



The Most Reliable Portable Printers®

LP3 LABEL PRINTER

User's Guide



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Label Printer Views

Front View



Figure 1

Back View

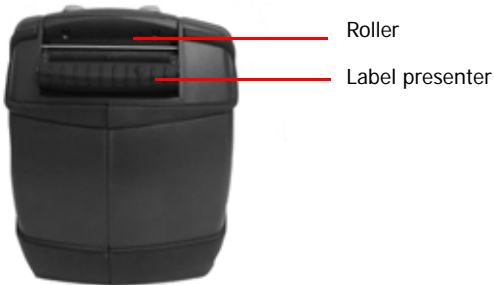


Figure 2

Right Side View

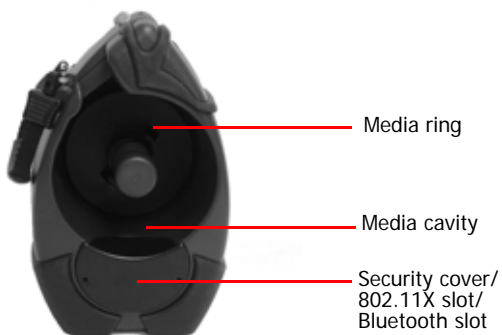


Figure 3

Left Side View

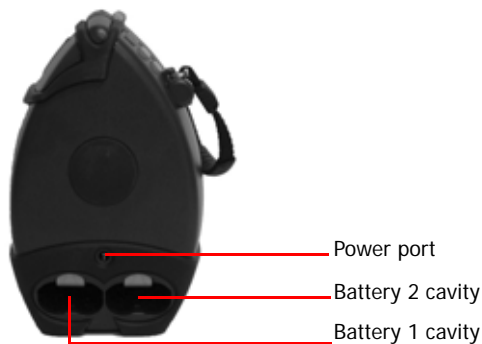


Figure 4

Setting Up Your Printer

Use the following information to set up your printer:

- Unpacking Your Printer on page 3
- Installing Batteries on page 3
- Loading Printable Media on page 7
- Printing a Self-Test on page 12
- Connecting the Printer on page 12
- Configuring the Printer on page 14

In addition to the steps outlined in each section, additional information may be included if it applies to, or expands upon, the step being discussed.

Unpacking Your Printer

Before using the printer, remove all packaging material and inspect the printer for possible shipping damage.

If the printer has been damaged:

- Contact the shipping company and file a damage report.
- Contact O'Neil Product Development, Inc.
- Keep all shipping materials.

Installing Batteries

1. Remove any packaging material (if applicable).
2. Lift the silver battery tab and pull on the red tab to remove the battery from the battery well (Figure 5).
3. Remove and discard the two red, battery isolator labels (Figure 6).



Figure 5



Figure 6

4. Position the battery with its **contacts facing up**. The battery contacts should face toward the back of the battery cavity (Figure 7).
5. Insert the battery into the battery cavity. The printer beeps one time when the first battery is installed.

Do not force the battery into the battery cavity. When inserted properly, the battery easily slides into place and the silver battery tab “locks” the battery (Figure 8). If the battery does not easily slide into place, re-align the battery based on step 2 above.



Figure 7



Figure 8

6. Repeat steps 1 to 5 to install the additional battery. Both batteries must be installed for your printer to operate properly.
7. Charge the batteries (batteries are shipped uncharged). For more information, see *Charging the Batteries on page 5*.

Removing Batteries

1. Lift the silver battery tab (Figure 9). If the battery does not completely eject, slightly tilt the printer toward you to remove the battery.



Silver battery tab

Figure 9

Charging the Batteries

If the batteries are low when the printer turns on, the battery status LED displays red. For more information, see *Using the Control Panel on page 15*. Perform the following procedure to charge the batteries:

1. Verify both batteries are installed correctly.
2. Locate your AC adapter cable and verify the plug matches the photo in Figure 10 (may or may not have tag attached).
3. Plug the AC adapter into the printer's power port (Figure 11).



Figure 10

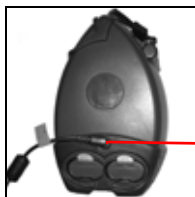


Figure 11

4. Plug the AC Adapter's power cord into an appropriate power source.
5. Charge the batteries. The Battery Status LED turns red while the batteries are charging and turns green when the batteries are fully charged. One complete charge takes 4 to 5 hours.

Determining the Batteries' Condition

The battery status LED displays the batteries' condition. When the battery status LED is solid red, the batteries must be charged; when solid orange, the batteries are at low power; when solid green, the batteries are charged. The batteries' voltage varies between 6.2 and 8.4 volts.

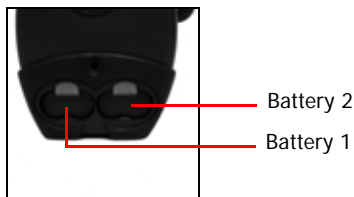


Figure 12

For information on battery error conditions, see *Using the Control Panel on page 15*.

Caution: There is a risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Caution: The operating temperature of this portable printer is 50° C. However, the operating temperature when used with O'Neil power supply part number 220240-100 for charging the portable printer is limited to 40 degrees C. Please charge the printer in a suitable location that meets this temperature requirement.

Caution: Please only use the O'Neil part number 220240-100 power supply with this product.

Loading Printable Media

Media Guidelines

Media width	1" to 3.125"
Roll capacity diameter	3.5"
Media types	Lined label media, thermal paper * Depending on the type of media used, you may need to configure your printer. For more information, see <i>Configuring the Printer on page 14</i> .

Use the following procedure to load printable media:

1. Move the printer so that the front of the printer is facing toward you.
2. While steadying the printer, push the two arrow buttons toward each other while opening the printhead cover (Figure 13).
3. Move the printer so that the left side of the printer is facing toward you.
4. Remove the media ring from the spindle by pressing the media ring's latches while pulling the media ring toward you (Figure 14).



Figure 13



Figure 14

5. Load the media onto the spindle. When loaded correctly, the media should form a figure "6" as shown in Figure 15.

6. Push the media as far back as possible on the spindle so that the edge of the media roll is aligned with the media "rib" of the label presenter as shown in Figure 16.



Figure 15



Figure 16

The printer begins printing at the media rib's edge; therefore, pushing the media back into the media cavity as far as possible helps to ensure the correct start position of the printhead.

7. Lay the media over the roller (Figure 17). If you are using lined media or perforated media, extend at least one (1) media label over the roller.
8. Slide the media guide as close as possible to the edge of the label without touching the media. Do not pinch the media. (Figure 18).

Note: To take up "slack" in the media, pull off or rewind the media.



Figure 17

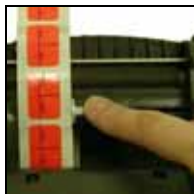


Figure 18

9. Re-attach the media ring onto the spindle and push it as far back as possible (the media ring "clicks" into place) as shown in Figure 19. The media ring must be attached to prevent the media from coming off of the spindle.

10. Close the printer's printhead cover. The printer's printhead cover "snaps" into place when completely closed.
11. Verify the media exits straight and the media is still aligned with the second "rib" of the label presenter.
12. If are presenting media, proceed to *Using the Label Presenter on page 10*.
13. Push the Media Function button one time to advance one label (if the printer is configured to recognize the bottom Q mark)(Figure 20).



Figure 19



Figure 20

Note: If the media advances more than one label, check your printer's configuration.

14. Remove the first label by grasping the media's top corner and pulling the paper up and away (Figure 21). Always tear media by pulling it over the top of the printer's lid. Verify the media tears between labels.

Warning: The tear bar and printhead cover's surface may be hot and/or sharp. Use caution when handling the printhead and tear bar.



Figure 21

Using the Label Presenter

Use the following procedure to separate lined media using the label presenter:

Note: You must configure your printer specifically to present media. For more information, see *Configuring the Printer on page 14*.

1. Install the lined media using the procedure described in *Loading Printable Media on page 7* steps 1 through 11.
2. Press the Media Function button so that a few labels extend beyond the tear bar (Figure 22). The edge of the tear bar should be the top of form for the next label (Figure 23).
3. Move the printer so that the back of the printer is facing toward you.
4. Remove the labels from the backing and discard.



Figure 22



Figure 23

Tear bar

5. Open the label presenter (Figure 24).
6. Route the media under the label presenter so that the end of the media exits under the presenter and over the metal bar (Figure 25).



Figure 24

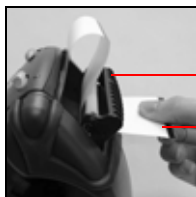


Figure 25

Label presenter

End of media

7. Pull the slack from the media and close the label presenter (Figure 26).

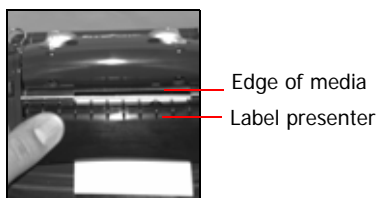


Figure 26

8. Press the Media Function button so that at least one label presents (Figure 27). The printer separates the lined media as shown in Figure 28 (side view). The media's backing should separate from the adhesive (Figure 28).

If you print more than one label during a print job, the printer waits for you to remove the label before presenting the next label.



Figure 27

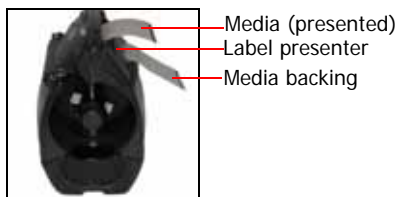


Figure 28

Printing a Self-Test

Note: When printing a self-test, use standard 3 inch receipt media without Q-Marks to show all printed data.

1. Press and hold the power button for approximately three (3) seconds until printing begins. For information on button functions, see *Using the Control Panel on page 15*.
2. After printing begins, release the power button.

Connecting the Printer

The LP3 is designed to transmit and receive data from a host terminal. The host terminal may be your computer, handheld, or laptop. Communication can occur by using a data cable to connect the printer and the host terminal.

Installing a Data Cable

1. Before connecting your printer to a host terminal, verify your printer's settings. For more information, see *Printing a Self-Test on page 12*.
2. Turn off the printer.
3. Insert the data cable's plug into your printer's data port (Figure 29).

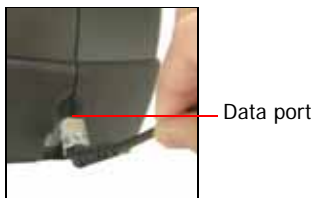


Figure 29

4. Connect the data cable to the host and/or device you are using.

Removing a Data Cable

1. Tilt the printer on its side so that the printer's data port is visible (Figure 30).
2. Using a pen or small screwdriver, lift the cable connector's lever and remove the cable.



Data port

Figure 30

Bluetooth and/or 802.11b Parameters

Your printer is configured with default factory settings. To determine your printer's radio configuration, print a self-test (For more information, see *Printing a Self-Test on page 12*). If you have multiple printers, configure them specifically for use in your environment.

For proper system operation, set the following parameters on your printer and host computer:

802.11b Parameters

- ESS ID
- IP Address (if not DHCP)
- DHCP
- Sub Net Mask
- WEP Encryption
- Port
- Network Type

Bluetooth Parameters

- Device Name
- Authentication
- Bondable
- Discoverable
- Connectable
- Encryption

For information on setting parameters, see *Configuring the Printer on this page*. Contact your network administrator to verify the proper radio settings for your environment.

Configuring the Printer

The printer has many configurable settings. To configure or upgrade firmware, download the latest Windows configuration program at www.oneilprinters.com.

Using the Control Panel

The tables on the following pages document the following:

- Audio Indicators on page 15
- Battery Status LED on page 16
- Power Button/LED on page 17
- Media Function Button/LED on page 17
- Radio Button/LED on page 18



Battery Status
LED



Power Button/
LED



Media Function
Button/LED



Radio
Button/LED

Audio Indicators

Beep(s)	Description	Action
1 short	Printer wakes up.	None.
2 short	Out of paper.	Install paper.
3 short	Low battery.	Charge battery.
1 very short	RF power is on. <i>Note:</i> This beep occurs when you press the RF power button and the RF power was off.	None.
2 very short	RF power is off. <i>Note:</i> This beep occurs when you press the RF power button and the RF power was on.	None.
1 long	Boot code is starting or restarting.	Redownload firmware.
8 short	CRC error in firmware.	Redownload firmware.

Battery Status LED



Battery Status LED	Description	Action
Red (solid): The batteries have less than 5% power.	<ul style="list-style-type: none"> If A/C power is not plugged in, the printer will soon turn off. If A/C power is plugged in, the LED flashes and charging is in progress. 	<ul style="list-style-type: none"> Charge batteries. None. Wait for the charge LED to turn green.
Orange (solid): The batteries have less than 25% power.	<ul style="list-style-type: none"> If A/C power is not plugged in, indicates the batteries are low. If A/C power is plugged in, the LED flashes and charging is in progress. 	<ul style="list-style-type: none"> Charge batteries. None. Wait for the charge LED to turn green.
Green (solid): The batteries are near, or at, full capacity.	<ul style="list-style-type: none"> If A/C power is not plugged in, batteries are well charged. If A/C power is plugged in, the LED is solid and charging is complete. 	<ul style="list-style-type: none"> None. None.
Red to orange flash - fast	Battery voltage is too high.	Replace battery.
Orange flash - slow	Charge has timed out.	Restart battery charge (battery may be bad).
Orange flash - fast	Internal code error.	Remove batteries, then re-connect A/C power.

Orange, red, or green flash - fast	When the AC adapter is plugged into the printer's power port, the battery status LED flashes orange, red, or green (depending on the battery status LED color that is initially displayed) to indicate the AC adapter is plugged in.	None.
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Power Button/LED

Power Button

Short press	If printer is off, turns printer on; if printer is on, turns printer off.
Long press (press and hold for three to five seconds)	Prints a self-test.

Power LED

Green	Power is awake.
Off	Printer is asleep.



Media Function Button/LED

Media Function Button

Short press	If printer is asleep, wakes up printer. If printer is awake, feeds one (1) label.
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Media Function LED

Red flash	Media is out; reload media.
Red flash - slow (if the printer is configured with the presenter ON)	Media is in the presenter.
Off	Media is present.

Radio Button/LED**Radio Button**

Short press	Toggles radio power off and on.
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Radio LED*

Blue flash - slow*	RF power is on and printer is awake.
Blue flash - fast*	RF power is on and printer is asleep.
Blue flash to solid red	The printer is out of range of the access point and/or infrastructure.
Blue flash to red flash	The printer is not correctly configured for the radio it recognizes.
Off	RF power is off.

* If the signal quality option is on (default is off) and the printer is awake, the amount of time the blue radio LED is on indicates the signal strength. For example, if the blue LED is on 90% of the time, the printer has a very strong signal; however, if the blue LED is on only 10% of the time, the printer has a very weak signal. When the signal quality option is turned on, the blue radio LED indicates signal strength only; it does not indicate whether the printer is awake or asleep as described in the table above.

Maintenance and Troubleshooting

Maintenance Guidelines

- Keep the printer in a cool, dry place, away from direct sunlight, high temperature, and moisture.
- Do not insert foreign objects into the printer.
- Do not operate the printer if it appears damaged.
- Do not operate the printer when your hands or body are wet.
- Do not operate the printer near water.
- To reduce risk of electric shock, unplug the printer and remove the batteries before cleaning.

Preventative Maintenance

Area	Method	Interval
Printhead/ roller	Use an approved cleaning card.	After every ten (10) rolls of media.
Tear bar	Clean thoroughly with 70% isopropyl alcohol on a cotton swab.	After every five (5) rolls of media.
Exterior	Use a soft cloth and mild cleanser if necessary. Do not use abrasive cleanser, chemicals or scrubbing pads, which can mark your printer's finish.	As needed.

Troubleshooting

Symptom(s)	Action
Printer does not print	<ul style="list-style-type: none"> • Verify the printer is turned on. • Recharge or replace the battery. • Verify the battery is properly installed. • Check your cable connections. (if applicable) • Check your radio card connections. If module is installed incorrectly, or configured incorrectly, data will not be transmitted from your host terminal to the printer.
Media/paper jam	<ul style="list-style-type: none"> • Open the printhead and reinstall media. • Verify the media is properly installed. For more information, see <i>Loading Printable Media on page 7</i>. • Clean the printhead and the media cavity.
Reduced battery capacity	<ul style="list-style-type: none"> • Recharge or replace battery.
Media does not feed	<ul style="list-style-type: none"> • Verify the printhead is closed and latched. • Verify the label sensors are not blocked.
Printer does not stop at Q Mark and/or, printer prints continuously	<ul style="list-style-type: none"> • Check your printer's configuration. Verify the configuration matches the type of media it is printing on.

Help Desk

If you need additional assistance, please contact O'Neil Printer Support at (949) 458-0588 ext.302 or e-mail printersupport@oneilinc.com. Please have the following information ready:

- Model number
- Serial number

Supplies

Media Supplies

O'Neil Product Development, Inc. offers many certified grades of paper for use in the printer. Our certified supplies are guaranteed compatible — this important qualification means that rigorous performance and image life testing have been performed. Quality supplies are key to obtaining optimal image quality and print performance. Quality supplies are also the key to extending the life of the printer. O'Neil Product Development strongly recommends using O'Neil Certified Supplies only.

For more information, contact O'Neil Printer Supplies Group at (949) 458-6400.

Maintenance Supplies

We recommend that you follow a regular maintenance schedule using our cleaning card. O'Neil's cleaning cards are designed to effectively remove dirt and other contaminants from the thermal printhead, rollers, and paper path...resulting in a clean, crisp image output — every time. Our cleaning kits remove any adhesive residue in addition to dirt and other contaminants.

For more information, contact O'Neil Printer Supplies Group at (949) 458-6400.

General Supplies

- Use only supplies certified by the Original Equipment Manufacturer (OEM). For OEM supplies, please contact O'Neil at (949) 458-0500.

For more information

- For more information about using the printer, contact O'Neil at (949) 458-0500, or visit www.oneilprinters.com.

Agency Approvals

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Applicable Directive

- 89/336/EEC, 73/23/EEC

Applicable Standards

- EN55022 (1998)
- EN55024 (1998)
- EN60950 (1992)



DECLARATION OF CONFORMITY

(According to ISO/IEC Guide 22 and EN 45014)
THE PRODUCT HEREWITH COMPLIES WITH THE REQUIREMENTS OF:

THE LOW-VOLTAGE DIRECTIVE 73/23/EEC.
THE EMC DIRECTIVE 89/336/EEC.

Manufacturer's Name:
O'Neil Product Development Inc.
8 Mason, Irvine, CA, 92618, USA

European Representative:
O'Neil Product Development Ltd
Witan Court 285-287, Upper Fourth Street,
Central Milton Keynes, UK MK9 1EH

Declares that the product listed below:

Product Type: ITE/Residential, Commercial, and Light Industrial
Product Name: Portable Thermal Printers
Model Number: LP3-L
Beginning Serial Number: All
Options: All
Date Issued: December 15 2006

Conforms to the following product specifications:

Safety: EN60950-1:2001

EMC: EN 55022 : 1998 / CISPR Publication 22 : 1997, Class B Limits and Methods
EN 55024 : 1998 +A1:2001 +A2:2003 (CISPR 24) ITE - Immunity Characteristics -
Limits and Methods of Measurement
EN 61000-4-2 : 1995+A1:1998 - Electrostatic Discharge
EN 61000-4-3 : 1995 - Radiated RF Field
EN 61000-4-4 : 1995 - Electrical Fast Transients
EN 61000-4-5 : 1995 - Voltage Surge
EN 61000-4-6 : 1996 - Conducted RF Field
EN 61000-4-8 : 1993 - Magnetic Field
EN 61000-4-11 : 1994 - Voltage Dips, Short Interruptions, And Variations
EN 61000-3-2 : 2000 - Harmonic Current Emissions
EN 61000-3-3 : 1995 +A1:2001 - Voltage Fluctuation and Flicker

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives(s) and Standards(s).

Company Official: Ken Carlson

Position: Director of Electrical Engineering

Signature: Signed Copy on File

Date: December 18, 2006

European Contact: O'Neil Product Development Ltd. Witan Court 285-287, Upper Fourth Street, Central Milton Keynes, UK MK9 1EH; Phone INT +44-1908-393300; Fax INT +44-1908-393400 www.oneilprinters.com

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