



The Most Reliable Portable Printers®

RP SERIES OF PRINTERS

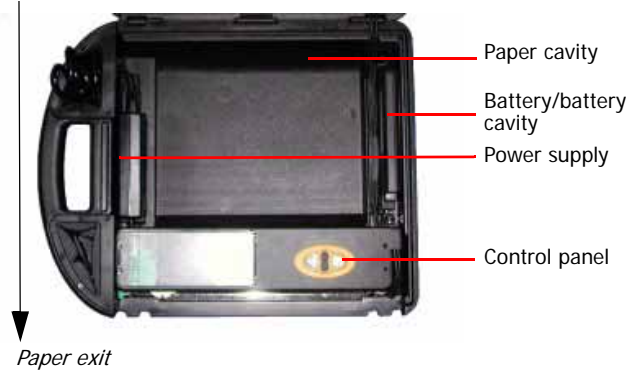
User's Guide



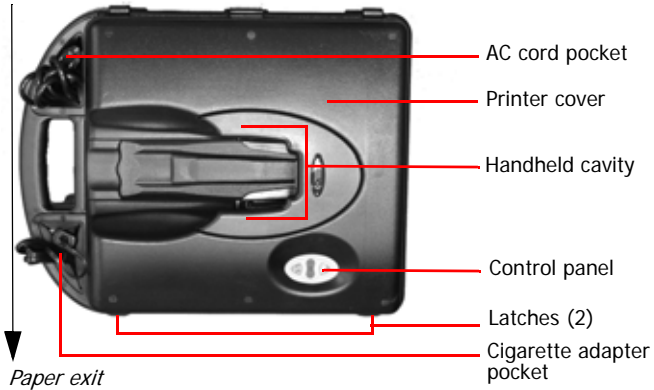
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RP Printer Views

Open View



Closed View



Installing the Printer

For information on installing the printer, see the *RP Installation Guide*, which is accessible from www.oneilprinters.com.

Using the Ribbon

Ribbon Guidelines

In the event of a jam to or under the ribbon, replace the ribbon immediately. If the jam continues, do not remove the smear guards.

Installing the Ribbon

1. Remove the ribbon from its packaging.
2. Open the printer's cover. Verify the control panel is facing toward you.
3. Remove the orange "Open Printer" label from the locking lever (Figure 1).
4. Slide the printhead away from the edge of the printer (Figure 2).



Figure 1



Figure 2

5. Hold the ribbon by the flat handle (Figure 3).

6. Install the ribbon on the printhead (Figure 4). Verify the ribbon is fully installed.



Figure 3

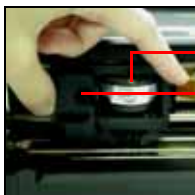


Figure 4

7. On the ribbon, turn the knob counter-clockwise several times to fully seat the ribbon to the printhead.

Removing the Ribbon

1. Slide the printhead away from the edge of the printer (Figure 5).



Figure 5

2. Pull the ribbon away from the printer (Figure 6).



Figure 6

Using Power Options

Use the following information to supply power to the printer:

- *Using a Battery on this page*
- *Using a Power Supply or Power Adapter on page 7*
- *Using a Cigarette Lighter Adapter or Optional Power Cables on page 9*

Using a Battery

Installing and/or Replacing Batteries

Note: If the printer will be mounted in a vehicle, a battery must be installed in the printer due to varying battery power conditions.

1. Open the printer's cover. Verify the control panel is facing toward you.
2. Place the battery in the battery cavity (Figure 7).



Battery
connector

Figure 7

3. Connect the printer's cable connector to the battery (Figures 8a and 8b). Verify the printer's battery connector is aligned properly. The rubber key (on the printer's battery connector) should be aligned with the bottom notch (on the battery).

**Figure 8a****Figure 8b**

4. Install the battery strap over the printer's cable connector and the battery so that they are both held in place (Figure 9).

**Figure 9**

5. Close the printer's cover.
6. Charge the battery. For more information, see *Charging a Battery on page 6*.

Charging a Battery

Note: The printer sounds a beep every 30 seconds when the battery is low.

You can charge the battery either by connecting power supplied from the AC power adapter, or by connecting power supplied from a cigarette lighter adapter, as follows:

- **AC Power Adapter:** Plug the AC power cord into a wall outlet. For information on using AC power, see *Using a Power Supply or Power Adapter on page 7*.
- **Cigarette Lighter Adapter:** Connect the printer's cigarette lighter adapter connector into your vehicle's cigarette outlet. For more information, see *Using a Cigarette Lighter Adapter or Optional Power Cables on page 9*.

The battery charges in approximately 4 to 5 hours when a handheld computer (HHC) is installed.

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 for charging the portable printer is limited to 35° C. Please charge the printer in a suitable location that meets this temperature requirement.

Caution: (For US/Canada) Please only use the O'Neil part number 220180-100 power supply with this product.

Using a Power Supply or Power Adapter

Routing the AC Power Adapter

1. Open the printer's cover. Verify the control panel is facing toward you.
2. Depress the locking lever to open the print mechanism (Figure 10).
3. Place the AC power adapter into the printer's adapter cavity (Figure 11).



Figure 10



Figure 11

4. Feed the AC power adapter's cable through the access hole in the printer's cigarette adapter pocket (Figure 12).

Note: Verify the AC power adapter's cable sits flat and does not interfere with closing the printhead mechanism (Figure 13).

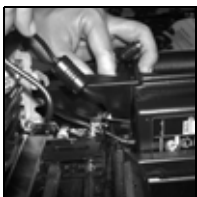


Figure 12



Figure 13

5. In the printer's cigarette adapter pocket, there are two (2) sockets. Connect the AC power adapter's plug to the printer's AC power socket (Figure 14). The printer's AC power socket has a red tag.

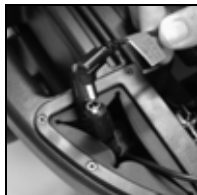


Figure 14

6. Place the plug and the socket into the printer's cigarette adapter pocket.
7. Close the printhead mechanism.

Connecting the AC Power Adapter

1. Feed the AC power adapter's cord into the printer's AC cord pocket and through its access hole (Figure 15).
2. Plug the AC power adapter into the adapter (Figure 16).

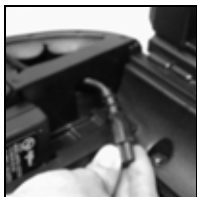


Figure 15



Figure 16

3. Close the printer's cover.
4. Plug the AC power adapter's cord into a wall outlet.

Using a Cigarette Lighter Adapter or Optional Power Cables

1. From the cigarette adapter pocket, connect the cigarette lighter adapter cable or power cable to the connector with the white tag (Figure 17).

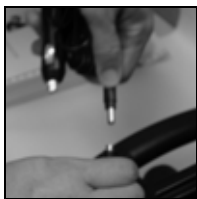


Figure 17

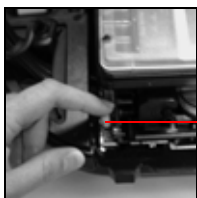
2. Plug the cigarette lighter adapter or power cable into your vehicle's cigarette outlet or power source.

Loading Paper

Note 1: Do not use paper that has glued edges or paper with carbon between the sheets; only use paper with clawed crimps.

Note 2: For information on the printer's paper capacity, see *Paper Quantity Guidelines* on page 13.

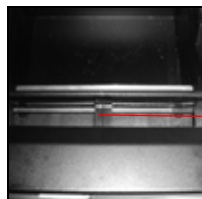
1. Open the printer's cover to the fully open position.
2. Depress the locking lever to open the print mechanism (Figure 18).



Locking lever

Figure 18

3. Verify the center guide is centered (Figure 19).
4. Lift the two tractor feed clips (Figure 20).



Center guide

Figure 19

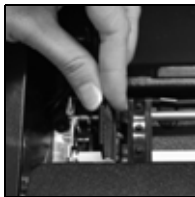


Figure 20

5. Install the paper as follows:

If you are loading paper into a standard RP Series printer, perform the following:

- a. Insert the paper stack into the paper cavity so that the back edges of the paper rests against the printer's lid. (Figure 21). When the lid is closed, the back edges of the paper stack will curve up.
- b. Proceed to Step 6.



Back edge of paper

Printer's lid

Figure 21

If you are loading paper into an RP printer equipped with an extended paper tray, perform the following:

- a. Insert the paper stack into the paper tray (Figure 22).
- b. Slide the front edge of the paper stack under the printhead. The paper stack should curve up so that the bottom edges of the paper stack rests against the paper tray's back wall (Figure 23). Proceed to Step 6.



Figure 22



Figure 23

6. Align the first sheet of paper on top of the open tractor feed wheel. The holes in the paper should align with the studs in the tractor feed wheel (Figure 24).

Note: Printing occurs “face up;” therefore, when you are loading paper, the white page should be facing up. If the paper has pre-printed text and/or graphics, the text and/or graphics should be upside down as it exits the printer.



Figure 24

7. Close both tractor feed clips (Figure 25).

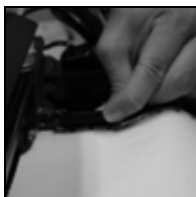


Figure 25

- Adjust the tractor feed clips so that the paper is taut.

Note: The left tractor feed is adjustable. To release the tractor feed, lift the locking lever.

- Close the print mechanism and the printer's cover.
- Set top of form. For more information, see *Setting Top of Form on page 15*.

Paper Quantity Guidelines

Note: Loading more paper than the maximum number of sheets results in paper jams.

Standard RP Printers

Form Parts/Ply	Maximum Number of Sheets
1	200
2	90
3	60
4	50

Mounting the Printer

The following mounting options are available:

Note: Standard RP printers can be mounted only if mounting brackets are used.

- **Mounting Brackets** - For information on using mounting brackets, refer to the documentation included in the brackets' original packaging.
- **Unmounted** - If the printer will not be mounted, then an AC power adapter *and* a battery must be used to supply power to the printer; however, using the printer unmounted is not recommended.

Mounting Guidelines

- The printer can only be mounted at a horizontal angle less than 60°; do not mount the printer at an angle greater than 60°.
- When the printer is mounted, the paper should always exit the printer at a downward slope. Mounting the printer so that the paper exits at another slope may result in paper jams.
- The printer is heavy, therefore, use caution when selecting a mounting location. Verify the mounting surface can support the weight of the printer.
- Position the printer with enough room to properly open and close the printer's lid.
- Position the printer so that it is protected from environmental elements such as moisture, tools, and boxes.
- Do not position the printer above, near, or relative to, the driver's position as to interfere with normal driving operations.
- Position the printer away from the driver's head to eliminate potential injury in the event of an accident.
- **Cabling:** All power to the printer must be fused. Make sure the fuse box is connected properly.

Printing a Self-Test

1. Press and hold Button 1. After printing begins, release Button 1 (Figure 29).

Setting Top of Form

1. Press Button 1 to turn on the printer.
2. Position the paper by pressing Button 1 until the end of the paper aligns with "TOP OF FORM" imprinted on the edge of the printer's case (Figure 28). If necessary, press Button 2 to back feed the paper.
3. Turn the printer off by pressing buttons 1 and 2 simultaneously (Figure 29).
4. Press Button 1 to turn on the printer. The top of form is automatically set.

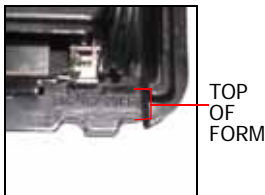


Figure 28

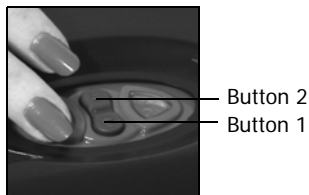


Figure 29

Tearing Paper

1. Set the paper to top of form. For more information, see *Setting Top of Form on page 15*.
2. Verify the printer's cover is closed.
3. Grab one side of the paper at a leading edge and pull up (Figure 30). Once the paper has started tearing at the perforation, finish with a swift pull upward and away (Figure 31).



Figure 30



Figure 31

Configuring the Printer

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

Inserting a Handheld

Standard RP Series Printers

Perform the following to insert a handheld computer (HHC) into a standard RP series printer:

1. Insert the HHC into the handheld cavity and press down until it is firmly seated (Figure 32).



Figure 32

Note: The RP 2000/9000 is intended for use with UL Listed Accessory Handheld Computer Symbol Technologies MC90 series.

RP2000-9000 Printers

Perform the following to insert an HHC into an RP2000-9000 printer:

1. Insert the handheld into the cavity by slightly rotating it into the side channels.

2. Press down until the handheld is fully seated (Figure 33).



Figure 33

3. Raise the yellow locking lever. When locked, the lever clicks into place (Figure 34).

Note: The HHC will not communicate with the printer unless the locking lever is locked into place.

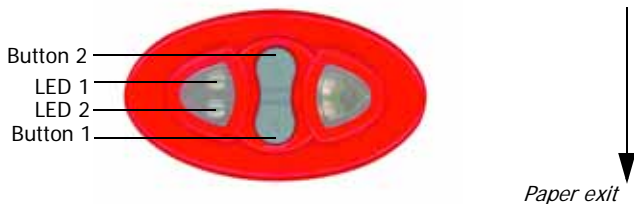


Figure 34

Removing a Handheld Computer

1. Lower the yellow locking lever.
2. Remove the handheld by gently rotating it out of the cavity in an "up and out" motion. The handheld should easily lift out of the cavity; do not use force to remove the handheld.

Using the Control Panel



LED Indicators

LED 1	Description	Action
Red flash - slow	Low temperature.	Change environment.
Red flash - fast	High temperature.	Change environment.
Red to orange - slow	Low voltage.	Restart charge.
Red to orange - fast	High voltage.	Replace battery.
Orange flash - slow	Charge timeout.	Restart battery charge.
Orange flash - fast	Internal error.	Reset printer
LED 2	Description	Action
Green	Power on.	None.
Green flash - fast	Paper out, head jam.	Install paper, check for paper jam.
Green to orange alternating flash - fast	If a radio card is installed, indicates the radio and printer are on.	None.
Orange flash - fast	If a radio card is installed, indicates radio is on and printer is off.	None.

Button Functions

Function	Description
1 line feed	Press Button 1 once.
5 line feeds	Press and hold Button 1.
Form feed	Press and hold Button 1, then release.
Self-test	Press and hold Button 1 until printing starts.
Clear out of paper or head up	Press Button 1.
Stop print or pause/clear buffer	Press Button 2.
Back feed	Press Button 2.
Power on/off/TOF	Press Button 1 and 2 simultaneously.

Note: Pressing Button 1 during a form feed or during printing cancels the action.

Audio Indicators

Beep(s)	Description	Action
Series of 50 short beeps	Head jam.	Check for paper jam. Check the ribbon.
1 short	RF power is on (when RF power button is pressed and RF power was off).	None.
1 long	Boot code is starting or restarting (occurs more than once when downloading new firmware).	Re-download firmware (only if you are not currently downloading firmware).
2 short	RF power is off (when RF power button is pressed and was on).	None.
3 mid-length	Low battery voltage.	Charge battery.
4 short	Charge is starting when external power is applied to printer.	None.
5 double	Out of paper.	Load paper.
8	CRC firmware error.	Redownload firmware.
10	Error writing to communication controller firmware.	Disconnect power to the printer, then restart the printer* or, Perform a back door erase and re-download firmware. For more information, refer to the Programmer's manual.*
Infinite beeps/ toggle LEDs	Comm controller failure.	Disconnect power to the printer, then restart the printer.*

* If these actions do not resolve the problem, your printer may need to be serviced. For more information, contact a service center listed on the back page.

Troubleshooting

Problem	Cause	Solution
When running on battery power, the printer fails to complete a print job. This may be accompanied by three beeps.	Battery may be drained.	Provide the printer with an external power source to charge the battery.
The amount of time the printer can operate using a fully charged battery is reduced.	The batteries may be at the end of their useful life.	Replace the batteries. Batteries should be replaced when they do not provide over 100 pages of continuous printing.
Paper jamming	Ribbon may not be installed correctly.	Re-install ribbon.
Light print	Head gap.	Send the printer in for repair.
Infinite beeps/toggles	Comm controller failure.	Disconnect power to the printer, then restart the printer.*

* If these solutions do not resolve the problem, your printer may need to be serviced. For more information, contact a service center listed on the back page.

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: MF8i ,VMP2000, PR2000-9000 Options: All
Beginning Serial Number: All Date Issued: November 8 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: November 8 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

Warranty

The Company warrants that O'Neil Product Development, Inc.'s products are free from defects in manufacturing materials and workmanship for two (2) years from date of original purchase to Buyer/Distributor (OEMs 90 days from the date of purchase). Batteries, cables, power supplies, and other accessories will be warranted for ninety (90) days. O'Neil Product Development, Inc. makes no other warranties, expressed or implied, including implied warranties of merchantability and fitness of purpose. If you try to repair, disassemble, or change the product in any way, or use parts not provided by O'Neil without prior, written authorization, all warranties are void. For complete warranty and repair information, see the Warranty Card included in your original packaging.

Warranty Disclaimer

Customers are not required to purchase O'Neil supplies. However, for a warranty claim, if O'Neil determines that damage to the printhead or printer mechanism was directly caused by the use of non-certified or non-approved supplies, O'Neil reserves the right to hold the user responsible for all labor and material charges required for the repair.

Copyright

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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.



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