

User Guide

FOR THE LOADRITE™ LP950 PRINTER





LOADRITE[™] LP950 Printer

USER GUIDE

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1 GENERAL INFORMATION

1.1 INTRODUCTION

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

This manual covers all models of Loadrite Printers. A detailed description of the 'print-outs' available is given in the Loadrite User Guide.

The Loadrite Printer is supplied complete with:

- A fully adjustable mounting bracket
- A cable which must be plugged between the Loadrite Printer and the PRINTER/EDP socket at the rear of the Loadrite Weigh Indicator
- A spare ink-ribbon cartridge

Printing is performed by the dot-matrix impact method, utilising 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 PRINTER CONTROLS AND INDICATORS

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

2.1 FUNCTION OF BUTTONS AND INDICATORS

ICON	NAME	DESCRIPTION
ON LINE	On Line Button	The printer can be switched 'ON LINE' and 'OFF LINE' (i.e. print data or don't print data) by successively pressing the ON LINE button. When the printer is 'ON LINE' the associated indicator light will be on.
OP PAPER FEED	Paper Feed Button	This button is used to fast feed the paper out of the printer. It may be used when required during paper loading.
Or PAPER	Paper Out Indicator	When illuminated, this indicates that the printer is out of paper and a new paper roll should be loaded to avoid losing printed information.
READY	Ready Indicator (LP950C only)	When illuminated this indicates the printer is ready to accept data for printing. This indicator goes off when the printer is out of paper, or if the printer is "OFF LINE" or the printer is busy printing and is unable temporarily to accept any more data.

Test Print Function

If the **Paper Feed** button is momentarily depressed while holding the **On Line** button, the printer will print a test print. After printing, the printer will be left in the **Off Line** state and the **On Line** button must be pressed before the printer will operate.



2.2 PAPER ROLL REPLACEMENT

IMPORTANT

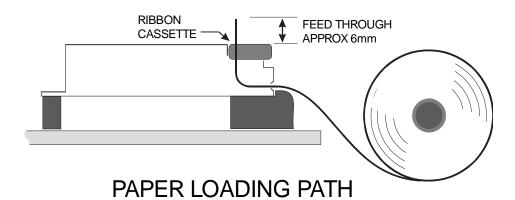
Do not pull the paper roll backwards through the printer mechanism as this will cause irreparable damage!

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:

- 1. Open the hinged lid by springing the plastic clip and 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 and insert the new roll with the paper direction as shown in the 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. Take the free end of the paper and gently push it 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.
- Tighten the ink ribbon in its cassette by turning the starshaped disc (on 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.
- Press the **On Line** button and the printer is now ready for operation.

2.3 RIBBON CASSETTE REPLACEMENT

Printing on plain paper in the Loadrite Printer is achieved by use of an inked ribbon which is contained in a replaceable cassette.

The ribbon will normally last for 2 to 3 rolls of paper.

To Replace the Cassette:

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.

IMPORTANT

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

- 2. Press down on the left-hand end of the cassette to pop the right-hand end up. The cassette can now be lifted out.
- 3. The new cassette is fitted in the reverse order to removal, i.e. position the right-hand end of the new cassette in the mechanism and gently push the left-hand end home.
- 4. Ensure that the paper lies between the ink ribbon and the cassette housing.



2.4 BAUD RATE

The Loadrite Printer communicates with the Loadrite weigh indicator at a communication speed of 9600 baud. Earlier printers communicated at the slower speed of 1200 baud.

If the Loadrite Printer is used with an LR810 indicator, the LR810 should have the Baud Rate setting changed to 9600 baud. (Ask your Loadrite dealer for details).

If the Baud Rate of the printer needs to be changed, your Loadrite dealer can provide an instruction sheet.

3 INSTALLATION

3.1 PRINTER

The Loadrite 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. 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. 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 downwards 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.
- 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.
- 4. The printer should be located in a position where:
 - The hinged lid can be opened without restriction, for replacement of the paper roll or ribbon cartridge. (The lid is secured with a sprung (not hinged) plastic clip. Bending this clip back too far may result in its breakage).
 - The operator has easy access to the printer to operate the printer controls.

3.2 ELECTRICAL CONNECTION

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

Connection is made by plugging the cable between the socket located at the rear of the Loadrite Printer and the **PRINTER/EDP** socket located at the rear of the Loadrite Weigh Indicator. The power supply to the printer is switched **On** and **Off** by the main power **On/Off** to the Loadrite indicator.



Ensure that the printer and cable are securely fastened and the cable routed to avoid accidental physical damage. Special care is needed when routing cable to avoid physical damage.

3.3 USE WITH DATA CAPTURE SYSTEM

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

Please consult your local Loadrite dealer for the supply of the Data Capture System.

4 SPECIFICATION

Case	Injection moulded polycarbonate.
	Silicon rubber 'O' ring sealed.
	UV resistant polyester front panel membrane push buttons.
Environmental	Operating ambient temp -10°C to +50°C.
	The unit must not be operated in direct sunlight.
	Relative humidity 20% to 90%.
	Splash proof to IP52 (water from above only).
Weight	With mounting bracket: 1.6kg
Print Method	Dot Matrix impact on plain paper.
	Inking by auto-feed, replaceable, ribbon cassette.
Paper	Standard plain calculator paper, 57mm wide, up to 57mm diameter roll.
	Optional 2 layer NCR paper for duplicate copy.
Print Format	24 columns, 5x8 dot matrix characters, 1.7 x 2.7mm with one dot (0.37mm) descender.
Printable Characters	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.
Indicator Lamps	LED type: On Line, Out of Paper and Ready (LP950 only).
Control Buttons	On front panel: On/Off Line, Paper Feed and Test Print Facility.
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 set by internal jumper.
Data Buffer	1 line (24 character) printing of line initiated when buffer full (24 char.) or LF, CR, CRLF received. CR and LF are treated as a CRLF pair.
Power Requirements	11.2 to 32V DC.
	Average Current when printing: 0.75A @ 12V DC input 0.4A @ 24V DC input.
	Peak Current when printing: 3.0A @ 12V DC input. 1.3A @ 24V DC input.
	Standby Current: 100mA max. 40mA typ. @ 24V.
Power Input Protection	Series diode to protect against reverse voltage. Input filter and high voltage preregular into switch-mode main regular to protect against "load-dump" and automotive transients.

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