USER MANUAL

P3X

CUSTOM®

CUSTOM S.p.A.
Via Berettine 2/B
43010 Fontevivo (PARMA) - Italy
Tel. : +39 0521-680111
Fax : +39 0521-610701
http: www.custom.biz

Customer Service Department:
www.custom4u.it

THE IMAGES USED IN THIS MANUAL ARE USED AS AN ILLUSTRATIVE EXAMPLES. THEY COULDN'T REPRODUCE THE DESCRIBED MODEL FAITHFULLY.

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 EN55024/EN55035 *(Electromagnetic compatibility of multimedia equipment - Immunity requirements)*
- EN IEC/EN62368-1 *(Audio/video, information and communication technology equipment)*

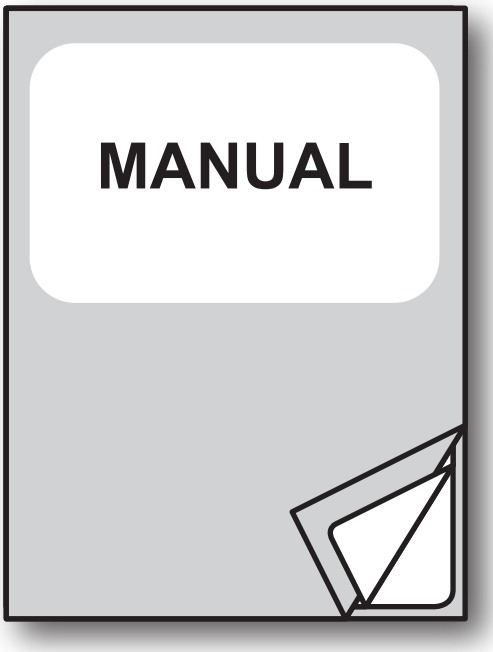
The device is in conformity with the essential requirements laid down in Directives 2014/53/EU about devices equipped with intentional radiators. The Declaration of Conformity and other available certifications can be downloaded from the site www.custom4u.it.

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.



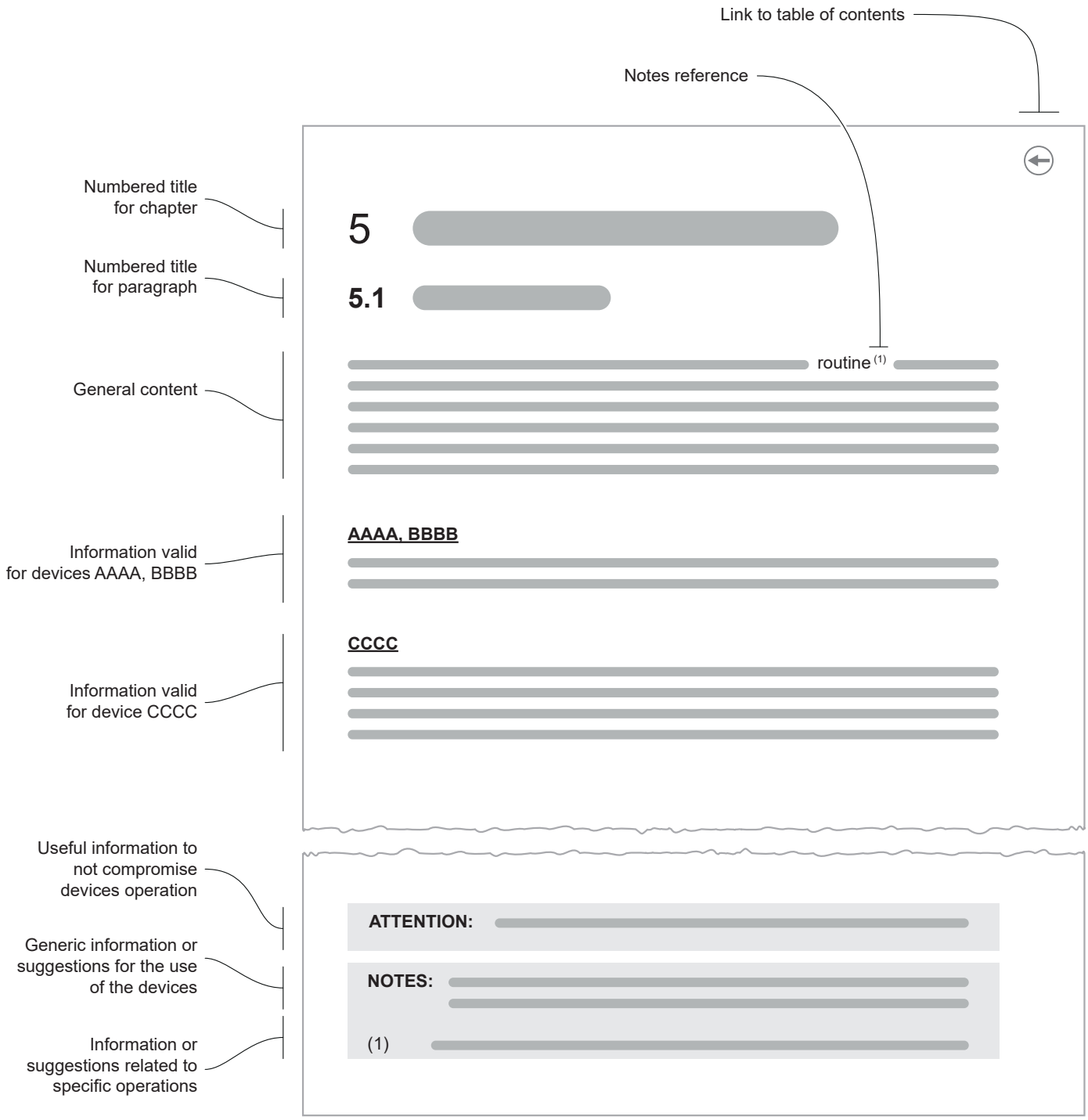
For details on the commands,
refer to the manual with code **0577200M000074**

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

TABLE OF CONTENTS

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.



2 IDENTIFICATION OF THE MODELS

NOMENCLATURA	DESCRIPTION
P3X	P3X base configuration
P3X Wi-Fi/BT	P3X with Wi-Fi/Bluetooth board

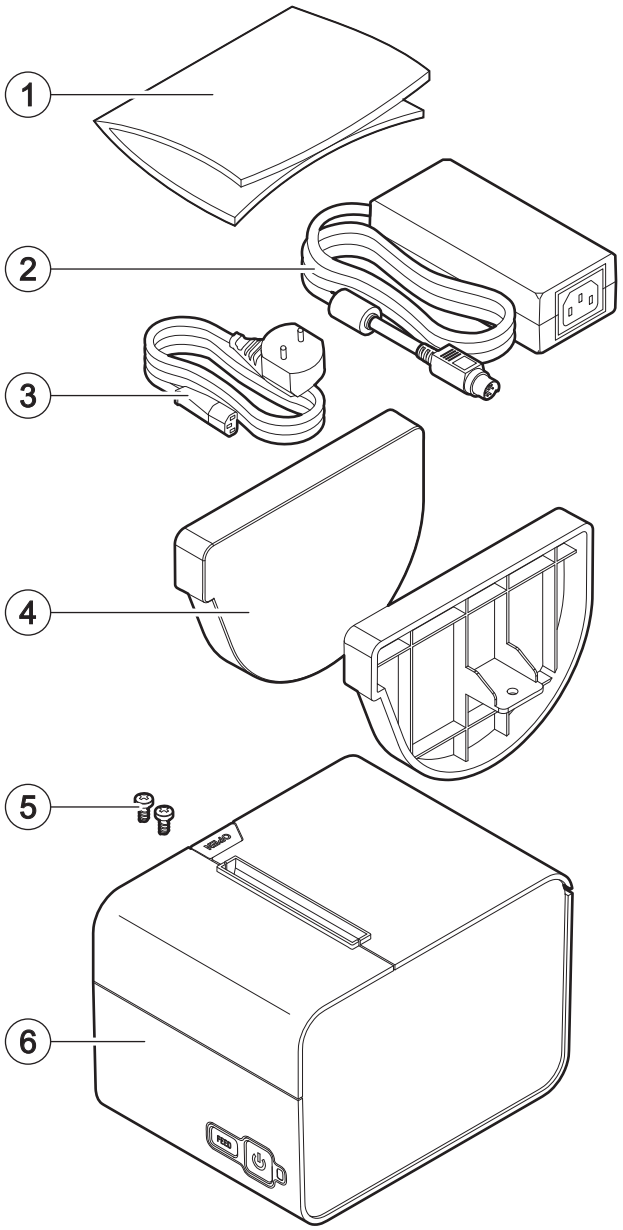
3 DESCRIPTION

3.1 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.

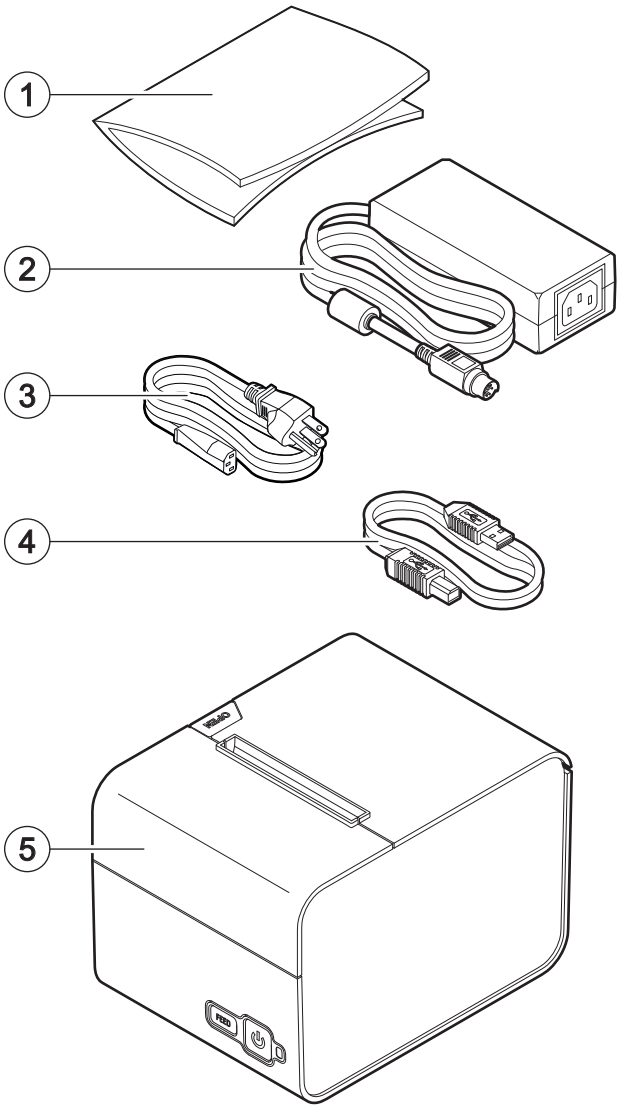
Worldwide market

1. Documentation (Short guide)
2. AC power supply
3. Standard AC power cord
4. Paper reduction guides
5. Paper reduction guides fixing screws
6. Device



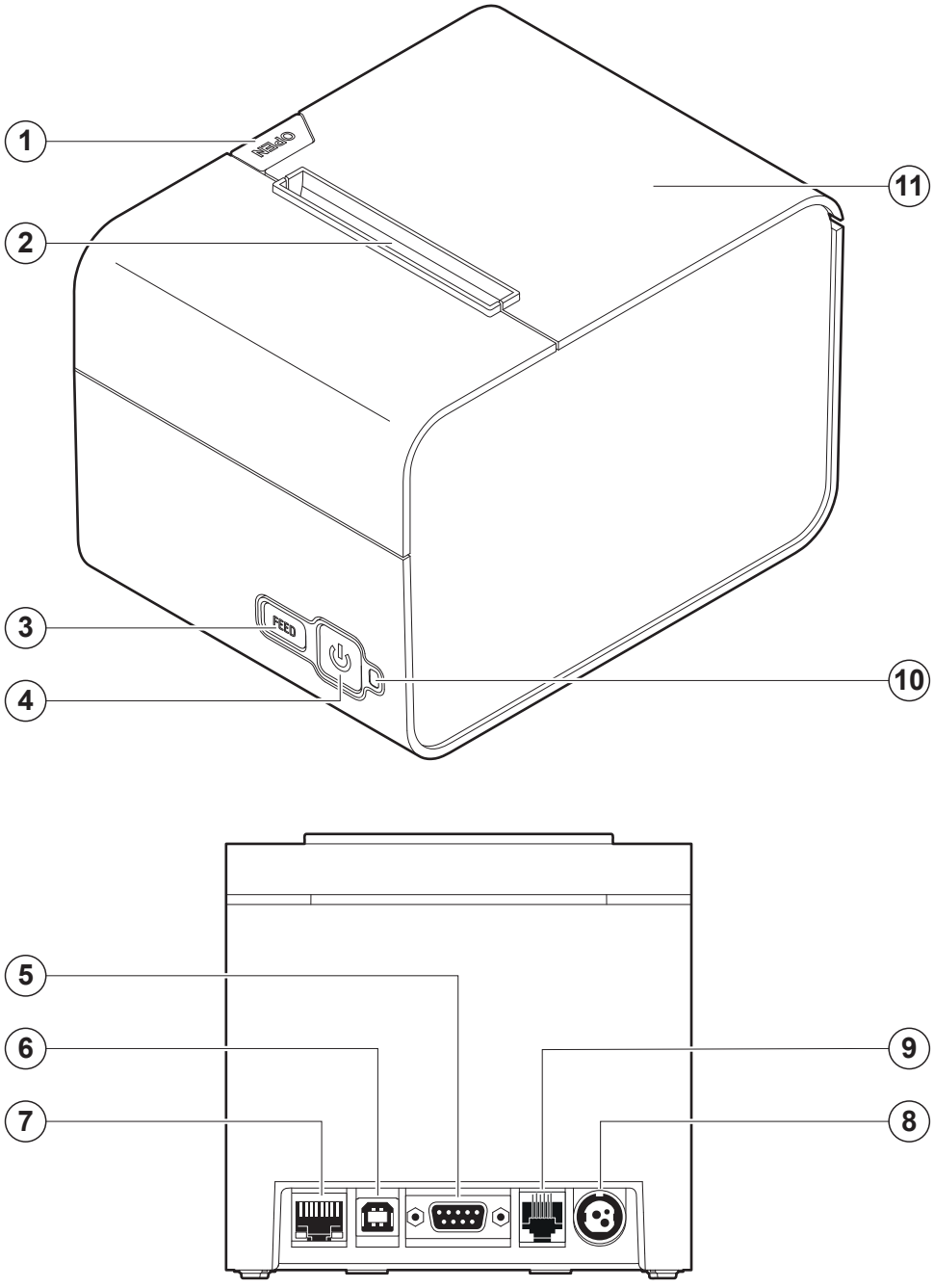
US market

1. Documentation (Short guide)
2. AC power supply
3. US market AC power cord
4. USB cable
5. Device



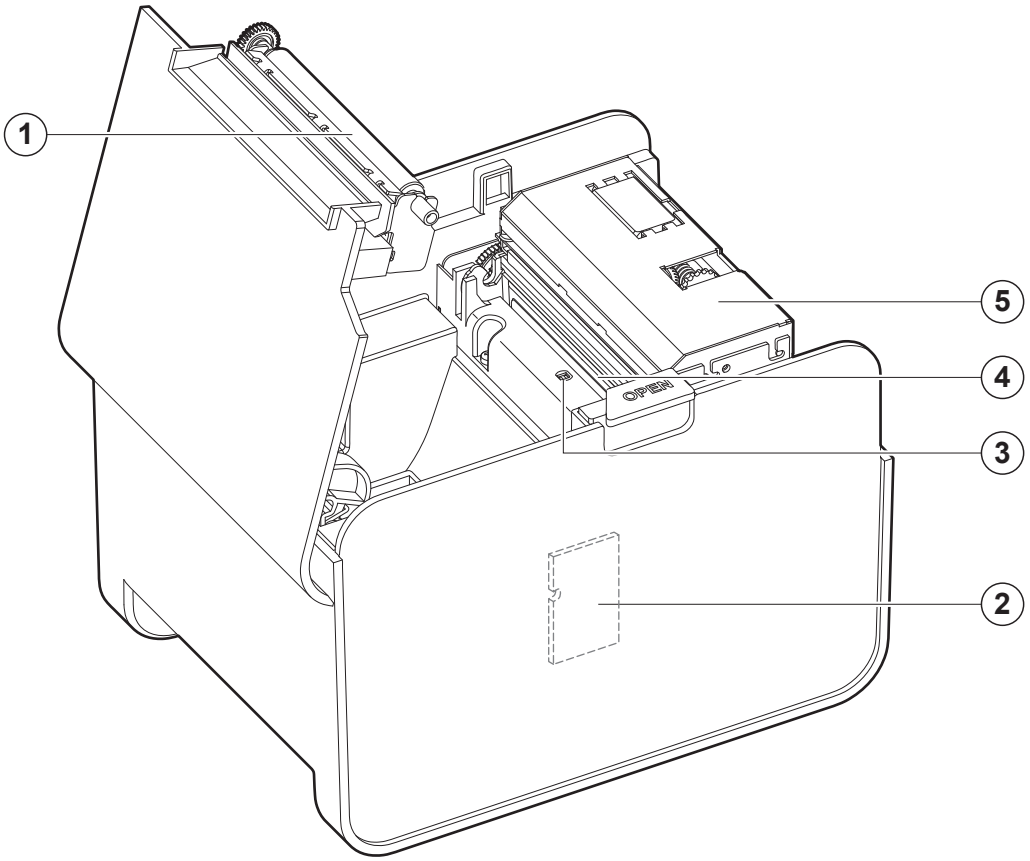
3.2 Device components: external views

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



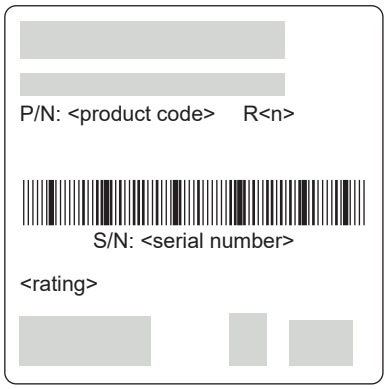
3.3 Device components: internal view

1. Platen roller
2. Wi-Fi/Bluetooth board (only for P3X Wi-Fi/BT)
3. Paper presence sensor
4. Printhead with temperature sensor
5. Autocutter



3.4 Device label

The main data used to identify the machine are shown on the label attached to the bottom of the device.
In particular, it shows the electrical data for the connection to a power source. It also shows the product code, the serial number and the hardware revision (R).



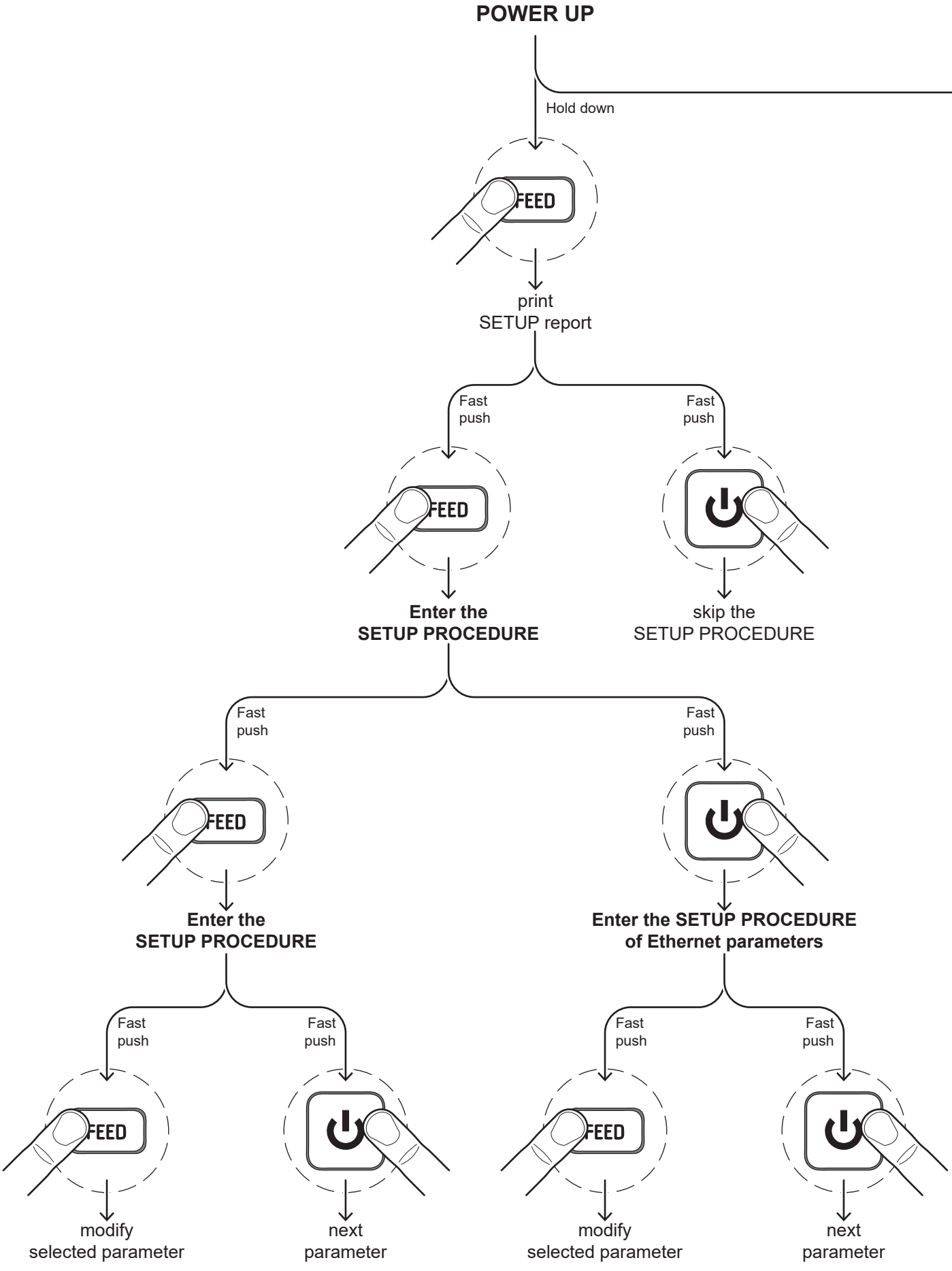
3.5 Status messages

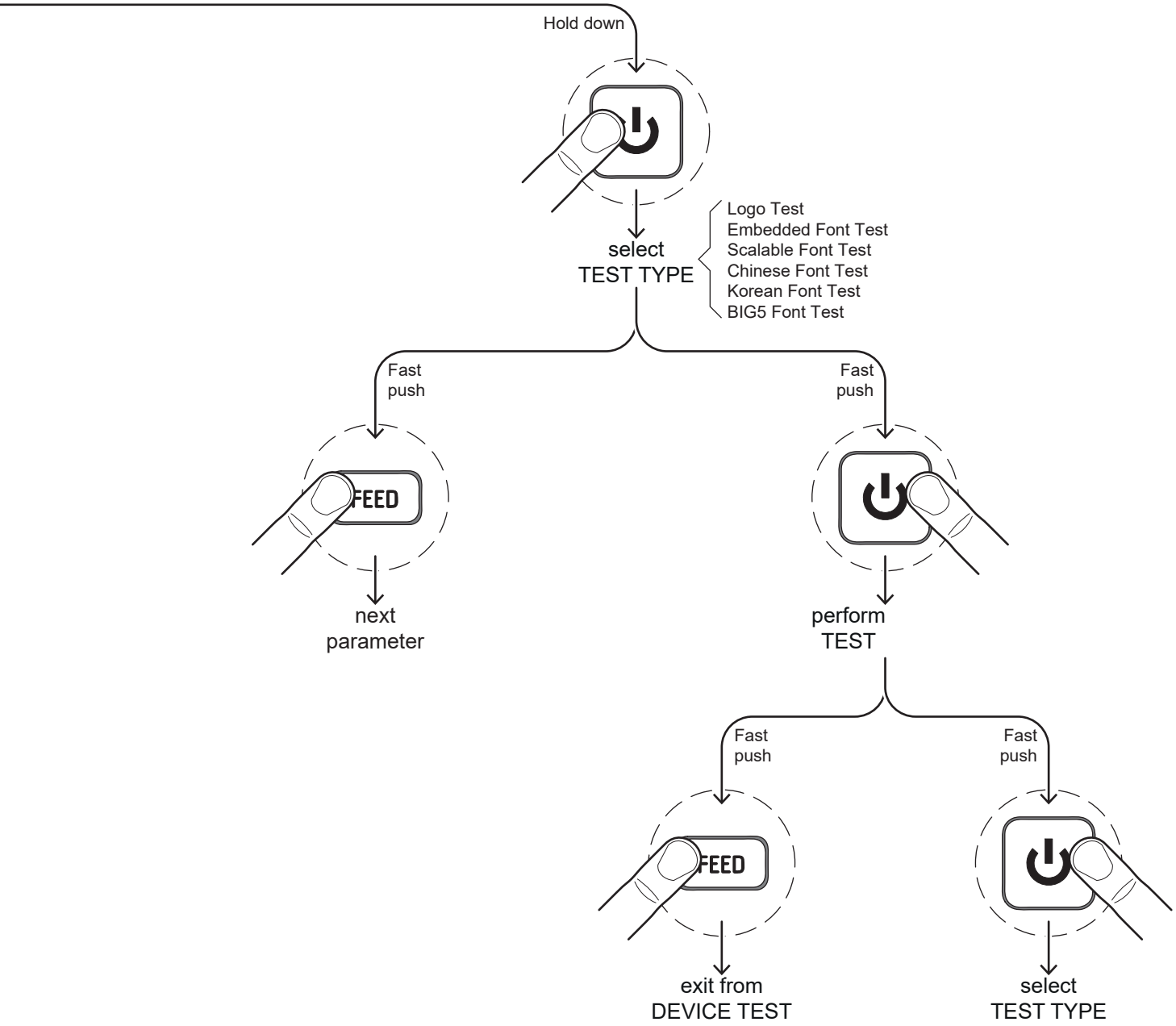
The status LED indicates hardware status of device. Given in the table below are the various LED signals and the corresponding device status.

STATUS LED		DESCRIPTION
-	OFF	DEVICE OFF
GREEN	ON	DEVICE ON: NO ERROR (ACTIVE CONNECTION*)
GREEN COMMUNICATION STATUS	x 1	WI-FI/BLUETOOTH INITIALIZATION*
	x 2	1PRINTHEAD OVERHEATED
	x 3	PAPER END
	x 4	POWER SUPPLY VOLTAGE INCORRECT
	x 5	RECEPTION ERROR (PARITY, FRAME ERROR, OVERRUN ERROR)
	x 6	COMMAND NOT RECOGNIZED
	x 7	COMMAND RECEPTION TIME OUT
	x 8	INSPECTION DOOR OPEN
	x 9	PAPER JAM
GREEN UNRECOVERABLE ERROR	x 10	AUTOCUTTER ERROR

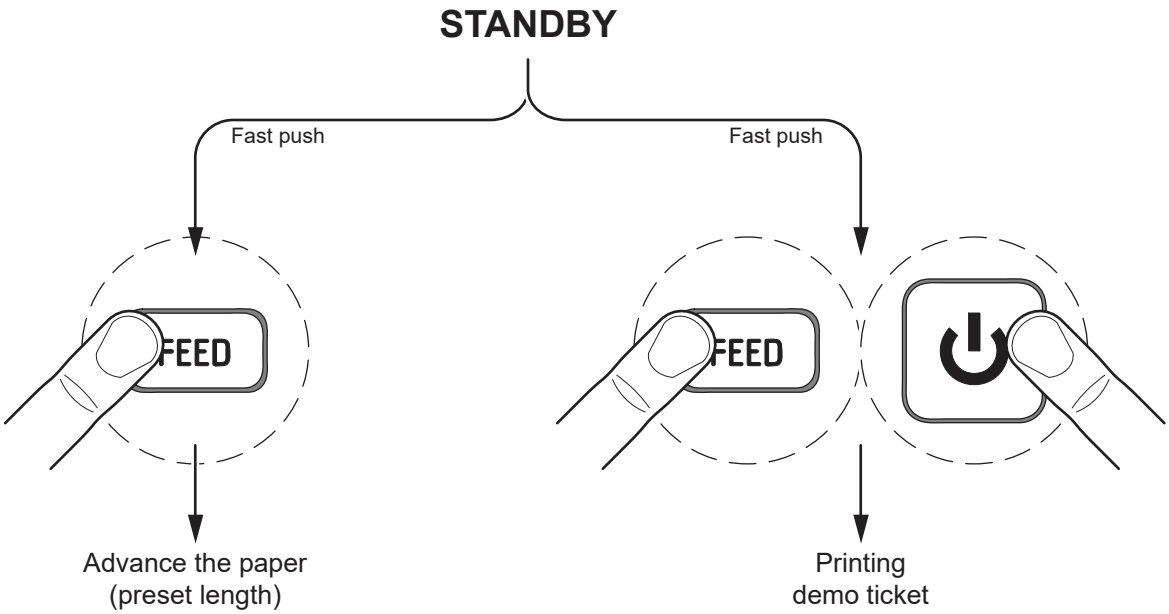
* Only for P3X Wi-Fi/BT model

3.6 Ke+y functions: power up




Hold down
select
TEST TYPE
Logo Test
Embedded Font Test
Scalable Font Test
Chinese Font Test
Korean Font Test
BIG5 Font Test
Fast
push
FEED
next
parameter
Fast
push
perform
TEST
Fast
push
FEED
exit from
DEVICE TEST
Fast
push
select
TEST TYPE

3.7 Key functions: standby

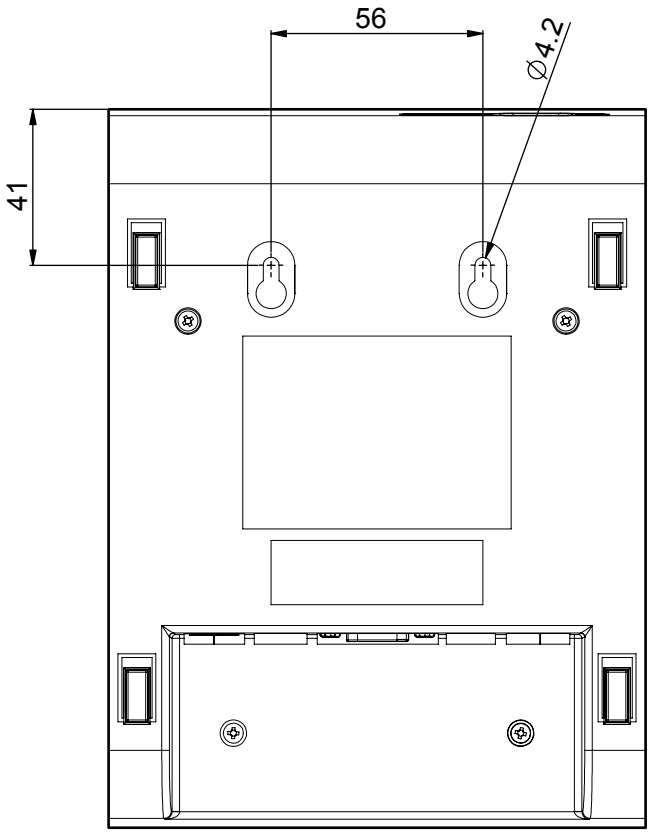


4 INSTALLATION

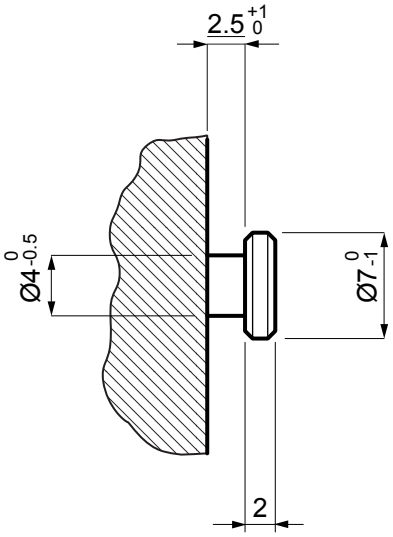
4.1 Wall mounting

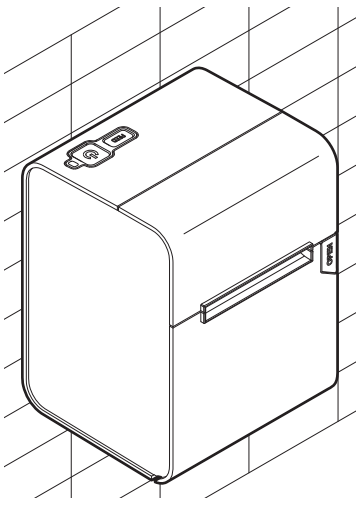
The device is equipped with two slots for mounting on pins for vertical mounting capability of the machine.

The arrangement is placed at the bottom of the machine (see figure below).
The dimensions shown in the image are expressed in millimetres.



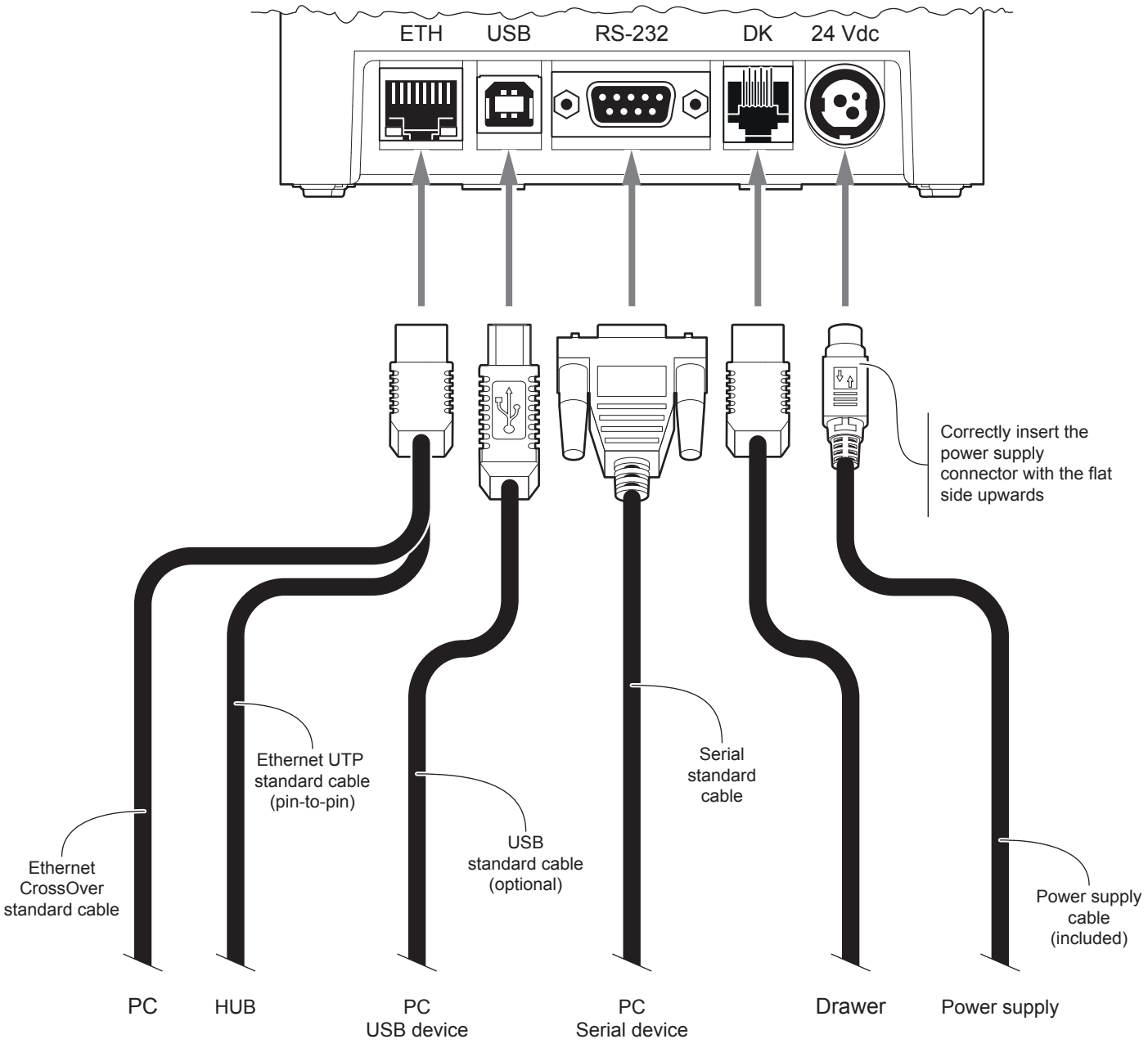
Attach two pins to the wall using the measurements shown on the previous image.
The dimensions of the fixing pins are provided below. The dimensions shown in the image are in millimetres.





4.2 Connections

The following figure shows the possible connections for the device. When the RS232 and USB communication cables are connected to the device at the same time, communication takes place via the USB port.

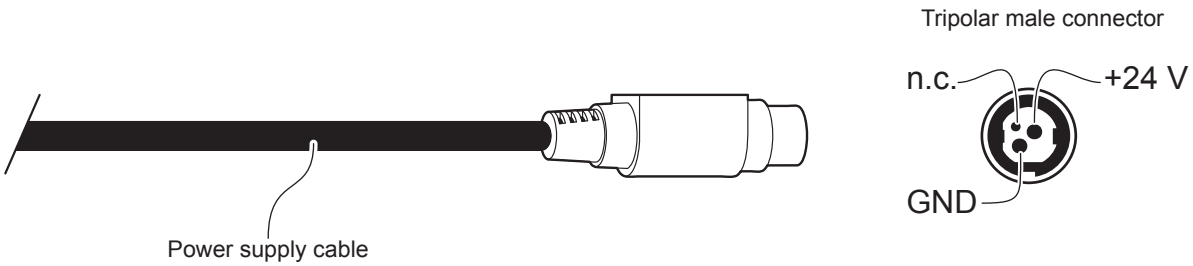


4.3 Pinout

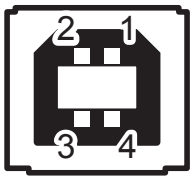
POWER SUPPLY
Tripolar female connector

J9	1	GND
	2	+24 Vdc
	3	GND
	4	Frame GND

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

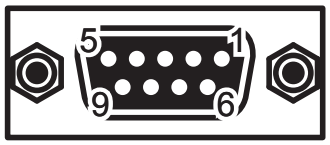


ATTENTION:
Respect power supply polarity.



USB INTERFACE
Female USB type B connector

J2	1	USBVBUS (out)
	2	USB0DN
	3	USB0DP
	4	GND



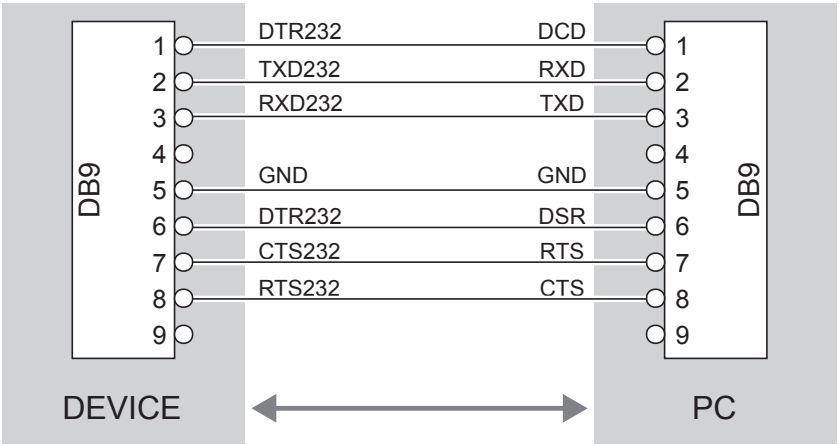
RS232 SERIAL INTERFACE

Female DB9 connector

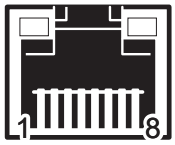
J3	1	DTR232	
	2	TXD232	During transmission, takes the values -VRS232 and + VRS232 depending on data
	3	RXD232	During reception, takes the values -VRS232 and +VRS232 depending on data
	4	n.c.	
	5	GND	
	6	DTR232	When +VRS232, device is power on
	7	CTS232	
	8	RTS232	When +VRS232, device is ready to receive data
	9	n.c.	

Given the presence of the RS232 standard, logic value “0” corresponds to the voltage value +VRS232 (voltage value between +3Vdc and +15Vdc) and logic value “1” corresponds to the voltage value -VRS232 (voltage value between -3Vdc and -15Vdc.

DEVICE > PC connection
The following picture shows an example of connection between the device and a personal computer using a 9 pin RS232 serial connector:



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



ETHERNET INTERFACE

Female RJ45 connector

J4	1	ETH_RXP
	2	+3.3VE
	3	ETH_RXN
	4	ETH_TXP
	5	+3.3V
	6	ETH_TXN
	7	n.c.
	8	GND
	9	+3.3V
	10	LED_LINK
	11	+3.3V
	12	LED-LAN
	13	SH1
	14	SH2

The functionality of two LEDs are specified in following tables:

- For 10Base-T connection:

LED	FUNCTION
LED-LNK	Link (yellow color): the LED lights up when a connection is active
LED-LAN	Rx/Tx: (green color): the LED lights up when occurs a data reception or transmission

- For 10/100Base-TX connection:

LED	FUNCTION
LED-LNK	The LED light (yellow color) on when a connection is active and flashes when occurs a data reception or transmission
LED-LAN	The LED light (green color) on when occurs a 100 Mbit connection and off when occurs a 10 Mbit connection

The device automatically recognizes the type of connection (cross or pin-to-pin).

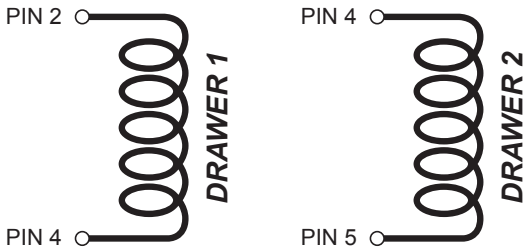
The pinout shown in table represents the input signals to component J4 before the isolation voltage transformer (through-hole pin).

DRAWER CONNECTOR

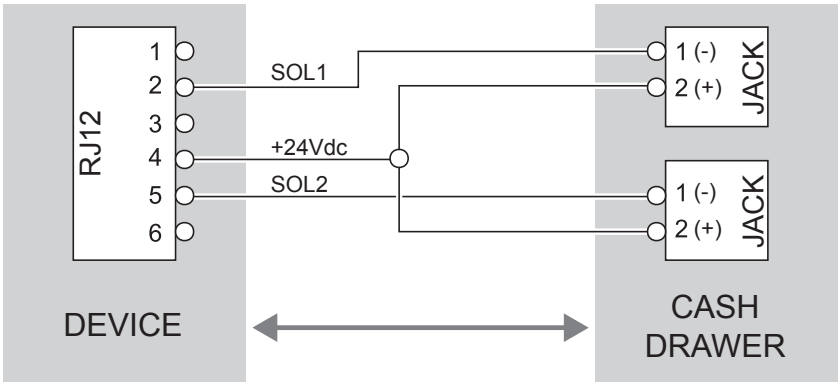
Female RJ12 connector

J11	1	GND
	2	CASS1
	3	IN-CASS
	4	+24VM
	5	CASS2
	6	GND

The solenoid of the drawer 1 must be connected from Pin 2 to Pin 4 on the drawer connector.
The solenoid of the drawer 2 must be connected from Pin 4 to Pin 5 on the drawer connector.



DEVICE > CASH DRAWER (optional) connection.
Use an optional adapter cable RJ12-Jack to connect the device to a cash drawer. Refer to the picture below for the connector pin signals.



4.4 Driver and SDK

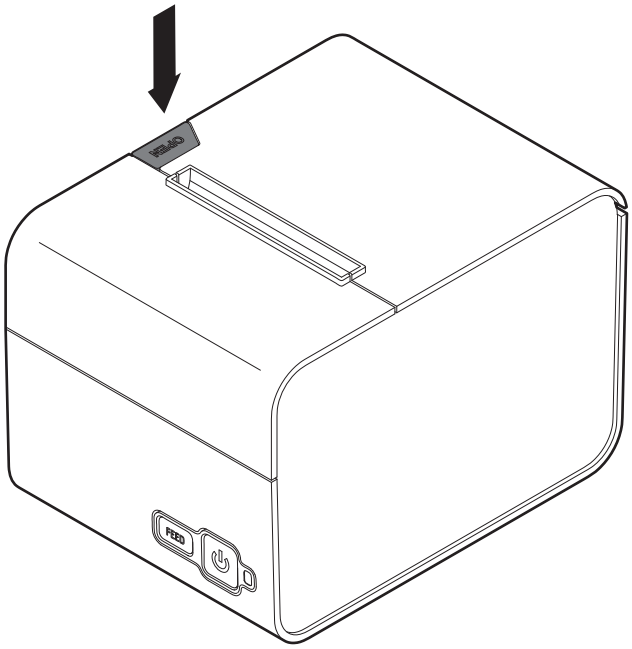
The drivers for the following operating system are available in the website www.custom4u.it:

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 Windows 10 (32/64 bit)	
	Driver for Windows 11 (32/64 bit)	
	Self-installing driver for Virtual COM (32/64 bit) (see paragraph 6.4)	
	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.
Windows / Linux	Driver for JavaPOS	Extract the zipped folder to the destination path desired.
Android	Library for CustomAndroidAPI	Extract the zipped folder to the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the SDK.
iOS	Library for CustomiOSApi	Extract the zipped folder to the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the library.

5 OPERATION

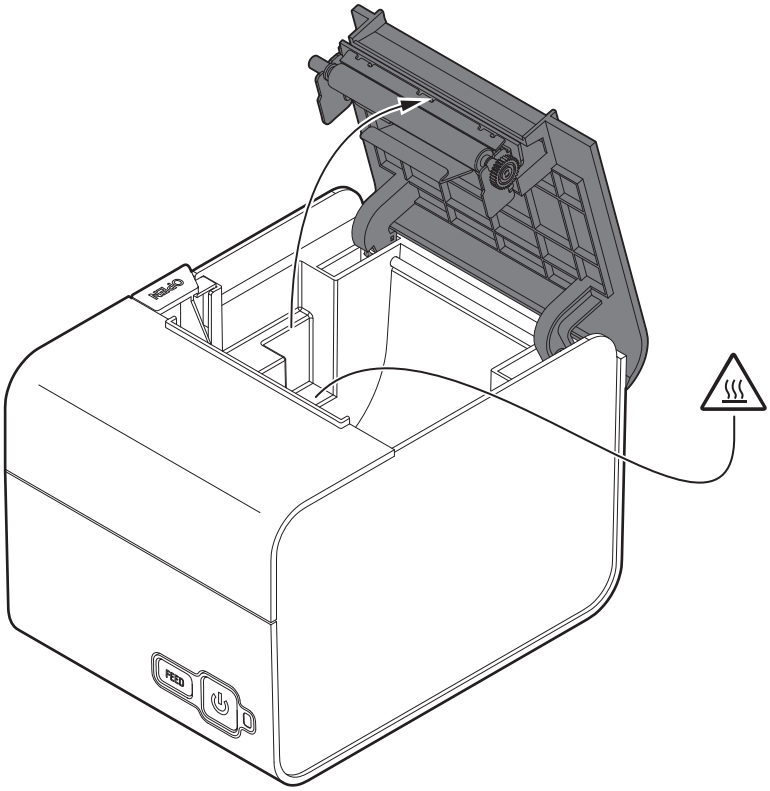
5.1 Opening device cover

1



Press the opening button of the paper compartment cover.

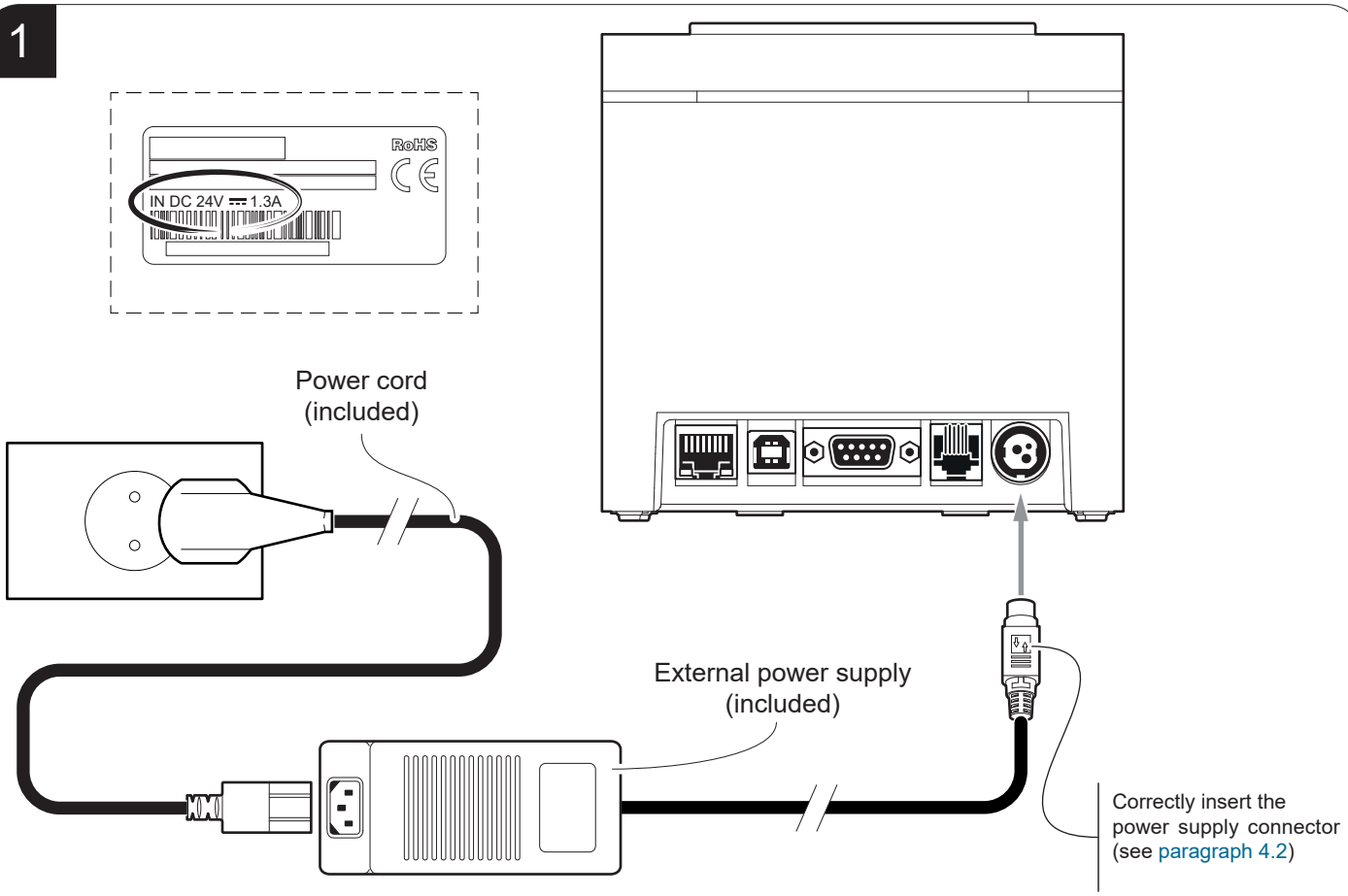
2



Open the device cover.

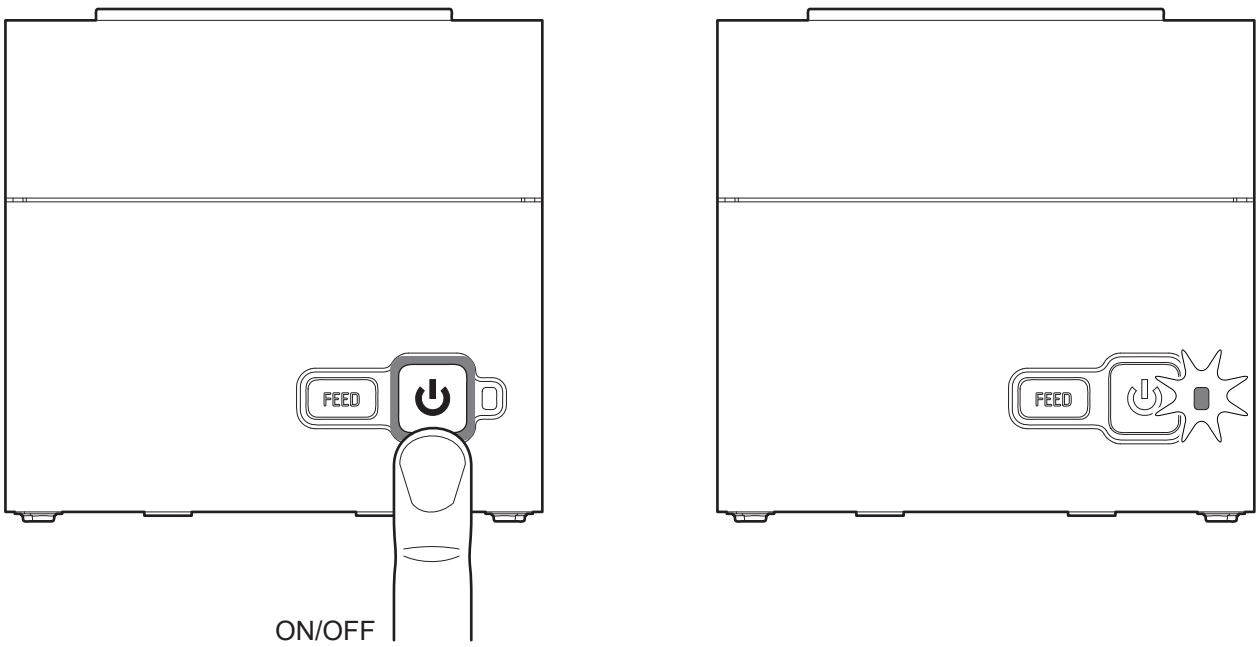
5.2 Switch the device on/off

1



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

2

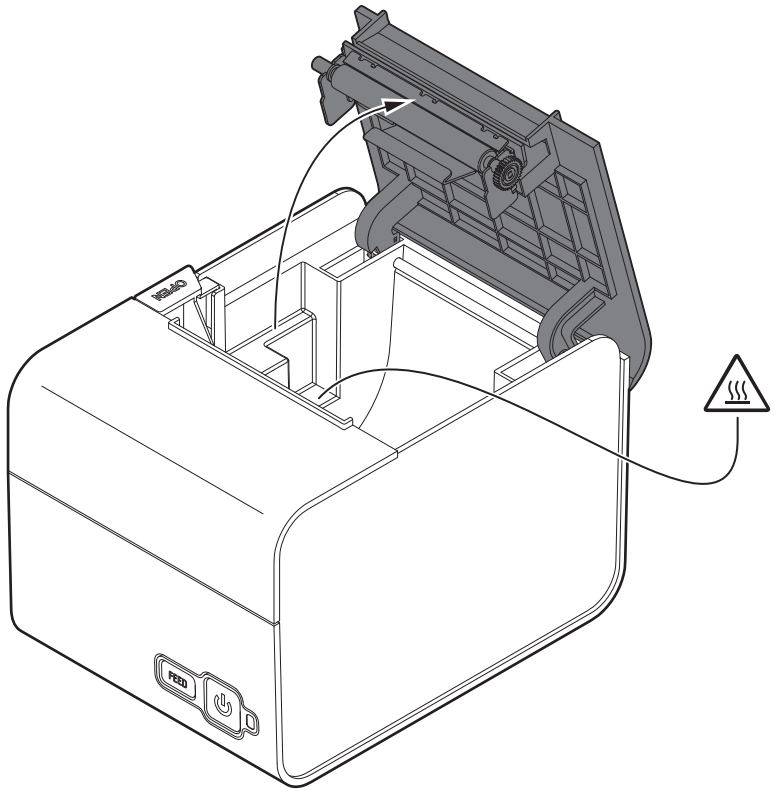


Switch the device on pressing ON/OFF key, the status LED turns on and the device is ready.
Switch the device off holding down the ON/OFF key.

5.3 Loading the paper roll

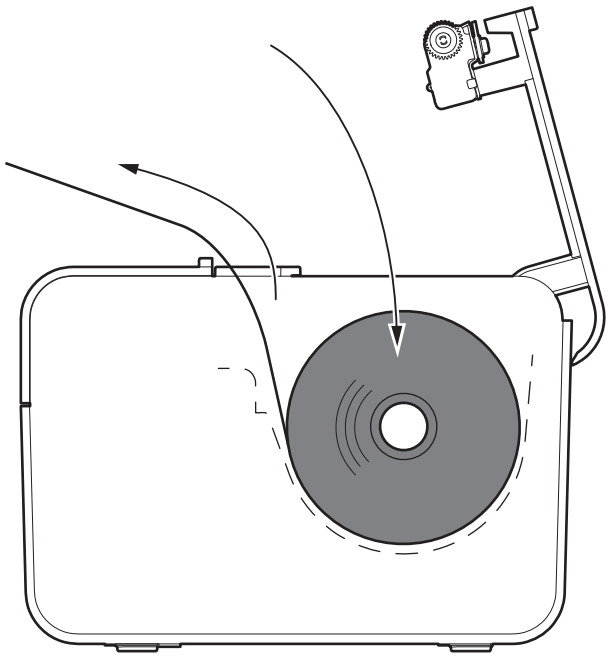
To change the paper roll proceed as follows. At every paper change, check inside the device to locate and remove any scraps of paper.

1



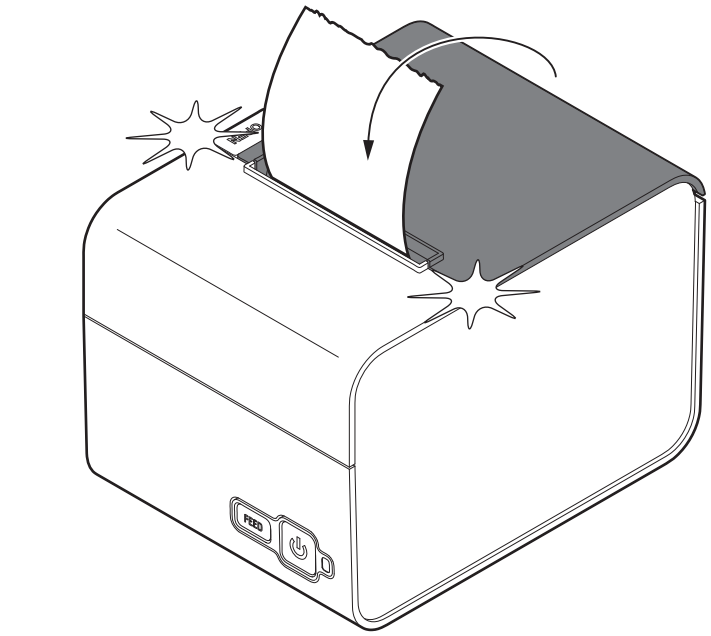
Open the device cover
(see paragraph 5.1).

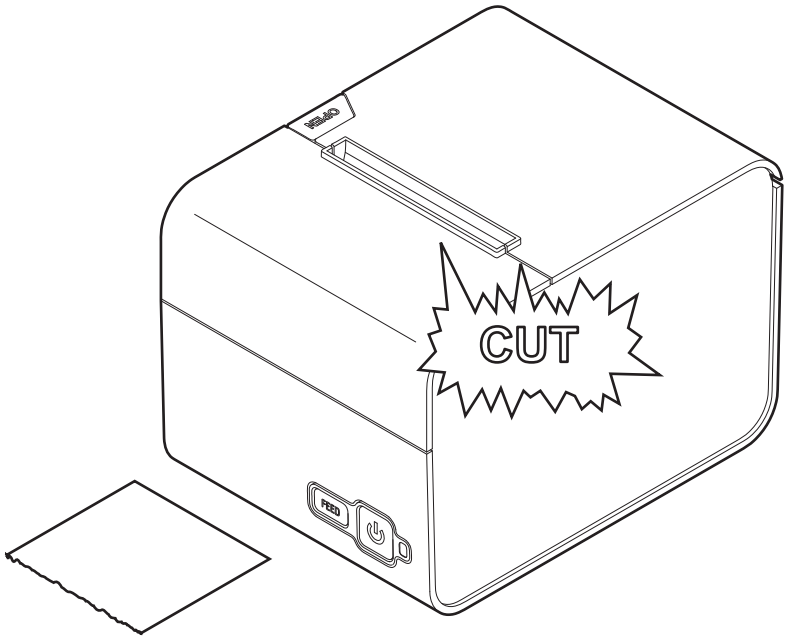
2



Place the roll in the paper compartment and pull out the paper for a few centimetres.

3



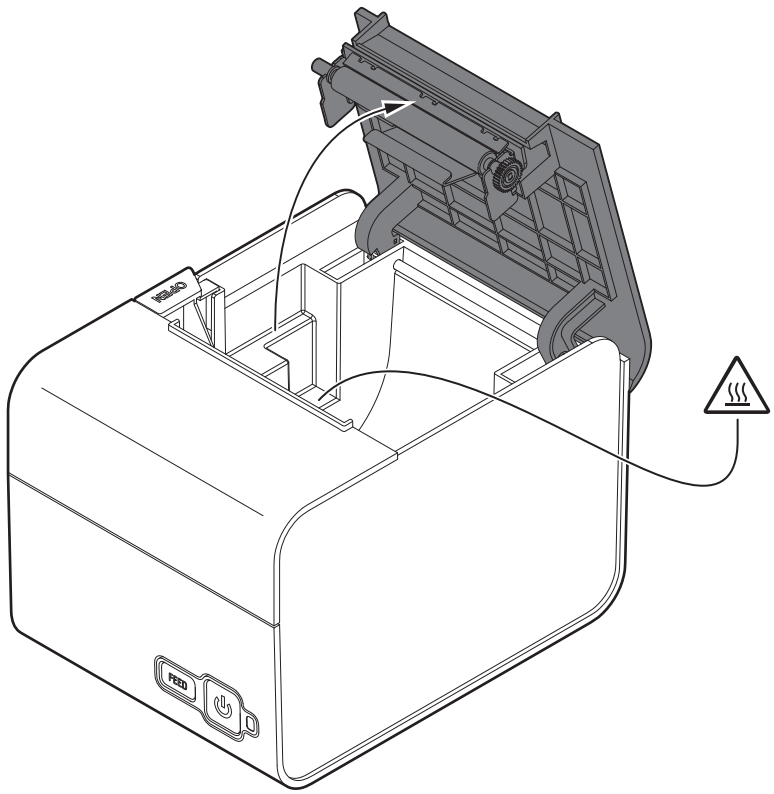


Close the device cover and wait until the paper is loaded and automatically cut off.

5.4 Paper reduction guides installation

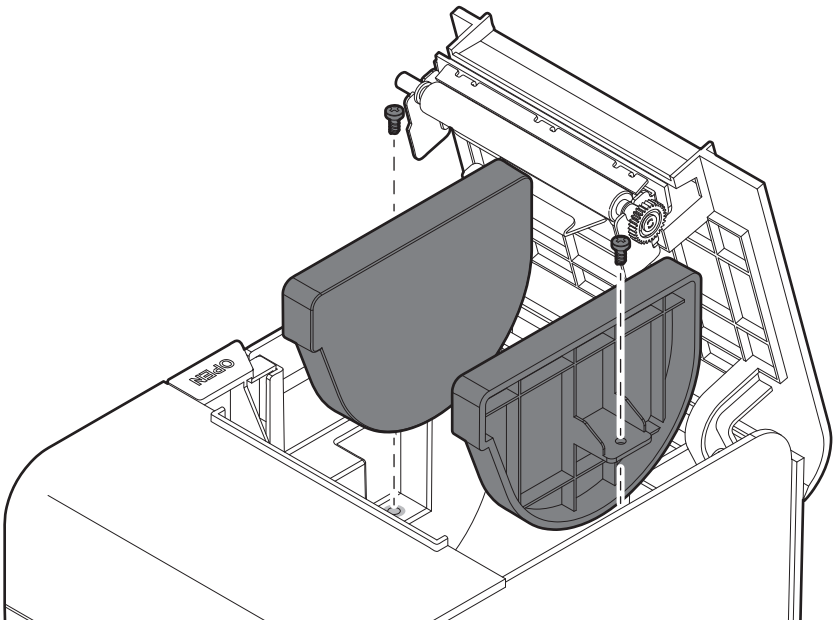
To install the paper reduction guides proceed as follows.

1



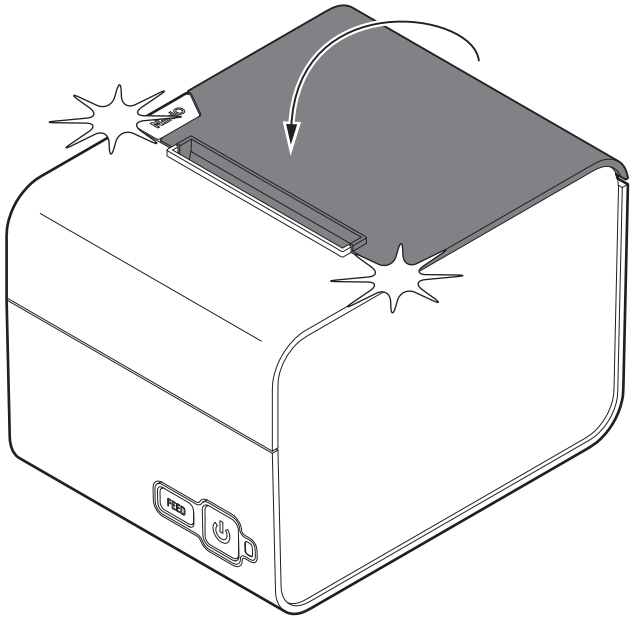
Open the device cover
(see paragraph 5.1).

2



Place the guides in the device paper compartment as shown in figure.
Fasten the guides with the fixing screws included with the device.

3



Close the device cover.

4

<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
Print Width ..... : **52 mm**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**

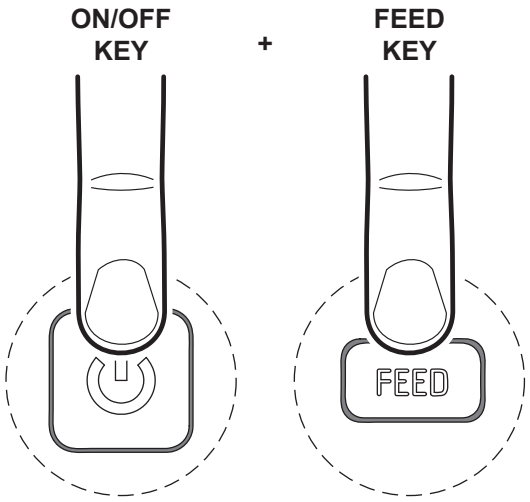
Set the “Print Width” configuration parameter to the value of “52 mm” (see chapter 6).

6 CONFIGURATION

6.1 Configuration by keys

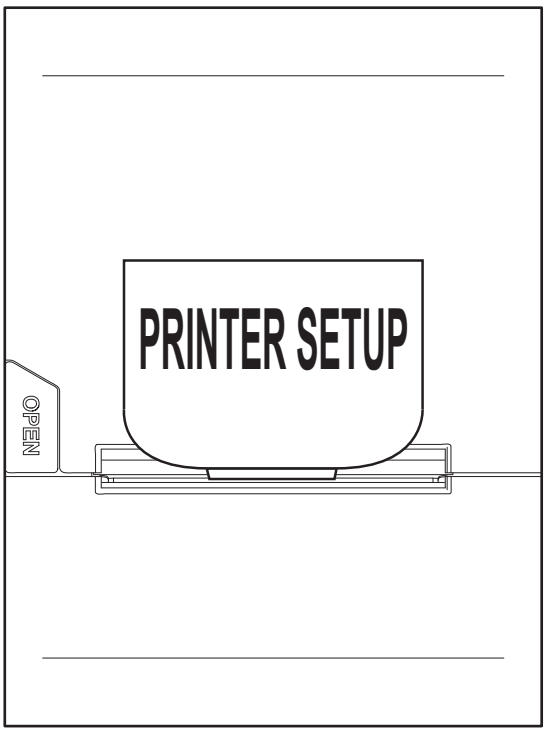
To enter the configuration mode and print a setup report with the operating parameters of the device, proceed as follows.

1



While pressing theFEED 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 the paper to proceed with configuration procedure.

The following figure shows the device setup report. The shown values for parameters are sample values; for a detailed description of the device operating parameters see the following paragraphs.

P3X

DEVICE NAME AND FIRMWARE MODULES RELEASE

<device name>
SCODE: <code> - <rel.>
FCODE: <code> - <rel.>
SCODE: <code> - <rel.>
S/N: <number>

PRINTER SETUP

DEVICE STATUS

PRINTER TYPE ..... <device model>
PRINTING HEAD TYPE ..... <head model>
INTERFACE RS232
PROGRAM MEMORY TEST.....OK
DYNAMIC RAM TEST.....OK
CUTTER TEST.....OK
HEAD VOLTAGE [V] = 24.12
HEAD TEMPERATURE [°C] = 22
POWER ON COUNTER = 6
PAPER PRINTED [cm] = 60
CUT COUNTER = 13

ETHERNET PARAMETERS

[Network configuration]
DHCP Client ..... : **Disabled**
IP Address ..... : **192.168.0.1**
Subnet Mask ..... : **255.255.255.0**
Default Gateway..... : **192.168.0.5**
TPC Printer Port ..... : **9100**
Network Printer Name ..... : **P3X**
[Ethernet]
MAC Address ..... : **00-00-00-00-00-00**

DEVICE CONFIGURATION PARAMETERS

Printer Emulation..... : **CUSTOM POS**
RS232 Baud Rate ..... : **115200 bps**
RS232 Data Length..... : **8 bits/chr**
RS232 Parity..... : **None**
RS232 Handshaking ..... : **Hardware**
RS232 Stop Bit..... : **1**
Print Mode ..... : **Normal**
Busy Condition ..... : **RxFull**
Autofeed ..... : **CR Disabled**
Chars / Inch ..... : **A=15 B=20 cpi**
Font Type..... : **International**
Code Table [num] ..... : **0**
Speed / Quality..... : **High Quality**
Print Width..... : **76 mm**
Paper Threshold..... : **40 %**
PaperEnd Buffer Clear ..... : **Disabled**
USB Address Number ..... : **0**
USB Class ..... : **Printer**
Print Density..... : **0%**
PowerFail WakeUp Mode..... : **Always ON**
Drawer signal ..... : **Normal**
Thai Printing Mode ..... : **1-pass**

KEYS FUNCTIONS

[LF] *enter Printer setup*
[ON/OFF] *skip setup*

DEVICE NAME AND FIRMWARE MODULES RELEASE

<device name>
SCODE: <code> - <rel.>
FCODE: <code> - <rel.>
DCODE: <code> - <rel.>
SCODE: <code> - <rel.>
S/N: <number>

PRINTER SETUP

DEVICE STATUS

PRINTER TYPE ..... <device model>
PRINTING HEAD TYPE ..... <head model>
INTERFACE RS232
PROGRAM MEMORY TEST.....OK
DYNAMIC RAM TEST.....OK
CUTTER TEST.....OK
HEAD VOLTAGE [V] = 24.12
HEAD TEMPERATURE [°C] = 22
POWER ON COUNTER = 6
PAPER PRINTED [cm] = 60
CUT COUNTER = 13

ETHERNET PARAMETERS

[Network configuration]
DHCP Client ..... : **Disabled**
IP Address ..... : **192.168.0.1**
Subnet Mask ..... : **255.255.255.0**
Default Gateway..... : **192.168.0.5**
TPC Printer Port ..... : **9100**
Network Printer Name ..... : **P3X**
[Ethernet]
MAC Address Ethernet..... : **00-00-00-00-00-00**

Wi-Fi/BLUETOOTH PARAMETERS

[Wi-Fi]
Security Type..... : **WPA**
SSID ..... : **WCustom**
MAC Address WiFi ..... : **00-00-00-00-00-00**
[Bluetooth]
BT Address..... : **00-00-00-00-00-00**
[Interface]
Wireless..... : **Off**

DEVICE CONFIGURATION PARAMETERS

Printer Emulation..... : **CUSTOM POS**
RS232 Baud Rate ..... : **115200 bps**
RS232 Data Length..... : **8 bits/chr**
RS232 Parity..... : **None**
RS232 Handshaking ..... : **Hardware**
RS232 Stop Bit..... : **1**
Print Mode ..... : **Normal**
Busy Condition ..... : **RxFull**
Autofeed ..... : **CR Disabled**
Chars / Inch ..... : **A=15 B=20 cpi**
Font Type..... : **International**
Code Table [num] ..... : **0**
Speed / Quality..... : **High Quality**
Print Width..... : **76 mm**
Paper Threshold..... : **40 %**
PaperEnd Buffer Clear ..... : **Disabled**
USB Address Number ..... : **0**
USB Class ..... : **Printer**
Print Density..... : **0%**
PowerFail WakeUp Mode..... : **Always ON**
Drawer signal ..... : **Normal**
Thai Printing Mode ..... : **1-pass**

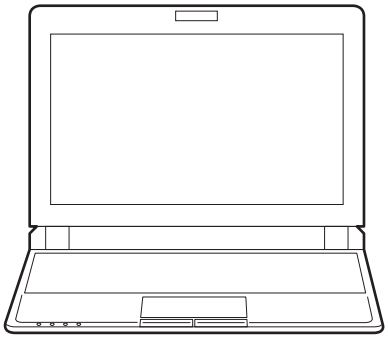
KEYS FUNCTIONS

[LF] *enter Printer setup*
[ON/OFF] *skip setup*

6.2 Configuration by software

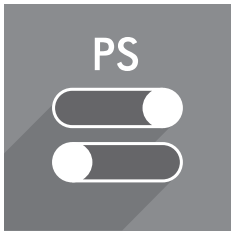
The setup parameters can be set by using the “PrinterSet” software tool available on www.custom4u.it.
For a detailed description of the device operating parameters see the following paragraphs.
To configure the device by software, proceed as follows.

1



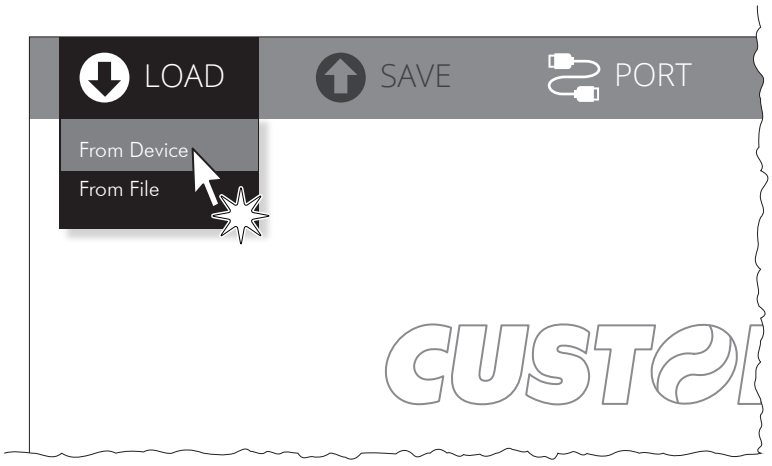
Connect the device to a PC directly (see paragraph 4.2),
without using HUB devices.

2



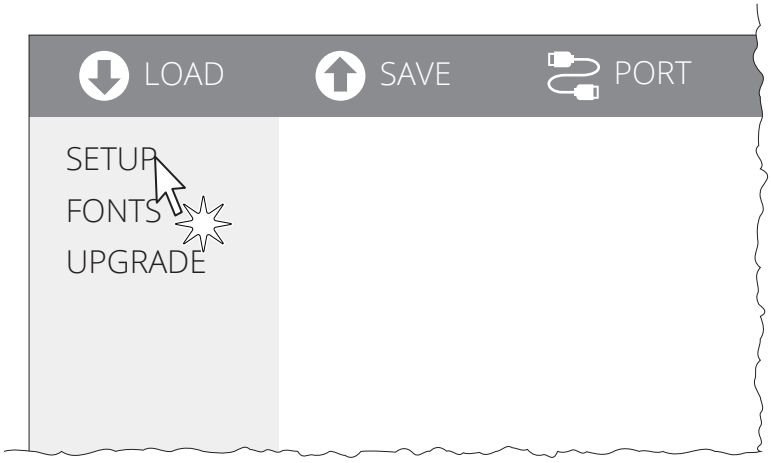
Start “PrinterSet” software tool.

3



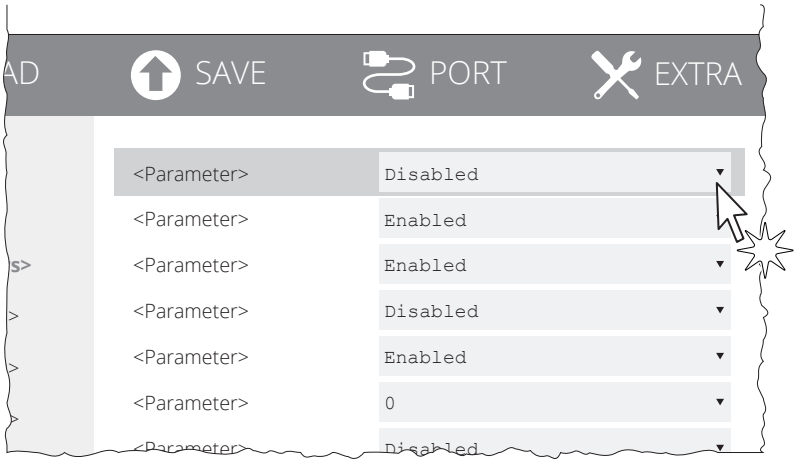
Click on LOAD > FROM DEVICE and select
the device connected to the PC.

4



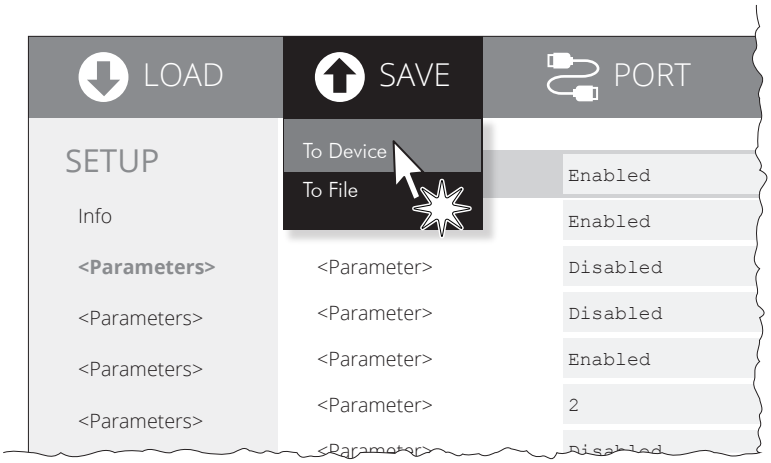
Click on SETUP to access the operating parameteres of the device to be configured.

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.

6.3 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	printing head model
INTERFACE	interface present
PROGRAM MEMORY TEST	OK appears if functioning and NOT OK if faulty
DYNAMIC RAM 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 made

6.4 Communication parameters

The 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.

RS232 BAUD RATE	Communication speed of the serial interface: 9600 57600 19200 115200 [D] 38400 Parameter valid only with serial interface.
RS232 DATA LENGTH	Number of bit used for characters encoding: 7 bits/car 8 bits/car [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 = software handshaking Hardware [D] = hardware handshaking (CTS/RTS) Parameter valid only with serial interface.
RS232 STOP BIT	Setting the number of stop bits: 1 [D] = 1 stop bit 2 = 2 stop bits Parameter valid only with serial interface.
BUSY CONDITION	Activation mode for the 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 CLASS	USB communication class definition. Printer [D] = setting the printer function Virtual COM = setting the USB port as a serial port

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
WIRELESS	Activation of the Bluetooth or Wi-Fi communication: OFF [D] Wi-Fi Bluetooth This parameter is present only for the P3X Wi-Fi/BT model.
DHCP CLIENT	Setting of the DHCP protocol: Disabled = protocol disabled Enabled [D] = protocol enabled When “DHCP Client” is disabled, the IP that is set will be used by both network interfaces.
IP ADDRESS	IP address of the device.
SUBNET MASK	This parameter identifies the local network address.
DEFAULT GATEWAY	This parameter identifies the gateway IP address used to send applications to the external network.
TCP PRINTER PORT	This parameter sets the TCP port number. This parameter is not printed on setup report and it is modifiable only during setup procedure by software (see paragraph 6.2).
NETWORK PRINTER NAME	Identification name of the device. This parameter is modifiable only during setup procedure by software (see paragraph 6.2).
MAC ADDRESS ETHERNET	This is the number, provided by the constructor, that identifies the device; this number is univocal. This parameter is not modifiable by setup.
WI-FI PRINTER NAME	Wi-Fi connection printer name identifier. This parameter can’t be modified by setup. This parameter is present only for the P3X Wi-Fi/BT model.
MAC ADDRESS Wi-Fi	This is the number, provided by the constructor, that identifies the device; this number is univocal. This parameter can’t be modified by setup. This parameter is present only for the P3X Wi-Fi/BT model.

SECURITY TYPE	Security Protocol: None [D] = protocol disabled WEP = WEP protocol enabled WPA = WPA protocol enabled WPA2 = WAP2 protocol enabled This parameter is not printed on setup report and it is modifiable only during setup procedure by software (see paragraph 6.2). This parameter is present only for the P3X Wi-Fi/BT model.
SSID	Name with which the network is identified; this number is assigned by the network administrator. This parameter is not printed on setup report and it is modifiable only during setup procedure by software (see paragraph 6.2). This parameter is present only for the P3X Wi-Fi/BT model.
PASSWORD	Printer password. This parameter is not printed on setup report and it is modifiable only during setup procedure by software (see paragraph 6.2). This parameter is present only for the P3X Wi-Fi/BT model.
TPC TIMEOUT (0-7200 s)	Setting the data transmission timeout of the TCP protocol. This parameter is not printed on setup report and it is modifiable only during setup procedure by software (see paragraph 6.2). This parameter is present only for the P3X Wi-Fi/BT model.
BT PRINTER NAME	Bluetooth connection printer name identifier. This parameter is not modifiable by setup. This parameter is present only for the P3X Wi-Fi/BT model.
BT ADDRESS	This is the number, provided by the constructior, that identifies the bluetooth device. This number is unique. This parameter is not modifiable by setup. This parameter is present only for the P3X Wi-Fi/BT model.

NOTE:
Wi-Fi network WEP keys only accept ASCII encoding and not HEXADECIMAL encoding.

6.5 Operation parameters

The 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] A = 20 cpi, B = 25 cpi CPI = Characters Per Inch
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 Korean CP949 = enables the use of the korean font CP949 Chinese BIG5 = enables the use of the chinese BIG5 font
CODE TABLE	Identifier number of the character code table to use. See paragraph 9.5 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). 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

SPEED / QUALITY	Setting of printing speed and printing quality: High Speed [D] High Quality

PRINT WIDTH	Width of printing area: 52 mm 76 mm [D]
PAPER THRESHOLD	Threshold value (in percent) for the recognition of paper presence by the paper presence sensor: 30% 60% 90% 40% [D] 70% 50% 80%
PAPEREND BUFFER CLEAR	Cleaning mode of data in receive buffer, if the printing is stopped due to lack of paper: Disabled [D] = Data remain in the receive buffer. When the paper runs out, the device keeps the remaining data in receive buffer and prints the remaining portion of ticket after that the new paper is loaded. Enabled = When the paper runs out, all data in the receive buffer are deleted.
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.
THAI PRINTING MODE	Thai font management: 1-pass [D] 3-pass
POWERFAIL WAKEUP MODE	Setting of the after power failure state: Always OFF = the device stays off until the ON/OFF key is pushed Always ON [D] = the device restarts LAST PWR State = the device reverts to its state (on or off) before the power failure
DRAWER SIGNAL	Drawer signal management: Normal [D] = Drawer signal active with high signal Invert = Drawer signal active with low signal

7 WIRELESS COMMUNICATION

P3X Wi-Fi/BT

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.

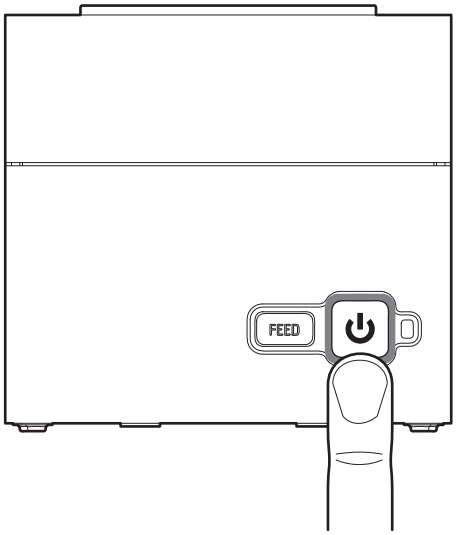
To perform the wireless printing with a printer equipped with Bluetooth connectivity is needed to pair with device.

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.

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.

7.1 Bluetooth pairing with Windows devices

1



Turn on the printer (see paragraph 5.2).

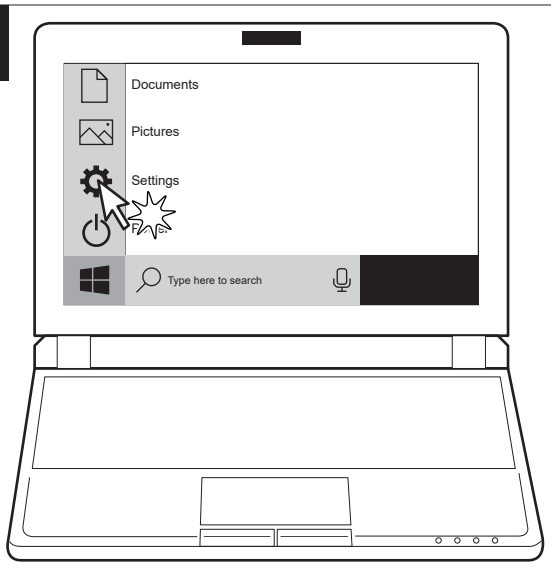
2

Wireless.....: **Bluetooth**

BT Address.....: **<BT Address>**

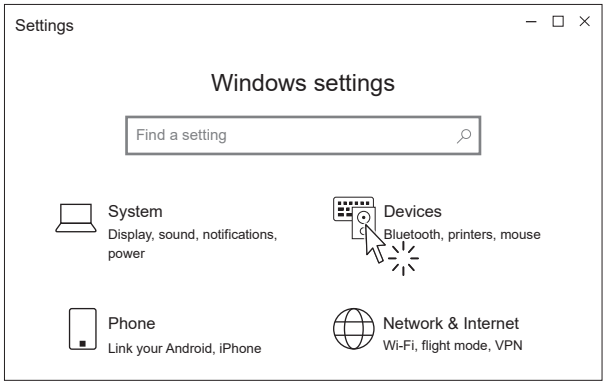
Check that the “Wireless” parameter is set on “Bluetooth” and take note of the “BT Address” parameter (see chapter 6).

3



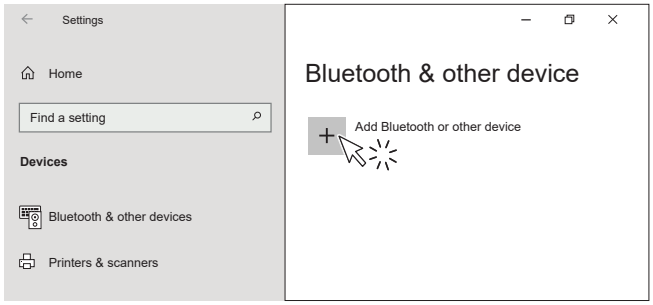
On PC taskbar click on Start > Settings.

4



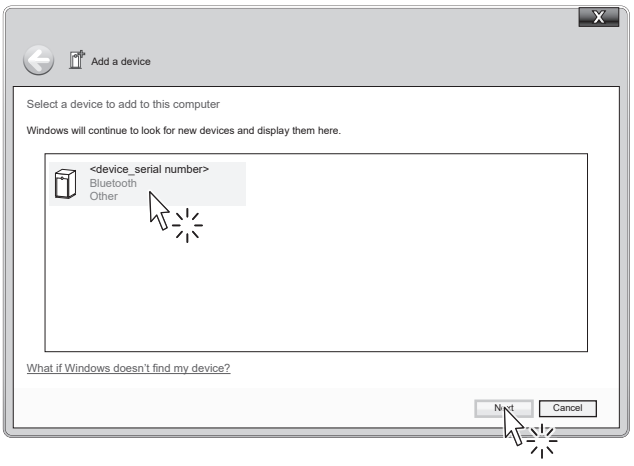
In the window that opens, click on DEVICES.

5



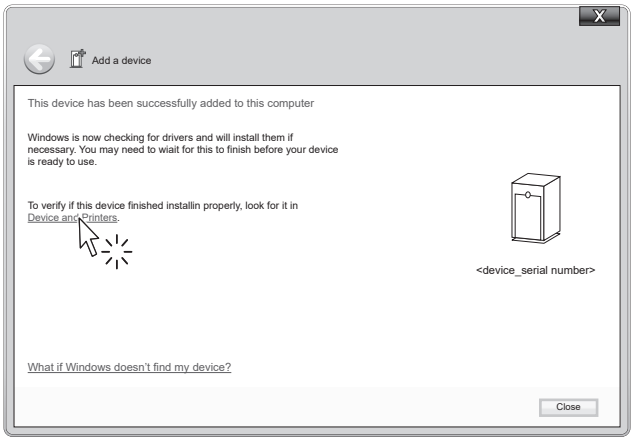
Check that bluetooth is active on PC and click on “ADD BLUETOOTH OR OTHER DEVICE”.

6



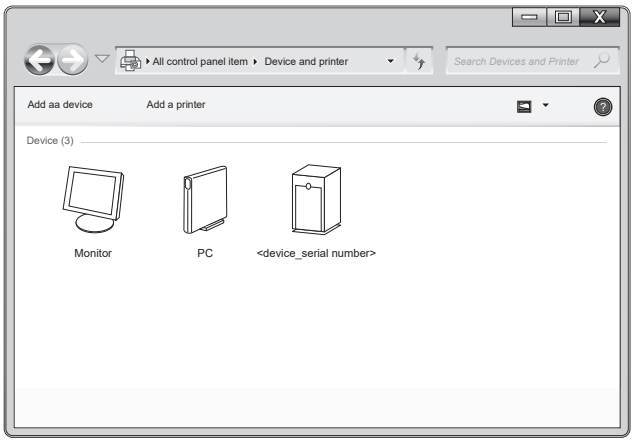
Locate your Bluetooth printer in the list of proposed devices (<device_serial number>) and select it with a click.

7



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

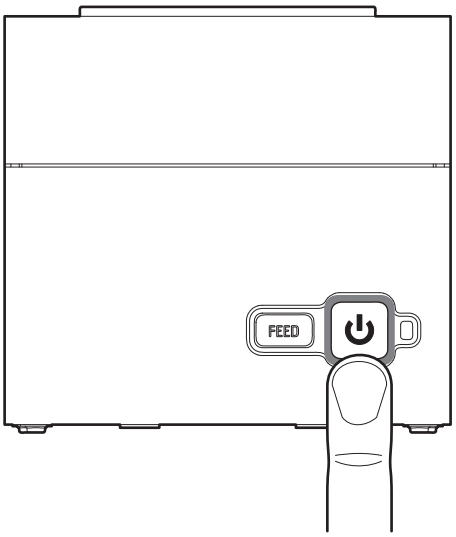
8



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

7.2 Bluetooth pairing with macOS devices

1



Turn on the printer (see paragraph 5.2).

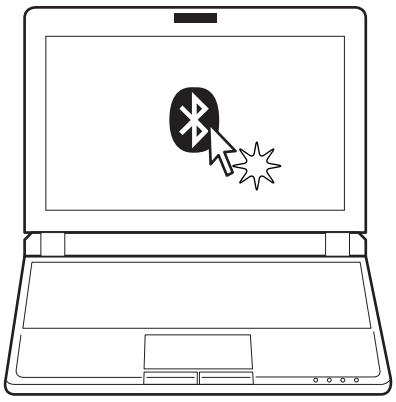
2

Wireless.....: **Bluetooth**

BT Address.....: **<BT Address>**

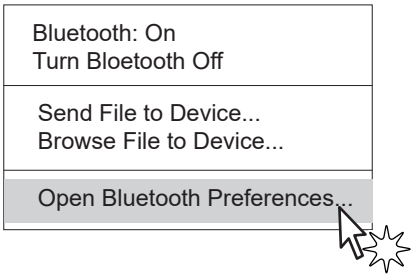
Check that the “Wireless” parameter is set on “Bluetooth” and take note of the “BT Address” parameter (see chapter 6).

3



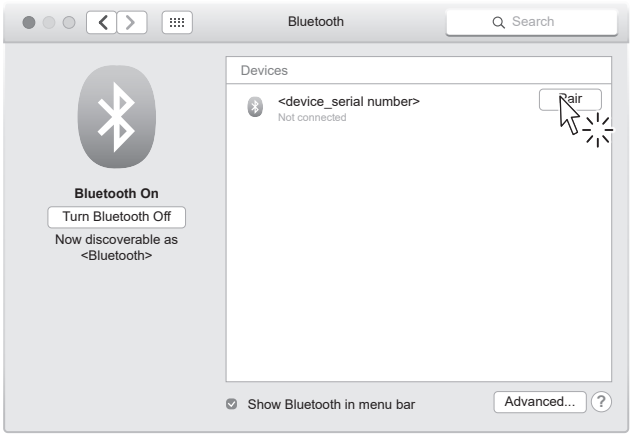
On the PC status bar click the Bluetooth icon.

4



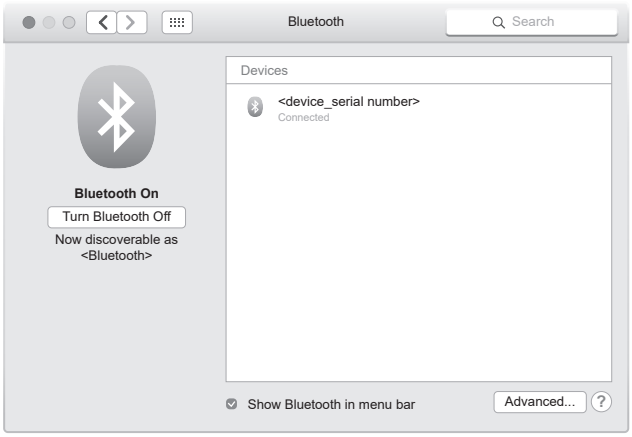
In the dropdown menu click OPEN BLUETOOTH PREFERENCES.

5



Locate your printer (<device_serial number>) and select it with a click. Click the NEXT key to confirm the pairing.

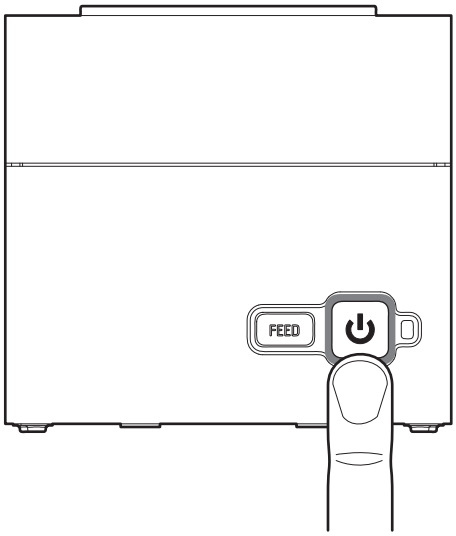
6



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

7.3 Bluetooth pairing with mobile devices

1



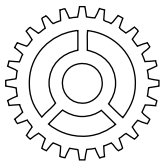
Turn on the printer (see paragraph 5.2).

2

Wireless.....: **Bluetooth**

Check that the “Wireless” parameter is set on “Bluetooth” (see chapter 6).

3

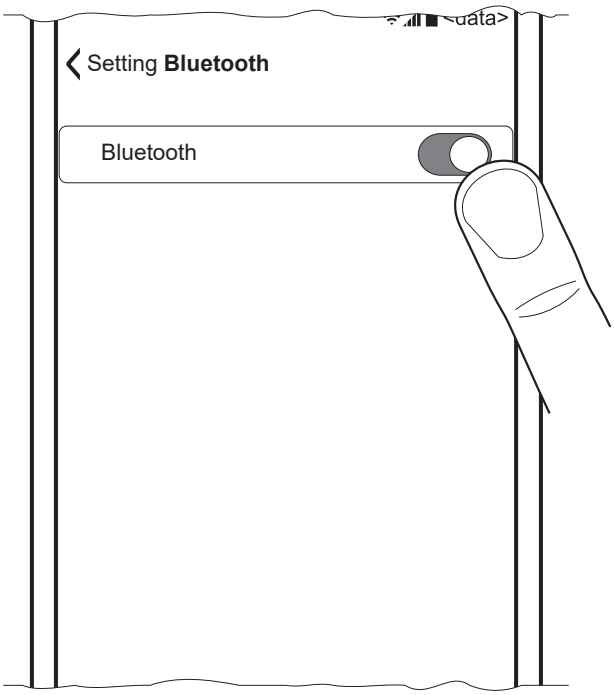


Press the SETTINGS icon on your mobile device.

4

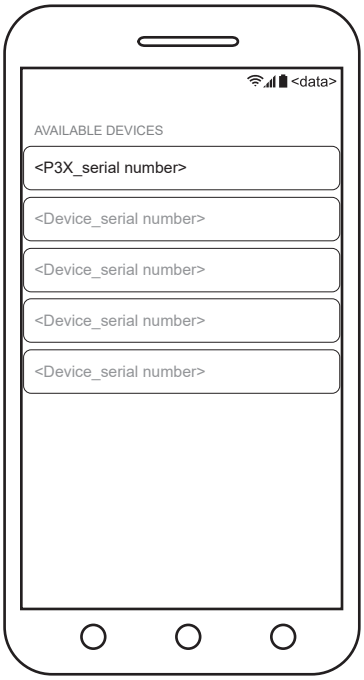
Press the Bluetooth icon.

5



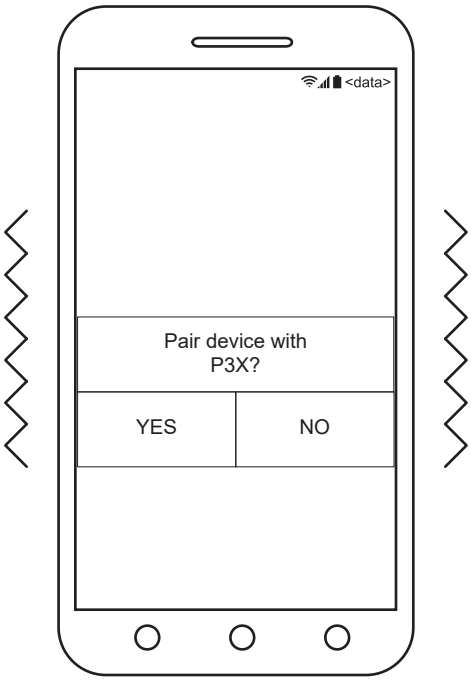
Move the switch to ON to enable the Bluetooth communication and start searching for available devices.

6



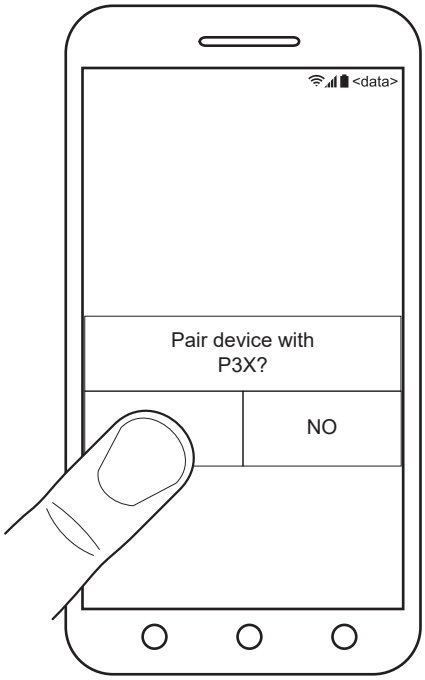
In the list of available devices,
locate your device
(<P3X_serial number>) and select it.

7



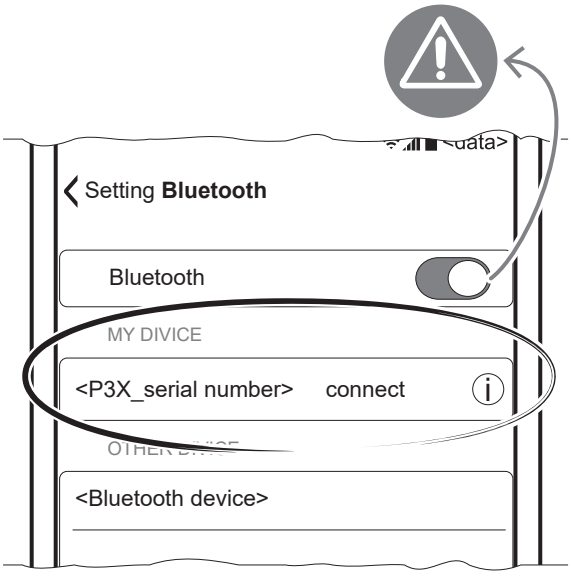
Once the printer is recognized,
the mobile device will vibrate and ask
association with the printer.

8



Confirm the association by pressing the YES key.

9



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

7.4 Wi-Fi pairing with mobile devices

1

→ **ON**

Turn on the printer (see paragraph 5.2).

2

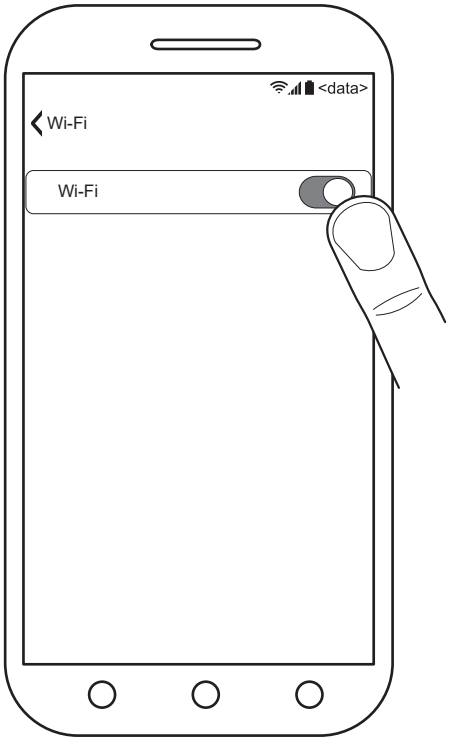
Wireless.....: **Wi-Fi**

SSID .....: **<name>**

Password.....: **<password>**

Check that the “Wireless” parameter is set on “Wi-Fi” and set “SSID” and “Password” parameters (see chapter 6) to the values of the network you want to associate with.

3

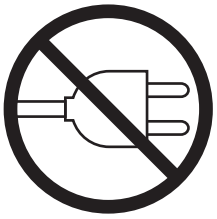


Check that the same wireless parameters set on the printer are set on your mobile device or that the devices are connected to the same network.

8 MAINTENANCE

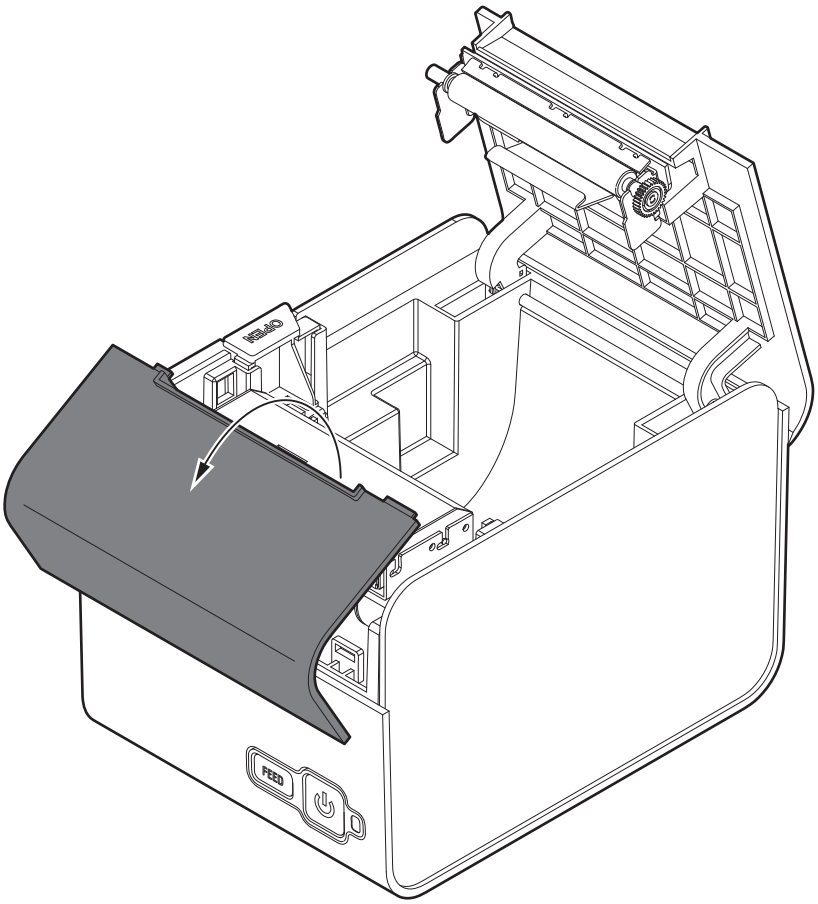
8.1 Autocutter jam

1



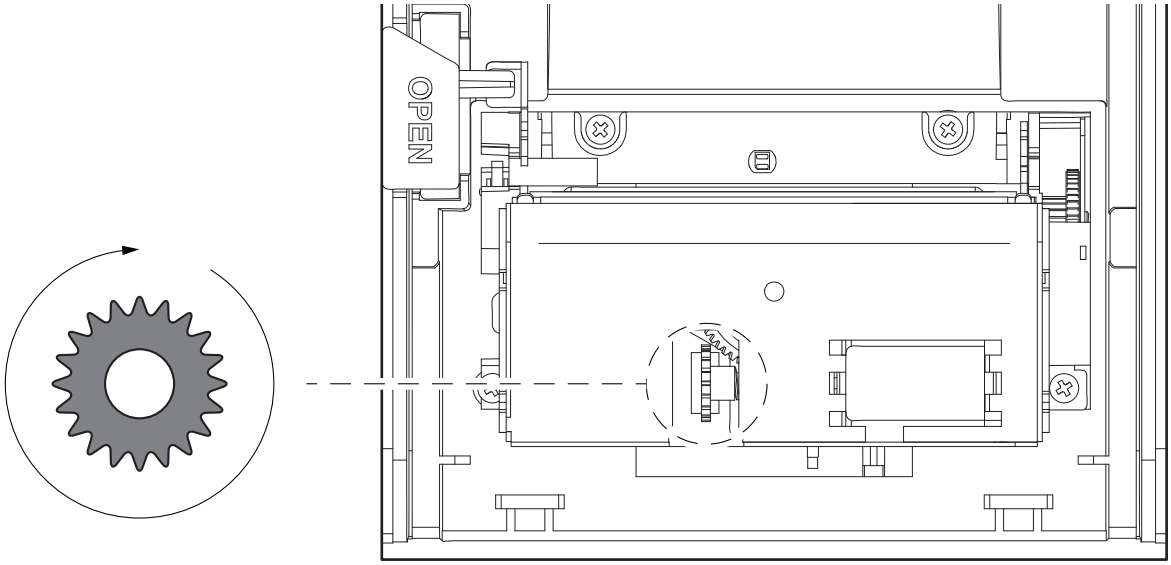
Disconnect the power supply cable and open the device cover (see paragraph 5.1).

2



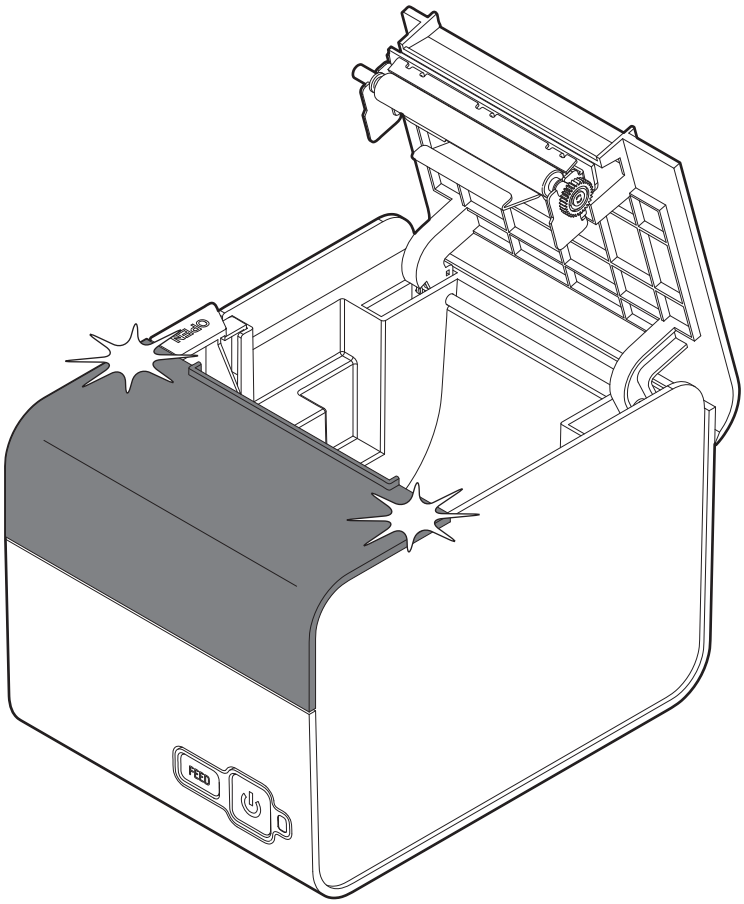
Remove the autocutter cover
making it move as shown in the figure.

3



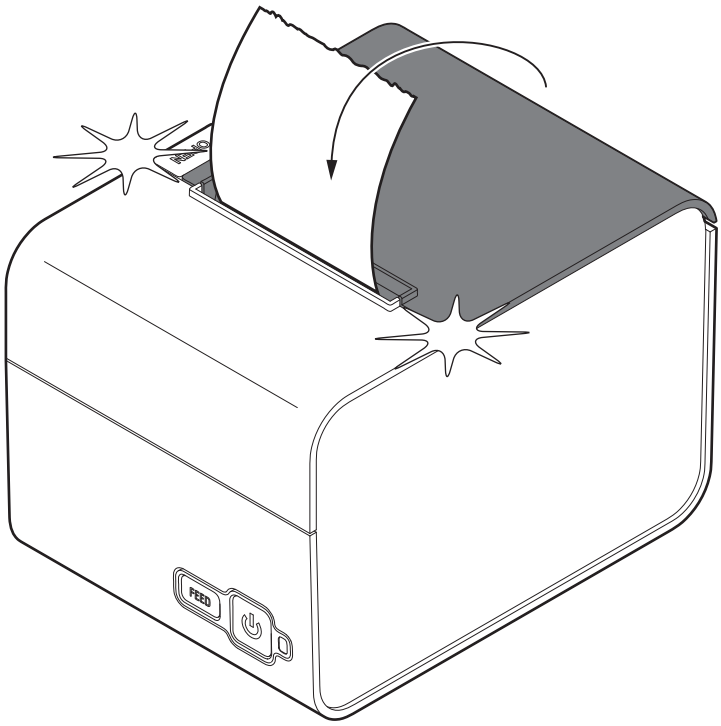
Rotate the gear in the direction with no resistance until the autocutter does not return to its inital position.

4



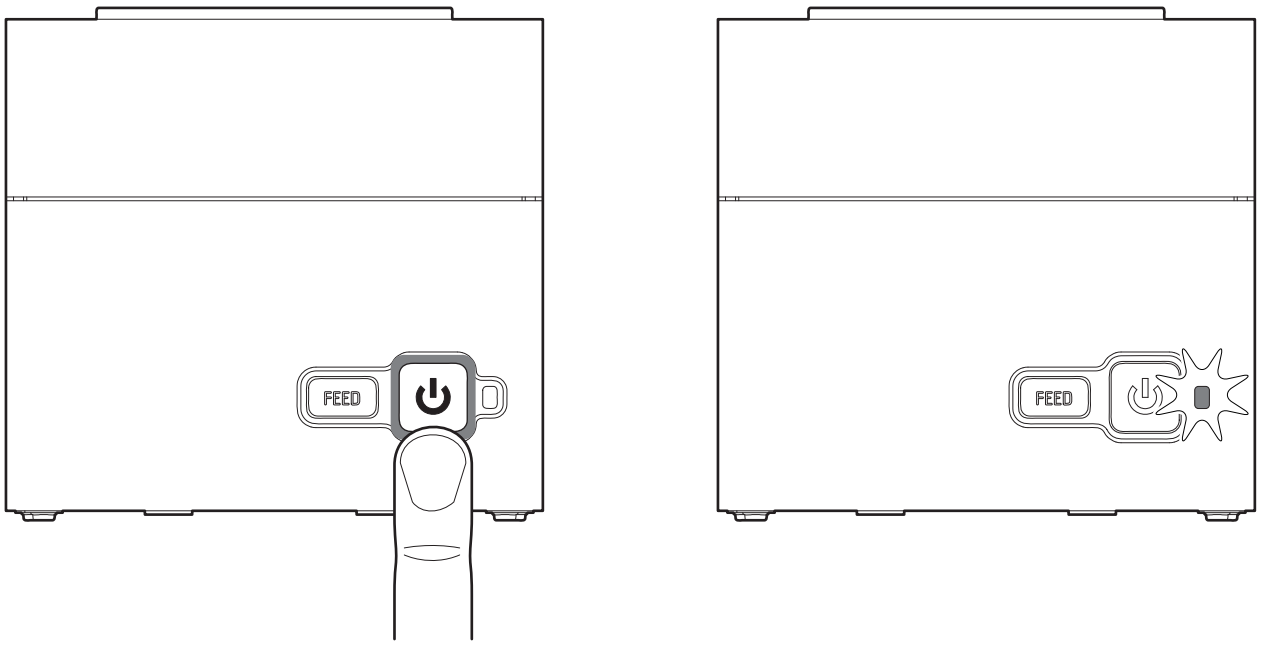
Assemble the autocutter cover.

5



Insert the paper roll
(see paragraph 5.3).

6



Turn on the device (see paragraph 5.2) and
verify the proper functioning of the device.

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 intervals between cleaning operations.

For specific procedures, see paragraph 8.3.

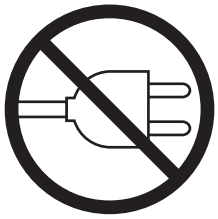
EVERY PAPER CHANGE	
Printhead	Use isopropyl alcohol
Platen roller	Use isopropyl alcohol
EVERY 5 PAPER CHANGES	
Autocutter	Use compressed air
Paper path	Use compressed air or tweezers
Sensor	Use compressed air
EVERY 6 MONTHS OR AS NEEDED	
Case	Use compressed air or a soft cloth

8.3 Cleaning

For periodic cleaning of the device, see instructions below.

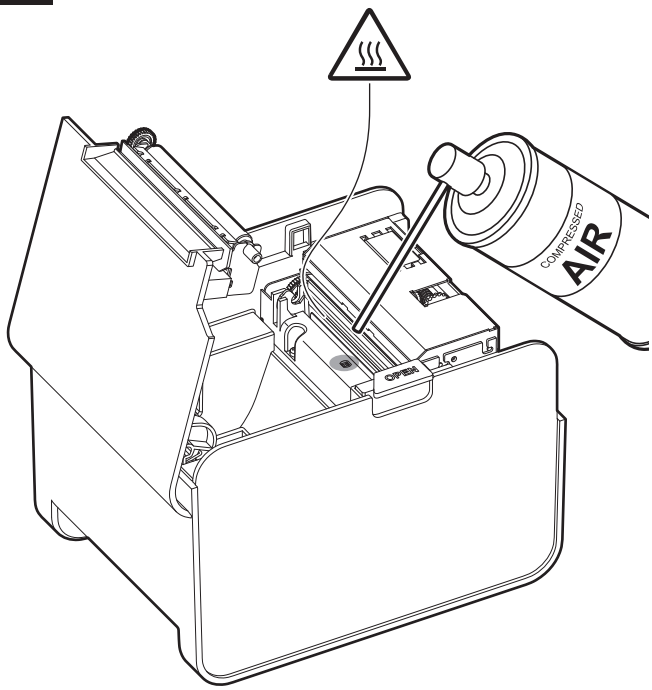
Sensors

1



Disconnect the power supply cable and open the device cover (see paragraph 5.1).

2

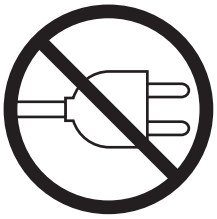


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.

Clean the device sensor by using compressed air.

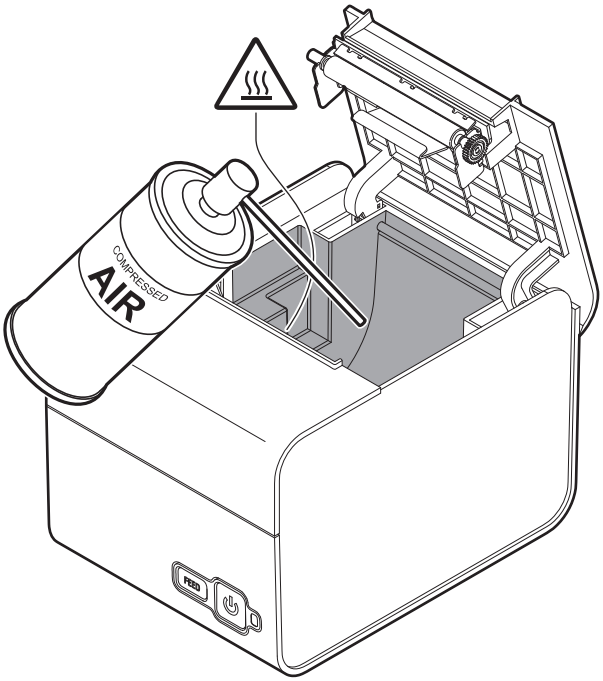
Paper path

1



Disconnect the power supply cable and open the device cover (see paragraph 5.1).

2

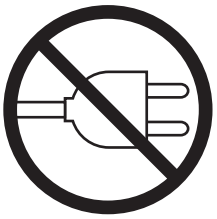


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.

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

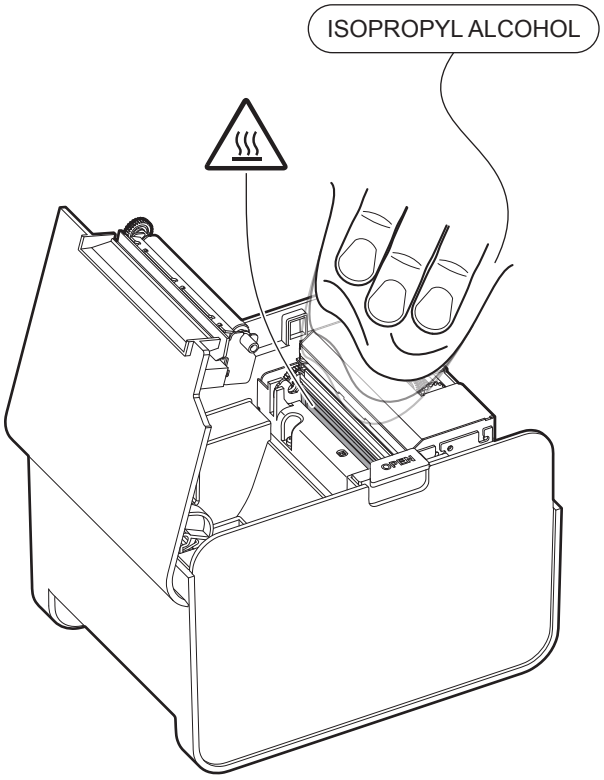
Printhead

1



Disconnect the power supply cable and open the device cover (see paragraph 5.1).

2

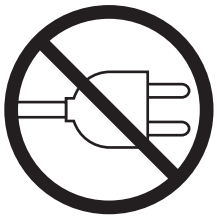


ATTENZIONE:
Non utilizzare solventi o spazzole dure. Assicurarsi che acqua o altri liquidi non penetrino all'interno del dispositivo. Per rimuovere i residui di stampa, utilizzare delle pinzette o aria compressa.

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

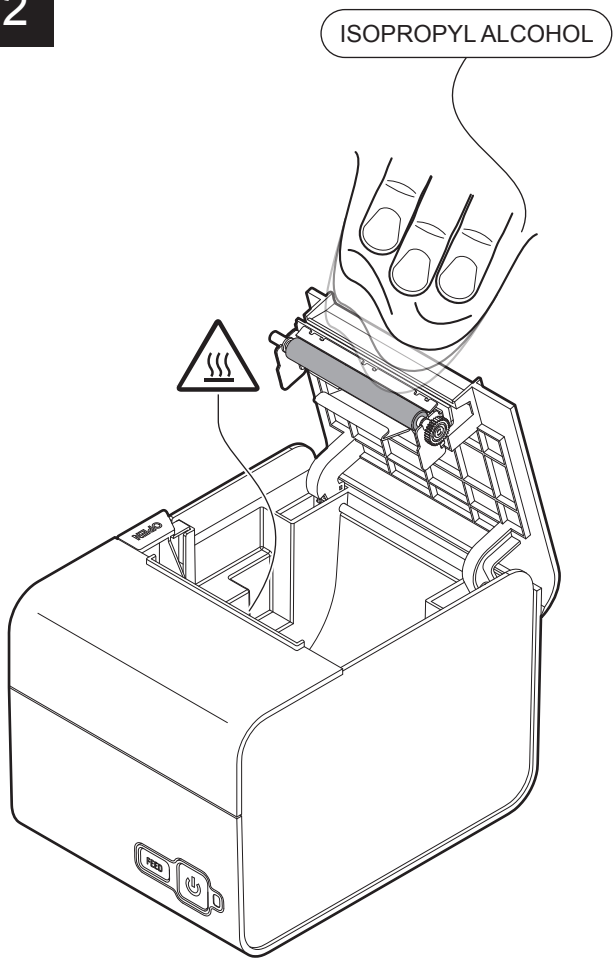
Platen roller

1



Disconnect the power supply cable and open the device cover (see paragraph 5.1).

2

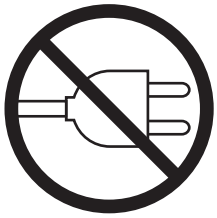


ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.

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

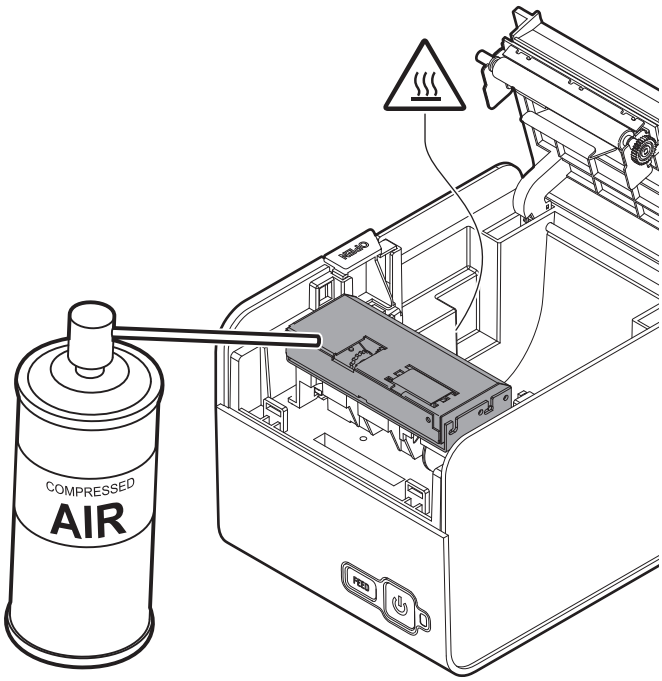
Autocutter

1



Disconnect the power supply cable and remove the autocutter cover (see paragraph 8.1).

2

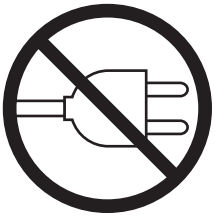


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.

Clean the autocutter by using compressed air.

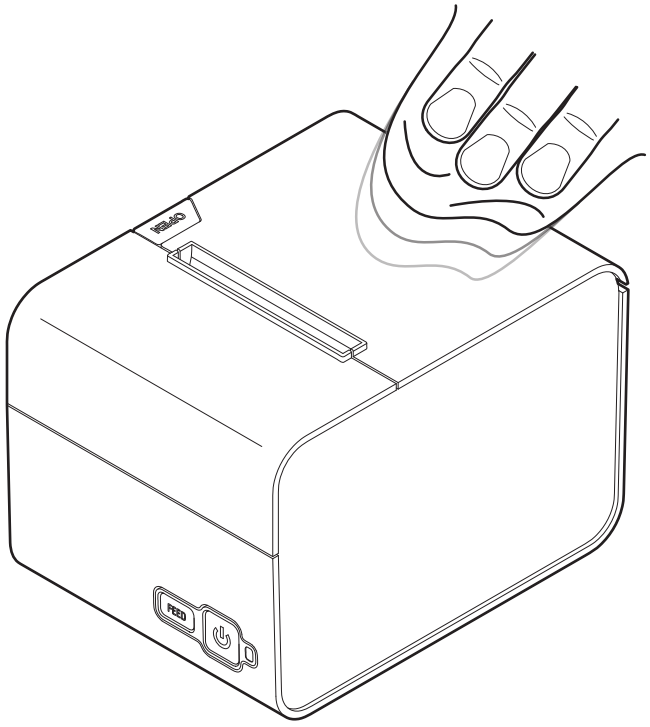
Case

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 machine.

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

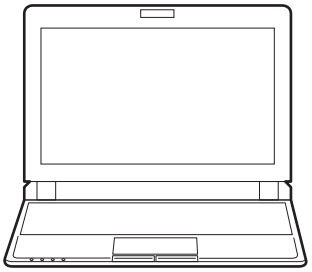
8.4 Firmware upgrade

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

1

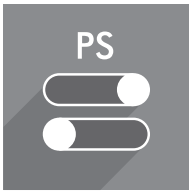
Login to the website www.custom4u.it, type in the product code of the device and download the latest firmware release available.

2



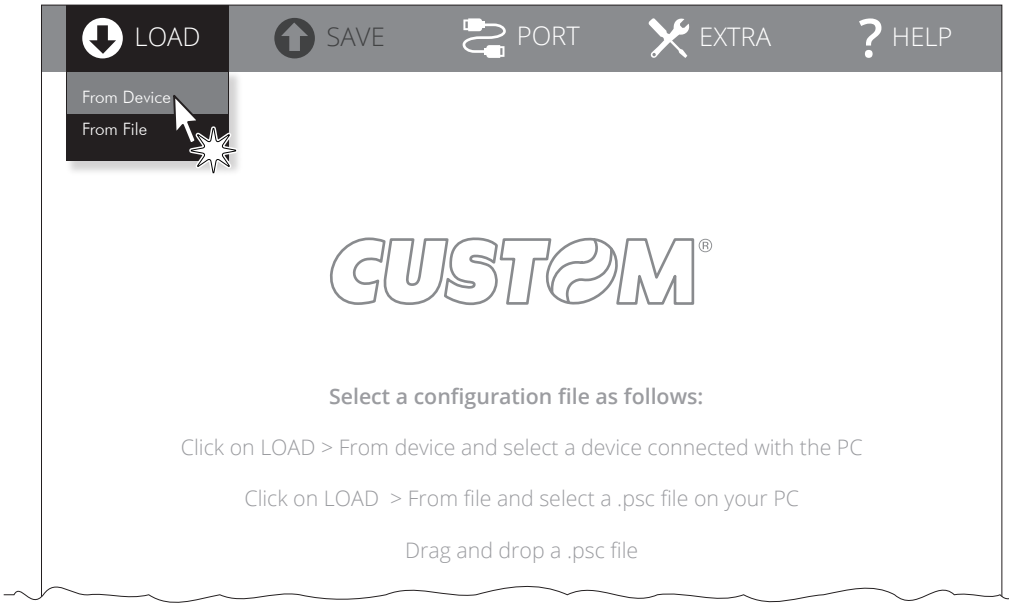
Connect the device to a PC directly (see paragraph 4.2), without using HUB devices.

3



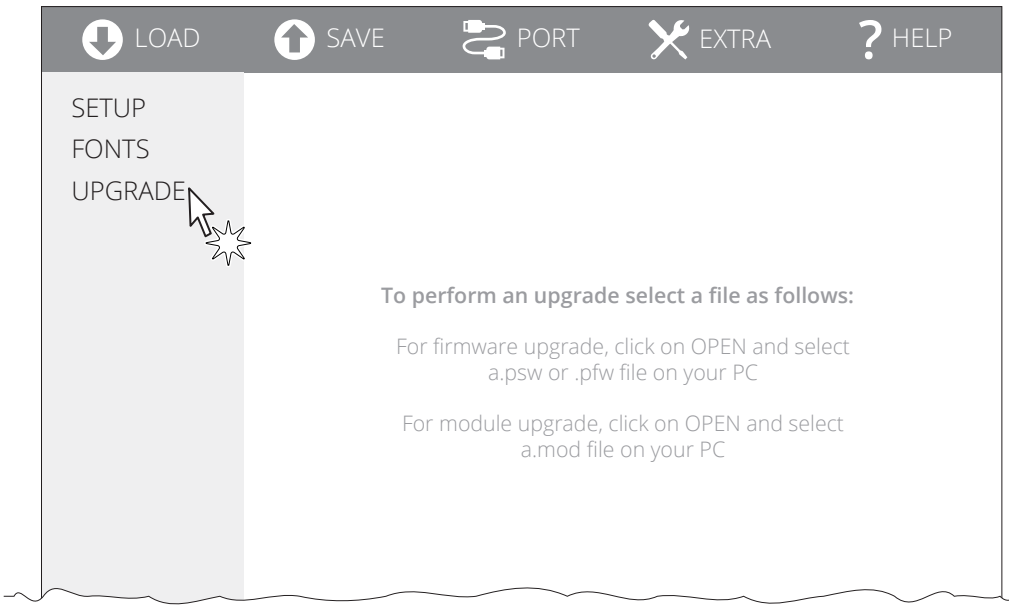
Start the “PrinterSet” software tool.

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 SPECIFICATIONS

9.1 Hardware specifications

GENERAL	
Sensors	Head temperature, paper presence, cover open
Emulations	CUSTOM/POS
Printing driver	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) Windows 11 (32/64 bit) Self-installing driver for Virtual COM (32/64 bit) Linux OPOS JavaPOS Android iOS
INTERFACES	
USB port	12 Mbit/s
RS232 serial port	from 9600 bps to 115200 bps
Ethernet port	10 Mbit/s, 100 Mbit/s
MEMORIES	
Receive buffer	16 kB
Flash memory	2 MB internal + 8 MB external
RAM memory	640 kB internal + SDRAM 8 MB
Graphic memory	512 kB
PRINTER	
Resolution	203 dpi (8 dot/mm)
Printing method	Thermal, fixed head

Head life [1]	
Abrasion resistance [2]	150 km (with recommended paper, 12.5% duty cycle)
Pulse durability	100 M (referred to each dot)
Printing width	76 mm 52 mm (with paper reduction guides installed)
Printing method	Normal, 90°, 180°, 270°
Printing format	Height/Width from 1 to 8, bold, reverse, underlined, italic
Character font	54 character code tables (see paragraph 9.5), extended chinese GB18030-2000, korean PC949, chinese BIG5
Printable barcodes	Codabar, Code 32, Code 39, Code 93, Code 128, EAN-8, EAN-13, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Expanded Stacked, ITF, UPC-A, UPC-E, Data Matrix, PDF417, QRCode
Printing speed [1] [3]	High Quality = 120 mm/s High Speed = 200 mm/s
PAPER	
Type of paper	Thermal rolls, heat-sensitive side on outside of roll
Paper width	80 mm 57 mm (with paper reduction guides installed)
Paper weight	from 60 g/m^2 to 90 g/m^2
Paper thickness	from 63 µm to 140 µm
Minimum ticket length	50 mm
External roll diameter	max. 80 mm
Internal roll core diameter	12 mm (+ 1 mm)
Core thickness	2 mm (+ 1 mm)
Paper end	Not attached to roll core
Core type	Cardboard or plastic

AUTOCUTTER	
Paper cut	Total cut or partial cut
Estimated life (1)	1000000 cuts
DEVICES ELECTRICAL SPECIFICATIONS	
Power supply	24 Vdc ± 10%
Medium consumption (3)	1.3 A
Typical consumption (3)	1.2 A
Standby consumption	0.04 A
POWER SUPPLY ELECTRICAL SPECIFICATIONS code 963GE020000071	
Power supply voltage	from 90 Vac to 264 Vac
Frequency	from 47 Hz to 63 Hz
Output	24 V, 2.5 A
Power	60 W
ENVIRONMENTAL CONDITIONS	
Operating temperature	from 0°C to +40°C
Relative humidity (RH)	from 10% to 85% (w/o condensation)
Storage temperature	from -20 °C to +70 °C
Storage relative humidity (RH)	from 10% to 95% (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 a standard CUSTOM receipt (L = 10 cm, Density = 12.5% dots on).
(4) : UL measurements.

9.2 Character specifications

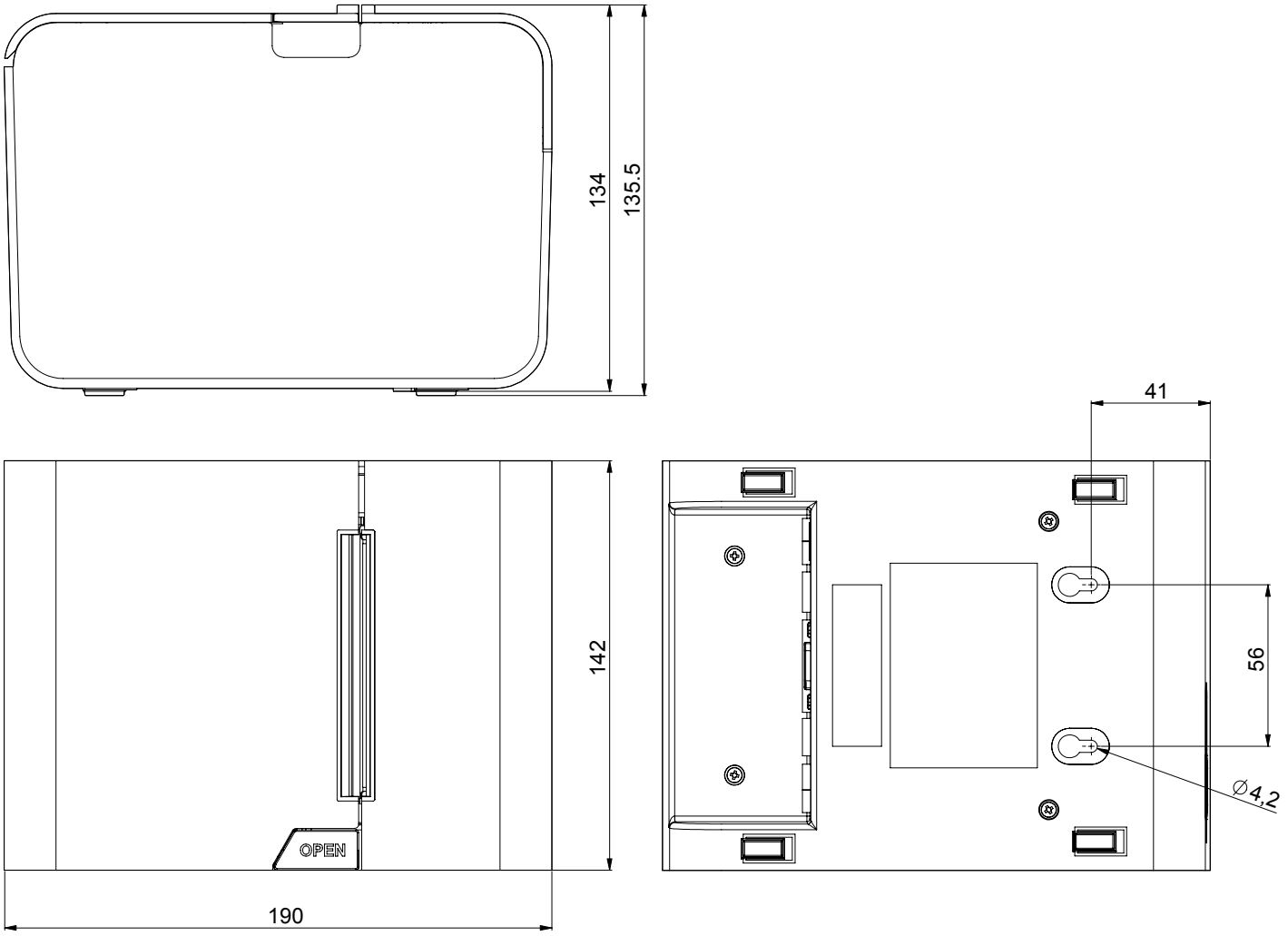
Character set		3	
Character density	11 cpi	15 cpi	20 cpi
Number of columns	35	49	64
Chars / second	2100	2940	3840
Lines / second	60	60	60
Characters (L x H mm)-Normal	2.25 x 3	1.625 x 3	1.25 x 3

Theoretical values.

9.3 Device dimensions

Length	190 mm
Height	135.5 mm
Width	142 mm
Weight	1100 g

All the dimensions shown in following figure are in millimetres and referred to devices with covers closed and without paper roll.



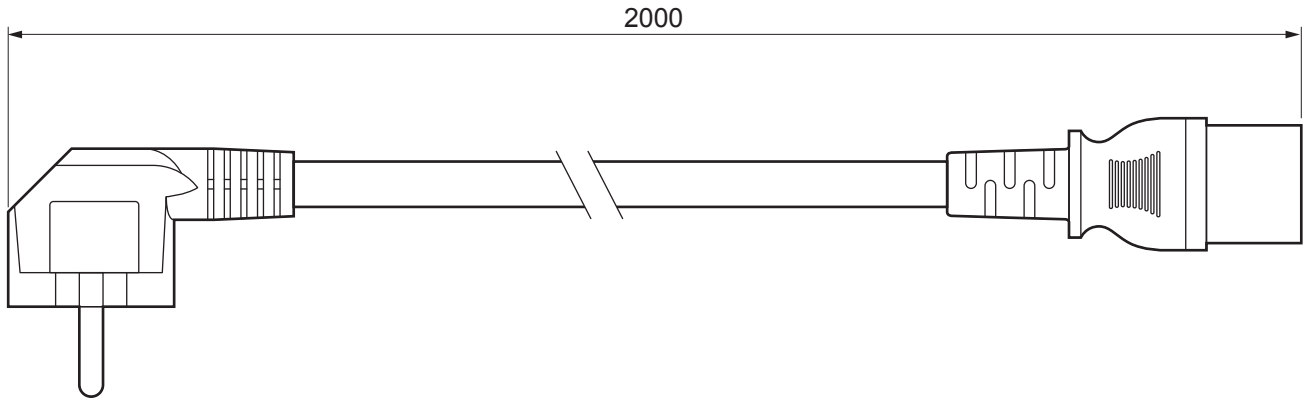
9.4 Power supply and power cord dimensions

The following table shows the dimensions of the power supply and the power cord included with the device.

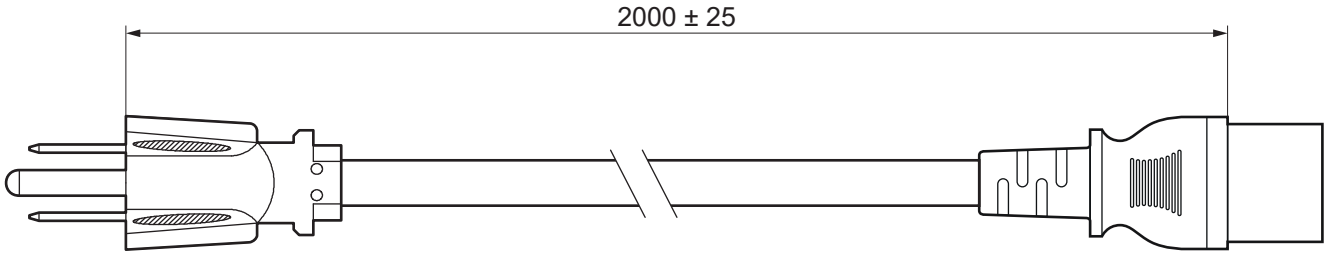
STANDARD POWER CORD code 26100000000311	
Length	2000 mm
POWER CORD FOR US MARKET code 976ZZ010000015	
Length	2000 ± 25 mm
POWER SUPPLY code 963GE020000071	
Length	130 ± 1 mm
Height	36 ± 1 mm
Width	57 ± 1 mm

All the dimensions shown in following figures are in millimetres.

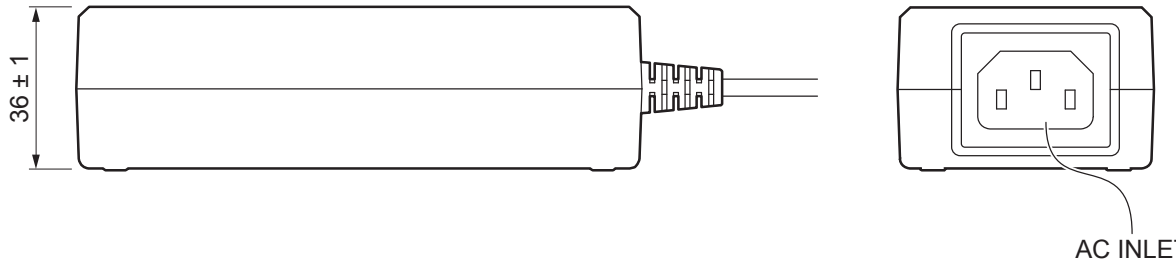
STANDARD POWER CORD code 26100000000311

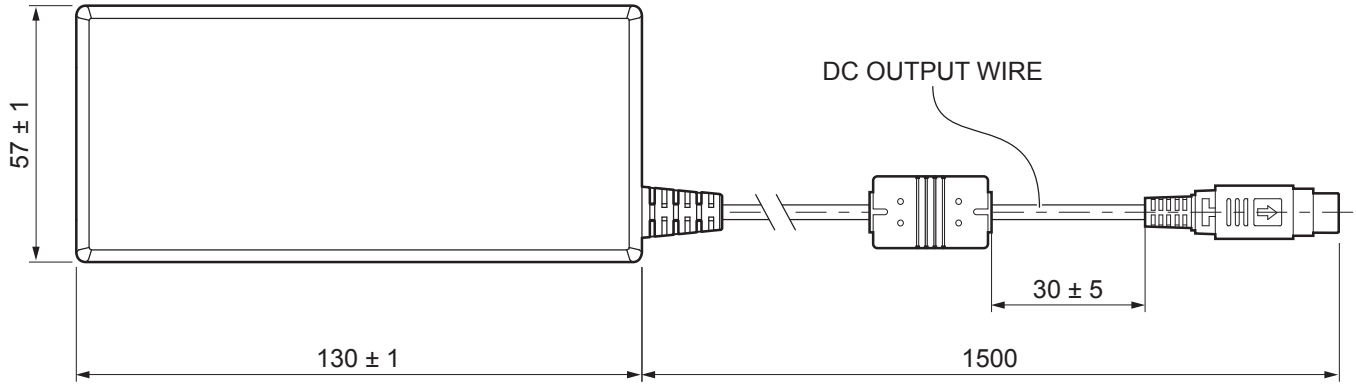


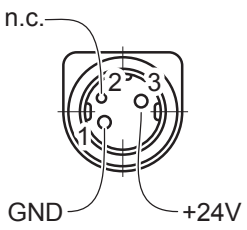
POWER CORD FOR US MARKET code 976ZZ010000015



POWER SUPPLY code 963GE020000071







9.5 Set di caratteri in emulazione CUSTOM/POS

The device has 3 fonts of varying width (11, 15 and 20 cpi) which may be related one of the coding tables provided on the device.

To know the coding tables actually present on the device, you need to print the font test (see paragraph 3.6).

You can set font and coding table by using the commands (see the commands manual of the device) or using the “Code Table” and the “Chars/Inch” parameters during the setup procedure (see paragraph 6.5).

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

<CodeTable>	Coding table	
0	PC437 - U.S.A., Standard Europe	
1	Katakana	
2	PC850 - Multilingual	
3	PC860 - Portuguese	
4	PC863 - Canadian/French	
5	PC865 - Nordic	
6	VISCII - Vietnamese Standard Code	
11	PC851 - Greek	on request
12	PC853 - Turkish	on request
13	PC857 - Turkish	
14	PC737 - Greek	
15	ISO8859-7 - Greek	on request
16	WPC1252 - Scandinavian	
17	PC866 - Cyrillic 2	
18	PC852 - Latin 2	
19	PC858 per simbolo Euro in posizione 0xD5	
20	KU42 - Thai	
21	TIS11 - Thai	
26	TIS18 - Thai	on request
30	TCVN_3 - Vietnamese	on request
31	TCVN_3 - Vietnamese	on request
32	PC720 - Arabic	on request

<CodeTable>	Coding table	
33	WPC775 - Baltic Rim	on request
34	PC855 - Cyrillic	
35	PC861 - Icelandic	on request
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 - Farsi	
42	PC1118 - Lithuanian	on request
43	PC1119 - Lithuanian	on request
44	PC1125 - Ukrainian	
45	WPC1250 - Latin 2	
46	WPC1251 - Cyrillic	
47	WPC1253 - Greek	
48	WPC1254 - Turkish	
49	WPC1255 - Hebrew	
50	WPC1256 - Arabic	
51	WPC1257 - Baltic Rim	
52	WPC1258 - Vietnamese	
53	KZ1048 - Kazakh	on request
255	Space page	

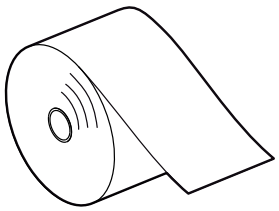
10 CONSUMABLES

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

67300000000398

THERMAL PAPER ROLL

weight = 55 g/m^2
width = 80 mm
external Ø = 80 mm
core Ø = 13 mm

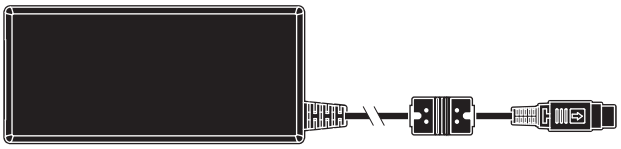


11 ACCESSORIES

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

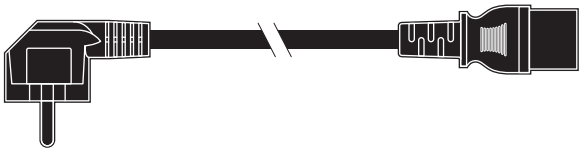
963GE020000071

POWER SUPPLY
(for technical specifications, see paragraph 9.1)



26100000000311

STANDARD POWER CORD SCHUKO PLUG
length = 2 m
(see paragraph 9.4)

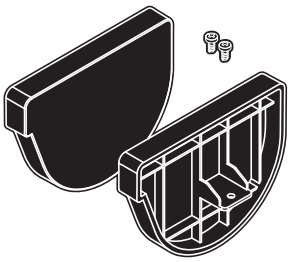


976ZZ010000015

US MARKET POWER CORD
length = 2 m
(see paragraph 9.4)

976MH010000001

57 mm PAPER REDUCTION KIT



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 3.4). The firmware release number (SCODE) can be found:

- on the setup report (see paragraph 6.1)
- connecting the device to a PC and starting the “PrinterSet” tool (see paragraph 6.2)

Code : 0576200M000135 Rev. 1.90

CUSTOM S.p.A.
World Headquarters
Via Berettine, 2/B - 43010 Fontevivo, Parma ITALY
Tel. +39 0521 680111 - Fax +39 0521 610701
info@custom.biz - www.custom.biz

www.custom.biz