Loadrite LP930 | LP930-BT Printer User Manual

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The LP930 | LP930-BT is fully EMC (Electro-Magnetic Compatibility) compliant and is CE marked accordingly. A Declaration of Conformity, in accordance with the EMC Directive 89/336/EEC (and as amended) is available from Loadrite (Auckland) Ltd on request. The LP930 | LP930-BT also carries an automotive e-mark that applies, provided the printer is installed in-line with the directive.
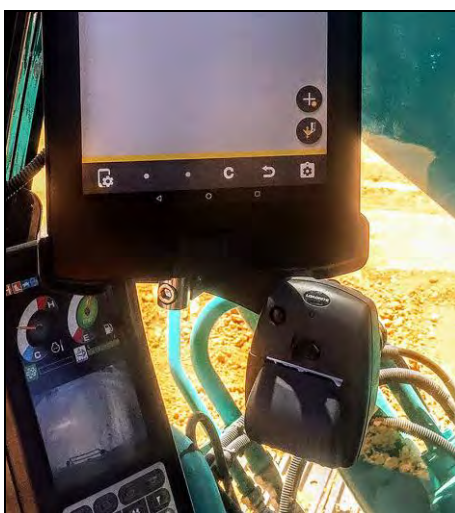
1.   Introduction

The Loadrite™ LP930 | LP930-BT 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:

LP930	LP930-BT
A mounting bracket which can be connected to either a mini-swivel mount (MNT-MINI/SWIVEL-1) or tubular mount (MNT-MINI/TUBULAR-1).	A mounting bracket which can be connected to either a mini-swivel mount (MNT-MINI/SWIVEL-1) or tubular mount (MNT-MINI/TUBULAR-1).
A cable which connects to the **PRINTER/DATA LOGGER** socket at the rear of the Loadrite Indicator.	A cable which connects to an available CAN socket on the power harness (this connection supplies power only).
Two rolls of thermal printer paper.	Two rolls of thermal printer paper.

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.

    ‣ 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. Mounting Bracket

The Loadrite LP930 | LP930-BT comes with a mounting bracket that slots into the printer on one side and into either a mini-swivel mount (`MNT-MINI/SWIVEL-1`) or tubular mount (`MNT-MINI/TUBULAR-1`) on the other side.
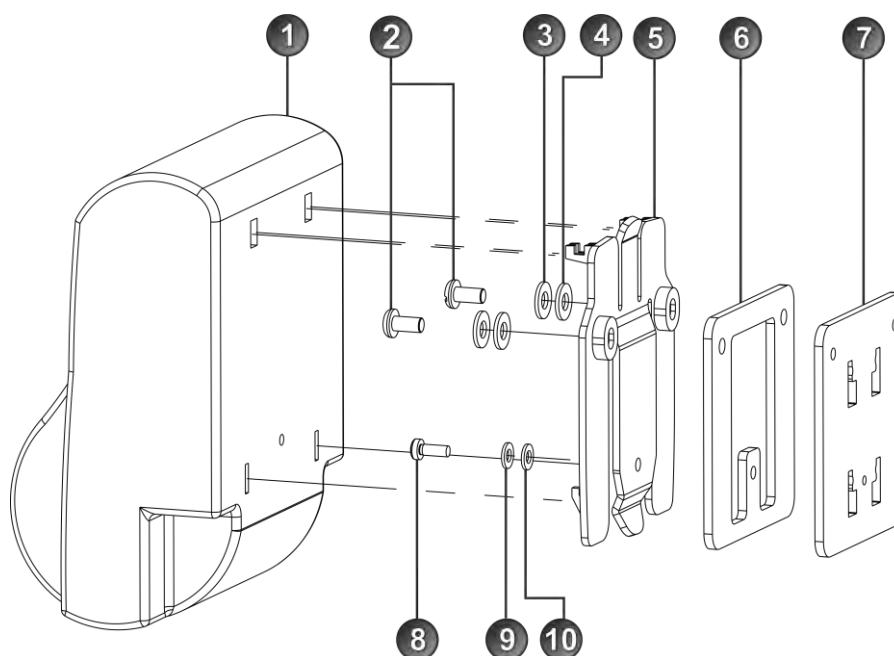
NOTE: `MNT-MINI/SWIVEL-1` and `MNT-MINI/TUBULAR-1` are available separately.

To mount the printer, complete the following:

1. If using the mini-swivel mount (`MNT-MINI/SWIVEL-1`), the swivel may need tightening. Tighten the adjustment screw from the base of the bracket, but do not over-tighten.

2. Push the lugs on the selected mount (`MNT-MINI/SWIVEL-1` or `MNT-MINI/TUBULAR-1`) into the slots on the metal plate (`41263`), then slide up until it locks into place. The fit is intentionally tight.

3. Push the lugs on the Belt Clip (`MNT-BELTCLIP/BRKT-1`) part of the mounting bracket into the slots on the rear of the printer, then slide up until it locks into place.

4. Attach the selected mount to a suitable surface, such as the vehicle window, ROPS, wall, cupboard or pole.

To remove the printer from the mounting bracket, press the tab at the top of the Belt Clip (`MNT-BELTCLIP/BRKT-1`) part of the mounting bracket.

2.2.1. Mounting Bracket Exploded Diagram

Item	Description
1	Loadrite LP930	LP930-BT printer
2	M4x8 screw (x2)
3	M4 spring washer (x2)
4	M4 flat nylon washer (x2)
5	Belt Clip (`MNT-BELTCLIP/BRKT-1`)

Item	Description
⑥	Adaptor bracket – spacer (41264)
⑦	Adaptor bracket – plate (41263)
⑧	M3x8 screw
⑨	M3 spring washer
⑩	M3 flat nylon washer

2.3. Cable Connection

2.3.1. Connect the LP930

NOTE: All power supply and signal connections to the printer are contained within the cable and connector assembly. No other connections are required.
The power supply to the printer is switched **On** or **Off** using the main power to the Loadrite Indicator.

1. Connect the printer cable to the **PRINTER/DATA LOGGER** socket at the rear of the Loadrite Indicator.

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

2.3.2. Connect the LP930-BT

The LP930-BT has two connections:

▸ A power connection via an available CAN socket, and

▸ A Bluetooth® connection to the Indicator.

Power connection

1. Locate an available CAN socket on the device's power harness.

   ▸ For more information, refer to the documentation for the device.

2. Connect the LP930-BT Printer cable to the CAN socket.
   The LED Light on the LP930-BT Printer will be lit green to indicate that it is receiving power.

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

Bluetooth connection

TIP: The instructions for connecting the LP930-BT Printer to the Indicator via Bluetooth may differ depending on the model of Indicator. For more information, refer to the Indicator documentation.

1. On the Indicator, navigate to the following location: *Settings > Bluetooth*
   The *Bluetooth* screen will display a list of nearby Bluetooth-enabled devices.

   ▸ If Bluetooth is not enabled, tap **Off** to enable Bluetooth. A list of nearby Bluetooth-enabled devices will display.

2. Locate and tap the printer name in the list of devices.

   ▸ The name of the printer will be in the format: LOADRITE LP930-BT SN:XXXXXXXX, where SN is the serial number of the printer.

   The Indicator will connect to the LP930-BT Printer via Bluetooth.

2.4.   Configuration

Ensure that the following settings are applied to the applicable Loadrite Weighing System Indicator or Integrator that the printer is connected to:

C-Series Integrator

➤ *User Menu > Setup > Configure > Comms*

Menu Option	Value
Prt Port	LP930

➤ *User Menu > Setup > Configure > Comms > Prt Menu*

Menu Option	Value
Baud	9600

L-Series Indicator

➤ *Install Menu > Setup > Configure > Print*

Menu Option	Value
Printer	LP950
Baud	9600

Payload Management for Earthworks (LM520)

All settings are automatically configured via Bluetooth® and do not require any changes.

X-Series Indicator

➤ *Install Menu > Setup > Configure > Print*

Menu Option	Value
Printer	LP950
Baud	9600

3.   Printer Operation

3.1.   Printer Modes

Normal Mode

The printer is ready to receive data to be printed. When the printer is printing data, the LED light will be lit green.

Spool Mode

The printer will automatically enter *Spool Mode* when the paper has run out, the lid is open or if an error has occurred. When in *Spool Mode*, the LED light will flash and the printer will receive and store data, but not print it. To exit *Spool Mode*, press the **Paper Feed** button twice.

3.2.   Printer Features

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.

‣   When in *Idle Mode*, press the **Paper Feed** button twice to print a demonstration message which include the firmware version, encoded calibration data and the supported character set.

‣   When in *Spool Mode*, press the **Paper Feed** button to print remaining stored data, then enter *Idle Mode*.

LED Light

The LED light has a number of color combinations to indicate the status of the printer.

Pattern	Power Status	Buffer Mode
Constant Green	Normal	Normal
Fast-Flashing Green	Normal	Spool
Long Green - Short Red	Low voltage	Normal
Short Green - Short Red	Low voltage	Spool
Fast-Flashing Red	Error	Spool (printing prohibited)
No light	Off	-

3.3.   Paper Roll Replacement

The Loadrite Printer uses standard 57mm wide thermal paper with a maximum roll diameter of 55mm.

To replace the paper roll, complete the following:

1.   Slide the **Lid Release** button until the lid springs open.

2.   Unroll a small amount of paper from the roll, then insert the paper roll into the printer with the unrolled portion close to the serrated metal edge.

3.   Close the lid ensuring that the unrolled portion of paper protrudes through the slot by the serrated metal edge. The lid will click into place.

4.   Press the **Paper Feed** button and check that the paper is straight and feeds properly.

5.   Tear off any excess paper by pulling the paper sharply towards the serrated metal edge.