use the external power supply with the 7914 Expansion Module:

Warning: This product relies on the building’s installation for short-circuit (over current) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. (240 VAC, 10A international) is used on the phase conductors (all current-carrying conductors).

Warning: The device is designed to work with TN power systems.
Installing the 7914 Expansion Module

**Note** To ensure a successful installation of the 7914 Expansion Module, make sure you have read the entire “Before You Begin” section on page 3.

To install the 7914 Expansion Module, you need to perform the following steps.
1. Remove the Footstand from the Cisco IP Phone 7960
2. Connect the Support Bar to the Cisco IP Phone 7960
3. Connect the 7914 Expansion Module to the Support Bar
4. Connect the RS 232 Cable
5. Connect the Power Supply
6. Connect the Footstand

Refer to the detailed instructions and corresponding illustrations that follow for each of these high-level steps.

**Caution** To ensure a successful installation, verify with your system administrator that your phone is ready for the 7914 Expansion Module and that Cisco CallManager is installed and configured for the 7914 Expansion Module. See the Cisco IP Phone Administration Guide for Cisco CallManager for more information. Make sure that you have all of the parts that you need (see the “Before You Begin” section on page 3).

1. **Remove the Footstand from the Cisco IP Phone 7960**

To remove the footstand from the IP Phone 7960 to which you are attaching the 7914 Expansion Module, follow these steps.

**Step 1** Unplug the Cisco IP Phone 7960 network and power connections.
Step 2  Unplug the handset, and headset if one is attached to the phone.

Step 3  Turn the Cisco IP Phone 7960 over and lay it on a protected flat surface to prevent it from being scratched.

Step 4  On the footstand, locate the two foot pins.

Step 5  Using a flat head screwdriver, carefully push away from your body on one of the foot pins to release it. Then carefully push away from your body on the other foot pin to release it.

**Note**  You may have to lift and hold the IP Phone to support it when pushing the foot pins.

Step 6  Lift off the footstand and store it separately.
2. Connect the Support Bar to the Cisco IP Phone 7960

To connect the support bar to the Cisco IP Phone 7960, follow these steps.

**Step 1** Position the support bar on the back of the IP Phone so that it fits flush with the phone.

**Step 2** Locate the two connector pins.

**Step 3** Using a flat head screwdriver, carefully push each of the connector pins so that the support bar is firmly fastened to the IP Phone.

3. Connect the 7914 Expansion Module to the Support Bar

To connect the Expansion Module to the support bar, follow these steps.

**Step 1** Position the phone so that the front of the phone is facing up.

**Step 2** Line up the two open slots on the bottom of the 7914 Expansion Module with the two hooks on the support bar. Insert the hooks into the slots and then rotate the top of the 7914 Expansion Module into the support bar so that it rests flush with the bar.

**Step 3** Tighten the thumb screw on the back of the 7914 Expansion Module.
Note

If you are installing two Expansion Modules, repeat Steps 2 and 3 for the second Expansion Module.
4. Connect the RS 232 Cable

To connect the RS 232 cable, follow these steps, and refer to the following table, which depicts the “in” and “out” icons on the RS 232 jacks.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Open slots on the 7914 Expansion Module</td>
</tr>
<tr>
<td>2.</td>
<td>Hooks on the support bar</td>
</tr>
<tr>
<td>3.</td>
<td>Insert and rotate the 7914 Expansion Module into the support bar</td>
</tr>
<tr>
<td>4.</td>
<td>Tighten the thumb screws</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In icon</th>
<th>Out icon</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="In icon" /></td>
<td><img src="image" alt="Out icon" /></td>
</tr>
</tbody>
</table>

**Step 1**  Plug one end of the RS 232 cable into the jack labeled RS 232 on the Cisco IP Phone 7960.

**Step 2**  Plug the other end of the RS 232 cable into the RS 232 jack with the “in” icon underneath on the 7914 Expansion Module.

**Note**  If you are installing a second 7914 Expansion Module, continue with Steps 3 and 4. Otherwise go to the “5. Connect the Power Supply” section on page 11.

**Step 3**  Plug one end of the second RS 232 cable into the RS 232 jack with the “out” icon underneath on the 1st Expansion Module.

**Step 4**  Plug the other end of the second RS 232 cable into the RS 232 jack with the “in” icon underneath on the 2nd Expansion Module.
5. Connect the Power Supply

To connect the power supply, follow these steps.

**Step 1**  Depending on how your Cisco IP Phone 7960 is powered, perform one of the following actions:
  - If your Cisco IP Phone 7960 is powered over the Ethernet and:
    - you have one Expansion Module—connect the power supply unit to the AC adaptor port on the Expansion Module and plug the other end into a standard electrical power outlet in the wall.
- you have two Expansion Modules—connect the power supply unit to the AC adaptor port on the Expansion Module closest to the IP Phone and plug the other end into a standard electrical power outlet in the wall.

- If your Cisco IP Phone 7960 is powered with a power supply unit and:
  - you have one Expansion Module—reconnect the original IP Phone power supply unit to the AC adaptor port on the IP Phone and plug the other end into a standard electrical power outlet in the wall.
  - you have two Expansion Modules, then connect a second power supply unit to the AC adaptor port on the Expansion Module closest to the IP Phone and plug the other end into a standard electrical power outlet in the wall.

<table>
<thead>
<tr>
<th>1</th>
<th>Power supply connector on the back of the Expansion Module</th>
</tr>
</thead>
</table>

**Step 2** Reconnect the Cisco IP Phone 7960 handset and network connections.
6. Connect the Footstand

To connect the footstand to the support bar, follow these steps.

**Step 1**  Locate the three hooks on the footstand.

**Step 2**  Position the hooks so that they align with the two open slots on the support bar.

**Note**  There are four positions in each of the three sets of open slots on the support bar. This lets you choose the angle of the footstand.

**Step 3**  Insert the footstand hooks into the support bar and push in slightly to make the connection.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Slots on the support bar</td>
</tr>
<tr>
<td>2</td>
<td>Hooks on the footstand</td>
</tr>
<tr>
<td>3</td>
<td>Insert and rotate footstand to connect to support bar</td>
</tr>
</tbody>
</table>
Start Up Sequence

After the 7914 Expansion Module is installed, upon startup the lighted buttons will all light steady red. Then the LCD screen refreshes and the lighted buttons will all go off and any line appearances will be displayed in the LCD screen. You can then start using the Expansion Module.

3 Features

The 7914 Expansion Module includes the following features.
How to Use the 7914 Expansion Module

The 7914 Expansion Module functions as a line appearance or speed dial module, allowing you to keep track of calls in progress, calls on hold, and calls requiring transfer. All call functions, such as answering a call, placing a call on hold, transferring a call, and so on, are performed from the Cisco IP Phone 7960. See the Cisco IP Phone 7960 and 7940 Series User Guide for instructions about using the IP Phone. To configure speed dial numbers, see the “Configuring Speed Dial Numbers” section on page 16.

Here is a typical scenario when using the Cisco IP Phone 7960 and 7914 Expansion Module combination.

You receive a call for your Director at extension 12345. You look at your 7914 Expansion Module and see that your Director has a call in progress with another party and also has another call on hold. Looking down the 7914 Expansion Module LCD screen, you note that another
manager in your group has just completed a call and could possibly assist the incoming caller. You consult briefly with the incoming caller and then transfer the call to the manager.

**Configuring Speed Dial Numbers**

Similar to the Cisco IP Phone 7960, you can configure speed dial numbers on the 7914 Expansion Module. Before you can configure speed dial numbers, contact your system administrator to find out:

- the URL to your Cisco IP Phone User Options Web page
- your Cisco IP Phone User Options Web page user name and password

After you have this information, you can configure your speed dial numbers.

To configure speed dial numbers, follow these steps.

**Step 1** Use your Web browser to access the URL provided by your system administrator. The Cisco IP Phone User Options logon page appears.

**Step 2** Enter your user ID and your password and click Log On. The User Options Menu page appears.

**Step 3** From the Select a device or device profile to configure drop-down list box, select your Cisco IP Phone 7960. The User Options Menu page redisplays with a list of configuration options.

**Step 4** Click Add/Update your Speed Dials. The Add/Update Your Speed Dials page appears, with sections for Speed Dial Settings on your Base Phone, and Speed Dial Settings for Line Extension Module 1 and Line Extension Module 2 (if you have two Expansion Modules).
Step 5 Scroll down to the Speed Dial Settings for Line Extension Module 1. You can set up speed dial numbers 5 - 18.

Note Do not set up 911 as a speed dial number on the 7914 Expansion Module.

Step 6 In the Speed Dial number field, enter the complete phone number or extension.

Step 7 In the Display Text field, enter the name associated with the speed dial number. If you leave this field blank, the LCD displays the speed dial number.

Step 8 If you have a second Expansion Module, scroll down to the Speed Dial Settings for Line Extension Module 2. You can set up speed dial numbers 19 - 32. Refer back to Steps 9 and 10.

Step 9 After you configure all your speed dial numbers, click Update.

The LCD screen on the Cisco IP Phone 7960 flashes for an instant and redisplayes. The lighted buttons on the Expansion Module(s) go dark and then shine steady red. Next, the 1st lighted button on the first Expansion Module flashes green and the LCD screen redisplayes with the speed dial numbers you configured. If you have a second Expansion Module, the 1st lighted button flashes green and the LCD screen redisplayes with the speed dial numbers you configured for that module.

Step 10 On the Speed Dial Configuration page, click Log off.
Adjusting the Contrast

Similar to the Cisco IP Phone 7960, you can adjust the contrast on the 7914 Expansion Module.

To adjust the contrast, follow these steps.

**Step 1**  On the Cisco IP Phone 7960, press the Settings button.

**Step 2**  Select **Contrast**, and press the **Select** softkey.

**Step 3**  Select Expansion Module(s) from the Contrast menu.

The Expansion Module 1 Contrast screen appears.

**Step 4**  Press the Up and Down softkeys to obtain the desired contrast on the 1st Expansion Module.

If you have a second Expansion Module, continue with Step 5. Otherwise go to Step 7.

**Step 5**  If you:

- have a second Expansion Module—press Next.

  The Expansion Module 2 Contrast screen appears.

  Press the Up and Down softkeys to obtain the desired contrast on the 2nd Expansion Module.

- do not have a second Expansion Module—press the Exit softkey to accept and save your changes.

5 Troubleshooting

Refer to the following table if you are having difficulty using your 7914 Expansion Module.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
</table>
| No display on the 7914 Expansion Module | • Verify that all of the cable connections are correct.  
                                           • Verify that you have power to the 7914 Expansion Module(s). |
If you are experiencing other difficulties, contact your system administrator.

6 Technical Specifications

This section provides the physical and operating environment specifications for the Cisco IP Phone 7914 Expansion Module, as well as the regulatory compliance information.

Physical and Operating Environment Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value or Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>0° to 40°C (32° to 104°F)</td>
</tr>
<tr>
<td>Operating relative humidity</td>
<td>10% to 95% (non-condensing)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-10° to 60°C (14° to 140°F)</td>
</tr>
<tr>
<td>Height</td>
<td>203mm, 8.0 inches</td>
</tr>
<tr>
<td>Width</td>
<td>121 mm, 4.75 inches</td>
</tr>
<tr>
<td>Depth</td>
<td>51 mm, 2.0 inches</td>
</tr>
<tr>
<td>Weight</td>
<td>366 g, 0.82 lbs.</td>
</tr>
<tr>
<td>Power</td>
<td>48V DC, 40mA max</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighted buttons on the first 7914 Expansion Module are all red.</td>
<td>Verify with your system administrator that your 7914 Expansion Module is defined in Cisco CallManager.</td>
</tr>
<tr>
<td>Lighted buttons on the second 7914 Expansion Module are all amber.</td>
<td>Verify with your system administrator that your 7914 Expansion Module is defined in Cisco CallManager.</td>
</tr>
</tbody>
</table>
Cable Specifications

- 2 RJ-11 jacks with 6 pin connectors for the RS 232 cable connections.
- 48-volt power connector. The diameter of the center pin in the Expansion Module power jack (Switchcraft 712A) is .1" (2.5 mm). The center pin is positive (+) voltage. The miniature power plug required to mate with the power jack on the Expansion Module is a Switchcraft 760 or equivalent.

Regulatory Compliance

The 7914 Expansion Module meets the following regulatory compliance and safety standards.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Compliance</td>
<td>Products bear CE Marking, indicating compliance with the 89/366/EEC, 73/23/EEC directive, which includes the following safety and EMC standards.</td>
</tr>
<tr>
<td>Safety</td>
<td>UL 1950</td>
</tr>
<tr>
<td></td>
<td>CSA-C22.2 No. 950</td>
</tr>
<tr>
<td></td>
<td>EN 60950</td>
</tr>
<tr>
<td></td>
<td>IEC 60950</td>
</tr>
<tr>
<td>EMC</td>
<td>FCC Part 15 (CFR 47) Class B</td>
</tr>
<tr>
<td></td>
<td>ICES-003 Class B</td>
</tr>
<tr>
<td></td>
<td>EN55022 Class B</td>
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<tr>
<td></td>
<td>CISPR22 Class B</td>
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<tr>
<td></td>
<td>AS/NZS 3548 Class B</td>
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<tr>
<td></td>
<td>VCCI Class B</td>
</tr>
<tr>
<td></td>
<td>EN55024</td>
</tr>
<tr>
<td></td>
<td>EN50082-1</td>
</tr>
<tr>
<td></td>
<td>EN 61000-3-2</td>
</tr>
<tr>
<td></td>
<td>EN 61000-3-3</td>
</tr>
</tbody>
</table>
7 For More Information

The following sections provide sources for obtaining documentation from Cisco Systems.

Related Documentation

The following documents provide additional information.

- **Cisco IP Phone Administration Guide for Cisco CallManager**—Provides instructions for the system administrator about configuring the 7914 Expansion Module in Cisco CallManager.
  

- **Cisco IP Phone 7960 and 7940 Series User Guide**—Provides instructions to end users for using the IP Phone.
  

- Cisco CallManager documentation—Provides instructions for using the Cisco CallManager Administration application to configure IP Phones and services.
  

Obtaining Documentation

These sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

http://www.cisco.com

Translated documentation is available at this URL:

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:
  http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
  http://www.cisco.com/go/subscription
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit comments electronically on Cisco.com. In the Cisco Documentation home page, click the Fax or Email option in the “Leave Feedback” section at the bottom of the page.

You can e-mail your comments to bug-doc@cisco.com.

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.
8 Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world. Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you with these tasks:

• Streamline business processes and improve productivity
• Resolve technical issues with online support
• Download and test software packages
• Order Cisco learning materials and merchandise
• Register for online skill assessment, training, and certification programs

If you want to obtain customized information and service, you can self-register on Cisco.com. To access Cisco.com, go to this URL:

http://www.cisco.com

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC Web Site and the Cisco TAC Escalation Center.
Cisco TAC inquiries are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

**Cisco TAC Web Site**

You can use the Cisco TAC Web Site to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to this URL: http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

http://www.cisco.com/register/

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC Web Site, you can open a case online by using the TAC Case Open tool at this URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.
Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.