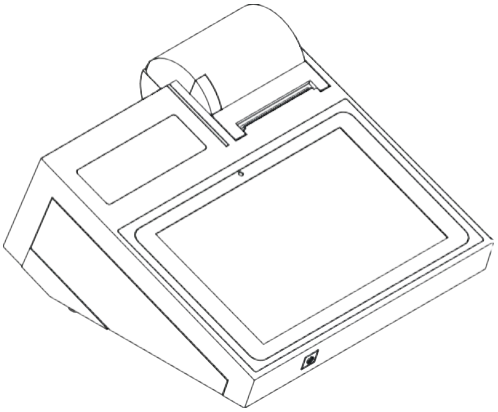
ABOX 3



USER MANUAL

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IDENTIFICATION

Manufacturer: RCH S.p.A.

Model: ABOX 3

Manual publication date: 10/2022

Manual review date: Rev.01_01/2023

1 GENERAL INFORMATION

1.1 CONTENTS OF THE MANUAL

These operating instructions contain information related to safe use, operation, maintenance, and troubleshooting to ensure the product is used correctly. These instructions represent an essential safety requirement and, as such, are an integral part of the product and must accompany it during its entire life cycle; therefore, they must be kept, distributed, and made available to all relevant personnel.

This manual may not be reproduced, fully or in part, in any form, modified, transcribed, translated, made available to third parties or used in a manner which may prejudice the interests of RCH S.p.A. without the prior authorisation of RCH S.p.A.
Failure to adhere to this provision shall be prosecuted in accordance with law and copyright law.
Subject to modifications and errors excepted.

1.1.1 MANUAL USE AND STORAGE

Before carrying out any operation, it is mandatory for all those involved to carefully read this manual and its attachments.

If there are any doubts regarding the correct interpretation of the documentation, contact RCH service centre, the supplier of the product, for the necessary clarifications.

Keep this manual and the attached documentation in a proper, legible condition, complete in all parts; do not remove, rewrite, or make any changes to the pages of the manual or their contents.

Keep the documentation in a safe and accessible place.

Ensure free consultation by all personnel interacting with the product.

Read this manual carefully before starting the product.

This instruction manual is an integral part of the product and must be kept for future reference.

RCH S.p.A. declines all liability for any damage to people, animals or property arising from the failure to comply with the warnings and operating methods described in this instruction manual.

If the instruction manual is lost or damaged, please request another copy from RCH service centre, specifying the document ID data.

1.2 SYMBOLS USED IN THIS MANUAL

INFORMATION - Indicates important information

ATTENTION - Indicates an operation to be carried out carefully to avoid damaging the product

PROHIBITED - Indicates prohibited actions

1.3 TERMINOLOGY AND DEFINITIONS

To make it easier to understand some of the topics covered in this manual, some of the terminology used is given below:

DEALER
The dealer is the provider of after-sales services, spare parts and accessories, for products, equipment and systems.

PRODUCT
The product and/or assembled item which is the subject of these operating instructions.

PURCHASER – USER
Company, corporation, shop, facility in general in which the object of these operating instructions is used.

ECR
Electronic Cash Register

MANUFACTURER
The company: RCH S.p.A., Via Cendon 39, 31057 Silea (TV)

1.4 HOW TO READ THE INSTRUCTION MANUAL

The manual has been divided into sections, each of which deals with a specific topic.

To facilitate understanding of the text, terms and abbreviations are used, the meaning of which is indicated in the list below:

- Chap. = chapter
- Sec. = section
- Tab. = table

Section ***Identification Data*** shows the current revision.

2 GENERAL DESCRIPTION

2.1 MANUFACTURER AND PRODUCT IDENTIFICATION DATA

2.1.1 MANUFACTURER NAME AND ADDRESS

The data identifying the manufacturer are provided below:

RCH S.p.A.
Via Cendon 39, 31057 Silea (TV)
Italy
Tel. +39 0422 3651
e-mail: info@rch.it
website: www.rch.it

2.1.2 EU DIRECTIVES

The product described in this manual complies with the following directives and standards

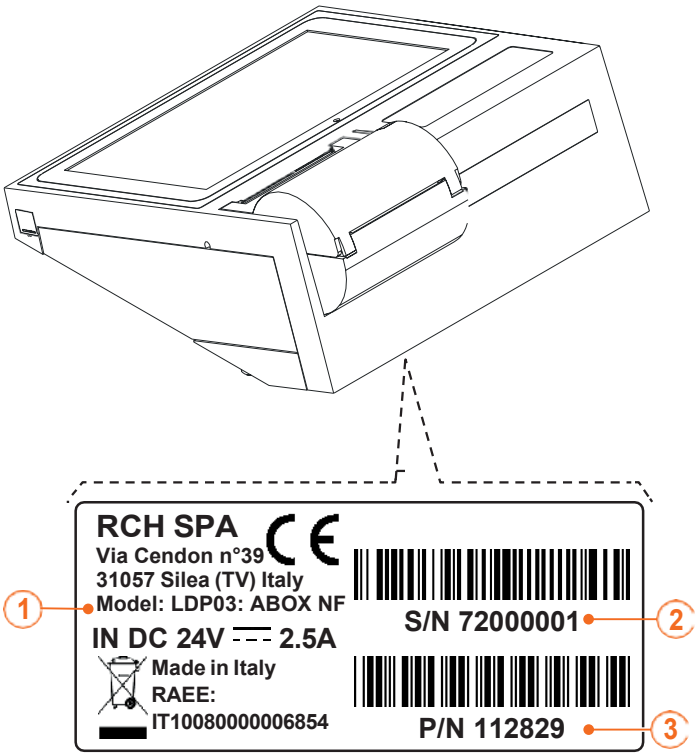
- Low Voltage Directive (LVD) 2014/35/EU
- Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- Safety of household and similar electrical appliances EN 62368-1

2.2 MARKING DATA

The marking data can be found on the ID plate on the product itself.
Below is an example of an identification plate showing:

1 *Model*
2 *Serial Number*
3 *Model Code*

Do not remove, copy, move or damage the nameplate on the product. If the ID plate deteriorates, is missing or difficult to read, it must be replaced. Contact MCT service centre for a replacement



3 PRODUCT IDENTIFICATION

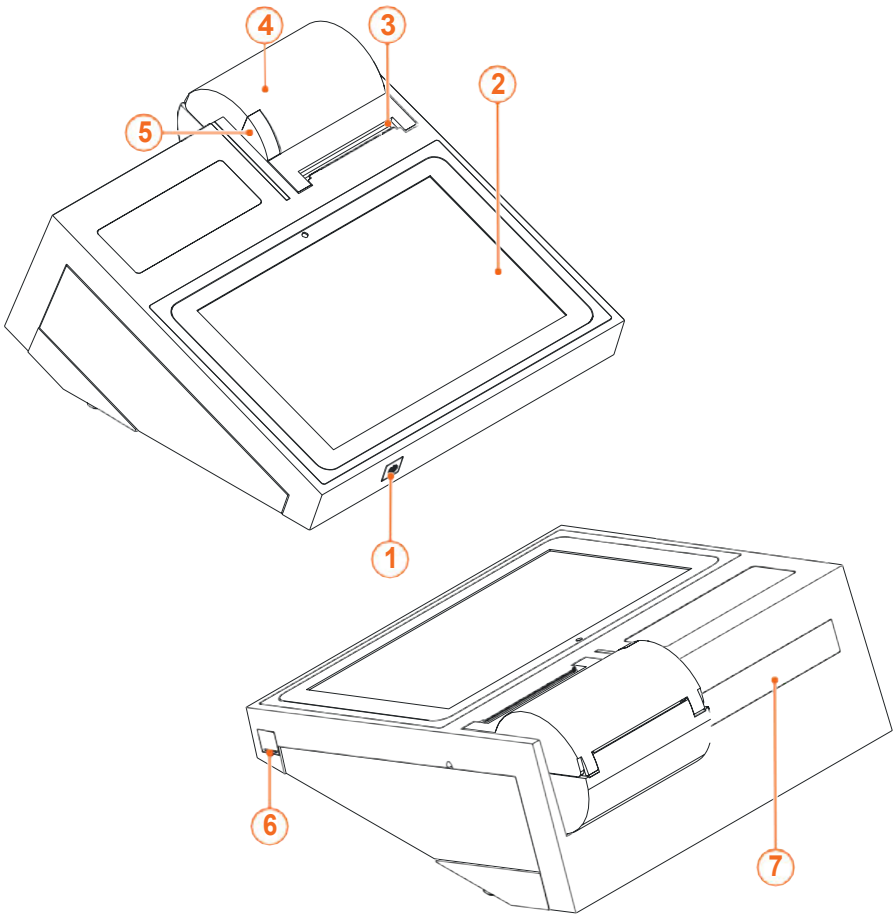
3.1 GENERAL DESCRIPTION

The advanced technological research in RCH has produced ABOX 3, the innovative Electronic Cash Register equipped with an Android System adaptable to the varied requirements of the market.

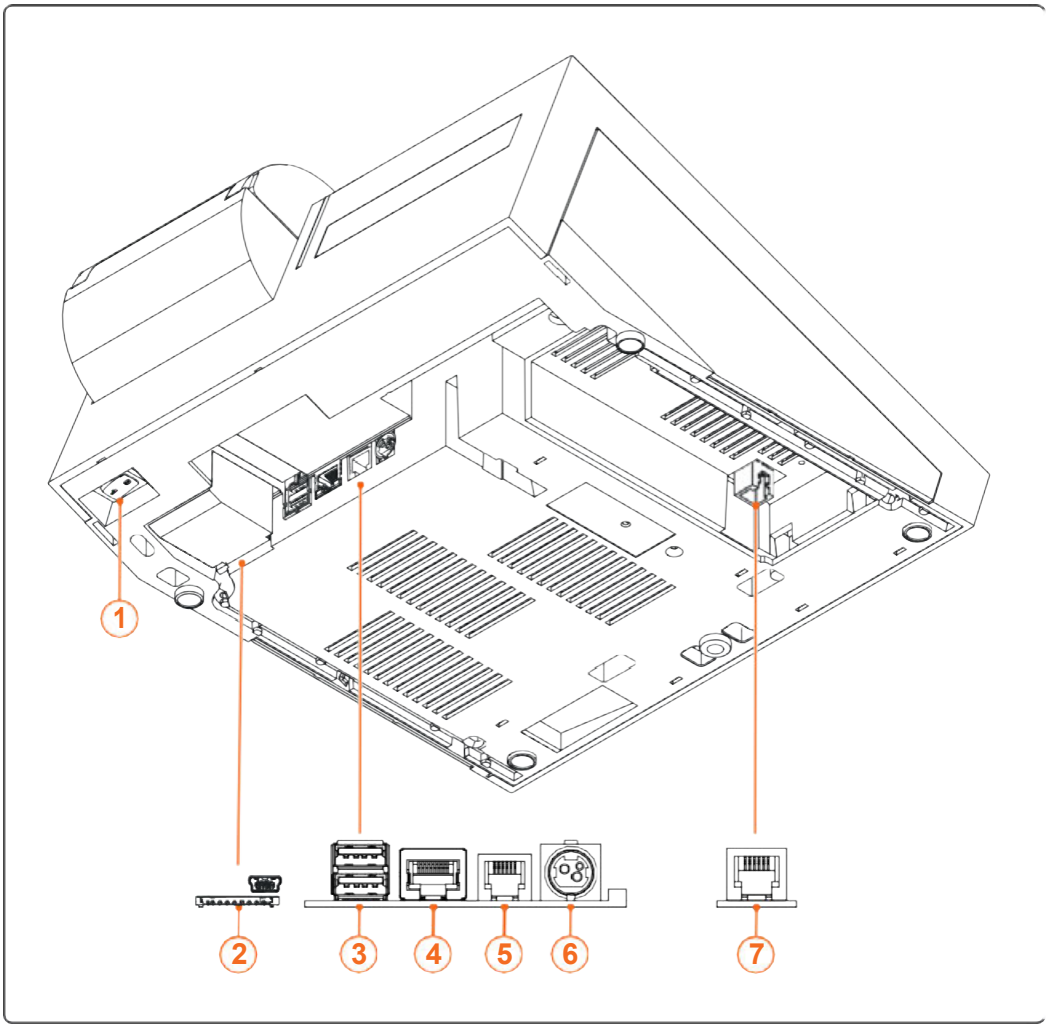
Accessing its functions is simple, quick, and intuitive, thanks to the 10” touch panel widescreen display that guarantees efficiency during sales operations. Its printer is equipped with a highspeed 200 mm/s and easy-loading paper roll system, facilitating daily operations.

The product’s compact, space-saving design makes it an all-in-one solution that brings elegance to any point of sale.

3.2 GENERAL SPECIFICATIONS



1 *Power ON/OFF button*
2 *TFT 10.1'' touch-screen display*
3 *Receipt Output*
4 *Paper roll cover*
5 *Cover-opening button*
6 *Seal*
7 *Customer display*



1 *Power ON/OFF button*
2 *USB OTG connection (USB 3) - SD slot (not available)*
3 *USB Host connection (USB 1 - USB 2)*
4 *Ethernet LAN connection*
5 *RJ11 connection (cash drawer)*
6 *Power supply and cable (24V)*
7 *Serial connection RS 232 (COM1)*

Through the connections provided, it is possible to connect personal computers, optical barcode readers, USB sticks

3.2.1 GENERAL TECHNICAL SPECIFICATIONS

Characteristic	Description
POWER SUPPLY	External Input: 100-240V 50-60Hz. Output: +24V ⎓ 2.5A
PRINTING TECHNOLOGY	Thermal printer
PRINTING RESOLUTION	576 dot/line, 8 dot/mm
PRINTING SPEED	200 mm/s
PAPER	Approved thermal paper. The producer suggests the following thermal paper brands: Mitsubishi F 5041 or Jujo Thermal AF 50 KSE
ROLL	80.0mm width (± 0.5mm).
AVAILABLE INTERFACES	1 RJ11 port (cash drawer)
	1 Ethernet LAN port
	2 USB Host ports
	1 RS 232 serial port
ENVIRONMENTAL CONDITIONS	From 0 °C to 40 °C
	Relative humidity 35-85% without condensate
DIMENSIONS	W 285 x D 296 x H 155 mm
WEIGHT	1.900 g
MONITOR	10.1" TFT display with input interface
INPUT INTERFACE	Virtual keyboard with capacitive touch panel
BARCODE SUPPORT	Multiple format support
DISPLAY	Client: LCD. 1 row x 16 alphanumeric characters Operator: 10.1" TFT display

3.2.2 DISPOSAL

The appliance is made up of several materials. It must be disposed of in accordance with local industrial and special waste regulations. It must not be disposed of with household waste.

The product does not contain toxic or hazardous substances and elements such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl. It therefore complies with SJ/T11363-2006

At the end of its service life, carry out the safe removal and responsible disposal of the components in accordance with the applicable environmental regulations in force in the country of disposal.

Remove the internal battery and dispose of it according to current regulations.

4 SAFETY REGULATIONS

4.1 INSTALLATION REQUIREMENTS

ABOX 3 must only be installed by technical personnel authorised by RCH S.p.A.

Before installation, check that the electrical system is earthed. The power socket must be installed near the appliance in an easily accessible position.

4.2 IMPROPER / PROHIBITED USE

RCH S.p.A. declines all liability for and the warranty will be void in the case of negligence when using the product or failure on the part of the operator to comply with the operating instructions.

No MISUSE/PROHIBITED USE/REASONABLY FORESEEABLE MISUSE of the product is permitted, in particular:

- **Do NOT** use the product in extremely cold/hot places or in direct sunlight for a long time. Correct operation is expected with temperatures between 0 and 35 °C
- **Do NOT** expose the ECR to atmospheric agents
- **Do NOT** allow contact with any liquid
- **Do NOT** use the ECR in dusty environments
- **Do NOT** touch the printer head
- **Do NOT** touch the cutter blade
- **Do NOT** use a power supply unit other than the one provided
- **Do NOT** excessively bend the power cable or place heavy objects on top of it
- **Do NOT** remove the power supply by simply pulling on the cable
- **Do NOT** allow any maintenance or repair work to be carried out on the product by unauthorised personnel
- **Do NOT** use cleaning detergents on the product that contain alcohol

4.3 WARNINGS FOR USE

Disconnect the product from the power supply if it is not going to be used for a prolonged period of time.

Batteries may only be replaced by technical personnel authorised by RCH S.p.a.

The ECR must be periodically overhauled in accordance with the regulations in force in the country of use.

Install the ECR on a flat, stable surface with no vibrations.

ABOX 3 is equipped with a thermal printer. It is mandatory to use approved thermal paper showing both the homologation details and the expiry date.

The user must store the documents in accordance with the law, in dark places, with relative humidity below 80% and temperature below 35 °C, avoiding direct contact with plastic materials and in particular with polyvinyl chloride.

4.4 MANUFACTURER'S LIABILITY

RCH S.p.A. is relieved of any liability arising from:

- Partial or complete failure to comply with the instructions provided in this manual
- Repairs not carried out in a workmanlike manner (the use of non-original spare parts and accessories can adversely affect the operation of the product)
- Damage caused by arbitrary changes by the user or by unauthorised interventions
- Failure to carry out maintenance as indicated
- Power supply faults
- Improper use of the product
- Use of the product by untrained personnel

RCH S p A does not assume any liability for damages caused to property, people, or animals caused by inappropriate use of this documentation or of the product.

RCH S p A declines all liability, and the warranty will become void, if the product has been tampered with, or if non-original parts have been used during maintenance.

Repairs cannot be carried out if original spare parts are unavailable.

4.5 CUSTOMER'S OBLIGATIONS

The following are the responsibility of the customer unless otherwise stipulated in the contract:

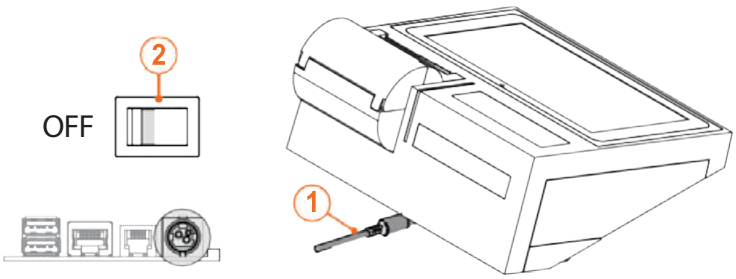
- Electrical power supply
- Provision of a suitable supporting structure for the product

5 INSTALLATION

The product is installed by MCT Service Centre or by authorised installation technicians.

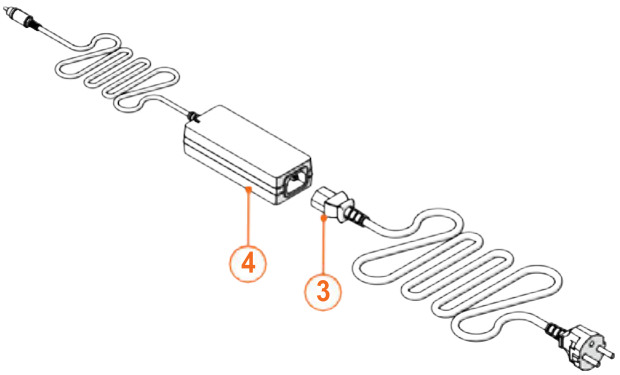
5.1 CONNECTION TO THE POWER SUPPLY

- Connect the power supply connector **(1)**;
- Press the power button and set it on "OFF" **(2)**;

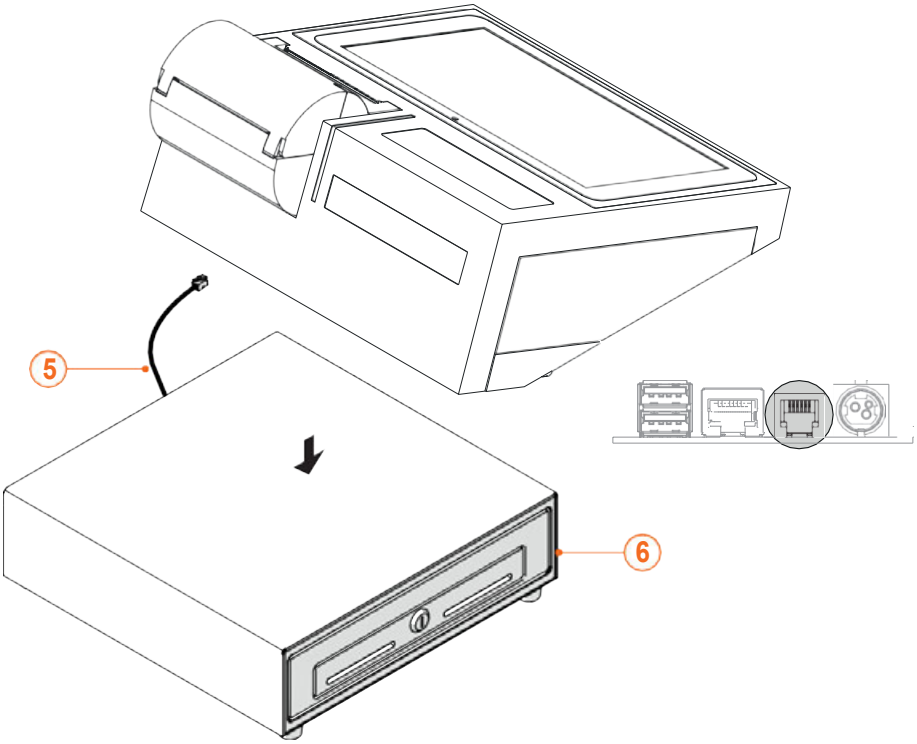


- Connect the plug **(3)** to the IEC connector **(4)** on the power supply unit;

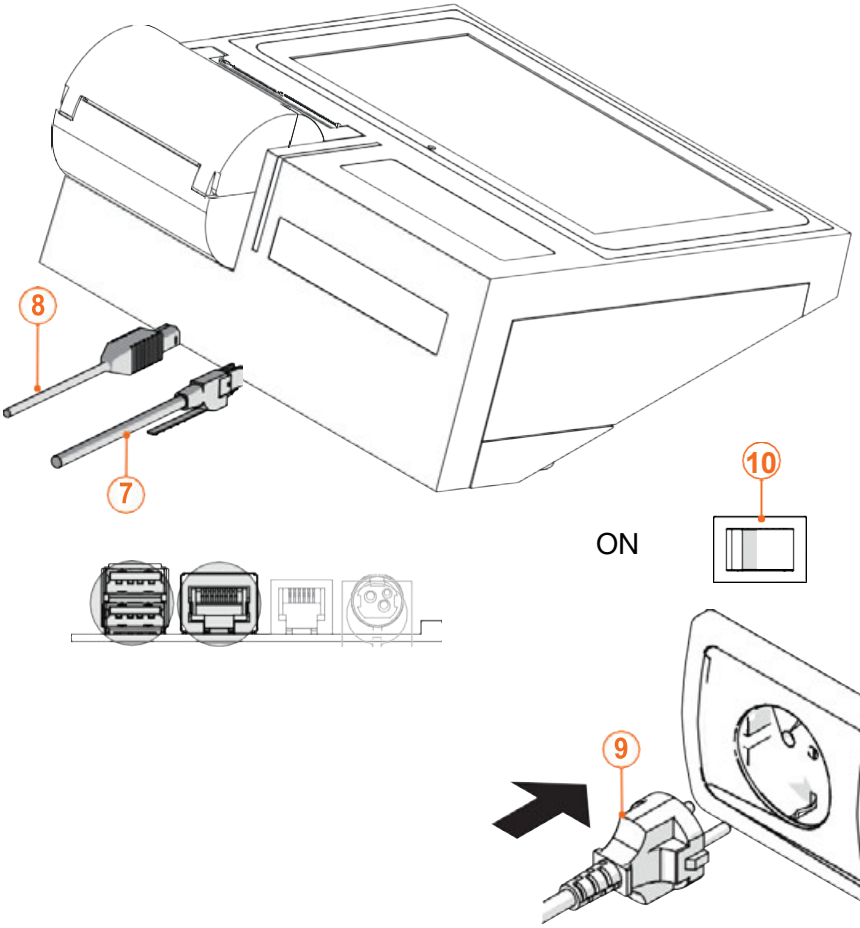
Only use the original cable and power supply unit. 100-240V, 50/60Hz power supply



- Connect the RJ11 cable **(5)** of the (optional) cash drawer **(6)** to ABOX 3;



- Connect the Ethernet cable in order to connect to the internet **(7)** and a (optional) USB optical barcode reader **(8)**;
- Connect the plug **(9)** to the wall-mounted power socket;
- Press the power button **(10)** and set it to "ON".



6 USE

The following instructions for date/time setting are carried out using the provided software. For further information, please consult the official documentation.

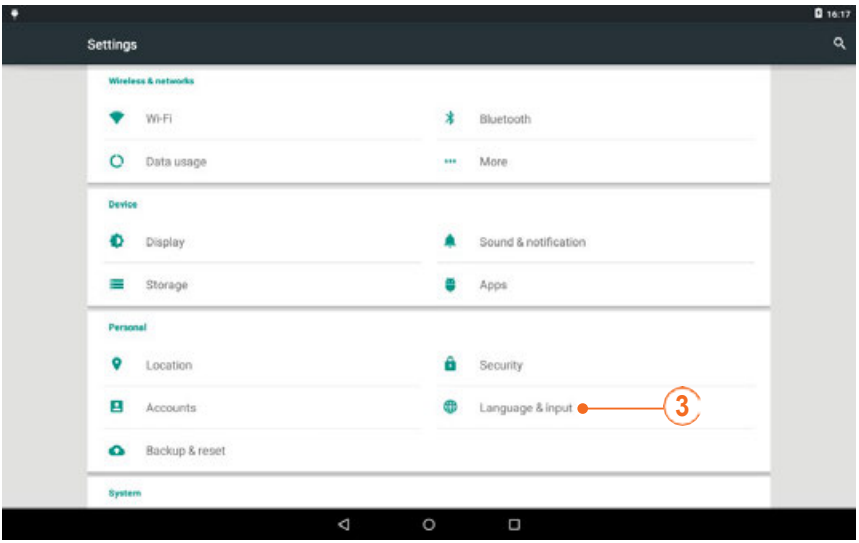
6.1 LANGUAGE AND INPUT

To change the system language:

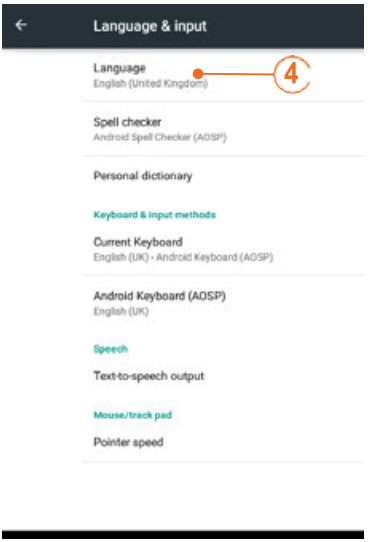
► Start the system and click on the “App” icon **(1)**;

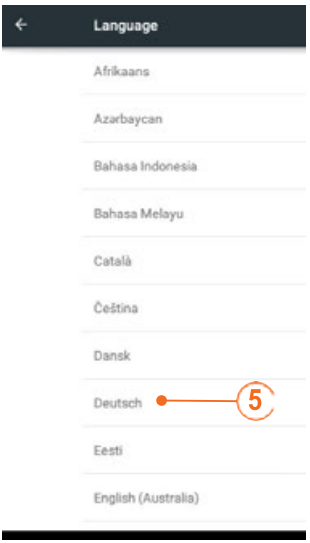
- Click on the "Settings" icon **(2)**;

- Click on the "Date and Time" option **(3)**;



- Choose “Language” **(4)**;
- Select the language you need **(5)**.

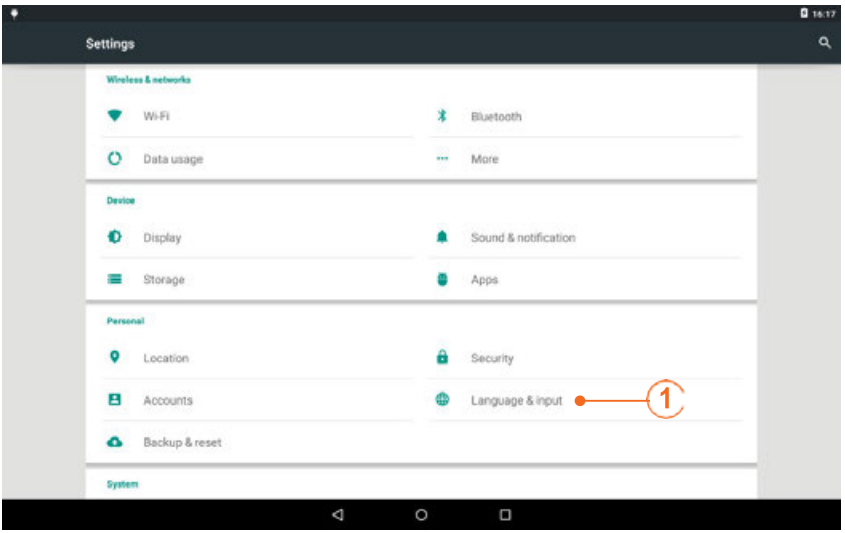




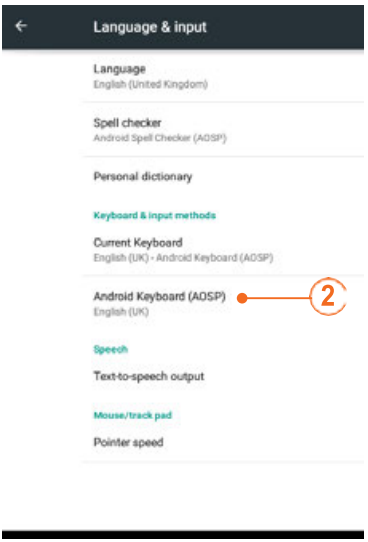
6.2 KEYBOARD INPUT

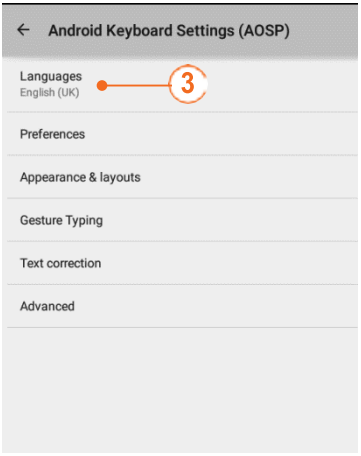
To change the keyboard input method:

- ► Start the system and click on the "App" icon;
- ► Select "Language & Input" **(1)** from the main menu;

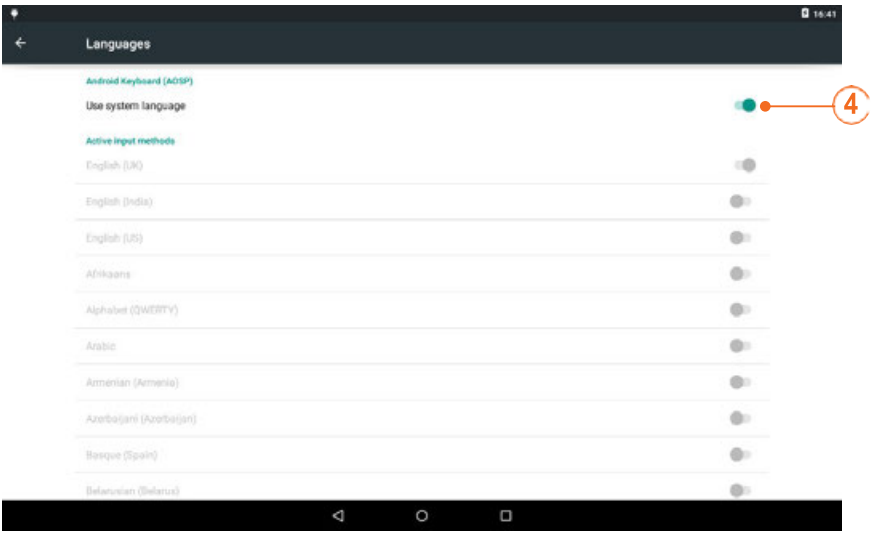


- In the section “Keyboard & input methods” select “Android Keyboards (AOSP)” **(2)**;
- Select Languages **(3)** from the new window;





- Deselect “Use system language” **(4)**. Now languages are activated.



- ► Select the languages you wish to use on the Android Virtual Keyboard, for example French **(5)** and German **(6)**;
- ► Exit from the menu by selecting the arrow key **(7)**.

6.3 DATE/TIME SETTING

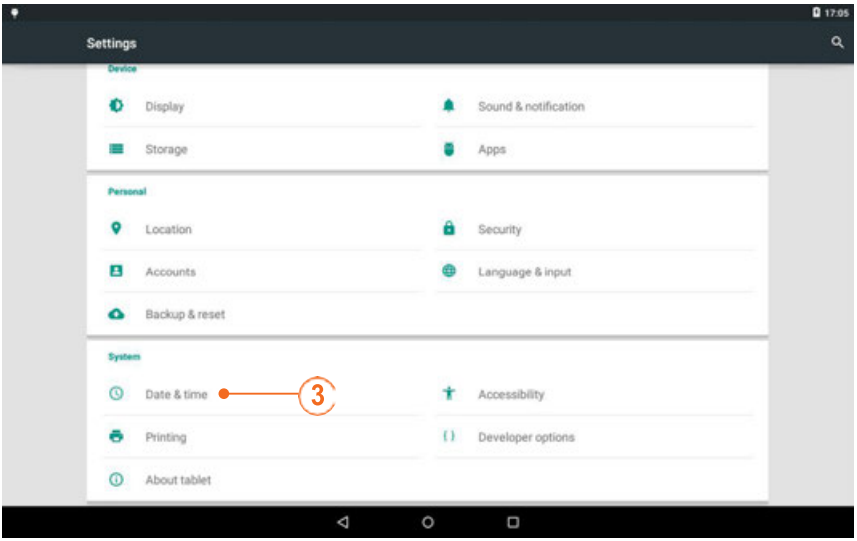
The following instructions for date/time setting are carried out using the provided software. For further information, please consult the official documentation.

Date and time are managed automatically using the system data. However, it is possible to change date and time manually

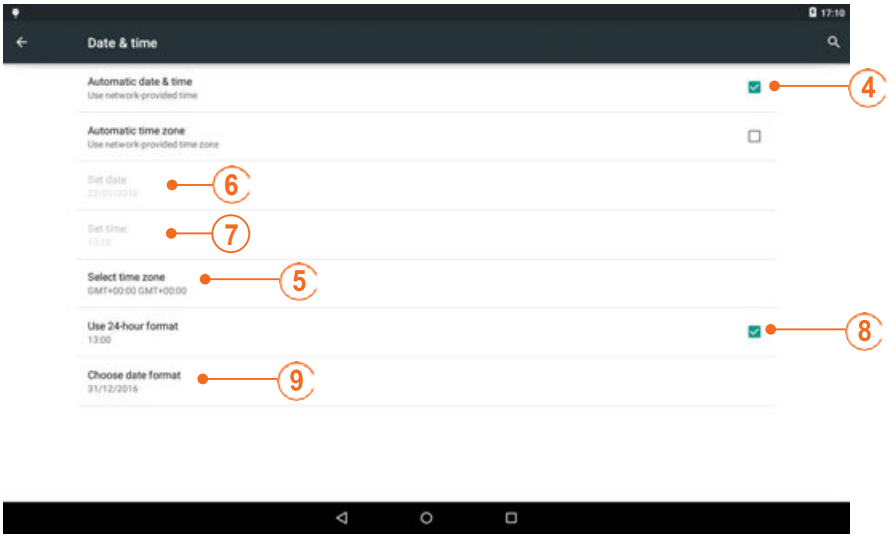
- Start the system and click on the “App” icon **(1)**;

- Click on the “Settings” icon **(2)**;

- Click on the “Date and Time” option **(3)**;



- Deselect “Automatic Date and Time” **(4)**;
- If you wish to change the time zone, you can check “Select time zone” **(5)** and set the desired time zone from the list.
- Touch “Set date” **(6)** and select the correct month, date, and year. Touch “OK” when the date is correct.
- Touch “Set time” **(7)** and select the correct hour (AM or PM) and minute. Touch “OK” when the time is correct.
- To display the time in 24-hour format, place a check mark next to “Use 24-hour format” **(8)**.
- Touch “Choose date format” **(9)**. Four date formats are available: Regional, Month/Date/Year, Date/Month/Year, or Year/Month/Date. Touch one option to select it.



6.4 INSTALLING AN APP

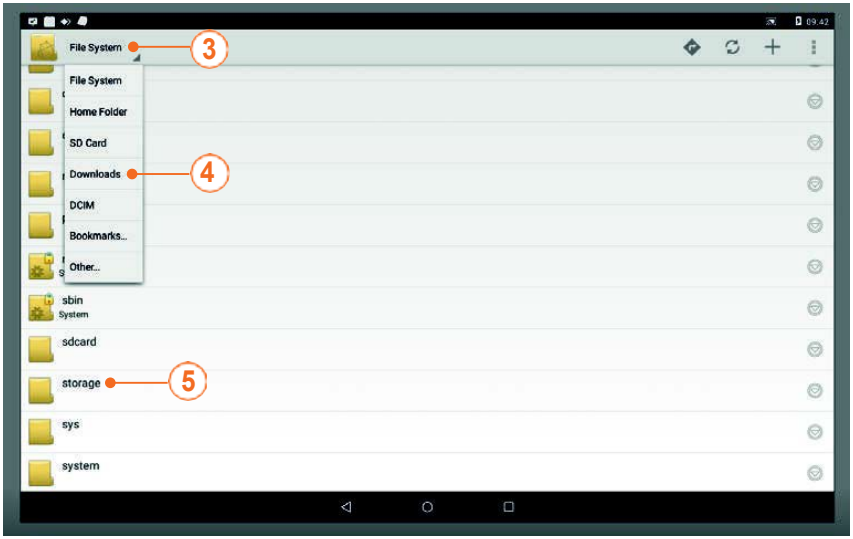
Apps can be installed and used just like on any normal tablet.

RCH declines all liability in case of malfunction if the installed applications are not among those suggested for the provided software.

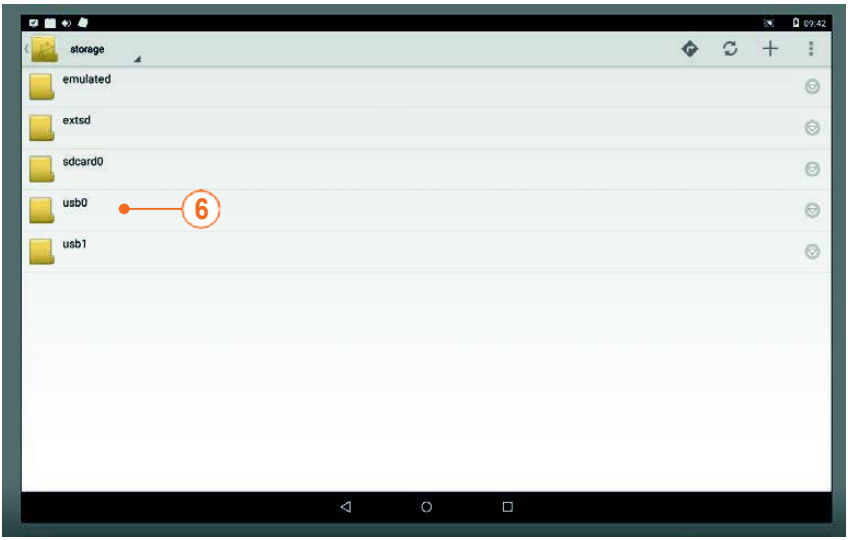
- Save the app to a USB memory stick. Use a USB port on the device to connect the peripheral device;
- Start the system and click on the “app” icon **(1)**;

- Click on the “File Explorer” icon **(2)**;

- Click on the “File System” folder **(3)**;
- Click on the "Downloads" folder **(4)** and then on the "storage" folder **(5)**;



- Click the appointed USB folder **(6)**;



- Click on the relevant "*.apk" file and proceed with the installation.

7 MAINTENANCE

7.1 ORDINARY MAINTENANCE

Maintenance is a set of operations necessary to maintain the functionality and efficiency of the product.

RCH S.p.A. declines all liability and the warranty will become void if the product has been tampered with, or if non-original parts have been used during maintenance.

Repairs cannot be carried out if original spare parts are unavailable.

In any case, the following general regulations must be fully observed:

- The product must be kept clean and tidy;
- Do not allow temporary or urgent repairs to become systematic.

The following are periodic checks and maintenance procedures that can be carried out by end users of the product

Frequency	Intervention to be carried out	Procedures and results
DAILY	General visual check	
WEEKLY	General cleaning	
WHEN NECESSARY	Thermal head cleaning	
WHEN NECESSARY	Cutter unblocking	
WHEN NECESSARY	Paper roll replacement	

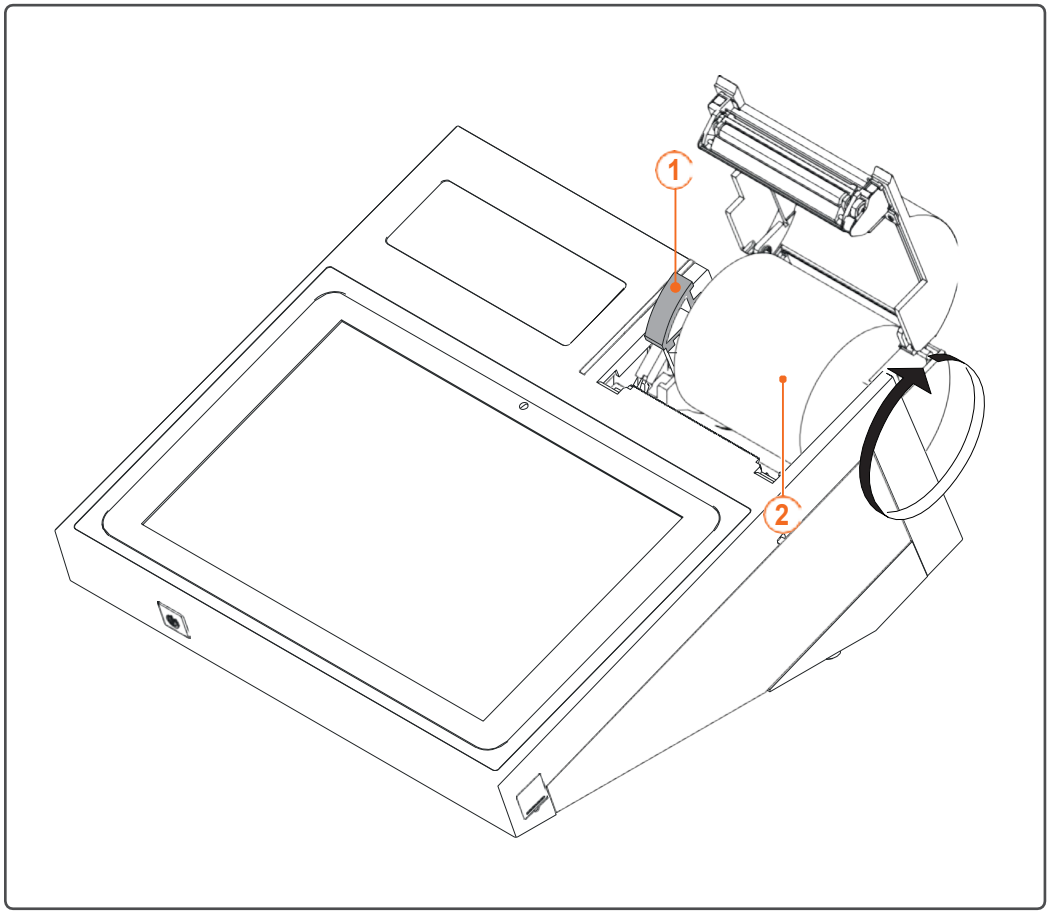
THERMAL HEAD CLEANING

To perform proper cleaning of the thermal head, the following material is required:

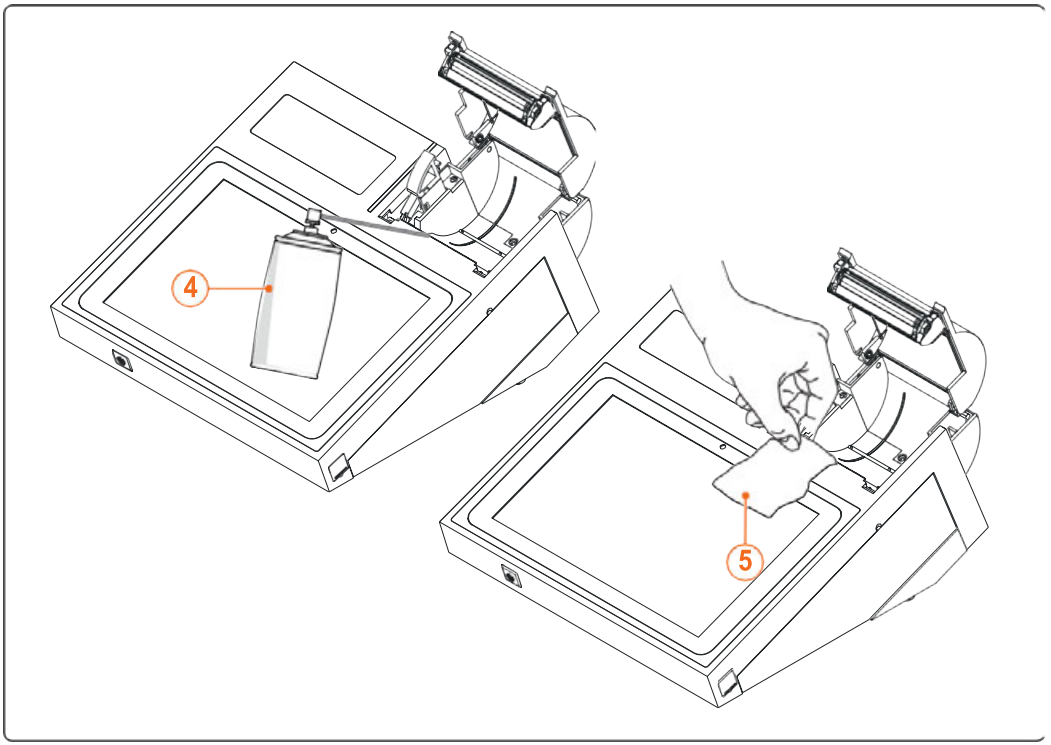
- Compressed air can;
- Wipes soaked in a solution composed of 70/75% Isopropyl Alcohol.

The user must:

- Turn the ECR off and wait for the thermal head to cool down (about 30 seconds);
- Push the cover button all the way in **(1)** to open the cover and remove the paper roll **(2)**;



- Aim the compressed air jet **(3)** in the direction of the printing mechanism and the cutter in order to remove dust and paper residues;
- Use a tissue **(4)** to clean the print head by wiping it multiple times in the same direction (e.g. from right to left);



Do not direct the air jet directly towards the thermal print head.

Do not touch the print head with bare hands. Skin grease or other contaminants may compromise the life and functionality of the print head.

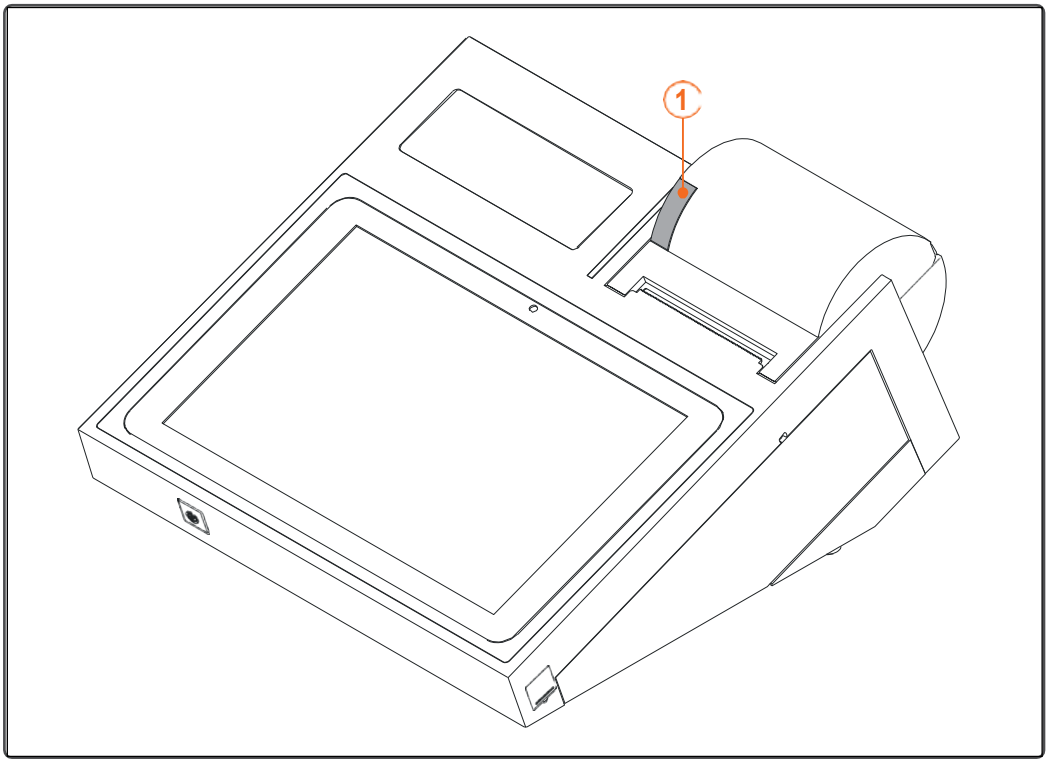
- Use a tissue to clean the rubber roller by wiping it multiple times in the same direction (e.g. from right to left);
- Place the paper roll correctly and close the holder and the cover.
- Wait about 30 seconds to allow the cleaning solution to evaporate and turn the ECR.

Use approved thermal paper only. The producer recommends thermal papers with a weight of 55gr/m^2 (e.g.: Mitsubishi P5046/P5047)

7.1.2 CUTTER UNBLOCKING

If paper is jammed in the cutter, proceed with the following steps:

- Turn off and on the system to allow the automatic repositioning of the cutter;
- Press and release the button many times **(1)**. Pressure gradually retracts the blade until the cover opens.



7.1.3 PAPER ROLL REPLACEMENT

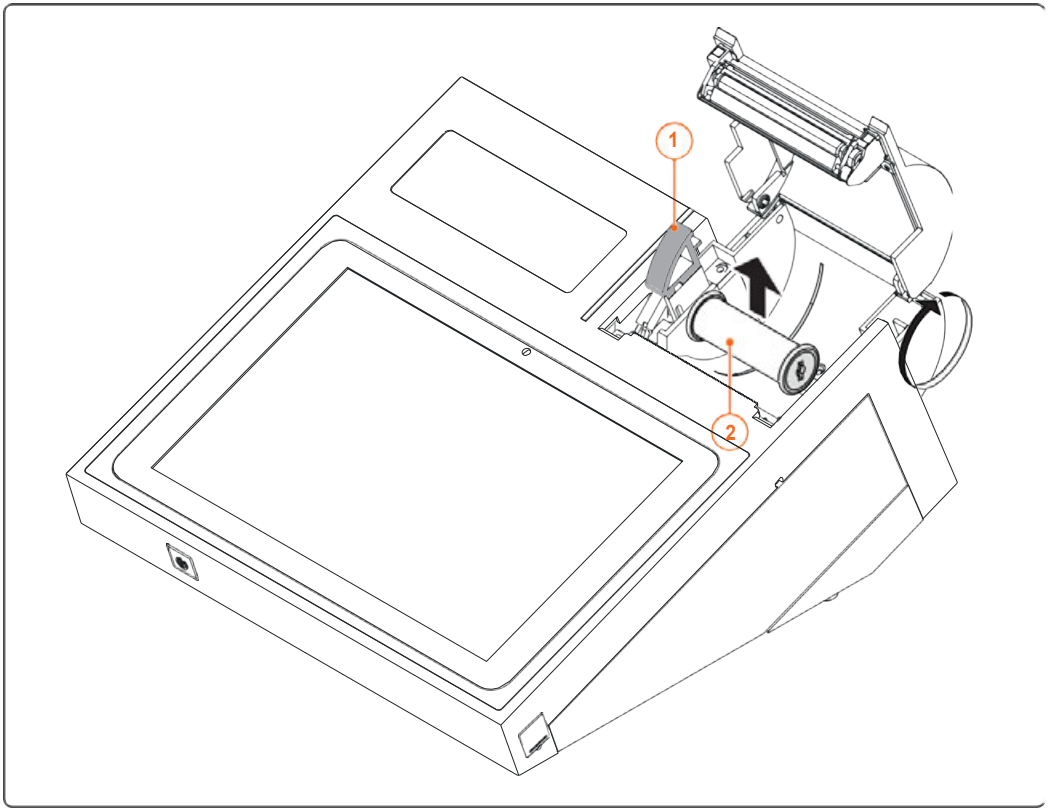
Paper rolls have coloured lines on them that signal when the roll is about to end.

We suggest replacing the rolls when the coloured indicators show, to avoid changing the paper roll during the printing of a pending commercial document.

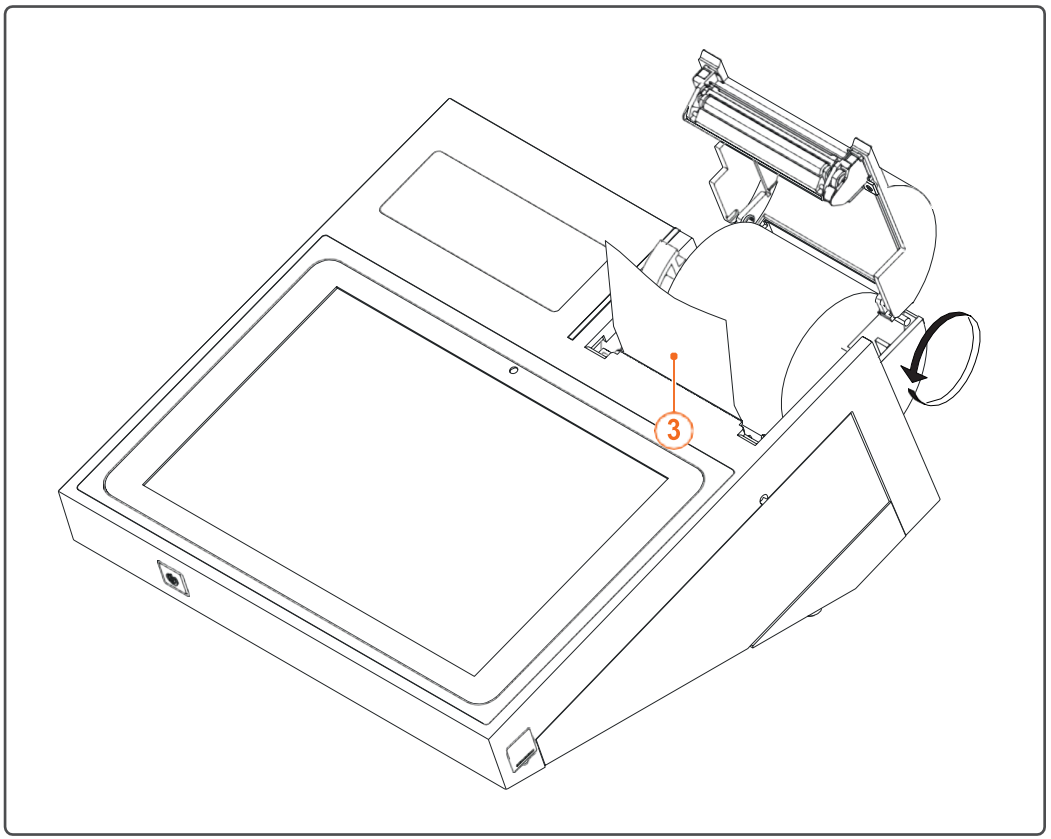
If the ECR paper finishes in the middle of a printout, the display will show a message asking to replace the paper roll.

To replace the paper roll, the user must:

- ► Push the button all the way **(1)** to open the cover and remove the empty paper roll **(2)**;



- Insert a new paper roll **(3)** making sure the top edge of the paper comes out;
- Close the paper roll cover.



NOTES

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