



▶ Polycom® DMA™ 7000 System  
Getting Started Guide

---

## Trademark Information

Polycom®, the Polycom “Triangles” logo, and the names and marks associated with Polycom’s products are trademarks and/or service marks of Polycom, Inc., and are registered and/or common-law marks in the United States and various other countries.

All other trademarks are the property of their respective owners.

## Patent Information

The accompanying product is protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

© 2008-2010 Polycom, Inc. All rights reserved.

Polycom, Inc.  
4750 Willow Road  
Pleasanton, CA 94588-2708  
USA

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc. Under the law, reproducing includes translating into another language or format.

As between the parties, Polycom, Inc., retains title to and ownership of all proprietary rights with respect to the software contained within its products. The software is protected by United States copyright laws and international treaty provision. Therefore, you must treat the software like any other copyrighted material (e.g., a book or sound recording).

Every effort has been made to ensure that the information in this manual is accurate. Polycom, Inc., is not responsible for printing or clerical errors. Information in this document is subject to change without notice.

---

# Contents

<b>Polycom® DMA™ System Server Setup . . . . .</b>	<b>1</b>
Collect Necessary Materials . . . . .	1
Complete the First-Time Setup Worksheet . . . . .	2
Unpack and Install the Hardware Components . . . . .	3
Configure the Polycom DMA System Server(s) . . . . .	4
Alternate Procedure: Configure the Polycom DMA System Server(s) Without Using the USB Stick . . . . .	8
<b>Polycom® DMA™ System Server Technical Specifications . . . . .</b>	<b>11</b>
<b>Regulatory Notices . . . . .</b>	<b>15</b>



---

# Polycom<sup>®</sup> DMA<sup>™</sup> System Server Setup

The sections below describe the steps required to perform the initial setup of a Polycom<sup>®</sup> Distributed Media Application<sup>™</sup> (DMA<sup>™</sup>) multipoint conference platform server or two-node server cluster.



If you're installing a new server to expand a single-node system into a two-node cluster, see "Adding a Second Server" in the *Polycom DMA Operations Guide* or online help.

At the end of this procedure, you will have successfully logged into the Polycom DMA system and be ready to finish configuring the system, including setting up users and MCUs, integrating with an enterprise directory, and configuring the system to use a gatekeeper.

## Collect Necessary Materials

Before you install a Polycom DMA system, collect these materials:

- Polycom DMA system server shipment
- Completed First-Time Setup Worksheet (see [page 2](#))
- PC running Microsoft Windows (XP Pro or Vista) with:
  - USB port
  - Java 1.6 or newer
  - Internet Explorer 6 or newer, or Firefox 2 or newer
  - Adobe Flash Player 9.0.28 or newer

## Complete the First-Time Setup Worksheet

Before you begin system setup, fill out the **My System Values** column of this worksheet.

### First-Time Setup Worksheet

System Configuration Information	My System Values	Description
Node 1 system name		Local host name of the first (or only) Polycom DMA system server. Must be a valid host name: the letters a - z (case-insensitive), digits 0 - 9, and internal hyphens are allowed.
Node 1 IP address		Static, physical IP address (dotted quad) for the first (or only) Polycom DMA system server.
Node 2 system name		Local host name of the second Polycom DMA system server. Not used for single-node installation.
Node 2 IP address		IP address for the second Polycom DMA system server. Not used for single-node installation.
Virtual system name		Local host name of the virtual host. Required even for single-node installation.
Virtual IP address		IP address of the virtual host. Required even for single-node installation.
System domain		Fully qualified domain name for the system (optional).
Subnet mask		Network mask that defines the subnetwork of the system.
Default gateway		IP address of the gateway server used to route network traffic outside the subnet.
Primary DNS server		IP address of the primary Domain Name System server (optional, but strongly recommended; at least one DNS server is required in order to import global groups from an enterprise directory).
Secondary DNS server		IP address of a second DNS server (optional).
Tertiary DNS server		IP address of a third DNS server (optional).

System Configuration Information	My System Values	Description
DNS search domains		Space- or comma-separated list of fully qualified domain names to query on the DNS servers to resolve host names (optional). The system domain is added automatically; you don't need to enter it here.
Time zone		Time zone in which the system resides.
NTP server #1		IP address of the primary NTP time server (optional, but strongly recommended).
NTP server #2		IP address of a second NTP time server (optional).
NTP server #3		IP address of a third NTP time server (optional).

## Unpack and Install the Hardware Components

The Polycom DMA system uses either one or two Polycom-branded Dell servers.

### To unpack and install the hardware

- 1** If you purchased Polycom RMX 2000 conference platforms (MCUs) with your Polycom DMA system servers, unpack and install them as described in the *Polycom RMX 2000 Getting Started Guide*.
- 2** Examine the Polycom DMA system shipping containers for damage. Polycom is not responsible for damage sustained during shipment of this product.
- 3** Open and review the container packing slips.
- 4** Open the containers and examine the contents. A single-node Polycom DMA system shipment includes:
  - 1 Polycom DMA system server
  - 2 power cords
  - 1 rack-mount kit (four-post)
  - 1 bezel key
  - 1 server documentation set
  - 1 copy of this *Polycom DMA System Getting Started Guide*
  - 1 Polycom DMA system installation disk (included for recovery purposes; the software on the disk is already installed on the server)

- 1 USB memory stick containing the Polycom DMA USB Configuration Utility
- 2 crossover Ethernet cables, short and long (not used for single-server system)
- Your license documents

If you ordered the optional 2-post rack mounting kit, it's in a separate box.

A two-node system shipment contains a second set of the above items.

**5** Examine the contents for damage.

If you find damage, file a claim with the delivery carrier. Polycom is not responsible for damage sustained during shipment.

**6** Remove all of the components from their containers.

**7** Install the Polycom DMA server(s) according to the server documentation. To rack-mount a server, refer to the *Rack Installation Guide* and use the brackets provided.

**8** Connect the Polycom DMA server(s) to the network:

- a** Connect the GB 1 Ethernet port of each server to the enterprise network.
- b** For a two-node system, connect one of the provided crossover cables to the GB 2 ports of the two servers.

Don't turn on the server(s) at this time.

**9** Remove the bezel(s) from the server(s).

## Configure the Polycom DMA System Server(s)

You configure the Polycom DMA system server(s) using the Polycom DMA USB Configuration Utility on the USB memory stick.



To configure the system server(s) without using the USB memory stick, see ["Alternate Procedure: Configure the Polycom DMA System Server\(s\) Without Using the USB Stick"](#) on page 8.

### To configure the Polycom DMA system server(s)

- 1** Connect the USB memory stick containing the Polycom DMA USB Configuration Utility to a Windows PC.

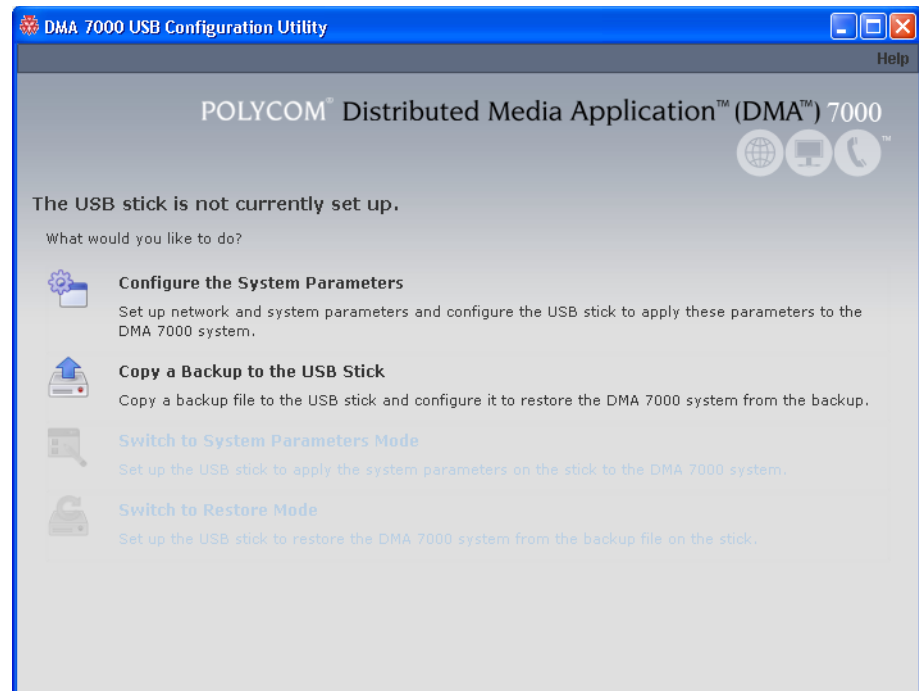


- 2 When prompted, elect to run the Configuration Utility.



If autorun doesn't work or is turned off, navigate to the USB memory stick using My Computer, Windows Explorer, or another file manager. Then start the Configuration Utility by double-clicking `dma7000-usb-config.exe`.

- 3 In the DMA USB Configuration Utility window, click **Configure the System Parameters**.

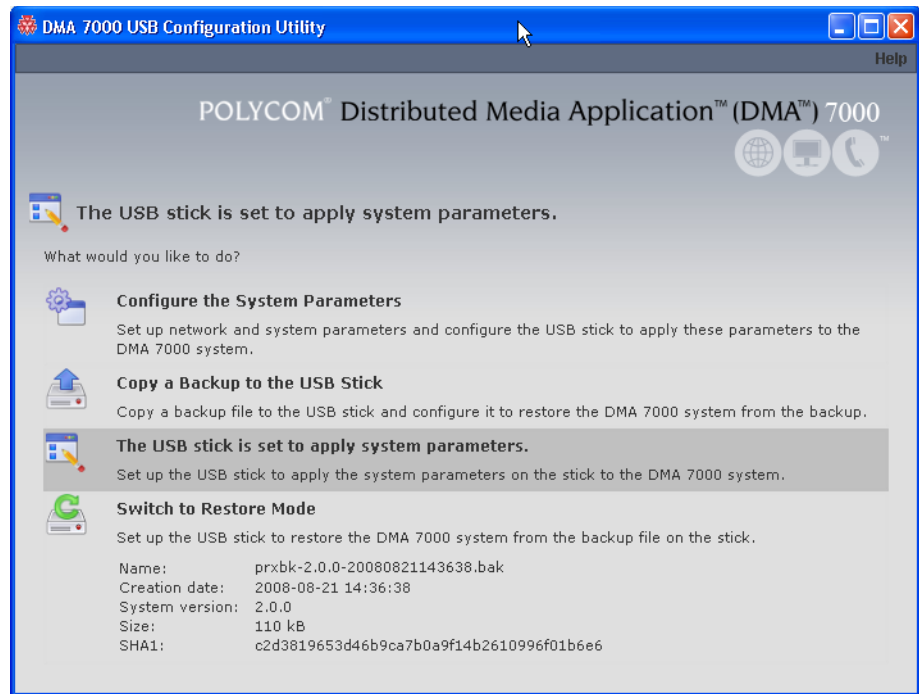


- 4 On the **Network** page, if you're installing a two-node cluster, click **Enable 2-node configuration**.
- 5 Enter the network values from the [First-Time Setup Worksheet](#) and click **Next**.
- 6 On the **System Time** page:
  - a Select the correct **System time zone** for your location.
  - b Leave **Auto Adjust For Daylight Savings** checked (deselecting this may cause problems, especially with NTP servers).
  - c Under **NTP servers**, enter the IP addresses (or domain names) for the time servers from the [First-Time Setup Worksheet](#).  
  
We strongly recommend specifying at least one and preferably three time servers. Use NTP stratum 3 quality time servers, if possible.
  - d Click **Next**.

- 7 On the **Security Configuration** page, select the unsecured access methods you want to enable and deselect the ones you want to disable. Or select **High security** to disable all those listed.

- 8 Click **Done**.

The utility confirms that the configuration file was created and returns you to the initial menu.



- 9 Verify that the initial menu now states that **The USB stick is set to apply system parameters**.
- 10 Close the program.
- 11 In your system tray, click **Safely Remove Hardware** and select **Safely Remove USB Mass Storage Device**. When a message tells you it's safe to do so, disconnect the USB memory stick from the PC.



The Polycom DMA system software is already installed on the server(s), so the system installation disk isn't needed to set up a new system. Using it overwrites the same software already on the server and needlessly lengthens the setup process. Put the disk away in a safe place in case it's ever needed to restore the system.

- 12 Make sure that both servers are off.
- 13 If you need to replace the system software on the server(s) with a different version, turn on the first (or only) server (the one you want configured as Node 1) and insert the system installation disk for that version. Otherwise, continue with the next step.

- 14** On the first (or only) server (the one you want configured as Node 1), insert the USB stick into a USB port and boot (or reboot) the server. Leave the second server off.

If you're replacing the system software, the server boots from the DVD, and the installation commences. About 15-20 minutes later, the DVD ejects and the server reboots.

If you're not replacing the system software (or if you are, after the reboot), the server reads its network and system parameters from the USB stick and applies them.

- 15** Wait for the front panel LCD to display **DMA Ready**. Then disconnect the USB stick and if applicable, remove the disk. If you're installing a single-node system, skip to step 17.

- 16** If you're installing a two-node cluster, turn on the second server (Node 2). If you're replacing the system software, insert the Polycom DMA system installation disk into the DVD drive, turn off the server, and turn it back on.

If you're replacing the system software, the server boots from the DVD, and the installation commences. About 15-20 minutes later, the DVD ejects and the server reboots.

If you're not replacing the system software (or if you are, after the reboot), the server detects and gets its configuration settings from Node 1, and joins the cluster. When done, both servers' LCDs display **DMA Clustered**.

- 17** On a PC with network access to the Polycom DMA system, point your browser to the system's virtual host name or IP address and log in with user ID **admin** and password **admin**.

The Polycom DMA system's management interface appears, displaying the **Dashboard**. From its menus, you can complete your system setup:

- Install your license(s) and enable capabilities (H.323, SIP, or both).
- Add MCUs to the system, add conference templates for the MCUs, and set conference defaults.
- Configure the system to use a gatekeeper (if H.323 is enabled) and set up SIP protocols and ports (if SIP is enabled).
- Install security certificates.
- Manage system access, either by adding local users or by integrating the Polycom DMA system with your enterprise directory, and secure the system.
- Make other desired configuration changes.

Refer to the online help or the *Polycom DMA Operations Guide* for the relevant descriptions and procedures.

## Alternate Procedure: Configure the Polycom DMA System Server(s) Without Using the USB Stick

If for some reason you don't have or can't use the Polycom DMA USB Configuration Utility on the USB memory stick, the following procedure enables you to complete the initial setup using only a laptop PC and an Ethernet cable.

This is possible because Polycom DMA system servers are shipped with default network settings that you can use to connect to the system. The settings are:

IP address: 192.168.1.101

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1

### To configure the Polycom DMA system server(s) using a laptop PC

- 1 Follow the unpack and install procedure ([page 3](#)) through step 7. *Do not* connect the server(s) to the enterprise network.

- 2 Configure the network settings on your laptop to put it on the same network segment as the Polycom DMA system server(s) (see the server's default settings above). For instance, you can use the following settings:

IP address: 192.168.1.20

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1

- 3 Connect an Ethernet cable between your laptop and the GB 1 interface of the first (or only) server (the one you want configured as Node 1).

You can use the cable that will later connect the server to the switch (enterprise network). Be sure you connect to the server's GB 1 interface, not the GB 2 interface.

- 4 On the laptop, point your browser to <http://192.168.1.101> (if a security certificate warning appears, ignore it) and log in with user ID **admin** and password **admin**.

The Polycom DMA system's management interface appears, displaying the **Dashboard**.

- 5 Go to **Configuration > System > Network**, enter the network values from the [First-Time Setup Worksheet](#), and click **Update**. When asked to confirm restarting the system, click **Yes**.

The system begins to reboot.

- 6** While the server is rebooting, disconnect the Ethernet cable from the laptop and connect the server's GB1 interface to the enterprise network.

The reboot process takes about three minutes. When it's finished, the front panel LCD displays **DMA Ready**.
- 7** From a PC with network access to the Polycom DMA system, point your browser to the system's virtual host name or IP address and log in with user ID **admin** and password **admin**.
- 8** Go to **Configuration > System > System Time** and do the following:

  - a** Select the correct **System time zone** for your location.
  - b** Leave **Auto Adjust For Daylight Savings** checked (deselecting this may cause problems, especially with NTP servers).
  - c** Under **NTP servers**, enter the IP addresses (or domain names) for the time servers from the [First-Time Setup Worksheet](#).

We strongly recommend specifying at least one and preferably three time servers. Use NTP stratum 3 quality time servers, if possible.
  - d** Click **Update**. When asked to confirm restarting the system, click **Yes**.

The system begins to reboot. The process takes about three minutes. When it's finished, the front panel LCD displays **DMA Ready**.
- 9** Log back into the system and go to **Configuration > System > Security Configuration**.
- 10** Either select one or more unsecured access methods to enable or select **Maximum security**. Click **Update**.

Depending on the settings you made, the system may need to restart. If so, you're asked to confirm. Click **Yes**.

If the system needs to reboot, it does so. The process takes about three minutes. When it's finished, the front panel LCD displays **DMA Ready**.
- 11** If you're installing a two-node cluster, verify that Node 2 is off and do the following:

  - a** Connect the GB 1 Ethernet port of the second server (Node 2) to the enterprise network.
  - b** Connect one of the provided crossover cables to the GB 2 ports of the two servers.
  - c** Verify that the first server (Node 1) is running and its front panel LCD displays **DMA Ready**. Then turn on the second server (Node 2).

After the second server boots, it detects and gets its configuration settings from Node 1 and joins the cluster. When done, both servers' LCDs display **DMA Clustered**.
- 12** Log back into the system, if necessary, and complete your system setup. Refer to the online help or the *Polycom DMA Operations Guide* for the relevant descriptions and procedures.



# Polycom<sup>®</sup> DMA<sup>™</sup> System Server Technical Specifications

The table below contains technical specifications for the Dell PowerEdge<sup>™</sup> R610 server used by the Polycom<sup>®</sup> Distributed Media Application<sup>™</sup> (DMA<sup>™</sup>) system.

Item	Description
<b>Processor</b>	
Processor Type	One or two quad- or dual-core Intel <sup>®</sup> Xeon <sup>®</sup> processors
<b>Expansion Bus</b>	
Bus Type	PCI Express Generation 2
Expansion slots via riser card: Riser 1 (Center Riser)  Riser 2 (Left Riser)	(Slot 1) One full-height, half-length x8 link  (Slot 2) One full-height, half-length x8 link  NOTE: Both slots support up to 25 W, but only one 25-W card can be installed in the system at a time. With two cards installed, one 25-W card can be installed while the other card must be 15 W or under.
<b>Memory</b>	
Architecture	800, 1066 or 1333 MHz DDR3 registered or unbuffered Error Correcting Code (ECC) DIMMs. Support for Advanced ECC or memory-optimized operation.
Memory module sockets	Twelve 240-pin
Memory module capacities	1 GB or 2 GB UDIMMs; 2 GB, 4 GB, or 8 GB RDIMMs, single-, dual-, or quad-ranked
Minimum RAM	1 GB with a single CPU
Maximum RAM	96 GB (with 8 GB RDIMMs) or 24 GB (with 2 GB UDIMMs)

Item	Description
<b>Drives</b>	
Hard drives	Up to six 2.5-inch, internal, hot-swappable SAS or SATA hard drives with backplane support
Diskette drive	Optional external USB 1.44-MB drive
Optical drive	One optional internal slimline SATA DVD-ROM or DVD+RW drive Optional external USB DVD NOTE: DVD devices are data only
Flash drive	Optional internal USB Optional internal Secure Digital (SD) memory card Optional external SD memory card
<b>Connectors</b>	
Back NIC Serial USB Video Optional external VFlash card	Four RJ-45 10/100/1000 Mbps Ethernet 9-pin, DTE, 16550-compatible Two 4-pin, USB 2.0 compliant 15-pin VGA One optional flash memory card slot with iDRAC6 Enterprise
Front Video USB	15-pin VGA Two 4-pin, USB 2.0 compliant
Internal USB Internal secure digital (SD) module	One 4-pin, USB 2.0-compliant One optional flash memory card slot with the internal SD module
<b>Video</b>	
Video type	Integrated Matrox G200
Video memory	8 MB shared



Item	Description
<b>Power</b>	
AC power supply (per unit)	
Wattage	717 W (High Output) 502 W (Energy Smart)
Voltage	90–264 VAC, autoranging, 47-63 Hz
Heat dissipation	2446.5 BTU/hr maximum (High Output) 1712.9 BTU/hr maximum (Energy Smart)
Maximum inrush current	Under typical line conditions and over the entire system ambient operating range, the inrush current may reach 55 A per power supply for 10 ms or less.
Batteries	
System battery	CR 2032 3.0-V lithium ion coin cell
RAID battery (optional)	3.7-V lithium ion battery pack
<b>Physical</b>	
Height	4.26 cm (1.68 in)
Width	48.24 cm (18.99 in) with rack latches 42.4 cm (16.69 in) without rack latches
Depth	76.2 cm (30 in)
Weight (maximum configuration)	17.69 kg (39 lb)
Weight (empty)	13.25 kg (29.2 lb)
<b>Environmental</b>	
Temperature	
Operating	10° to 35°C (50° to 95°F) with a maximum temperature gradation of 10°C per hour  NOTE: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft.
Storage	–40° to 65°C (–40° to 149°F) with a maximum temperature gradation of 20°C per hour
Relative humidity	
Operating	20% to 80% (noncondensing) with a maximum humidity gradation of 10% per hour
Storage	5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour

Item	Description
Maximum vibration Operating Storage	0.26 Gms from 5–350 Hz for 5 minutes in operational orientations 1.54 Gms from 10–250 Hz for 10 minutes in all orientations
Maximum shock Operating Storage	Half sine shock in all operational orientations of 31 G plus or minus 5% with a pulse duration of 2.6 ms plus or minus 10% Half sine shock on all six sides of 71 G plus or minus 5% with a pulse duration of 2 ms plus or minus 10% Square wave shock on all six sides of 27 G with a velocity change at 235 in/sec or greater
Altitude Operating Storage	–16 to 3048 m (–50 to 10,000 ft) NOTE: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft. –16 to 10,600 m (–50 to 35,000 ft)

---

# Regulatory Notices

## Regulatory Notices

### USA Regulatory Notices

#### Part 15 FCC Rules

This device is compliant with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interferences received, including interference that may cause undesired operation.

#### Class A Digital Device or Peripheral

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

In accordance with part 15 of the FCC rules, the user is cautioned that any changes or modifications not expressly approved by Polycom Inc. could void the user's authority to operate the equipment.

We recommend that you install an AC surge arrestor in the AC outlet to which this device is connected. This action will help to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

### EEA Regulatory Notices

This Polycom DMA system has been marked with the CE mark. This mark indicates compliance with EEC Directives 2006/95/EC and 2004/108/EC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd, 270 Bath Road, Slough, Berkshire, SL1 4DX, UK.

## Regulatory Notices

### Czech Republic Regulatory Notices

This device belongs to Class B devices as described in EN 55022, unless it is specifically stated that it is a Class A device on the specification label. The following applies to devices in Class A of EN 55022 (radius of protection up to 30 meters). The user of the device is obliged to take all steps necessary to remove sources of interference to telecommunication or other devices.

Pokud není na typovém štítku počítače uvedeno, že spadá do třídy A podle EN 55022, spadá automaticky do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (ochranné pásmo 30m) podle EN 55022 platí následující. Dojde-li k rušení telekomunikačních nebo jiných zařízení, je uživatel povinen provést taková opatření, aby rušení odstranil.

### Canadian Regulatory Notices

#### Class A Digital Device

This Class [A] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [A] est conforme à la norme NMB-003 du Canada.

### South Korean Regulatory Notices

A급 기기 (업무용 정보통신기기)

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

### Worldwide Regulatory Notices

#### Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

#### Plugs Acts as Disconnect Device

The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.

La prise électrique à laquelle l'appareil est branché doit être installée près de l'équipement et doit toujours être facilement accessible.

#### Installation Instructions

Installation must be performed in accordance with all relevant national wiring rules.

L'installation doit être exécutée conformément à tous les règlements nationaux applicable au filage électrique.