



Nortel CallPilot

703t Server Hardware Installation

Document status: Standard
Document version: 01.01
Document date: 23 February 2007

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The following applies to server models 1005r, 703t, and 1002rp:

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This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective action.

Publication History

February 2007

CallPilot 5.0, Standard 01.01 of the *703t Server Hardware Installation* guide is issued for general release.

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Chapter 1

How to get help

This section explains how to get help for Nortel products and services.

Getting help from the Nortel Web site

The best way to get technical support for Nortel products is from the Nortel Technical Support Web site:

<http://www.nortel.com/support>

This site provides quick access to software, documentation, bulletins, and tools to address issues with Nortel products. More specifically, the site enables you to:

- download software, documentation, and product bulletins
- search the Technical Support Web site and the Nortel Knowledge Base for answers to technical issues
- sign up for automatic notification of new software and documentation for Nortel equipment
- open and manage technical support cases

Getting help over the phone from a Nortel Solutions Center

If you don't find the information you require on the Nortel Technical Support Web site, and have a Nortel support contract, you can also get help over the phone from a Nortel Solutions Center.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following Web site to obtain the phone number for your region:

<http://www.nortel.com/callus>

Getting help from a specialist by using an Express Routing Code

To access some Nortel Technical Solutions Centers, you can use an Express Routing Code (ERC) to quickly route your call to a specialist in your Nortel product or service. To locate the ERC for your product or service, go to:

<http://www.nortel.com/erc>

Getting help through a Nortel distributor or reseller

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller.

Chapter 2

703t server description

In this chapter

"Server features" (page 11)

"Slot assignments" (page 16)

"Network connectivity" (page 17)

"Network connectivity" (page 17)

"Supported peripheral devices" (page 20)

"Reference documents" (page 21)

Server features

This section provides a general overview of the 703t server.

Server dimensions

Height	chassis only: 420 mm (16.75 in.)
	with chassis feet: 440 mm (17.5 in.)
Width	chassis only: 215 mm (8.6 in.)
	with chassis feet: 320 mm (12.7 in.)
Depth (distance from front to back)	650 mm (26 in.)

Clearance	<ul style="list-style-type: none"> • front: 250 mm (10 in.) • rear: 125 mm (5 in.) • side: 75 mm (3 in.) <p>Note: Additional side clearance is required for service.</p> <ul style="list-style-type: none"> • top: 75 mm (3 in.)
Weight of fully loaded system with	approximately 22 kg (46 lb)
	<ul style="list-style-type: none"> • two SCSI hard drives • six populated boards • CD-ROM drive • floppy drive • tape drive

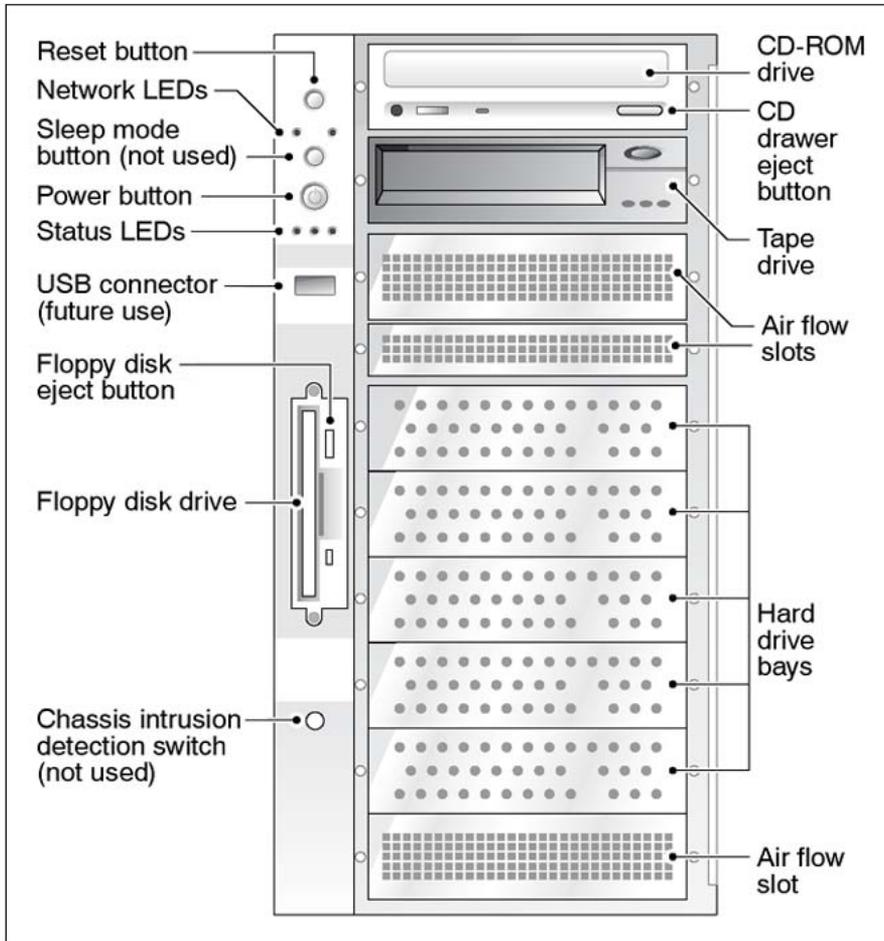
Environmental specifications

Environmental condition	Specification
Operating temperature	10°C to 35°C (50°F to 95°F)
	Maximum rate of change must not exceed 10°C (50°F) per hour.
Non-operating (storage) temperature	-40°C to 70°C (-40°F to 158°F)
Non-operating humidity	95%, non-condensing at 30°C (86°F)
Altitude	1829 m (6000 ft)
Electrostatic discharge	15 kV or more
Acoustic noise	50 dBA in a typical office ambient temperature (18°C to 25°C [64.4°F to 77°F])
Operating shock	No errors with a half sine wave shock of 2G (with 1 millisecond duration)
Handling drop	Operational after a free fall from 450 mm to 600 mm (18 in. to 24 in.) (depending on weight)

Front panel features

The following diagram shows the 703t server's front panel features:

The table below describes the parts that are identified in the preceding diagram:

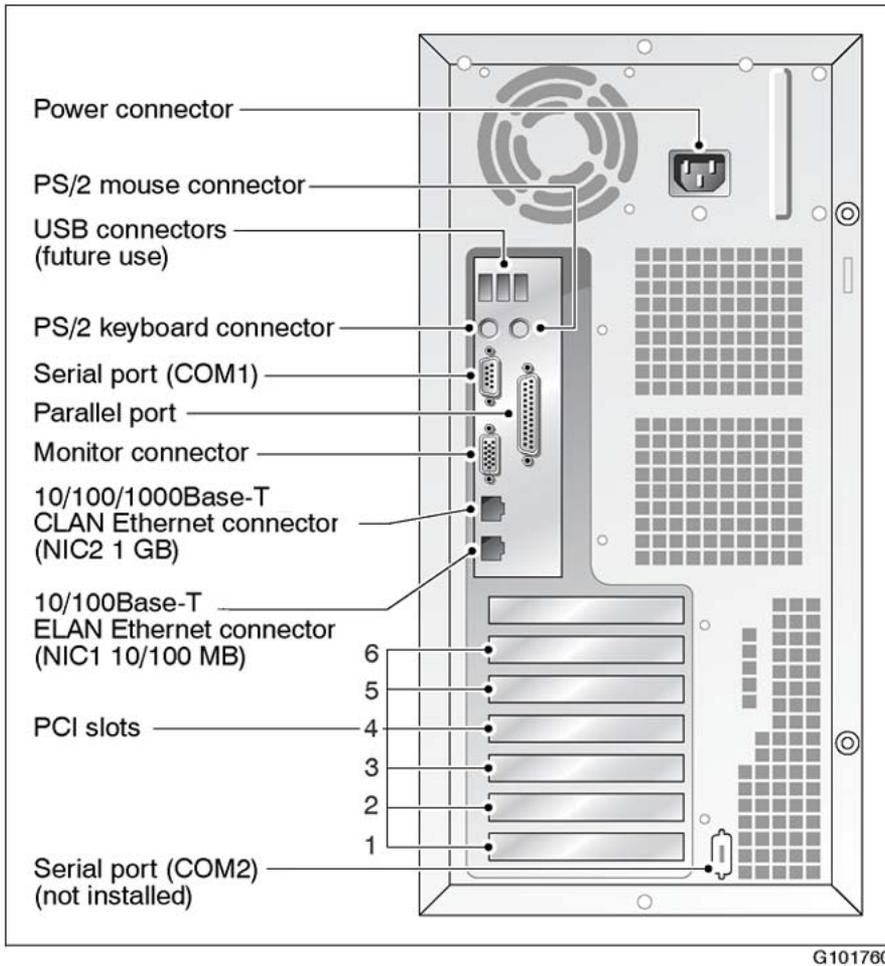


Part	Function
Reset button	Triggers a hardware (cold) reset. Do not use this button to perform a server restart. Restart the server as described in "Restarting the server" in the <i>Installation and Configuration Task List</i> (NN44200-306).

Part	Function
Network controller LEDs (green)	<p>Left: 10/100Base-T controller LED (NIC1 10/100 MB: ELAN for Meridian 1*/CS 1000* connection)</p> <p>Right: 10/100/1000Base-T controller LED (NIC2 1 GB: CLAN for Customer LAN connection)</p>
Sleep mode button	Not used
Power button	Turns the server's power on or off.
Status LEDs	<p>Indicates when the server is powered up and the disk drives are active.</p> <ul style="list-style-type: none"> • Left: hard drive activity LED (not used) • Center: power/sleep LED (green) • Right: status LED (bi-color) indicates whether the server is functioning properly, or whether a hardware event has occurred.
USB connector	For future use
Floppy disk eject button	Ejects the floppy disk.
Floppy drive	Drive for 3-1/2 inch diskettes.
IDE CD-ROM drive (5.25 in.)	Enables you to use the CallPilot software and documentation CD-ROMs.
CD drive eject button	Opens the CD-ROM drawer. Push the button again to close the drawer.
Backup tape drive	Allows backup of hard drive data.
Hard drive 1	10,000 rpm hard drive
Hard drive 2	10,000 rpm hard drive
Drive bay	Vacant
Drive bay	Vacant
Drive bay	Vacant
Air flow slot	Must remain empty for proper system cooling.

Rear panel diagram

The following diagram shows the 703t server's rear panel features:



Note: For more information, see "Slot assignments" (page 16).

The table below describes the parts that are identified in the preceding diagram:

Part	Color
AC power supply connector (450 W non hot-swap power supply)	Not applicable
USB connectors	Not applicable
PS/2 keyboard connector	Purple
PS/2 mouse connector	Green
COM1 serial port connector (9-pin)	Teal
Parallel port connector (25-pin)	Pink

Part	Color
Monitor connector (15-pin)	Blue
10/100/1000Base-T CLAN network connector for Customer LAN connection (NIC2 1 GB)	Not applicable
Note: For more information, see " LAN connectivity " (page 19).	
10/100Base-T ELAN network connector for Meridian 1/CS 1000 connection(NIC1 10/100 MB)	Not applicable
Note: For more information, see " LAN connectivity " (page 19).	
PCI slots (6)	Not applicable
<ul style="list-style-type: none"> • Four slots are 100 MHz 3.3 V 64-bit PCI slots. • Two slots are 33 MHz 5 V 32-bit PCI slots. 	
Note: For more information, see " Slot assignments " (page 16).	
COM2 serial port connector slot (not installed)	Teal

Slot assignments

The slot assignment tables show

- the physical location of boards inside the server, relative to other boards
- the order in which boards are installed (for example, board #1, 2, 3, and so on)
- how the boards are represented in CallPilot Manager applications (that is, on the Maintenance Administration page)
- the maximum capacity for each switch connectivity

Note: Your server may vary depending on what was ordered from Nortel; therefore, your server may not have all of the slots populated.

Slot definition and numbering

In the following table, the term "slot" refers to the available slot openings in the chassis, not the PCI connectors inside the server.

The slots are numbered from the bottom of the server to the top. Slot 1 is the bottom slot in the chassis when the chassis is standing upright.

Slot number	CallPilot-assigned board label ^a	Meridian 1 or Communication Server 1000
7 (not a slot)	Not used	Not used
PCI slot 6 (full length)	BRD06	RAID card
PCI slot 5 (full length)	BRD05	Not used
PCI slot 4 (full length)	BRD04	MPB96 board
PCI slot 3 (full length)	BRD03	Not used
PCI slot 2 (full length)	BRD02	Not used
PCI slot 1 (full length)	BRD01	Not used

a. In CallPilot Manager applications, the CallPilot-assigned board label may appear. This label corresponds to the slot number. For example, BRD01 refers to the board in slot 1.

Network connectivity

This section describes how the 703t server can be integrated into your network. The integration depends on the type of switch you are using.

ATTENTION

To secure the CallPilot server from unauthorized access, ensure that the CallPilot network is inside your organization's firewall.

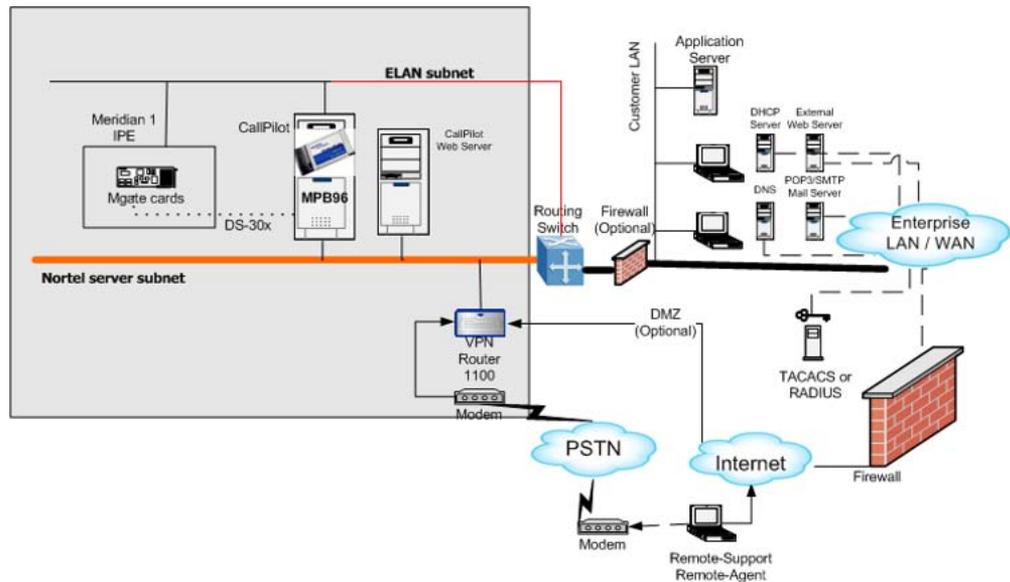
Sample network setup: Meridian 1

The Meridian 1 switch can be one of the following:

- Option 11C or Option 11C Mini using fiber connections
- Option 51C

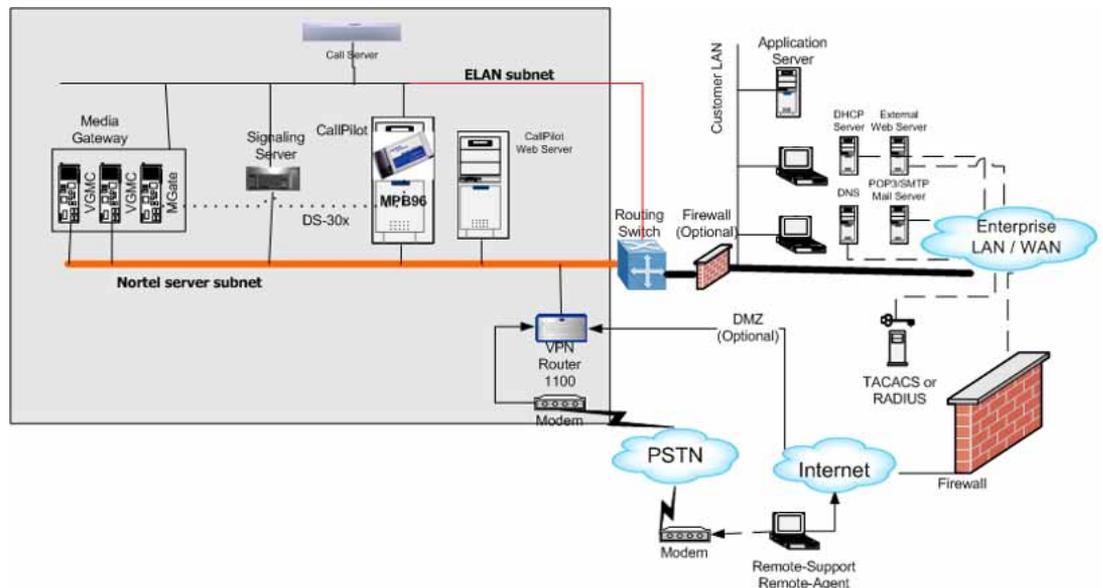
- Option 61C
- Options 81 and 81C

The following diagram shows a CallPilot 703t server network setup with a Meridian 1 switch.



Sample network setup: Communication Server 1000

The following diagram shows a CallPilot 703t server network setup with a CS 1000 system:



In the previous diagram, the telephony LAN (TLAN) provides IP connectivity between the CS 1000 system and the i2004 Internet phonesets. The connection between the Call Server and Media Gateway can be point-to-point, or it can be through the LAN, if the system is installed in a distributed data network.

For information about the CS 1000 system and i2004 Internet phoneset bandwidth and network requirements, refer to the *Communication Server 1000 Planning and Installation Guide*.

Switch connectivity

For more details about how the 703t server and switch connection is established, refer to the switch and server setup document for your switch:

- *Communication Server 1000 and CallPilot Server Configuration* (NN44200-312)
- *Meridian 1 and CallPilot Server Configuration* (NN44200-302)

LAN connectivity

The 703t server contains two Ethernet controllers on the motherboard that provide the following:

- 10/100Base-T Ethernet network connectivity to the ELAN subnet (Meridian 1 and CS 1000 only)

For information about the ELAN subnet's purpose and requirements, see the *Planning and Engineering Guide* (NN44200-200).

- 10/100/1000Base-T Ethernet connectivity to the Nortel server subnet

The Nortel server subnet is an optional connection that provides data connectivity among desktop and Web messaging clients, administrative PCs, and the CallPilot server.

See "[Rear panel diagram](#)" (page 14) to identify the location of network interface connectors.

Network requirements

Appropriate networking equipment must be available for the ELAN subnet and the optional Nortel server subnet if it is used.

The ELAN subnet (and the optional Nortel server subnet if used) must be properly configured for correct CallPilot operation. To ensure correct configuration, Nortel recommends that you consult a network specialist.

Remote access connectivity

The RS-232 COM1 connector on the rear of the 703t server provides the connection to an external dial-up modem. The modem allows administrators and technical support personnel to administer the 703t server from a remote location.

pcAnywhere is used to establish a remote access connection to the server.

Supported peripheral devices

This section identifies external devices that are supported by the 703t server. The following table describes the supported peripheral devices:

Device	Description
Modem	<p>A 56 Kbps external modem (NTRH9078 in North America only) provides remote access to the 703t server. The modem connects to the RS-232 COM1 connector on the rear of the server.</p> <p>Because the modem is an external device, it requires its own AC power source referenced to the same ground as the 703t server and the switch to which it is connected.</p>
Ethernet hub	<p>A 10Base-T Ethernet hub provides the ELAN subnet connection between the 703t server and the Meridian 1 switch or CS 1000 system. The customer can supply a hub or switch from third-party vendors or from Nortel.</p> <p>Because the hub is an external device, it requires an AC power source referenced to the same ground as the 703t server and the switch to which it is connected.</p>

ATTENTION

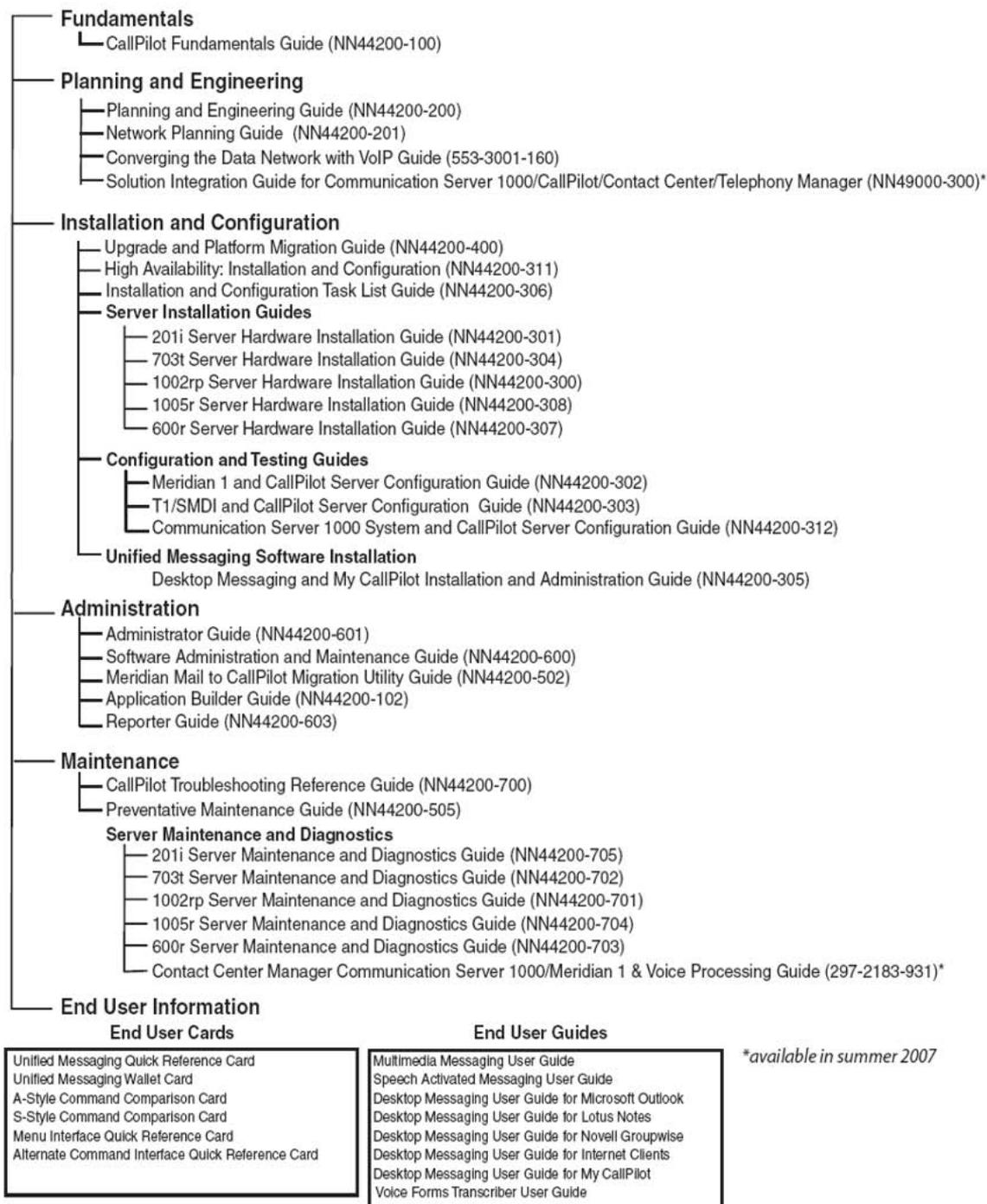
To comply with EMC requirements, a Class A hub must be located 10 m (33 ft.) away from the 703t server.

Device	Description
Monitor, keyboard, and mouse	<ul style="list-style-type: none"><li data-bbox="740 306 1390 363">• 15-inch monitor: NTRH9011 or N0038380 LCD monitor <p data-bbox="786 386 1390 506">Because the monitor is an external device, it requires its own AC power source referenced to the same ground as the 703t server and the switch to which it is connected.</p> <ul style="list-style-type: none"><li data-bbox="740 527 1054 552">• Keyboard: NTRH9013<li data-bbox="740 573 1023 598">• Mouse: NTRH9014

Reference documents

For a list of all CallPilot documents, see the following Customer Documentation Map

CallPilot Customer Documentation Map



*available in summer 2007

Chapter 3

Preinstallation requirements

In this Chapter

"Installation overview" (page 23)

"Unpacking the 703t server" (page 26)

"Removing the side cover" (page 26)

"Inspecting the server interior" (page 29)

"Replacing the side cover" (page 30)

"Installing the chassis feet" (page 32)

Installation overview

Introduction

This section provides an overview of the steps required to install the 703t server and peripheral devices. For detailed instructions, see [Chapter 4 "Installing the server and connecting the peripheral devices" \(page 35\)](#) .

When you are finished, continue with the switch and server setup as described in the document for your switch:

- *Communication Server 1000 and CallPilot Server Configuration (NN44200-312)*
- *Meridian 1 and CallPilot Server Configuration (NN44200-302)*

Installation checklist

Step	Description	Check
1	Review the "Installing the CallPilot server" section in the <i>Installation and Configuration Task List</i> (NN44200-306), and complete stage 1 of the "Installation checklist."	
2	Unpack the server, and ensure you have all the items you need (see "Unpacking the 703t server" (page 26)). Complete the following checklists that are provided in the <i>Installation and Configuration Task List</i> (NN44200-306): <ul style="list-style-type: none"> "CallPilot software media and documentation checklist" "CallPilot server hardware checklist" 	
3	Remove the server cover, and inspect the interior (see pages "Removing the side cover" (page 26) and "Inspecting the server interior" (page 29)).	
4	Replace the server cover.	
5	Place the 703t server in the chosen location (see "Installing the server" (page 35)).	
6	Set the DIP switches on the modem (see "To set the modem DIP switches" (page 37)).	
7	Connect the 703t server and devices as follows: <ul style="list-style-type: none"> Connect the monitor, keyboard, and mouse (see "To connect the mouse, keyboard, and monitor to the server" (page 40)). Connect the modem (see "To connect the modem to the server" (page 40)). Connect the 703t server to the ELAN hub (see "To connect the server to the ELAN subnet (Meridian 1 or CS 1000 only)" (page 41)). 	

ATTENTION

To comply with EMC requirements, a Class A hub must be located 10 m (33 ft.) away from the 703t server.

Note: If you are connecting the optional Nortel server subnet, do not power up unless your antivirus programs and Nortel security updates are installed first.

-

Step	Description	Check
	<p>Connect the 703t server to the CLAN hub (optional); (see "Connecting the server to the Nortel server subnet (optional)" (page 42)).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>ATTENTION</p> <p>To comply with EMC requirements, a Class A hub must be located 10 m (33 ft.) away from the 703t server.</p> </div> <ul style="list-style-type: none"> • Install the software feature dongle (see "Installing the Nortel software feature dongle" (page 43)). • Connect the power cords for all devices, and then power them up (see "Connecting the server to power" (page 45)). 	
8	Start the 703t server (see "To start the server" (page 47)).	

Conventions for warnings

You may encounter the following types of warnings in this guide. Do not ignore them.



DANGER

Risk of electric shock

Warns you of an immediate electrical hazard, which, if not avoided, will result in shock, serious injury, or death.



WARNING

Warns you of a situation in which you can be injured if instructions are not followed exactly as stated.



CAUTION

Alerts you to situations where data can be lost or damaged, equipment can be damaged, actions can result in service interruption, and productive time can be lost.

ATTENTION

Provides information that is essential to the completion of a task.

Unpacking the 703t server

Introduction

Follow this procedure to unpack the server and peripherals.



WARNING

Risk of personal injury

The 703t CallPilot server weighs approximately 22 kg (46 lb) as shipped from manufacturing. If necessary, and to prevent personal injury, ask someone to help you unpack and position the server.

To unpack the equipment

ATTENTION

As you unpack each item, check it off against the packing list, as well as against the following checklists provided in the *Installation and Configuration Task List* (NN44200-306):

- "CallPilot software media and documentation checklist"
- "CallPilot server hardware checklist"

Step	Action
1	Carefully open the cardboard carton containing the server.
2	Remove the server from the carton and set it on the floor.
3	Carefully open the cartons containing the monitor, keyboard, mouse, modem, and ELAN hub (if supplied), and set the peripherals aside.
4	Put all manuals, CD-ROMs, operating system disks, and any disks for peripherals in a safe place.
5	Save all packing materials and cartons in case you must return any equipment to the carrier.

—End—

What is next?

Remove the server cover so that you can inspect the interior of the server. See ["Removing the side cover"](#) (page 26).

Removing the side cover

Introduction

This section describes how to remove the server's side cover so that you can work with the interior components. The side cover is on the server's left side when the front of the server is facing you.

To remove the side panel



WARNING

Risk of personal injury

Be careful when you handle the sharp edges of the side panel and chassis to prevent personal injury.

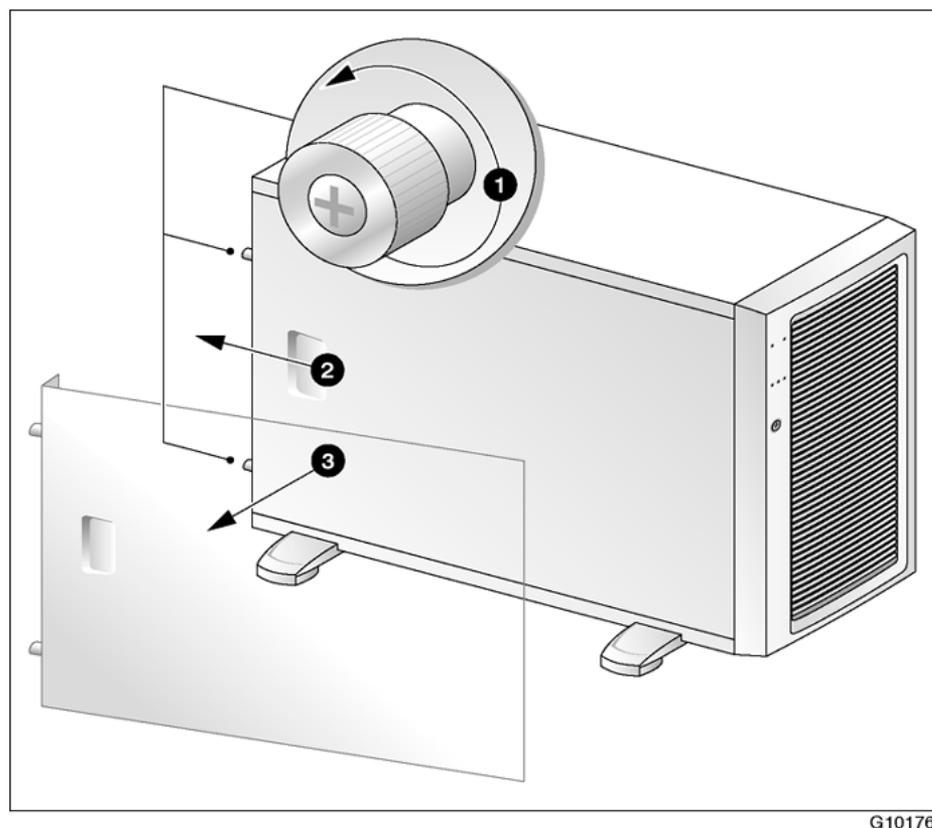


CAUTION

Risk of equipment damage

- Use an ESD wrist strap to protect static-sensitive components.
- Place the server on its side to prevent the server from accidentally falling over. This provides greater stability. If you attempt to work with the server in its standing position, it may tip over when you work with the interior components.

The following diagram shows how to remove the side panel. See the instructions for removal below.



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Step	Action
------	--------

- | | |
|---|---|
| 1 | Place the server on its side on your working surface. |
| 2 | Turn the two thumbscrews on the back of the server counter-clockwise to loosen them.

Note 1: The thumbscrews are not removable.
Note 2: If a removable screw is present, remove it. This screw secures the cover to the server during shipping. |
| 3 | Place your fingertips in the depression on the side cover, and then as you apply pressure, pull the cover approximately 25 mm (1 in.) away from the front of the server until it stops. |
| 4 | Use one hand to pull the top edge of the cover away from the server to disengage the top row of tabs on the cover from the notches in the chassis. |

- 5 Use both hands to lift the cover upward to disengage the bottom row of tabs from the notches in the chassis.
- 6 Set the cover aside.
- 7 Continue with "[Inspecting the server interior](#)" (page 29).

—End—

Inspecting the server interior

Introduction

Before you install the server, you should perform a visual inspection for loose components, foreign matter, or shipping damage inside the server.



CAUTION

Risk of equipment damage

When working with interior components, use an ESD wrist strap to protect static-sensitive components.

To inspect the server interior

Step	Action				
1	Ensure that all the cards are fully seated on the baseboard.				
2	Check for any loose wires or foreign objects, such as loose screws, inside the chassis.				
3	Review the slot locations (see " Rear panel diagram " (page 14)).				
4	Do one of the following:				
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">IF</th> <th style="text-align: left;">THEN</th> </tr> </thead> <tbody> <tr> <td>you observe any damage</td> <td>contact your Nortel technical support representative.</td> </tr> </tbody> </table>	IF	THEN	you observe any damage	contact your Nortel technical support representative.
IF	THEN				
you observe any damage	contact your Nortel technical support representative.				

IF	THEN
components have become loose	secure them. Then replace the server cover and proceed with the hardware installation. Refer to the procedures in <i>CallPilot 703t Server Maintenance and Diagnostics</i> (NN44200-702).
you are satisfied that the 703t server has arrived at your site undamaged	replace the server cover. For instructions, see " Replacing the side cover " (page 30).
—End—	

Replacing the side cover

Introduction

When you are satisfied that the server was not damaged during shipment, reinstall the side cover.

To replace the side cover



CAUTION

Risk of equipment damage

Ensure that there are no tools or loose parts inside the server chassis before replacing the side cover.

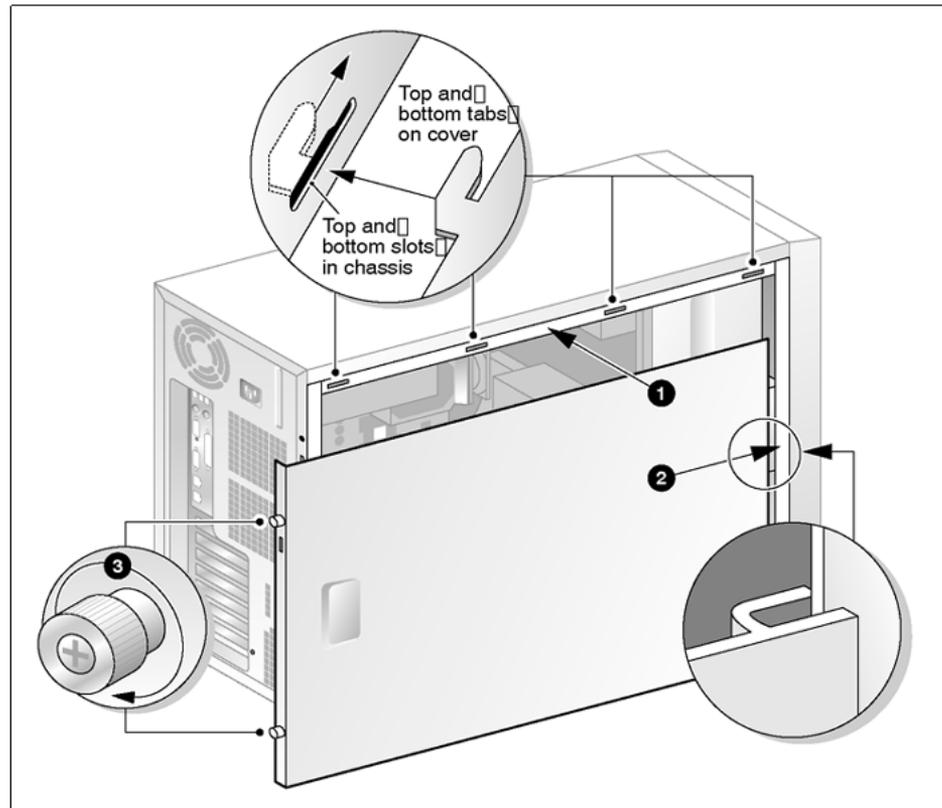
Step	Action
1	Align the right edge of the server's side cover with the inside ledge at the front of the server.
2	Ensure that the cover lays flat along the side of the server.
3	Insert the tabs along the top and bottom edges of the server's cover inside the slots along the top and bottom of the server.
4	Push the cover towards the front of the server until the tabs firmly engage in the chassis.

Note: When correctly engaged, the cover clicks into place.

- 5 Tighten the two thumbscrews on the back of the server.

—End—

The following diagram shows how to: 1) align the tabs, 2) engage the cover, and 3) tighten the thumbscrews.



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What is next?

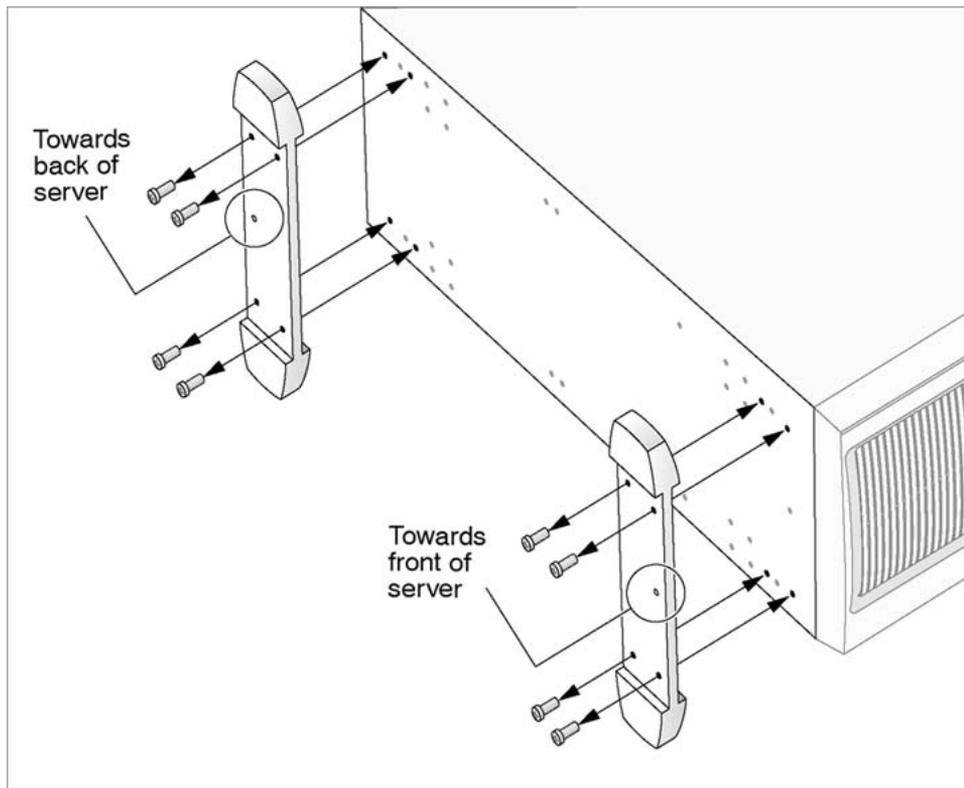
If you want to install the chassis feet on the bottom of the server, continue with "[Installing the chassis feet](#)" (page 32). Otherwise, continue with the hardware installation. For more information, see "[Installation checklist](#)" (page 24).

Installing the chassis feet

Introduction

You can install feet on the bottom of the server. The feet stabilize the server and will help prevent the server from accidentally falling over on its side.

To install the chassis feet



G101782

Step	Action
1	Ensure that the server is laying on its side, supported to give the server bottom four to five inches clearance above the work surface.
2	Attach the feet as shown in the preceding diagram. Use four screws to attach each foot to the chassis. The holes in the feet line up with only one set of holes in the chassis, as follows: <ul style="list-style-type: none"> • front foot: The middle hole is towards the front of the chassis. • back foot: The middle hole is towards the back of the chassis.

- 3 Place the server on its feet.

—End—

What is next?

Continue with the hardware installation. For more information, see ["Installation checklist" \(page 24\)](#).

Chapter 4

Installing the server and connecting the peripheral devices

In this chapter

"Installing the server" (page 35)

"Preparing the modem" (page 36)

"Connecting peripherals to the server" (page 38)

"Connecting the server to the ELAN subnet" (page 41)

"Connecting the server to the Nortel server subnet (optional)" (page 42)

"Installing the Nortel software feature dongle" (page 43)

"Connecting the server to power" (page 45)

Installing the server

Before you install the 703t server, ensure that the chosen location meets the requirements identified in the "Site inspection checklist" provided in the *Installation and Configuration Task List* (NN44200-306).

To install the server

Step	Action
------	--------

- | | |
|---|---|
| 1 | Place the 703t server in its chosen location. |
|---|---|

Note 1: The server must be placed within 20 m (60 feet) of the Meridian 1 switch or CS 1000 system.

Note 2: The DS30X cable that connects the MPB96 boards to the MGate cards is 20 m (60 feet) long. This allows the server to be placed in a different room from the Meridian 1 switch or CS 1000 system.

- 2 Connect peripheral devices as described in the remainder of this chapter.

—End—

Preparing the modem

You require a modem to support remote dial-up access to the CallPilot server. The modem also enables Nortel technical support to connect to your CallPilot server for troubleshooting purposes. Nortel connects to your server only when you request technical assistance.

Required equipment

To install the modem, you need the following equipment:

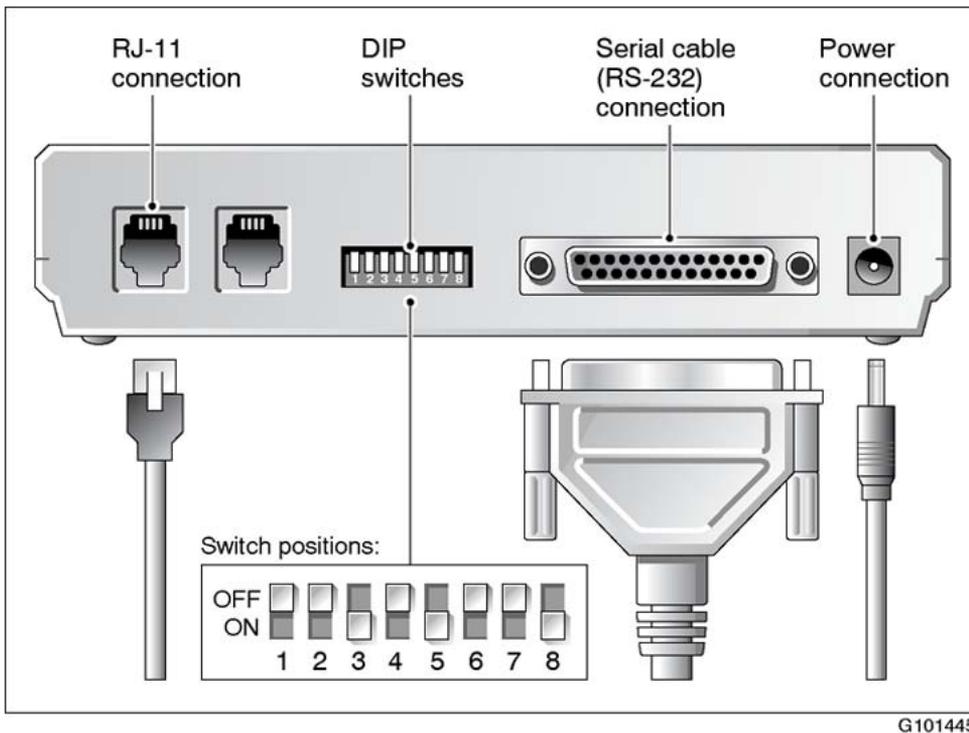
- an analog external modem that includes
 - an RJ-11 analog phone cord
 - a power adapter cord
 - US Robotics 56 Kbps modem (NTRH9078) (North America only)
 - a 25-pin male to 9-pin female shielded serial cable for your modem (A0841984)
- an analog line jack
- tweezers, or a screwdriver small enough to use to adjust DIP switches

Modem DIP switches

Set the modem DIP switches before you connect the modem to the CallPilot server.

Note: This section applies only to the US Robotics 56 Kbps external Sportster modem. If your modem is different, refer to the documentation for your modem.

The following diagram shows the key components of the external modem, including the location and required settings of the DIP switches:



To set the modem DIP switches

Use a pair of tweezers or a small screwdriver to set the DIP switches as described in the "Change to" column of the following table:

Note: ON is down. OFF is up.

DIP switch	Default setting	Change to	Function
1	OFF	OFF	Data Terminal Ready (DTR) override <ul style="list-style-type: none"> • OFF: Normal DTR operations. (The computer must provide a DTR signal for the modem to accept commands. If DTR is dropped, the call is terminated.) • ON: The modem ignores DTR (override).
2	OFF	OFF	Verbal/numeric result codes <ul style="list-style-type: none"> • OFF: Verbal (word) results. • ON: Numeric results.

DIP switch	Default setting	Change to	Function
3	ON	ON	Result code display <ul style="list-style-type: none"> OFF: Suppresses result codes. ON: Enables result codes.
4	OFF	OFF	Command mode local echo suppression <ul style="list-style-type: none"> OFF: Displays keyboard commands. ON: Suppresses echo.
5	ON	ON	Auto answer suppression <ul style="list-style-type: none"> OFF: The modem answers on the first ring or later, as specified in user-defined nonvolatile memory (NVRAM). ON: Disables auto answer.
6	OFF	OFF	Carrier Detect (CD) override <ul style="list-style-type: none"> OFF: The modem sends a CD signal when it connects with another modem; it drops the CD on disconnect. ON: CD is always on (override).
7	OFF	OFF	Power-on and ATZ reset software defaults <ul style="list-style-type: none"> OFF: Loads Y or Y1 configuration from NVRAM. ON: Loads &F0-Generic template from read-only memory (ROM).
8	ON	ON	AT command set recognition <ul style="list-style-type: none"> OFF: Disables command recognition (dumb mode). ON: Enables recognition (smart mode).

What is next?

Continue with "[Connecting peripherals to the server](#)" (page 38).

Connecting peripherals to the server

This section describes how to connect the monitor, keyboard, mouse, and modem to the server.

Rear panel

The peripheral device connection panel at the back of the server provides a legend that shows the symbol for each peripheral device and which connector to use.

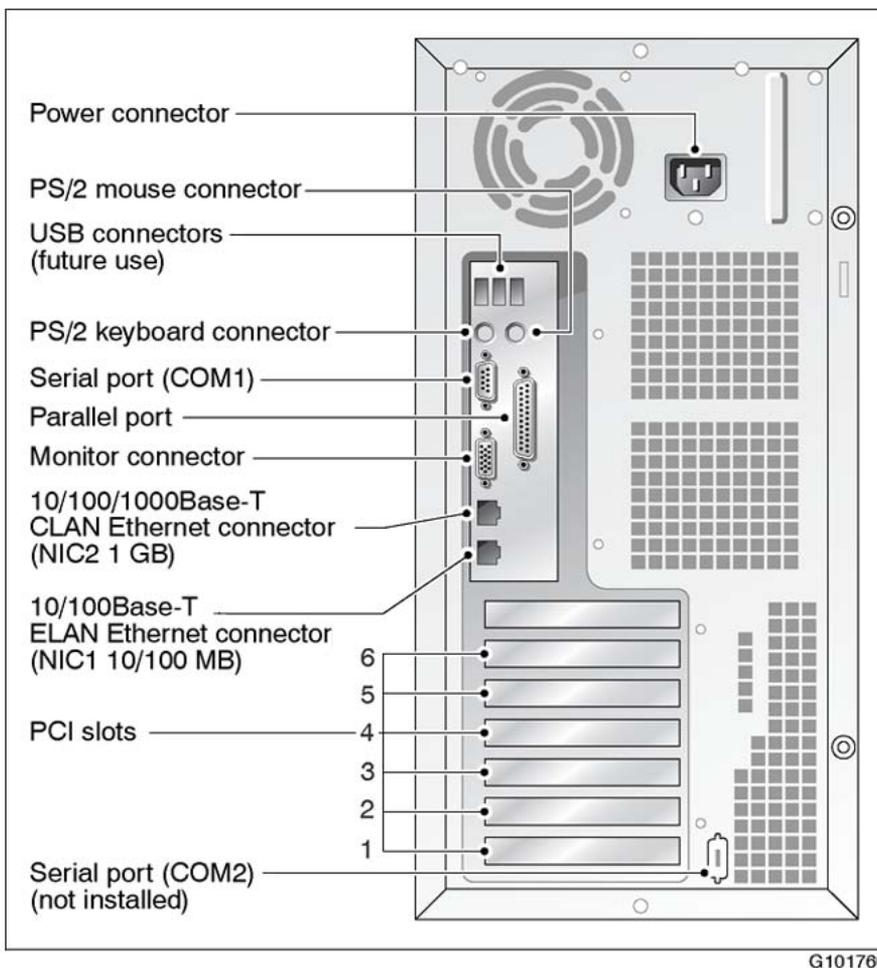


CAUTION

Risk of system failure

You can install or use only Nortel-supplied peripheral devices on your server. Installation or use of other peripheral devices can result in system failure.

The diagram below shows the connectors for the power cord and the peripheral devices on the 703t server.



To connect the mouse, keyboard, and monitor to the server

Step	Action
1	Place the monitor, keyboard, and mouse in the same location as the server.
2	Plug the keyboard and mouse into the appropriate PS/2 connectors on the chassis rear panel. See the diagram on page 52 .
3	Plug in the monitor connector. Tighten the screws on the connector.
4	Ensure that a single-point ground reference is available for all the power outlets serving the CallPilot server and its peripherals. Before the CallPilot server installation, a qualified electrician must implement the single-point ground reference requirement between the power outlets of the CallPilot server and the power outlets of the switch.
5	Connect the power cord to the monitor, and plug the other end into a wall receptacle or power bar.
6	Turn on the monitor.

—End—

To connect the modem to the server

Step	Action
1	Ensure that the modem's AC power cord is not plugged in.
2	Connect the large 25-pin male connector to the back of the modem. Tighten the connector screws.
3	Connect the 9-pin female connector to COM1 port at the rear of the server. Tighten the connector screws.
4	Connect one end of the telephone cable to the modem RJ-11 jack labeled LINE.
5	Connect the other end of the telephone cable to the RJ-11 jack in the wall.
6	Ensure that a single-point ground reference is available for all the power outlets serving the CallPilot server and its peripherals. Before the CallPilot server installation, a qualified electrician must implement the single-point ground reference requirement between

the power outlets of the CallPilot server and the power outlets of the switch.

- 7 Connect the power cord to the modem, and plug the other end into a wall receptacle or power bar.
- 8 Turn on the modem.

—End—

What is next?

Connect the server to the ELAN and CLAN hubs (if applicable).

IF the server will	THEN
be connected to the ELAN Subnet	continue with "Connecting the server to the ELAN subnet" (page 41) .
be connected only to a Nortel server subnet	continue with "Connecting the server to the Nortel server subnet (optional)" (page 42) .
not be connected to either the ELAN subnet or Nortel server subnet	continue with installing the software feature dongle. See "Installing the Nortel software feature dongle" (page 43) .

Connecting the server to the ELAN subnet

Connect the CallPilot server to the Meridian 1 switch or CS 1000 system using the Embedded LAN (ELAN).

ATTENTION

For important considerations about using the ELAN subnet in your network, see the *Planning and Engineering Guide* (NN44200-200).

ATTENTION

To comply with EMC requirements, a Class A hub must be located 10 m (33 feet) away from the 703t server.

To connect the server to the ELAN subnet (Meridian 1 or CS 1000 only)

Step	Action
------	--------

- | | |
|---|---|
| 1 | Locate the ELAN Ethernet connector on the back of the server. |
|---|---|

Note: The ELAN connector is labeled as NIC1 10/100 MB. For the connector location, see the diagram on [page 52](#).

- 2 Connect an RJ-45 network cable from the ELAN hub to the server's ELAN connector.

Note: The ELAN hub is optional if you use a cross-over network cable to make a direct point-to-point connection from the server to the switch. However, if you choose to establish a direct point-to-point ELAN subnet connection, no other device can connect to the ELAN subnet.

- 3 At the switch, connect the ELAN network cable to an MAU (Ethernet) transceiver. Then complete the connection from the transceiver to the switch.



DANGER

Risk of fire hazard

The NTRH9069 MAU is not suitable for installation in ducts, plenums, or other spaces used for environmental air. Do not install it above a false ceiling or below a raised floor, unless it can be confirmed that these spaces are not used to convey environmental air.

—End—

What is next?

IF the server will	THEN
be connected to a Nortel server subnet	continue with " Connecting the server to the Nortel server subnet (optional) " (page 42).
not be connected to a Nortel server subnet	continue with installing the software feature dongle. See " Installing the Nortel software feature dongle " (page 43).

Connecting the server to the Nortel server subnet (optional)

This section provides instructions to connect the server to the Customer LAN (CLAN).

Note: The Nortel server subnet connection is optional. However, connection to a Nortel server subnet is required for support of desktop and Web messaging users, or administration by means of a Web-enabled PC. Make sure that your latest antivirus programs and Nortel security updates are installed.

ATTENTION

To comply with EMC requirements, a Class A hub must be located 10 m (33 feet) away from the 703t server.

To connect the server to the Nortel server subnet

Step	Action
1	Locate the CLAN connector on the back of the server. Note: The CLAN connector is labeled as NIC2 1GB. For the connector location, see the diagram on page 52 .
2	Connect an RJ-45 network cable from the CLAN hub to the CLAN connector. Note: When connecting the optional Nortel server subnet, do not power up unless your antivirus programs and Nortel security updates are installed first.

—End—

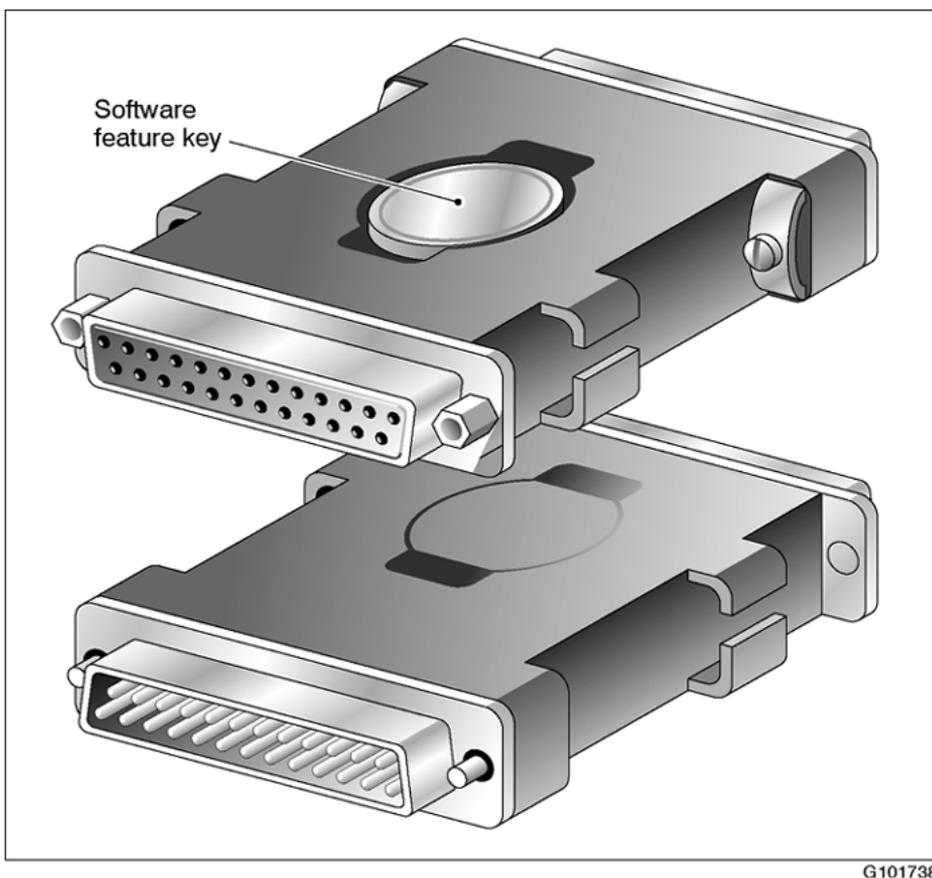
What is next?

Continue with "[Installing the Nortel software feature dongle](#)" (page 43).

Installing the Nortel software feature dongle

The software feature key is a security device that stores the unique serial number of the server. The feature key is embedded in the Nortel software feature dongle, which plugs into the parallel port.

An illustration of the software feature key embedded in the software feature dongle is shown below:



Requirements

For installation, you require a Phillips No. 1 screwdriver.

To install the software feature dongle

Step	Action
1	<p>Ensure that there is no cable connected to the parallel port.</p> <p>Note: The parallel port is also known as the printer port or LPT1. It is located at the back of the server. See the diagram on page 52.</p>
2	<p>If the software feature key is not pre-installed on the dongle, remove it from the plastic bag and carefully insert it into the software feature slot on the dongle. Make sure that the clips secure it properly and that the Nortel logo faces outwards.</p>
3	<p>Plug the male end of the adapter into the parallel port.</p>

- 4 Tighten the connector screws.

—End—

What is next?

Continue with "[Connecting the server to power](#)" (page 45).

Connecting the server to power

Before you begin

Ensure that proper power and grounding are available for all the power outlets serving the CallPilot server and its associated peripherals. Power for these devices must be wired and fused independently of all other receptacles and referenced to the same ground as the PBX system.

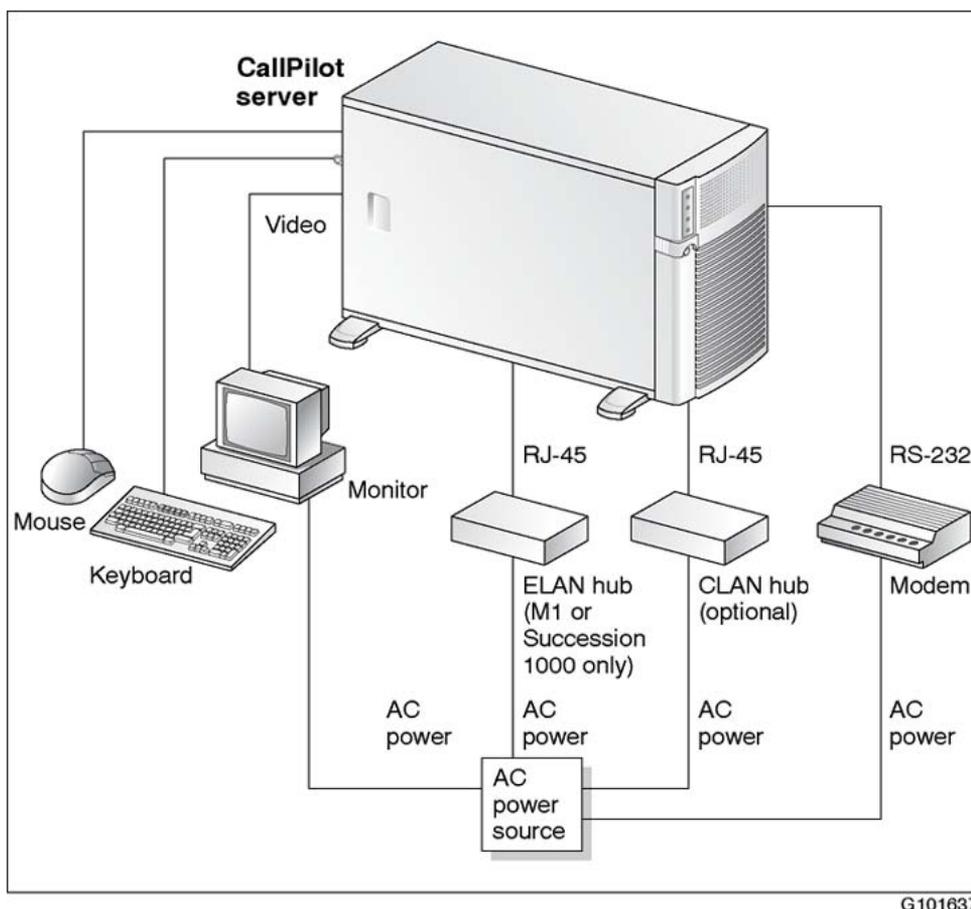
A qualified electrician must implement the single-point ground reference as required among the power outlets of the CallPilot server, its associated peripherals, and the power outlets of the switch.

Provide a sufficient number of properly grounded power outlets or power bars for all equipment.

The single-point ground (SPG) required by the system can be an isolated ground (IG) bus or AC equipment ground (ACEG) bus in the service panel or transformer. The system must be connected to safety ground/protective earth in accordance with NEC requirements. For international use, the system must be connected to safety ground/protective earth in accordance with Paragraph 2.5 of EN60950/IEC950.

Note: Refer to *Large System: Planning and Engineering* for a complete description of approved ground sources and methods. Insulated ground wire must be used for system grounding.

Before you connect the server to the power source, review the following diagram (and the warning that follows) to ensure that all peripheral hardware devices are in place:



WARNING

Risk of personal injury and risk of hardware failure

You must connect the power outlets that are used by the CallPilot server and its peripheral devices to the same single-point ground reference as the one used by the switching system connected to the CallPilot server.

If this requirement is not met, power transients can cause personal injury, hardware failure, or both. For more information on single-point grounding requirements, refer to the *Installation and Configuration Task List* (NN44200-306).

To connect the server to power

Step Action

- 1 Plug the server's AC power cord into the server's rear panel.

- 2 Plug the other end into a wall receptacle or power bar.

—End—

To start the server

Step	Action
------	--------

- 1 Press the server power switch to start the server.
- 2 Observe the Power-On Self Test (POST) and initialization messages on the monitor.
- 3 Let the mini-setup sequence run until you are prompted to log in to the operating system.
Note: The system may perform multiple reboots. This is normal.
- 4 Ensure that the operating system logon window appears on the monitor.
Note: If the logon window does not appear, refer to the CallPilot Maintenance and Diagnostics guide for your server for troubleshooting instructions.
- 5 Proceed with the CallPilot server and switch configuration guide for your switch to connect and configure the server and switch.

—End—

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Nortel CallPilot

703t Server Hardware Installation

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Publication: NN44200-304
Document status: Standard
Document version: 01.01
Document date: 23 February 2007

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