Preface

Objective

The Cisco VCO/4K Hardware Installation Guide describes the procedures for installing and connecting a VCO/4K system. Before installation, read the *Cisco VCO/4K Hardware Planning Guide*, along with the *Cisco VCO/4K Site Preparation Guide*.

Use the checklist in the *Cisco VCO/4K Site Preparation Guide* to verify that the site is prepared according to the guidelines.

Note

This document represents the most current information about VCO/4K mechanical assemblies. If you need information pertaining to VCO/4K assemblies, circuit cards, or other components that are not included in this document, see the following URL on Cisco's web site for legacy VCO/4K information:

http://www.cisco.com/univercd/cc/td/doc/product/tel_pswt/index.htm

Audience

This manual is intended for VCO/4K system users and third-party support personnel. If you are unfamiliar with the VCO/4K system, refer to one or more of the related documents listed in the "Related Documentation" section on page viii.

This manual assumes that the host application (if it is a hosted system) is written to conform to the VCO API Programming Reference Manual. However, that does not preclude problems occurring between the application and the VCO/4K system.

Each release of the VCO/4K Generic is described in the *Cisco VCO/4K Release Notes* that contain detailed information on changes from one release to the next. If your VCO/4K System includes the SS7 subsystem, refer to the *SS7 Release Notes*.

Conventions



This document uses the following conventions:

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.



Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Warning Means *danger.* You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translated versions of the warning, refer to the *Regulatory Compliance and Safety* document that accompanied the device.

Document Organization and Use

The Cisco VCO/4K Hardware Installation Guide is organized as follows:

- Chapter 1, "System Installation," explains how to move, unpack, check for damage, install the system in a cabinet or rack, connect the power, and connect cables.
- Chapter 2, "Peripheral Equipment Installation," describes connection options for VCO/4K peripheral equipment.
- Chapter 3, "Power, Configuration, and Testing," describes connecting power to the Power Entry Module, power-on procedures, and system testing.
- Chapter 4, "Cutover and Acceptance Testing," describes the transition to call handling.

Related Documentation

The following documents are referenced from this guide or contain information that is directly related to system performance and configuration.

Knowledge of PSTN communication protocols is also important.

VCO/4K System

- Cisco VCO/4K System Software Release Note
- Cisco VCO/4K SS7 ISUP Release Notes
- Cisco VCO/4K TCAP Release Notes
- Cisco VCO/4K Product Overview
- Cisco VCO/4K Hardware Planning Guide

- Cisco VCO/4K System Maintenance Manual
- Cisco VCO/4K Mechanical Assemblies
- Cisco VCO/4K Standard Programming Reference
- Cisco VCO/4K Extended Programming Reference
- Cisco VCO/4K System Administrator's Guide
- Cisco VCO/4K Ethernet Guide
- Cisco VCO/4K Site Preparation Guide
- Cisco VCO/4K Card Technical Descriptions
- Cisco VCO/4K Troubleshooting Guide
- *Ring Generator Instruction Sheet* (included with the ring generator kit)

The VCO/4K documents are available at:

http://www.cisco.com/univercd/cc/td/doc/product/tel_pswt/

Third-party Documents

The following third-party documents are recommended by Cisco:

- Theodore Frankel's ABC Of the Telephone: Traffic Series Tables For Traffic Management And Design
- International Telecommunications Union ITU-T Q.931 ISDN documentation
- ANSI T1.113-1992, SS7 ISUP documentation
- OEM manuals supplied with peripheral equipment installed as part of the system configuration
- The documentation set produced for the host computer system
- · Documentation for the application software package developed to run on the host

Obtaining Documentation

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

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- http://www.cisco.com
- http://www-china.cisco.com
- http://www-europe.cisco.com

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships 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 as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

• Registered 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 corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

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

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

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

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic
 product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

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

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

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

Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

 P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available. • P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.