



USER GUIDE



MC310

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Matica
April 2020
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Refer to the warranty statement provided with the printer for the warranty terms and conditions, and its limitations of liability.

Environmental Impact

Matica is committed to reducing the environmental impact of its products through improvements in energy efficiency.

DIRECTIVE 2002/96/EC ON THE TREATMENT, COLLECTION, RECYCLING AND DISPOSAL OF ELECTRIC AND ELECTRONIC DEVICES AND THEIR COMPONENTS

1. FOR COUNTRIES IN THE EUROPEAN UNION (EU)

The disposal of electric and electronic devices as solid urban waste is strictly prohibited: it must be collected separately. The dumping of these devices at unequipped and unauthorized places may have hazardous effects on health and the environment. Offenders will be subjected to the penalties and measures laid down by the law.

TO DISPOSE OF OUR DEVICES CORRECTLY:

- a) Contact the Local Authorities, who will give you the practical information you need and the instructions for handling the waste correctly, for example: location and times of the waste collection centers, etc.
- b) When you purchase a new device of ours, give a used device like the one purchased to our dealer for disposal.



The crossed dustbin symbol on the device means that:

- When it to be disposed of, the device is to be taken to the equipped waste collection centers and is to be handled separately from urban waste:

- Matica guarantees the activation of the treatment, collection, recycling and disposal procedures in accordance with Directive 2002/96/EC (and subsequent amendments).

2. FOR OTHER COUNTRIES (NOT IN THE EU)

The treatment, collection, recycling and disposal of electric and electronic devices will be carried out in accordance with the laws in force in the country in question.

For Europe

Warning

“This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.”

Product contains RF section (or module), compiled with ETSI EN 300 330 V2.1.1 (2017-02)

For US

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

- (1) This device may not cause harmful interference, and*
- (2) This device must accept any interference received, including interference that may cause undesired operation.*

FCC Caution!!!

- Any changes or modification not expressly approved by the party responsible for compliance could void the user's authorities to operate this equipment.

This equipment has been tested and found to comply with the limits for 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 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.*

For Canada

In English:

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and*
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.*

In French :

Cet appareil est conforme aux RSS sans licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes:

- 1) Cet appareil ne doit pas provoquer d'interférences; et*
- 2) Cet appareil doit accepter toutes les interférences, y compris celles qui pourraient entraîner un mauvais fonctionnement de l'appareil.*

General Note: - This equipment must be used by – Ordinary person / Instructed person / Skilled person

About caution symbols:




	These cautions indicate the risk of injury or shock or malfunction if the printer is not operated correctly. Be sure to follow these cautions to operate the printer safely.
	These cautions indicate the heated surface & involve the risk of heat injury if person touch with bare hand.
	These cautions indicate the touch of surface with bare hand is prohibited.

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1 Product Overview

The printer described in this User Guide provides full color dye-sublimation or monochrome thermal transfer printing on standard 54x86 mm plastic cards. PVC, PVC Composite, PET, ABS, PC and Re-printable cards are supported (accordingly with varnished card product configuration). It is managed from the computer through the USB port or via Ethernet/Wi-Fi.

The ribbon carrier, that comes with the printer, allows the ribbon to be replaced quickly and easily.

Several options are available so that the printer can be configured to operate in different types of environments:

- Magnetic stripe encoder
- Smart Card Encoding Station with Contact and Contactless Smart Card encoder
- 10/100 Ethernet and/or 802.11a/b/g Wi-Fi connection
- Single Card Feed Option through Manual feeder
- Connection for external smart card encoding
- Locking system for input Hopper, reject bin and ribbons

2 Getting Started

The printer comes with several accessories; check carefully that they have been all received. This list may vary depending on the location where the printer will be used and the configuration you have ordered.

The printer is shipped in special packaging designed to prevent damage during transportation. If any visible damage is noticed upon reception, contact the dealer immediately.

Maintain the printer packaging intact and store it in a clean and dry place.

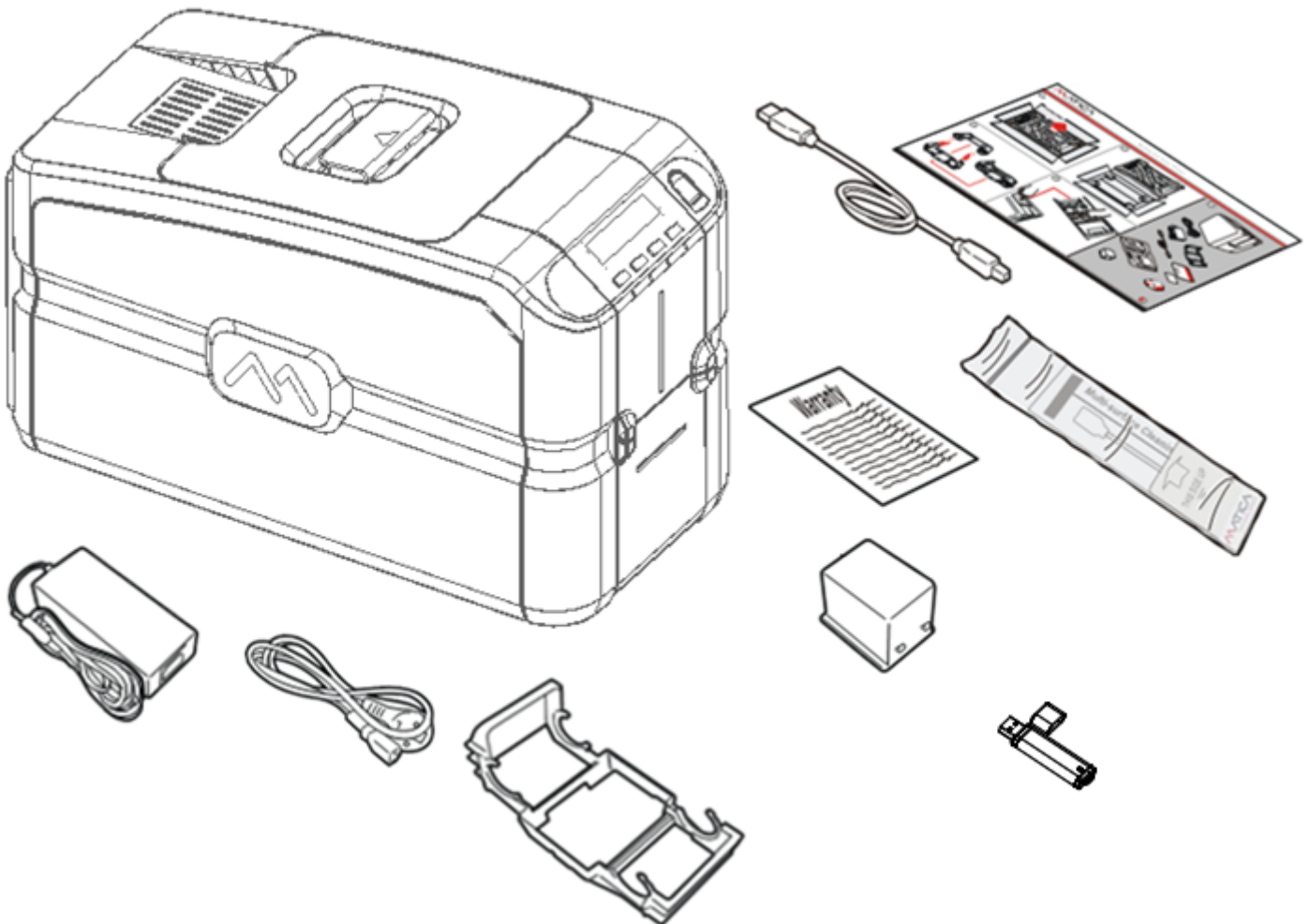
Note: If the printer has to be returned, it must be returned integrally with its full original packaging (box, cushions and protective bags). If it is returned without its original packaging and any components are damaged during transportation, such components will no longer be covered by the warranty. Matica will also charge for the new packaging which will be required to ship the printer back.

2.1 Unpacking the Printer

The following items are included in the box:

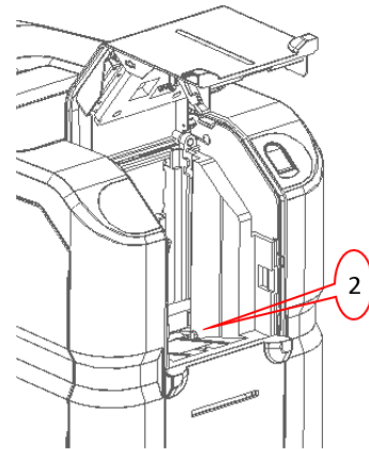
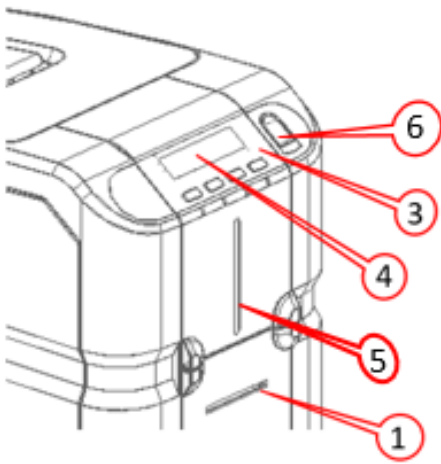
- Printer
- Memory stick containing the Installer, Printer driver and Printer Manager
- Quick Installation Guide
- Cleaning swab
- Cleaning card
- Power cord
- Power supply
- USB cable
- Ribbon carrier
- Reject bin

Note: Contact the dealer immediately if any of the items listed above is missing.
Only use the power supply provided with the printer.



2.2 Functional Description

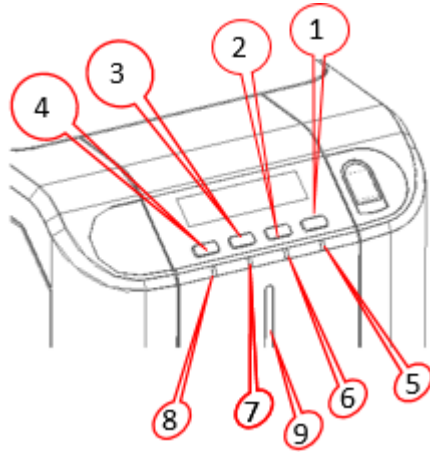
2.2.1 Front View



The front of the printer is the operator side and has following features:

- 1) Front slot for Single card Manual Feeding.
- 2) Input Hopper
- 3) Operator panel and printer status indicators: ON/OFF key and 3 functional keys
- 4) LCD display
- 5) LED light indicating card availability status in the input hopper.
- 6) Biometric lock option (Only for MC310s, S3110 (Financial version))

2.2.2 Operator Panel



The front operator panel consists of 4 soft touch buttons and 4 status LEDs along with an informative display

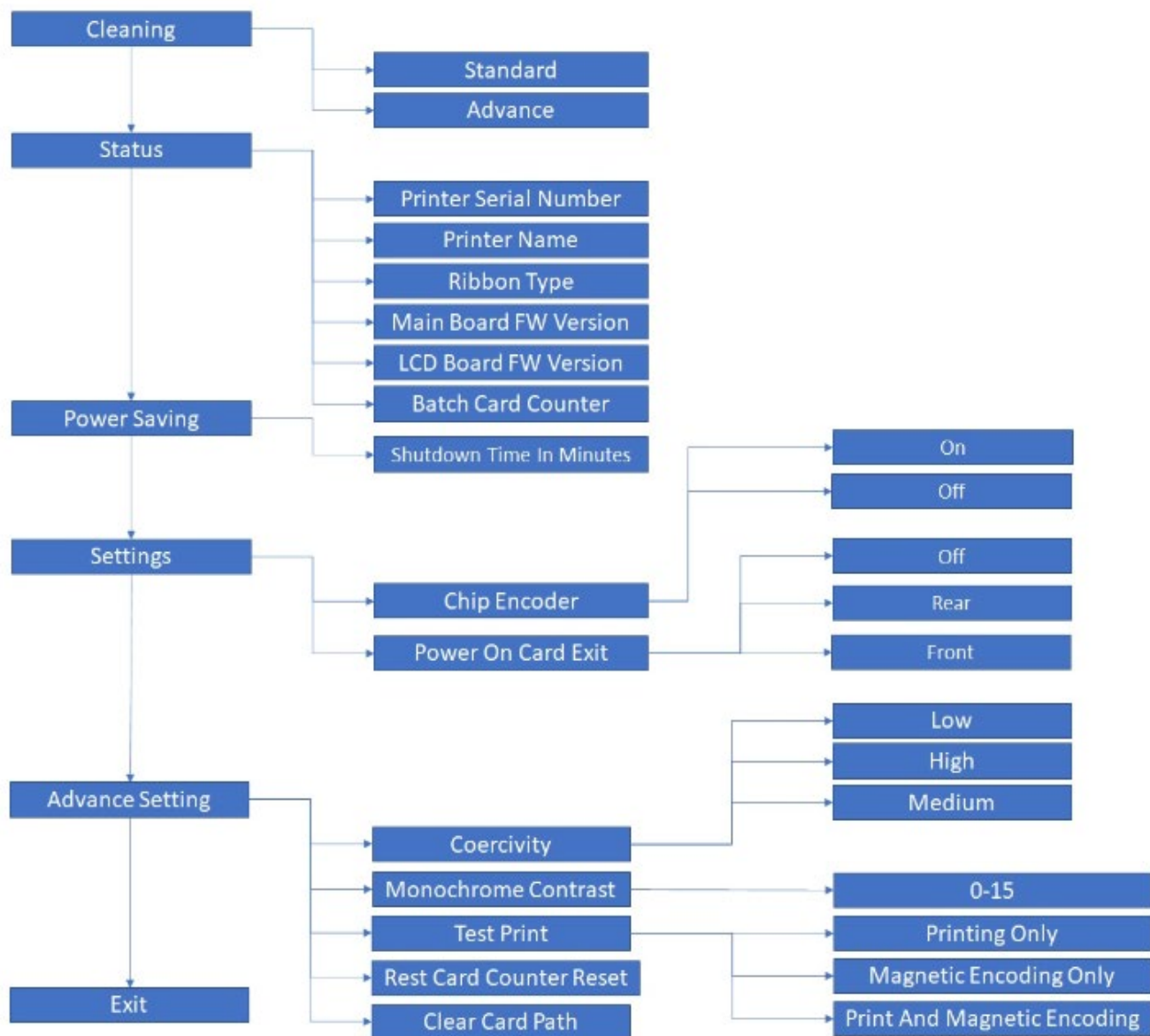
- **Button operation**

- **Power button (Shown as 1)**
 - Short press to turn on the printer
 - Long press to turn off the printer when it is ON
- **Selection button (Shown as 2)**
 - To select the menu option and transit to respective sub-menu
 - Selecting option in sub-menu. Ex. Standard Cleaning, chip encoder setting
- **Menu/Scroll button (Shown as 3)**
 - Button will be used to enter in **Menu**
 - Same button will be used to scroll to next menu item
 - Same button will be used for incrementing the value while setting Sleep time
- **Wi-Fi button (Shown as 4)**
 - Press to tun on the Wi-Fi, if the Wi-Fi option is present in the system
 - LCD will display the status

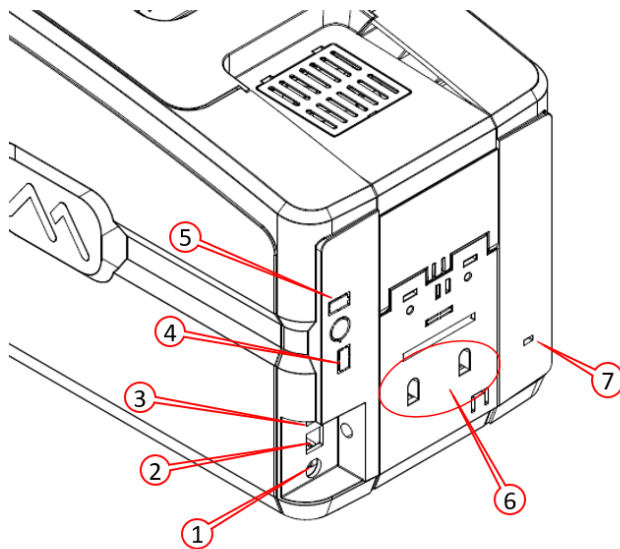
- **Status LED**

- **Power LED (Shown as 5)**
 - White - indicates printer is ON
- **Status LED – Ready (Shown as 6)**
 - Green – indicates printer is ready for printer
 - Green blinking – indicates printer is receiving data or printing
 - Amber – indicates ribbon is nearing end
 - Amber blinking – indicates there is no card OR no ribbon
- **Status LED – Error (Shown as 7)**
 - Red – indicates there is an error, card jam, cover open etc in printer
 - Red blinking – indicates printer requires servicing OR firmware upgrade
- **Wi-Fi LED – (Shown as 8)**
 - Off – indicates Wi-Fi is not available in printer
 - Blue blinking – indicates Wi-Fi is available in printer but not connected
 - Blue – indicates printer is connected
- **Input hopper LED – (Shown as 9)**
 - Off – indicates there is no card available in printer
 - Red blinking – indicates no. of cards in the hopper are running low.
 - Red – indicates there are cards available in input hopper

- LCD Display Sequence for MENU option



2.2.3 Rear View



The following components are located on the back panel:

- 1) Power cord socket
- 2) USB 2.0. Female B type. Host socket
- 3) Ethernet connector with traffic LED
- 4) USB 2.0 Port – No.1
- 5) USB 2.0 Port – No.2
- 6) Rejection bin fixing slot
- 7) Kensington lock

2.2.4 Power Supply

The printer comes with an external auto-switching power supply.

Note: Only use the power supply provided with the printer.

2.2.5 Plastic Cards

Listed below are the plastic card specifications:

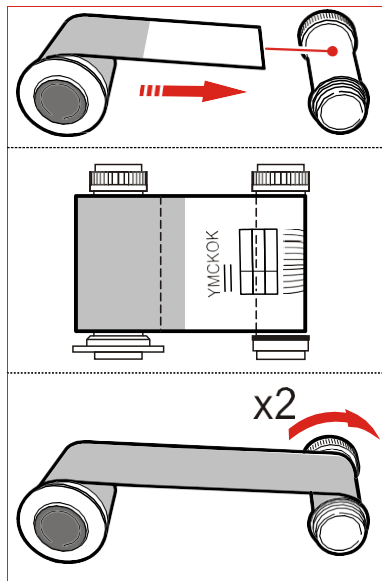
- **Type:** PVC, PVC Composite, PET, ABS (varnished), PC, Re-printable cards
- **Dimensions:** ISO CR80 - ISO 7810 (53.98 x 85.60)
- **Thickness:** 0.25 to 1.25 mm (10 to 50 mil) manual gauge adjustment
- **Magnetic stripe:** ISO 7811
- **Smart Card Contact:** ISO 7816-1,2,3,4
- **Smart Card Contactless:** ISO 14443A/B.

3 Installation Procedures

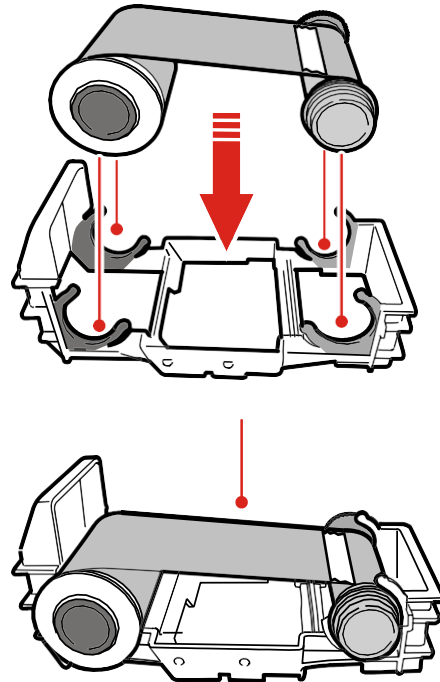
3.1 Installing the Ribbon

Original Matica ribbons are to be installed carefully. The ribbon carrier that comes with the printer helps to install the ribbon quickly, easily and accurately. Once the ribbon is in its carrier, the carrier can then be easily dropped into the printer using the red and grey guides.

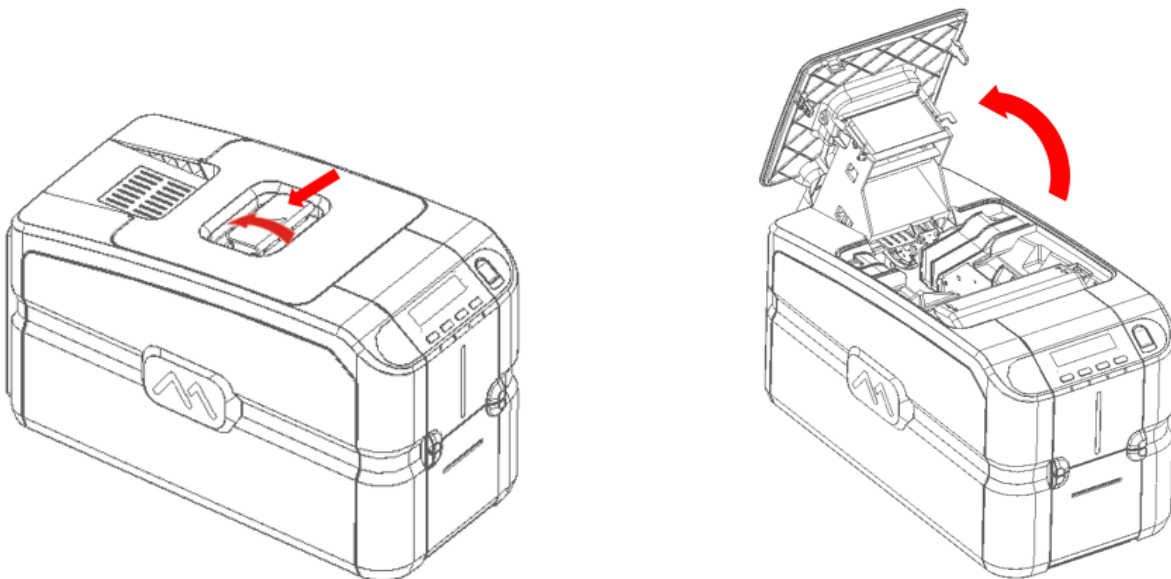
1) Installing the ribbon



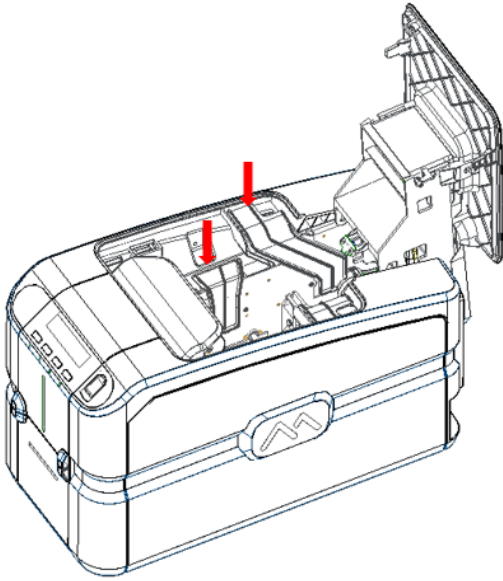
2) Insert the ribbon (not provided with the printer) into the ribbon carrier.



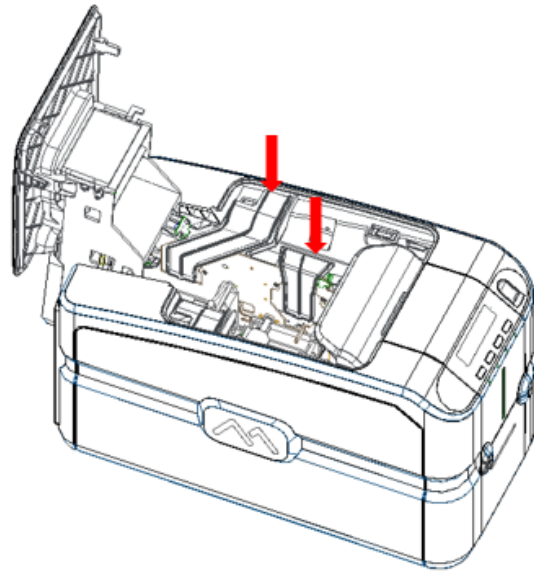
3) Move the door handle in the direction shown and open the Top cover.



4) Ribbon carrier should be positioned inside the Right & Left Guide cores as illustrated below

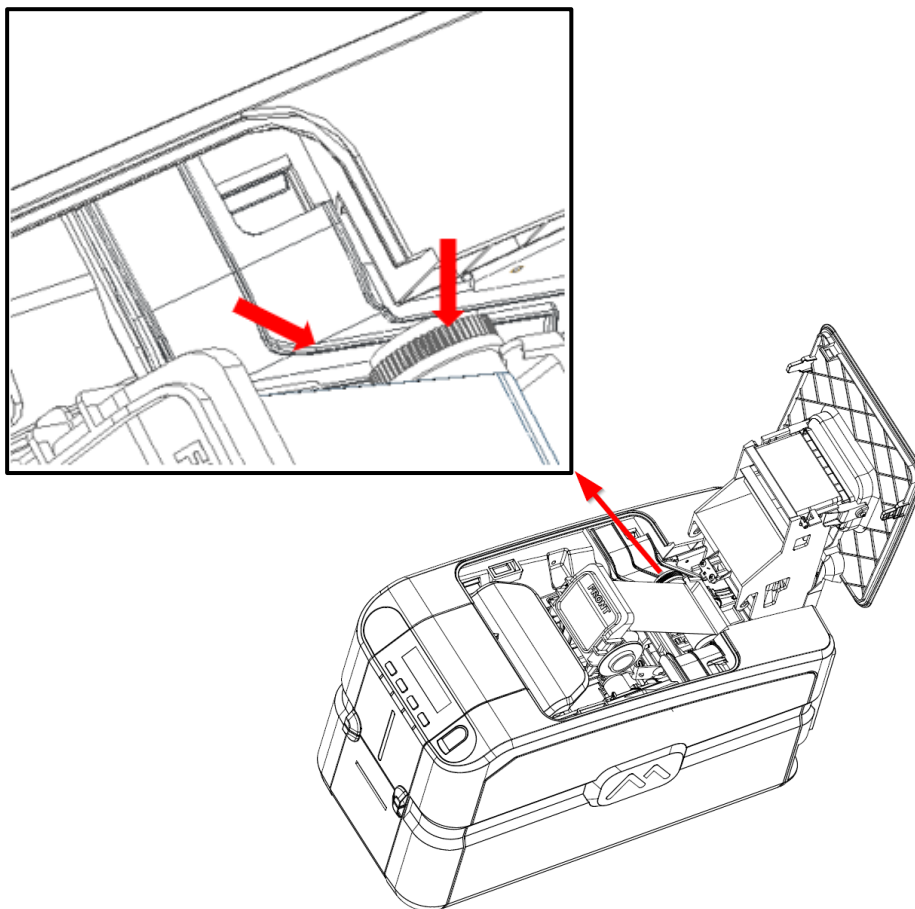


Left Guide Core for Ribbon carrier

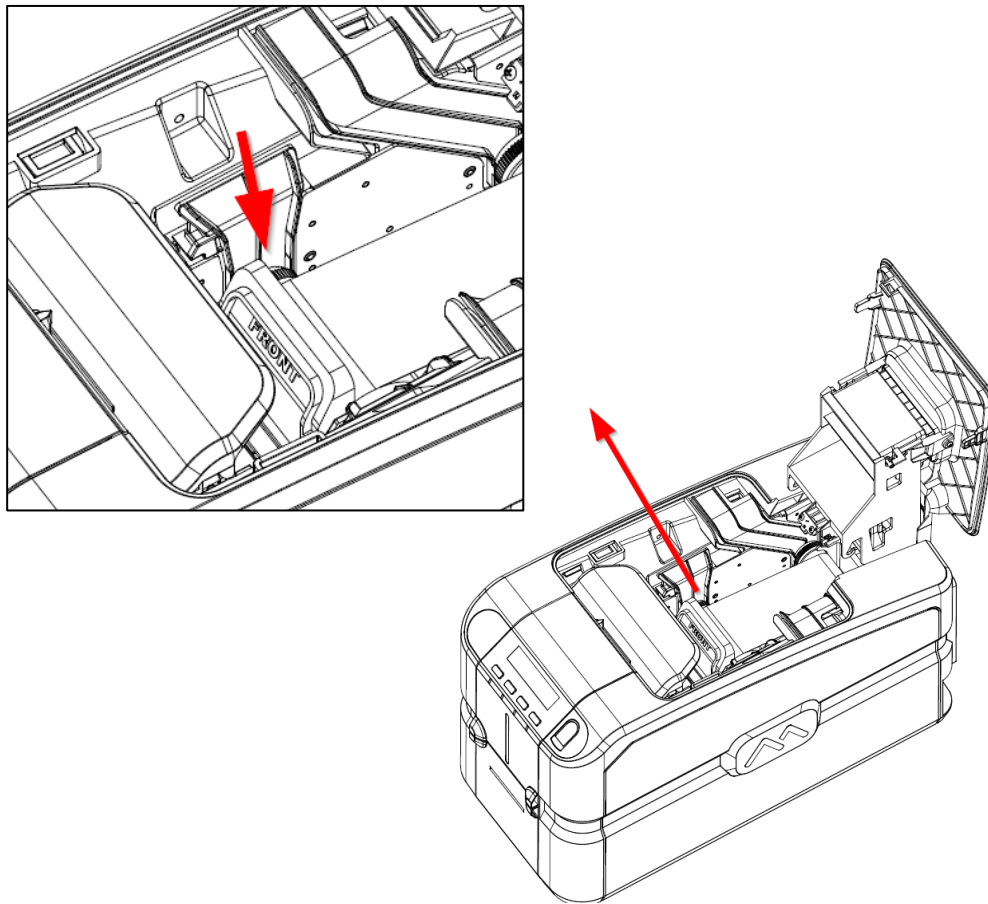


Right Guide Core for Ribbon carrier

5) Slide the Ribbon carrier back side (Trailer core) inside the backend Guide cores as per below instructions.



- 6) Slide Ribbon carrier front side (Leading core) inside the front Guide cores as per instructions till it touches the bottom of guide core as illustrated below,



- 7) Close the Top cover.

Note: Ribbon carrier should be assembled without touching/damaging the printer head

3.2 Card Feeding

The input Hopper (automatic card feeder) can hold a maximum of one hundred 0.76 mm thick cards. A label inside the door gives the instructions for correctly positioning and orienting the card.

When the single card manual feeder option is present, it can be used without needing to empty the input Hopper.

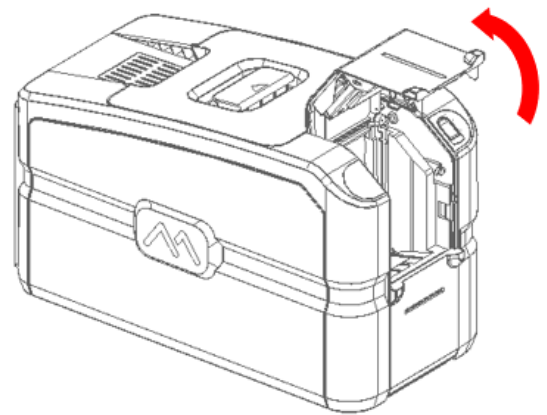
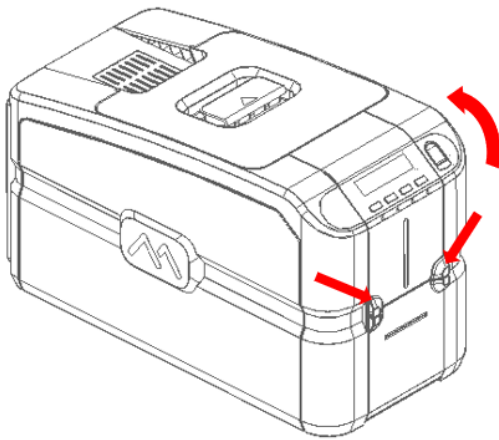
The card path can be selected via software to speed card processing:

- *Hopper*
- *Reject bin*

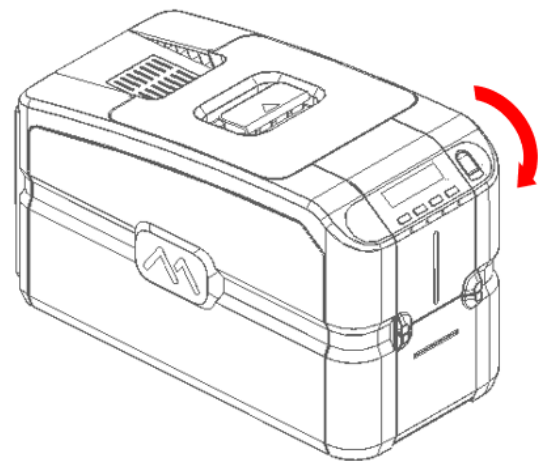
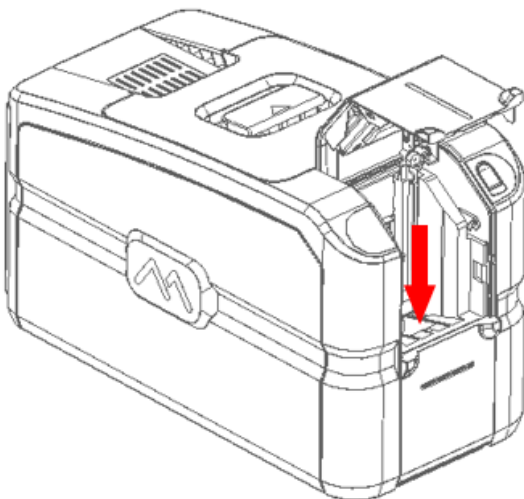
The output Hopper at the front of the printer can hold a maximum of thirty 0.76 mm thick cards.

3.2.1 Input Hopper (Automatic Card Feeder)

1. Open Front door manually as shown below.



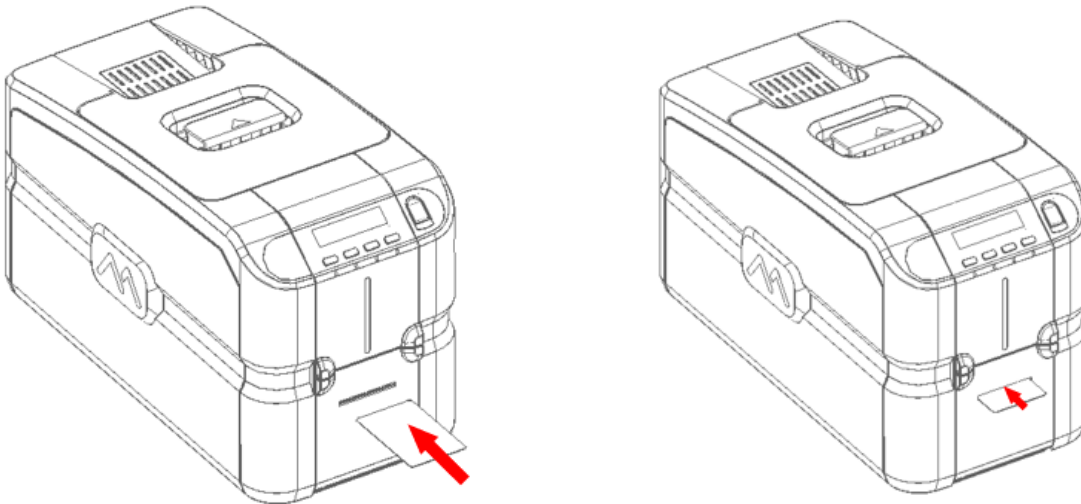
2. Load the cards in the Hopper and then close the door.



3.2.2 Front Slot (Manual Card Hopper)

The manual card feeder is always ready for use and is prioritized. It is suggested that it can be used when the job requires a different card other than the ones loaded inside the input Hopper.

Insert the card inside the slot as per below illustration.

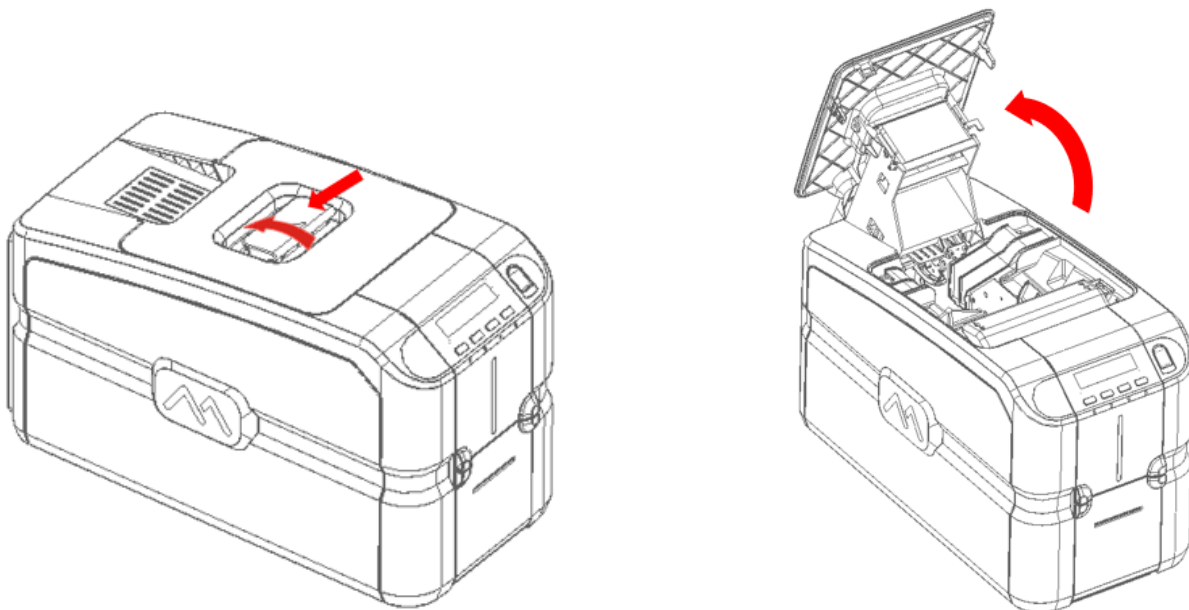


3.3 Adjusting the Card Thickness

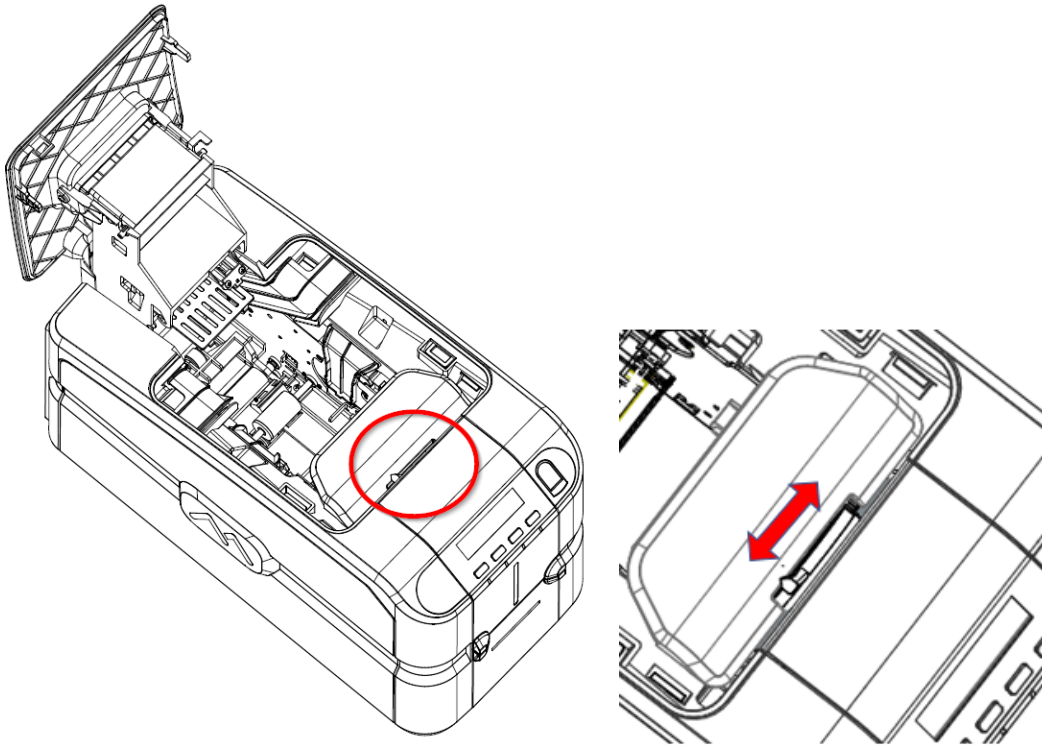
The card thickness can be adjusted by sliding the Selection knob (A label is attached on the Encoder cover to guide the selection knob) to the required thickness.

Cards with thicknesses ranging between 0.25 mm and 1.25 mm (10 - 50 mil) can be processed by the printer. Proceed as follows to adjust the card thickness:

- 1) Open the printing module compartment cover as per below instructions.



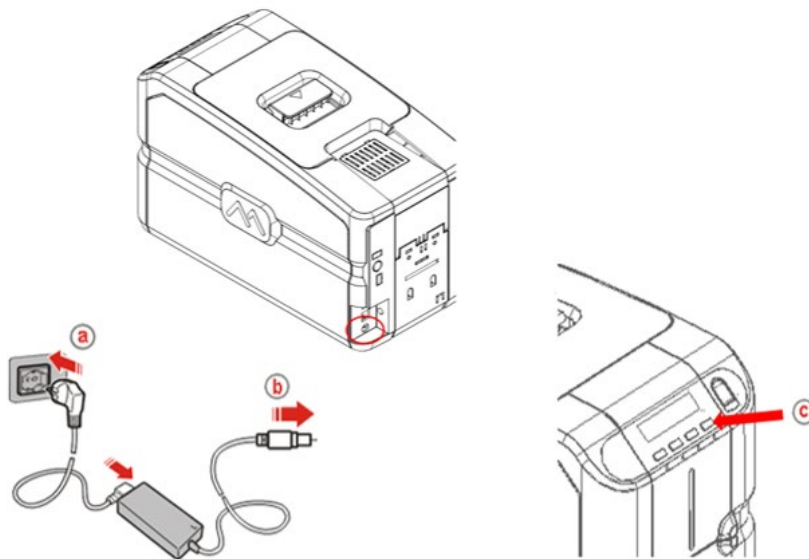
2) Slide the Card thickness selection knob to match the card thickness which is to be printed.



3) Close the Top cover.

3.4 Connecting the Power Supply and Powering ON the Printer

Connect the power cord to the power outlet (a) to the power supply and then connect the power supply to the printer (b) as shown below. Press the ON/OFF button (c) to power on the printer.



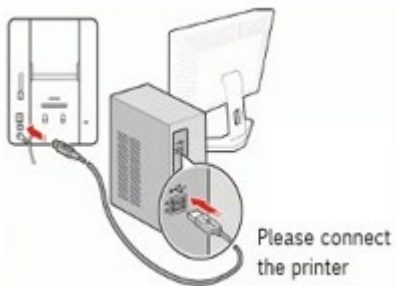
4 Installing the Software and Configuring the Printer

The USB stick that comes with the printer contains the following:

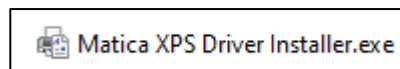
- Windows Vista, Win7, Win8, Win8.1 (32 and 64 bit), Win10 printer driver for USB, Ethernet LAN and Wireless connections (if supported by the purchased model)
- Printer Manager application
- PDF User Guide
- Driver Installer (XPS DRIVER)

4.1 Connecting the Printer to the Computer and Installing the Software

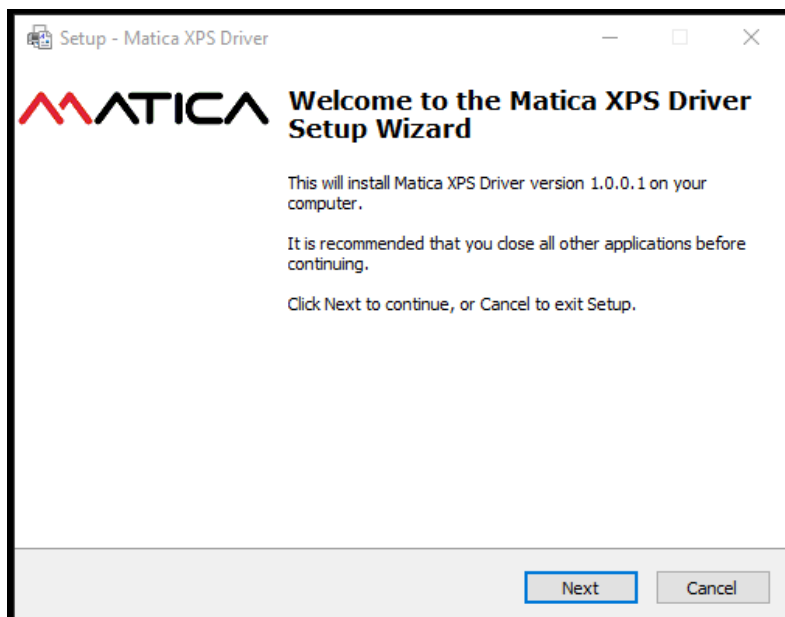
- 1) Power on the computer and then insert the USB stick. Copy the installer into the computer desktop. Connect USB of printer to computer and MC310 printer.



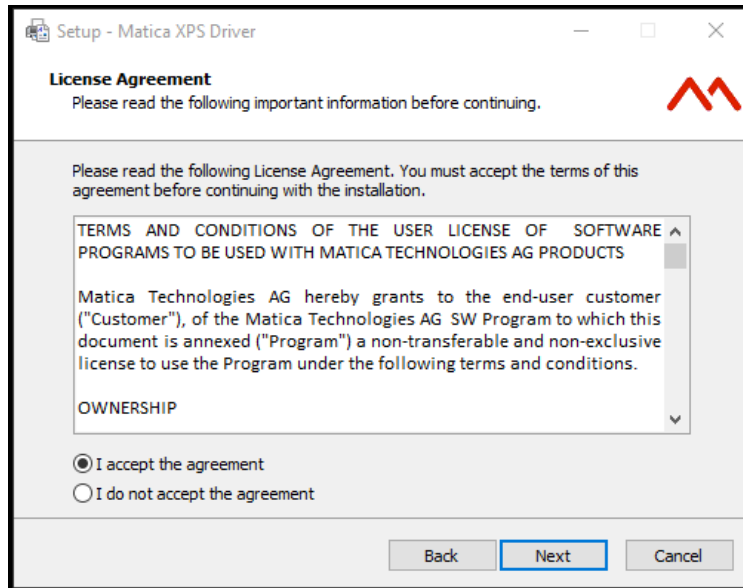
- 2) Double click on the Matica XPS Driver installer .exe application to setup the Wizard.



- 3) Set up wizard displayed. Click next button.



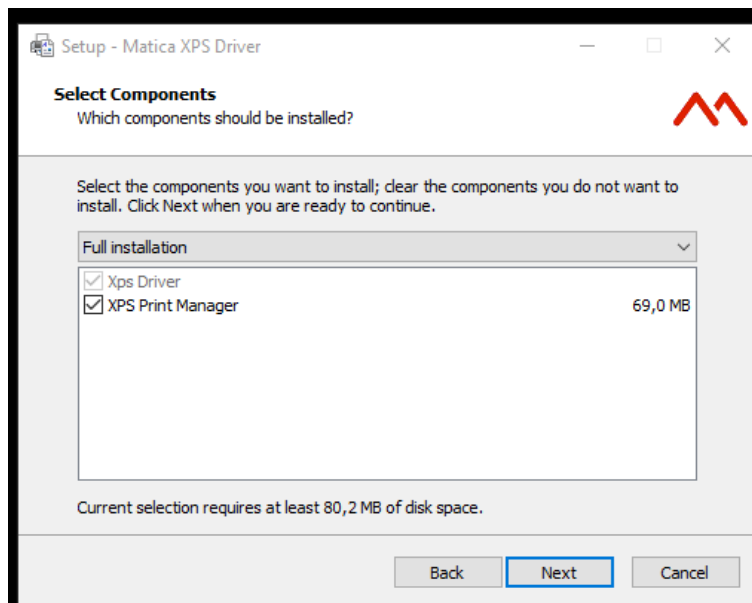
- 4) Click "I accept the agreement" to accept the license agreement and then click **Next**. The following screen is displayed.



- 5) Select Components and Click **Next** to continue

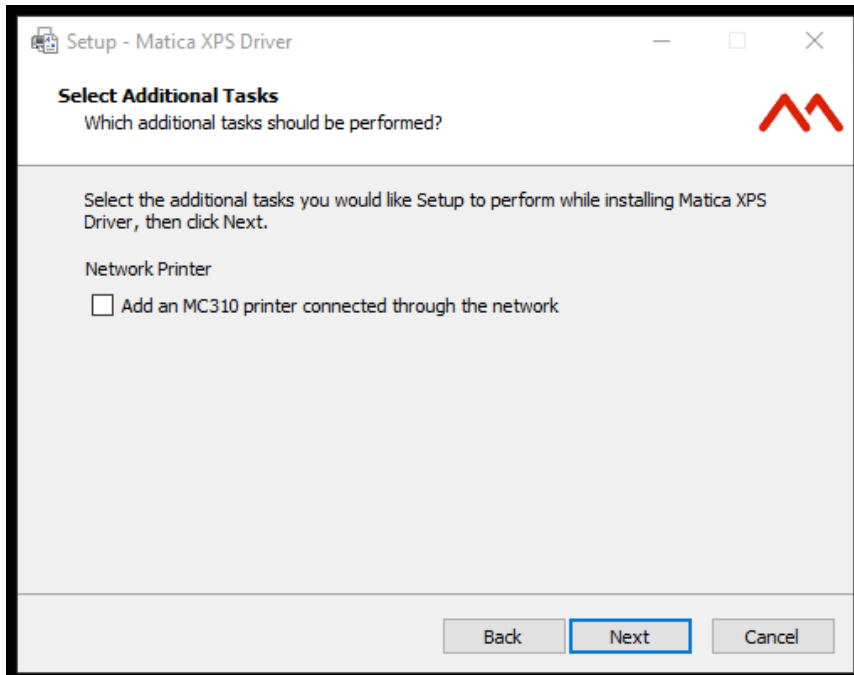
The setup program will provide you several option to install components

- Full installation: XPS Driver + XPS Print Manager
- Driver only : Only XPS Driver
- Custom installation : XPS Driver + XPS Print Manager (optional)

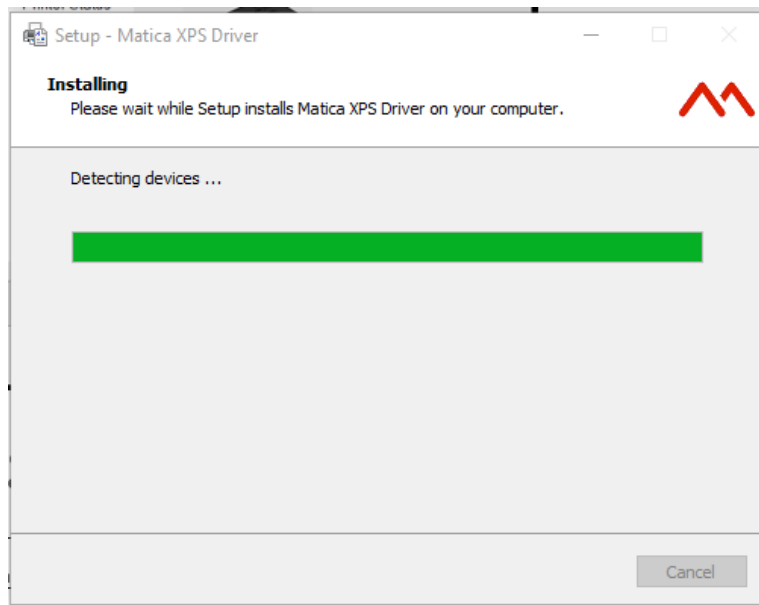


- 6) In case if you want to 'Add an MC310 printer connected through the network' then select the checkbox and Click **Next** to continue with the installation.

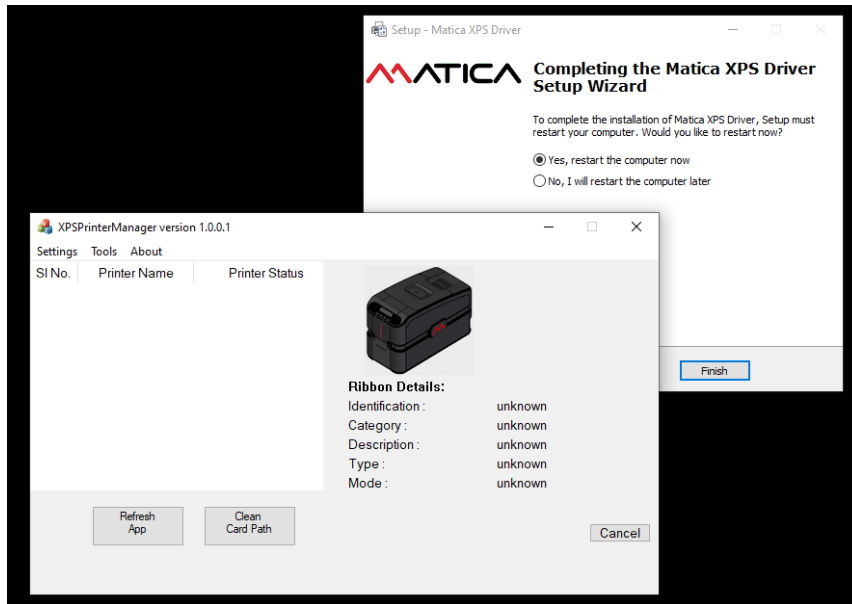
Network printer selection is not mandatory to continue the setup.



- 7) Installation process starts,



8) Following windows are displayed upon completion of the installation procedure



The installation program also automatically executes the **XPS Printer Manager**. Click 'Finish' button, the computer will restart to complete the installation of Matica XPS driver

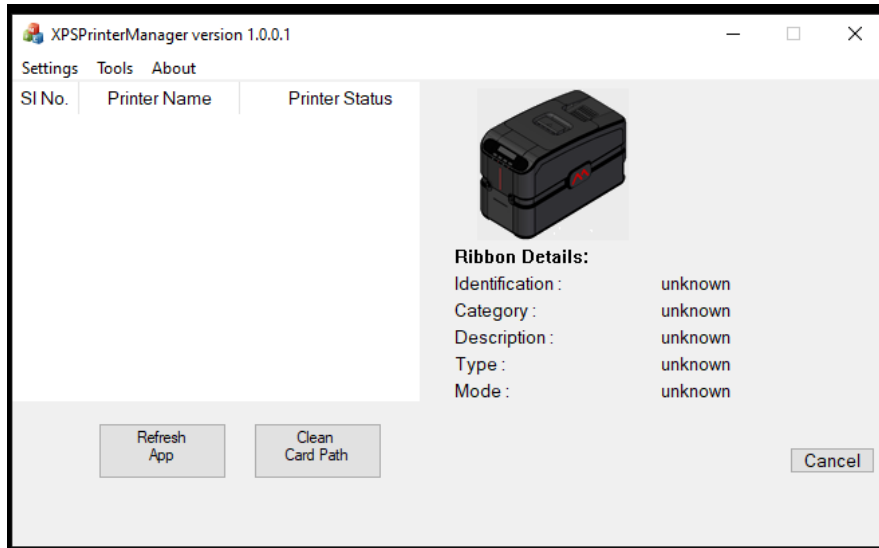
4.2 Add Printer Manager Communication

When the software installation is complete, Communication with the Printer can be made through

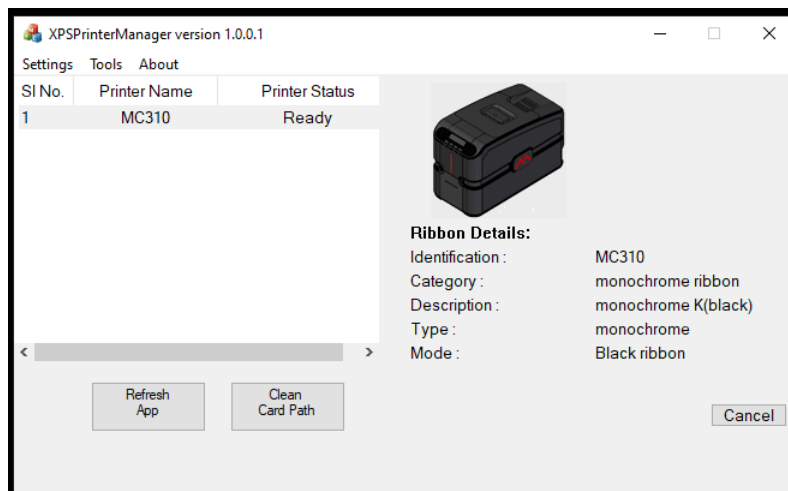
- USB
- Ethernet

4.2.1 USB Connection

1. Switch on the Printer and Open the Matica Printer Manager application

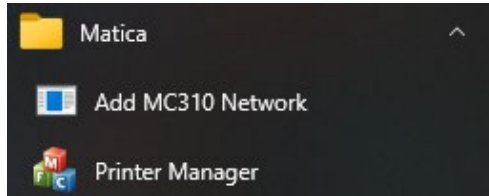


2. Connect the USB cable provided with the Printer to the Computer and wait for the Printer to appear on the Printer manager window with status 'Ready'.
Click 'Refresh' App if the Printer do not appear in the Pinter Manager window

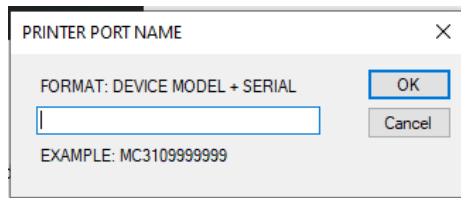


4.2.2 Ethernet (LAN) Connection

1. Connect the LAN cable to the printer & network port
2. Go to Windows start button, Click Matica folder and Click 'Add MC310 Network'



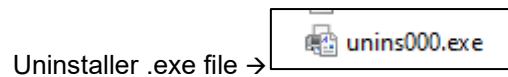
3. Below window appears, Add printer port name as per the format appear in below display & click OK. Now printer will appear in network.



4.3 Uninstall Program Tabs

To uninstall the software:

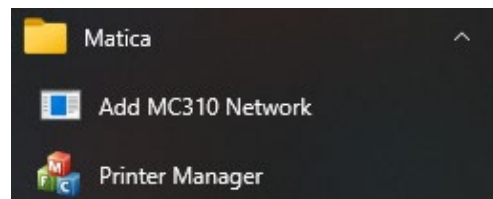
- 1) in Windows XP, select Start > Control Panel > Add/Remove Programs > Matica XPS Driver version 1.x.x.x
- 2) in Windows 7, Windows 8/8.1, Win10 select Start > Control Panel > Programs> Uninstall a Program > Matica XPS Driver version 1.x.x.x
- 3) Also, driver can be uninstalled by clicking unins000.exe file available in XPS driver installed folder. Refer below attached path.



4.4 Matica Printer Manager

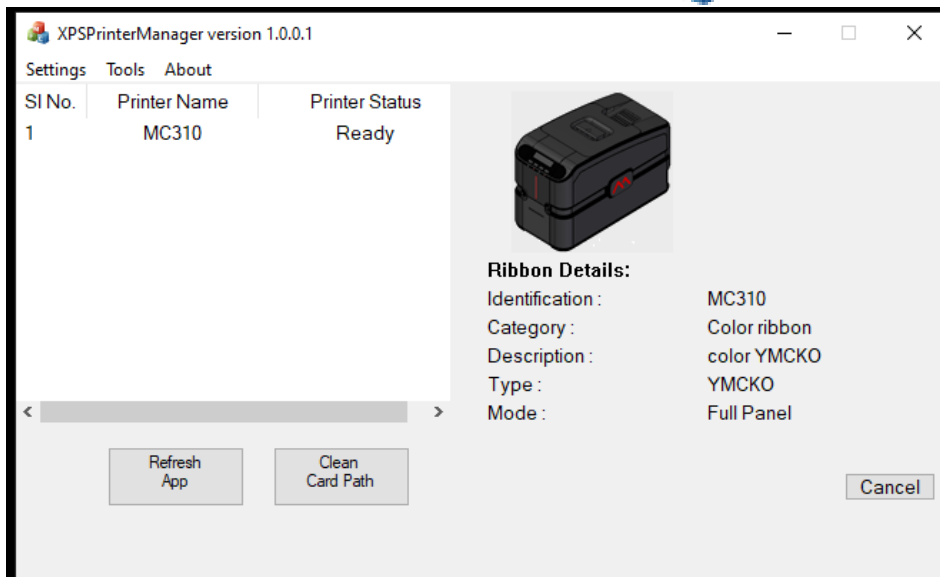
Upon successful installation, the following programs are installed on the computer, you can find the Printer manager under the Start Menu → Matica,

- *Add MC310 Network*
- *Printer Manager*



4.5 Printer Manager

Open the **Print Manager window** by clicking on the Printer Manager  application in the Start menu



Following information is displayed in this window

- **Printer name and Status**
- **Ribbon details**

Under the Main Menu,

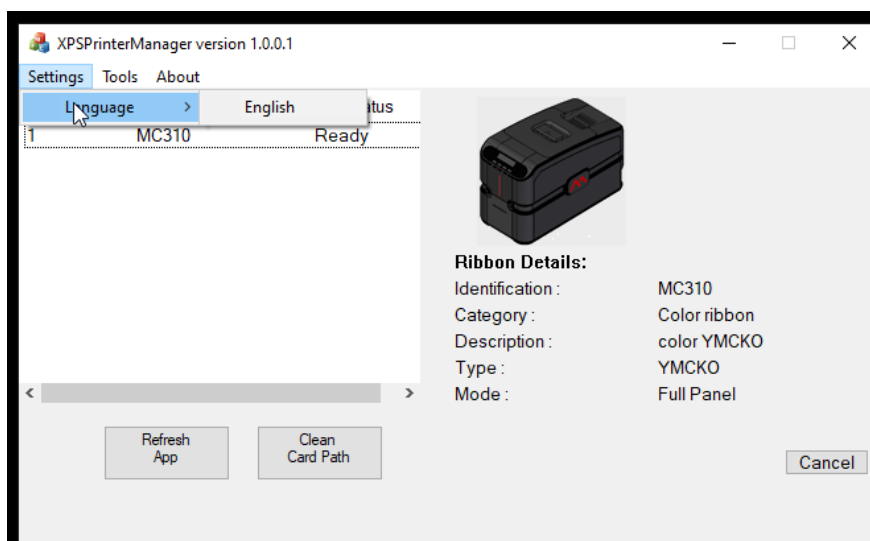
- **Settings, to change the language**
- **Tools, to perform different operations in the Printer**
- **About, displays the printer FW version**

Click **Cancel** to close the Printer Manager window

4.5.1 Settings

In the Settings menu, you can choose the Language.

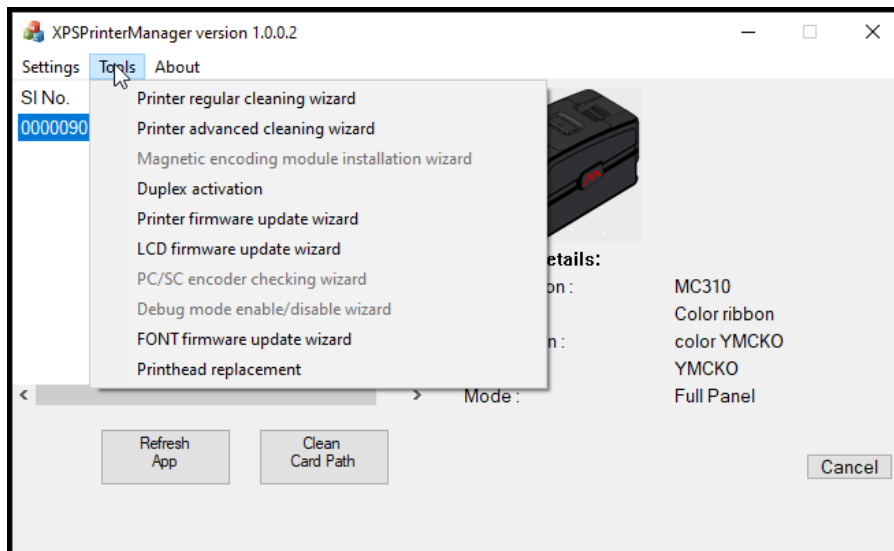
Current Printer manager version is available only in English



4.5.2 Tools

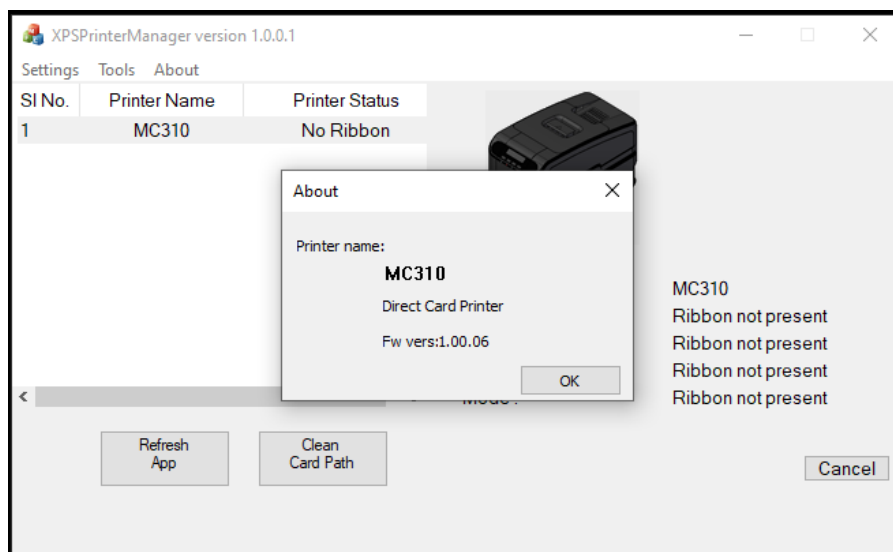
In the Tools menu, User can manage different operations in the Printer like the following

- Printer regular cleaning wizard, [Refer to Chapter 6.2 \(Standard Cleaning\)](#)
- Printer advanced cleaning wizard, [Refer to Chapter 6.3 \(Card patch advanced Cleaning\)](#)
- Magnetic encoding module installation wizard, [Refer to Chapter 7.2 \(Magnetic Encoding\)](#)
- Duplex activation, [Refer to Chapter 7.3 \(Duplex activation\)](#)
- Printer firmware update wizard
- LCD firmware update wizard
- PC/SC encoder checking wizard
- Debug mode enable/disable wizard
- FONT firmware update wizard
- Printhead replacement, [Refer to Chapter 6.7 \(Printhead replacement procedure\)](#)



4.5.3 About

In the About menu, User can check the FW version installed in the printer



5 Printing

5.1 Card Printing

Cards are usually printed and encoded by a Printer Application chosen by the User. However, if required, a compatible non-proprietary application is available as an option for designing and printing cards. Cards can be customized (logo, image and name) by creating graphic images and defining page formats.

The Printer Application recognizes the printer, allowing the User to create fully customized card jobs.

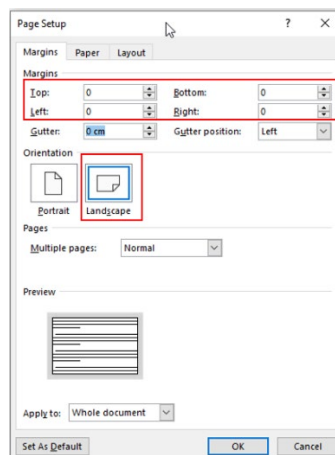
5.1.1 Card Printing Using Word

There are a large number of Windows applications that allow document printing (for example Microsoft Office® suite tools such as MS-Word®, MS-Access®, MS-Excel® and MS-PowerPoint®).

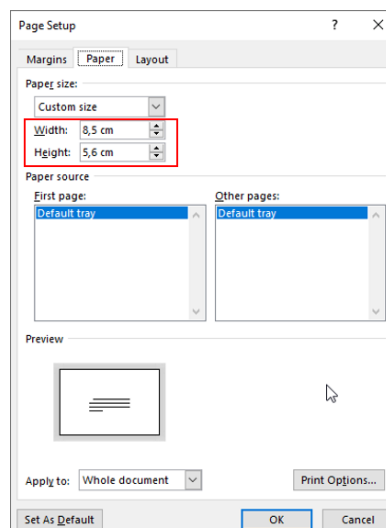
An example is provided below:

Using Microsoft® Word

- 1) Run the MS-Word application. In the Menu bar, click **Layout**
- 2) Click on Margins and Select **Custom Margins** to open the **Page Setup** window to Edit the Margins to **0** (Top, Bottom, Right, Left)
- 3) Select **Orientation** → **Landscape**



- 4) In the **Paper** tab, select the Paper Size option followed by the custom size 8,5cm x 5,6cm (85mm x 56mm)



5) Close the window by clicking **OK**

6) The card can now be customized by adding the various items composing the card:

- Logotype, illustrations, Identification photo
- Fixed and variable texts
- Barcode, etc.

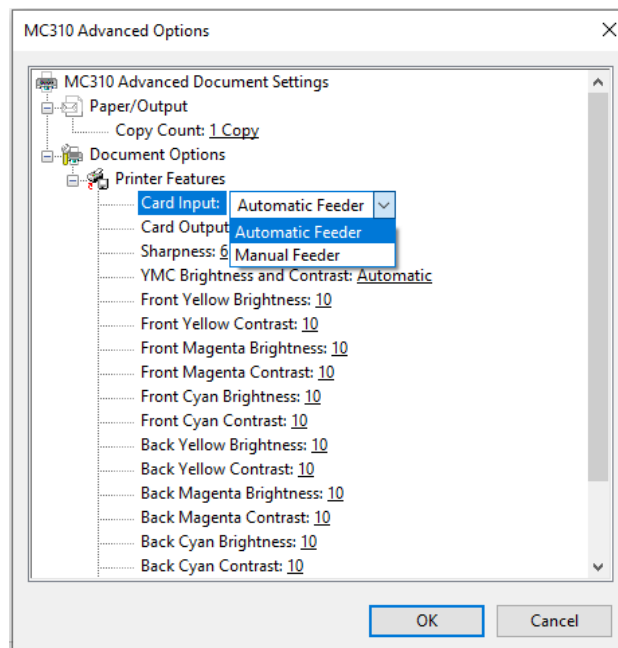
Once the operation is complete, click **File** followed by **Print**.

7) Under **Printer** section, Select **MC310** from the drop down menu

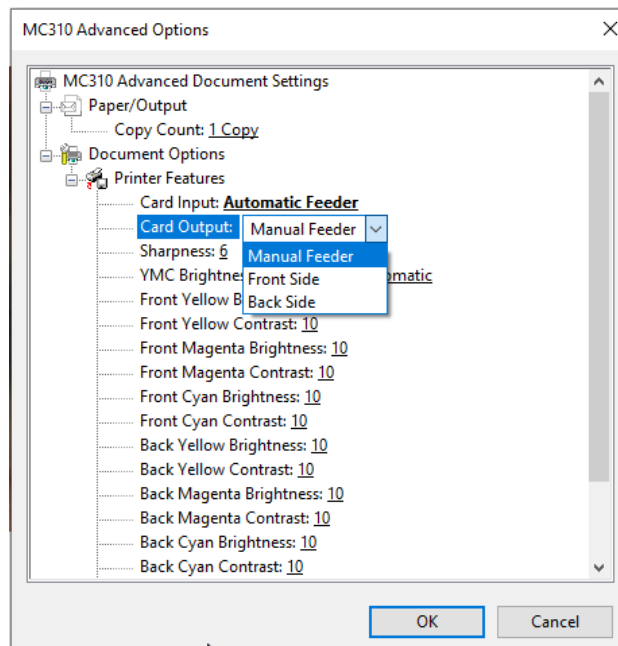
8) Click **Printer Properties** to customize the print options from this screen

9) To define the Print Orientation, Select either **Portrait or Landscape**

10) To define the Card path input, Click on 'Advanced' in Printer properties window and Select the Card Input path

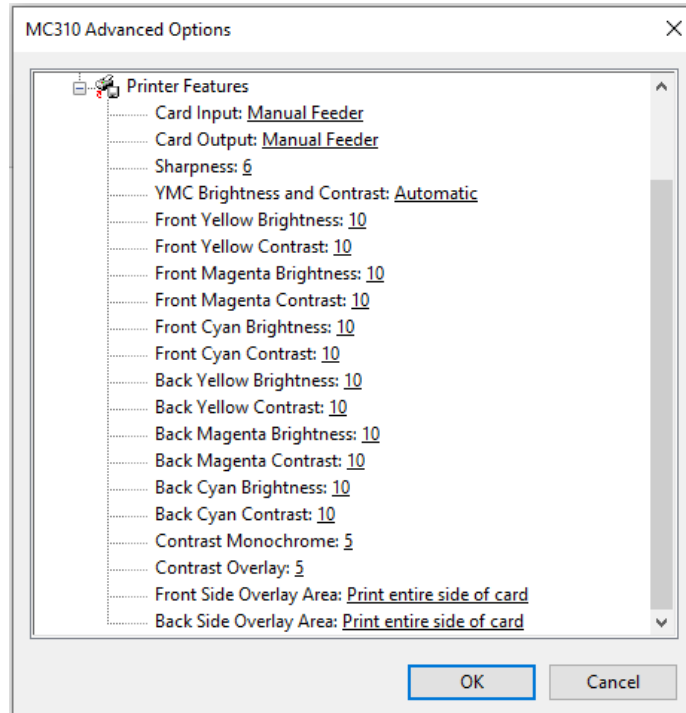


11) To define the Card path output, Click on 'Advanced' in Printer properties window and Select the Card output path



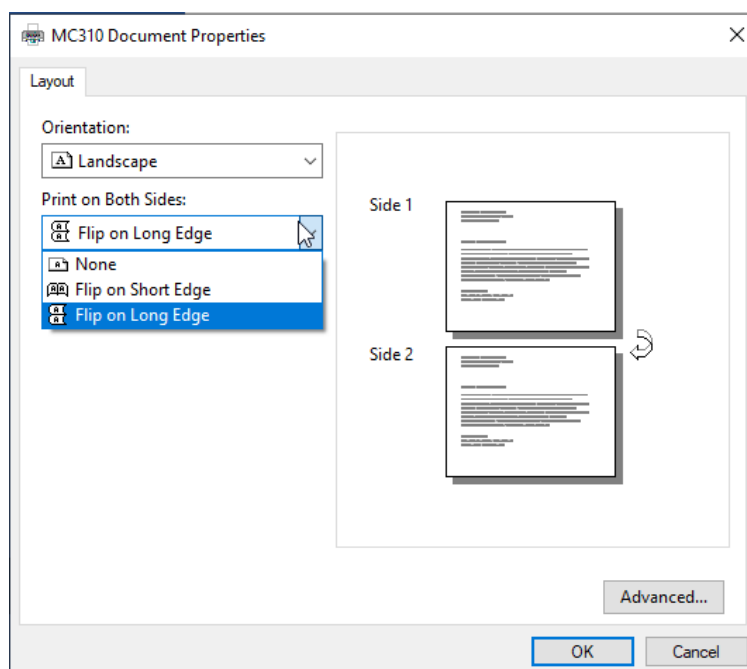
12) To configure specific settings such as:

- Copy count
- Color Panel Adjustment (brightness, contrast, sharpness)
- Overlay Panel Adjustment
- K Panel /Monochrome Adjustment (greyscale, black text, etc.)



5.2 Double-side Printing

- 1) Click **Printer Properties** from Print window to customize the printing options
- 2) In the Printer Properties window, Select the Dual side print type under the **Print on Both sides** drop down menu

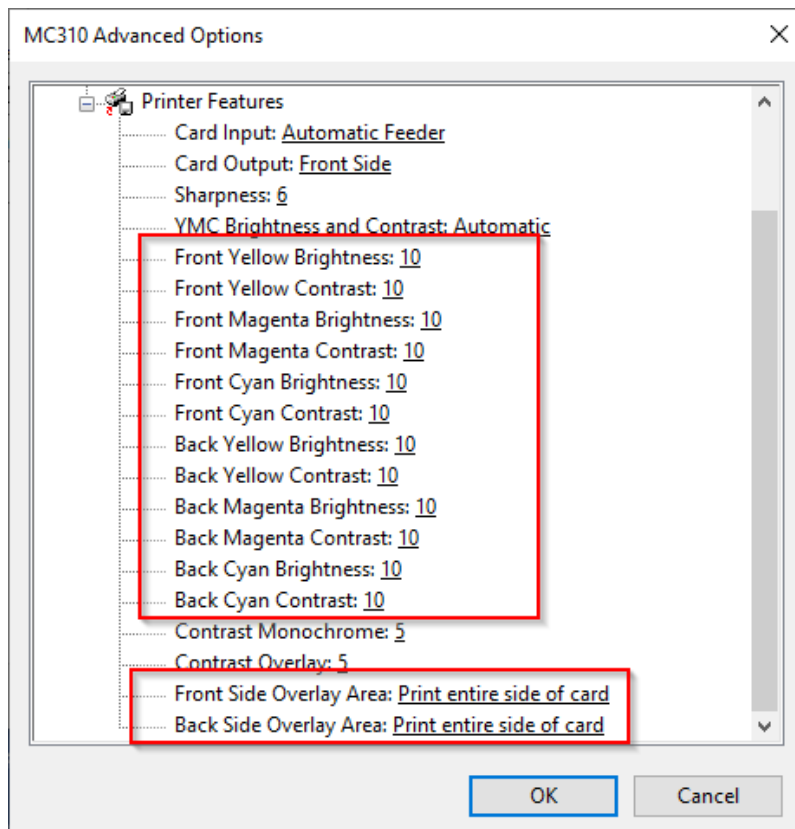


3) Click **OK** to store the settings made and print the card.

Note: Two-sided printing is optional (installation of the Duplex Kit is required).

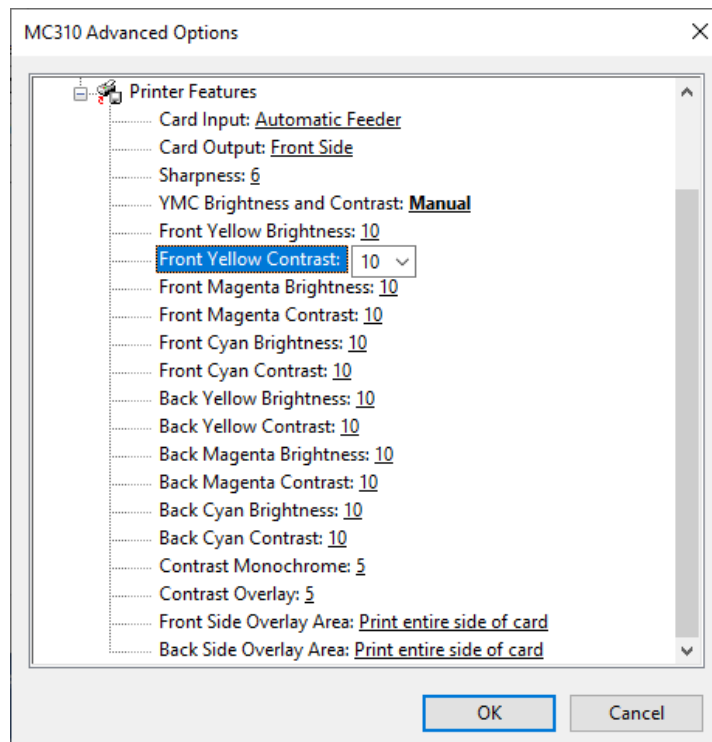
If **Dual-side** printing was selected, by clicking the **Advanced of Printer Properties** the following parameters for the two sides of the card can be selected independently:

- Color Panel Adjustment (brightness, contrast, sharpness)
- Overlay Panel Adjustment
- K Panel /Monochrome Adjustment (greyscale, black text, etc.)



5.3 Color Settings

To customize color printing, Click **Printer Properties** → **Advanced** → **YMC Brightness and Control** → **Manual**



You can modify the saturation of each color being printed by selecting the value for each Color panel

However, to be sure that the actual result obtained meets your expectations, it is necessary to run a few print tests.

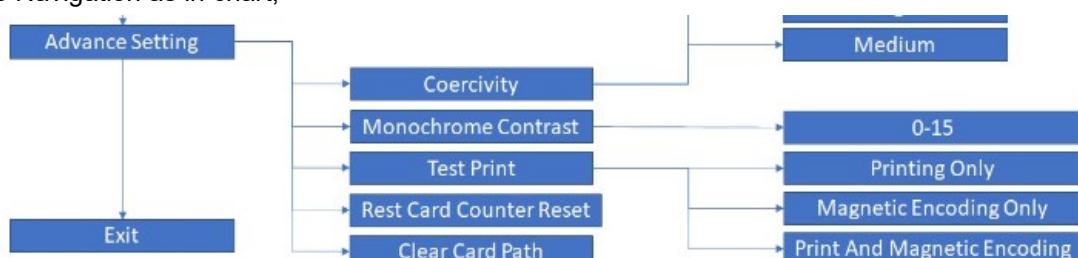
5.4 Printing Test Cards using Printer menu

Test Cards are used to check that the printer is operating correctly and to obtain some important printing parameters.

Print a Test card using the LCD Display menu,

- In the Menu/Scroll button, Scroll to Advanced setting
- Press the Selection button to transit to respective sub-menu
- Scroll to Test Print only
- Press the Selection button to print the Test card

Refer to the Navigation as in chart,



6 Printer Maintenance

6.1 Printer Routine Cleaning

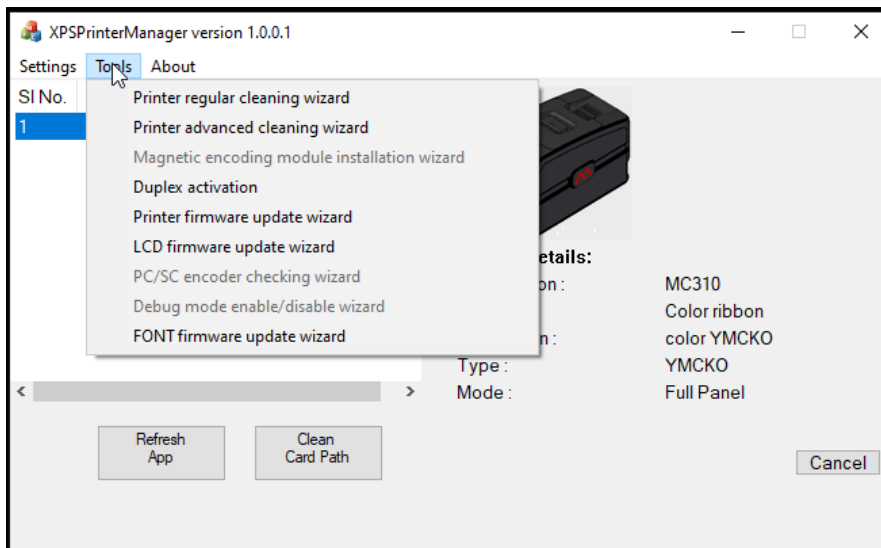
Four different cleaning processes are implemented in the printers using MC310 Cleaning kit (PR20309601)

6.2 Standard Cleaning

- Suggested frequency
Color printing: Each time the ribbon is changed
- Mandatory frequency (to prevent voiding the warranty)
After every 1,000 prints, Printer will alert the user for 'Basic Cleaning' in the display with AMBER LED blink
Standard cleaning is performed using the Extended cleaning card as explained below.
The product has an internal counter that keeps track of the number of cards printed and warns the user when the mandatory cleaning procedure must be performed.
- If the Cleaning procedure is not followed after 1000 prints, At 1200 print Printer will alert the user for 'Mandatory cleaning' in the display and RED LED
- For Printer with ISO Magnetic stripe option: Cleaning frequency should be more often

Standard Cleaning Procedure

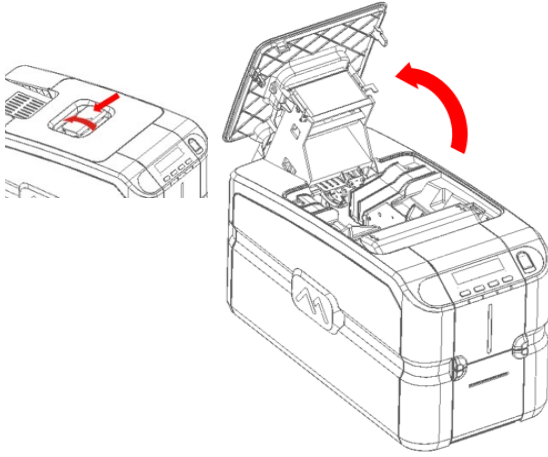
1. To perform the Standard cleaning, Select 'Printer regular cleaning wizard' from the Printer Manager



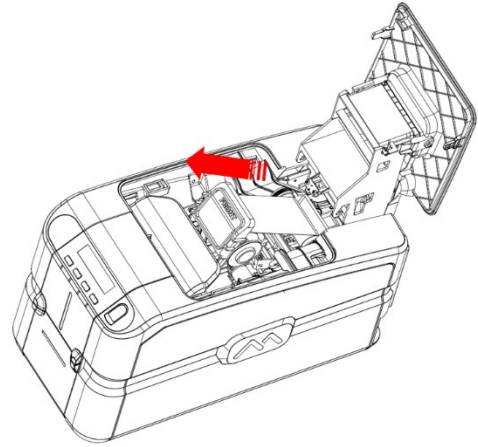
2. Follow the instructions in the wizard, as below

a) Select the Printer

b) Open the Top cover



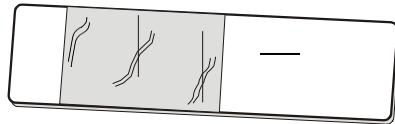
c) Remove the ribbon carrier.



d) Close the Top cover.

e) Use the Extended Cleaning Card. **Remove the protective film.**

Extended card



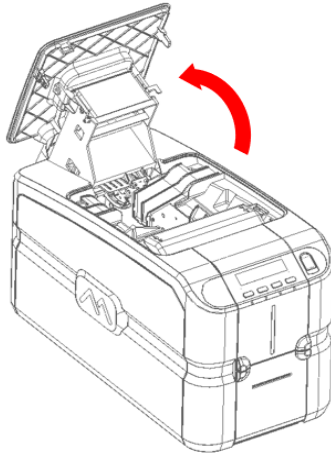
f) Insert the Longer side of the Extended card in the back slot of the printer as represented in Figure
The adhesive surface is on both sides.



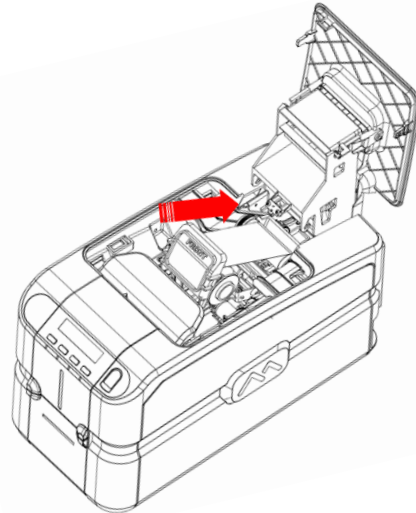
Insert the **Long side** of the
Extended card in the **Back slot**

- g) Insert the card and launch the cleaning process by clicking 'Next' on the Printer Manager
- h) Once the cleaning procedure is completed, the Extended cleaning card is ejected from the back slot
- i) Refer to [Chapter 6.5](#) for Printhead cleaning procedure, Click 'Finish' to complete the Standard Cleaning procedure

3) Open the Top cover



4) Insert the ribbon and close



5) The Standard cleaning procedure is now concluded

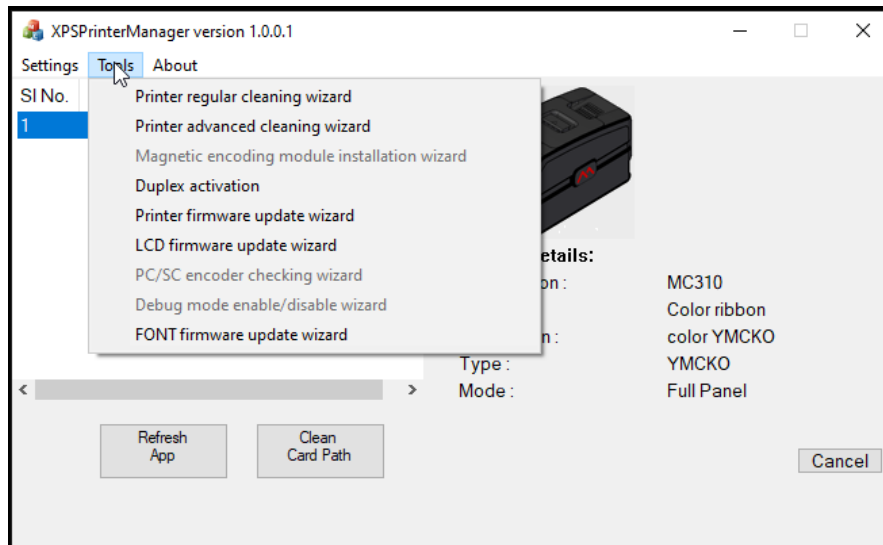
6.3 Card Path Advanced Cleaning

The card path advanced cleaning procedure is required after performing **five Standard cleaning procedures**:

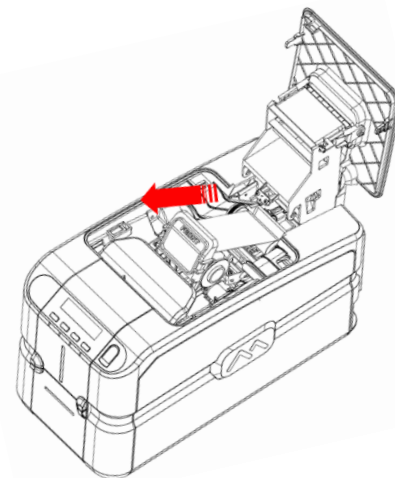
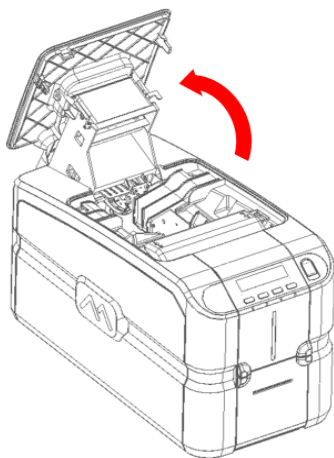
- After every 5000 prints, Printer will alert the user for 'Advanced Cleaning' in the Printer display with RED LED blink
- Advanced cleaning is performed using the T-card as explained below. The procedure involves cleaning the card path, removing the dust on the rollers and cleaning the magnetic head.
- The printer has an internal counter that stores the number of Standard cleaning procedures performed, so as to notify when the Advanced Cleaning procedure is required (see the Printer Manager Specifications).
- A software-guided procedure will assist in carrying out the cleaning operations.

6.3.1 Advanced Cleaning Procedure

1. To perform the Standard cleaning, Select 'Printer advanced cleaning wizard' from the Printer Manager



2. Follow the instructions in the wizard, as below
 - a. Select the Printer
 - b. Open the Top cover and Remove the ribbon carrier.



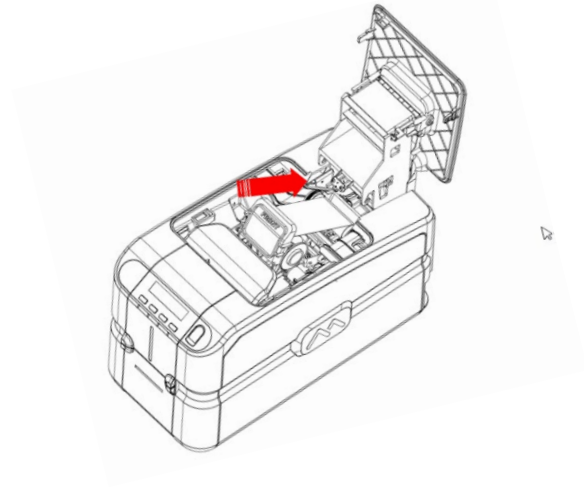
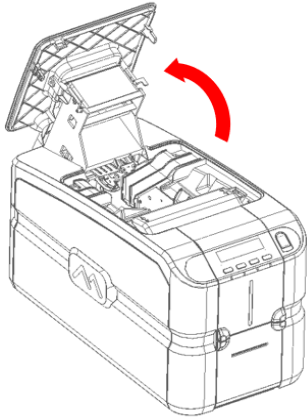
- c) Close the top cover
- d) Insert the **T-card** in the back slot of the printer



Insert the **T-card** in the **Back slot**

- e) Insert the card and launch the cleaning process by clicking 'Next' on the Printer Manager
- f) Once the cleaning procedure is completed, remove the T-card from the back slot
- g) Refer to [Chapter 6.5](#) for Printhead cleaning procedure, Click 'Finish' to complete the Advanced Cleaning procedure.

3. Open the Top cover and insert the Ribbon



4. Close the Top cover
5. The advanced cleaning procedure is now concluded.

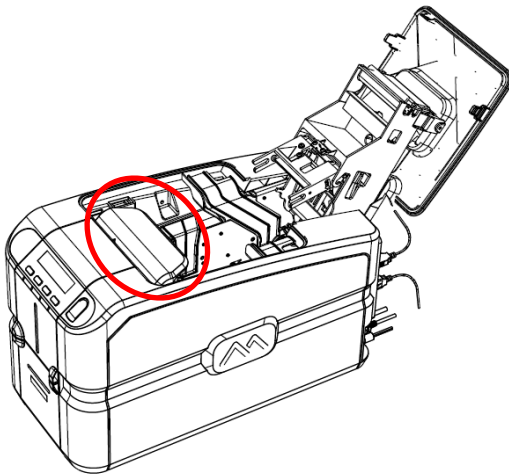
6.4 Cleaning Roller Advanced Cleaning

It is suggested to perform an advanced cleaning of the cleaning roller when the standard cleaning procedure does not efficiently remove all the dust from the cleaning roller. (Cleaning frequency: After every 1000 prints or even more often based on the working environment)

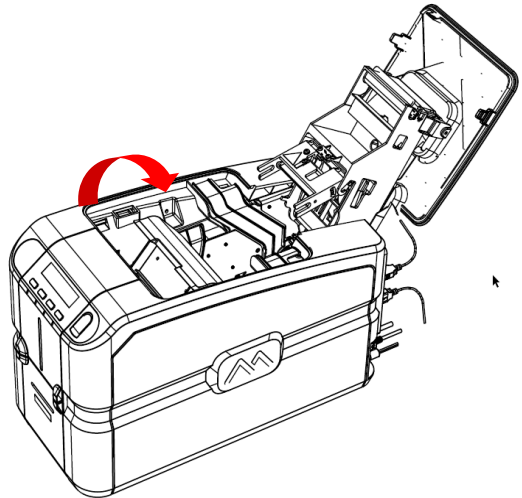
6.4.1 Roller cleaning Procedure

- 1) Unplug the printer from the power supply.
- 2) Open the Top cover
- 3) Remove the ribbon carrier

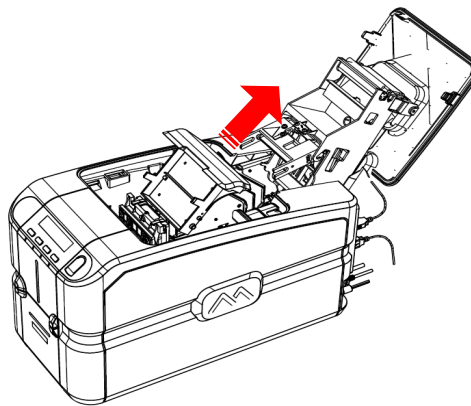
4) Remove the Encoder Cover by following the instructions as in the Figures



Step 1: Hold the Encoder cover

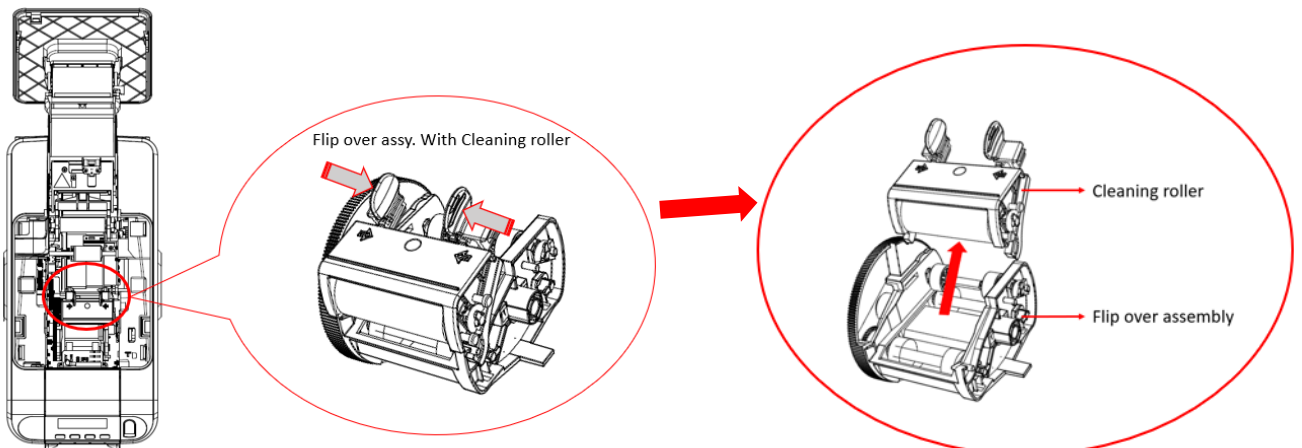


Step 2: Move the Cover towards the downward direction as shown in the image to disengage



Step 3: Slide out the Encoder cover in the direction as shown in the image

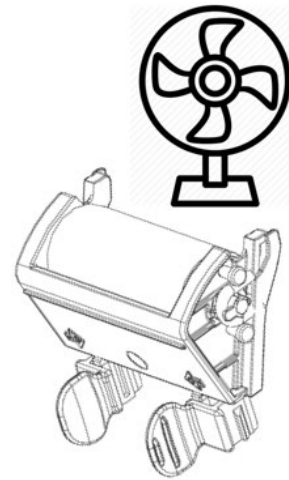
5) Once the cover is open below you could see the Flip over Assembly with Cleaning roller (Marked with 2 arrows)
Press with 2 fingers to remove only the Cleaning roller from the Flip over assembly, as illustrated below.




6) Identify the roller & gently clean the roller with water only.

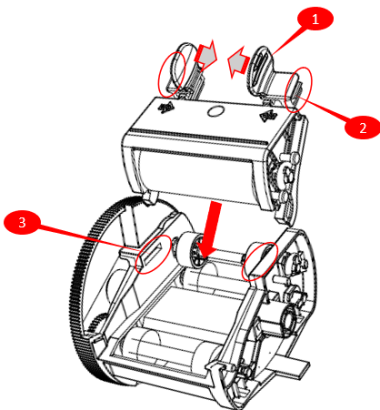


7) After cleaning, dry the roller thoroughly.

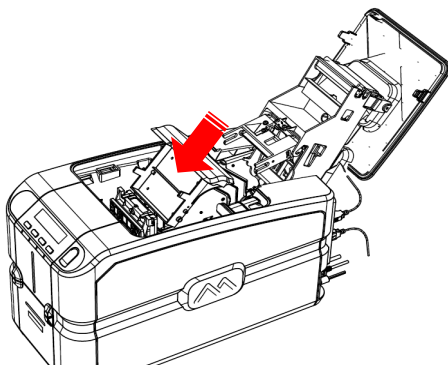


 Just air dry.
Do not use paper towels or cloth towels for drying the cleaning roller.

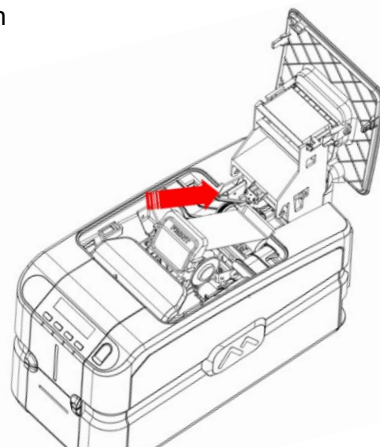
8) Reinsert the roller by pressing the flanges(1) of the Cleaning roller and pushing the projections(2) into its slot(3), pressing downwards until you hear a sound of locking.



9) Insert the Encoder cover and ribbon carrier back into its position



1. Insert the Encoder cover



2. Insert the Ribbon carrier

10) Close the printing module compartment

11) The roller cleaning procedure is now concluded.

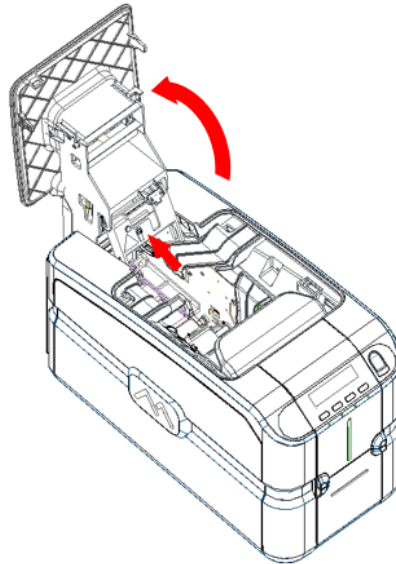
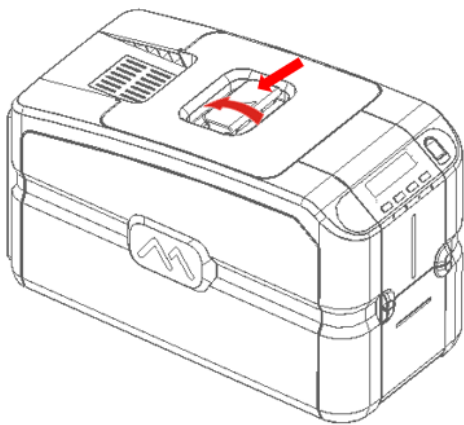
6.5 Printhead Cleaning

It is suggested to clean the printhead when dots are missing on the printed cards:

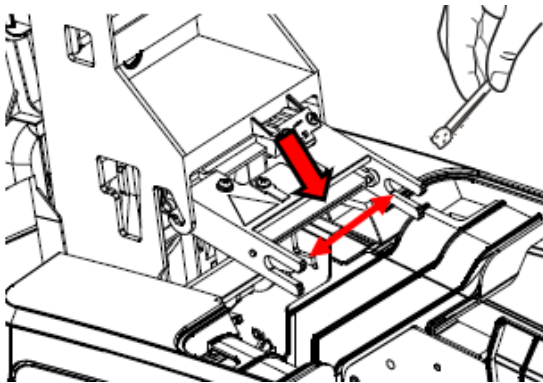
- The edge of the printhead must be cleaned using the Cleaning pen.
- The edge of the printhead must be cleaned to remove residual ink or dust.

6.5.1 Printhead Cleaning Procedure

- 1) Unplug the printer from the power supply.
- 2) Open the Top cover.



- 3) Using the cleaning pen that is provided in the Cleaning Kit, clean the printhead by rubbing the pen in the direction indicated by the arrow in the figure below.



**Printhead might be hot,
please ensure that it is cooled down
before proceeding further**

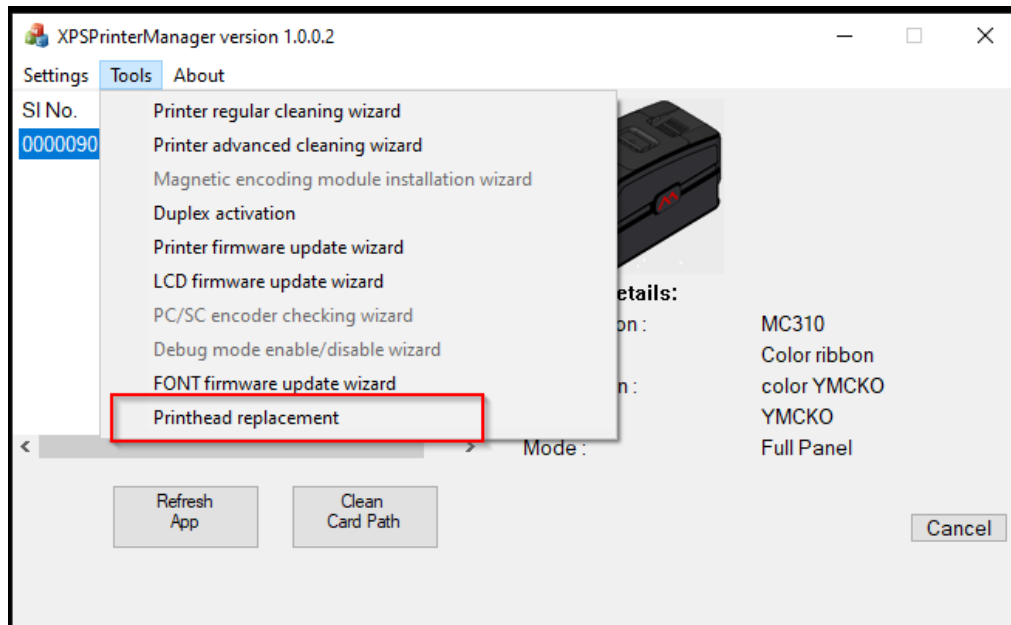
- 4) Close the Top cover
- 5) The printhead cleaning procedure is now concluded.

6.6 Print head replacement procedure

As the print head is the most important component of the printer, it is advisable to carry out the recommended cleaning procedures in order to guarantee maximum quality at all times and longest possible service life. However, the print head may become worn and must be replaced after a certain period of time.

6.6.1 Replacement procedure

- 1) To perform the Printhead replacement, Select 'Printhead replacement' from the Printer Manager

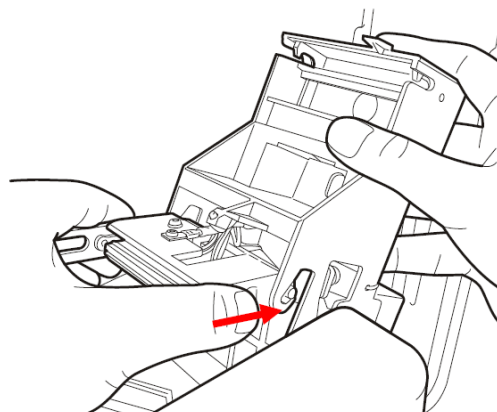


- 2) Select the connected Printer from the drop down box in the wizard and Click 'Next' to continue

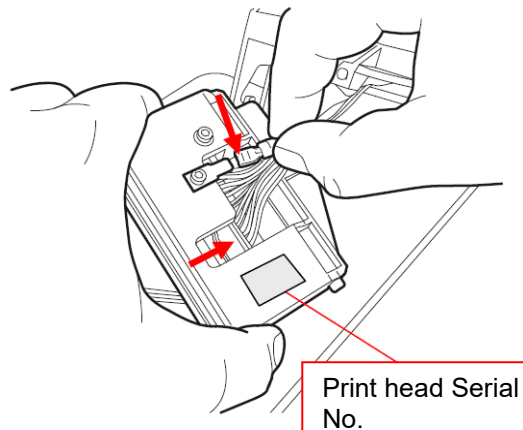
- 3) Unplug the Printer from the Power supply, Open the Top cover and Click 'Next' to continue

- 4) Remove the Printhead as instructed below,

- a) To remove the print head. Press in the direction indicated by the arrow to loosen the spring and to release this from its housing and Click 'Next' to continue in the Printer Manager wizard

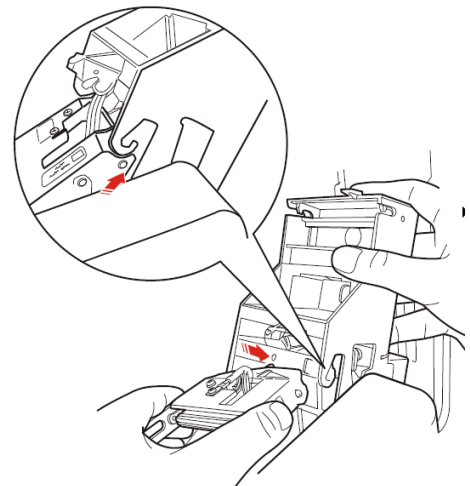


b) Remove the earth wire and the connector, connect these to the new print head and make a note of the Print Head Serial No. and Click 'Next' to continue in the Printer Manager wizard

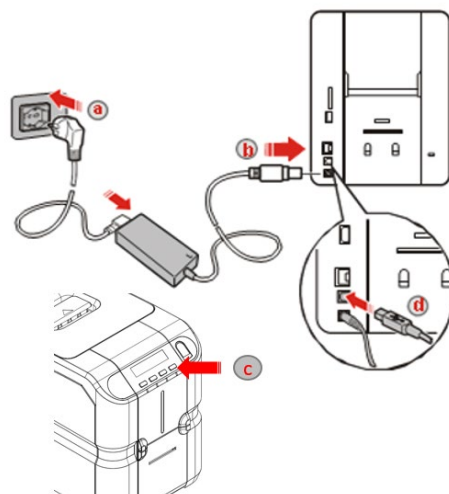


c) Insert the new print head.
During re-insertion, press with the sphere present in the tip of the print head on the point indicated in the figure and rotate it slightly in order to insert it in its housing and Close the top cover.

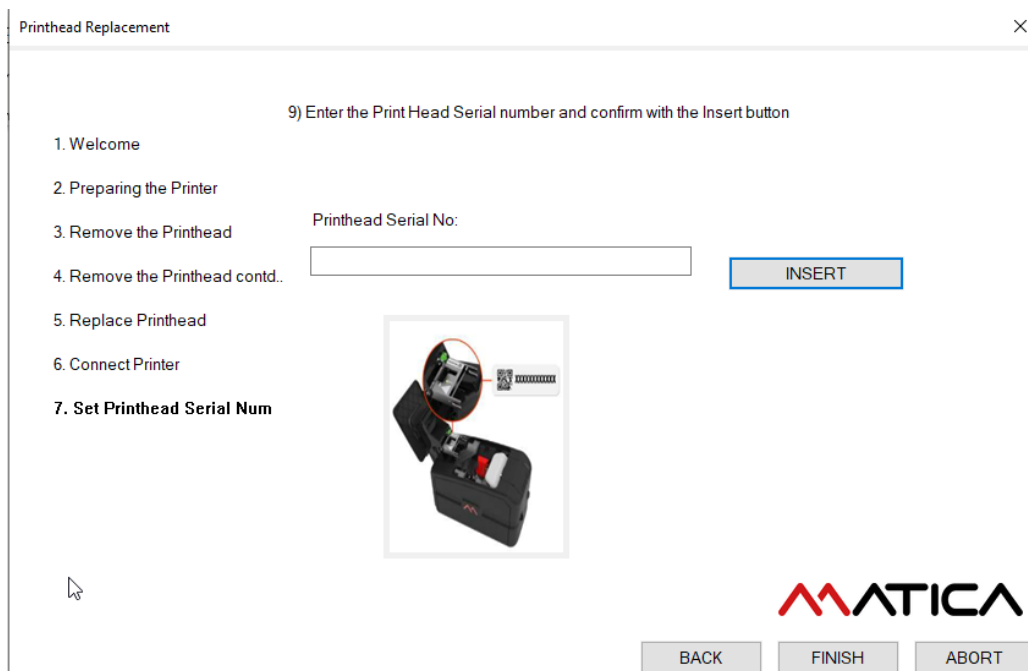
Click 'Next' to continue in the Printer Manager wizard



5) Connect the printer to the power supply, switch on and connect it to a computer with the USB cable
Click 'Next' to continue in the Printer Manager wizard



6) Enter the **Print Head Serial number** and confirm with the **Insert** button.



7) Click 'Finish' to complete the Printhead replacement operation

7 Options

7.1 Chip Encoding (Contact and Contactless)

The Chip Encoder is an optional module for the MC310 Series that allows the encoding of chip cards (smart cards).

Available chip encoding modules and related functionalities:

- **Dual Interface Encoder Module (Contact and Contactless cards)** Code **PR10300003**
Allows you to run chip encoding on contact and contactless cards

Install the module according to the instructions contained in the package.

Regarding the configuration of the Encoders to be updated in the Next version

7.2 Magnetic Encoding

The Magnetic Encoder is an optional module for the MC310 Series that allows the encoding of magnetic cards.

The following modules are available:

- **MAG ENCODER**
It allows you to perform the encoding magnetic in ISO/ JIS2 format Code **PR10300001**

Install the module according to the instructions contained in the package.

Regarding the configuration of the Encoders to be updated in the Next version

7.3 Duplex activation

The Duplex activation is an optional module for the MC310 Series that allows the printer to print on both side of the cards.

The following modules are available:

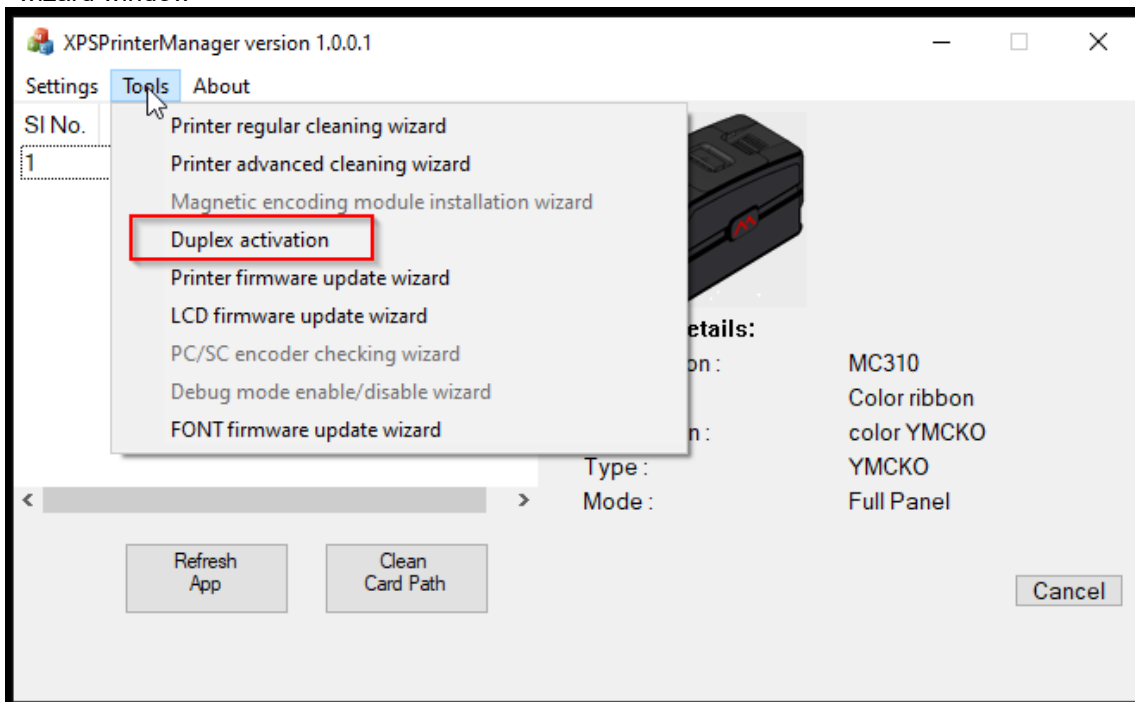
- **MC310 Duplex Activation Kit**

It will enable the printer to print dual side of a card

Code **PR10300016**

In order to enable the Dual sided printing please follow the below instructions,

1. Go to Printer manager → Tools → Duplex Activation → Click ok to proceed to the Duplex activation wizard window

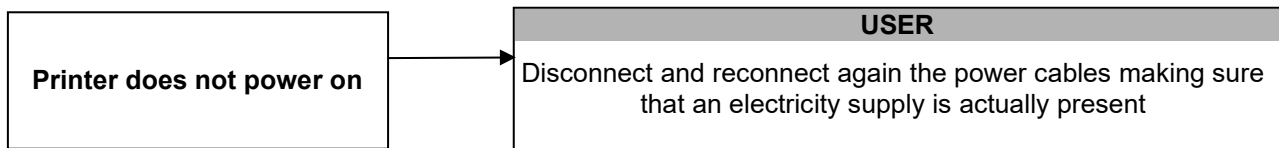


Since the Duplex activation wizard is self explanatory so only the steps are mentioned below without images

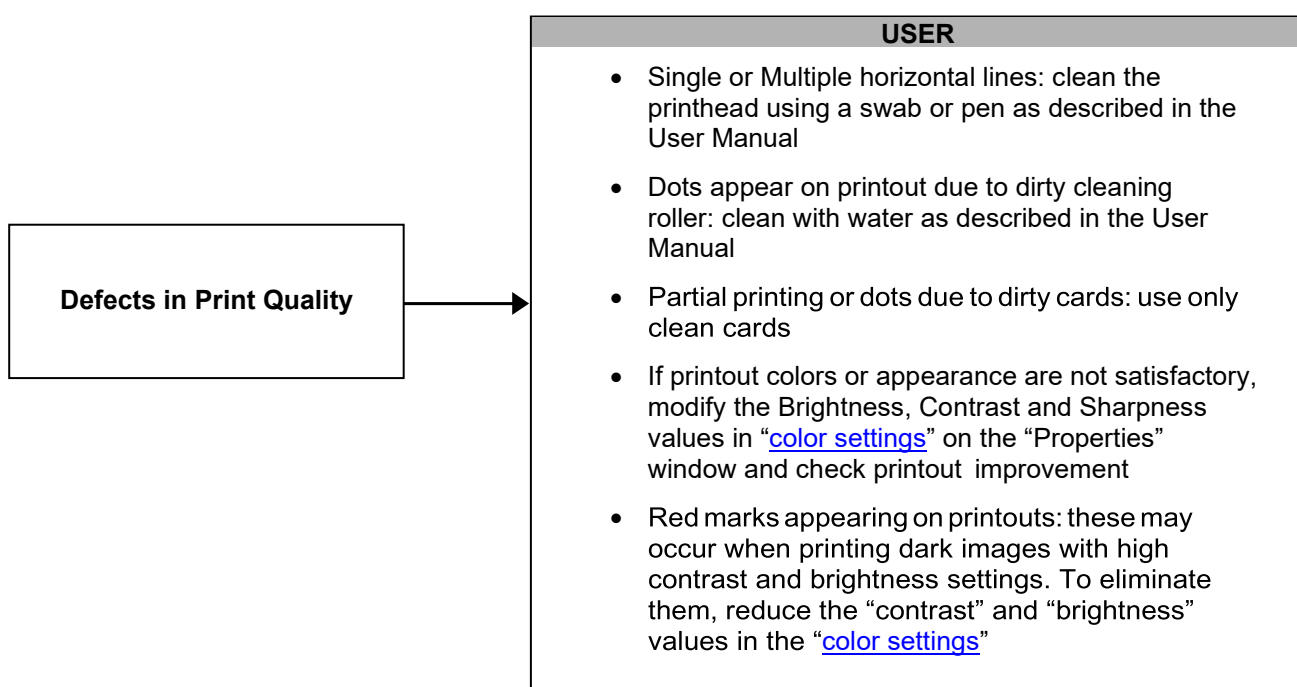
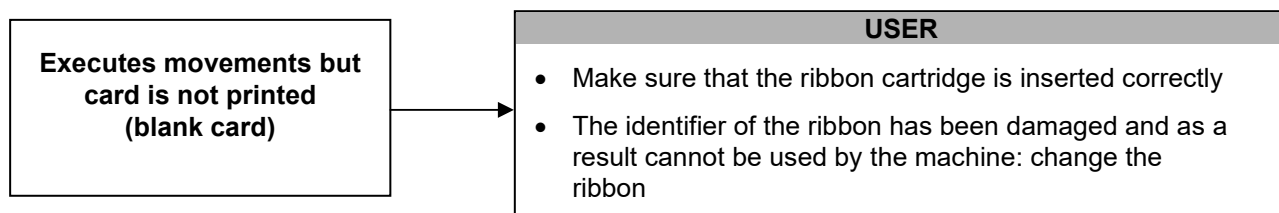
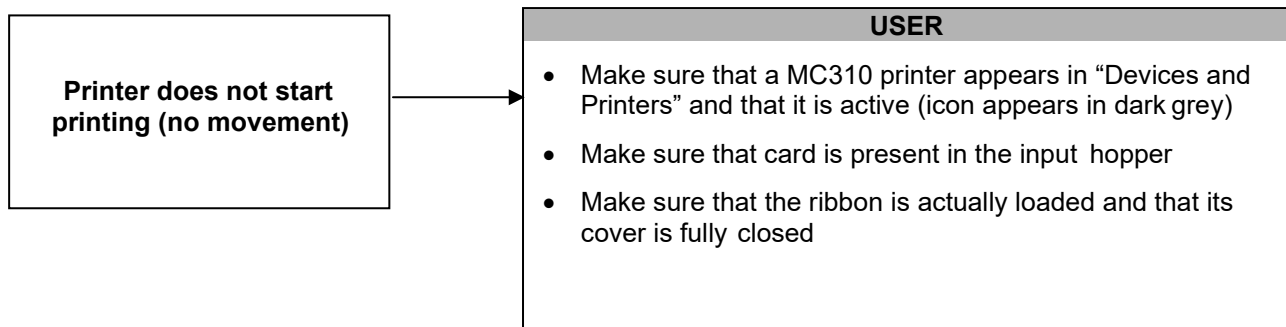
2. Select Printer from the drop down box, to which you want to enable the Dual side printing in the Duplex activation wizard and Click **Next**
3. Connect the USB to the printer and Power on before starting the operation. Click **Next**
Note: Do not disconnect the printer during update
4. Remove the Ribbon out from the Printer. Click **Next**
Note: Incase if the Ribbon is present in the Printer, it will show an error when you Click Next
5. If a Dual Sided printer is ordered, the box with contain a small box labelled as 'MC310 Duplex Activation Kit', remove the Encoded PVC card from the case. Hold the card over the red Matica 'M' on the right side of the printer and Click **Next** and wait until the activation is confirmed
6. Write the Printer serial number at the bottom of the Card and keep this card for future reference.
7. Duplex activated, Switch Off and On the printer
8. Test card ([Double side printing procedure](#))
9. Finish

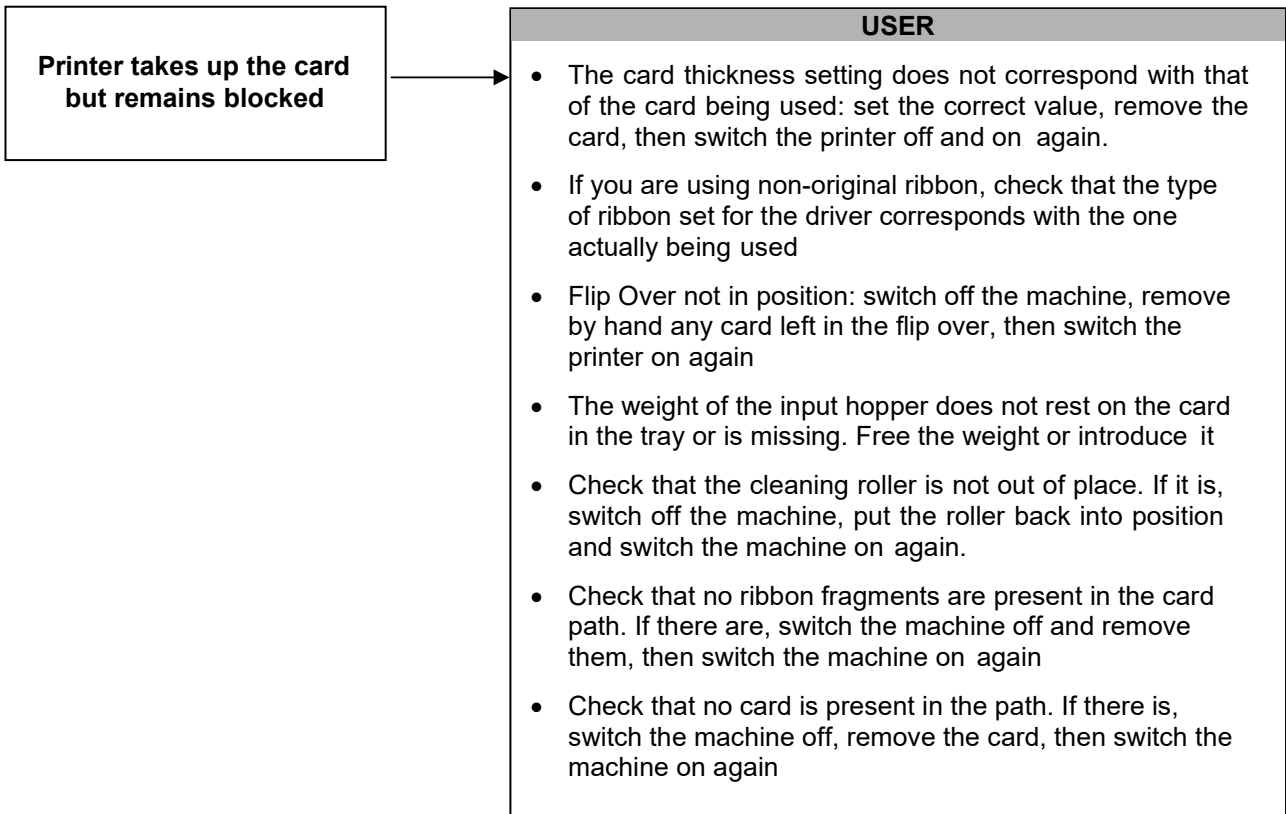
8 Trouble shooting

8.1 Printer does not power on

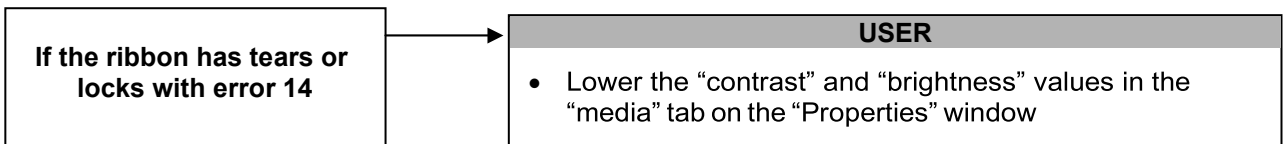


8.2 Printer has printing problems

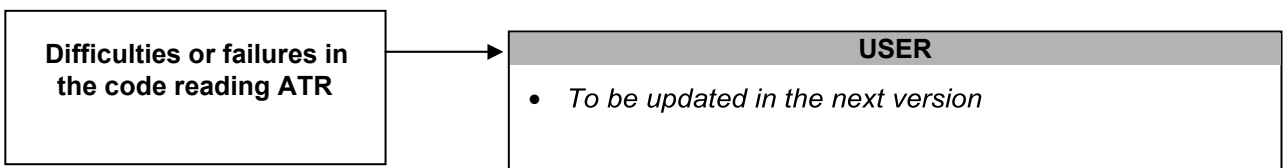




8.3 Printer has problem with ribbon



8.4 Chip Encoding problems



9 Ribbons

The following Matica ribbons can be used:

Ribbon Type	Code to order
chromXpert YMCKO MC310 Color Ribbon, 250 prints	PR20307301
chromXpert YMCKO MC310 Color Ribbon, 100 prints	PR20307311
chromXpert YMCKO-K MC310 Color Ribbon, 200 prints	PR20307302
chromXpert ymcKO MC310 Color Ribbon, 400 prints	PR20307303
chromXpert KO MC310 Ribbon, 600 prints	PR20305304
chromXpert K MC310 Monochrome Ribbon, 2000 prints	PR20314305
chromXpert SILVER MC310 Monochrome Ribbon, 500 prints	PR20314306
chromXpert GOLD MC310 Monochrome Ribbon, 500 prints	PR20314307
chromXpert WHITE MC310 Monochrome Ribbon, 1000 prints	PR20314308
chromXpert RED MC310 Monochrome Ribbon, 1000 prints	PR20314309
chromXpert GREEN MC310 Monochrome Ribbon, 1000 prints	PR20314311
chromXpert BLUE MC310 Monochrome Ribbon, 1000 prints	PR20314312
chromXpert SCRATCH-OFF MC310 Ribbon, 2000 prints	PR20314313

Each Matica ribbon has an RFID tag with ribbon identification data that allows the printer to configure all the counting and optimization parameters and procedures.

It is strongly suggested to exclusively use original Matica ribbons. The use of non-original accessories could damage the product and therefore void the factory warranty

10 Cleaning Kits

The following Cleaning Kits can be used:

Cleaning Kits	Code to order
Standard Cleaning Kit: 5 Cleaning Cards, 5 Cleaning Swabs, 1 Cleaning Pen for Printhead, 1 Long T-Card	PR20309601

11 Technical Characteristics

- Single-side or dual-side (*) printing module
- Edge-to-edge printing
- Color dye sublimation and monochrome thermal transfer
- 300 dpi printhead (11.8 dots/mm)
- Up to 128MB of RAM
- Drop-in ribbon carrier
- User-friendly features for easy-to-use functionality and maintenance

Connectivity*

- High-speed USB 2.0
- Ethernet TCP-IP, 10BaseT, 100BaseT with Traffic LED
- WiFi 802.11 a/b/g (*)

Card Management

- 100 card capacity in automatic input Hopper (0.76 mm – 30 mil thickness)
- 30 cards (front) or 80 cards (rear) card capacity in output Hopper (0.76 mm – 30 mil thickness)
- Exception card manual feeder
- Reject bin
- Card types: PVC, PVC Composite, PET(*), ABS(*), and re-writable cards (*), PC(*)
- Card thickness: 0.25 to 1.25 mm (10 to 50 mil thickness)
- Card format: ISO CR80, ISO 7810 (53,98 mm x 85,60 mm)

Ribbons

- Automatic detection and parameter setting
- Two level encoding protection
- Smart Ribbon level memory and management
- Smart Ribbon optimization in monochrome printing
- Available ribbon: please refer to Matica website: www.maticacorp.com

Print Speed

- Single-side Monochrome: up to 850 cph
- Single-side YMCKO: up to 180 cph
- Dual-side YMCKO-K: up to 130 cph

Encoding (*)

- Magnetic encoder (read/write) 3-track HiCo/LoCo ISO 7811 and JIS II
- Smart card contact station ISO 7816-1, -2 (excluding Appendix B), -3, -4
- Contact/Contactless encoders compatible with standard Cards MIFARE®, MIFARE DESFire® iCLASS® ICODE, ISO 14443 A&B, ISO 15693 and ISO 7816

Software

- Printer driver (XPS driver)
- Printer Manager
- Automatic Installer
- Compatible with Windows: XP SP3, Win7, Win8, Win8.1, Win10 (32/64 bit)

Security

- Slot for Kensington®lock (*)
- Lockers with keys for input Hopper, rear bin and ribbon (*)
- K-panel erase feature (or scramble printing) (*)

Power Supply

- Auto-switching external power supply unit with interchangeable power cords
- Input 220-240 Volts AC, 50-60 Hz, 1.6 A
- Output 24 Volts DC, 3.0 A

Dimensions and Weight

- Dimensions (H x W x L): 255,6 x 202 x 405,4 mm
- Weight: 10 kg

Quality Standards

- RoHS
- CE, FCC, cTÜVus, WEEE
- Proposition 65 (California, USA)
- Sound pressure less than 48 dB (A) in operation mode (ISO 7779)
- Min/max operating temperature: 15° - 40 °C (59° F- 104 °F)
- Humidity: 20% to 65% non-condensing
- Min/max storage temperature: -5° - +70 °C (23° - 158 °F)
- Storage humidity: 20% to 70% (non-condensing)

(*) *Only in some models/options*

Declaration of Conformity

We, manufacturer, hereby declare that the product
Model: MC3XXX, S3XXX (X = A-Z, a-z, 0-9 or BLANK)
Type: Desktop Direct-To-Card Printer

is in compliance with all the essential requirements of 2014/53/EU and 2014/30/EU where applicable:

Safety: IEC 62368-1
EMI/EMC: EN 300 330 V2.1.1 (2017-02), EN 62368-1:2014+A11:2017, EN 55032:2015+A11:2020,
EN 55035:2017+A11:2020, EN 61000-3-2:2019, EN 61000-3-3:2013+A1:2019

Test laboratory:
TÜV Rheinland (India) Pvt. Ltd.
27/B, 2nd Cross Road, Electronic City Phase 1; Bengaluru-560 100, INDIA

Representative (or importer) in the EU:
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This declaration has been issued under the sole responsibility of the manufacturer and his authorized Representative, and is marked in accordance with the council regulation (EC) No 765/2008 on CE marking.

Manufacturer:
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Tel. +49 711 900 373 25



Munich, 9. Apr. 2021


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Ralf Erdhutter / CEO



Product Code: PR00300001