

Loadrite LP950 Printer User Manual

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LOADRITE[®]

LOADRITE LP950 Printer User Manual

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Table Of Contents

1. INTRODUCTION	1-3
2. INSTALLATION	2-4
2.1. Installation Requirements	2-4
2.2. Cable Connection	2-4
2.3. Data Capture System	2-4
3. PRINTER OPERATION	3-5
3.1. Printer Features	3-5
3.2. Paper Roll Replacement.....	3-6
3.3. Ribbon Cassette Replacement	3-6
3.4. Baud Rate.....	3-7
4. SPECIFICATIONS	4-8

1. Introduction

The LOADRITE™ LP950 is an accessory to the LOADRITE weighing system and is used to provide a permanent record of the weighing operations as they are performed.

The LOADRITE Printer is supplied complete with:

- ▶ A fully adjustable mounting bracket
- ▶ A cable which connects the LOADRITE Printer to the **PRINTER / DATA LOGGER** socket at the rear of the LOADRITE Indicator.
- ▶ A spare ink-ribbon cartridge

Printing is performed by the dot-matrix impact method, utilizing a replaceable ink-ribbon cartridge, on to either:

- ▶ Standard 57mm calculator plain paper, or
- ▶ 2-Layer NCR paper (if a duplicate copy is required).

2. Installation

2.1. Installation Requirements

The printer should be installed at the appropriate mounting angle, orientation and location to provide optimal conditions of use by the operator.

The following important rules should be observed:

- 1) To reduce the risk of entry of dust or moisture into the printer case:
 - ▶ The unit should be mounted with the mouth of the paper exit slot in a downward direction.
 - ▶ Care should be taken that externally accumulated dust, water and oil, etc, does not enter when the lid is opened to replace the paper roll.
- 2) The printer should be located in such a way that it does not hinder the normal operation of the machine controls or the visibility of the operator:
 - ▶ The lid can be opened without restriction for replacement of the paper roll or ribbon cartridge.

NOTE: The lid is secured with a sprung (not hinged) plastic clip. Bending this clip back too far may result in it breaking.

- ▶ The operator has easy access to the printer to operate the printer controls.
- 3) The printer should not be located in direct sunlight or near any engine compartments which can become excessively hot. If necessary a screen should be provided to shade the unit from direct heat and sunlight.

2.2. Cable Connection

NOTE: All power supply and signal connections to the printer are contained within the cable and connector assembly. No other connections are required.

- ▶ Connect one end of the cable to the socket located at the rear of the LOADRITE Printer.
- ▶ Connect the other end to the **PRINTER / DATA LOGGER** socket located at the rear of the LOADRITE Indicator.

The power supply to the printer is switched **On** or **Off** using the main power to the LOADRITE Indicator.

Ensure that the printer and cable are securely fastened and the cable routed to avoid accidental physical damage.

2.3. Data Capture System








The LOADRITE weighing system may be operated with both an LP950 Printer and a Data Capture System.

- ▶ For further information, contact your LOADRITE distributor.

3. Printer Operation

The Indicator Printer has two control buttons and three associated lights on the operator control panel.

3.1. Printer Features

LP950C	LP950D	Name	Description
		Power / Online	This button is used to toggle the printer between online (can print data) or offline (can't print data). When the printer is online, the associated light will be illuminated.
		Paper Feed	This button is used to fast-feed the paper out of the printer. It may be used when required during paper loading.
		Paper Out	Illuminates when the printer is out of paper. When illuminated, a new paper roll should be loaded to avoid losing printed information.
		Ready (LP950C only)	Illuminates when the printer is ready to accept data for printing. It will not illuminate if the printer is out of paper, the printer is offline, or the printer is busy printing and temporarily unable to accept more data.

Test Print Function

If the **Paper Feed** button is momentarily depressed while pressing the **Power / Online** button, the printer will print a test print. After printing, the printer will go offline, so the **Power / Online** button will need to be pressed again before the printer will operate.

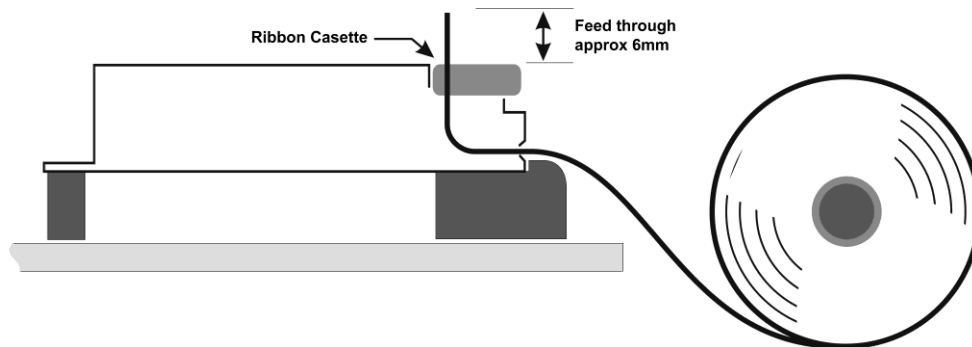
3.2. Paper Roll Replacement

WARNING: Do not pull the paper roll backwards through the printer mechanism as this will cause irreparable damage!

The LOADRITE Printer uses standard 57mm wide paper; either plain or 2-layer NCR if a duplicate copy is required. The maximum roll diameter in either case is 57mm.

To replace the paper roll, complete the following:

- 1) Open the hinged lid by springing the plastic clip, then lift the lid wide open.
- 2) Remove the short length of paper remaining in the printing mechanism by:
 - a. Using the **Paper Feed** button, or
 - b. Using the manual paper feed wheel, or
 - c. Gently pulling the paper through the mechanism by hand, in the normal direction.
- 3) Remove the old roll core from the holding fingers, then insert the new roll with the paper direction as shown in the below diagram.



- 4) Free the end of the new paper roll, checking that the end is cut reasonably square and is free from irregular or jagged tears. If needed, trim the end with scissors.
- 5) Gently push the free end of the paper over the plastic ramp and into the mouth of the printer.
- 6) By using the manual feed knob (or the **Paper Feed** button if power is connected), feed the paper through the mechanism and leave approximately 6mm (1/4") of paper protruding from the mechanism. Ensure that the paper lies between the ink ribbon and the cassette housing.
- 7) Tighten the ink ribbon in the cassette by turning the star-shaped disc on the right-hand end of cassette two or three turns clockwise.
- 8) Close the case and secure the lid catch.
- 9) Press the **Paper Feed** button until the paper emerges past the tear-off edge.
- 10) Press the **Power / On Line** button.

3.3. Ribbon Cassette Replacement

Printing on plain paper in the LOADRITE Printer is achieved by use of an inked ribbon contained in a replaceable cassette. The ribbon will normally last for 2 to 3 rolls of paper.

To replace the cassette, complete the following:

- 1) Open the lid of the printer. If there is paper in the mechanism, remove it by cutting the paper close to the exit slot of the mechanism.

WARNING: Do not pull the paper roll backwards through the printer mechanism as this will cause irreparable damage!

- 2) Press down on the left end of the cassette. The right end will pop up. The cassette can now be removed.
- 3) Fit the new cassette in the reverse order to removing it: position the right end of the new cassette in the mechanism and gently push the left end in.
- 4) Ensure that the paper lies between the ink ribbon and the cassette housing.

3.4. Baud Rate

The LOADRITE Printer communicates with the LOADRITE Indicator at a communication speed of **9600** baud.

If the Baud Rate of the printer needs to be changed, contact your LOADRITE distributor.

4. Specifications

Case	<ul style="list-style-type: none"> ▶ Injection molded polycarbonate. ▶ UV-resistant polyester front panel membrane push buttons.
Environmental	<ul style="list-style-type: none"> ▶ Operating ambient temperature -10°C to +50°C. ▶ The unit must not be operated in direct sunlight. ▶ Relative humidity 20% to 90%.
Weight (with mounting bracket)	1.6kg
Print Method	<ul style="list-style-type: none"> ▶ Dot Matrix impact on plain paper. ▶ Inking by auto-feed, replaceable ribbon cassette.
Paper	<ul style="list-style-type: none"> ▶ Standard plain calculator paper roll: 57mm wide, up to 57mm diameter. ▶ Optional 2-layer NCR paper for duplication.
Print Format	24 columns, 5x8 dot matrix characters, 1.7 x 2.7mm with one dot (0.37mm) descender.
Character Set	Full ASCII character set, plus extended set.
Print Speed	1.7 lines/second typical.
Paper Feed	4.0 lines/second typical.
Test Print	All printable alpha-numerical characters are printed.
LEDs	<ul style="list-style-type: none"> ▶ Power / Online ▶ Paper Out ▶ Ready (LP950C only).
Control Buttons	<ul style="list-style-type: none"> ▶ Power / Online ▶ Paper Feed ▶ Test Print.
Data Input	Serial ASCII, RS232 protocol with printer-ready handshake. Ready line goes "low" when buffer full or printer printing.
Baud Rate	1200 or 9600 baud rate set by internal jumper.
Data Buffering	Up to 24 characters can be buffered. Printing is initiated when buffer full or on receipt of CR, LF, or both CR and LF.
Power Requirements	<p>11.2 to 32V DC.</p> <p>Average Current when printing:</p> <ul style="list-style-type: none"> ▶ 0.75A @ 12V DC input ▶ 0.4A @ 24V DC input. <p>Peak Current when printing:</p> <ul style="list-style-type: none"> ▶ 3.0A @ 12V DC input. ▶ 1.3A @ 24V DC input. <p>Standby Current:</p> <ul style="list-style-type: none"> ▶ 100mA max. ▶ 40mA typ. @ 24V.
Power Input Protection	<ul style="list-style-type: none"> ▶ Series diode to protect against reverse voltage. ▶ Protected against "load dump" and other automotive transients.

