

# AlcoPrint

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## Thermal Printer Operation Manual V2.1

# Operation Instruction

## AlcoPrint Thermal Printer

This manual is a reference of your operation. If you have found something that is not consistent, please send us a brief comment to enable us to rectify the inconsistencies.

It's possible to modify owing to further developments that contrast to the data and illustrations contained in these operating instructions

This manual is subject to the service of bluepoint MEDICAL GmbH & Co.KG.

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## 1 General Safety and Service Notes

### Please read these instructions before operation!

Handling the device requires exact knowledge of these operating instructions and their observance. The device is intended for the application described only.



This symbol means: WARNING.

Warnings are indicated by the WARNING symbol shown on the left.



This symbol means: ATTENTION

Attentions alert the user to the care required for the printer to be safe and efficient.

### Do not use this device in explosive place.

Contdition:

Do not deal with the devices as a domestic waste. They must be disposed in accordance with national or regional regulations.

### 1.1 Safety Requirement

Only matched batteries and battery charging devices can be used in this printer. Otherwise, it's user's responsibility for any damages, low performance, explosion and fire caused by wrong use of them.

Do not open the paper cover when printing is just end, otherwise Thermal hurt to skin will casued.

### 1.2 Caution in use

Do not print more than 1 meter continuously, otherwise, the printer will be damaged.

Do not open the cover through pulling out the cover directly, otherwise, the cover will be damaged. User can open the cover through the cover button.

Do not open the cover when printing is on, otherwise, the quality of the printout will not be guaranteed.

Do not put the thermal paper at an improper position on the printer.

Do not dorp the printer from high positon.

A proper distance is less than 20 meters for wireless (optional) print, otherwise, data will not be received correctly.

Printing can be done through cable or wireless (optional) way, but it is better to use one way in the printing. If cable printing is used, do not pull out the cable during printing.

It is a general character for wireless printing that the performance will not be good if there are other wireless noise. In this condition, cable printing is a good alternative solution.

When the print interface on the AlcoTrue P/M has closed for some reason, but you still want to print this measurement, you can go to the "Last measurement result" of the main manual to achive this printing, please refer to **User Instruction** of AlcoTrue P/M.

Only thermal paper recommended is permitted in this printer, otherwise, perfomacne will not be guaranteed.

Make sure that the voltage of the car smoke charger is 12V, otherwise, damage will be casued to the printer.

### 1.3 Caution in storage

Do not store the printer at a place where exposed in direct sunlight.

Do not store the printer at a place with high temperature.

The thermal paper can be stored for 5 years if condition is ok, but the End-Users should bare the responsibility to make a copy for important printouts.

## 2 Function and Application

This printer is designed for AlcoTrue P/M alcohol analyser. Through cable or wireless (optional) way, printing can be achieved.

This is a Thermal printer. The life of the printout is determined by the thermal paper. For recommended thermal paper, 5 years is guaranteed.

## 3 Controls and symbols

### 3.1 The device

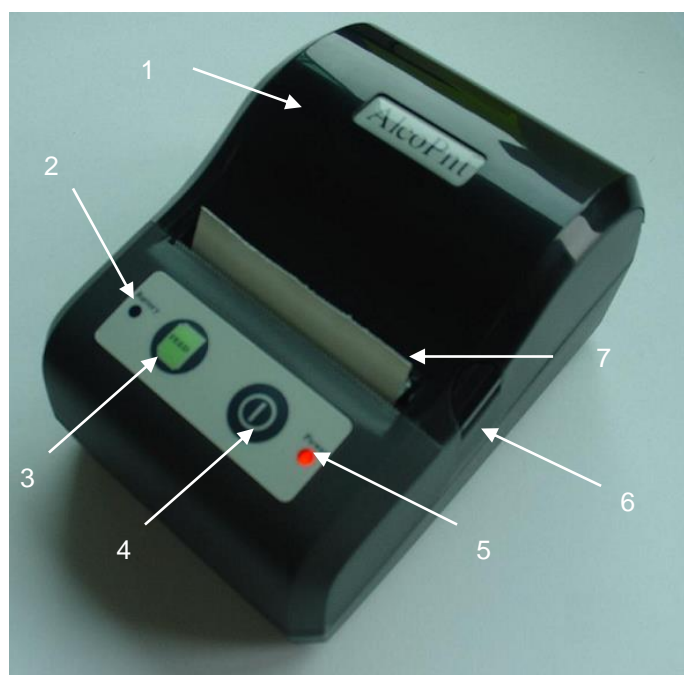





Figure 1 The outline of the printer

No	Assignment
1	Paper cover
2	Battery LED (Blue LED)
3	FEED button
4	Power button
5	Power LED (Red LED)
6	Cover button
7	Thermal paper out slot

## 3.2 Symbols on AlcoPrint Thermal Printer

Symbol	Description
	Read the operating instructions!
	Date of manufacture
	Manufacturer
<b>PN</b>	Product number
<b>SN</b>	Serial number

## 4 Preparing for operation

### 4.1 Paper Load

Open the paper cover through cover button (Fig. 1), then put the paper into the correct position on the paper out slot. Close the cover after that.



Attention:

- Do not open the cover through pull the cover out directly, otherwise, damage will happen.
- Cover button is a right means to open the cover.
- There are two faces for thermal paper. Only one side is for printing.

### 4.2 Battery Charge

It is time to charge the battery if the printout is not clear, the battery LED is flashing, or there is no response when feed button is put.

When the voltage of the battery is too low, no printing happens even the data are received correctly.

Two ways can be used to charge the battery: AC/DC adaptor or smoke adaptor. When charging, the blue battery LED will be on, until the LED turns off means the battery is full. One full charging cycle is about 3 hours.



Attention:

- Use the recommended charger to charge the battery.
- Pay attention to the polarity of the battery charger.
- Correctly connect the battery charger to the printer.
- Do not put the printer on a place with high temperature.
- It's not recommended to print when battery charging is on.

### 4.3 Cable Connection

Inset the printer cable into the printer and the alcohol analyser.

No need to press any button on the printer.

The printer will shut down automatically after printing.



Attention:

- Do not remove the cable during printing, otherwise, printing will not be guaranteed.
- No need to switch the power LED on during cable printing.

#### 4.4 Wireless Connection (optional)

It is necessary to switch on the power through power button if it is the first printing in 30 minutes through wireless. This will activate the wireless data receiving unit, in 30 minutes, any data sent from the AlcoTrue P/M to the printer can be received no need to press the power button anymore.

The wireless function will be switched off if no operation in 30 minutes. It is necessary to re-open the wireless function by pressing power button again if next wireless printing is necessary after 30 minutes.



Attention:

- The RED power LED should be on during wireless printing.

## 5 Operation

After preparation, printer is ready:

### 5.1 Cable printing

The blue battery LED is on when data are sending out from the AlcoTrue P/M. If there is no problem to data receiving, printing will be started soon.

Button is temporary no function during printing.

### 5.2 Wireless printing (optional)

The printing process is the same as cable printing. But data can only be received when red power LED is on.



Attention:

#### Error description and rectification of wireless printing:

- No data can be received if the printer is too far away from the AlcoTrue P/M. Under this condition, even blue LED is on, no printing will be started.
- If two or more printouts are to be done, please start the next printing after the previous one has completed with blue LED off.

### 5.3 Power off

For cable printing, no need to run off the printer. After every printing, the printer will turn off automatically.

For wireless printing, It will be off if there is no operation in 30 minutes. But for power saving consideration, user can shut down the printer before 30 minutes through pressing the power button again.

### 5.4 Paper feed

Adjust the paper position through pressing the paper feed button.

### 5.5 Description of LED:

RED LED on: power is on or a printing is processing.

RED LED flash: battery low or out of paper.

BLUE LED on: battery is charging, it will turn off when charging is done; Or when receiving data, it will be off when data receiving is over.

## 6 Device care and Cleaning

### 6.1 Device Cleaning

Do not use alcohol and other chemical detergents to clean the platen. Wet cotton is enough.

Do not clean the printing head when power is on.

### 6.2 Storage

Thermal paper should be stored on a dry place.

Cable and battery charger should be stored properly.

### 6.3 Low Battery indication

If red power LED is flashing after power button is put down, it means the battery is low. Battery charge is needed.

If red LED is flashing after a printing, it also means low battery.

### 6.4 Battery change

Li-ion battery is equipped on this printer, in normal applications, the battery can be charged and discharged for about 300 cycles.

If the quality of the printout is not good as before even the battery is full, or the life of battery after charging is significantly less than before, the battery has to be replaced by a new one. Please contact the authorized agent for new battery replacement.

## 7 Maintenance



Attention:

- Maintenance can only be performed by authorised person.

## 8 Error and rectification

Error	Reason	Solution
<b>User error</b>		
Blue LED is off when data is sending out from AlcoTrue P/M to the printer.	Power hasn't been turned on when it is the first printing in 30 minutes, so no data can be received.	Turn on the power.
Power LED is on but no printing started	Distance between alcohol analyser and printer is too large.	Shorten the distance
No paper roll after put down the feed button.	Battery is low, the paper or the cover is not in correct position	Charge the battery Put the cover and paper to a correct position
<b>Printer error</b>		
No response when buttons have been put down	Battery is too low and has come into protected condition	Charge the battery
No response to button to be put down	Button failure	Maintenance
The quality of the printout is not very good.	Printer header is destroyed	Maintenance
The life of the battery is too short after one fully charging.	Life of the battery is over	Change the battery
Data receiving failure on wireless printing.	Wireless noise is too large	Cable printing

## 9 Technical parameters

Operation condition:  Ambient conditions: Temperature range – operation: Temperature range – storage: Ambient pressure: Ambient humidity:  Dimensions ( L x W x H): Weight:  LED:  Buttons:  Power:  Interface to AlcoTrue P/M:	0°C to +50°C -20°C to +60°C 600 to 1400 hPa 10 to 98 % r.h.  120mm x 84mm x 70mm 200g, include battery  Power LED(red)/Battery LED (blue)  Power Button/FEED button  1.2 A in printing 20uA in standby  RS232 cable / Wireless (optional)
Printing head  Print mode: Paper Width: Print Width: resolution: Dot per line: Speed( depended on battery voltage): Maxmium: Minimum: Thickness of paper: Paper load mode:	thermal dot line printing 57mm 48mm 8dot/mm 384dot  60mm/S 30mm/S 60—80um Easy load
Battery of printer  Type: Rated voltage: Capacity: Charging cycle: Charging time: Life of fully charged battery:	Li-ion rechargeable battery 7.4V 1200mAh 300 times 4.5hours 400 printouts in normal condition
Battery Charger  AC/DC adaptor(Option): Input: Output: Regulatory : Polarity:	100V—240V, 50/60Hz 12V, 1A DC CE Postive in, negative out

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Smoke adaptor(Optional): In: Polarity:	12V, 2A DC Positive in, negative out
Wireless unit(Optional)	
Power supply:	1.9V-3.6V
Frequency:	868MHz/915MHz
Output power:	+10dB
Typical Sensitivity:	-100dB
Transmitted data rate	100Kbps
Transmit distance @ room	>20 meters (depending on the ambient condition)
Temperature range	-40-85°C

## 10 Order information

Item	Code
<b>Printer:</b> Thermal printer - AlcoPrint	4040112007

Accessories	Code
<b>Paper:</b> Long life thermal paper	1040122100
<b>Cable:</b> Connect the printer to the analyser	3040122011

## 11 Warranty

We give a 1-year warranty for defects caused by material or manufacturing faults from the date of purchase. Defects which come under the terms of the warranty are rectified in accordance with our terms of warranty.

The cost for transport to and from the place of repair for a measure that is not covered by the warranty shall be borne by the customer.

Please send devices to be repaired together with all accessories to the following address:

bluepoint MEDICAL GmbH & Co.KG

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 Website: [www.bluepoint-medical.com](http://www.bluepoint-medical.com)



Attention:

- Warranty coverage given only if the purchase receipt is presented