



## About This Guide

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## Document Objectives

This guide describes how to install the Cisco PIX security appliance hardware components.

## Audience

This guide is for network administrators who perform any of the following tasks:

- Managing network security
- Installing and configuring firewalls, security appliances, or similar network equipment
- Managing default and static routes, and TCP and UDP services

## Document Organization

This guide includes the following chapters:

- [Chapter 1, “Preparing for Installation,”](#) describes the installation overview, safety recommendations, and general site requirements.
- [Chapter 2, “PIX 501,”](#) provides a product overview, installation instructions, and lithium battery replacement instructions.
- [Chapter 3, “PIX 506/506E,”](#) provides a product overview, installation instructions, and lithium battery replacement instructions.

- [Chapter 4, “PIX 515/515E,”](#) provides a product overview, installation instructions, as well as the procedure to remove and replace the chassis cover. This chapter also includes installation procedures for the circuit board and installation of the DC model.
- [Chapter 5, “PIX 520,”](#) provides a product overview, installation instructions, as well as the procedure to remove and replace the chassis cover. This chapter also includes the procedure for installation of the DC model.
- [Chapter 6, “PIX 525,”](#) provides a product overview, installation instructions, as well as the procedure to remove and replace the chassis cover. This chapter also includes installation procedures for the circuit board and installation of the DC model.
- [Chapter 7, “PIX 535,”](#) provides a product overview, installation instructions, as well as the installation procedure for the circuit board and installation of the DC model.
- [Appendix A, “Cable Pinouts,”](#) provides cable pinouts.

## Document Conventions

Command descriptions use these conventions:

- Braces ( { } ) indicate a required choice.
- Square brackets ( [ ] ) indicate optional elements.
- Vertical bars ( | ) separate alternative, mutually exclusive elements.
- **Boldface** indicates commands and keywords that are entered literally as shown.
- *Italics* indicate arguments for which you supply values.

Examples use these conventions:

- Examples depict screen displays and the command line in `screen` font.
- Information you need to enter in examples is shown in **boldface screen** font.
- Variables for which you must supply a value are shown in *italic screen* font.

Graphic user interface access uses these conventions:

- **Boldface** indicates buttons and menu items.
- Selecting a menu item (or screen) is indicated by the following convention:

Click **Start > Settings > Control Panel**.

**Note**

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

## Warning Definition

**Warning****IMPORTANT SAFETY INSTRUCTIONS**

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. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

**SAVE THESE INSTRUCTIONS****Waarschuwing****BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van de standaard praktijken om ongelukken te voorkomen. Gebruik het nummer van de verklaring onderaan de waarschuwing als u een vertaling van de waarschuwing die bij het apparaat wordt geleverd, wilt raadplegen.

**BEWAAR DEZE INSTRUCTIES****Varoitus****TÄRKEITÄ TURVALLISUUSOHJEITA**

Tämä varoitusmerkki merkitsee vaaraa. Tilanne voi aiheuttaa ruumiillisia vammoja. Ennen kuin käsittelet laitteistoa, huomioi sähköpiirien käsittelemiseen liittyvät riskit ja tutustu onnettomuuksien yleisiin ehkäisytapoihin. Turvallisuusvaroitusten käännökset löytyvät laitteen mukana toimitettujen käännettyjen turvallisuusvaroitusten joukosta varoitusten lopussa näkyvien lausuntonumeroiden avulla.

**SÄILYTÄ NÄMÄ OHJEET**

**Attention    IMPORTANTES INFORMATIONS DE SÉCURITÉ**

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

**CONSERVEZ CES INFORMATIONS****Warnung    WICHTIGE SICHERHEITSHINWEISE**

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

**BEWAHREN SIE DIESE HINWEISE GUT AUF.****Avvertenza    IMPORTANTI ISTRUZIONI SULLA SICUREZZA**

Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di intervenire su qualsiasi apparecchiatura, occorre essere al corrente dei pericoli relativi ai circuiti elettrici e conoscere le procedure standard per la prevenzione di incidenti. Utilizzare il numero di istruzione presente alla fine di ciascuna avvertenza per individuare le traduzioni delle avvertenze riportate in questo documento.

**CONSERVARE QUESTE ISTRUZIONI****Advarsel    VIKTIGE SIKKERHETSINSTRUKSJONER**

Dette advarselssymbolet betyr fare. Du er i en situasjon som kan føre til skade på person. Før du begynner å arbeide med noe av utstyret, må du være oppmerksom på farene forbundet med elektriske kretser, og kjenne til standardprosedyrer for å forhindre ulykker. Bruk nummeret i slutten av hver advarsel for å finne oversettelsen i de oversatte sikkerhetsadvarslene som fulgte med denne enheten.

**TA VARE PÅ DISSE INSTRUKSJONENE****Aviso    INSTRUÇÕES IMPORTANTES DE SEGURANÇA**

Este símbolo de aviso significa perigo. Você está em uma situação que poderá ser causadora de lesões corporais. Antes de iniciar a utilização de qualquer equipamento, tenha conhecimento dos perigos envolvidos no manuseio de circuitos elétricos e familiarize-se com as práticas habituais de prevenção de acidentes. Utilize o número da instrução fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham este dispositivo.

**GUARDE ESTAS INSTRUÇÕES**

**¡Advertencia! INSTRUCCIONES IMPORTANTES DE SEGURIDAD**

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

**GUARDE ESTAS INSTRUCCIONES****Varning! VIKTIGA SÄKERHETSANVISNINGAR**

Denna varningssignal signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanliga förfaranden för att förebygga olyckor. Använd det nummer som finns i slutet av varje varning för att hitta dess översättning i de översatta säkerhetsvarningar som medföljer denna anordning.

**SPARA DESSA ANVISNINGAR****FONTOS BIZTONSÁGI ELOÍRÁSOK**

Ez a figyelmeztető jel veszélyre utal. Sérülésveszélyt rejtő helyzetben van. Mielott bármely berendezésen munkát végezte, legyen figyelemmel az elektromos áramkörök okozta kockázatokra, és ismerkedjen meg a szokásos balesetvédelmi eljárásokkal. A kiadványban szereplő figyelmeztetések fordítása a készülékhez mellékelt biztonsági figyelmeztetések között található; a fordítás az egyes figyelmeztetések végén látható szám alapján kereshető meg.

**ORIZZE MEG EZEKET AZ UTASÍTÁSOKAT!****Предупреждение ВАЖНЫЕ ИНСТРУКЦИИ ПО СОБЛЮДЕНИЮ ТЕХНИКИ БЕЗОПАСНОСТИ**

Этот символ предупреждения обозначает опасность. То есть имеет место ситуация, в которой следует опасаться телесных повреждений. Перед эксплуатацией оборудования выясните, каким опасностям может подвергаться пользователь при использовании электрических цепей, и ознакомьтесь с правилами техники безопасности для предотвращения возможных несчастных случаев. Воспользуйтесь номером заявления, приведенным в конце каждого предупреждения, чтобы найти его переведенный вариант в переводе предупреждений по безопасности, прилагаемом к данному устройству.

**СОХРАНИТЕ ЭТИ ИНСТРУКЦИИ**

**警告** 重要的安全性说明

此警告符号代表危险。您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾提供的声明号码来找到此设备的安全性警告说明的翻译文本。

请保存这些安全性说明

**警告** 安全上の重要な注意事項

「危険」の意味です。人身事故を予防するための注意事項が記述されています。装置の取り扱い作業を行うときは、電気回路の危険性に注意し、一般的な事故防止策に留意してください。警告の各国語版は、各注意事項の番号を基に、装置に付属の「Translated Safety Warnings」を参照してください。

これらの注意事項を保管しておいてください。

## Cautions

This section includes the following cautions:

- [DC Power Connection Warning, page xii](#)
- [Lightening Protection Installation Warning, page xiii](#)
- [Power Supply Disconnection Warning, page xiii](#)
- [Jewelry Removal Warning, page xiii](#)
- [AC Power Disconnection Warning, page xiii](#)
- [TN Power Warning, page xiii](#)
- [48 VDC Power System, page xiii](#)
- [More Than One Power Cord, page xiii](#)
- [Circuit Breaker \(15A\) Warning, page xiv](#)
- [Grounded Equipment Warning, page xiv](#)
- [Safety Cover Requirement, page xiv](#)
- [Faceplates and Cover Panel Requirement, page xiv](#)
- [Wrist Strap Warning, page xiv](#)

### DC Power Connection Warning


**Caution**

After wiring the DC power supply, remove the tape from the circuit breaker switch handle and reinstate power by moving the handle of the circuit breaker to the ON position.

### Lightening Protection Installation Warning

**Caution**

Lightning protection or grounding blocks are required to isolate or protect the in-building equipment from the hazards associated with the outside plant or outside environment. Lightning protectors and/or grounding blocks are normally installed outside the building just prior to the coaxial cable entering the building.

### Power Supply Disconnection Warning

**Caution**

Before working on a chassis or working near power supplies, unplug the power cord on AC units; disconnect the power at the circuit breaker on DC units.

### Jewelry Removal Warning

**Caution**

Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.

### AC Power Disconnection Warning

**Caution**

Before working on a chassis or working near power supplies, unplug the power cord on AC units.

### TN Power Warning

**Caution**

The device is designed to work with TN power systems.

### 48 VDC Power System

**Caution**

The customer 48 volt power system must provide reinforced insulation between the primary AC power and the 48 VDC output.

### More Than One Power Cord

**Caution**

This unit might have more than one power cord. To reduce the risk of electrical shock, disconnect all power supply cords before servicing the unit.

### Circuit Breaker (15A) Warning

**Caution**

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that a UL Listed and Certified fuse or circuit breaker no larger than 60 VDC, 15 A is used on all current-carrying conductors.

### Grounded Equipment Warning

**Caution**

This equipment is intended to be grounded. Ensure that the host is connected to earth ground during normal use.

### Safety Cover Requirement

**Caution**

The safety cover is an integral part of the product. Do not operate the unit without the safety cover installed. Operating the unit without the cover in place will invalidate the safety approvals and pose a risk of fire and electrical hazards.

### Faceplates and Cover Panel Requirement

**Caution**

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.

### Wrist Strap Warning

**Caution**

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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