

Truelab®

micro PCR Printer



REF 603050001

User Manual

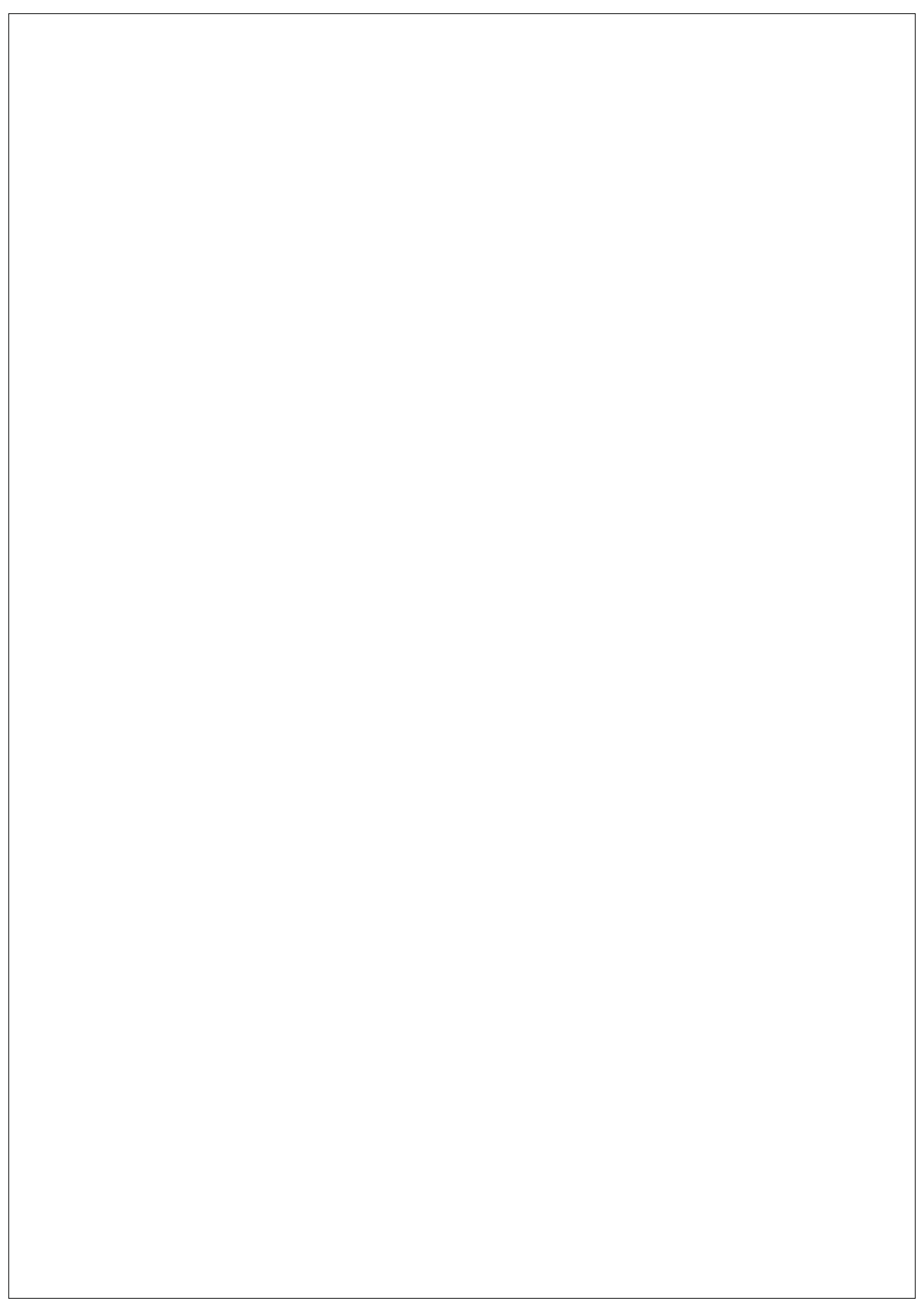


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Preface

I. Contact Addresses

Molbio Diagnostics Private Limited

Registered Office: Plot No. L-46, Phase II D,
Verna Industrial Estate,
Verna, Goa - 403 722, INDIA.

II. Warranty

Warranty Information would be specified in the warranty certificate. Contact your Molbio representative for further information. Normally the instrument would be under warranty for a period of 12 Months from the date of Installation or 14 Months from the date of Invoice whichever is earlier. Post warranty services are also available from Molbio.

III. Trademarks

Truelab® / Trueprep® / Truepet® / Truenat® are trademarks of Molbio Diagnostics Private Limited

IV. Intended Use

The **Truelab® micro PCR Printer** is intended for Printing the result page obtained from the **Truelab®** devices.

V. Preamble

Before using the **Truelab® Micro PCR printer** it is important to read this **USER MANUAL** thoroughly and completely. All instructions contained in this manual need to be adhered to and non-adherence may lead to serious damage to the equipment.

VI. Usage of the Truelab® Micro PCR printer User Manual

The **USER MANUAL** at the outset introduces the fundamental concept of pairing and printing the result page obtained from **Truelab®** devices.

VII. Conventions used in this Manual

This manual uses certain conventions that make it easier for you to differentiate types of instructions.

Note for customers: Any serious incident that has occurred in relation to the device shall be reported to the Molbio Diagnostics Private Limited and the competent authority of the Member State in which the user and/or the patient is established.

1. INTRODUCTION

Truelab® micro PCR printer is a portable, mains/rechargeable battery operated Bluetooth and USB compatible thermal printer for printing out results from the Truelab® Real time Quantitative micro PCR analyzer. The printer works for 6-8 hours with a fully charged battery.

2. PRINTER OVERVIEW

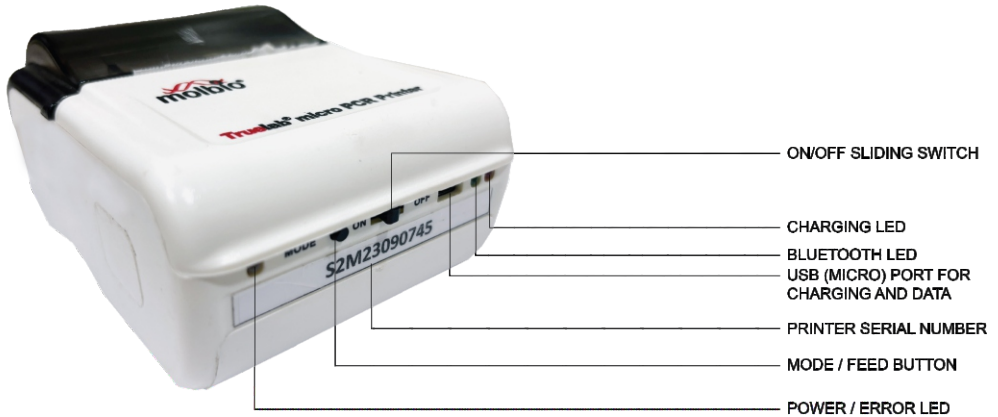


Figure 1: Illustration of Truelab® Micro PCR printer.

3. FEATURES AND SPECIFICATIONS

Printer	2" Thermal Printer
Printing	Thermal line printer method
Paper width	58 mm
Dot Size	0.125 mm x 0.12 mm
Printing Speed	75mm/s (higher speed optional)
High Speed	High speed 80mm/s
Processor	32 Bit ARM processor
Interface	Wireless Bluetooth interface High speed USB 2.0 interface
Battery	7.4 V DC, 2600 mAh, Li-ion Rechargeable
Charger	5V, 2A battery charger
Other features	Compact, Rugged Vibration Resistant Dust Tolerant Easy Paper Loading

4. DIMENSIONS

Height	: 109 mm
Width	: 75 mm
Depth	: 46 mm
Weight	: 245 gms

5. STANDARD ACCESSORIES

Adaptor - Output 5V DC @2Amp. Input - 100V - 240V AC 50-60Hz
USB cable
User Manual

6. ENVIRONMENTAL CONDITIONS

Operating Temperature : 0° C to 50° C
Storage Temperature : -20° C to +60° C
Relative Humidity : 20-80% (non-condensing)

7. POWER ON/OFF

The power button is on the front side of the printer. Green light glows when the printer is switched ON.

8. FEED PAPER

Single press the mode button to feed the paper.
For taking the sample print, press and hold mode button, a sample print will be generated.

9. PANEL LIGHTS

Red : Charging LED, Green : Bluetooth LED, White : Power/Error LED
Error is indicated by red light on the left side of the printer.

1. Bluetooth Not working: Red LED Blinks once every 3 seconds.
 2. Battery is LOW: Red LED Blinks twice every 3 seconds.
 3. No paper: Red LED Blinks four times after every 3 seconds.
 4. Print Head getting too hot: Red LED Blinks eight times after every 3 seconds.
- Green LED on right(Bluetooth LED), LED Blinks on start and end of the print.
Red LED on right (Charging LED), Charging in process is indicated by red light.

10. BLUETOOTH

This model is equipped with Bluetooth 4.2 standard with power level of class 2 and is compatible with the Bluetooth version of Truelab® analyzer. While printing, the Analyser (host) and the printer should be at a distance of less than 10 meters. If there is any obstacle between the host and the printer, then a distance of less than 5 meters is required.

11. PRINTING WITH TRUELAB® REAL TIME QUANTITATIVE MICRO PCR ANALYZER

Ensure the printer is switched on. Switch on the bluetooth of PCR analyzer, Pair the analyzer with the printer. Once the device is paired go to the results page and print the result.

12. BATTERY CHARGING

For Charging the lithium ion battery pack. Connect the Charging jack of the adapter to the printer, Charging in progress is indicated by red light. Battery has to be charged for 3 hours. Battery charging should be performed away from potential heat sources.

13. ADAPTOR

Molbio recommends to use only the adaptor supplied along with the printer to charge the battery. Use of other chargers may cause damage to the printer and void the warranty. This adaptor is SMPS based module and works on Input power of 100-240V AC 50-60 Hz. The output is 5V DC @ 2Amp. It also has protection for over charging, as it detects the full charge status and cuts off the battery from the input supply.

NOTE : Before remove the charging cable from printer charger port, ensure that the power is switched OFF and the adaptor is unplugged. Do not plug or unplug adaptor with wet hands.

14. REPLACING PAPER ROLL

Ensure the printer is turned OFF, lift the radial cover of the printer and remove the used roll. Replace with a new 75 GSM paper roll, ensuring correct direction for the paper to come off the roll. Pull out a small length of paper and close the radial cover. Switch ON the printer and press the Paper feed button on the left side of the printer to feed paper. The printer is now ready.

Note: Do not use paper roll till the end, as adhesive tape if any at the end may damage the printer.



Figure 2: Right way to feed 75 GSM Paper.



Figure 3: Wrong way to feed 75 GSM Paper.

15. CLEANING PRINTER HEAD

Turn off the printer, open the radial cover and clean the thermal elements on print head with a cotton swab soaked in alcohol solvent (ethanol, methanol or iso-propyl alcohol). It is recommended to clean the head periodically (once every month) to maintain high quality of print. NOTE: After printing, the print head is hot. Allow it to cool before cleaning. Do not touch the print head with fingers or any hard object.



Figure 4: Procedure to clean the printer head

16. Glossary

Bluetooth: Wireless technology that allows the printer to connect to Truelab® devices without cables.

Pairing: The process of connecting your printer to another Bluetooth-enabled Truelab® device for communication.

Thermal Printing: A printing technology that uses heat to transfer ink from a ribbon or directly onto thermal paper.

17. References

Bluetooth Special Interest Group (SIG) (2021) Bluetooth Core Specification: Overview of Bluetooth Technology. Bluetooth SIG.

Available at: <https://www.bluetooth.com/specifications>

Zebra Technologies Corp. (2020) Thermal Printing Technology Basics: An Overview of Thermal Printing Methods. Zebra Technologies.

Available at: <https://www.zebra.com/content/dam/zebra/manuals/thermal-printing-basics.pdf>

18. Symbol Keys

Symbols	Description of Symbol key
REF	Catalogue number



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