



USER GUIDE



MC320x

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Matica
June 2023
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Printer Warranty

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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2 Product overview

The printer described in this user manual 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 connection
- Single Card Feed Option through Manual feeder
- Connection for external smart card encoding.

3 Getting started

The printer comes with several accessories; check carefully that they have all been 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.

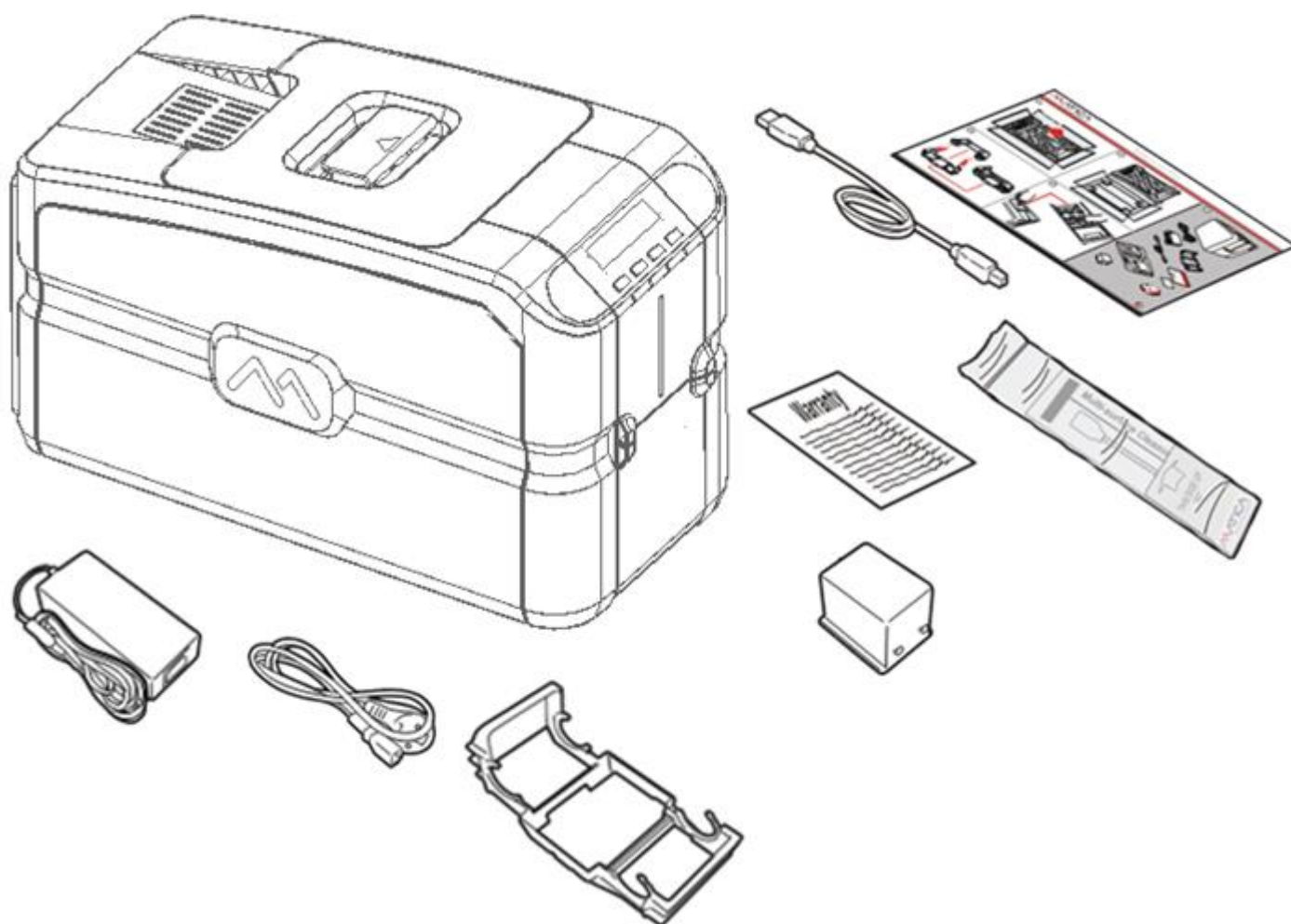
Note: If the printer must be returned, it must be returned integrally with its full original packaging (box, cushions, and protective bags). If it is returned without its original packaging and any components are damaged during transportation, such components will no longer be covered by the warranty.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

3.1 Unpacking the printer

The following items are included in the box:

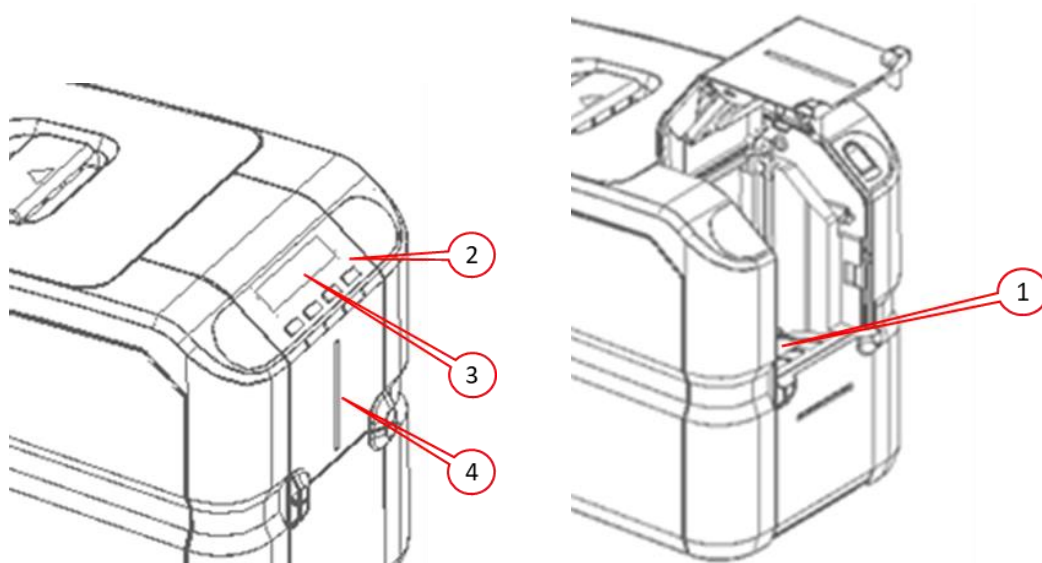
- Printer
- Quick Installation Guide
- Cleaning swab
- Cleaning card
- Power cord
- Power supply
- USB cable
- Ribbon carrier
- Reject bin

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



3.2 Functional description

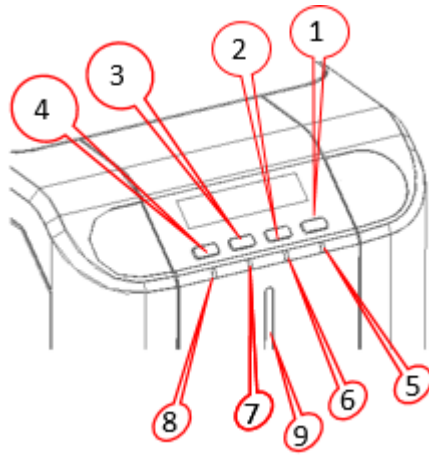
3.2.1 Front view



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

- 1) Input Hopper
- 2) Operator panel and printer status indicators: ON/OFF key and 3 functional keys
- 3) LCD display

3.2.2 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 the printer on
 - 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.

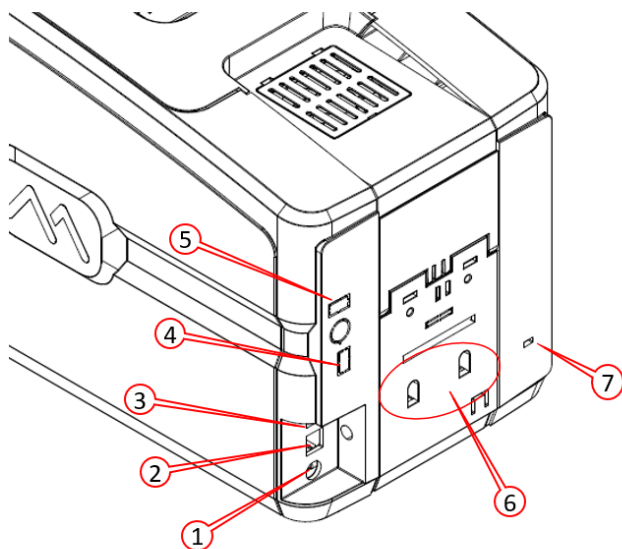
- **Status LED**

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

- LCD display sequence for the MENU option



3.2.3 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

3.2.4 Power supply

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

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

3.2.5 Plastic cards

Listed below are the plastic card specifications:

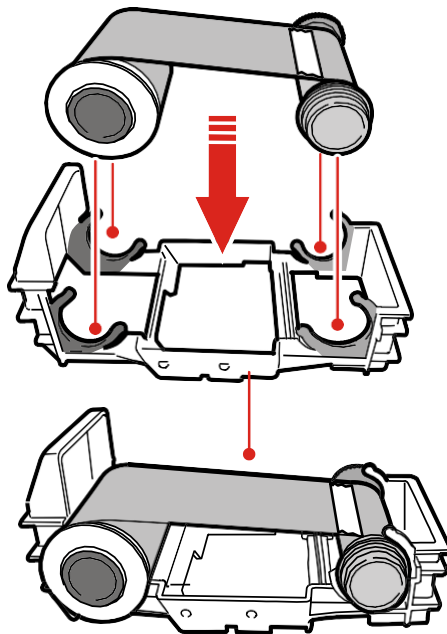
- **Type:** PVC, PVC & Composite
- **Dimensions:** ISO CR80 - ISO 7810 (53.98 x 85.60)
- **Thickness:** 0.25 to 1.25 mm (10 to 50 mil) manual gauge adjustment
- **Magnetic stripe:** ISO 7811
- **Smart Card Contact:** ISO 7816-1,2,3,4
- **Smart Card Contactless:** ISO 14443A/B.

4 Installation procedures

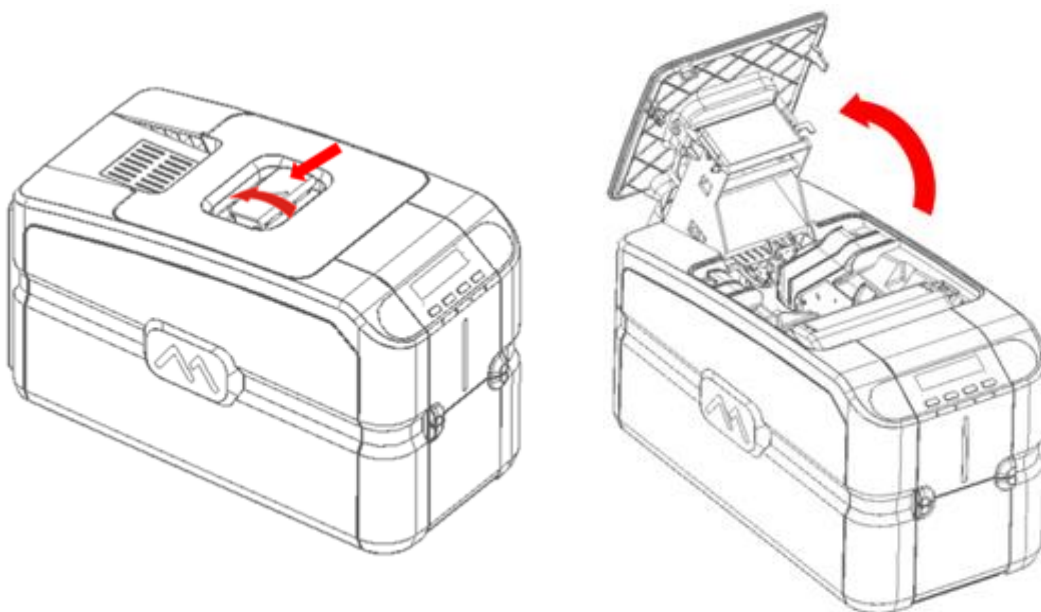
4.1 Installing the ribbon

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.

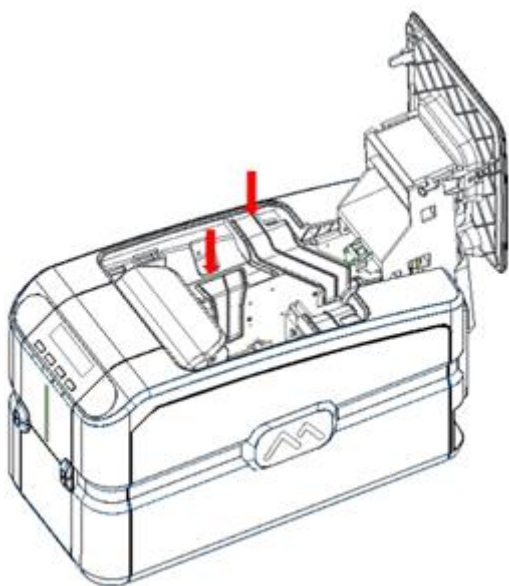
- 1) Insert the ribbon (not provided with the printer) into the ribbon carrier by inserting the red reel to FRONT side and grey reel to the REAR.



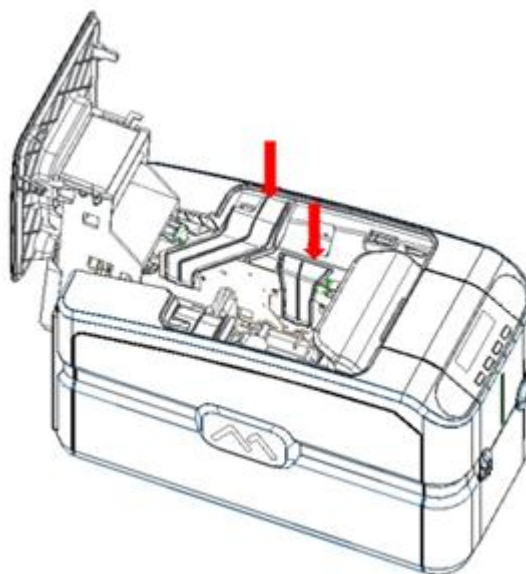
- 3) Move the handle in the direction shown to open the top cover.



4) The ribbon carrier should be positioned inside the Right & Left guide cores as illustrated below.

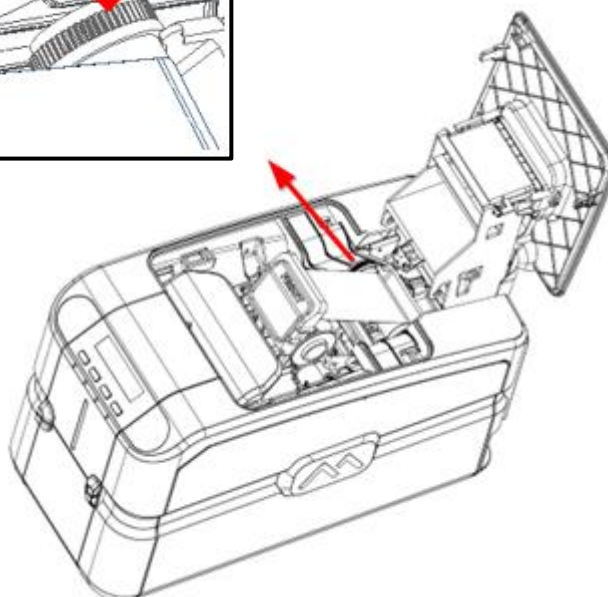
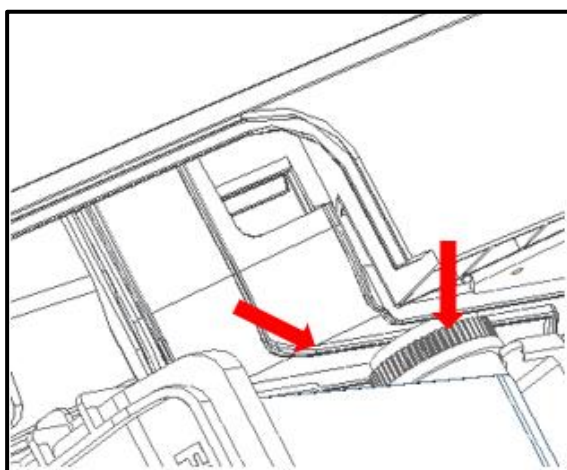


Left guide core for ribbon carrier

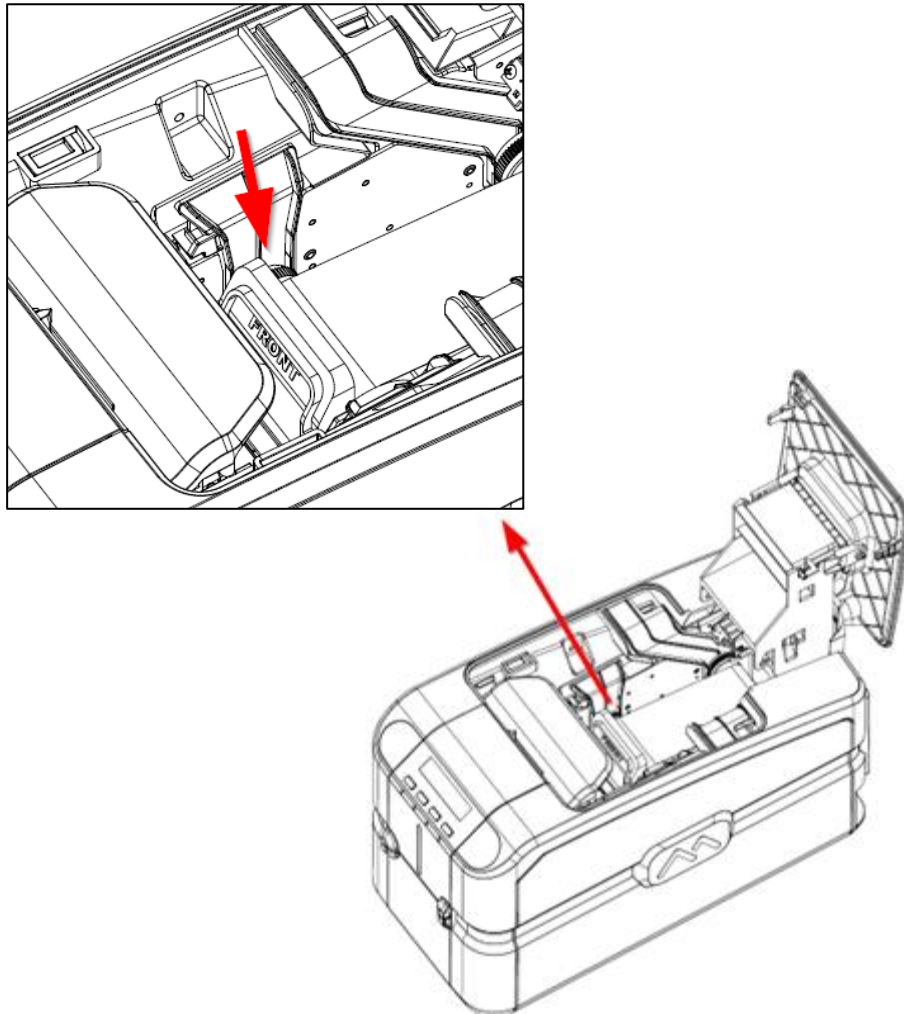


Right guide core for ribbon carrier

5) Drop the ribbon carrier's back side (trailer core) into the backend guide cores as per below instructions.



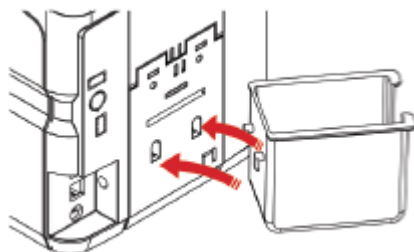
6) Slide the ribbon carrier's front side (leading core) inside the front guide cores as per illustration.



7) Now close the top cover.

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

4.2 Rear bin installation



4.3 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 clear 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.

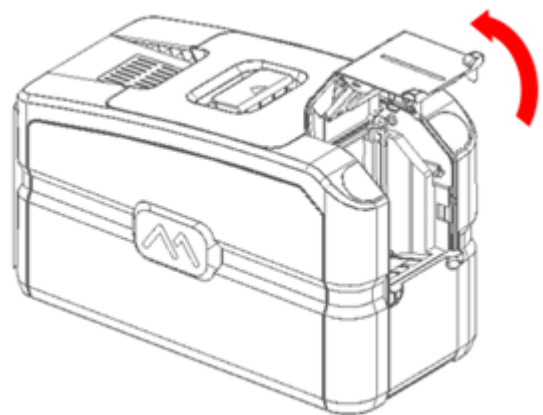
The card path can be selected via the software to increase card processing speed:

- *Hopper*
- *Reject bin*

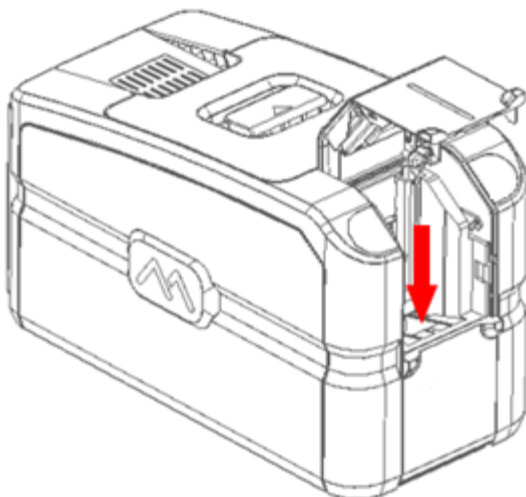
The output hopper at the front of the printer can hold a maximum of thirty 0.76 mm thick cards.

4.4 Input hopper (Automatic card feeder)

1. Open the front door manually as shown below.



2. Load the cards into the hopper and close the door.



Card insertion direction

For contact type cards, chip will be visible on the top.
Mag stripe will be facing downwards towards the right.

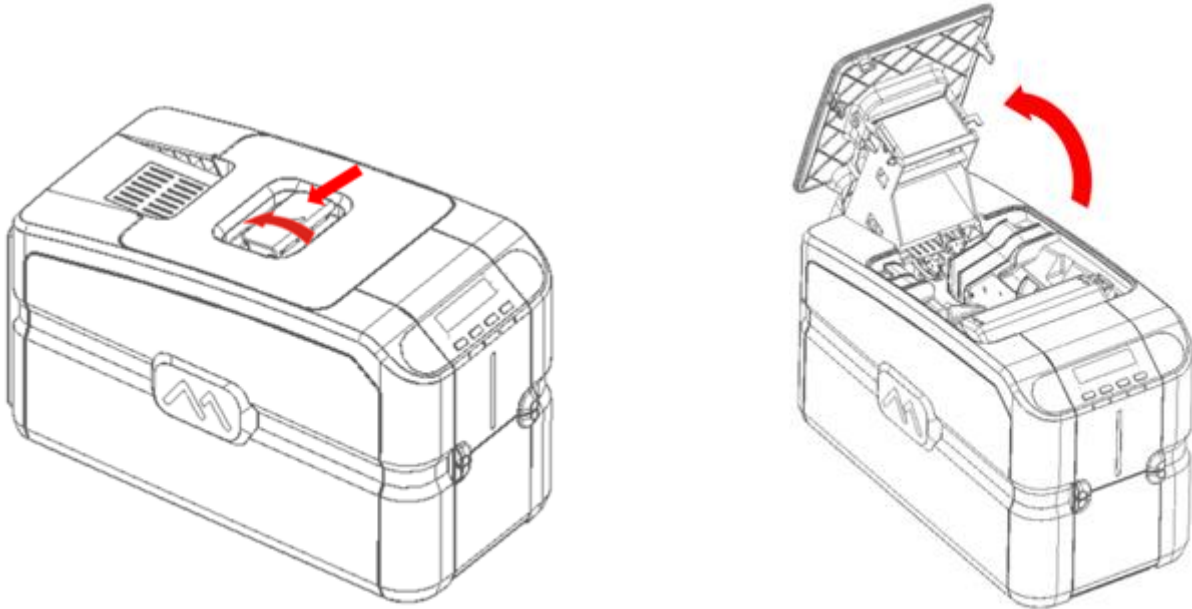


4.5 Adjusting the card thickness

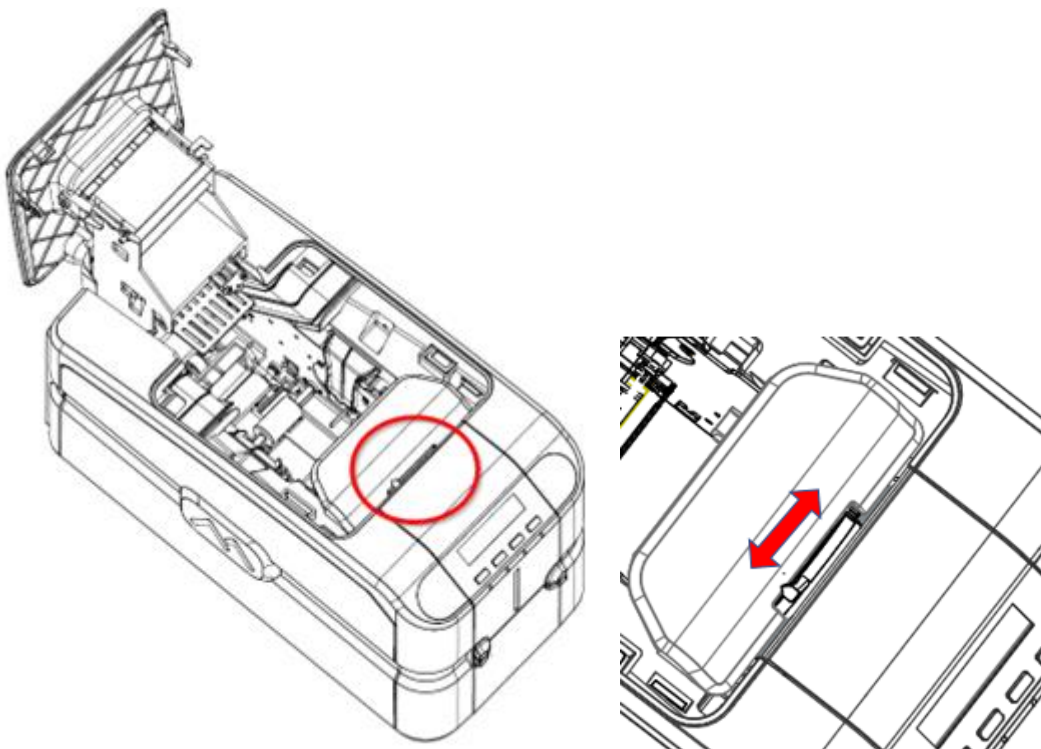
The card thickness can be adjusted by sliding the selection knob (A label is attached on the encoder cover to guide the selection knob) to the required thickness.

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 top cover as per the instructions below.



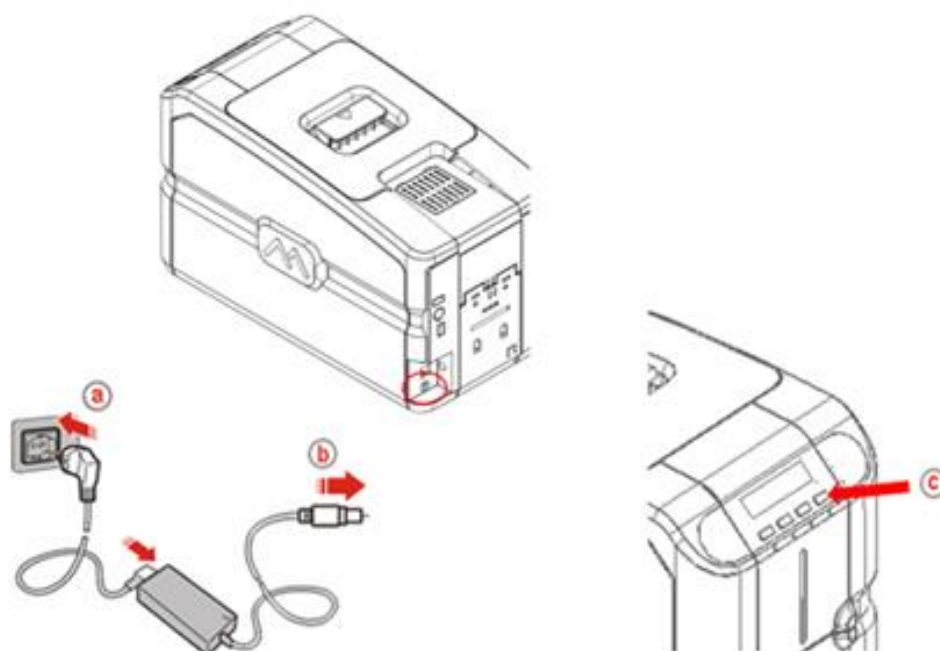
- 2) Slide the card thickness selection knob to match the card thickness.



- 3) Close the top cover.

4.6 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.



5 Installing the software and configuring the printer

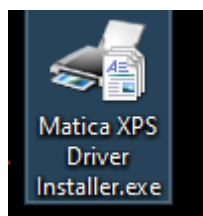
The XPS driver can be accessed via the link here: <https://www.maticagroup.com/products/mc320x/> or stated on the quick start guide. The link will provide you with the following downloads:

- Windows 7, 8, 8.1, 10, 11 (32 and 64 bit), Server 2016, 2019, 2022 printer driver for USB, Ethernet LAN and Wireless connections (if supported by the purchased model)
- PDF User Guide
- Driver Installer (XPS DRIVER)

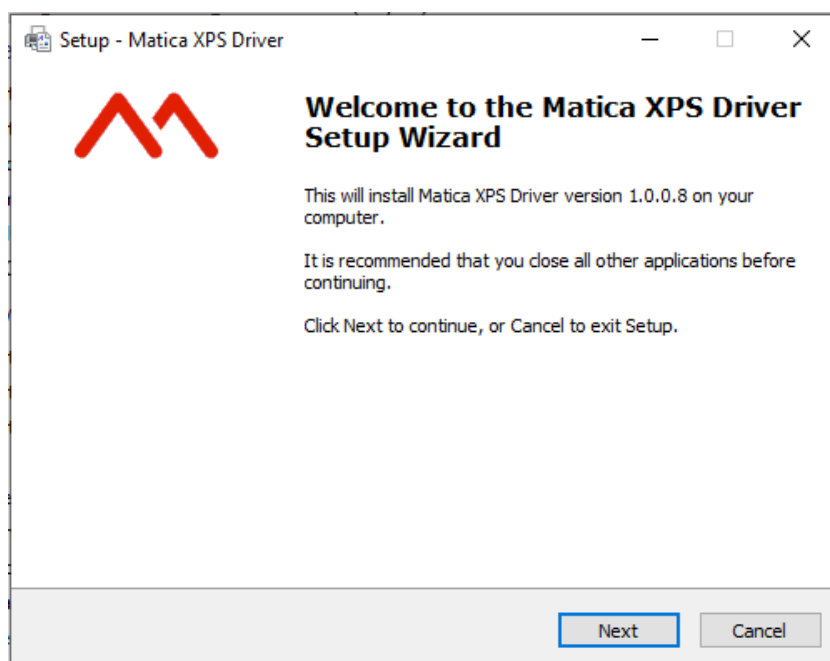
5.1 Connecting the printer to the computer and installing the software

5.1.1 Printer connection through USB

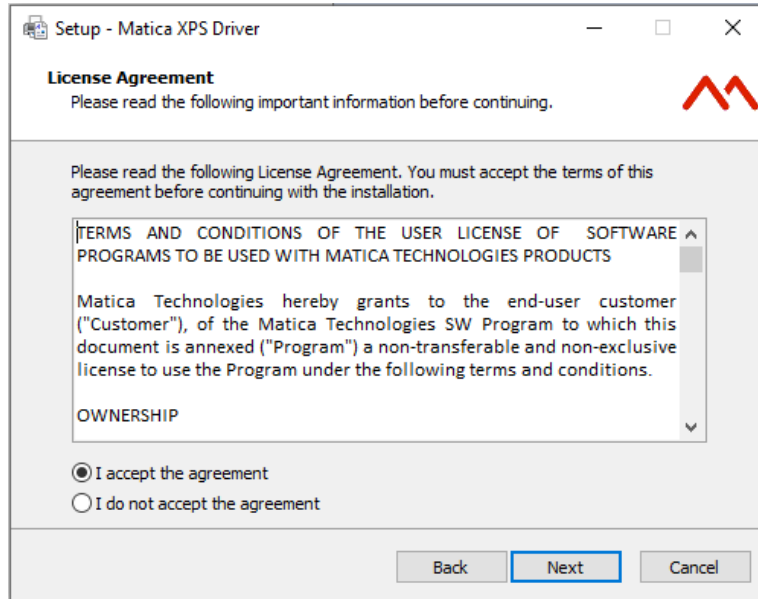
- 1) Download/ save a copy of MC320x driver software onto your PC/Laptop.
- 2) Double click on the Matica XPS driver installer.exe application to setup the wizard.



- 3) Click '**Next**'.

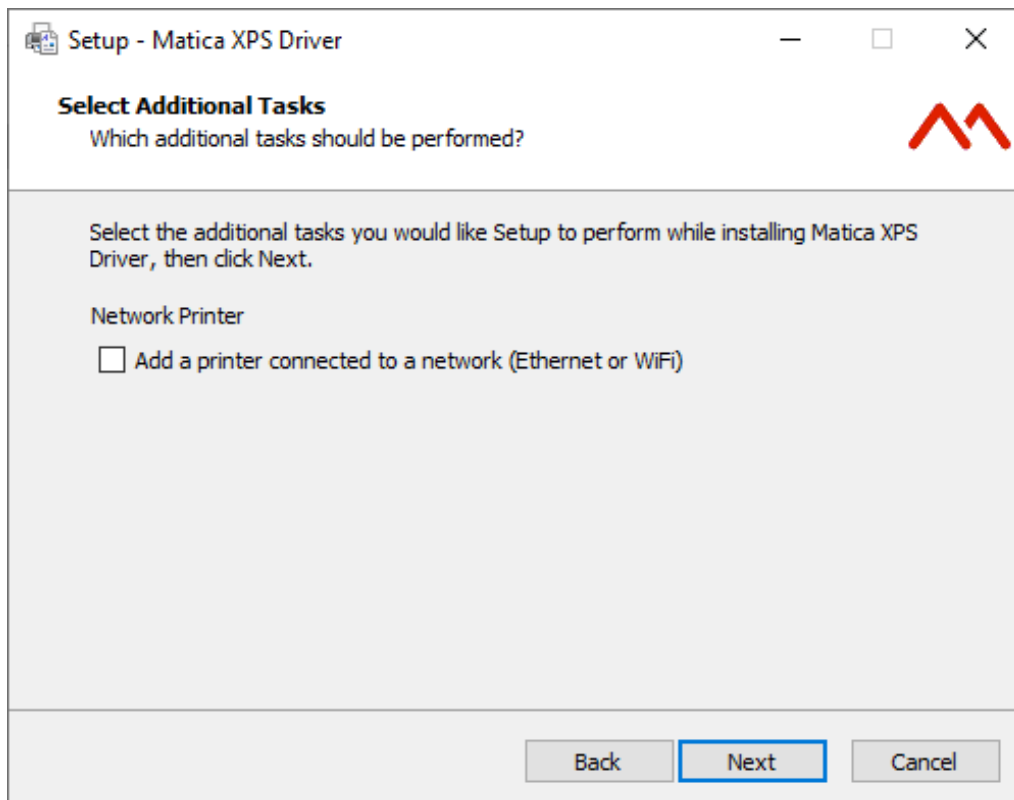


4) Select "I accept the agreement" to accept the license agreement and click '**Next**'.

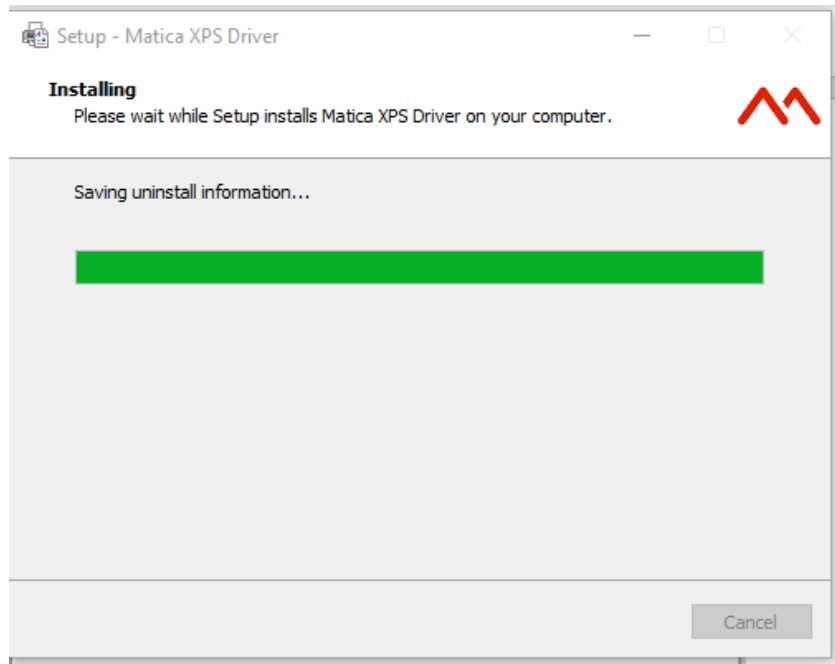


5) In case you want to Install the printer using LAN connection tick the box 'Add a printer connected through the network' and Click '**Next**' to continue with the installation.

For USB connection leave the option unticked & click '**Next**' to continue with the installation.

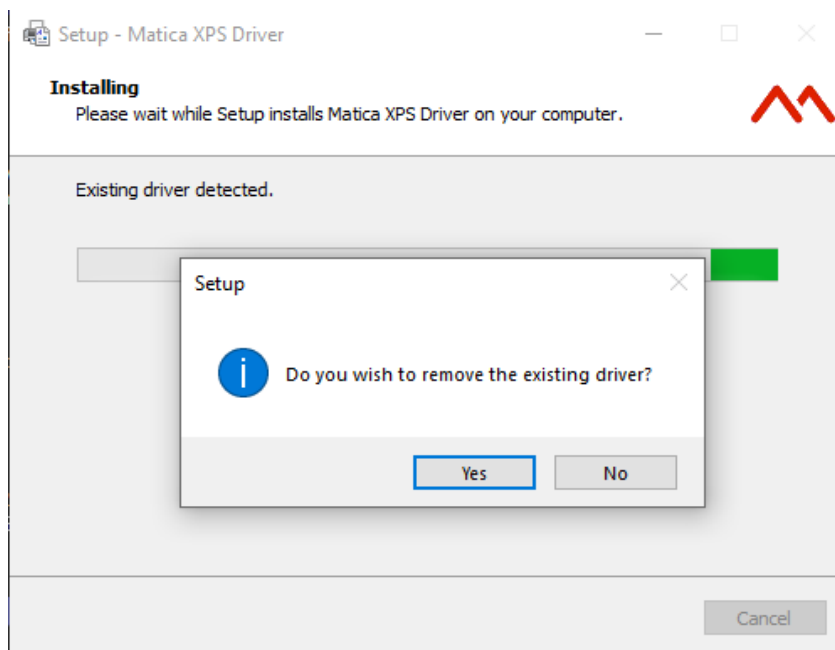


6) The installation process will now start,

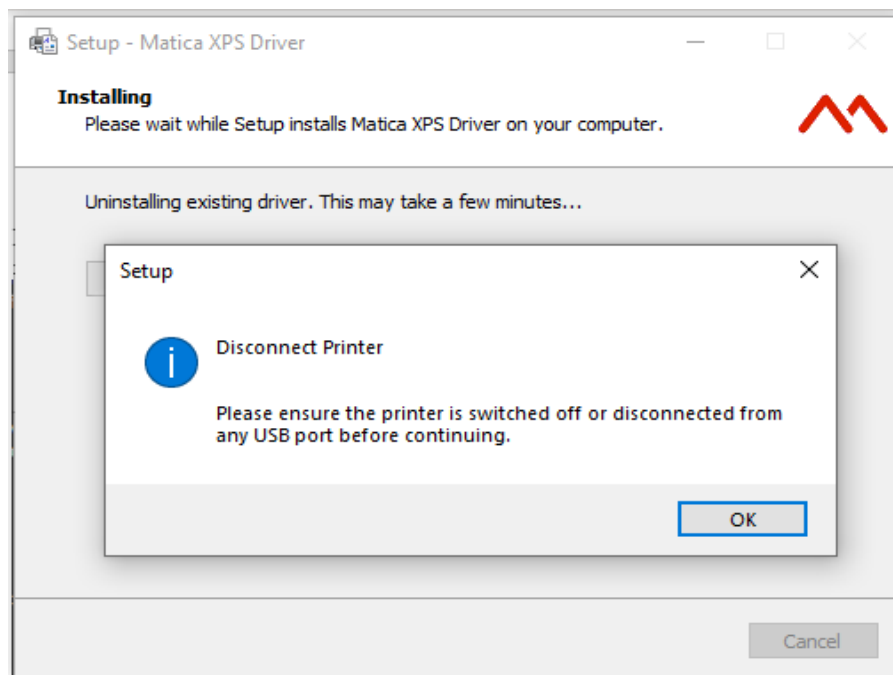


7) During the installation process, the installer checks for previous versions of the driver.

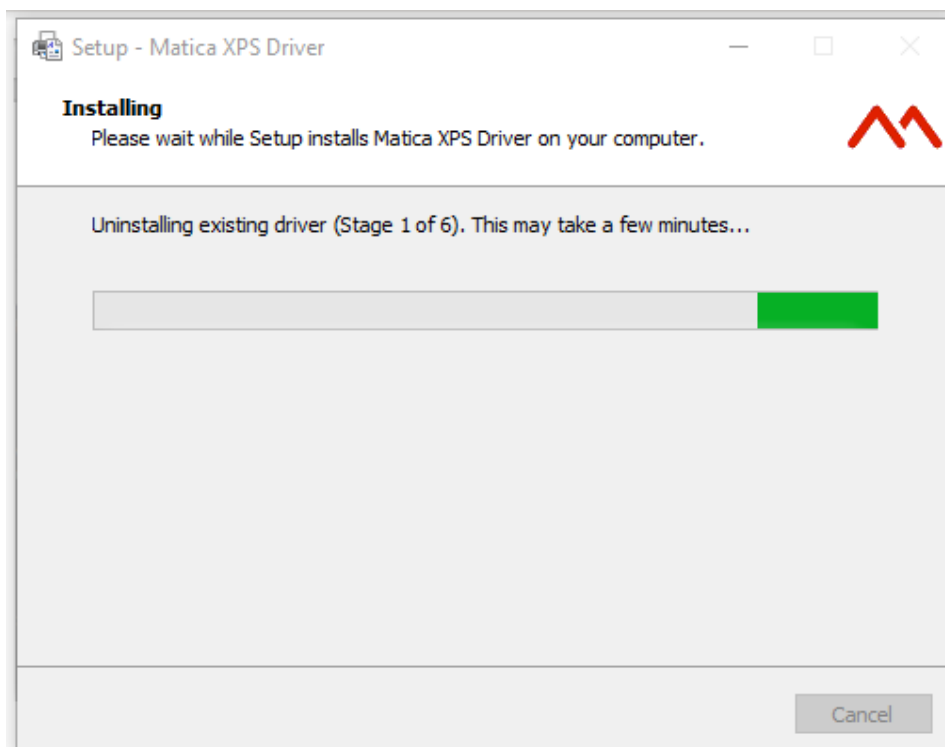
- a. If it detects a previous version, then a pop-up window will appear asking for permission to remove the existing driver. Click 'Yes' as it is recommended to remove any current version of the driver.
- b. If there is no existing driver, see step 11 and continue.



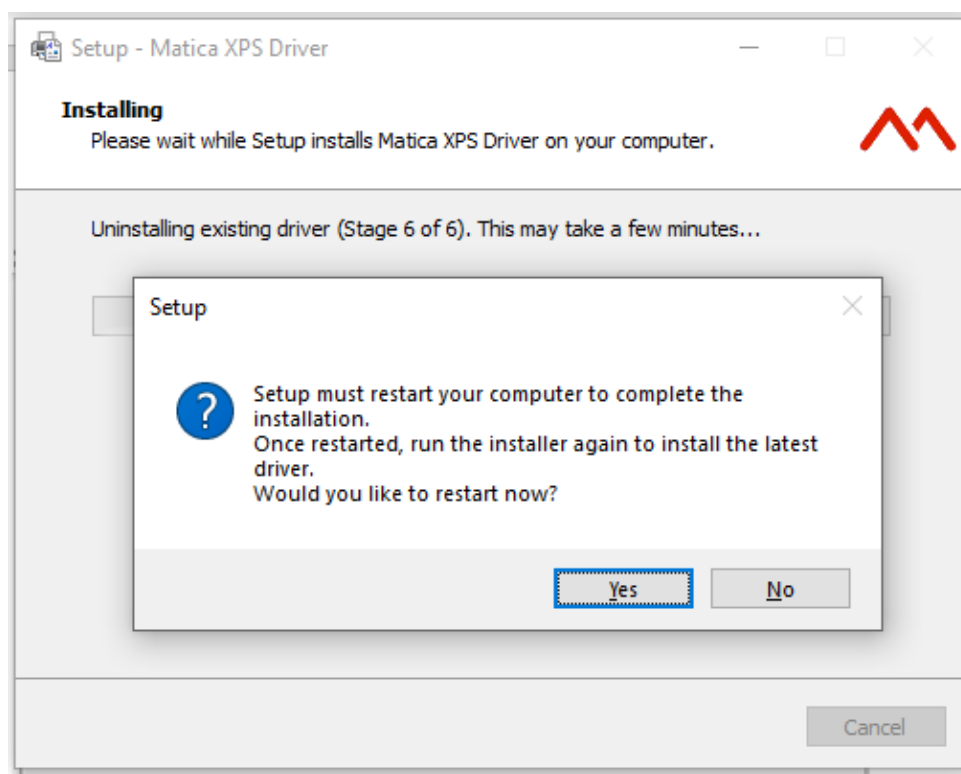
8) A dialog box will appear instructing to switch the printer off or disconnect the USB cable.



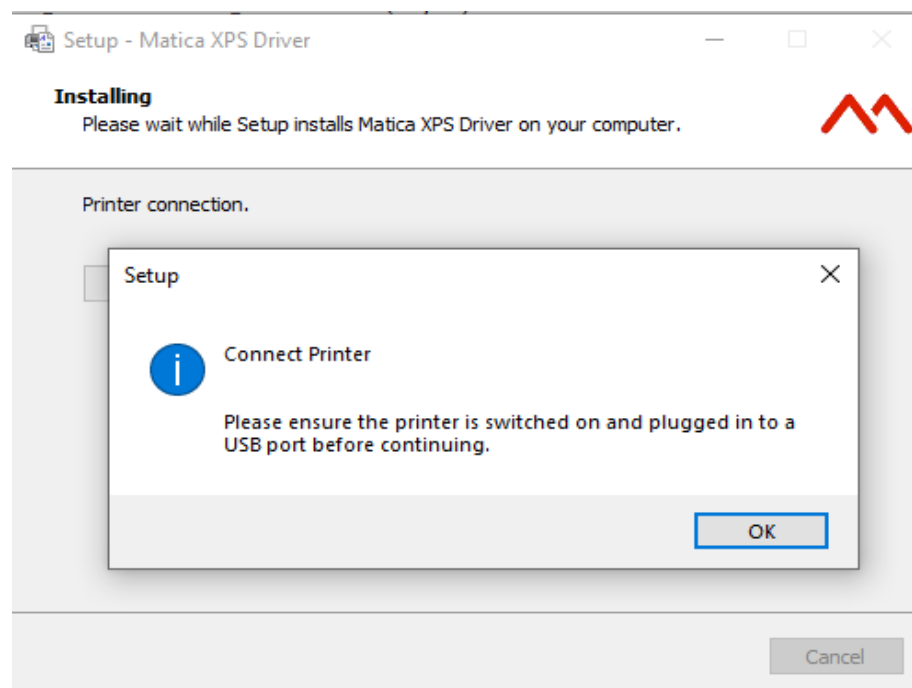
9) At this stage, the installer starts to uninstall any existing driver.



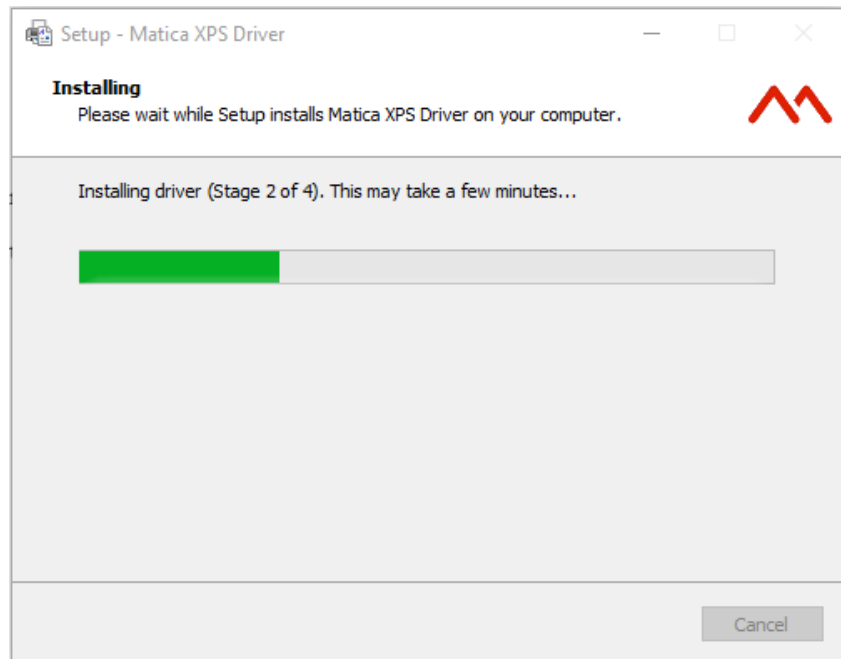
10) A computer restart is now required, follow the next steps to complete the uninstallation procedure.



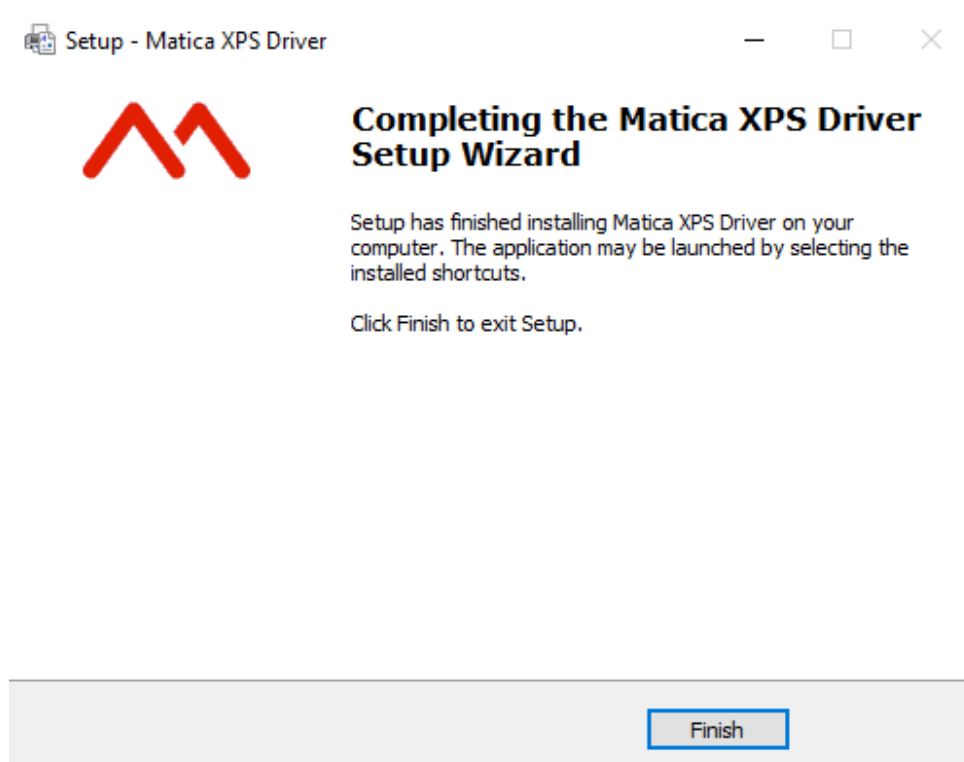
11) After restarting the PC, run the installer again.
Ensure the printer is switched on and plugged into a USB port before clicking OK.



12) The installation may take several minutes to complete.



13) The XPS driver install is now complete, Click 'Finish'



5.1.2 Printer connection through LAN/ethernet

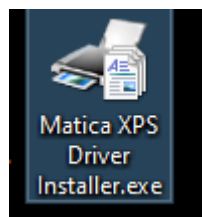
The printer can be connected to a network via LAN or ethernet using 2 types of connection

- a) DCP
- b) Static IP

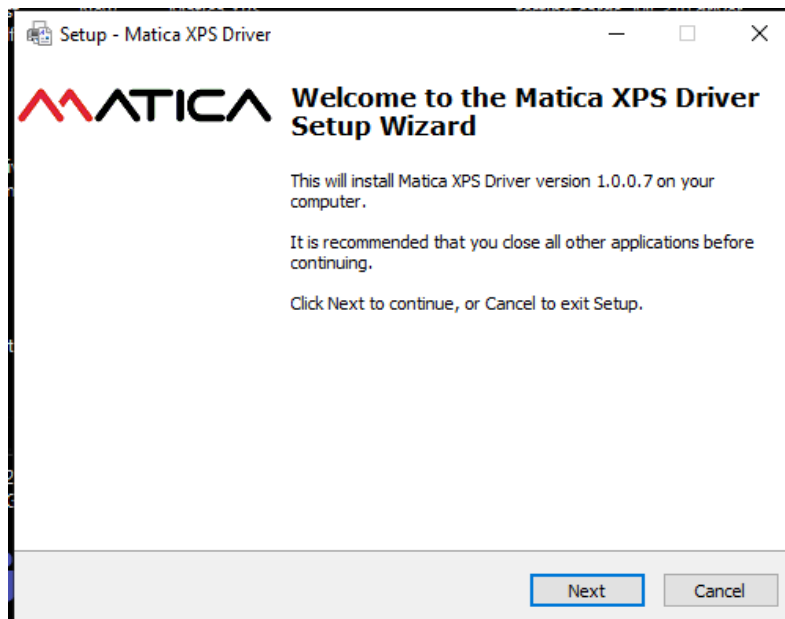
5.1.3 DCP

If the printer is already installed through USB connection, disconnect the USB connection and Switch OFF the printer.

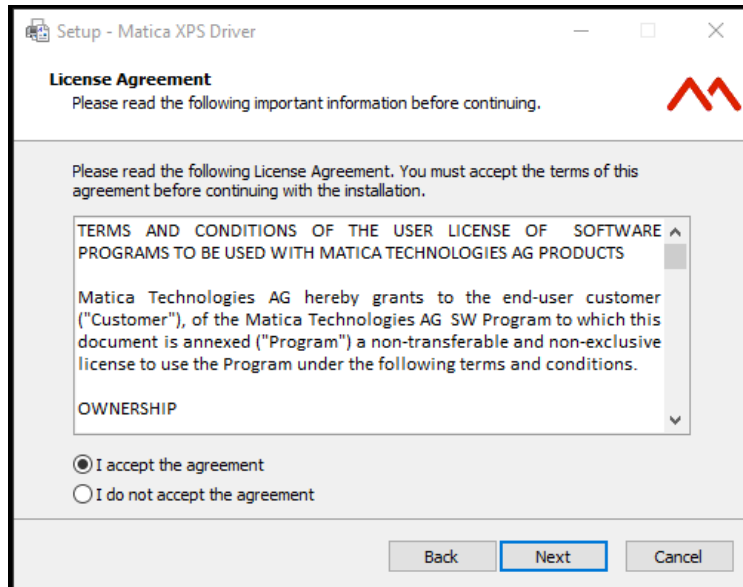
- 1) Download/ save a copy of MC320x driver installer software onto your PC/laptop.
- 2) Double click on the Matica XPS driver installer application to setup the Wizard.



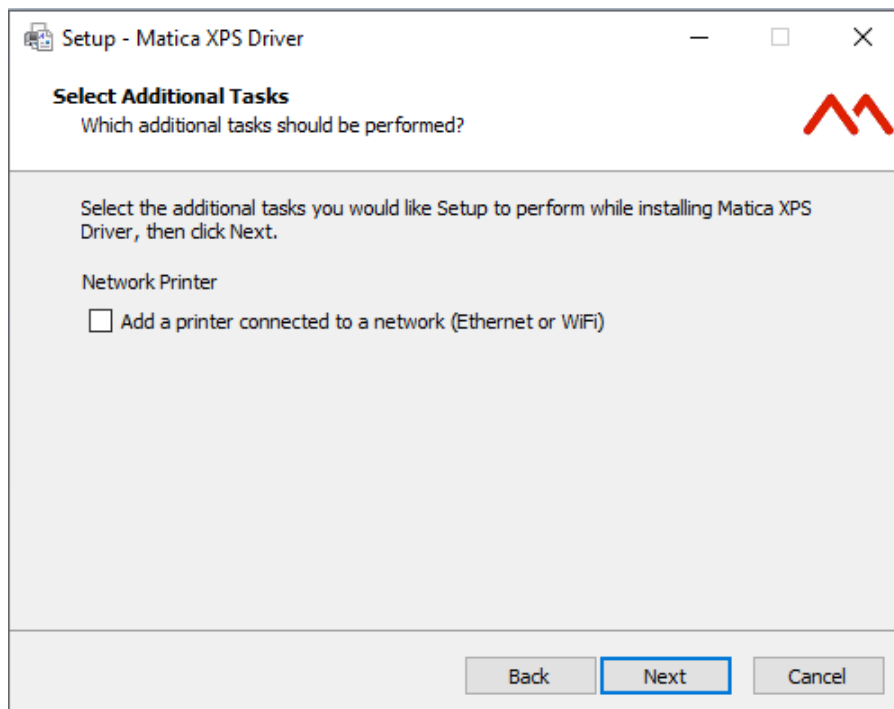
- 3) Follow the steps in the wizard displayed.



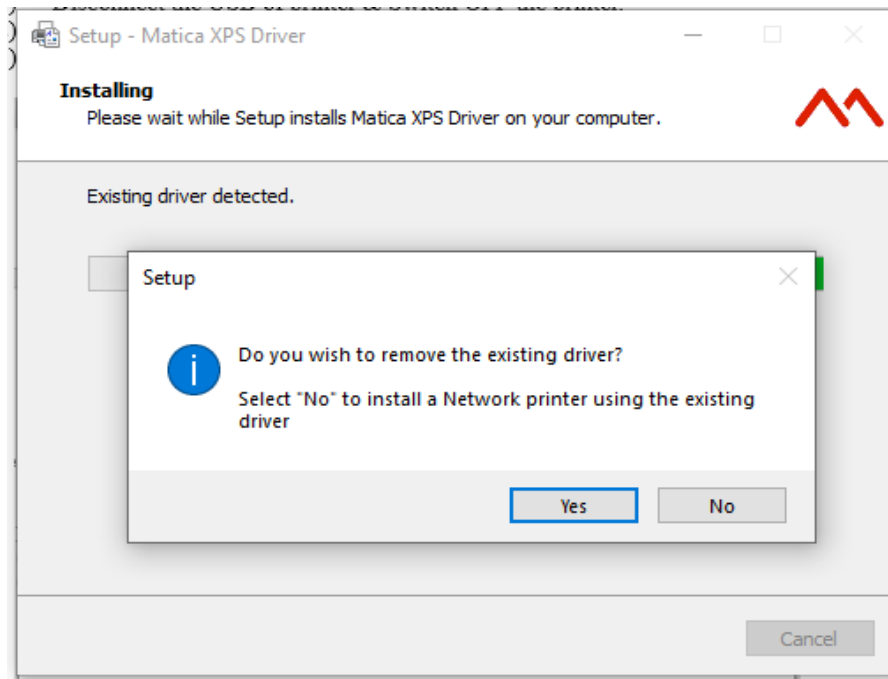
- 4) Select "I accept the agreement" to accept the license agreement and then click **Next**.



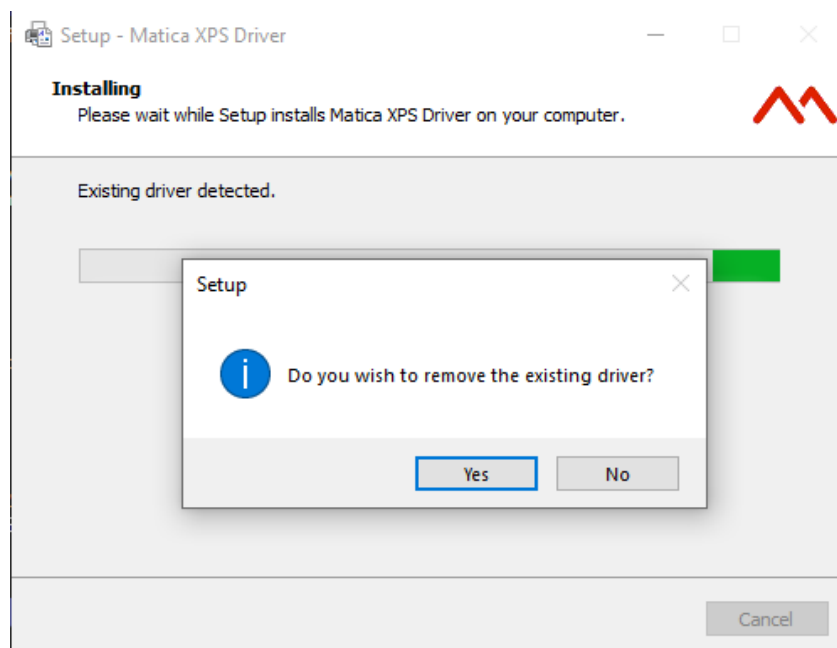
- 5) Click 'Add a printer connected to a network (Ethernet or WiFi)'. Click **Next**.



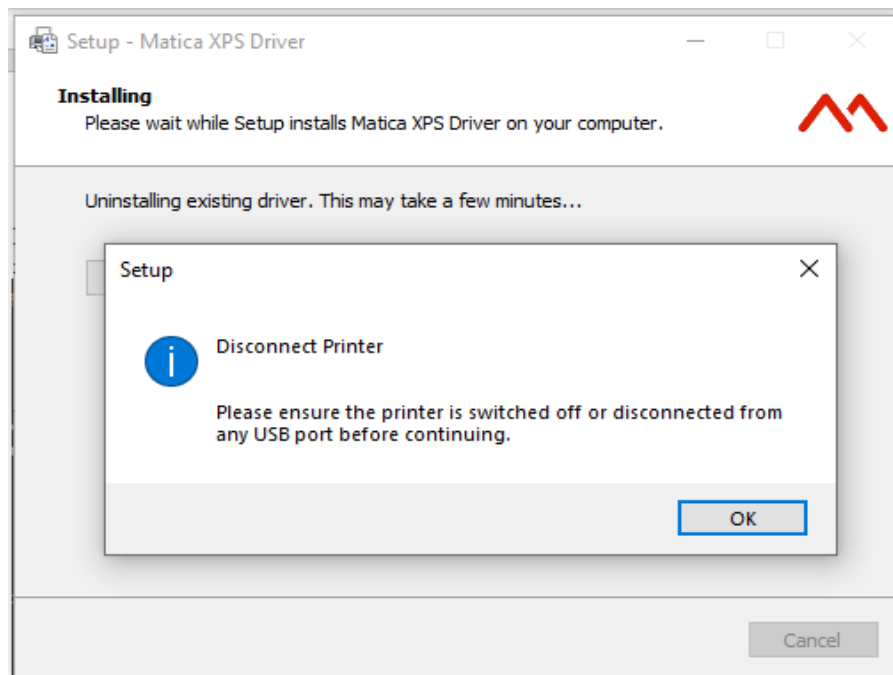
- 6) Click **No** if the user has already installed the new version of driver. Click **Yes** if user requires a new installation & follow the next steps.



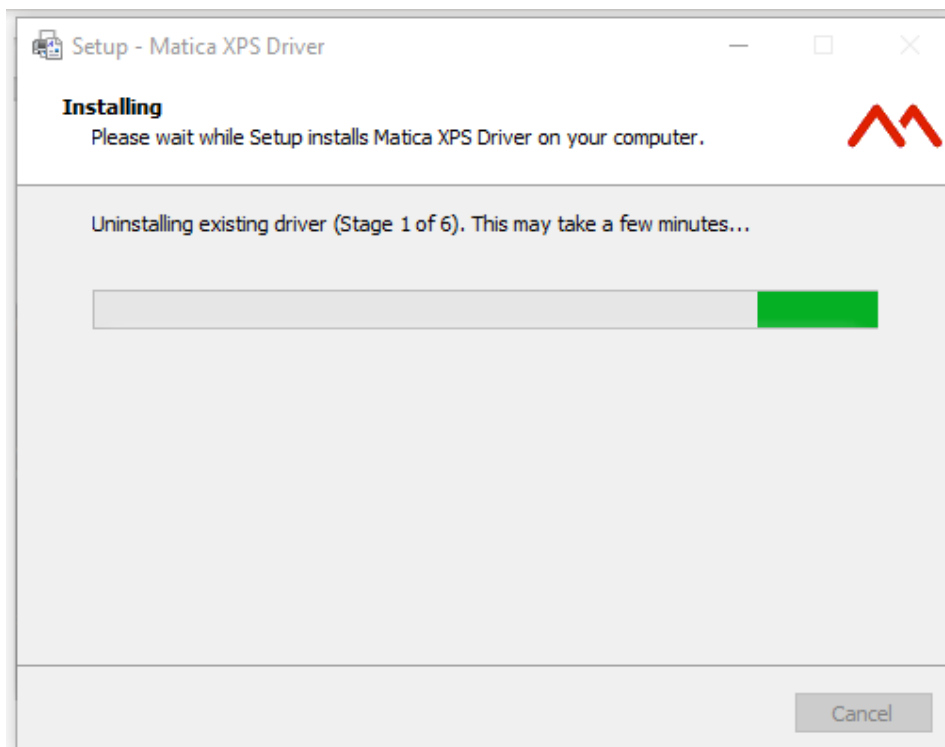
- 7) During the installation process, the installer checks for any previous version of the driver
- c. If it detects a previous version then the installer will request permission to remove the existing driver. Click **Yes**.



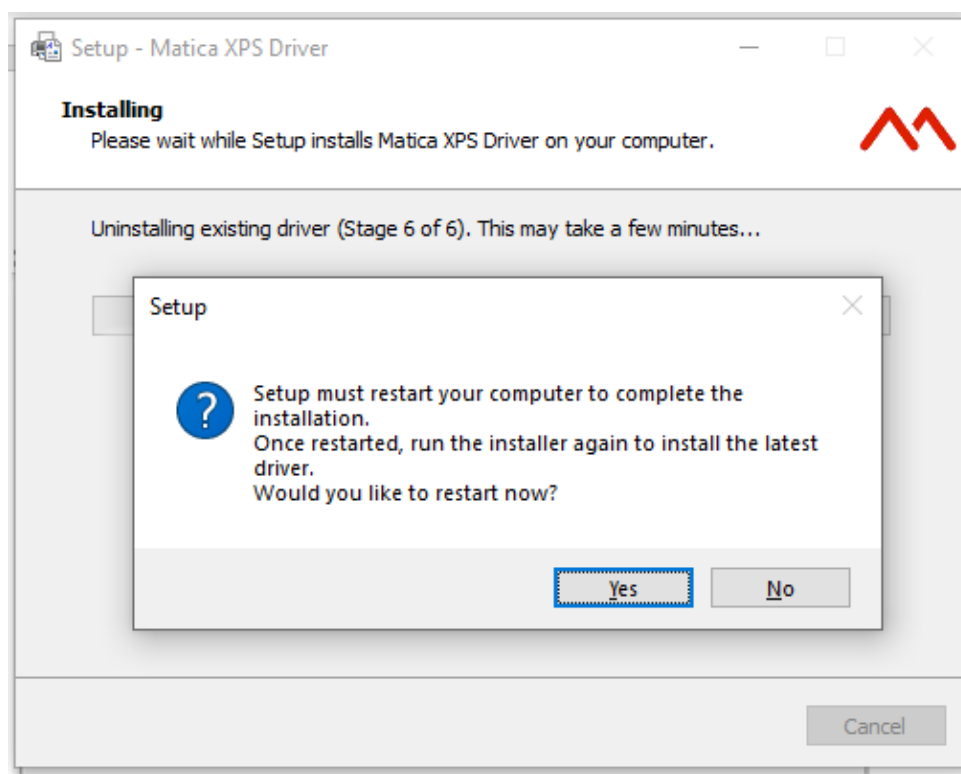
- 8) A Dialog box appears to switch the printer off & disconnect from any USB port of PC/laptop. Follow the steps and click 'OK'.



- 9) The installer will now start to uninstall the existing drivers.

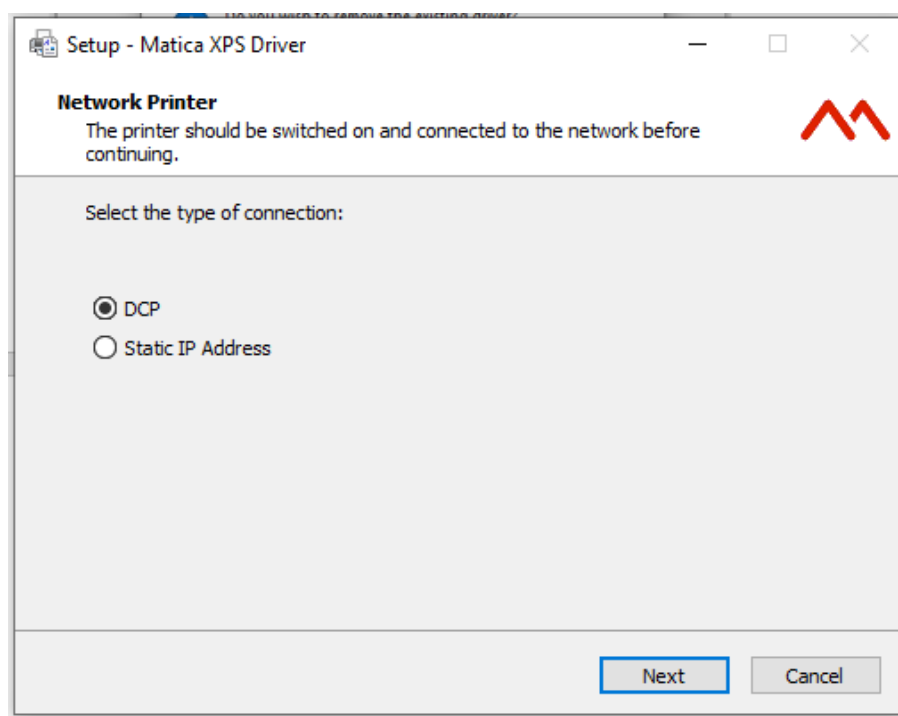


10) Restart the PC/Laptop by clicking 'Yes'.



11) Connect the ethernet cable to the printer and switch on.

12) **For DCP type connection:** Select the DCP connection type & click 'Next'.

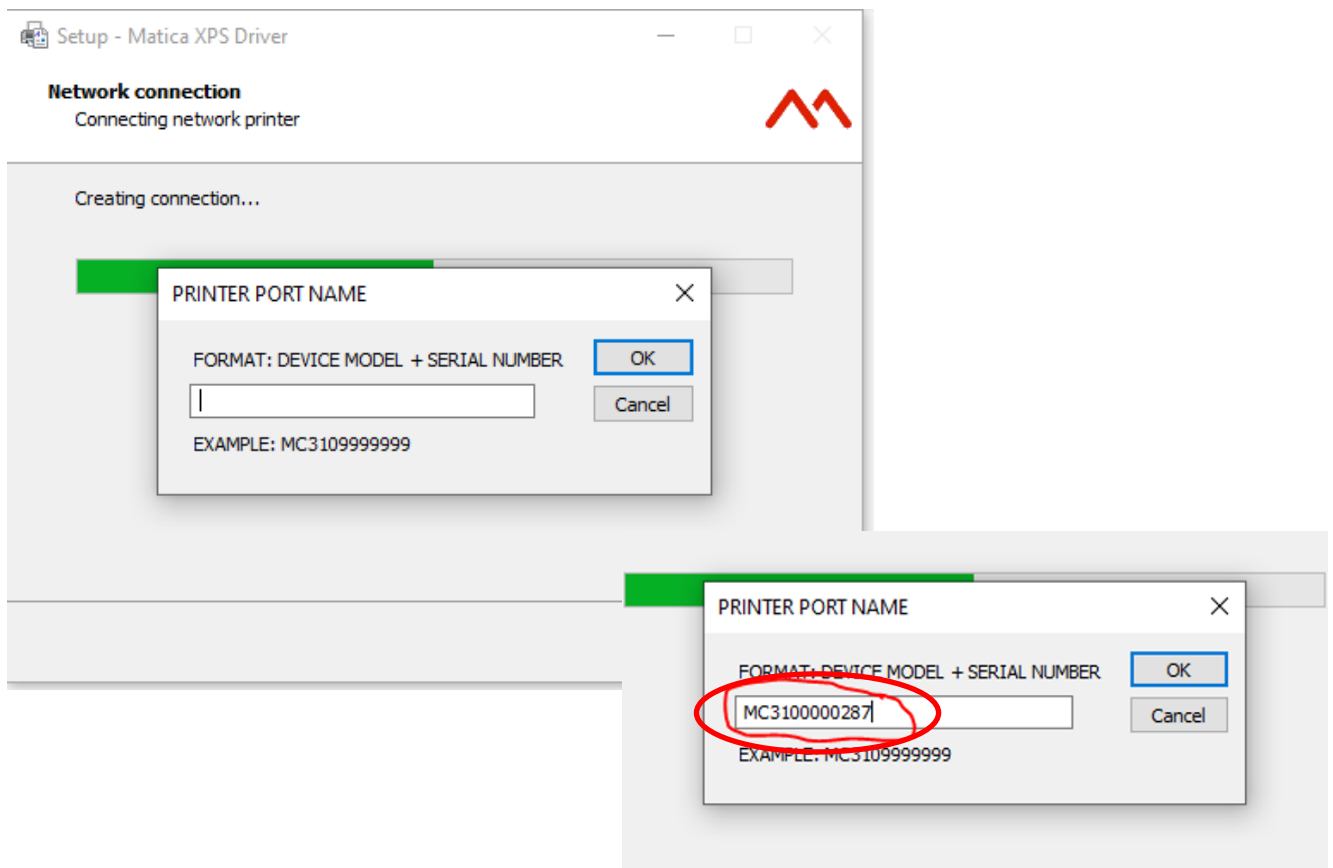


13) Connect the printer using the DCP option, the below dialog box will then appear. It allows the user to add the printer port name as the guideline provided i.e., Model name + 7-digit serial number

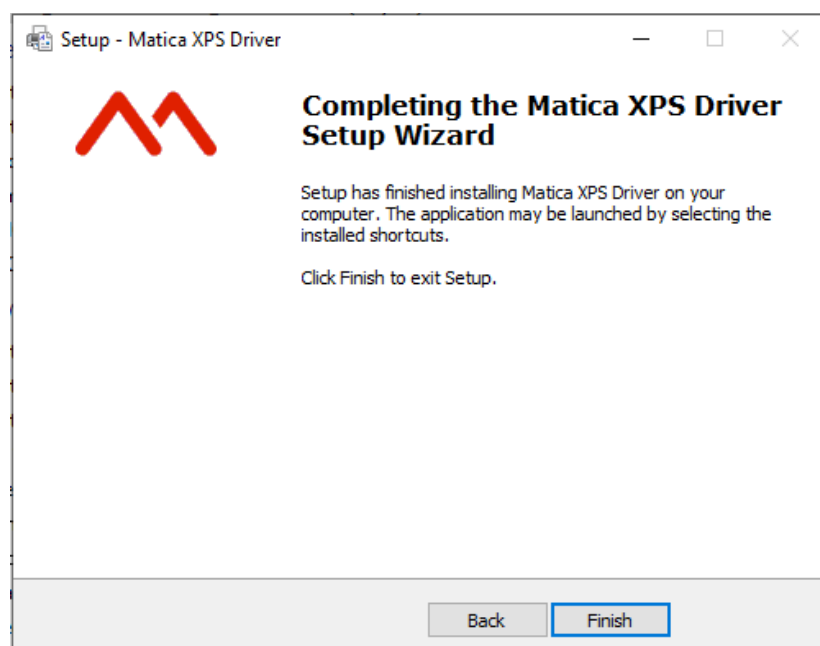
An example shown below,

If printer Model name is MC320x, then format is MC320x +Serial number of the printer, i.e.MC320x99999999

Below snapshot for example.



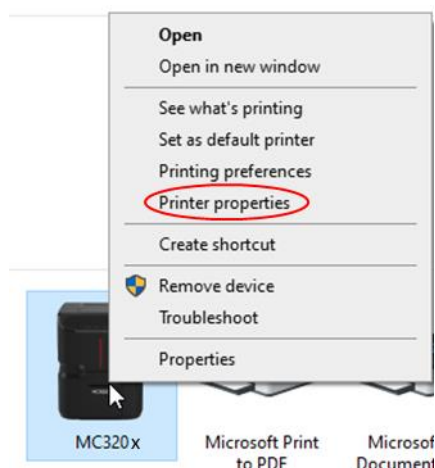
14) Click '**Finish**' to complete the Matica XPS driver setup.



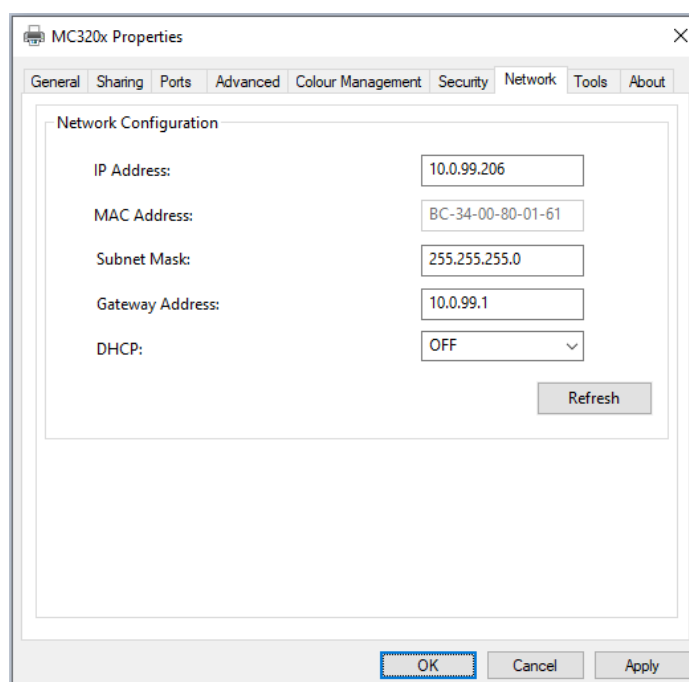
5.1.4 Static IP

Follow the below steps to set a static IP address.

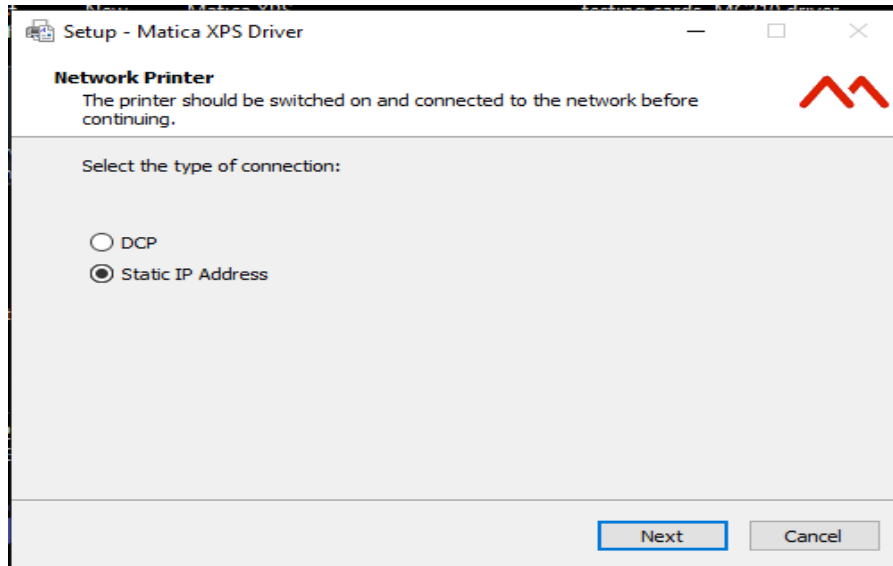
1. Ensure the driver is installed using USB connection. Switch printer on & connect to the USB port.
2. Connect the LAN, USB and switch OFF & ON the printer. Ensure the PC/ Laptop is also connected to same LAN connection.
3. Go to devices & printers and right click on MC320x printer icon. Select printer properties from the drop-down menu.



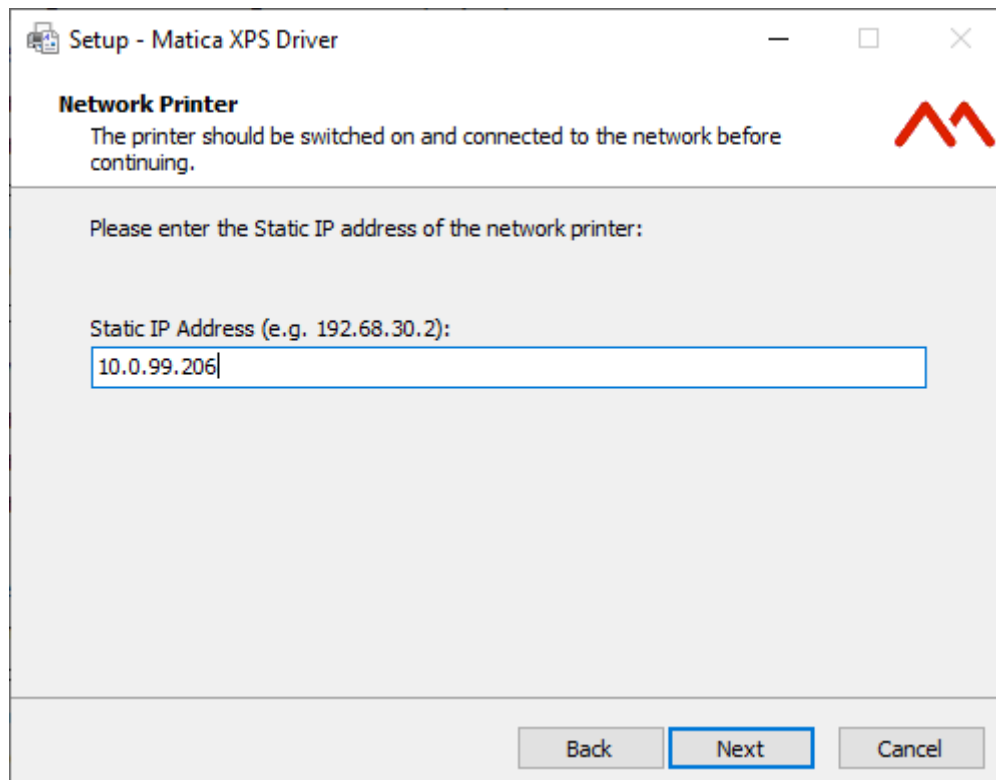
4. Open the MC320x printer properties and click the network tab.
5. Take note of the IP address & set DHCP to OFF. Click '**Apply**' & then '**OK**'.
Note: If the user needs to change the IP address, then set the DHCP to OFF and change the IP & gateway address. Click '**Apply**' & then '**OK**'.



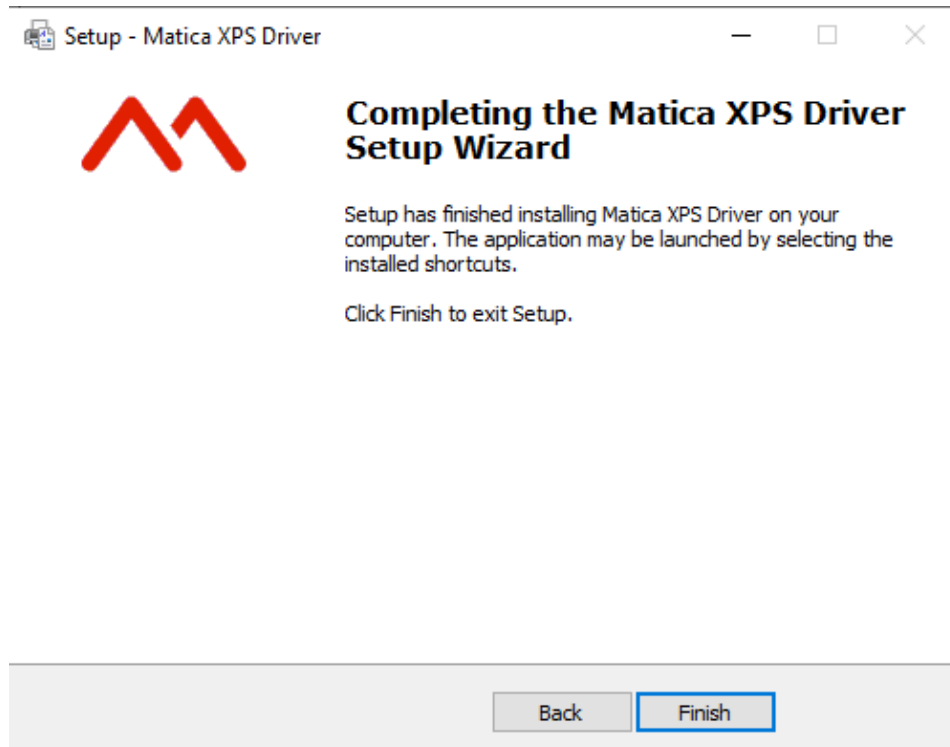
6. Once the IP address has been set or noted down, disconnect the USB cable.
7. Connect the LAN cable and switch the printer OFF and ON.
8. Select Static IP address and Click 'Next'.



9. Enter the Static IP address, as noted from step 5 and Click Next,



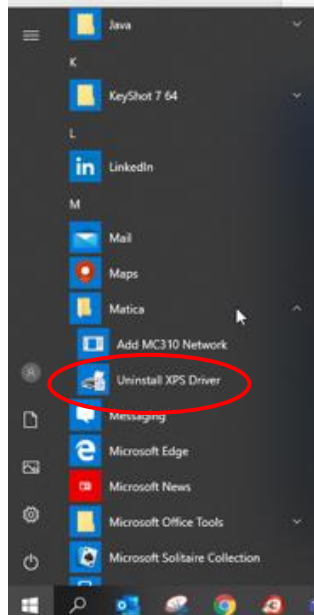
10. Click Finish to complete the Matica XPS Driver Setup Wizard,



5.2 Uninstall program tabs

To uninstall the software:

Ensure the printer is disconnected from the PC/Laptop. Click the start button, select Matica and click 'Uninstall XPS driver' and follow the remaining steps



1) Once the XPS driver has been uninstalled, re-start the PC/Laptop.

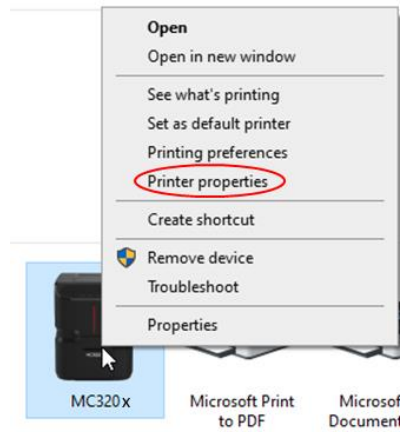
5.2.1 Tools

In the tools menu, the user can manage different operations in the printer like the following:

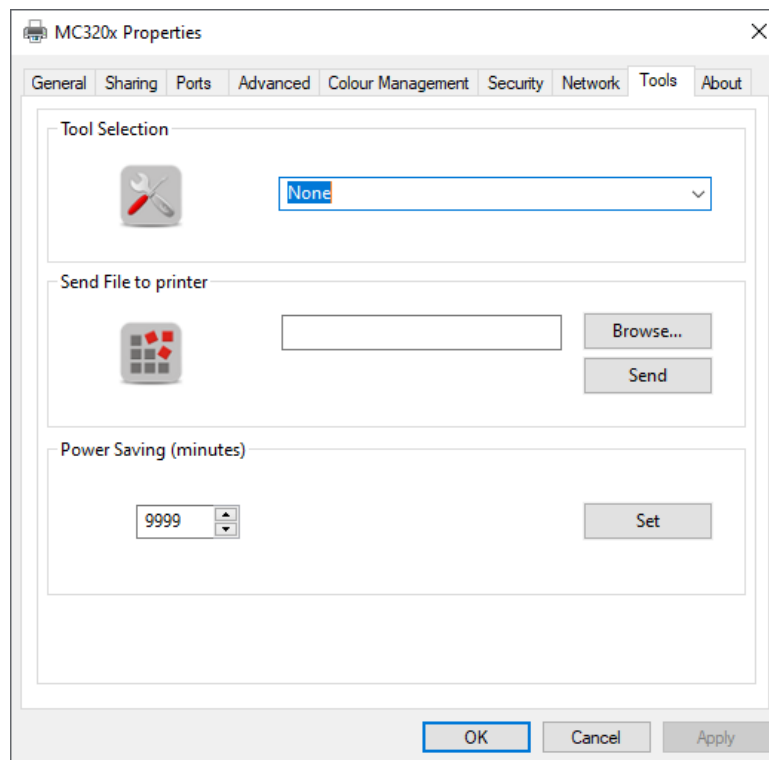
- Printer cleaning, [Refer to Chapter 6.2 \(Standard Cleaning\)](#)
- Advanced printer cleaning, [Refer to Chapter 6.3 \(Card patch advanced Cleaning\)](#)
- Activate Duplex printing, [Refer to Chapter 7.3 \(Duplex activation\)](#)
- Update printer firmware
- Update Printer LCD firmware
- Perform PC/SC encoder check
- Update Printer FONT firmware
- Printhead replacement, [Refer to Chapter 6.7 \(Printhead replacement procedure\)](#)

The user can access the tool menu in the MC320x printer properties.

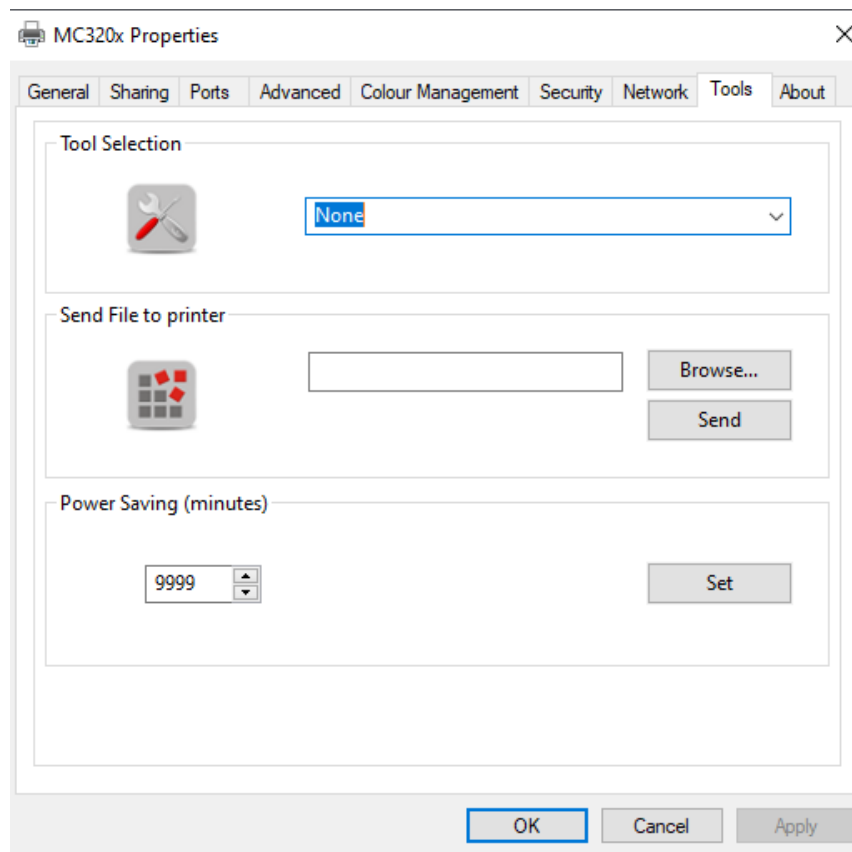
- 1) Ensure that printer is connected to PC/Laptop through USB.
- 2) Go to devices & printers and right click on the MC320x printer icon. Select printer properties from drop down menu.



3) Select the tool tab in MC320x printer properties,

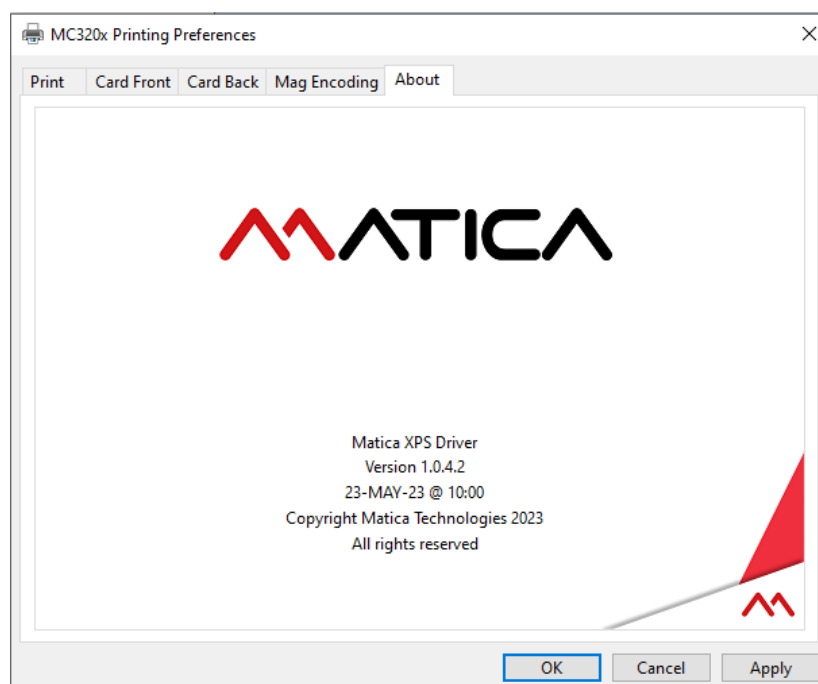


4) The user can now select the required operation from tool selection menu.



5.2.2 About

The user can check the driver version & other related details via the 'About' tab.



6 Printing

6.1 Card printing

Cards are usually printed and encoded via a card design software 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 printing application recognizes the printer, allowing the user to create fully customized card designs.

6.1.1 MC320x Printing preferences

MC320x XPS driver printing preferences allow the user to set the printer properties based on the printing operation requirements.

The MC320x printing preferences has the following tabs,

- Print
- Card front
- Card back
- Mag encoding
- About tab

6.1.2 Print settings

The print setting tab allows the user to set the orientation of the image on the card including duplex, card input & output option, card type & the number of copies to be printed. Also, it provides information of printer configuration, ribbon type & ribbon usage for the current ribbon fitted inside the printer.

The screenshot shows the 'MC320x Printing Preferences' dialog box with the 'Print' tab selected. The dialog is divided into several sections: 'Orientation' (Portrait/Landscape), 'Duplex' (None), 'Card Path' (Input: Automatic Feeder, Output: Front), 'Card Type' (Normal), 'Printer Configuration' (showing a printer icon and ribbon status: MC320x Monochrome, 100% remaining), and 'Output' (Copies: 1). Red arrows point from text boxes on the left to specific settings in the dialog.

Print image orientation setting. User can set portrait or landscape

Duplex setting: The user can print both sides of the card when using any duplex enabled printer.

Card path selection: The drop down menu allows the user to select & set the feeder option & output option.

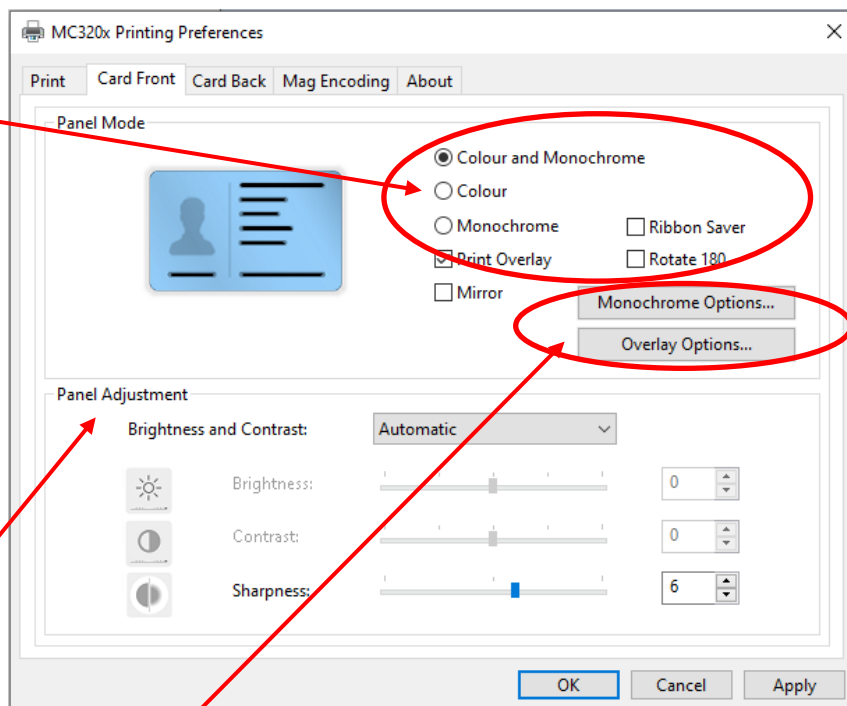
Card type selection: The drop down menu allows the user to set the type of card used for printing in the printer.

Current printer model & ribbon details

6.1.3 Card front settings

Panel mode setting: Based on the type of ribbon used inside the printer, the user can set color, monochrome & overlay options..
**** For printing color & overlay on the front side & monochrome K on the back when using YMCKO. Ribbon saver option must be enabled.**

Panel adjustment: The user can manually adjust the brightness, contrast and sharpness based on the print image requirement.

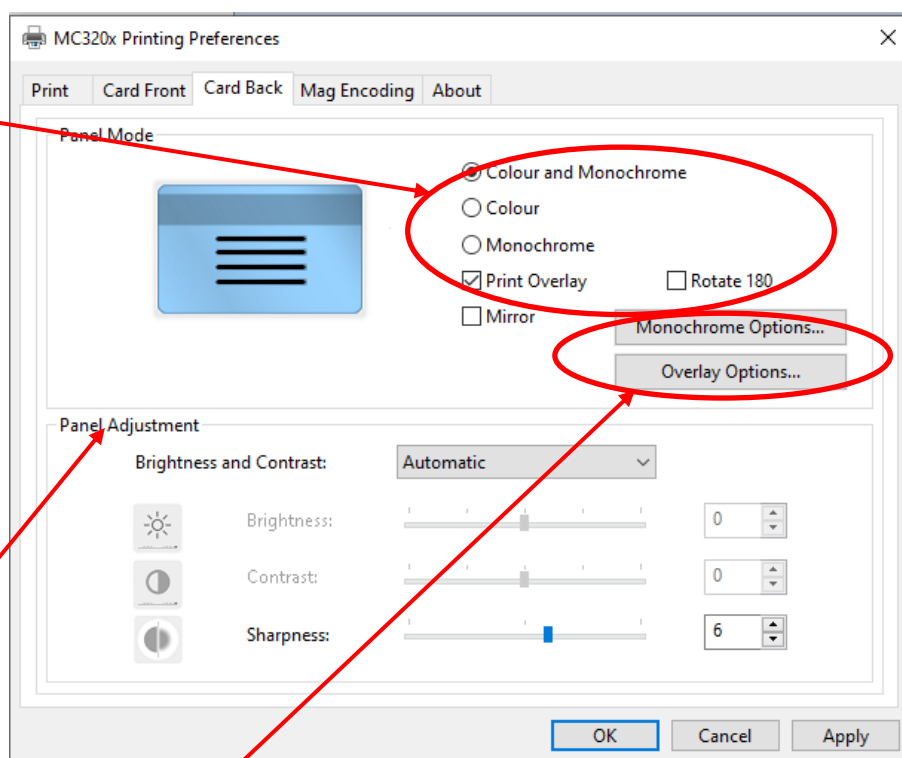


Monochrome option: This option allows the user to adjust the contrast and the half tone of the monochrome panel.
Overlay option: This option allows the user to adjust the contrast of the overlay panel and the area in which the overlay will be printed.

6.1.4 Card back

Panel mode setting: based on the type of ribbon fitted inside the printer, the user can choose which type of panel will be printed on the back of the card. i.e., Monochrome & overlay.

Panel adjustment: The user can manually adjust the brightness, contrast and sharpness based on the print image requirement.

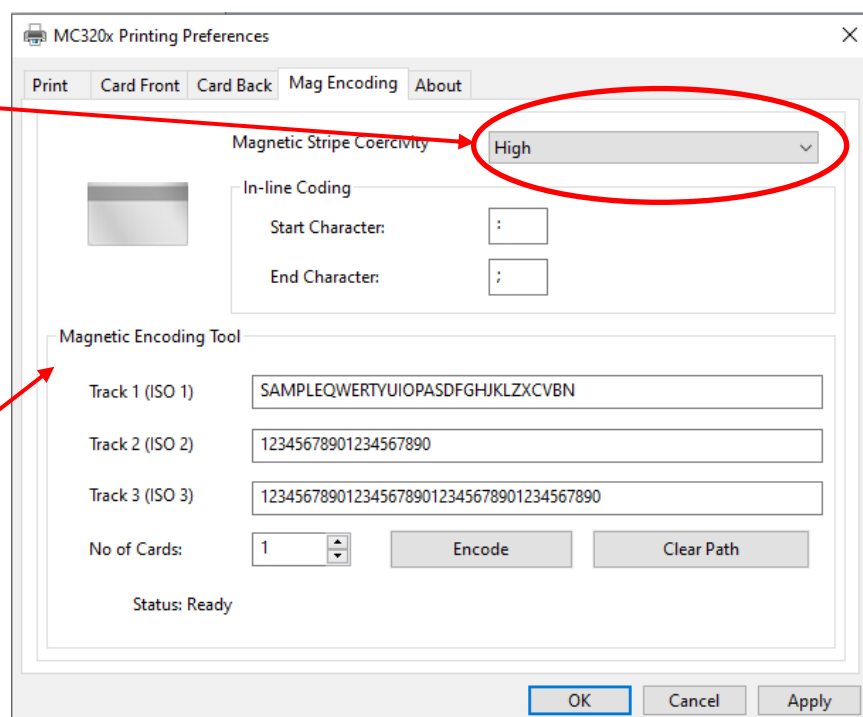


Monochrome option: This option allows the user to adjust the contrast and the half tone of the monochrome panel.
Overlay option: This option allows the user to adjust the contrast of the overlay panel and the area in which the overlay will be printed.

6.1.5 Mag encoding settings mag encoding tools

Magnetic stripe coercivity setting: Based on the type of magnetic stripe card coercivity, the user must select the correct coercivity from the drop down menu.

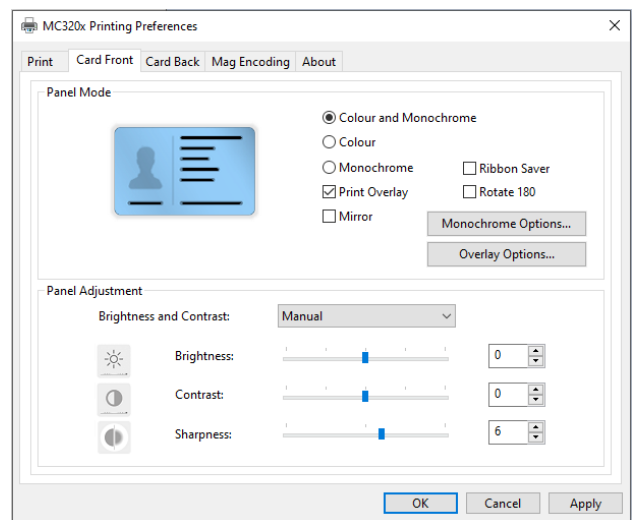
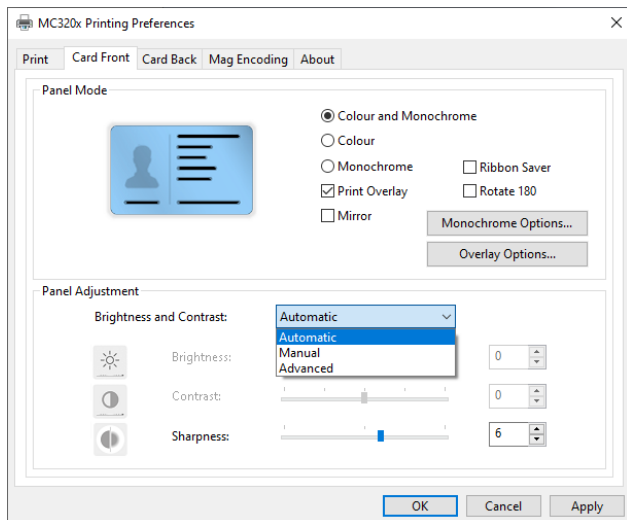
Magnetic encoding tools : The user can use this standalone tool to encode magnetic striped cards.



6.2 Color settings

By default, the brightness and contrast setting is set to 'Automatic'.

To customize color printing, Click Printer Properties → Card front/card back → Panel adjustment → Brightness and Contrast → Manual → Adjust the brightness, contrast and sharpness based on requirement → Click apply → Click OK.

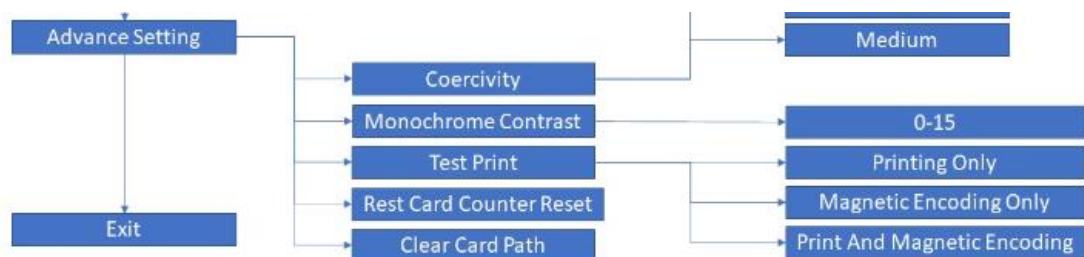


6.3 Printing test cards

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

Printing a test card using the LCD Display menu,

- Using the menu/scroll button, scroll to the 'Advanced' setting.
- Scroll to 'Test Print'
- Press the selection button to print the test card



7 Printer maintenance

7.1 Printer cleaning

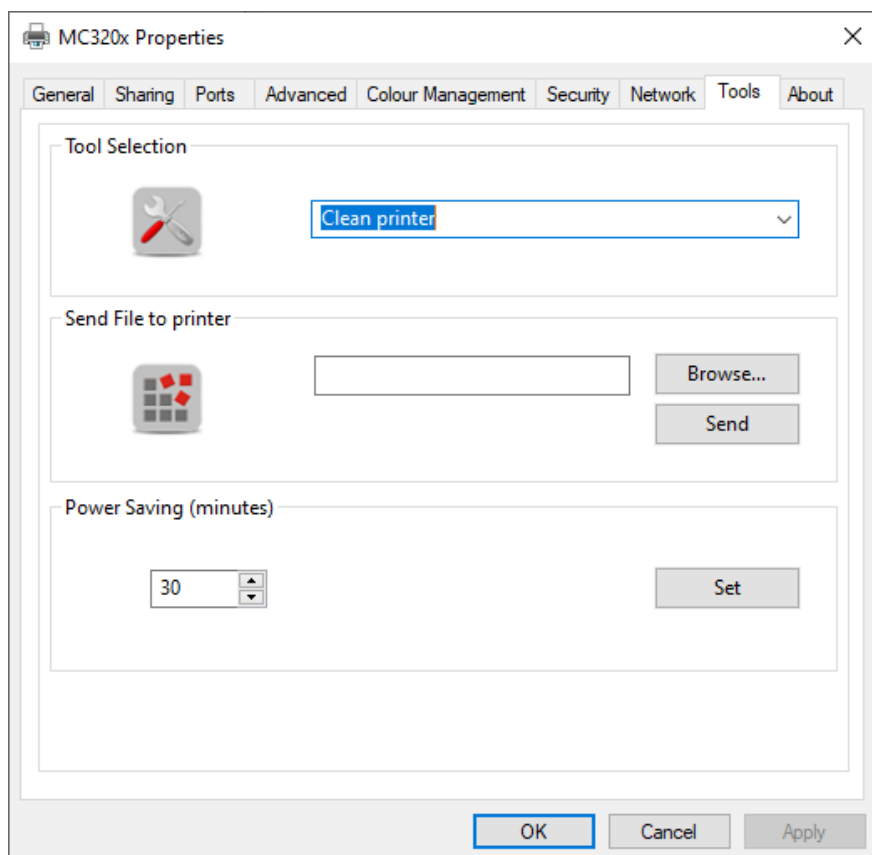
Four different cleaning processes are available when using the MC DTC Cleaning kit (PR20309601)

7.2 Standard cleaning

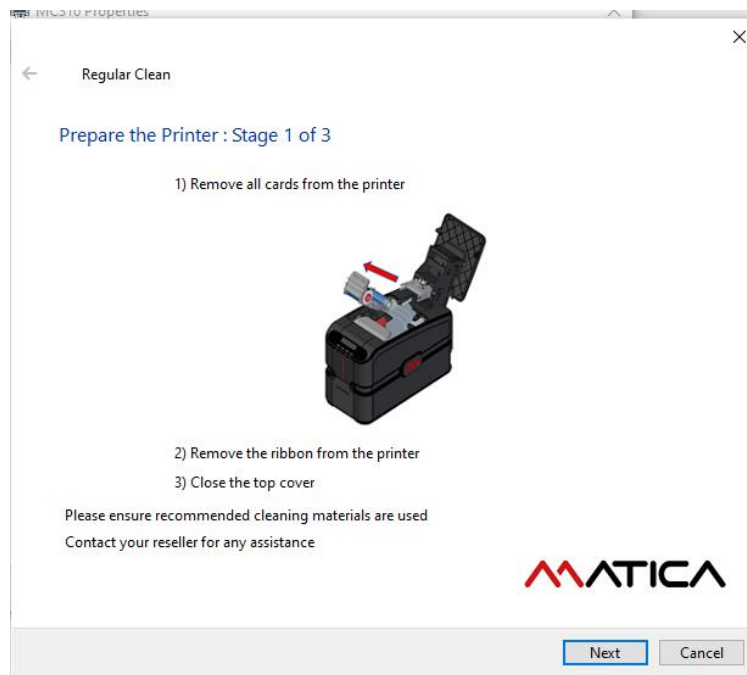
- Suggested frequency
Color printing: Each time the ribbon is changed.
- Mandatory frequency (to prevent voiding the warranty)
After every 1,000 prints, the printer will alert the user for 'Basic cleaning' on the display with a blinking amber LED.
Standard cleaning is performed using the cleaning card 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 performed after 1000 prints, at 1200 prints the printer will alert the user for 'Mandatory cleaning' by displaying a red LED
- For printers with the ISO magnetic stripe encoders: the cleaning frequency should be more frequent.

Standard cleaning procedure

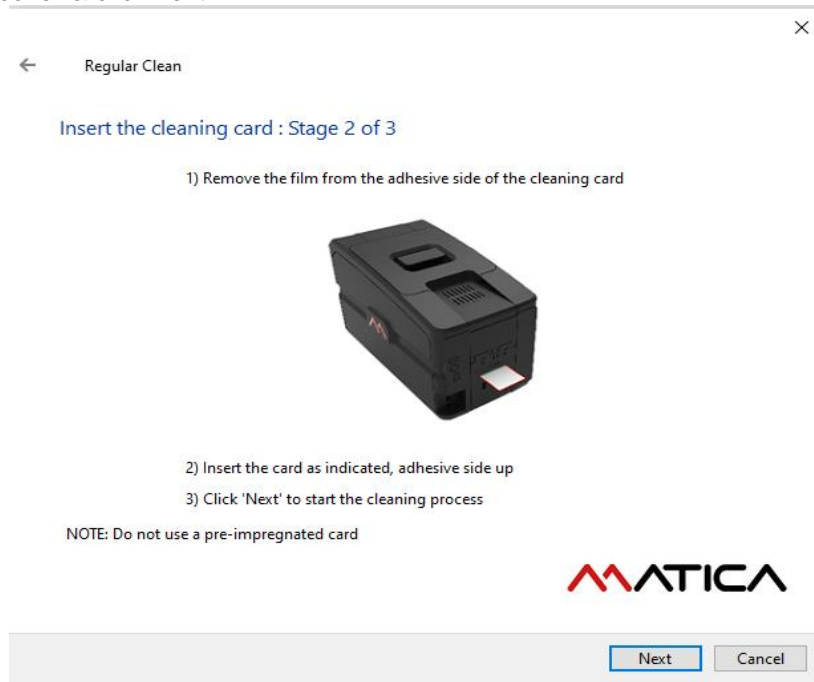
1. To perform the standard cleaning, Select 'clean printer' from the drop down menu available in the printer properties tools tab.



2. Follow the instructions in the wizard, as shown below.



3. Close the top cover & click next.



Note: Insert the cleaning card in the back slot of the printer.
The adhesive surface is on both sides.



4. Cleaning the print head,

Refer to [Chapter 6.5](#) for Printhead cleaning procedure, Click 'Finish' to complete the standard cleaning procedure

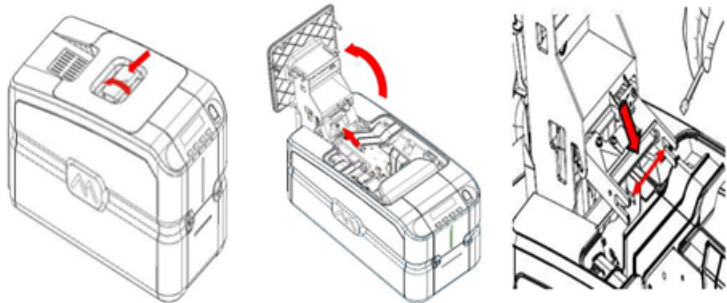
← Regular Clean

Head cleaning : Stage 3 of 3


1) Unplug the printer from the power supply

2) Open the top cover. The printhead might be hot so ensure that it is cool before proceeding further

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



4) Close the top cover. The print head cleaning procedure is now complete



Finish

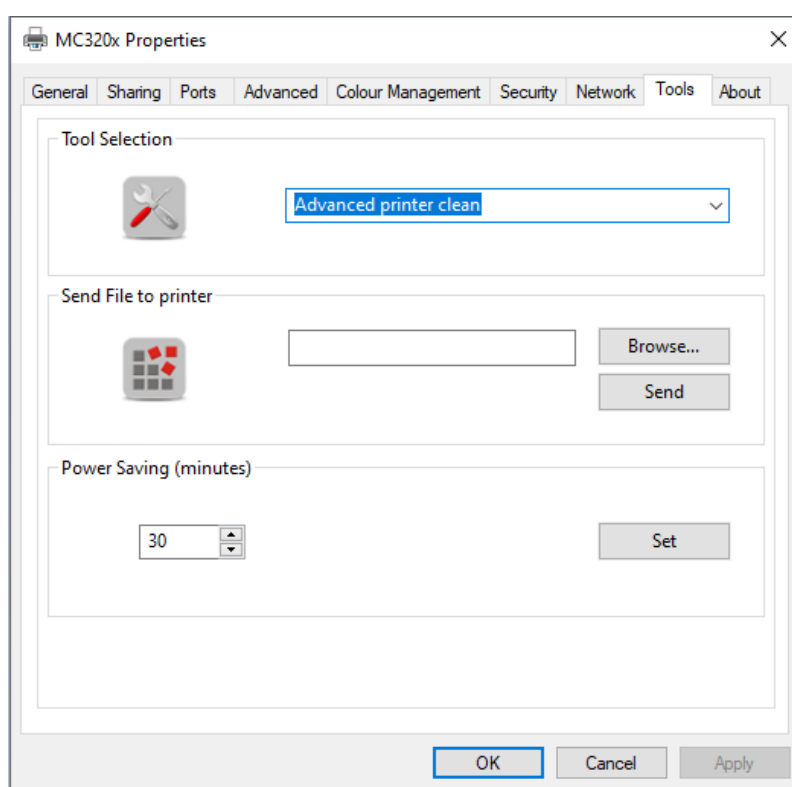
7.3 Card path advanced cleaning

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

- After every 5000 prints, the printer will alert the user for 'Advanced Cleaning' by displaying a red blinking red LED
- Advanced cleaning is performed using the T shaped card as explained below.
The procedure involves cleaning the card path, removing the dust on the rollers, and cleaning the magnetic head.
- A software-guided procedure will assist in carrying out the cleaning operations.

7.4 Advanced cleaning

1. To perform the advanced clean, select 'Advance printer clean' from drop down menu available in the printer properties tool tab.



Note: a) Insert the **T-card** in the back slot of the printer

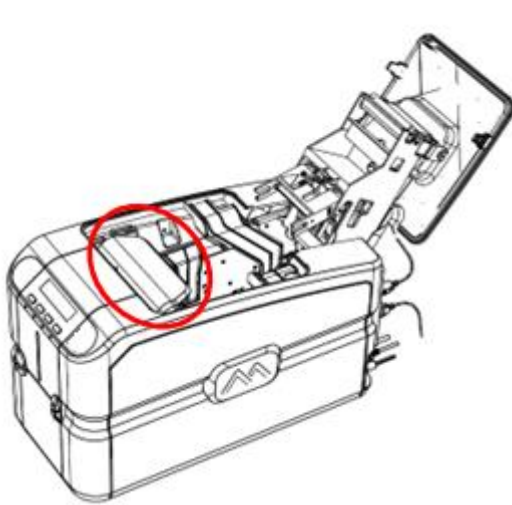


7.5 Cleaning roller

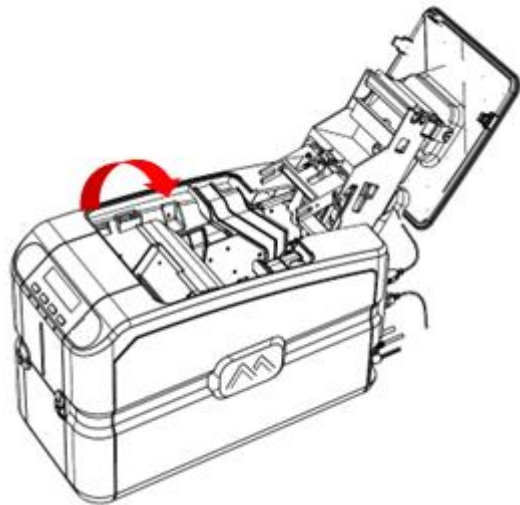
It is suggested to perform an advanced cleaning of the cleaning roller when the standard cleaning procedure does not efficiently remove all the dust from the cleaning roller. (Cleaning frequency: After every 1000 prints or even more often based on the working environment)

7.5.1 Roller cleaning procedure

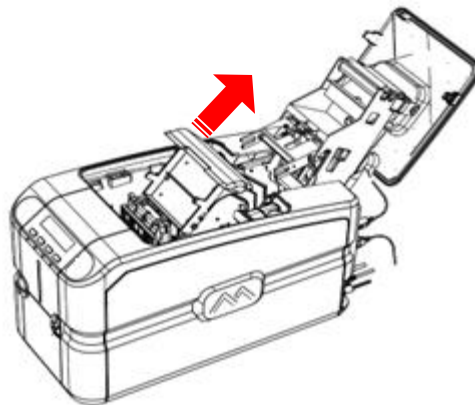
- 1) Unplug the printer from the power supply.
- 2) Open the top cover
- 3) Remove the ribbon carrier
- 4) Remove the encoder cover by following the instructions shown below



Step 1: Hold the encoder cover



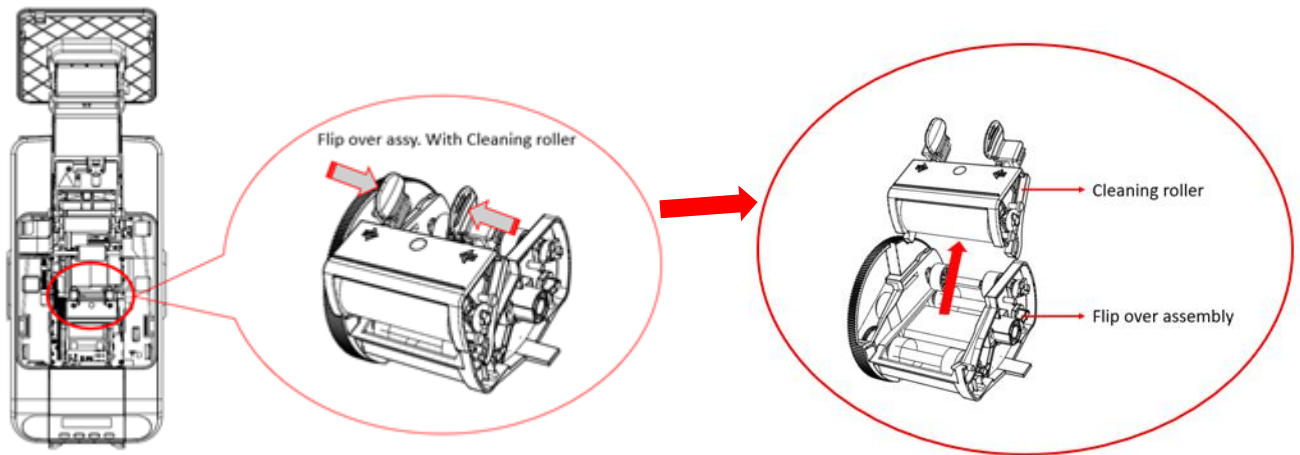
Step 2: Move the cover towards the downward direction as shown in the image to disengage



Step 3: Slide out the encoder cover in the direction shown in the image.

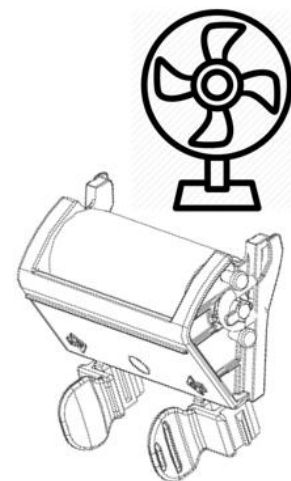
5) Below you can see the flip over assembly with the cleaning roller (marked with 2 arrows)


Press with 2 fingers to remove only the cleaning roller from the flip over assembly, as illustrated below.



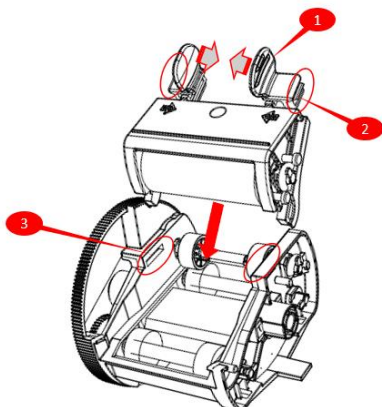
6) Gently clean the roller with water only.

7) After cleaning, dry the roller thoroughly.

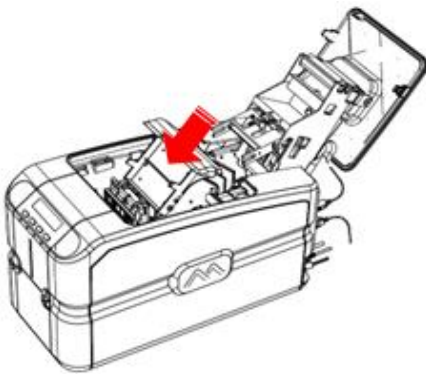


 Just air dry.
Do not use paper towels or cloth towels for drying the cleaning roller.

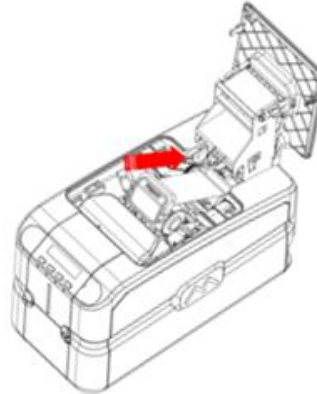
8) Reinsert the roller by compressing the flanges of the cleaning roller and push the projections into its slot. Press downwards until you hear a sound of clicking.



9) Refit the encoder cover and ribbon carrier back into its position



1. Insert the encoder cover



2. Insert the ribbon carrier

10) Close the top cover.

11) The roller cleaning procedure is now concluded.

7.6 Printhead cleaning

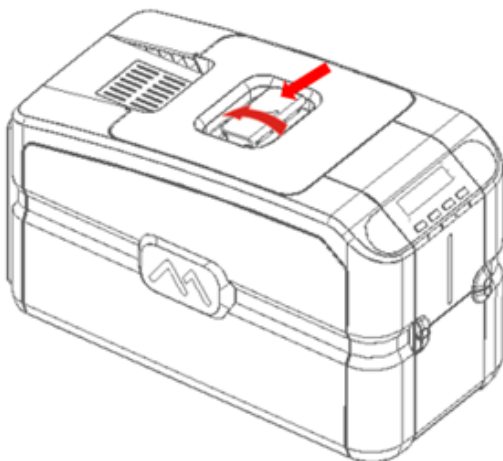
It is suggested to clean the printhead if the print quality starts to deteriorate:

- 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.

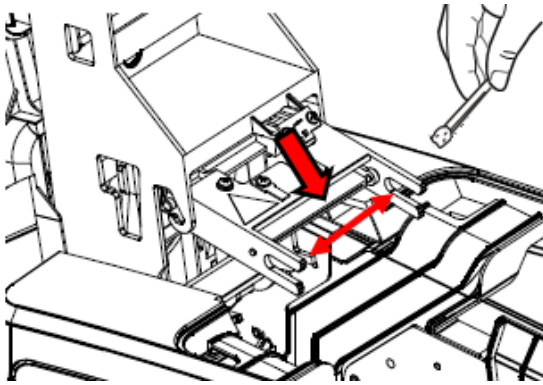
7.6.1 Printhead cleaning procedure

1) Unplug the printer from the power supply.

2) Open the top cover.



- 3) Using the cleaning pen/swab that is provided with 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**

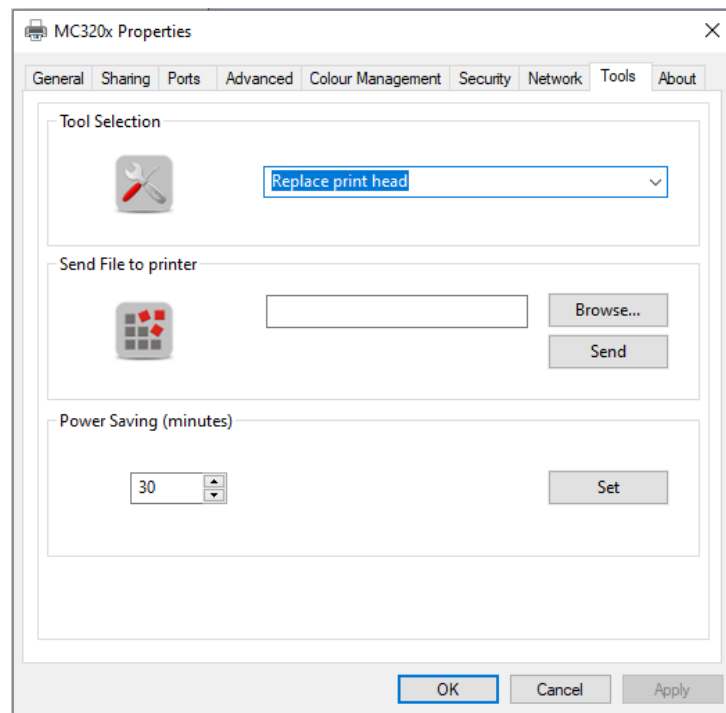
- 4) Close the top cover.
- 5) The printhead cleaning procedure is now complete.

7.7 Print head replacement

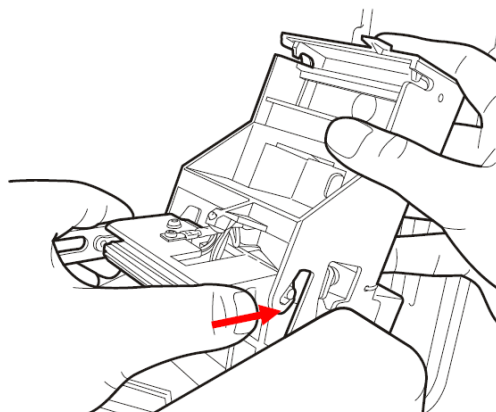
As the print head is the most important component of the printer, it is advisable to carry out the recommended cleaning procedures to always guarantee maximum quality and the longest possible service life. However, the print head may become worn and therefore must be replaced.

7.7.1 Replacement procedure

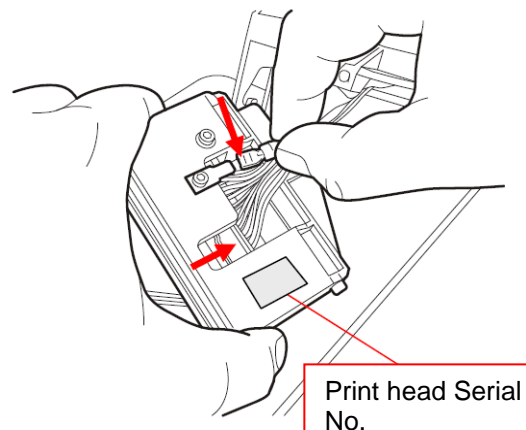
- 1) To perform the printhead replacement, select 'Replace Printhead' from the Tools menu,



- 2) Unplug the printer from the power supply and open the top cover. Remove the printhead as instructed below,
 - i. To remove the printhead. Press in the direction indicated by the arrow to compress the spring and to release from its housing. Once removed Click '**Next**' to continue.

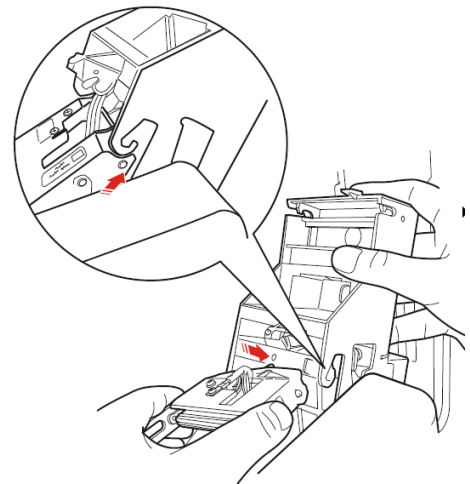


- b) Remove the earth wire and the connector, connect these to the new printhead and make a note of the Print Head Serial No. Click 'Next' to continue.

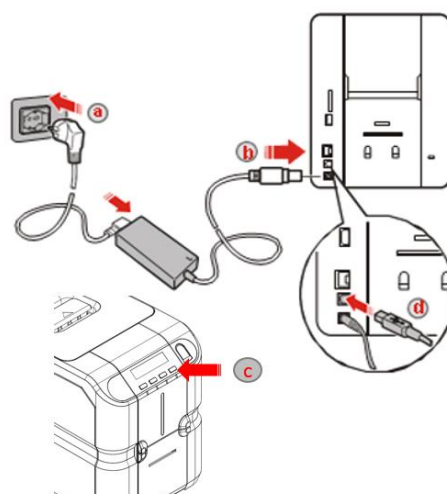


5. Insert the new print head.

During re-insertion, press with the sphere present in the tip of the printhead on the point indicated in the figure and rotate to insert it in its housing, close the top cover once complete and Click '**Next**' to continue.



- 3) Connect the printer to the power supply and switch the printer on, then click '**Next**' to continue.



- 4) Enter the **printhead serial number** and click '**Set**'.

×

← Replace print head

Set Serial Number : Stage 6 of 6

8) Enter the Print Head Serial number and confirm with the 'Set' button

Print Head Serial Number:

Set





Finish

- 5) Click '**Finish**' to complete the printhead replacement procedure.

8 Options

8.1 Chip encoding (contact and contactless)

The chip encoder is an optional module for the MC320x series that allows the encoding of chip cards and contactless (smart cards).

Available chip & contactless encoding modules and related functionalities:

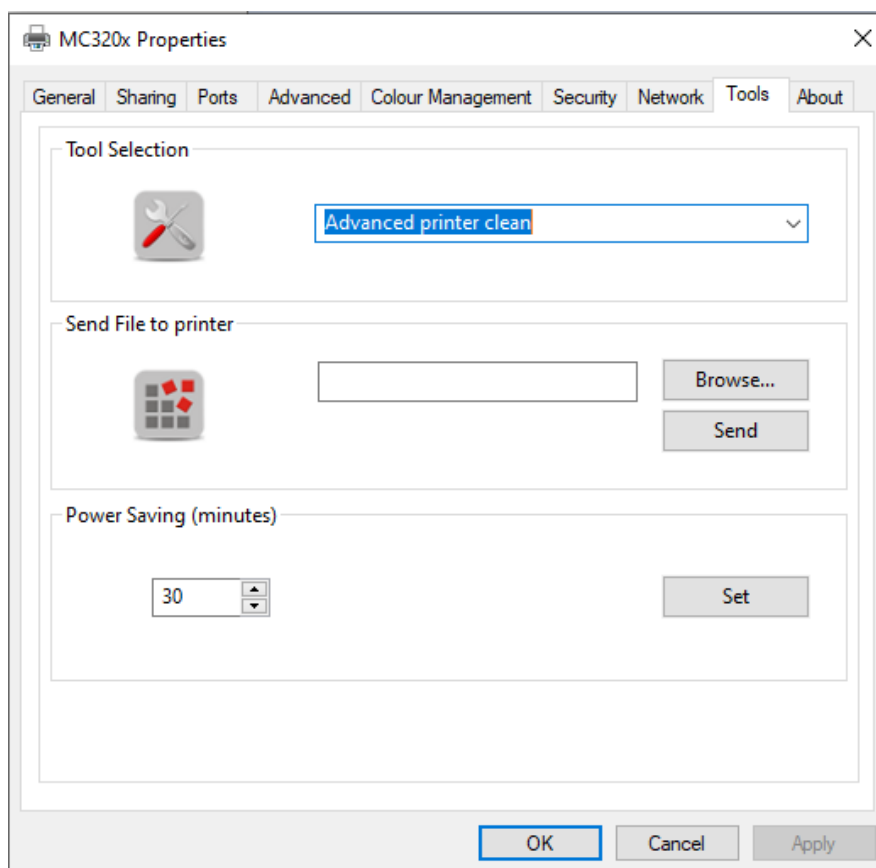
- **Dual interface encoder module (Contact and Contactless cards)** Code **PR10300003**
Enables the user to encode chip and contactless smart cards.

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

8.2 7.2 Use of PC/SC encoder tests

To ensure that the dual interface is working, select 'Perform PC/Sc encoder check' from the tools menu & click 'OK'.

Note: Test can only be performed with MC320x printer which has been installed with dual interface module PR10300003.



Follow the instruction provided in wizard & click next to continue.

Click the activate dual interface module and insert the smart card into the feeder.

PC/SC Encoder Test

Dual Interface: Stage 2 of 2

Available readers:

- HID Global OMNIKEY 5122 Smartcard Reader
- HID Global OMNIKEY 5122CL Smartcard Reader

Activate Dual Interface Module

Test

Load card Read ATR Clear Card Path

Contact - ATR:

ContactLess - ATR:

MATICA

Finish

To conduct the test, click load card & card move to dual interface → click read ATR. The software will read & display the ATR once the test has been completed successfully.

PC/SC Encoder Test

Dual Interface: Stage 2 of 2

Available readers:

- HID Global OMNIKEY 5122 Smartcard Reader
- HID Global OMNIKEY 5122CL Smartcard Reader

Activate Dual Interface Module

Test

Load card Read ATR Clear Card Path

Contact - ATR: 3B4A2131091

ContactLess - ATR: 3B8F801804FCA0003630100006A

MATICA

Finish

8.3 Magnetic encoding

The magnetic encoder is a factory option and not available for purchasing as a module.

8.4 Configuration

Warning: Before proceeding with the configuration of the module make sure the printer is turned on and connected to your computer via USB.

Note: Refer 5.1.1.5 of this document for the mag encoding setting & mag encoding tool tab.

Sample encoding format:

Layout test for sending data to track 1: ~**1**:ABCDEFGHijkl1234;

Layout test for sending data to track 2: ~**2**:123456789456789999;

Layout test for sending data to track 3: ~**3**:123456789342567;

8.5 Duplex activation

The duplex activation is an optional module for the MC320x series printer that allows the user to print on both sides of the cards.

The following module is available:

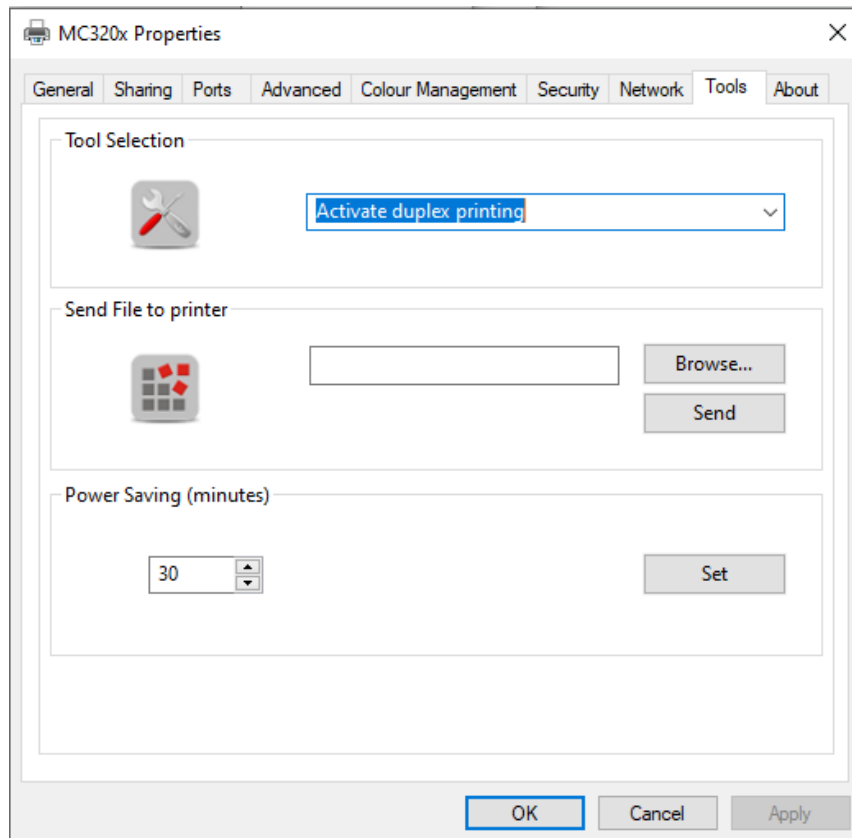
- **MC310 duplex activation kit**

It will enable the printer to print dual sided

Code **PR10300016**

To enable the dual sided printing please follow the below instructions,

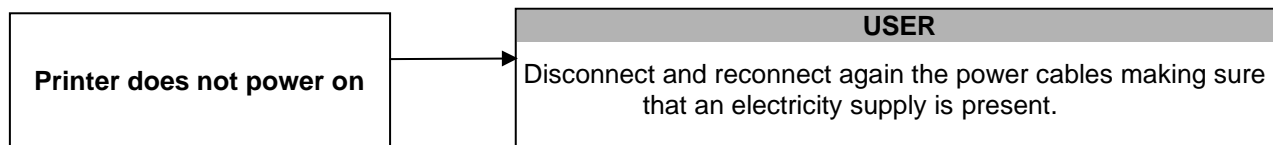
1. Go to Printer properties → Tools → select Activate Duplex printing from drop down menu → Click ok to proceed to the duplex activation wizard window.



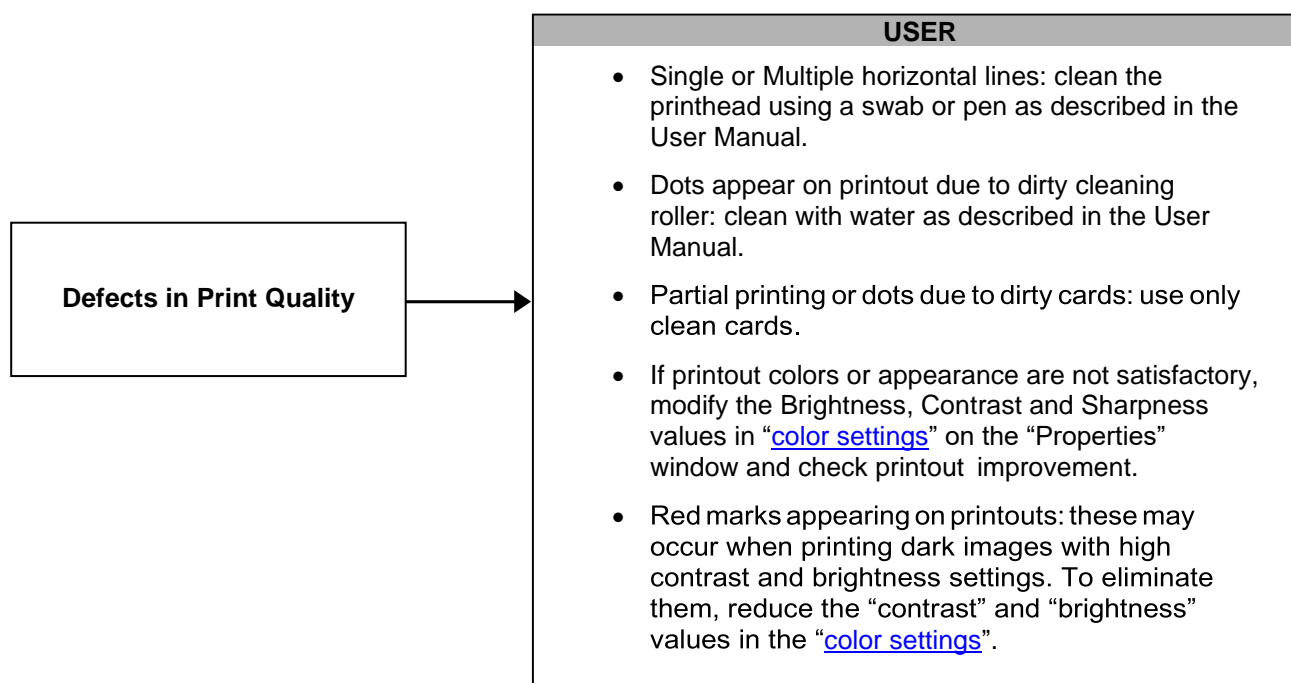
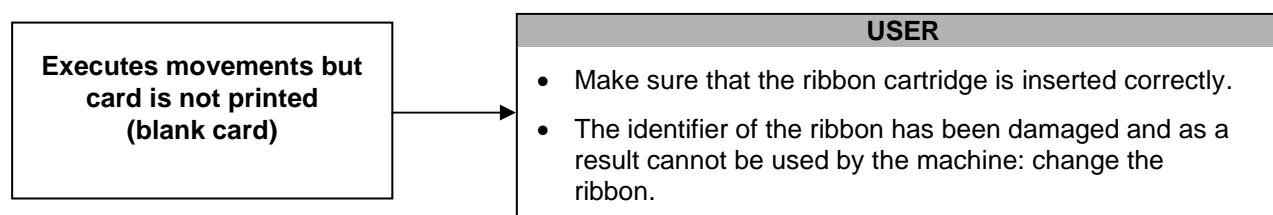
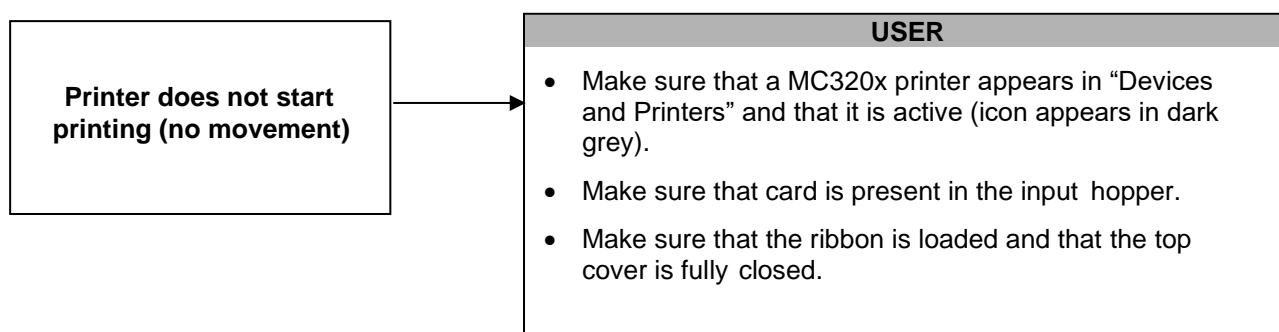
Once activated, switch the printer OFF & ON and test with a double sided print job.

9 Trouble shooting

9.1 Printer does not power on



9.2 Unable to print



Unable to feed cards automatically

USER

- The card thickness setting does not correspond with that of the card being used: set the correct value, remove the card, then switch the printer off and on again.
- If you are using non-original ribbon, check that the type of ribbon set for the driver corresponds with what is being used.
- Flip Over not in position: switch off the machine, remove by hand any card left in the flip over, then switch the printer on.
- The weight of the input hopper does not rest on the card in the tray, or it is missing. Free the weight.
- Check that the cleaning roller is not out of place. If it is, switch off the machine, put the roller back into position and switch the printer on.
- Check that no ribbon fragments are present in the card path. If there are, switch the machine off and remove them, then switch the printer on.
- Check that no card is present in the path. If there is, switch the machine off, remove the card, then switch the printer on.

9.3 Ribbon errors

If the ribbon has tears or locks with error 14

USER

- Lower the “contrast” and “brightness” values on the “Properties” window.

9.4 Chip encoding

Difficulties or failures in the code reading ATR

USER

- *To be updated in the next version*

10 Ribbons

The following Matica ribbons can be used:

Ribbon type	
YMCKO color ribbon, 250 prints	BD32250x
YMCKO color ribbon, 100 prints	BD32100x
YMCKO-K color ribbon, 200 prints	BD32200x
KO ribbon, 600 prints	BD32254x
K monochrome ribbon, 2000 prints	BD32255x
SILVER monochrome ribbon, 500 prints	BD32256x
GOLD monochrome ribbon, 500 prints	BD32257x
WHITE monochrome ribbon, 1000 prints	BD32258x
RED monochrome ribbon, 1000 prints	BD32259x
GREEN monochrome ribbon, 1000 prints	BD32261x
BLUE monochrome ribbon, 1000 prints	BD32262x
SCRATCH-OFF ribbon, 1000 prints	BD32263x

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.

11 Cleaning kits

The following cleaning kit can be used:

Cleaning Kit	Code to order
Standard cleaning kit: 5 cleaning cards, 5 cleaning swabs, 1 cleaning pen for printhead, 1 long T-Card	PR20309601

12 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

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)
- Reject bin
- Card types: PVC & PVC Composite
- 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.maticagroup.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) optional – factory fit. ISO 7811 HiCo/LoCo, JIS2
- 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

- Driver (XPS driver)
- Automatic installer
- Compatible with Windows: Window 7, 8, 8.1, 10, 11 (32/64 bit), Server 2016, Server 2019, Server 2022

Security

- Slot for Kensington®lock (*)

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/option

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:

MATICA Technologies AG

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Tel. +49 89 510 8588-12

Fax. +49 89 510 8588-88

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:

MATICA Technologies AG

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Tel. +49 711 900 373 25



Munich, 9. Apr. 2021


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