



# M410

User Manual

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Revision A

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Our products are sold with the understanding that the buyer will test them in actual use and determine for themselves the adaptability to their intended uses. Brady warrants to the buyer that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Brady's satisfaction to have been defective at the time Brady sold it. This warranty does not extend to any persons obtaining the product from the buyer.

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## Safety and Environment

Please read and understand this manual before using the M410 printer for the first time. This manual describes all of the main functions of the M410 printer.

### Precautions

Before using the M410 printer, please note the following precautions:

- Read all instructions carefully before operating the printer and prior to performing any procedure.
- Do not place the unit on an unstable surface or stand.
- Do not place anything on top of the unit.
- Keep the top clear of obstructions.
- Always use the printer in a well ventilated area. Do not block the slots and opening on the unit, which are provided for ventilation.
- Only use the power source indicated on the rating label.
- Use only the power cord that comes with the unit.
- Do not place anything on the power cord.
- This equipment is not intended for use by children.

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## Technical Support and Registration

### Contact Information

For repair or technical assistance, locate your regional Brady Technical Support office by going to:

- **United States:** [bradyid.com/techsupport](http://bradyid.com/techsupport)
- **Canada:** [bradycanada.ca/contact-us](http://bradycanada.ca/contact-us)
- **Mexico:** [bradyid.com.mx/es-mx/contacto](http://bradyid.com.mx/es-mx/contacto)
- **Latin America:** [bradylatinamerica.com/es-mx/soporte-técnico](http://bradylatinamerica.com/es-mx/soporte-técnico)
- **Europe:** [bradyeurope.com/services](http://bradyeurope.com/services)
- **Australia:** [bradyid.com.au/technical-support](http://bradyid.com.au/technical-support)
- **Asia Pacific:** [brady.co.uk/landing-pages/global-landing-page](http://brady.co.uk/landing-pages/global-landing-page)

### Registration Information

To register your printer go to:

- [bradycorp.com/register](http://bradycorp.com/register)

### Repair and Return

If for any reason you need to return the product for repair, please contact Brady Technical Support for repair and replacement information.

## Document Conventions

When using this document, it is important that you understand the conventions used throughout the manual.

- All user actions are indicated by **Bold** text.
- References to menus, windows, buttons and screens are indicated by *Italicized* text.

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# 1 Introduction

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The M410 label printer is capable of printing on a variety of both pre-sized and continuous labels, up to 1 inch (25.4 mm) wide. It includes the following features:

- Targeted applications to simplify the creation of specific label types.
- Battery operation - printing 1000 or more standard Brady pre-sized labels on a fully charged Brady battery pack.
- Ability to use the printer while the battery is charging.
- Large display (240 x 160 pixels; 50.39 x 33.59 mm).
- Easy to use graphic user interface.
- 300 dpi print resolution.
- USB 2.0.
- One step label and ribbon cartridge installation.
- Smart-cell technology that works intelligently with Brady authentic cartridges.

## System Specifications

The M410 printer has the following specifications:

- Thermal Transfer Print Mechanism 300 dpi
- Optical registration system for Precise print registration
- Softplast QWERTY keypad technology
- Custom True Type fonts
- Print width: 1 inch (25.4 mm) maximum label width
- Maximum print length for labels: 39" (990.6 mm)
- Prints up to 1000 1" x 2" labels per battery charge

## Physical and Environmental Characteristics

The M410 printer has the following physical and environmental characteristics:

Physical	U.S. Units	Metric Units
Dimensions	11.5" x 3.6" x 6" H	292 x 91 x 152 mm
Weight (with NiMH battery pack)	2.6 lbs	1.2 kg

**Note:** The table below refers to the M410 printer only. Consumable performance may vary.

Environmental	Operation	Storage
Temperature (Printer) Exposing the printer to direct sunlight is not recommended.	39° to 110° F (4° to 43° C) The AC adapter is rated at a maximum temperature of 104° F (40° C).	0° to 110° F (-18° to 43° C)
Relative Humidity (Printer)	20% to 90% (non-condensing)	10% to 90% (non-condensing)



**CAUTION!** Avoid using the printer near water, in direct sunlight, or near a heating device.

Do not attempt to use batteries other than those recommended in this manual.

## 2 Setup

### Unpacking

Carefully unpack and inspect the exterior and interior of the printer.

#### What's in the Box

Before setting up the printer, verify that you have received the following items in the packaging:

- M410 printer
- Battery pack (M410-BATT)
- AC adapter (M41-51-61-AC)
- USB connection cable
- Quick Start Guide
- USB drive containing User Manual, Quick Start Guide, and Windows driver
- Cartridge (M4C-1000-595-WT-BK)
- Brady Workstation insert with download link



#### Save the Packaging

Please keep the original packaging, including the box, in case the printer must be returned or repaired.



**CAUTION!** Never ship the M410 printer without first removing the rechargeable battery pack from the printer.

If shipping both the printer and battery pack, remove the battery pack from the printer and place the items in the original shipping material before transporting. Consult with your transportation carrier for state, federal, municipal, and international shipping regulations regarding the nickel metal hydride (NiMH) battery pack.

#### Registration

Register your printer on-line at [www.bradycorp.com/register](http://www.bradycorp.com/register) and receive free product support and updates!

# Printer Components



1	Cover	7	Eject button
2	Power button	8	Battery door latch
3	Function keys	9	Label exit
4	Navigation pad with Enter key	10	AC adapter port
5	Cutter lever	11	USB port (to computer)
6	Lock lever (inside)	12	USB port (for USB drive)

## Power

Power is supplied to the printer through an NiMH battery pack or through an AC power adapter (included).

### AC Power Adapter

The printer can be powered through an AC power adapter (included). When the adapter is plugged in, it is also charging the battery.



**CAUTION!** Use only the 18V DC, Brady AC adapter for supplying power to the printer.

#### To plug in the printer:

1. Plug the power cable into the adapter.



2. Insert the round end of the adapter cable into the power port on the back of the printer.



3. Plug the other end of the cord into an electrical outlet.

## Battery



**WARNING!** Risk of explosion if battery is replaced by incorrect type. Dispose of used batteries according to instructions.



**WARNING!**

- Do not expose batteries to temperatures above 140° F (50° C).
- Do not disassemble or mistreat the battery pack.
- Do not attempt to open, damage, or replace components in the battery pack.
- The battery pack should only be used and charged in an M410 printer.
- Do not use any other rechargeable battery pack other than M410-BATT in the M410 printer.
- Do not allow metal or other conductive materials to touch the battery terminals



**WARNING!**

- Keep the battery pack away from sparks, flames, or other heat sources. Avoid storage in direct sunlight.
- Keep the battery pack away from water.
- Never lay objects on top of the battery pack.
- Store your battery pack only in a cool, dry place.
- Keep the battery pack out of the reach of children.
- The battery pack must be recycled or disposed of properly according to federal, state, and municipal regulations.

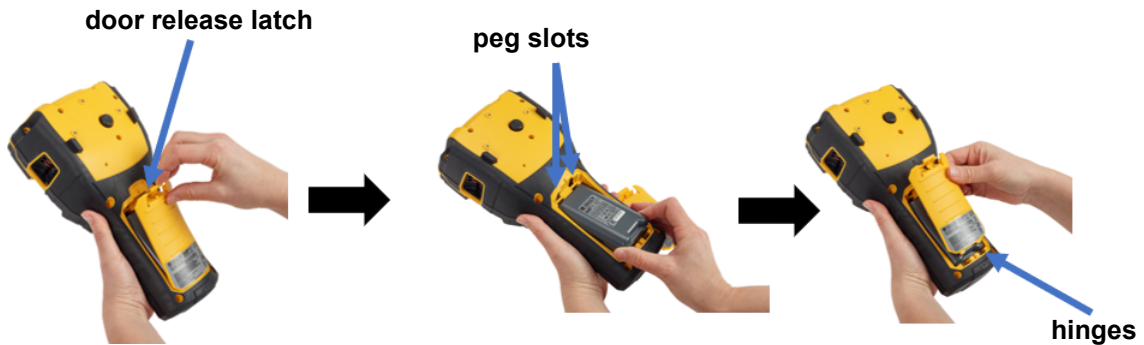


**WARNING!**

- The battery pack is not intended to be transportable. To prevent damage when not in use, the battery pack should be stored in the original packaging or in the M410 hard case or soft case which are available as accessories.
- Do not remove the battery pack from its original packaging until required for use.
- Do not subject the battery pack to mechanical shock.
- Keep the battery pack clean and dry.
- Wipe the battery pack terminals with a clean dry cloth if they become dirty.
- After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance.
- When possible, remove the battery from the equipment when not in use.

### **Installing the Battery**

1. On the backside of the printer, pull the door release latch downward, then swing the battery compartment door up and out. (The door will come off.)
2. With the battery label facing outward, insert the battery pegs into the peg slots at the top of the compartment; then tip the battery downward into place.
3. Re-insert the battery door hinges at the base of the compartment and swing the battery compartment door closed, snapping it into place.



### **Power On**

To turn the printer on or off:

1. Press the power button on the front of the printer.
2. The first time you turn on the printer, choose a language in which to display screen items. See [“Printer Settings” on page 8](#).



Whenever the printer is powered on, the system performs an initialization process. Part of this process is recognizing the installed cartridge. If the cartridge is not installed, an error message displays. You can dismiss this error during initial setup or if you wish to continue without the label and ribbon.

The detected cartridge information is used when designing labels. While you can design labels without installing a cartridge, if you choose not to install any, the label design may not match the cartridge used to print.

### **Automatic Shut Down**

To conserve energy, the printer automatically turns off after a period of inactivity. Any data on the screen at the time of auto shutdown is retained and available the next time the power button is pressed to restart the printer.

To set the inactive time, or to turn off this feature when the printer is plugged in, see [“Printer Configuration” on page 9](#).




## Printer Settings

Use the keyboard and screen to configure standard settings, such as the language. For an introduction to the screen and keyboard, see [“Using the Screen” on page 21](#) and [“Using the Keyboard” on page 24](#).

### Language

When turning the printer on for the first time, choose the language in which you want all printer menus, functions, and data displayed.





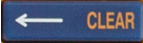
**To set the language for text on the screen:**

1. Press  + .
2. Use the navigation keys to move through the menu until **Language** is highlighted.
3. Use the up and down navigation keys to select the desired language.
4. Press  to accept the choice.

### Time and Date

Set the printer's clock to the current date and time. Also set the format to use when adding the current date or time to a label.

**To set the date and time:**


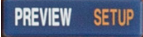

1. Press  + .
2. Use the navigation keys to move through the menu until **Time/Date** is highlighted.
3. Press  to accept the choice and display the time and date settings.
4. For information on how to use the screen, see [“Settings Screens” on page 23](#). Most of the settings on this screen are self-explanatory, but the following information may be useful.
  - **Display 24 Hour:** If this is selected, hours are numbered 1-24. Clear this field to number the hours 1-12 and use AM and PM.
  - **PM:** Not available if *Display 24 Hour* is selected. Clear this check box for AM; set it for PM.
5. Select **OK** and press .
6. Press  **CLEAR** to dismiss the menu. Alternatively, use the navigation keys to navigate to the next setting that you want to configure.

### Units

Set the unit of measure to inches or millimeters.




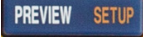

**To set the unit of measure:**

1. Press  + .
2. Use the navigation keys to move through the menu until **Units** is highlighted.
3. Use the up and down navigation keys to select the desired unit.
4. Press  to accept the choice.

## Pause/Cut

The Pause/Cut function allows you to remove a label from the printer before another label starts printing.


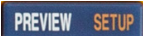

**To set pausing and cutting:**



1. Press  + .
2. Use the navigation keys to move through the menu until **Pause/Cut** is highlighted.
3. Use the up and down navigation keys to select the desired function.
  - **On:** The printer pauses after each label.
  - **Off:** The printer prints all labels in a file without pausing.
4. Press  to accept the choice.

## Printer Configuration

Use the *Config* menu to set the brightness, automatic shutdown, and to clean the printer.

**To configure the printer:**


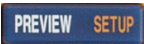





1. Press  + .
2. Use the navigation keys to move through the menu until **Config** is highlighted.
3. Press  to accept the choice and display the printer configuration settings.
4. For information on how to use the screen, see [“Settings Screens” on page 23](#).
  - **Shut Off Delay:** Set the amount of time, in minutes, that the printer should remain idle before shutting down automatically.
  - **No Shut Off (AC):** Select this check box to turn off the automatic shutdown, which is not needed when the printer is plugged in.
  - **Backlight time:** Set the amount of inactive time after which the backlight on the screen should shut off.
  - **Always on:** Select this check box to keep the backlight on at all times while using the AC adapter.
  - **Brightness:** Change the brightness of the screen.

5. Select **OK** and press .
6. Press  to dismiss the menu. Alternatively, use the navigation keys to navigate to the next setting that you want to configure.

## Font Settings

Choose the font to use when creating labels on the printer. These settings do not affect any currently open label file. They take effect for the next new label file created.

### To set the font:

1. Press  + .
2. Use the navigation keys to move through the menu until **Font Settings** is highlighted.
3. Press  to accept the choice and display the font settings.
4. For information on how to use the screen, see [“Settings Screens” on page 23](#).
  - **Typeface:** Select the style of lettering. The font types (*Brady Fixed Width* and *Brady Alpine*) give you the option of displaying a zero with or without a slash (0 or Ø) through it.
  - **Attributes:** Select one or more of bold, italic, and underline. This sets the default attribute. When editing a label, you can change the attribute for any character.
  - **Units:** Choose whether to show the font size in points (a standard unit used in most word processors) or millimeters.
5. Select **OK** and press .
6. For the font changes to take effect, clear all data:
  - a. Press  + .
  - b. Use the navigation keys to select **Clear All**, and press .

**Note:** You can use the *FONT* button to change the size and attributes for a line of text while editing a label, but the values specified here in the *SETUP* menu will continue to be used as the default on new labels and areas. (For information about areas see [“Labels and Areas” on page 38](#).)

## Software for Creating Labels

In addition to creating labels on the printer, you can use labeling software. Install labeling software on your computer, set up the connection to the printer, then use the software to design labels and send them to the printer.

Brady Workstation software provides a variety of apps to simplify label creation for specific purposes. It also provides easy-to-use apps for custom label design. Depending on the package that you purchased, the printer comes with either Brady Workstation Basic Design Suite or Brady Workstation Product and Wire Identification Suite.

**To install Brady Workstation software:**

1. Make sure your computer is connected to the internet.
2. Go to [workstation.bradyid.com/free](http://workstation.bradyid.com/free).
3. Follow the instructions on the screen to download and install the software.
4. If you have the Brady Workstation Product and Wire Identification Suite, the software will prompt you for activation when you open an app that requires activation. Follow the instructions on the screen to activate the software. Use the license ID and password on the printed insert that came with the printer.

For other Brady Workstation software or additional licenses, go to [www.workstation.bradyid.com](http://www.workstation.bradyid.com) or contact your Brady representative.

## Installing the Windows Driver (Optional)

If you are using Brady Workstation software, you do not need to install the windows driver. Skip to “[Connecting the Printer](#)” on page 12.

If you are using older Brady software or third-party software, you must install the Windows driver. The driver installation is included on the USB drive that came with the printer.

**To install the Windows driver:**

1. Insert the USB drive into a USB port on the computer that has Brady Workstation software.
2. Use Windows Explorer to open the Brady M410 Printer Driver folder on the USB drive.
3. Double click **M410\_Printer\_Driver.exe** and follow the instructions on the screen.

## Connecting the Printer

To connect to a computer via USB 2.0, plug the provided USB cable into the printer and the computer. Brady Workstation software automatically detects the printer when connected via USB cable.

**Note:** If you are not using Brady Workstation software, you need to install the printer driver. See [“Installing the Windows Driver \(Optional\)”](#) on page 11.



**Note:** If the printer has lost communication with the computer while still connected via the USB cable, turn the printer off, then restart it to restore the connection.

## Loading Cartridges

Brady cartridges come equipped with smart-cell technology that enables the printer and Brady labeling software to recognize the type of label and automatically set many label formatting details.

The status bar at the bottom of the display indicates how much labels and ribbon remain in the cartridge. When a cartridge is empty, recycle according to local regulations. If you need to store a cartridge with remaining supplies, store it in a cool, dry place. Unused supplies in the cartridge will last up to six months before deterioration sets in.



**CAUTION!** Please note that the cartridge bay contains parts and assemblies that may be susceptible to damage by Electrostatic Discharge (ESD). When loading or unloading a cartridge, care must be taken so that devices are not damaged.

**To change the cartridge:**

1. To open the printer cover, push or pull up on the finger tab.
2. Slide the locking lever left to unlock the cartridge.
3. Push the eject button on the back of the printer. Then, grasping the hinged fin, pull the cartridge out of the cartridge bay.



4. Holding the hinged fin on the new cartridge, place the cartridge into the cartridge bay, pushing gently until it snaps into place.
5. Slide the locking lever to the right to lock the cartridge in place.
6. Close the cover, pushing down until it snaps into place.



Although the printer can be operated with the cover open, it is recommended that the cover remain closed except while changing the cartridge.

## Recycling the Cartridge

Cartridges need to be recycled in accordance with local regulations. Before recycling, the used cartridges must be pulled apart to release the individual components. These various components must then be recycled in the correct recycling bins.

## Materials

- 1/4-inch blade flathead screwdriver
- Safety Glasses
- Safety Gloves



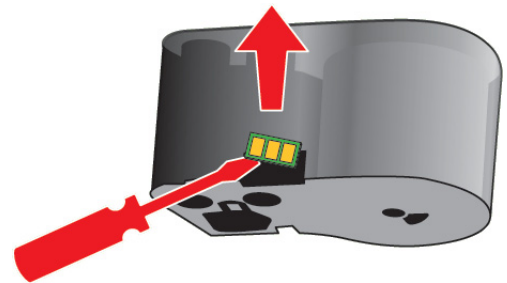
**CAUTION!** Always wear personal protective equipment when dismantling a ribbon or label cartridge.

## Dismantling the Cartridge

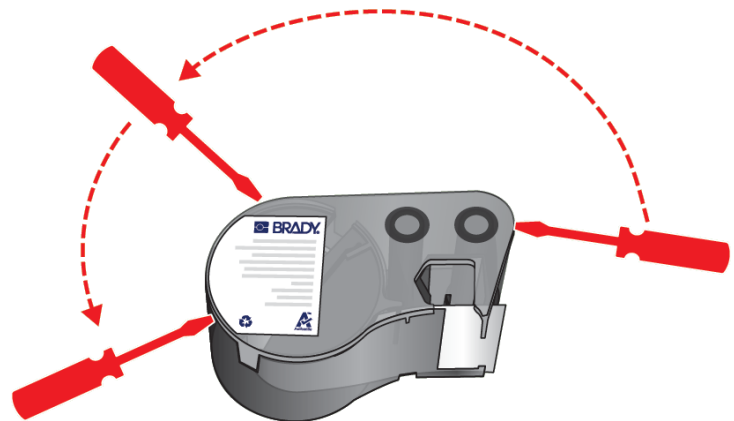
### To dismantle the cartridge:

1. Using the flathead screwdriver, pry off the smart cell on the bottom of the cartridge by placing the screwdriver blade under a corner of the smart cell and lifting up.

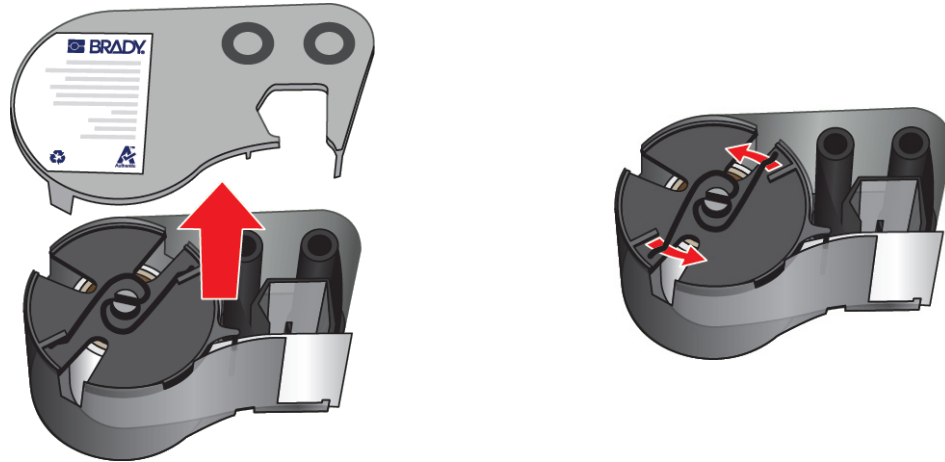
The chip is held on with a plastic clip and should release fairly easily.



2. Starting at the narrow end of the cartridge, insert the flathead screwdriver into the seam of the cartridge, then twist the screwdriver slightly to loosen the two outside pieces of housing. Repeat at various points around the seam.



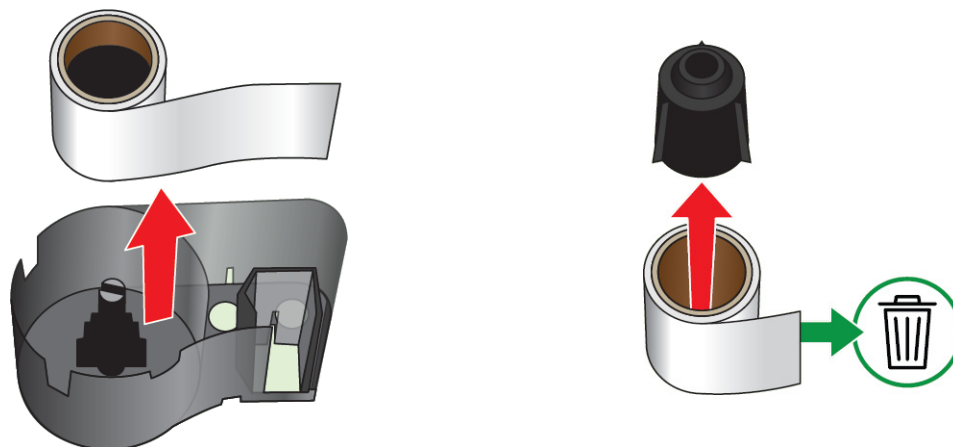
3. Separate the top of the housing from the base. Pry one leg of the metal spring on top of the disk out from the clip. The spring and disk will pop out of the housing.



4. Remove the ribbon spools. Unwind and detach the ribbon from its spools.



5. Lift the labels out of the cartridge housing and then remove the black plastic cylinder from inside the label core.



- Slide the metal spring out from the inside of the black plastic cylinder.



## Recycling Components

These components should be removed from the cartridge and recycled according to the following guidelines.

### Housings and Spools

		<p><b>Slotted Wheel</b></p>
		<p><b>Springs</b></p>
		<p><b>Smart Cell</b></p>
		<p><b>Label and Ribbon</b></p>

Component	Material	Recycle Bin
Housings and spools	Polycarbonate (PC)	#7 Plastics
Springs	Metals	#40 Metals
Smart cell	Electronic	Electronic waste
Slotted wheel	Polystyrene	#6 Plastics



## Accessories

The following accessories are available for the M410 printer and can be purchased separately from your distributor:

- Magnet (M410-MAGNET)
- Utility hook (M410-HOOK)
- Additional NiMH battery pack (M410-BATT)
- AC adapter (M41-51-61-AC)
- Hard-sided carrying case (M410-HC)
- Quick charger (M410-QC)

### Attaching the Magnet

Use the magnet accessory, purchased separately, to attach the printer to magnet-receptive metal surfaces such as panels and I-beams.



**WARNING!** The magnet accessory contains a neodymium magnet.

- Strong magnets may interfere with proper operation of heart pacemaker, defibrillator, insulin pump, or other medical devices. Keep magnets a sufficient distance from anyone wearing these devices.
- Do not use magnets in explosive atmospheres.



- Do not give children strong magnets (especially neodymium). Keep this product out of the reach of children.
- Many magnets are brittle and may shatter if they “jump” together or jump onto a steel surface. Always wear eye protection if this is likely to happen.
- Analog watches, televisions, and computer monitors can be permanently damaged by placing magnets near them.
- Strong magnets may affect or interfere with sensitive electronic instruments and navigation equipment. Always keep magnets a sufficient distance from such devices.
- Magnets can destroy information stored on magnetic media such as credit cards, tape drives, and computer hard drives. To preserve your data, keep these and other magnetic media away from the product.

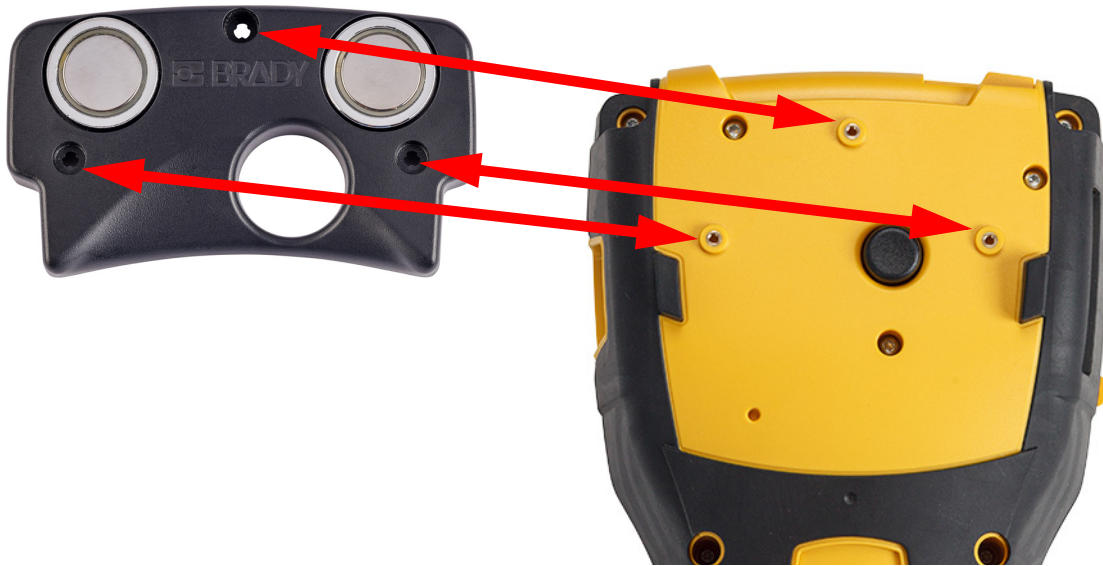
Dispose in accordance with federal, state, and local regulations.

#### To attach the magnet accessory to the printer:

1. Slide the magnet keeper plate off of the magnet.



2. Position the magnet accessory on the back of the printer so that the screw holes line up.



3. Screw in the three screws that come with the magnet to affix it to the printer. Replace photo with photo of M410.

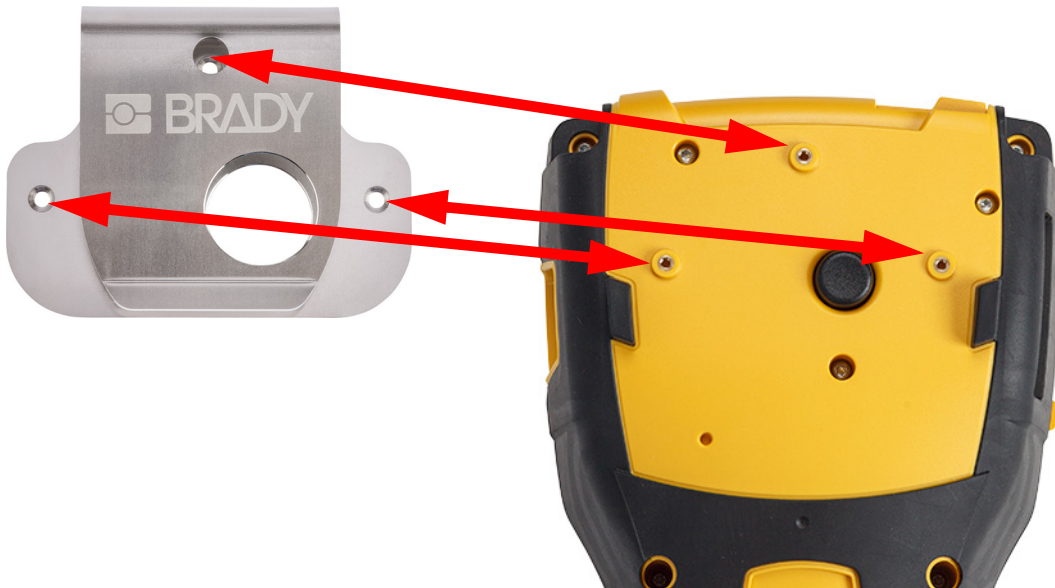


## Attaching the Utility Hook

Use the utility hook, purchased separately, to hang the printer from a hook, knob, or other protuberance.

### To attach the utility hook:

1. Position the utility hook on the back of the printer so that the screw holes line up.



2. Screw in the three screws that come with the utility hook to affix it to the printer.



# 3 General Operation

---

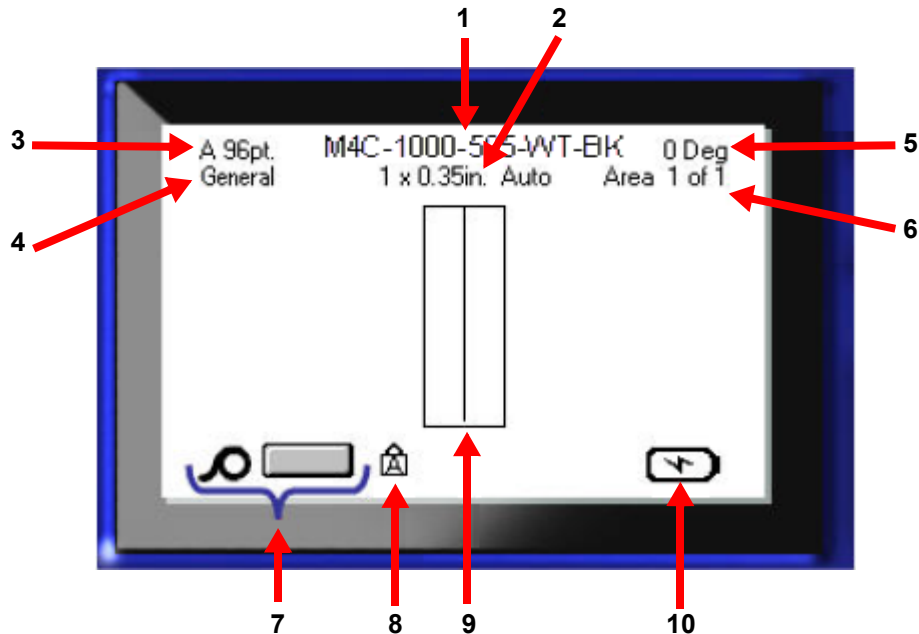
This chapter provides information on the general operation of the printer.

- Using the Screen .....21**
  - Menus .....22
  - Settings Screens .....23
  - Cancel .....23
- Using the Keyboard .....24**
- Creating a Simple Text Label .....28**
- Starting a New Label File .....29**
- Printing .....29**
  - Print .....29
  - Cancel Printing .....30
  - Preview .....30
  - Multiple Print .....31

## Using the Screen

Use the printer's screen to create labels, configure settings, and check status, among other functions. Touch the screen with your finger to make a selection.

The screen shows a representation of the installed cartridge (or the last known cartridge) in the correct color. The screen displays one label at a time. For labels with multiple areas, only one area displays at a time. Use the preview to see all areas at once. See [“Preview” on page 30](#).

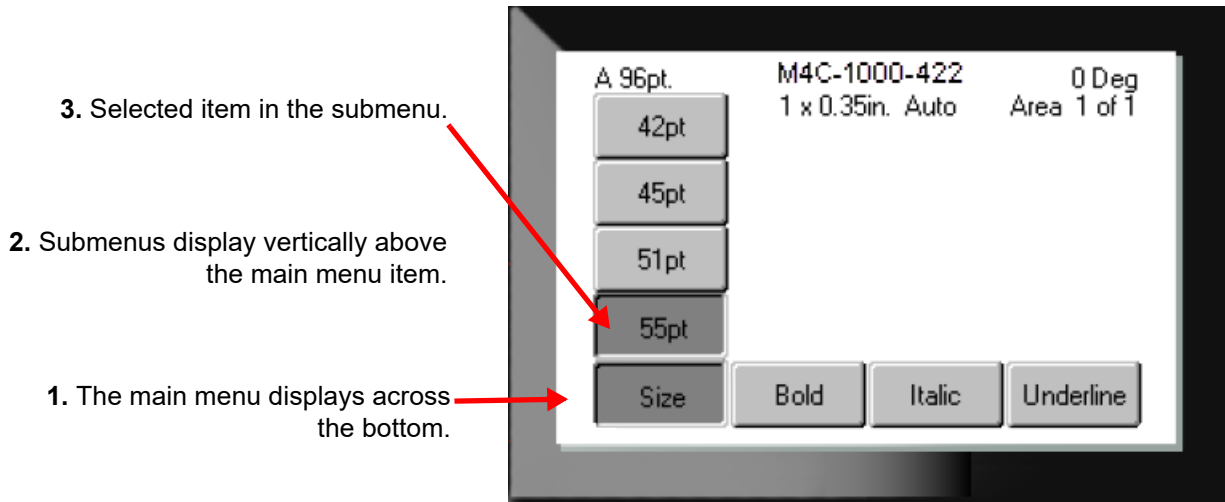


1. **Cartridge.** The part number of the installed cartridge.
2. **Label size.** The word *Auto* after the label size indicates that a cartridge with continuous labels (as opposed to pre-sized) is set to automatically size to the label contents.
3. **Font size.** The letter "A" indicates that it is set to *Auto*. See [“Font Size” on page 35](#).
4. **Label type.** The printer provides tools for editing labels for specific purposes, such as wire markers, terminal blocks, and vials. See [Chapter 5: Label Types](#).
5. **Rotation.** Degrees that the label is rotated. See [“Rotation” on page 40](#).
6. **Area number.** The total number of areas on the label and the area currently being edited. See [“Labels and Areas” on page 38](#).
7. **Supply levels.**
8. **Caps lock.** This symbol is visible when the caps lock is on.
9. **Cursor.** Marks the insertion point for data entry.
10. **Battery charge remaining.**

## Menus

Menus provide access to controls such as printer settings, label setting, font, and so on. Use the blue keys on the keyboard to open menus. See [“Using the Keyboard” on page 24](#).

Menus open across the bottom of the screen. Sub-menus open vertically, above the main menu selection. Selected menu items are a darker gray. The image below shows the *Font* menu.



**To select items on a menu:** Use the navigation keys to move through the menu. When the desired option is highlighted, press . For more information see [“Using the Keyboard” on page 24](#).

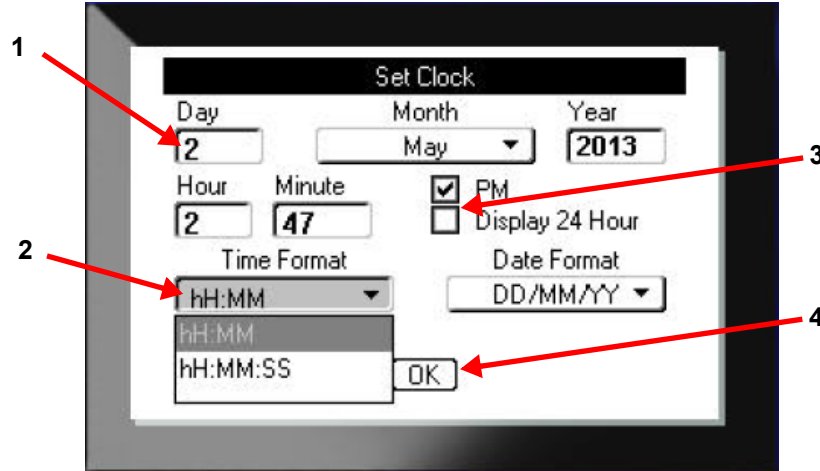
**To close a menu without making changes:** Press the backspace key.

You may have to press backspace more than once to exit out of all menus.






Alternatively, press **FN** + to exit out of all menus.

## Settings Screens

The following instructions show how to interact with selection options on the control screens.

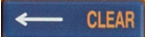


Use the navigation keys to move between settings and highlight the desired setting.

1. To enter data, type on the keyboard, and then press .
2. To select from a list,
  - Use the navigation keys to highlight the list, then press  to expand the list.
  - Use the navigation keys to make your selection, and then press  again.
3. To select or clear a check box, use the navigation keys to highlight the box, then press .
4. To save the changes, use the navigation keys to highlight the **OK** button on the screen and then press .

For more details on using the keyboard to make selections, see [“Using the Keyboard” on page 24](#).

## Cancel



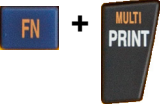




To exit a menu or a setting screen without making changes, press the backspace key . When pressing backspace in the middle of a function, you are walked out of the function a screen at a time. You may have to press backspace several times to completely exit the function.



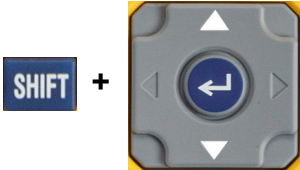

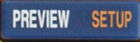



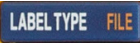

## Using the Keyboard

Most keys perform two functions, indicated on the key in white and orange. To perform the function in white, simply press the key. To perform the function (or type the character) in orange, press FN and then press the key.





	Function	Key	Description
1	Power		Turns the printer on and off.
2	Print		Prints all labels in a label file.
	Multi		Brings up options to set various print parameters (such as number of copies, print range, and mirror print) before printing.
	Cancel Printing		Cancels printing.
3	Navigation		<p>Navigation keys:</p> <ul style="list-style-type: none"> <li>• In a line of text, move the cursor left or right a character at a time, or up and down a line at a time.</li> <li>• In menus, move the selection left or right in a primary menu; up or down through a secondary, or sub-menu.</li> <li>• In a dialog box, move up/down or left/right through the fields. In a field with a drop down list, after pressing OK, moves the cursor up or down through the list.</li> <li>• In Print Preview, scrolls left or right through multiple areas on a label.</li> </ul>
4	Enter		<p>Located in the center of the navigation keys.</p> <ul style="list-style-type: none"> <li>• Adds a new blank line to a label.</li> <li>• Accepts menu items and attributes.</li> </ul>
17	Function		<ul style="list-style-type: none"> <li>• Used in conjunction with the alternate function (displayed in orange) on some of the keys. Press the FN key, then press the alternate function key. (Alternatively, hold the FN key while simultaneously pressing the key that has the alternate function.)</li> <li>• Used to access keys special characters on the alphabetical keys.</li> </ul>

	Function	Key	Description
19	Shift		When Caps Lock is turned off, used in conjunction with a single letter to enter that letter in uppercase. When Caps Lock is turned on, click shift prior to the letter to make it lowercase.
	Highlight Text		Highlights (selects) text on the editing screen, left or right a character at a time, enabling you to add font attributes (bold, italics, underline) to text already entered. Hold the SHIFT key while pressing the left or right navigation key. See <a href="#">“Existing Text” on page 37</a> .
	Font Size Increment		On the editing screen, increases or decreases the font size, a point at a time. Hold the [SHIFT] key while pressing the up or down navigation key.
5	Feed		Feeds the label supply through the printer.
6	Preview		Previews the label as it will look when printed. See <a href="#">“Preview” on page 30</a> .
	Setup		Opens the menu to configure printer settings. See <a href="#">“Printer Settings” on page 8</a> .
7	Backspace		<ul style="list-style-type: none"> <li>Removes characters one at a time, moving to the left.</li> <li>Backs out of menu options and functions, one screen at a time.</li> </ul> <p>Note: Depending on how deep you are into menus and functions, you may have to press Backspace multiple times.</p>
	Clear		Clears data or all menus from the screen.
8	Label Type		Opens a menu to select the type of label that you want to create. This sets up the label with the proper layout for the application (for example, wire marking, flags, or terminal blocks). See <a href="#">Chapter 5: “Label Types” on page 52</a> .
	File		Saves, opens, or deletes a label or set of labels. See <a href="#">Chapter 6: “File Management” on page 63</a> .

	Function	Key	Description
9	Settings		Provides formatting that affects the entire label (for example, centering data on the label, framing the label, rotating data).
	Serial		Adds sequential data to your labels, that is, data that increments (or decrements) from one label to the next. See <a href="#">“Serialization (Sequential Data)” on page 48</a> .
10	Font		Provides font sizes and attributes such as bold and italic. See <a href="#">“Typeface” on page 35</a> .
	Caps Lock		Acts as a toggle to lock text into uppercase as data is entered. Press once to turn Caps Lock on; press again to turn Caps Lock off.
11	Insert Date		Inserts the current date, as set on the printer. See <a href="#">“Date and Time” on page 45</a> .
12	Insert Time		Inserts the current time, as set on the printer. See <a href="#">“Date and Time” on page 45</a> .
13	Subscript		<ul style="list-style-type: none"> <li>Places the next typed character in subscript format, displaying slightly below the line of text.</li> <li>Places multiple characters in subscript if the characters are highlighted first. See <a href="#">“Existing Text” on page 37</a> for information on highlighting characters.</li> </ul>
14	Superscript		<ul style="list-style-type: none"> <li>Places the next typed character in superscript format, displaying slightly above the line of text.</li> <li>Places multiple characters in superscript if the characters are highlighted first. See <a href="#">“Existing Text” on page 37</a> for information on highlighting characters.</li> </ul>
15	Symbol		Accesses the various symbols (graphics) available on the printer. (Refer to <a href="#">“Symbols” on page 44</a> .)
16	Barcode		Places a text string in Barcode format, toggling the barcode on and off. (Refer to <a href="#">“Barcode” on page 46</a> .)
20	Area		Adds, removes, and formats areas on a label. See <a href="#">“Labels and Areas” on page 38</a> .
	Next Area		On a multi-area label, moves from the current area to the next area. For an explanation of areas see <a href="#">“Labels and Areas” on page 38</a> .

	Function	Key	Description
21	International		Accesses characters specific to some international alphabets with diacritical and accent marks incorporated into the characters. See <a href="#">“International Characters” on page 45</a> .
	Previous Area		In a multi-area label, moves to the previous area from the current area. For an explanation of areas see <a href="#">“Labels and Areas” on page 38</a> .
18	Backlight		Increases readability of screen in low light conditions.

## Creating a Simple Text Label

This section describes the creating a text label with minimal formatting, using basic editing techniques, and printing the label. For more detailed information, see [Chapter 4: Editing Labels on the Printer](#) beginning on page 33.

**Note:** The printer also provides easy set up for many specific types of labels, such as wire markers or terminal block labels. See [Chapter 5: Label Types](#) beginning on page 52.

### To create a text-only label:

1. Be sure the cartridge is loaded and the power is on.
2. Make sure the *General* label type is selected. Look at the upper left corner of the screen. If it does not say *General*, do the following.
  - a. Press the **Label Type** key.
  - b. Use the left and right arrows on the navigation keys to highlight **General**.
  - c. Press

The screen displays an image of a label. The blinking vertical line is the cursor and is the starting point for every label you create using the printer.

3. Type the desired text.  
The cursor moves across the screen as you enter data. The standard font, as defined in the printer setup, is in effect. See [“Font Settings” on page 10](#).
4. Press to start another line of text.
5. If you wish to insert, delete, or format text, see [“Editing Text” on page 34](#) and [“Formatting Text” on page 35](#).

## Starting a New Label File

After editing a label file, the labels remain on the screen. You must clear the existing file before starting a new one.

### To start a new label file:

1. If desired, save the current label. See [“Saving Labels Created on the Printer” on page 63](#).
2. Press  + .
3. Select **Clear All** and press . The printer displays a message confirming that you want to delete the label from the workspace.
4. Press  to clear the label from the workspace so that you can start a new label. It does not delete the saved file. If you have saved the labels, the saved file still exists.
5. Enter data for your next label file or use the *LABEL TYPE* button to select a different type of label.

## Printing

There are several scenarios for printing from the M410 printer.

- Create a label on the printer, and print from the editor. See [“Print” on page 29](#).
- Create a label in Brady Workstation and print it. See the help in the Brady Workstation app.
- Save label files created on the printer to print later.


The following sections cover the print-related keys on the printer.

### Print

For information how to print from computer software, refer to your software documentation.

For information on setup and connection see [“Software for Creating Labels” on page 10](#) and [“Connecting the Printer” on page 12](#).

**To print a label that is open on the printer:**

1. Press  .
2. When the cut label message displays, pull the cutter lever forward as far as it will go.  
The cut label message remains on the screen until the label is fully cut through.

**Note:** If you manually clear the cut label message and continue to print, the partially cut label will cause a jam. Make sure the label is completely cut through before attempting to print again

3. The label exit chute contains rubber grips that hold the label in place after cutting so it will not fall off. Gently pull the label away from the label exit.



Printing occurs in the background, meaning you can continue to edit or create new labels while the file is printing.

**Cancel Printing**

If a print job is interrupted, for instance when labels or ribbon runs out, or you unlock the cartridge, the system automatically stops the print job and displays a message. Follow the instructions on the display to resume printing.


**To intentionally cancel printing:**

1. Press  +  +  .

**Preview**

Use the preview to view your label file prior to printing.

**Preview the label:**

- Press  .

**Scroll the labels:**

- If the label is too long to appear in full on the screen, use the left and right navigation keys to scroll the label.
- If there are multiple labels or areas, use the up and down navigation keys to scroll through the labels.

Print directly from the preview:

- Press  .



Exit the preview and return to the editing screen:

- Press  .

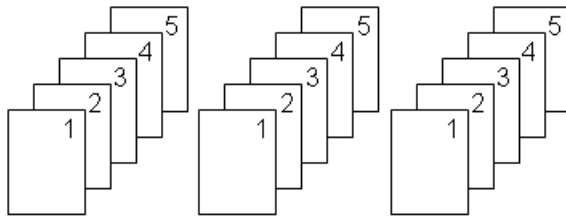
## Multiple Print

Multiple print lets you print multiple copies or print a range of labels rather than all the labels in the file.

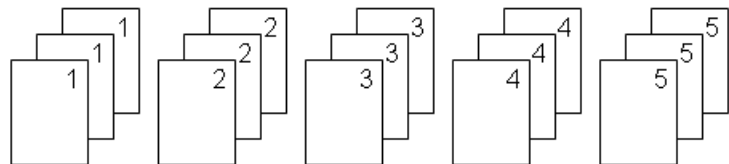
To use the multiple print options:

1. Press  +  . The *Multiple Print* screen displays.
2. Make your selections. For help using the screen, see [“Settings Screens” on page 23](#).
  - **No. of Copies:** Enter the number of copies desired.
  - **Print Range:** Select the **From** field and enter the number of the first label to be printed. Select the **To** field and enter the number of the last label to be printed.
  - **Collate:** Collation determines the order in which multiple copies of each label will print. For example, suppose you have set the number of copies to three, and you have five labels in the file.

With *Collate* selected, you get three sets of all five labels.




With *Collate* cleared, you get three copies of label 1, then three copies of label 2, and so on.



- **Mirrored Print:** Mirrored print takes all data on a label and flips it to provide a mirror image. Mirroring displays on the printed label only. Mirrored print applies to the entire label; you cannot mirror data in an individual area.



- **Separator:** (Available depending on the cartridge and the type of label.) To separate different labels on continuous label supply, add a separator by selecting it from the drop down list.

Select the **Separator** list, press , then select **None**, **Line**, or **Tic**, and then press



123	124	125	126
-----	-----	-----	-----

**Line Separator**

123	124	125	126
-----	-----	-----	-----

**Tic Separator**

3. Select **OK** and press . The labels begin printing.



## 4 Editing Labels on the Printer

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This chapter discusses the *General* label type and provides information on the following editing and formatting tasks.

<b>Editing Text</b> .....	<b>34</b>
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Deleting Text.....	34
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**Note:** For information about creating labels for specific applications, such as pipemarkers or safety labels, see [Chapter 5: “Label Types” on page 52](#).

## Editing Text

If you want to change the content or format of your label, edit the information before printing.

### Positioning the Cursor


The cursor is a vertical line that marks the position on the label where text or other data will be entered. See [“Using the Screen” on page 21](#).

To position the cursor when editing text, use the navigation keys. See [“Using the Keyboard” on page 24](#).

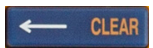
### Inserting Text


**To insert additional text within a line of text:**

1. Use the navigation keys to position the cursor at the point where text should be inserted.
2. Enter the text. Existing data positioned to the right of the cursor moves progressively to the right to make room for the inserted text.
  - If a fixed font size is selected, when the end of the line is reached, no more data can be inserted.

To add more data, either press  to start another line, or decrease the size of the font. (To set default font type and size see, [“Font Settings” on page 10](#). To change the font attributes or size for a line of text, see [“Font Size” on page 35](#) or [“Font Attributes” on page 36](#).)

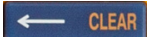
- If the font size is set to *Auto*, as more data is added to a line of text, the font size automatically decreases a point at a time until the smallest font size is reached. When the maximum character limit is reached an error message displays. To remove the error message, press





- Press  to start another line of text.

### Deleting Text



**To remove characters one at a time:**

1. Position the cursor to the right of the rightmost character that you want to delete. See [“Positioning the Cursor” on page 34](#).
2. Press  repeatedly until all the characters that you want to delete are removed.

**To clear all the data on a label or labels:**

1. Press  + . You are presented with the following options.

Clear Option	Definition
Clear Text	Clears data from the label, but retains formatting (font size, number of areas, and so on). If the file contains multiple labels, data is only cleared from the current label; data on other labels is retained.
Clear All	Removes all labels in memory. You are returned to one single label in General Mode, with all default settings reapplied.

2. Select the desired option and press .
3. If you selected *Clear All*, a message displays asking for confirmation. Select **Yes** in the message and press .

If you do not want to delete the labels, press  to cancel the Clear All function. You are returned to the screen with all labels intact.

## Formatting Text

Character and line formats called attributes change the appearance of the fonts, such as size, weight (bold), angle (italics), underline, and expanding or condensing the text. Many of these can be set as defaults from the *SETUP* menu, but you can change them on individual labels or lines.

### Typeface

The typeface (font style) is determined in the setup menu and applies to the entire label. That is, the typeface cannot be changed on individual lines or areas of a label. See [“Font Settings” on page 10](#).


### Font Size



Font size applies to an entire line of data at a time and is measured in point size or millimeters, as determined in the Setup function.

If the size is changed before the data is entered, all the data in the current and subsequent lines takes on the new font size until font size is changed again. Changing the font size on pre-entered data changes the size on the entire line, regardless of where the cursor is in the line. However, the font size will not change on subsequent lines of pre-entered data. You must change the font size on each individual line of pre-entered data.

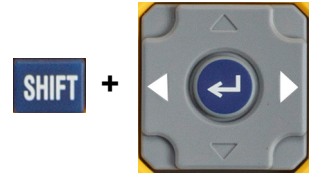
**To change the size of the chosen font:**

1. Position the cursor on the line of text that you want to resize. See [“Positioning the Cursor” on page 34](#).

2. Press .
 

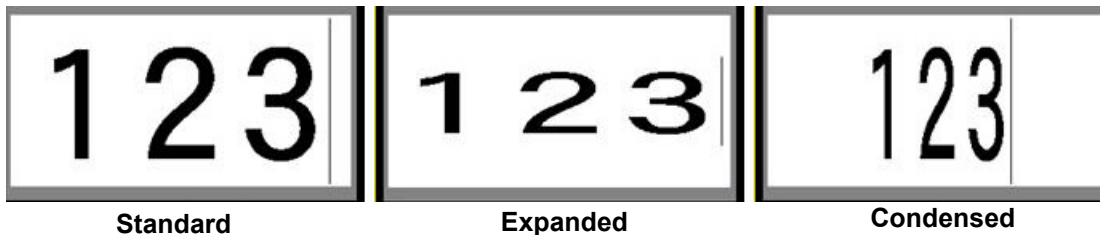
A pop-up menu displays the available font sizes for the label supply installed.
3. Navigate through the **Size** menu to select the desired font size.
  - **Custom:** To manually enter a size, select **Custom**. The minimum/maximum range is shown below the type-in field. If you exceed these values an error will display.
  - **Auto:** To have text automatically size as you type, select **Auto**. Autosize starts with the largest font size that fits on the label. When a line of text reaches the edge of a label it scales downward until you press  or the minimum font size is reached. When working with autosize and multiple lines of text, all lines on a label maintain the same size. Autosize is the default setting for all labels and is indicated with an 'A' in the upper left corner of the screen.
4. Press .

**Shortcut:** You can increase or decrease the size of the font one point at a time using the navigation keys. Hold the shift key and press the up or down navigation key repeatedly to reach the desired font size.





### Font Attributes

Font attributes (**bold**, *italic*, underline, expanded, or condensed) can be applied to an entire line of text or to individual characters within a line of text. The attributes can be turned on before entering the text or after the text has already been entered.



### New Text

To turn an attribute on before entering the text:

1. Position the cursor where the attribute should take affect.
2. Press .
3. Select the desired attribute, then select **On** (for bold, italics, and underline). For expanded, select a percentage lower than 100; for condensed, select a percentage higher than 100.
4. Press .
5. Enter the text to be affected by the attribute.

- If you want to continue typing without the attribute, press again and turn the attribute off. For expanded or condensed text, change the percentage to 100% to return to normal.

When applying the attribute to text as it is being typed, the attribute stays on until it is turned off or until you move to a new area.

### Existing Text

#### To apply an attribute to previously entered text:

- Select the text to which you want to apply the attribute.

Hold while moving the cursor with the navigation keys across the characters to which the attribute will be applied.

**Note:** Highlighting works on a line-by-line basis. You cannot highlight more than one line at a time.



- Press .
- Select the attribute, then select **On** (bold, italics, and underline) or the percentage of expanded or condensed text.
- Press .

All highlighted text displays the attribute.

To remove the highlighting from the characters, press any navigation key.

#### To remove an attribute that was previously applied to some text:

Repeat the steps for applying the attribute but select **Off** instead.

### Superscript and Subscript






Superscript places a character slightly above the line of type and subscript places a character slightly below the line of type. The super- or subscript character also displays slightly smaller than the normal line of type. Super- and subscript functions are on the numeric keypad. Pressing either key applies that format to the next character typed. It immediately turns off after the character is entered and you are returned to the normal line of type.

#### To apply superscript or subscript to a single character:

- Position the cursor in the line of text where the superscript or subscript character will display.
- Press + for superscript or + for subscript.
- Type the character to be displayed in superscript or subscript.

Only the character typed directly after pressing the superscript or subscript key is displayed in super- or subscript.

**To apply superscript or subscript to multiple characters:**

1. Type the characters that you want to put into super- or subscript.
2. Position the cursor at the beginning of the character string that you want to display in super- or subscript.
3. Hold  while moving the cursor with the navigation keys across the characters that will display in super- or subscript. This highlights the characters.
4. Press  +  for superscript or  +  for subscript.

## Labels and Areas

Areas are used to apply different formatting (such as justification, rotation, and frames) to different parts of a single label. Areas can only be added when using a continuous label supply set to auto length mode (see “[Label Length](#)” below). However, area formatting can be applied to pre-sized labels that have pre-defined areas.



**Note:** You cannot set a fixed length of an area on a label that has multiple areas. The size of the area is based on the amount of data entered and the font size of that data.

### Label Length

Auto length is the default for continuous label supplies. With the length set to *Auto*, the label will be as long as it needs to be to accommodate the entered data, up to a maximum of 39 inches. You can, however, set a fixed length for a label. A different length can be set for each label in a file.

**Note:** To change the unit of measure for the length see “[Units](#)” on [page 8](#) for more information.

**To change the length of the label:**



1. Press .
2. Select **Length**, then **Fixed**. *Length* is not available if you are using a pre-sized label supply.
3. Enter the desired length of the label into the field.
4. Press .

### Add Area

The cartridge must contain continuous labels (as opposed to pre-sized) and the length must be set to *Auto*. The top of the screen indicates the label size. See “[Using the Screen](#)” on [page 21](#).

**Note:** Areas can only be added and deleted on cartridges with continuous labels.

**To add an area to a label:**



1. Press .
2. Choose **Add**.
3. Press .

A new area is added at the end of existing areas and its number is reflected in the upper right corner of the screen. The font size used on the first line of the previous area carries over to the new area. To navigate between areas see [“Go to Area” on page 39](#).





Only the current area displays on the editing screen. Use the print preview to view the entire label.

## Go to Area

**To move to another area on a label with multiple areas:**

1. Press .
2. Select **Go To**, then enter the number of the area desired.
3. Press .



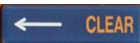
## Shortcut Keys

- Press  +  to move to the next area within a label with multiple areas configured.
- Press  +  to move to the previous area within a label with multiple areas configured.

## Delete Area

**Note:** Areas can only be added and deleted on cartridges with continuous labels.

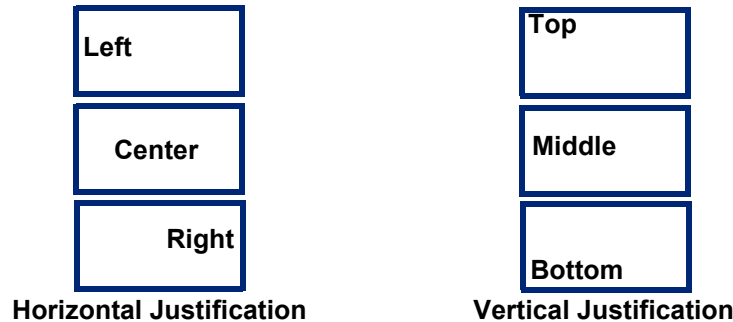
**To delete an area:**

1. Navigate to the area you want to delete. See [“Go to Area” on page 39](#).
2. Press .
3. Choose **Delete**.
4. A confirmation message displays. Press  to confirm or  to cancel.




## Formatting Labels and Areas

### Justification

Justification refers to the alignment of data between boundaries (margins) on a label or in an area. There are two types of justification: horizontal and vertical. Horizontal justification (H. Justify) aligns data between the left and right boundaries of a label or area, while Vertical justification (V. Justify) aligns data between the top and bottom boundaries of a label or area. Justification is applied to an area or a label. It cannot be applied line-by-line.



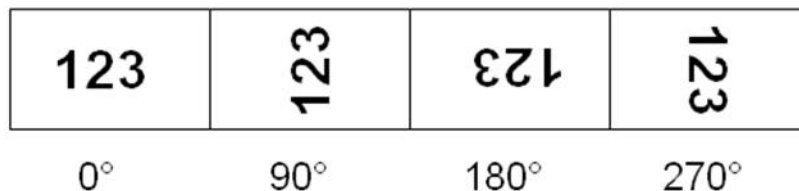
#### To apply justification:

1. If the label has multiple areas, navigate to the area that you want to justify. See [“Go to Area” on page 39](#).
2. Open the label or area menu.
  - For a label, press .
  - For an area, press .
3. Choose **H. Justify** or **V. Justify**.
4. Choose the horizontal or vertical justification desired.
5. Press .

Every line of data on the label or in an area is justified according to the option selected. Different justification can be applied to different areas on one label.

### Rotation

Rotation flips the data on a label or in an area counter-clockwise in 90° increments. Rotation affects all data on a label or in an area.






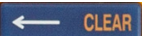


If rotation is applied individually to areas, you cannot apply rotation to the entire label.

Data cannot be rotated on a line-by-line basis. When adding a new area, the rotation is the same as the previous area.

**To rotate data:**

1. If the label has multiple areas, navigate to the area that you want to rotate. See [“Go to Area” on page 39](#).
2. Open the label or area menu.
  - For a label, press .
  - For an area, press .
3. Choose **Rotate** and select the degree of rotation.
4. Press .

If the font size is set to *Auto*, rotated data is automatically sized to accommodate the new label orientation. However, if using a fixed font size, the rotated data may not fit on the label. If this occurs, an error message displays indicating rotated text will not fit. The Rotate function is canceled and data is not rotated. To clear the error message press .



Rotation is not reflected on the editing screen, although the degree of rotation is displayed in the upper left corner of the screen. To view the actual rotation use [“Preview” on page 30](#).

## Frame

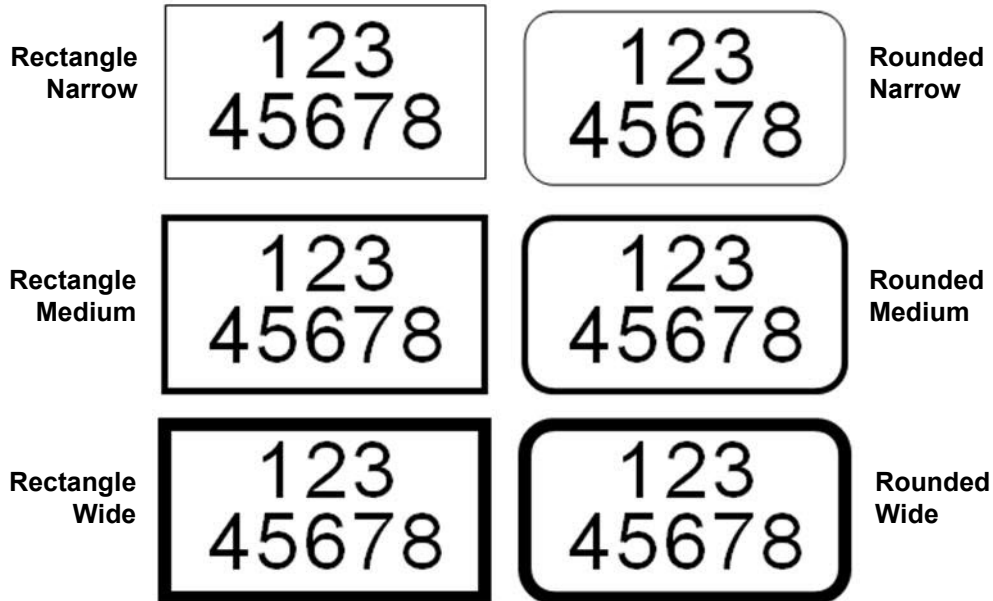
A frame (border) can be added to an area or a label, but not to a line of text. You can have a different frame, or no frame, on individual areas in a multi-area label. You can also place a frame on a label that contains area frames.

**Note:** Frames can only be placed on continuous labels, not pre-sized labels.

**To add a frame:**

1. If the label has multiple areas, navigate to the area that you want to frame. See [“Go to Area” on page 39](#).
2. Open the label or area menu.
  - For a label, press .
  - For an area, press .

3. Choose **Frame** and select the frame type.

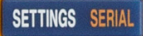




4. Press .

Frames do not display on the editing screen. Use print preview to view the label or area frames. See [“Preview” on page 30](#).

**Note:** Frames do not display edge to edge, but may appear slightly offset from the very edge of the label.

**To remove the Frame:**

1. Open the label or area that contains the frame.
2. Open the label or area menu.
  - For a label, press .
  - For an area, press .
3. Choose **Frame**, and then **None**.
4. Press .

## Reverse

The Reverse function switches the foreground and background colors of data on a label, based on the color of ribbon and label supply in the cartridge. For instance, black lettering on a yellow background, if reversed, would print yellow lettering on a black background.



You can apply reverse formatting to areas or labels. When adding another area, the reverse function status carries over.

**Note:** This feature is only available when the cartridge contains continuous supply. Reverse cannot be applied to a barcode or to an individual line of text.

### To apply or remove Reverse formatting to a label or area:

1. With the cursor in the label or area, open the label or area menu.
  - For a label, press .
  - For an area, press .
2. Navigate to **Reverse**, and then choose either **On** or **Off**.
3. Press .

## Vertical Text

In vertical text, each character drops down a line below the preceding character.


**Example:** The word “WIRE” as vertical text displays as such:

W  
I  
R  
E



Vertical text can only be applied to an area or a label. It cannot be applied line-by-line.

### To format text vertically:

1. If the label has multiple areas, navigate to the area that you want to format. See [“Go to Area” on page 39](#).
2. Open the label or area menu.
  - For a label, press .
  - For an area, press .
3. Navigate to **Vertical**, and then choose **On**.

4. Press . The text displays vertically.

**To remove the vertical text option, placing text in normal, horizontal format:**

1. With the cursor in the label or area, open the label or area menu.
  - For a label, press .
  - For an area, press .
2. Navigate to **Vertical**, and then choose **Off**. The text realigns according to predefined formats.

**Multiple Vertical Lines of Text**

If more than one line of text is present, subsequent lines of text display vertically to the right of the first line of text.

**Note:** The horizontal and vertical justification set before applying vertical formatting is carried over to the vertical lines of text.

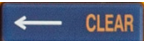
1 2 3  
4 5 6 7

Multiple lines, before applying Vertical text (autosized)

4  
1 5  
2 6  
3 7

Multiple lines, after applying Vertical text (autosized)

**Errors with Vertical Text**

If a barcode is in the line of text to be placed vertically, or if the height of the label cannot accommodate the vertical placement of text, an error message displays. Press  to clear the error message. The editor then displays the text in its original format, without applying the vertical text option.



**Symbols**

The M410 printer contains hundreds of symbols that can be used for a variety of applications. The symbol categories available are:

- |                |              |                 |                 |             |
|----------------|--------------|-----------------|-----------------|-------------|
| • Arrows       | • Electrical | • HSID          | • Packaging     | • Public    |
| • CLP/GHS      | • Exit       | • International | • Personal      | Information |
| • Data         | • Fire       | • Laboratory    | Protective      | • Safety    |
| Communications | • First Aid  | • Mandatory     | Equipment (PPE) | • Warning   |
| (Datacomm)     | • Greek      | • Miscellaneous | • Prohibition   | • WHMIS     |

For images of all the symbols included on the printer, see [Appendix A: “Symbols” on page 76](#).

**To add a symbol to the label:**

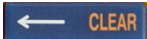
1. Position the cursor at the point where you want the symbol to display.
2. Press .
3. Navigate to the symbol category and press .

A symbols grid displays. Some of the grids are lengthy and may require scrolling to view all of the symbols.

4. Select the desired symbol.
5. Press .

The symbol displays with the same font size that is currently in use.

**To remove a symbol from the label:**

1. Position the cursor to the right of the symbol.
2. Press .

## Date and Time

The printer inserts the current date or time using the current system clock value at the time of printing and the date and time format defined in the Setup function. (For more information, see [“Time and Date” on page 8](#).)

**To insert the current date or time on each label:**

1. Position the cursor at the point on the label where you want the date or time to be inserted.
2. Press  +  or  + .



The date or time displays the format on the editing screen (for example, mm/dd/yy or HH:MM). To view the actual date or time, use print preview (see [“Preview” on page 30](#)).

## International Characters

The M410 printer contains hundreds of internationally recognized characters, complete with diacritical marks.

**To add an international character to your label:**

1. Position the cursor at the point where you want the international character to be placed.

2. Press the *international* button to open the list of characters. 
3. Use the navigation keys to scroll through the character list until the desired character is found. You can also press a letter on the keyboard to jump to that section of the character list.
4. Select the character and press . The character displays with the same font size that is currently in use.

## Barcode

Barcodes are generated following industry standard symbology. A typical barcode is composed of vertical lines (bars) and spaces of varying thickness, depending on the text entered. It can also include “human readable text.” Human readable text is the data entered that makes up the barcode. Because you cannot read bars and spaces, you can have the actual text that makes up the barcode display.

Barcode elements support vertical resizing (height) only. The width of the barcode is based on data and symbology and cannot be changed. However, some barcode widths (depending on symbology used) can be altered by changing the ratio and density of the bar code.



Barcode data can be displayed in the same line as other data (text or symbols). It is not necessary to have a separate area for the barcode. Barcode data on the same line as text will not overwrite the text already on the line but will be placed next to it. Any text in the same line as the barcode will align on the baseline with the barcode.

## Barcode Settings


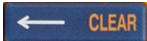
Before entering a barcode, determine the barcode symbology and attributes to use.

**Note:** Additional barcode types are supported in Brady Workstation software.

### To access the barcode settings:

1. Press .
2. Navigate to the **Barcode** menu and press . (For navigation help see “Menus” on [page 22.](#))
3. Input the desired settings. For information on how to use the screen, see “Settings Screens” on [page 23.](#)
  - **Symbology:** This is the topmost field in the upper left. Select the type of barcode that you want to use on the label. The printer supports Code 128 and Code 39.
  - **Height (or Max. Height):** The height of a barcode can vary with a minimum of 0.1 inch (2.54 mm) and a maximum of 1.2 inches (30.48 mm).


- **Human Readable:** Human readable text is the data entered that makes up the barcode. Because you cannot read bars and spaces, you can display the actual text that makes up the barcode. Human Readable text can be placed above or below the barcode symbology, or you can choose to not display it.  
If you choose to display the human readable text, a field for the text size becomes available. Choose a size for the human readable barcode text.
- **Width:** This changes the thickness of the bars and spaces within the barcode, which in turn lengthens or shortens the barcode. Set the width, in pixels (dots), of the narrowest bar of a barcode.
- **Ratio:** The ratio of a barcode is the relationship of narrow elements to wide elements, where elements are the bars and spaces.
- **Check Digit:** A check digit is used for error detection in a barcode. It consists of a single digit computed from the other digits in the barcode. A check mark in the *Check Digit* box turns the function on. This field is only available for Code 39 barcodes.

4. When finished, select **OK** on the screen and then press .
5. Press  to exit the menu.

## Add a Barcode

The barcode key acts as a toggle between a barcode and text. Press once to turn it on, press again to turn it off.

### To add a barcode:

1. Make sure the symbology and other barcode settings are the way you want them. See [“Barcode Settings” on page 46](#).
2. Position the cursor where you want to add the barcode. See [“Positioning the Cursor” on page 34](#).
3. Press .
4. Enter the barcode value. The barcode displays on the screen as the data is being entered.
  - a. Type the value. The image below shows the barcode placed within a line of text with the human readable text below the barcode.




If the human readable text were set to *None*, the barcode value would appear in the middle of the barcode as you are entering it, but would not be visible once you finished.

- b. When finished with the barcode entry, press . You can add text or other elements to the label as normal.

## Edit Barcode Data

### To edit barcode data:

1. Position the cursor on the barcode. The barcode mode automatically turns on.
2. Edit the barcode text.

The barcode mode automatically turns off when you move past the last character of the barcode, or when you select OK and press .

## Serialization (Sequential Data)

Serialization (or sequencing) automatically adds a series of sequential numbers or letters to the labels. The Serial function consecutively places the next number or letter in the defined sequence on individual labels. The number of labels created is defined by the sequence values you enter.

Sequences can be combined with other data on a label. Any data displayed on a label that includes a sequence will be repeated on every label along with the sequential data.

### How Serialization Work

Serialization is alphanumeric, with numbers from 0 to 9 and letters A-Z. Serialization can be simple or linked, with a maximum of two sequences per label.

**Note:** You can incorporate serialized data into a barcode.

Serialization consists of a Start Value, End Value, and Increment. The Start Value is the number, letter, or combination of numbers and letters that begin the serialization sequence. The End Value is the termination point of the sequence.

The Increment is the value that is added to the previous number in the sequence to produce the next sequence number. (You cannot have an increment value of 0.) For instance, a start value of 1, an end value of 25, and an increment of 4 would produce 1, 5, 9, 13, 17, 21, 25.

### Examples of Serialization

#### Simple Example

In a simple serialization, a sequence runs through its full range of numbers (0 to 9) or letters (A- Z), using one number/letter for each label.

#### Example:

Start Value:1  
End Value:10



Increment:1  
Produces:1, 2, 3, 4, 5, 6, 7, 8, 9, 10

### Simple Alphanumeric Example

You can combine letters and numbers in a single serialization. When the right-most character in the Start Value reaches its maximum value (9, Z), the character immediately to the left is incremented, and the right character cycles back to its minimum value (0, A)

**Example:**

Start Value:A1  
End Value:D4  
Increment:1  
Produces:A1...A9, B0...B9, C0...C9, D0...D4

### Advanced, Independent Example

In a multi-sequence serialization, where the second set of values is NOT dependent on the first set (that is, the *Linked* box is NOT selected), the two sequences increment sequentially, independent of each other.

**Example:** Two sequences that increment independently:

<b>Sequence #1</b>	<b>Sequence #2</b>
Start Value: 1	Start Value: A
End Value: 10	End Value: C
Increment: 1	Increment: 1
Produces: 1A, 2B, 3C, 4A, 5B, 6C, 7A, 8B, 9C, 10A, 1B, 2C, 3A, 4B, 5C ...	

### Advanced, Dependent Example



In a multi-sequence “linked” serialization (the *Linked* box is selected), the second set of values is dependent on the first set. The second sequence holds its initial value until the first sequence completes, after which it moves to the next value.



**Example:** Two sequences that increment dependently.

<b>Sequence #1</b>	<b>Sequence #2</b>
Start Value: 1	Start Value: A
End Value: 10	End Value: C
Increment: 1	Increment: 1
Produces: 1A...10A, 1B...10B, 1C...10C	

## Add Serialization







To add serialization to labels:

1. Position the cursor on the label where you want the serialization to display.
2. Press  + .

3. Enter the values for the sequence.
  - In the **Start Value** field, enter the start value of the sequence. If the start value is larger than the end value, the series will decrement automatically.
  - In the **End Value** field, enter the end value of the sequence.
  - In the **Increment** field, enter the amount to increment each value in the sequence. For example, a sequence beginning with 1 with an increment of 2 yields: 1, 3, 5, 7, 9, and so on.
4. For a simple sequence, select **OK**, press  and you are done. If you wish to add a second sequence, continue. The remaining steps result in one complex sequence on the labels. To have the two sequences appear in different places on the label, see [“To add multiple sequences, displayed at different locations on the label:” on page 50](#).
5. Select the **Add Seq 2** box.
6. Under *Sequence #2*, enter the **Start Value**, **End Value**, and **Increment**.
7. If you want the values to increment dependently, as described in [“Advanced, Dependent Example” on page 49](#), select **Linked**.
8. Select **OK**, and press . The sequence is placed on the labels.

**Note:** Linked serializations do not have to display at the same position on the label. They can be in separate locations within the label. See below.




**To add multiple sequences, displayed at different locations on the label:**

1. Position the cursor on the label where you want the first sequence to display.
2. Press  + .
3. Enter the values for the first sequence.
  - In the **Start Value** field, enter the start value of the sequence. If the start value is larger than the end value, the series will decrement automatically.
  - In the **End Value** field, enter the end value of the sequence.
  - In the **Increment** field, enter the amount to increment each value in the sequence. For example, a sequence beginning with 1 with an increment of 2 yields: 1, 3, 5, 7, 9, and so on.
4. Select **OK** and press  to return to the editing screen.
5. On the editing screen, navigate to the next sequence location (cursor position) on the label.
6. Press  + . The values from the first sequence are already filled in.
7. Select the **Add Seq 2** box.
8. In the *Sequence #2* enter the start and end values for that sequence, as well as the increment.
9. Select **OK** and press .

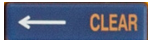
## Edit a Sequence

You can change the serialization values after a sequence has been determined.

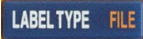
### To edit the sequence values:

1. Press  +  .  
The screen displays the current sequence values.
2. Select the value fields to change and enter the new values.
3. When ready, select **OK** and press  .

### To delete a sequence:

In the editor, with the cursor just to the right of a value in the sequence, press  .

# 5 Label Types

Label types provide templates that guide and control the layout for specific applications. Some label types require specific label supplies. To select a label type, press  and see the following sections for more details on each.

<b>General</b> .....	<b>52</b>
<b>Wire Marker</b> .....	<b>52</b>
<b>Flags</b> .....	<b>54</b>
<b>Terminal Block, Patch Panel, 66-Block</b> .....	<b>55</b>
<b>110-Block, Bix Block</b> .....	<b>57</b>
<b>DesiStrip (Designation Strip)</b> .....	<b>60</b>
<b>Breaker Box</b> .....	<b>60</b>

Depending on the label type chosen, a sub-menu or dialog box displays to collect information for automatically formatting the specific label type.


The name of the specific label type being used is displayed in the upper left corner of the screen, below the font size. See [“Using the Screen” on page 21](#).

## General

The *General* label type contains standard functions and formats used for most generic labels, but does not provide templates as do other label types.

If you have been working with another label type and want to return to the General label type, perform the following steps.

**To select the General label type:**

1. Press .
2. Use the navigation keys to highlight **General**.
3. Press .

See [Chapter 4: Editing Labels on the Printer](#) beginning on page 33 for instructions on using the editing tools for the *General* category of labels.

## Wire Marker

The *Wire Marker* label type is designed to repeat entered data down the length of the label. The data repeats as many times as possible, considering the font size and the wire size selected.

Pre-sized, self-laminating, or continuous label supplies can be used for wire marker labels.

**To create a wire marker label:**

1. Press .

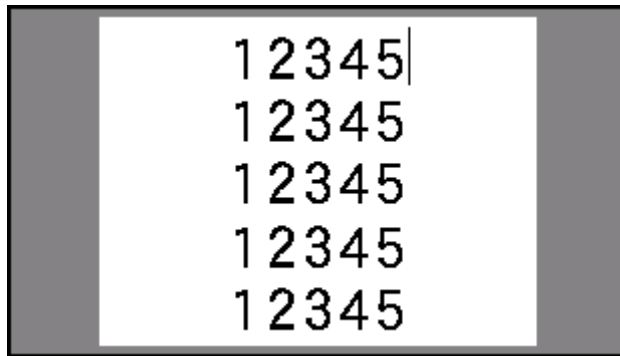
2. Select **Wire Marker**.


For continuous labels, select the wire marker gauge and length. For pre-sized labels no additional selections are available.

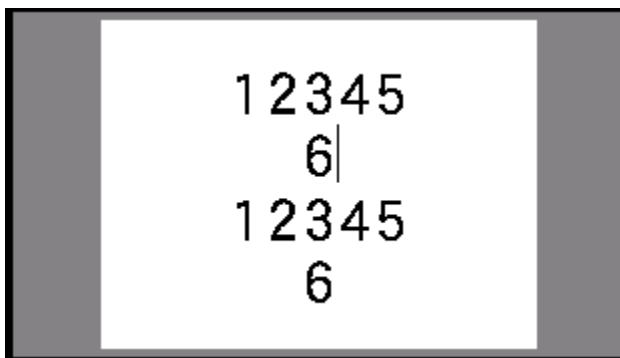
3. Press .

4. Enter the data.

The data is repeated down the wire marker label as many times as the length of the label allows given the font size used. The smaller the font size, the more the data is repeated. The font is set to *Auto* by default, but you can change it. See [“Font Size” on page 35](#).





If you press  to start a new line of text, a space opens below each line of repeated data and begins to repeat the next line of text as you enter it.

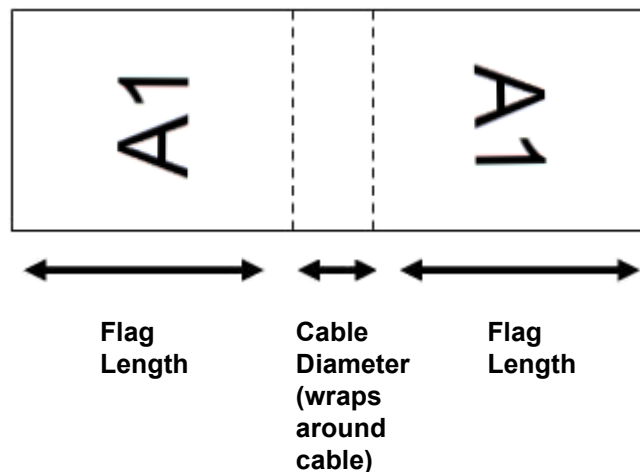


## Flags

A flag label wraps around a wire or cable, with the ends joined together to form a flag. The flag label type is designed to work with continuous labels or specific multi-area pre-sized labels.

### To create a flag label:




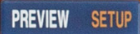
1. Press **LABEL TYPE FILE**.
2. Select **Flags** and press . The printer displays the settings screen for flags.
3. Select the desired layout. Navigate to the circle above the image of the desired layout and press .
4. If continuous label supply is installed, navigate to the **Flag Length** field and enter the length of the flag (the part that contains the text). (*Flag Length* is not available for pre-sized labels.)



5. Navigate to the **Cable Diameter** field and enter the diameter of the wire or cable to which the flag will be applied. (*Cable Diameter* is not available for pre-sized labels.)  
The range for the cable diameter is 0.25 inches to 8 inches. By entering the diameter of the wire or cable, the system automatically calculates an additional length of label to allow complete wrap of the wire or cable with additional label material left for the flag.

- Rotate the data if desired. The provided layouts orient the text parallel to the wire or cable. If you want the text rotated 90°, select the **Rotate** check box.

A1	A1	A1	A1
A1	A1	A1	A1
A1	A2	A1	A2
A1	A2	A1	A2
Original Layout		Rotation Applied	


- When finished, navigate to **OK** and press .
- On the editing screen, enter the text that will display on the flag. Depending on the layout you chose, you may have to navigate to the second area to enter all the text.
  - If the layout chosen puts the same text element on both sides of the flag, the printer automatically duplicates the entered text for the other area, rotating according to the predefined layout.
  - If the layout chosen uses different text on each side of the flag, enter the text in the first area and then navigate to the second area and enter text. The upper right of the touchscreen indicates which area is currently visible. Use the **FN** +  and **FN** +  keys to navigate between areas. See “Go to Area” on page 39.
- Press  to view the labels before printing.




## Terminal Block, Patch Panel, 66-Block

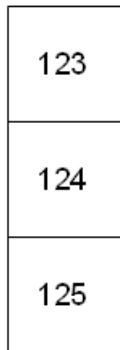
*Terminal Block, Patch Panel, and 66-Block* label types are designed to be used with continuous labels. If a cartridge with continuous labels is not installed, these label types do not display in the menu.

**To create terminal block, patch panel, or 66-Block labels:**

- Press .

2. Select **Terminal Block**, **Patch Panel**, or **66-Block** and press .
 




The printer displays the settings screen for terminal block, patch panel, or 66-Block labels. All three types contain the same settings.
3. If you are going to set up a sequence to enter data, select **Serialize** to place a check mark in the option box and press . If you will manually enter data, leave the box empty.
4. Navigate to the **Terminal Repeat** field and type the size of the gap between each terminal (with a minimum of 0.20 inches). The leading zero and the decimal point are provided for you, so just type the two digits after the decimal point.
5. Navigate to the **Number of Terminals** field and type the number of terminals on the block for which the label is intended. This field is not available if you selected *Serialize*. In that case the sequence values determine how many labels to create.
6. Navigate to the **Separator** list and press . Select *None*, *Tic*, or *Line* to mark the division between labels and then press .



Line Separator, Vertical Orientation




Tic Separator, Horizontal Orientation

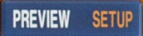
7. Navigate to the **Orientation** list, press , select either **Vertical** or **Horizontal**, and press  again. See above.
8. When finished, select **OK** and press .
9. If the *Serialize* option box is checked, the settings screen for sequences displays.
  - a. Set up the sequence or sequences.
 

For instructions on setting up the sequence, see [“Add Serialization” on page 49](#). For information about serialization see [“Serialization \(Sequential Data\)” on page 48](#).



- b. Select **OK** and press .

The number of terminal blocks are created as areas on one label with the serialization characters displayed in each area.

10. If serialization was not used, the editor opens on area 1. Enter data for each area. For help navigating areas see [“Go to Area” on page 39](#).
11. Press  to view the label before printing. Use the up and down navigation keys to scroll through the areas on the label.

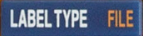

## 110-Block, Bix Block

*110-Block* and *Bix Block* use continuous label supplies with widths of 0.625 or 0.475 inches (15.9 or 12.1 mm).

The 110-Block label type is based on user-selected pair configurations, with the length of the label determined by the pair type selected. The label height uses a dedicated 110-Block label height of 0.475 inch (12.1 mm). The length of a 110-Block label is 7.5 inches (190.5 mm), with a total strip length of 7.9 inches (200.7 mm). The number and formatting of areas is based on pair configuration and serialization selected.

Bix Block template information is similar to the 110-block, with some variations on height and length of strip. The label height uses a dedicated Bix Block part height of 0.625 inch (15.9 mm). The length of a Bix Block label is 6.2 inches (157.5 mm) with a total strip length of 6.6 inches (167.6 mm).

### To create 110- or Bix block labels:

1. Press .
2. Select **110-Block** or **Bix Block** and press . The printer displays the settings screen for 110-block or Bix block labels. (For information on navigating settings screens, see [“Settings Screens” on page 23](#).)
3. In the **Block Type** field, from the drop down list, select the pair configuration to use. In the 110- and Bix Block applications, the number of areas created is based on the pair configuration selected. Vertical and horizontal separator lines are automatically added.

The following example displays the areas based on the *Block Type* selected (2-pair, 3-pair, 4-pair, 5-pair, or Blank). The blank strip is formatted as two areas covering the full printable length of the strip.

**2 Pair**

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

**3 Pair**

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

**4 Pair**

1	2	3	4	5	6
7	8	9	10	11	12

**5 Pair**

1	2	3	4	5
6	7	8	9	10

**Blank**

Text entered in area 1 prints here.
Text entered in area 2 prints here.

4. In the **Sequence Type** field, from the drop down list, select if and how you want to add sequential data to the label.
  - If **None** is selected, the areas are blank and you can independently enter data in each area of the strip.
  - **Horizontal** increments one number per area, based on the start value.

- In **Backbone** serialization, the left-most area on each strip prints with two numbers. The first number is left-justified; the second number is right-justified. All other areas print with one right-justified number.

**2 Pair: None**


**2 Pair: Horizontal**

	1	2	3	4	5	6	7	8	9	10	11	12	
	13	14	15	16	17	18	19	20	21	22	23	24	

**2 Pair: Backbone**

	1	2	4	6	8	10	12	14	16	18	20	22	24	
	25	26	28	30	32	34	36	38	40	42	44	46	48	

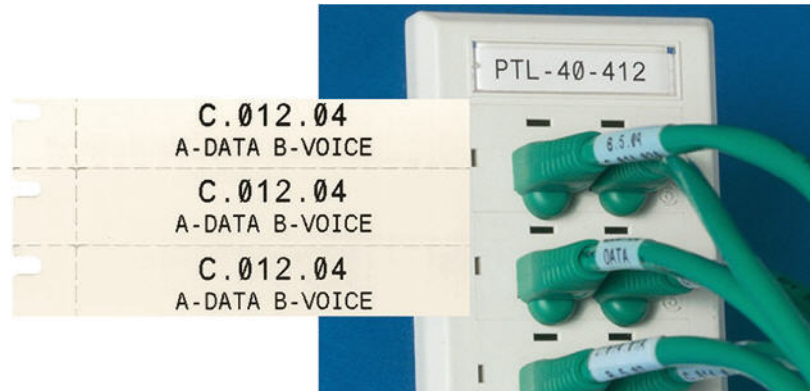
- In the **Start Value** field (except when *None* is selected in the *Sequence Type* field), enter the first number of the sequence.
- In the **# of Strips** field, enter the number of strips (labels) to be created in the block configuration chosen.

**Note:** If serializing the data, additional strips will continue the serialization from the last number of the previous strip. Example: When requesting two strips of a 2-pair horizontal configuration, the first strip will contain values 1-24, the second strip will contain numbers 25-48.

- When finished, select **OK** and press  .

## DesiStrip (Designation Strip)

A DesiStrip (Designation Strip) is a paper faceplate label that can rest over the keys of a phone or switches in a breaker box, and so on.




### To create a DesiStrip label:

1. Press **LABELTYPE FILE**.

2. Select **DesiStrip** and press .

3. Enter the length of an individual strip.

**Tip:** You can type the entire number including the decimal point or you can simply type three digits and the printer supplies the decimal point for you. For example, type 2 0 0 to get 2.00. Type 0 5 0 to get 0.50.


4. Select **OK** and press .

## Breaker Box

Breakers are usually arranged in two columns or along one row, depending on geographic regions. The breaker positions are numbered left-to-right or top-to-bottom, depending on label orientation. This numbering system is universal across various competing manufacturers of breaker panels.

### To create breaker box labels:

1. Press **LABELTYPE FILE**.

2. Select **Breaker Box** and press . The printer displays the settings screen for breaker box labels.

3. Navigate to the **Breaker Repeat** field, enter the width of a standard breaker, and then press



**Tip:** You can type the entire number including the decimal point or you can simply type three digits and the printer supplies the decimal point for you. For example, type 2 0 0 to get 2.00. Type 0 5 0 to get 0.50.

4. Navigate to the **Number of Breakers** field, enter the number of breakers to be labeled, and



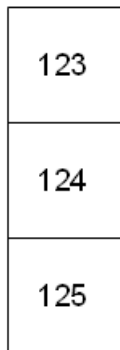
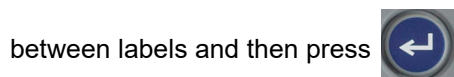
This produces one continuous strip, separated by the *Breaker Repeat* width.

5. If the breakers contain different pole counts, navigate to **Variable Pole Count** and press

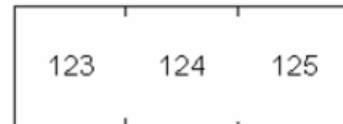


to place a check mark in the option box. The printer uses the pole count to calculate the distance between breakers to ensure accurate spacing. A single-pole breaker takes up only one space in the electrical panel, while a double-pole takes up two.

6. Navigate to the **Separator** list and press . Select *None*, *Tic*, or *Line* to mark the division



Line Separator, Vertical Orientation



Tic Separator, Horizontal Orientation

7. Navigate to the **Orientation** list, press , select either **Vertical** or **Horizontal**, and press



again. See above.

8. When finished, select **OK** and press . If Variable Pole Count is not selected, skip to step 11.

If *Variable Pole Count* is selected, the breaker box pole count screen displays. The number of poles for each breaker defaults to 1.

9. For each breaker, enter the number of poles.

10. When finished, select **OK** and press .

11. On the editing screen, enter the unique data that will display on the label for each breaker.

Each breaker is consigned to an area, with the number of areas determined by the number of breakers defined. The number of areas is indicated in the upper right of the touchscreen. Use

 +  and  +  to move to the different labels.

12. Press  to view the label before printing.

## 6 File Management

A label can be saved as a file, to be opened and reused at a later date. Follow the instructions in this chapter to save, open, and delete files.

### Saving Labels Created on the Printer

You can save labels as internal or external files.

- Internal files are stored directly on the printer.
- External files are stored on some external device, such as a USB drive.

#### File Naming Standards

To create a file on the M410 printer, the file must be given a name. Names can be up to 20 characters long and can consist of letters, numbers, and spaces.

When creating files, remember this rule: You cannot have two files with the same name. If you do, the most recent file with the name will overwrite the previous file with that name. A one-character difference in the name creates a different file and will not overwrite a previous file.


#### Folders

To better organize your data, place similar label files into folders. Similar files could consist of all labels for a specific project, or all files that use the same label supply, or specific label applications. Instructions on creating or selecting a folder are within the instructions for saving a file below.


#### Saving a File

To save labels as a file:

1. Press  + .

2. Choose **Save**, then press .

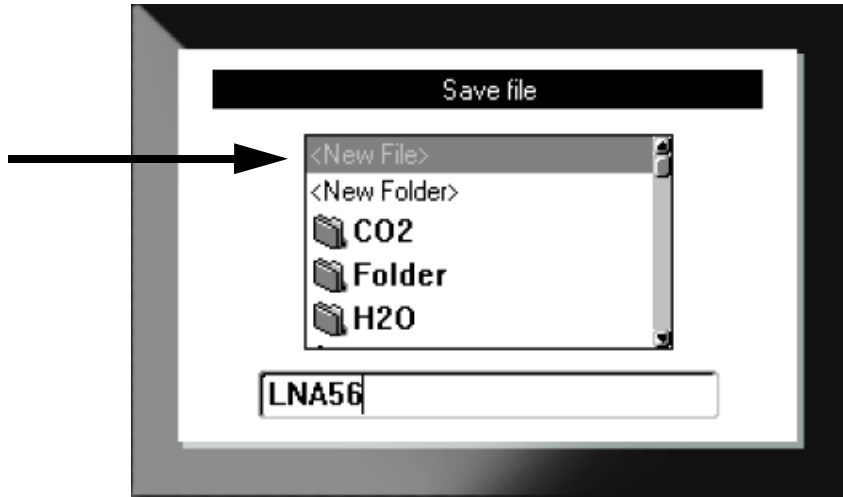
The memory location dialog box displays **ONLY** if an external source is attached to the printer.

3. If a USB drive is attached to the printer, the printer asks where to save the file.
  - Select **Internal** to save directly to the printer.
  - Select **External** to save to the attached external source.
  - After making your selection, press .

4. The *Save file* screen opens. At this point you can create a new folder to place the file in, select an existing folder, or just save the file without organizing it into a folder.

- **To save the file without putting it in a folder:** With *<New File>* highlighted, type a name


for the file and press . Proceed to step 5.




- **To create a folder:**


- a. With *<New Folder>* highlighted, type a name for the folder and press .


- b. Select **Previous folder** and press .

- c. Select the folder that you just created and press .


- d. With *<New File>* highlighted, type a name for the file and press . Proceed to step 5.

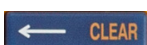
- **To choose an existing folder:**

- a. Select the desired folder and press .

- b. With *<New File>* highlighted, type a name for the file and press .

5. If the name already exists, a message displays asking if you want to overwrite the existing file with that name.

- To overwrite the existing file, press .

- To go back and type a different file name, press .



## Closing the File

When the file is saved, you are returned to the editing screen with the saved file still displayed.

To remove the file from the screen:

1. Press + .
2. Select **Clear All** and press . The printer displays a message confirming that you want to delete the label from the workspace.
3. Press to clear the label from the workspace so that you can start a new label. It does not delete the saved file. (If you change your mind and want to edit the existing label, press .)

## Opening a File

To open a saved file:

1. Press + .
2. Choose **Open** and press .
3. Select the location of the file and press . A list of previously saved folders and files displays.
  - Choose **Internal** if the file is stored on the printer.
  - Choose **External** if the file is stored on a USB drive. Make sure that the USB drive is plugged into the USB port.
4. If the file is stored in a folder, navigate to the desired folder and press .
5. Navigate to the desired file and press .


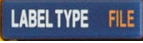





Only one file can be displayed on the screen at a time. When opening a saved file, if the editing screen contains other data, you are prompted to save the data before the screen is cleared. If you decide to save the displayed data, the Save function is invoked and you are allowed to give the data a file name before the requested file to open is displayed in the editor.

When opening a file, if the stored data does not fit on the installed label supply, an error message displays. While you do not have to use the exact cartridge used when saving the file, you must use a cartridge with labels that can accommodate the data in the file being opened. You cannot open a file created for continuous labels while pre-sized labels are installed and vice versa.

## Deleting a File

The workspace does not have to be cleared before deleting a file. A file can be deleted with other data still on the screen.

### To delete a previously saved file:

1. Press  + .
2. Choose **Delete** and press .
3. Select the location of the file and press . A list of previously saved folders and files displays.
  - Choose **Internal** if the file is stored on the printer.
  - Choose **External** if the file is stored on a USB drive. Make sure that the USB drive is plugged into the USB port.
4. If the file is stored in a folder, navigate to the desired folder and press .
5. Navigate to the desired file and press . A delete confirmation message displays.
6. Press  to delete the file. The file is removed from the system and is no longer available for use.

**Note:** Folders are deleted the same way as files, only the folders must be empty in order to delete.

## 7 Maintenance

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### Installing Firmware Upgrades

Upgrades to firmware (printer system software) are available online.



CAUTION! Do not interrupt printer power during an upgrade.

#### To upgrade the firmware:

1. Use the USB cable to connect the printer to a computer with an internet connection.
2. On the computer, go to the technical support website for your region. See [“Technical Support and Registration” on page iv](#).
3. Find firmware updates.
4. Find the most recent M410 firmware upgrade.
5. Download the firmware.
6. Save the downloaded .msi file to your computer.
7. Double-click the .msi file.
8. Follow the prompts on the screen.
9. After the installation is finished, run the update utility.
  - a. Open the Windows Start menu.
  - b. Expand the **Brady Corp** folder.
  - c. Click **M410 Firmware Update Utility**.
10. Follow the prompts to connect the M410 printer to your computer, turn the printer on, then click the **Upgrade M410** button in the update utility.
11. Cycle power on the printer for the upgrades to effect.

### Cleaning the Printer

Cleaning the printer will improve print quality and legibility. It also increases output, machine life, printer reliability, and performance.


## Screen

### To clean the screen:

1. Lightly moisten a soft (non-scratching) cloth with Isopropyl alcohol or use a pre-moistened swab from the Brady Cleaning Kit PCK-6.
2. Gently wipe the display screen until clean.
3. Remove excess Isopropyl alcohol with a dry, soft (non-scratching) cloth.

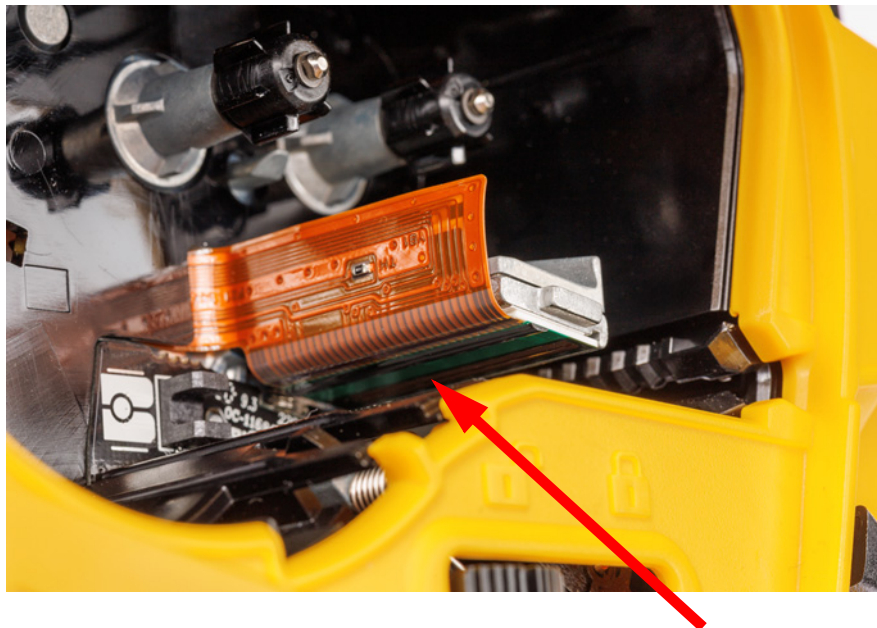
## Printhead and Platen Roller

### To clean the printhead and platen roller:

1. Press the power button to turn the printer off. 
2. Remove the cartridge. See [“Loading Cartridges” on page 12.](#)

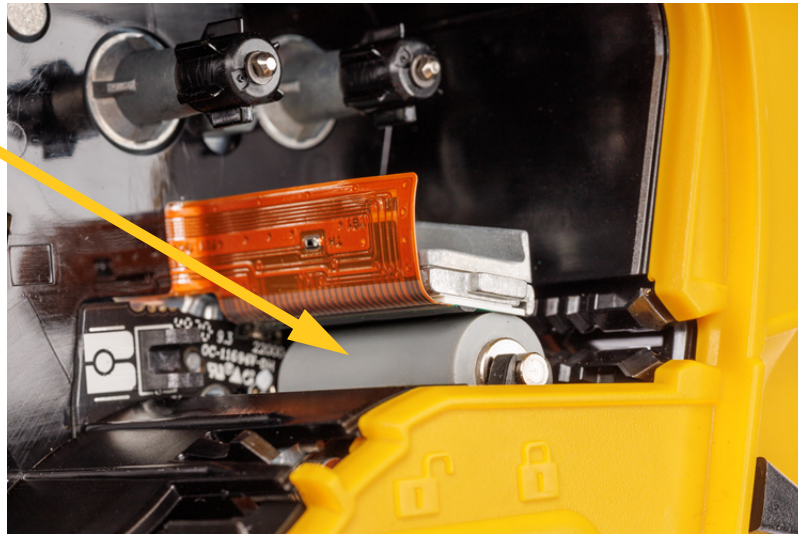
**Note:** Make sure the lock lever is in the unlocked position (to the left). If not, you will not be able to access the printhead.

3. Lightly moisten a lint-free swab with isopropyl alcohol or use pre-moistened cleaning swabs (PCK-6). We recommend using Brady part number PCK-6 pre-moistened swabs because they are lint free and the isopropyl alcohol contains no additives.
4. Gently swab the printhead.



5. Slide the lock lever to the locked position to access the platen roller.


- Using a clean moistened swab, gently brush the platen roller.



## Sensor

Debris on the sensor can cause print to be offset on pre-sized labels.

**To clean the position sensor:**

- Press the power button to turn the printer off. 
- Remove the cartridge. See [“Loading Cartridges” on page 12.](#)
- Clean debris off the sensor either with a can of compressed air or a lint-free swab.



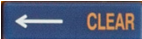



# 8 Troubleshooting

Use the following tables to troubleshoot and diagnose possible performance problems with your printer. If the corrective action suggested does not work, contact Brady's Technical Support Group. See ["Technical Support and Registration"](#) on page iv.

**Error Messages** .....70  
**Other Issues** .....72  
 Hardware .....72  
 Power On and Off (Printer not Working) .....73  
 Print Quality .....73  
 Labels .....75

## Error Messages


Message	Cause	Corrective Action
<b>Check media.</b> <b>Replace cartridge.</b>	There is a problem with the labels.	<ul style="list-style-type: none"> <li>• Check for a jam. See <a href="#">"Printer jammed, cannot feed labels."</a> on page 75.</li> <li>• Replace the cartridge. See <a href="#">"Loading Cartridges"</a> on page 12.</li> </ul>
<b>Cut while printing</b>	Operating the cutter while labels are still printing.	To remedy this error: <ol style="list-style-type: none"> <li>1. Cut through the material completely.</li> <li>2. Press  +  to clear the error message.</li> <li>3. Reprint the label.</li> </ol>
<b>Data exceeds label dimensions</b>	The label supply is not the right size for the amount of data on the label.	Install a cartridge with larger labels. See <a href="#">"Loading Cartridges"</a> on page 12.
	The character typed is not valid data for the type of barcode.	Press  and type a different character.

Message	Cause	Corrective Action
<b>File incompatible with installed media.</b>	A saved label file was created for a different cartridge than the one installed.	Install the cartridge that the file was created for, or a similar cartridge. Try swapping a cartridge with continuous labels for a cartridge with pre-sized labels, or vice versa.
<b>Head temperature outside range</b>	The printhead is either too hot or too cold. The operating temperature is 39° to 110° F (4° to 43° C).	Let the printhead cool down or warm up for approximately 10 minutes, then re-initiate printing.
<b>Incompatible media for chosen application.</b>	The selected Label Type is not compatible with the installed cartridge.	Install a cartridge that is compatible with the current label type. The current label type is shown in the upper left corner of the screen. See <a href="#">Chapter 5: “Label Types”</a> on page 52.
<b>Invalid media. Replace cartridge.</b>	The cartridge cannot be authenticated.	Install a cartridge with the Authentic logo. See <a href="#">“Loading Cartridges”</a> on page 12. 
<b>Invalid terminal repeat value entered</b>	The value entered is out of the range.	The acceptable range is between the minimum of 0.15 inch to the maximum of 40 inches.
<b>Locking lever not closed. Close lever.</b>	The locking lever is not in the locked position.	Open the cover and slide the locking lever to the right (locked position). Then push down firmly on the cover until you hear it latch. For the location of the locking lever see <a href="#">“Printer Components”</a> on page 4. If the locking lever will not lock, make sure the cartridge is fully inserted. When installing, you must press down on the cartridge until it snaps into place.
<b>Low battery</b>	The battery needs to be charged.	Attach the AC adapter to the printer and plug into an electrical outlet. This will supply immediate power while charging the battery at the same time.

Message	Cause	Corrective Action
No media detected	The cartridge is not installed or is improperly installed.	Install a cartridge. See <a href="#">"Loading Cartridges"</a> on page 12.
	The circuit board on the cartridge may be damaged	Replace the cartridge.
	The contacts in the cartridge bay may be damaged.	Contact Technical Support. See <a href="#">"Technical Support and Registration"</a> on page iv.
Out of media	The cartridge is empty.	Replace the cartridge.
Top of form	The label or ribbon has jammed.	See <a href="#">"Printer jammed, cannot feed labels."</a> on page 75.

## Other Issues

### Hardware

Problem	Cause	Corrective Action
Cutter does not cut.	Label material is stuck in the cutter blades. Label fragments may be stuck in the cutter.	<p>Open the cover. Remove the cartridge. Use a small tool such as tweezers or needle-nose pliers to carefully remove any fragments visible within the cartridge bay. Use caution not to damage any of the components in the cartridge bay. If you have concerns, please contact technical support for further assistance.</p> <p> <b>WARNING!</b></p> <p>Never attempt to remove fragments with your fingers. The cutter assembly includes very sharp components that can cause injury.</p>

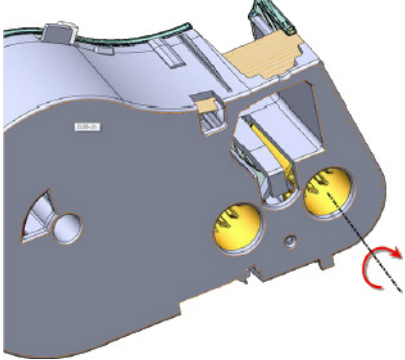


## Power On and Off (Printer not Working)


Problem	Cause	Corrective Action
Printer does not power up when turned on.	Battery pack is not charged.	Attach the AC adapter to the printer and plug into an electrical outlet. This will supply immediate power while charging the battery at the same time.
Screen freezes	User interface error.	<ol style="list-style-type: none"> <li>1. Press the power button to turn the printer off.</li> </ol> If the power button does not shut down printer: <ol style="list-style-type: none"> <li>2. Remove the AC adapter (if using one).</li> <li>3. Remove and re-insert the battery pack.</li> <li>4. Power on the printer.</li> </ol>
Printer frequently powers OFF.	Battery is low.	Attach the AC adapter to the printer and plug into an electrical outlet. This will supply immediate power while charging the battery at the same time.
	Auto shutoff timing.	Adjust the shut off delay timing in the <i>Setup, Config</i> menu. (See <a href="#">"Printer Configuration"</a> on page 9.)
Printer not responding	Battery is dead.	<ul style="list-style-type: none"> <li>• Attach the AC adapter to provide power to the printer and charge the battery.</li> <li>• Install a new battery.</li> </ul>

## Print Quality

Problem	Cause	Corrective Action
Poor quality printing	Battery pack may be worn out and not properly holding a charge.	Battery life is approximately one to three years, depending on its use and care. Order a replacement battery pack.
	Dust or adhesives accumulated on the printhead.	Clean the printhead. (See <a href="#">"Printhead and Platen Roller"</a> on page 68.)

Problem	Cause	Corrective Action
The first label printed has a black line on it.	If the cartridge is left locked when the printer is not in use, the printhead remains pressed against the platen roller. Residual heat in the printhead can cause ink to transfer to the label.	Reprint the label and unlock the cartridge when the printer is not in use.
Void areas or lines appear on printed text.	Ribbon wrinkling.	<ol style="list-style-type: none"> <li>1. Remove the cartridge from the printer.</li> <li>2. Advance the ribbon by rotating the take-up spool clockwise until the wrinkled or damaged ribbon is no longer visible (typically about one or two full turns).</li> </ol>  <ol style="list-style-type: none"> <li>3. Reinstall the cartridge.</li> </ol> <p>If the problem persists, install a new cartridge.</p>
Faint print on labels	Ribbon not advancing properly.	Remove the cartridge and advance the ribbon as described above.
Compressed print or the print is in the wrong position on the label.	Dirty platen roller.	<p>Make sure the last cut label has been removed.</p> <p>Clean the platen roller. See <a href="#">“Printhead and Platen Roller” on page 68.</a></p>
Print is in the wrong position on pre-sized labels.	Damaged label notch	<p>Use a pair of scissors to cut a straight leading edge on the label roll.</p> <p>Use proper care when handling cartridges to avoid damaging label material.</p>

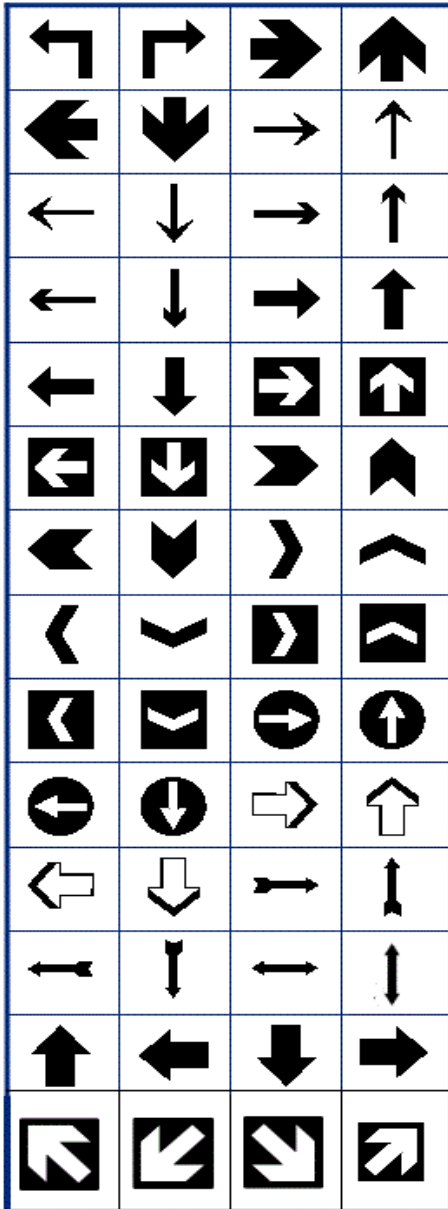
## Labels

Problem	Cause	Corrective Action
Printer will not feed labels.	The leading edge of the label supply is uneven or torn (not a straight edge).	Remove the cartridge. Use a pair of scissors to cut off the bent or damaged portion making sure to cut a straight leading edge.
Printer jammed, cannot feed labels.	The label exit chute is blocked causing label material to back up inside the printer.	<p>To clear the jam inside the printer:</p> <ol style="list-style-type: none"> <li>1. Open the printer cover.</li> <li>2. Slide the locking lever to the unlocked position (left). (Unlocking retracts the platen so the cartridge can be removed. If there is a large jam, you may have to force the locking lever to the unlock position.)</li> <li>3. Remove the cartridge.</li> <li>4. Use tweezers or a needle-nose pliers to clear the label jam.</li> </ol> <p> <b>WARNING!</b></p> <p>The printhead is susceptible to damage. Using metal objects to remove jams can scratch, dent, or crack the printhead. Use every precaution when clearing a jam.</p>

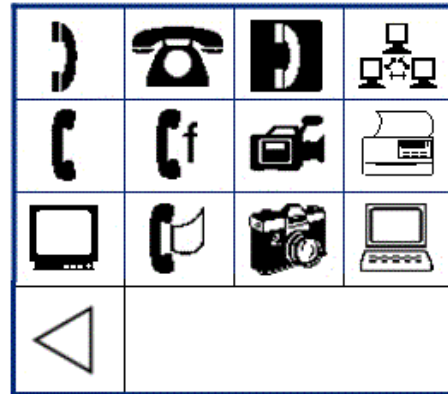
# A Symbols

Symbols for all enabled applications are available for use on any label, regardless of the application/label type in use. See ["Symbols" on page 44](#) for information on applying symbols to labels.

Arrows



DataComm



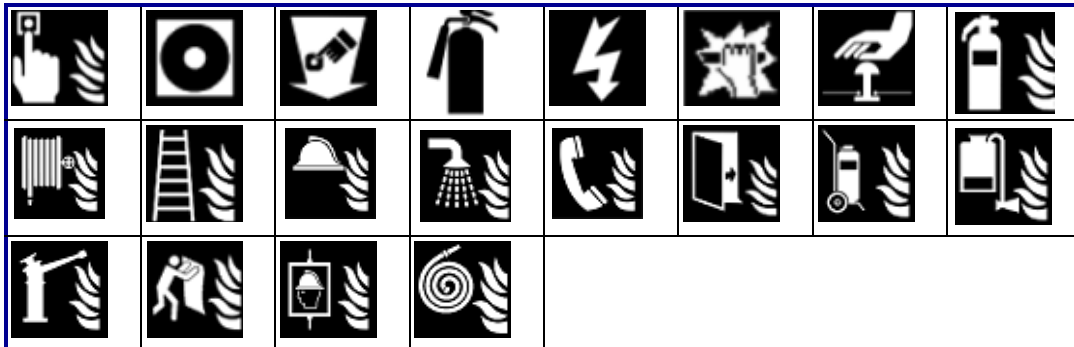
Electrical

	$\mu$		$\epsilon$
	$\Omega$	$\Omega$	$\pm$
$\lambda$	$\rho$		
	$\Upsilon$		

Exit

<b>Exit</b>		<b>EXIT</b>	

Fire



First Aid



CLP/GHS



Greek



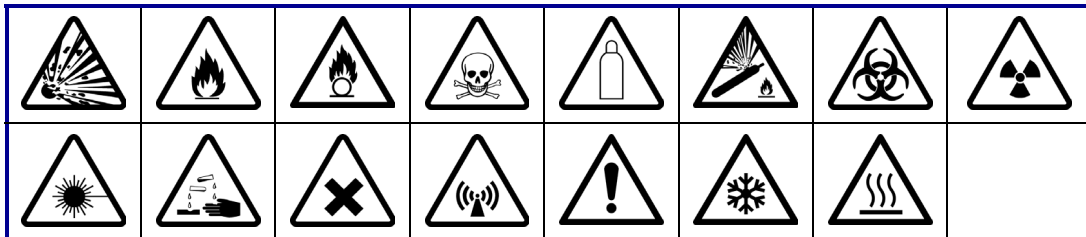
Home Electrical



HSID



International



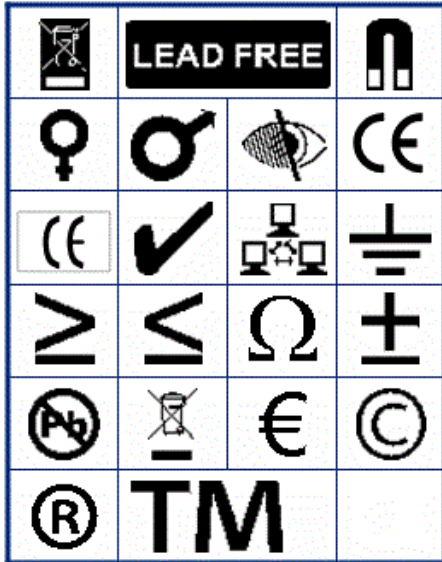
Laboratory

					<b>IVD</b>	<b>LOT</b>	<b>REF</b>	<b>SN</b>
<b>STERILE</b>	<b>STERILE A</b>	<b>STERILE EO</b>		<b>STERILE R</b>				
<b>STERILE</b>	<b>CONTROL</b>	<b>CONTROL -</b>		<b>CONTROL +</b>				
<b>IN ANALYSIS</b>		<b>CONFIDENTIAL</b>						

Mandatory




Miscellaneous



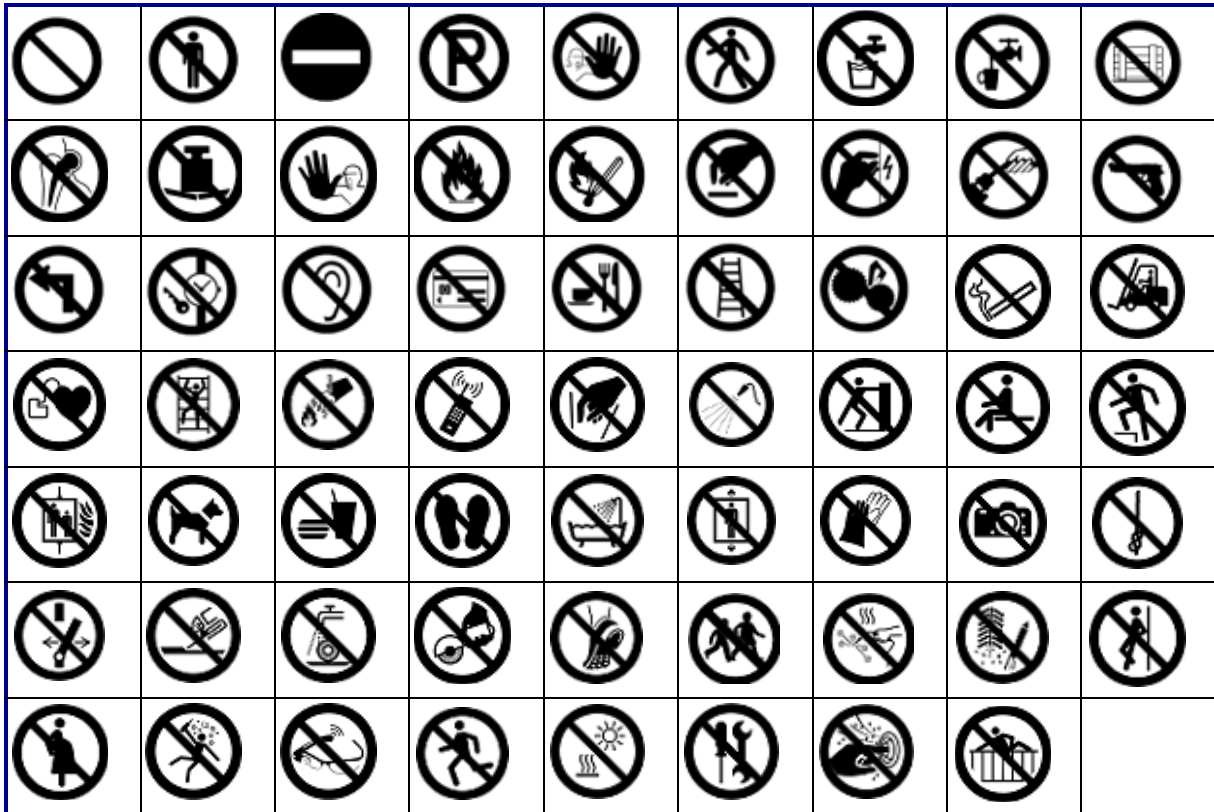
Packaging



PPE



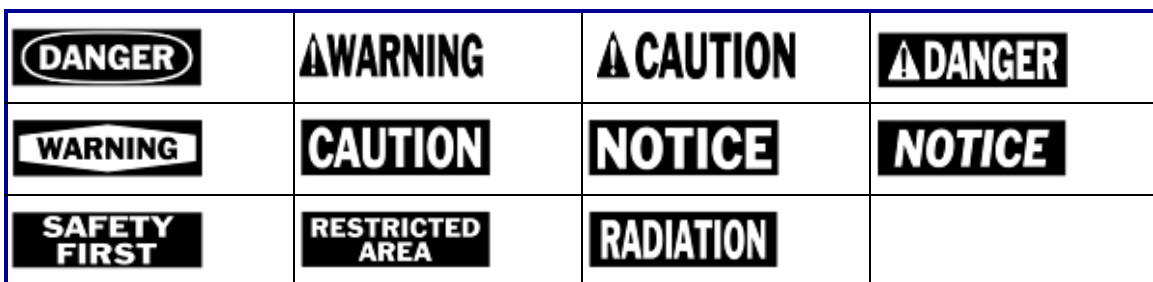
Prohibition



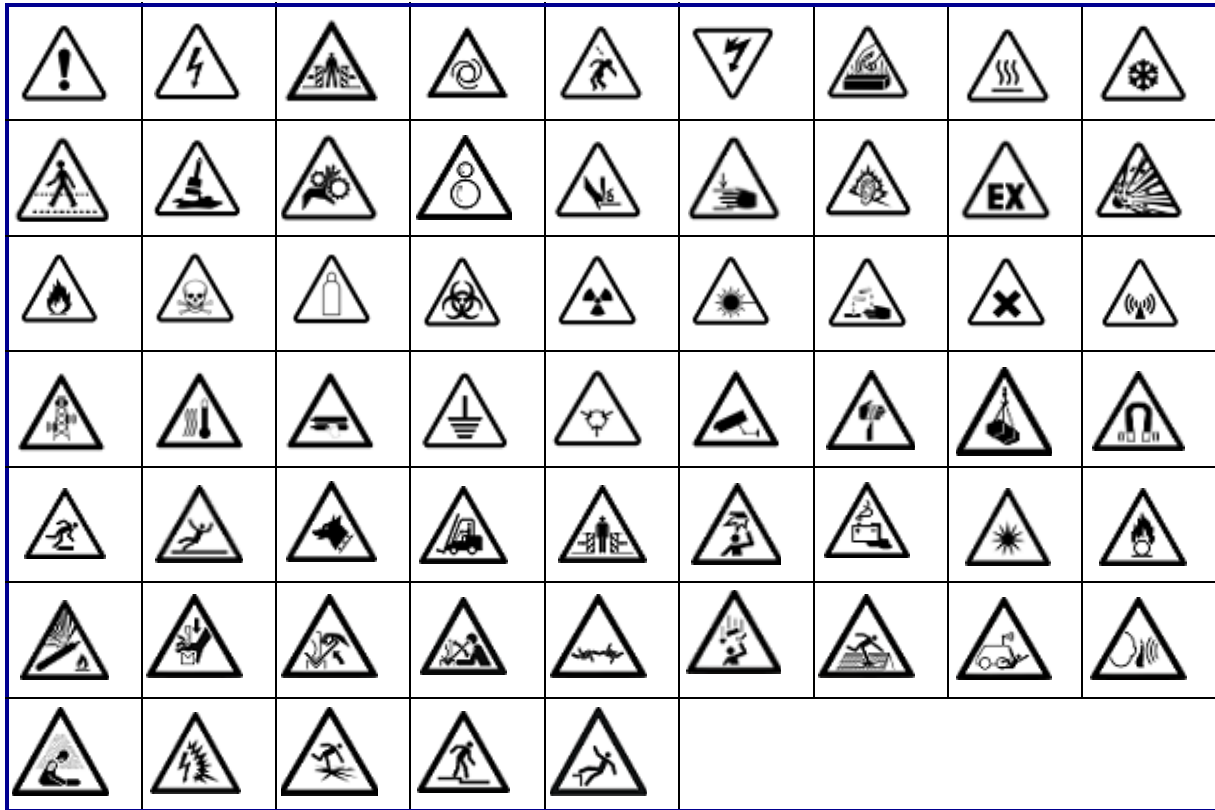
Public Info



Safety



Warning



WHMIS



# B Regulatory Compliance

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## Agency Compliance and Approvals

### United States

#### *FCC Notice*

**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 may cause harmful interference in which case the user will be required to correct the interference at his own expense.

In instances where interference is experienced, the following measures are recommended to assist in mitigation:

- Reorient or reposition the equipment relative to the interference.
- Increase the separation distance between the equipment and the interference.
- Connect equipment to a separate power circuit than the interference if applicable.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies 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 interference received, including interference that may cause undesired operation.

### Estados Unidos

#### *Aviso de la FCC*

**Nota:** Este equipo se puso a prueba y se confirmó que cumple con los límites para un dispositivo digital de Clase A, conforme a la Parte 15 de las Regulaciones de la Comisión Federal de Comunicaciones (Federal Communications Commission, FCC). Estos límites se han diseñado para proporcionar protección razonable contra interferencias perjudiciales cuando el equipo se utilice en un entorno comercial. Este equipo genera, utiliza y puede emitir energía de radiofrecuencia y, si no se instala y se utiliza según el manual de instrucciones, puede ocasionar interferencias perjudiciales en las radiocomunicaciones.

El uso de este equipo en un área residencial puede causar interferencias perjudiciales, en cuyo caso el usuario tendrá que corregir dichas interferencias por su cuenta.

En los casos donde se producen interferencias, se recomiendan las siguientes medidas para ayudar a mitigarlas:

- Volver a orientar o reposicionar el equipo para evitar la interferencia.
- Aumente la distancia de separación entre el equipo y la interferencia.
- Si es posible, conecte el equipo a un circuito eléctrico distinto al de las interferencias.

Los cambios o las modificaciones que no hayan sido aprobados expresamente por la parte responsable del cumplimiento pueden invalidar la autorización que se le otorga al usuario para utilizar el equipo.

Este dispositivo cumple con la Parte 15 de las Regulaciones de la FCC. El uso está sujeto a las siguientes dos condiciones: (1) es posible que este dispositivo no provoque interferencias perjudiciales y (2) este dispositivo debe aceptar cualquier interferencia recibida, incluso aquella que pueda generar un uso no deseado.

## Canada

Innovation, Science and Economic Development (ISED)

Canada ICES-003: Information Technology Equipment (including Digital Apparatus)

Canada NMB-003: Équipement de technologie de l'information (incluant les appareils numériques)

CAN ICES-3 (A)/NMB-3(A)

## Europe



**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.



### **Waste Electrical and Electronic Equipment Directive**

In accordance with the European WEEE Directive, this device needs to be recycled in accordance with local regulations.

## ***RoHS Directive 2011/65/EU, 2015/863/EU***

This product is CE marked and complies with the European Union's Directive 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

EU Directive 2015/863 of 31 March 2015 (RoHS 3) amends Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances.

### Batteries Directive 2006/66/EC



This product contains a lithium coin cell battery. The crossed-out wheeled bin shown to the left is used to indicate 'separate collection' for all batteries and accumulators in accordance with European Directive 2006/66/EC. Users of batteries must not dispose of batteries as unsorted municipal waste. This Directive determines the framework for the return and recycling of used batteries and accumulators that are to be collected separately and recycled at end of life. Please dispose of the battery according to your local regulations.

#### Notice to Recyclers

##### To remove the lithium coin cell battery:

1. Disassemble printer and locate the lithium coin cell battery located on the main circuit board.
2. Using a small screwdriver, pry the battery from its holder and remove the battery from the board. Dispose of in accordance with local regulations.

### Turkey

Turkish Ministry of Environment and Forestry

(Directive on the Restriction of the use of certain hazardous substances in electrical and electronic equipment).

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

### Eurasian Economic Union (EAEU)



### China

China RoHS Hazardous Substance Table related to this product is available at [www.bradyid.com/M410compliance](http://www.bradyid.com/M410compliance).

#### 警告

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，可能需要用户对干扰采取切实可行的措施。

仅适用于非热带气候条件下安全使用

### Taiwan

Class A Statement

警告：為避免電磁干擾，本產品不應安裝或使用於住宅環境

Taiwan Restricted Substances Containment Status (RoHS Declaration) related to this product is available at [www.BradyID.com/M410compliance](http://www.BradyID.com/M410compliance).

Importer:

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