

Made for



iPod



iPhone



iPad

USER MANUAL

Q3x

CUSTOM[®]

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UNLESS OTHERWISE SPECIFIED, THE INFORMATION GIVEN IN THIS MANUAL ARE REFERRED TO ALL MODELS IN PRODUCTION AT THE ISSUE DATE OF THIS DOCUMENT.

GENERAL INSTRUCTIONS

CUSTOM S.p.A. declines all responsibility for accidents or damage to persons or property occurring as a result of tampering, structural or functional modifications, unsuitable or incorrect installations, environments not in keeping with the equipment's protection degree or with the required temperature and humidity conditions, failure to carry out maintenance and periodical inspections and poor repair work.

GENERAL SAFETY INFORMATION

Your attention is drawn to the following actions that could compromise the characteristics of the product:

- Read and retain the instructions which follow.
- Follow all indications and instructions given on the device.
- Make sure that the surface on which the device rests is stable. If it is not, the device could fall, seriously damaging it.
- Make sure that the device rests on a hard (non-padded) surface and that there is sufficient ventilation.
- Do not fix indissolubly the device or its accessories such as power supplies unless specifically provided in this manual.
- When positioning the device, make sure cables do not get damaged.
- [Only OEM equipment] The equipment must be installed in a kiosk or system that provides mechanical, electrical and fire protection.
- The mains power supply must comply with the rules in force in the Country where you intend to install the equipment.
- Make sure that there is an easily-accessible outlet with a capacity of no less than 10A closely to where the device is to be installed.
- Make sure the power cable provided with the appliance, or that you intend to use is suitable with the wall socket available in the system.
- Make sure the electrical system that supplies power to the device is equipped with a ground wire and is protected by a differential switch.
- Before any type of work is done on the machine, disconnect the power supply.
- Use the type of electrical power supply indicated on the device label.
- These devices are intended to be powered by a separately certified power module having an SELV, non-energy hazardous output. (IEC60950-1 second edition).
- [Only POS equipment] The energy to the equipment must be provided by power supply approved by CUSTOM S.p.A.
- Take care the operating temperature range of equipment and its ancillary components.
- Do not block the ventilation openings.
- Do not insert objects inside the device as this could cause short-circuiting or damage components that could jeopardize printer functioning.
- Do not carry out repairs on the device yourself, except for the normal maintenance operations given in the user manual.
- The equipment must be accessible on these components only to trained, authorized personnel.
- Periodically perform scheduled maintenance on the device to avoid dirt build-up that could compromise the correct, safe operation of the unit.
- Do not touch the head heating line with bare hands or metal objects. Do not perform any operation inside the printer immediately after printing because the head and motor tend to become very hot.
- Use consumables approved by CUSTOM S.p.A.



THE CE MARK AFFIXED TO THE PRODUCT CERTIFY THAT THE PRODUCT SATISFIES THE BASIC SAFETY REQUIREMENTS.

The device is in conformity with the essential Electromagnetic Compatibility and Electric Safety requirements laid down in Directives 2014/30/EU and 2014/35/EU inasmuch as it was designed in conformity with the provisions laid down in the following Standards:

- EN 55032 (*Electromagnetic compatibility of multimedia equipment - Emission Requirements*)
- EN 55024/EN 55035 (*Electromagnetic compatibility of multimedia equipment - Immunity requirements*)
- EN IEC/EN 62368-1 (*Audio/video, information and communication technology equipment*)

The device is in conformity with the essential requirements laid down in Directives 2014/53/EU about devices equipped with intentional radiators. The Declaration of Conformity and other available certifications can be downloaded from the site www.custom4u.it.



GUIDELINES FOR THE DISPOSAL OF THE PRODUCT

The crossed-out rubbish bin logo means that used electrical and electronic products shall NOT be mixed with unsorted municipal waste. For more detailed information about recycling of this product, refer to the instructions of your country for the disposal of these products.

- Do not dispose of this equipment as miscellaneous solid municipal waste, but arrange to have it collected separately.
- The re-use or correct recycling of the electronic and electrical equipment (EEE) is important in order to protect the environment and the wellbeing of humans.
- In accordance with European Directive WEEE 2012/19/EU, special collection points are available to which to deliver waste electrical and electronic equipment and the equipment can also be handed over to a distributor at the moment of purchasing a new equivalent type.
- The public administration and producers of electrical and electronic equipment are involved in facilitating the processes of the re-use and recovery of waste electrical and electronic equipment through the organisation of collection activities and the use of appropriate planning arrangements.
- Unauthorised disposal of waste electrical and electronic equipment is punishable by law with the appropriate penalties.
- For the waste sorting of the packaging materials, please check the local waste disposal laws.



The format used for this manual improves use of natural resources reducing the quantity of necessary paper to print this copy.

Q3X

Made for

iPhone 7 Plus
iPhone 7
iPhone 6s Plus
iPhone 6s
iPhone 6
Plus iPhone 6
iPhone 5s
iPhone 5c
iPhone 5
iPhone 4s
iPhone 4
iPhone 3GS
iPhone 3G
iPhone

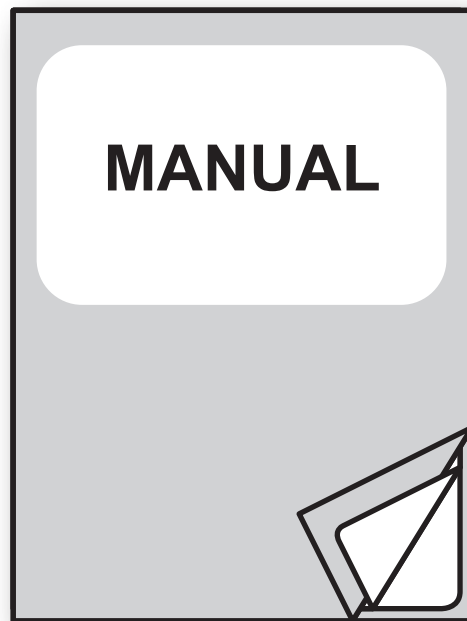
iPad Pro (12.9 - inch)
iPad Pro (9.7- inch)

iPad mini 4
iPad mini 3,
iPad mini 2
iPad mini

iPad (5th generation)
iPad (4th generation)
iPad (3rd generation)
iPad 2
iPad

iPad Air 2
iPad Air

iPod touch (5th generation)
iPod touch (4th generation)
iPod touch (3rd generation)
iPod touch (2nd generation)
iPod touch (1st generation)



For details on the commands,
refer to the manual with code **77200000001400**

For further information about the use of “PrinterSet” tool
refer to the manual with code **78200000001800**

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1 INTRODUCTION

This document is divided into sections and chapters. Each chapter can be reached by the index at the beginning of this document. The index can be reached by the button on each page as shown in the diagram below.

Link to table of contents

Notes reference

Numbered title
for chapter

Numbered title
for paragraph

General content

Information valid
for devices AAAA, BBBB

Information valid
for device CCCC

Useful information to
not compromise
devices operation

Generic information or
suggestions for the use
of the devices

Information or
suggestions related to
specific operations

5

5.1

routine ⁽¹⁾

AAAA, BBBB

CCCC

ATTENTION:

NOTES:

(1)



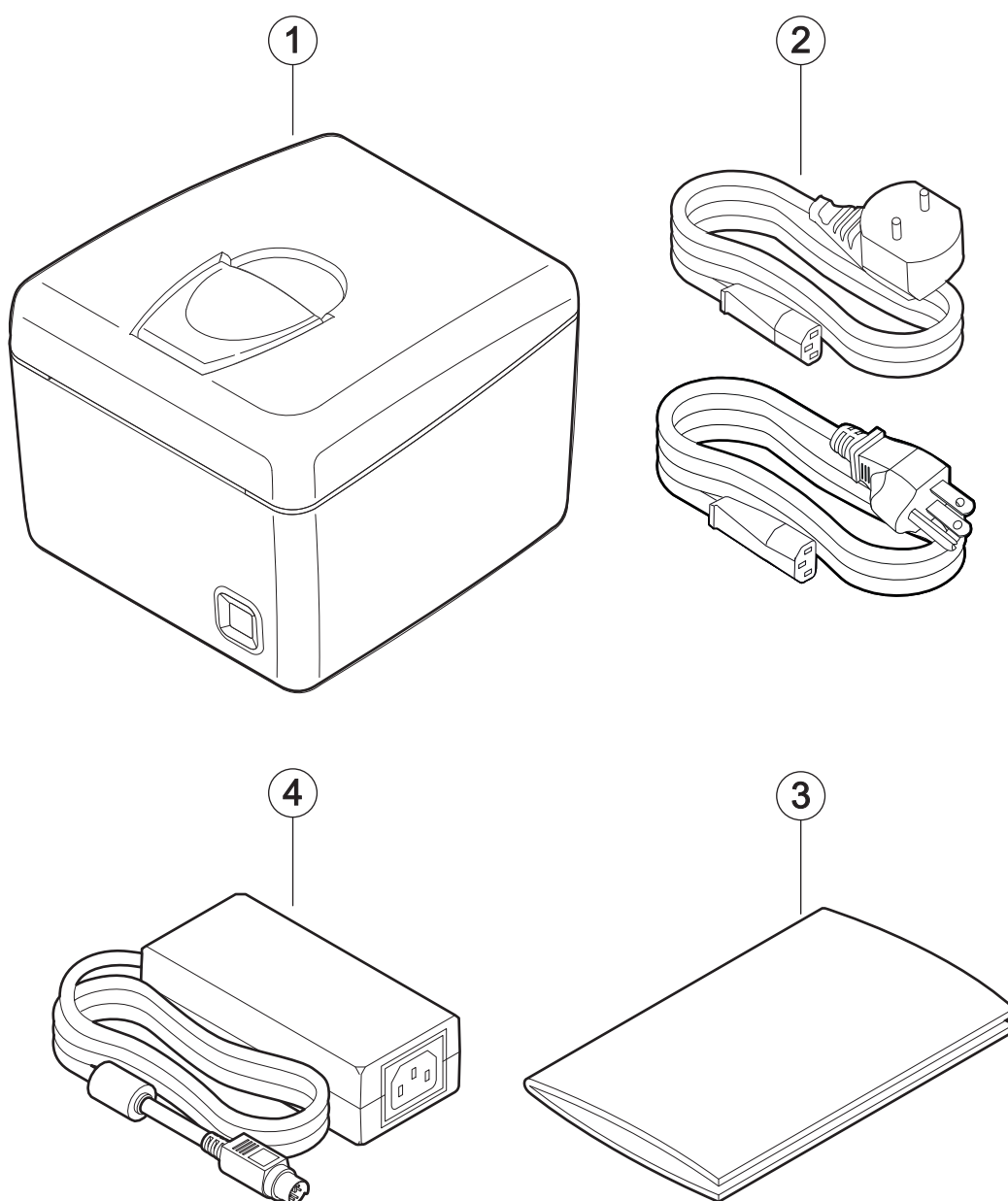
2 DESCRIPTION

2.1 Box contents

Remove the device from its carton being careful not to damage the packing material so that it may be re-used if the device is to be transported in the future.

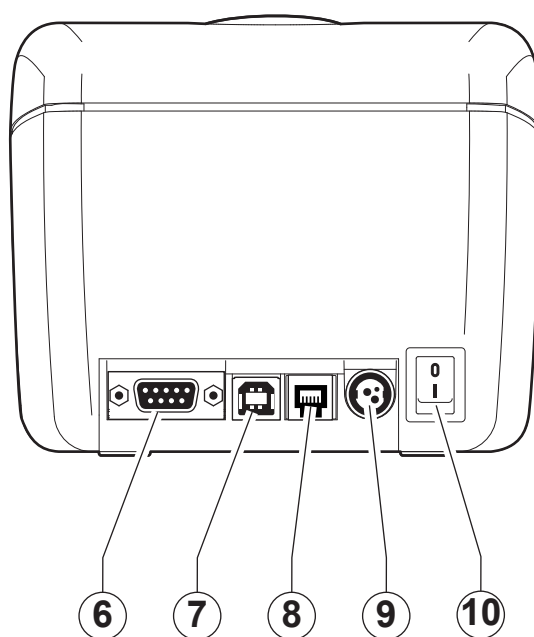
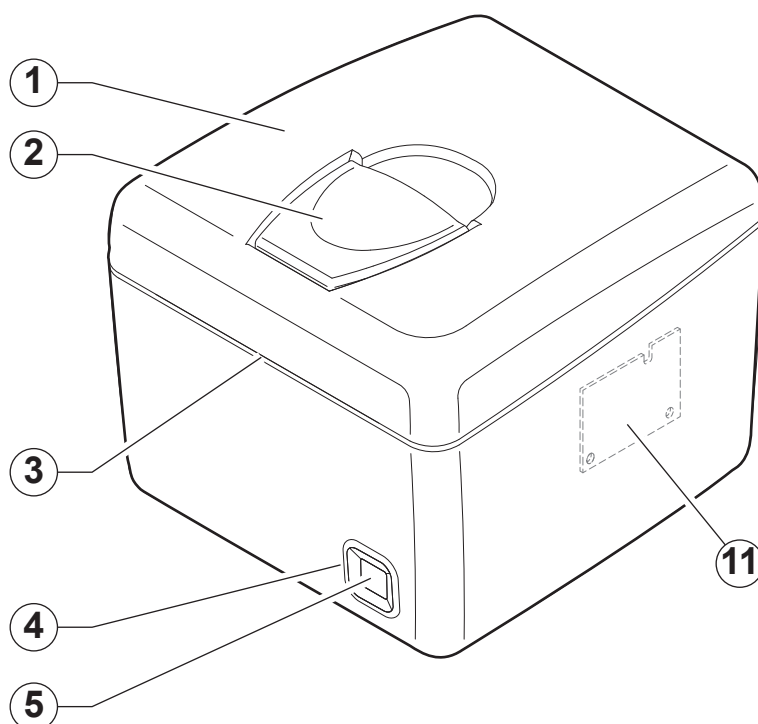
Make sure that all the components illustrated below are present and that there are no signs of damage. If there are, contact customer service.

1. Device
2. Standard AC power supply cable or US market AC power supply cable
3. Documentation (Short guide)
4. AC power supply



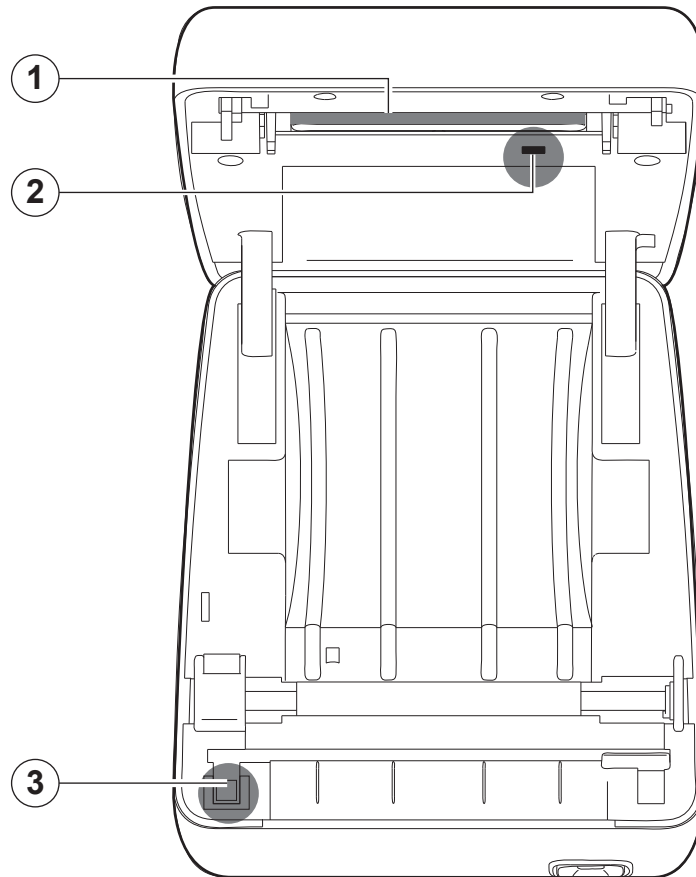
2.2 Device components: external views

- | | |
|--|----------------------|
| 1. Paper compartment cover | 7. USB port |
| 2. Paper compartment cover opening lever | 8. Drawer port |
| 3. Paper out | 9. Power supply port |
| 4. Status LED | 10. ON/OFF key |
| 5. FEED key | 11. Bluetooth board |
| 6. RS232 serial port | |



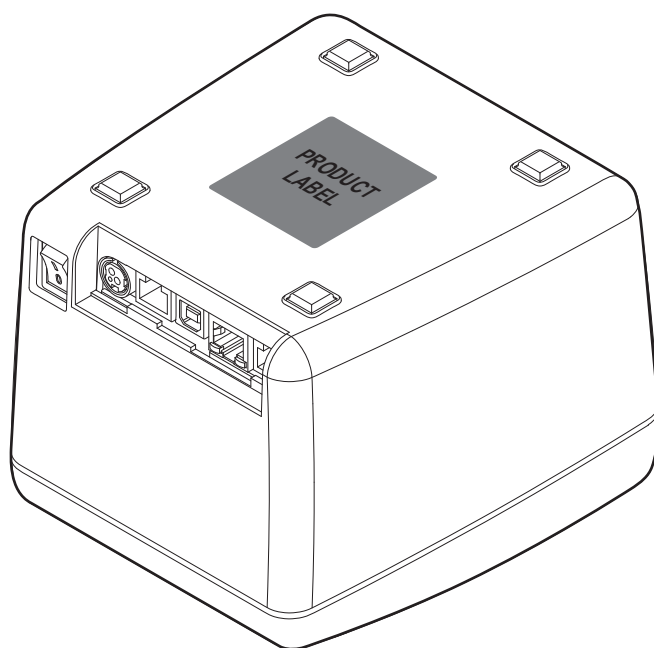
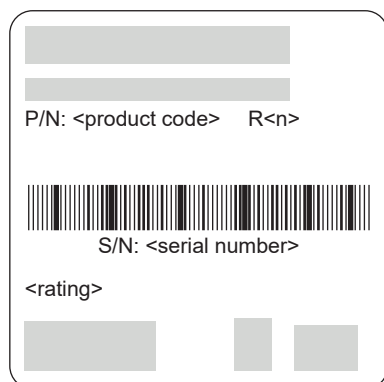
2.3 Device components: internal view

1. Sensor for printhead temperature
2. Sensor for paper end and black mark detection
3. Sensor for cover open

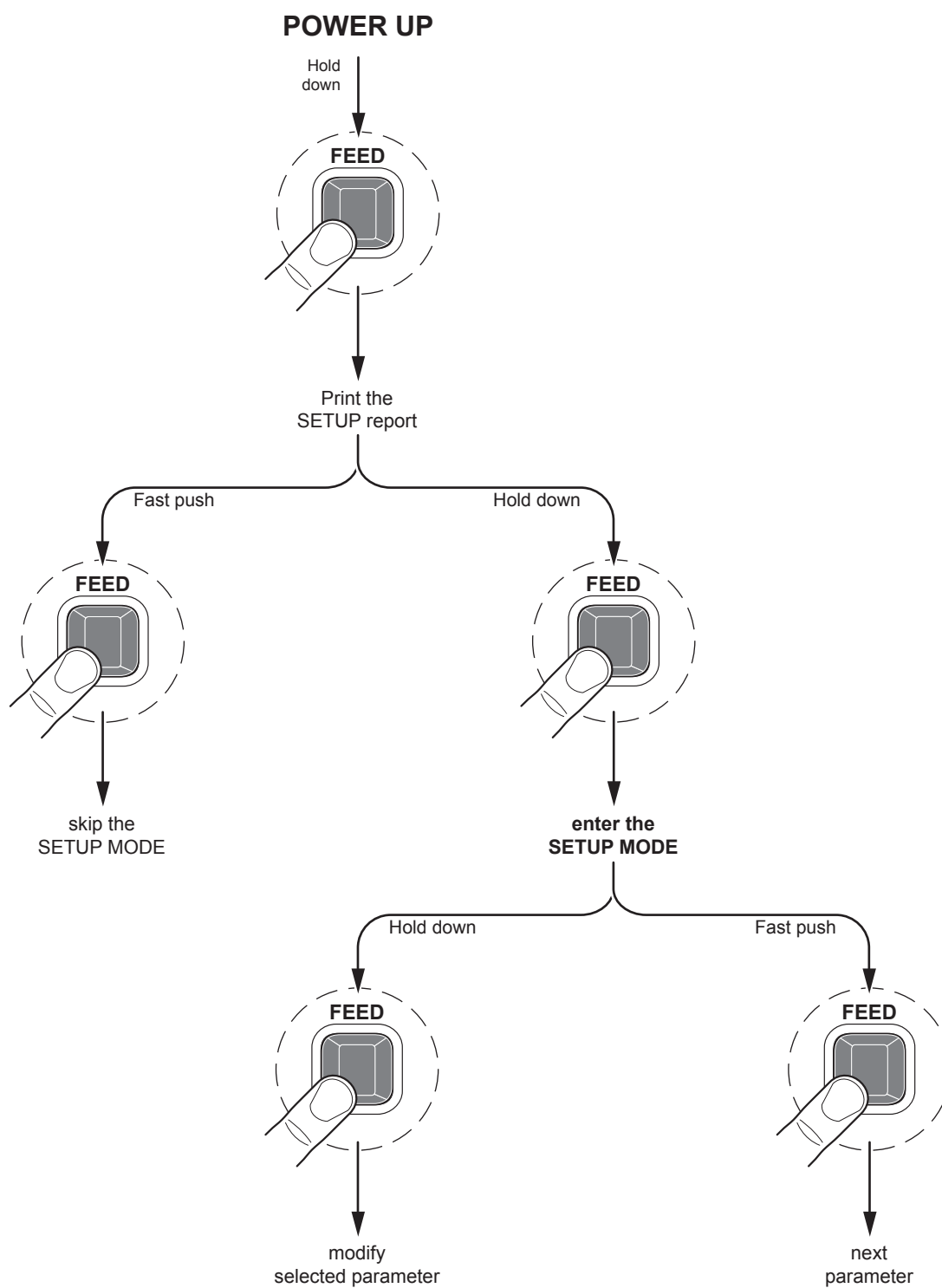


2.4 Product label

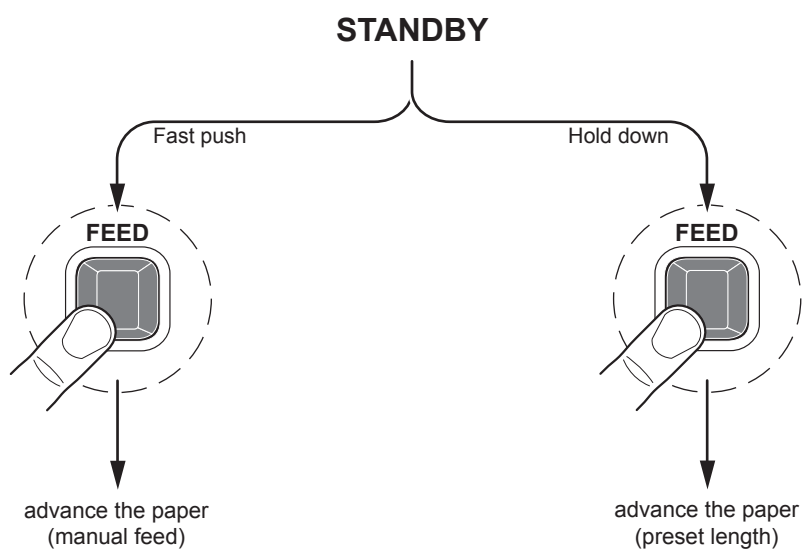
The main data that allow identification of the device are shown on the appropriate label applied to the bottom of the same. In particular, it reports the electrical data (rating) for connection to a power source, the product code, the serial number, the model number and the hardware revision (R).



2.5 Key functions: power up



2.6 Key functions: standby





2.7 Status flashes

The status LED indicates hardware status of device. Given in the table below are the various LED signals and the corresponding device status.

STATUS LED		DESCRIPTION
-	OFF	DEVICE OFF
WHITE/BLU	ON	DEVICE ON: READY MODE. CABLE COMMUNICATION ACTIVE AND/OR BLUETOOTH DEACTIVATED
BLUE COMMUNICATION STATUS	x 1	RECEIVE DATA
	x 2	RECEPTION ERRORS (PARITY, FRAME ERROR, OVERRUN ERROR)
	x 3	COMMAND NOT RECOGNIZED
	x 4	COMMAND RECEPTION TIME OUT
YELLOW NOTIFICATION STATUS	x 2	HEADING OVER TEMPERATURE
	x 3	PAPER END
	x 5	POWER SUPPLY VOLTAGE INCORRECT
	x 6	COVER OPEN
YELLOW BLUETOOTH STATUS	x 1	INITIALIZATION INITIALIZATION MODULES BLUETOOTH
GREEN BLUETOOTH STATUS	ON	DEVICE ON: NO ERROR WIRELESS COMMUNICATION ACTIVE, WAITING PAIRING BLUETOOTH IS IN PROGRESS
VIOLET BLUETOOTH STATUS	ON	WIRELESS CONNECTION ACTIVE.
RED UNRECOVERABLE ERROR	x 3	RAM ERROR
	x 4	EEPROM ERROR
	x 5	AUTOCUTTER ERROR

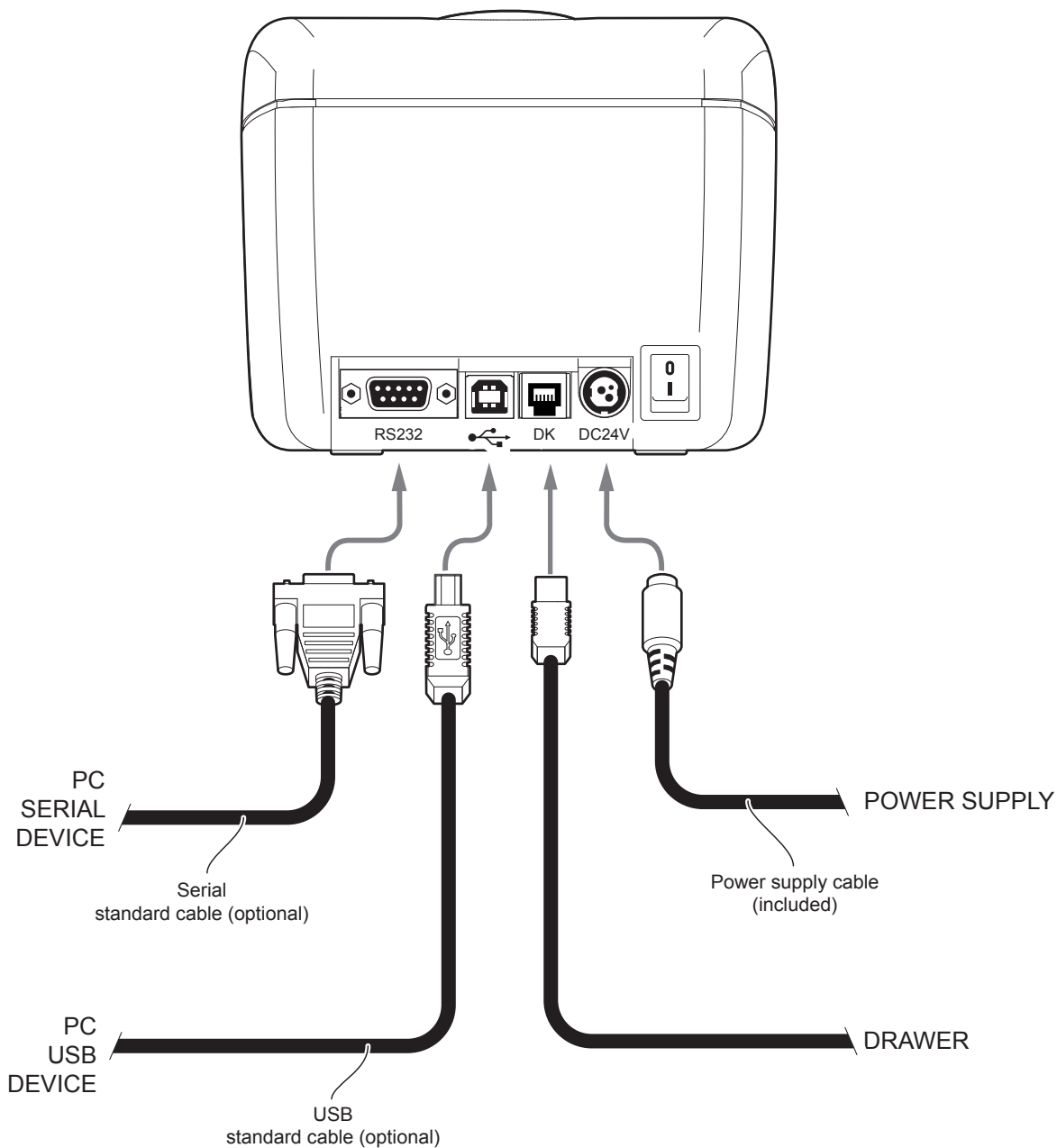


3 INSTALLATION

3.1 Connections

The following figure shows the possible connections for the device.

When RS232 and USB communication cables are connected to the device simultaneously, the communication takes place via the USB port.



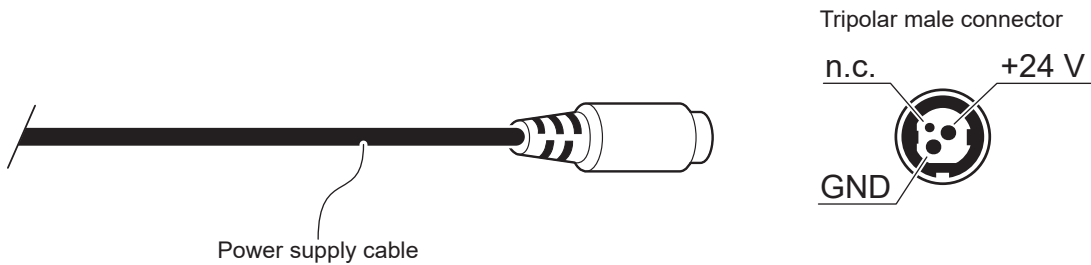
3.2 Pinout



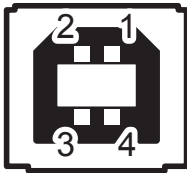
POWER SUPPLY
Tripolar female connector

J12	1	GND
	2	+24 Vdc
	3	GND
	4	Frame GND

Power supply cable
The following figure shows the connector pinout of the power supply cable for the device:

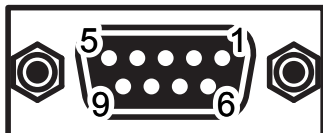


ATTENTION:
Respect power supply polarity.



USB INTERFACE
Female USB type B connector

J2	1	USB-PLUG (in)
	2	D- (in/out)
	3	D+ (in/out)
	4	GND



RS232 SERIAL INTERFACE

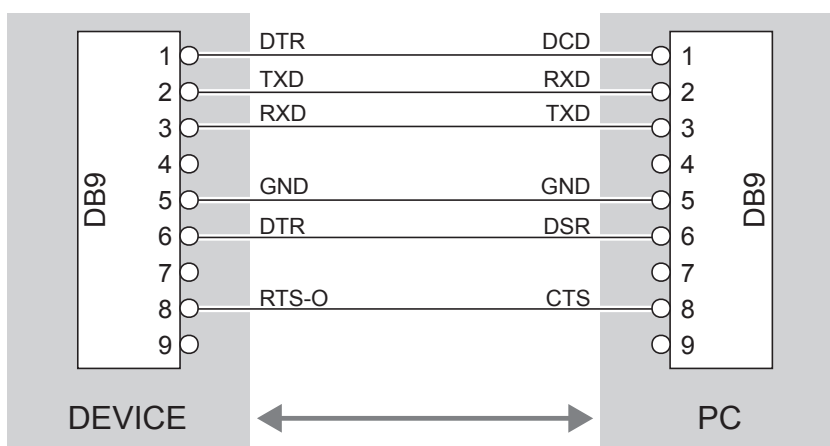
Female DB9 connector

J1	1	DTR	
	2	TX	During transmission, takes the values -VRS232 and +VRS232 depending on data.
	3	RX	During reception, takes the values -VRS232 and +VRS232 depending on data.
	4	n.c.	
	5	GND	
	6	DTR	When +VRS232, device is power on.
	7	n.c.	
	8	RTS-O	When +VRS232, device is ready to receive data.
	9	n.c.	

Given the presence of the RS232 standard, logic value "0" is associated with voltage value +VRS232 (corresponds to a voltage level of between +3Vdc and +15Vdc) and logic value "1" is associated with voltage value -VRS232 (corresponds to a voltage level of between -3Vdc and -15Vdc).

DEVICE > PC connection

The following picture shows an example of connections between the device and a personal computer using a 9 pin RS232 serial connectors:



When use a serial cable, we recommend the installation of a ferrite core on the serial cable.

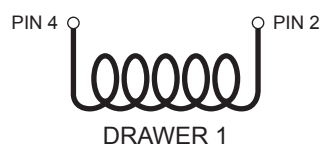


DRAWER CONNECTOR

Female RJ12 connector

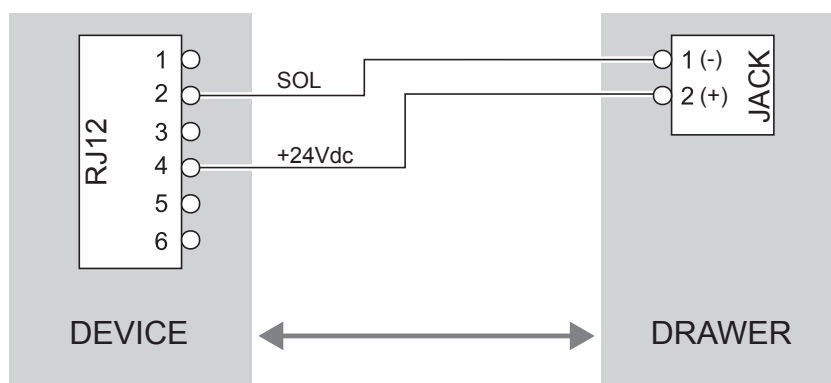
J5	1	GND	
	2	SOLEN	(out) Drawer 1 command
	3	CASS	(in) Drawer status
	4	+24V TO	
	5	n.c.	
	6	GND	

The solenoid of the drawer 1 must be connected from Pin 2 to Pin 4 on the drawer connector



DEVICE > DRAWER (optional) connection

Use an optional adapter cable RJ12-Jack to connect the device to a drawer. Refer to the picture below for the connector pin signals:



ATTENTION:

This device can manage drawers of power supplies 24 V. To prevent a current overload, check and set correctly the kind of cash drawer.



3.3 Driver and SDK

In the website www.custom4u.it are available the drivers for the following operating system:

OPERATING SYSTEM	DESCRIPTION	INSTALLATION PROCEDURE
Windows	Driver for Windows XP	From the START menu, press Run and type-in the path where the SW was saved on your PC, then click OK. Follow the instructions that appear on the screen to install the driver.
	Driver for Windows VISTA (32/64 bit)	
	Driver for Windows 7 (32/64 bit)	
	Driver for Windows 8 (32/64 bit)	
	Driver for Windows 8.1 (32/64 bit)	
	Driver for Windows10 (32/64 bit)	
	Self-installing driver for Virtual COM (32/64 bit) (see paragraph 5.4)	
	Driver for OPOS	
Linux	32/64 bit	Follow the instruction get back on the "README.txt" file. You can find it in the software package downloaded in advance.
macOS	Driver for macOS X	Follow the instruction in the ".pkg" file. You can find it in the software package downloaded previously.
Android	Library for CustomAndroidAPI	Extract the zipped folder to the the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the library.
iOS	Library for CustomiOSApi	Extract the zipped folder to the the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the library.
Windows Phone		Extract the zipped folder to the the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the library.

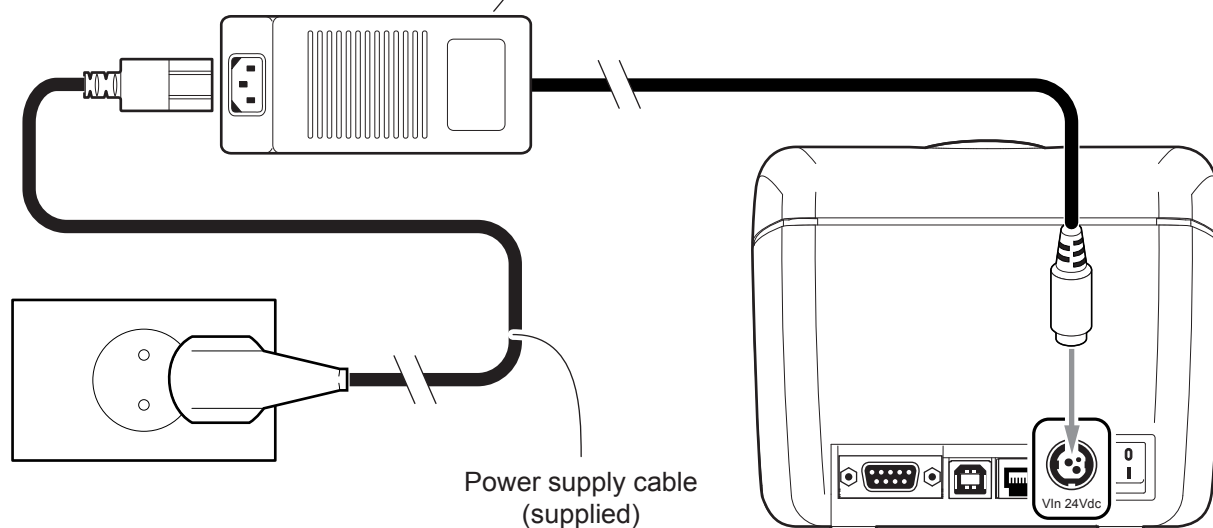
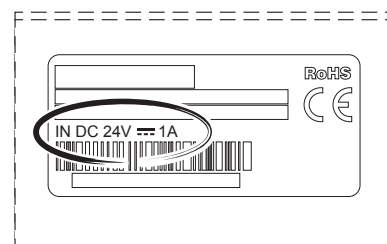


4 OPERATION

4.1 Switch the device ON/OFF

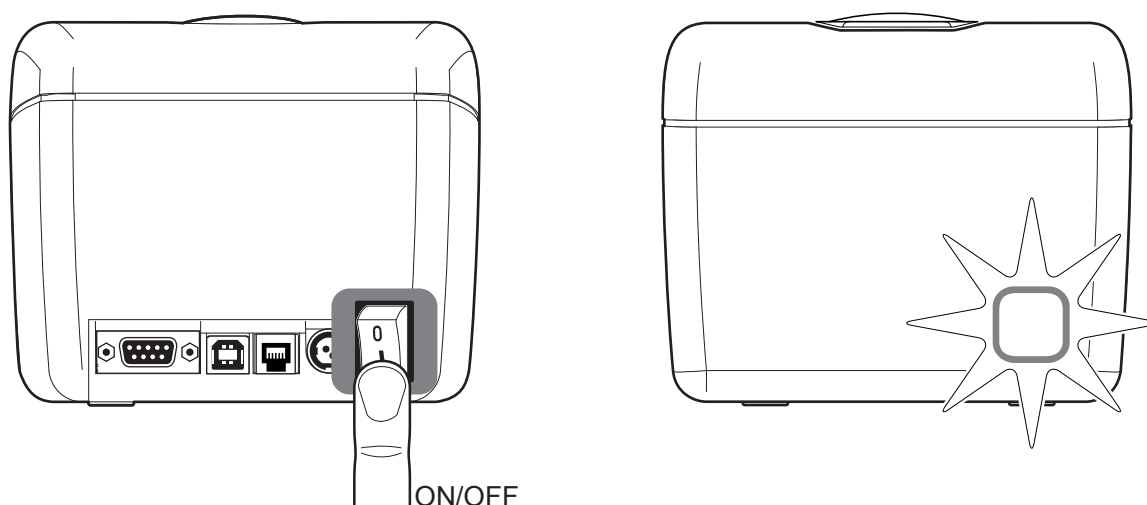
1

For printing receipts with wide black zones, we recommend to replace the included power supply with the optional power supply that provides a peak current higher for larger time intervals (see technical specification for power supplies codes).



Connect the power adapter (supplied) to the device and the mains outlet.
Use the type of electrical power supply indicated on the label.

2

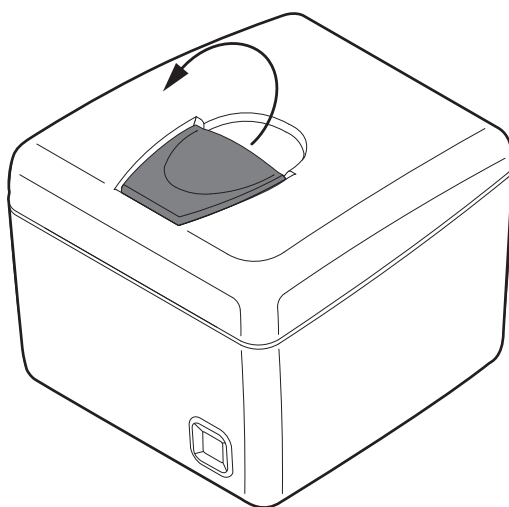


Switch device on pressing key ON/OFF, the LED is switched on and the device is ready.
Switch device off pressing key ON/OFF.

4.2 Opening cover

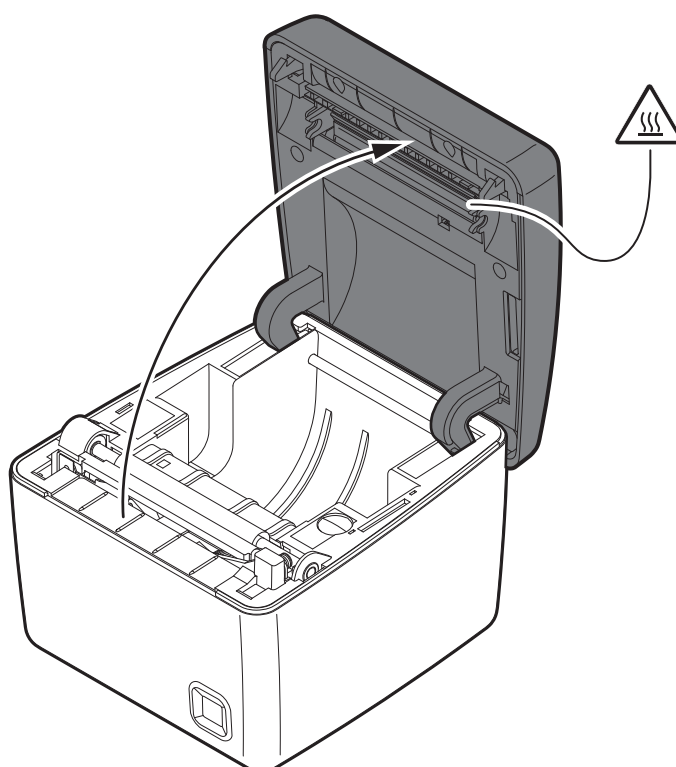
To open the device cover proceed as follows.

1



Lift the opening lever.

2

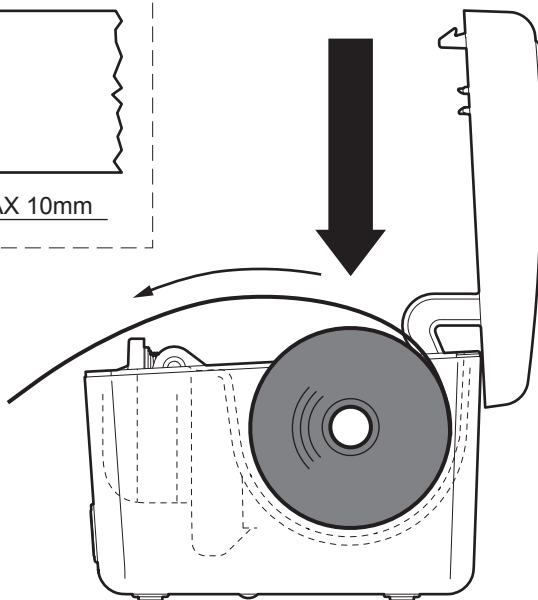
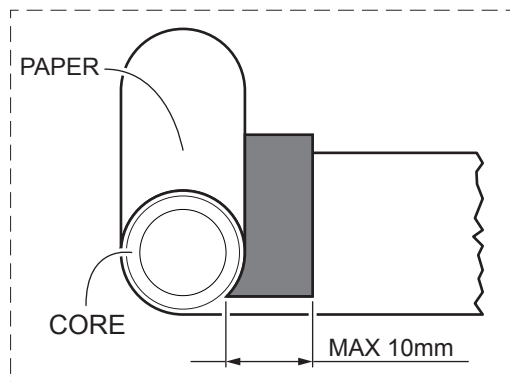


Open the device cover.

4.3 Loading the paper roll

To change the paper proceed as follows. At every change of paper, check inside the device to locate and remove any scraps of paper.

1

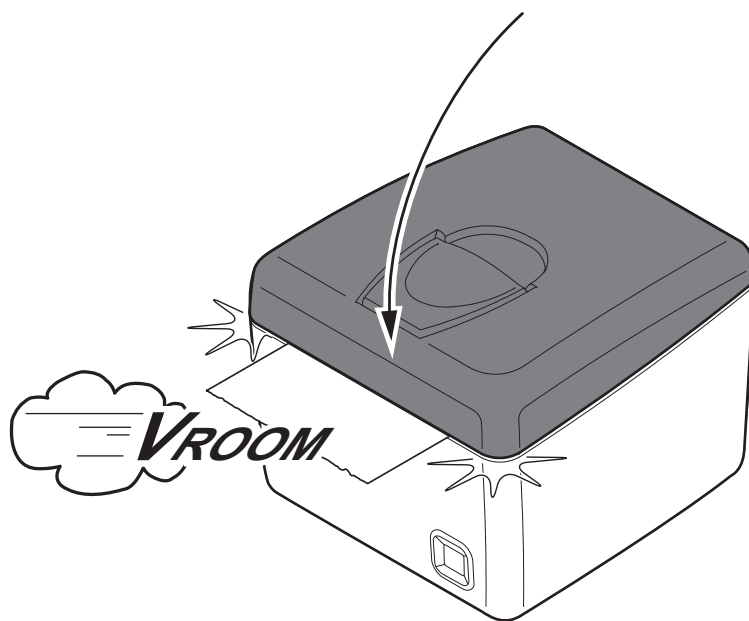


Open the device cover (see [paragraph 4.2](#)).

Place the roll in the paper compartment respecting the correct direction of rotation shown in figure and pull out the paper for a few centimetres.

Use paper rolls in accordance with the measure for the double roll up of the paper at the roll core.

2



Close the device cover and wait until the paper is automatically loaded .

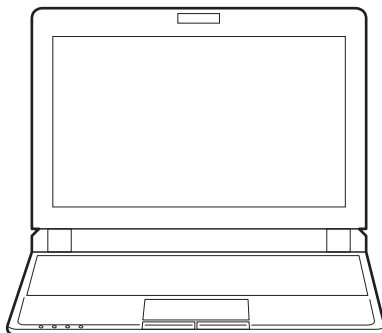


5 CONFIGURATION

5.1 Configuration by software

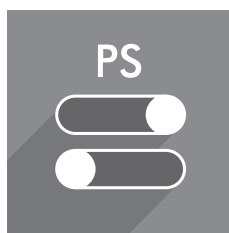
The setup parameters can be set by using the “PrinterSet” software tool available on www.custom4u.it.
For a detailed description of the device operating parameters see the following paragraphs.
To configure the device by software, proceed as follows:

1



Connect the device to a PC directly
(see [paragraph 3.1](#)), without using HUB devices.

2



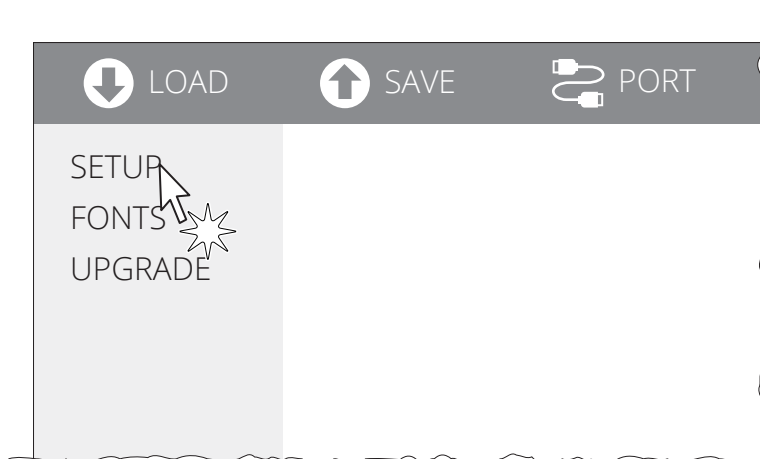
Start “PrinterSet” software tool.

3



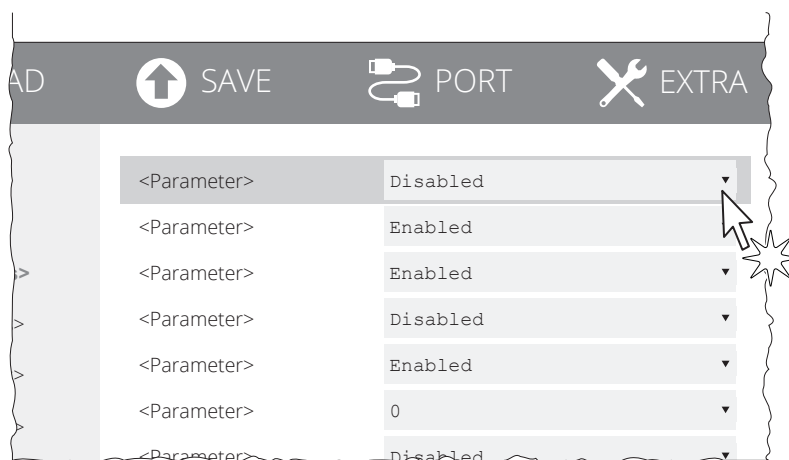
Click on LOAD > FROM DEVICE and select
the device connected to the PC.

4



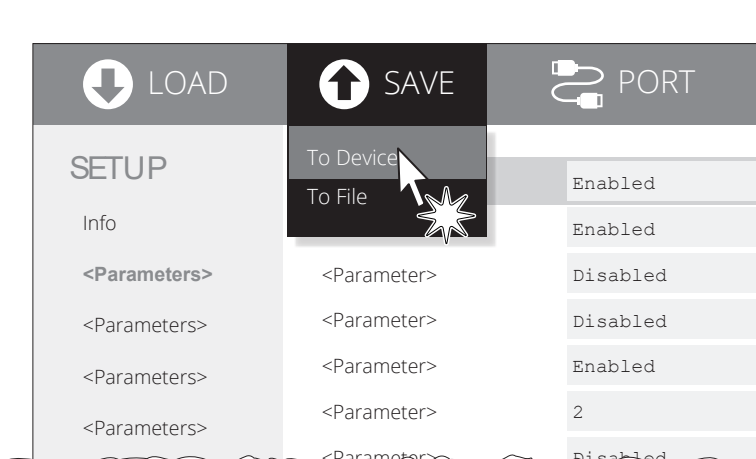
Click on SETUP to access the operating parameters of the device to be configured.

5



Make the desired changes to the device operating parameters.

6



Click on SAVE > TO DEVICE
to make the changes made effective.

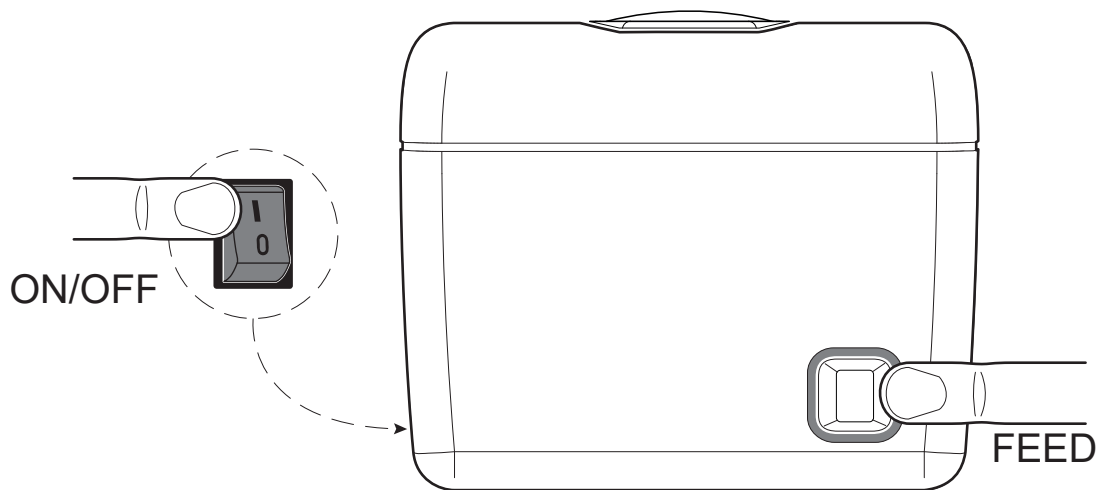
ATTENTION:

During saving, it is strongly discouraged to disconnect the communication cable or to remove the power supply of the PC or the device.

5.2 Configuration by keys

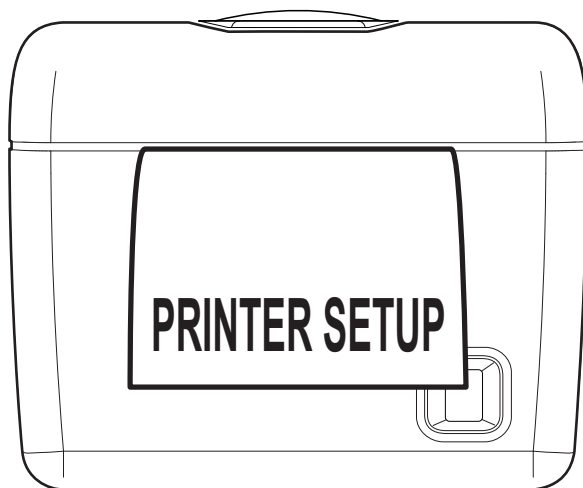
To enter the configuration mode and print a setup report with the operating parameters of the device, proceed as follows.

1



While pressing the FEED key,
switch on the device by pressing the ON/OFF key.

2



The device prints the report with the settings parameters.
Follow the instruction printed on paper to proceed with configuration procedure.



The following figures show the setup reports of the device. The shown values for parameters are sample values; for the list and the description of device operating parameters see the following paragraphs.

DEVICE NAME AND
FIRMWARE MODULES
RELEASE

DEVICE
STATUS

DEVICE
CONFIGURATION
PARAMETERS

KEYS FUNCTIONS

<device>

SCODE <code> - rel.

FCODE <code> - rel.

PRINTER SETUP

PRINTER TYPE <device model>
PRINTING HEAD TYPE <head model>
INTERFACE BLUETOOTH
PROGRAM MEMORY TEST..... OK
STATIC RAM TEST OK
EXTERNAL MEMORY TEST OK
CUTTER TEST..... OK
HEAD VOLTAGE [V] = 23.70
HEAD TEMPERATURE [°C] = 25
POWER ON COUNTER = 4
PAPER PRINTED [cm] = 40
CUT COUNTER = 1
BT PRINTER ID = <dispositivo_n. di serie>
PAIRING BT PIN = 1234
BT BUILD VERSION = 121016A IDPS

Wireless..... **ON**

BT AutoReconnect..... **Disabled**
Pairing BT..... **Disabled**
RS232 Baud Rate **19200 bps**
RS232 Data Length **8 bits/chr**
RS232 Parity **None**
RS232 Handshaking **Xon/Xoff**
Busy Condition **RxFull**
USB Address Number **0**
USB Virtual COM..... **Disabled**
Autofeed **CR Disabled**
Print Mode **Normal**
Chars / inch **A=15 B=20 cpi**
Speed / Quality..... **Normal**
Black Marck Alignment **Enabled**
Black Marck Threshold **40%**
Black Marck Distance [mm] **+15**
PaperEnd Buffer Clear **Disabled**
Font Type..... **International**
Code Table [num] **00**
USB Virtual COM..... **Disabled**
Print Density..... **0%**

[**PUSH**] *key to enter setup*

[**FAST PUSH**] *key to skip setup*



5.3 Device status

The device operating status is indicated in the configuration print-out in which, next to the name of the components displayed, the following information is given:

PRINTER TYPE	device model
PRINTING HEAD TYPE	print head model
INTERFACE	interface present
PROGRAM MEMORY TEST	OK appears if functioning and NOT OK if faulty
STATIC RAM TEST	OK appears if functioning and NOT OK if faulty
EXTERNAL MEMORY TEST	OK appears if functioning and NOT OK if faulty
CUTTER TEST	OK appears if functioning and NOT OK if faulty
HEAD VOLTAGE	voltage of the head
HEAD TEMPERATURE	temperature of the head
POWER ON COUNTER	number of power-ups made
PAPER PRINTED	centimetres of paper printed
CUT COUNTER	number of cuts performed
BT PRINTER ID	device identifier
PAIRING BT PIN	device password
BT BUILD VERSION	firmware release of the Bluetooth module



5.4 Communication parameters

The parameters marked with the symbol ^D are the default values.
Settings remain active even after the device has been turned off

RS232 BAUD RATE	Communication speed of the serial interface:				
	1200	19200 ^D			
	2400	38400			
	4800	57600			
	9600	115200			
	Parameter valid only with serial interface.				
RS232 DATA LENGTH	Number of bit used for characters encoding:				
	7 bits/char				
	8 bits/char ^D				
	Parameter valid only with serial interface.				
RS232 PARITY	Bit for the parity control of the serial interface:				
	None ^D = parity bit omitted				
	Even = even value for parity bit				
	Odd = odd value for parity bit				
	Parameter valid only with serial interface.				
RS232 HANDSHAKING	Handshaking:				
	XON/XOFF ^D = software handshaking				
	Hardware = hardware handshaking (CTS/RTS)				
	Parameter valid only with serial interface.				
	When the receive buffer is full, if handshaking is set to XON/XOFF, the device sends the XOFF (0x13) on the serial port. When the receive buffer has cleared once again, if handshaking is set to XON/XOFF, the device sends the XON (0x11) on the serial port.				
BUSY CONDITION	Activation mode for Busy signal:				
	OffLine/ RXFull = busy signal is activated when the device is both in OffLine status and the buffer is full				
	RXFull ^D = busy signal is activated when the buffer is full				
	Parameter valid only with serial interface.				
USB ADDRESS NUMBER	Numerical address code for the univocal identification of the USB device (in case of more than a USB device connected with the same PC):				
	0 ^D	2	4	6	8
	1	3	5	7	9



USB VIRTUAL COM	Setting the USB port as a virtual serial port: Disabled ^D = virtual COM disabled Enabled = virtual COM enabled To use this configuration it is necessary to install an additional driver (see the paragraph 3.3).
WIRELESS	Activation of the Bluetooth communication: ON OFF ^D If the “Wireless” parameter is set to ON (enabled) do not connect any communication cable to the device and disconnect all the communication cables from the device.
BT AUTORECONNECT	Setting the automatically connection function (only for Apple devices) Disabled ^D = AutoReconnect function disabled. To communicate with the printer must perform the pairing between the Apple device and the printer when communication is interrupted (power off, stand by, etc.). Enabled = AutoReconnect function enabled. The printer automatically attempts to restore the connection with the last device connected Apple whenever communication is interrupted (power off, stand by, etc.). Before enabling this function, you must perform the pairing between the Apple device and printer.
PAIRING BT	Setting the paring function for the Bluetooth devices: Disabled ^D = pairing function disabled. No passkey is requested to make association Enabled = pairing function enabled. To set it entering the pincode/passkey indicated on the setup report “Pairing BT PIN” (1234). To communicate with Bluetooth devices Apple set the parameter to Disabled

ATTENTION:

Any changes to network parameters will interrupt browser connection. If the server not responding you must reconnect to the new IP address set.



5.5 Operating parameters

This device allows the configuration of the parameters listed in the following table.

The parameters marked with the symbol ^D are the default values.

Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

PRINT MODE	Printing mode: Normal ^D = enables printing in normal writing way Reverse = enables printing rotated 180 degrees
AUTOFEED	Setting of the Carriage Return character: CR disabled ^D = carriage Return disabled CR enabled = carriage Return enabled
CHARS / INCH	Font selection: A = 11 cpi, B = 15 cpi A = 15 cpi, B = 20 cpi ^D CPI = Characters Per Inch
SPEED / QUALITY	Setting of printing speed and printing quality: Normal ^D High Quality
PAPEREND BUFFER CLEAR	Cleaning mode of the data in receive buffer, if the printing is stopped due to lack of paper: Disabled ^D = the data remain in the receive buffer. When the paper runs out, the device keeps the remaining data in the receive buffer and prints the remaining portion of the ticket after that the new paper is loaded. Enabled = when the paper runs out, all data in the receive buffer are deleted.
FONT TYPE	Setting of the font type: International ^D = Enables the use of the 256 characters font tables Chinese GB18030 = Enables the use of the chinese extended font GB18030-2000 Korean PC949 = Enables the use of the korean font PC949 When the "International" font is enabled, you need to choose the character code table (parameter "Code Table"). When the Chinese or Korean fonts is enabled, the selection of the character code table is suspended (parameter "Code Table").



CODE TABLE [NUM]

Identifier number of the character code table to use.

The numeric value of the identifier is made up with the following two parameters for the setting of two digits for the tens and the units:

Code Table [num x 10]

Setting the digit for tens:

0 ^D	2	4
1	3	5

Code Table [num x 1]

Setting the digit for units:

0 ^D	2	4	6	8
1	3	5	7	9

See the [paragraph 9.7](#) to learn about the character tables corresponding to the identification numbers set with this parameter.

The character tables set with this parameter are the same set with the command 0x1B 0x74 (refer to the commands manual of the device).

PRINT DENSITY

Adjusting the printing density:

-25%	0% ^D	+25%
-12%	+12%	

The print quality is strongly influenced by the type of chemical treatment and the type of storage to which the thermal paper has been subjected, as well as by the weight of the same. It may therefore necessary to act on this parameter to obtain the desired print quality.



5.6 Alignment parameters

This device allows the configuration of the parameters listed in the following table.

The parameters marked with the symbol ^D are the default values.

Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

BLACK MARK ALIGNMENT Alignment management:

Disabled ^D = the black mark alignment is not performed

Enabled = the black mark alignment is performed

BLACK MARK THRESHOLD Threshold value for the recognition of the presence of black mark by the black mark sensor:

0.75 V 1.50 V 2.25 V

1.00 V 1.75 V ^D 2.50 V

1.25 V 2.00 V 2.75 V

If the “Black Mark Alignment” parameter is disabled, this parameter is not printed.

BLACK MARK DISTANCE “Black Mark Distance” is the minimum distance (in millimeters) between the upper edge of ticket and the black mark (see [chapter 7](#)). The numeric value of the distance is made up with the following four parameters for the setting of three digits (two for the integer part of the number, one for the decimal part and of the sign):

B. MARK DISTANCE [mm x 10] Setting the digit for tens:

0 ^D 1 2

B. MARK DISTANCE [mm x 1] ⁽¹⁾ Setting the digit for units:

0 ^D 2 4 6 8
1 3 5 7 9

B. MARK DISTANCE [mm x .1] Setting the digit for decimals:

0 ^D 2 4 6 8
1 3 5 7 9

For example, to set the black mark distance to 15 mm, modify the parameters as follows:

Black Mark Distance [mm x 10] = 1

Black Mark Distance [mm x 1] = 5

Black Mark Distance [mm x .1] = 0

If the “Black Mark Alignment” parameter is disabled, the parameters for the “Black Mark Distance” are not printed.

(1) : The values of “Black Mark Distance [mm x 1]” > 2 can be set only if “Black Mark Distance [mm x 10]” = 0 or 1



5.7 Hexadecimal dump

This function is used for the diagnosis of the characters received from the communications port. Characters are printed as hexadecimal code and the corresponding ASCII code (see below). Each line is preceded by a counter in hexadecimal that indicates the number of bytes received.

During the startup, if you hold down the FEED key, the printer enters the self-test routine and print the setup report. The printer remains in standby until a key is pressed or characters are received through the communication port (Hexadecimal Dump mode). For each character sent, the receipt contain an indication of the hexadecimal and ASCII values (if the characters are underlined, the receive buffer is full). Shown below is an example of a Hexadecimal Dump:

HEXADECIMAL DUMP											
31	32	33	34	35	...	12345	...				
39	30	31	32	33	...	90123	...				
37	38	39	75	69	...	789ui	...				
68	6B	6A	73	64	...	hkjsd	...				
73	64	66	6B	6A	...	sdfkj	...				
66	73	64	66	6B	...	fsdfk	...				
65	69	6F	79	75	...	eioyu	...				
6F	72	69	75	77	...	oriuw	...				
6F	75	77	65	72	...	ouwer	...				
77	65	72	69	6F	...	werio	...				
72	69	6F	75	77	...	riouw	...				
6B	6C	73	64	66	...	kl sdf	...				
64	66	6B	73	64	...	dfksd	...				
73	64	66	6B	6A	...	sdfkj	...				
66	6B	F2	6A	73	...	fk≥j	...				
6A	6B	6C	68			jklh					



6 WIRELESS COMMUNICATION

The Bluetooth connectivity of the printer allows the wireless printing from a PC (e.g. using a text editor or third-part software) or from a mobile device Android, iOS and Windows Phone after installing the application “CustomPrint”, downloadable from the web site www.custom4u.it.

To perform the wireless printing with a printer equipped with Bluetooth connectivity is needed to pair with device.

The windows used in this paragraph may be different from the screens that appear on the device used for printing and may vary depending on the version of the operating system.

6.1 Pairing with Windows devices

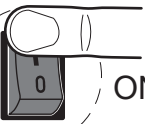
1

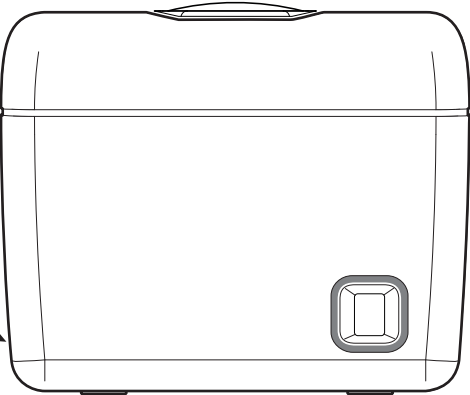
XXXXXXXXXXXXXXXXX Rx

<serial number>

Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2

 ON/OFF



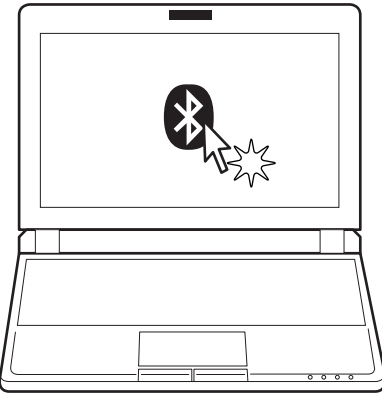
Turn on the printer
(see [paragraph 4.1](#)).

3

Wireless.....: **ON**
BT AutoReconnect.....: **Disabled**

Configure the parameters “Wireless” to “ON” and “BT AutoReconnect” to “Disabled” in one of the modes described in the previous paragraphs (see [chapter 5](#)).

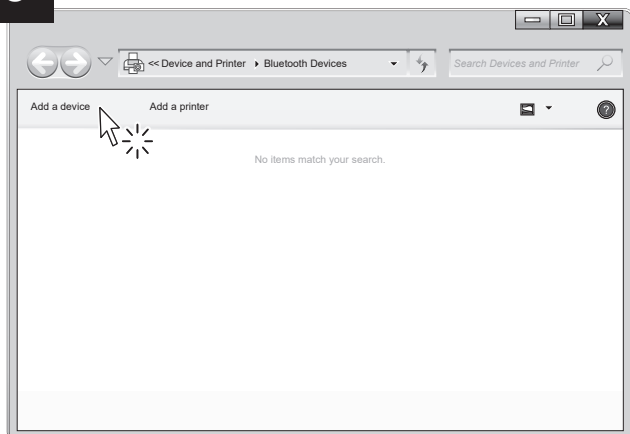
4



On the PC status bar click the Bluetooth icon.

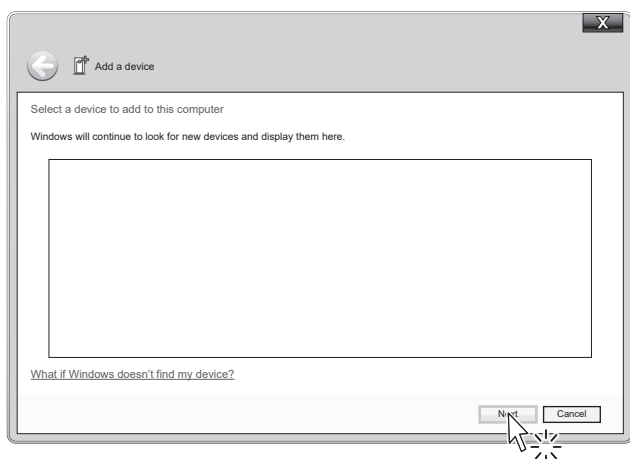


5



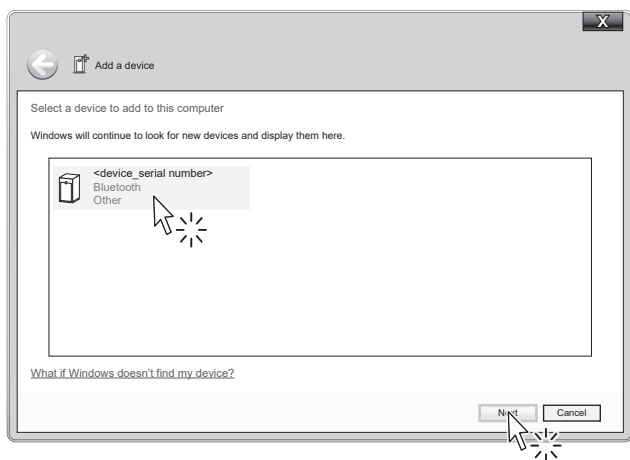
In the window that opens,
click ADD DEVICE.

6



Click the NEXT key.

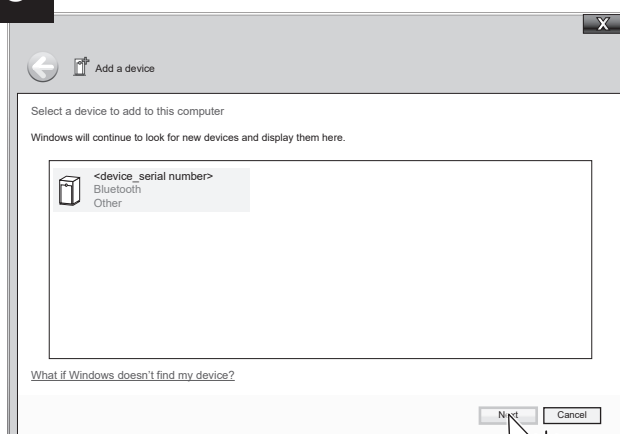
7



Locate your Bluetooth printer in the list of proposed
devices (<device_serial number>)
and select it with a click.

8

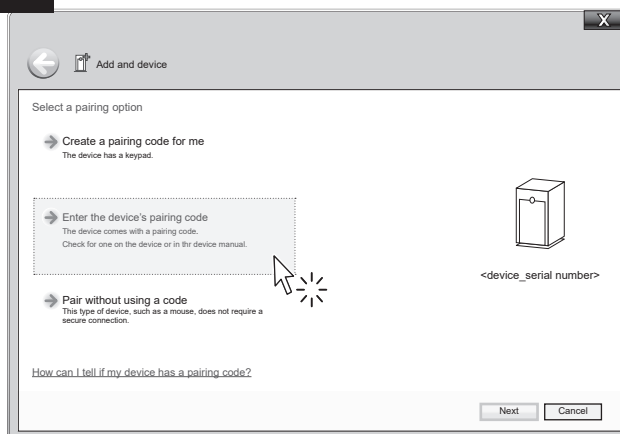
“Pairing BT” = Disabled



If the parameter “Pairing BT” of the printer
is set to “Disabled” (see [paragraph 5.4](#)),
click the NEXT key to confirm the pairing
and skip to step 11.

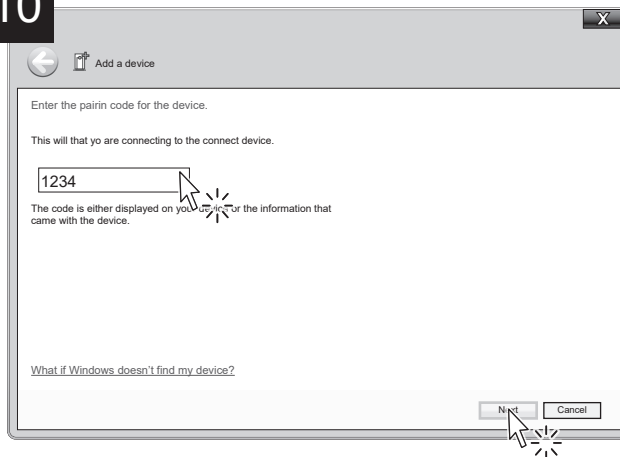
9

“Pairing BT” = Enabled



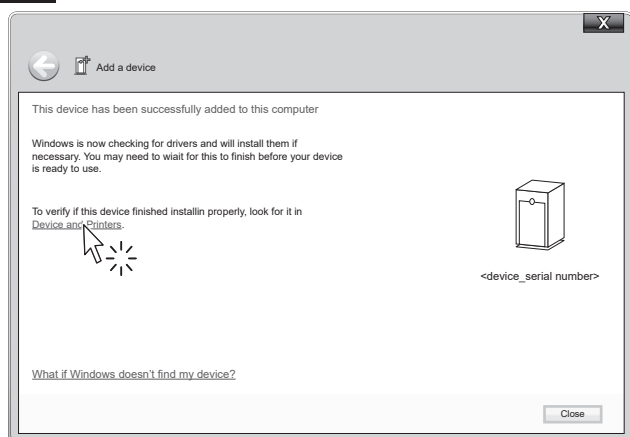
If the parameter “Pairing BT” of the printer
is set to “Enabled” (see [paragraph 5.4](#)),
click ENTER THE DEVICE'S
PAIRING CODE.

10



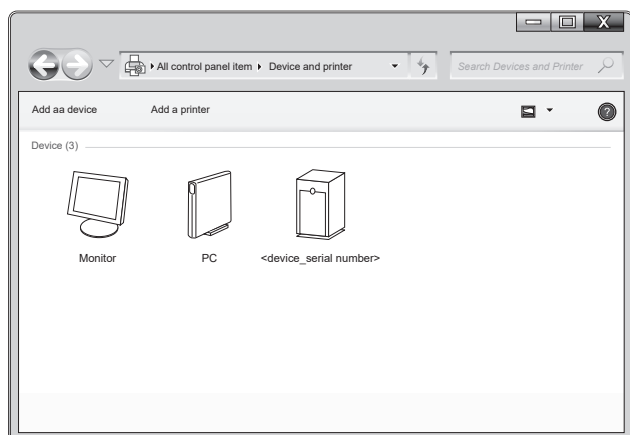
Enter the PIN (1234) and
click the NEXT key.

11



In the confirmation message that appears, click
DEVICE AND PRINTERS.

12

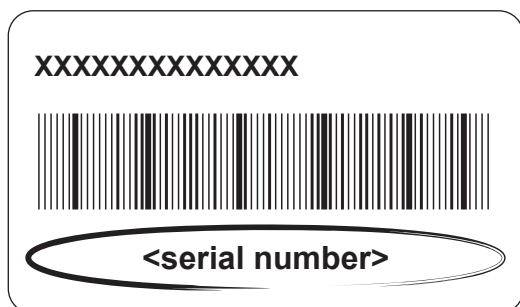


Check that your device appears in the list
of paired devices.

NOTE: Once that has occurred the association (pairing) between the host and printer, this remains active even in the event of switching off, interruption of communication, etc.

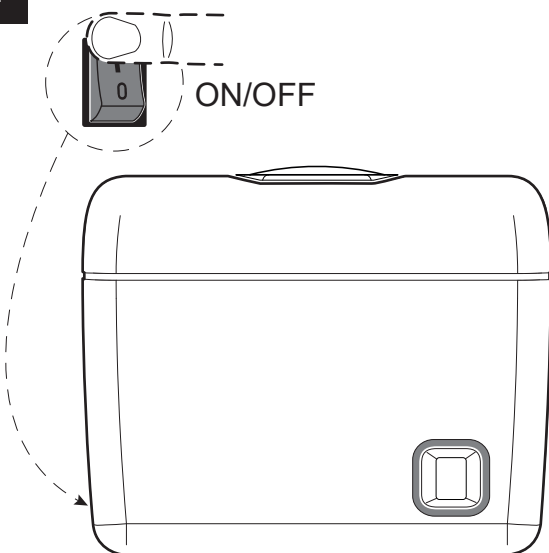
6.2 Pairing with macOS devices

1



Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2



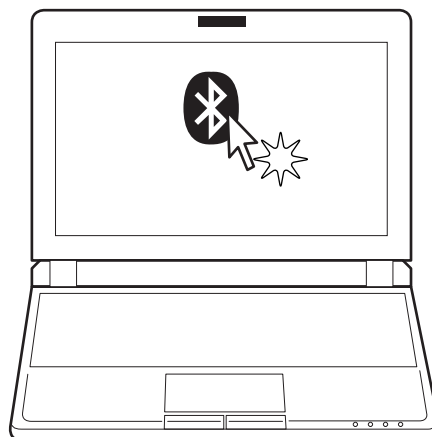
Turn on the printer (see [paragraph 4.1](#)).

3

Wireless.....: **ON**
BT AutoReconnect.....: **Disabled**

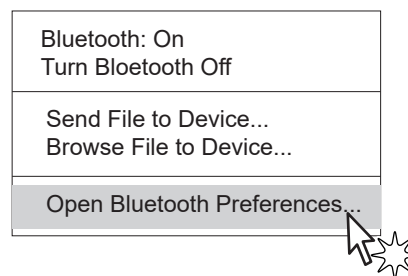
Configure the parameters “Wireless” to “ON” and “BT AutoReconnect” to “Disabled” in one of the modes described in the previous paragraphs (see [chapter 5](#)).

4



On the PC status bar click the Bluetooth icon.

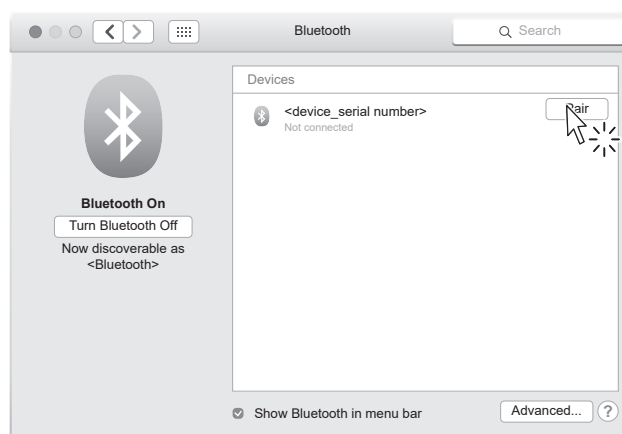
5



In the dropdown menu click OPEN BLUETOOTH PREFERENCES.

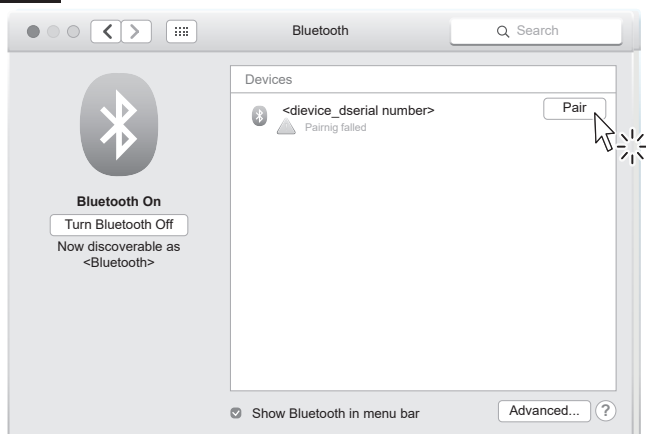
6

“Pairing BT” = Disabled



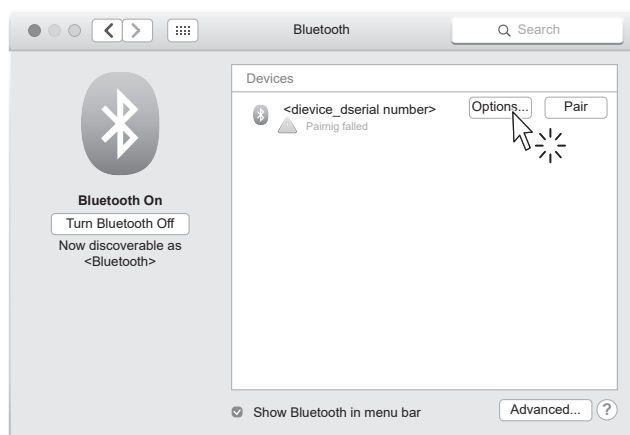
If the parameter “Pairing BT” of the printer is set to “Disabled” (see [paragraph 5.4](#)), locate your printer (<device_serial number>) and select it with a click.
Click the NEXT key to confirm the pairing and skip to step 10.

7 “Pairing BT” = Enabled



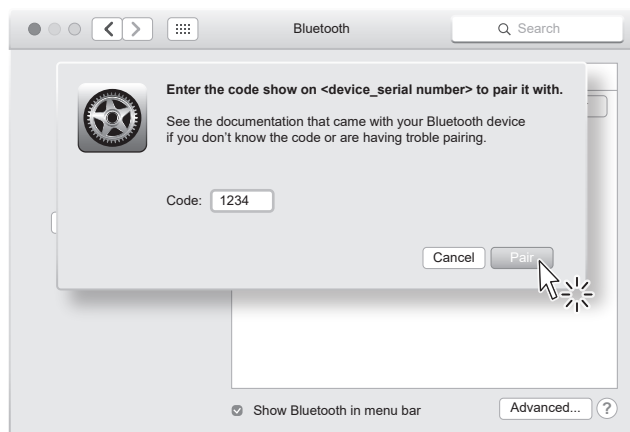
If the parameter “Pairing BT” of the printer is set to “Enabled” (see [paragraph 5.4](#)), click the PAIR key. An error message appears on the screen. Click the PAIR key again.

8



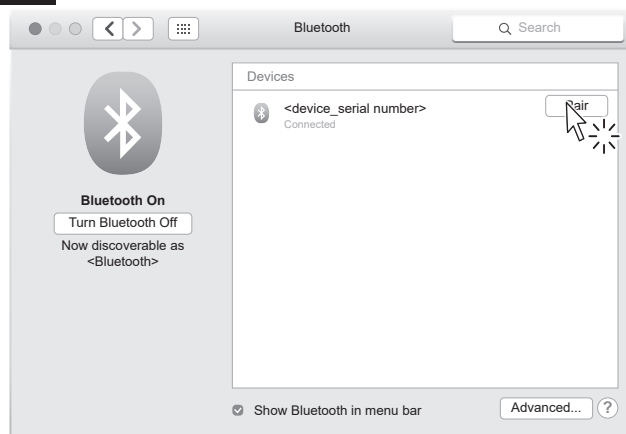
Click OPTIONS key.

9



Enter the PIN (1234) and click PAIR key to confirm.

10

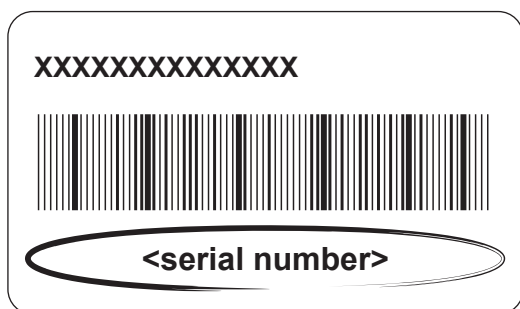


Check that your device appears in the list of paired devices.

NOTE: Once that has occurred the association (pairing) between the host and printer, this remains active even in the event of switching off, interruption of communication, etc.

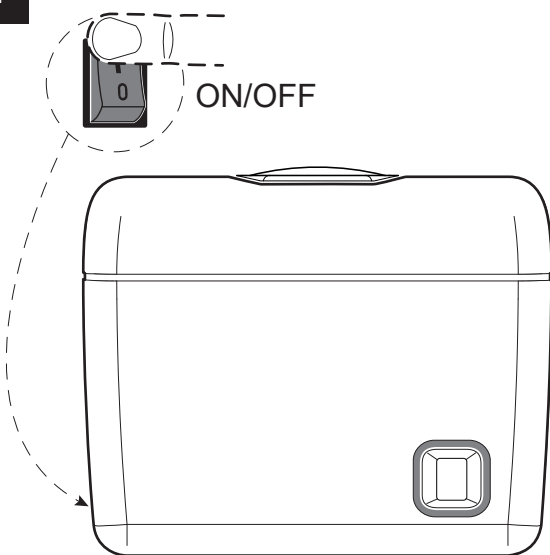
6.3 Pairing with Linux devices

1



Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2



Turn on the printer (see [paragraph 4.1](#)).

3

Wireless.....: **ON**
BT AutoReconnect.....: **Disabled**

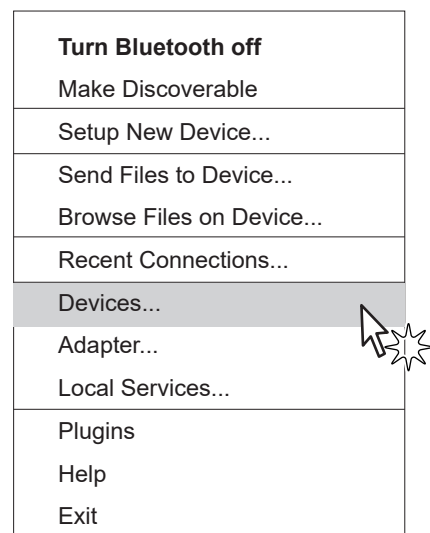
Configure the parameters “Wireless” to “ON” and “BT AutoReconnect” to “Disabled” in one of the modes described in the previous paragraphs (see [chapter 5](#)).

4



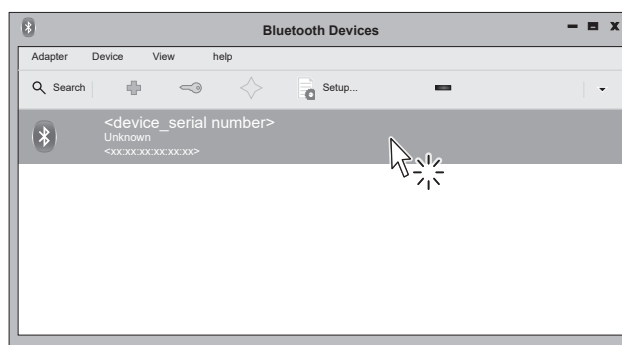
On the PC status bar click the Bluetooth icon.

5



In the dropdown menu click DEVICES.

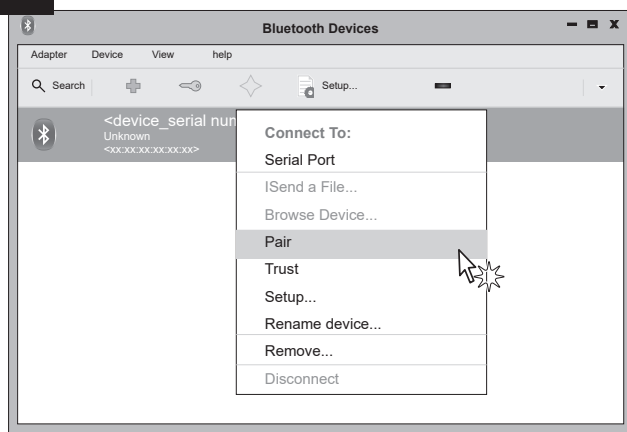
6



Locate your printer (<device_serial number>) and select it with a click.

7

“Pairing BT” = Disabled

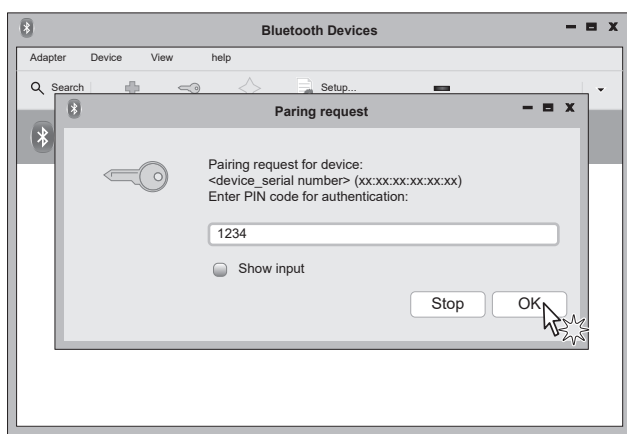


In the dropdown menu, click the PAIR key. If the parameter “Pairing BT” of the printer is set to “Disabled” (see [paragraph 5.4](#)), skip to step 9.

NOTE: Once that has occurred the association (pairing) between the host and printer, this remains active even in the event of switching off, interruption of communication, etc.

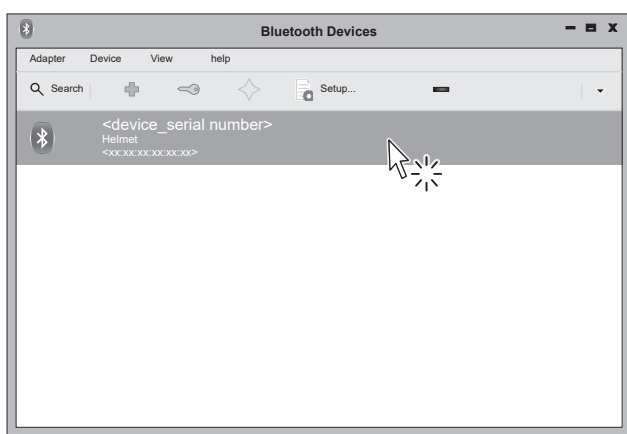
8

“Pairing BT” = Enabled



If the parameter “Pairing BT” of the printer is set to “Enabled” (see [paragraph 5.4](#)), enter the PIN (1234) and click OK to confirm.

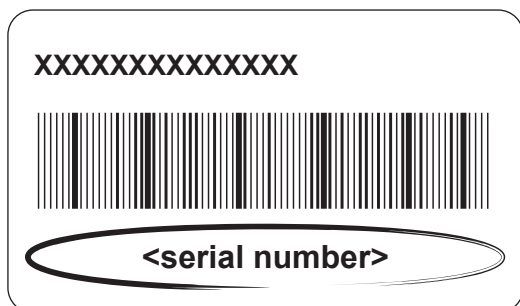
9



Check that your device appears in the list of paired devices.

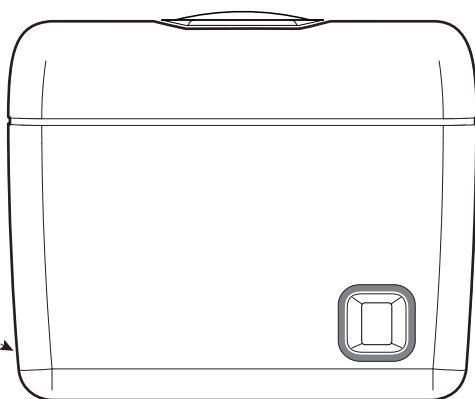
6.4 Pairing with Android devices

1



Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2



Turn on the printer
(see [paragraph 4.1](#)).

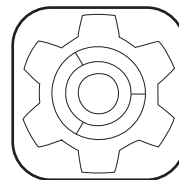
3

Wireless.....: **ON**

BT AutoReconnect.....: **Disabled**

Configure the parameters "Wireless" to "ON" and "BT AutoReconnect" to "Disabled" in one of the modes described in the previous paragraphs (see [chapter 5](#)).

4



Press the SETTINGS icon on your Android device.

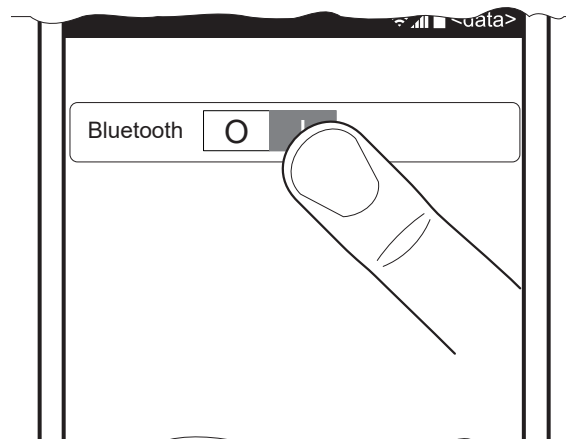
5



Bluetooth

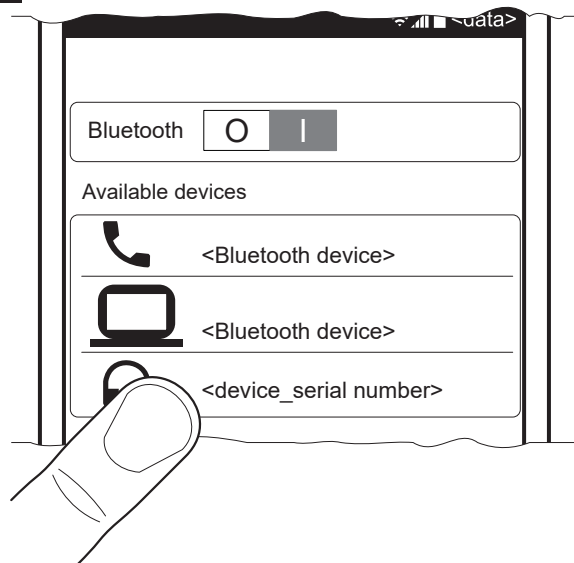
Press the Bluetooth icon.

6



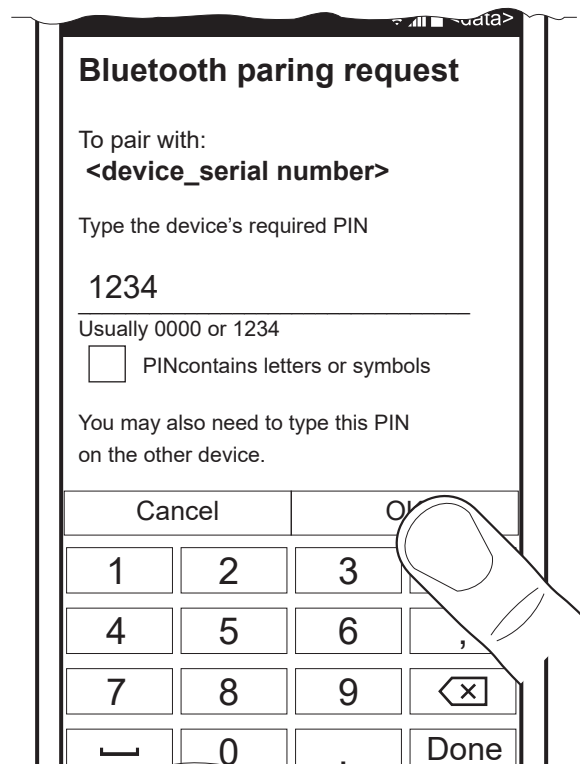
Move the switch to ON to enable the Bluetooth communication and start searching for available devices .

7



Locate your printer (<device_serial number>) and select it with a click.

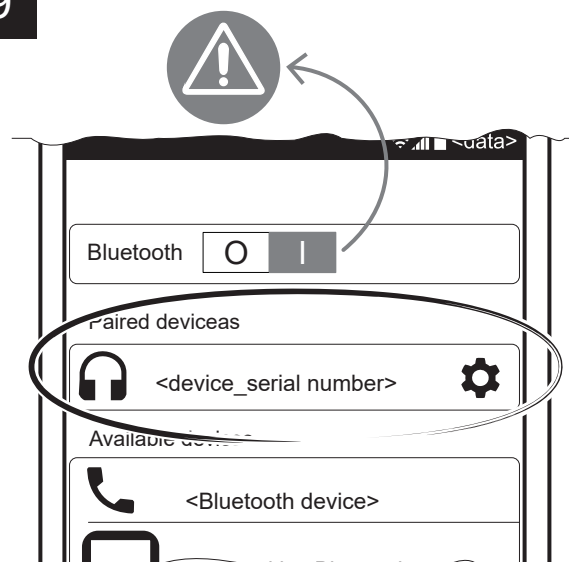
8



If the parameter “Pairing BT” of the printer is set to “Enabled” (see [paragraph 5.4](#)), enter the PIN (1234) and click OK to confirm.

If the parameter “Pairing BT” of the printer is set to “Disabled” (see [paragraph 5.4](#)), pairing is automatically performed.

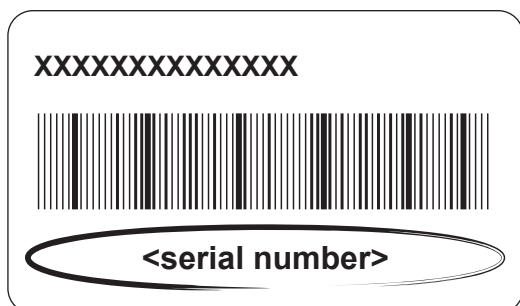
9



Once pairing is completed, do not turn off Bluetooth communication. Otherwise, communication will be interrupted.

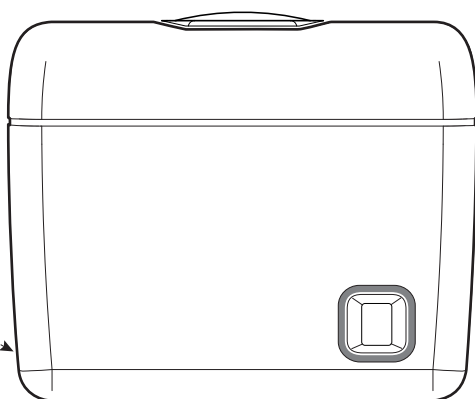
6.5 Pairing with iOS devices

1



Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2



Turn on the printer (see [paragraph 4.1](#)).

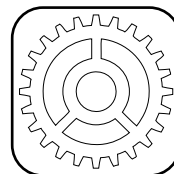
3

Wireless.....: **ON**

BT AutoReconnect.....: **Disabled**

Configure the parameters “Wireless” to “ON” and “BT AutoReconnect” to “Disabled” in one of the modes described in the previous paragraphs (see [chapter 5](#)).

4



Press the SETTINGS icon, on your iOS device.

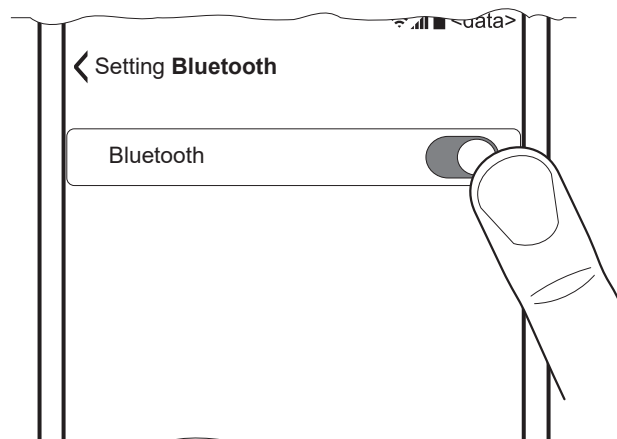
5



Bluetooth

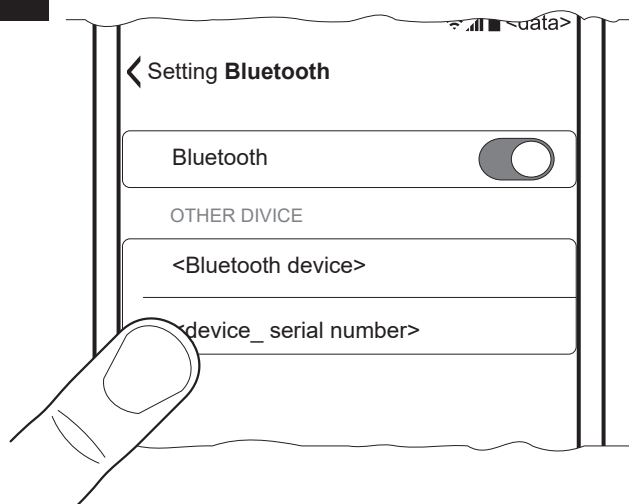
Press the Bluetooth icon.

6



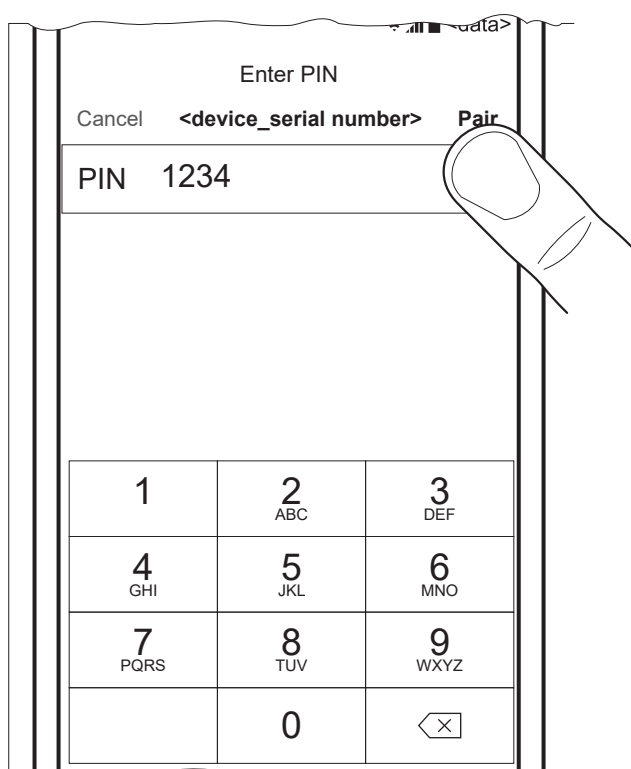
Move the switch to ON to enable the Bluetooth communication and start searching for available devices .

7



Locate your printer (<device_serial number>) and select it with a click.

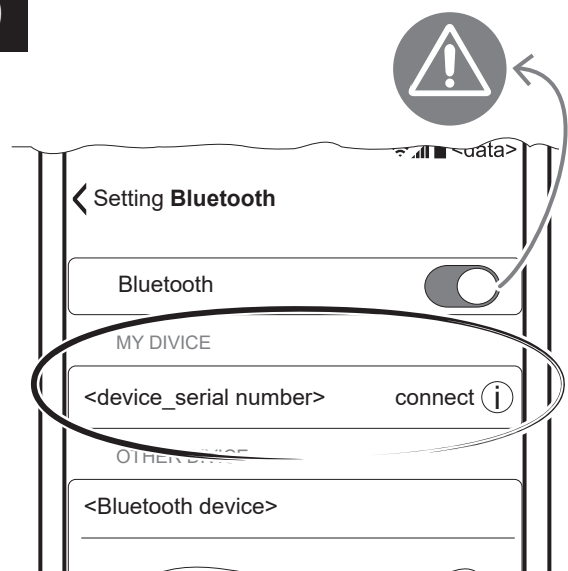
8



If the parameter “Pairing BT” of the printer is set to “Enabled” (see [paragraph 5.4](#)), enter the PIN (1234) and press the PAIR key to confirm.

If the parameter “Pairing BT” of the printer is set to “Disabled” (see [paragraph 5.4](#)), pairing is automatically performed.

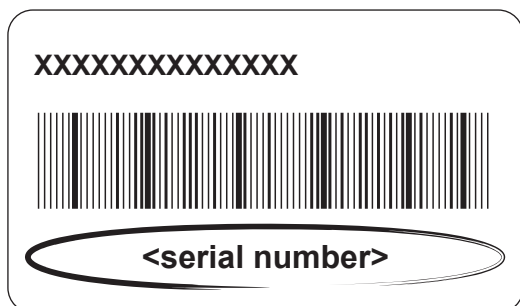
9



Once pairing is completed, do not turn off Bluetooth communication. Otherwise, communication will be interrupted.

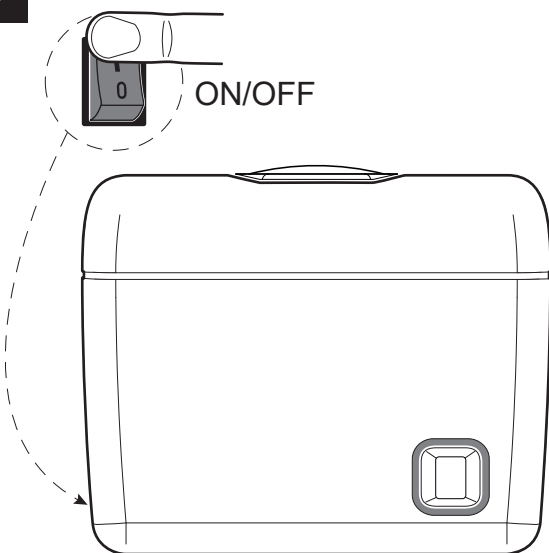
6.6 Pairing with Windows Phone devices

1



Write down the 16-digits serial number indicated on the label of the printer (see [paragraph 2.4](#)).

2



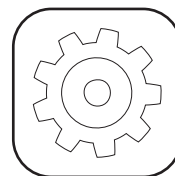
Turn on the printer
(see [paragraph 4.1](#)).

3

Wireless.....: **ON**
BT AutoReconnect.....: **Disabled**

Configure the parameters “Wireless” to “ON” and “BT AutoReconnect” to “Disabled” in one of the modes described in the previous paragraphs (see [chapter 5](#)).

4



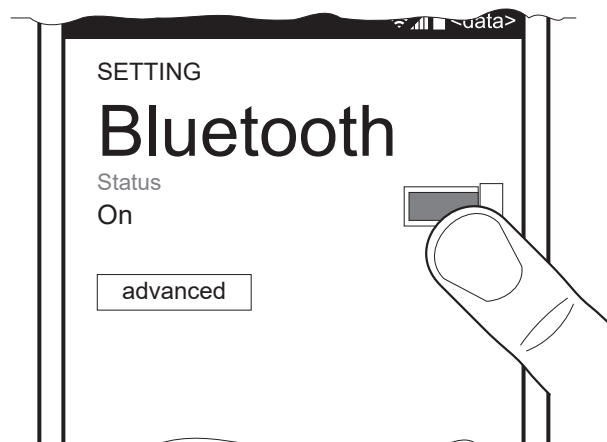
Press the SETTINGS icon on the Windows device.

5

Bluetooth

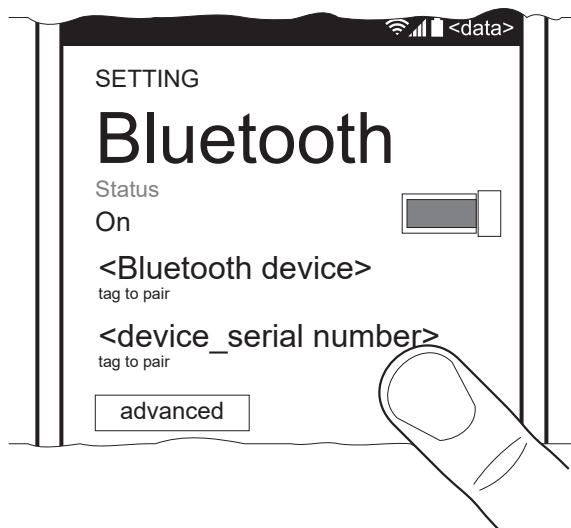
Press the Bluetooth icon.

6



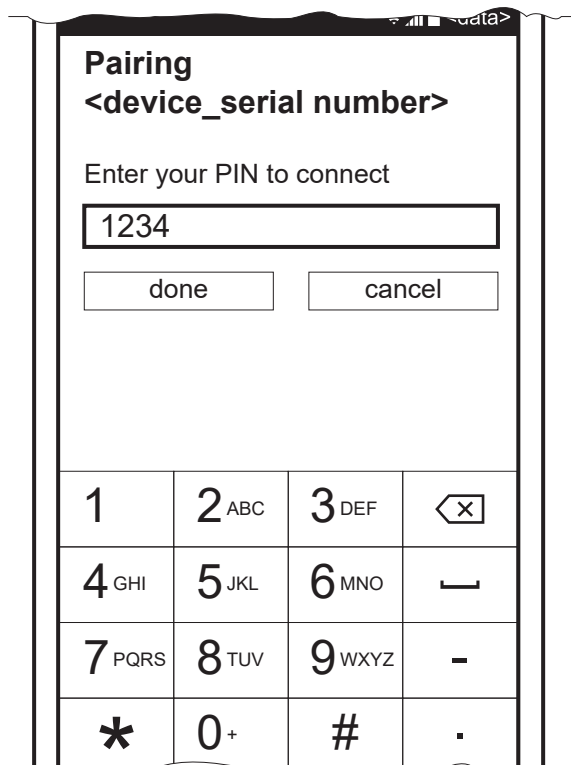
Move the switch to ON to enable the Bluetooth communication and start searching for available devices.

7



Locate your printer (<device_serial number>) and select it with a click.

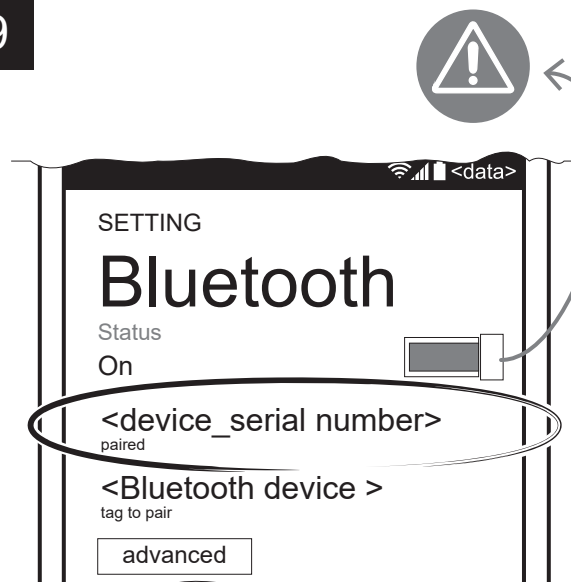
8



If the parameter “Pairing BT” of the printer is set to “Enabled” (see [paragraph 5.4](#)), enter the PIN (1234) and press the PAIR key to confirm.

If the parameter “Pairing BT” of the printer is set to “Disabled” (see [paragraph 5.4](#)), pairing is automatically performed.

9



Once pairing is completed, do not turn off Bluetooth communication. Otherwise, communication will be interrupted.





7 ALIGNMENT

Device is provided with a sensor for the use of alignment black mark printed on paper in order to handle roll of tickets with pre-printed fields and a fixed length.

The alignment sensor assembled on the device is “reflection” sensor: this kind of sensor emits a band of light and detects the quantity of light reflected to it. The presence of the black mark is therefore detected by the amount of light that returns to the sensor, considering that the light is reflected by the white paper and absorbed by the black mark.

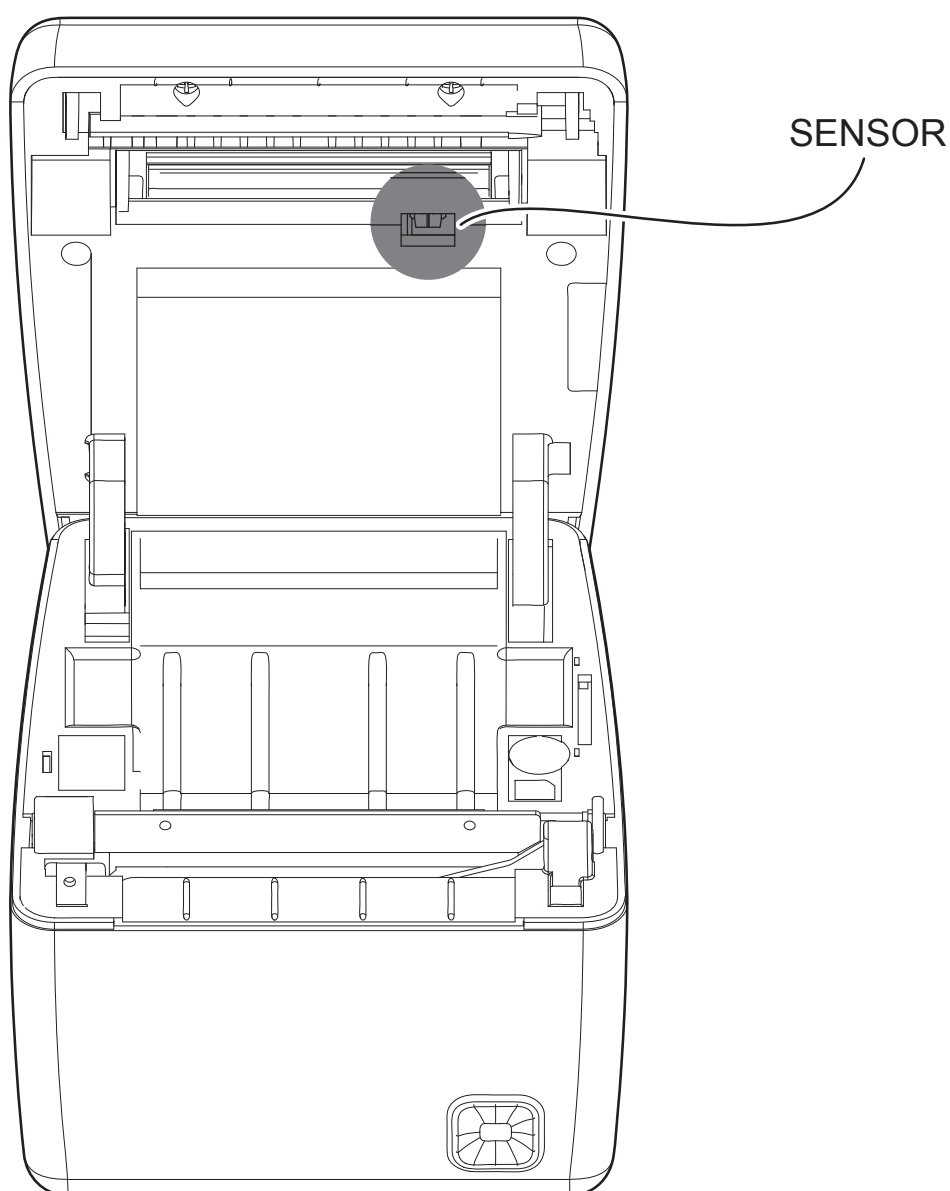
The following paragraphs show how to correctly set the configuration parameters of device in order to assure the alignment.

7.1 Enable alignment

Device is provided with one sensor for alignment, placed on the on the internal side of the cover for paper compartment.

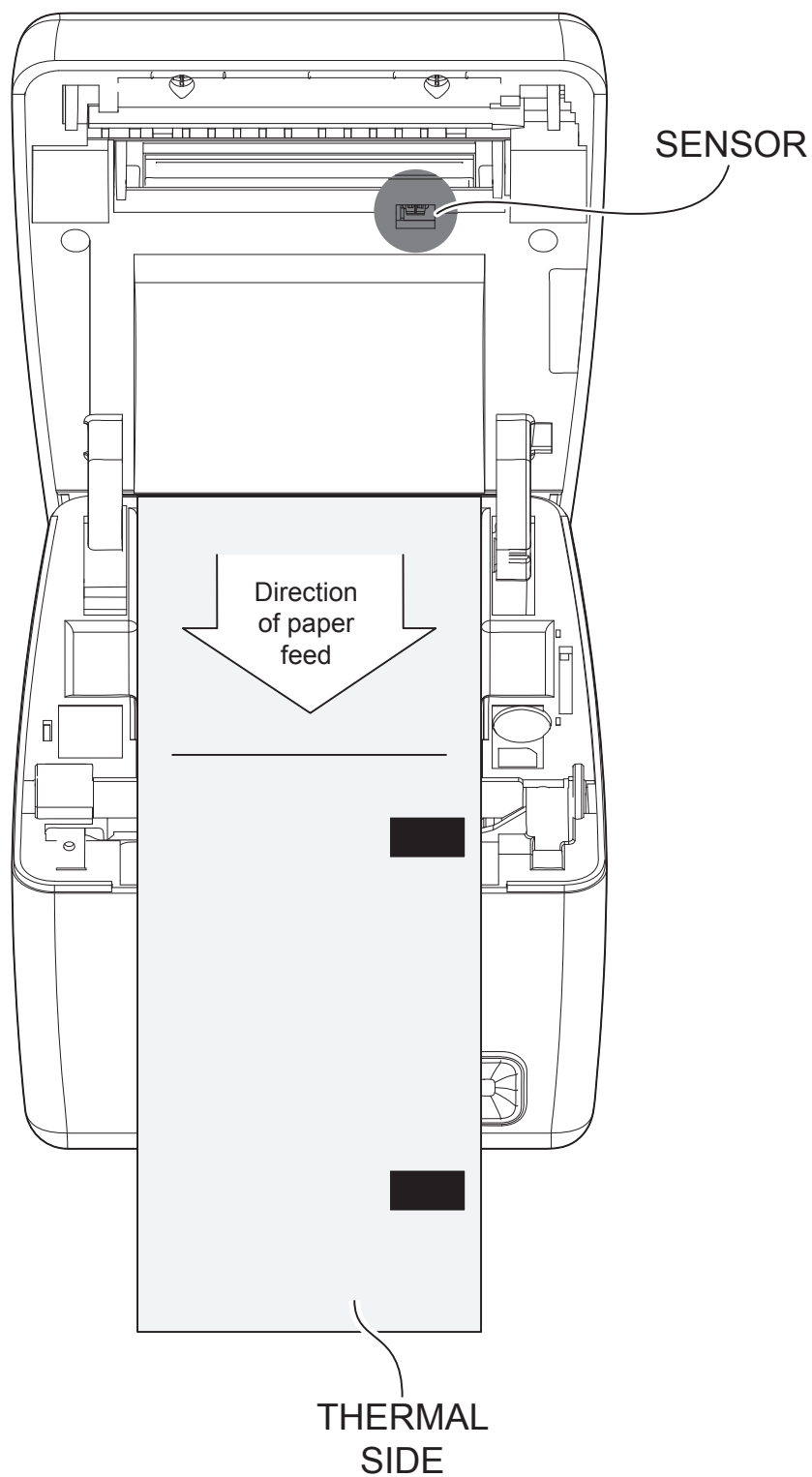
To guarantee the alignment, it is necessary enable the parameter “Black Mark Alignment” during the setup procedure (see [chapter 5](#)) and set the correct value of this parameter as described in the following table.

VALUE OF THE BLACK MARK ALIGNMENT PARAMETER	USING MODE OF SENSOR	BLACK MARK TYPE
Disabled	-	Alignment disabled
Enabled	Reflection	Black mark printed on the thermal side of paper



Paper with black mark on the thermal side

The following figure show the usable format of paper and the corresponding sensor used for alignment.



7.2 Calibration

The sensor calibration occurs automatically and consists in adjusting the quantity of light emitted to match the degree of whiteness of the paper used and the degree of black of the mark printed on paper.

The device automatically performs the self-calibration during the setup procedure only if the “Black Mark Alignment” parameter is set to “Enabled” (see [chapter 5](#)).

When self-calibration starts, the device performs some paper feeds and then it prints the calibration result and the value of the PWM duty-cycle of the alignment sensor driver so that it can be perform an optimal black mark detection:

```
AUTOSETTING BLACK MARK : OK
POLARIZATION VOLT : 2.4V [75%]
```

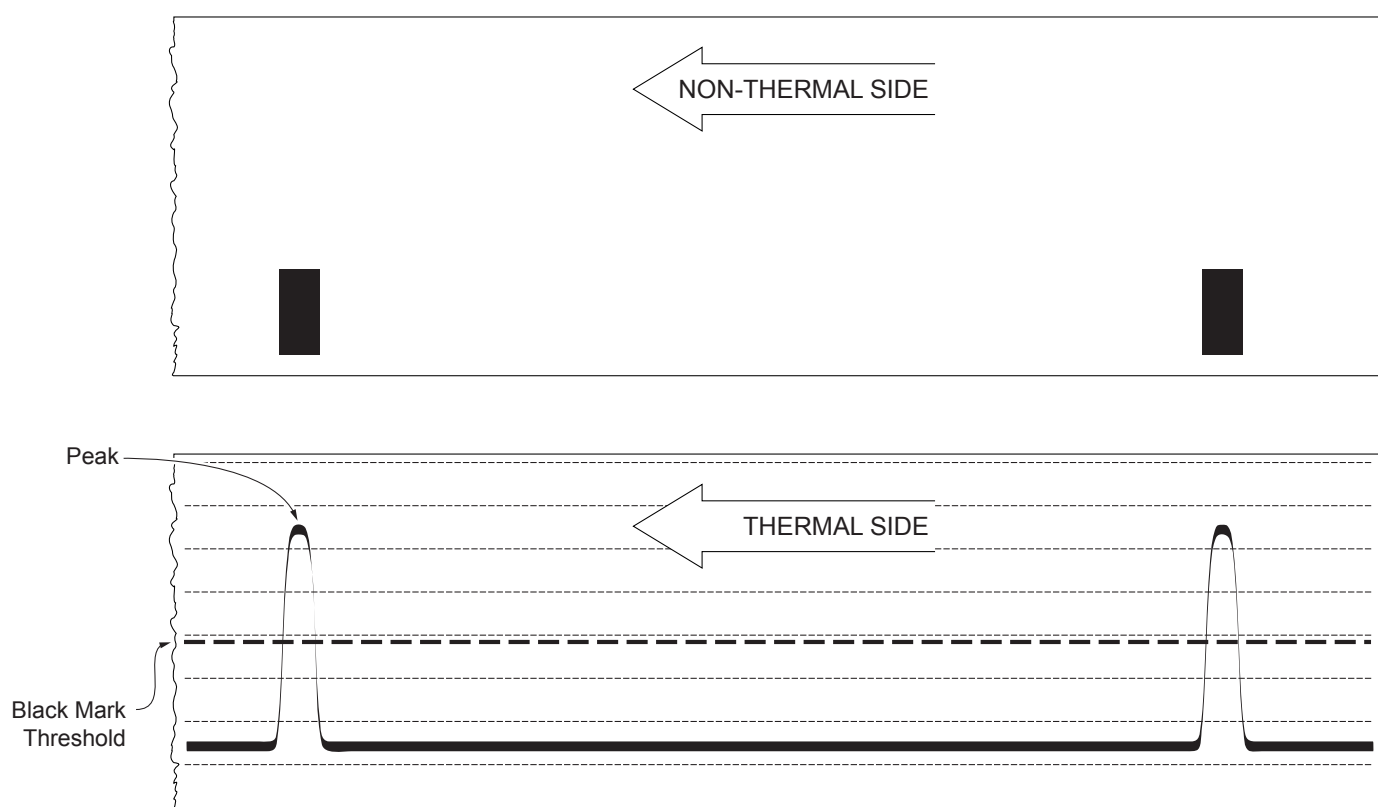
The “Autosetting Black Mark” parameter indicates the result of the self-calibration procedure; “OK” will appear if it has been successful, “NOT OK” will appear if the procedure has failed.

After the printing of the procedure result, the device offers the execution of the function of paper characterization “Characterize paper” and the change of the “Black Mark Threshold” parameter which represents the detection threshold of the black mark. Choosing the “YES” value for the “Characterize paper” parameter, the device prints a graphic representation (see following figures) of the outgoing voltage of the alignment sensor (expressed as a percentage) and the “Black Mark Threshold” value.

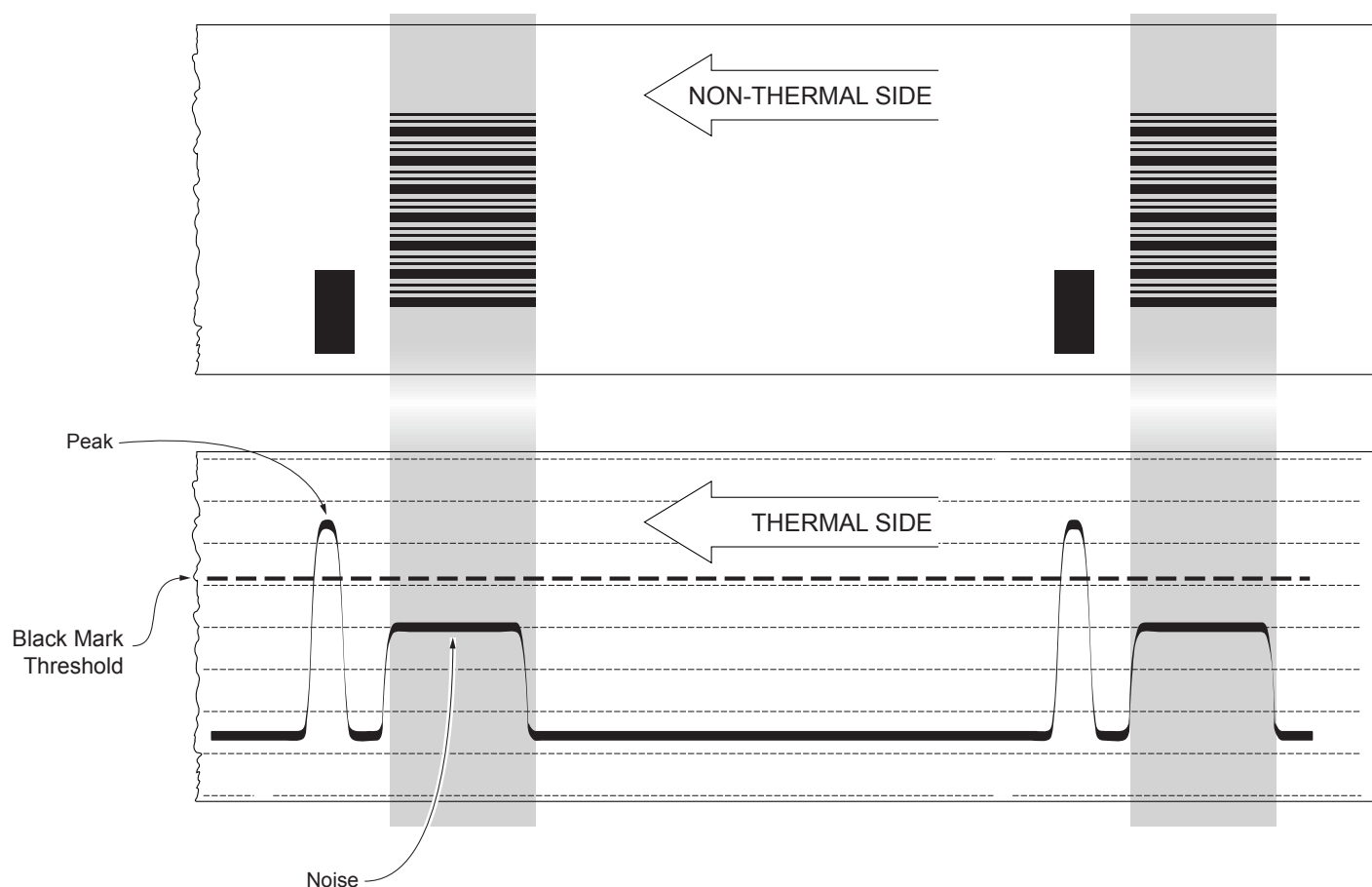
This graphic representation is useful to set the most suitable value to assign to the “Black Mark Threshold” parameter and then to better identify the optimal threshold value which takes into account the variations of the signal and the small oscillations around zero.

The following figure shows an example of paper with the non-thermal paper printed with black marks: the outgoing voltage is constant while passing the white paper between two black marks and presents a peak at each black mark.

In this case, the optimal value for “Black Mark Threshold” parameter is placed about half of the peak



The following figure shows an example of paper with the non-thermal paper printed with black marks and other graphics (for example, a barcode): the outgoing voltage is constant while passing the white paper between two black marks, presents a peak at each black mark and presents some “noise” at each barcode. In this case, the optimal value for the “Black Mark Threshold” parameter is located about halfway between the peak value and the maximum value of the “noise”.



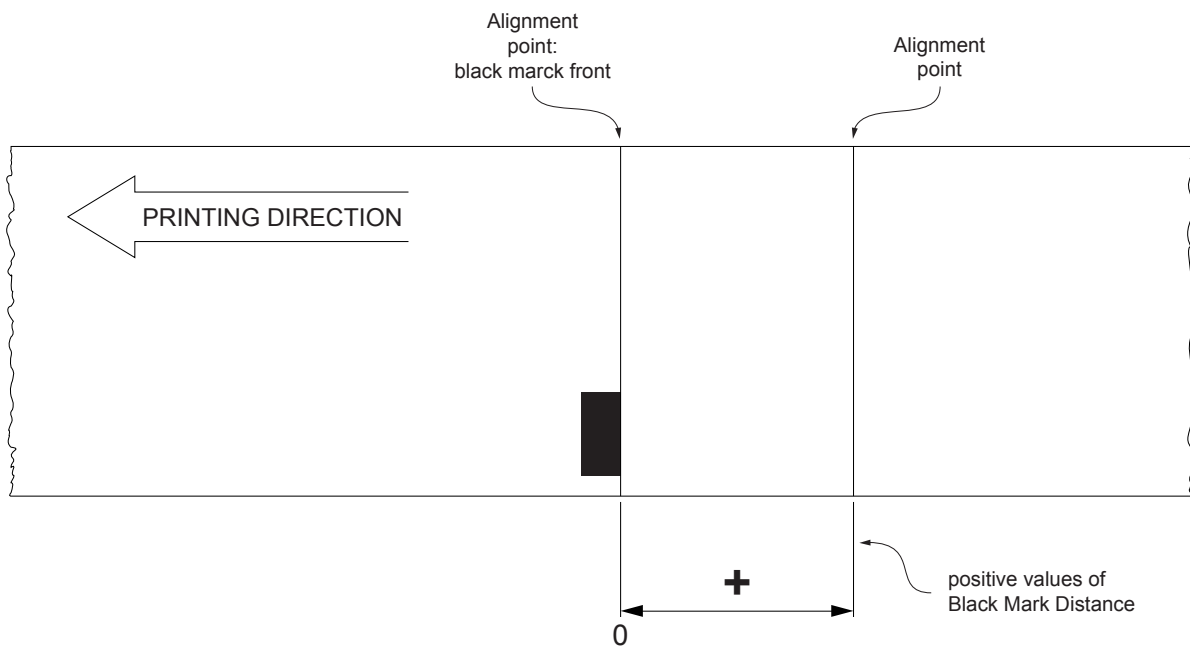
If the maximum value of “noise” read by the sensor is very close to the peak value, it might be difficult to place the value of the “Black Mark Threshold” at an intermediate point. In these cases, it is mandatory that the portion of paper between the point of printing end and the front of black mark is completely white (no graphics). In this way, the only next graphic detected by the sensor for alignment after the printing end will be the black mark.

7.3 Alignment parameters

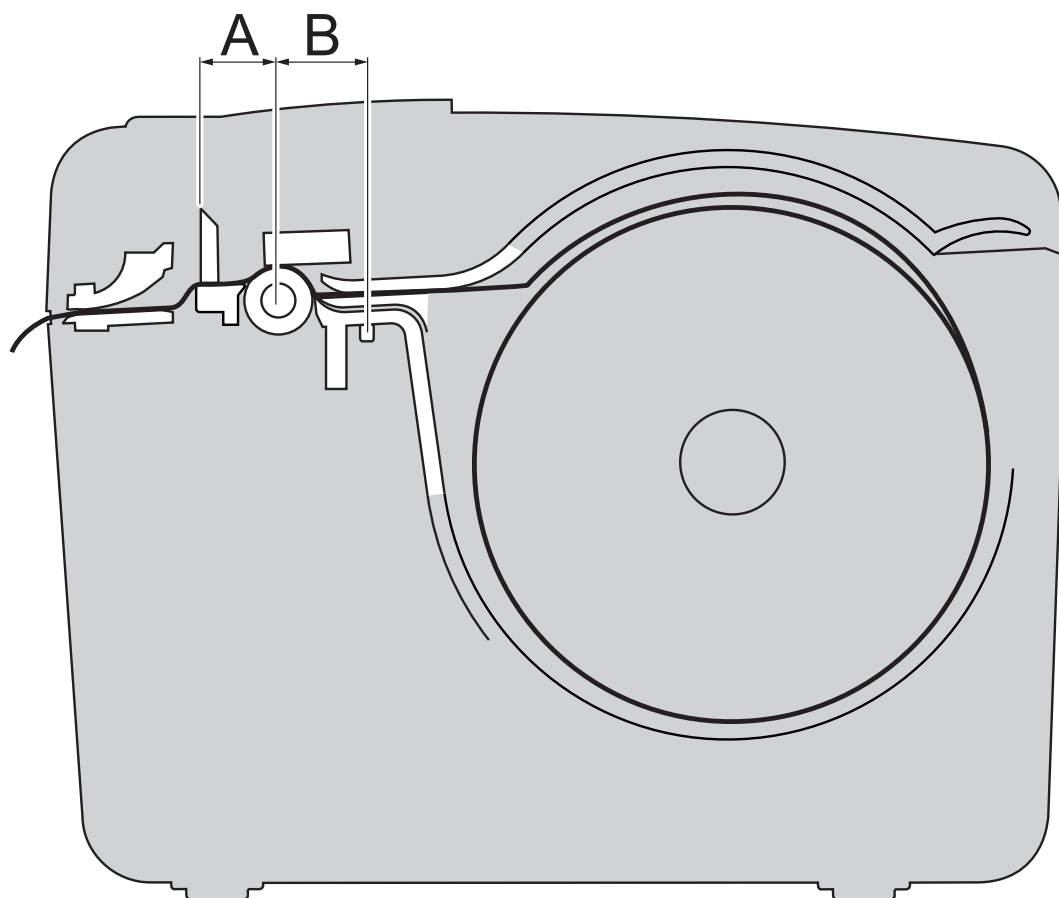
The “alignment point” is defined as the position inside the ticket to use for the black mark alignment. The distance between the black mark edge and the alignment point is defined as “Black Mark Distance”.

Referring to the front of the black mark, the value of “Black Mark Distance” value varies from 0 mm minimum and 22 mm maximum.

If the “Black Mark Distance” value is set to 0, the alignment point is set at the beginning of the black mark.



The following figure shows a simplified section of the device with the paper path and the distances (in mm) between the alignment sensor, the print head, cutter (cutting line) and paper out mouth.



A = distance between printing head and cutter = 13.5 mm
 B = distance between printing head and alignment sensor = 15 mm

CUSTOM/POS EMULATION

To define the alignment point you need to set the device parameters that compose the numerical value of the “Black Mark Distance” parameter (see [paragraph 5.5](#)).

For example, to set a black mark distance of 15 mm between the black mark and the alignment point, the parameters must be set on the following values:

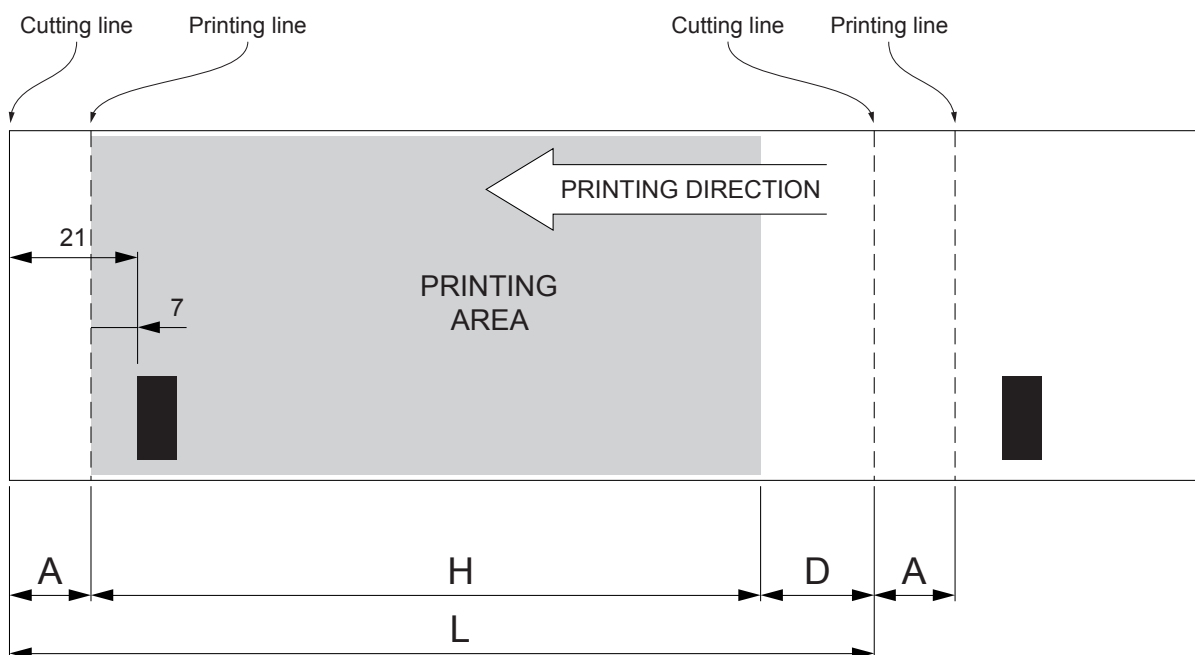
Black Mark Distance [mm x 10] : 1
 Black Mark Distance [mm x 1] : 5
 Black Mark Distance [mm x .1] : 0

The “Black Mark Distance” parameter can be modified as described in [chapter 5](#).

7.4 Printing area

In order to print ticket containing only one black mark and to not overlay printing to a black mark (that will make it useless for the next alignment), it is important to well calibrate the height of the printing area of the ticket according to functional the inter-black mark distance.

The following figure shows an example of tickets with “Black Mark Distance” set to 0:



A “Non-printable area” of 14 mm generated from:

“Distance between black mark front/cutting line” - “Distance between black mark front/printing line”

where:

“Distance between black mark front/cutting line” = 21 mm

“Distance between black mark front/printing line” = 7 mm

H Distance between the first and the last print line, called “Height of the printing area”.

L Ticket length.

D Automatic feed for alignment at the next black mark.

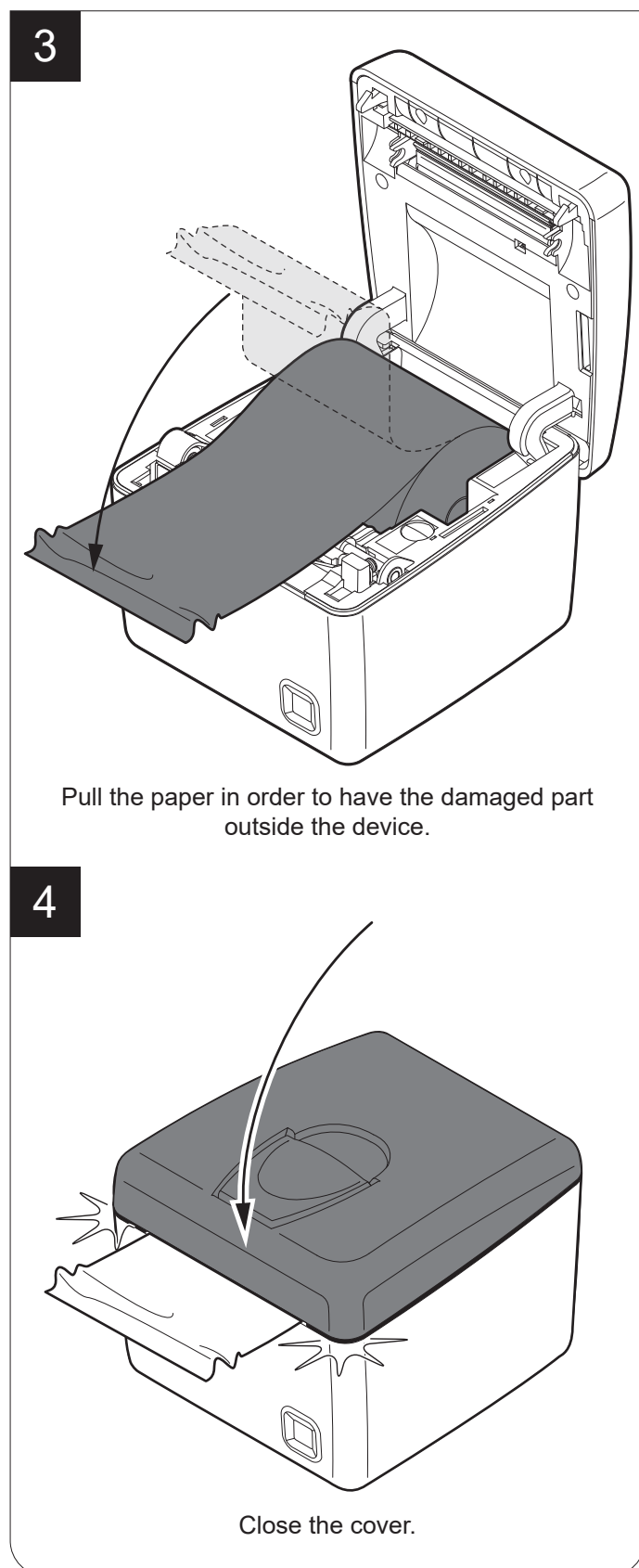
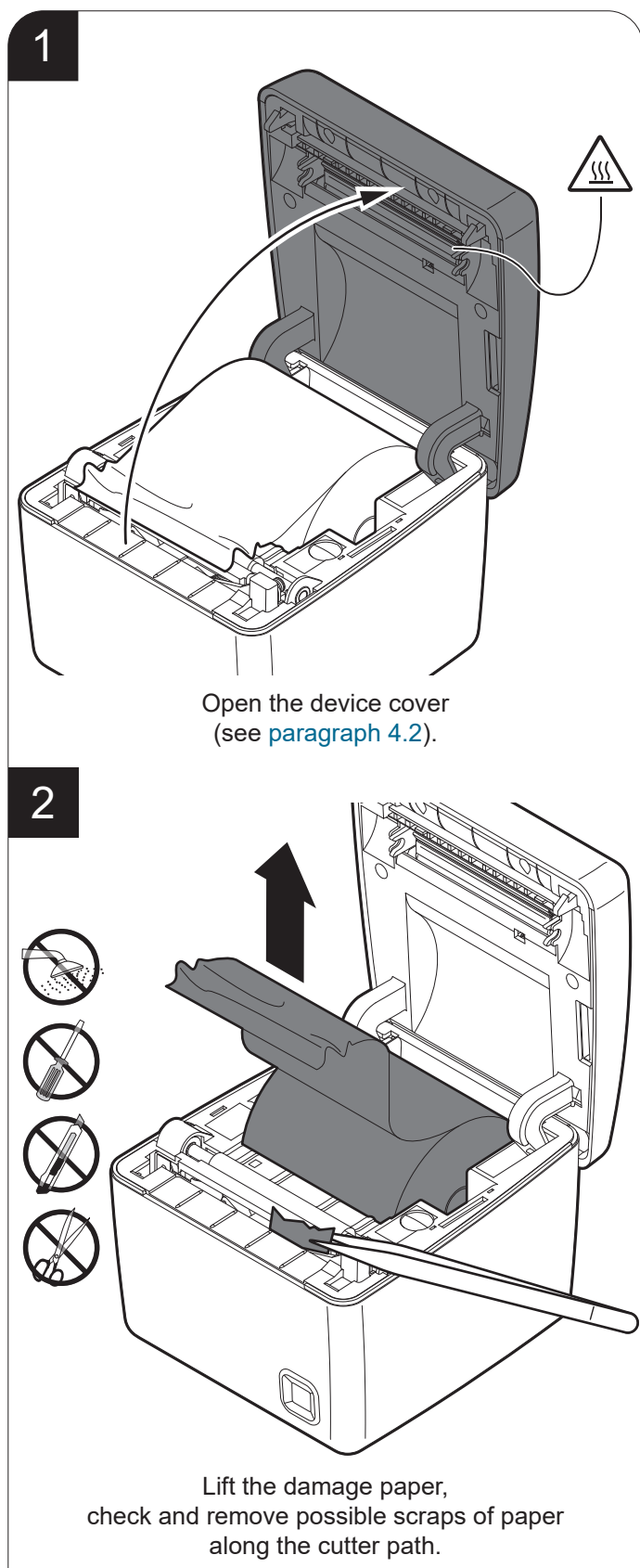
To use all the black marks on the card, you must comply with the following equation:

$$H + A \leq L$$

The height of the printing area (H) can be increased to make no progress on alignment (D) but no further.

8 MAINTENANCE

8.1 Paper jam





8.2 Planning of cleaning operations

The regular cleaning of the device keeps the print quality and extends its life. The following table shows the recommended planning for the cleaning operations.

If you use the device in dusty environments, you must reduce the intervals between the cleaning operations.

EVERY PAPER CHANGE

Printhead	Use isopropyl alcohol
-----------	-----------------------

Platen roller	Use isopropyl alcohol
---------------	-----------------------

EVERY 5 PAPER CHANGES

Cutter	Use compressed air
--------	--------------------

Paper path	Use compressed air or tweezers
------------	--------------------------------

Sensors	Use compressed air
---------	--------------------

EVERY 6 MONTHS OR AS NEEDED

Printer case	Use compressed air or a soft cloth
--------------	------------------------------------

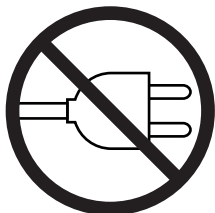
For specific procedures, see the following pages.

8.3 Cleaning

For periodic cleaning of the device, see the instructions below.

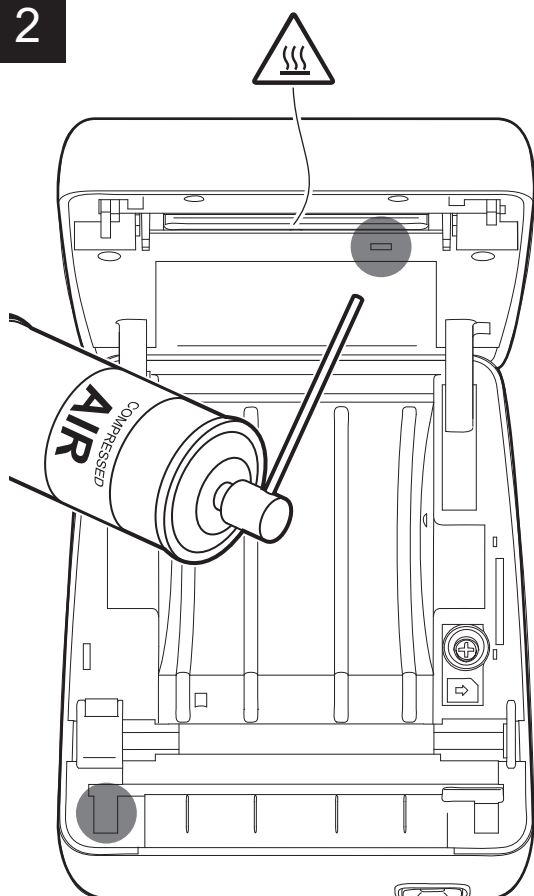
Sensors

1



Disconnect the power supply cable and open the device cover (see [paragraph 4.2](#)).

2



ATTENTION:

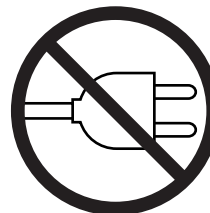
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



Clean the device sensors by using compressed air.

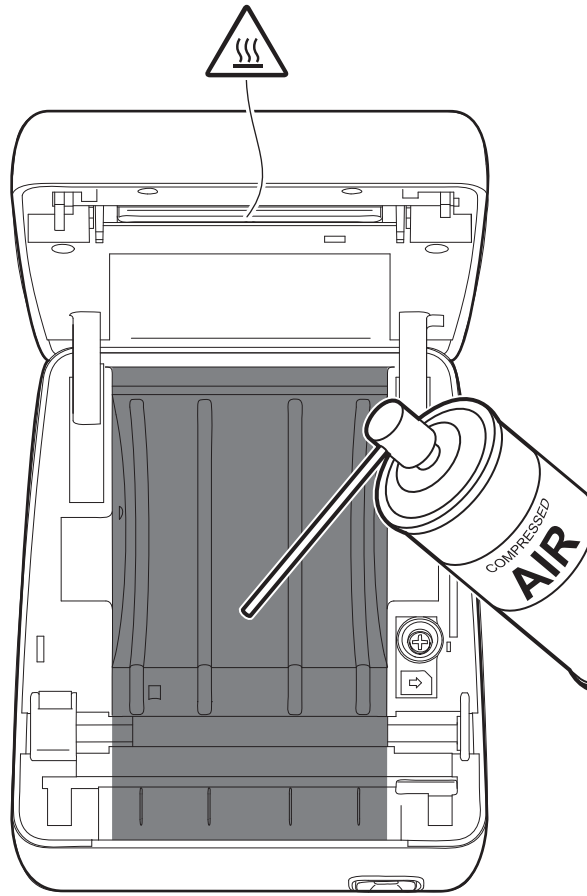
Paper path

1



Disconnect the power supply cable and open the device cover (see [paragraph 4.2](#)).

2



ATTENTION:

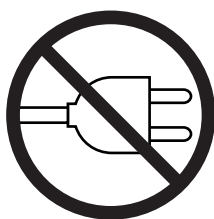
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



Clean the area involved in the passage of paper by using compressed air.

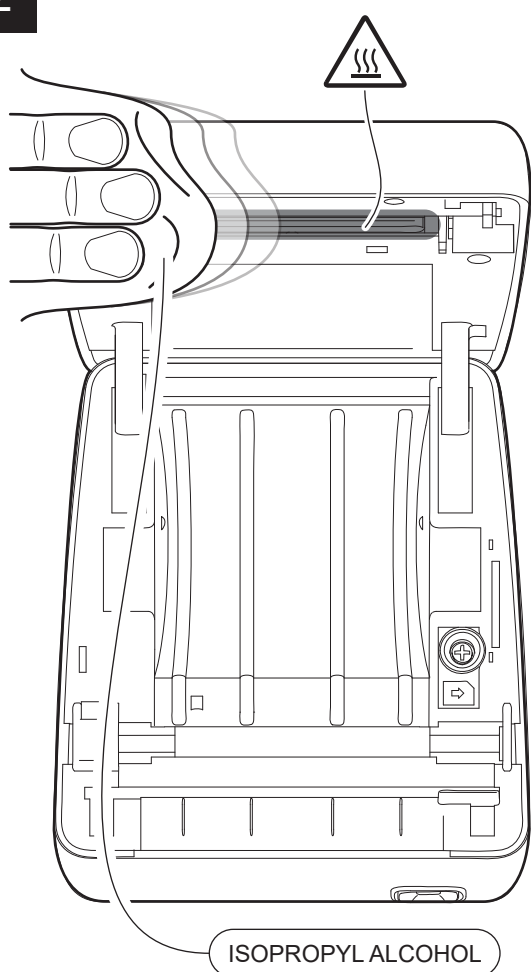
Printhead

1



Disconnect the power supply cable and open the device cover (see [paragraph 4.2](#)).

2



ATTENTION:

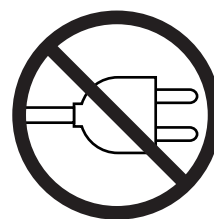
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the device.



Clean the printhead by using a non-abrasive cloth moistened with isopropyl.

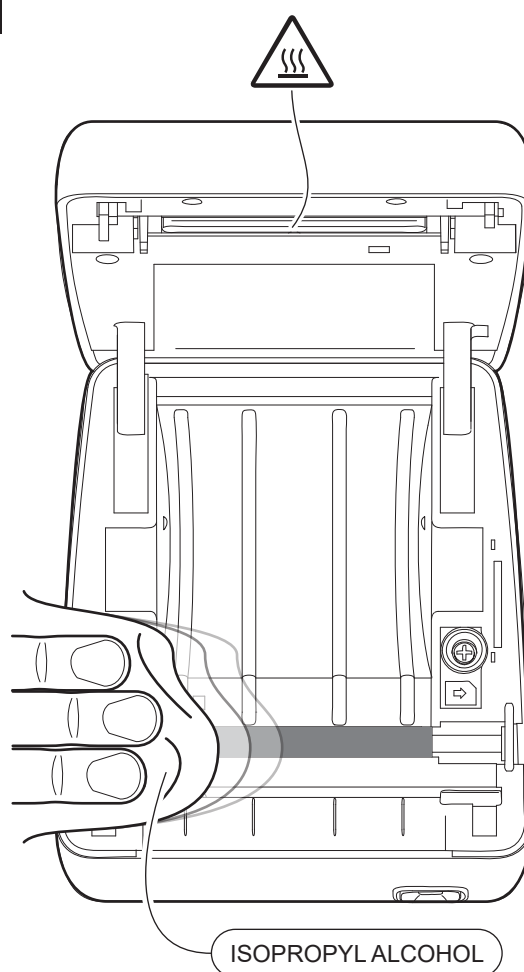
Platen roller

1



Disconnect the power supply cable and open the device cover (see [paragraph 4.2](#)).

2



ATTENTION:

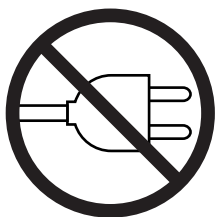
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the device.



Clean the platen roller by using a non-abrasive cloth moistened with isopropyl.

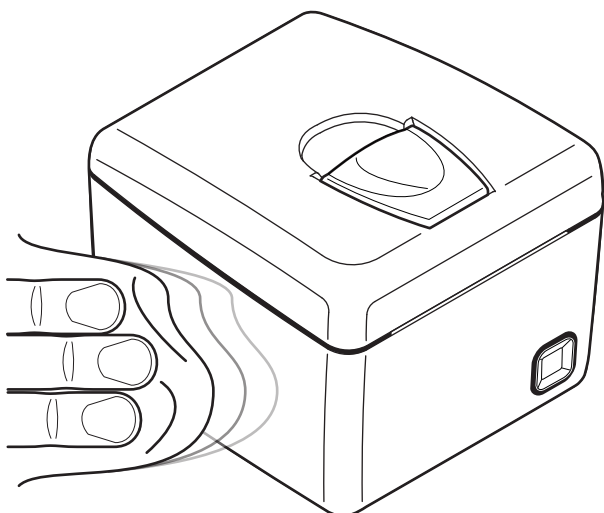
Case

1



Disconnect the power supply cable.

2



ATTENTION:

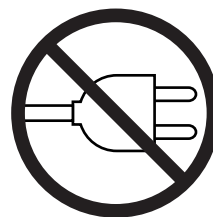
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



To clean the device,
use compressed air or a soft cloth.

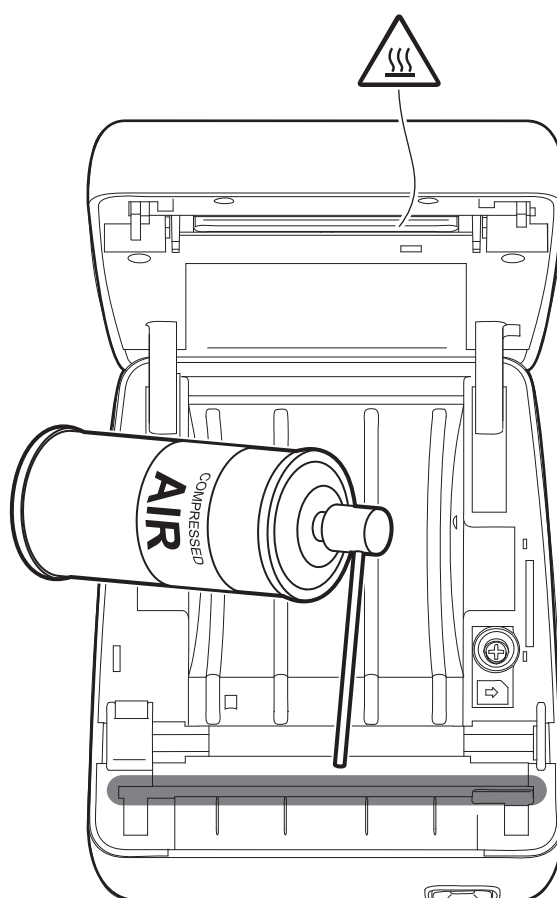
Cutter

1



Disconnect the power supply cable
and open the device cover
(see [paragraph 4.2](#)).

2



ATTENTION:

Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



Clean the cutter compartment from the inside
using compressed air.

8.4 Firmware upgrade

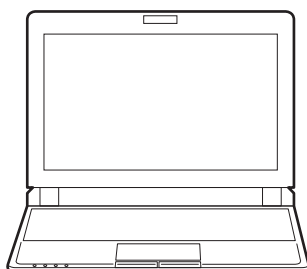
Firmware upgrade can be performed by using the “PrinterSet” software tool available on www.custom4u.it. To upgrade firmware, proceed as follows:

1

www.CUSTOM4u.it

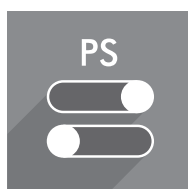
Login to the website www.custom4u.it, type in the product code of the device and download the latest firmware release available.

2



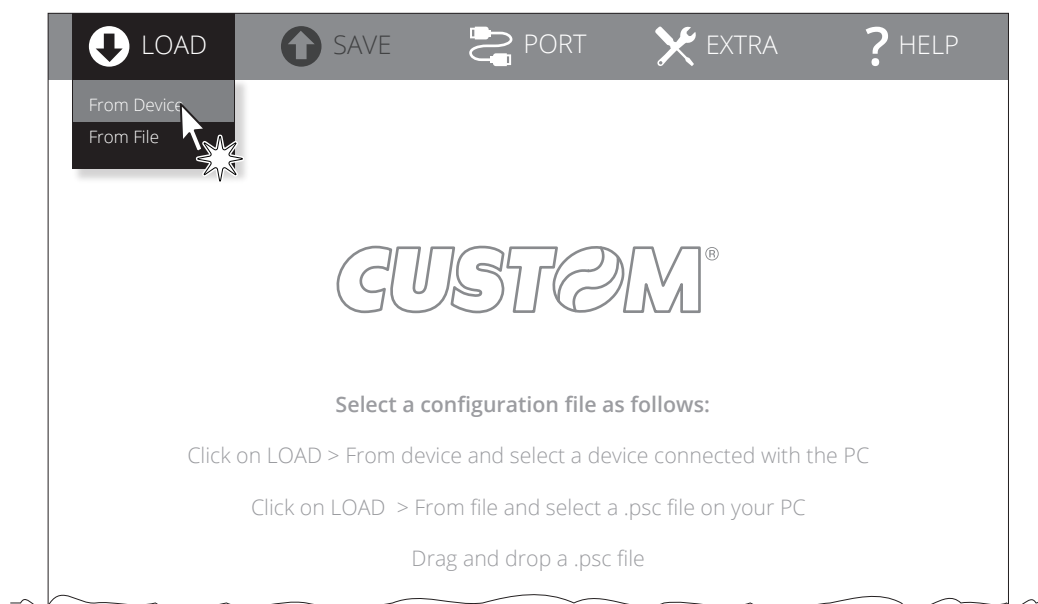
Connect the device to a PC directly (see [paragraph 3.1](#)), without using HUB devices.

3



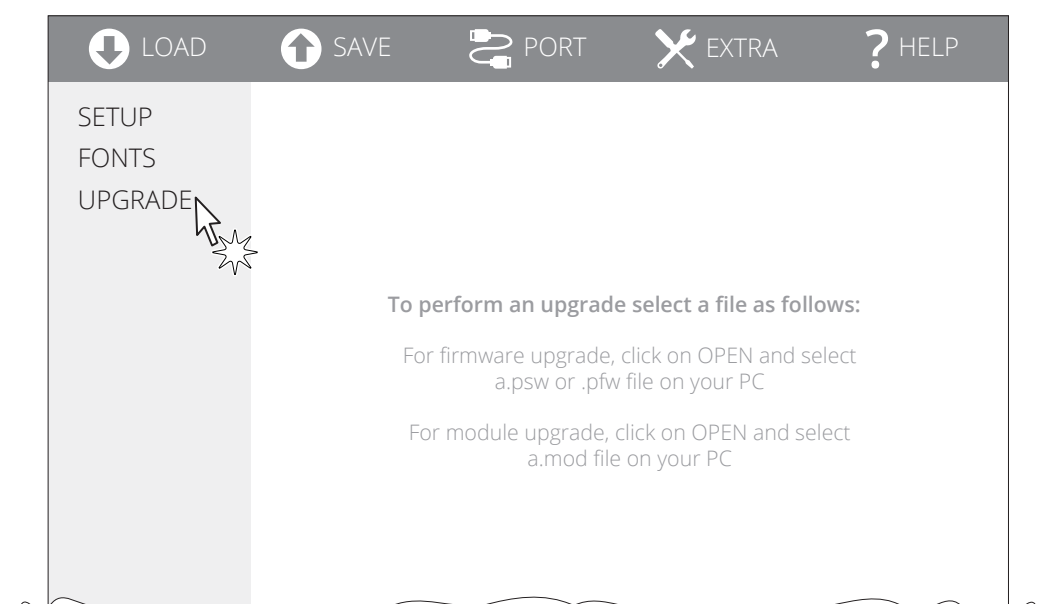
Start the “PrinterSet” software tool.

4



Click on LOAD > FROM DEVICE and select the device connected to the PC.

5



Click on UPGRADE and follow the instructions shown on the screen.

ATTENTION:

During saving, it is strongly discouraged to disconnect the communication cable or to remove the power supply of the PC or the device.





9 SPECIFICATION

9.1 Hardware specifications

GENERALS	
Sensors	Head temperature, paper presence, detection of black mark, cover open
Emulations	CUSTOM/POS Windows XP VISTA (32/64 bit) Windows 7 (32/64 bit) Windows 8 (32/64 bit) Windows 8.1 (32/64 bit) Windows 10 (32/64 bit) Virtual COM (32/64 bit) with or without silent installation OPOS Linux (32/64 bit) Android Windows Phone iOS macOSX
Printing driver	
INTERFACES	
USB port	12 Mbit/s (USB 2.0 full speed)
RS232 serial port	from 1200 bps to 115200 bps
RJ12 drawer port	24 V
MEMORIES	
Receive buffer	20 kB
Flash memory	4 MB (+1 MB internal to the micro)
RAM memory	2 MB
Graphic memory	1 logo (576 x 910 dots)
PRINTER	
Resolution	203 dpi (8 dot/mm)
Printing method	Thermal, fixed head



Head life ⁽¹⁾	
Abrasion resistance ⁽²⁾	50 km (with recommended paper, 12.5% duty cycle)
Pulse durability	100 M (referred to each dot)
Printing width	72 mm
Printing mode	Normal, 90°, 180°, 270°
Printing format	Height/Width from 1 to 8, bold, reverse, underlined, italic
Character fonts	54 character code tables (see paragraph 9.7) Extended chinese GB18030-2000
Printable barcode	UPCA, UPCE, EAN13, EAN8, CODE39, ITF, CODABAR, CODE93, CODE128, CODE32, PDF417, QR code
Printing speed ^{(1) (3)}	Normal = 140 mm/s High Quality = 100 mm/s

PAPER

Type of paper	Thermal rolls, heat-sensitive side on outside of roll
Paper width	80 mm ± 0.5 mm
Paper weight	from 55 g/m ² to 60 g/m ²
Paper thickness	63 µm
Recommended types of paper	KANZAN KLS46 MITSUBISHI PF5067 MITSUBISHI TL3000 MITSUBISHI TF7067 KANZAKI Lotto 500 RICOH 140GA APPVION Alpha Plus 600-3.2
External roll diameter	max. 80 mm
Internal roll core diameter	12 mm (+ 1 mm) 25 mm (+ 1 mm)
Core thickness	2 mm (+1 mm)



Paper end	Not attached to roll core
Core type	Cardboard or plastic
AUTOCUTTER	
Paper cut	Partial cut
Estimated life ⁽¹⁾	1000000 cuts (with paper thickness 200 µm, ambient temperature)
BLUETOOTH MODULE SPECIFICATIONS	
Communication speed	2.0 Class 2 - SPP (Serial port profile)
PRINTER ELECTRICAL SPECIFICATIONS	
Power supply	24 Vdc ±10% (optional external power supply)
Medium consumption ⁽³⁾	1 A
Typical consumption ⁽⁴⁾	1 A
Stand-by consumption	0.05 A
ELECTRICAL SPECIFICATIONS POWER SUPPLY code 963GE020000117 ⁽⁵⁾	
Power supply voltage	from 100 Vac to 240 Vac
Frequency	from 50 Hz to 60 Hz
Output	24 V, 2.5 A
Power	60 W
ELECTRICAL SPECIFICATIONS POWER SUPPLY code 963GE020000053 (optional)	
Power supply voltage	from 100 Vac to 240 Vac
Frequency	from 50 Hz to 60 Hz
Output	24 V, 2.5 A
Power	60 W



ENVIRONMENTAL CONDITIONS

Operating temperature	from 0 °C to +50 °C
Relative humidity (RH)	from 10% to 80% (w/o condensation)
Storage temperature	from -20 °C to +70 °C
Storage relative humidity (RH)	from 10% to 90% (w/o condensation)

NOTES:

- (1) : Respecting the regular schedule of cleaning for the device components.
- (2) : Damages caused by scratches, ESD and electromigration are excluded.
- (3) : Referred to the UL measurements.
- (4) : Referred to a standard CUSTOM receipt (L = 10 cm, Density = 12.5% dots on).
- (4) : For receipts with wide black zones is recommended the optional power supply code 963GE020000053 that provides a peak current higher for larger time intervals.



9.2 Character specifications

Theoretical values.

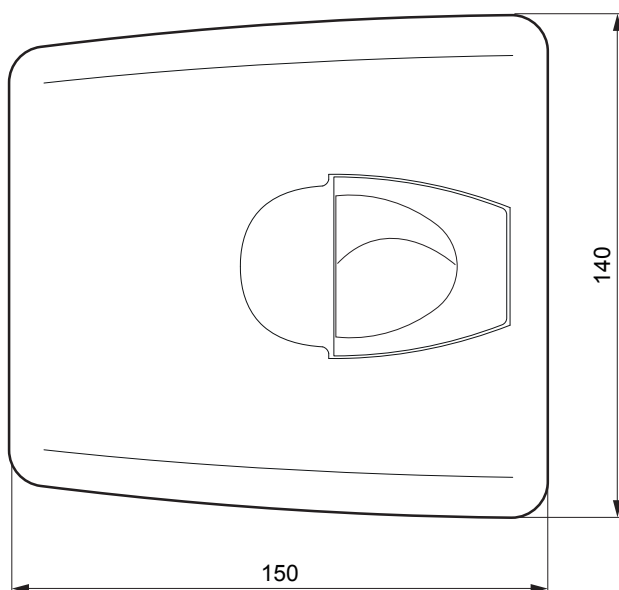
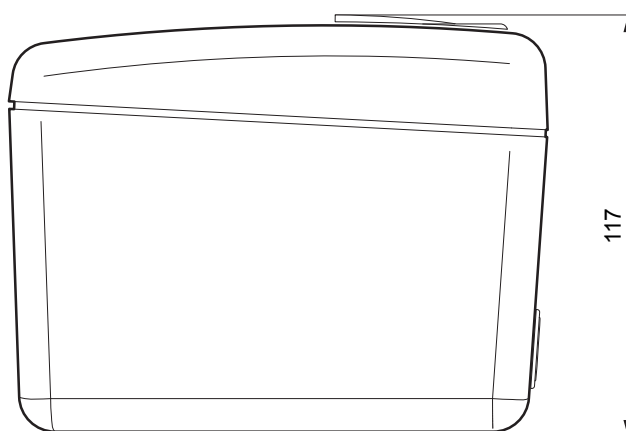
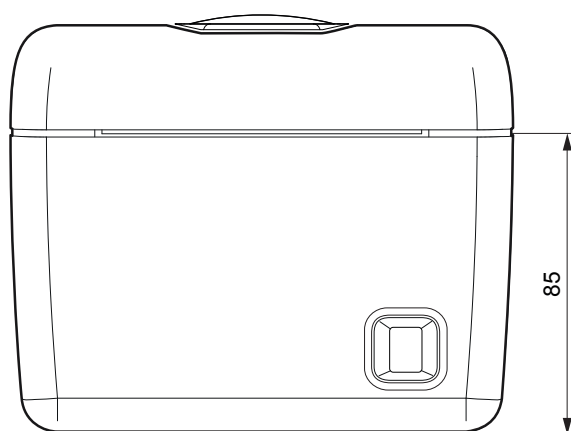
Character set	3		
Character density	11 cpi	15 cpi	20 cpi
Number of columns	32	42	56
Chars / s	1815	2310	3080
Lines / s	55	55	55
Characters (L x H mm)-Normal	2.25 x 3	1.75 x 3	1.25 x 3

9.3 Device dimensions

Dimensions referred to devices without paper roll.

All the dimensions shown in following figures are in millimetres.

Length	150 mm
Height	117 mm (with cover closed)
Width	140 mm
Weight	920 g

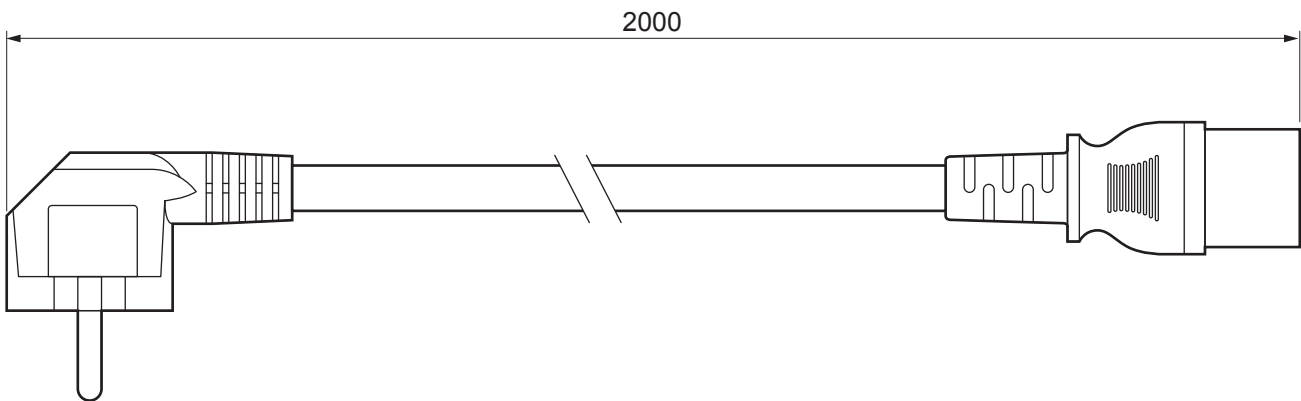


9.4 Power supply and power cord dimensions

The following table shows the dimensions of the power supply and the power cord supplied with the device. All the dimensions shown in following figures are in millimetres.

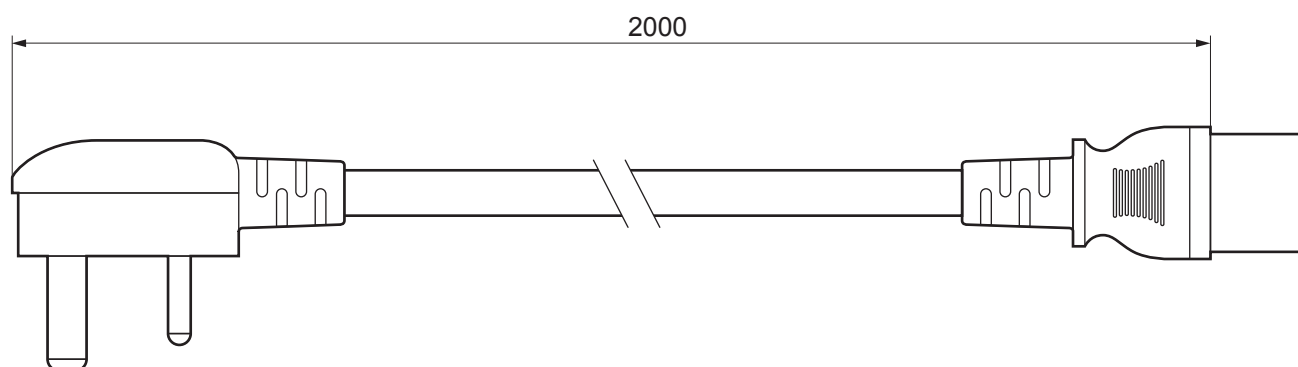
POWER CORD code 26100000000311 and code 26100000000313	
Length	2000 mm
POWER SUPPLY code 963GE020000117	
Width	100 mm
Length	36 mm
Height	57 mm

POWER CORD code 26100000000311

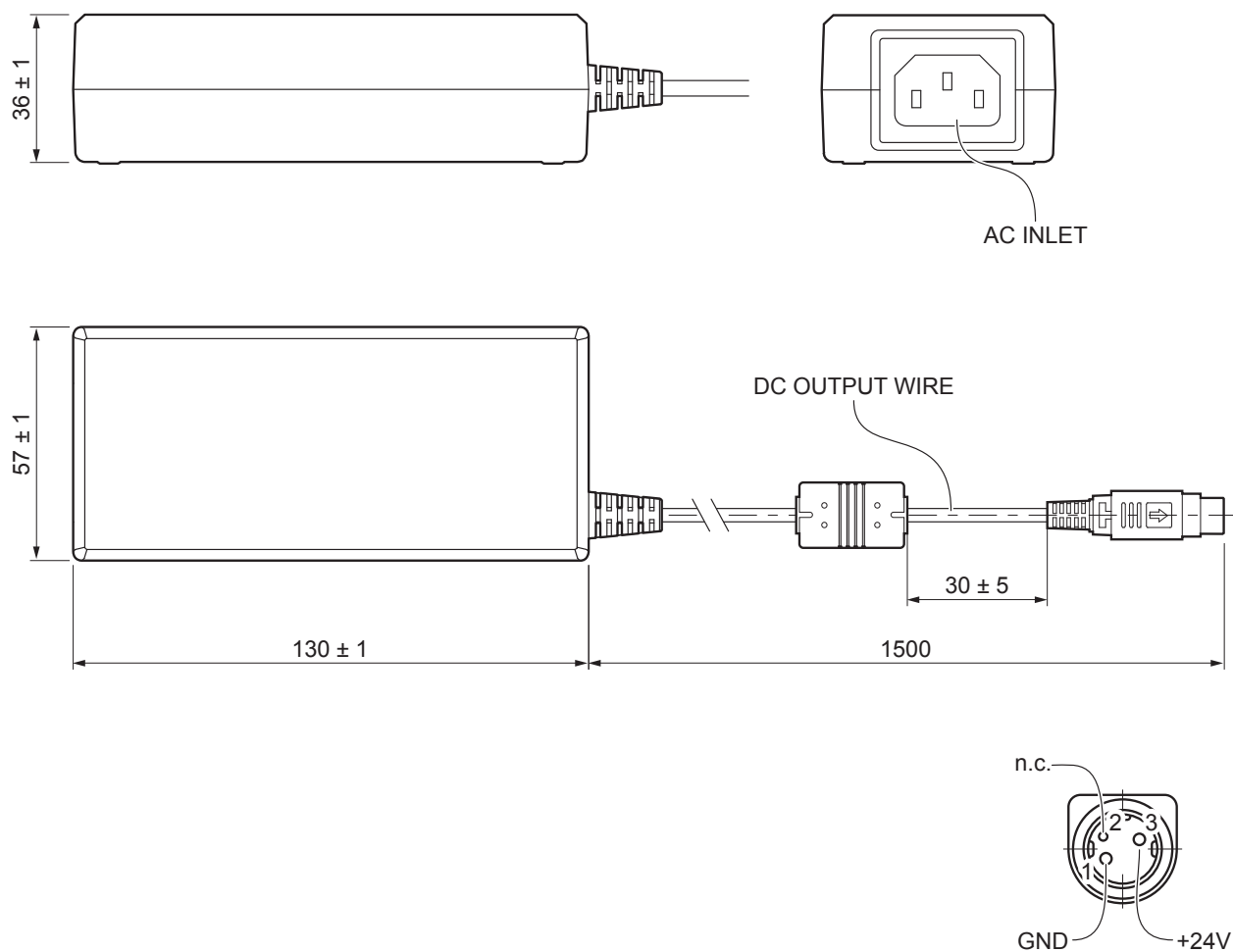




Power cord code 26100000000313



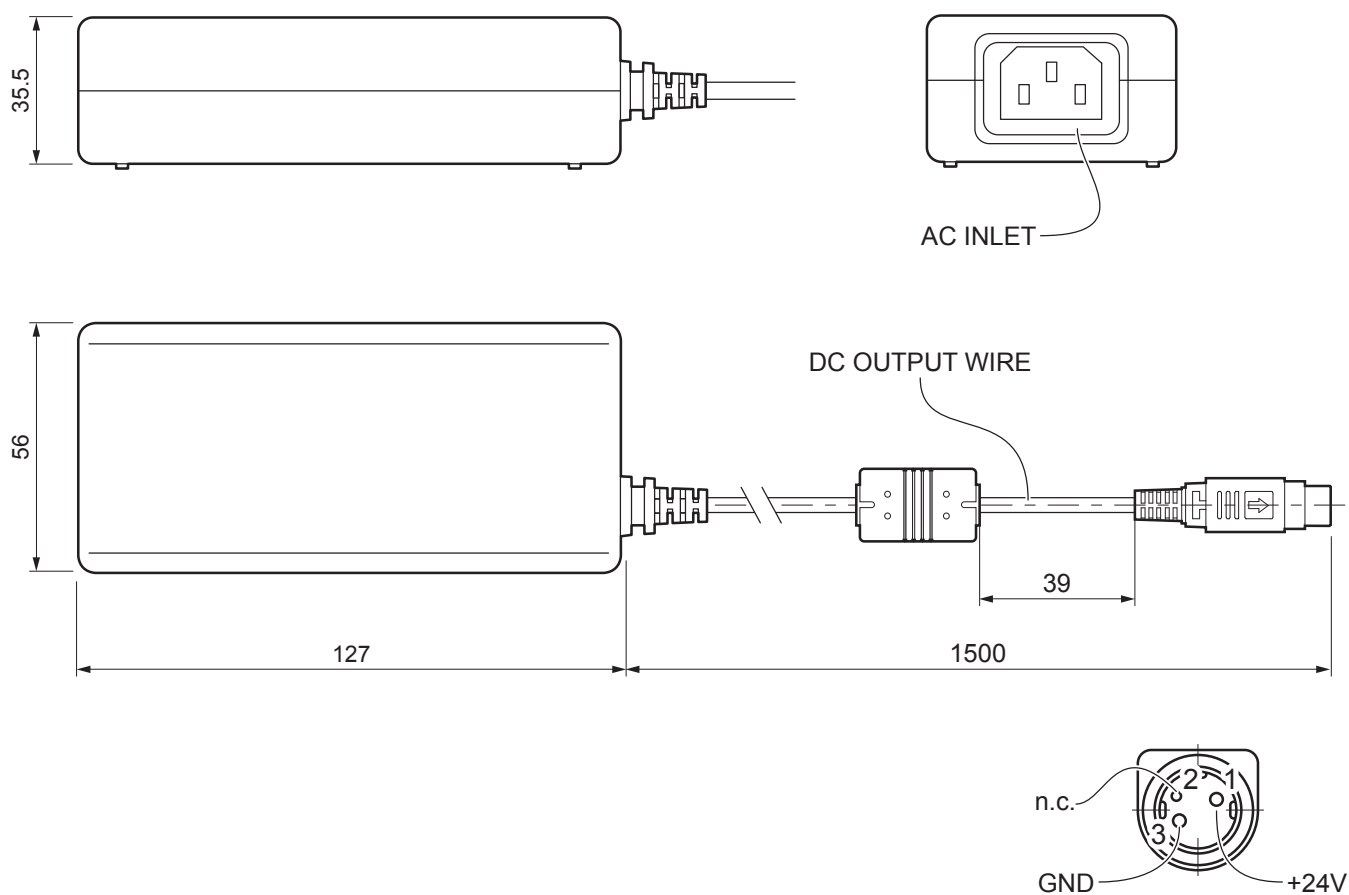
Power supply code 963GE020000117



9.5 Dimensions of power supply code 963GE020000053 (optional)

All the dimensions shown in following figures are in millimetres.

Length	127 mm
Height	35.5 mm
Width	56 mm

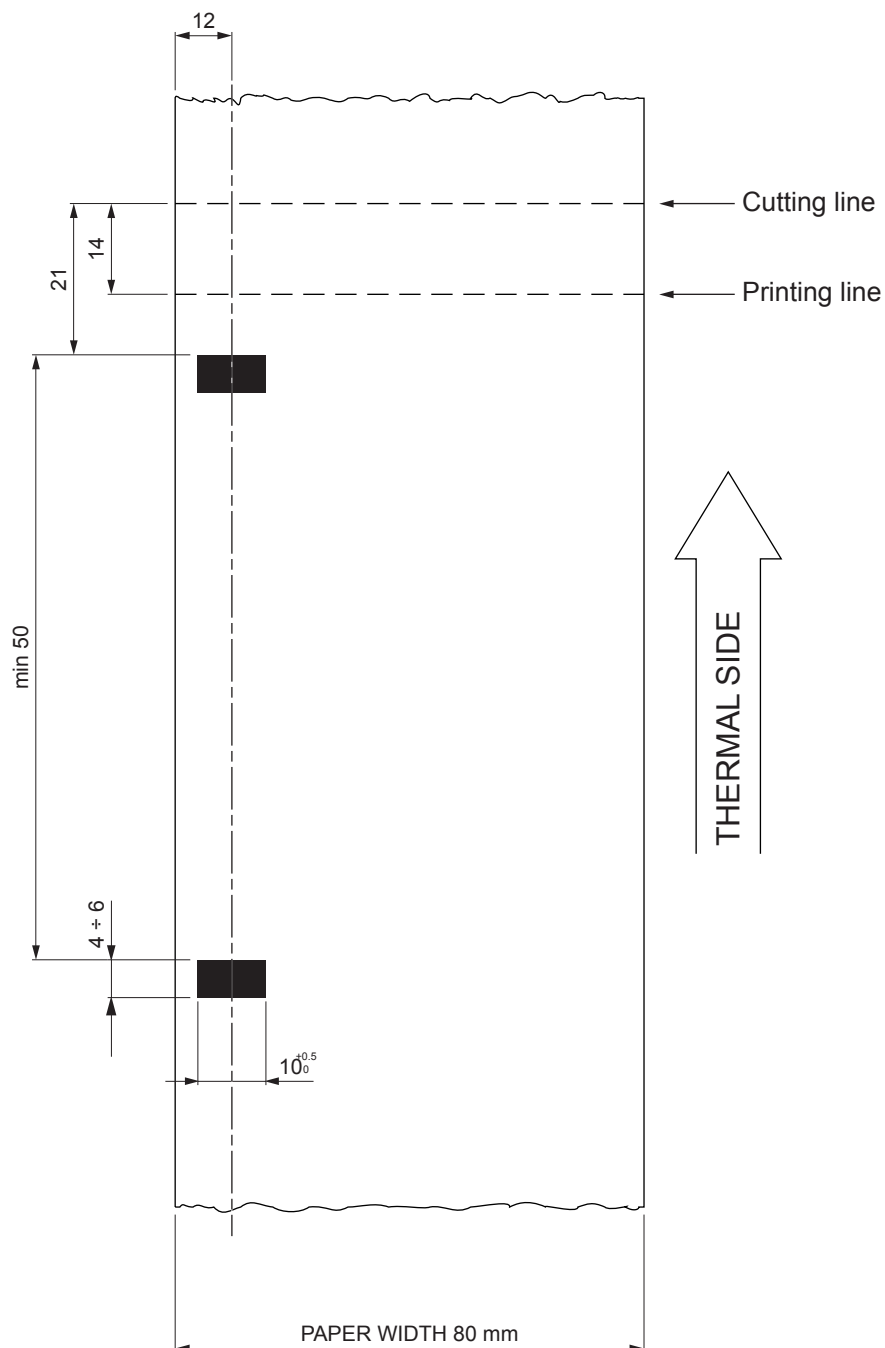


9.6 Paper specification

Paper with black mark for fixed sensor

The following image shows the placement of the black mark on the thermal side of the paper. For more information about the use of paper with black mark see [chapter 7](#).

All the dimensions shown in following figures are in millimetres





9.7 Character sets in CUSTOM/POS emulation

The printer has 3 internal fonts with a width of 11, 15, 20 cpi, which can be associated with one of the coding tables stored on the device.

The selection of the font and the encoding table is done via command (see the commands manual of the device) or through the setup procedure by properly setting the parameters “Chars / Inch” and “Code Table” (see [paragraph 5.5](#)).

The following is the complete list of coding tables that can be installed on the device.

<Code Table>	CHARACTER TABLES	
0	PC437 - U.S.A., Standard Europe	
1	Katakana	
2	PC850 - Multilingual	
3	PC860 - Portuguese	
4	PC863 - Canadian/French	
5	PC865 - Nordic	
11	PC851 - Greek	on request
12	PC853 - Turkish	on request
13	PC857 - Turkish	
14	PC737 - Greek	
15	ISO8859-7 - Greek	on request
16	WPC1252	on request
17	PC866 - Cyrillic 2	
18	PC852 - Latin 2	
19	PC858 for Euro symbol at position 213	
20	KU42 - Thai	
21	TIS11 - Thai	on request
26	TIS18 - Thai	on request
30	TCVN_3 - Vietnamese	on request
31	TCVN_3 - Vietnamese	on request
32	PC720 - Arabic	
33	WPC775 - Baltic Rim	on request
34	PC855 - Cyrillic	
35	PC861 - Icelandic	on request

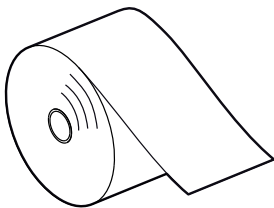


<Code Table>		CHARACTER TABLES
36	PC862 - Hebrew	
37	PC864 - Arabic	
38	PC869 - Greek	on request
39	ISO8859-2 - Latin 2	on request
40	ISO8859-15 - Latin 9	on request
41	PC1098 - Farci	
42	PC1118 - Lithuanian	on request
43	PC1119 - Lithuanian	on request
44	PC1125 - Ukrainian	on request
45	WPC1250 - Latin 2	
46	WPC1251 - Cyrillic	on request
47	WPC1253 - Greek	on request
48	WPC1254 - Turkish	on request
49	WPC1255 - Hebrew	on request
50	WPC1256 - Arabic	
51	WPC1257 - Baltic Rim	on request
52	WPC1258 - Vietnamese	on request
53	KZ1048 - Kazakh	on request
255	Space page	



10 CONSUMABLES

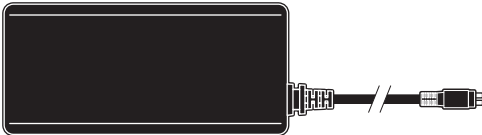
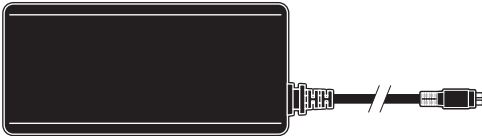
The following table shows the list of available consumables for device:

DESCRIPTION	CODE
67300000000398 THERMAL PAPER ROLL weight = 58 g/m ² width = 80 mm Ø external = 80 mm Ø core = 12 mm	



11 ACCESSORIES

The following table shows the list of available accessories for device:

DESCRIPTION	CODICE
963GE020000071 POWER SUPPLY (for technical specifications, see paragraph 9.1)	
963GE020000053 POWER SUPPLY (for technical specifications, see paragraph 9.1)	
26100000000311 POWER CORD SCHUKO PLUG length = 2 m	
26100000000313 POWER CORD UK PLUG length = 2 m	
26500000000352 SERIAL CABLE 9 pin male connector - 9 pin female connector length = 1.8 m	
26500000000356 USB CABLE A-B type length = 1.8 m	





12 TECHNICAL SERVICE

In case of failure, contact the technical service accessing the website www.custom4u.it and using the support tools on the homepage. It is advisable to keep the identification data of the product at hand.

The product code, the serial number and the hardware release number can be found on the product label (see [paragraph 2.4](#)). The firmware release number (SCODE) can be found:

- on the setup report (see [paragraph 5.2](#))
- connecting the device to a PC and starting the “PrinterSet” tool (see [paragraph 5.1](#))
- by consulting the “setup.ini” file if available



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