The Phonebook Tab

Click the **Phonebook** tab to create and edit Phonebook entries.

Downloads the Phonebook entries from the Printer Settings Utility to the machine.

Reads the Phonebook entries from the machine to the Printer Settings Utility.

Phonebook entries

Allows you to edit a selected Phonebook entry in a separate Edit window.

Deletes a selected Phonebook entry.

Deletes all Phonebook entries.
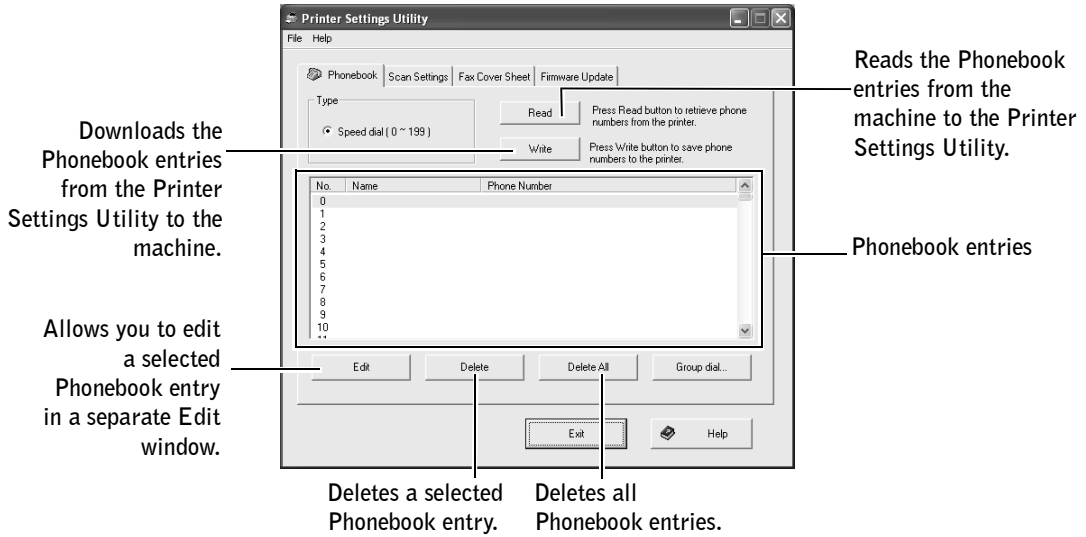
The Scan Settings Tab

Click the **Scan Settings** tab to configure the scan destination list that appears on the operator panel display when you press <Select Software> on the operator panel. Using the destination list, you can select a software program that an image can be scanned to.

Select the program you want from the Available Scan Destinations and click to add it to the Front Panel Destination List.
To delete the selected program, click .

Click to restore the default settings.

Click to send the list you add to the machine.

Maintenance | **159**
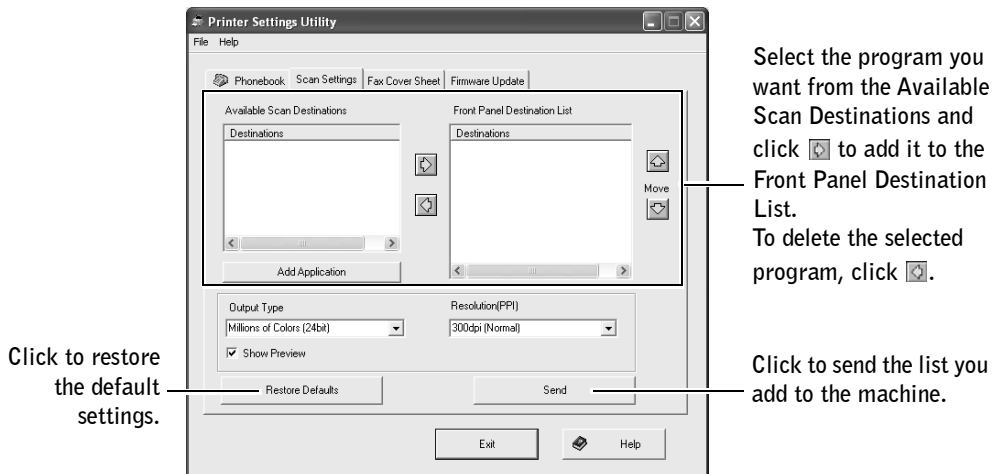
The Fax Cover Sheet Tab

Click the **Fax Cover Sheet** tab to create a fax cover page. When you send a fax, you can send a cover page together. For details, see page 139. The fax cover page contains the date, the sender's fax number and machine ID, the recipient's fax number and machine ID and the total number of pages you sent.

Enter the machine ID you set.

Enter your fax number.

Click to send this cover page to the machine.
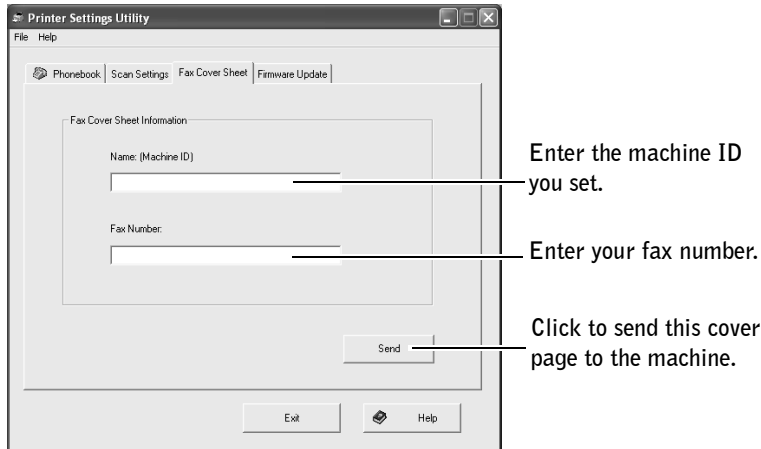
The Firmware Update Tab

Click the **Firmware Update** tab to update the firmware of your machine. This feature should be used by an authorized technician. Please consult with the purchase point.
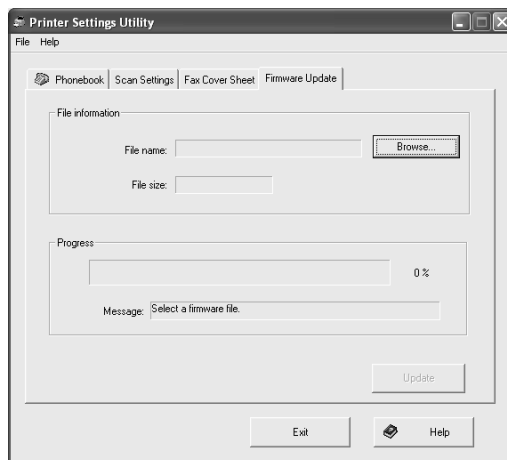
Installing Options

Precautions When Installing Machine Options

Installing Printer Memory

Installing an Optional Tray2

Precautions When Installing Machine Options

DISCONNECTING THE POWER CORD:

Never remove the control board while the printer is plugged in.

To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external printer option.

DISCHARGE OF STATIC ELECTRICITY:

The control board and internal printer memory are sensitive to static electricity. Before installing or removing an internal printer memory, discharge static electricity from your body by touching something metal on any device plugged into a grounded power source. *If you walk around before finishing installation,* discharge any static electricity once again.
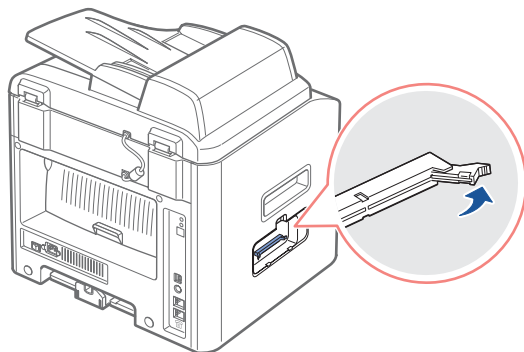
Installing Printer Memory

Additional printer memory option is provided on Dual In-line Memory Module (DIMM). This procedure is applicable to either option.
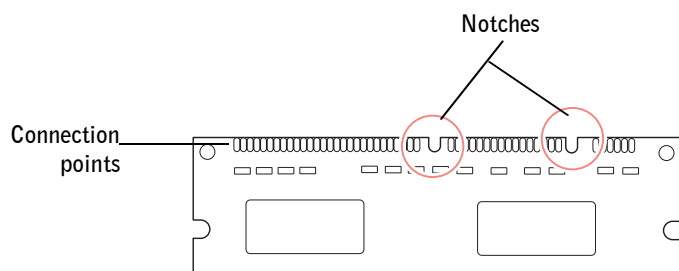
1 Turn the printer off and unplug all cables from the printer.

2 To remove the control board cover, pull out gently, as shown.
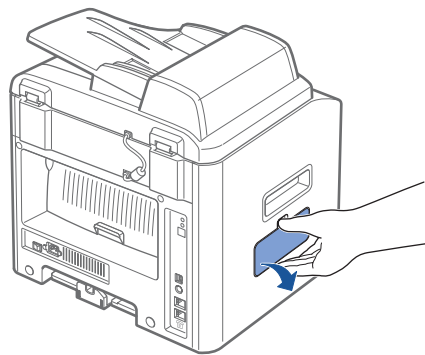
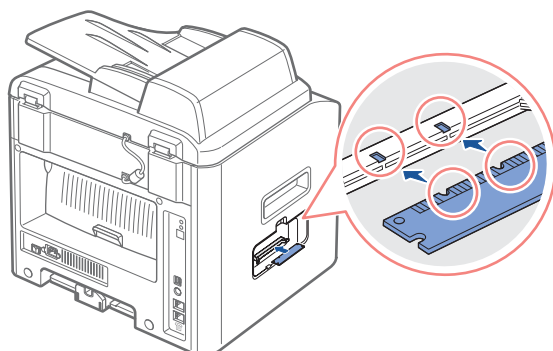**3** Open the lever on each side of the DIMM slots completely.

4 Remove the memory DIMM from the antistatic package. Locate the alignment notches on the bottom edge of the DIMM.

📝 **NOTE:** Avoid touching the connection points along the edge of the memory.

5 Hold the memory DIMM. Align the notches on the DIMM with the notches at the top of the DIMM slot.

6 Insert the ends of the memory DIMM into the slot on the levers.
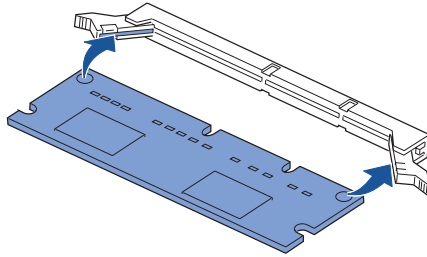
7 Push the memory DIMM firmly in to make sure you fully insert it into the slot.

8 Replace the control board cover, as shown.

9 Reconnect the power cord and printer cable, and turn the printer on.

Removing the Memory

1 Follow steps 1 and 2 on page 186 to access the control board.

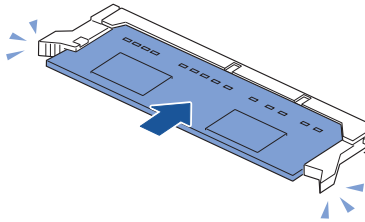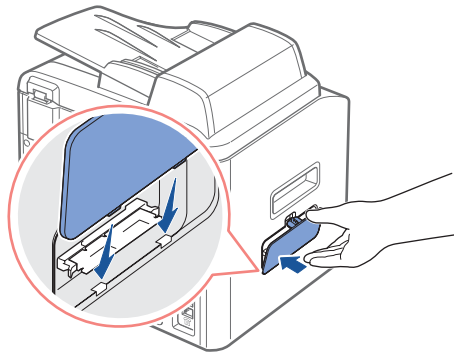**2** Push the levers at both ends of the DIMM slot away from the DIMM.
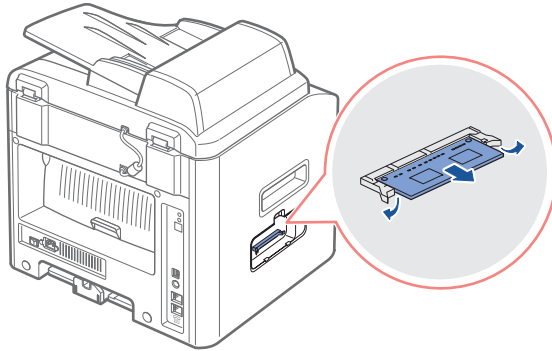
3 Place the DIMM in its original packaging or wrap it with paper and store it in a box.

4 Follow from step 8 on page 188.

Installing an Optional Tray2

You can increase the paper handling capacity of your machine by installing an optional Tray2. This tray holds 250 sheets of paper.

1 Turn the machine off and unplug all cables from the machine.

2 Remove the packing tape and the tape fastening the interface cable from the bottom of the optional Tray2.
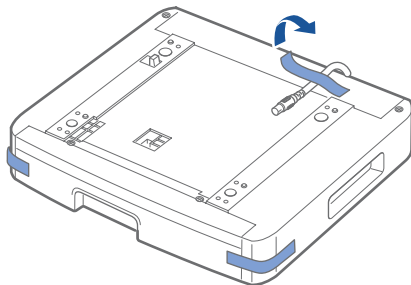
3 Find the location of the connector and the optional tray positioners.
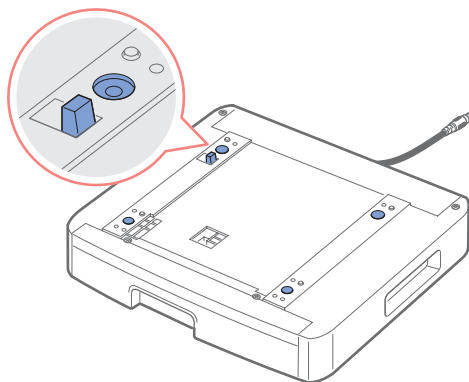
4 Place the machine over the tray, aligning the feet on the machine with the positioners in the optional Tray2.
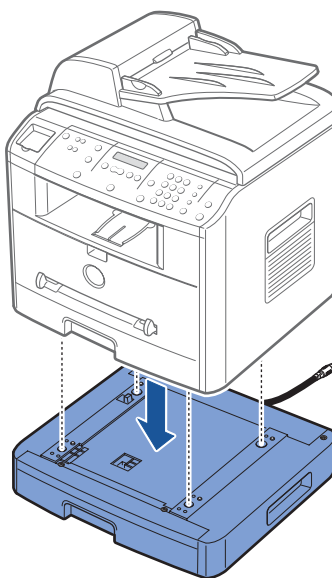
5 Plug the cable into the connector on the back of the machine.
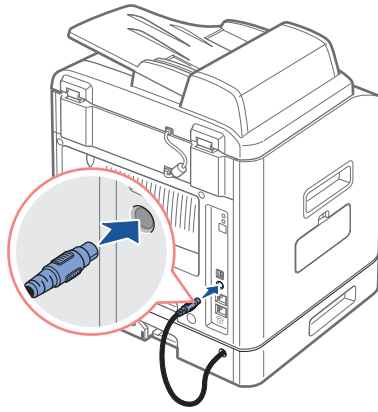
6 Load paper in the optional Tray 2. For information about loading paper in this tray, see page 17.

7 Reconnect the power cord and cables and then turn the machine on.

When you print a document on paper loaded in the optional Tray 2, you must configure the properties of the printer driver.

To access the properties of the printer driver:

1 Click the Windows **Start** button.

2 For Windows 98/Me/NT 4.0/2000, click **Settings** and point to **Printers**.

For Windows XP, click **Printers and Faxes**.

3 Click the **Dell Laser MFP 1600n** printer.

4 Right-click the printer icon and:

In Windows 98/Me, click **Properties**.

In Windows 2000, click **Print Setup** or click **Properties** and then point to **Printing Preferences**.

In Windows NT 4.0, click **Document Default**.

5 Click the **Printer** tab, and select **Tray 2** from the **Optional Tray** drop-down list.
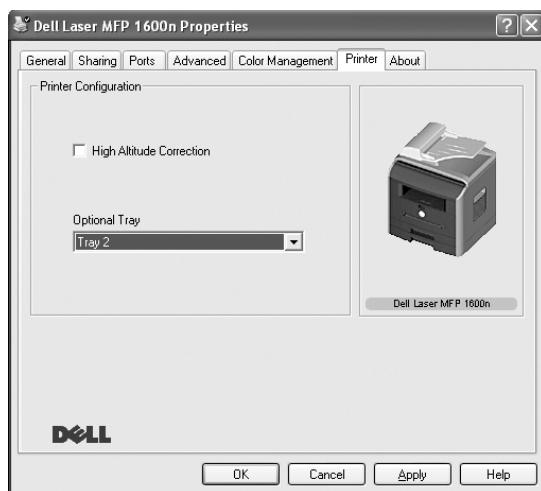
6 Click **OK** and print the document.

Specifications

General Specifications

Item	Description
Automatic document feeder	Up to 50 sheets (20 lb, 75g/m^2)
ADF Document size	Width: 5.6-8.5in. (142-216 mm)
	Length: 5.8-14in. (148-356 mm)
Paper input capacity	Paper tray: 250 sheets (weight: 17-24 lb)
	Bypass tray: 1 sheets (weight: 16-43 lb)
Paper output capacity	Front output tray: 150 sheets (face down)
	Rear output slot: 1 sheet (face up)
Paper type	Paper tray: Plain paper (60-90 g/m^2, 16- 24 lb)
	Bypass tray: Plain paper, Transparencies, Labels, Card, Post card, Envelopes (60-120 g/m^2, 16-32 lb)
Consumables	1-piece toner cartridge system
Power requirements	100-127 VAC, 50/60 Hz, 4.5A
	220-240 VAC, 50/60 Hz, 2.5A
Power consumption	Sleep mode: 20 W Energy Star Compliant
	Average: 350 W
Noise	Copy: 55 dB
	Standby mode: 39 dB
	Printing: 51 dB
Warm-up Time	Less than 42 seconds
Operating conditions	Temperature: 50ºF-89ºF (10ºC-32ºC)
	Humidity: 20%-80% RH
LCD	16 characters x 2 lines
Toner cartridge life	5,000 pages (for starter, 3,000 pages) @ IDC 5% coverage
SET dimension (W x D x H)	17.7 x 16.7 x 18in.
	(450 x 423 x 456 mm)
Random Access Memory (RAM)	Standard 32MB
	Expandable to 160 MB: SDRAM

Item	Description
Weight	Net: 15.6Kg (including toner cartridge), 14.8Kg (except toner cartridge)
	Gross: 20.4Kg(including consumables, accessories and package)
Package Weight	Paper: 2.7Kg
	Plastic: 0.7Kg

Scanner and Copier Specifications

Item	Description
Compatibility	TWAIN standard
Scanning method	Color CCD (Charge Coupled Device) module
Resolution	Optical: 600 x 1200 dpi
	Enhanced: 4,800 x 4800 dpi
Effective scanning length	Platen: 11.5 in. (293 mm)
	ADF: 14in. (356 mm)
Effective scanning width	8.2 in. (208mm)
Color bit depth	24 bit
Mono bit depth	1bit for Lineart
	8bit for Gray scale
Scan speed (Text mode)	Platen: 20 (Linearity), 64 (Gray), 64 seconds (Color)
	ADF: 18 (Linearity), 62 (Gray), 62 seconds (Color)
Copy speed	SDMC (Single Document Multiple Copy): 22 cpm (copies per minute for letter), 20cpm for A4
	MDMC (Multi-document Multiple Copy) at Text and Mixed: 14cpm
	MDMC at Photo mode: 8cpm
Paper size	Letter, A4, Legal, Folio, Executive, A5, A6, B5
Zoom rate	Platen: 25%-400%
	ADF: 25%-100%
Multiple copies	1-99 pages
Copy mode(=Original Type)	Text, Text&Photo, Photo

Printer Specifications

Item	Description
Printing method	Laser Beam Printing
Printing speed	Letter: 22 ppm (pages per minute)
	A4: 20 pages per minute
Paper size	Paper tray: Letter, A4, Legal, Folio, A5, A6
	Bypass tray: Letter, Legal, A4, Folio, Executive, A5, A6, A6 card, Post Card 4x6, HagaKi, Envelope 7-3/4, Envelope 9, Envelope 10, Envelope COM-10, Envelope DL, Envelope C5, Envelope C6, Envelope B5, JIS B5, ISO B5
	* Min.: 3 x 5in. (76 x 127 mm) Max.: 8.5 x 14 in. (216 x 356 mm)
Print resolution	600 x 600 dpi (1200 x 600 dpi)
Emulation	GDI, PC6, PCL5e, PostScript Level3
PC Interface	USB 2.0 (option)
Network Interface	10/100 Base TX
Compatibility	Windows 98/2000/NT 4.0/Me/XP
First printing time	Standby mode: 12 seconds
	Power save mode: 54 seconds

Facsimile Specifications

Item	Description
Compatibility	ITU-T Group 3
Applicable line	Public Switched Telephone Network (PSTN) or behind PABX
Data coding	MH/MR/MMR (ECM Mode) and JPEG for color fax transmission
Modem speed	33.6 Kbps
Transmission speed	Approx. 3 seconds/page * Transmission time applies to memory transmission of text data with ECM compression using only ITU-T No.1 Chart.
Scanning speed	Platen: approx. 6 seconds/A4 (at standard fax resolution mode) ADF: approx. 2 seconds/Letter (at standard fax resolution mode), 2.5 seconds/Letter (at fine fax resolution mode)
Maximum document length	Platen: 297 mm ADF: 1.5 mm
Paper size	Letter, A4, Legal
Resolution	Standard: 203 x 98 dpi Fine: 203 x 196 dpi Super Fine: 300 x 300 dpi
User Memory	4 MB (320 pages)
Halftone	256 levels

Paper Specifications

Overview

Your machine accepts a variety of print materials, such as cut-sheet paper (including up to 100 percent recycled fiber content paper), envelopes, labels, transparencies and custom-size paper. Properties, such as weight, composition, grain and moisture content, are important factors affecting the machine's performance and the output quality. Paper that does not meet the guidelines outlined in this *User's Guide* can cause the following problems:

- Poor print quality

- Increased paper jams

- Premature wear on the machine.

> **NOTE:** Some paper may meet all of the guidelines in this guide and still not produce satisfactory results. This may be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Dell has no control.

> **NOTE:** Before purchasing large quantities of paper, insure the paper meets the requirements specified in this *User's Guide*.

> ⚠ **CAUTION: Using paper that does not meet these specifications may cause problems, requiring repairs. These repairs are not covered by the Dell warranty or service agreements.**

Supported Sizes of Paper

Paper	Dimensions[a]	Weight	Capacity[b]
Letter	8.5 X 11in. (216 X 279 mm)	• 60-105 g/m^2 bond (16-28 lb) for the paper tray • 60-120 g/m^2 bond (16-32 lb) for the Bypass tray	• 250 sheets of 75 g/m^2 bond (20 lb) paper for the paper tray • 1 sheet of paper for the Bypass tray
A4	8.3 X 11.7 in. (210 X 297 mm)		
Executive	7.25 X 10.5in. (191 X 267 mm)		
Legal	8.5 X 14in. (216 X 356 mm)		
Folio	8.5 X 13 in. (216 X 330 mm)		

Paper	Dimensions[a]	Weight	Capacity[b]
Minimum size (custom)	3 x 5in. (76 x 127 mm)	60-120g/m^2 bond (16-32 lb)	1 sheet of paper for the Bypass tray
Maximum size (Legal)	8.5 x 14 in. (216 x 356 mm)		
Transparency	Same minimum and maximum paper sizes as listed above.	138-146 g/m^2	
Labels		120-150 g/m^2	
Cards		90-163 g/m^2	
Envelopes		75-90 g/m^2	

a. The machine supports a wide range of media sizes.
b. Capacity may vary depending on print materials' weight and thickness, and environmental conditions.

NOTE: You may experience jams when using print materials with a length of less than 127 mm (5inches). For optimum performance, ensure that you are storing and handling the paper correctly. Please refer to page 209.

Guidelines for Using Paper

For the best result, use conventional 75 g/m^2 (20 lb) paper. Ensure that the paper is of good quality, and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

If you are unsure of what type of paper you are loading, such as bond or recycled paper, check the label on the package.

The following problems may cause print quality deviations, jamming or even damage to the machine:

Symptom	Problem with paper	Solution
Poor print quality or toner adhesion, problems with feeding	Too moist, too rough, too smooth or embossed; faulty paper lot	Try another kind of paper, between 100-400 Sheffied, 4%-5% moisture content.
Dropout, jamming, curl	Stored improperly	Store paper flat in its moisture-proof wrapping.
Increased gray background shading/printer wear	Too heavy	Use lighter paper, use the rear output slot.

Symptom	Problem with paper	Solution
Excessive curl problems with feeding	Too moist, wrong grain direction or short-grain construction	• Use the rear output slot. • Use long-grain paper.
Jamming, damage to machine	Cutouts or perforations	Do not use paper with cutouts or perforations.
Problems with feeding	Ragged edges	Use good quality paper.

NOTE: Do not use letterhead paper printed with low-temperature inks, such as those used in some types of thermography.

NOTE: Do not use raised or embossed letterhead.

NOTE: The machine uses heat and pressure to fuse toner to the paper. Insure that any colored paper or preprinted forms use inks that are compatible with this fusing temperature (200 °C or 392 °F for 0.1 second).

Paper Specifications

Category	Specifications
Acid Content	5.5 pH or lower
Caliper	0.094-0.18 mm (3.0-7.0 mils)
Curl in Ream	Flat within 0.02 in. (5 mm)
Cut Edge Conditions	Cut with sharp blades with no visible fray.
Fusing Compatibility	Must not scorch, melt, offset or release hazardous emissions when heated to 200°C (392°F) for 0.1 second.
Grain	Long Grain
Moisture Content	4%-6% by weight
Smoothness	100-400 Sheffied

Paper Output Capacity

Output Location	Capacity
Frint Output Tray (Face Down)	150 sheets of 75 g/m^2 bond (20 lb) paper
Rear Output Slot (Face Up)	1 sheet of 75 g/m^2 bond (20 lb) paper

Printer and Paper Storage Environment

Paper storage environmental conditions directly affect the feed operation.

Ideally, the machine and paper storage environment should be at or near room temperature, and not too dry or humid. Remember that paper is hygroscopic; it absorbs and loses moisture rapidly.

Heat works with humidity to damage paper. Heat causes the moisture in paper to evaporate, while cold causes it to condense on the sheets. Heating systems and air conditioners remove most of the humidity from a room. As paper is opened and used, it loses moisture, causing streaks and smudging. Humid weather or water coolers can cause the humidity to increase in a room. As paper is opened and used it absorbs any excess moisture, causing light print and dropouts. Also, as paper loses and gains moisture it can become distorted. This can cause paper jams.

Care should be taken not to purchase more paper than can be used in a short time (about 3 months). Paper stored for long periods may experience heat and moisture extremes, which can cause damage. Planning is important to prevent damage to large supplies of paper.

Unopened paper in sealed reams can remain stable for several months before use. Opened packages of paper have more potential for environment damage, especially if they are not wrapped with a moisture-proof barrier.

The paper storage environment should be properly maintained to ensure optimum performance. The required condition is 20°C to 24°C (68°F to 75°F), with a relative humidity of 4 percent to 55percent. The following guidelines should be considered when evaluating the paper's storage environment:

- Paper should be stored at or near room temperature.

- The air should not be too dry or too humid.

- The best way to store an opened ream of paper is to rewrap it tightly in its moisture-proof wrapping. If the machine environment is subject to extremes, unwrap only the amount of paper to be used during the day's operation to prevent unwanted moisture changes.

Regulatory Notices

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of a radio navigation or other safety service or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service. Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, air-traffic control, pager, and Personal Communication Services (PCS). These licensed services, along with unintentional radiators such as digital devices, including computers, contribute to the electromagnetic environment.

Electromagnetic Compatibility (EMC) is the ability of items of electronic equipment to function properly together in the electronic environment. While this computer has been designed and determined to be compliant with regulatory agency limits for EMI, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference with radio communications services, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and the receiver are on different branch circuits.

If necessary, consult a Dell Technical Support representative or an experienced radio/television technician for additional suggestions.

Dell™ computers are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

- Class A is typically for business or industrial environments.
- Class B is typically for residential environments.

Information Technology Equipment (ITE), including devices, expansion cards, printers, input/output (I/O) devices, monitors, and so on, that are integrated into or connected to the computer should match the electromagnetic environment classification of the computer.

A Notice About Shielded Signal Cables: Use only shielded cables for connecting devices to any Dell device to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment. For parallel printers, a cable is available from Dell. If you prefer, you can order a cable from Dell on the World Wide Web at accessories.us.dell.com/sna/category.asp?category_id=4117.

Most Dell computers are classified for Class B environments. However, the inclusion of certain options can change the rating of some configurations to Class A. To determine the electromagnetic classification for your computer or device, see the following sections specific for each regulatory agency. Each section provides country-specific EMC/EMI or product safety information.

FCC Notices (U.S. Only)

Most Dell computers are classified by the Federal Communications Commission (FCC) as Class B digital devices. To determine which classification applies to your computer, examine all FCC registration labels located on the bottom, side, or back panel of your computer, on card-mounting brackets, and on the cards themselves. If any one of the labels carries a Class A rating, your entire computer is considered to be a Class A digital device. If *all* labels carry an FCC Class B rating as distinguished by either an FCC ID number or the FCC logo, (**FC**), your computer is considered to be a Class B digital device.

Once you have determined your computer's FCC classification, read the appropriate FCC notice. Note that FCC regulations provide that changes or modifications not expressly approved by Dell could void your authority to operate this equipment.

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

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

Class A

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 manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

Class B

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

FCC Identification Information

COMMENT: Add the regulatory model number as appropriate for your computer in the following bulleted list.

The following information is provided on the device or devices covered in this document in compliance with FCC regulations:

*   Model number:

*   Company name:

    Dell Inc.
    One Dell Way
    Round Rock, Texas 78682 USA
    512-338-4400

COMMENT: The following modem information is only applicable for products with onboard modems, not add-in modem PCMCIA cards.

Modem Regulatory Information

This equipment complies with Part 68 of the FCC Rules. On the bottom of your computer is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for your equipment. If requested, you must provide this information to the telephone company.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most areas, the sum of all the RENs on your telephone line should be less than five to ensure proper service from the telephone company. To be certain of the number of devices that you may connect to a line, as determined by the total RENs, contact your local telephone company.

The registration jack Universal Service Order Code (USOC) used by this equipment is RJ-11C. An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that is Part 68 compliant.

This equipment cannot be used on public coin-phone service provided by the telephone company. Connection to party line service is subject to state tariffs.

There are no user serviceable parts on the modem contained in your computer.

If your telephone equipment causes harm to the telephone network, the telephone company will notify you in advance that service may be temporarily discontinued. If advance notice is not practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of this equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

COMMENT: Verify the accuracy of the cross-reference in the following paragraph.

If you experience trouble with this telephone equipment, see "Getting Help" in your computer's troubleshooting documentation or, for some computers, the section titled "Contacting Dell" in your computer's online guide to find the appropriate telephone number for obtaining customer assistance. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent, identification of the business, other entity, or individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual. The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.

IC Notice (Canada Only)

Most Dell computers (and other Dell digital apparatus) are classified by the Industry Canada (IC) Interference-Causing Equipment Standard #3 (ICES-003) as Class B digital devices. To determine which classification (Class A or B) applies to your computer (or other Dell digital apparatus), examine all registration labels located on the bottom, side, or the back panel of your computer (or other digital apparatus). A statement in the form of "IC Class A ICES-003" or "IC Class B ICES-003" will be located on one of these labels. Note that Industry Canada regulations provide that changes or modifications not expressly approved by Dell could void your authority to operate this equipment.

This Class B (or Class A, if so indicated on the registration label) digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B (ou Classe A, si ainsi indiqué sur l'étiquette d'enregistration) respecte toutes les exigences du Reglement sur le Materiel Brouilleur du Canada.

COMMENT: The following modem information is only applicable for products with onboard modems, not add-in modem PCMCIA cards.

Modem Regulatory Information

The IC label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The IC label does not guarantee that the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alteration made by a user to this equipment, or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection, that the electrical ground connections of the power utility, telephone lines, and internal metallic water-pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

> **NOTICE:** Users should not attempt to make such connections themselves. Contact the appropriate electric inspection authority, or electrician, as appropriate.

> **NOTE:** The REN assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed the number five.

COMMENT: WRITERS: Verify the "0.6 B" measurement in the following clause with your Regulatory modem contacts.

The REN for the internal modem as stated on the IC regulatory label located on the bottom of the computer is 0.6 B.

The following information is provided in compliance with IC regulations:

Dell Inc.
One Dell Way
Round Rock, TX 78682 USA
512-338-4400

CE Notice (European Union)

Marking by the symbol CE indicates compliance of this Dell computer to the EMC Directive and the Low Voltage Directive of the European Union. Such marking is indicative that this Dell system meets the following technical standards:

- EN 55022 — "Information Technology Equipment — Radio Disturbance Characteristics — Limits and Methods of Measurement."
- EN 55024 — "Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement."
- EN 61000-3-2 — "Electromagnetic Compatibility (EMC) - Part 3: Limits - Section 2: Limits for Harmonic Current Emissions (Equipment Input Current Up to and Including 16 A Per Phase)."
- EN 61000-3-3 — "Electromagnetic Compatibility (EMC) - Part 3: Limits - Section 3: Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment With Rated Current Up to and Including 16 A."
- EN 60950 — "Safety of Information Technology Equipment."

NOTE: EN 55022 emissions requirements provide for two classifications:

- Class A is for typical commercial areas.
- Class B is for typical domestic areas.

COMMENT: Include the following warning ONLY for Class A computers/products. Do not precede it with an icon, and do not change it to a caution.

RF INTERFERENCE WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency (RF) interference, in which case the user may be required to take adequate measures.

COMMENT: Include the following sentence ONLY for Class B computers/products:

This Dell device is classified for use in a typical Class B domestic environment.

COMMENT: In rare cases, the regulatory engineer may instruct you to keep both the warning (Class A) and the sentence (Class B) in the same document. When that occurs, precede the RF INTERFERENCE WARNING for Class A with the following sentence (Enterprise writers, delete "system information" from the following paragraph): To determine which classification applies to your computer, examine the FCC or ICES information on the regulatory label located on the back, side, or bottom panel of the computer. If the FCC or ICES information on the label indicates a Class A rating, the following Class A warning applies to your computer:

COMMENT: Then precede the Class B statement with the following sentence: If the FCC or ICES information on the label indicates a Class B rating, the following Class B statement applies to your computer:

COMMENT: Include the following paragraph, regardless of Class A or Class B certification.

A "Declaration of Conformity" in accordance with the preceding directives and standards has been made and is on file at Dell Inc. Products Europe BV, Limerick, Ireland.

CE Mark Notice

This equipment complies with the essential requirements of the European Union Directive 1999/5/EC.

Cet équipement est conforme aux principales caractéristiques définies dans la Directive européenne RTTE 1999/5/CE.

Die Geräte erfüllen die grundlegenden Anforderungen der RTTE-Richtlinie (1999/5/EG).

Questa apparecchiatura é conforme ai requisiti essenziali della Direttiva Europea R&TTE 1999/5/CE.

Este equipo cumple los requisitos principales de la Directiva 1999/5/CE de la UE, "Equipos de Terminales de Radio y Telecomunicaciones".

Este equipamento cumpre os requisitos essenciais da Directiva 1999/5/CE do Parlamento Europeu e do Conselho (Directiva RTT).

Ο εξοπλισμός αυτός πληροί τις βασικές απαιτήσεις της κοινοτικής οδηγίας EU R&TTE 1999/5/ΕΚ.

Deze apparatuur voldoet aan de noodzakelijke vereisten van EU-richtlijn betreffende radioapparatuur en telecommunicatie-eindapparatuur 1999/5/EG.

Dette udstyr opfylder de Væsentlige krav i EU's direktiv 1999/5/EC om Radio- og teleterminaludstyr.

Dette utstyret er i overensstemmelse med hovedkravene i R&TTE-direktivet (1999/5/EC) fra EU.

Utrustningen uppfyller kraven för EU-direktivet 1999/5/EC om ansluten teleutrustning och ömsesidigt erkännande av utrustningens överensstämmelse (R&TTE).

Tämä laite vastaa EU:n radio- ja telepäätelaitedirektiivin (EU R&TTE Directive 1999/5/EC) vaatimuksia.

COMMENT: Use the New Zealand Telecom Warnings only in documents for computers that have modems and are shipping to New Zealand.

New Zealand Telecom Warnings

General

"The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services."

"This equipment does not fully meet Telecom impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances."

"This equipment shall not be set up to make automatic calls to the Telecom '111' Emergence Service."

"If a charge for local calls is unacceptable, the 'Dial' button should NOT be used for local calls. Only the 7-digits of the local number should be dialed from your telephone. DO NOT dial the area code digit or the '0' prefix."

"This equipment may not provide for the effective hand-over of a call to another device connected to the same line."

Important Notice

"Under power failure conditions, this telephone may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use."

"Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specification:

1   There shall be no more than 10 call attempts to the same number within any 30-minute period for any single manual call initiation, and the equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.

2   Where automatic calls are made to different numbers, the equipment shall go on-line for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.

3   The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing."

"All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is to be aware that it is being recorded. In addition, the Principles enumerated in the Privacy Act of 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is used and what is disclosed to any other party."

COMMENT: Do not change the warning in the Simplified Chinese Class A Warning Notice (China Only) to a caution.

Simplified Chinese Class A Warning Notice (China Only)

On Class A systems, the following warning will appear near the regulatory label:

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.

<div align="center">声明</div>

此为A级产品，在生活环境中， 该产品可能会造成无线电干扰。 在这种情况下，可能需要用户对其干扰采取切实可行的措施。

EN 55022 Compliance (Czech Republic Only)

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 štitku počitače uvedeno, že spadá do třídy A podle EN 55022, spadá automatickz do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (ochranné pásmo 30m) podle EN 55022 platí následujíčí. Dojde-li k rušení telekomunikačních nebo jinych zařízení, je uživatel povinen provést taková opatření, aby rušení odstranil.

VCCI Notice (Japan Only)

Most Dell computers are classified by the Voluntary Control Council for Interference (VCCI) as Class B information technology equipment (ITE). However, the inclusion of certain options can change the rating of some configurations to Class A. ITE, including devices, expansion cards, printers, input/output (I/O) devices, monitors, and so on, integrated into or connected to the computer should match the electromagnetic environment classification (Class A or B) of the computer.

To determine which classification applies to your computer, examine the regulatory labels/markings located on the bottom, side, or back panel of your computer. Once you have determined your computer's VCCI classification, read the appropriate VCCI notice (see "VCCI Class A ITE Regulatory Mark" or "VCCI Class B ITE Regulatory Mark").

Class A ITE

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラス A 情報技術装置です。
この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な
対策を講ずるよう要求されることがあります。

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

VCCI Class A ITE Regulatory Mark

If the regulatory label includes the following marking, your computer is a Class A product: VCCI

Class B ITE

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラス B 情報技術装置です。
この装置は家庭環境で使用することを目的としていますが、ラジオやテレビジョン受信機に近接して使用
されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

This is a Class B product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

VCCI Class B ITE Regulatory Mark

If the regulatory label includes the following marking, your computer is a Class B product:

MIC notice (Republic of Korea Only)

To determine which classification (Class A or B) applies to your computer (or other Dell digital device), examine the Republic of Korean Ministry of Information and Communications (MIC) registration labels located on your computer (or other Dell digital device). The MIC label may be located separately from the other regulatory marking applied to your product. Line two of the label identifies the emissions class for the product—"(A)" for Class A products or "(B)" for Class B products.

NOTE: MIC emissions requirements provide for two classifications:

- Class A devices are for business purposes.
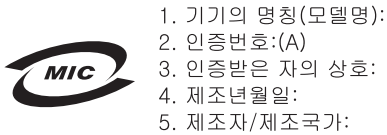- Class B devices are for nonbusiness purposes.

Class A Device

기 종 별	사 용 자 안 내 문
A급 기기 (업무용 정보통신기기)	이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

Please note that this device has been approved for business purposes with regard to electromagnetic interference. If you find that this device is not suitable for your use, you may exchange it for a nonbusiness-purpose device.

MIC Class A Regulatory Label

If the regulatory label includes the following marking, your computer is a Class A product:


```
1. 기기의 명칭(모델명):
2. 인증번호:(A)
3. 인증받은 자의 상호:
4. 제조년월일:
5. 제조자/제조국가:
```

Class B Device

기 종 별	사 용 자 안 내 문
B급 기기 (가정용 정보통신기기)	이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역 에서는 물론 모든 지역에서 사용할 수 있습니다.

Please note that this device has been approved for nonbusiness purposes and may be used in any environment, including residential areas.

COMMENT: The following MIC Class B Regulatory label requires system-specific changes, so ensure that you check with your EMC engineer about modifying it for your system. (If your system was manufactured at a Compal or Quanta facility, you can use the graphic in the "Graphic for MIC Class B" folder for line 5 of the following MIC Class B Regulatory label.) The regulatory model and marketing name/model will change with every system.

MIC Class B Regulatory Label

If the regulatory label includes the following marking, your computer is a Class B product:

명칭/모델명: 노트북컴퓨터
인증번호: Refer to Regulatory Label
인증받은자의 상호: 델 컴퓨터
제조 년 월 일: Refer to Regulatory Label
제조자/제조국: Refer to Regulatory Label for Country of Origin

Polish Center For Testing And Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a 3-prong socket). All equipment that works together (computer, monitor, printer, and so on) should have the same power supply source.

The phasing conductor of the room's electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark "B" confirms that the equipment is in compliance with the protection usage requirements of standard PN-EN 55022.

Wymagania Polskiego Centrum Badań i Certyfikacji

Urządzenie powinno być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kołkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukarka) powinny być zasilane z tego samego źródła.

Instalacja elektryczna pomieszczenia powinna zawierać w przewodzie fazowym rezerwową ochronę przed zwarciami, w postaci bezpiecznika o wartości znamionowej nie większej niż 16A (amperów).
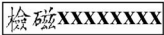
W celu całkowitego wyłączenia urządzenia z sieci zasilania, należy wyjąć wtyczkę kabla zasilającego z gniazdka, które powinno znajdować się w pobliżu urządzenia i być łatwo dostępne. Znak bezpieczeństwa "B" potwierdza zgodność urządzenia z wymaganiami bezpieczeństwa użytkowania zawartymi w *PN-EN 60950:2000 i PN-EN 55022:2000.*

Jezeli na tabliczce znamionowej umieszczono informacje, ze urzadzenie jest klasy A, to oznacza, ze urzadzenie w srodowisku mieszkalnym moze powodowac zaklócenia radioelektryczne. W takich przypadkach mozna zadac od jego uzytkownika zastosowania odpowiednich srodków zaradczych.

Pozostałe instrukcje bezpieczeństwa

• Nie należy używać wtyczek adapterowych lub usuwać kołka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żyłowego z prawidłowo połączonym przewodem ochronnym.

• System komputerowy należy zabezpieczyć przed nagłymi, chwilowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezzakłóceniowego źródła zasilania.

• Należy upewnić się, aby nic nie leżało na kablach systemu komputerowego, oraz aby kable nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub potykać się o nie.

• Nie należy rozlewać napojów ani innych płynów na system komputerowy.

• Nie należy wpychać żadnych przedmiotów do otworów systemu komputerowego, gdyż może to spowodować pożar lub porażenie prądem, poprzez zwarcie elementów wewnętrznych.

• System komputerowy powinien znajdować się z dala od grzejników i źródeł ciepła. Ponadto, nie należy blokować otworów wentylacyjnych. Należy unikać kładzenia luźnych papierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

BSMI Notice (Taiwan Only)

If you find a 檢磁 **XXXXXXXX** or ⊖ mark on the regulatory label on the bottom, side, or back panel of your computer, the following section is applicable:

BSMI通告（僅限於台灣）

大多數的 Dell 電腦系統被 BSMI（經濟部標準檢驗局）劃分爲乙類數位裝置。但是，使用某些選件會使有些組態的等級變成甲類。若要確定您的電腦系統適用等級，請檢查所有位於電腦底部或背面板、擴充卡安裝托架，以及擴充卡上的 BSMI 註冊標籤。如果其中有一甲類標籤，即表示您的系統爲甲類數位裝置。如果只有 BSMI 的檢磁號碼標籤，則表示您的系統爲乙類數位裝置。

一旦確定了系統的 BSMI 等級，請閱讀相關的 BSMI 通告。請注意，BSMI通告規定凡是未經 Dell Inc. 明確批准的擅自變更或修改，將導致您失去此設備的使用權。

此裝置符合 BSMI（經濟部標準檢驗局）的規定，使用時須符合以下兩項條件：

• 此裝置不會產生有害干擾。

• 此裝置必須能接受所接收到的干擾，包括可能導致無法正常作業的干擾。

甲類

此設備經測試證明符合 BSMI（經濟部標準檢驗局）之甲類數位裝置的限制規定。這些限制的目的是爲了在商業環境中使用此設備時，能提供合理的保護以防止有害的干擾。此設備會產生、使用並散發射頻能量；如果未遵照製造廠商的指導手冊來安裝和使用，可能會干擾無線電通訊。請勿在住宅區使用此設備。

<div style="border:1px solid black; padding:10px; text-align:center;">
警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，
在這種情況下，使用者會被要求采取某些適當的對策。
</div>

乙類

此設備經測試證明符合 BSMI（經濟部標準檢驗局）之乙類數位裝置的限制規定。這些限制的目的是爲了在住宅區安裝時，能防止有害的干擾，提供合理的保護。此設備會產生、使用並散發射頻能量；如果未遵照製造廠商的指導手冊來安裝和使用，可能會干擾無線電通訊。但是，這並不保證在個別的安裝中不會產生干擾。您可以透過關閉和開啓此設備來判斷它是否會對廣播和電視收訊造成干擾；如果確實如此，我們建議您嘗試以下列一種或多種方法來排除干擾：

• 重新調整天線的接收方向或重新放置接收天線。

• 增加設備與接收器的距離。

• 將設備連接至不同的插座，使設備與接收器連接在不同的電路上。

• 請向經銷商或有經驗的無線電／電視技術人員查詢，以獲得幫助。

NOM Information (Mexico Only)

COMMENT: The model number, supply voltage, frequency, and current consumption figures may vary from computer to computer. Check with Product Safety Engineering to determine the information for your computer. Also ask whether you should use dashes or slashes for the "Supply voltage" and "Frequency" numbers.

The following information is provided on the device(s) described in this document in compliance with the requirements of the official Mexican standards (NOM):

Exporter:	Dell Inc. One Dell Way Round Rock, TX 78682
Importer:	Dell Computer de México, S.A. de C.V. Paseo de la Reforma 2620 - 11° Piso Col. Lomas Altas 11950 México, D.F.
Ship to:	Dell Computer de México, S.A. de C.V. al Cuidado de Kuehne & Nagel de México S. de R.L. Avenida Soles No. 55 Col. Peñon de los Baños 15520 México, D.F.
Model number:	
Supply voltage:	*xxInsert correct info here, such as:* 100/240 VAC
Frequency:	*xxInsert correct info here, such as:* 50/60 Hz
Current Consumption:	*xxInsert correct info here, such as:* 1.5 A
Output voltage:	*xxInsert correct info here, such as:* 20 VDC
Output current:	*xxInsert correct info here, such as:* 3.5 A

ENERGY STAR® Compliance

Certain configurations of Dell computers comply with the requirements set forth by the Environmental Protection Agency (EPA) for energy-efficient computers. If the front panel of your computer bears the ENERGY STAR® Emblem, your original configuration complies with these requirements and all ENERGY STAR® power management features of the computer are enabled.

NOTE: Any Dell computer bearing the ENERGY STAR® Emblem is certified to comply with EPA ENERGY STAR® requirements as configured when shipped by Dell. Any changes you make to this configuration (such as installing additional expansion cards or drives) may increase the computer's power consumption beyond the limits set by the EPA's ENERGY STAR® Computers program.

ENERGY STAR® Emblem

The EPA's ENERGY STAR® Computers program is a joint effort between the EPA and computer manufacturers to reduce air pollution by promoting energy-efficient computer products. The EPA estimates that use of ENERGY STAR® computer products can save computer users up to two billion dollars annually in electricity costs. In turn, this reduction in electricity usage can reduce emissions of carbon dioxide, the gas primarily responsible for the greenhouse effect, and sulfur dioxide and nitrogen oxides, the primary causes of acid rain.

You can also help reduce electricity usage and its side effects by turning off your computer when it is not in use for extended periods of time, particularly at night and on weekends.