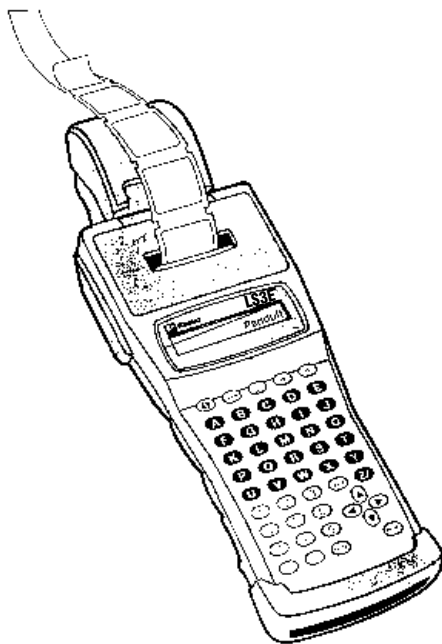


***Pan-Quik*™ LS3E Printer Operator Manual**

**English Version
(Consult Factory for Additional Languages)**



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INTRODUCTION

The LS3E ***Pan-Quik***[™] Hand-Held Printer is the complete printing solution for Electricians, Assemblers, Maintenance & Repair, Construction, and Network Communication Personnel. This versatile, on-site, on-demand printer provides users the capability to save, retrieve, and edit custom or serialized labels for wire and cable marking, component labeling, and network labeling.

The LS3E Printer offers a variety of features including: a ***Quik-Key***[™] Fast Label Formatting System, a custom formatting option, letter quality font for large and normal text sizes, multi-language screen prompts, rotated and underlined text, automatic serialization of labels, automatic legend repeat, and superior print speed.

This manual will guide you step-by-step through the set-up, operation, and troubleshooting of the LS3E Printer. If you have problems not covered herein, contact your local Panduit Sales Representative.

SAFETY PRACTICES

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

DO NOT OPERATE IN AN EXPLOSIVE ENVIRONMENT

Do not operate the product in the presence of flammable gases or fumes. Operation of any electrical equipment in such an environment constitutes a definite safety hazard.

DO NOT OPERATE IN WET OR DAMP AREAS

Do not operate the product in wet or damp areas. Operation of any electrical equipment in such an environment constitutes a definite safety hazard.

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 equipment. The proper components for service and repair may be obtained from Panduit Corp., Labeling Systems Department.



WARNING:

When the printer has been in use for a long time, the print head may become hot. **DO NOT** touch the print head with bare hands.

INFORMATION TO USER

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 interference in which case the user will be required to correct the interference at his own expense.

This digital apparatus does not exceed Class B limits for radio noise for digital devices as 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 B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

This unit includes EMI/RFI filters, however, it is possible that infrequent electrical phenomena may cause printer functions to be temporarily interrupted. This interruption can be corrected by turning the printer “off,” and then back “on” again.

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. Please remember to fill out the enclosed warranty card and return to Panduit. 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 their intended use and user assumes all risk and liability whatsoever in connection therewith.

This warranty is made in lieu of and excludes all other warranties, expressed or implied. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE ARE SPECIFICALLY EXCLUDED. Neither seller nor manufacturer shall be liable for any other injury, loss or damage, whether direct or consequential, arising out of the use of, or the inability to use the product.

The product may be returned for service and repair by calling and requesting a Printer Tracking Number. Please provide your company name, contact name, address, telephone number, and serial number of the printer when requesting the Printer Tracking Number. When the Printer Tracking Number is issued, an address to mail the printer to will be provided.

Printers found to be defective in accordance with the above mentioned parameters can be returned for service and repair, and if required, replacement. Under no circumstances will used printers be returned for credit.

PLEASE RETAIN ORIGINAL LS3E SHIPPING CARTON FOR ANY RETURN SHIPMENTS.

The information contained in this literature is based on our experience to date and is believed to be reliable. It is intended as a guide for use by persons having technical skill at their own discretion and risk. We do not guarantee favorable results or assume any liability in connection with its use. Dimensions contained herein are for reference purposes only. For specific dimensional requirements consult the factory. This publication is not to be taken as a license to operate under, or a recommendation to infringe any existing patents. This supersedes and voids all previous literature, etc.

TECHNICAL SPECIFICATIONS

Dimensions: 4 1/4" Wide x 13 1/4" Long x 3 5/8" High

Weight: 2.7 lb.

Display: 2 line by 16 character LCD

Keyboard: 49 color coded keys with ergonomically designed keypad

Print Method: 9 pin dot matrix print head

Power: 12 VDC, 1200 mAh rechargeable Ni-Cad battery pack (included)

PRINTER SET-UP

REMOVAL / INSERTION OF THE BATTERY PACK

The battery pack can be found underneath the printer. Please note that the battery pack is designed to fit only one way in the printer. To remove the battery pack, squeeze the tabs at the top of the battery pack and slide down (See Figure 1). To re-insert the battery pack after charging, slide the battery pack up until you hear a click and the tabs lock into place. Use only with Panduit Model LS3E Printers. Recharge only with Panduit Model LS3E Battery Chargers (supplied with printer). The battery pack is shipped uncharged with the printer, and must be charged a minimum of 15 hours before use.

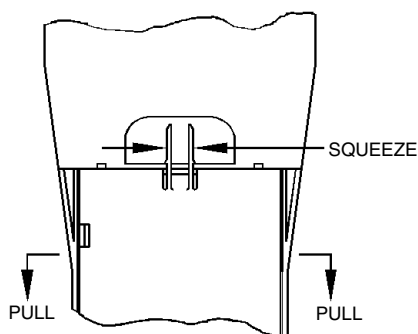


FIGURE 1



WARNING:

This battery pack contains a toxic substance (cadmium) and must be disposed of properly. Do not disassemble, short, or dispose of this battery in a fire which might cause it to release toxic substances or explode. Contact your local authorities for appropriate disposal and for additional information.

CONNECTING THE BATTERY CHARGER

A battery charger has been included with your LS3E Printer. There is an input connector on the right hand side of the battery pack. Insert the charger plug into the connector and plug the battery charger into an outlet. The printer will not operate with the battery charger plugged in.



WARNING:

Use of chargers other than those supplied by Panduit may damage or shorten the life of the printer or battery pack!

BATTERY POWER

It is recommended the user charge the battery for a minimum of 15 hours before operating the printer. When the battery pack power is low, the printer will display "WARNING: LOW BATTERY" until the user presses any key to acknowledge the message. To obtain maximum battery life the battery should continue to be used until the

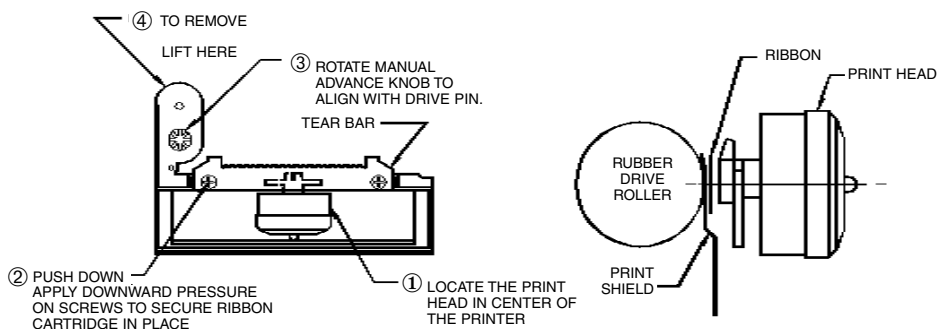
printer shuts down. The battery should then be recharged fully for 15 hours. When fully charged, the battery pack will measure 14-14.5 volts, and will power the printer all the way down to approximately 11 volts. The printer has an auto shut-off feature which will automatically turn the printer off after being idle for 5 minutes to conserve battery power.

NOTE:

“WARNING: LOW BATTERY” message is a warning and may appear with some battery life remaining. Therefore the printer can continue to be used until it shuts down.

RIBBON CARTRIDGE INSTALLATION

Open the label door of the printer by inserting your finger into the label exit slot and gently pulling up OR grasp the label compartment cover and pull up gently. Place the ribbon cartridge (Part Number LS3-RIB) in the ribbon compartment with the metal tear bar facing upward and the manual advance knob on the left (See Figure 2). Turn the manual advance knob counterclockwise while applying gentle downward pressure until the knob is positioned. Continue to turn the manual advance knob while pushing down on the screws on the metal tearbar until the ribbon cartridge snaps onto both plastic tabs on the sides of the rubber drive roller. Once installed, turn the manual advance knob counterclockwise to make sure the ribbon is loaded properly. Make sure the ribbon is between the nose of the print head and the print shield (See Figure 2).



WHEN LOADING BE SURE THAT THE RIBBON IS LOCATED
BETWEEN THE PRINT SHIELD AND THE PRINT HEAD.

FIGURE 2



WARNING:

Do not operate the printer when the ribbon cartridge is not installed. This may cause damage to the print head.

RIBBON CARTRIDGE REMOVAL

To remove the ribbon cartridge, place your finger under the ribbon cartridge at the location shown in Figure 2 near the manual advance knob. Lift upward firmly until the cartridge snaps loose.

PRINTER OPERATION

The LS3E Printer is extremely versatile and is designed to accommodate all levels of experience. The user can view and select options through use of the SETUP menu. The experienced user can quickly configure the printer to the desired formats using the **Quik-Key™** options or if completing repetitive jobs can use the custom formatting option immediately after turning the printer on. The use of each of these options is covered below in Sections 1 through 3.

SECTION 1: Using the SETUP Menu

Step 1: Turning the Printer On:

Locate the POWER Key, represented by the $\text{\textcircled{P}}$ symbol, found in the upper left hand corner of the keypad. Press and hold the POWER Key until the print head cycles. The LS3E will display the last label code in use.

Step 2: Loading/Removing the Labels:

1. Load labels on mandrel (label roll holder), as shown on the decal inside the printer door.
2. Look inside the label door area and locate the label width guides found behind the print mechanism. Push the left guide into the appropriate slot in the aluminum base to match your label width. Be sure the guides lock into position.
3. Place leading edge of label liner under the rubber drive roller until contact is made, label side down (See Figure 3 for label orientation when loading). **Insure the labels are loaded all the way to the right side.**
4. Press and release the FEED Key to load the labels into printing position.
5. Place mandrel behind label width guides and close the cover door.

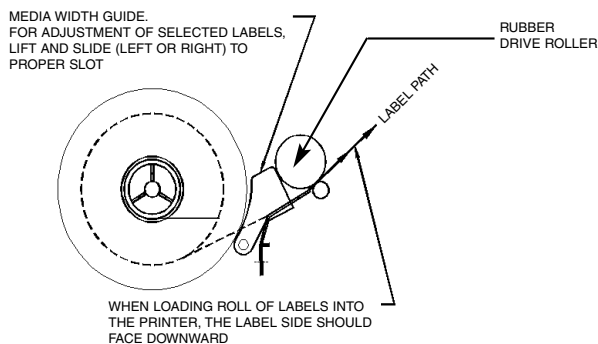


FIGURE 3

To unload the labels, press and release the SHIFT Key and then press and release the FEED Key. When reverse feeding labels that have been printed, or have moved past the ribbon tearbar, push labels toward drive roller while reverse feeding to prevent snagging of labels, or tear off excess labels before unloading.



WARNING:

When using heat shrink tubing, the liner must be cut or torn along the perforation by hand. Trying to use the tear bar to cut the heat shrink liner will not work, and may damage the tear bar.

Step 3: Entering the Label Code:

All LS3E label rolls have a 4 digit label code. The label code can be found inside the label core, on a label attached to the first label on the roll, and also on the box label. Using the key pad, key in the 4 digit code and then press the ENTER Key, or simply press the ENTER Key if desired label code is already displayed in the LCD.

Step 4: Selecting the Desired Format:

To view the format of your label or to change that format press the SETUP Key. This will display the SETUP menu screens where you may view or change the label format. The SETUP menu consists of 11 menus with between 1 and 11 options per menu. To change between each menu use the → or ← Keys. To view options within each menu use the ↑ or ↓ Keys. The option with the * beside it shows the selected option. To select an option, press the ENTER Key. An * will appear to the left verifying your selection. Once all desired options and features have been selected press the "X" Key and this will display the SETUP menu exit screen. Press the ENTER Key to exit the SETUP menu and you are ready to enter your label legend.

Step 5: Entering the Desired Legend:

The printer features a 2 line by 16 character LCD display. If the legend that you desire is greater than 16 characters long or greater than 2 lines high then you will not be able to view the entire legend at one time. Enter the desired legend via the keypad. Once you have completed the current line, press the ENTER Key to move the cursor to the start of the next line. It is not necessary to hit the ENTER Key on the last line of text. Use of the automatic legend repeat (See page 11) and serialization (See page 14) features can significantly reduce the time required to produce labels. If during legend entry an error is made, position the cursor over the incorrect character and press the CLR/DEL Key to delete that character. Press and release the SHIFT Key prior to pressing the CLR/DEL Key to clear the entire legend.

Step 6: Printing Your Labels

To print a copy of the currently selected label press the PRINT Key. This will print one set of the current selected labels. Pressing and releasing the SHIFT Key prior to pressing the PRINT Key will allow you to print multiple copies of the currently selected label. Multiple copies can also be selected in the SETUP menu. Pressing the PRINT Key during a print job will stop the print job.

SECTION 2: Using the *Quik-Key™* Fast Label Formatting System:

Step 1: Turning the Printer On:

See SECTION 1: Using the SETUP Menu, Step 1.

Step 2: Loading the Labels:

See SECTION 1: Using the SETUP Menu, Step 2.

QUIK-KEY™ OPTIONS

<u>OPTION</u>	<u>QUIK-KEY™ CODE</u>	<u>PRINT MODE</u>	<u>EXAMPLE</u>
TEXT FONT	K	Standard *	ABC
	Q	Letter Quality @	ABC
	R	Rotated	>
TEXT SIZE	V	Compressed Text	ABC
	S	Small Text	ABC
	N	Normal Text*	ABC
	L	Large Text	ABC
TEXT CASE	O	Lower Case @	abc
	P	Upper Case *	ABC
PRINT DENSITY	A	Normal*	ABC
	B	Bold	ABC
HORIZONTAL TEXT POSITION	E	Left	ABC
	F	Right	ABC
	G	Center*	ABC
VERTICAL TEXT POSITION	H	Top	ABC
	I	Bottom	ABC
	J	Center*	ABC
LABEL FORMAT	C	Component Label*	} See Figures Below
	M	Strip Label	
	T	Terminal Block Label	
	W	Wiremarker Label	
OTHER OPTIONS	D	Demo Print	
	U	Underlined Text +	<u>ABC</u>
COMPONENT CODE: C (Default)	STRIP CODE: M	TERMINAL CODE: T (Must Select Vertical Spacing)	WIREMARKER CODE: W (Automatic Legend Repeat)
MAIN POWER 440 VOLTS	A1 A2 A3 A4	-1 -2 -3 -4	ABC ABC ABC ABC

- * Auto-Set Parameter.
- @ This option is available only with Normal and Large size text.
- + This option is not available with Large text or Rotated text.

Step 3: Entering the Label Code and Pressing the Letter Q to Enter the *Quik-Key™* Options:

All LS3E label rolls have a 4 digit label code. The label code can be found inside the label core, on a label attached to the first label on the roll and also on the box label. Using the key pad, key in the 4 digit code, press the "Q" Key. The screen will now display the *Quik-Key™* format screen and allow you to enter up to 6 *Quik-Key™* options, as listed on page 11 and on the back of your battery pack. When all options are complete press the ENTER Key to exit the *Quik-Key™* options and return to the label code menu. Press the ENTER Key to exit to the legend entry screen.

Step 4: Entering the Desired Legend:

See SECTION 1: Using the SETUP Menu, Step 5.

Step 5: Printing Your Labels:

See SECTION 1: Using the SETUP Menu, Step 6.

SECTION 3: Using the Custom Formatting Option:

Step 1: Turning the Printer On:

See SECTION 1: Using the SETUP Menu, Step 1.

Step 2: Loading the Labels:

See SECTION 1: Using the SETUP Menu, Step 2.

Step 3: Entering the Label Code and the Custom Formatting Option:

All LS3E label rolls have a 4 digit label code. The label code can be found inside the label core, on a label attached to the first label on the roll and also on the box label. Using the key pad, key in the 4 digit code number and then the letter corresponding to the desired custom formatting option as listed on page 13 (e.g., C, W, T, R, or S). Press the ENTER Key to finish your selection.

	(C)omponent	(W)iremarker	(T)erminal	(R)otated	(S)pecial
TEXT FONT	Letter Quality	Letter Quality	Letter Quality	Letter Quality	Standard
TEXT SIZE	Normal	Normal	Large	Large	Normal
TEXT CASE	Upper	Upper	Upper	Upper	Upper
PRINT DENSITY	Normal	Normal	Normal	Normal	Normal
HOR. POSITION	Center	Center	Center	Center	Center
VER. POSITION	Center	Bottom	Center	Center	Center
LABEL FORMAT	Component	Wiremarker	Terminal	Component	Component
UNDERLINE	No	No	No	No	No
TEXT ORIENTATION	Normal	Normal	Normal	Rotated	Normal

*See CHANGING CUSTOM FORMATTING OPTIONS below to change any of these settings.

Step 4: Entering the Desired Legend:

See SECTION 1: Using the SETUP Menu, Step 5.

Step 5: Printing Your Labels:

See SECTION 1: Using the SETUP Menu, Step 6.

CHANGING CUSTOM FORMATTING OPTIONS:

Each of the 5 custom formatting options can be customized to fit the specific needs of the user and can result in quicker and more consistent label production. Custom formatting options may be viewed or changed through use of the SETUP menu. At printer power-up enter the custom formatting option that you desire to review (See Section 3, Step 3.) Press the SETUP Key to enter the SETUP menu. Each feature and option activated for the selected custom formatting option will be displayed with an * beside that option. If a change is desired, then move to the options that you want to set and press the ENTER Key. Prior to exiting the SETUP menu, select #7 OTHER OPTIONS and select the SET FORMAT options screen that corresponds to the format that you would like to save your changes under. Press the ENTER Key. Default settings were selected by Panduit to represent the most commonly completed tasks of users and are included in on this above for reference.

PRINTER SHUTDOWN

To turn the printer off, two key strokes are required. Press and release the SHIFT Key and then press and release the POWER Key. This prevents inadvertent shutdown. The printer will automatically turn itself off after being idle for 5 minutes to conserve battery power. This function can be deactivated by selecting the Auto Shut Off option in the Other Options menu of the main SETUP menu.

CREATING SERIALIZED LEGENDS ON SUCCESSIVE LABELS

Symbols and alternate characters (yellow alternate characters on keys) will not serialize. During legend entry, place the cursor at the desired location of the serialized property and press the SRL Key.

- Use the ↑ or ↓ Key to highlight Numeric or Alphabetic and then press the ENTER Key.
- Enter in the starting character and press the ENTER Key.
- Enter in the ending character and press the ENTER Key.
- Enter in the desired increment and press the ENTER Key.

For an Alphabetic Serialization example, Start - A, End - H, Increment - 2 will produce labels with A, C, E, and G respectively. Up to 4 separate serializations can be defined per label. After the serialization is complete, the screen will show " " at the location in the legend where the serialization was inserted.

PRINTING UPPER AND LOWER CASE LEGENDS IN THE SAME LABEL

- Key in the portion of the legend that is to appear in upper case. Use the SPACE Key to leave blanks where lower case letters will appear.
- Press the SETUP Key. Select the Lower Case option in the Text Case menu and exit the SETUP menu.
- Use the arrow keys to position the cursor to the desired location of the lower case letters and use the key pad to insert the lower case letters.

PRINTING UNDERLINED AND NON-UNDERLINED LEGENDS IN THE SAME LABEL

- Key in the portion of the legend that will not be underlined. Use the SPACE Key to leave blanks where underlined characters will appear.
- Press the SETUP Key. Select the Underlined option in the Other Options menu and exit the SETUP menu.
- Use the arrow keys to position the cursor to the desired location of the underlined characters and use the key pad to insert the underlined characters.

Note: Underlined characters do not display with underline, but will print as underlined.

PRINTING BOLD AND NON-BOLD LEGENDS IN THE SAME LABEL

- Key in the portion of the legend that will not be bold. Use the SPACE Key to leave blanks where bold characters will appear.
- Press the SETUP Key. Select the Bold option in the Print Density menu and exit the SETUP menu.
- Use the arrow keys to position the cursor to the desired location of the bold characters and use the key pad to insert the bold characters.

SAVING, RECALLING AND DELETING LABEL FILES

The LS3E has the ability to save and recall labels. Saving or recalling label files is completed through the SETUP menu as follows:

Saving A Label

- Once the label legend is entered press the SETUP Key.
- Select the Save Label option in the Other Options menu and press the ENTER Key.
- Enter in up to 8 characters to identify the label file and press the ENTER Key.
- Exit the SETUP menu.

Note: If you enter the name of a label that already exists then the printer will ask if you want to overwrite that file. If you answer Y then the file will be overwritten; answering N will start the saving process over.

Recalling a Label

- Select the Recall Label option in the Other Options menu and press the ENTER Key.
- Enter in up to 8 characters to identify the label and press the ENTER Key.
- Exit the SETUP menu.

Note: The current label code must match the label code of the label file you are trying to recall.

Deleting a Label

- Select the Delete Label option in the Other Options menu and press the ENTER Key.
- Enter in up to 8 characters to identify the label and press the ENTER Key.
- Exit the SETUP menu.

Note: At the Name: [_ _ _ _ _] screen press the ↑ or ↓ arrow to view the list of currently saved label files. When the name of the file that you would like to Save, Recall or Delete is listed, press the ENTER Key to complete the operation.

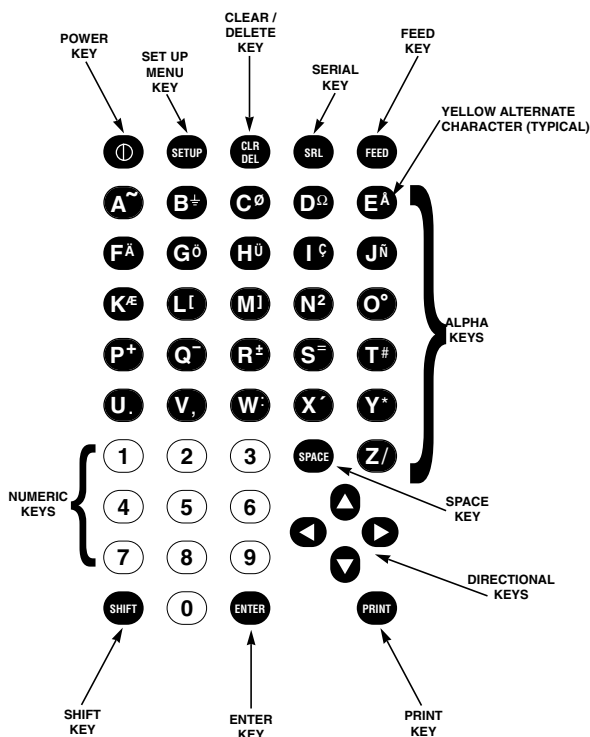
TERMINAL BLOCK LABELS

Selecting the Terminal option in the Label Format menu of the main SETUP menu allows the user to set the vertical spacing between text lines. The user will be asked to input the vertical spacing prior to legend input. This feature is designed to allow quick and accurate production of Terminal Block labels as follows.

- Display the Terminal option in the Label Format menu of the Main SETUP menu. Press the ENTER Key.
- Enter in the desired vertical spacing using the keypad. Press the ENTER Key. If the vertical spacing entered would result in one line of text overprinting the next line of print, a warning will be displayed. Press the ENTER Key and enter in a larger vertical spacing.
- Exit the SETUP menu.
- Enter the desired legend

Notes: The Terminal option can be used in conjunction with serialization (see page 14) and with rotated text. When continuous terminal block labels (labels with code ending with 00) are used, the printer will automatically select the Terminal option for the user. Line spacing can be entered in inches or millimeters; use the UP ARROW Key and DOWN ARROW Key to select the desired units. Part numbers LC-14 and LC-15 are continuous terminal block labels.

Terminal Block	Rotated Terminal Block
DATA 1 PHONE 1 FAX 1	DATA 1 PHONE 1 FAX 1
Serialized Terminal Block	Rotated Serialized Terminal Block
101 102 103	101 102 103



**To reach yellow alternate character or function, press SHIFT, release and then press the appropriate key.

FIGURE 4

KEY DESCRIPTION CHART

KEY / SYMBOL	FUNCTION
POWER ⏻	Turns the printer on, SHIFT then POWER turns the printer off
SETUP	Activates the SETUP menu.
CLR/DEL	DEL-removes the character above the cursor, CLR (SHIFT DEL) - erases the text on the entire label
SRL	Activates serializing function
FEED	Advances one label, SHIFT then FEED reverse feeds
SPACE	Inserts a blank character
UP ARROW ▲	Moves cursor up, one option or line at a time
DOWN ARROW ▼	Moves cursor down, one option or line at a time
RIGHT ARROW ►	Moves cursor right, one option or character at a time
LEFT ARROW ◄	Moves cursor left, one option or character at a time
PRINT	Activates printing of label(s), SHIFT then PRINT for multiple copies.
ENTER	Completes a selection or moves cursor to next line.
SHIFT	Access alternate function or characters

Printer Replacement Parts

Part Number	Description
LS3-RIB	Replacement Printer Ribbon
LS3E-BP	Replacement Battery Pack
LS3E-MAN-A	Replacement Operator Manual
LS3EC-*	Replacement Battery Charger

Optional Accessories

Part Number	Description
LS3E-CP	Replacement Battery Charging Pack. Power the LS3E directly from an AC Power Source and charge the LS3E Battery Pack at the same time. This Charging Pack must be used with the Universal AC Adapter and Power Cords (not included).
LS3-BS	Printer Belt Holster
LS3-CASE	Hard Sided Carrying Case
CORD-*	Replacement Power Cord
LS3EA	Replacement Universal AC Adapter
LS3EAP	Replacement Auto Plug. Powers the LS3E directly from Auto Cigarette Lighter.

KITS

Part Number	Description
LS3EAC*	1 each: Universal AC Adapter (LS3EA) Battery Charging Pack (LS3E-CP) and Power Cord (CORD*). Powers the LS3E directly from the Power Outlet and charges the LS3E Battery Pack at the same time.
LS3EAK-*	1 each: Universal AC Adapter (LS3EA) and Power Cord (CORD*). Powers the LS3E directly from a power outlet.
LS3ECAP	1 each: Battery Charging Pack (LS3E-CP) and Auto Plug (LS3EAP). Powers the LS3E directly from Auto Cigarette Lighter and charges the LS3E Battery Pack at the same time.

*A=Australia, E=European, S=North American, U=United Kingdom

HELPFUL HINTS

1. Entering Text:
The printer will automatically restrict your entry to the size of the label (determined by your 4-digit label code). The printer will allow you to key in only as many characters as will fit on the label. Use the ARROW Keys to move within the text on your label. To delete or replace characters, simply move the cursor via the 4 directional arrow keys to the desired position, and press the DEL Key to delete a character - or press a letter/number to overwrite the original character. The text entries will be positioned according to the horizontal text position selected.
2. To activate any of the alternate characters appearing in yellow on any key, press and release the SHIFT Key. An upcarrot “^” will be displayed, signifying that the next keystroke will be the desired alternate character (e.g. alternate character is “/” instead of “Z”).
3. To delete any entered character, move the cursor with the ARROW Keys over any character and press the DEL Key.
4. Press the ENTER Key to advance to the next numbered line in your legend.
5. Use the ARROW Keys to move cursor to any line desired.
6. To completely clear a label legend, press and release the SHIFT Key and then press the CLR/DEL Key.
7. Press and release the SHIFT Key, then press and release the FEED Key to reverse feed the label.
8. Press and release the SHIFT Key and then hold the UP ARROW Key or DOWN ARROW Key to micro advance or micro reverse labels, respectively.

9. Press and release the SHIFT Key then press the POWER Key to turn the printer off.
10. The printer will automatically turn itself off after being idle for 5 minutes to conserve battery power. This feature can be disabled by using the **Quik-Key™** code "Y".
11. Press and release the SHIFT Key, then press and release the PRINT Key to print multiple copies.
12. When saving a label file, it is recommended to include the 4 digit label code in the file name. This will help you to have the proper labels loaded the next time you recall that label file.

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 Service at (888)506-5400 extension 7470.

SYMPTOM	PROBABLE CAUSE	ACTION
Printer does not power up properly, and LCD does not come on.	Printer not receiving power. Charger plugged in. Battery pack is worn out or damaged.	To turn printer on, depress the power button and hold down until the printhead cycles. Make sure the battery pack is fully charged. Charge a drained battery pack for a minimum of 15 hours with LS3EC-* battery charger. Make sure battery pack is fully seated into printer (e.g., the battery pack snaps into place). Unplug charger. Make sure battery charger is not plugged into a switched outlet when charging the battery. Try a new charged battery pack.
Media is not advancing properly in the printer.	Label jam in printer. Labels are not loaded properly. End of label roll reached.	Label is caught in print mechanism. To clear a jam: 1. Turn printer power OFF. 2. Open printer door. 3. Detach any printed labels. 4. Remove unprinted labels from the printer. 5. Carefully remove any labels caught in the printer. Make sure labels are properly loaded on mandrel, and side guides are positioned correctly. Labels should be as far to right as possible. Detach end of label roll from core.
Labels will not reverse feed.	Printed labels are snagging on tearbar or print shield.	Tear off printed labels before reverse feeding, or push labels toward drive roller while reverse feeding.

Labels not registering properly, or stopping at next label.	Labels are not loaded properly. Sensor is dirty.	Make sure labels are properly loaded on mandrel, and side guides are positioned correctly. Labels should be located as far to right as possible. Make sure printhead is located in the center of the printer. Carefully clean registration sensor located to the right side of drive roller by blowing on the opening of the sensor.
Not printing.	Printer is not ready to operate.	Make sure printer: 1. Is turned on. 2. Has ribbon cartridge properly loaded.
Print is smudged or too dark.	Ribbon is not loaded correctly. Drive roller or print shield is dirty.	Load ribbon properly between the printhead and print shield. Remove ribbon cartridge, and carefully clean drive roller, print shield, and print mechanism assembly with isopropyl alcohol and cotton swab.
Print dots missing or light.	Ribbon problem. Drive roller is not seated properly. Printhead has broken pin or blown solenoid (visible if a portion of the line of text is missing).	Make sure ribbon is properly installed between the printhead and print shield, and ribbon manual advance knob is spinning during printing. Ribbon is worn. Replace ribbon. Ribbon not advancing. Remove cartridge from printer, and make sure ribbon can be advanced by turning knob on ribbon cartridge counter-clockwise. Install ribbon properly. Make sure drive roller is not skewed and is firmly supporting the label stock. Contact Panduit Technical Service at (888)506-5400 extension 7470.

Unexpected printing results.	Battery pack is fully drained. Printhead is not moving freely, causing text to be compressed together or printed on edge of label.	Charge battery pack, if “LOW BATTERY” warning message was previously received. Make sure ribbon is advancing freely. Make sure no labels are stuck in the printer. If required, lubricate printhead shafts (see below for more information).
Printhead does not slide freely or fully.	Printhead shafts need to be lubricated. Battery pack is fully drained.	Carefully apply a thin film of oil (Tuffoil Lubit-8, or equivalent) to the 2 printhead shafts. Tuffoil Lubit-8 is manufactured by: Fluoramics, Inc. 18 Industrial Avenue Mahwah, NJ 07430 Charge battery pack, if “LOW BATTERY” warning message was previously received.
Ribbon is not advancing properly.	Ribbon is not loaded correctly. Ribbon drive pin needs to be lubricated.	Load ribbon properly between the printhead and print shield. Carefully apply a small amount of oil to the drive pin (Tuffoil Lubit-8, or equivalent).
Code vs. Size error message.	Printer width sensor detects label width different than that defined by the label code.	Verify label code and enter correct label code, if incorrect. Close printer door. Press any key to clear error message, and ignore.
Character does not display on screen when key is depressed.	Key is stuck.	Make sure no keys are stuck in the depressed position.

Lines Per Label / Characters Per Line

Pandaunit Label P/N	Label Code*	Print Width In. (mm)	Print Length In. (mm)	Compressed Text		Small Text		Normal Text		Large Text	
				Lines per label	Characters per line	Lines per label	Characters per line	Lines per label	Characters per line	Lines per label	Characters per line
L3CBX##	1313	0.50 (12.7)	0.50 (12.7)	4	8	4	6	3	4	2	3
L3CPLF@	3108	1.23 (31.1)	0.33 (8.5)	2	22	2	17	1	12	1	9
L3EFPL1	1074	0.38 (9.5)	2.90 (73.7)	33**	2**	33**	2**	22**	1**	16**	1**
L3EFPL2	3808	1.50 (38.1)	0.34 (8.5)	2	28	2	22	1	16	1	11
L3EFPN1	0876	0.33 (8.5)	3.00 (76.2)	34**	2**	34**	2**	23**	1**	17**	1**
L3EFPN2	1050	0.40 (10.2)	1.95 (49.5)	21**	3**	21**	3**	15**	1**	11**	1**
L3PJ1##	2607	0.64 (16.2)	0.19 (4.8)	1	11	1	9	1	7	1	5
L3PL1	3838	1.50 (38.1)	1.50 (38.1)	16	28	16	22	11	16	8	11
L3PL2	3823	1.50 (38.1)	0.90 (22.9)	9	28	9	22	6	16	4	11
L3PP2++	0993	0.25 (6.4)	3.68 (93.5)	41**	1**	41**	1**	28**	1**	21**	1**
LC-1	3832	1.50 (38.1)	1.25 (31.8)	13	28	13	22	9	16	6	11
LC-2	2525	1.00 (25.4)	1.00 (25.4)	10	17	10	14	7	10	5	7
LC-3	1313	0.50 (12.7)	0.50 (12.7)	4	8	4	6	3	4	2	3
LC-4	2519	1.00 (25.4)	0.75 (19.1)	7	17	7	14	5	10	3	7
LC-5	3819	1.50 (38.1)	0.75 (19.1)	7	28	7	22	5	16	3	11
LC-6	1307	0.50 (12.7)	0.28 (7.0)	1	8	1	6	1	4	1	3
LC-7	2507	1.00 (25.4)	0.28 (7.0)	1	17	1	14	1	10	1	7
LC-8	3807	1.50 (38.1)	0.28 (7.0)	1	28	1	22	1	16	1	11
LC-9	2510	1.00 (25.4)	0.40 (10.2)	3	17	3	14	2	10	1	7
LC-10	2513	1.00 (25.4)	0.50 (12.7)	4	17	4	14	3	10	2	7
LC-11	3813	1.50 (38.1)	0.50 (12.7)	4	28	4	22	3	16	2	11
LC-14	0900	0.31 (7.9)	CONTINUOUS	---	5	---	4	---	2	---	2
LC-15	1000	0.38 (9.5)	CONTINUOUS	---	6	---	4	---	3	---	2
LC-38	3611	1.50 (38.1)	0.75 (19.1)	3	26	3	20	2	15	1	10
LC-39	3811	1.50 (38.1)	0.75 (19.1)	3	28	3	22	2	16	1	11
LC-40	3813	1.50 (38.1)	0.75 (19.1)	4	28	4	22	3	16	2	11
LC-41	3617	1.50 (38.1)	0.75 (19.1)	6	26	6	20	4	15	3	10

*Label codes are distinct codes used to tell the printer the size of the label.

**Because these labels are generally printed in the Rotated Text Mode, values shown are for Rotated Text.

##WH= White, CL=Clear.

@ WH=White, YL=Yellow, RD=Red, BU=Blue, GR=Green, IG=Gray, OR=Orange, PR=Purple, BR=Brown, CL=Clear

++ WH=White, YL=Yellow, RD=Red, BU=Blue, GR=Green, IG=Gray, OR=Orange, PR=Purple, BR=Brown

Panduit Label P/N	Label Code*	Print Width In. (mm)	Print Length In. (mm)	Compressed Text		Small Text		Normal Text		Large Text	
				Lines per label	Characters per line	Lines per label	Characters per line	Lines per label	Characters per line	Lines per label	Characters per line
LHSW-1/LHSY-1*	T206	0.50 (12.7)	0.25 (6.4)	1	8	1	6	1	4	0	0
LHSW-2/LHSY-2	T106	1.00 (25.4)	0.25 (6.4)	1	18	1	14	1	10	0	0
LHSW-3/LHSY-3*	T211	0.50 (12.7)	0.44 (11.2)	3	8	3	6	2	4	1	3
LHSW-4/LHSY-4	T111	1.00 (25.4)	0.44 (11.2)	3	18	3	14	2	10	1	7
LHSW-5/LHSY-5	T121	1.00 (25.4)	0.84 (21.3)	8	18	8	14	5	10	4	7
LHSW-6/LHSY-6*	T208	0.50 (12.7)	0.34 (8.5)	2	8	2	6	1	4	1	3
LHSW-7/LHSY-7	T108	1.00 (25.4)	0.34 (8.5)	2	18	2	14	1	10	1	7
LW-1	1332	1.00 (25.4)	1.25 (31.8)	13	8	13	6	9	4	6	3
LW-2	2532	1.00 (25.4)	1.25 (31.8)	13	17	13	14	9	10	6	7
LW-3	1325	0.50 (12.7)	1.00 (25.4)	10	8	10	6	7	4	5	3
LW-4	1319	0.50 (12.7)	0.75 (19.1)	7	8	7	6	5	4	3	3
LW-5*	2532	0.50 (12.7)	1.25 (31.8)	13	7	13	6	9	4	6	3
LW-6*	2519	0.50 (12.7)	0.75 (19.1)	7	7	7	6	5	4	3	3
LWS-1	1313	0.50 (12.7)	0.50 (12.7)	4	8	4	6	3	4	2	3
LWS-2 ▲▲	2513	1.00 (25.4)	0.50 (12.7)	4	17	4	14	3	10	2	7
LWS-3	3813	1.50 (38.1)	0.50 (12.7)	4	28	4	22	3	16	2	11
LWS-4	1310	0.50 (12.7)	0.38 (9.5)	3	8	3	6	2	4	1	3
LWS-5	2510	1.00 (25.4)	0.38 (9.5)	3	17	3	14	2	10	1	7
LWS-6	1310	0.50 (12.7)	0.38 (9.5)	3	8	3	6	2	4	1	3
LWS-7	2510	1.00 (25.4)	0.38 (9.5)	3	17	3	14	2	10	1	7
LWS-8*	2510	0.50 (12.7)	0.38 (9.5)	3	7	3	6	2	4	1	3
LWS-9*	2513	0.50 (12.7)	0.50 (12.7)	4	7	4	6	3	4	2	3
LWS-10 ▲▲	2519	1.00 (25.4)	0.75 (19.1)	7	17	7	14	5	10	3	7
LWS-11	3819	1.50 (38.1)	0.75 (19.1)	7	28	7	22	5	16	3	11
LWS-12 ▲▲	2525	1.00 (25.4)	1.00 (25.4)	10	17	10	14	7	10	5	7
LWS-13	3825	1.50 (38.1)	1.00 (25.4)	10	28	10	22	7	16	5	11
LWS-14	2538	1.00 (25.4)	1.50 (38.1)	16	17	16	14	11	10	8	7
LWS-54	2513	1.00 (25.4)	0.50 (12.7)	4	17	4	14	3	10	2	7

*Label codes are distinct codes used to tell the printer the size of the label.

• Butt-cut double wide

▲▲ To order with colored print-on area, add YL for Yellow, RD for Red, BU for Blue, GR for Green, IG for Gray, OR for Orange, PR for Purple, BR for Brown

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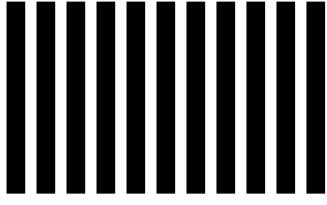
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