



BMP™71 LABEL PRINTER
USER'S MANUAL

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UNITED STATES

Note

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

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

INDUSTRY CANADA

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

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 2002/95/EC

This statement clarifies Brady's product compliance with the European Union's Directive 2002/95/EC, Restriction of Hazardous Substances.

Batteries Directive 2006/66/EC



This product contains a lithium 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 battery:

1. Disassemble printer and locate the lithium cell battery located on the main circuit board.
2. To remove, push down on the center tab of the battery retainer, remove the battery from the board, and dispose of in accordance with local regulations.

To remove the NiMH battery:

1. Turn the printer over and locate the slide release latch.
2. Release the battery from the printer and dispose of in accordance with local regulations.

Taiwan

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

BRADY Warranty

Our products are sold with the understanding that the buyer will test them in actual use and determine for him or herself their adaptability to his/her 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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Technical Support

Technical Support Numbers/On-line Help

For repair or technical assistance, find your regional Brady Tech Support office by going to:

- In the Americas: www.bradyid.com
- In Europe: www.bradyeurope.com
- In Asia: www.bradycorp.com

Repair and Replacement Parts

Brady Corporation offers repair and replacement services. Contact Brady Technical Support for repair and replacement information.

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Introduction

The BMP™71 Label Printer is capable of printing on a variety of both die-cut and continuous supplies, up to two inches (51 mm) wide. It includes the following features:

- Targeted applications to simplify the creation of specific label types
- Long battery life, printing up to 3900 1" x 2" labels per charge
- Ability to use the printer while the battery is charging
- Large color display
- Easy to use graphic user interface
- Print speed of 1.5 ips
- 300 dpi print resolution
- USB 2.0
- Easy loading label and ribbon supplies
- Compatible with existing TLS2200™ and Handimark® label media
- Smart-cell technology that works intelligently with Brady consumables

Unpack Your Printer

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

- Hardsided carrying case
- BMP71 printer
- Battery pack
- AC adapter/battery charger
- USB connection cable
- TLS 2200[®]/HandiMark[™] label roll adapter
- Cleaning card and swab
- Product CD
- Quick Start Guide
- M71-R6000 black ribbon
- M71-31-423 die cut labels and/or M71C-2000-580-WT labels



Save Your Packaging

The packaging surrounding your BMP71 printer should be saved in the event you have to ship the printer and accessories back to the supplier.



WARNING

Never ship the BMP71 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.

Register Your Printer

Register your printer on-line at www.bradycorp.com/register and receive free product support and updates!

BMP71 System Specifications

The BMP71 printer has the following specifications:

- Weight 5.45 lbs (2.47 kg) (with battery, no consumables)
- Thermal Transfer Print Mechanism 300 dpi
- Optical Registration System for Precise Print Registration
- Elastomeric Keypad
- 3.5" QVGA color LCD
- Custom True Type Fonts
- Print Width - 51 mm, 2" maximum label width
- Maximum print length for labels: 40" (1016 mm)
- Prints up to 3900 1" x 2" labels per battery charge

Physical and Environmental Characteristics

The BMP71 printer has the following physical and environmental characteristics:

| Physical | Metric Units | U.S. Units |
|----------------------------|-------------------|---------------------------|
| Dimensions | 330 x 241x 117 mm | 13.0" L x 9.5" Wx 4.6" H. |
| Weight (with battery pack) | 2.5 kg | 5.5 lb. |

Note

The table below refers to the BMP71 printer only. Consumable performance may vary.

| Environmental | Operation | Storage |
|--------------------------------|--|--------------------------------|
| Temperature* (Printer) | 5° to 49° C (40° to 120° F) Be mindful, when using the AC adapter with the printer, that the AC adapter is rated at a maximum temperature of 30° C (86° F). | -30° to 60° C (-24° to 140° F) |
| Relative Humidity (Printer) | 10% to 90 % (non-condensing) | 10% to 90% (non-condensing) |
| Temperature (AC Adapter) | 0 to 30° C (30° - 86° F) | -20° 85° C (-68° - 185° F) |
| Relative Humidity (AC Adapter) | 10% to 90% (non-condensing) | 5% - 90% (non condensing) |

*Exposing the BMP71 printer to direct sunlight is not recommended.



WARNING

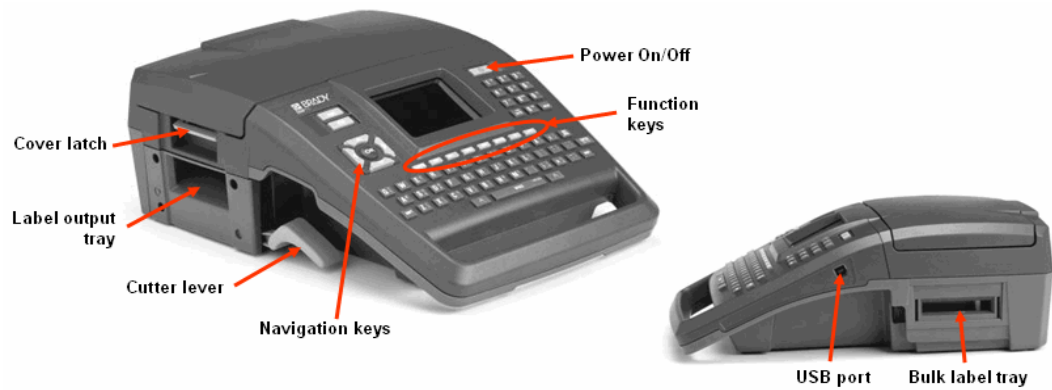
Avoid using the system near water, in direct sunlight, or near a heating device.

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

Firmware Upgrades

Future upgrades to BMP71 firmware can be downloaded from Brady’s website. Access www.bradyid.com/bmp71, click Support>Downloads, then select BMP71 from the list of products.

External View



Power Source

Power is supplied to the BMP71 printer through a Nickel Metal Hydride (NiMH) battery pack or through an AC power adapter (included).



WARNING

Do not expose batteries to temperatures above 60C (140F).

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 only in the BMP71 Printer and BMP71-QC Battery Quick Charger.

Do not attempt to charge your battery in any other device other than the BMP71 Printer and BMP71-QC Battery Quick Charger.

Do not allow metal or other conductive materials to touch the battery terminals.

 **WARNING**

The battery pack is not intended to be transportable. When not in use, the battery pack should be stored in the BMP71 Hard Case, BMP71 Soft Case, or equivalent casing to prevent possible damage to the battery pack.

Keep the battery pack away from sparks, flames, or other heat sources.

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.

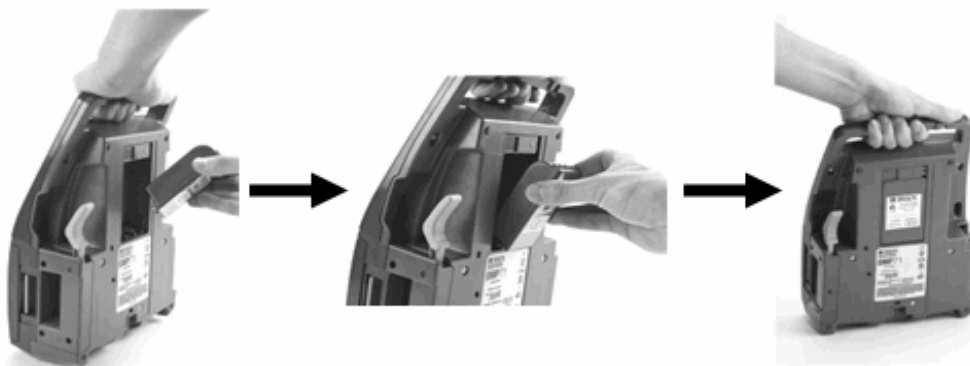
Keep the battery pack out of the reach of children.

At the end of battery life, replace your old battery only with the Brady BMP71 Battery Pack.

The battery pack must be recycled or disposed of properly according to federal, state, and municipal regulations.

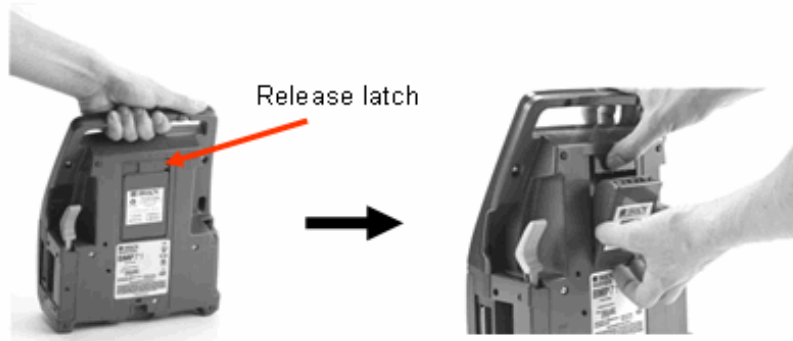
Loading Battery

1. Holding the printer by the handle, tip it onto the back side.
2. With the battery label facing outward, insert battery tabs into bottom of battery compartment.
3. Pivot the battery backward until it snaps into place.



Unloading Battery

1. Tip the printer onto its back side.
2. With one hand over the battery to ease its release, use your other hand to slide the release latch to the right.



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.



WARNING

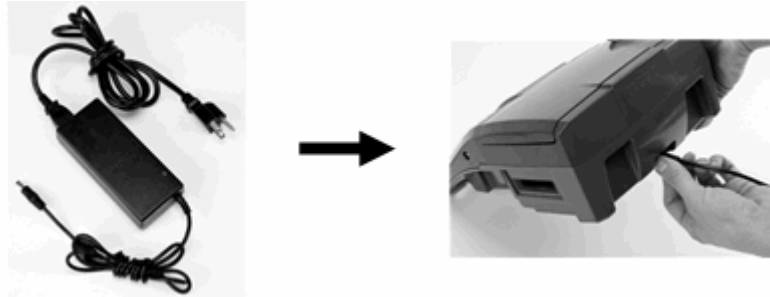
Use only the 18 VDC, 3.3A, Brady AC adapter for supplying power to the BMP71.

Brady AC Adapters

| Catalog Number | Region |
|----------------|---------------------------------|
| BMP71-AC | North America, Asian Pacific |
| BMP71-AC-EUR | Europe |
| BMP71-AC-UK | United Kingdom |
| BMP71-AC-AR | Argentina |
| BMP71-AC-BR | Brazil |

Attaching the Adapter

1. Insert the round end of the adapter cable...
2. ...into the plug-in port on the back of the printer. Plug the other end of the cord into an electrical outlet..



Print from PC

The BMP71 Label Printer is equipped with a USB port, enabling you to connect it to a computer running Microsoft Windows®. You can create labels in various applications on the PC and send the data to be printed on the BMP71.

Note

BMP71 can also store label files created on the PC using LabelMark™ Labeling Software V.5.1.

The printer must be connected to the PC before data is sent. If you attempt to send data to a printer that is either not connected or not turned on, the BMP71 printer does not recognize the data and an error message displays on the PC.

Printer Driver Installation

BMP71 accepts data from a number of Windows based programs. In order to send data from these programs to the BMP71 printer, you must install the BMP71 printer driver. The printer drivers can be found on the CD enclosed with your BMP71 printer package.

The BMP71 printer is a “plug-and-play” printer which means your PC will automatically recognize the new hardware (printer) when it is attached and will launch a wizard that will auto-install the printer drivers.

To install the printer drivers:

1. Insert the product CD into the CD drive of your computer.
2. Attach the small end of the USB cable to the printer, then the flat end of the cable to the PC.
3. Turn the printer on.

On the PC, “Found New Hardware” pops up in the lower right corner of the screen and the printer driver wizard is launched.



For Windows 2000, Windows XP, Windows NT:

1. In the launched Wizard, click “Install the software automatically” (if it is not already selected).
2. Click Next.

The printer driver installs. This takes a minute or two.

3. When complete, in the Wizard, click Finish.

For Windows 7:

1. Display the Autoplay pop-up window.

Note

The Autoplay pop-up window displays when a CD is placed in the CD drive. If you are currently running the BMP71 CD, either eject the CD, then immediately re-insert the CD to again display the Autoplay window.

OR

In Windows Explorer, right click the CD drive and select Open Autoplay.

2. From the Autoplay pop-up window, click “**Open folder to view files.**”
3. Open the Autoplay folder.
4. Open the Print Driver folder.
5. Double click **PrinterInstall.exe**.
6. On the “User Account Control” window, click Yes.
7. When the Power Down message displays, shut off the printer (if not already off), then click OK.
8. When the Power UP message displays, restart the printer, then click OK.

Your PC will automatically install the driver. When complete, a balloon message at the bottom right indicates “Your device is ready to use.”

Download Print Drivers

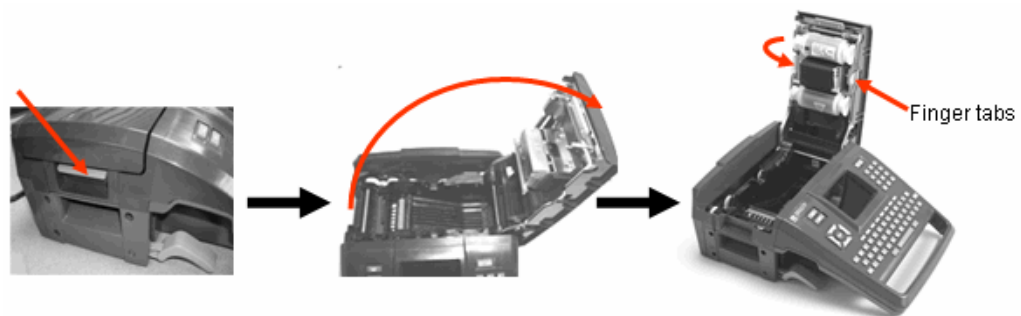
You can also download the print drivers from the Brady website at www.bradyid.com. On the website, choose **Support>Downloads**, then follow the instructions on the screen.

Ribbon

Use only BMP71-specific ribbons. The ribbon can be loaded with the power on or off.

Loading a Ribbon

1. Pull up on cover latch.
2. Open the cover.
3. With the cartridge label facing up, grasp finger tabs of cartridge and place directly over printhead, pushing slightly to snap into place. Then, close the cover until it latches.



Note

Turn the top spool of the ribbon counterclockwise to clear the printhead area of used ribbon.

The color of the ribbon displays in the color of the text entered on the editing screen. The amount of ribbon remaining in the cartridge registers in the gauge in the lower right of the status bar.

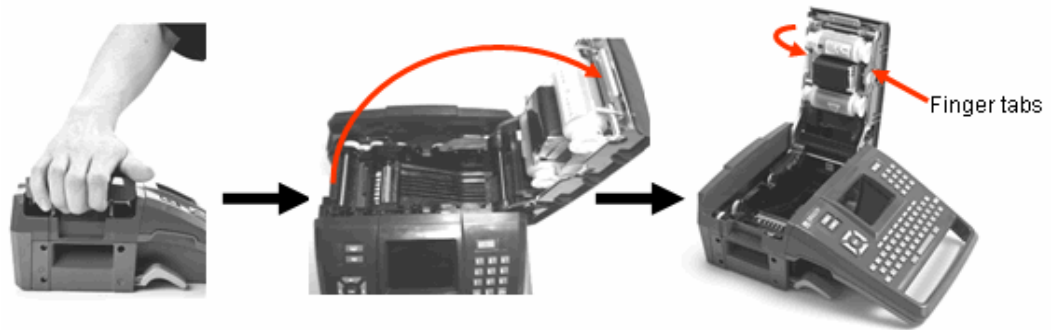
BMP71 displays a message if no ribbon is installed. You do not have to install a ribbon to create a label. However, if no ribbon is installed the system defaults to the last known ribbon cartridge used.

Unloading a Ribbon

1. Pull up on cover latch.

2. Open the cover.

3. Grasping finger tabs of cartridge, pull cartridge out of the ribbon compartment.



If the ribbon is spent, recycle the ribbon cartridge according to local regulations.

The ribbon gauge at the bottom of the status window indicates how much ribbon remains. Store this ribbon in a cool, dry place. Unused ribbon will last up to six months before deterioration sets in.

Labels

Brady labels come equipped with smart-cell technology that enables the printer to recognize the type of label and automatically sets many label formatting details.

For optimum performance, it is recommended that you use genuine Brady BMP71 labels. Labels designed for the Brady TLS 2200™ and Handimark® printers can also be used, but with limitations. (See Appendix B, starting on [page 125](#), for details.)

Labels can be loaded with the power on or off.

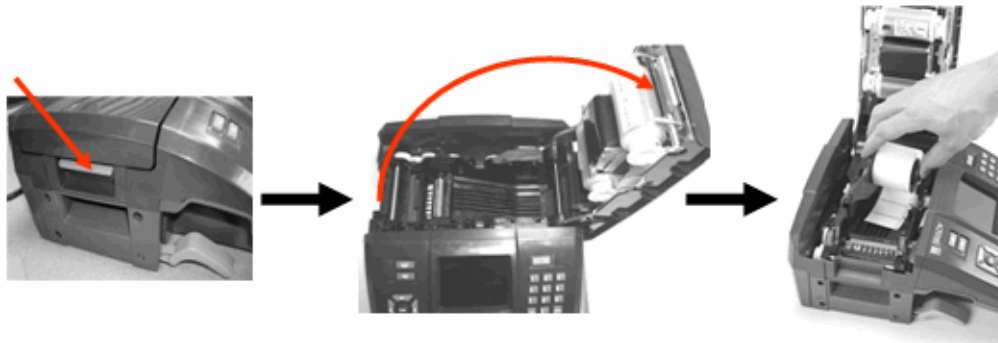
Loading Labels



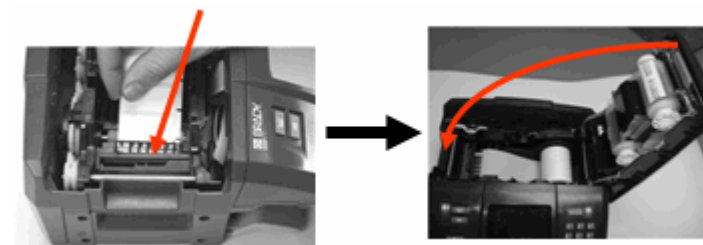
WARNING

Before loading or unloading labels, ensure that the cutter lever is in the 'down' position.

1. Pull up on cover latch.
2. Open the cover.
3. Grasping the label spool, drop into compartment.



4. Insert the loose label end up to the black line under the ribs.
5. Close the cover until it latches.



You do not have to install media to create a label. However, if no media is installed, the system defaults to the last known media that was installed.

Unloading Labels



WARNING

Before loading or unloading labels, ensure that the cutter lever is in the 'down' position.

To change the label part, remove the active label from the printer and load another.

1. Pull up on cover latch.
2. Open the cover.
3. Grasp label spool and pull up.



The label gauge at the bottom of the status window indicates how much label tape remains. Store unused labels in a cool, dry place.

Power On

To turn the system on or off:

1. Press **Power** .

After a user defined amount of time of non-use, the printer automatically shuts down. Press the **[Power]** key again to restart. (For more information, see “Setup Printer Configuration” on [page 32](#).)

The first time the printer is turned on, you will want to choose a language in which to display screen items. Language selection is performed in the Setup function. (For more information, see “Setup Language” on [page 28](#).)

Whenever the printer is powered on, the system performs an initialization process. Part of this process is recognizing the ribbon and label part installed. If the ribbon or label is not installed, an error message displays. While it is possible to power on the printer without installing ribbon or labels, if you choose not to install any, the printer reverts to the last label and ribbon installed in the printer.

Be aware that reverting to the last known label part can affect the layout of new labels being created if they differ from what was previously installed.

Display Screen

The display screen enables you to view font attributes and other formatting features directly on the screen while you are entering and editing data. The screen changes colors as needed to match the installed ribbon and label color.

The screen displays one label at a time. For labels with multiple areas, only one area displays at a time. A Zoom function is available for alternate label views, as desired.

Status Information

A status bar displays permanently at the top and bottom of the screen and contains the following:




















Figure 1 • Status bar









The color of the gauges will turn from blue to red when capacity reaches 10%.

Keypad











Navigation and Editing Keys

| Function | Key | Description |
|-----------------|---|--|
| Navigation Keys |  | <p>Navigation keys:</p> <ul style="list-style-type: none"> • 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. • In menus, move the selection left or right in a primary menu; up or down through a secondary, or sub-menu. • In a dialog box, move up/down or left/right through the fields. In a field with a drop down list, after pressing OK, move the cursor up or down through the list. • In Print Preview, scroll left or right through a label, or up and down through multiple labels. |
| OK |  | <p>Accept menu items and attributes.</p> |
| Enter |  | <ul style="list-style-type: none"> • Adds a new blank line of text to a label. • Also accepts menu items and attributes. (Works the same as OK key.) |
| Alt |  | <ul style="list-style-type: none"> • Used in conjunction with an alternate function (displayed in yellow) on some of the keys. Hold the Alt key while simultaneously pressing the key that has the alternate function. • Used to access special characters on the alphabetical keys. <p>Note: For accented letters, press Alt+Special Character, then type the letter.</p> |














| Function | Key | Description |
|--|---|---|
| Shift + Alt |  +  + | Used together with an alpha key to access the top special character when two special characters exist on the key. Note: for accented letters, press Shift+Alt+Special Character, then type the letter. |
| Backspace |  | Removes characters one at a time, moving to the left. |
| Delete |  +  | Removes characters one at a time, moving to the right. |
| Caps Lock (except for QWERTY Americas) |  +  | Acts as a toggle to lock text into upper- or lowercase as data is entered. Note: Because text defaults to uppercase, use the Caps Lock to switch to lowercase. |
| Clear/Esc |  | <ul style="list-style-type: none"> • Clears data from the screen. • Cancels menu options and functions. |
| Superscript |  +  | <ul style="list-style-type: none"> • Places the next typed character in superscript format, displaying slightly above the line of text. • Will place multiple characters in superscript if the characters are highlighted first. (Refer to page 47 for information on highlighting characters.) |
| Subscript |  +  | <ul style="list-style-type: none"> • Places the next typed character in subscript format, displaying slightly below the line of text. • Will place multiple characters in subscript if the characters are highlighted first. |
| Date |  | Inserts the current date, as set on the printer. |

| Function | Key | Description |
|---------------|---|---|
| Time |  +  | Inserts the current time, as set on the printer. |
| Print |  | Prints all labels in a label file. |
| Adv Print |  +  | Brings up options to set various print parameters (such as, number of copies, print range, and mirror print) before printing. |
| Print Preview |  +  | Previews all labels in a file as they will look when printed. |
| Feed |  | Feeds the labels through the printer to the next notch on the liner. Feeds a full label for die cut; 0.5-inch (12.7 mm) for continuous. |

Function Keys

| Function | Key | Description |
|----------|---|---|
| Font |  | Provides font sizes and attributes (such as bold and italics). |
| Label |  | Adds, removes, and formats labels. |
| Area |  +  | Adds, removes, and formats areas on a label. |
| Symbol |  | Accesses the various symbols (graphics) available in the printer. |
| Serial |  | Sets the values for creation of single, multiple, or linked serializations. |
| Barcode |  | Places a text string in Barcode format. The barcode acts as a toggle to turn the barcode format on and off. |
| File |  | Saves, opens, or deletes a label file. |
| Apps |  | Accesses the different applications/label types installed. |
| Setup |  | Defines the printer's default parameters and activates specific applications. |

Keyboard Shortcuts

| Function | Key | Description |
|---------------------|--|---|
| Move to an Area |  +  | On a multi-area label, moves left or right to the different areas. |
| Move to a Label |  +  | In a multi-label file, moves up or down to the different labels. |
| 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. |
| Font Size Increment |  +  | On the editing screen, increases or decreases the font size, one point size at a time. |
| Add a Label |  +  | Adds a new label to a string of labels, inserting directly after the current label. |
| Add an Area |  +  +  | Adds a new area to a label. This can only be performed on continuous labels. |

Menus

Menus display at the bottom of the screen and are activated by the function keys (the row of keys just below the display). Use navigation keys to access the different menu items. A yellow border displays around the menu item selected. If more menus are associated with a function key than what can be displayed on the screen, a yellow vertical bar displays either to the right or left of the main menus or at the top and bottom of the sub-menus. Continue to press the navigation keys to access the overflow menu. When you have reached the last menu item displayed, the yellow bar disappears.

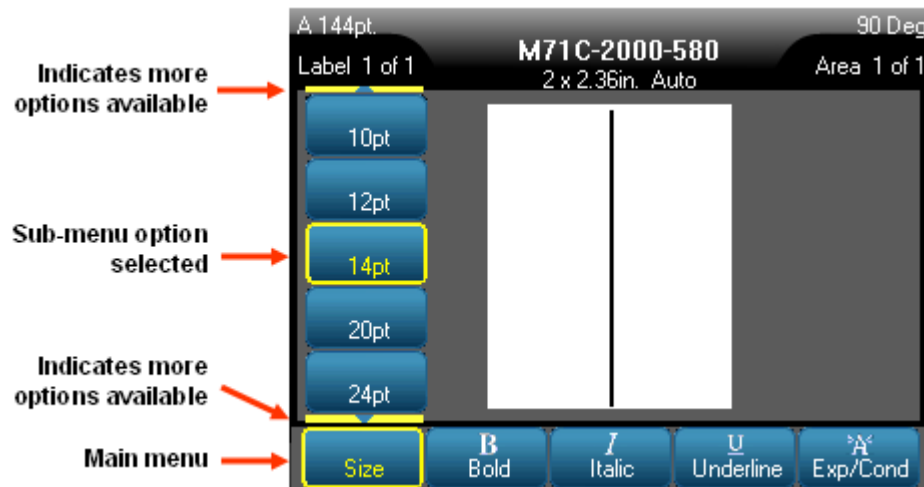


Figure 2 • Menus

To access the menus:

1. Press the Function key for the menu you want to access.

The menu choices for that particular function display.



2. Press the left/right navigation keys to access the main menu items.

As you navigate over a menu item, if a sub-menu is available, it immediately pops-up.

To access a sub-menu:

3. Press the up/down navigation keys.

A yellow border highlights a selected menu item.

4. To activate the highlighted sub-menu, press OK  or Enter .

A menu option remains in effect until a different menu option is activated. When accessing the menus again, the current, in-use item is highlighted and its text displays in green when navigating the other options in the sub-menu.

The various functions and menus are discussed in further detail in the Formatting section of this manual, starting on [page 43](#).

Dialog Boxes

Some function keys display dialog boxes, rather than sub-menus.

Note

You will know that a dialog box is associated with a menu if a sub-menu does not immediately pop up when highlighting the main menu option.

To access the dialog box, with the desired main menu selected:

1. Press OK  or Enter .

A dialog box displays.







Figure 3 • Dialog box

2. Press the up/down and left/right navigation keys to move to the different fields.

An activated field displays in yellow.



Drop Down Field Lists

If a field has a drop down list associated with it, a small arrow displays in a scroll bar on the right side of the field. To select an option from the field list:

1. Press OK  or Enter  to open the drop down list.
2. Use up/down navigation keys to highlight the desired option.
3. Press OK  or Enter  to select the option.

Radio Buttons and Option Boxes

To check or uncheck a radio button or option box:

1. Navigate to the field.
2. Press OK  or Enter .

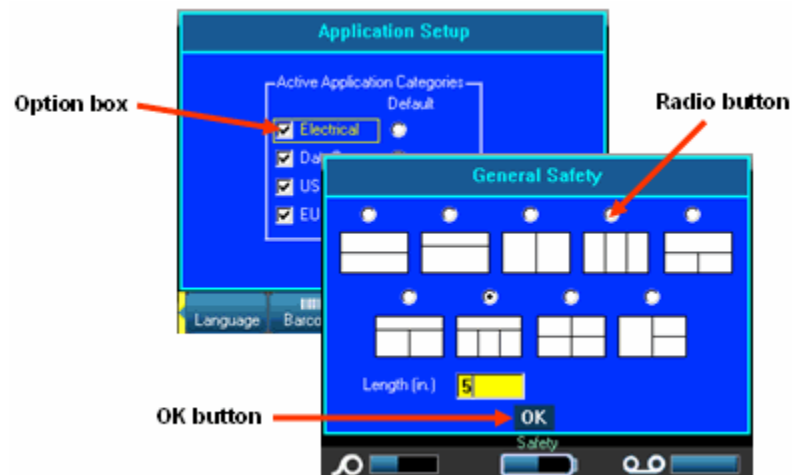


Figure 4 • Radio buttons, Option boxes and OK button

Accept Dialog Box Edits


To accept all edits in a dialog box:

1. Navigate to the OK button at the bottom of the dialog box.

2. Press OK  or Enter .

Cancel a Menu or Dialog Box

To cancel a menu or dialog box, without accepting changes:

1. Press Clear/Esc .

Setup

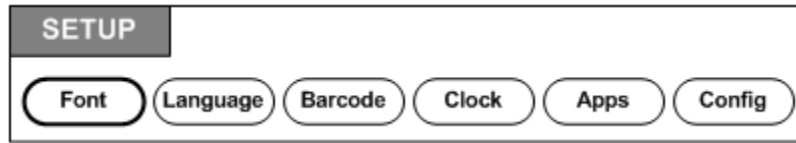





Figure 5 • Setup menu options

The Setup function key is used to determine the default settings for the printer. To change Setup functions:

1. Press Setup .
2. Using navigation keys, choose the setup function to change.
3. Press OK  or Enter .

A dialog box associated with that particular Setup function displays.

Setup - Font

The following settings can be found under the Font menu in the Setup function.



Figure 6 • Font settings in Setup function

Only one font type can be selected per label file. The editing screen must be cleared for font type changes to be applied.

Setup Language










The following settings can be found under the Language menu in the Setup function.




Figure 7 • Language settings in Setup function

Initial Language Setup

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

1. Press Setup .
2. Navigate to Language and press OK  or Enter .
3. In the *Language* field, press OK  or Enter .
4. Use the up/down navigation keys to select the desired language.
5. Press OK  or Enter  to accept the choice.
6. Navigate to the OK button and press OK  or Enter .

To remove the Setup main menus from the screen:

7. Press Clear/Esc .

Setup Barcode

The following settings can be found under the Barcode menu in the Setup function.



Figure 8 • Barcode settings in Setup function

Setup Clock

The following settings can be found under the Clock menu in the Setup function.



Figure 9 • Clock settings in Setup function

Setup Apps

The following settings can be found under the Apps menu in the Setup function. (There are two screens in application setup.)

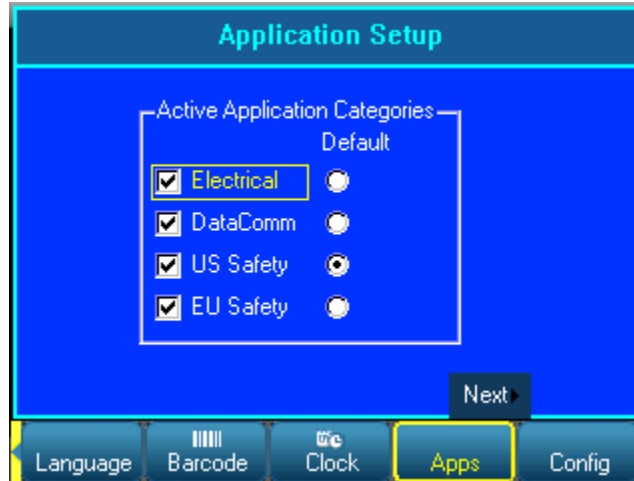


Figure 10 • Apps settings in Setup function - first screen

Note

The applications checked display as main menus when the Apps function key is pressed. The application checked as 'Default' will be the first (left) main menu item displayed.

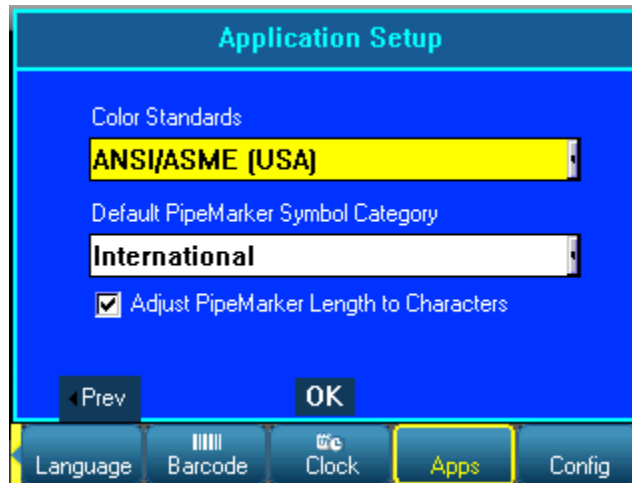


Figure 11 • Apps settings in Setup function - second screen

Color Standards refers to the country-defined color norms for pipemarker labels.

Note

Setting the Default PipeMarker Symbol Category is a convenient way to have the the symbols most often used when creating PipeMarkers readily available. You can, however, select a different category at any time when in the PipeMarker applications.

Setup Printer Configuration

The following settings can be found under the Config menu in the Setup function.

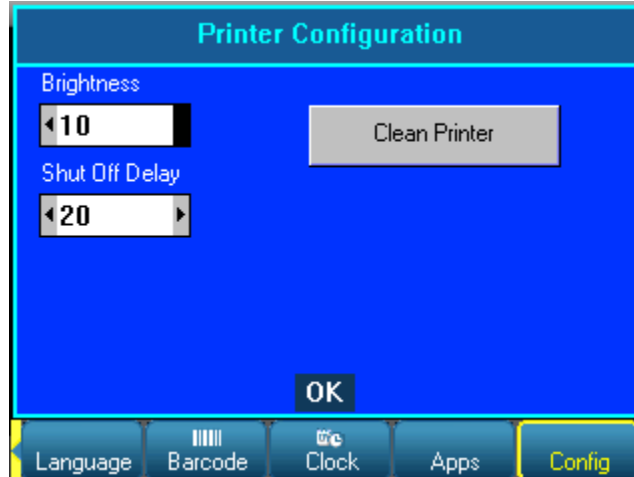


Figure 12 • Printer configuration in Setup settings

Cleaning the Printer







A cleaning kit is included in the BMP71 printer package. This kit contains a pre-saturated, disposable BMP71 cleaning card which is designed to safely and effectively remove all dirt, ribbon ink residue, adhesive, and other contaminants from the thermal print head, platen roller, and paper path. The kit also includes a pre-saturated cotton swab for cleaning the cutter blade and the sensors.

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

Note

Remove the ribbon cartridge and label spool before initiating the cleaning routine.

To clean the printer:

1. Choose **Config** and press OK  or Enter .
2. Navigate to the Clean Printer  button and press OK  or Enter .
3. Follow the instructions on the screen.
4. Place the cleaning card in the label compartment of the printer, inserting the left edge of the card up to the black line under the ribs.
5. Close the printer cover, ensuring that it latches.
6. Press OK  key to initiate the cleaning routine.

Note

Allow 15 seconds for the print head, platen roller, and label path to dry before reloading labels and the ribbon cartridge.

Cleaning the Cutter Blade and Sensors

The stationary and movable cutter blade should be cleaned periodically to remove any adhesive buildup from cut labels. Likewise, the sensors inside the printer compartment should also be cleaned on a regular basis to ensure accurate readings. You should also clean any other area in the print compartment that may accumulate dust.

To clean the cutter blade:

1. From the cleaning kit, remove the premoistened cotton swab from its wrapper.



WARNING

The cutter blade is cleaned from OUTSIDE the printer. To avoid injury, never clean the blade from inside the print compartment.

2. With the print cover closed, pull up slightly on the cutter lever to expose the blade.
3. Entering from the label output tray, insert the swab and gently wipe the cutting edge of the movable cutter blade.

4. Release the cutter lever so the blade is no longer exposed. Then, entering from the label output tray again, insert the swab and gently wipe the stationary blade. (See diagram below.)

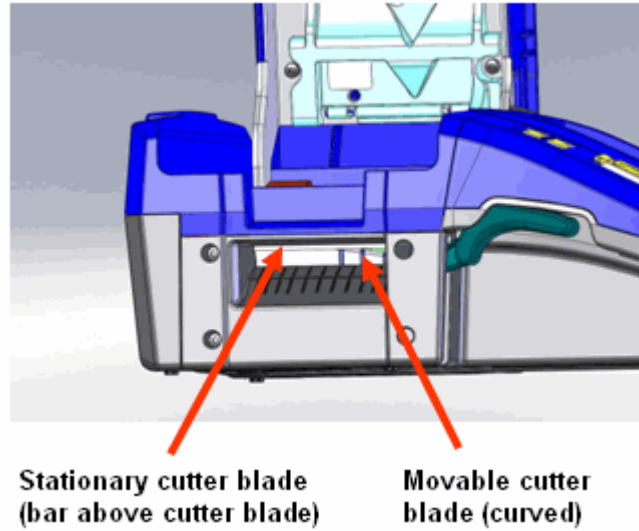


Figure 13 • Cutter blades

To clean the sensors:

1. Pull up on the cover latch and open the print compartment cover.

Note

Be sure the labels have been removed before cleaning the sensors.

- Using the premoistened cotton swab, gently wipe the sensors, located just before and below the ribs. (See diagram below.)

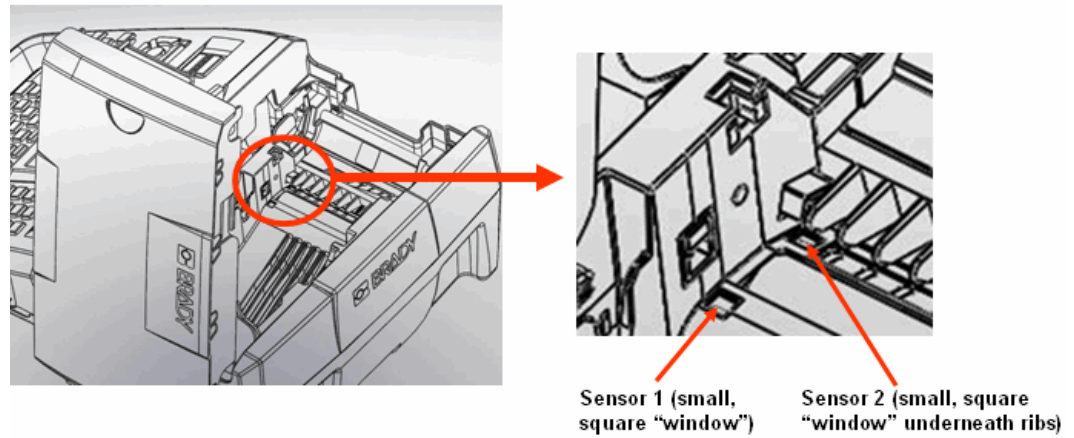


Figure 14 • Sensor locations

Allow cleaned parts to dry before replacing ribbon and labels in the printer.

Getting Started

This section describes the process of creating a text label with minimal formatting, using basic editing techniques, and printing the label.

Entering Text

Before entering label text, be sure the ribbon and media are loaded and the power is ON.

The blinking vertical line is the cursor and is the starting point for every label you create using the BMP71 printer. Begin entering text at the position of the cursor. The cursor moves across the screen as you enter data. The standard font, as defined in the printer Setup configuration (see [page 27](#)), is in effect. If you want another line of text, press [ENTER].

Editing Text

If you have entered some text in error or want to change the content or format of your label, edit the information before printing.

Inserting Text


To insert additional text within a line of text:

1. 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, press [ENTER] to start another line or decrease the size of the font.

Deleting Text

To remove characters, one at a time, from the position of the cursor TO THE LEFT (backwards):

1. Press Backspace .

To remove characters, one at a time, from the position of the cursor TO THE RIGHT:


2. Press Delete  + .

Clear/Esc

[CLEAR/ESC] is used to clear data from the screen or cancel a function.

Clear Data

To Clear data:

1. Press Clear/Esc .

You are presented with the following options (the first two are enabled only if you have multiple areas):

| Clear Option | Definition |
|--------------------|---|
| Clear Area Data | Clears data only from an area, but does not remove the area formats or the area itself. |
| Use Area Defaults | Clears all data from the area and returns to the initial defaults for the label part (i.e., auto size, justification, rotation, etc.) |
| Clear Label Data | Clears data only from a label, but retains all areas added to the label. The label formats remain. |
| Use Label Defaults | Clears all label data and returns to the initial defaults. All areas on the label are also removed. |
| Delete All Labels | Removes all labels in memory. You are returned to one single label in General Mode, with all default settings reapplied. |

2. Choose the desired option.

3. Press OK  or Enter .

If deleting all labels, a message displays asking confirmation.

4. Press OK  or Enter  to confirm the deletion.

If you do not want to delete the labels, press [CLEAR/ESC] to cancel the Delete All Labels function. You are returned to the screen with all labels intact.

Cancel Functions

[CLEAR/ESC] is also used to cancel functions, a menu, or dialog box. When pressing [CLEAR/ESC] in the middle of a function, you are walked out of the function a screen at a time. You may have to press [CLEAR/ESC] several times to completely exit the function.

Error Messages

If a function does not operate under current conditions, an error or information message displays indicating the problem and/or offers situational advice. Read the message carefully and follow the instructions.

Default Settings

Default settings are standard formatting settings (font size, justification, etc.) built into the system. When the label supply and/or application label type is reloaded, it will return to these settings. To change formatting from the defaults, use the Font, Label, and Area functions.

Font Size

Font size is applied on a line-by-line basis. 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.

Note

The Font (typeface) is determined in the Setup menu (see [page 27](#)). The font selected applies to the entire label file only.

Autosize

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 [Enter] 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.

By default, autosize is turned on for all labels and is displayed as an 'A' in the upper left corner of the Status Bar.



Figure 15 • Text entered with Autosize turned on


To turn autosize on (if not already on):

1. Press Font .
2. Choose **Size>Auto**.
3. Press OK  or Enter .

Autosize remains on for the entire area or label, until a different font size is selected. However, after being turned off, any previous text entered using autosize retains the size generated by autosize.

Printing a Label

To print a label file:

1. Press Print .

After printing, to cut the label:

2. Pull the cutter lever up as far as it will go.

Printing from the BMP71 printer occurs in the background, meaning you can continue to edit or create new labels while the file is printing.



Formatting

Formatting refers to the layout, structure, and appearance of a label. Different formatting features can be found under the Font, Label and Area functions.

Font

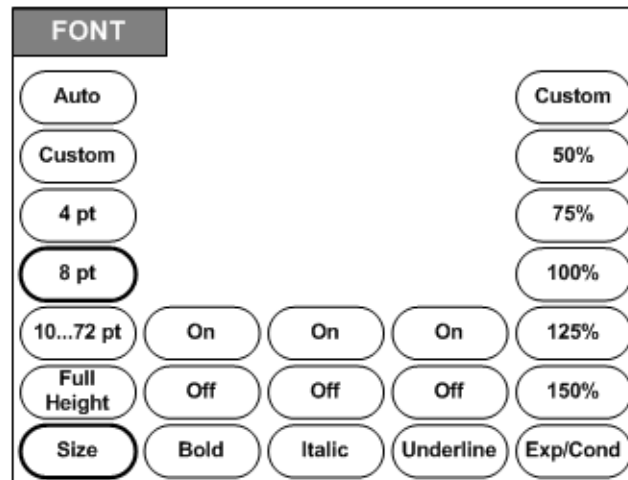


Figure 16 • Font menu options

Character/line formats are called attributes that change the appearance of the fonts, such as size, weight (bold), and angle (italics).

The default font used is Arial, but can be changed when configuring the printer. (For more information, see “Setup - Font” on [page 27](#).)

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. To change the size of the chosen font:

1. Press Font .

A pop-up menu displays the available font sizes for the media installed.

Note

The current font size in use is highlighted in the menu.

2. Choose **Size**>*font size* desired.

Note

Full Height maximizes the font size to fit the full height of the installed label part.

3. Press OK  or Enter .

If the desired size is not displayed, you can manually enter a font size within the valid size range. This option is available under “Custom” of the Size menu.

To manually enter a font size:

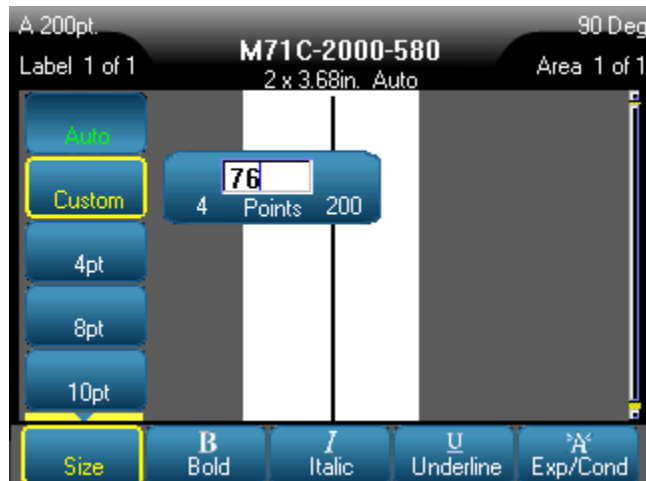
1. Choose **Custom** and enter the font size.
OR
Type the first number of the desired font size.

Note

When you begin entering a font size, the system automatically jumps to the Custom entry box, where you can complete the font size entry.

2. Press OK  or Enter .




When entering a custom font size, a minimum/maximum range is presented to accommodate the label size loaded in the printer. The minimum size reflects readability and the maximum size accommodates proper fit on a label. If you enter a size smaller than the minimum or larger than the maximum, an error message displays indicating the entered size exceeds lower or upper limits.



Font Attributes




Font attributes (bold, italics, underline) can be applied to individual characters in a line of text.

To turn an attribute on:

1. Position the cursor where the attribute should take affect.
2. Press Font  .
3. Choose the desired attribute, then choose **ON**.
4. Press OK  or Enter  .
5. Enter the text to be affected by the attribute.


If 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 or label.

To turn the attribute off:

1. Press Font  .
2. Choose the attribute, then choose **OFF**.
3. Press OK  or Enter  .

Pre-Existing Data




To apply an attribute to previously entered text:

1. Hold Shift  while moving the cursor across the characters on which the attribute will take affect.

This highlights the data.

Note

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





2. Press Font .
3. Choose the attribute, then choose **ON**.
4. Press OK  or Enter .

All highlighted text displays the attribute.

Note

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

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

1. Hold Shift  while moving the cursor across the characters from which the attribute will be removed.
2. Press Font .
3. Choose the attribute, then choose **OFF**.
1. Press OK  or Enter .

The attribute is removed from the text.




Expand/Condense

Expanding and condensing data affects character width and the spacing between characters in a word. Data can be expanded or condensed according to predefined percentages.




Figure 17 • Expanded and condensed text



To Expand or Condense data, as it is entered:

1. Position the cursor where Expand or Condense should take affect.
2. Press Font .
3. Choose **Exp/Cond**>*percentage* desired.
4. Press OK  or Enter .

You can manually enter an expand/condense percentage.

1. Press Font .
2. Choose **Exp/Cond>Custom**, then enter the percentage desired.
OR
Choose **Exp/Cond** and enter the first number of the desired percentage


This immediately launches the Custom entry box.

3. Finish entering the percentage number in the entry box.
4. Press OK  or Enter .




The Custom option supports whole numbers between 50% and 200%.

While entering data, the expand or condense attribute stays on until it is returned to 100%, or until you move to a new area or label.

To expand or condense pre-existing data:

1. Hold Shift  while moving the cursor across the characters that are to be expanded or condensed.

This highlights the data.

2. Press Font .
3. Choose **Exp/Cond>percentage** desired.
4. Press OK  or Enter .





All highlighted text takes on the attribute.

Superscript/Subscript

Superscript places a character slightly above the line of type and subscript places a character slightly below. The super- or subscript character also displays slightly smaller than the normal line of type. Superscript and subscript functions are on the numeric keypad. Pressing either the superscript or subscript 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:

1. Position the cursor in the line of text where the superscript or subscript character will display.


2. Press Super  +  or Sub  + .

3. 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.

Multi-Characters

To place a number of characters in Super- or Subscript:

1. Enter the text that should display in super- or subscript.
2. Hold Shift  while moving the cursor across the characters that will display in super- or subscript.

This highlights the characters.

3. Press Super  +  or Sub  + .

All the highlighted characters display in super- or subscript.

4. To remove the highlighting, press any navigation key.

Symbols

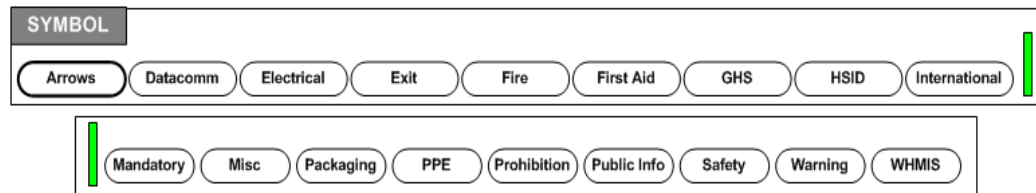







Figure 18 • Symbol categories

The BMP71 printer contains hundreds of symbols (graphics) that can be used for a variety of applications. To add a symbol to the label:

1. Position the cursor at the point where you want the symbol to display.
2. Press Symbol .
3. Choose the symbol category.
4. Press OK  or Enter .


A symbols grid displays.

5. Using navigation keys, select the desired symbol.
6. Press OK  or Enter .



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

Remove a Symbol

The symbol is the same as any other character. To remove a symbol:

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


OR

3. Position the cursor to the left of the symbol.
4. Press Delete  + .

Date and Time

To have the current date and/or time inserted on each label:

1. Position the cursor at the point on the label where you want the date and/or time to be inserted.

2. To insert the date, press Date .

3. To insert the time, press Time  + .

The BMP71 printer inserts the current Date or Time data using the current system clock value at the time of printing and the date/time format defined in the Setup function. (For more information, see “Setup Clock” on [page 29](#).)

The date or time displays the selected format on the editing screen (e.g., mm/dd/yy or HH:MM). To view the actual date or time, use Print Preview (see [page 81](#)).

Labels and Areas

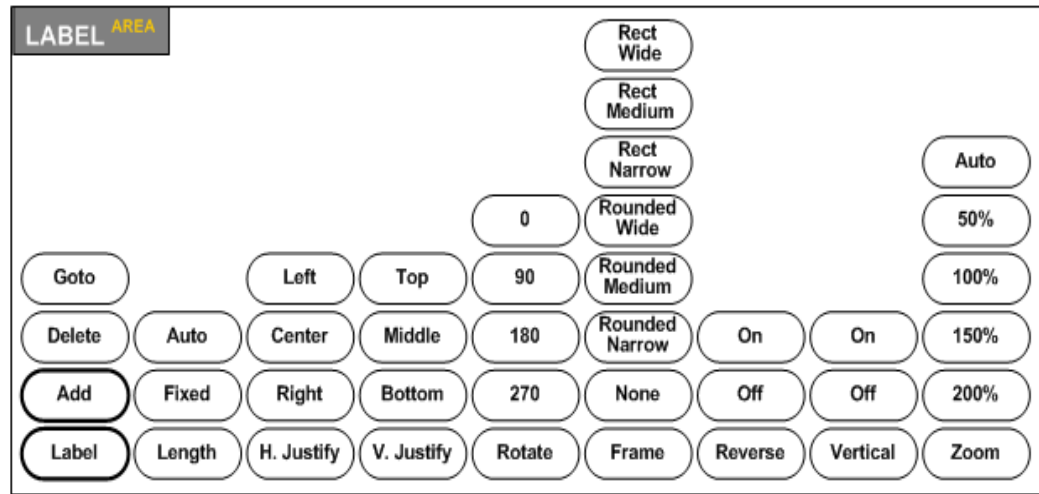


Figure 19 • Label menu options

You can create a number of labels in one label file, each new label being inserted immediately after the current label.

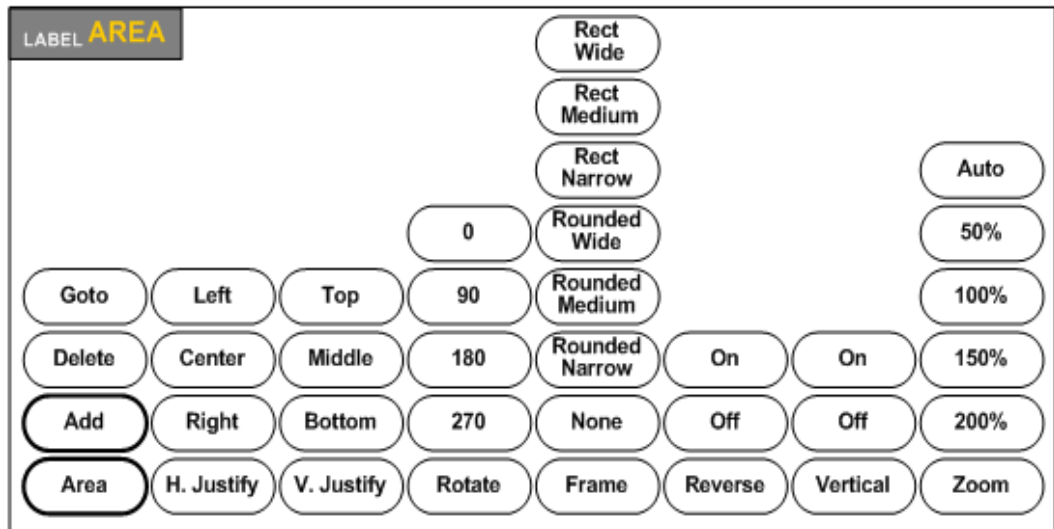


Figure 20 • Area menu options

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 to continuous media set to auto length mode. However, area formatting can be applied to die cut 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.

The number of areas, and the font size used on the first line of data in those areas, repeat on a new label when one is added to the file.


Only the current area displays on the editing screen. Use Print Preview (see [page 81](#)) to view the label with all its areas.

Add Label or Area

Note

Labels cannot be added to files containing serialization.

To add a label to a label file:

1. Press Label .

OR, to add an area to a single label:

Press Area  + .

2. Choose **Add**.

3. Press OK  or Enter .

The new label is inserted immediately after the current label and its number is reflected on the upper left side of the Status bar. Each label added will be of the same application, label type, and format.

A new area is added at the end of existing areas and is reflected on the upper right side of the Status bar. The font size used on the first line of the previous area carries over to the new area.

Shortcut

To add a label using keystrokes:

1. Press Add Label  + .


To add an area using keystrokes:

1. Press Add Area  +  + .

Label Length

Auto length is the default for continuous media. With Auto Length, the label will be as long as it needs to be to accommodate the entered data, up to a maximum of 40 inches. You can, however, set a fixed length for a label. A different length can be set for each label in a file.

To change the length of the label:

1. Press .
2. Choose **Length>Fixed**.
3. In the text entry box displayed, enter the desired length of the label.


Note

The unit of measure for the length is determined in the Setup menu. (See “Setup Language” on [page 28](#) for more information.)

4. Press OK  or Enter .



Go To Label or Area

To move to another label:

1. Press Label .

OR, to move to another area on a multi-area label:

Press Area  + .



2. Choose **GoTo**, then enter the number of the label or area to go to.
3. Press OK  or Enter .

Shortcut



To go to the next label in the file:

1. Press Next Label  + .


To go to the previous label in the file:

2. Press Previous Label  + .

To move to the next area:

1. Press Next Area  + .


To move to the previous area:

2. Press Previous Area  + .

Delete Label or Area

To delete a label or area:

1. Navigate to the label or area you want to delete.

2. Press Label .

OR, to delete an area:

Press Area  + .

3. Choose **Delete**.

4. Press OK  or Enter .

5. Press OK  or Enter  again to confirm the deletion.


Delete removes the label or area itself.



Justification



Justification refers to the alignment of data between boundaries 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. Navigate to the label or area where justification is to be applied.

2. To apply justification to a label, press Label  .
OR

To apply justification to an area, press Area  +  .

3. Choose **H. Justify** or **V. Justify**.
4. Choose the horizontal or vertical justification desired.
5. Press OK  or Enter  .

Every line of data on the label or in an area is justified according to the option selected. When adding a new label, the justification maintains the current justification settings, but you can change it again. Different justification can be applied to individual labels in a multi-label file or different areas on one label.

Rotate

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

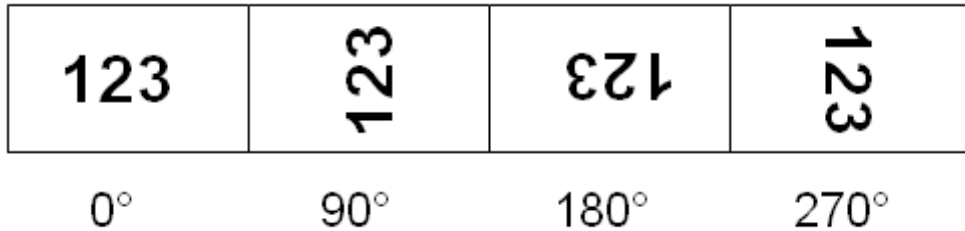


Figure 21 • Degrees of rotation on printed label


Note

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 or label, the rotation is the same as the previous area or label.

To rotate data:

1. Navigate to the label or area where rotation will take affect.

2. To set rotation for the label, press Label .

OR

- To set rotation for an area, press Area  + .

3. Choose **Rotate**>*degree of rotation*.

4. Press OK  or Enter .

Note

If the auto font size is selected, rotated data is autosized to accommodate the height vs. the width of the label. 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.

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 labels in a multi-label file. You can also place a frame on a label that contains area frames.

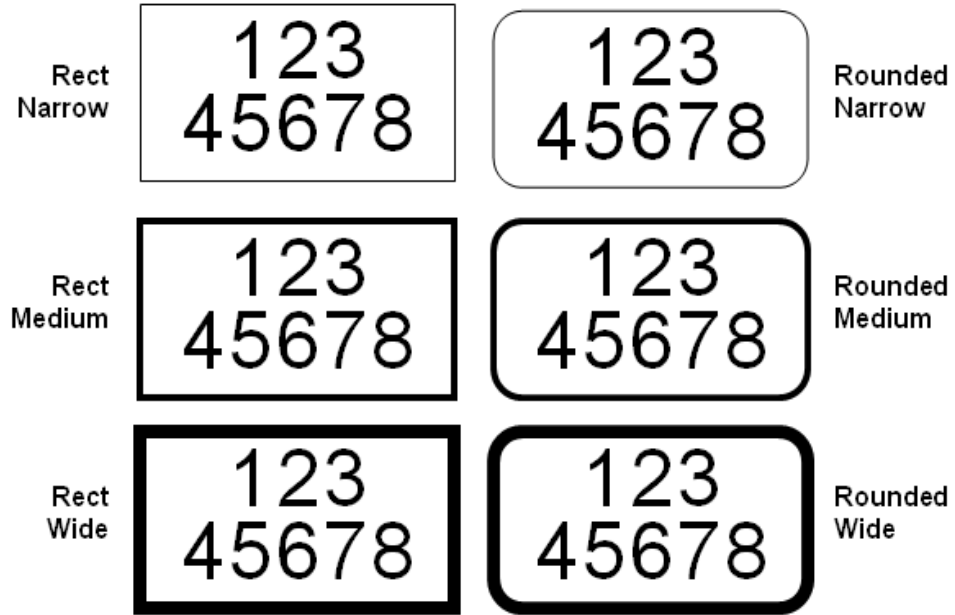




Figure 22 • Available frame options

1. To add a frame to a label, press Label  .

OR

To add a frame to an area, press Area  +  .


2. Choose **Frame**>*frame type*.

3. Press OK  or Enter  .

Frames do not display on the editing screen. Use Print Preview (see [page 81](#)) to view the label or area frames.

To remove the Frame:

1. Navigate to the label or area that contains the Frame.

2. Press Label .

OR

Press Area  + .

3. Chooses **Frame>None**.

4. Press OK  or Enter .

Reverse

The Reverse function switches the foreground and background colors of data on a label, based on the color ribbon and media installed.




Figure 23 • Reverse text





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 or label, the reverse function status carries over. Reverse cannot be applied to an individual line of text or to a barcode.

To apply Reverse formatting to a label or area:

1. Press Label  .


OR

- Press Area  +  .
2. Choose **Reverse>ON**.
3. Press OK  or Enter  .

The system formats the edge-to-edge data so that the foreground and background colors are switched.

To remove the Reverse function:

1. Navigate to the label or area displayed in Reverse.

2. Press Label .

OR

Press Area  + .

3. Choose **Reverse>OFF**.

4. Press OK  or Enter .

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. Navigate to the label or area where you want to display text vertically.

2. Press Label .

OR

Press Area  + .

3. Choose **Vertical>On**.

4. Press OK  or Enter .

The word(s) display vertically on the label or in the area.

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



Multiple lines, before applying Vertical text (autosized)



Multiple lines, after applying Vertical text (autosized)

Figure 24 • Multi-line vertical alignment

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. The Editor then displays the text in its original format, without applying the vertical text option.

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

1. Navigate to the label or area displaying data as Vertical Text.

2. Press Label  AREA .

OR

- Press Area  + LABEL .

3. Choose **Vertical>OFF**.


4. Press OK  or Enter .

The text realigns according to predefined formats.





Zoom

You can "zoom in" to get a close-up view of your label/area or "zoom out" to see more of the label/area at a reduced size. To adjust the view, Zoom in or out according to the percentages available.

To adjust the Zoom:


1. Press Label  .

OR





- Press Area  +  .
2. Choose **Zoom>percentage to zoom**.
3. Press OK  or Enter  .

The label/area zooms to the selected percentage.

Auto zoom provides the optimum view of a label/area. To return to the Auto (default) zoom percentage:

1. Press Label  .

OR

- Press Area  +  .
2. Choose **Zoom>Auto**.
3. Press OK  or Enter  .

Barcode

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. The height of the barcode is determined in the Barcode Setup function. (See “Setup Barcode” on [page 29](#) for more information.) Any text in the same line as the barcode will align on the baseline with the barcode.


Barcode Settings

| Field | To Use |
|-------------------|---|
| Barcode Symbology | The BMP71 Label Printer supports Code 128 and Code 139 barcode symbology. |
| Ratio | The ratios available are 2:1 and 3:1. |
| Height | The height of the bars in a barcode can vary, with a minimum of 0.1 inch (2.54 mm). |
| Width | The width of the narrow bar of a barcode is 1, 2, or 3 dots. |
| Human Readable | Human Readable text can be placed above or below the barcode, or you can choose to not have it displayed. |
| Check Digit | A check digit is used for error detection in a barcode. You can turn the check digit function on or off. |

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. Position the cursor where you want to add the barcode.
2. Press Barcode .

The barcode displays start and stop characters following the barcode parameters determined in the Setup function.

3. Enter the barcode data.

The barcode displays on the screen as the data is being entered. In addition, a data entry box displays enabling you to view and edit the barcode data as you are entering it. The data in this entry box does not print out. If you want the actual data that the barcode represents to print out, turn on the Human Readable option in the Setup Barcode function.



Figure 25 • Barcode and text line combined


When finished with the barcode entry, if you want to enter more data on the same line of text as the barcode:

4. Press Barcode  again.

This turns the Barcode mode off and returns to text mode.

OR

When finished with the barcode entry, if you want to start a new line of text **BELOW** the barcode entry:

5. Press Enter .

Pressing Enter moves the cursor to the next line, automatically turning off the Barcode function.

Edit Barcode Data

To edit barcode data:

1. Position the cursor in the barcode text.

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.

Serialization

Serialization (or sequencing) automatically adds a series of sequential numbers or letters to the printed 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, and displays in the Status Bar. You can view the serialized labels before they print through the Print Preview function. (See “Print Preview” on [page 81](#) for more information.)

Serialization can be combined with other data on a label. Any data displayed on a label that includes serialization will be repeated on every label along with the serial data.

How Serialization Works

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

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

Example: Simple serialization:
Sequence #1
Start Value: 1
End Value: 10
Increment: 1
Produces: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

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: Combined, single serialization:
Sequence #1
Start Value: A1
End Value: D4
Increment: 1
Produces: A1...A9, B0.. B9, C0.. C9, D0...D4

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

Example: Multiple serializations (where the second set of values is NOT dependent on the first set of values):

| Sequence #1 | Sequence #2 |
|---|----------------|
| 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 | |

In a multi-sequence “linked” serialization (i.e., Linked box checked), 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.

Multiple linked serialization:

| | |
|-------------------------------------|----------------|
| Sequence #1 | Sequence #2 |
| Start Value: 1 | Start Value: A |
| End Value: 10 | End Value: C |
| Increment: 1 | Increment: 1 |
| Produces: 1A..10A, 1B..10B, 1C..10C | |

Numbers in Sequences

Single digit numbers are “padded” with zeros (0), which you can display if desired. To display zeros, enter a zero before single-digit numbers (e.g., 01, 02, 03...). If the 0 is not entered, it becomes a virtual 0 acting as a placeholder, allowing for better alignment of numbers/letters.

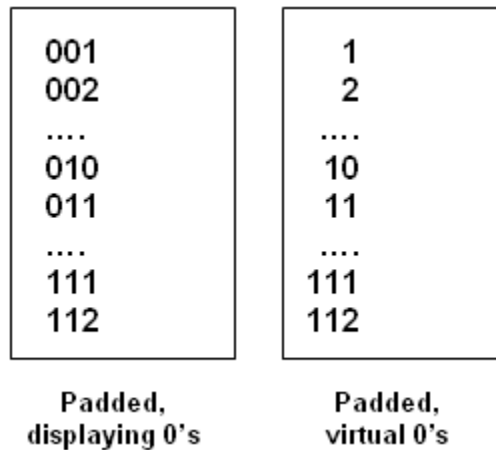



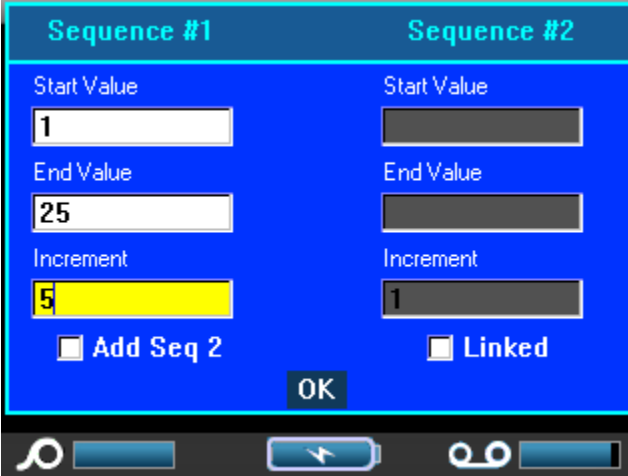
Figure 26 • Displayed vs. virtual zeros in sequences

Add Serialization

To add serialization to labels:

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

A dialog box displays where you can enter the start value of the serialization, the end value, and the increment value.





For simple serialization:

3. With the cursor immediately displayed in the *Start Value* field of Sequence #1, enter the start value of the sequence.

If the start value is larger than the end value, the series will decrement automatically.

4. In the End Value field, enter the end value of the sequence.
5. In the Increment field, enter the increment value.

The default increment is 1. If that is the desired increment, skip this entry field.

6. Navigate to the OK button.
7. Press OK  or Enter .

For multiple serialization:

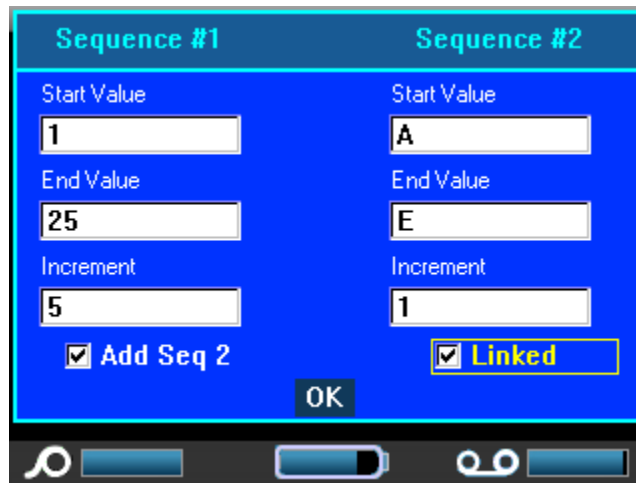
8. Complete Steps 1 through 7 above.
9. On the Editing screen, navigate to the next sequence location (cursor position) on the label.

Note

If creating a compound serialization to display at the same cursor position on the label, skip Step 10 below and proceed immediately to Step 11.

10. Press Serial .

The previous serialization values display in the dialog box presented.



11. Navigate to the Add Seq 2 option box and press OK or Enter .
12. In the Sequence #2 Start Value field, enter the start value for that sequence.
13. In the Sequence #2 End Value field, enter the end value for that sequence.
14. In the Sequence #2 Increment field, enter the increment for that sequence.



For Linked serialization:

Note

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

15. Navigate to the Linked option box.


16. Press OK  or Enter .

17. Navigate to the OK button and press OK  or Enter .

The total number of labels to be printed in the sequence displays in the Status Bar (i.e., Label # of ##).



Edit a Sequence

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

1. Press Serial .

The Serial dialog box displays with the current values listed.

2. Move to the value fields to change and enter the new value.

3. Navigate to the OK button, and press OK  or Enter .

File Management

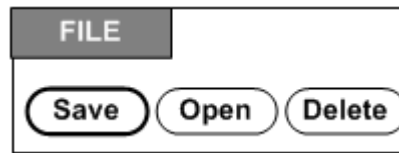


Figure 27 • File menu options

A single label or a number of labels can be saved as a file, to be opened and reused at a later date. The following are guidelines when creating a label file:

- Labels using continuous media or die-cut media cannot be combined in the same label file. All labels in a label file must use the same label part number.
- Serialized labels cannot be combined in a file with other non-serialized labels.

Save






A saved file is held internally in the printer, even when the power is turned off. The saved file retains the label data, data attributes, and alignment parameters. This file is available for reuse whenever needed.

File Naming Standards

To create a file on the BMP71 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.

To save labels as a file:

1. Press File .
2. Choose **Save**.
3. Press OK  or Enter .
4. In the displayed entry box, enter a name for the file.
5. Press OK  or Enter .






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

6. To overwrite, press OK  or Enter .
- OR
- Press Clear/Esc  to remove the message from the screen and return to the file name entry box. To enter a different file name repeat Steps 4 and 5 above.



When the file is saved, you are returned to the Editing screen with the saved file still displayed. If you want to remove the saved file from the screen, press [CLEAR/ESC]. (See “Clear/Esc” on [page 38](#) for more information.)

Open a File

To open (recall) a saved file:

1. Press File .
2. Choose **Open**.
3. Press OK  or Enter .

A list of previously saved files displays.

4. Using navigation keys, choose the file to open.
5. Press OK  or Enter .






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 media, an error message displays. While you do not have to use the exact label part number used when saving the file, you must use a part number that can accommodate the data in the file being opened.



Delete a File

The Editor 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 File .
2. Choose **Delete**.
3. Press OK  or Enter .

A list of previously saved files displays.

4. Using navigation keys, choose the file to be deleted.
5. Press OK  or Enter .

A delete confirmation message displays.

6. Press OK  to accept the deletion.

If [OK] is pressed, the file is removed from the system and is no longer available for use.



Printing

The Print function prints the current file.

To print:

1. Press Print .

The data is printed and the status of the print job is reflected in the Status Bar (e.g., Printing 1 of 10).

After printing, to cut the label:

2. Pull the cutter lever up as far as it will go.

Printing from the BMP71 printer occurs in the background, meaning you can continue to edit or create new labels while the file is printing.

If a print job is interrupted, for instance when media or ribbon runs out, or you intentionally open the cover, the system automatically stops the print job and displays a message. While the message remains on the screen, follow the instructions on the display to resume printing.

Print Preview

The Print Preview function of the BMP71 printer enables you to view your label file prior to printing.


To preview the label:

1. Press Print Preview .


The label contents display.



To print directly from Print Preview:

1. Press Print .

To exit Print Preview and return to the editing screen:

1. Press Clear/Esc .

You are returned to the editing screen.

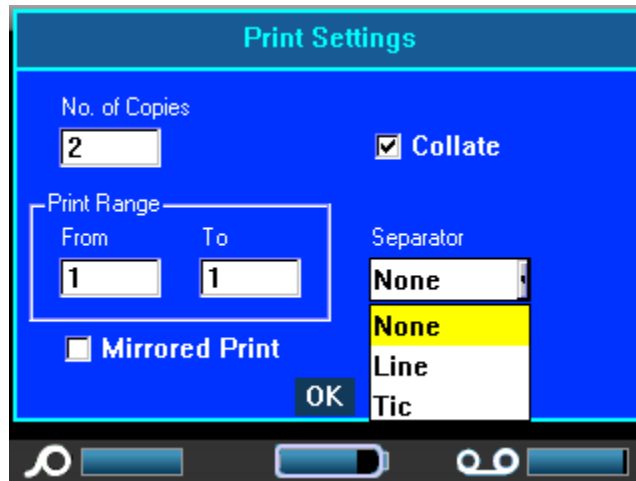
Scrolling in Print Preview

If a label file is particularly long it may not be completely visible on one screen in print preview. The Print Preview screen displays left/right or up/down scroll bars indicating there is more data to view. To scroll through a preview of a long label or multiple labels:

1. Press left/right or up/down navigation keys, as applicable.

Adv Print

Pressing the Adv Print key brings up a menu displaying the following options:



Adv print lets you indicate the number of copies to print. The default is to print collated, printing each label set completely before the next copy is printed.

To print a number of copies:

1. Press Adv Print  + .
2. With the cursor in the No. of Copies field, enter the number of copies desired.

To get multiple copies of a serialization, first determine if the sequence should be collated or non-collated.



Collated – All sequential numbers will print once, then the entire sequence prints again

Example: Collate three copies of Sequence 1-5
 Produces 1,2,3,4,5; 1,2,3,4,5; 1,2,3,4,5

Non-collated – Prints all first numbers in a sequence, then all second numbers, etc.

Example: Print three copies of sequence 1-5, non-collated
 Produces: 1,1,1; 2,2,2; 3,3,3; 4,4,4; 5,5,5.

The default is to print collated. If you do not want to collate the copies:

3. Navigate to the Collate option box and press OK  or Enter  to remove the checkmark.

When printing (or re-printing) a single label in a series, or a range of labels in a series, use the Print Range feature.

4. Navigate to the *From* field, under Print Range, and enter the number of the first label to be printed.
5. Navigate to the *To* field, under Print Range, and enter the number of the last label to be printed..

To separate different labels on continuous media, add a separator.

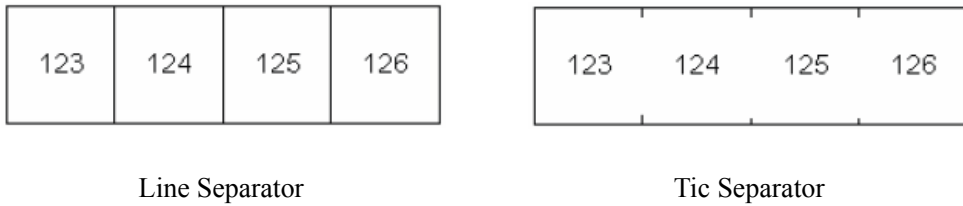






Figure 28 • Separators

6. Navigate to the Separator field and press OK  or Enter .
7. From the drop down list, select the separator to use and press OK  or Enter .

Mirrored print takes all data on a label and flips it to provide a mirror image. Mirroring displays on the printed label only.

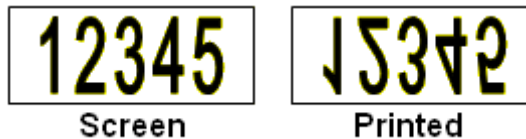






Figure 29 • Mirror image

Mirrored print is label-based, meaning all data on the label is mirrored. You cannot mirror data in an individual area.

To provide a mirror image of label contents:

8. Navigate to the *Mirrored Print* option box and press OK  or Enter .
9. When finished with desired options, navigate to the OK button and press OK  or Enter .

Applications

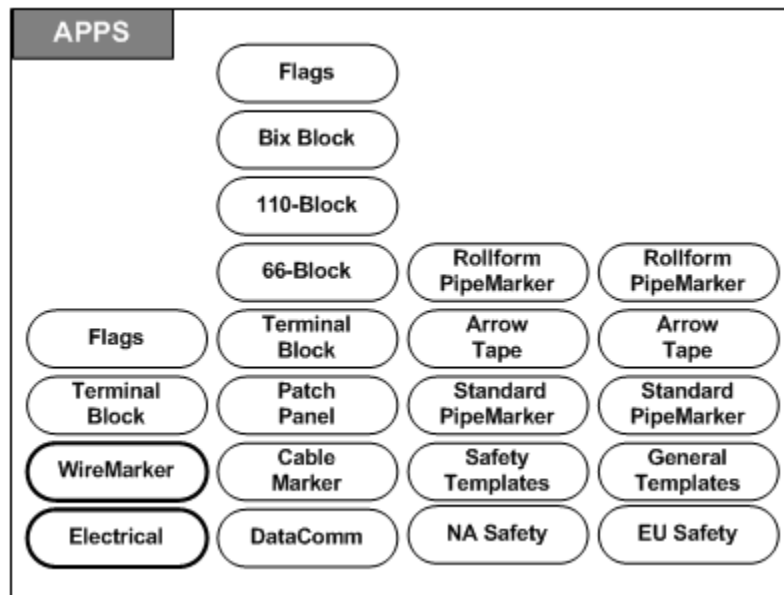


Figure 30 • Apps menu options

General mode contains standard functions and formats used for most generic labels. Applications, however, provide templates that guide and control the layout for specific label types.

Currently, there are three categories available for the BMP71 printer (Electrical, DataComm, and Safety), each containing various applications.

Accessing an Application

To work with an application:



1. Press Apps .

A menu displays indicating the available categories. Only those categories enabled in the Setup function are displayed. (See “Setup Apps” on [page 30](#) for more information.)

2. Choose the desired category and application.

3. Press OK  or Enter .


A dialog box displays to collect information for automatically formatting the specific application.

4. Enter data requested in the dialog box.
5. When finished, navigate to the OK button and press OK  or Enter .

The application's template is launched. The name of the specific application being used is displayed in the Status bar above the battery gauge.

Edit an Application

A number of options are available when editing an application. Some applications receive all their information and formatting settings from the dialog box presented when accessing the application. Others allow you to edit the information directly on the screen. To edit an application's settings:

1. Press Clear/Esc .

Depending on the application you are using, the following options display when pressing [Clear/Esc].

Clear Label Data

To clear the contents of the label but leave all formatting settings for that application, after pressing [Clear/Esc]:

1. Choose **Clear Label Data**.
2. Press OK  or Enter .

Use Label Defaults

To clear all label data and return to the initial defaults as defined by the application, after pressing [Clear/Esc]:


1. Choose **Use Label Defaults**.
2. Press OK  or Enter .

Exit Application



To clear the label(s) and exit the application, after pressing [Clear/Esc]:



1. Choose **Exit Application**.

If data on the Editing screen has not been saved, a message displays asking if you want to save the data:

2. Press Clear/Esc  to remove the message and clear the data.

OR, to save the data:

3. Press OK  or Enter  to clear the message and return to the Save File dialog box.

4. Enter a name for the file and press OK  or Enter .



The previous data is saved, and you exit the application.

Restart Application

To start a new file of the same application, using different options in the dialog box, after pressing [Clear/Esc]:

1. Choose **Restart Application**.
2. Determine if you want to save the previous data.

Once the Save Data message is off the screen you are returned to the dialog box where you can re-enter options.



3. Enter the new formatting options for that application.
4. When finished, navigate to the OK button and press OK  or Enter .

Edit Application

To edit an application (for those applications where the editing must be done in the dialog box), after pressing [Clear/Esc]:

1. Choose **Edit Application**.

You are returned to the last used dialog box with all previous values maintained.

2. Make the desired changes in the dialog box.
3. When finished, navigate to the OK button and press OK  or Enter .

Adding Labels and Areas in Applications

The following table illustrates in which applications you can add labels or areas.

| Application Category | Application Name | Label Addition | Area Addition |
|----------------------|---------------------|---|---------------|
| Electrical | WireMarker | Yes (same length as the first one) | No |
| | Terminal block | No | No |
| | Flags | Yes (same layout as the first one) | No |
| DataComm | Flags | Yes(same layout as the first one) | No |
| | Bix Block | Yes (Only if label is not sequenced) Whole strip gets added | No |
| | 110-Block | Yes (Only if label is not sequenced) Whole strip gets added | No |
| | 66-Block | No | No |
| | Terminal Block | No | No |
| | Patch Panel | Yes | No |
| | Cable Marker | Yes | No |
| NA Safety | Rollform PipeMarker | No | No |
| | Arrow Tape | No | No |
| | Standard PipeMarker | No | No |
| | General Templates | No | No |
| | Safety Templates | No | No |
| EU Safety | Rollform PipeMarker | No | No |
| | Arrow Tape | No | No |
| | Standard PipeMarker | No | No |
| | General Templates | Yes | No |

WireMarker, Cable Marker

The WireMarker and Cable Marker applications are designed to repeat entered text down the length of the label. The data will repeat as many times as possible, considering the number of text lines available on the label.

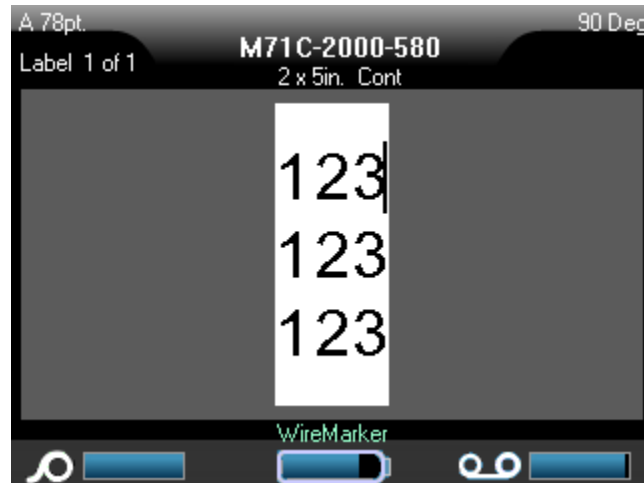





Figure 31 • Repeated data on a WireMarker or Cable Marker label

Die-cut, self-laminating, or continuous media can be used for WireMarker or Cable Marker labels.

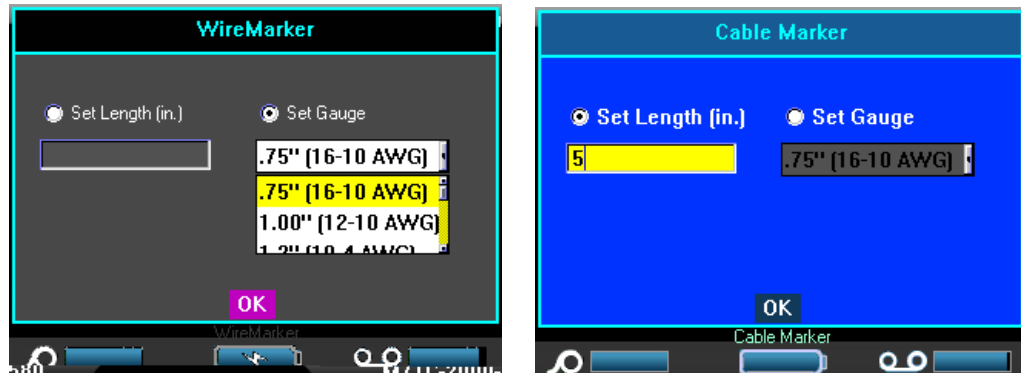
To use the WireMarker or Cable Marker application:

1. Press Apps .
2. Choose **Electrical**>**WireMarker**.

OR



Choose **DataComm**>**Cable Marker**.
3. Press OK  or Enter .

If using continuous media, a dialog box displays. (For a review of dialog box navigation, see [page 24](#).) The Set Length radio button is selected.



Electrical>WireMarker

DataComm>Cable Marker

4. Select the Set Length or Set Gauge radio button, then enter the length of the label in the entry box or select the gauge from the drop down list.
5. When finished, navigate to the OK button and press OK  or Enter .

The WireMarker or Cable Marker template is launched and a visual display of the label is presented. As you enter data, the data is repeated down the label. The font size is set to Auto, which can be changed as desired.

If you press [Enter] 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.




Figure 32 • WireMarker label with multiple lines

Terminal Block, 66 Block

Terminal Block and 66 Block applications are designed to be used with continuous media. If no continuous media is installed when Terminal or 66 Block is selected, a message displays indicating incompatible media.



To use a Terminal or 66 Block label type:

1. Press Apps .
2. Choose **Electrical>Terminal Block**.

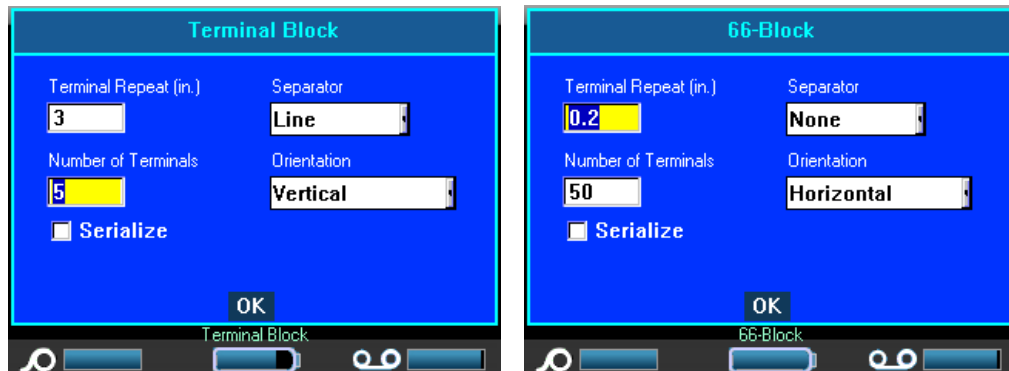
OR

Choose **DataComm>Terminal Block**.

OR

Choose **Datacomm>66 Block**.
3. Press OK  or Enter .



A dialog box displays requesting additional information. (For a review of dialog box navigation, see [page 24](#).)

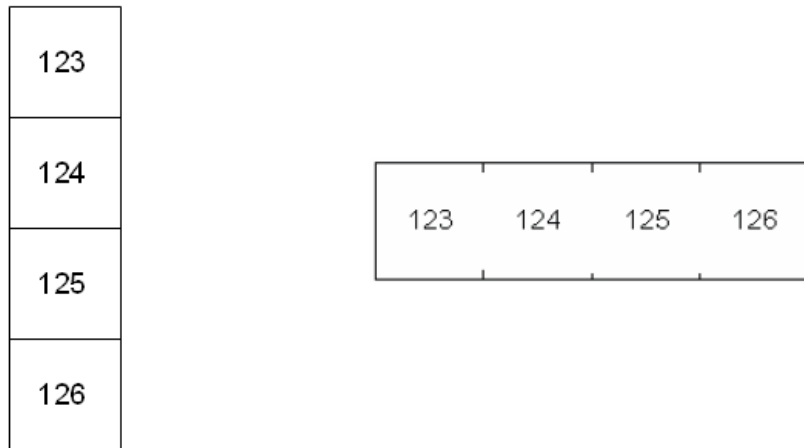


4. In the *Terminal Repeat* field, indicate the size of the gap between each terminal (with a minimum of 0.2 inches).
5. In the *Number of Terminals* field, enter the number of terminals on the block for which the label is intended.

If you intend to use serialization for the Terminal Block label type, you do not need to enter the Number of Terminals. The serialization values determine how many labels to create.



To serialize terminal block labels:

6. Navigate to the Serialize option box and press OK  or Enter  to select the option.
7. In the *Separator* field, from the drop down list, select the separator to use.



Line Separator, Vertical Orientation Tic Separator, Horizontal Orientation

Figure 33 • Separators and Orientation

8. In the *Orientation* field, from the drop down list, select the desired layout.
9. When finished, navigate to the OK button and press OK  or Enter .

If the Serialize option box is checked, the Serial dialog box displays.

10. Complete the Serialization. (See “Add Serialization” on [page 74](#) for more information.)

The number of terminal blocks are created as labels, with the serialization characters displayed on each label.




If serialization was not used, on the Editing screen, enter unique data for each label, using [Alt + Up/Down] navigation key to move to the different labels.

Use Print Preview to view the labels before printing.

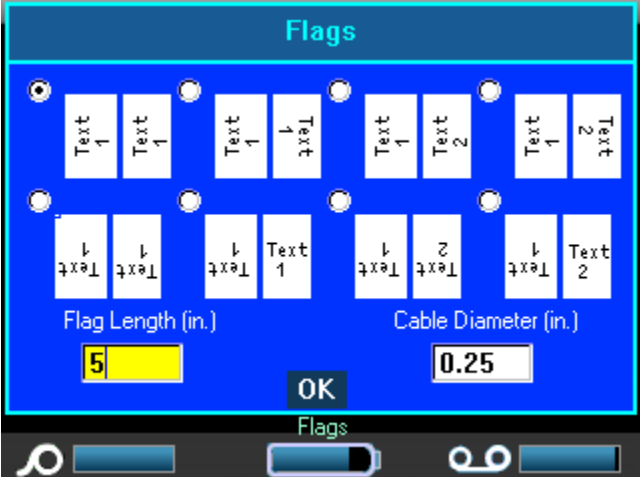
Flags

A Flag label wraps around a wire or cable, with the ends joined together to form a flag. The Flag application is designed to work with continuous media or specific multi-area die cut labels.



To use a Flag label type:

- 1. Press Apps .
- 2. Choose **Electrical**> **Flags**.
- OR
- Choose **DataComm**>**Flags**.
- 3. Press OK  or Enter .

A dialog box displays the different Flag layouts, preceded by a radio button.



To select a layout:

4. Navigate to the radio button of the desired layout and press OK  or Enter .
5. If continuous media is installed, navigate to the *Flag Length* field and enter the length of the flag (the part that contains the text).

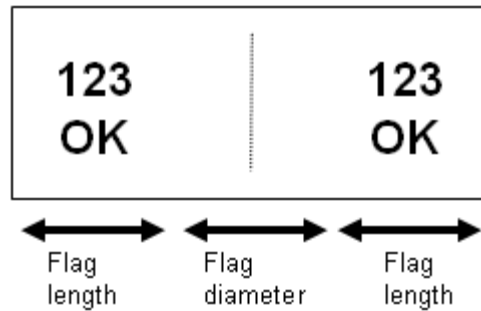


Figure 34 • Flag length vs. diameter

6. Navigate to the *Cable Diameter* field and enter the diameter of the wire/cable to which the flag will be applied.

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/cable with additional label material left for the flag.

7. When finished, navigate to the OK button and press OK  or Enter .

Rotation is embedded in the template design, based on the flag design you pick. Justification is defaulted to center, middle, and autosize is automatically turned on.

If the design chosen indicates only one text element, the printer automatically duplicates the entered text for the other area, rotating according to the predefined layout.




In a 1-text design, the status bar indicates two areas but you cannot move to the second area. Use Print Preview to view both areas.

In a 2-text element design, you enter text in the two separate areas. Use the [Alt + Left/Right] navigation keys to move to the different areas. The status bar indicates which area you are in.

Patch Panel

Continuous media is the preferred media for the Patch Panel application. If die-cut media is installed, an error message displays indicating the media is incompatible and the Patch Panel selection is cancelled.

To use the Patch Panel application:

1. Press Apps .
2. Choose **DataComm>Patch Panel**.
3. Press OK  or Enter .



A dialog box displays. (For a review of dialog box navigation, see [page 24](#).)



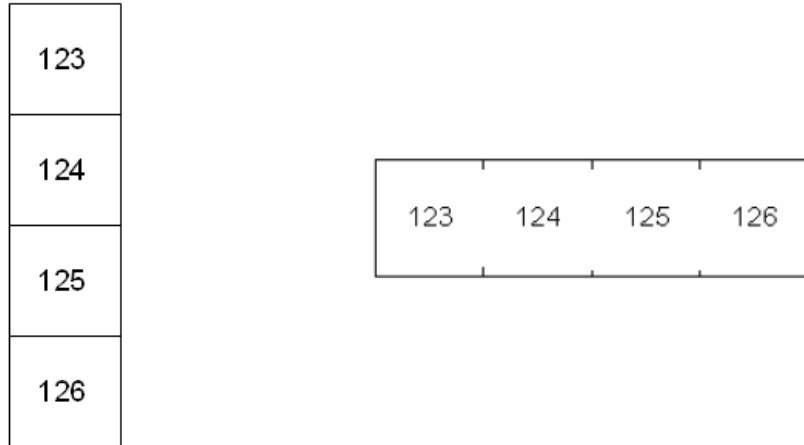
4. In the *Port Length* field, enter the length of a port. (The default length displays as 0.6 inches.)
5. In the *Number of ports* field, enter the number of ports for which you want to make labels.

If you intend to use serialization for the Patch Panel label type, you do not need to enter the Number of ports. The serialization values determine how many labels to create.

To serialize Patch Panel labels:

6. Navigate to the Serialize option box and press OK  or Enter  to select the option.

7. In the *Separator* field, from the drop down list, select the separator to use.



Line Separator, Vertical Orientation Tic Separator, Horizontal Orientation

Figure 35 • Separators and orientation

8. In the *Orientation* field, from the drop down list, select the orientation to use.

9. When finished, navigate to the OK button and press OK  or Enter .

If the *Serialize* option box is checked, the *Serial* dialog box displays.

10. Complete the *Serialization*. (See “Add *Serialization*” on [page 74](#) for more information.)

Patch Panel blocks are created as labels, with the *serialization* characters displayed on each label.

If *serialization* was not used, on the *Editing* screen, enter unique data for each label, using [Alt + Up/Down] navigation key to move to the different labels.

Use *Print Preview* to view the labels before printing.

110-Block, Bix Block Label Type




The 110-Block and Bix Block use only the following dedicated label parts.

- 110-Block: M71C-475-412 or M71C-412-422
- Bix Block: M71C-625-412 or M71C-625-422

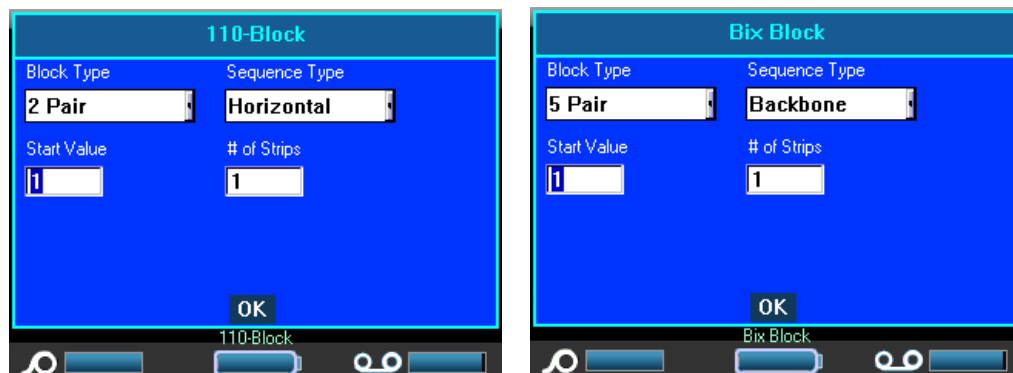
The 110-Block label type is based on user-selected pair configurations, with the length of the label determined by the pair type selected. The label height uses a dedicated 110-Block part height of 0.475 inch. The length of a 110-Block label is 7.5 inches, with a total strip length of 7.9 inches. The 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. The length of a Bix Block label is 6.2 inches with a total strip length of 6.6 inches.

To use the 110- or Bix Block application:

1. Press Apps .
 2. Choose **DataComm>110-Block**.
- OR
- Choose **DataComm>BIX Block**.
3. Press OK  or Enter .

A dialog box displays requesting further information. (For a review of dialog box navigation, see [page 24](#).)



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 (i.e., 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 | |

Blank

| | | |
|--|------------------------------------|--|
| | Text entered in area 1 prints here | |
| | Text entered in area 2 prints here | |

Figure 36 • Sample pair configurations

4. In the *Block Type* field, from the drop down list, choose the pair configuration to use.

Sequence Type is used to determine how, and if, you want to serialize data. 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

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2 pair - horizontal

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|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 |

Figure 37 • Sample sequence types

- In the *Sequence Type* field, from the drop down list, select the Sequence Type to use.
- 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 4-pair configuration, the first strip will contain values 1-12, the second strip will contain numbers 13-24.

- When finished, navigate to the OK button and press OK  or Enter .


Safety Templates

Safety Templates are designed for use with pre-printed die cut and continuous labels. Other die cut labels with a 2:1 length to height ratio can also be used. Continuous labels will have a length that is twice the height.

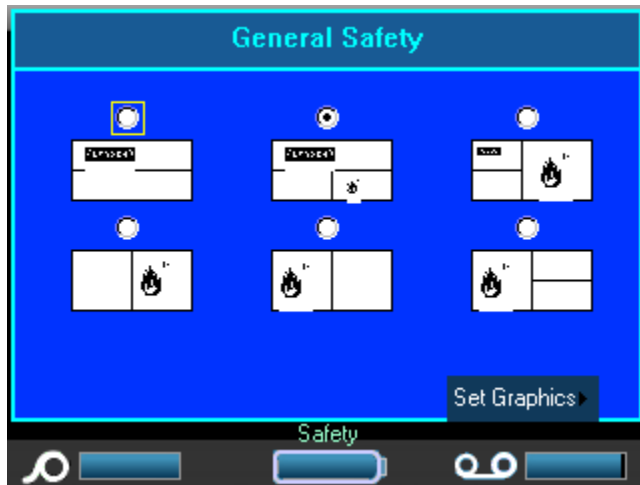
If preprinted die cut media is being used, only two templates are available and the template does not prompt you for header information. The template automatically adjusts the width of the areas depending on the width of the media.





For any other media used, you can choose from all six available templates. If the template contains header information, you will be prompted to select a header.

To use a Safety label type:

1. Press Apps .
2. Choose **NA Safety>Safety Templates**.
3. Press OK  or Enter .

A dialog displays the templates from which to choose.





4. Navigate to the desired template and press OK  or Enter .
5. Navigate to Set Graphics button and press OK  or Enter .











The following dialog box displays.



If the template chosen contains header information:

6. Use the Left/Right navigation keys to access the desired header, then press OK  or Enter .

If the template chosen contains a graphic:




7. Navigate to the Category field and press OK  or Enter .
8. From the drop down list, select the symbol category desired and press OK  or Enter .
9. Navigate to the Graphic #1 field and press OK  or Enter .
10. Navigate to the desired symbol and press OK  or Enter .
11. When finished, navigate to the OK button and press Press OK  or Enter .

Use Print Preview to view the finished label before printing.

General Templates





When choosing the General Templates you are presented with a grid outlining the different templates to use for the label you want to produce. There are nine templates from which to choose. General Templates are designed for use with die cut or continuous labels.

To use a General Template:

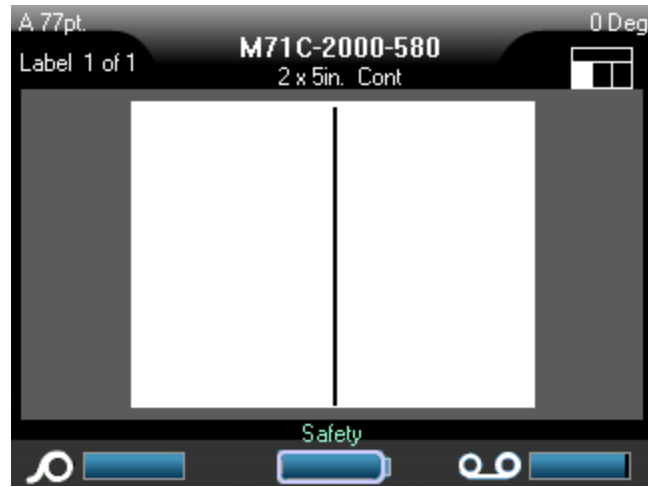
1. Press Apps .
2. Choose **EU Safety>General Templates**.
3. Press OK  or Enter .

A dialog box displays the templates from which to choose.



4. To select a template, navigate to the desired template and press OK  or Enter .
5. For continuous labels, navigate to the *Length* field and enter the intended length of the label.
6. When finished, navigate to the OK button and press OK  or Enter .

An icon of the label displays in the upper right corner of the status bar, with the current area highlighted.



7. Press Alt + Left/Right navigation keys to move to the different areas to enter data.

You can apply symbols to the various areas according to standard procedures. (See “Symbols” on [page 51](#) for more information.)


Use Print Preview to view the finished label before printing.

Standard PipeMarker



The Standard Pipemarker application enables you to accurately label contents of pipes, conduits, and ducts according to the approved standards in the specific country. Directional arrows can be included on one or both ends of the pipemarker, indicating flow direction. These arrows are part of the template.

Standard PipeMarker applications are compatible with continuous media only. If no continuous media is installed when the Standard PipeMarker application is selected, a message displays indicating incompatible media and the Standard PipeMarker selection is canceled.

To use a Standard PipeMarker label type:

1. Press Apps .
2. Choose **NA Safety>Standard PipeMarker**.

OR

Choose **EU Safety>Standard PipeMarker**.
3. Press OK  or Enter .

You are presented with a dialog box.



NA Safety>Standard PipeMarker



EU Safety>Standard PipeMarker

The EU Standard Pipemarker dialog requests some additional information. If using NA Safety>Standard Pipemarker, proceed to Step 5.



4. In the *Pipe Contents* field, from the drop down list, select the property of the material contained in the pipe to be labeled.

Note

The contents and associated color combinations available in Pipe Contents are based on the country specific Color Standards defined in Setup, Apps. (See “Setup Apps” on [page 30](#) for more information.)

5. In the *PipeMarker Arrow Ends* field, select the desired arrows from the drop down list.

If using the NA Safety>Standard PipeMarker, proceed to Step 7.

6. Navigate to the Set Text button and press OK  or Enter .





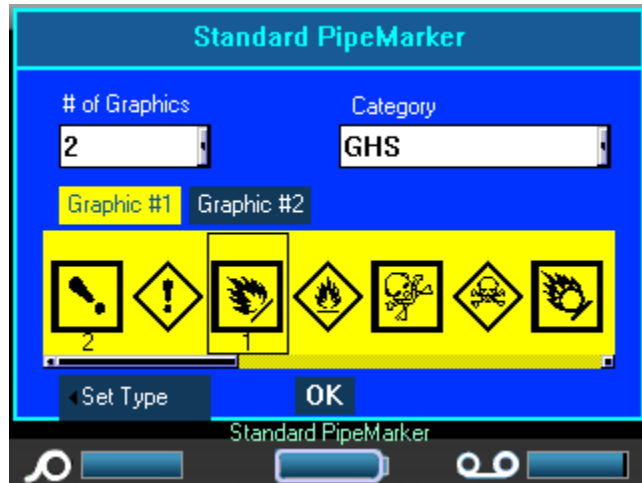
NA Safety>Standard PipeMarker



EU Safety>Standard PipeMarker

7. In the *Product Name* field, enter the contents of the pipe or conduit. (E.g., Water, Gas, Steam, etc.)
8. In the *Comment 1 (optional)* field, enter any additional text that should display on the label. As the field name suggests, this field is optional.









9. Navigate to the Set Graphics button and press OK  or Enter .





10. In the *# of Graphics* field, from the drop down list, select the number of graphics to display on the label. You can add up to four graphics per label. If '0' is selected, proceed to Step 16.

The Category field displays the default symbol category determined in Setup>Apps. (See “Setup Apps” on [page 30](#) for more information.)

If you want to change the category:

11. Navigate to the *Category* field and press OK  or Enter .
12. From the drop down list, select the desired symbol category and press OK  or Enter .
13. Navigate to the *Graphic #1* field and press OK  or Enter  to enter the field.
14. Navigate to the desired symbol and press OK  or Enter .

The graphic number follows the navigation and displays below the selected graphic.

15. If more than one graphic is assigned, repeat Steps 13 and 14 above, for each Graphic # field (i.e., navigate to Graphic #2, etc.).
16. When finished, navigate to the OK button and press OK  or Enter .

You can always go back to the previous dialog box by selecting the lower left button on the screen (i.e., Set Type, Set Contents, etc.)

The label displays in a preview mode on the screen. Use the navigation keys to view the contents of the entire label.

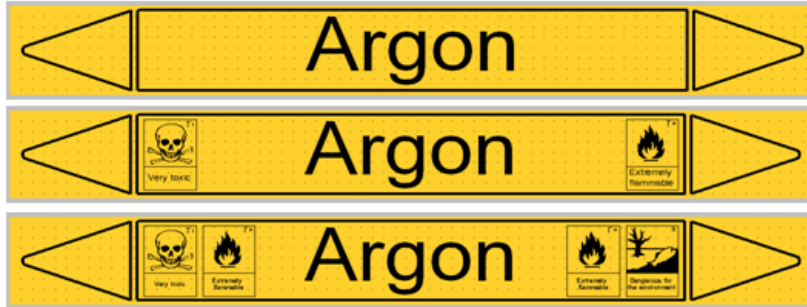





Figure 38 • Examples of Standard PipeMarkers

Arrow Tape

The ArrowTape application uses continuous media only. The Arrow Tape application includes a single graphic (or arrow), rotated 90 degrees, repeated the length of the label.

To use the Arrow Tape application:

1. Press Apps .
2. Choose **NA Safety**>**Arrow Tape**.

OR
Choose **EU Safety**>**Arrow Tape**.
3. Press OK  or Enter .

A dialog box displays. (Place NA and EU dialog box.)



4. In the *Pipe Contents* field, from the drop down list, select the property of the material contained in the pipe to be labeled.
5. In the *Pipe Diameter* field, enter the diameter of the pipe to be labeled.

Enter the pipe diameter in inches or millimeters, depending on the units of measure selected in the Setup>Language function. (See “Setup Language” on [page 28](#) for more information.)

6. In the *Type* field, from the drop down list, select the type of graphic (arrow or symbol) to be placed on the label.

If an arrow is selected, proceed to Step 14.

7. If a Symbol is selected, navigate to the Set Graphics button and press OK  or Enter





NA Safety>Arrow Tape - screen 2













EU Safety>Arrow Tape - screen 2

If using NA Safety>Arrow Tape, proceed to Step 9.

8. In the *# of Graphics* field, press OK  or Enter  to access the drop down list and select the number of graphics to display (up to 4).

The Category field displays the default symbol category determined in Setup>Apps. (See “Setup Apps” on [page 30](#) for more information.)

If you want to change the category:

9. Navigate to the *Category* field and press OK  or Enter .
 10. From the drop down list, select the desired symbol category and press OK  or Enter .
 11. Navigate to the *Graphic #1* field and press OK  or Enter  to enter the field.
 12. Navigate to the desired symbol and press OK  or Enter .
- The graphic number follows the navigation and displays below the selected graphic.
13. If more than one graphic is assigned, repeat Steps 11 and 12, above.
 14. Navigate to the OK button and press OK  or Enter .

Rollform PipeMarker

Rollform Pipemarkers use only continuous media. Rollform pipemarkers include one to two lines of text, repeated the length of the pipemarker, alternating at 90 degree and 270 degree rotation. You can add up to four graphics, placed in predetermined locations. Graphics are repeated and rotated along the length of the pipemarker, as is the text.

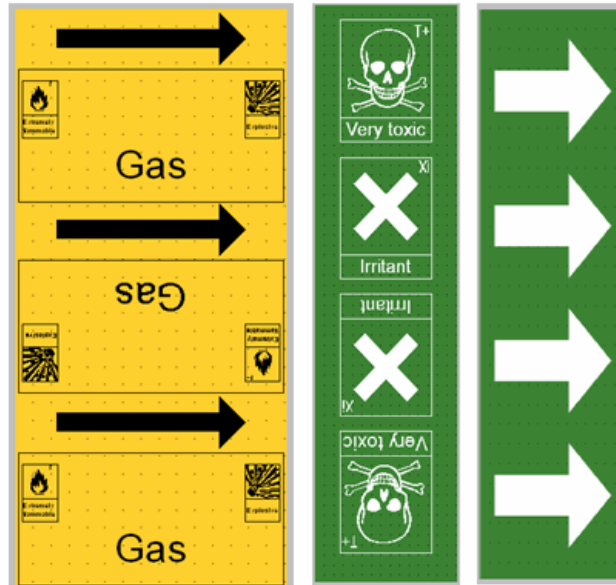


Figure 39 • Examples of Rollform PipeMarkers

To use a Rollform PipeMarker label type:

1. Press Apps .
2. Choose US Safety>Rollform PipeMarker.

OR

Choose EU Safety>Rollform PipeMarker.

3. Press OK  or Enter .

A dialog box displays.



NA Safety>Rollform PipeMarker



EU Safety>Rollform PipeMarker

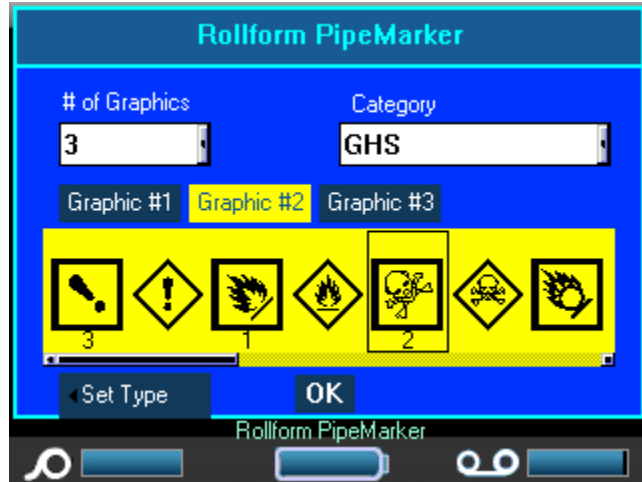
If using NA Safety>Rollform Pipemarker, proceed to Step 5.

4. In the *Pipe Contents* field, from the drop down list, select the property of the material contained in the pipe to be labeled.
5. In the *Pipe Diameter* field, enter the diameter of the pipe (in inches or millimeters, depending on your unit of measurement) around which the label will be placed.

Note

When entering the pipe diameter, the application calculates the length of tape necessary to wrap around the circumference of the pipe, adding 15% as overlap. This calculated length is displayed in the Label Size indicator on the Status Bar. The maximum that can be entered in the Pipe Diameter field is 11 inches (279.4 mm).









6. In the *Product Name* field, enter the contents of the pipe or conduit. (E.g., Water, Gas, Steam, etc.)
7. In the *Comment 1 (optional)* field, enter any additional text that should display on the label. As the field name suggests, this field is optional.
8. Navigate to the Set Graphics button and press OK  or Enter .



- In the *# of Graphics* field, from the drop down list, select the number of graphics to display on the label. You can add up to four graphics per label. If '0' is selected, proceed to Step 15.



The *Category* field displays the default symbol category determined in Setup>Apps. (See "Setup Apps" on [page 30](#) for more information.)

If you want to change the category:

- Navigate to the *Category* field and press OK  or Enter .
- From the drop down list, select the desired symbol category and press OK  or Enter .
- Navigate to the *Graphic #1* field and press OK  or Enter  to enter the field.
- Navigate to the desired symbol and press OK  or Enter .

The graphic number follows the navigation and displays below the selected graphic.

- If more than one graphic is assigned, repeat Steps 12 and 13 above, for each *Graphic #* field (i.e., navigate to *Graphic #2*, etc.).

- When finished, navigate to the OK button and press OK  or Enter .

You can always go back to the previous dialog box by selecting the lower left button on the screen (i.e., Set Type, Set Contents, etc.)

The label displays in a preview mode on the screen. Use the navigation keys to view the contents of the entire label.

Appendix A

Symbols for all enabled applications are available for use on any label, regardless of the application/label type in use (including General mode).

Note

The specific application label type templates will only allow the user to choose symbols that apply to that application/label type.

Symbol Grids

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| Miscellaneous | | | | Packaging | | | |
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Safety Sign Headers

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Appendix B

| BMP™ 71 Material/Ribbon Cross Reference Guide | | | | | | | | | |
|---|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|----------------------|--------------------|
| Yellow Highlighting = BMP71 Material | | | | | | | | | |
| ● = Recommended Δ = Acceptable | | | | | | | | | |
| MATERIAL | | RIBBON | | | | | | | |
| Brady Material No. | Material Description | M71-R4300 (Black) | M71-R6000 (Black) | M71-R6200 (Black) | M71-R6400 (Black) | M71-R6600 (Black) | M71-R4400-WT (White) | M71-R6800-WT (White) | M71-R6900 (Colors) |
| 109 | Tag | ● | | Δ | | | | | |
| 145 | Tag | | ● | | | | Δ | | |
| 145FR | Tag | | ● | | | | Δ | | Δ |
| 321 | Polyolefin | | | ● | | | | | |
| 341 | Polyolefin | ● | | | | | | | |
| 342 | Polyolefin | ● | | | | | | | |
| 344 | Fluid Resistant Sleeves | Δ | Δ | | | ● | | | |
| 345 | High Temp Sleeve | | | | | ● | | | |
| 351 | Vinyl | | | ● | | | | | |
| 352 | Vinyl | | ● | | | | Δ | | Δ |
| 353 | Paper | ● | | | | | | | |
| 390 | Polypropylene | | ● | | | | Δ | | Δ |
| 412 | Polypropylene | Δ | | ● | | | | | |
| 422 | Polyester | | ● | | | | Δ | | Δ |
| 423 | Polyester | | ● | Δ | | | Δ | | Δ |
| 424 | Paper | ● | | | | | | | |
| 425 | Polyimide | ● | | | | | | | |
| 426 | Polyimide | ● | | | | | | | |
| 427 | Vinyl | ● | | Δ | | | | | |
| 428 | Polyester | ● | | | | | | | |
| 430 | Polyester | | ● | Δ | | | Δ | | Δ |
| 432 | Polyester | | ● | | | | Δ | | Δ |
| 433 | Polyester | | ● | | | | Δ | | Δ |
| 435 | Polyester | | ● | | | | Δ | | Δ |
| 437 | Tedlar | ● | | | | | | | |

BMP™ 71 Material/Ribbon Cross Reference Guide

Yellow Highlighting = BMP71 Material

● = Recommended

△ = Acceptable

| MATERIAL | | RIBBON | | | | | | | |
|--------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|----------------------|--------------------|
| Brady Material No. | Material Description | M71-R4300 (Black) | M71-R6000 (Black) | M71-R6200 (Black) | M71-R6400 (Black) | M71-R6600 (Black) | M71-R4400-WT (White) | M71-R6800-WT (White) | M71-R6900 (Colors) |
| 439 | Vinyl | | ● | △ | | | △ | | △ |
| 457 | Polyimide | | ● | | | | △ | | △ |
| 459 | Polyester | | ● | | | | △ | | △ |
| 461 | Polyester | ● | | △ | | | | | |
| 473 | Polyester | | ● | △ | | | △ | | △ |
| 477 | Polyimide | | ● | △ | | | △ | | △ |
| 478 | Polyimide | | ● | | | | △ | | △ |
| 479 | Polyimide | | ● | | | | △ | | △ |
| 481 | Polyester | | | | ● | | | | |
| 483 | Polyester | | ● | △ | | | △ | | △ |
| 486 | Polyester | ● | | | | | | | |
| 488 | Polyester | ● | | △ | | | | | |
| 489 | Polyester | ● | | △ | | | | | |
| 490 | Polyester | ● | | | | | | | |
| 495 | Polyethylene Napthalate | | ● | | | | △ | | △ |
| 498 | Vinyl Cloth | △ | | ● | | | | | |
| 499 | Nylon Cloth | ● | | △ | | | | | |
| 529 | Polypropylene | | ● | | | | △ | | △ |
| 530 | Tamper Resistant | | ● | | | | △ | | △ |
| 580 | Vinyl | | ● | | | | △ | | △ |
| 581 | Vinyl | | ● | | | | △ | | △ |
| 582 | Phosphorescent | | ● | | | | △ | | △ |
| 584 | Reflective | | ● | | | | △ | | △ |
| 593 | Polyester | | ● | | | | △ | | △ |
| 642 | Tedlar | ● | | △ | | | | | |
| 7531 | Metalized Polyester | ● | | | | | | | |

| BMP™ 71 Material/Ribbon Cross Reference Guide | | | | | | | | | |
|--|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|-----------------------------------|--------------------|
| Yellow Highlighting = BMP71 Material | | | | | | | | ● = Recommended △ = Acceptable | |
| MATERIAL | | RIBBON | | | | | | | |
| Brady Material No. | Material Description | M71-R4300 (Black) | M71-R6000 (Black) | M71-R6200 (Black) | M71-R6400 (Black) | M71-R6600 (Black) | M71-R4400-WT (White) | M71-R6800-WT (White) | M71-R6900 (Colors) |
| 7536 | Polyester | | | ● | | | | | |
| 7546 | Tamper-Evident Polyester | | ● | | | | △ | | △ |
| 7551 | Polyester | | | ● | | | | | |
| 7566 | Tamper-Evident Polyester | | ● | | | | △ | | △ |
| 7576 | Tamper-Evident Metalized Polyester | | | ● | | | | | |
| 7593 | Polyethelene | | ● | | | | △ | | △ |
| 7596 | Vinyl | | | ● | | | | | |
| 7597 | Polyethelene | ● | | | | | | | |
| 7599 | Polyethelene Tag | | | ● | | | | | |
| 7643 | Thermo-plastic Polyether Polyurethane | | ● | | | | △ | | △ |
| 7696 | Vinyl Tag | | ● | | | | △ | | △ |
| 8425 | Polypropylene | | ● | | | | △ | | △ |

Using TLS2000®/HandiMark Labels

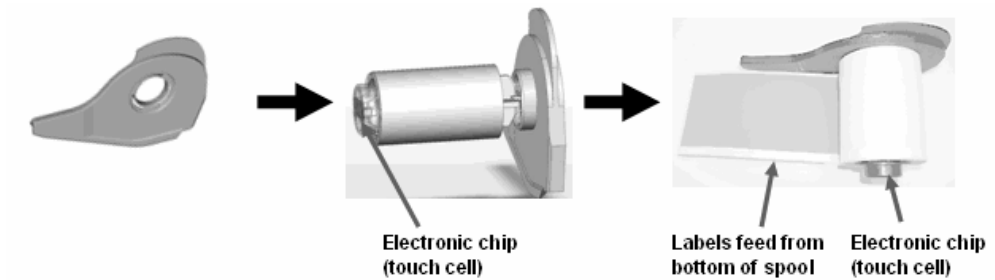
For optimum performance, it is recommended that you use genuine BMP71 Label Printer supplies in your BMP71 printer. However, you can also use TLS2000 and HandiMark label media, but will encounter the following limitations:

- Multi-area formats will display as one area (similar to the TLS2000® printer interface).
- The “Labels Remaining” gauge is not functional (i.e., the indicator displays in black).
- The Part Number does not display at the top of the Status bar.
- All labels display on the screen in white, regardless of the color of the tape installed

BMP71 Label Roll Adapter

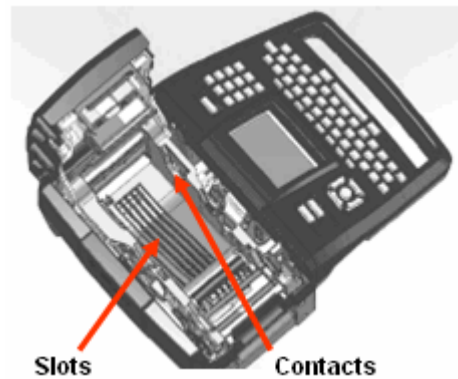
In order to use TLS2000 or HandiMark labels in the BMP71 printer, you must attach the BMP71 Label Roll Adapter.

1. With the pointed end of the guide facing in the direction that the labels come off the bottom of the spool...
2. ...position the hole of the adapter over the end of the spool, opposite the electronic chip (touch cell).
3. Gently push the adapter onto the spool to snap it into place.



4. Place the TLS2000 or HandiMark label roll, with adapter attached, into the printer the same way you load BMP71 label material. (See [page 13](#) for more information.)

Note: To accommodate different size label rolls, make sure that the label roll adapter is positioned in the correct slot in order to push the electronic chip up against the contacts.



Appendix C

Use the following table to troubleshoot and diagnose possible performance problems with your BMP71 printer. If the corrective action suggested does not work, contact Brady's Technical Support Group at www.bradyid.com.

| Troubleshooting Guide | | |
|--|--|--|
| Problem | Cause | Corrective Action |
| Hardware | | |
| Head over temp | Print Head too hot | Printhead has reached maximum operating temperature. Let printhead cool down for approximately 10 minutes, then re-initiate print job. |
| Keyboard works intermittently or not at all. | One or more keys is stuck in depressed state. | Identify any keys stuck in down position. Repress key to unstick. |
| Error - "Cover not closed" | Cover not closed. (Printer has a sensor that indicates when the printer cover is fully latched.) | Push down firmly on cover till you hear it latch. It should line up evenly with printer case. |
| Cutter does not cut. | Possible adhesive buildup. | Clean the cutter blades with a moistened swab from the cleaning kit. (See page 32 for more information on cleaning the printer.) |
| Power ON/OFF (Printer not working) | | |
| 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"> 1. Press Power button to turn the printer off. If Power button does not shut down printer: <ol style="list-style-type: none"> 2. Remove the AC adapter (if using one). 3. Remove the battery pack, then immediately re-insert. 4. Power ON the printer. |

| Troubleshooting Guide | | |
|---|---|--|
| Problem | Cause | Corrective Action |
| Power ON/OFF (Printer not working) (continued) | | |
| 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. |
| Printer frequently powers OFF. | Auto shutoff timing. | Adjust the Shut Off Delay timing in the Setup>Config menu. (See page 32.) |
| Printer not responding | Battery is dead. | Attach the AC adapter to provide power to the printer and charge the battery. OR Install a new battery. |
| | (Other?) | |
| Error while printing | Printer cover was opened during printing/feeding function. | <ol style="list-style-type: none"> 1. Reinstall ribbon and label/media. 2. Press [CLEAR/ESC] key to clear error. |
| Print Quality | | |
| Poor quality printing | Incorrect label material/ribbon combination. | Verify the correct ribbon for the label roll is loaded in the printer. Refer to the Ribbon Cross Reference Guide (Appendix B) for the proper ribbon selection. |
| 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. |
| Poor print quality. | Ribbon and label media are incompatible. | Change the ribbon or label combination. (See Appendix B for a list of compatible media.) |
| Poor print quality. | Ribbon or label media are installed incorrectly. | Review the instructions for loading the ribbon (page 11) or loading the labels (page 13). |
| Poor print quality. | Dust or adhesives accumulated on the print head. | Clean the print head. (Refer to page 32 for instructions on cleaning the printer.) |

| Troubleshooting Guide | | |
|---|--|---|
| Problem | Cause | Corrective Action |
| Print Quality (continued) | | |
| No print on the label | The label or ribbon is not loaded correctly. | Review the instructions for loading the ribbon (page 11) or loading the labels (page 13). |
| No print on the label | Out of ribbon. | Load a new ribbon. |
| Void areas or lines appear on printed text. | Ribbon wrinkling. | <ul style="list-style-type: none"> • With the ribbon installed, tension the ribbon by rotating the rewind spool (top spool) in a downward direction until all slack is removed. (See page 11 for more information.) • Try another ribbon cartridge. |
| Faint print on labels. | Ribbon not advancing properly. | <ul style="list-style-type: none"> • With the ribbon installed, tension the ribbon by rotating the rewind spool (top spool) in a downward direction until all slack is removed. (See page 11 for more information.) • Try another ribbon cartridge. |
| Ribbon | | |
| Error - "No ribbon installed" | No ribbon installed or ribbon installed incorrectly. | <ol style="list-style-type: none"> 1. Press [CLEAR/ESC] key to continue editing. 2. Ensure ribbon is installed correctly before printing. (See page 11 for proper installation.) |
| Error - "No ribbon installed" | Damaged circuit board (memory device) on ribbon cartridge. | Replace ribbon cartridge. |
| Error - "No ribbon installed" | Damaged contacts on printer for reading ribbon cartridge. | Send to Brady for repair. |
| Error - "Out of ribbon" | Ribbon supply has run out. | <ol style="list-style-type: none"> 1. Replace ribbon cartridge. 2. Press [CLEAR/ESC] key to clear error |

| Troubleshooting Guide | | |
|--|---|---|
| Problem | Cause | Corrective Action |
| Ribbon (continued) | | |
| Error - "Out of ribbon" | Ribbon cartridge has excessive slack between the supply spool and rewind spool. The printer utilizes a sensor to verify that the ribbon supply spool is turning during feeding or printing operations. Excessive slack will cause supply spool to not turn and therefore a premature "out of ribbon" error. | <ol style="list-style-type: none"> 1. With the ribbon installed, tension the ribbon by rotating the rewind spool (top spool) in a downward direction until all slack is removed. 2. Press [CLEAR/ESC] key to clear error (Refer to page 11 for proper ribbon installation.) |
| Error - "Out of ribbon" | Ribbon is broken. Ribbon can break by (1) reprinting over an area of the ribbon that has already been printed or (2) damage in handling. | <ol style="list-style-type: none"> 1. Replace ribbon cartridge. 2. Press [CLEAR/ESC] key to clear error |
| Error - "Out of ribbon" | Label or ribbon jam during feeding/printing | <ol style="list-style-type: none"> 1. Clear any jams by opening the printer cover and removing an excess labels in the feed roller or exit chute areas. 2. Press [CLEAR/ESC] key to clear error |
| Error - "Out of ribbon" | Ribbon cartridge memory device has counted down to zero. Circuit board on ribbon cartridge contains a memory device that tells the printer how much unused ribbon remains in the ribbon cartridge. | <ol style="list-style-type: none"> 1. Replace ribbon cartridge 2. Press [CLEAR/ESC] key to clear error. |
| Error - "Label and ribbon color are identical" | Ribbon color and label color are the same. Printing will not be visible. | <ol style="list-style-type: none"> 1. Replace ribbon or label/media. 2. Press [CLEAR/ESC] key to clear error. |
| Error - "Ribbon not optimized for label type" | Ribbon material type and label material type that are installed in the printer may not be compatible. Poor printing or poor ink adherence to labels may result | <ol style="list-style-type: none"> 1. Replace ribbon or label/media. 2. Press [CLEAR/ESC] key to clear error. (See Appendix B - Media.) |
| Labels (Media) | | |
| Printer will not feed labels. | The leading edge of the label roll is not inserted up to the black line under the ribs. | Make sure the leading edge of the label roll is securely under the ribs (at least up to the black line). |

| Troubleshooting Guide | | |
|-----------------------------------|--|---|
| Problem | Cause | Corrective Action |
| Labels (Media) (continued) | | |
| Printer will not feed labels. | The leading edge of the label roll is uneven or torn (not a straight edge). | Use a pair of scissors to cut a straight leading edge on the label roll. |
| Label material jams in printer. | Last label was not removed. | Make sure the last cut label has been removed from the label tray. |
| Error - "Out of Media" | Label/Media supply is exhausted | <ol style="list-style-type: none"> 1. Replace label/media roll. 2. Press [CLEAR/ESC] key to clear error |
| Error - "Out of Media" | Labels/media are not installed correctly. Labels/media must be installed so that they are biased against the front wall of the lower printer base. Notch Sensors in the lower printer base need to detect the presence of the labels to allow printer to operate correctly. | <ol style="list-style-type: none"> 1. Reinstall labels/media. 2. Press [CLEAR/ESC] key to clear error. (See page 13 for proper label/media loading.) |
| Error - "Out of Media" | Notch sensors in lower printer frame are dirty. Notch Sensors in the lower printer base need to detect the presence of the labels to allow printer to operate correctly. | <ol style="list-style-type: none"> 1. Clean sensors in lower printer base. Press [CLEAR/ESC] key to clear error. (See page 32 for proper cleaning techniques.) |
| Error - "Out of Media" | Label/media memory device has counted down to zero. Circuit board on the roll holder core of label/media contains a memory device that tells the printer how much unused material remains on the label/media supply. Reuse of the roll holder with memory device will eventually count down to zero and give error | <ol style="list-style-type: none"> 1. Replace label/media or label/media roll holder. 2. Press [CLEAR/ESC] key to clear error. |
| Error - "No media installed" | BMP71 labels/media are not installed correctly. | <ol style="list-style-type: none"> 1. Reinstall labels/media. 2. Press [CLEAR/ESC] key to clear error. See page 13 for proper label/media loading. Verify that circuit board on core of labels are mating with contacts in receiver slot of lower printer base. |

| Troubleshooting Guide | | |
|--|---|--|
| Problem | Cause | Corrective Action |
| Labels (Media) (continued) | | |
| Error - "No media installed" | Damaged circuit board on label/ media roll | <ol style="list-style-type: none"> 1. Replace label/media roll. 2. Press [CLEAR/ESC] key to clear error |
| Error - "No media installed" | Damaged contacts in receiver slot of lower printer base. | Send to Brady for Repair |
| Error - "Top of form" | Label/media or ribbon has caused jam | <ol style="list-style-type: none"> 1. Clear any jams by opening the printer cover and removing an excess labels in the feed roller or exit chute areas. 2. Press [CLEAR/ESC] key to clear error. |
| Error - "Top of form" | Notch sensors in lower printer frame are dirty. Notch Sensors in the lower printer base need to detect the prescence of the labels to allow printer to operate correctly. | <ol style="list-style-type: none"> 1. Clean sensors in lower printer base. 2. Press [CLEAR/ESC] key to clear error. (See page 32 for proper cleaning techniques.) |
| Error - "Label and ribbon color are identical" | Ribbon color and label color are the same. Printing will not be visible. | <ol style="list-style-type: none"> 1. Replace ribbon or label/ media. 2. Press [CLEAR/ESC] key to clear error. |
| Program | | |
| File incompatible with installed media | A saved file (or power off file) was designed for media not currently installed. | Install correct media. |
| Incompatible Media for chosen application | The labels installed cannot accommodate the application requirements. (E.g., attempting to run a 110-Block application on die cut media.) | Install correct media. |
| Invalid terminal repeat value entered. | The value entered is out of the range. | The acceptable range is between the minimum of 0.2 inch to the maximum of 40 inches. |

| Troubleshooting Guide | | |
|------------------------------|---------------------------|---|
| Problem | Cause | Corrective Action |
| Program (continued) | | |
| No applications available | Applications not selected | Ensure that the desired applications are activated. <ol style="list-style-type: none">1. Press Setup.2. Choose Apps.3. Navigate to the desired applications and press [OK] to place a checkmark in front of each application.4. Navigate to the OK button and press [OK]. |

