



Zebra[®] GC420d[™]

Desktop Thermal Printer

User Guide



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

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2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B Digital Devices, 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 residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the product manuals, may cause harmful interference to 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, the user is encouraged to do one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
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About This Document



This section provides you with contact information, document structure and organization, and additional reference documents.

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Who Should Use This Document

This User Guide is intended for use by any person who needs to operate or to troubleshoot problems with the printer.

How This Document Is Organized

The User Guide is set up as follows:

Section	Description
<i>Introduction on page 1</i>	This section describes what you get in your shipping box and provides an overview of printer features. This section also has procedures that describe how to open and close the printer and report any problems.
<i>Getting Started on page 9</i>	This section describes how to set up your printer for the first time and use the most common operating procedures for loading media.
<i>Print Operations on page 25</i>	This section provides media and print handling, font and language support, and the set up of less common printer configurations.
<i>Printer Options on page 39</i>	This section covers the common printer options and accessories with brief descriptions and how to get you started using or configuring your printer option or accessory.
<i>Maintenance on page 47</i>	This section provides routine cleaning and maintenance procedures.
<i>Troubleshooting on page 59</i>	This section provides information about printer error reporting that you might need for printer troubleshooting. Assorted diagnostic tests are included.
<i>Appendix: Interface Wiring on page 73</i>	This section provides additional interface information and wiring diagrams to assist with printer to host system integration (typically a PC).
<i>Appendix: Dimensions on page 77</i>	This section provides external printer dimensions for the standard printer and printer with options.
<i>Appendix: ZPL Configuration on page 81</i>	This section briefly covers printer configuration and includes a cross-reference to ZPL printer configuration commands.

Contacts

Technical Support via the Internet is available 24 hours per day, 365 days per year.

Web Site: www.zebra.com

E-mail Back Technical Library:

E-mail address: emb@zebra.com

Subject line: Emailist

Self Service Knowledge Base: www.zebra.com/knowledgebase

Online Case Registration: www.zebra.com/techrequest

Which Department Do You Need?	The Americas	Europe, Middle East, and Africa	Asia Pacific and India
Regional Headquarters	Zebra Technologies Corporation 475 Half Day Road, Suite 500 Lincolnshire, IL 60069 USA T: +1 847 634 6700 Toll-free +1 866 230 9494 F: +1 847 913 8766	Zebra Technologies Europe Limited Dukes Meadow Millboard Road Bourne End Buckinghamshire, SL8 5XF United Kingdom T: +44 (0) 1628 556000 F: +44 (0) 1628 556001	Zebra Technologies Asia Pacific Pte. Ltd. 120 Robinson Road #06-01 Parakou Building Singapore 068913 T: +65 6858 0722 F: +65 6885 0838
Technical Support For questions on the operation of Zebra equipment and software, please call your distributor. For additional assistance, contact us. Please have your model and serial numbers available.	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 913 2578 Hardware: ts1@zebra.com Software: ts3@zebra.com <i>Kiosk printers:</i> T: +1 866 322 5202 E: kiosksupport@zebra.com	T: +44 (0) 1628 556039 F: +44 (0) 1628 556003 E: Tseurope@zebra.com	T: +65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Repair Service Department For back-to-base service and repair.	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 821 1797 E: repair@zebra.com To request a repair in the U.S., go to www.zebra.com/repair .	T: +44 (0) 1772 693069 F: +44 (0) 1772 693046 New requests: ukrma@zebra.com Status updates: repairupdate@zebra.com	T: +65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Technical Training Department For Zebra product training courses.	T: +1 847 793 6868 T: +1 847 793 6864 F: +1 847 913 2578 E: ttamerica@zebra.com	T: +44 (0) 1628 556000 F: +44 (0) 1628 556001 E: Eurtraining@zebra.com	T: +65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Inquiry Department For product literature and distributor and dealer information.	T: +1 877 ASK ZEBRA (275 9327) E: inquiry4@zebra.com	T: +44 (0) 1628 556037 F: +44 (0) 1628 556005 E: mseurope@zebra.com	E: China: GCmarketing@zebra.com <i>All other areas:</i> APACChannelmarketing@zebra.com
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Key: T: Telephone
F: Facsimile
E: E-mail

Document Conventions

The following conventions are used throughout this document to convey certain information.

Alternate Color (online only) Cross-references contain hot links to other sections in this guide. If you are viewing this guide online in **.pdf** format, you can click the cross-reference ([blue text](#)) to jump directly to its location.

Command Line Examples Command line examples appear in `Courier New` font. For example, type `ZTools` to get to the Post-Install scripts in the `bin` directory.

Files and Directories File names and directories appear in `Courier New` font. For example, the `Zebra<version number>.tar` file and the `/root` directory.

Icons Used



Caution • Warns you of the potential for electrostatic discharge.



Caution • Warns you of a potential electric shock situation.



Caution • Warns you of a situation where excessive heat could cause a burn.



Caution • Advises you that failure to take or avoid a specific action could result in physical harm to you.

Caution • (No icon) Advises you that failure to take or avoid a specific action could result in physical harm to the hardware.



Important • Advises you of information that is essential to complete a task.



Note • Indicates neutral or positive information that emphasizes or supplements important points of the main text.



Example • Provides an example, often a scenario, to better clarify a section of text.

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Notes • _____



Introduction

This section describes what you get in your shipping box and provides an overview of printer features. This includes procedures that describe how to open and close the printer and report any problems.

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GC420d™ Thermal Printers

The Zebra® GC420d™ model is the best value in a desktop thermal printer. The GC420d™ printer provides direct thermal printing at speeds up to 4 ips (inches per second) at a 203 dpi (dots per inch) print density. The GC420d™ supports both ZPL™ and EPL™ Zebra printer programming languages and a wide variety of interface and feature options.

The GC420 printers feature:

- Automatic printer language detection and switching between ZPL and EPL programming and label formats.
- OpenAccess™ design for simplified media loading.
- Color-coded operator controls and media guides.
- Zebra™ Global Printing Solution – supports Microsoft Windows keyboard encoding (and ANSI), Unicode UTF-8 and UTF 16 (Unicode Transformation Formats), XML, ASCII (7 and 8 bit used by legacy programs and systems), basic single and double byte font encoding, Hexadecimal encoding, and custom character maps (DAT table creation, font linking, and character remapping).
- Improved printer performance: faster print speeds and a 32-bit processor.
- A complete suite of free software applications and drivers to configure printer settings, design and print labels and receipts, get printer status, import graphics and fonts, send programming commands, update firmware, and download files. Clone printer settings and send graphics, files, fonts, and firmware (updates) to one or more Zebra® Ethernet and locally connected printers with ZebraNet™ Bridge.
- Maintenance reporting enabled and customizable by the user.
- The GC420 direct thermal printer models also include support for Line Mode printing to support EPL1 legacy programming based printing applications.

The GC420 printers offer these basic printer options:

- Label Dispense (Peel-Off).
- Zebra® ZBI 2.0™ (Zebra BASIC Interpreter) programming language. ZBI™ allows you to create custom printer operations that can automate processes, use peripherals (i.e. scanners, scales, keyboards, Zebra® KDU or KDU Plus™, etc.) all without being attached to a PC or network.

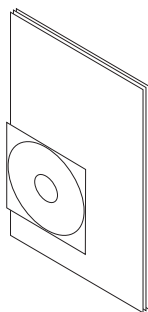
This user's guide provides all the information you need to operate your printer on a daily basis. To create label formats, refer to your programming guides or label design applications such as ZebraDesigner™.

Your printer, when connected to a host computer, functions as a complete system for printing labels and tags.

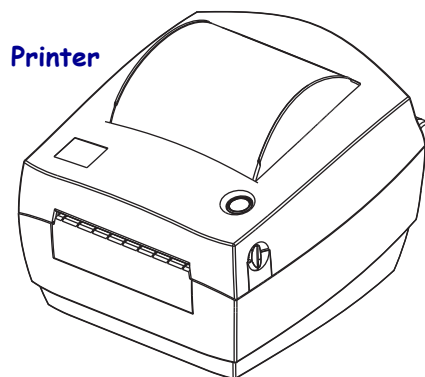
Note • Many printer settings may also be controlled by your printer's driver or label design software. Refer to the driver or software documentation for more information.

What's in the Box?

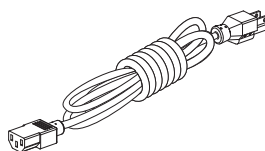
Save the carton and all packing materials in case you need to ship or store the printer later. After unpacking, make sure you have all parts. Follow the procedures for inspecting the printer to familiarize yourself with printer parts so you can follow the instructions in this book.



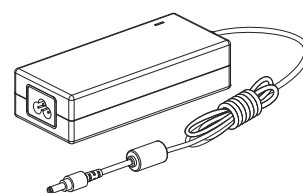
**Documentation
and Software**



Printer



**Power Cord
varies by locale or region**



**Power
Supply**

Unpack and Inspect the Printer

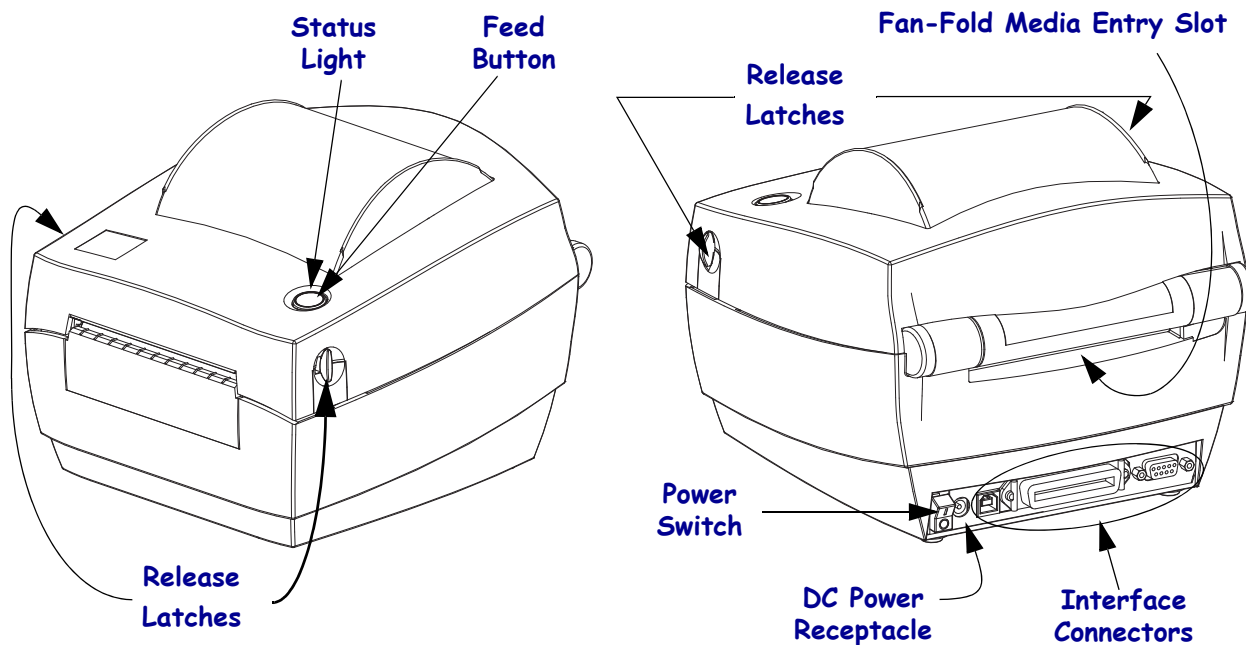
When you receive the printer, immediately unpack it and inspect for shipping damage.

- Save all packing materials.
- Check all exterior surfaces for damage.
- Open the printer and inspect the media compartment for damage to components.

If you discover shipping damage upon inspection:

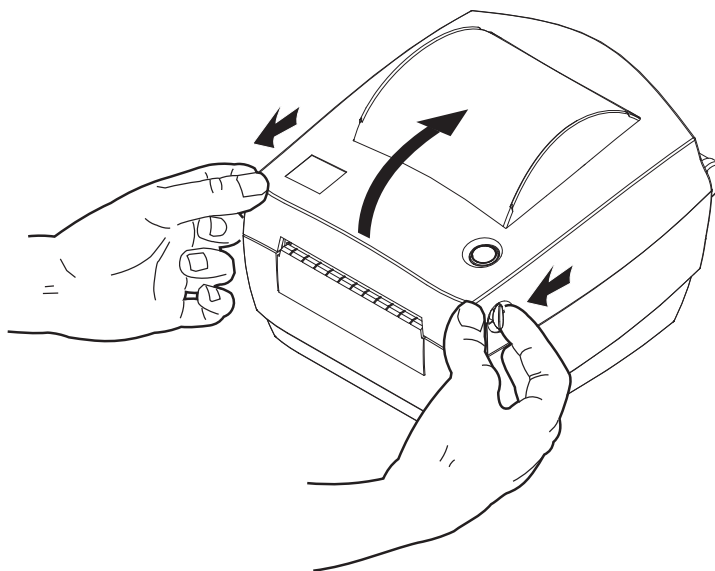
- Immediately notify the shipping company and file a damage report. Zebra Technologies Corporation is not responsible for any damage to the printer incurred during shipment, and will not cover the repair of this damage under its warranty policy.
- Keep all packaging material for shipping company inspection.
- Notify your authorized Zebra[®] reseller.

Your Printer



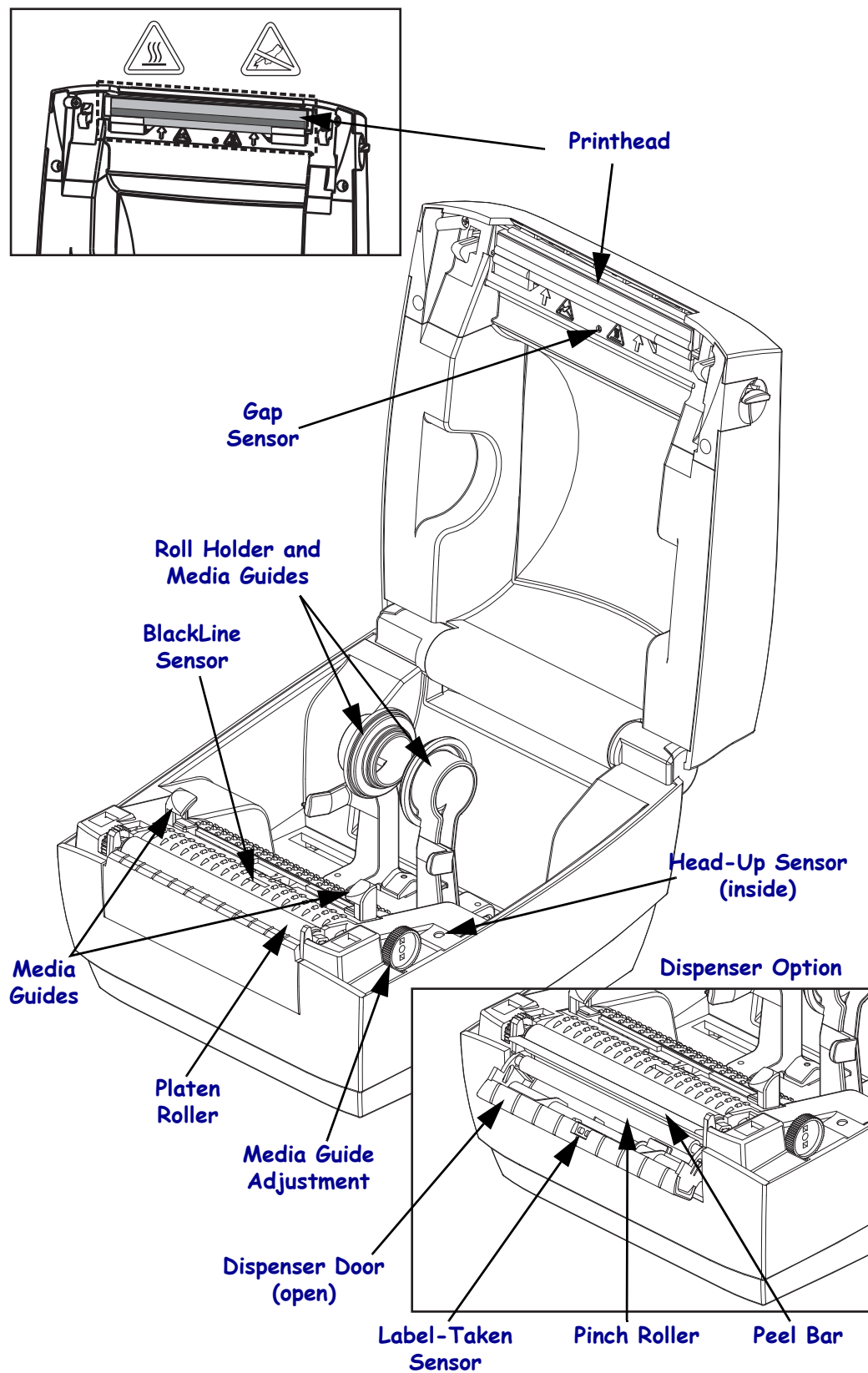
Opening the printer

To access the media compartment, you must open the printer. Pull the release latches towards you and lift the cover. Check the media compartment for loose or damaged components.



Caution • The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the printhead or electronic components used in this device. You must observe static-safe procedures when working with the printhead or the electronic components under the top cover.

Printer Features



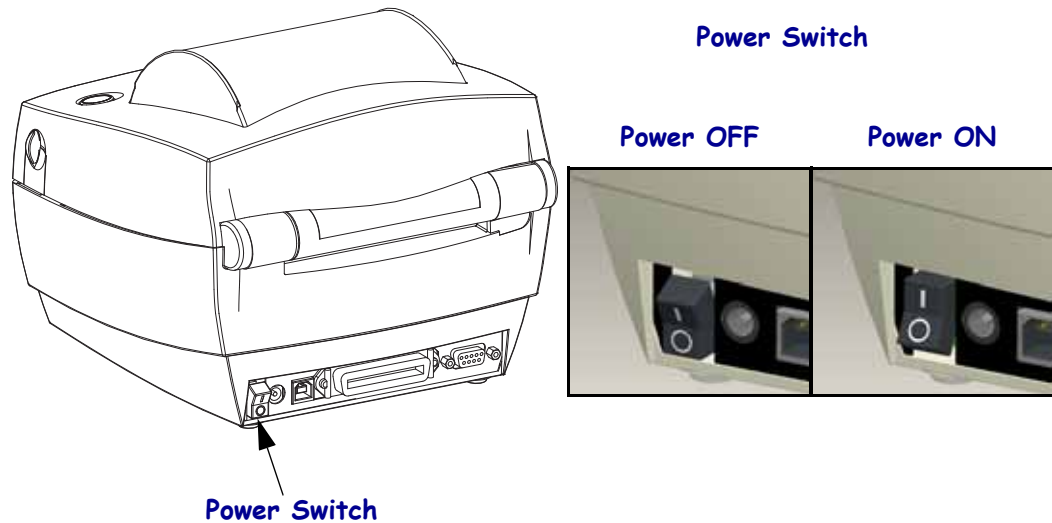
Operator Controls

Power Switch

Press *up* to turn **ON** or *down* to turn **OFF** the printer.



Caution • The printer power should be turned off before connecting or disconnecting the communications and power cables.

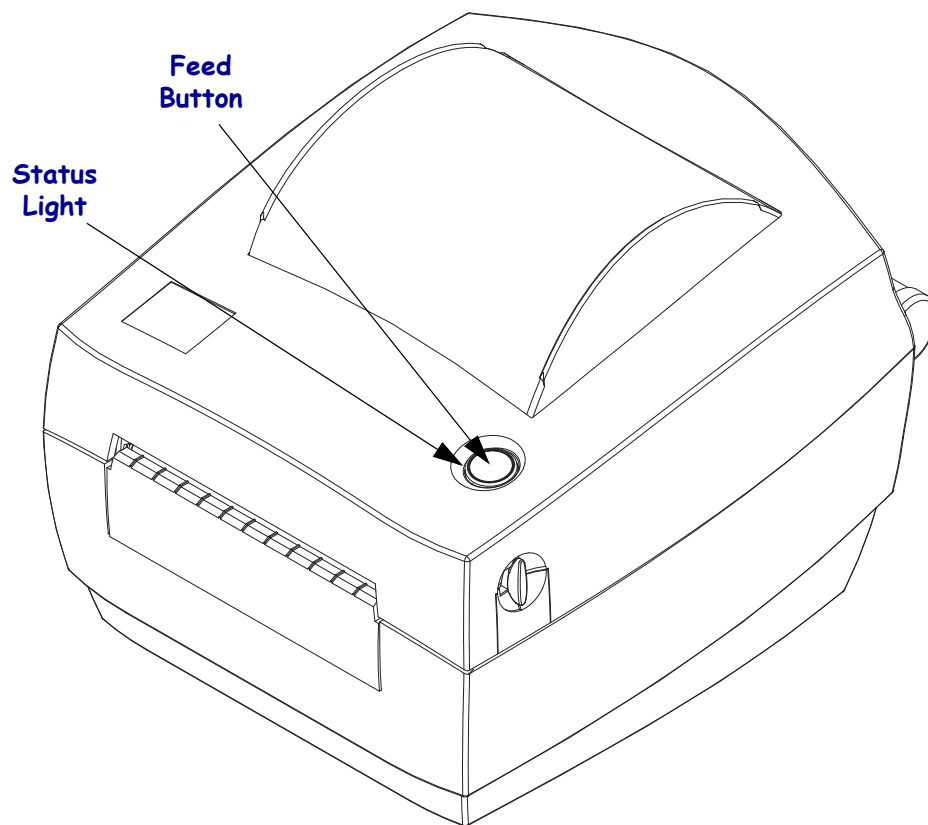


Feed Button

- Tap the Feed button once to force the printer to feed one blank label.
- Press the Feed button to take the printer out of a “pause” condition. The printer is put into “pause” by either a programming command or an error condition. See *What the Status Light is Telling You* [on page 60](#) in the Troubleshooting chapter.
- Use the Feed button for printer setup and status (see *Feed Button Modes* [on page 70](#) in the Troubleshooting chapter).

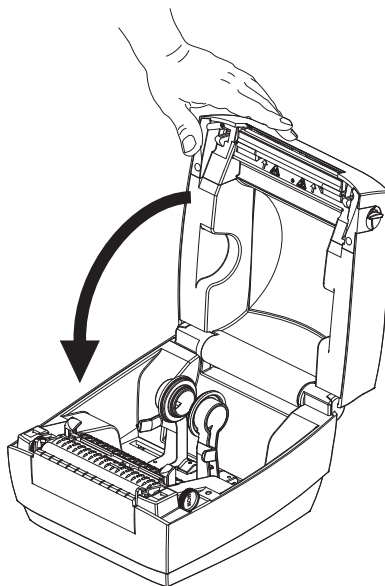
Status Light

Located on the top case next to the feed button, the status light functions as a printer operational indicator (see *Status Light Descriptions* [on page 60](#)).

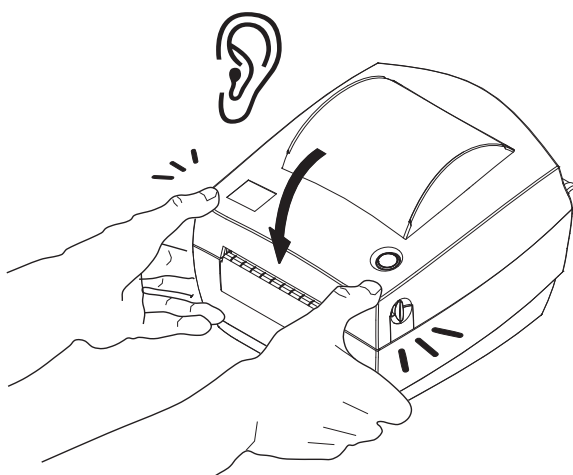


Closing the printer

1. Lower the top cover.



2. Press down until the cover snaps closed.





Getting Started

This section describes how to set up your printer for the first time and use the most common operating procedures for loading media.

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Attaching Power

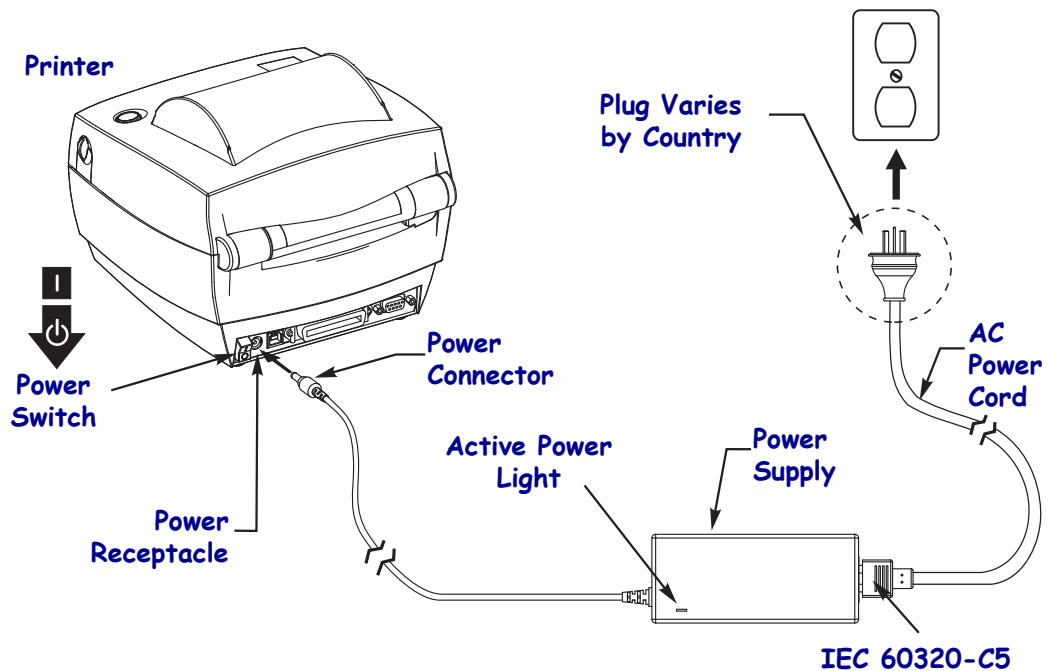


Important • Set up your printer so that you can handle the power cord easily if needed. To make certain the printer cannot carry electrical current, you must separate the power cord from the power supply receptacle or AC electrical outlet.



Caution • Never operate the printer and power supply in an area where they can get wet. Serious personal injury could result!

1. Make sure the printer's power switch is in the off position (down).
2. Insert the AC power cord into the power supply.
3. Plug the other end of the cord into an appropriate AC electrical outlet. Note: The active power light will go on if power is on at the AC outlet.
4. Insert the power supply's power connector into the printer's power receptacle.



Note • Ensure the appropriate power cord with a three (3) prong plug and an IEC 60320-C5 connector are used at all times. These power cords must bear the relevant certification mark of the country in which the product is being used.

Loading Roll Media

When you load media, you must place the roll onto the media hangers.

You must use the correct media for the type of printing you require.

Preparing Media

Whether your roll media is inside or outside wound, you load it into the printer the same way.

- Remove the outside length of media. During shipment, handling, or storage, the roll may become dirty or dusty. Removing the outside length of media avoids dragging adhesive or dirty media between the printhead and platen.

