



*PANTHER*TM LS8

HAND-HELD THERMAL TRANSFER PRINTER

Operator's Manual

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REV. 0 – 9/1/05

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SECTION 1

GETTING STARTED

INTRODUCTION & SAFE OPERATION

Congratulations on your purchase of the *PANTHER*[™] LS8 Hand-Held Thermal Transfer Printer. The versatile *PANTHER*[™] LS8 is designed to meet the demanding printing requirements of electrical and network users. The LS8 prints high quality industrial labels on a wide variety of materials for electrical and network applications, such as wire/cable, components, safety, and facility identification. It is the ideal labeling tool for electricians, installers, maintenance personnel, and contractors. As you will read throughout this operator's manual, the *PANTHER*[™] LS8 has been designed with many time saving features that will allow you to maximize your labeling productivity.

This manual will guide you step by step through the set-up, operation, and troubleshooting of the *PANTHER*[™] LS8 Hand-held Thermal Transfer Printer. If you have problems not covered herein, contact your local Panduit Sales Representative, call Panduit Technical Support at 866-871-4571, or call Panduit Customer Service at 800-777-3300. More information is also available on the web at www.panduit.com.

SAFE OPERATION PRACTICES

The following general safety practices supplement the specific warnings and cautions depicted elsewhere in this manual. They are recommended precautions that must be understood and applied during the operation and maintenance of this printer.

Do Not Operate In An Explosive Environment



Do not operate the printer in the presence of flammable gases or fumes. Operation of this printer in such an environment constitutes a definite safety hazard.

Do Not Operate In Wet Or Damp Areas



Do not operate this printer in wet or damp areas. Operation of the printer in such an environment constitutes a definite safety hazard.

INTRODUCTION & SAFE OPERATION

Do Not Substitute Parts Or Modify Equipment



Because of the danger of introducing additional hazards, do not install substitute parts or perform an unauthorized modification to the printer or its accessories. The proper components for service and repair may be obtained from Panduit Corp.

WARNING:



When the printer has been in use for an extended period of time, the printer motor may become hot. DO NOT touch the printer motor with bare hands.

Information to USA Users

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

Information to Canadian Users

This digital apparatus does not exceed Class A limits for radio noise emissions for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

It is possible that infrequent electrical phenomena (static discharge, power line fluctuations) may cause printer function to be temporarily interrupted. In this case, the printer will usually reset itself. In extreme cases, the user should remove then re-apply power (batteries or AC adapter).

INTRODUCTION & SAFE OPERATION

Printer Power Supply

The *PANTHER*[™] LS8 is supplied with 6 AA alkaline batteries. These batteries are not re-chargeable. After the batteries have surpassed their useful life, they must be disposed of properly.

An optional AC adapter is also available for use with the *PANTHER*[™] LS8. The AC adapter is available in different versions that are suitable for use in many regions of the world, including North America, Europe, Australia, and the United Kingdom.

Certifications

The *PANTHER*[™] LS8 Hand-Held Thermal Transfer Printer meets the requirements of the following standards:

- FCC Part 15 Class A
- CE

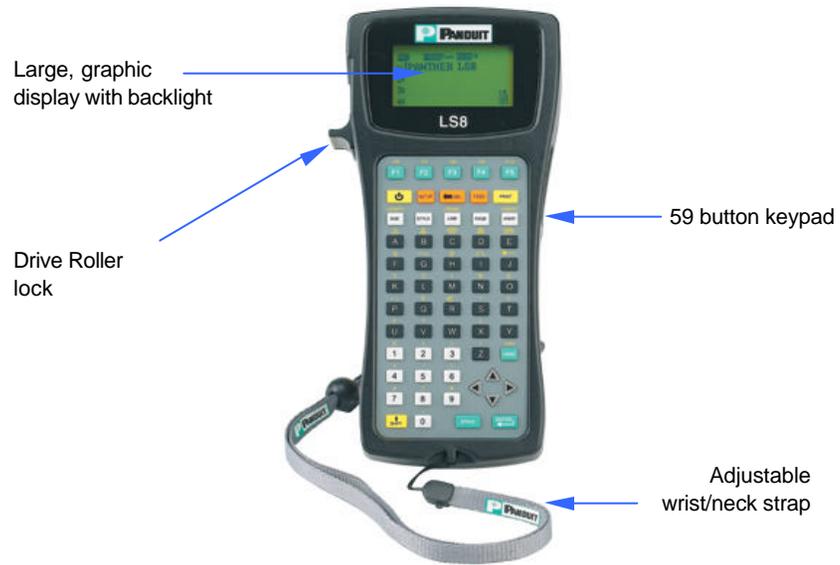
Additional Reference Materials

A Quick Reference Card, which summarizes the most important and frequently used features of the *PANTHER*[™] LS8 is included with your printer. The Quick Reference Card has several label exercises to help familiarize you with LS8 functions. Should you misplace the quick reference card, you may download another copy from the web at www.panduit.com.

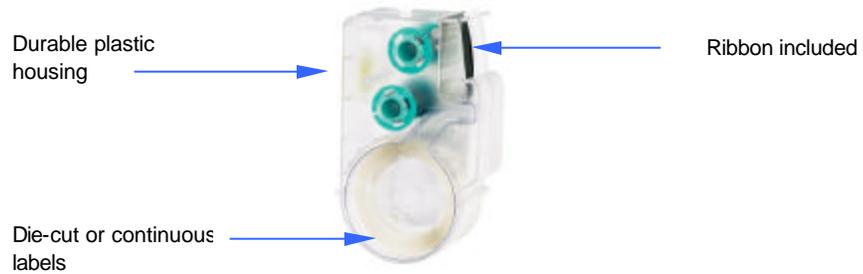
All of the detailed product ordering information is included in the comprehensive Product Bulletin. The bulletin is available from Panduit Customer Service (800-777-3300) or online at www.panduit.com.

GENERAL DESCRIPTION

PANTHER^ä LS8 Hand-Held Thermal Transfer Printer



P1^ä Label Cassette System



GENERAL DESCRIPTION

Print Technology

The *PANTHER™* LS8 prints labels using thermal transfer printing technology. The print head melts ink contained on a thin web of ribbon material allowing the ink to transfer to the label material. The print head operates at a resolution of 203 dots per inch (dpi).

Smart Label Cassette

P1™ label cassettes are automatically detected by the *PANTHER™* LS8 printer. The LS8 printer automatically adjusts its settings according to the label cassette that is installed. This process saves you the time and effort normally required to begin printing. With the LS8, simply install the label cassette and lock the drive roller. Now you are ready to begin printing. *P1™* label cassettes have an embedded memory device designed to improve your labeling productivity. The device maintains an accurate count of the remaining labels in the cassette. The device also recalls the last label design used. Now when you take a label cassette out of the printer, your last label design goes with the cassette.

Label Cutter

The *PANTHER™* LS8 has a manually operated cutter blade. Press and release the cutter button in order to cut your label. The cutter button has two possible settings: **Full Cut and Partial Cut.**

Full Cut is used to cut entirely across a label and its liner. This is the familiar cutting style used on other hand-held printers. Partial Cut is used to leave a very small area of the label liner attached even after cutting. This is an innovative adaptation to label cutting that allows you to avoid the frustration of searching for the correct label within a disorganized pile or having to use scissors. After using the partial cut setting, you will take a strand of labels to a job and then separate them as needed. In this way, your labels remain in the order they were printed.

The Cut Pause feature allows you to cut between labels during a print job. When Cut Pause is turned on, the printer will stop printing and allow you to cut the label. After cutting, the printer will resume printing. The Cut Pause feature is turned on or off inside of the Setup menu.

Carrying Case

The *PANTHER™* LS8 has a custom protective carrying case constructed of durable plastic material. The case provides a convenient method of transporting the printer, label cassettes, and accessories to and from a job site.

GENERAL DESCRIPTION

PC KIT

The PC KIT includes a CR-ROM with *PanTherLink*[™] software and a USB cable. The PC KIT is used to communicate between a computer and the *PANTHER*[™] LS8 printer. This provides the ability to transfer files or upgrade the operating system.

LOADING BATTERIES AND LABEL CASSETTE

Loading the Batteries

1. Remove the battery door from the back of the *PANTHER™* LS8 printer. If the impact bumper is installed on the printer, you will have to move it away from the battery door first.
2. Install the 6 AA batteries according to the molded indicators within the battery compartment.
3. Reattach the battery door. Move the impact bumper back over the battery door if necessary.

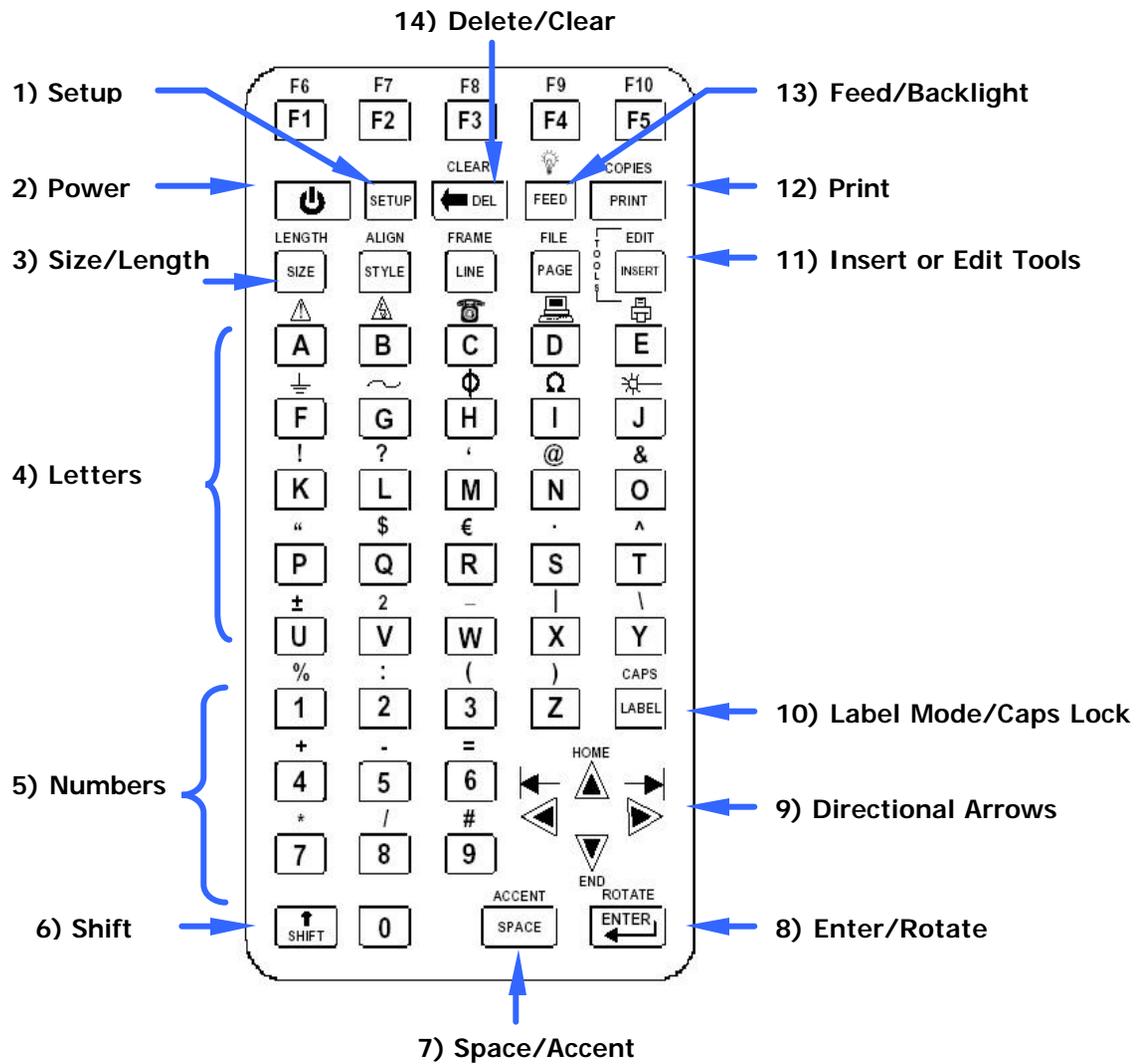
Loading a Label Cassette

1. Remove the cassette door from the back of the *PANTHER™* LS8 printer.
2. Remove the plastic sleeve from the cassette. Retain the sleeve for later use.
3. Install a label cassette. Press firmly to lock the cassette in place.
4. Lock the drive roller.
5. Reattach the cassette door.

NOTE: To uninstall a label cassette:

1. Unlock the drive roller.
2. Remove the cassette door.
3. Remove the cassette. Use the removal tab for assistance.
4. Re-apply the plastic sleeve to the cassette.
5. Reattach the cassette door.

KEYBOARD FUNCTIONS



KEYBOARD FUNCTIONS

Basic Keyboard Functions

- POWER – Turn printer on or off
- SETUP – Access the Set Up menu
- DELETE – Erase characters and tools
- CLEAR – Clear the entire screen
- FEED – Feed labels
-  – Turn the backlight on or off
- PRINT – Print labels
- COPIES – Print multiple copies
- SIZE – Select the text font size
- LENGTH – Set the length of continuous label media
- STYLE – Select the text font style
- ALIGN – Change the label justification
- LINE – Add vertical and horizontal lines to a label
- FRAME – Add a frame around a label
- PAGE – Move to another page
- FILE – Access the file manager
- INSERT – Insert a new tool
- EDIT – Edit an existing tool
- LABEL – Change the label mode
- CAPS – Turn caps lock on or off
- HOME – Move to home position on screen
- END – Move to end position on screen
- SHIFT – Access secondary functions on keypad
- SPACE – Add a space to a label
- ACCENT – Insert an international character
- ENTER – Move to the next line or accept menu changes
- ROTATE – Rotate the label to 0, 90, 180, or 270 degrees

SECTION 2

WORKING WITH THE *PANTHER*[™] LS8

USING THE *PANTHER*™ LS8

The Home Screen

The home screen is where the user enters and edits text or places label items known as tools. The home screen is also where the user prints labels. The home screen has several different indicators, including:

INDICATOR	ICON	DESCRIPTION
Caps Lock		Indicates if caps lock is on or off.
Shift Function		Indicates if the shift key has been pressed.
Text Size		Indicates the text size for the current line.
Text Style		Indicates the text style for the current cursor position. Available styles include Bold and Bold + Underline.
Text Line		Indicates the current line.
Page		Indicates the current page. There are 9 total pages.
Vertical or Horizontal Line		Indicates that a label has one or more dividing lines selected.
Frame		Indicates that a label has a frame selected.

The Tool Menu

The tool menu includes serializations, symbols, data lists, bar codes, and date/time stamps. These items are placed on the home screen. The tool menu is accessed by pressing the Insert key.

Tool Icons

The following icons represent the available tools:

- Serialization
- Symbol
- Data List
- Barcode
- Date Stamp
- Time Stamp

CREATING TEXT

Creating Text

After turning on the *PANTHER™* LS8, the home screen will appear. The home screen is also the text editor.

To create text on the home screen, simply begin pressing the alphabetic or numeric keys on the keypad. Text will be entered at the position of the cursor. The cursor is indicated by a vertical line. To insert blank spaces, press the  key. Press  to move down to the next line. Use the directional arrow keys to move the cursor up, down, right, or left. The home screen has a maximum of 8 lines on which to place text. The home screen also has 9 separate pages on which to place text. The current page number is indicated in the bottom right corner of the home screen.

Inserting Text

To insert characters on a line, move the cursor to any position and begin typing. The character will be inserted at the cursor position.

Deleting Text

To remove characters from the screen, press the  key. Each press of the  key will delete one character at a time immediately to the left of the cursor. .

Text Size

The *PANTHER™* LS8 has 9 different font sizes available for creating text. The font sizes range from 6 point to 72 point. To change the font size, press the SIZE key. Then scroll up or down with the directional arrows. Press ENTER To select a size. The new size will be displayed at the top of the home screen.

Each *P1™* label cassette has a default font size. The default font size is automatically chosen when inserting a new cassette.

The text size can be different on each of the 8 available lines of text on each page.

CREATING TEXT

Text Style

The *PANTHER™* LS8 has two different text styles: Bold and Bold + Underline. To change the text style, press the STYLE key. All characters typed after changing the style will have the new style. Text style can be different for each individual text character on a line.

Text Rotation

Label legends may be rotated to 0, 90, 180, and 270 degrees in the clockwise direction. The page shaped icon in the lower right hand corner of the display indicates the current rotation. To change the rotation, press the  key and then press the  key. Use the directional arrows to scroll to the desired rotation and press ENTER. The rotation of the legend can be different on each of the 9 pages of a label.

Text Justification

Label legends may be horizontally and vertically justified by pressing the  key and then pressing ALIGN. The horizontal justification options include left justified, center justified, and right justified. The vertical justification options include top justified, center justified, and bottom justified. The character "A" inside of the page shaped icon in the lower right hand corner of the display indicates the current justification setting. The character "A" will move within the page shaped icon to indicate the current justification settings.

CREATING SERIALIZATIONS

The Serialization Tool

The serialization tool is used to automatically number labels in a sequence. The sequence can be either numeric (1 to 999) or alphabetic (A to ZZZ). A serialization is defined by a start value, an end value, and a step value.

To correctly define a serialization, the end value must be larger than the start value **and** the start and end values must be both numeric or both alphabetic. (Numbers and letters cannot be used together when defining a particular serialization.)

The step value can be any number between 1 and 99.

Serializations can be combined with other label items, such as text, boxes, lines, symbols, etc. For example, to create a prefix or a suffix to a serialization, enter text immediately before or after the serialization on a line.

Serializations can be printed as text or as bar codes on a label.

Creating a Serialization

The serialization tool should be accessed from the home screen. To access the serialization tool:

1. Press the INSERT key to enter the tools menu.
2. Press the directional arrows to highlight the serialization tool.
3. Press the  key to select the serialization tool.
4. Use the up or down directional arrow keys to select the serialization parameters: **Start, End, or Increment.**
5. Use the right or left directional arrow keys to set the values for **Start, End, or Increment.**

NOTE: Pressing the right directional arrow key will move the cursor to the current value of the selected parameter. For a new serialization the start and end values will display an asterisk *. After entering a value, pressing ENTER will automatically move the cursor to the next parameter.

6. Repeat step 5 for each parameter.
7. Press the  key to accept the changes and to return to the home screen. Otherwise, press the DEL key to return to Tools menu without accepting changes.
8. On the home screen, the serialization tool icon  will appear at the position of the cursor.

CREATING SERIALIZATIONS

More Serialization Parameters

The serialization tool includes more parameters on a second screen following the first screen. The second screen includes **Copies** and **Collate**. To access the second screen press the down directional arrow twice after **Increment**.

1. The **Copies** parameter determines the number of copies to print for the serialization. The **Copies** parameter can be set to any number from 1 to 99.

To change the **Copies** parameter, press the up or down directional arrow keys to highlight **Copies**

Press the right directional arrow key to move the cursor to the current value of the Copies parameter. The Copies parameter will default to a value of 1. Enter the number of copies to print.

Press the  key to accept the changes.

2. The **Collate** parameter determines whether or not the copies of the serialization items will be collated. The **Collate** parameter only works when more than one copy of a serialization is defined. The **Collate** parameter defaults to **No**.

If **No** is selected, then consecutive copies of the serialization items **will** be placed together. The result will resemble the following legend:

A01	A01	A02	A02	A03	A03
-----	-----	-----	-----	-----	-----

If **Yes** is selected for **Collate**, then consecutive copies of the serialization items **will not** be placed together. The result will resemble the following legend:

A01	A02	A03	A01	A02	A03
-----	-----	-----	-----	-----	-----

CREATING SERIALIZATIONS

To change the **Collate** parameter, press the up or down directional arrow keys to highlight **Collate**.

Press the right directional arrow key to select **Yes** or **No**.

Press the  key to accept the changes and to return to the home screen.

Advanced Serialization Options

The serialization tool includes several advanced options for customizing labels. The advanced serialization options are **Print As** and **Place On**.

1. The **Print As** option determines whether the serialization will print as text or as a bar code on the labels. The default setting will print as text. The bar code settings can be changed in the setup menu. Printing a serialization as a bar code is useful for asset tracking, component manufacturing, and quality control.
2. The **Place On** option determines whether the serialization will print on consecutive labels or on consecutive pages of the same label. The default setting will print on labels. Printing a serialization on pages is useful for creating serialized patch panel labels using die cut network systems label media.

Editing a Serialization

To edit a serialization on the home screen, move the cursor directly to the left of the serialization and then press the INSERT key. Follow the steps listed above for creating a serialization.

CREATING SYMBOLS

The Symbol Tool



The Symbol Tool is used for creating electrical, network, and safety or facility identification labels.

Creating a Symbol

The symbol tool should be accessed from the home screen. To access the symbol tool:

1. Press the INSERT key to enter the tools menu.
2. Press the directional arrows to highlight the symbol tool.
3. Press the  key to select the symbol tool.
4. Use the right or left directional arrow keys to search the symbol library. (see the next page for available symbols)
5. Use the up or down directional arrow keys to increase or decrease the size of the symbol.
6. Press the  key to accept the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.
7. On the home screen, the symbol tool icon  will appear at the position of the cursor.

Editing a Symbol

To edit a symbol on the home screen, move the cursor directly to the left of the symbol and then press the INSERT key.

1. Use the right or left directional arrow keys to search the symbol library. (see the next page for available symbols)
2. Use the up or down directional arrow keys to increase or decrease the size of the symbol.
3. Press the  key to accept the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.

NOTE: There are 3 sizes available for each symbol. The sizes range from 1 (smallest) to 3 (largest).

CREATING SYMBOLS

Currently available symbols and their assigned library numbers are listed below. Additional symbols may be added to the *PANTHER™* LS8 firmware in the future.

								
1	2	3	4	5	6	7	8	9
								
10	11	12	13	14	15	16	17	18
								
19	20	21	22	23	24	25	26	27
								
28	29	30	31	32	33	34	35	36
								
37	38	39	40	41				

CREATING DATA LISTS

The Data Tool



The data tool is used to create printable data lists in the *PANTHER™* LS8. The data tool is very useful for customizing labels because it allows up to one hundred unique labels to be created from a list of data. With the data tool, users can input, store, or transfer custom lists of data. The *PANTHER™* LS8 stores up to 6 unique data lists.

Creating a Data Tool

The data tool should be accessed from the home screen. To access the data tool:

1. Press the INSERT key to enter the tools menu.
2. Press the directional arrows to highlight the data tool.
3. Press the  key to select the data tool.
4. Use the up or down directional arrow keys to highlight the data tool options. You can recall a previously saved data list or you can create a new list. Creating a new list is similar to working on the home screen. Use the PAGE function to move forward or backward through the 100 data list items. After finishing a new list press the INSERT key to return to the main data tool menu.
5. After making all changes to the data tool options, press the  key to accept all of the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.
6. On the home screen, the data tool icon  will appear at the position of the cursor.

Editing a Data Tool

To edit a data tool on the home screen, move the cursor directly to the left of the data tool and then press the INSERT key. Follow the steps list above for creating a data tool.

CREATING BAR CODES

The Bar Code Tool



The bar code tool can be used for bin labeling, component identification, or asset management and can be used in combination with other tools. The bar code tool can be printed with or without a checksum digit or human readable text. The bar code symbology available in the *PANTHER*[™] LS8 is **CODE 39**.

Creating a Bar Code

The bar code tool should be accessed from the home screen. To access the bar code tool:

1. Press the INSERT key to enter the tools menu.
2. Press the directional arrows to highlight the bar code tool.
3. Press the  key to select the bar code tool.
4. Press the right directional arrow key to input text. Type the text in the text window. The bar code must include at least one digit of text.
5. Press the  key to accept the text.
6. Use the up or down directional arrow keys to highlight the other bar code settings.
7. Use the right or left directional arrow keys to change the bar code settings.
8. Press the  key to accept all of the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.
9. On the home screen, the bar code tool icon  will appear at the position of the cursor.

Editing a Bar Code

To edit a bar code on the home screen, move the cursor directly to the left of the bar code and then press the INSERT key.

1. Press the right directional arrow key to input text. Type the text in the text window. The bar code must include at least one digit of text.
2. Press the  key to accept the text.
3. Use the up or down directional arrow keys to highlight the other bar code settings.
4. Use the right or left directional arrow keys to change the bar code settings.

CREATING BAR CODES

5. Press the  key to accept all of the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.

Bar Code Settings

The default bar code settings can be changed in the setup menu. To change the default settings, access the printer settings in the setup menu.

Readable: Indicates whether the bar code text is human readable or not. If activated (bar code text is human readable) the setting will display Yes.

Checksum: Indicates whether the checksum digit is activated or not. If activated (checksum digit is turned on) the setting will display Yes.

Bar Size: Indicates the width of the bar code. Available sizes are 0.010 inches, 0.015 inches, and 0.020 inches. The default width is 0.010 inches.

Serialized Bar Codes

The *PANTHER*[™] LS8 is able to serialize bar codes. In order to do so, a serialization must first be defined. Please see the section entitled “CREATING SERIALIZATIONS” for more information about serialized bar codes.

CREATING A DATE OR TIME STAMP AND CREATING LINES

The Date Tool



The Date Tool allows the user to print a date stamp on a label. The date printed on the label is defined by the internal clock of the *PANTHER™* LS8.

Creating a Date Tool

The date tool should be accessed from the home screen. To access the date tool:

1. Press the INSERT key to enter the tools menu.
2. Press the directional arrows to highlight the date tool.
3. Press the  key to select the date tool.
4. On the home screen, the date tool icon  will appear at the position of the cursor.

Editing a Date Tool

To edit a date tool on the home screen, move the cursor directly to the left of the date tool and then press the INSERT key.

The Time Tool



The Time Tool allows the user to print a time stamp on a label. The time printed on the label is defined by the internal clock of the *PANTHER™* LS8.

Creating a Time Tool

The time tool should be accessed from the home screen. To access the time tool:

1. Press the INSERT key to enter the tools menu.
2. Press the up directional arrow key to highlight the date tool.
3. Press the  key to select the time tool.
4. On the home screen, the time tool icon  will appear at the position of the cursor.

Editing a Time Tool

To edit a time tool on the home screen, move the cursor directly to the left of the time tool and then press the INSERT key.

CREATING A DATE OR TIME STAMP AND CREATING LINES

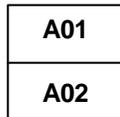
Lines



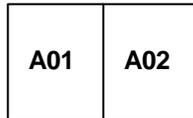
Lines allows custom placement of vertical and horizontal lines on a label. Lines are especially useful for creating patch panel, faceplate, or terminal block labels. There are seven unique line settings available: **Center Horizontal**, **Center Vertical**, **Top**, **Bottom**, **Left**, **Right**, and **@ Pages**. Each of these settings may be turned on or off independently.

NOTE: The top, bottom, left, and right sides of the label will rotate with the legend when a label is rotated.

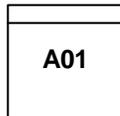
1. The **Center Horizontal** setting places a line through the center of the label in the horizontal direction.



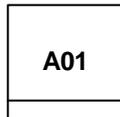
2. The **Center Vertical** setting places a line through the center of the label in the vertical direction.



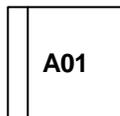
3. The **Top** setting places a line at the top of the label.



4. The **Bottom** setting places a line at the bottom of the label.

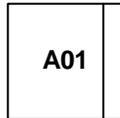


5. The **Left** setting places a line at the far left side of the label.

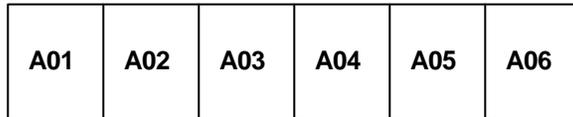


CREATING A DATE OR TIME STAMP AND CREATING LINES

6. The **Right** setting places a line at the far right side of the label.



7. The **@ Pages** setting places lines between each page of a label that has multiple pages defined. The **@ Pages** setting is used for patch panel, outlet, and terminal block labeling.



Creating Lines

Lines should be accessed from the home screen. To access the line tool:

1. Press the LINE key.
2. Use the up or down directional arrow keys to select the desired line position.
3. Use the right or left directional arrow keys to turn on or turn off the line tool at the selected position.
4. Press the  key to accept the changes and to return to the home screen. Otherwise, press the DEL key to return to the home screen without accepting changes.
5. On the home screen, the line icon  will appear on the right side of the display when a line is activated.

CREATING FRAMES

Frames



Frames are useful for customizing a label. There are three unique frame settings available: **Outline**, **Reverse**, and **Frame Off**.

The **Outline** setting places a box outline around the perimeter of the entire label area.

WARNING

The **Reverse** setting places a dark background with light text characters on a label.

WARNING

The **Frame Off** setting deactivates the frame.

Creating a Frame

The frame menu should be accessed from the home screen. To access the box tool:

1. Press the FRAME key to enter the tools menu.
2. Use the right directional arrow key to change the setting.
3. Press the  key to select the frame type.
4. On the home screen, the frame icon  will appear on the right side of the display when a frame is activated.

NOTE: If a frame is activated, it will appear on all printed pages of a label.

USING PAGES

The Page Function

The *PANTHER*[™] LS8 provides 9 separate pages for each label. Label items, including text and tools may be placed on each of the 9 pages. The pages function is particularly useful for creating non-standard serializations that do not follow a common increment. The pages function is also useful for creating text on patch panel labels.

Using the Page Function

The page number icon in the lower right hand corner of the display indicates the current page. For example, 1:9 indicates that page 1 of 9 is currently displayed. To change the page, press the PAGE key. Then scroll forward using the right directional arrow key or backward using the left directional arrow key. Press ENTER to accept the page change and return to the home screen.

SETTING UP THE PANTHER LS8 AND USING FILE MANAGER

The Setup Menu

The setup menu is used to modify the default printer settings. The setup menu should be accessed from the home screen. To access the setup menu press the  key.

Use the setup menu to adjust the contrast, heat, time, date, units, language, and bar code settings. Also use the setup menu to transfer files to a personal computer or to upgrade your printer's operating system.

Within the setup menu, scroll up or down using the directional arrows. Select the setting to adjust by pressing ENTER. Once inside the setting, use the arrow to select a parameter to change. Press ENTER to accept the changes and return to the main setup menu screen.

Press SETUP to exit from the setup menu will all changes.

Label Modes

To edit the label mode, press the LABEL key.

1. Use the up or down directional arrows to select the desired mode and press ENTER.

Available Modes include:

MODE	DESCRIPTION	APPLICATIONS
Component	Vertically centers legend	Electrical components
Wiremarker	Repeats legend until label is filled	Wire and cable marking
Terminal	Places legends at terminal locations	Terminal blocks
Tape	Rotates legends 90° clockwise	Safety/facility ID, pipe marking
Strip	Repeats legend until label is filled and copies legend on two sides of middle perforation	Wire and cable marking
Network	Places legends at port locations	Data communications components
Flag	Prints legend once at top of label and then repeats the legend once at the bottom of label	Wire and cable marking
Vertical	Prints legend vertically	Safety/facility ID, pipe marking

SETTING UP THE PANTHER LS8 AND USING FILE MANAGER

The *PANTHER*™ LS8 has the ability to store and recall label files. Label files stored and recalled within **File Manager**. Label files are designated with a **.LS8** ending.

To access **File Manager**, press the FILE key:

1. Use the right or left directional arrow keys to select the desired file.
There are 50 file storage locations in the *PANTHER*™ LS8.

NOTE: When saving a new file, press the  key to begin entering a file name. Use the alphabetic or numeric keys to enter a file name. After entering a file name, press the  key again to **Save**.

NOTE: When renaming a previously saved file, press the  key to begin entering the new file name. Use the alphabetic or numeric keys to enter the new file name. After entering the name, press the  key again to **Save**. The printer will then prompt to **Overwrite File? 1-Yes 2-No**. Press 1 to accept the new file name or press 2 to keep the previous file name.

2. Use the up or down directional arrow keys to highlight **Action**.
3. Use the right or left directional arrow keys to select **Save**, **Load**, **Delete**, or **Delete All**.

 **WARNING:** Selecting **Delete All** will erase all stored label and data files.

4. Press the  key to complete the selected action.

NOTE: When recalling a previously stored label file, the part number of the stored label file must match the part number of the label roll installed in the printer. If the part numbers do not match, an error message will display on the screen.

PANTHERLINK

Installing PANTHERLINK

Use the *PANTHERLINK*™ CD to install *PANTHERLINK*™ software onto a personal computer. The *PANTHERLINK*™ CD is available with the purchase of LS8-KIT or LS8-PCKIT.

Insert the CD into a personal computer. The installation program will begin automatically. Follow the instructions in the installation wizard in order to complete the installation process.



PANTHERLINK™ desktop icon

Using PANTHERLINK

To use *PANTHERLINK*™ software with the *PANTHER*™ LS8 printer:

1. Connect the USB cable (included with LS8-KIT and LS8-PCKIT) to a personal computer.
2. Connect the USB cable to the *PANTHER*™ LS8 at the USB port.
3. Turn **ON** the *PANTHER*™ LS8.
4. Press the  key to access the setup menu.
5. Use the up or down directional arrow keys to highlight **PanTherLink**.
6. Press the  key. The LS8 is now ready to communicate to a personal computer.
7. Open *PANTHERLINK*™ software on a personal computer.



8. Use *PANTHERLINK*™ to transfer label files between the *PANTHER*™ LS8 and a computer.

PRINTER CLEANING INSTRUCTIONS

Cleaning the Print Head and Drive Roller

The print head should be cleaned regularly, and more often in harsh environments. The drive roller should be cleaned whenever foreign matter, such as dust or adhesive, is present.

1. Turn **OFF** power to printer.
2. Unlock the drive roller lever.
3. Remove the label cassette from the printer
4. Use a cotton swab and rubbing alcohol to gently wipe the print head, drive roller, and cutter blade.

PRINTER TROUBLESHOOTING

This section helps identify printer conditions and problems that can often be solved by the user. If you are unable to correct the problem contact Panduit Technical Support at **866-871-4571** or Panduit Customer Service at **800-777-3300**.

SYMPTOM	ACTION
POWER	
Printer does not power up properly, and LCD does not come on.	<ul style="list-style-type: none"> • To turn printer ON, press the power button. • Make sure that 6 AA alkaline batteries are loaded in the printer. If problem persists, replace batteries. • Plug in AC Adapter.
PRINTING	
Not printing.	<ul style="list-style-type: none"> • Make sure printer: <ol style="list-style-type: none"> 1. Is turned ON 2. Has label cassette loaded properly. 3. Drive roller lever is locked.
Tools Too Big!	<ul style="list-style-type: none"> • The items on the home screen are too large for the printable area. Adjust the text size on the home screen, adjust the symbol size, rotate the label, or use a larger label.
Media is not advancing properly in the printer.	<ul style="list-style-type: none"> • Drive roller lever is not locked. • End of label roll reached. Replace label cassette. • Label jam in printer. Label is caught in print mechanism. To clear jam: <ol style="list-style-type: none"> 1. Turn printer power OFF. 2. Unlock the drive roller 3. Open cassette door. 4. Detach any printed labels with cutter. 5. Remove label cassette from printer. 6. Carefully remove any labels caught in the printer. 7. Reinstall label cassette. 8. Replace cassette door. 9. Lock drive roller.

PRINTER TROUBLESHOOTING

SYMPTOM	ACTION
Printed image is full, but grayish or “translucent”.	<ul style="list-style-type: none">• Print head heat setting is too high. Reduce heat setting. The heat setting is accessible in the Setup menu. Press the SETUP key, scroll down to heat and Press ENTER. Adjust the heat setting with the up or down arrows.
Voids in printed image: areas where there is no print.	<ul style="list-style-type: none">• Print head elements or “dots” are dirty or obstructed. Clean print head with soft-stemmed swab and isopropyl alcohol.
LABELS	
Labels not registering	<ul style="list-style-type: none">• Make sure that labels are feeding properly.• Printer not reset for new label format. Turn printer OFF, then ON again. Printer will re-calibrate for new label.
Die-cut labels continue to feed without stopping.	<ul style="list-style-type: none">• Label sensor is dirty or obstructed. Clean sensor with soft-stemmed swab and isopropyl alcohol or compressed air.

WARRANTY INFORMATION

Our products are warranted to be free from defects in material and workmanship at the time of sale but our obligation under this warranty is limited to the replacement of any product proved to be defective within 6 months (for product) or 90 days (for printers) from the date of delivery. Printer warranty is void if Panduit printers are modified, altered or misused in any way. Use of Panduit printers with any product other than the specified Panduit products for which the printer was designed, constitutes misuse. Before using, user shall determine the suitability of the product for his intended use and user assumes all risk and liability whatsoever in connection therewith.

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GENERAL SPECIFICATIONS

Print Method:	Thermal transfer
Effective Print Width:	1.00" (25.4 mm)
Print Length:	30.00" (maximum label length)
Print Resolution:	203 dpi (horizontally and vertically)
Label Width:	0.24" to 1.0"
Media Length:	Up to 25' continuous tapes
Media Types:	Die cut or continuous tapes
Materials:	Vinyl self-laminating, flattened heat shrink, vinyl cloth, polyester, continuous tape, vinyl, non-adhesive polyester, polyolefin
Media Cutting:	Manually operated cutter
Display:	4 line x 14 graphic LCD with backlight
LCD Contrast Control:	Adjustable via keypad
Operating System:	Panduit proprietary – user upgradeable
Power Supply:	6 AA alkaline batteries
AC Adapter:	Universal Input (100 - 240 VAC, 50/60 Hz) with
Oper. Temp/Hum:	41-104° F (5-40 °C), 0 - 90% relative humidity (non-condensing)
Stor. Temp/Hum:	-40-140° F (-40-60 °C), 0 - 90% relative humidity (non-condensing)
Compliance:	FCC Part 15 Class A, European Community EMC and Low Voltage Directives regarding safety, emissions, and immunity
Weight	1.8 lbs. (1.86 kg) - includes battery pack