

BOWMONK

THERMAL PRINTER

Model MCP7830-197 User Guide

Part No: Bow 805

INTRODUCTION

The Bowmonk MCP7830-197 is an ultra-compact, lightweight, portable thermal printer with an easy-load paper feature making it easy and reliable to use.

It is designed and manufactured in the UK to work with the Bowmonk BrakeCheck electronic decelerometer unit to provide quick and simple printed brake test results.

It is powered from Ni-MH rechargeable batteries with a maintenance free operation for trouble free service virtually anywhere.

The printer has been factory programmed to provide the optimum settings for printing when used with the Bowmonk BrakeCheck and requires neither configuration nor adjustment.



PREPARATION

Important Information

The printer's batteries will require installation and charging prior to use

Bowmonk Ltd take every precaution possible to ensure your printer reaches you in perfect condition. To aid this we remove the rechargeable batteries from the printer for transit.

When the printer is first delivered there may be little or no charge in the printer's batteries. The printer should be turned **OFF**, connected to the mains adapter and allowed to charge for 16 hours before it is used for the first time.

This will ensure optimum battery capacity and life.

When you receive your printer you should be able to locate 4 x rechargeable NiMH batteries in the packaging. Remove protective jacket and the battery cover from the base of the printer and insert the batteries, taking care to ensure the batteries are inserted correctly using the illustration guide inside the battery compartment to guarantee the batteries are correctly positioned. Replace the battery cover and protective jacket.

Replacement Battery

Battery, AA 1.5V, Ni-MH (4 required) Ref No. MJ10

FULL BATTERY CHARGE

It is recommended to connect the printer to the mains power adapter and recharge the batteries as soon as the green Status LED on the printer indicates low battery. (See LED status codes table)

It is permissible to leave the printer connected to the mains power adapter for longer periods to trickle charge the printer batteries.

FAST BATTERY CHARGE

To fast charge the printer batteries, the printer must be **OFF**.

If the batteries in the printer become exhausted, printing will become faint, erratic or not possible at all.

Turn the printer **OFF** and recharge the batteries for at least 15 minutes before attempting further printing. The mains power adapter cannot supply the full power requirements for the printer during printing, so the batteries must be partially charged before printing is possible.

MCP7830-197/UG/A
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INSTRUMENTS

All instruments designed and
manufactured in
Great Britain.
The manufacturer reserves
the right to alter specifications
without prior notice

IMPORTANT NOTE

The printer should only be used in conjunction with the supplied MPS101 (UK) mains charger.

Never use the mains charger of the BrakeCheck unit to charge the MCP7830-197 printer

Never use the mains charger of the MCP7830-197 printer to charge the BrakeCheck unit.

Users wishing to provide their own mains charger or use a non specified power source would void the warranty of the printer and/or Brake-Check.

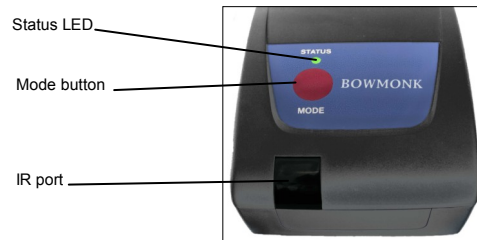
PRINTER FEATURES

Printer Status LED

The MCP7830-197 printer incorporates a green LED indicator, for status and fault code indication, located on the front panel of the printer just above the mode button.

Operation Mode Button

The MCP7830-197 printer incorporates a single operation button located on the front panel of the printer just below the printer status LED. This mode button will allow operation of the printer and printer modes.



PRINTER AND BRAKECHECK UNIT CONNECTION

Select your required method of connection between the MCP7830-197 printer and the BrakeCheck unit.

INFRA-RED INTERFACE

Portable use:

The MCP7830-197 printer can use the wire free connection feature of the BrakeCheck unit by simply aligning the BrakeCheck units Infra-red transmitter located in the top end of the BrakeCheck unit within range (max 40cm) of the printers Infra-red receiver located in the front of the printer and leaving aligned until printing is complete.



SERIAL INTERFACE

Stationary use:

The MCP7830-197 printer can use the wired connection feature of the BrakeCheck unit by simply connecting the supplied serial cable to the RJ12 location in the underside of the printer and the DIN location in the bottom end of the BrakeCheck unit.



PRINTER FAULT DIAGNOSTICS TABLES

The printers green LED status indicator is used to report the printer condition. If there is a fault then the green LED will flash in sequence. The fault can be identified by counting the number of flashes.

Status LED Flash Codes

LED Indication	Condition	Solution
On	Printer On	-
Off	Printer Off	-
Short flash every second	Fast Charging	-
LED flashes per second		
* * *	Paper out	Fit new paper
** ** *	Thermal head too hot	Allow head to cool
*** ** *	Battery cut-out (no charge remaining)	Recharge battery
**** ** *	Battery low (approx. 20% charge remaining)	Recharge battery

Printer Faults Table

Apparent Fault	Check	Possible Solution
Will not switch ON	Battery charge, ON switch, mains charger	Connect to mains charger; switch ON; check LED flash code; and fully charge
Will not print	Connection, paper, operation, thermal limit mode, battery charge	Align printer and BrakeCheck units; ensure Serial cable is connected at both ends; is paper roll correctly installed; allow printer to cool; charge batteries
Miss print, poor print, paused printing	Connection, paper, battery charge	Align printer and BrakeCheck units; ensure Serial cable is connected at both ends; is paper roll correctly installed; charge batteries
Technical Help Line	Bowmonk Ltd	Tel: 01603 485 153

Self Test

The printer self test procedure will check most of the printer functions, i.e. Printer Mechanism, Control Circuitry, Firmware version and print quality. The test does not check the Ir and Serial Interface.

When the printer is **OFF**, press and hold the mode button depressed for approximately 3 secs, then release the button, the printer will power on and print a self-test report .

TECHNICAL HELPLINE

For technical help and information, telephone 01603 485 153

PRODUCT WARRANTY

The Bowmonk—Thermal Printer, Model: MCP7830-197—Part No. Bow 805.

Bowmonk Ltd offer a 12 month from date of purchase limited warranty on this product.

Contact Bowmonk Ltd for full warranty terms.

Bowmonk Ltd, Diamond Road, St Faith's Industrial Estate, Norwich, Norfolk, NR6 6AW, ENGLAND
Tel: +44 (0)1603 485 153. Fax: +44 (0)1603 418 150. Email: info@bowmonk.com

REPLACEMENT AND ADDITIONAL PARTS

Item Description	Part Number
UK Mains Charger Unit	MPS101
Thermal Paper Roll 25m	MM58
Serial Cable RJ12/DIN	MGK55
Battery AA 1.5V Ni-MH x 4	MJ10
Protective Jacket	MPB500

DISPOSAL

At the end of its working life the printer should be disposed of in accordance with The Waste Electrical and Electronic Regulations ("the WEEE Regulations), if in use within the EU, and in accordance with national requirements in other countries.

This printer contains NiMH batteries that should be disposed of by a qualified recycler or hazardous material handler.

PRINTER SPECIFICATIONS

Model: Bowmonk –Thermal Printer. MCP7830-197
Part No: Bow 805

For full product specifications please contact
Bowmonk Ltd, Diamond Road, St Faith's Industrial Estate, Norwich, Norfolk, NR6 6AW, ENGLAND

Tel: +44 1603 485153
Fax: +44 1603 418150
E-mail: info@bowmonk.com

PRINTER OPERATION

Getting Started

Check the batteries are sufficiently charged. Open the paper cup lid by pulling the central lever upwards and forwards from its locked position. To avoid damage do not use excessive force. Ensure that a paper roll is present and that there are no foreign objects inside the paper reservoir.

Close the lid by applying equal amounts of pressure on each side of the lid until it is in the locked position. The paper should emerge over the tear bar.

The Mode Button

Turn On

One press of the Mode button turns the printer **ON**, the green LED Status indicator will illuminate and the printer mechanism will reset.

Turn Off

One press of the Mode button turns the printer **OFF**, the green LED Status indicator will be off and the printer is off.

Thermal Limit Mode

The printer incorporates a safety cut-off mode which operates after extensive printing when the print head temperature may rise to an unusable level. The Status LED will report this (see Status LED flash code table) and printing will be suspended until the head temperature returns to normal levels.

Allow the printer to fully cool down before continuing to print.

Paper Out Mode

The printer will automatically detect when the paper roll has run out. The Status LED will report when this occurs (see Status LED flash code table) and printing will be suspended until a new paper roll is placed in the reservoir. Use the Mode button to feed through the last few centimetres of paper by holding down the button until the paper is clear, then fit a new roll as described below.

Replacing the paper roll

If the paper roll needs replacing, open the paper cup lid by pulling the central lever upwards and forwards until it is released from its locked position, to avoid damage do not use excessive force, remove the spool and any remaining paper.

Reel off a few centimetres from a new roll. Hold approximately 5cm of paper outside the printer, place the new roll in the paper reservoir with the paper feeding from the bottom front of the roll with the leading edge over the tear bar. Close the lid by applying equal amounts of pressure on each side of the paper cup lid until the lid is in the locked position.

Tear away the surplus paper.

Replacement Thermal Paper Roll

Thermal Paper Roll, 58mm width, 25m length, 44mm dia, Ref No: MM58