## **USER MANUAL**

# KPM862 KPM863 TK862



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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 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.



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.





# FCC STATEMENT (FEDERAL COMMUNICATIONS COMMISSIONS).

This note is valid only for device bringing FCC trademark.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

The devices may not cause harmful interference. The devices must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help.

Modifications to this product not authorized by CUSTOM S.p.A. could void the FCC & Industry Canada regulations and negate your authority to operate the product.

This Class B digital apparatus complies with Canadian ICES-003.

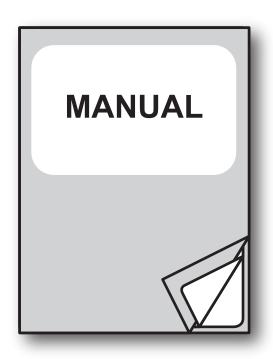
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



This product meets the ENERGY STAR® guidelines for energy efficiency.

For more information about ENERGY STAR®, visit <a href="https://www.energystar.gov">www.energystar.gov</a>.

This note is valid only for device bringing ENERGY STAR® trademark.



For details on the commands, refer to the manual with code **77200000004700** 

For further information about the use of "PrinterSet" tool refer to the manual with code **7820000001800** 

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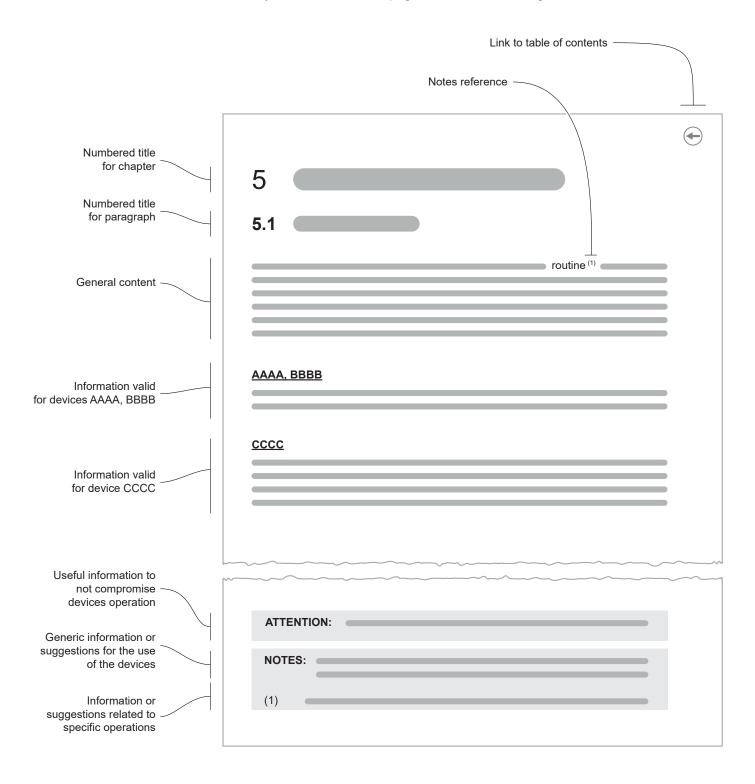
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# 1 INTRODUCTION

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.











# 2 IDENTIFICATION OF THE MODELS

NOMENCLATURE	DESCRIPTION	NOTES
KPM862 1	KPM862 base configuration with 203 dpi printhead	-
KPM862 2	KPM862 with ejector group	Accessory required
KPM862 3	KPM862 with selector group for vertical fixing	Accessory required
KPM862 4	KPM862 with selector group for horizontal fixing	Accessory required
KPM862 5	KPM862 with integrated RFID antenna	-
KPM862 6	KPM862 with VeriPrint® system	-
KPM862 DF 1	KPM862 with dual feeder	-
KPM862 DF 2	KPM862 DF with ejector group	Accessory required
KPM862 DF 3	KPM862 DF with selector group for vertical fixing	Accessory required
KPM862 DF 4	KPM862 DF with selector group for horizontal fixing	Accessory required
TK862 1	TK862 base configuration with 203 dpi printhead	-
TK862 2	TK862 with ejector group	-
TK862 3	TK862 with VeriPrint® system	-
TK862 4	TK862 with integrated RFID antenna	-
TK862 DF 1	TK862 with dual feeder	-
TK862 DF 2	TK862 DF with ejector group	Accessory required
TK862 DF 3	TK862 DF with VeriPrint® system	-
KPM863 1	KPM863 base configuration with 304 dpi printhead	304 dpi version only on project
KPM863 2	KPM863 with ejector group	304 dpi version only on project
KPM863 3	KPM863 with selector group for vertical fixing	304 dpi version only on project
KPM863 4	KPM863 with selector group for horizontal fixing	304 dpi version only on project
KPM863 DF 1	KPM863 with dual feeder	304 dpi version only on project
KPM863 DF 2	KPM863 DF with ejector group	304 dpi version only on project
KPM863 DF 3	KPM863 DF with selector group for vertical fixing	304 dpi version only on project
KPM863 DF 4	KPM863 DF with selector group for horizontal fixing	304 dpi version only on project







# 3 DESCRIPTION

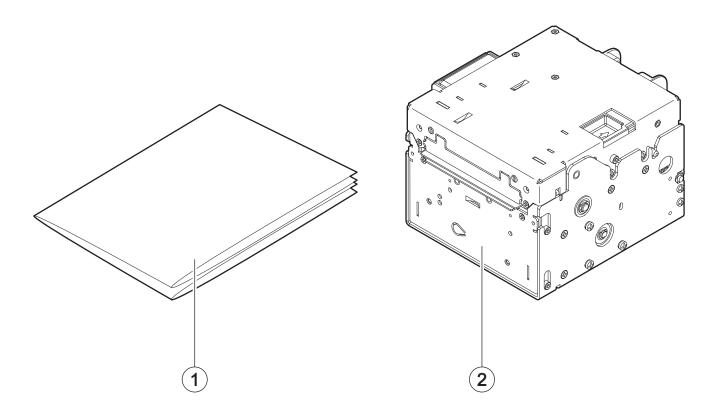
#### 3.1 Box contents

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.

#### <u>KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6</u> <u>KPM863 1, KPM863 2, KPM862 3, KPM863 4</u>

- 1. Documentation (installation instruction sheet)
- 2. Device

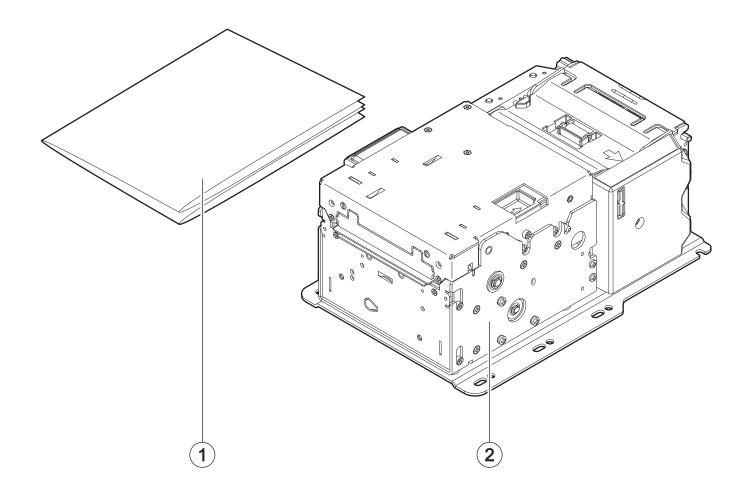






#### KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

- 1. Documentation (installation instruction sheet)
- 2. Device







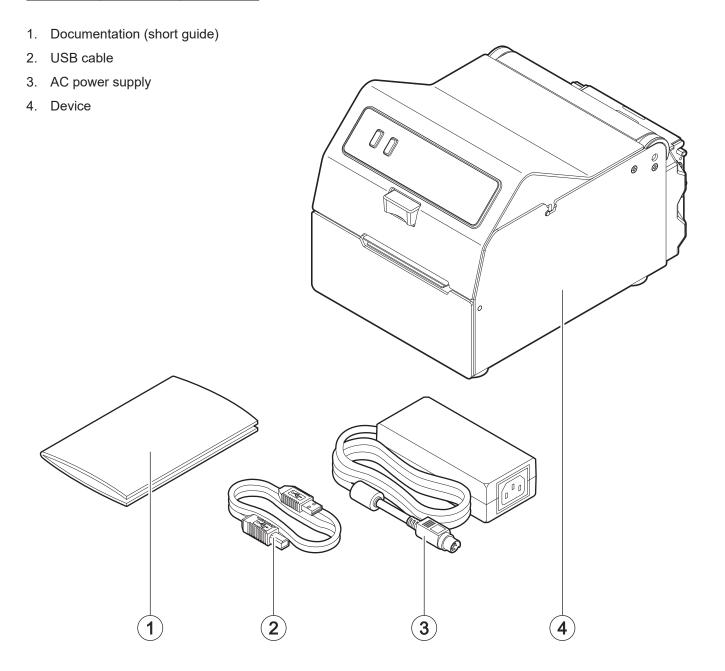
#### TK862 1, TK862 2, TK862 3, TK862 4

1. Documentation (short guide) USB cable 2. AC power supply 4. Device





#### TK862 DF 1, TK862 DF 2, TK862 DF 3



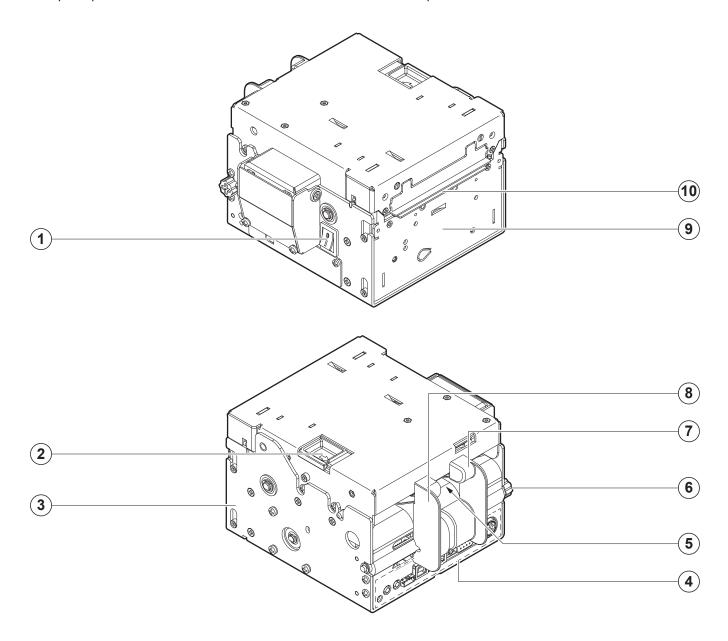


## 3.2 Device components: external views

#### <u>KPM862 1, KPM862 5, KPM862 6</u> <u>KPM863 1</u>

- 1. ON/OFF key
- 2. Opening lever for upper cover
- 3. Device chassis
- 4. Keys and connectors panel (see paragraph 3.3)
- 5. Paper input

- 6. Adjustment knob for paper input width
- 7. Left paper guide
- 8. Right paper guide
- 9. Front cover
- 10. Paper out



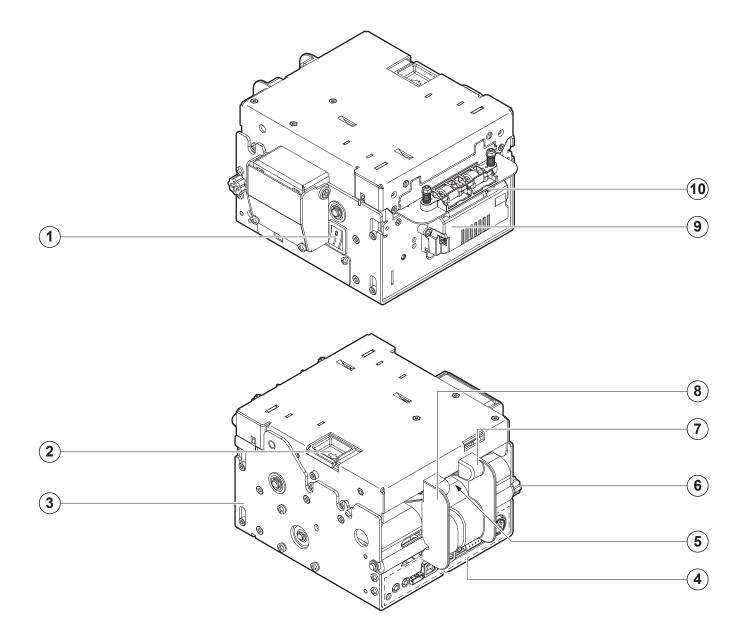




#### KPM862 2 KPM863 2

- 1. ON/OFF key
- 2. Opening lever for upper cover
- 3. Device chassis
- 4. Keys and connectors panel (see paragraph 3.3)
- 5. Paper input

- 6. Adjustment knob for paper input width
- 7. Left paper guide
- 8. Right paper guide
- 9. Front cover with ejector group
- 10. Paper out



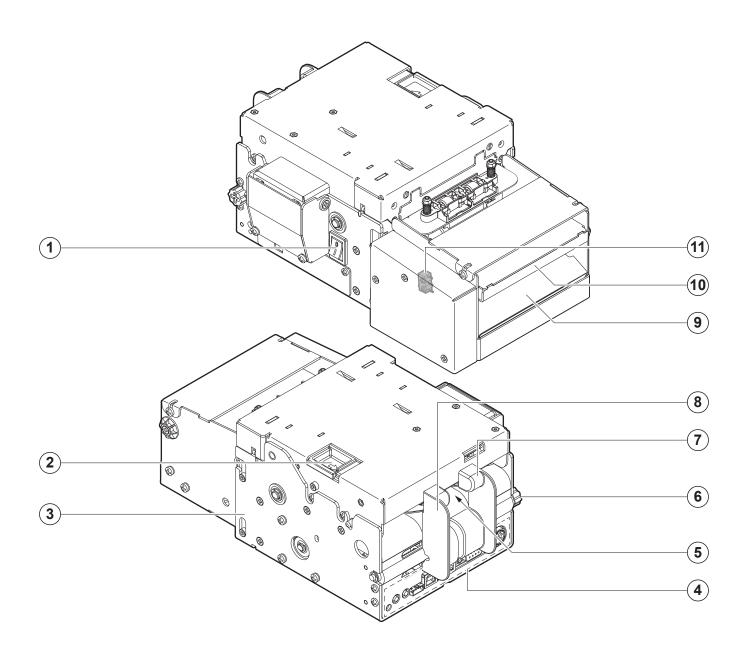




#### KPM862 3 KPM863 3

- 1. ON/OFF key
- 2. Opening lever for upper cover
- 3. Device chassis
- 4. Keys and connectors panel (see paragraph 3.3)
- 5. Paper input
- 6. Adjustment knob for paper input width

- 7. Left paper guide
- 8. Right paper guide
- 9. Paper out (see paragraph 5.5)
- 10. Tilting slide
- 11. Sensor for tilting slide position



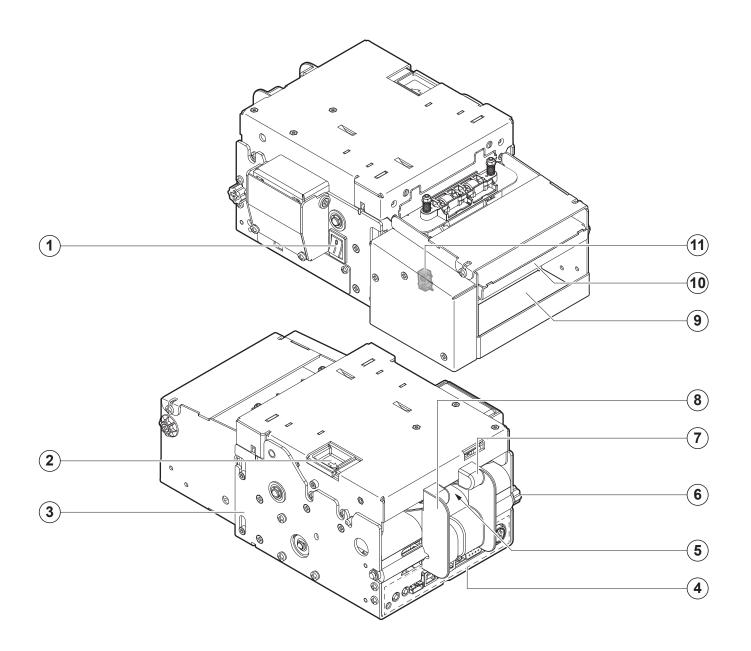




#### KPM862 4 KPM863 4

- 1. ON/OFF key
- 2. Opening lever for upper cover
- 3. Device chassis
- 4. Keys and connectors panel (see paragraph 3.3)
- 5. Paper input
- 6. Adjustment knob for paper input width

- 7. Left paper guide
- 8. Right paper guide
- 9. Paper out (see paragraph 5.5)
- 10. Tilting slide
- 11. Sensor for tilting slide position



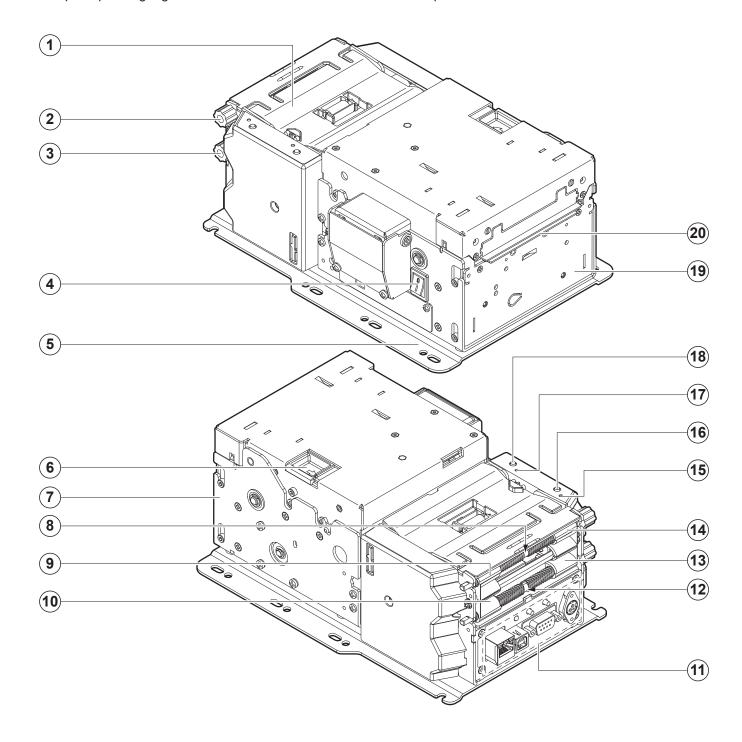




#### KPM862 DF 1 KPM863 DF 1

- 1. Dual feeder
- 2. Adjustment knob for paper input 1 width
- 3. Adjustment knob for paper input 2 width
- 4. ON/OFF key
- 5. Fixing plate
- 6. Opening lever for upper cover
- 7. Device chassis
- 8. Paper input 1
- 9. Paper input 1 right guide
- 10. Paper input 2 right guide

- 11. Keys and connectors panel (see paragraph 3.3)
- 12. Paper input 2
- 13. Paper input 2 left guide
- 14. Paper input 1 left guide
- 15. F1 status LED
- 16. F1 key
- 17. F2 status LED
- 18. F2 key
- 19. Front cover
- 20. Paper out



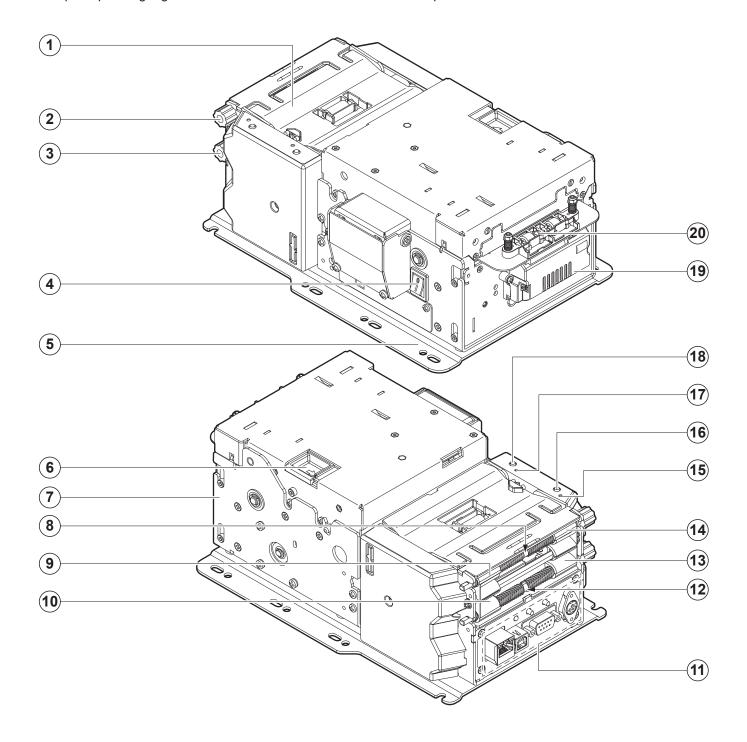




#### KPM862 DF 2 KPM863 DF 2

- 1. Dual feeder
- 2. Adjustment knob for paper input 1 width
- 3. Adjustment knob for paper input 2 width
- 4. ON/OFF key
- 5. Fixing plate
- 6. Opening lever for upper cover
- 7. Device chassis
- 8. Paper input 1
- 9. Paper input 1 right guide
- 10. Paper input 2 right guide

- 11. Keys and connectors panel (see paragraph 3.3)
- 12. Paper input 2
- 13. Paper input 2 left guide
- 14. Paper input 1 left guide
- 15. F1 status LED
- 16. F1 key
- 17. F2 status LED
- 18. F2 key
- 19. Front cover with ejector group
- 20. Paper out



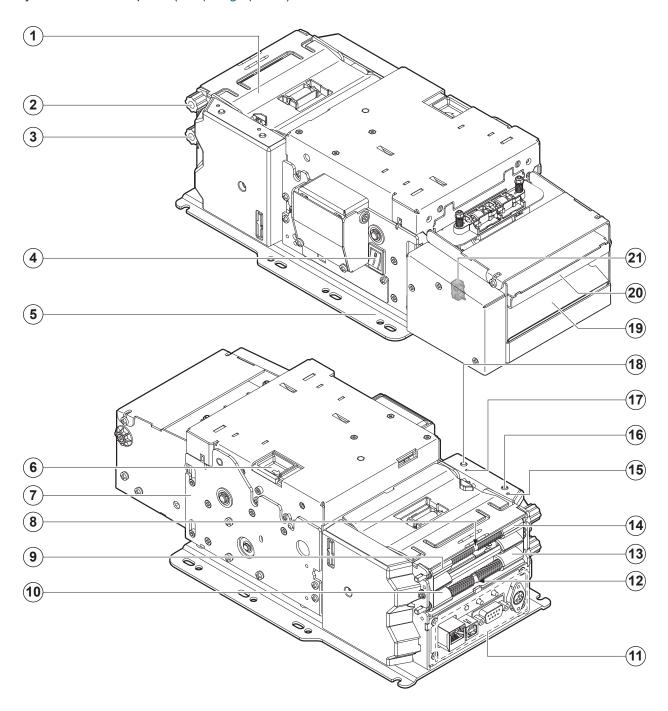




#### KPM862 DF 3 KPM863 DF 3

- 1. Dual feeder
- 2. Adjustment knob for paper input 1 width
- 3. Adjustment knob for paper input 2 width
- 4. ON/OFF key
- 5. Fixing plate
- 6. Opening lever for upper cover
- 7. Device chassis
- 8. Paper input 1
- 9. Paper input 1 right guide
- 10. Paper input 2 right guide
- 11. Keys and connectors panel (see paragraph 3.3)

- 12. Paper input 2
- 13. Paper input 2 left guide
- 14. Paper input 1 left guide
- 15. F1 status LED
- 16. F1 key
- 17. F2 status LED
- 18. F2 key
- 19. Paper out (see paragraph 5.5)
- 20. Tilting slide
- 21. Sensor for tilting slide position



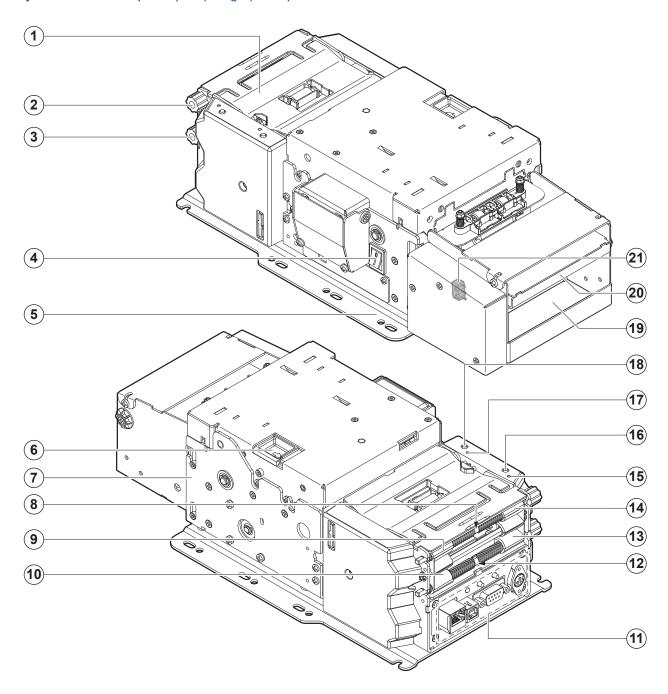




#### KPM862 DF 4 KPM863 DF 4

- 1. Dual feeder
- 2. Adjustment knob for paper input 1 width
- 3. Adjustment knob for paper input 2 width
- 4. ON/OFF key
- 5. Fixing plate
- 6. Opening lever for upper cover
- 7. Device chassis
- 8. Paper input 1
- 9. Paper input 1 right guide
- 10. Paper input 2 right guide
- 11. Keys and connectors panel (see paragraph 3.3)

- 12. Paper input 2
- 13. Paper input 2 left guide
- 14. Paper input 1 left guide
- 15. F1 status LED
- 16. F1 key
- 17. F2 status LED
- 18. F2 key
- 19. Paper out (see paragraph 5.5)
- 20. Tilting slide
- 21. Sensor for tilting slide position



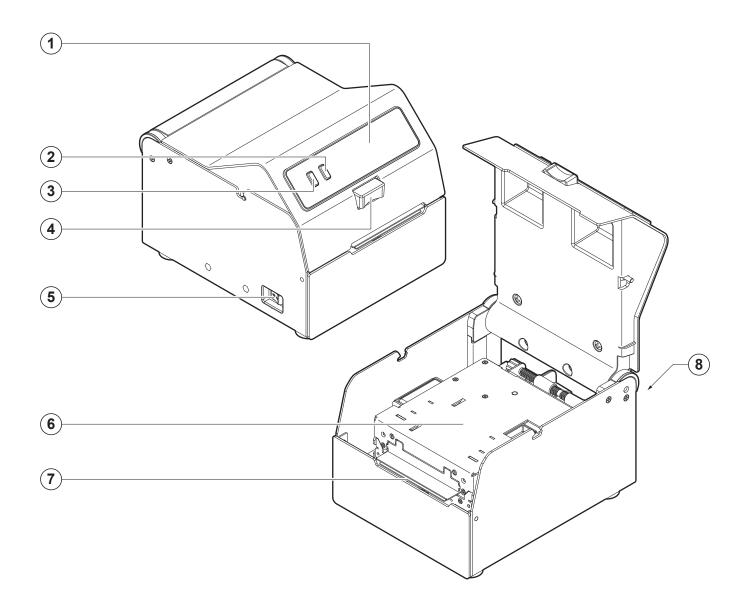




#### TK862 1, TK862 3, TK862 4

- 1. Display
- 2. LINE FEED key
- 3. FORM FEED key
- 4. Opening lever for upper cover

- 5. ON/OFF key
- 6. Internal printer (see previous pages)
- 7. Paper out
- 8. Paper input



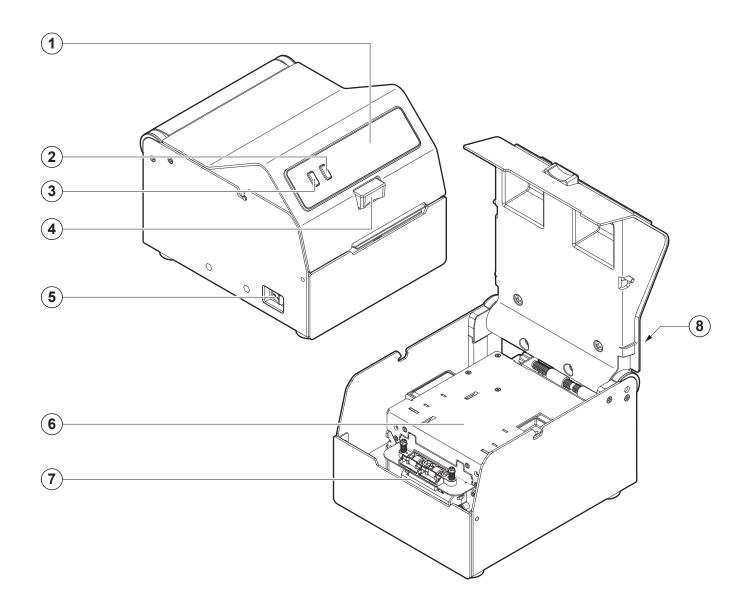




#### TK862 2

- 1. Display
- 2. LINE FEED key
- 3. FORM FEED key
- 4. Opening lever for upper cover

- 5. ON/OFF key
- 6. Internal printer with ejector group (see previous pages)
- 7. Paper out
- 8. Paper input

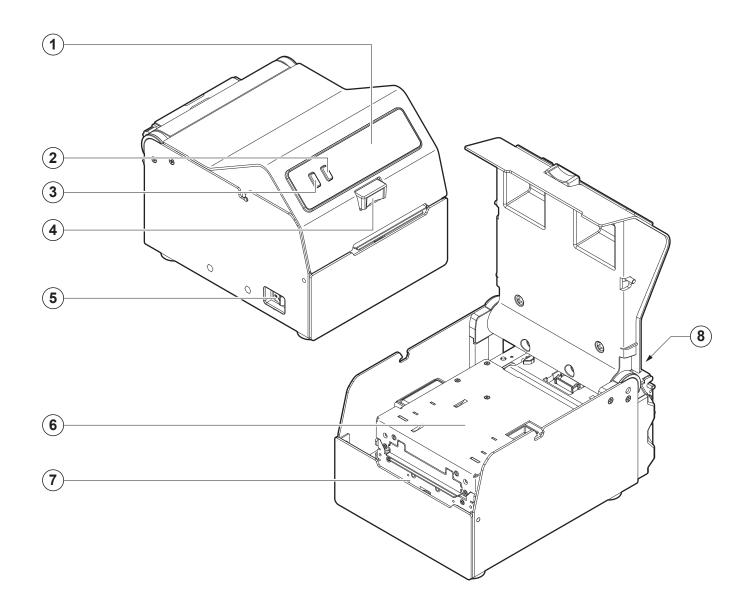




#### TK862 DF 1, TK862 DF 3

- 1. Display
- 2. LINE FEED key
- 3. FORM FEED key
- 4. Opening lever for upper cover

- 5. ON/OFF key
- 6. Internal printer with dual feeder (see previous pages)
- 7. Paper out
- 8. Paper input



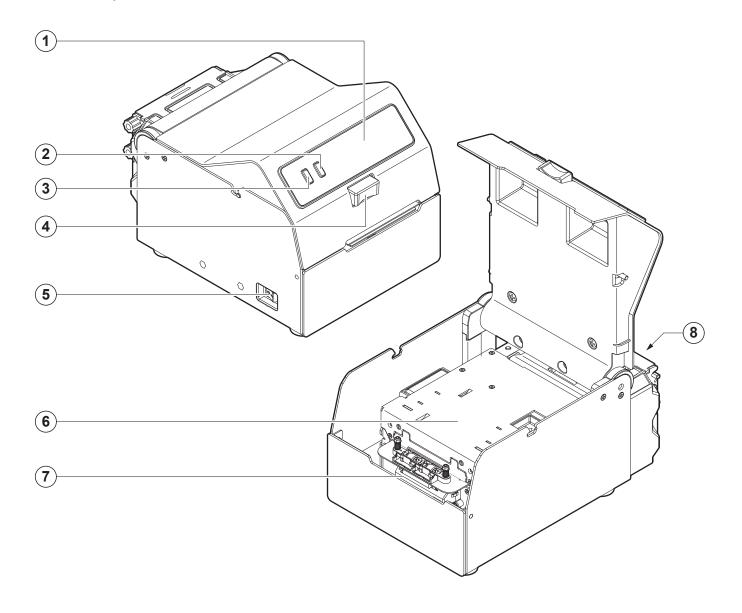




#### **TK862 DF 2**

- 1. Display
- 2. LINE FEED key
- 3. FORM FEED key
- 4. Opening lever for upper cover
- 5. ON/OFF key

- 6. Internal printer with dual feeder and ejector group (see previous pages)
- 7. Paper out
- 8. Paper input



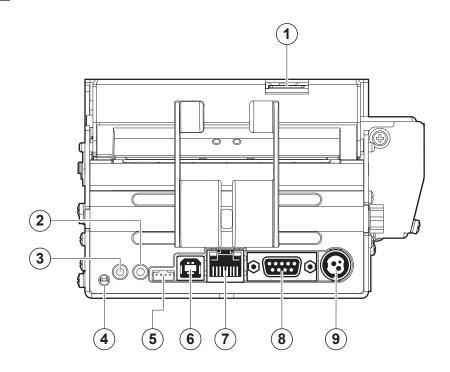


## 3.3 Device components: keys and connectors view

For ease of reference, for some models is represented only the internal printer group.

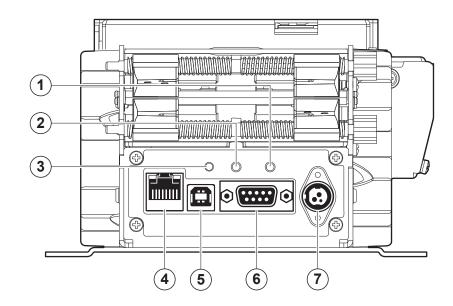
#### KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 TK862 1, TK862 2, TK862 3, TK862 4 KPM863 1, KPM863 2, KPM863 3, KPM863 4

- SAM module port
   (only for KPM862 5 and TK862 4
- 2. FORM FEED key
- 3. LINE FEED key
- 4. Status LED
- 5. External low paper sensor connector
- 6. USB port
- 7. Ethernet port
- 8. RS232 serial port
- Power supply port



#### KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

- 1. FORM FEED key
- 2. LINE FEED key
- Status LED
- 4. Ethernet port
- 5. USB port
- RS232 serial port
- 7. Power supply port

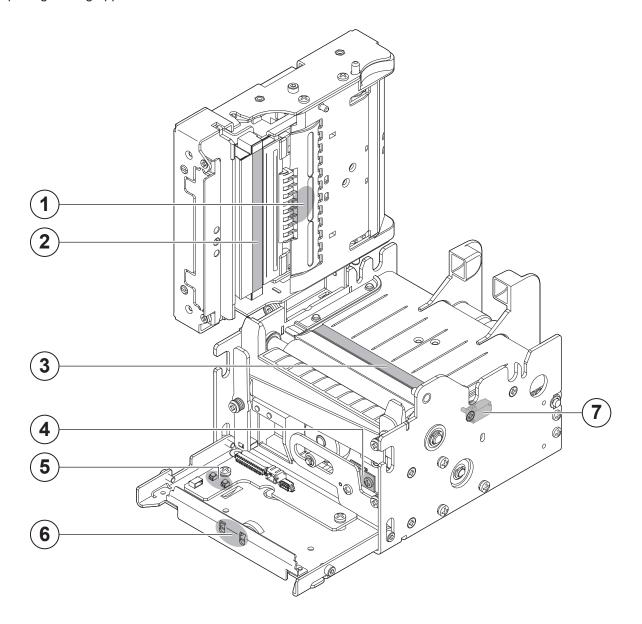






# 3.4 Device components: internal view

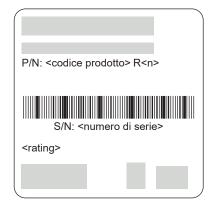
- 1. Head temperature sensor
- 2. Upper CIS reader (only for KPM862 6, TK862 3 and TK862 DF 3)
- 3. Lower CIS reader
- 4. Autocutter position sensor
- 5. Opening/closing front cover sensor
- 6. Paper out presence sensors
- 7. Opening/closing upper cover sensor





#### 3.5 Device label

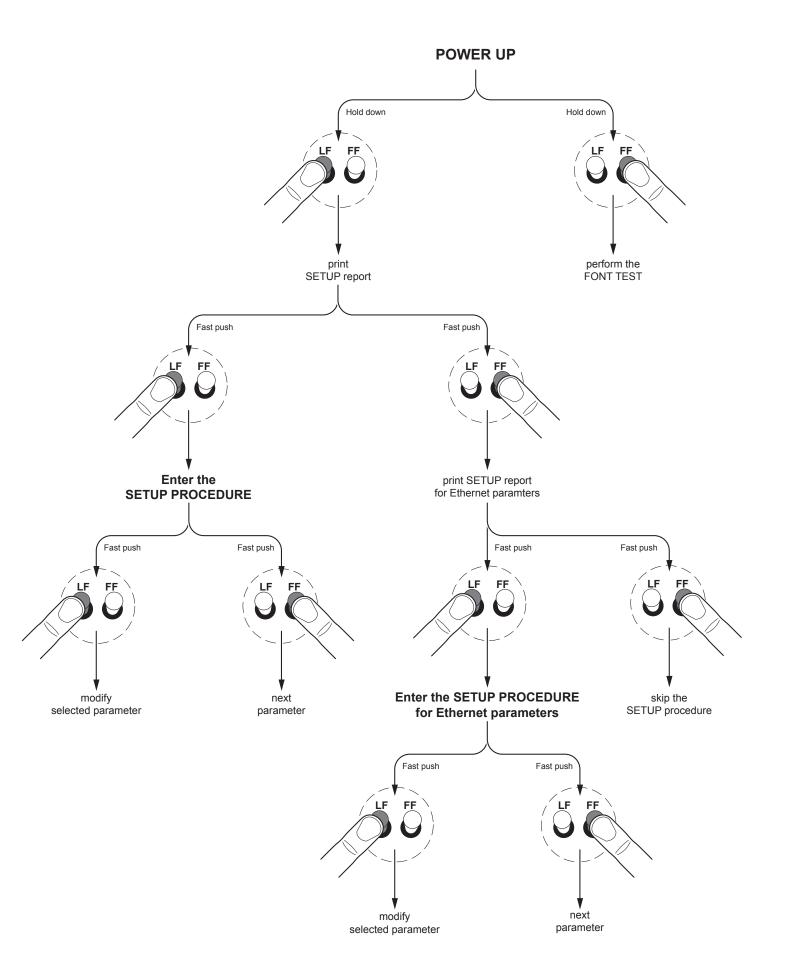
The main data used to identify the machine are shown on the label attached to the bottom of the device. In particular, it shows the electrical data for the connection to a power source. It also shows the product code, the serial number and the hardware revision (R).





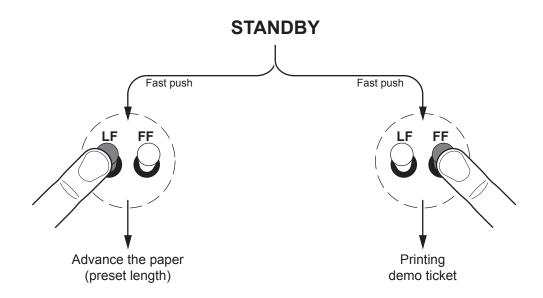
# •

# 3.6 Key functions: power up

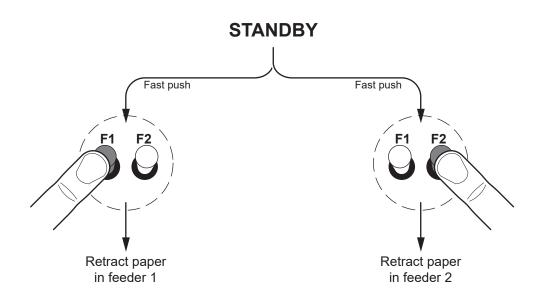




# 3.7 Key functions: standby



KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4







# 3.8 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
	x 1	RECEIVE DATA
GREEN COMMUNICATION	x 2	RECEPTION ERRORS (PARITY, FRAME ERROR, OVERRUN ERROR)
STATUS	x 3	COMMAND NOT RECOGNIZED
	x 4	COMMAND RECEPTION TIME OUT
	x 2	PRINTHEAD OVERHEATED
	x 3	PAPER END
YELLOW RECOVERABLE ERROR	x 4	PAPER JAM
	x 5	POWER SUPPLY VOLTAGE INCORRECT
	x 6	COVER OPEN
	x 2	FPGA ERROR
	x 3	RAM ERROR
RED UNRECOVERABLE ERROR	x 4	EXTERNAL FLASH ERROR
	x 5	CUTTER ERROR
	x 6	FRONT COVER OPEN





## 3.9 Dual feeder status messages

KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

The LED panel of dual feeder is comprised of two LED (one of green colour and one of red colour).

The LED indicate the dual feeder status and the paper status. Given in the table below are the various LED signals and the corresponding dual feeder status.

STATUS LED		DESCRIPTION
	ON	FEEDER COVER OPEN
RED		ERROR (PAPER JAM, COMMAND RECEPTION TIMEOUT)
GREEN	ON	PAPER PRESENCE
ORANGE (1)	ллл	FEEDER PAPER END

#### NOTE:

(1): The orange paper end status message is present only when the setup parameter "Paper End Management" is set to the "Retract" value.





## 3.10 Messages on display

#### TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

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

PRINTER READY 01/01/21 12:00:00  Device ON: no error	RECEIUING DATA SPOOLING Receive data
RS232 RX ERROR CHECK RS232 SETTINGS Reception errors (parity, frame error, overrun error)	COMMAND ERROR COMMAND NOT FOUND Command not recognized
COMMAND ERROR COMMAND NOT FINISH Command reception time out	PRINTHEAD OUERTEMP WAIT COOLING Heading over temperature
END PAPER PLEASE INSERT PAPER Paper end	PAPER JAM CLEAR PAPER PATH Paper jam
POWER VOLTAGE ERROR CHECK POWER SUPPLIER Power supply voltage incorrect	COUER ERROR CLOSE COUERS Cover open
RAM ERROR POWER ON AGAIN RAM error	EEPROM ERROR POWER ON AGAIN EEPROM error
CUTTER ERROR OPEN COUER AND CLEAR Cutter error	CUTTER ERROR CUTTER COVER OPEN! Cutter cover open
PRINT TICKET ERROR! CHECK TICKETS PATH	



Black mark alignment error

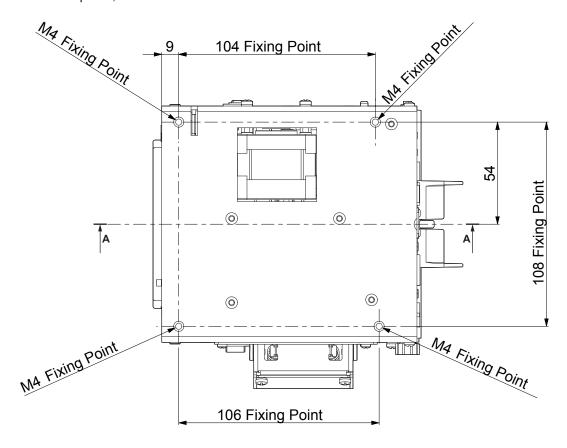


# 4 INSTALLATION

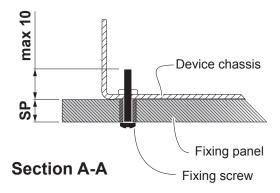
## 4.1 Fastening

#### KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 KPM863 1, KPM863 2, KPM863 3, KPM863 4

The device is provided with four fixing holes on the bottom of device (see following figure, dimensions in millimetres). To fasten the device on a panel, use four M4 screws.



It's very important to consider the screws length not to damage the internal components placed near the fixing holes (see following figure).



The screw length (L) will be calculated according to the thickness of the panel (Sp) on which the device is fixed, as follows:

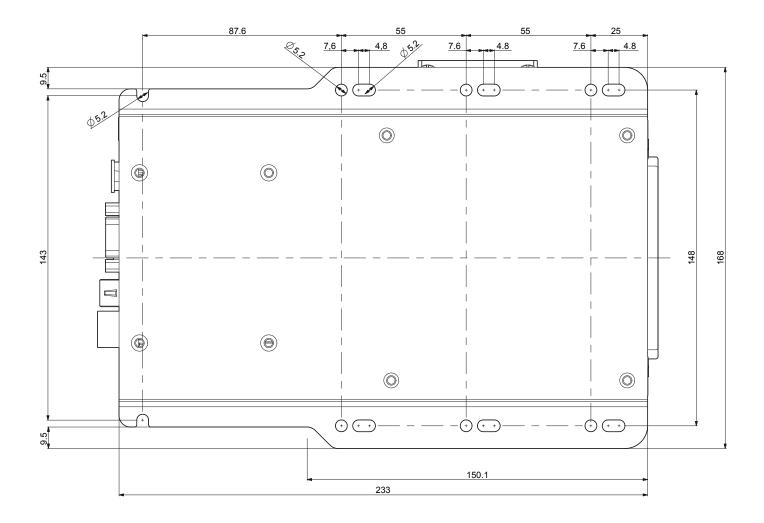
For example, if panel thickness is 10 mm (Sp = 10 mm), the maximum length for screws will be 20 mm.





### KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

The device is provided with six fixing holes and six slots on the bottom of device (see following figure, dimensions in millimetres).





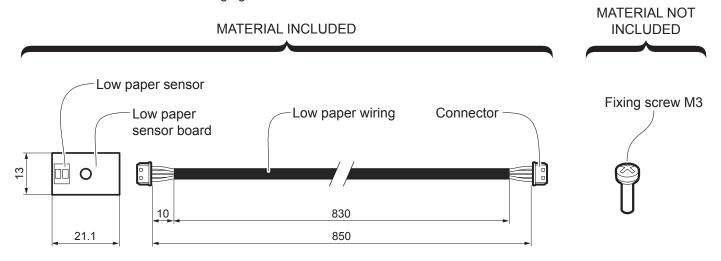


### 4.2 Low paper sensor

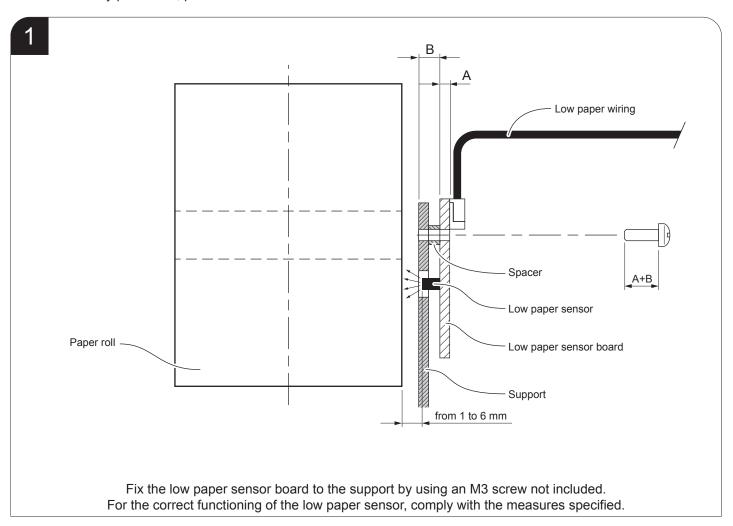
#### KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 KPM863 1, KPM863 2, KPM863 3, KPM863 4

The device provides as an accessory (see chapter 11) a low paper sensor with the cable (see following figure). To fix the sensor, use an M3 screw not supplied.

All the dimensions shown in following figures are in millimetres.

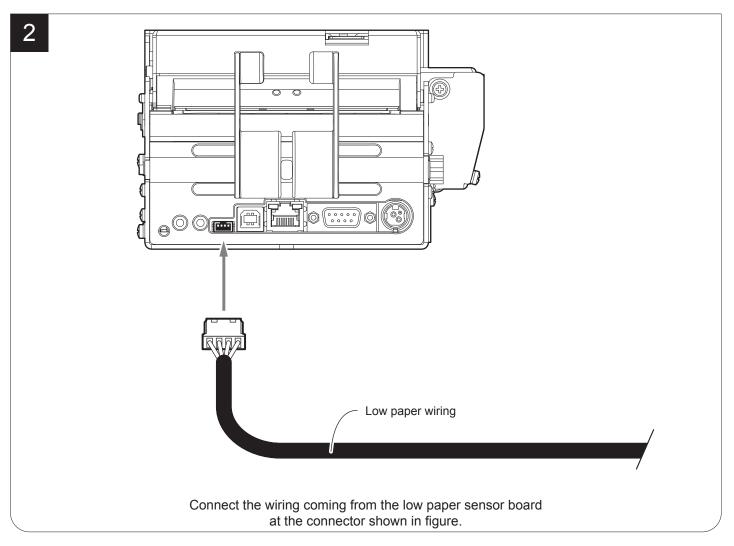


For the assembly procedure, proceed as follows:







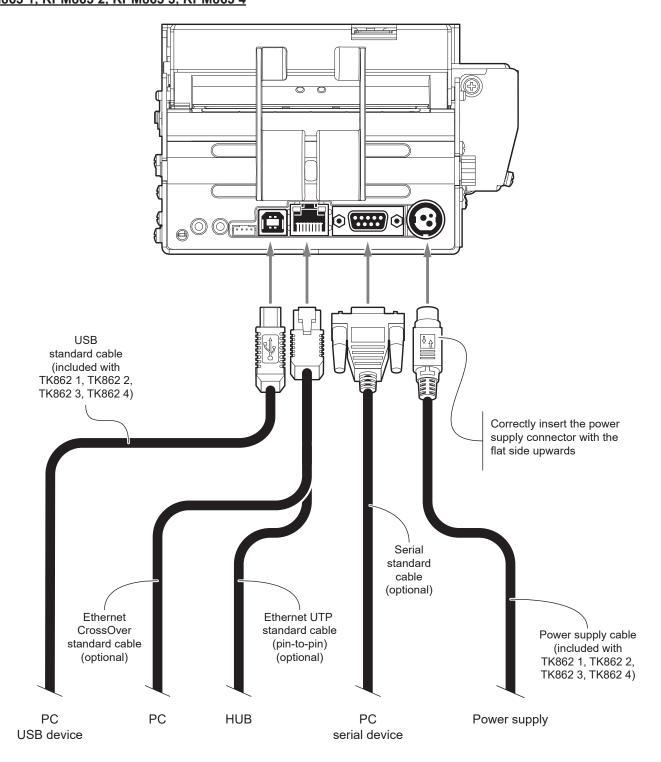




### 4.3 Connections

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. For ease of reference, for some models is represented only the internal printer group.

### KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 TK862 1, TK862 2, TK862 3, TK862 4 KPM863 1, KPM863 2, KPM863 3, KPM863 4

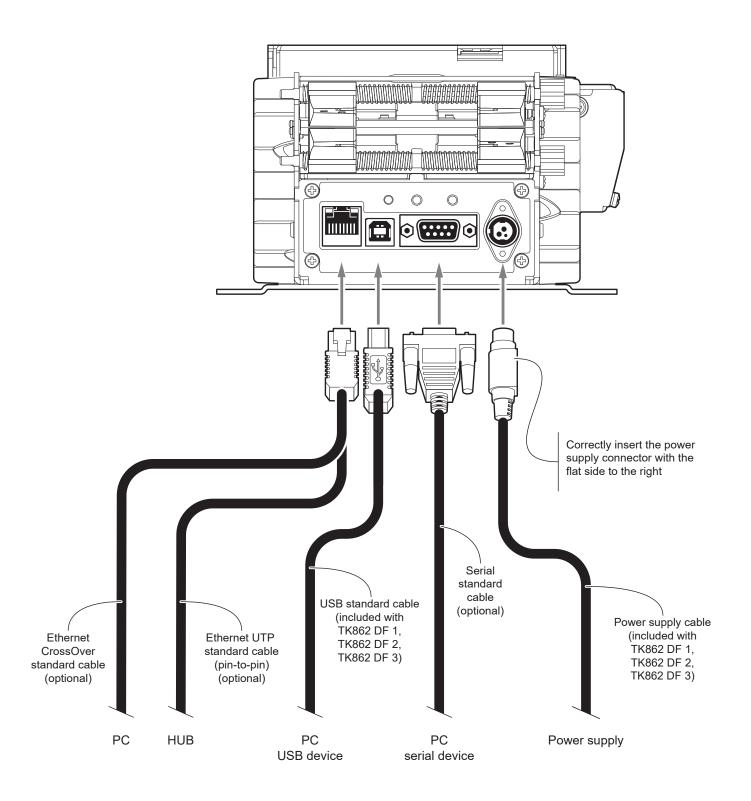


ATTENTION: In some using conditions, we recommend the installation of a ferrite core on the power supply cable.





### KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4



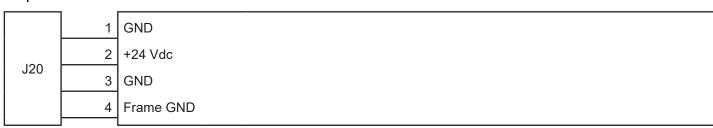
ATTENTION: In some using conditions, we recommend the installation of a ferrite core on the power supply cable.



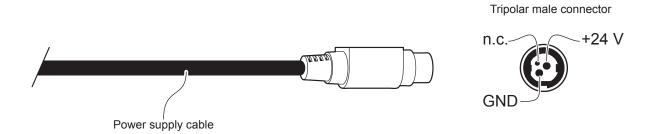
# **(**

### 4.4 Pinout



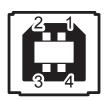


The following figure shows the connector pinout of power supply cable:



ATTENTION:

Respect power supply polarity.



### **USB INTERFACE**

Female USB type B connector

J4	1	USBHS_VBUS (out)
	2	USBHS_D-
	3	USBHS_D+
	4	GND
	SH1	SHIELD
	SH2	SHIELD







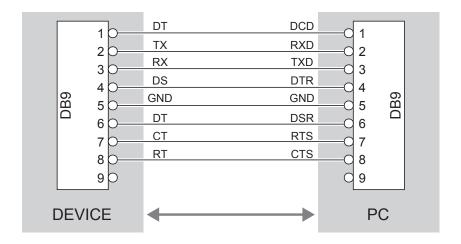
### **RS232 SERIAL INTERFACE**

Female DB9 connector

	1		
J3	1	DT	
	2	тх	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	DS	
	5	GND	
	6	DT	When +VRS232, device is power on
	7	СТ	
	8	RT	When +VRS232, device is ready to receive data
	9	+5V	
	SH1	SHIELD	
	SH2	SHIELD	
	J		

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.

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

	1	ETX+
	2	ETX-
	3	ERX+
	4	+V
	5	+V
	6	ERX-
J1	7	GND
	8	GND
	9	+3.3 V
	10	LED-LNK
	11	+3.3 V
	12	LED-LAN
	13	SH1
	14	SH2
	15	FIX1
	16	FIX2
	l l	

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	AN 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 J1 before the isolation voltage transformer (throughhole pin).





### 4.5 Driver and SDK

The drivers for the following operating system are available in the website <a href="www.custom4u.it">www.custom4u.it</a>:

OPERATING SYSTEM	DESCRIPTION	INSTALLATION PROCEDURE
	Driver for Windows XP	
	Driver for Windows VISTA (32/64 bit)	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 7 (32/64 bit)	
Windows	Driver for Windows 8 (32/64 bit)	
	Driver for Windows 8.1 (32/64 bit)	
	Driver for Windows 10 (32/64 bit)	
	Self-installing driver for Virtual COM (32/64 bit) (see paragraph 6.6)	
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.
Android	SDK for Custom Android API	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.





# 5 OPERATION

## 5.1 Opening device cover

For ease of reference, for some models is represented only the standard model of internal printer group without dual feeder.

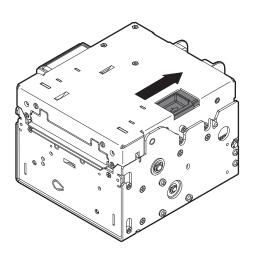
KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6

KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4

KPM863 1, KPM863 2, KPM863 3, KPM863 4

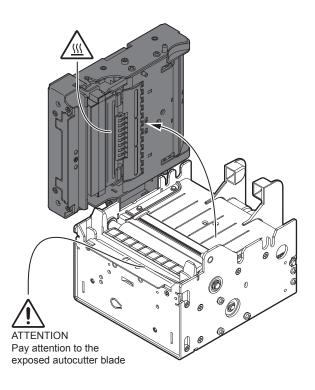
KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

1



Push the opening lever in the direction shown in figure.

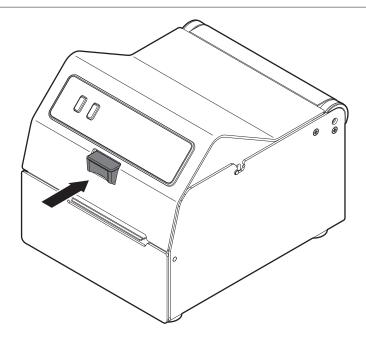
2



Open the device upper cover.

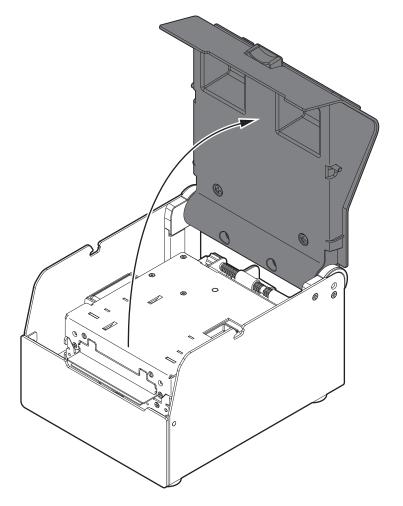
### TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

1



Push the opening lever in the direction shown in figure.

2



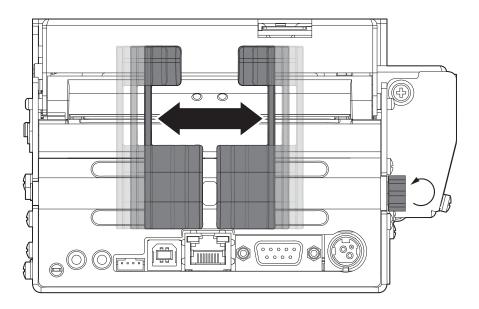
Open the device upper cover.



## 5.2 Adjusting paper width

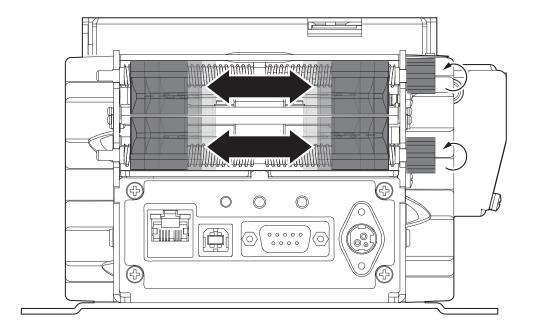
### <u>KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6</u> <u>KPM863 1, KPM863 2, KPM863 3, KPM863 4</u>

Paper width may be adjusted from 40 mm to 86 mm turning the adjustment knob for paper input.



#### KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

Paper width may be adjusted from 40 mm to 86 mm turning the adjustment knobs for dual feeder paper input.



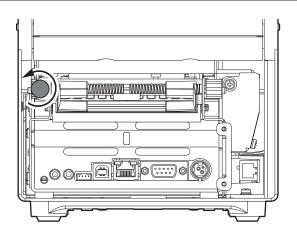


# •

### TK862 1, TK862 2, TK862 3, TK862 4

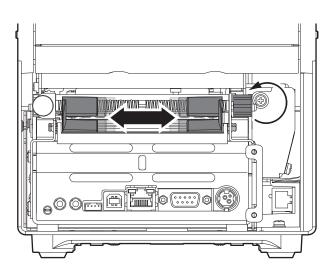
Paper width may be adjusted from 40 mm to 86 mm turning the adjustment knob for paper input.

1



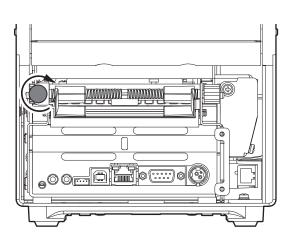
Loosen the knob shown in figure.

2



Adjust the paper width.

3



Tighten the knob.



### 5.3 Switch the device on/off

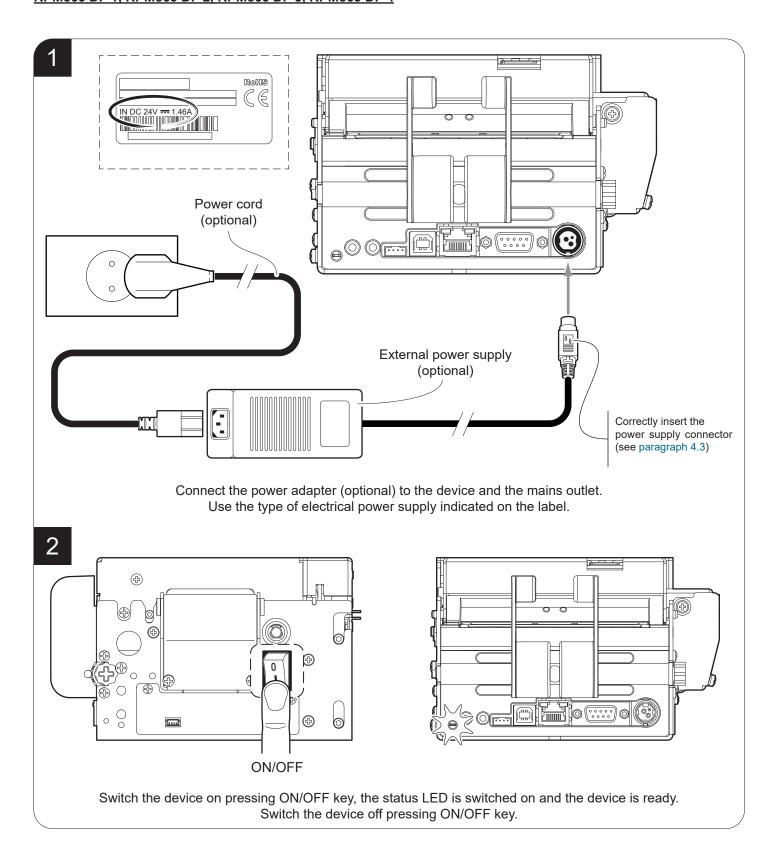
For ease of reference, for some models is represented only the standard model of internal printer group without dual feeder.

KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6

KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4

KPM863 1, KPM863 2, KPM863 3, KPM863 4

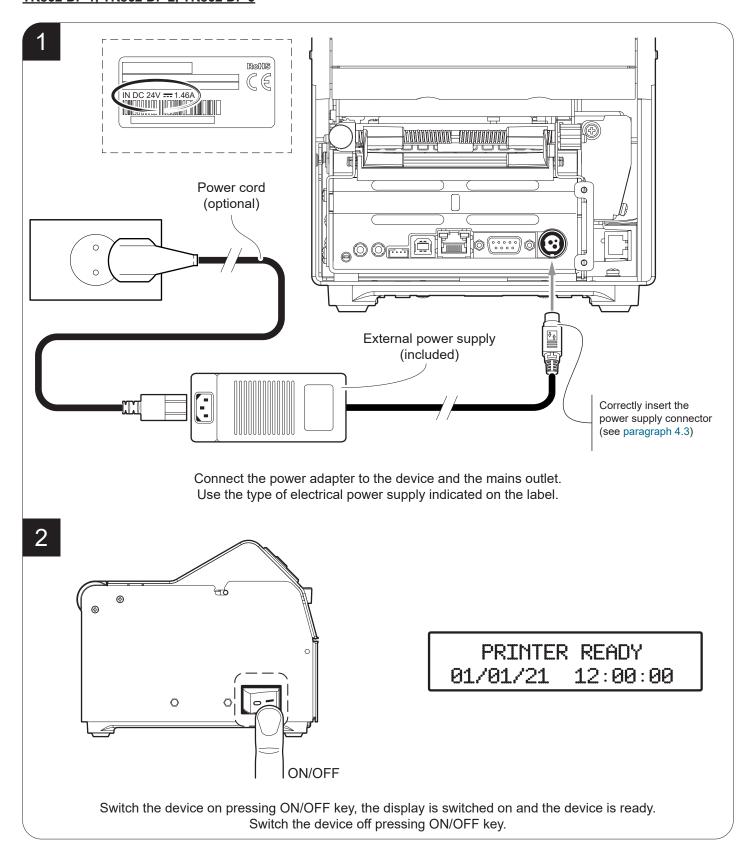
KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4





# **(+)**

#### TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3



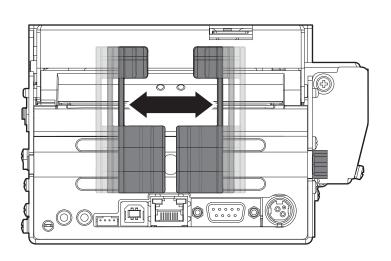


## 5.4 Loading the paper roll

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

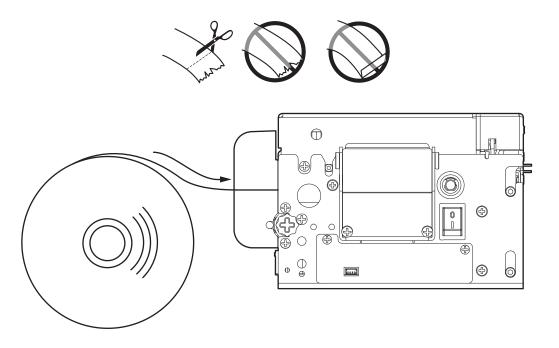
#### <u>KPM862 1, KPM862 2, KPM862 5, KPM862 6</u> <u>KPM863 1, KPM863 2</u>

1



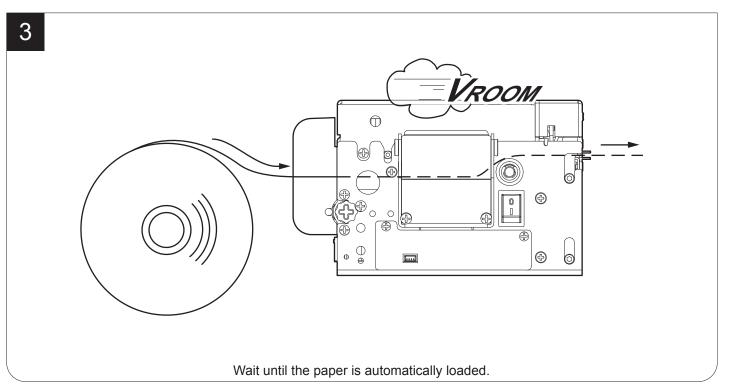
Adjust the paper width (see paragraph 5.2).

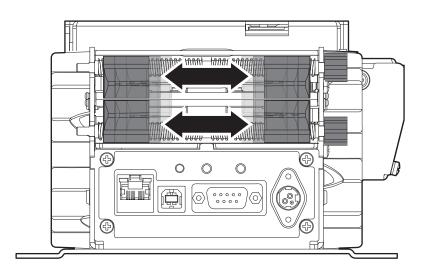
2



Insert the paper into the input mouth so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.

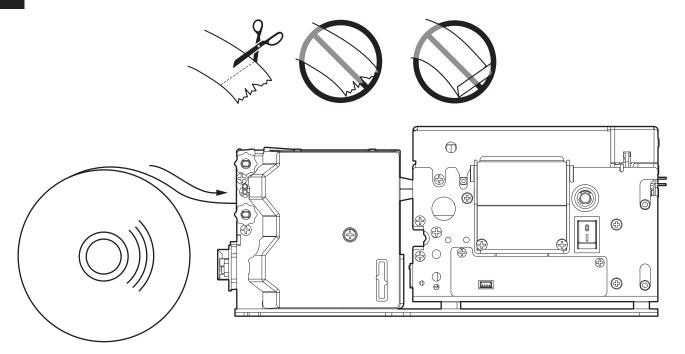






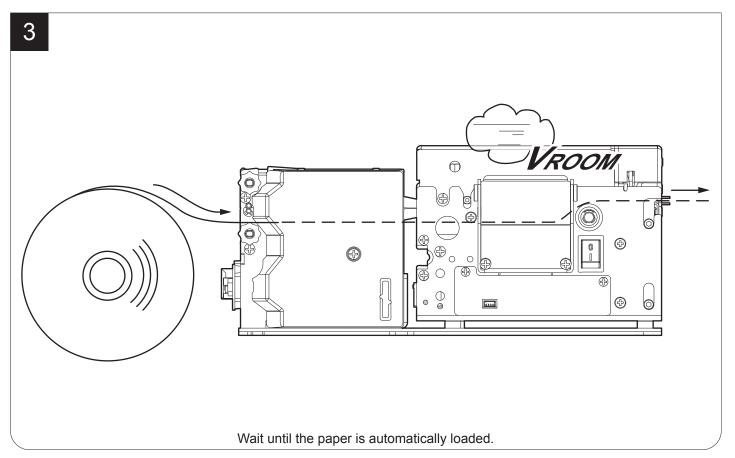
Adjust the paper width (see paragraph 5.2).

2



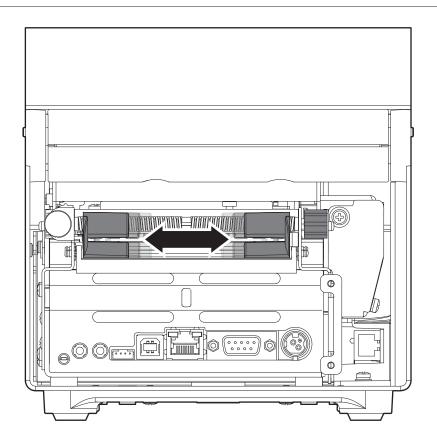
Insert the paper into one of the input feeder so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.





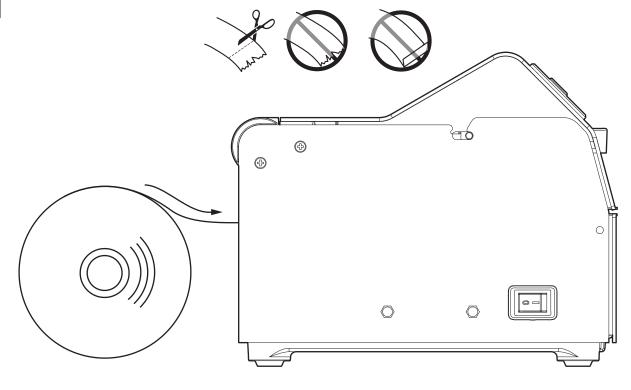
#### TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

1



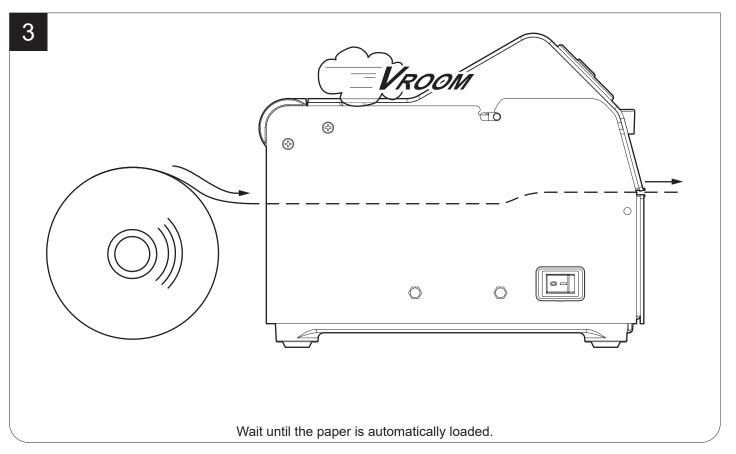
Adjust the paper width (see paragraph 5.2).

2



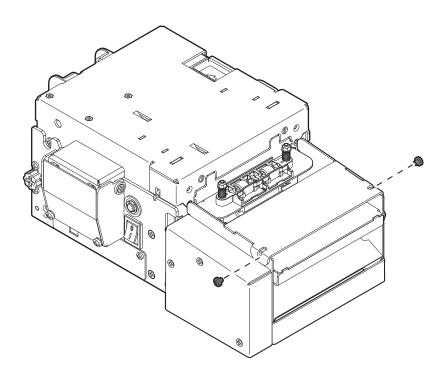
Insert the paper into the input mouth so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.





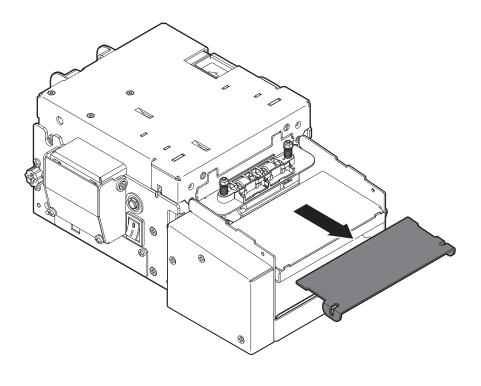


### PAPER ROLL CORE EXTERNAL DIAMETER < 48 mm

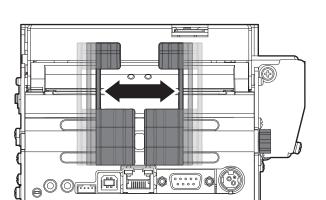


If the external diameter of the paper roll core is less than 48 mm, unscrew the two fixing screws shown in figure. If the external diameter of the paper roll core is greater than 48 mm, go directly to step 3.

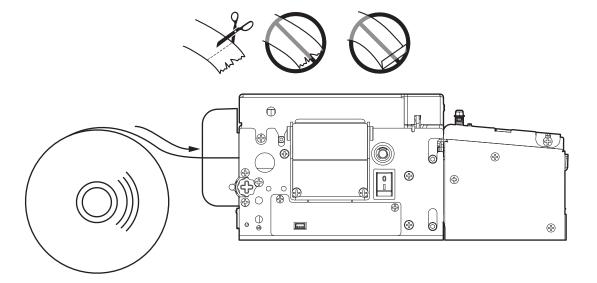
2



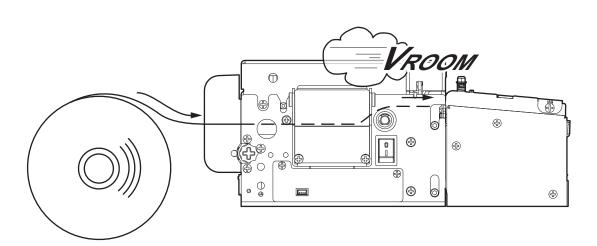
Remove the selector top cover.



Adjust the paper width (see paragraph 5.2).



Insert the paper into the input mouth so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.



Wait until the paper is automatically loaded.



## 5.5 Issuing ticket

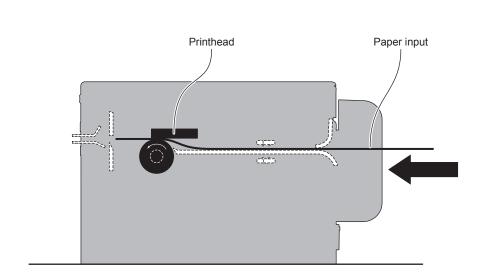
The device allows you to choose between different operating modes for the issuance of printed tickets.

The operating modes shown in following images, depend on the settings of configuration parameters and commands sent to the device.

For ease of reference, for some models is represented only the internal printer group without dual feeder.

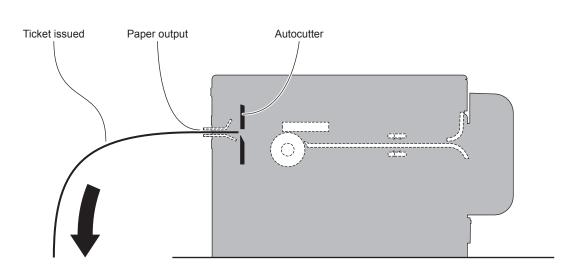
#### **Standard mode**

1



The device starts the ticket printing.

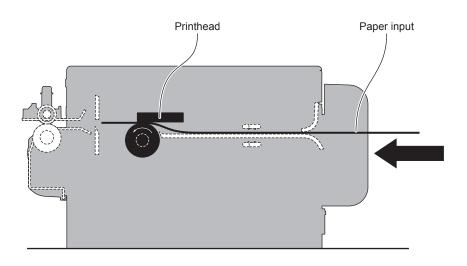
2



When printing ends, the device cuts the ticket printed that is issued from the paper output.

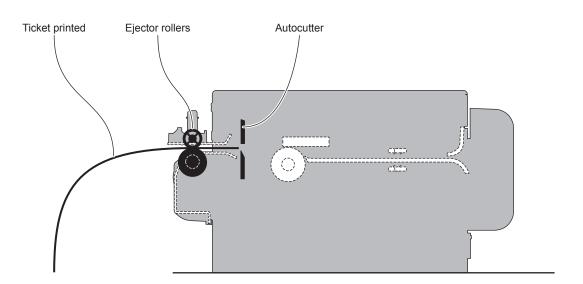






The device starts the ticket printing.

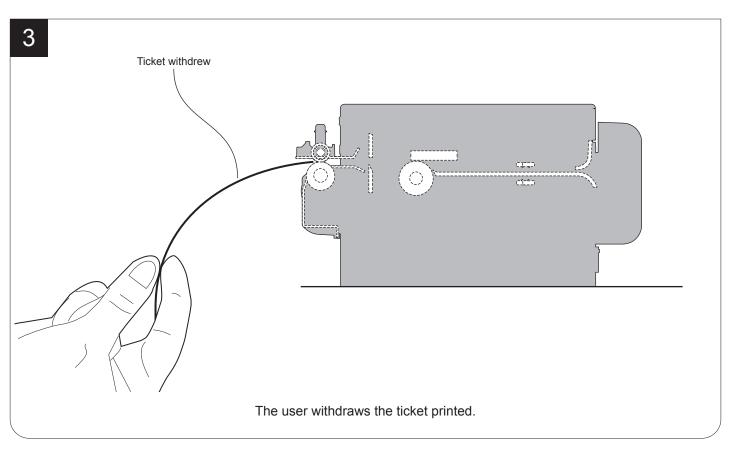
2



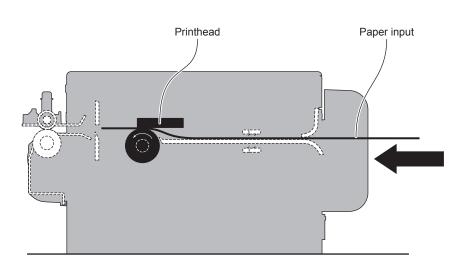
When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.





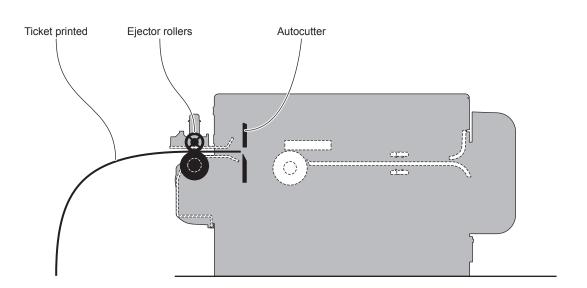






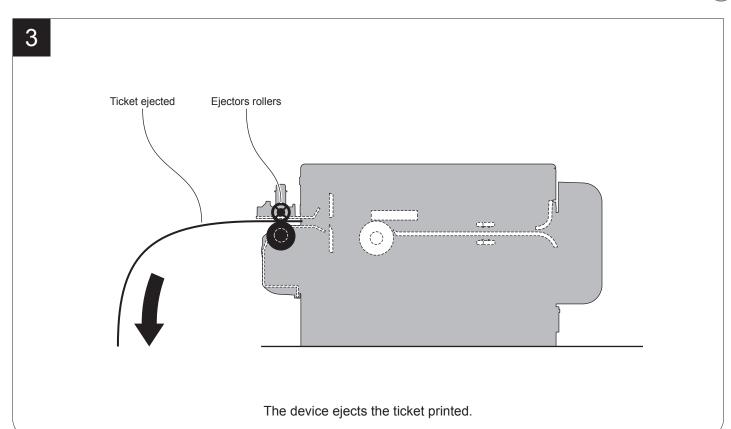
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.



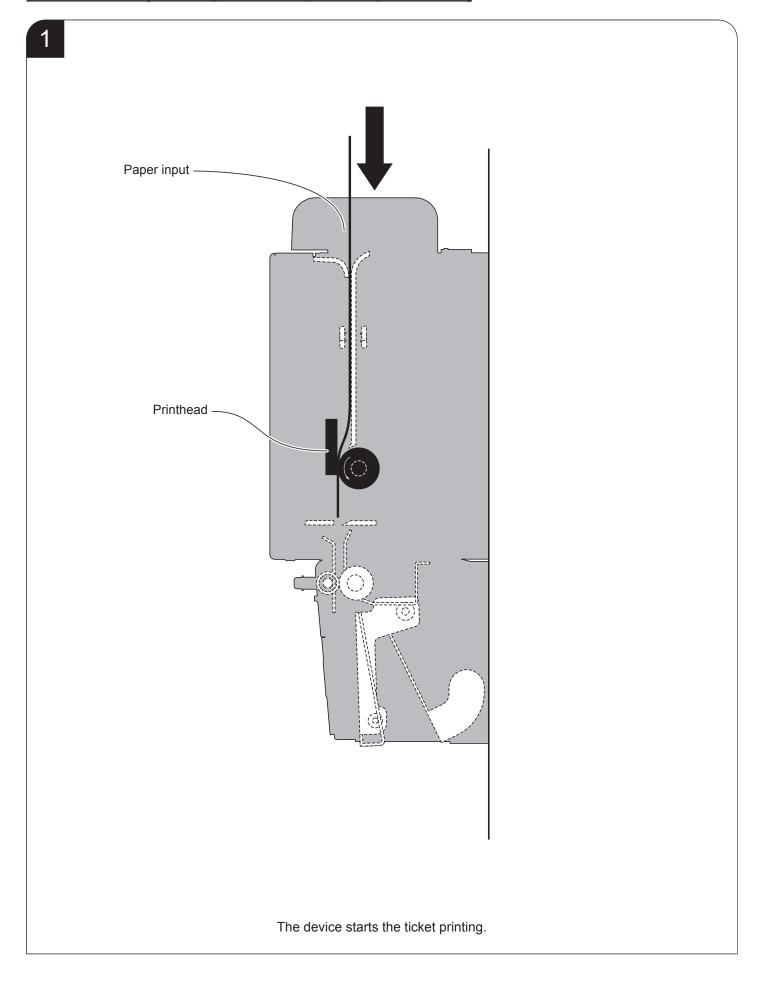


#### NOTE:

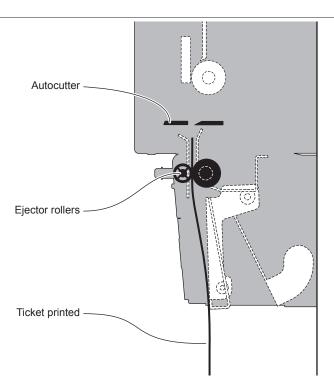
To enable this issuing method, you need to correctly set the operation mode of the ejector device with the command  $0x1D\ 0x65\ 0x31$  (see the device commands manual).





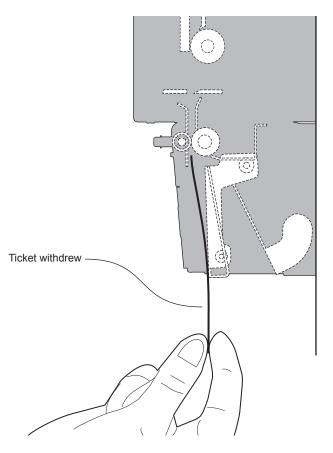






When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

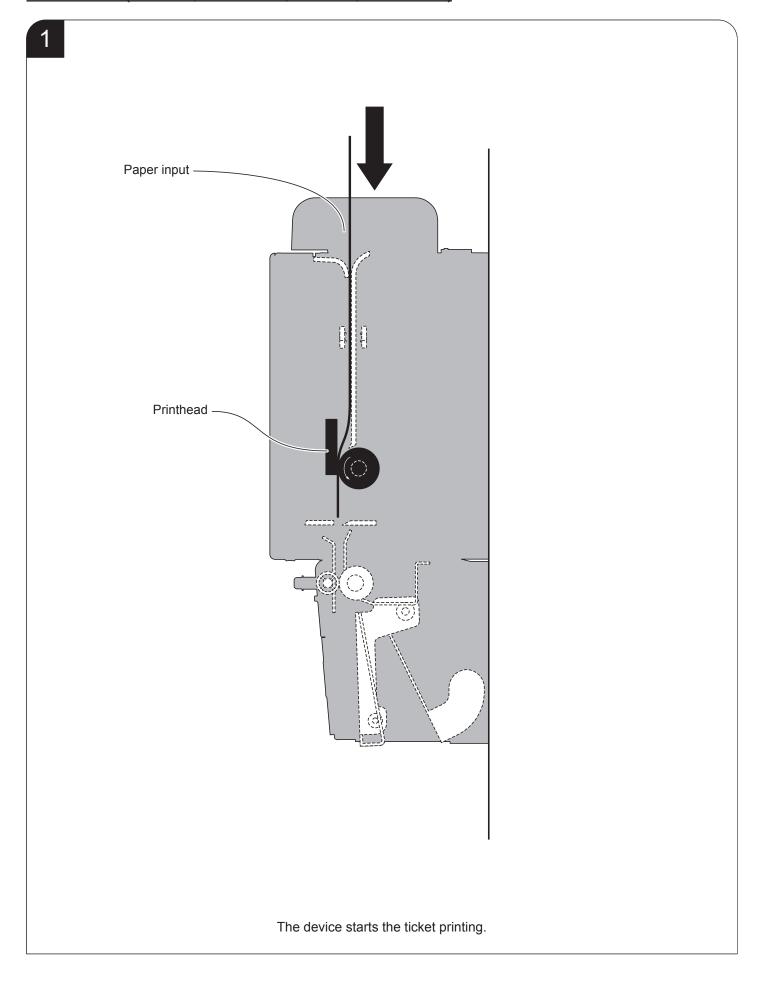
3



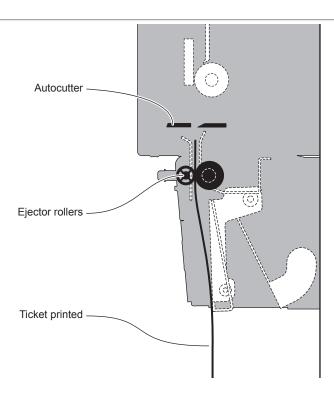
The user withdraws the ticket printed.

NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the command 0x1D 0x70 0x6F (see the device commands manual).

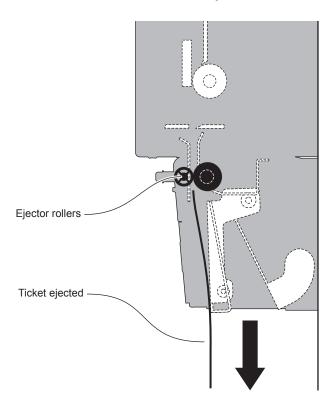








When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

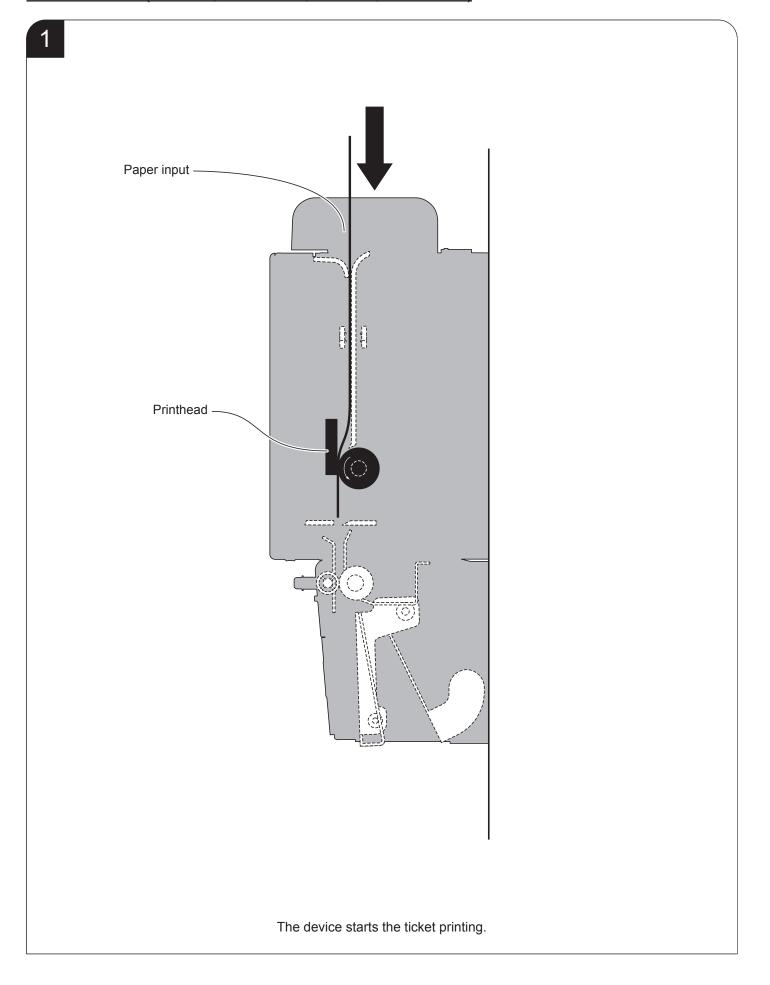


The device ejects the ticket printed.

NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x65 0x31 (see the device commands manual).

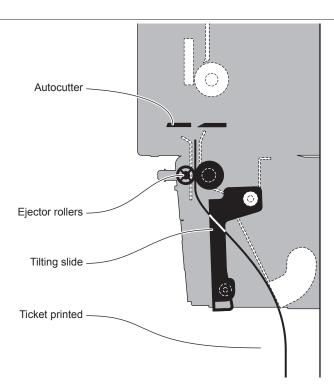








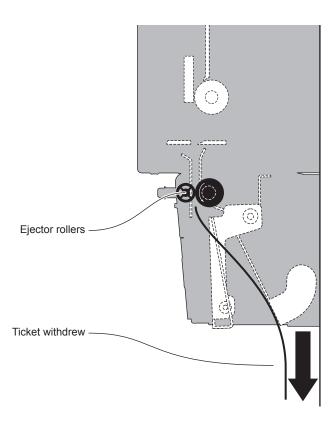




When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

The ticket printed is driven into the ejection canal.

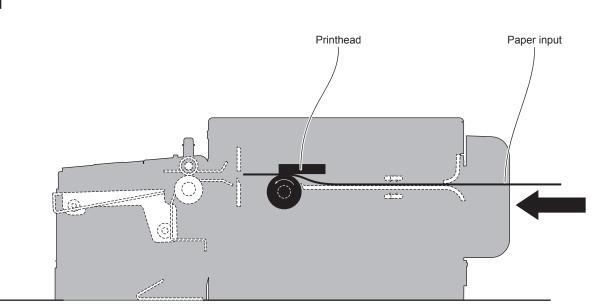




The device collects the ticket printed.

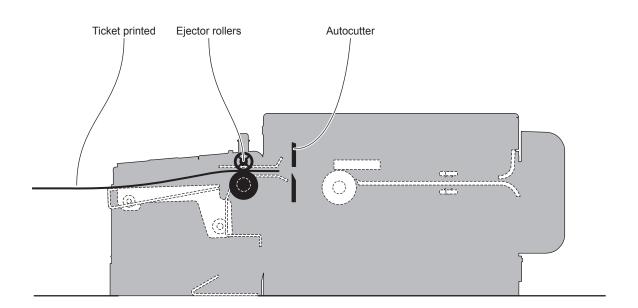
NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x70 0x73 and 0x1D 0x65 0x31 (see the device commands manual).





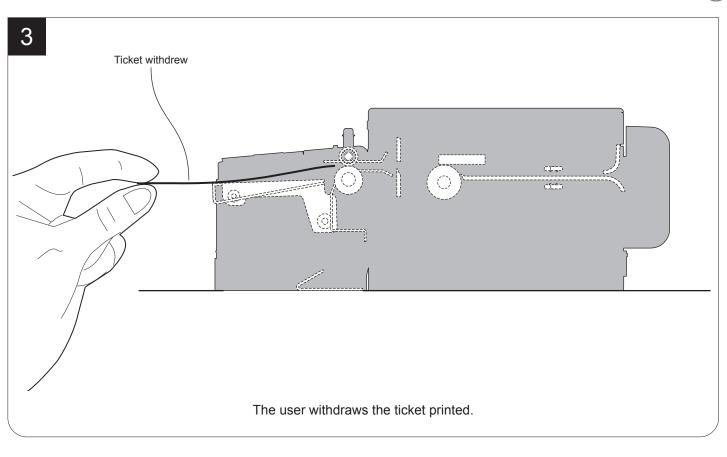
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.



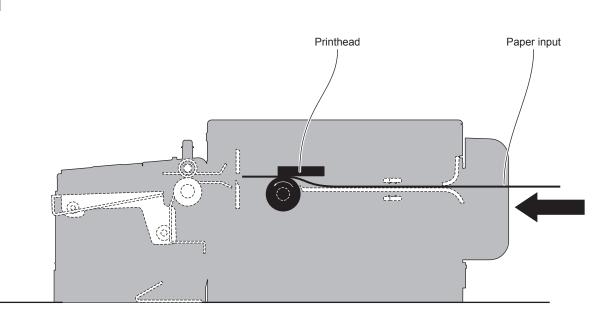


NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the command  $0x1D\ 0x70\ 0x6F$  (see the device commands manual).



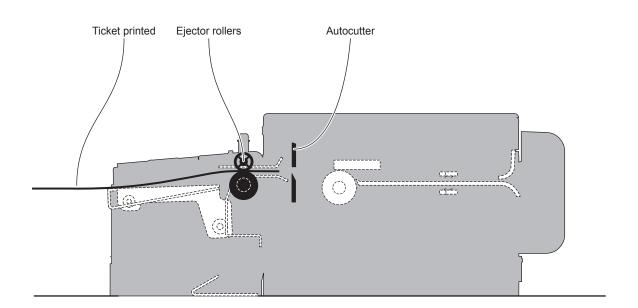


1



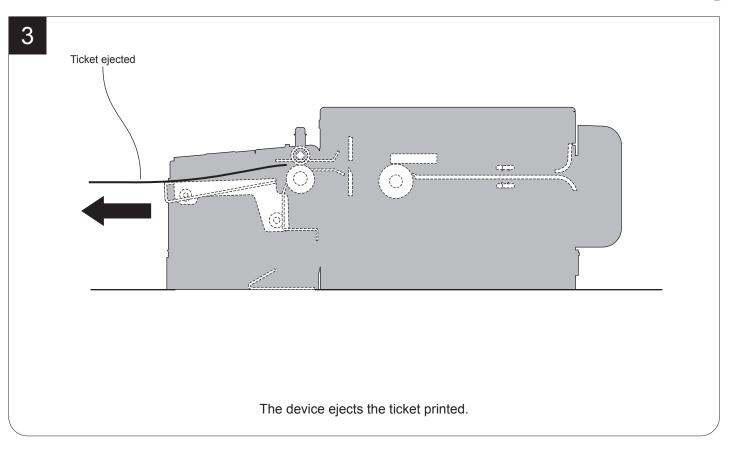
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.



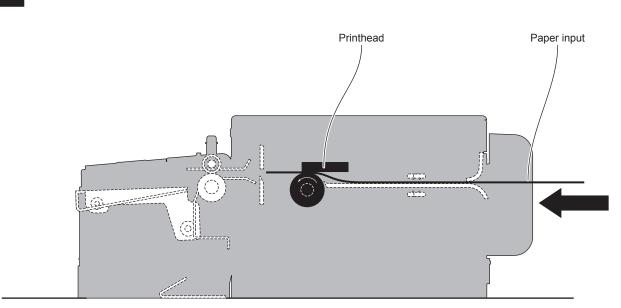


NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x65 0x31 (see the device commands manual).

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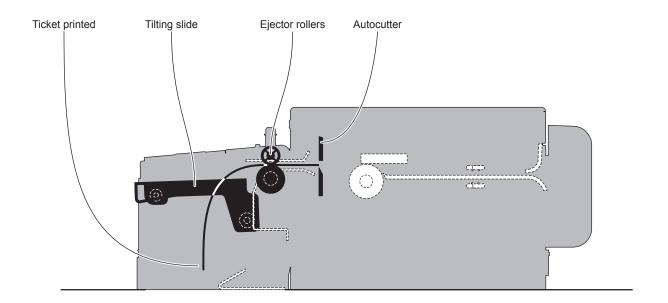


1



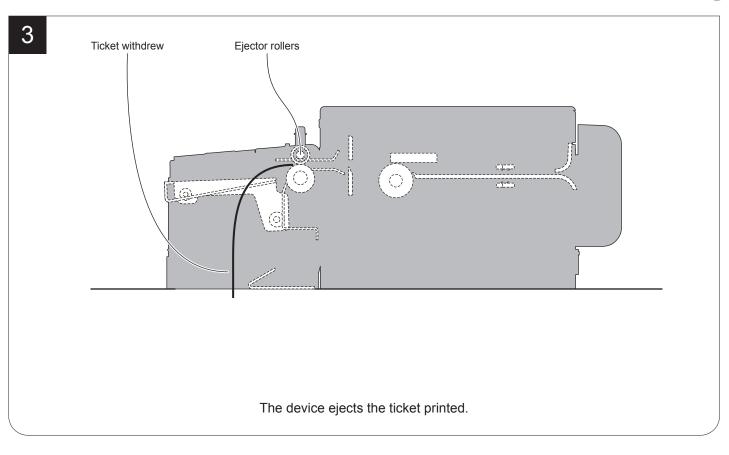
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers. The tilting slide is lifted and the ticket printed is driven into the ejection canal.





NOTE: To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x6F and 0x1D 0x6F and 0x3D 0x6F 0x3D 0x6F 0x3D 0x6F 0x3D 0x6F 0x3D 0x6F 0x3D 0x6F 0x3D 0x6D 0x7D 0x6D 0x7D 0x6D 0x7D 0x6D 0x7D 0x6D 0x7D 0x6D 0x7D 0

GUSTOM®



### 5.6 VeriPrint® system

#### KPM862 6, TK862 3, TK862 DF 3

VeriPrint® is a system designed by CUSTOM S.p.A. thanks to which the functions of an image scanner and those of a thermal printing head can be integrated in a single component to be included in systems and terminals for POS, betting/lottery and ticketing application automation. Solutions and benefits with VeriPrint®:

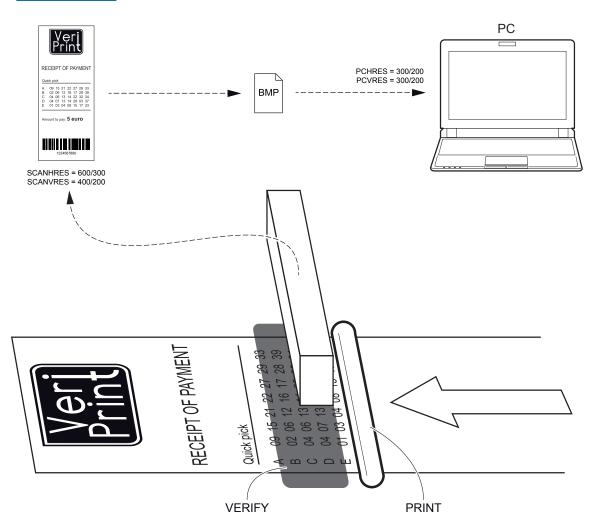
- · Automatic scan of the images of all tickets.
- · Protection against manipulated tickets.
- In case of doubts on the originality of a ticket presented, possibility of retrieval of the original image.
- · Maximum safety, resulting in claim and cost reductions.



#### How VeriPrint® works

While printing a receipt, an integrated scanning element captures the image of the receipt automatically and reads any barcode printed (for readable formats see paragraph 9.1). The image can be sent to a remote host in real time through commands (see the device commands manual). The captured image represents the actual and "true" look of the receipt as the customer receives it from the operator or a self-service kiosk.

The operating parameters for the scanner unit and VeriPrint® system can be set by using the "PrinterSet" software tool available on <a href="https://www.custom4u.it">www.custom4u.it</a>.







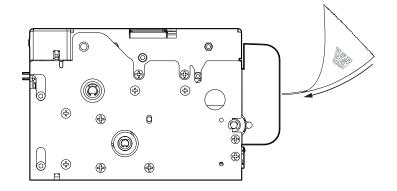
### 5.7 Stock control

Stock control is a system that allows you to check the print media used during printing and to guarantee protection against the risk of manipulated tickets.

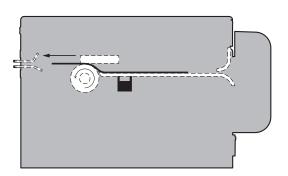
#### **How stock control works**

When handling the paper, the sensor placed inside the device automatically reads the pre-printed barcode on the back of the ticket to verify its originality. The application can verify its veracity and, in case of validation, the device proceeds with the printing of the ticket.

In order to use the stock control it is necessary to purchase a specific license. Contact technical assistance or your dealer.



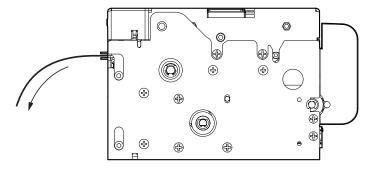
STEP 1: Pre-printed barcode on the back (1D or 2D)



STEP 2:
Data acquisition and validation







**STEP 3:** If validation is OK then ticket printing







# **(+)**

# 6 CONFIGURATION

### 6.1 Configuration by keys

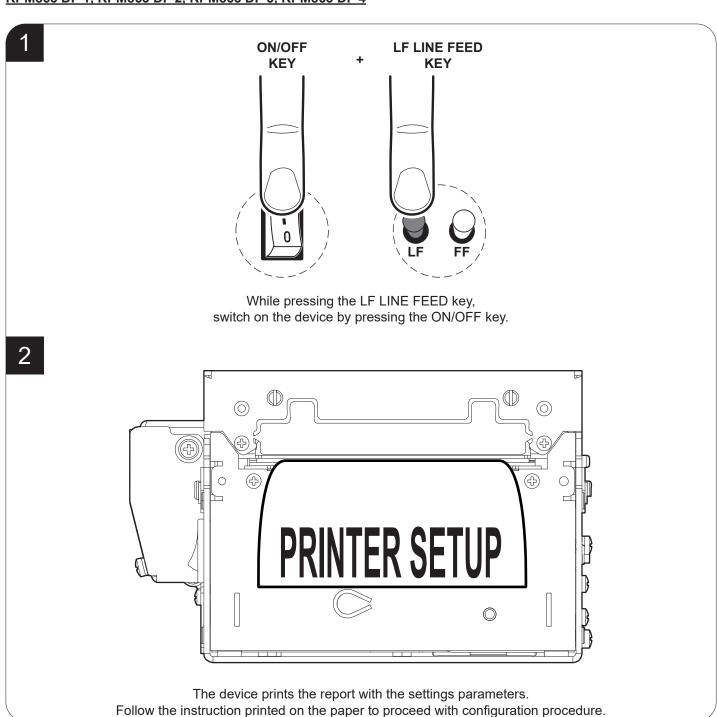
To enter the configuration mode and print a setup report with the operating parameters of the device, proceed as follows. For ease of reference, for some models is represented only the standard model of internal printer group without dual feeder.

KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6

KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4

KPM863 1, KPM863 2, KPM863 3, KPM863 4

KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

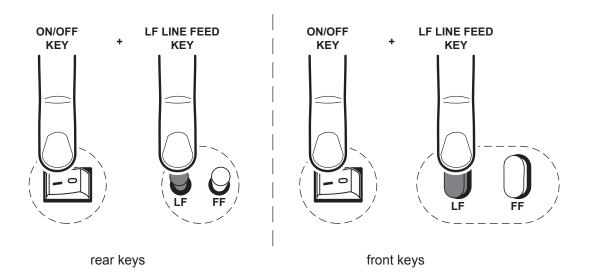




### TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

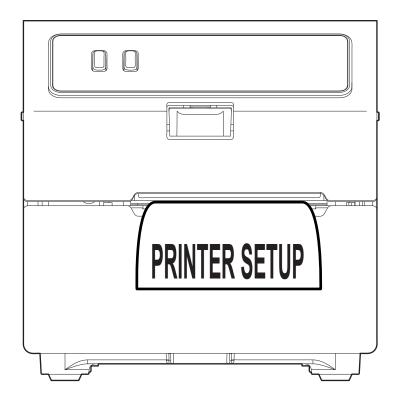


1



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

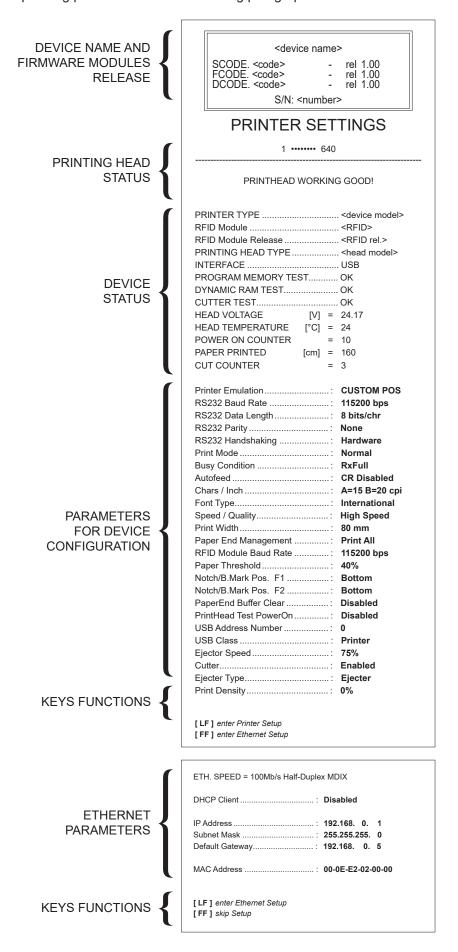
2



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



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







## 6.2 Configuration by software

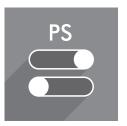
The setup parameters can be set by using the "PrinterSet" software tool available on <a href="www.custom4u.it">www.custom4u.it</a>. For a detailed description of the device operating parameters see the following paragraphs. To configure the device by software, proceed as follows:

1



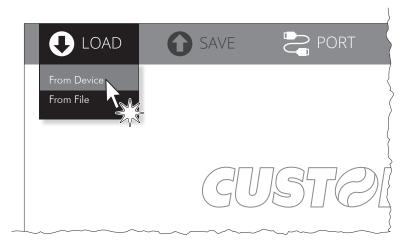
Connect the device to a PC directly (see paragraph 4.3), without using HUB devices.

2



Start "PrinterSet" software tool.

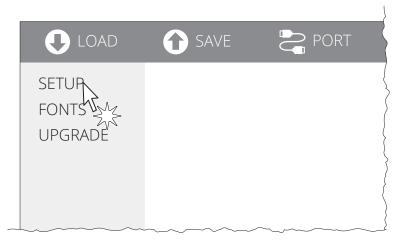
3



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

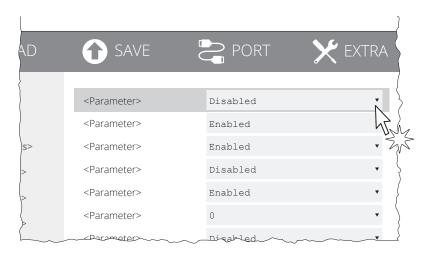


4



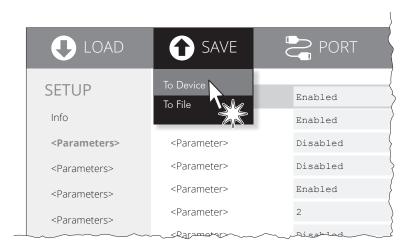
Click on SETUP to access the operating parameteres of the device to be configured.

5



Make the desired changes to the device operating parameters.

6



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

#### ATTENTION:

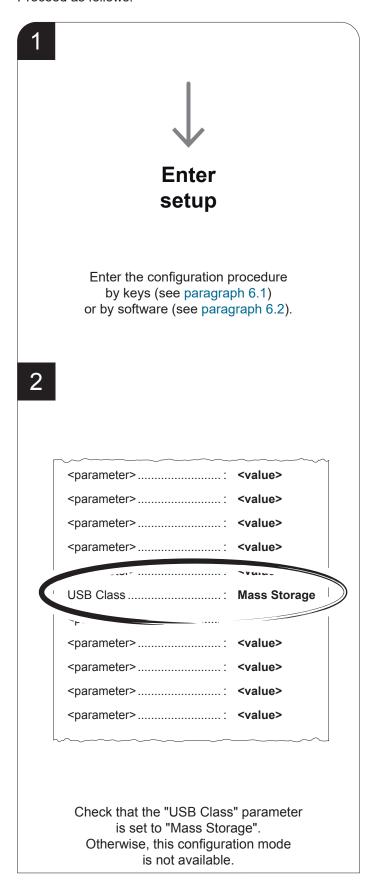
During saving, it is strongly discouraged to disconnect the communication cable or to remove the power supply of the PC or the device.

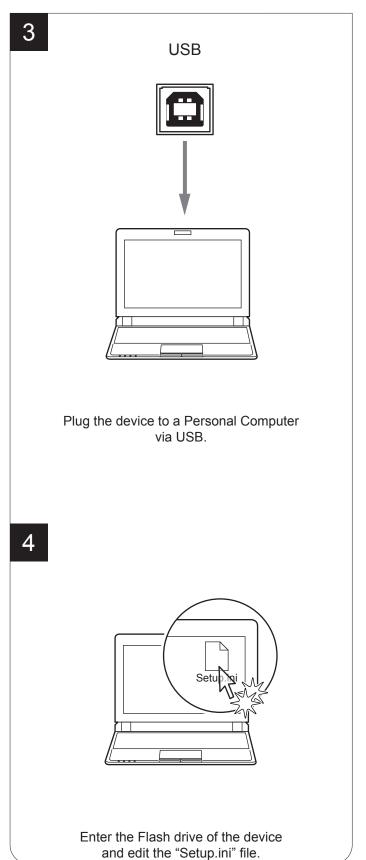




## 6.3 Configuration by file

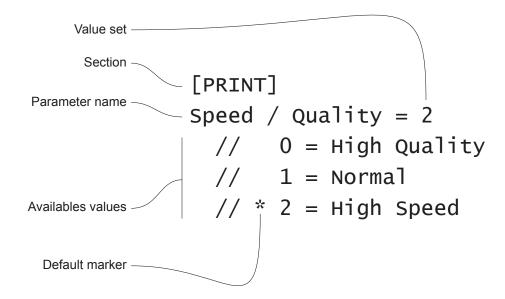
The setup parameters can be set by editing the "Setup.ini" file stored on the Flash Drive of the device. Proceed as follows:







The "Setup.ini" file is a configuration file that contains all the configurable parameters listed in text format and divided into some sections (indicated between square brackets). For each parameter, you find the parameter name followed by the value currently set and then the available values listed with a reference number. The reference number marked with the symbol '\*' is the default one (see figure).



To modify the parameter, change the numeric value after the parameter name or use the default value by typing "D". After editing device's parameter, simply save the "Setup.ini" file to make the modifies activated. For a detailed description of the device operating parameters see the following paragraphs.

#### ATTENTION:

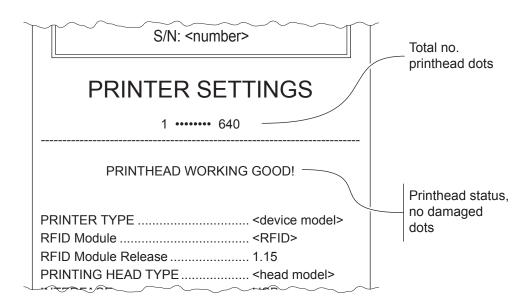
The change of value for the "USB Class" parameter may compromise the access to the Setup.ini file. Be careful to keep the "Mass Storage" value to allow a new access to the Flash Drive.



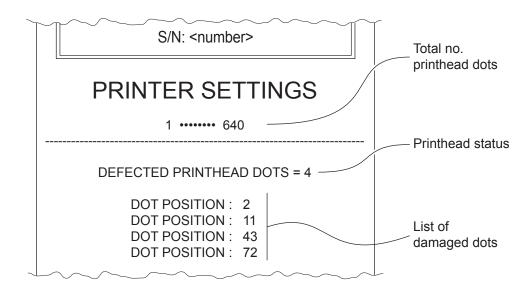


#### 6.4 Printhead status

The device performs the printhead operating status when printing the setup report. The total number of dots is reported Are indicated the total dots number of the printhead and their status (see figure below).



In case of damaged dots, these are listed in the print out in according to their position on the heating line (see figure below).







### 6.5 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	
RFID MODULE	presence of RFID module	
RFID MODULE RELEASE	RFID module firmware release	
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	





# 6.6 Communication parameters

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

The parameters marked with the symbol <sup>D</sup> 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 <sup>D</sup>					
	38400					
	Parameter valid only with serial interface.					
RS232 DATA LENGTH	Number of bit used for characters encoding:					
	7 bits/car					
	8 bits/car <sup>D</sup>					
	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					
	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.					
	Tarameter valid only with serial internace.					
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					
	Mass Storage = setting the sharing mode from Mass Storage					
	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 <sup>D</sup>	2	4 5	6 7	8 9	
NETWORK PRINTER NAME	Identif	fication	name o	f the dev	ice wit	hin a network.
				t printed see para		up report and it is modifiable only during setup pro-6.2).
DHCP CLIENT	Settin	g of the	DHCP	protocol		
	Disab Enabl	led <sup>D</sup> = ed =	•	ocol disa ocol enal		
	Press	Press FORM FEED key to modify the value of highlighted digit.  Pressing LINE FEED key to move cursor on next digit (if cursor is on the latest digit, proceed to next parameter by pressing LINE FEED key).				
IP ADDRESS	IP add	IP address of the device.				
	Press	Press FORM FEED key to modify the value of highlighted digit.  Pressing LINE FEED key to move cursor on next digit (if cursor is on the latest digit, proceed to next parameter by pressing LINE FEED key).				
SUBNET MASK	This p	This parameter identifies the local network address.				
	Press	Press FORM FEED key to modify the value of highlighted digit.  Pressing LINE FEED key to move cursor on next digit (if cursor is on the latest digit, proceed to next parameter by pressing LINE FEED key).				
DEFAULT GATEWAY	This parameter identifies the gateway IP address used to send applications to the external network.					
	Press FORM FEED key to modify the value of highlighted digit.  Pressing LINE FEED key to move cursor on next digit (if cursor is on the latest digit, proceed to next parameter by pressing LINE FEED key).					
PRIMARY DNS SERVER	This parameter identifies the Domain Name System (DNS).					
	This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).					
SECONDARY DNS SERVER	This parameter identifies the Domain Name System (DNS).					
	This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).					
TCP PRINTER PORT	This p	aramete	er sets th	ne TCP p	ort nun	nber.
		This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).				





MAC ADDRESS	This is the number, provided by the constructor, that identifies the device; this number is univocal.  This parameter is not modifiable by setup.		
RFID BAUD RATE	Communication speed of the RFID module:  1200 9600 57600 2400 19200 115200 D 4800 38400		





# 6.7 Operation parameters

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

The parameters marked with the symbol <sup>D</sup> are the default values.

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

PRINTER EMULATION	Available	emulations	for the device:			
	CUSTOM SVELTA	CUSTOM/POS D SVELTA				
PRINT MODE	Printing m	iode:				
			rinting in norm rinting rotated	•	•	
AUTOFEED	Setting of	the Carriag	e Return char	acter:		
			age Return dis age Return en			
CHARS / INCH	Font selec	ction:				
	A = 15 cpi	A = 11 cpi, B = 15 cpi A = 15 cpi, B = 20 cpi <sup>D</sup> A = 20 cpi, B = 25 cpi				
	CPI = Cha	CPI = Characters Per Inch				
FONT TYPE	Setting of	Setting of the font type:				
	Chinese C	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				
PRINT WIDTH	Width of p	Width of printing area:				
	38 mm 40 mm 42 mm 44 mm	46 mm 48 mm 50 mm 52 mm	54 mm 56 mm 58 mm 60 mm	62 mm 64 mm 66 mm 68 mm	70 mm 72 mm 74 mm 76 mm	78 mm 80 mm <sup>D</sup>
SPEED / QUALITY	Setting of	printing spe	ed and printin	ng quality:		
	High Quality Normal High Speed <sup>D</sup>					
PAPER THRESHOLD	Threshold sensor:	Threshold value (in percent) for the recognition of paper presence by the paper presence sensor:				
	30% 40% <sup>D</sup> 50%	60% 70% 80%	90%			





PAPER END MANAGEMENT	Management of the paper end sensors of dual feeder:		
	Print All D = when the paper end sensor of a feed line of the dual feeder detects the paper end, it is not possible to change the feed line until all tickets remaining in that feed line are printed (so that the paper sensors of the printer will have detected the end of paper)		
	Eject = when the paper end sensor of a feed line of the dual feeder detects the paper end, the device automatically ejects the paper remaining on that feed line and prints diagonal voiding lines on the remaining tickets		
	Retract = when the paper end sensor of a feed line of the dual feeder detects the paper end, the device performs a paper retracting up to the parking position		
	This parameter is valid only for KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4, KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4, TK862 DF 1, TK862 DF 2, TK862 DF 3.		
PAPEREND BUFFER CLEAR	Cleaning mode of data in receive buffer, if the printing is stopped due to lack of paper:		
CLEAR	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.		
PRINTHEAD TEST POWERON	Setting of the performing of the print head test:		
	Disabled D = the test is performed only during the printing of the setup report  Enabled = the test is performed at each power on		
PRINT DENSITY	Adjusting the printing density:		
	-25% 0 <sup>D</sup> +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.		
EJECTOR SPEED	Adjusting the ejector speed:		
	100% 75% <sup>D</sup> 50% +25%		
CUTTER	Enable or disable the autocutter at the hardware level:		
	Disabled = autocutter disabled Enabled D = autocutter enabled		
	For the device described in this document, keep this parameter set on "Enabled", as the default value.		





**EJECTER TYPE** Management of the ejector device:

after the printing end, the device cuts the ticket and holds it between the

ejector rollers in a "cut & hold" mode waiting for the user withdrawal

Ejecter D after the printing end, the device cut the ticket and eject it

This parameter is valid only for KPM862 2, KPM862 DF 2, TK862 DF 2.

SELECTOR OPTION

Selector management:

Not Present D = Selector not present Selector present Present =

BARCODE STOCK CONTROL Barcode search function:

Disabled D = the search is not performed Enabled = the search is performed

STOCK CONTROL TIMEOUT Search timeout value (expressed in milliseconds) for the barcodes selected in the "STOCK CONTROL BARCODE LIST" parameter:

> 700 1000 100 400 200 500 D 800 300 600 900

This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).

STOCK CONTROL **BARCODE LIST** 

List of barcodes to be read and checked during the stock control procedure.

This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).

VeriPrint TIMEOUT

Search timeout value (expressed in milliseconds) for the barcodes selected in the "VeriPrint BARCODE LIST" parameter:

100 700 1000 400 200 500 D 800 300 600 900

This parameter is valid only for KPM862 6, TK862 3 e TK862 DF 3.

This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).

VeriPrint BARCODE LIST

List of barcodes to be read during the VeriPrint® procedure.

This parameter is valid only for KPM862 6, TK862 3 e TK862 DF 3.

This parameter is not printed on setup report and it is modifiable only during setup procedure by file (see paragraph 6.3).





# 6.8 Alignment parameters

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

The parameters marked with the symbol <sup>D</sup> are the default values.

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

BLACKMARK POS. F1	Position of the black mark align	nment and choice of appropriate black mark sensor:				
	Bottom D = the black mark	c alignment is not performed consistion is detected by the lower sensor (reflection) consistion is detected by both the sensors (transparence)				
BLACKMARK POS. F2	Position of the black mark align	nment and choice of appropriate black mark sensor:				
	Bottom D = the black mark	c alignment is not performed consistion is detected by the lower sensor (reflection) consistion is detected by both the sensors (transparence)				
	This parameter is valid only for KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4, KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4, TK862 DF 1, TK862 DF 2, TK862 DF 3.					
BLACKMARK	for detecting the black mark, the ment black mark and the correct barcode search. For more information on alignm	For more information on alignment see chapter 7. This parameter is not printed on setup report and it is modifiable only during setup pro-				
	BLACK PERCENT (%)	Percentage of black points within the alignment black mark area necessary for it to be retained:				
		from 0 to 100				
	RIGHT MARGIN (1/10 mm)	Distance between the right edge of the ticket and the right edge of the alignment black mark:				
		from 0 to 853				
	HEIGHT (1/10 mm)	Alignment black mark height:				
		from 0 to 200				
	WIDTH (1/10 mm)	Alignment black mark width:				
		from 0 to 853				
	CUT DISTANCE (1/10 mm)	Distance between alignment black mark edge and the alignment point:				
		from -998 to +998				





STOCK CONTROL CUT DISTANCE (1/10 mm)	Distance between stock control barcode height and alignment point:
	from 270 to 5998
STOCK CONTROL HEIGHT (1/10 mm)	Stock control barcode height:
	from 50 to 439
THRESHOLD B/W	Value of the conversion threshold from grayscale to B/W of the scanned image:
	from 0 to 255







## 7 ALIGNMENT

Device is provided with a CIS sensor for the use of alignment black mark in order to handle:

- roll of tickets with pre-printed fields and a fixed length;
- · fan-fold module of tickets with pre-printed fields and a fixed length.

The alignment black mark may be formed by (see paragraph 9.10):

- black mark printed on paper;
- · hole between two tickets;

A CIS (Contact Image Sensor) sensor consists of a linear array of RGB LEDs (red, green and blue) that turn on and off in rapid sequence illuminating the original image to be scanned and of a row of CIS sensors for record the changes in reflecting brightness, without using mirrors and lenses.

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.

To use tickets with holes, it is possible to use the same sensors as "transparence" sensors. The presence of the hole is detected as if it were a black mark printed on the paper.

To guarantee the alignment, it is necessary to correctly choose how to use the CIS sensor to use for the notch/b.mark detection depending on the type of paper.

To do this, you must enable the parameter "Notch/B.Mark Pos. F1" during the setup procedure (see chapter 6) and set the correct value of this parameter as described in the following table:

VALUE OF THE "NOTCH/B.MARK POS. F1" PARAMETER	BLACK MARK TYPE
Disabled	Alignment disabled
Bottom	Black mark printed on the non-thermal side of paper
Transparent	Hole between tickets

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



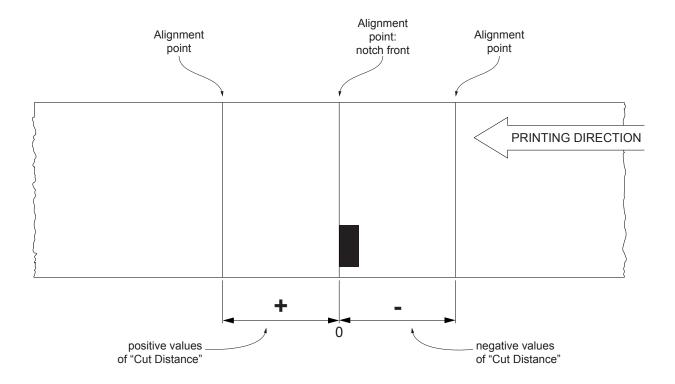


## 7.1 Alignment parameters

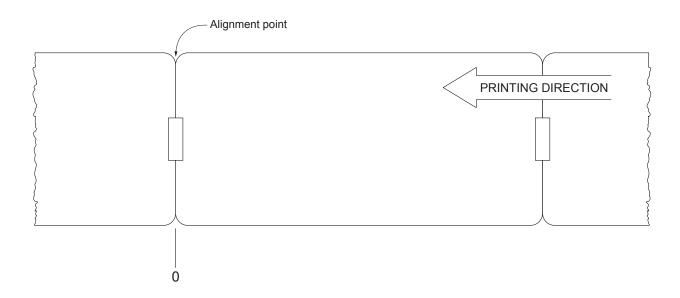
The "alignment point" is defined as the position inside the ticket to use for the notch/b.mark alignment. The distance between the notch/b.mark edge and the alignment point is defined as "Cut Distance".

The value of "Cut Distance" varies from a minimum value of -99.8 mm to a maximum value of 99.8 mm.

If the "Cut Distance" value is set to 0, the alignment point is set at the beginning of the notch/b.mark:

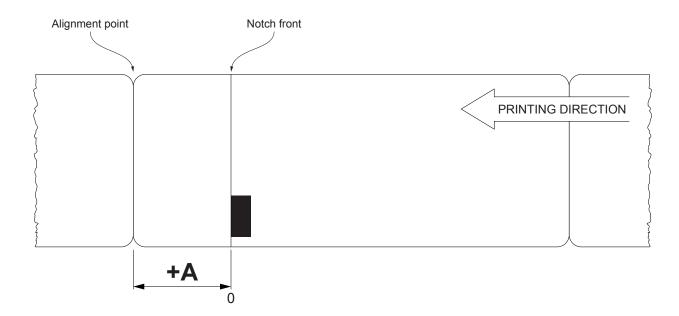


For paper with holes, if the "Cut Distance" value is set to 0, the alignment point is set at the center line of the hole:

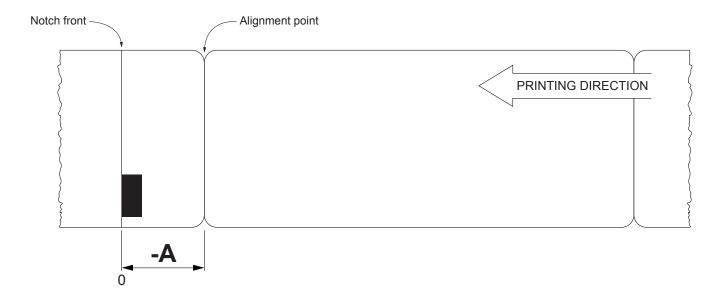




The following figure shows an example of paper with alignment point set by a positive value of "Cut Distance" ("Cut Distance" = + A):



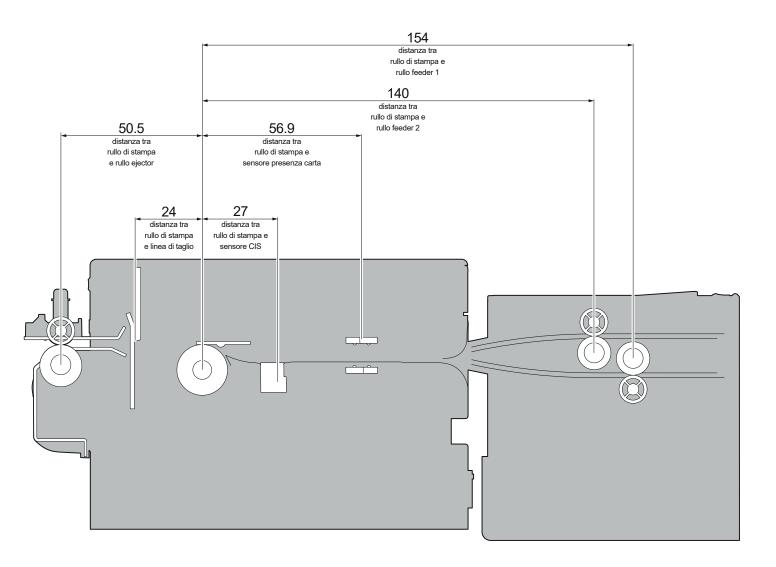
To set a negative value of the "Cut Distance" parameter is useful in cases where the alignment point refers to the notch/b.mark on the previous ticket or where the desired cutting line is placed in the middle of the alignment notch/b.mark. In the following images, the value of "Cut Distance" parameter is set to -A.







The following figure shows a simplified section of the device with the paper path and the distances (in millimetres) between the alignment sensors, the printing head and the autocutter (cutting line).



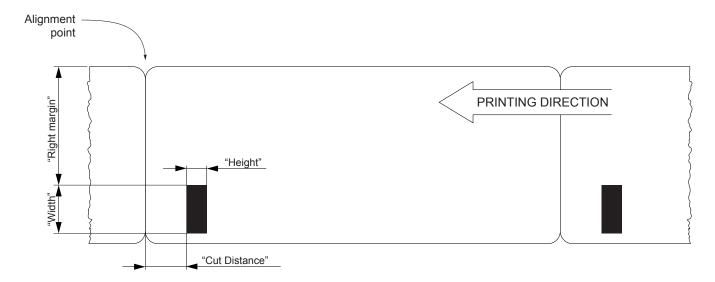


#### **CUSTOM/POS emulation**

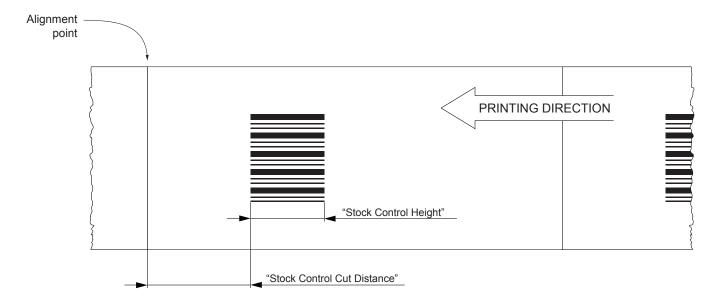
To define the alignment point you need to set the values that compose the setup parameter "Blackmark". The "Blackmark" parameter can be modified as described in paragraph 6.8.

The following figures shows some of the values of the "Blackmark" parameter to be modified to define the alignment point:

- "Right Margin"
- "Height"
- "Width"
- · "Cut Distance"



- "Stock Control Cut Distance"
- "Stock Control Height"







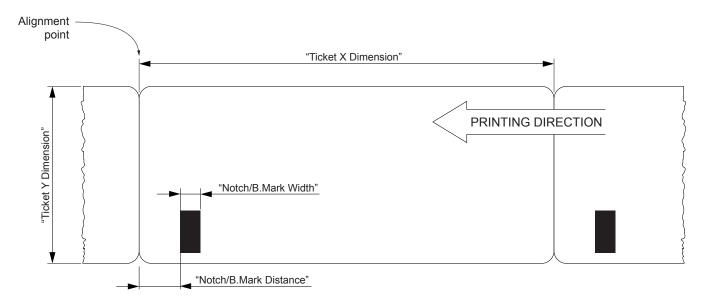
#### **SVELTA** emulation

The ticket features and the alignment parameters, may be modified as follows:

- by using the parameters of the <LHT> command (for more details, refer to the commands manual)
- by modifying the Setup.ini file (see paragraph 6.3)
- by driver

The following figure shows some of the parameters for alignment of the Setup.ini file:

- "Ticket X Dimension"
- "Ticket Y Dimension"
- "Notch Width"
- "Notch Distance"





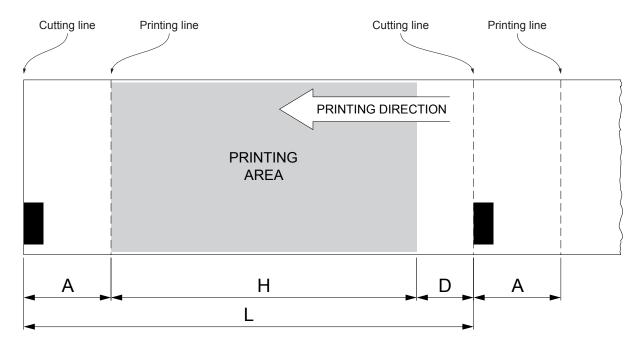


### 7.2 Printing area

In order to print ticket containing only one notch or black mark and to not overlay printing to a notch or black mark (that will make it useless for the next alignment), it is important to well calibrate:

- the length of the printing area of ticket according to the inter-black mark distance;
- the value for the paper recovery after a cut.

The following figure shows an example of tickets with "Cut Distance" set to 0:



A "Non-printable area" generated from:

"Distance between autocutter/printing head"- "Value for the paper recovery after a cut"

In CUSTOM/POS emulation, after a performed cut, the paper is not completely recovered (in order to avoid jamming when using of thin paper). Otherwise, in this emulation you can use the command 0x1C 0xC1 to modify the "Value for the paper recovery after a cut" (see commands manual).

The SVELTA emulation, instead, it is designed specifically for ticketing and then for using with heavy paper, which avoids the risk of paper jams. After performing a cut, the device completely recovers the paper

- H Distance between the first and the last print line, called "Hieght of the printing area".
- L Distance between an edge of the black mark and the next one, called "Inter-black mark distance".
- D Automatic feed for alignment at the next black mark.

To use all the black marks on paper, 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.



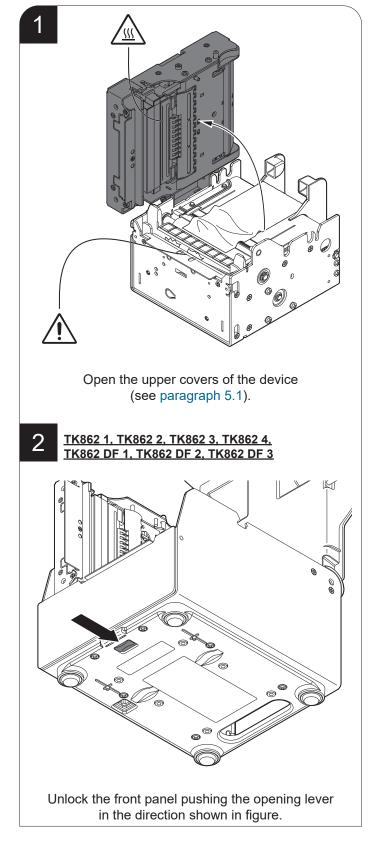


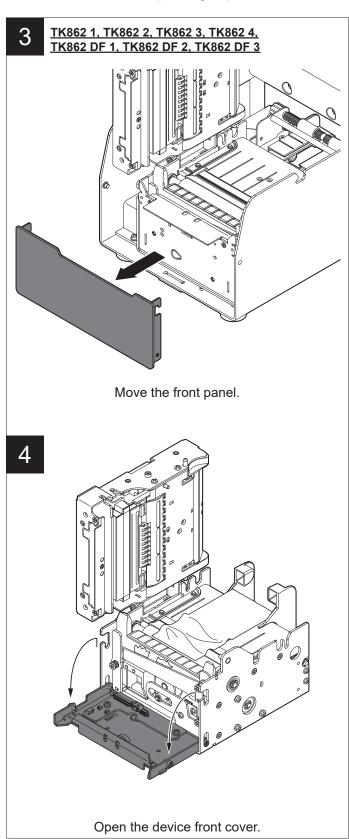


# 8 MAINTENANCE

## 8.1 Device paper jam

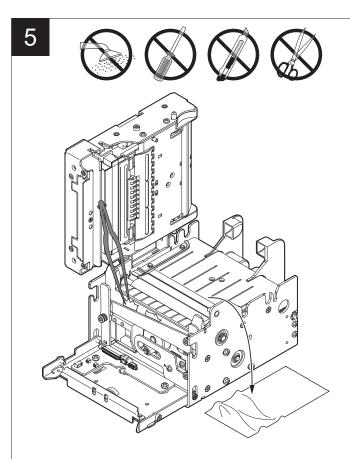
For ease of reference, for some models is represented only the standard model of internal printer group without dual feeder.



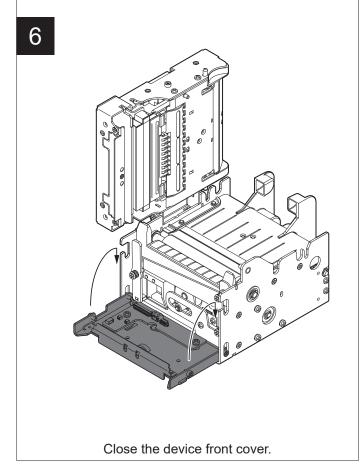


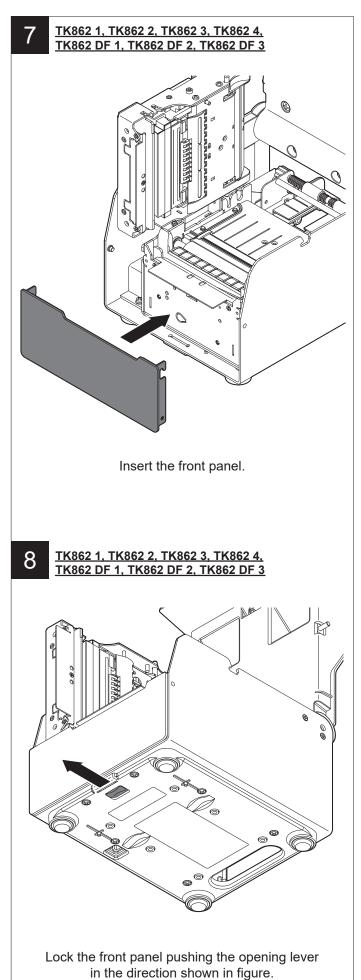




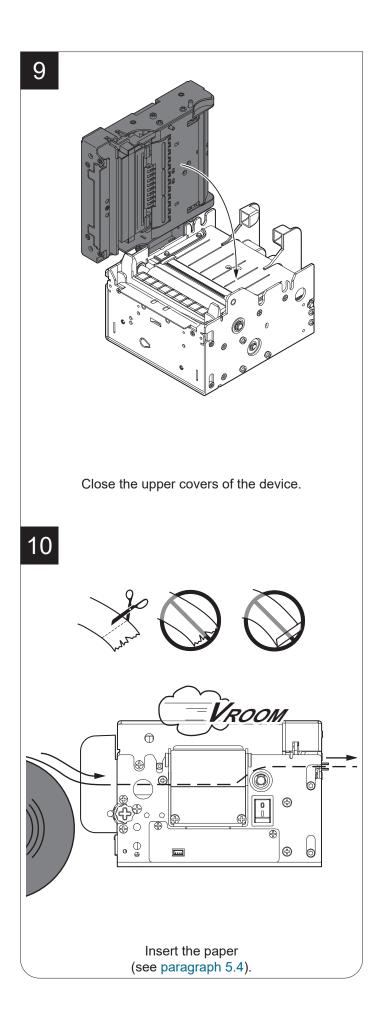


Remove the damaged paper and check the presence for paper scraps inside the device. Carefully remove all paper scraps. If necessary use tweezers.











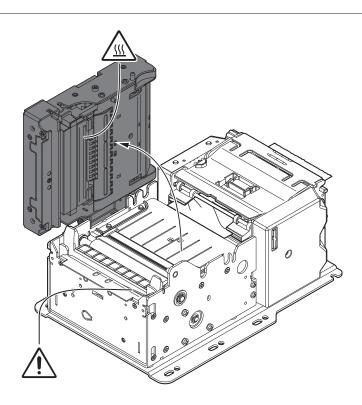


## 8.2 Dual feeder paper jam

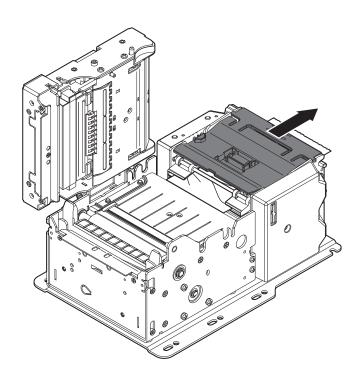
For ease of reference, for some models is represented only the internal printer group.

KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 DF 1, TK862 DF 2, TK862 DF 3 KPM863 DF 1, KPM863 DF 2, KPM863 DF 4, KPM863 DF 3

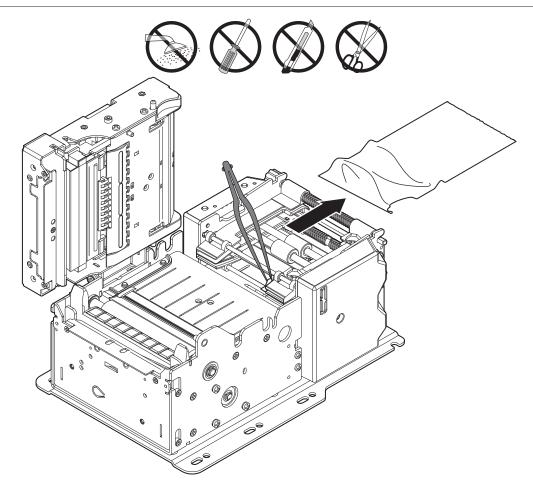
1



Open the upper covers of the device (see paragraph 5.1).

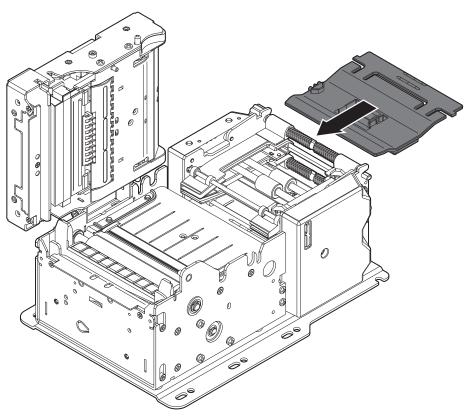


Lift up and pull the dual feeder upper cover.



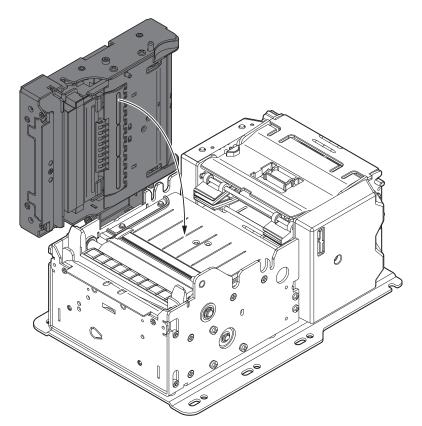
Remove the damaged paper and check the presence for paper scraps inside the device. Carefully remove all paper scraps. If necessary use tweezers.



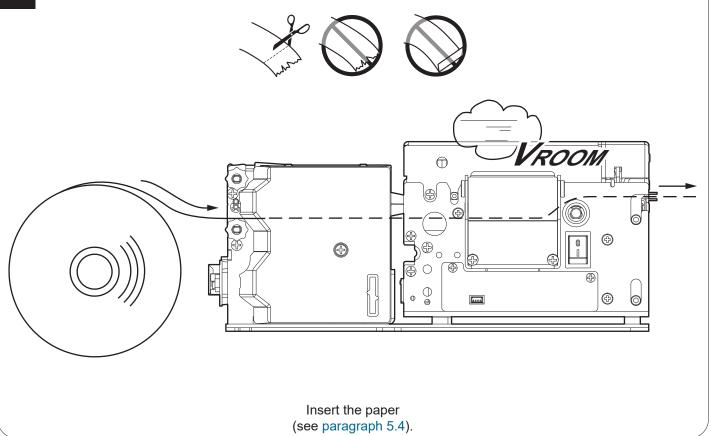


Insert the dual feeder upper cover.





Close the device upper covers.







## 8.3 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 8.4.

EVERY PAPER CHANGE	
Printhead	Use isopropyl alcohol
Platen roller	Use isopropyl alcohol
CIS reader	Use a soft cloth
EVERY 5 PAPER CHANGES	
Autocutter	Use compressed air
Paper path	Use compressed air or tweezers
Sensors	Use compressed air
Dual feeder (1)	Use compressed air
EVERY 6 MONTHS OR AS NEEDED	
Case	Use compressed air or a soft cloth
Display (2)	Use compressed air or a soft cloth Do not use ammonia-based products

#### **NOTES**

(1): Only for KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4, TK862 DF 1, TK862 DF 2, TK862 DF 3, KPM863 DF 1, KPM863 DF 2, KPM863 DF 3 and KPM863 DF 4.

(2): Only for TK862 1, TK862 2, TK862 3, TK862 4, TK862 DF 1, TK862 DF 2 and TK862 DF 3.



# **(+)**

### 8.4 Cleaning

For periodic cleaning of the device, see instructions below.

For ease of reference, for some models is represented only the standard model of internal printer group without dual feeder.

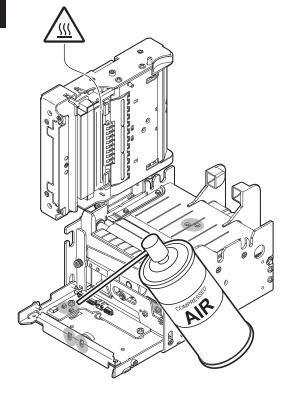
#### <u>Sensors</u>

1



Disconnect the power supply cable and open the device covers (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.





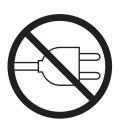




Clean all the device sensors by using compressed air.

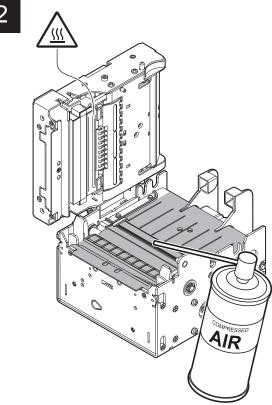
#### Paper path

1



Disconnect the power supply cable and open the upper 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.









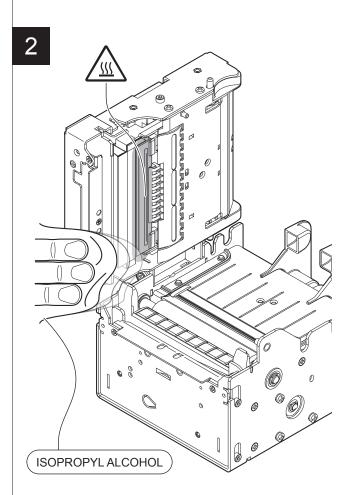
Clean the area involved in the passage of paper by using compressed air.



#### **Printhead**



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



#### 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.





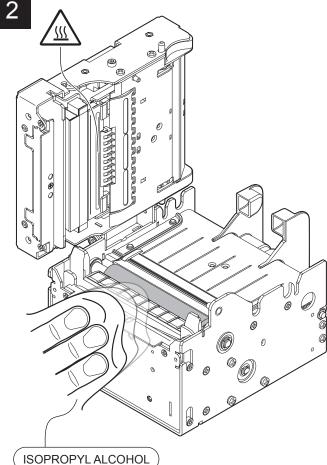


Clean the printing head by using a non-abrasive cloth moistened with isopropyl.

#### Platen roller



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



#### 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.





#### <u>Autocutter</u>

1



Disconnect the power supply cable and open the device covers (see paragraph 8.1).

2 COMPRESSED AIR

#### 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.









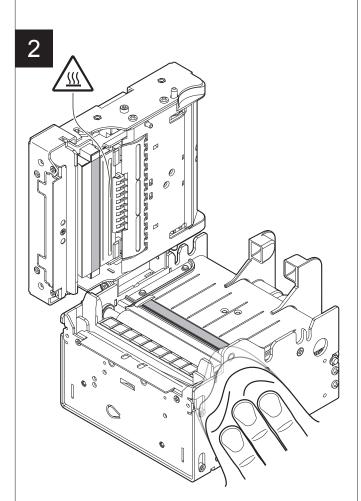
Clean the autocutter by using compressed air.

#### **CIS** reader

1



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



#### ATTENTION:

Do not use alcohol, solvents, or hard brushes.

Do not let water or other liquids get inside the machine.









Clean the windows for barcode reading by using a soft cloth.





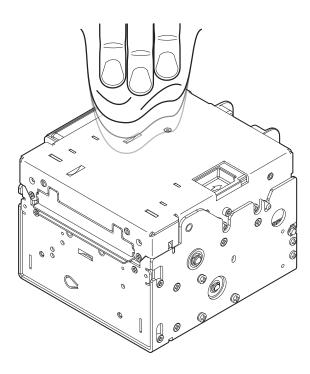
#### <u>Case</u>

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.

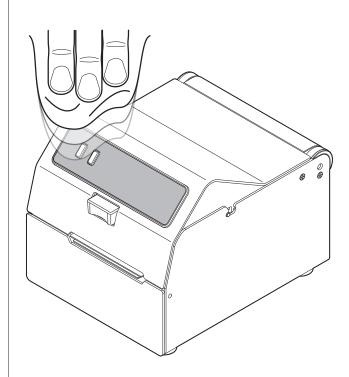
#### **Display**

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. Do not use ammonia-baesd products.









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

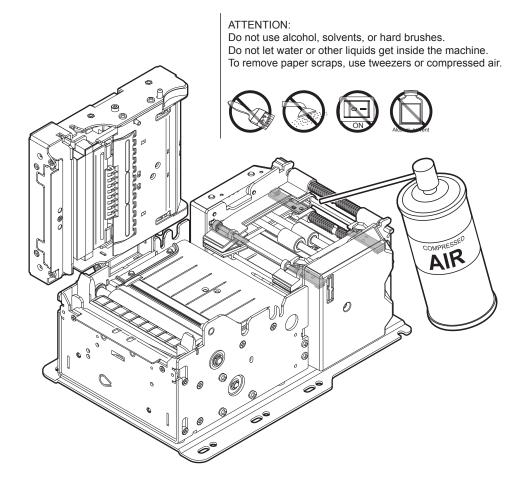


1



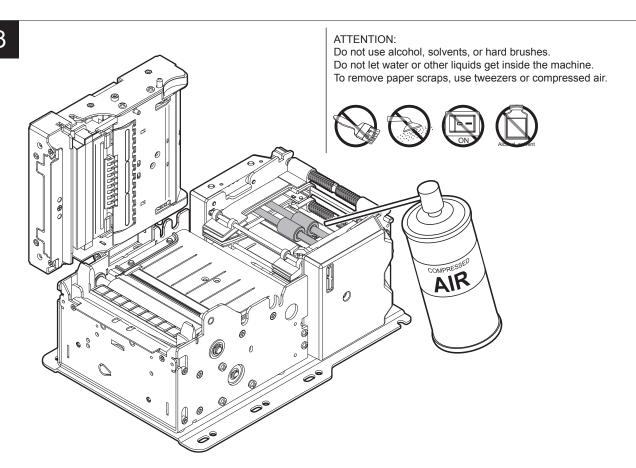
Disconnect the power supply cable and open the upper cover of the device and dual feeder (see paragraph 8.2).

2

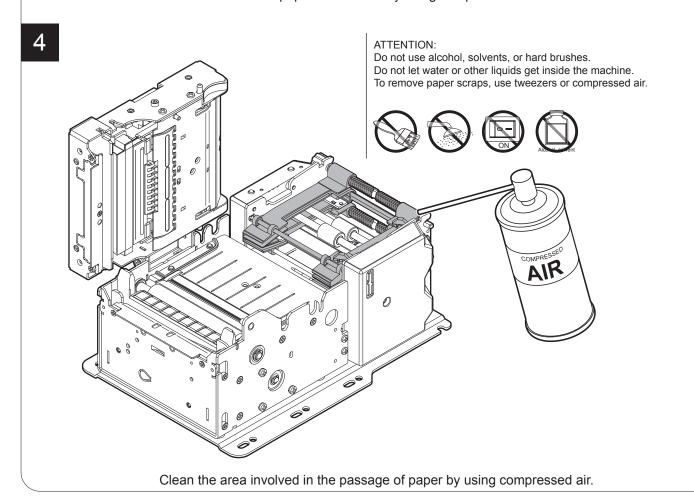


Clean all the sensors by using compressed air.





Clean the paper feed rollers by using compressed air.





# •

### 8.5 Firmware upgrade

Firmware upgrade can be performed by using the "PrinterSet" software tool available on <a href="https://www.custom4u.it">www.custom4u.it</a>. To upgrade firmware, proceed as follows:

1



Login to the website <a href="www.custom4u.it">www.custom4u.it</a>, 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 4.3), without using HUB devices.

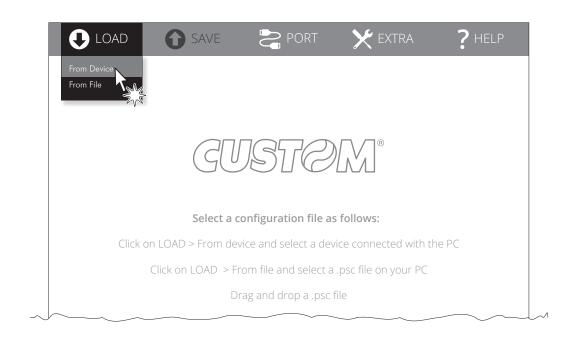
3



Start the "PrinterSet" software tool.

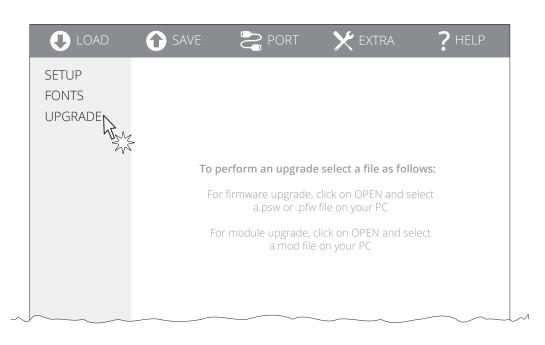


4



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, input paper presence, output paper presence, CIS reader, front and upper cover open, external low paper, tilting slide position (only for models with selector), dual feeder paper input (only for models with dual feeder)
Emulations	CUSTOM/POS, SVELTA
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) Self-installing driver for Virtual COM (32/64 bit) Linux (32/64 bit) Android
INTERFACES	
USB port	12 Mbit/s
RS232 serial port	from 9600 bps to 115200 bps
Ethernet port	10 Mbit/s, 100 Mbit/s
MEMORIES	
Flash memory	internal 2 MB + external 8 MB
RAM memory	internal 640 kB + external 8 MB





PRINTER	
Resolution	
KPM862 1	
KPM862 2	
KPM862 3	
KPM862 4 KPM862 5	
KPM862 6	
KPM862 DF 1	
KPM862 DF 2	
KPM862 DF 3	203 dpi (8 dot/mm)
KPM862 DF 4	
TK862 1 TK862 2	
TK862 3	
TK862 4	
TK862 DF 1	
TK862 DF 2	
TK862 DF 3	
KPM863 1	
KPM863 2	
KPM863 3 KPM863 4	
KPM863 DF 1	304 dpi (12 dot/mm)
KPM863 DF 2	
KPM863 DF 3	
KPM863 DF 4	
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 method	Normal, 90°, 180°, 270°
Printing format	Height/Width from 1 to 8, bold, reverse, underlined, italic
Character font	
CUSTOM/POS emulation	54 character code tables (see paragraph 9.11), extended chinese GB18030-2000, korean PC949
SVELTA emulation	18 internal fonts (see paragraph 9.12)





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, Aztec, Aztec Rune, Data Matrix, PDF417, QRCode, Micro QRCode
Readable barcodes (3)	Codabar, Code 39, Code 93, Code 128, EAN-8, EAN-13, DataBar Omnidirectional, DataBar Stacked, DataBar Limited, DataBar Expanded, DataBar Expanded Stacked, ITF, UPC-A, UPC-E, Aztec, CC-A, CC-B, CC-C, Data Matrix, Go Gode II, Han Xin Barcode, Maxi Code, PDF417, Micro PDF417, QRCode, Micro QRCode, Micro QRCode Extended
Printing speed (1)(4)	High Quality = 148 mm/s Normal = 200 mm/s High Speed = 220 mm/s
PAPER	
Type of paper	Thermal rolls, heat-sensitive side on outside of roll, Thermal Fan-fold module, Thermal paper in ISO 7810 ID-1 format (both longitudinally and transversely)
Paper width	from 40 mm to 86 mm
Paper weight	
KPM862 1 KPM862 2 KPM862 3 KPM862 4 KPM862 5 KPM862 6 KPM863 1 KPM863 2 KPM863 3 KPM863 3 KPM863 4 TK862 1 TK862 2 TK862 3 TK862 4	from 70 g/m² to 255 g/m²
KPM862 DF 1 KPM862 DF 2 KPM862 DF 3 KPM862 DF 4 KPM863 DF 1 KPM863 DF 2 KPM863 DF 3 KPM863 DF 4 TK862 DF 1 TK862 DF 1 TK862 DF 2 TK862 DF 3	from 100 g/m² to 250 g/m²





Paper thickness	max 280 μm
Minimum ticket length	
KPM862 1	
KPM862 3	
KPM862 4	
KPM862 5	
KPM862 6	
KPM862 DF 1	
KPM862 DF 3	
KPM862 DF 4	
KPM863 1	F0
KPM863 3	50 mm
KPM863 4	
KPM863 DF 1	
KPM863 DF 3	
KPM863 DF 4	
TK862 1	
TK862 3	
TK862 4	
TK862 DF 1	
KPM862 2	
KPM862 DF 2	
KPM863 2	
KPM863 DF 2	30 mm
TK862 2	
TK862 DF 2	
TK862 DF 3	
KPM862 3	
KPM862 4	
KPM862 DF 3	
KPM862 DF 4	70 mm <sup>(5)</sup>
KPM863 3	130 mm <sup>(6)</sup>
KPM863 4	
KPM863 DF 3 KPM863 DF 4	
KI WOOD DI 4	
External roll diameter (7)	
KPM862 DF 1	
KPM862 DF 2	
KPM862 DF 3	
KPM862 DF 4	
KPM863 DF 1	
KPM863 DF 2	max. 150 mm
KPM863 DF 3	
KPM863 DF 4	
1K862 DF 3	
KPM862 DF 1 KPM862 DF 2 KPM862 DF 3 KPM862 DF 4 KPM863 DF 1 KPM863 DF 2 KPM863 DF 3	max. 150 mi



Estimated life (1)  TRANSPONDER SPECIFICATIONS HF RFID CU  Supported transponders (HF high frequency RFID - 13.5 MHz)  Supported SAM modules  DEVICES ELECTRICAL SPECIFICATIONS	1500000 cuts (with paper thickness 260 μm, ambient temperature)  JSTOM (KPM862 5, TK862 4)  ISO 14443-A:  Mifare UltraLight, Mifare 1K/4K, Mifare UltraLight EV1,  Mifare UltraLight C, Mifare UltraLight C + SAM,  Mifare DESFire, Mifare Plus, NTAG 203 (NFC), NTAG 213 (NFC)  ISO 14443-B:  SRx / SRt / SRi, Calypso  ISO 15693:  iCode SLI, iCode Texas  Compatible with ISO/IEC 7816
TRANSPONDER SPECIFICATIONS HF RFID CU Supported transponders (HF high frequency RFID - 13.5 MHz)	JSTOM (KPM862 5, TK862 4)  ISO 14443-A: Mifare UltraLight, Mifare 1K/4K, Mifare UltraLight EV1, Mifare UltraLight C, Mifare UltraLight C + SAM, Mifare DESFire, Mifare Plus, NTAG 203 (NFC), NTAG 213 (NFC)  ISO 14443-B: SRx / SRt / SRi, Calypso  ISO 15693: iCode SLI, iCode Texas
TRANSPONDER SPECIFICATIONS HF RFID CU	JSTOM (KPM862 5, TK862 4)  ISO 14443-A: Mifare UltraLight, Mifare 1K/4K, Mifare UltraLight EV1, Mifare UltraLight C, Mifare UltraLight C + SAM, Mifare DESFire, Mifare Plus, NTAG 203 (NFC), NTAG 213 (NFC)  ISO 14443-B: SRx / SRt / SRi, Calypso ISO 15693:
Estimated life (1)	1500000 cuts (with paper thickness 260 μm, ambient temperature)
Paper cut	Total cut
AUTOCUTTER	
Core type	Cardboard or plastic
Paper end	Not attached to roll core
Core thickness	2 mm (+ 1 mm)
Internal roll core diameter	25 mm (+ 1 mm)
KPM862 3 KPM862 4 KPM862 5 KPM862 6 KPM863 1 KPM863 2 KPM863 3 KPM863 4 TK862 1 TK862 2 TK862 3 TK862 4	max. 300 mm





#### POWER SUPPLY ELECTRICAL SPECIFICATIONS code 963GE020000106

(optional for KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 DF 1, KPM862 DF 2, KPM862 3, KPM862 DF 4, KPM863 6, KPM863 1, KPM863 2, KPM863 3, KPM863 4, KPM863 DF 1, KPM863 DF 2, KPM863 DF 3 and KPM863 DF 4, included with TK862 1, TK862 2, TK862 4, TK862 DF 1, TK862 DF 2, TK862 3 and TK862 DF 3)

Power supply voltage	Auto Range, 90-264 Vac
Frequency	from 47 Hz to 63 Hz
Output	24 V, 4.17 A
Power	100 W
ENVIRONMENTAL CONDITIONS	
Operating temperature	
KPM862 1 KPM862 2 KPM862 3 KPM862 4 KPM862 5 KPM862 6 KPM862 DF 1 KPM862 DF 2 KPM862 DF 3 KPM862 DF 4 KPM863 1 KPM863 1 KPM863 1 KPM863 2 KPM863 3 KPM863 DF 1 KPM863 DF 1 KPM863 DF 2 KPM863 DF 2 KPM863 DF 3 KPM863 DF 3	from -20 °C to +60 °C <sup>(8)</sup>
TK862 1 TK862 2 TK862 3 TK862 4 TK862 DF 1 TK862 DF 2 TK862 DF 3	from 0 °C to +40 °C
Relative humidity (RH)	from 10% to 95% (w/o condensation)
Storage temperature	from -20 °C to +70 °C
0( (7)	

from 10% to 95% (w/o condensation)

Storage relative humidity (RH)



#### NOTES:

- (1): Respecting the regular schedule of cleaning for the device components.
- (2): Damages caused by scratches, ESD and electromigration are excluded.
- (3): Purchase the specific license. Contact technical assistance or your dealer.
- (4): Referred to a standard CUSTOM receipt (L = 10 cm, Density = 12.5% dots on).
- (5): With paper weight greater than 170 g/m<sup>2</sup> and internal roll core diameter 50 mm.
- (6): With paper weight greater than 170 g/m² and internal roll core diameter 25 mm.
- (7): For external rolls diameter higher to Ø150 mm it's recommended to use a paper pretensioning device.
- (8) : If you use the device with the power supply code 963GE020000106, supplied as an accessory, the operating temperature range is from 0  $^{\circ}$ C to +40  $^{\circ}$ C.





## 9.2 Character specifications

KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

Character set		3	
Character density	11 cpi	15 cpi	20 cpi
Number of columns	35	49	64
Chars / second	2566	3593	4693
Lines / second	73	73	73
Characters (L x H mm)-Normal	2.25 x 3	1.625 x 3	1.25 x 3

#### <u>KPM863 1, KPM863 2, KPM863 3, KPM863 4</u> <u>KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4</u>

Character set		3	
Character density	15 cpi	20 срі	25 cpi
Number of columns	50	64	80
Chars / second	5500	7040	8800
Lines / second	110	110	110
Characters (L x H mm)-Normal	1.6 x 2	1.25 x 2	1 x 2

NOTE: Theoretical values.

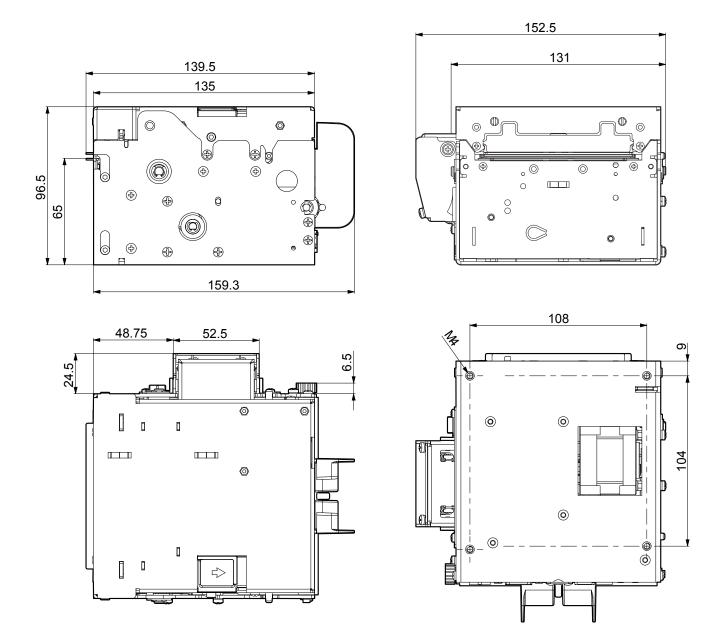




### 9.3 Device dimensions

#### <u>KPM862 1, KPM862 5, KPM862 6</u> <u>KPM863 1</u>

Length	163.8 mm
Height	96.5 mm
Width	152.5 mm
Weight	2150 g

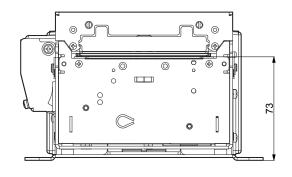


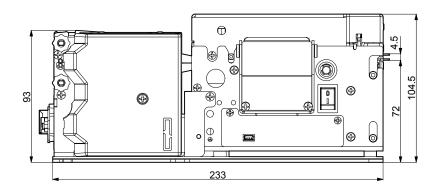


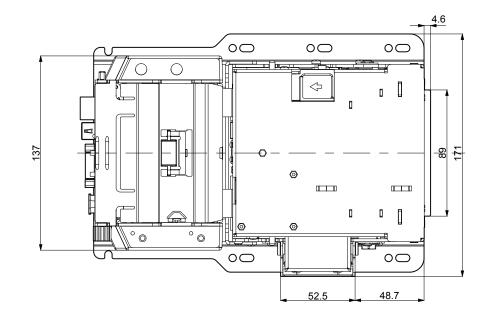


#### KPM862 DF 1 KPM863 DF 1

Length	237.6 mm
Height	104.5 mm
Width	171 mm
Weight	3400 g



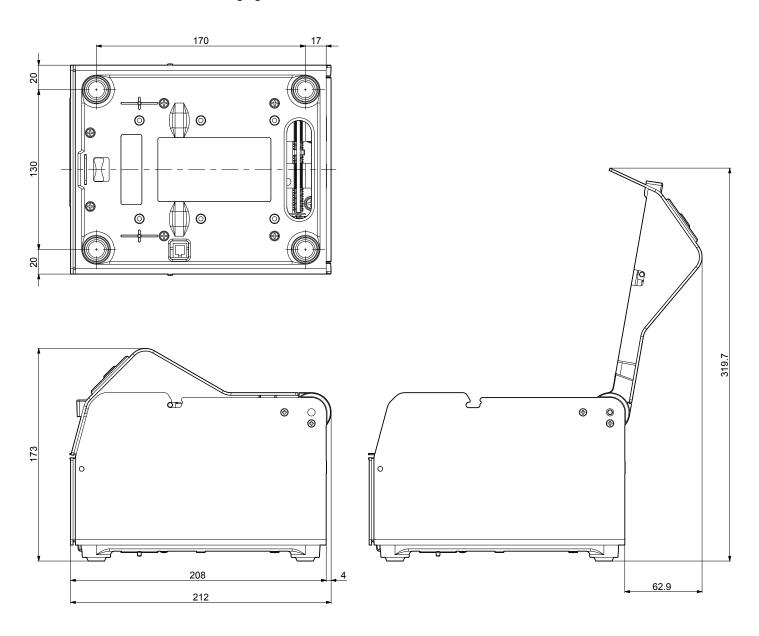






#### TK862 1, TK862 3, TK862 4

Length	212 mm (with cover closed) 274.9 mm (with cover open)
Height	173 mm (with cover closed) 319.7 mm (with cover open)
Width	170 mm
Weight	4850 g

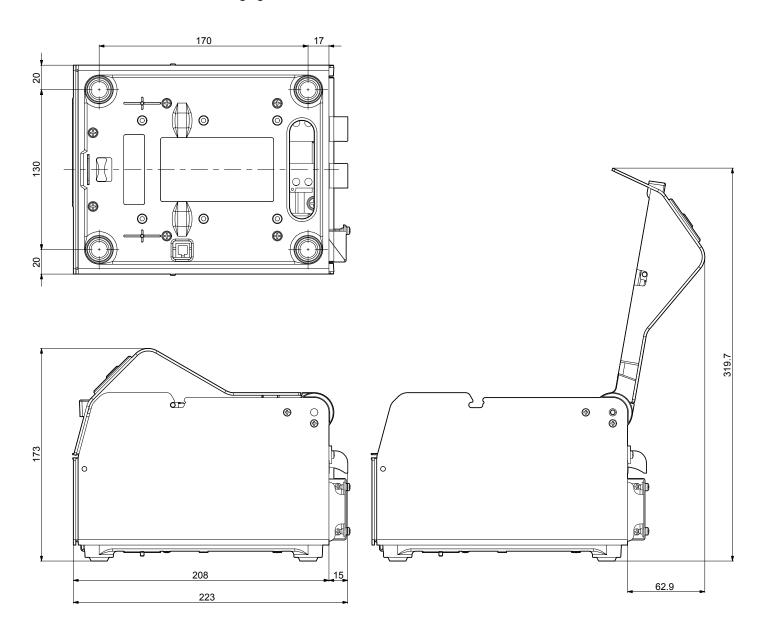






### TK862 2

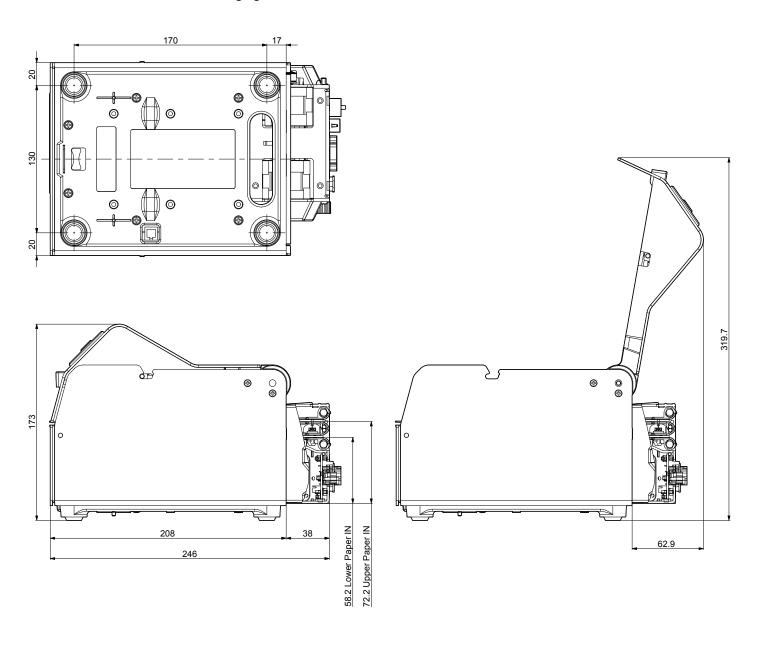
Length	223 mm (with cover closed) 274.9 mm (with cover open)
Height	173 mm (with cover closed) 319.7 mm (with cover open)
Width	170 mm
Weight	5000 g





#### TK862 DF 1, TK862 DF 3

Length	246 mm (with cover closed) 274.9 mm (with cover open)
Height	173 mm (with cover closed) 319.7 mm (with cover open)
Width	170 mm
Weight	6100 g



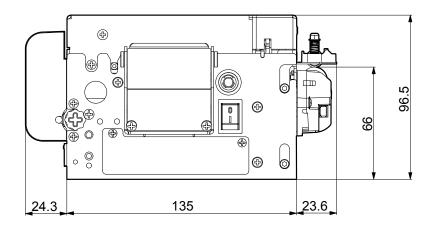


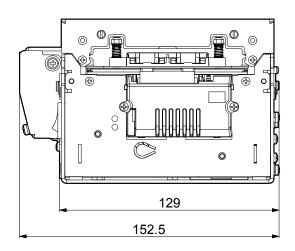


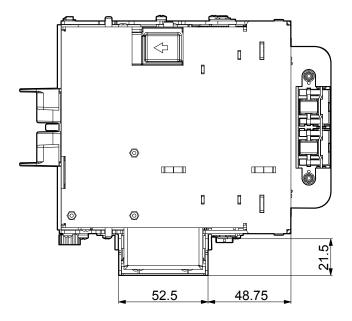
# 9.4 Device dimensions with ejector group code 976LK010000001 (optional)

#### KPM862 2 KPM863 2

Length	182.9 mm
Height	96.5 mm
Width	152.5 mm
Weight	2300 g



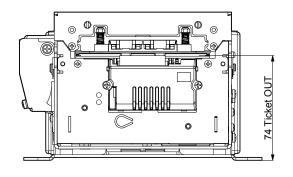


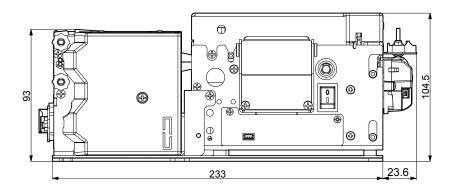


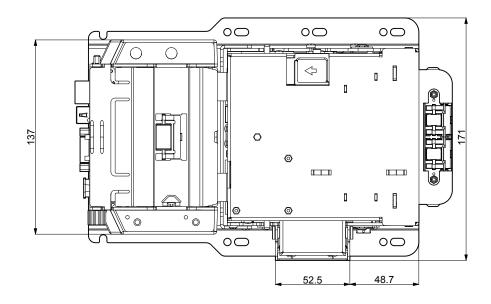


#### KPM862 DF 2 KPM863 DF 2

Length	256.6 mm
Height	104.5 mm
Width	171 mm
Weight	3550 g





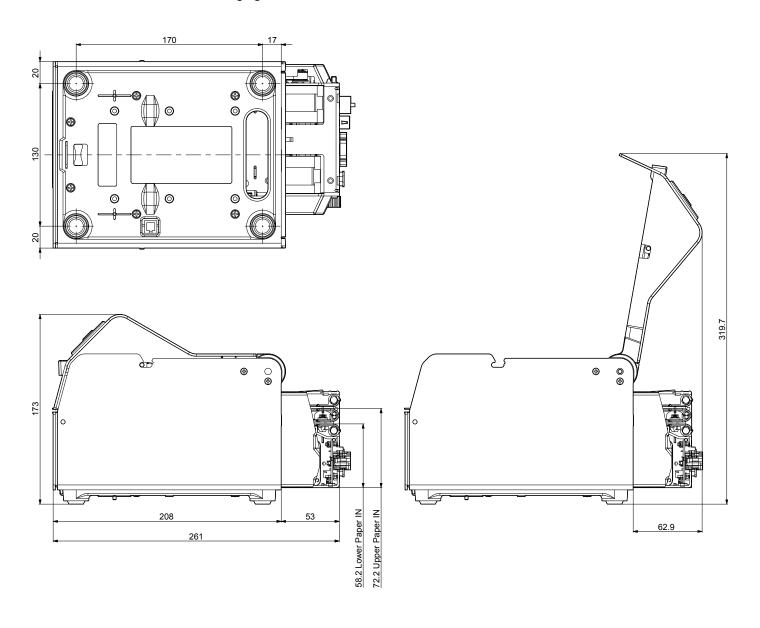






### TK862 DF 2

Length	261 mm (with cover closed) 274.9 mm (with cover open)
Height	173 mm (with cover closed) 319.7 mm (with cover open)
Width	170 mm
Weight	6250 g

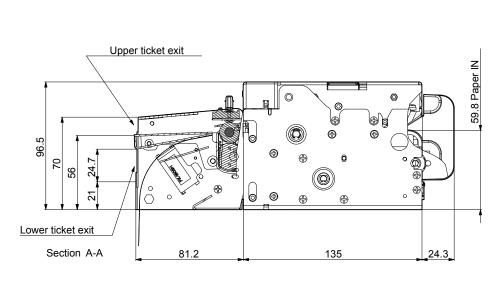


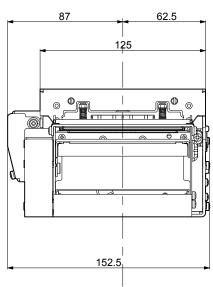


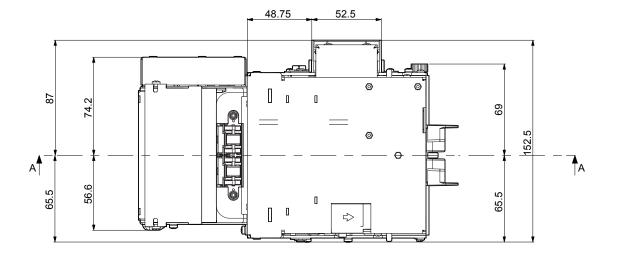
# 9.5 Device dimensions with selector group for horizontal fixing code 976LK010000002 (optional)

#### KPM862 4 KPM863 4

Length	240.5 mm
Height	96.5 mm
Width	152.5 mm
Weight	2750 g





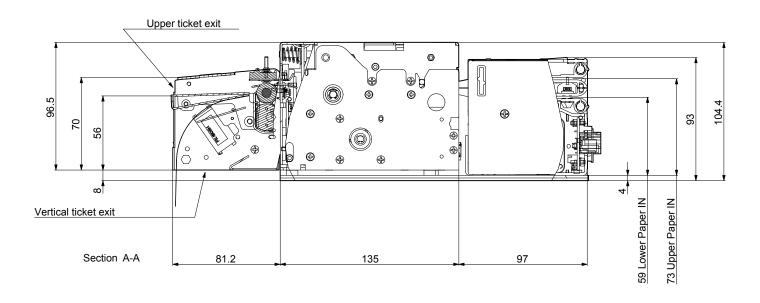


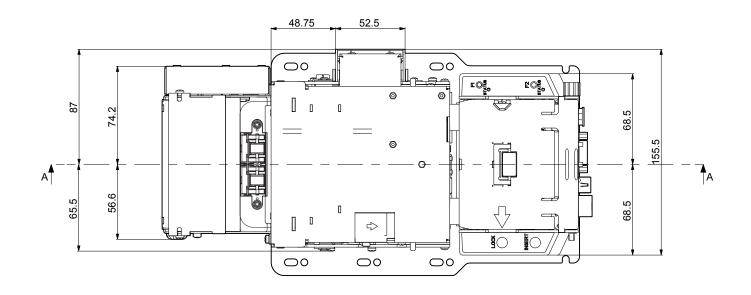




#### KPM862 DF 4 KPM863 DF 4

Length	313.2 mm
Height	104.4 mm
Width	155.5 mm
Weight	4000 g





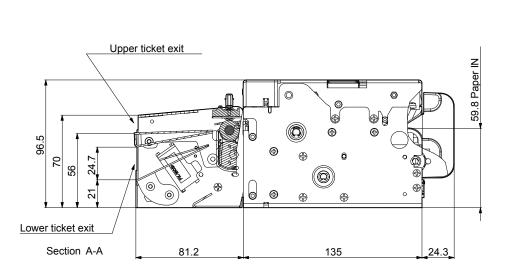


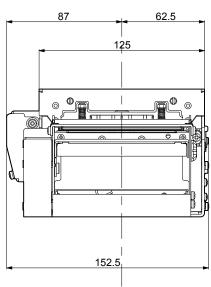


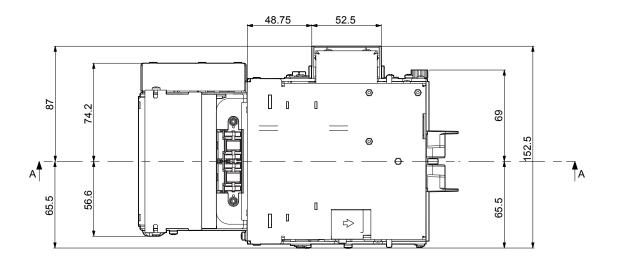
# 9.6 Device dimensions with selector group for vertical fixing code 976LK010000003 (optional)

#### KPM862 3 KPM863 3

Length	240.5 mm
Height	96.5 mm
Width	152.5 mm
Weight	2750 g





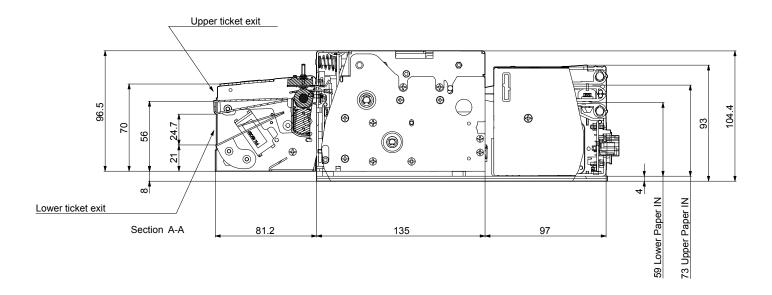


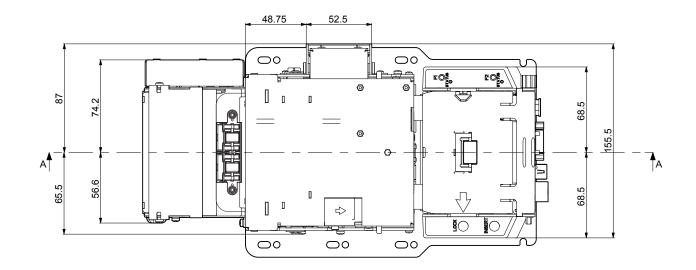




#### KPM862 DF 3 KPM863 DF 3

Length	313.2 mm
Height	104.4 mm
Width	155.5 mm
Weight	4000 g





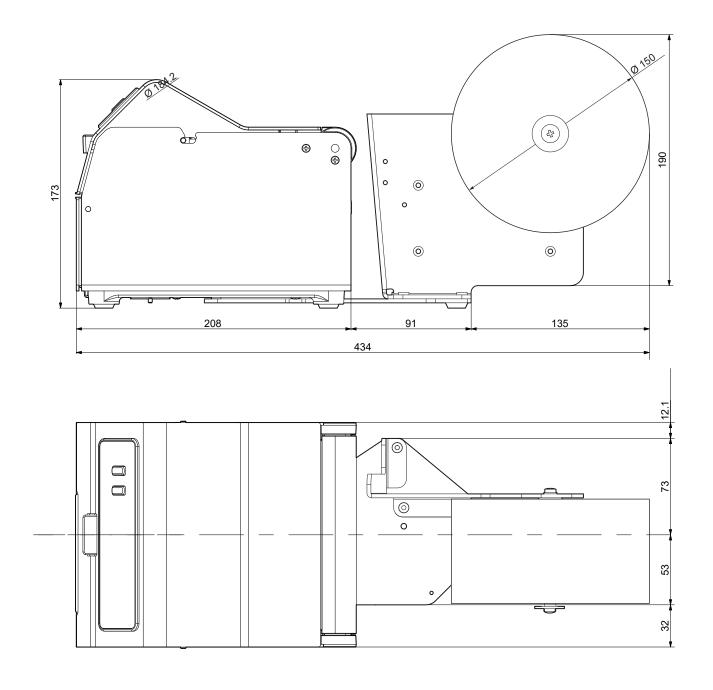




# 9.7 Device dimensions with paper roll holder code 974LU010000001 (optional)

#### TK862 1, TK862 3, TK862 4

Length	434.8 mm
Height	max. 207 mm
Width	194 mm
Supported paper rolls	Width from 54 mm to 82.5 mm, 25 mm inner core, 150 mm external diameter



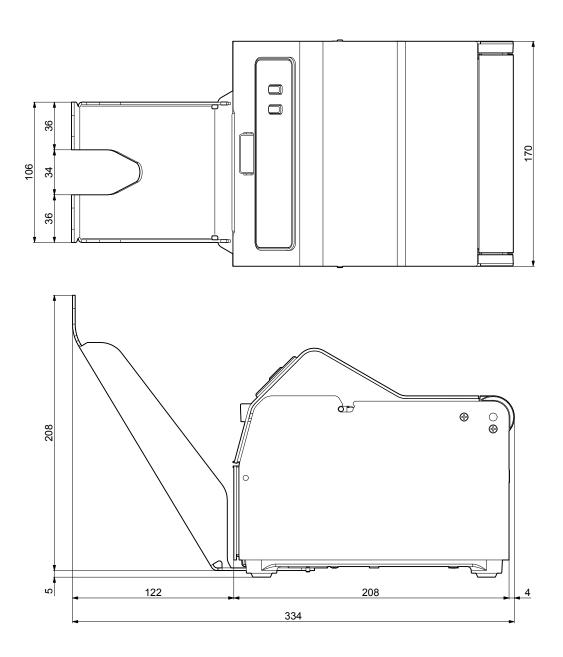




# 9.8 Device dimensions with vertical ticket tray code 974LU010000003 (optional)

#### TK862 1, TK862 3, TK862 4

Length	334 mm
Height	213 mm
Width	170 mm







# 9.9 Power supply and power cord dimensions

The following table shows the dimensions of the power supply, the power cord and the adapter for power supply optionals for the device.

POWER CORD code 26100000000311 and code 26100000000313 (optional)

Length 2000 mm

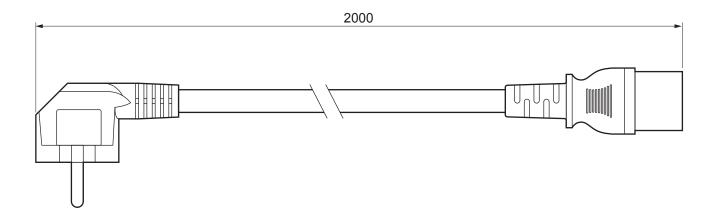
### POWER SUPPLY code 963GE020000106

(optional for KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6, KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4, KPM863 1, KPM863 2, KPM863 3, KPM863 4, KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4)

Length	146.2 mm
Height	39 mm
Width	75.2 mm

All the dimensions shown in following figures are in millimetres.

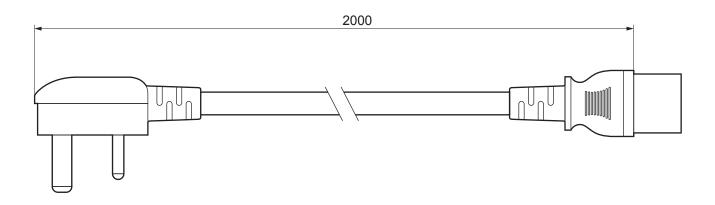
### POWER CORD code 2610000000311



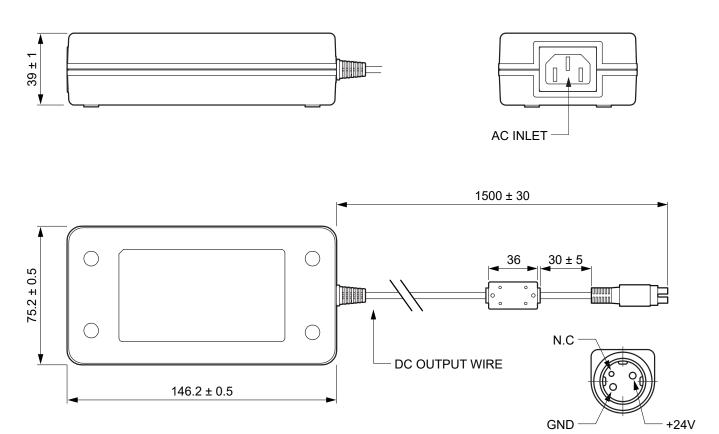




# POWER CORD code 26100000000313



# POWER SUPPLY code 963GE020000106





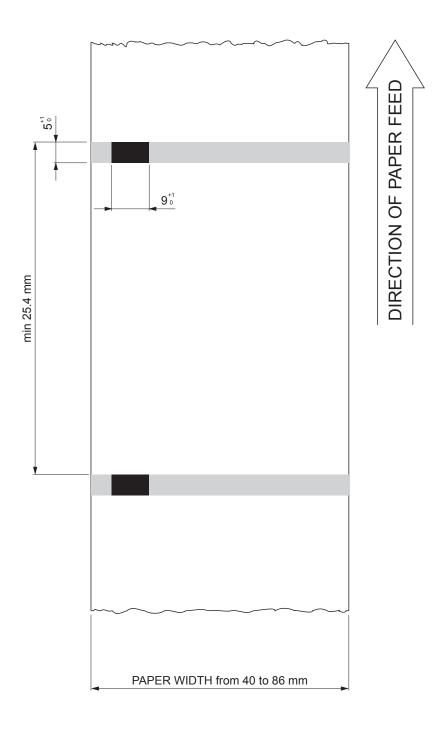
# 9.10 Paper specification

All the dimensions shown in following figures are in millimetres.

### Paper with black mark on the non-thermal side

The following image shows the placement of the black mark on the non-thermal side of the paper. The black mark can be placed anywhere on the whole width of the paper.

For more information about the use of paper with black mark see chapter 7.



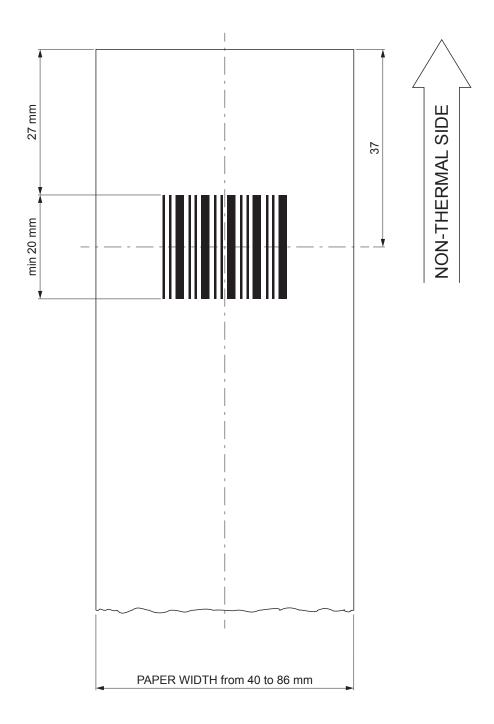




# Paper with barcode

The following image shows the placement of the barcode on the ticket. The barcode must be printed on the non-thermal side of the paper and at 27 mm from the edge of the ticket to ensure the correct barcode reading when ticket alignment is performed.

For more information about the use of paper with barcode see chapter 7.



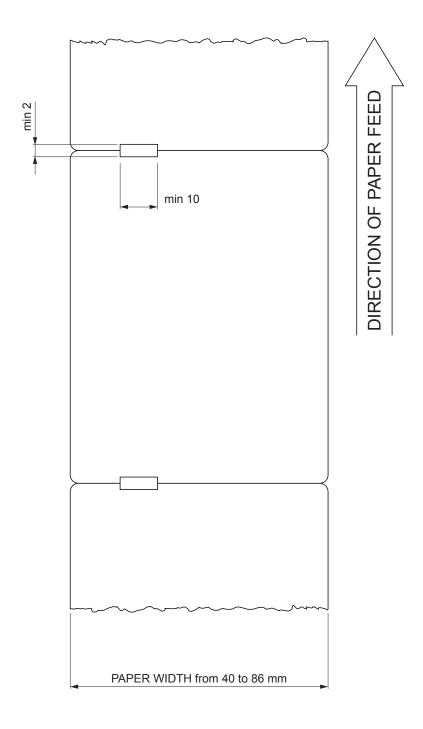




# Fan-fold paper with hole

The following image shows the placement of the hole on the paper. The hole can be positioned across the width of the ticket. To manage tickets with hole, set the parameters "Blackmark Pos. F1" and "Blackmark Pos. F2" (for models with dual feeder) to "Transparent".

For more information about the use of paper with hole see user manual.







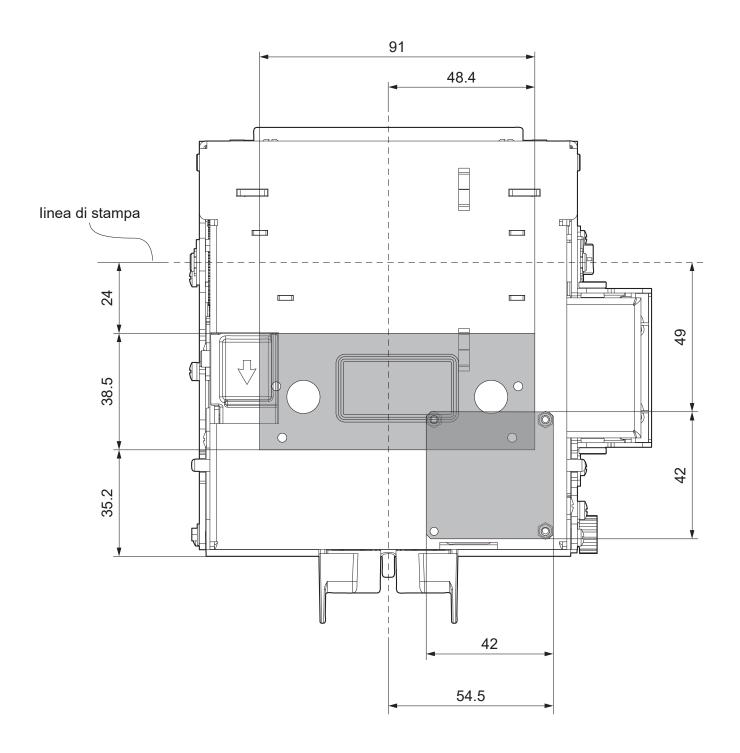
### Ticket with RFID tag (KPM862 5, TK862 4)

RFID (acronym for Radio Frequency IDentification) is a technology to identify automatically items using radio waves; this system is based on wireless data capture from RFID tag using appropriate readers. The RFID tag, or transponder, is made up of :

- the microchip that stores the data (including also a unique serial number written);
- an RFID antenna.

The device models are equipped with an RFID transceiver, provided with antenna, that allows to send and receive RF data to and from the tag. For this application the ticket dimensions are not binding but for good reading is important that the tag inside the ticket, after alignment, intersects the antenna area.

The following figures show the positions of antenna RFID inside the device.







# 9.11 Character set in CUSTOM/POS emulation

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 6.7).

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

<codetable></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		on request
17	PC866 - Cyrillic 2		
18	PC852 - Latin 2		
19	PC858 per simbolo Euro in posizione 0xD5		
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		on request





<codetable></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		

In CUSTOM/POS emulation, it is possible to use TrueType fonts. To be used, a TrueType font must be monospace type (every character of the font must have the same dimension). The check is made by the device when the font is selected. TrueType fonts will be automatically scaled by the device in order to obtain the same available width for the embedded fonts (11, 15 and 20 cpi for the 200dpi models and 16, 23 and 30 cpi for the 300dpi models).

The quality of TrueType fonts and the correct positioning into the printable area will result from the font producers and the font implementation.

For the correct printing of the code tables, it is necessary that the selected TrueType font contains all the characters in the tables. Otherwise, the '□' symbol will be printed instead the missing character.

All commands for printing configuration are usable both with TrueType fonts and with embedded fonts.

It is possible to address the TrueType font respects the UNICODE standard (see www.unicode.org), by using UTF-8 or UTF-16 encoding.





# 9.12 Character sets in SVELTA emulation

In SVELTA emulation the device has 18 embedded fonts of varying width which may be accessed through control characters (see commands description in SVELTA emulation of command manual). The following list shows the font available and relative dimensions in dot:

Font HEL8PT8 (A) Proportional font with fixed height (H = 28 dot) Font HEL10PT8 (A) Proportional font with fixed height (H = 34 dot) Font HEL14PT8 (A) Proportional font with fixed height (H = 50 dot) Font HEL16PT8 (A) Proportional font with fixed height (H = 55 dot) Font 8x12 (B) Fixed font Font 8x12 2 (B) Fixed font Font 12x12 (B) Fixed font Font 14x11 (B) Fixed font Font 16x24 (B) Fixed font Font 16x24 2 (B) (C) Fixed font Font 16x24 3 (B) (C) Fixed font Font 20x15 (B) Fixed font Font 28x20 (B) Fixed font Font 14x24 (B) (C) Fixed font Font 16x24CUR (B) (C) Fixed font Font OCRB (20x32) (C) Fixed font Font GB18030 Fixed font Font CP949 Fixed font

For further information to characters representations print directly the font test (D).

In SVELTA emulation, it is possible to use TrueType fonts. True Type fonts are printable with every angle of rotation and in bold, reverse, italic and underlined mode.

It is possible to address the TrueType font respects the UNICODE standard (see www.unicode.org), by using UTF-8 or UTF-16 encoding.

For the correct printing of the code tables, it is necessary that the selected TrueType font contains all the characters in the tables. Otherwise, the ' $\square$ ' symbol will be printed instead the missing character.

#### NOTES:

- (A): A proportional font is a font in which different characters have different pitches (width).
- (B): A fixed font is the opposite of a proportional font and is a fixed-pitch font.
- (C): The fonts with the same name and dimension contain different characters in different positions from theirs.
- (D): During power-up, if the FORM FEED (FF) key is held down, the device executes the FONT TEST.







# 10 CONSUMABLES

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

KPM862 1, KPM862 2, KPM862 3, KPM862 4, KPM862 5, KPM862 6 KPM862 DF 1, KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 KPM863 1, KPM863 2, KPM863 3, KPM863 4 KPM863 DF 1, KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

### 6730000000386

THERMAL PAPER ROLL

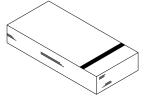
weight =  $180 \text{ g/m}^2$ width = 80 mm $\emptyset \text{ external} = 180 \text{ mm}$  $\emptyset \text{ core} = 25 \text{ mm}$ 



### 67A0000000304

FAN-FOLD (100 ticket)

weight =  $140 \text{ g/m}^2$ dimensions = 152 mm x 80 mm



# TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3

#### 6730000000386

THERMAL PAPER ROLL

weight =  $180 \text{ g/m}^2$ width = 80 mmØ external = 180 mmØ core = 25 mm









# 11 ACCESSORIES

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

KPM862 1, KPM862 5, KPM862 6

**KPM862 DF 1** 

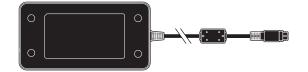
**KPM863 1** 

**KPM863 DF 1** 

### 963GE020000106

**POWER SUPPLY** 

(for technical specifications, see paragraph 9.1)



### 26100000000311

POWER CORD SCHUKO PLUG length = 2 m (see paragraph 9.9)



### 26100000000313

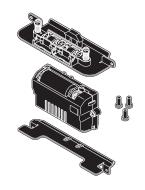
POWER CORD UK PLUG length = 2 m (see paragraph 9.9)



# 976LK010000001

**EJECTOR DEVICE** 

To use this accessory it is necessary to set, via PrinterSet, the setup parameter "Ejecter Type" to the value "Ejecter (see chapter 6)



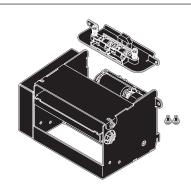




#### 976LK010000002

# SELECTOR DEVICE FOR HORIZONTAL FIXING

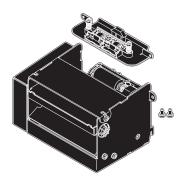
To use this accessory it is necessary to set, via PrinterSet, the setup parameter "Selector Option" to the value "Enabled" (see chapter 6)



### 976LK010000003

# SELECTOR DEVICE FOR VERTICAL FIXING

To use this accessory it is necessary to set, via PrinterSet, the setup parameter "Selector Option" to the value "Enabled" (see chapter 6)



### 976LN010000001

EXTERNAL LOW PAPER SENSOR board with cable 850 mm long

(only for KPM862 1, KPM862 6, KPM863 1)

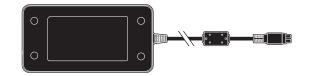




KPM862 2, KPM862 3, KPM862 4 KPM862 DF 2, KPM862 DF 3, KPM862 DF 4 KPM863 2, KPM863 3, KPM863 4 KPM863 DF 2, KPM863 DF 3, KPM863 DF 4

### 963GE020000106

POWER SUPPLY (for technical specifications, see paragraph 9.1)



### 26100000000311

POWER CORD SCHUKO PLUG length = 2 m (see paragraph 9.9)



### 26100000000313

POWER CORD UK PLUG length = 2 m (see paragraph 9.9)



### 976LN010000001

EXTERNAL LOW PAPER SENSOR board with cable 850 mm long

(only for KPM862 2, KPM862 3, KPM862 4, KPM863 2, KPM863 3, KPM863 4)



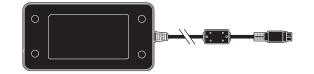


# TK862 1, TK862 2, TK862 3, TK862 4 TK862 DF 1, TK862 DF 2, TK862 DF 3



### 963GE020000106

POWER SUPPLY (for technical specifications, see paragraph 9.1)



### 26100000000311

POWER CORD SCHUKO PLUG length = 2 m (see paragraph 9.9)



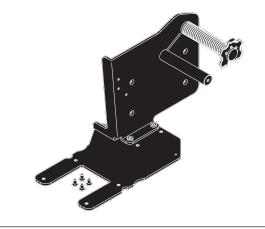
#### 26100000000313

POWER CORD UK PLUG length = 2 m (see paragraph 9.9)



## 974LU010000001

PAPER ROLL HOLDER (see paragraph 9.7)



### 974LU010000003

**VERTICAL TICKET TRAY** 





# 976LN010000001

EXTERNAL LOW PAPER SENSOR board with cable 850 mm long

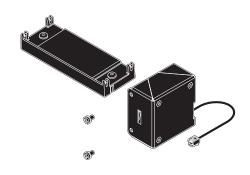
(only for TK862 1, TK862 2, TK862 3)



# 918LU010100000

RFID UHF KIT

(only for TK862 1, TK862 2, TK862 3)











# 12 TECHNICAL SERVICE

In case of failure, contact the technical service accessing the website <a href="www.custom4u.it">www.custom4u.it</a> 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 3.5). 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)
- by consulting the "setup.ini" file (see paragraph 6.3)





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