

600NEO

User Guide



600NEO Card Printer – User Guide

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PRINTER LIMITATIONS

1. First and foremost, always ensure the printer is kept clean and free of any dust. The printer must be cleaned at the frequency recommended (after every 700 images or at the change of a standard film). Do not leave card stock or partially spent dye film open to gather dust as trapped debris and dust will be evident in the finished card.

2. Image Size is important to ensure full edge to edge coverage.

For 100NEO: 1016 x 642 Pixels or 85.6 x 54mm

For 300NEO and 600NEO: 1013 x 642 Pixels or 85.7 x 54mm

For Ultima and Prima: 1036 x 664 Pixels or 87.7 x 56.1mm

Note: For the Retransfer series, the printer produces an over-the-edge sized image (consistent with reverse transfer printing) which allows the entire card surface to be covered with a “bleed” image.

Therefore, it is important that any aspects of the image that the user wants to have wholly visible should fit centrally within 1013 x 642 pixel area to avoid any unwanted clipping.

3. Cards to be printed on should be from a reputable source and conform to ISO7810. Any debris, inclusions or pits within the card may be evident in the finished image reproduction.

To ensure optimal card feeding performance, the card stock should be fanned (separated) and the input hopper maintained between 10 minimum and 100 cards maximum (the input Hopper capacity being 100 cards).

Do not use any cards outside the Printers card thickness specification 0.50 - 1.27mm (20 - 50mil). To do so may result in a card jam within the printer and may not be covered under the manufacturer’s warranty.

SAFETY INSTRUCTIONS

- To prevent electric shock do not remove covers.
- Do not attempt to service the printer yourself.
- There are no user serviceable parts inside (either printer or dye film). In the event of malfunction, contact your printer/consumable supplier.
- This product is only to be used with the Power Source supplied at point of purchase.
- Take care not to spill any liquid on the printer.
- When handling the printer avoid touching the printing edge of the Thermal Print Head. Any grease and contamination will shorten its life.
- Before transporting the printer, remove dye film & card hoppers and pack the printer in its original packaging to reduce the likelihood of damage in transit. Magocard is not responsible for printers/items inadequately packaged.

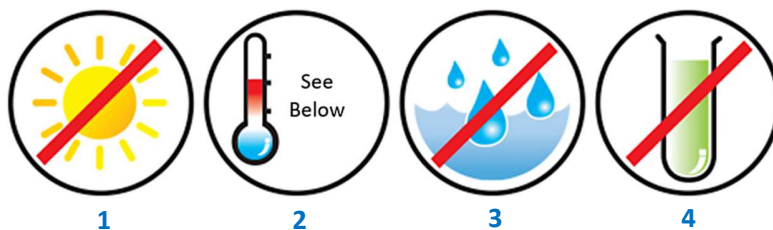
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PRINTER SPECIFICATION

Print Resolution:	300 dpi
Colour Depth:	256 levels (8 bit)
Print Speed:	YMCKO 18s (approximately). Measured as 'click to card' K only 5s (approximately). Measured as 'click to card'
Card Feeder Capacity:	100 Cards (0.76mm/0.029")
Card Stacker Capacity:	70 Cards (0.76mm/0.029")
Card Thickness:	0.50mm to 1.27mm (20 mil to 50 mil)
Card Size:	CR79/CR80
Card Material:	PVC
Dye Film Types:	MN: 100, 250, 300, 450
Dye Film Prefix:	All models: (MN)
Front Panel Display:	Multi-function Colour LCD
Dimensions (L x W x H):	May vary according to printer model
Estimated Weight:	May vary according to printer model
Power Source:	100-240V AC, 3.75A, 50-60 Hz. 90W
Interface:	USB 2.0, WiFi, Ethernet (10 BASE-T/100 BASE-T)
System Requirements:	Windows 8.1, 10, 11 (32/64bit). Windows Server 2008, 2012, 2016 GNU/Linux and Mac OS X 10.9.0 upwards
Printer/Printhead Warranty:	May vary between region and printer model or variant
Internal Memory Size:	512 MB
Printer security:	Kensington lock
Magnetic Encoding options:	HiCo and LoCo (ISO 7811)
Security watermark:	Holokote (10 options) - User customisable. Holopatch
Printer Variants:	May vary according to Geographic Region

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PRINTER AND DYE FILM ENVIRONMENTAL REQUIREMENTS

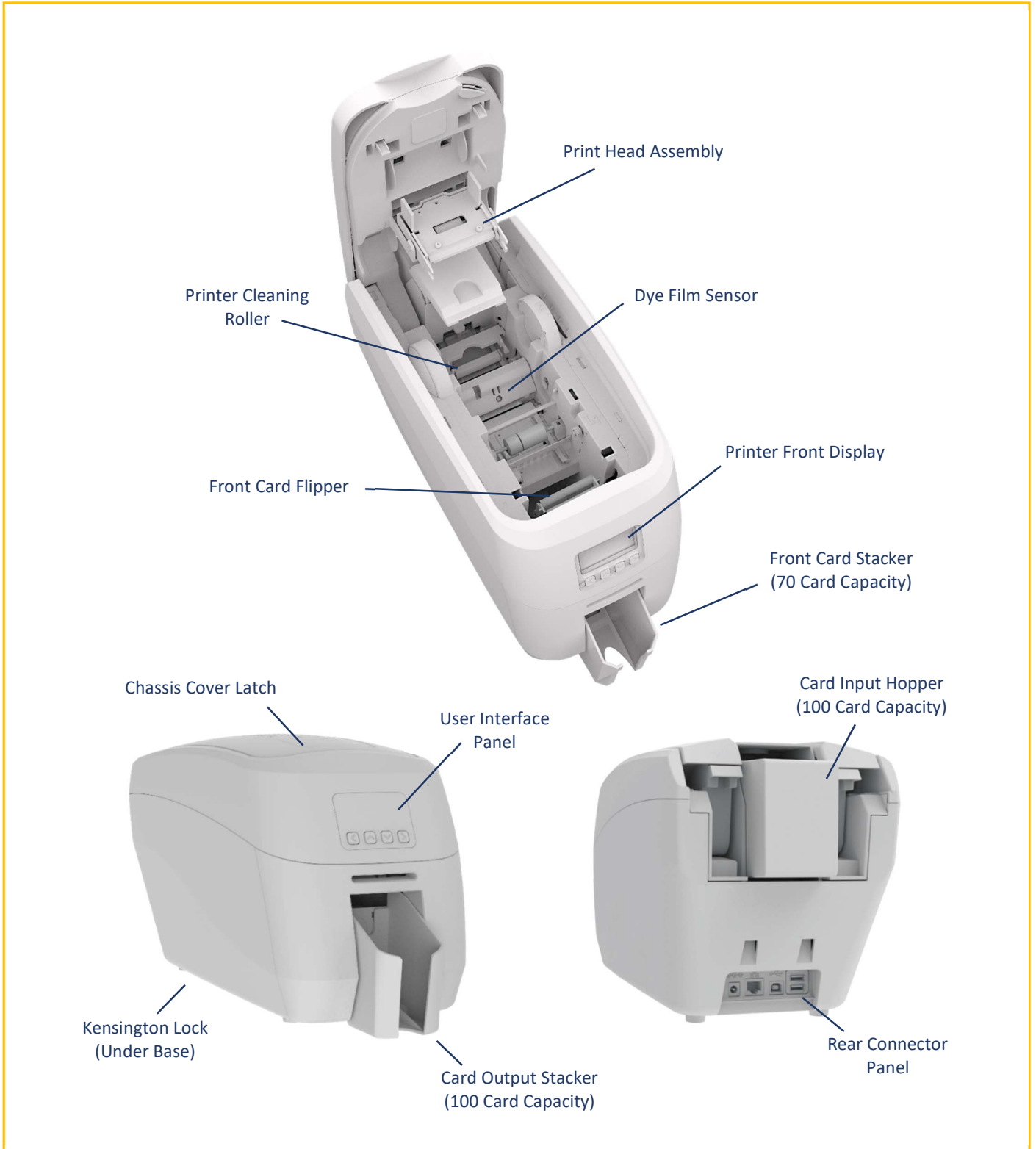


It is recommended that the printer is installed and used in a normal office environment with:

1. Protection from direct sunlight.
2. An ambient temperature between +10 to 30° C (50 to 86° F).
3. Relative humidity 20 to 70%. Do not expose to excessive moisture.
4. Protection from chemicals.
5. Sufficient space for:
 - Opening the printer's lid.
 - Cable access to the rear of the printer.
 - Adequate ventilation.
6. WiFi on this device operates at a frequency of 2.4 GHz. Do not locate the printer in close proximity to devices which could interfere with WiFi operations and connectivity (e.g. Microwave ovens, Direct Satellite services, Power sources, 2.4 GHz Mobile phones, Wireless or RF video).

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PRINTER MAIN EXTERNAL FEATURES

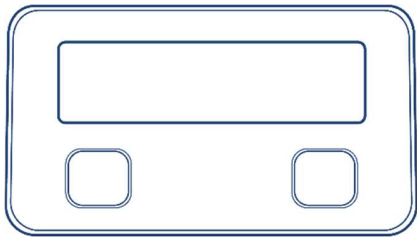


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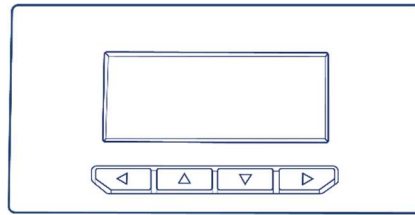
THE PRINTER USER INTERFACE

FRONT USER INTERFACE PANELS FOR COMPARISON ONLY (not to scale)

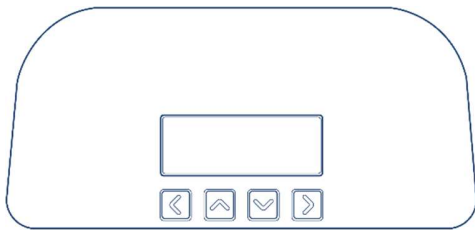
In each case, the front panel buttons are used (in conjunction with the front panel display) to navigate through the various printer User and Maintenance menu options (please see pages 8, 9 and 10 for details).



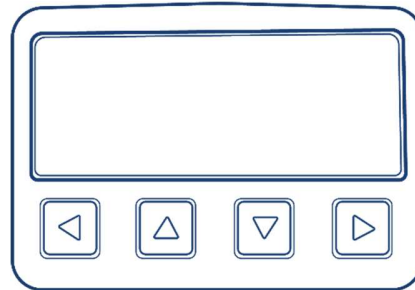
300NEO Front Panel



360 NEO Front Panel



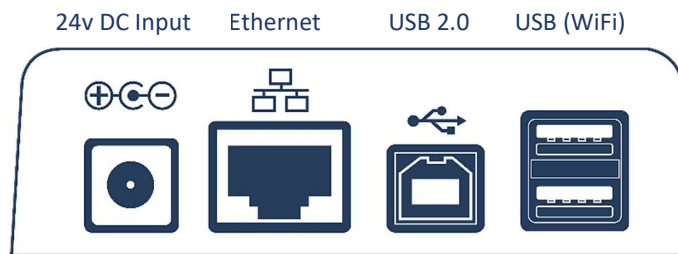
D NEO Front Panel



600NEO Front Panel

**** NOTE:** Printer menu options may differ depending on printer model.

REAR USER INTERFACE PANEL



600NEO

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Printer Menu Options

The User Menu

MAIN MENU							
TOP LEVEL		Sub Level 1		Sub Level 2		Sub Level 3	Comments
Clean Rollers	>	Remove Cards/Film	>	Get Cleaning Card Ready	>	Insert Cleaning Card now	
Hand Feed Mode	>	Hand Feed ON/OFF					** See Menu Note 1.
Print Test	>	Print Test – Are you sure? Yes/No					
Mag Test	>	ISO/JIS-2	>	ISO/JIS-2 – Are you sure? Yes/No			** See Menu Note 2.
More >	>	Standby Time	>	Standby Time OFF/ON			** See Menu Note 3.
	>	Network Info.	>	Wired	>	IP Address	Network Info. 192.XXX.XX.XXX
					>	DCHP	DCHP ON/OFF
					>	Subnet	255.255.XXX.X
					>	Gateway	XX.XX.XX.X
					>	MAC	< MAC Address >
				WiFi		IP Address	Network Info. 192.XXX.XX.XXX
						DCHP	DCHP OFF/ON
						Subnet	255.255.XXX.X
						Gateway	XX.XX.XX.X
						MAC	< MAC Address >
				** See also Menu Note 4		WiFi enabled	ON/OFF

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MAIN MENU						
TOP LEVEL	Sub Level 1	Sub Level 2	Sub Level 3	Comments		
>	Dye Film Info.	>	Dye Film ID	ID XX250YMCKOK		
		>	Film Used	0%		
		>	Region	0		
		>	Grade	Grade #0		
>	Cards Printed	>		Cards Printed XXXX		
>	Serial Number	>	Serial Number	XXXXXXXX		
>	Software Info.	>	Software Info.	< Firmware version >		
>	Hardware Info.	>	Hardware Info.	< Issue number >		
>	Printer Info.	>	Region >	Region X		
			Grade >	Grade #X		
>	Reboot Printer	>		Printer Initialises		

Menu Notes

1. **Hand Feed Mode:** Hand Feed mode enables the user to select whether cards are fed from the rear Hopper or by hand via the printer's front panel. The default setting is OFF.
2. **Mag Test:** The Mag Test option (if applicable) enables verification on encoder operation offline. Sample data is written on to the card's magnetic stripe (by the printer) and then read back (by the printer) to provide read/write verification.
3. **Standby Time:** Using the +/- keys, the Standby time can be selected for 15, 60, 600 minutes or OFF.
4. **Troubleshooting WiFi:** If the installed dongle is defective (or not fitted), then selecting the WiFi option will give a 'No Dongle' message on the printer's front display.

**** NOTE:** WiFi can only be used with the dongle supplied with the printer. Do not substitute different dongles (Magicard or otherwise).

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The Maintenance Menu

MAINTENANCE MENU					
TOP LEVEL		Sub Level 1		Sub Level 2	Comments
Turn Rollers	>		>	Use Up/Down Keys	
Calibrate	>	Remove Film	>	Calibrating...	
Soak Test	>	Soak Printer	>	Feeding Card	> Soak Printer 1/100
	>	Soak Flipper	>	Feeding Card	> Soak Flipper 1/100
	>	Soak Encoder	>	Feeding Card	> Soak Encoder 0/50
	>	Soak Card Feed	>	Feeding Card	> Soak Card Feed 1/100
	>	Long Soak	>	Feeding Card	> Long Soak 1/10000
Sensor Test	>	Cam Sensor	>	Cam Sensor < blocked/unblocked >	
	>	Dye Sensor	>	R XXX, G XXX, B XXX	Respective RGB values displayed
	>	Flip Sensor	>	Flip Sensor < blocked/unblocked > I.R.	
	>	Front Sensor	>	Front Sensor	
	>	Mid Sensor	>	Mid Sensor	
	>	Rear Sensor	>	Rear Sensor	
	>	Lid Sensor	>	Lid Sensor < blocked/unblocked >	
	>	Tacho Count	>	Tacho Count < value displayed >	
	>	PH Temperature	>	PH Temperature < value = C >	Value displayed (Centigrade)
	>	Smart Opto	>	Smart Opto < clear/blocked >	
	>	Smart Switch	>	Smart Switch < clear/blocked >	

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DRIVER INSTALLATION

Windows

The Windows driver is available in two versions: the **‘.exe’** version and the **‘Bare Driver files’** version. The **‘.exe’** format driver is the standard version for most users whereas the bare files version is more suited to I.T. support personnel. Both versions can be downloaded from the Magicard website using the links below.

‘Bare Driver files’ version and video:

<https://support.magicard.com/solution/network-admin-magicard-ultradriver-bare-files/>

The **‘.exe’** driver version can be downloaded as follows:

1. From your PC, first go to the Magicard website: <https://magicard.com>
2. Select the **Support** option at the top of the page and then select your printer model from the selection shown.
3. Select **Drivers and Downloads** and then the **Magicard Windows Printer Driver** option. You should now see the current driver version. Scroll down the page until you see the **Downloads and attachments** section.
4. Select the Magicard Printer Driver option from this. The driver will then download to your PC.
NOTE: Before running the downloaded driver, please ensure the printer’s USB cable is disconnected (you will be prompted to connect this during the installation process).
5. Finally, please follow the on-screen instructions (this will guide you through the installation process).
With the printer driver successfully installed, you can view the installed printer icon on your PC as follows:
6. Open the **Control Panel** window. When open, ensure the **View by:** option (top-right of window) is selected to **Small icons**. Select the **Devices and Printers** option from the displayed list.
7. In the ‘Devices and Printers’ window, you should now see various driver icons representing the drivers already installed on the computer (one of which, should be the Magicard printer you’ve recently installed). From here, you will be able to configure the printer driver to suit your own particular printing requirements using the ‘Printing Preferences’ options.
8. To open the ‘Printing Preferences’ window, right-click on the icon representing your printer and select the **Printing Preferences** option.
9. To assist in configuring the driver printing preferences, there is a separate **ID Card Printer Driver Guide** which can be viewed on the Magicard website using the link:
<https://support.magicard.com/solution/windows-driver-help-guide/>

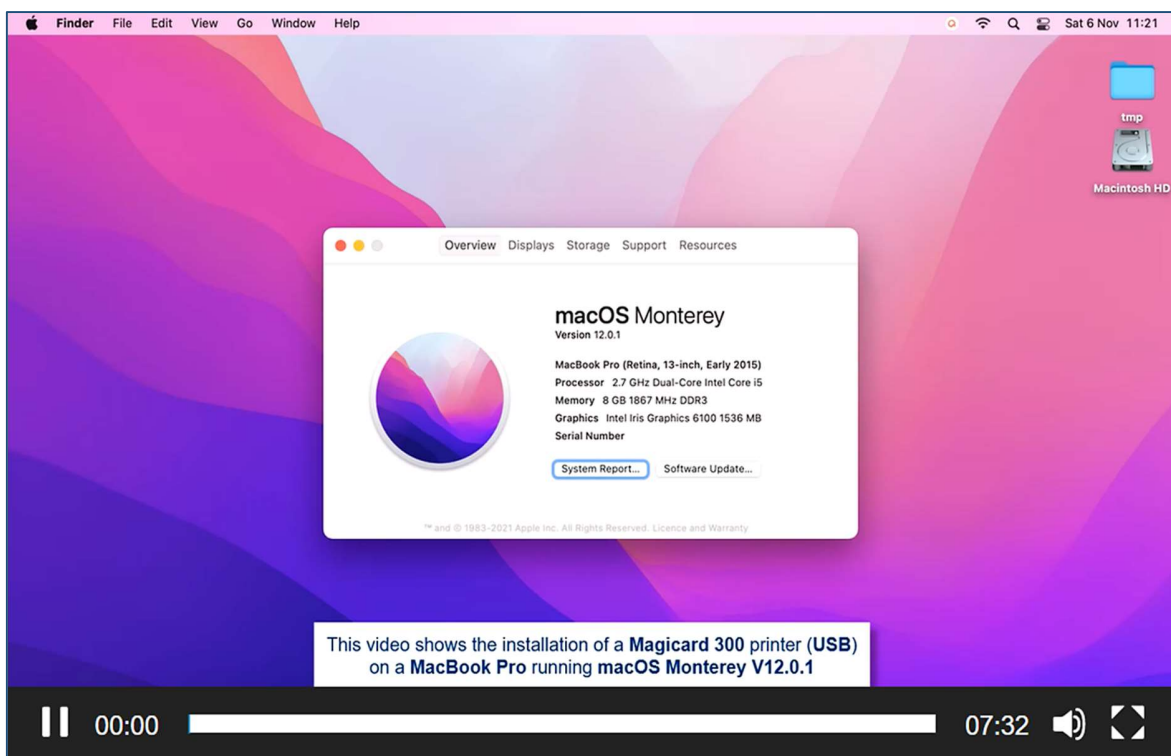
This document will guide the user through each stage of the printer driver, explaining the various options available. The guide can also be downloaded as a separate document if required.

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Macintosh

The Macintosh printer driver can be downloaded as follows:

1. From your Macintosh (Mac) computer, first go to the Magicard website: <https://magicard.com>
2. Select the **Support** option at the top of the page and then select your printer model from the selection shown. Then select **Drivers and Downloads** and finally, the **MacOS Printer Driver** option.
3. You should now see the option to select a different Operating System (OS) – Macintosh (Apple icon) or Linux (Penguin icon). Select the **'Apple'** icon option. This will download the Macintosh driver installer to the user's computer.
4. **NOTE: Before** installing the Mac driver, it is first recommended to watch the **Video Guide for Download and Installation** (see below) and also, to check which processor your Mac computer is using – Intel or ARM (please see the following page for further details).



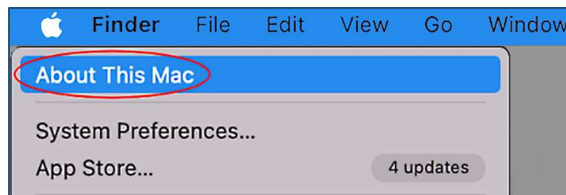
The Macintosh Driver Install Video

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Which Processor does my Mac have (Intel or ARM)?

Having selected the Mac driver option from the Magicard website, the user will see the option to choose from two driver versions depending on which processor the Mac computer is using (Intel or ARM).

The type of processor used can be found using the 'About this Mac' option as shown below.



The Intel Driver Option



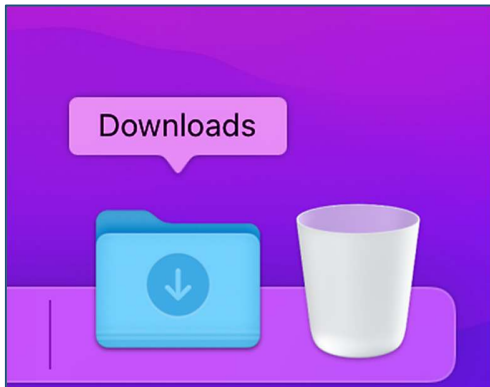
The ARM Driver Option

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The Macintosh Driver Installation

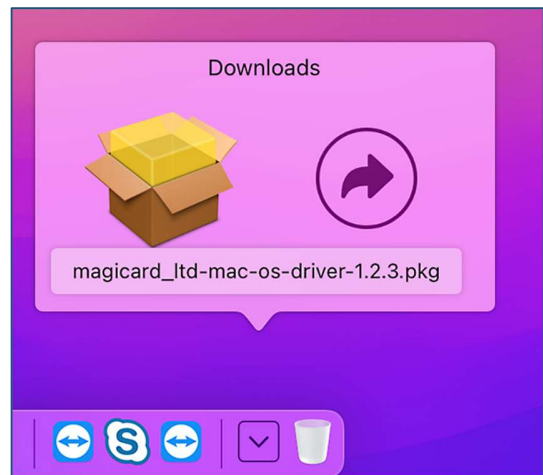
The Driver download is shown below, but in addition to this, the user will also be guided by on-screen instructions through each stage of the process.

1



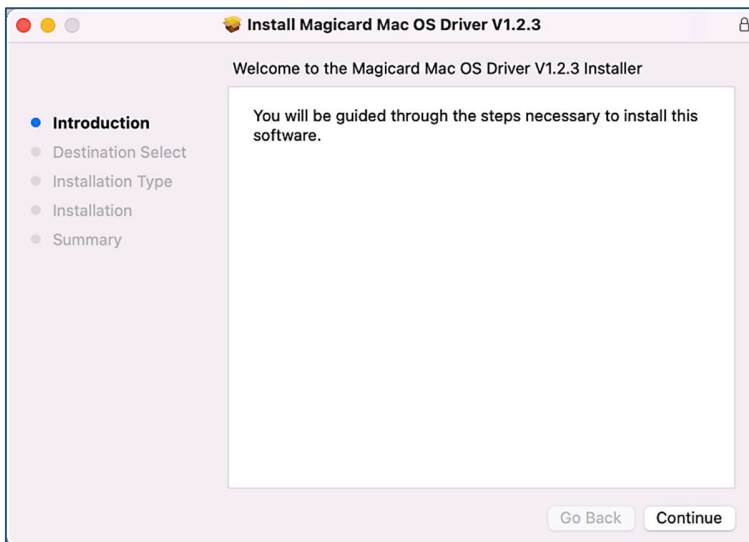
1. Open the Downloads folder

2



3. Click on the Mac OS Driver

3

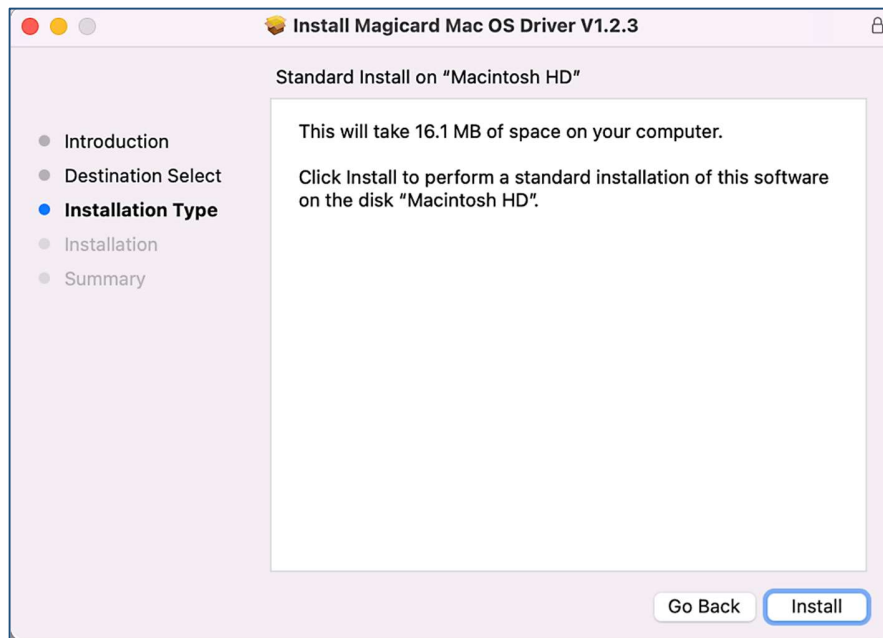


2. The Installer Introduction – Click 'Continue'

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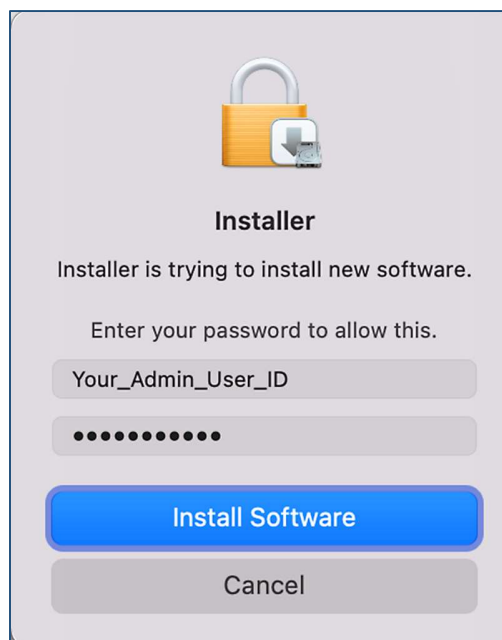
The Macintosh Driver Installation (continued)

4



4. Click 'Install'

5

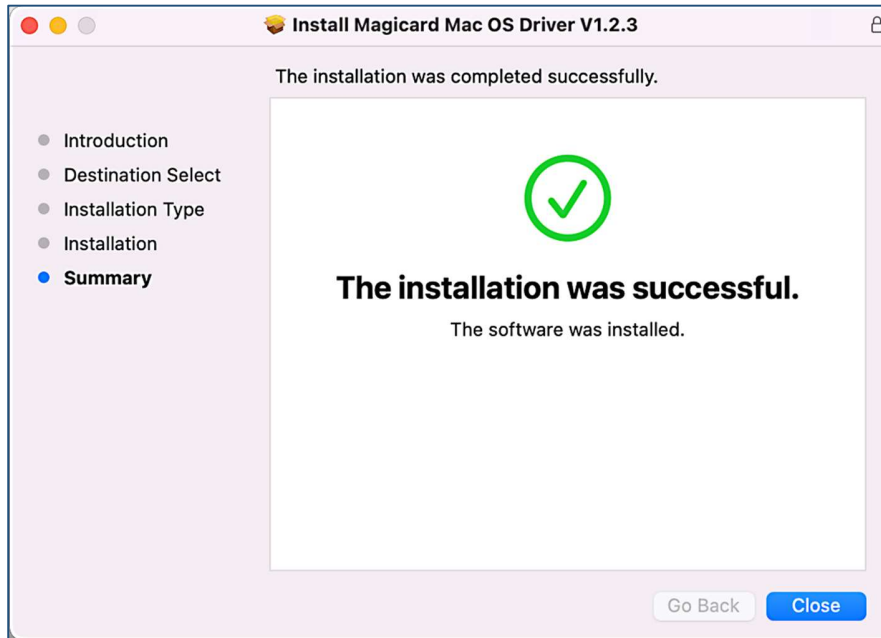


Enter your admin credentials
and click 'Install Software'

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The Macintosh Driver Installation (continued)

6



5. Installation successful. Click 'Close' to finish

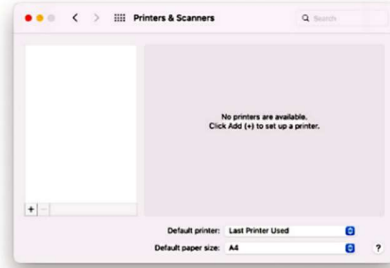
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Mac OS Quickstart Guide

1. Open the System Preferences



2. Select 'Printers and Scanners'



USB Switch on your printer. Connect the USB cable.



The printer is automatically detected and added to your list of available printers.

Installation is complete.



LAN



Connect the LAN (Ethernet) cable to your network. Switch on your printer.



By default, your printer will obtain an IP address automatically via DHCP.

1. Click Add



2. Select IP option



3. Obtain your printer's IP Address

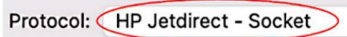


4. Enter the IP Address



Consult the **QuickStart Guide** or **User Manual** for your printer on how to obtain the IP address.

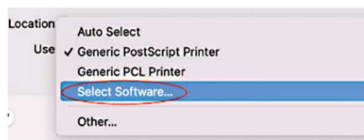
5. Select 'HP Jetdirect - Socket' protocol



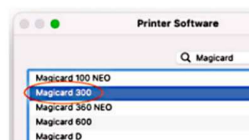
6. Enter a name for the printer



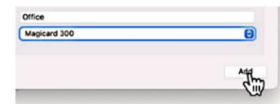
7. In the Use drop-down choose **Select Software...**



8. Choose the **exact** printer model from the list



9. Click Add

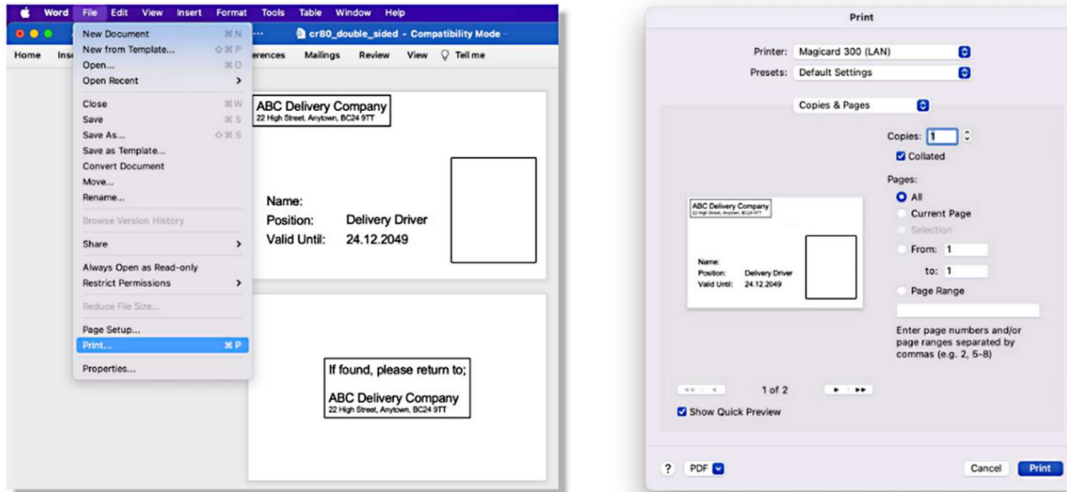


Installation is complete.

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Customising the Settings and Features

From the application you are printing from, open the **Print** dialog;



Select **Printer Features** from this drop-down menu;



- General
- Printer
- Card Front
- Card Back
- Advanced

Depending on the exact printer model, there are up to 5 **Feature Sets** available;

- General** 300 / 600dpi K-Resin (600 only).
- Printer** Single / double-sided options.
- Card Front** Card front adjustments.
- Card Back** Card back adjustments.
- Advanced** Advanced options.

General

- 300 DPI
- 600x300 DPI

K-Resin (Black) resolution adjustment is only available on the **Magicard 600** series.

- 300 DPI** Standard resolution.
- 600 x 300 DPI** High resolution (K-Resin panel only)
Applies to the long axis of the card.

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Configuring Settings and Features (continued)

Printer

✓ Front only

Both sides

Back only

Duplex printing is only possible on printers which have the option enabled (normally 'Duo' will be shown on the printer's display after the model name).

- Front Only** Single-sided printing, card front.
- Both Sides** Double-sided printing.
- Back Only** Single-sided printing, card back.

Card Front

Card Front Colour Format

- Colour with composite black (YMC)
- Colour with resin black (YMCK)
- Monochrome (K Only)

1

Card Front Black Resin Options

- All black is printed with K
- All black is printed with YMC

2

Card Front Overcoat

- Print without overcoat layer**
- Print overcoat layer

3

Card Front HoloKote™ (watermark)

- Print without HoloKote(R) image
- Print with HoloKote(R) image

4

Card Front HoloPatch™ (Gold square)

- Print without HoloPatch(R)
- Print with HoloPatch(R) image



5

Card Front Rotation

- 0 degrees
- 180 degrees

6

Card Front Overcoat Holes

- No hole
- Magnetic stripe normal
- Magnetic stripe wide
- Magnetic Chip normal
- Magnetic Chip large

7

Card Front HoloKote™ Slot

- Slot 1
- Slot 2
- Slot 3
- Slot 4

8

Card Front HoloKote™ Rotation

- No rotation
- 180 degrees

9

Card Front HoloKote™ X Adjust

- 2
- 1
- ✓ 0
- 1
- 2

10

Card Front HoloKote™ Y Adjust

- 2
- 1
- ✓ 0
- 1
- 2

11

Card Front Use With Laminate

- 0 degrees
- 180 degrees

12

Feature Sets: Card Front

Card Front Colour format: Colour with resin black (YMCK) 1

Card Front Black resin options: All black is printed with YMC 2

Card Front Overcoat: Print overcoat layer 3

Card Front HoloKote(R): Print with HoloKote(R) image 4

Card Front HoloPatch(R): Print without HoloPatch(R) 5

Card Front Rotation: 0 degrees 6

Card Front Overcoat holes: No hole 7

Card Front HoloKote slot: Slot 1 8

Card Front HoloKote(R) Rotation: No rotation 9

Card Front HoloKote(R) X Adjust: 0 10

Card Front HoloKote(R) Y Adjust: 0 11

Card Front Use with Laminate: Use without Laminate 12

** Overcoat must be used when printing colour.

Card Back

Card back settings are identical to card front (see above).

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Configuring Settings and Features (continued)

Advanced

The screenshot shows the 'Advanced' settings panel with the following settings and callouts:

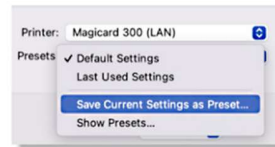
- Feature Sets:** Advanced (dropdown)
- Colour correction:** Absolute colorimetric (dropdown) **a**
- Sharpness:** 0 (slider) **b**
- Printhead Power (YMC):** 0 (slider) **c**
- Printhead Power (Black resin):** 0 (slider) **d**
- Printhead Power (Overcoat):** 0 (slider) **e**
- Status polling:** Enable (dropdown) **f**

Callout details:

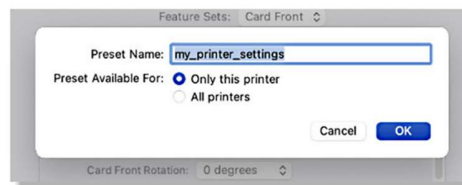
- a:** Colour Correction menu with options: None, Driver managed, Perceptual, Saturation, Relative colorimetric, Absolute colorimetric.
- b:** Sharpness slider with values: -2, -1, 0, 1, 2.
- c:** Printhead Power (YMC) slider with values: -2, -1, 0, 1, 2.
- d:** Printhead Power (Black Resin) slider with values: -2, -1, 0, 1, 2.
- e:** Printhead Power (Overcoat) slider with values: -2, -1, 0, 1, 2.
- f:** Status Polling menu with options: Disable, Enable.

Saving your printer settings as a Preset

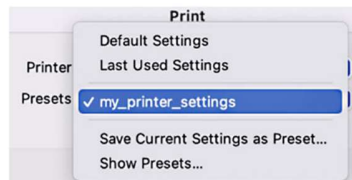
From the **Presets** drop-down menu
Select **Save Current Settings as Preset...**



Type a name for your preset.
Then click **OK**.



Your preset is available for future use.



600NEO Card Printer – User Guide

Enabling the CUPS Interface on a Mac

CUPS (Common UNIX Printing System) is a printing system that allows Mac OS devices to connect to various printers on a network. The CUPS web interface may be disabled by default on a user's Mac and so will need to be enabled to access available network devices and to set default settings.

- First, visit the following location to check the CUPS status:
<http://localhost:631/printers/>

A screen should then appear indicating that CUPS has been disabled. If this is the case, the CUPS Web Interface can be enabled as follows:

- Copy the following string and paste into the Terminal:

```
cupctl WebInterface=yes
```

- Press return, and close the terminal. Now you can access the CUPS Interface by entering:

localhost:631 into your browser address bar.

INFO

CUPS is the standards-based, open source printing system developed by Apple Inc. for OS X® and other UNIX® like Operating Systems. CUPS uses the Internet Printing Protocol (IPP) to support printing to local and network printers.

<http://cups.org/>

Further information is also available on the Magicard website at:

<https://support.magicard.com/solution/mac-osx-printer-driver/>

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CHOOSING THE CORRECT FILM AND CARDS

Dye Film Types

NEO COLOUR DYE FILMS		
Dye Film Type	Card Print Capacity	Product Part Number
100YMCKO Colour	100 images	MN100YMCKO/4*
250YMCKOK Colour	250 images	MN250YMCKOK/4*
250YMCKOKO Half Panel Colour	250 images	MN250YMCKOKO-HF/4*
300YMCKO Colour	300 images	MN300YMCKO/4*
450YMCKO Half Panel Colour	450 images	MN450YMCKO-HALF/4*

NOTE: 'MN' = NEO Dye Film prefix code. 4* = NEO region code.

MA1000 Film Variations

NOTE: MA1000K films consist of one continuous film (no panels) and are available in a variety of colours as shown below. The card capacity of **MA1000K** films is 1000 cards. To order, simply quote the part number (MA1000K) plus the colour required.

The card capacity of the **MN600KO/4** film is 600 cards (colour: black and clear).

****** 'Scratch' films apply a removable film to the card's surface which can easily be scratched off by the user.

SINGLE-SIDED MONOCHROME DYE FILMS	
Dye Film Part Numbers	Product Variant
MA1000K < Colour >	Black
	Red
	Blue
	Green
	Silver
	Gold
	White
	Scratch **
MN600KO/4	

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Card Types

Pure PVC Card stock or laminated PVC/Polyester Cards are available. The latter are more durable and better suited to heavy use and heat lamination when required. For access control and Smart Card applications, your supplier should provide the appropriate type for 'direct to card' printing. For consistent results, stick to a single variety of good quality Cards.

Generally, there are two standard sizes of card that can be used with the printer. These are as follows:

Physical Dimensions

CR80 = 3.375" x 2.125" (85.7 mm x 54.0 mm) (w x h)

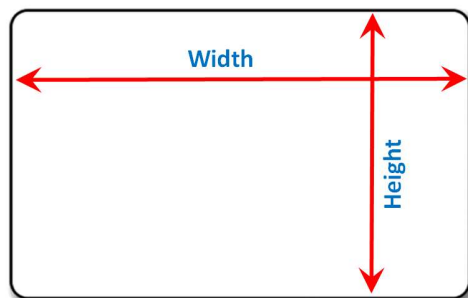
CR79 = 3.303" x 2.051" (83.9 mm x 51.0 mm) (w x h)

Card thickness should be as follows:

Standard – 0.030" (0.76 mm).

Minimum – 0.020" (0.51 mm).

Maximum – 0.040" (1.02 mm).



Do not use any cards outside the printer card thickness specification 0.50 - 1.27mm (20 – 50 mil). To do so may result in a card jam or damage within the printer and may not be covered under the manufacturer's warranty.

Pixel Dimensions

CR80 Pixel dimensions:

1013 x 642 (w x h)

CARD VARIANTS	
Card Part Numbers	Product Variant
M9006 - 793	Premium Blank White Cards – CR80
M9006 – 794	Blank White Cards with Magnetic Stripe – CR80
M9007 - 011	Self-Adhesive Blank White Cards – CR80
M3610 – 054	Self-Adhesive Blank White Cards – CR80 (USA)
M9006 – 796	Holopatch Blank White Cards with Gold Square – CR80
M9006 – 797	Holopatch Blank White Cards with Gold Square and Magnetic Stripe – CR80
E9323	Blank Rewriteable Card front & standard PVC back

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Magnetic Stripe Cards

If you have a printer fitted with the optional magnetic encoding module, you can print and encode the data on the rear of the Card in one operation. The magnetic encoding module can encode both HiCo and LoCo magnetic stripe card specifications.

When loading magnetic stripe cards, make sure the stripe is facing down on the left side of the printer (as viewed from the front).

To encode a magnetic stripe card, please refer to your card printing application (although it's also possible directly via the Driver Interface).

Self-Adhesive Cards

There are many types of self-adhesive cards. Thorough investigation and testing has shown that poor quality or incorrect card types will cause:

- Poor image quality.
- Card feed failures.
- Dye film cutting or snapping.
- Cards jamming during printing.

Rewriteable Cards

Rewriteable cards are plastic cards that are reusable or erasable. In some cases, the cards can be reused up to 500 times (the actual number of times can vary between card type and manufacturer).

Rewriteable cards are identical to standard PVC cards in terms of physical size and thickness but differ in that one side of the card will have a matt finish rather than the usual glossy finish.

The glossy side of the card can be printed on in the same way as a standard card using standard dye film. The matt side has a special dye coating which is sensitive to temperature variations (generally, the hotter the temperature applied to the matt surface, the darker the dye colour at that point). Standard dye film is not used with rewriteable cards.

Using the heat from the printhead, it is possible to produce an image as with standard cards but these images will usually be monochrome (the colour being determined by the actual heat-sensitive dye used in the manufacture of the cards) and usually slightly lower resolution to a similar image printed using standard dye film.

Rewriteable cards offer an economical alternative to printing standard colour images using colour dye film.

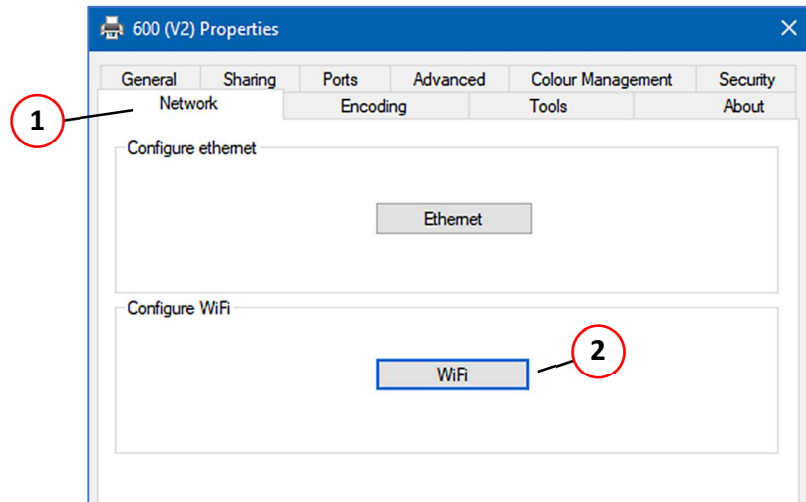
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INITIAL PRINTER SETUP

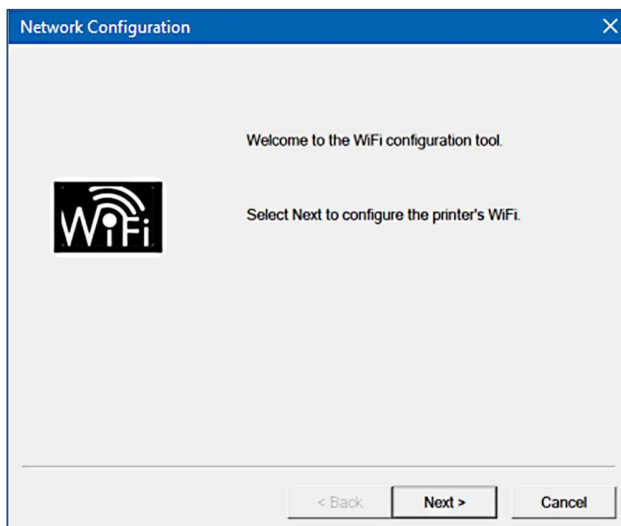
WiFi Setup

Setting up the 600NEO printer for WiFi operation is very straightforward and can be done by following the simple steps below:

1. Open the **Devices and Printers** window and right-click on your printer icon. Select the **Printer Properties** option.
2. In the Properties window, select the **Network** tab (1) and then click the **WiFi** button (2).
3. You should now see the **Network Configuration** window below. Click **Next** to proceed. At this point, there may be a slight delay while the computer attempts to establish a connection with the printer.



Properties window

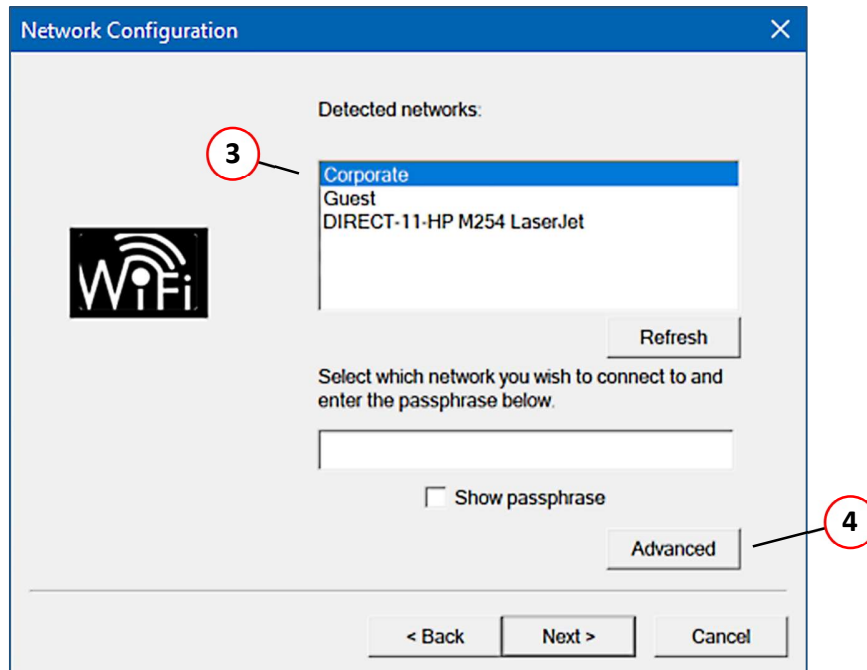


Network Configuration window

4. If any networks are detected, a Network Configuration window will open showing the networks detected (3). Please refer to the following page for details. The user can then select a network to which a WiFi connection can be established. Click the **Advanced** button (4) followed by **Next** to continue.

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WiFi Setup (continued)



Detected Networks window

Setting up a Static WiFi Address

Please refer to the following pages for additional details.

Having selected the network to connect for WiFi operation, the next step will be to configure the network settings (generally, static network settings are used when connecting to a printer). This can be done as follows (please refer to the following page for additional details):

- Select the **Use Static Network Settings** option **(a)**.
- Enter the **Static IP Address** (that the printer will use)**(b)**.
- Enter the **Static Net Mask** (Subnet Mask) **(c)**, the **Static Default Gateway** **(d)** and the **Primary DNS Address** **(e)** for your network.
- Enter the password for the selected WiFi network **(f)**.
- Click the **Connect** button **(g)**. (The **Establishing Connection...** window will be displayed at this point).
- When the connection has been established, the WiFi configuration window should re-appear (with the static network settings area now greyed-out **(h)**). Click **OK** to close the window. A **Network Configuration Status** window **(i)** should now be displayed. Click **Next** to continue.
- The printer should now be set up for WiFi operation. Click the **Finish** button to exit.

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WiFi Setup (continued)

The screenshot shows the 'WiFi configuration' dialog box. It is divided into several sections:

- WiFi configuration:** Includes fields for IP address, Net mask, MAC address (0c:b6:d2:d1:0e:9b), and Default gateway. There is a checked checkbox for 'Enable Printer WiFi'.
- Networks:** Features a 'Connected to SSID' field with a 'Disconnect' button. Below it is a list of 'Available networks' with 'Moonbeam_2G' selected. There are also fields for 'Hidden SSID' and 'Password', and a 'Connect' button.
- Static settings:** A checked checkbox 'Use static network settings' is followed by fields for 'Static IP address' (192.168.1.203), 'Static Net Mask' (255.255.255.0), 'Primary DNS address' (10.14.10.12), 'Secondary DNS address' (10.14.10.13), and 'Static Default gateway' (192.168.1.1).

Callouts are placed as follows: 'a' points to the 'Use static network settings' checkbox; 'b' points to the 'Static IP address' field; 'c' points to the 'Static Net Mask' field; 'd' points to the 'Static Default gateway' field; 'e' points to the 'Secondary DNS address' field; 'f' points to the 'Password' field; and 'g' points to the 'Connect' button.

The WiFi Configuration window



Establishing Connection...

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WiFi Setup (continued)

h

Use static network settings

Static settings

Static IP address: 192.168.1.203 Static Net Mask: 255.255.255.0

Primary DNS address: 192.168.1.1 Static Default gateway: 192.168.1.1

Secondary DNS address: 10.14.10.13

OK Cancel

Connection Established (Settings Greyed-out)

i

Network Configuration

WiFi connection established



WiFi IP Address: 192.168.1.203
WiFi Net Mask: 255.255.255.0
Default Gateway: 192.168.1.1

Select 'Next' to print using this Wi-Fi connection.
A printer model will be installed with (Wi-Fi) appended.


< Back Next >

The Network Connection
Status window

Having completed the steps in the **Setting up a Static WiFi address** section, the printer should now be set up to use on a WiFi network (please see above). Click the **Finish** button to exit.

Network Configuration

The printer is now connected to the WiFi network.



< Back Finish Cancel

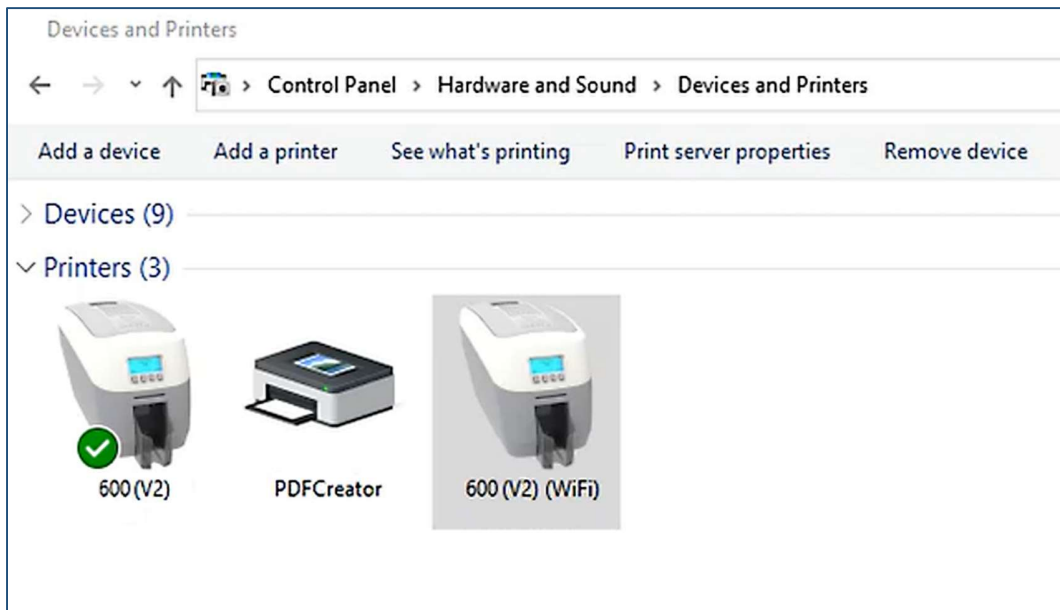
Printer WiFi Setup complete

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Checking the Printer installation and Port settings

When correctly installed, the WiFi printer should appear with the other installed printers in the Devices and Printers window on the computer. The WiFi printer should be clearly labelled as shown below.

NOTE: The procedure below shows the 600 printer model. The procedure is identical for the 600NEO model.

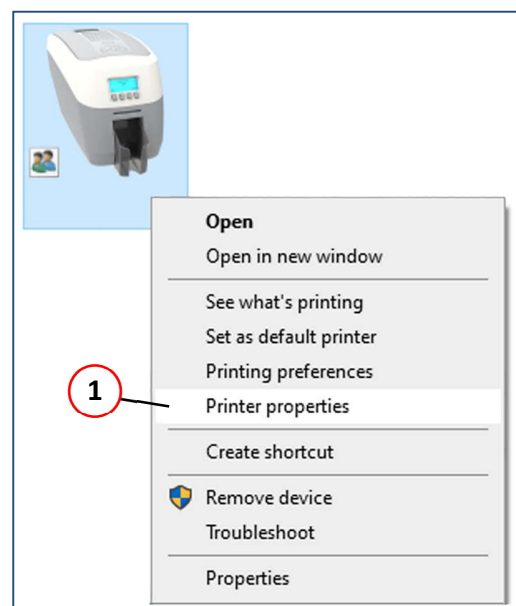


The WiFi Printer installed

Checking the USB Printer Port

Communications between the computer and printer can sometimes occur if there are problems with the USB port setup. The status of the USB port can be checked as follows:

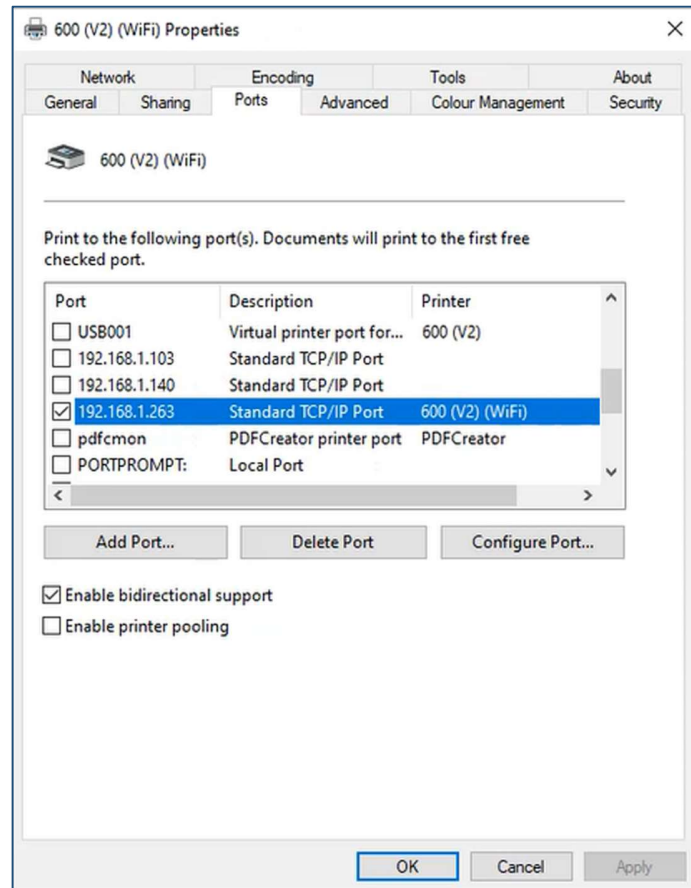
1. Open the Devices and Printers window the right-click on the printer icon and select Printer Properties **(1)**.
2. In the Properties window, select the **Ports** tab **(2)**. This will list the available ports on the computer (together with their respective IP addresses) and indicate those allocated.



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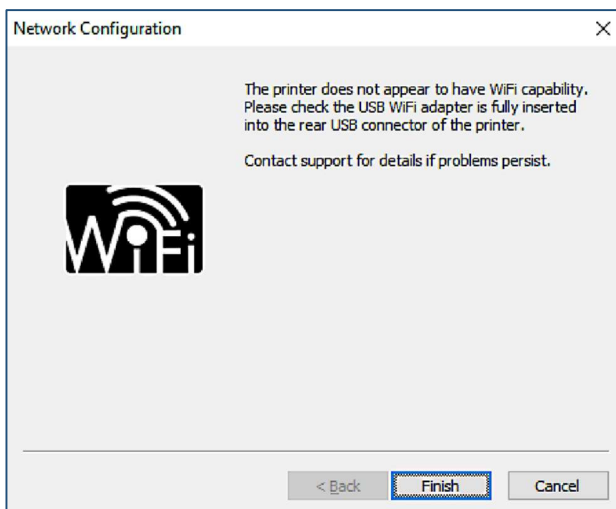
Checking the Ports Tab

With the Ports window, it is possible to check the IP address of the newly created WiFi channel is correct. (This can also be done locally at the printer using the front panel menu options - please refer to the [Printer Menu Options \(User Menu\)](#) page for further details).



The Ports Tab window

WiFi Errors



If for any reason, there is a problem with the WiFi connection, check the WiFi dongle is fully inserted into the rear of the printer and is of the correct type. If problems persist, please contact Technical Support or your printer Dealer/Supplier.

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Ethernet Setup

Setting up a Static IP Address

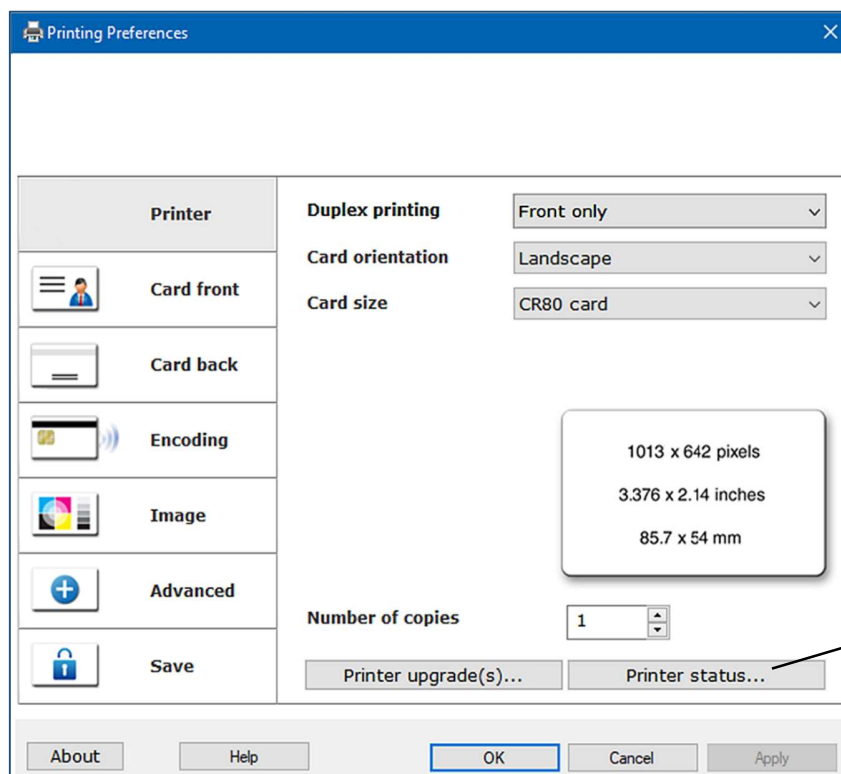
To set up the printer for Ethernet (network) operation, the printer will first need to be connected via the USB port – this is temporary.

After the printer has been setup for networking, the USB cable can be disconnected and the network (Ethernet) connector fitted).

First, ensure the printer has a communication link (or Status) with the PC. This can be done as follows:

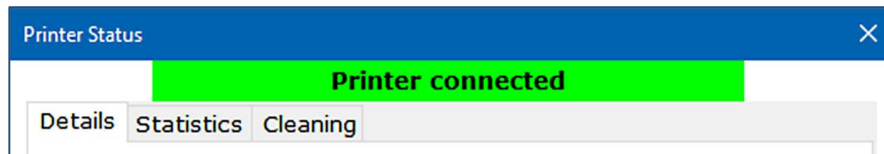
1. Open the **Control Panel** window. When open, ensure the **View by:** option (top-right of window) is selected to **Small icons**. Select the **Devices and Printers** option from the displayed list. In the Devices and Printers window, you should now see various driver icons (one of which, should be the Magicard printer).
2. Right-click on the printer icon and select **Printing Preferences**. This will open the **Printer** window below.
3. Click on the **Printer Status...** button (1). The printer should show as Connected (please see the following page for the **Printer Status** window details).

This ensures there is communication between the printer and PC.



Selecting the Printer Status option

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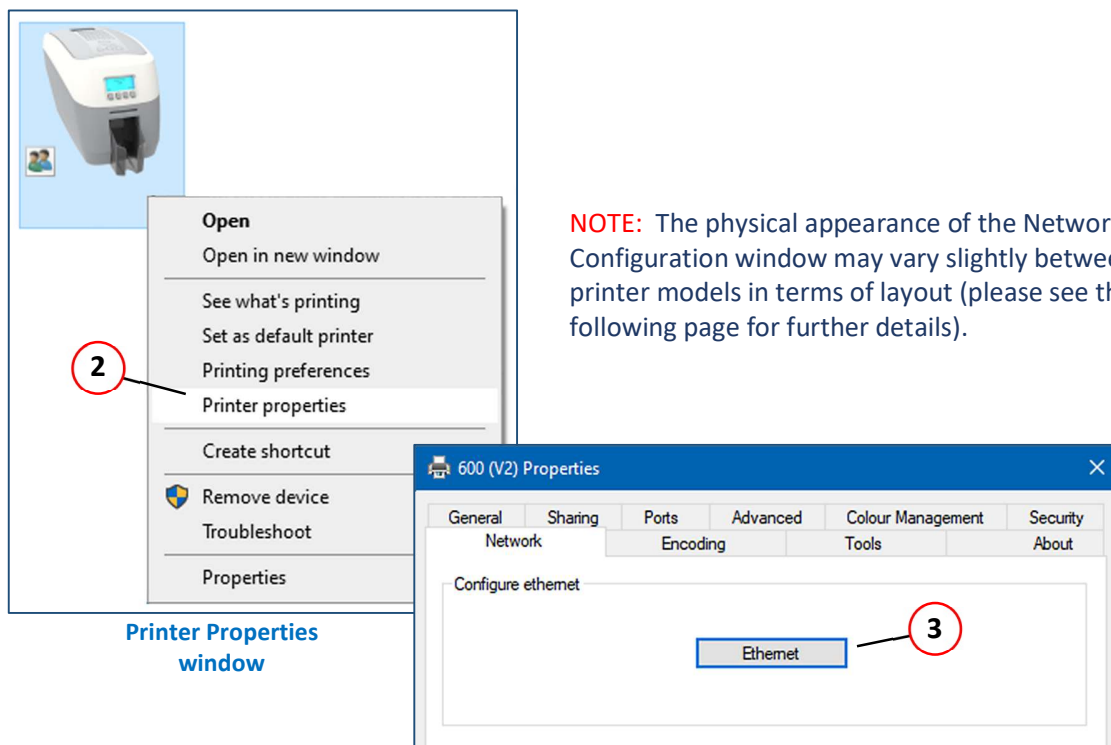


Printer Status – Connected

With the “connected” status, further information will also be available to the user such as printer details, statistics and cleaning history details.

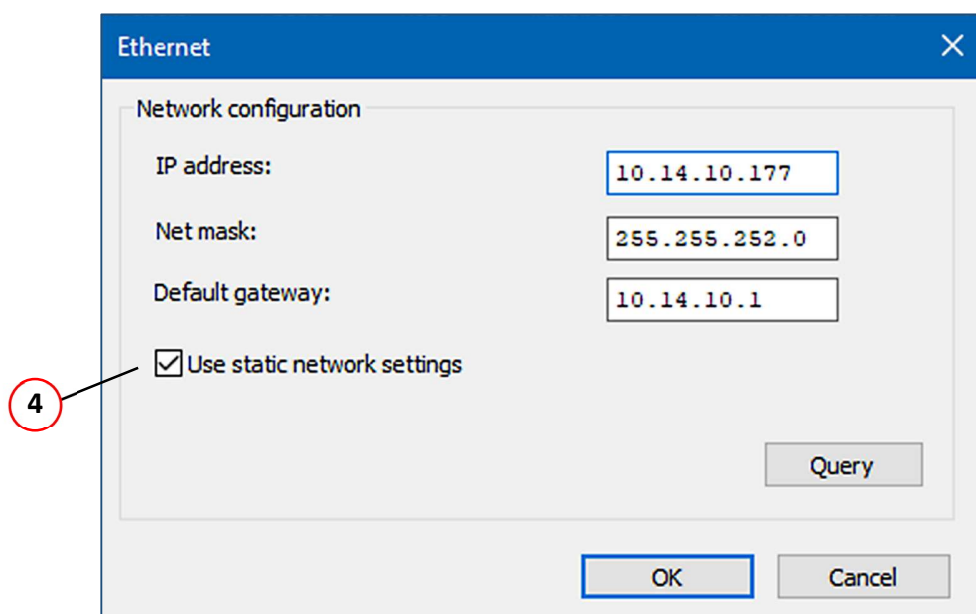
4. If there is no problem, close the Printer Status dialogue box and continue (**NOTE:** Setting the printer up for network operation will not be possible if there is no status (communication) between the printer and PC).
5. Right-click on the printer icon (in the Devices and Printers window) and select **Printer Properties (2)** and then the **Network** tab. Next, click the **Ethernet (3)**. The Network configuration dialogue box should now be displayed.

NOTE: The procedure below shows the 600 printer model. The procedure is identical for the 600NEO model.



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The Network and Configuration window allows the user to set (and store) an IP address in the printer. The user also has the option to choose a static or dynamic IP address. (Static IP settings are generally more commonly used with networked printers).



Setting the Printer Network configuration

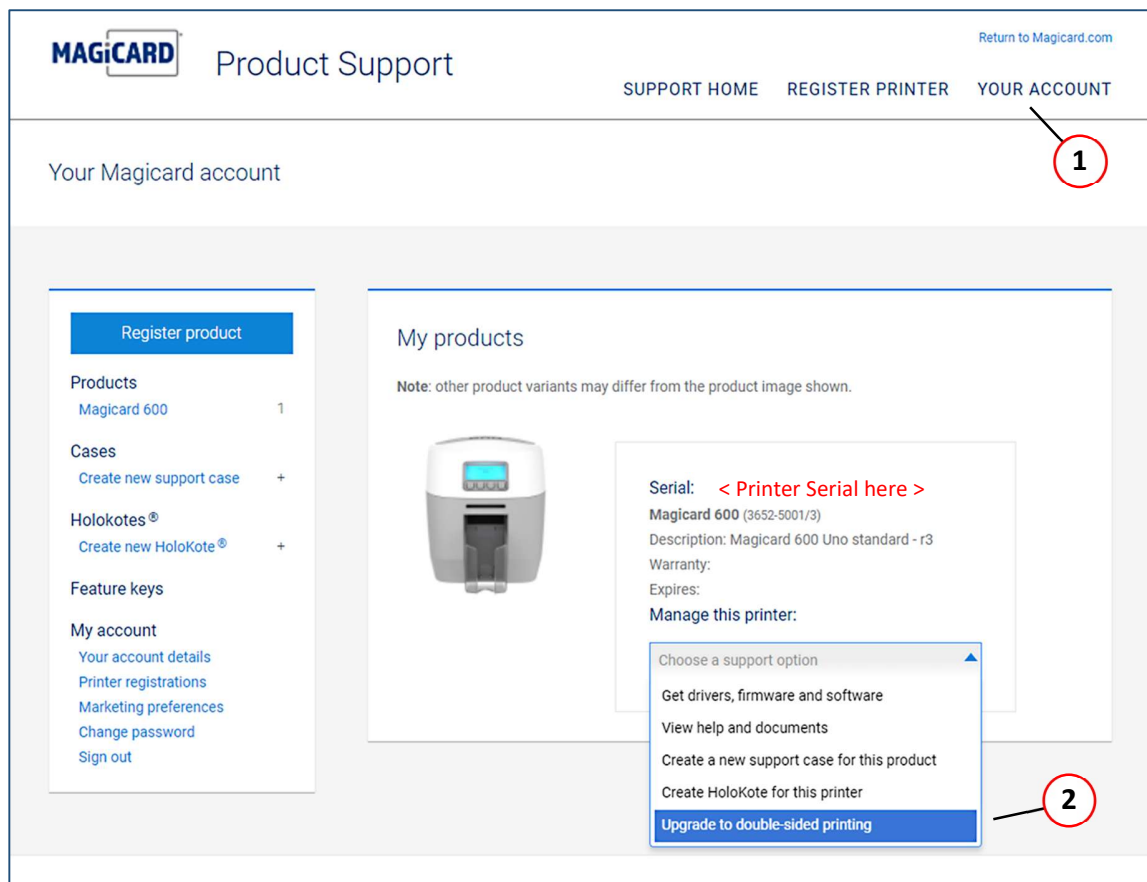
6. Select the **Use Static Network settings** option (4) (together with the other network settings applicable to the user's network).
7. Click the **OK** button. This will exit the setup windows and save the user's settings.
Finally, connect the network (LAN) cable to the Ethernet port of the rear of the printer and then power-cycle the printer (remove the power supply connector and then refit. Allow the printer to fully initialise).
8. When the printer is fully initialised, the user can check the stored configuration using the front panel buttons as follows:
Select **Menu > More > Network Info > IP Address** (please also refer to the Menu options on page 9 for additional details).

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Installing Upgrades

Duo Operation

You can upgrade your single sided printer to print double sided cards. To upgrade, the user must first create an account and register the printer. This can be done via the Magicard support website (www.magicard.com) as follows:



Upgrading to double sided printing from the Support website

1. At the Support page, select the **Your Account** option. You will then be given the option to log in to your account or **Register** to create a new account (you will be required to enter your own details and register the printer details – please follow the on-screen instructions).
2. Once the printer has been registered, select the **Choose a Support option** followed by **Upgrade to double-sided option**. (Please see the following page for further details).

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[Register product](#)

Products

[Magicard 600](#) 1

Cases

[Create new support case](#) +

Holokotes®

[Create new HoloKote®](#) +

Feature keys

My account

[Your account details](#)

[Printer registrations](#)

[Marketing preferences](#)


[Change password](#)

[Sign out](#)

Double-sided printer upgrade for

Submit this form to request a double-sided upgrade for this printer.

Payment for your double-sided upgrade will be transacted through the original vendor of your printer. *
We will instruct your vendor to contact you to complete the transaction.



Serial: < Printer Serial here >
Magicard 600 (3652-5001/3)
Description: Magicard 600 Uno standard - r3
Warranty:
Expires:

Your dealer information

Purchased from: [magicard](#)
Purchased date:

Important - please read

Please ensure you have read and understood the following before submitting your double-sided printer enquiry:

- o Your printer can be connected to an internet-enabled computer
- o The printer serial number above matches that of your printer
- o You have installed the latest Magicard universal printer driver
- o You have installed the latest printer firmware

Once we have received payment confirmation from your vendor, your double-sided upgrade key will be available for download and installation.

You will receive notification via email when your double-sided upgrade key is ready along with instructions on how to install it to your printer.

DoubleSided upgrade key MSRP is £275, \$475 or €395

I agree to the terms and conditions

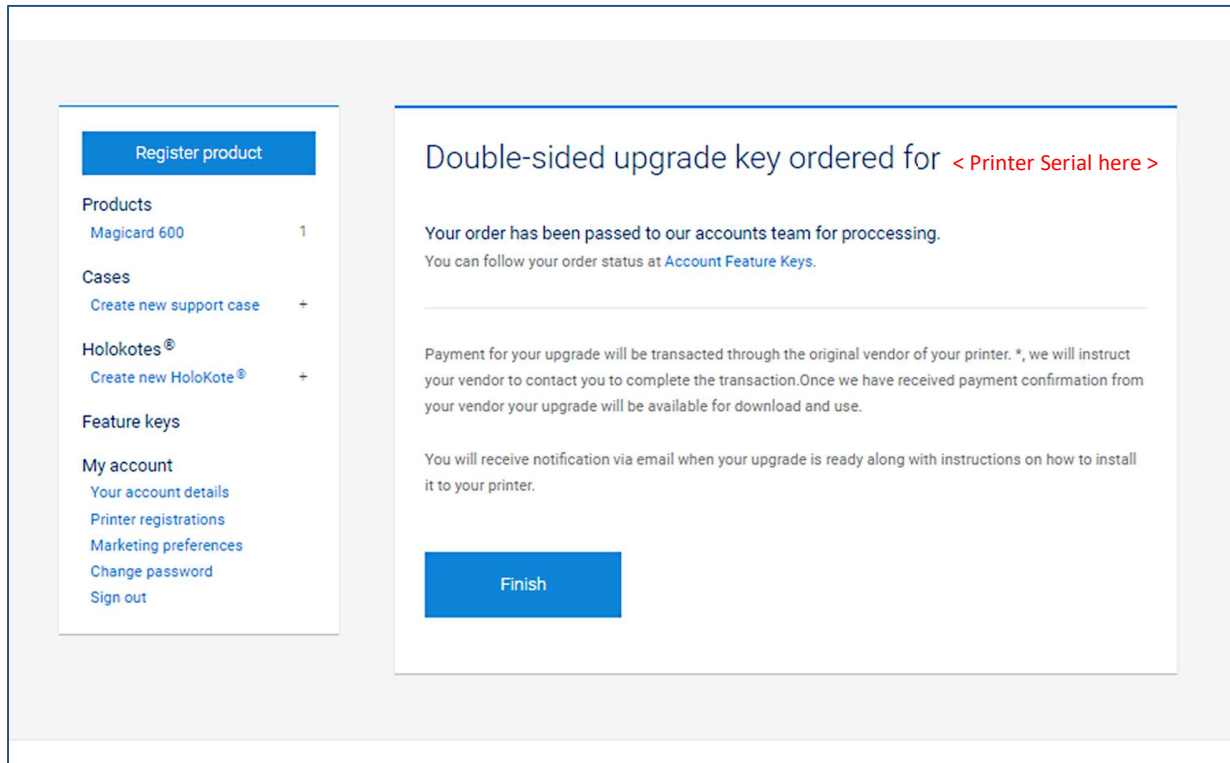
4 [Place order](#)

Placing the upgrade order

3. After reading the text on the above page, the user will need to agree the Terms and conditions to proceed.

4. Finally, select the **Place Order** button to complete.

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Double Sided order placed.

When complete, the user will get confirmation the order has been placed. (When placed, the order will be sent to Magicard Sales who will process this further).

Once payment for the upgrade has been made, the upgrade will be sent to the user in electronic form for download to the printer.

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Custom Holokotes

In addition to the standard Holokote images supplied with the printer, the user has the opportunity to add their own designs as Holokote images. The user can install a maximum of ten custom images on the 600NEO printer.

(NOTE: This function may not be available on all printer models).

Further details on the Holokote feature in general can be found on the Magicard website using the link:

<https://magicard.com/holokote>

Ordering a custom Holokote

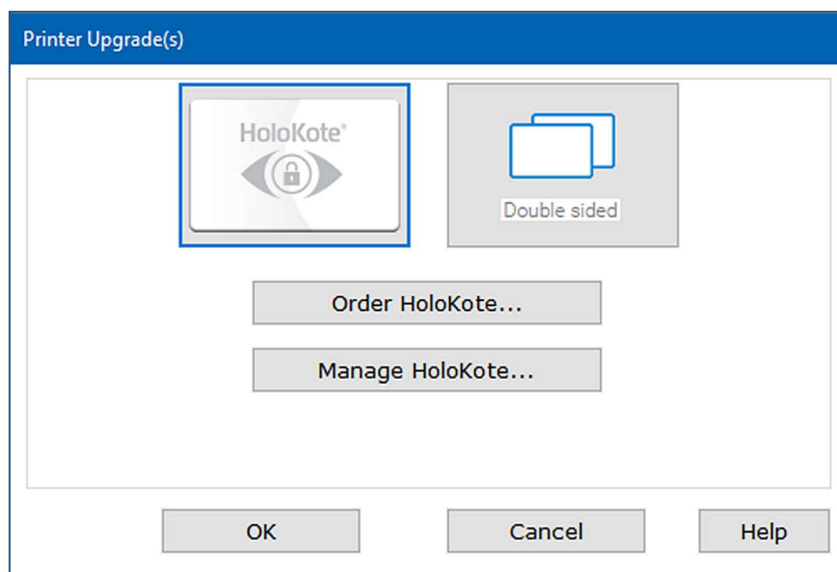
A custom HoloKote can be ordered from the Driver **Printing Preferences / Printer Tab / Printer Upgrade(s)...** button). When the 'Printer Upgrades' button is selected, the user will see the option to order the Holokote.

Order Holokote...

Selecting the **Order Holokote...** option opens a browser to Magicard's support website:

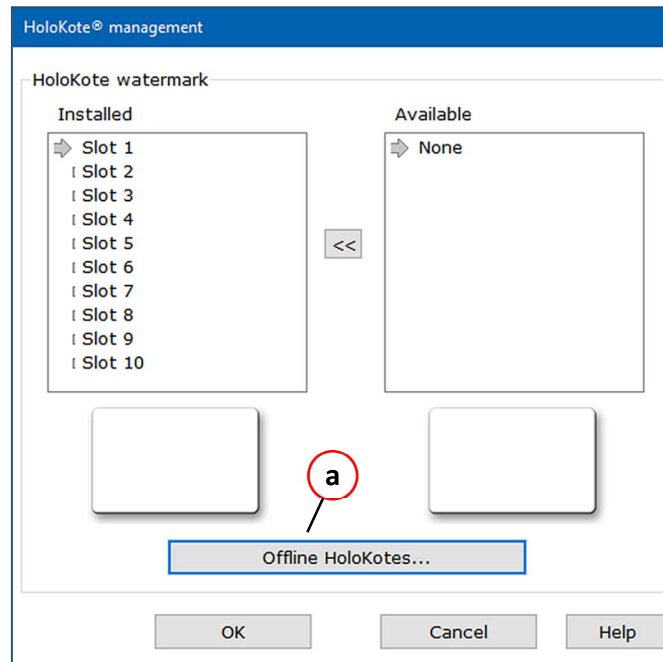
<https://support.magicard.com/login>

Once a Magicard support account is created and the printer registered, the user will be able to order their custom Holokote via the online process built into the support account. Once the creation process is complete, Magicard will process the order and where applicable, payment will be taken via the original vendor of the printer. Upon payment completion and design approval, the custom Holokote will be ready to install to the printer via **Manage Holokote...** (please see below).



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Manage Holokote...



Offline Holokotes

Select **Manage Holokote** to move an available Holokote into one of the printer's Holokote 'slots'. If the printer's PC is 'online', your custom Holokote file will be visible in the **Available**, right hand side pane. If the printer's PC is 'offline', the custom Holokote file can be downloaded from the Magicard support account (Feature Key section) from an online computer, then moved to the printer's computer and placed into the **Available** section via 'Browse'. The custom Holokote can then be allocated a slot in the left (**Installed**) window using the "<<" button.

The user is free to choose the order in which specific images are placed.
(**NOTE:** The number of available slots may vary between printer models).

The **Offline Holokotes...** option (**a**) allows the user to browse for previously downloaded Holokote images stored on their computer which can then be added as required.
(Holokote files will have a *.jif file extension).

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Using Clix Software

Clix is a piece of software that can be used to access your D or K type printer remotely.

There is no installer for Clix since it is not a native application. Provided the end user has a web browser, be that on a desktop PC, a tablet, or a smart phone, they can use Clix.

Before Clix can be used, the printer will need to be powered on, initialised and connected to a network using an Ethernet cable (please see the 'Rear Interface Panel' diagram on page 8 for further details).

To use Clix the end user simply needs to have the printer and the device that they wish to use Clix with, connected to the **same** network, and then enter their printer's IP address (or hostname, if they prefer that option) in the URL bar of their browser, prepended with 'http://'

For example, if the printer's IP address was **192.168.1.2**, then the user would enter '**http://192.168.1.2**' in the URL bar and press **enter** - they should then be taken to Clix automatically. If this does not happen, then the most likely cause is that the computer and printer are not connected to the same network.

The IP address of the printer can be found via the front panel user menu (please refer the menu options on page 9 for further details).

The Clix home screen (see below) is straightforward and easy to use. All of the options shown below, when selected by the user, are generally self-explanatory.

1. Current Dye Film Status

This option shows the dye film type and the amount of film used.

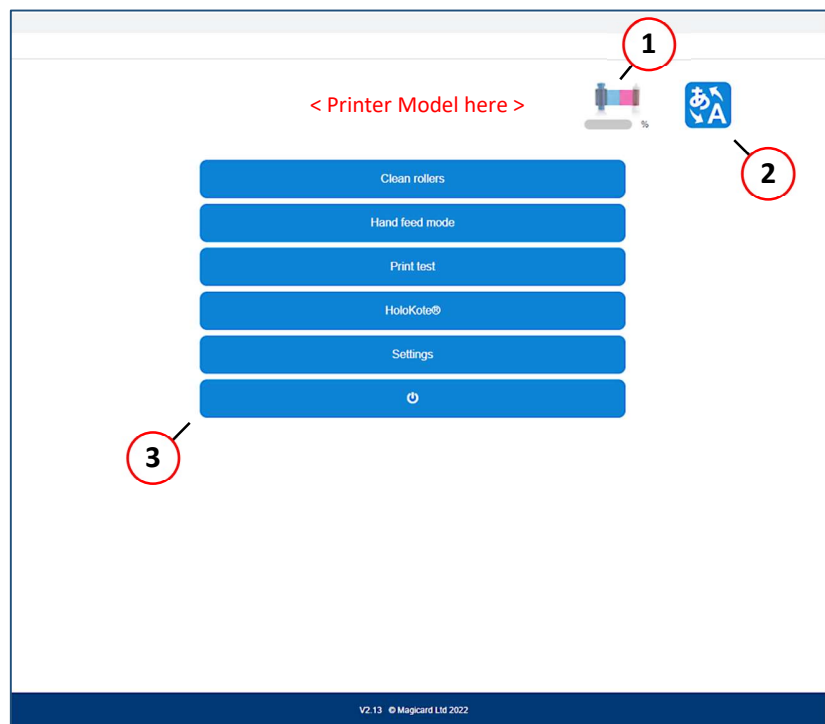
2. Language Selection

This option gives the user the choice of selecting 8 different languages offering maximum flexibility.

3. User Options

These user options are as follows:

- **Clean Rollers**
- **Hand Feed mode**
- **Print Test**
- **Holokote**
- **Settings**
- **Power**



The Clix Home Screen

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Using Clix Software (Continued...)

User Options

- **Clean Rollers**

This option gives the user the means to clean the printer using a standard cleaning card. (If the printer is located remotely from the end user, it will require a second user beside the printer).

- **Hand Feed Mode**

This option gives the user the choice to select or deselect 'Hand Feed' mode. When selected, the printer will only accept cards from the front slot (under the LCD) – **not** the rear feed hopper.

- **Print Test**

This option gives the user the choice of printing two test cards: 'Setup' and 'Skew test'.

- **Setup**

- Allows the user to print a standard test card (showing the printer setup parameters).

- **Skew**

- The skew test card prints a grid on the card which is useful when checking performance of the print head.

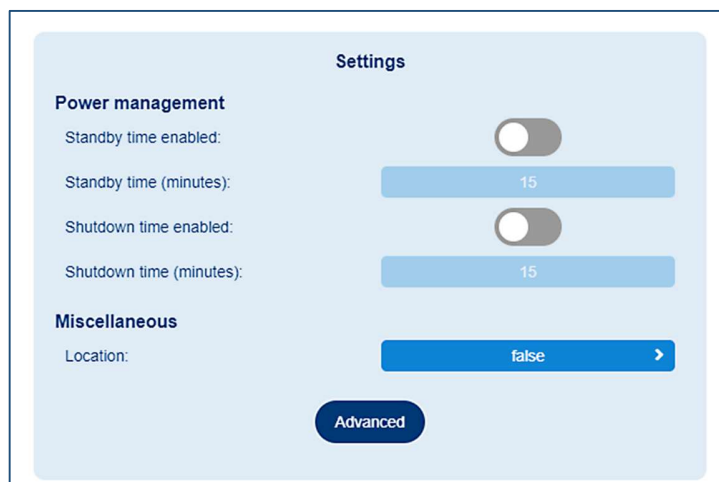
- **Holokote**

This option allows the user to select any of the four installed Holokote images (which when enabled in the printer driver, will print as an overlay on the card if selected).

- **Settings**

- **Power Management settings:** Allows the end user to enable and set the printer standby times (measured in minutes).

- **Location:** Allows the user to specify the printer's physical location (this does not change any settings and is for user information only).



The Settings Window

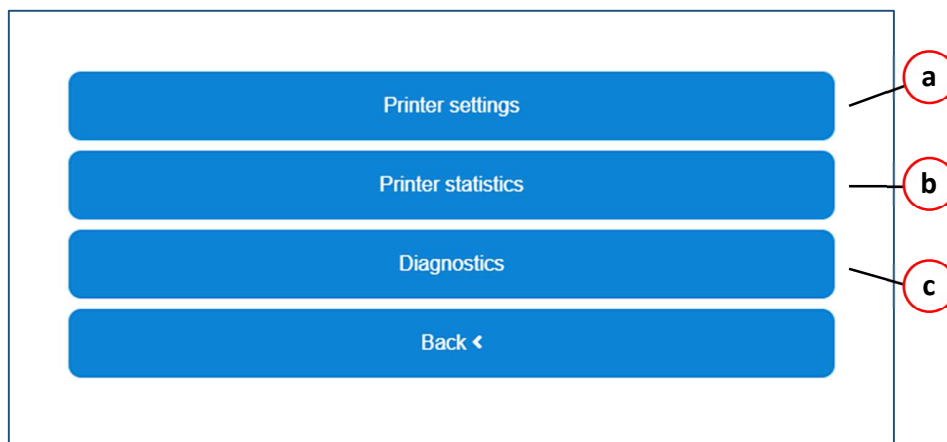
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- **Advanced (within the Settings Menu)**

This option allows further options such as Printer settings, Printer Statistics settings and Diagnostics.

NOTE: The advanced menu should be used with caution, and only when you are physically at the printer. Improper use of the Advanced Menu can cause damage to the printer.

The Advanced Main Menu Options



The Advanced Main Menu

a. Printer Settings

The Printer Settings panel gives the user information about the printer such as the identity (serial number, installed software version, region code etc). There is also useful information regarding cleaning, consumables, network data and security.

b. Printer Statistics

The Printer Statistics panel provides the user with valuable information about the printer usage (such as the number of cards printed, total dye film panels printed, cleaning cycles performed etc.).

Other data provided is specific to the dye film fitted (such as type, region code and dye film panel information).

c. Diagnostics

The Diagnostics panel provides the user with technical data such the current states of the various sensors in the printer (for example, dye film, card, flipper and cam etc).

In addition, the user can query the printer to view information on the current operating status and run various soak tests (useful when investigating intermittent or temperature related problems).

NOTE: Please refer to the following pages for details of the printer settings, printer statistics and the diagnostics utilities.

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The Advanced Menu Options (Continued...)

The Printer Settings Page

1. Security

SSL Certificates

A SSL certificate is a digital certificate that authenticates a website's identity and enables an encrypted connection. SSL stands for **Secure Sockets Layer**, a security protocol that creates an encrypted link between a web server and a web browser.

It is advisable to add SSL certificates to websites to secure online transactions and keep client information private and secure.

2. Websites with a SSL can usually be identified by a small padlock icon located to the left of the site URL.



The SSL Website Padlock

SSL works by ensuring that any data transferred between users and websites, or between two systems, remains impossible to read. It uses encryption algorithms to scramble data in transit, which prevents hackers from reading it as it is sent over the connection. This data could include potentially sensitive information such as names, addresses, credit card numbers, or other financial details.

Printer settings

Identity

Serial number: 73753802

Software version: 12.42

Hardware version: 1

Region code: 4

Grade code: 28672

Cleaning

Clean from rear:

Cards between cleaning: 700

Consumables

Low consumables threshold (%): 30

Network

IP address: 10.101.104.59

DHCP: Enabled

Subnet mask: 255.255.254.0

Default gateway: 10.101.104.1

MAC address: d8:a9:8b:fc:60:33

Security

HTTPS:

Auto SSL:

Auto SSL client certificate: Regenerate

Auto SSL CA certificate: Download

SSL certificate: Import

Printer statistics

Diagnostics

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The Printer Statistics Page

Printer settings

Printer statistics

Usage

Total cards printed:	44
Total panels printed:	286
Cards printed by printhead:	44
Panels printed by printhead:	286
Cards since last clean:	0
Panels since last clean:	0
Cleaning cycles performed:	3

Media

Dye film type:	MA1000K
Dye film region code:	1
Dye film grade code:	65535
Contains YMC panels:	No
Contains resin panel:	Yes
Contains overcoat panel:	No
Contains second resin panel:	No

Diagnostics

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The Printer Diagnostics Page

Printer settings

Printer statistics

Diagnostics

Card sensors

Front opto:

Mid opto:

Rear opto:

Turn rollers:

Dye control

Dye film sensor:

Tacho count:

Dye motor current:

Cam mechanism

Cam opto:

Flipper mechanism

Flipper opto:

Soak tests

Test type:

Printer query

Miscellaneous sensors

Printhead temperature (°C):

Lid opto:

Low card sensor:

Exit sensor:

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PRINTER MAINTENANCE

Cleaning the Printer

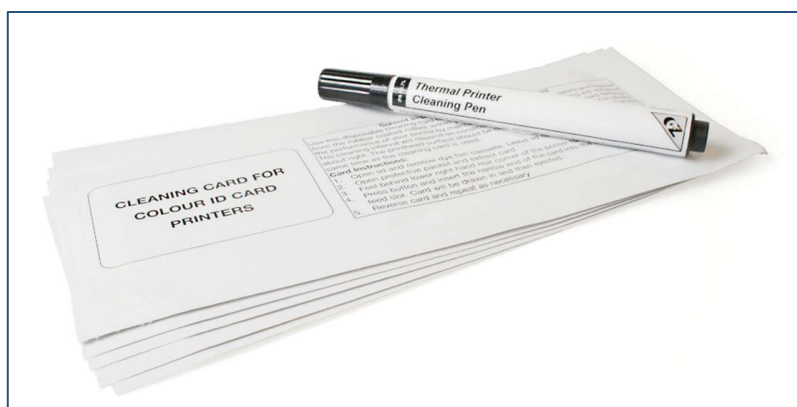
Your printer is designed to give many years of trouble-free service provided the printer is regularly cleaned and maintained.

Generally, it is recommended the printer is cleaned (using an approved cleaning kit) each time 700 cards are printed or whenever the printer dye film is replaced (whichever is the sooner).

- Maintaining a regular cleaning routine will give you optimum print quality and prevent down time. We recommend that you clean the printer's rollers and printhead each time you change the dye film.
- A clean printer will produce superior quality ID cards and is less likely to require factory maintenance and/or repair.
- In normal environments, regular maintenance should improve the longevity of the Printhead itself. (Remember... foreign particles can lodge under the Head and cause permanent damage!)
- Increased reliability when magnetic encoding which ensures the encoded data can be read accurately, reliably and continuously.

The Recommended Cleaning Kit

The recommended cleaning kit (Pt. 3633-0053) comprises of ten cleaning cards and a cleaning pen. Replacement kits can be ordered from your Dealer or printer supplier.



The Recommended Cleaning Kit

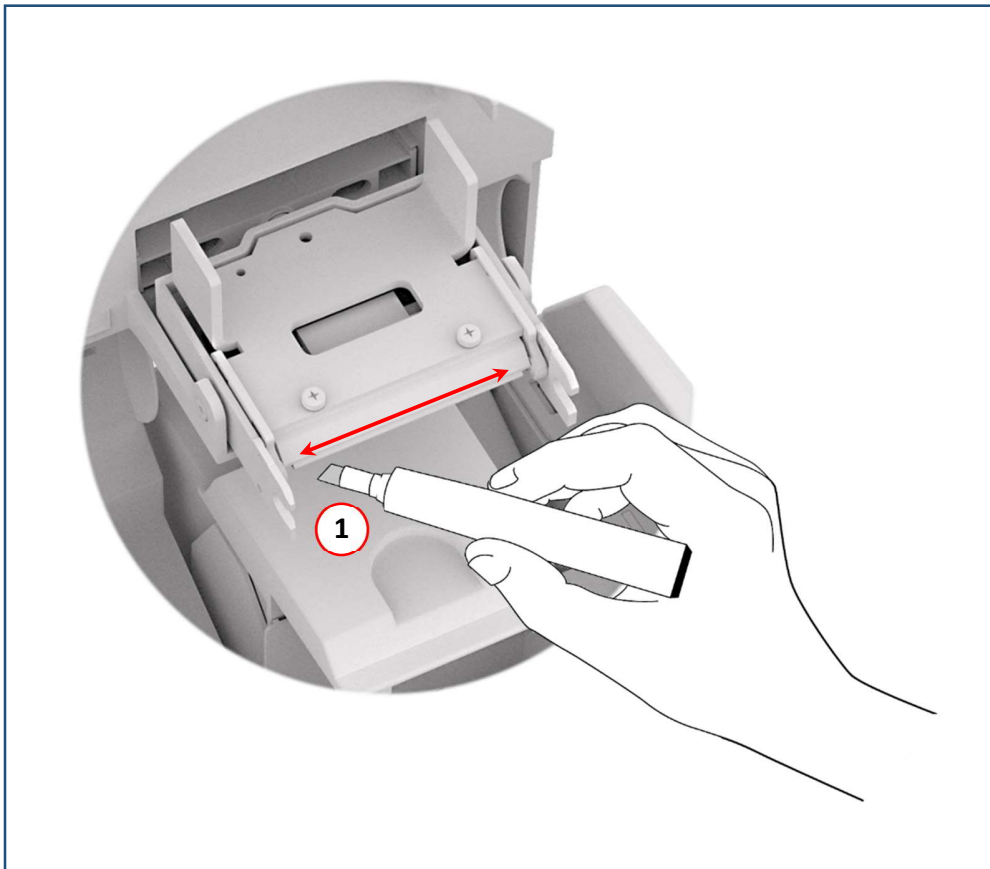
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Using the Cleaning Pen

The Cleaning Pen (supplied with the Cleaning Kit (Pt. 3633-0053)) is used to clean the face of the print head. The pen contains Isopropyl Alcohol (IPA) and is very effective at removing light grease (such as finger grease etc.) which would otherwise spoil a printed card.

To use, simply run the tip of the pen across the print face several times as shown in the diagram below **(1)**. Once clean, do not touch the print face!

The tip of the cleaning pen can itself be cleaned using an old (expired) cleaning card. Gently rub the tip of the pen against the (now dry) surface of the card to remove any contamination.



Cleaning the Printhead Face using the Cleaning Pen

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There are two cleaning rollers in your printer that work together: The Orange Tacky Roller and the Blue Sticky Roller.

The Orange Tacky Roller

The Orange Tacky roller cleans the card surface upon its entry from the rear feed hopper and is located inside and towards the rear of the printer body. It physically sits below the blue sticky roller.

The roller has a soft surface (slightly tacky to the touch) and is designed to pick up dust/grit etc. from the card feeding in from underneath.

The orange roller is easily removed and should be cleaned regularly using a damp cloth. When clean, refit the roller (do not discard).



The Orange Tacky Roller



Blue Sticky Roller Pack

The Blue Sticky Roller

As the name suggests, the blue roller has a sticky coated layer which is exposed when the protective paper wrapper is removed.

The purpose of the blue roller is to collect and retain the dust/debris collected from the orange roller (please see previously). The blue roller is then replaced as part of the printer cleaning process. (Please refer to the following page for replacing the blue roller). A new blue roller is supplied with each new genuine Magicard dye film ordered. Alternatively, a Blue Sticky Roller pack (Pt. 3633-0054) can be ordered through your Dealer or printer supplier. (This comprises five rollers and one metal bar).

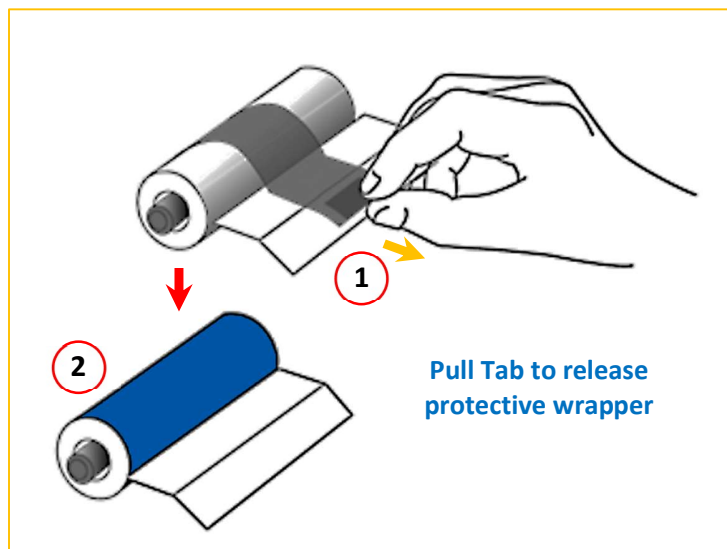
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Replacing the Blue Sticky Roller

When cleaning your printer, it is also recommended the internal blue cleaning roller is replaced also. (This roller is easily identifiable as when new, it will be supplied with a protective paper wrapper and pull-tab).

The Blue Sticky roller can be replaced as follows:

1. Open the printer's lid and remove the old (used) blue roller (this is held by two clips and can easily be removed by hand).
2. Slide out the metal bar inside the blue roller.
NOTE: Do not discard this metal bar as it will be required for the replacement roller. Discard the old (used) blue roller.
3. Slide the metal bar into the new replacement blue roller.
4. Refit the new roller (with bar) into the printer.
5. When fitted, remove the protective paper wrapper (using the pull-tab) to expose the sticky layer. Close the printer's lid.



Preparing the Blue Sticky Roller

Cleaning your Printer (video)

In addition to the above, a video on cleaning your printer is also available to watch on the Magicard website using the link: <https://support.magicard.com/solution/cleaning-rollers>

The printer shown in the video is the 360 model but the process is identical to the 600NEO printer.

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PRINTER ERROR CODES

Error code documentation for DTC printer firmware version v11.39

1: LID OPENED

Error code 1:0

Reason: The lid was opened while the print engine was performing an operation. Close the lid and try again.

Error code 1:1

Reason: The lid was open at the point the printer was about to begin a print job. Close the lid and try again.

2: OUT OF CARDS

Error code 2:5

Reason: While feeding a card from the hopper, it took too long for the rear sensor to block.

Error code 2:6

Reason: While trying to feed a card from the hopper, it took too long for the front sensor to block.

3: NO HAND FEED

Error code 3:0

Reason: While hand feeding a card, it took too long for the front sensor to block.

Error code 3:1

Reason: While hand feeding a card, it took too long for the hopper sensor to detect a card.

4: CARD JAM

Error code 4:0

Reason: While moving the card forwards to the front sensor in preparation for placing it in the contactless encoding position, it took too long for the front sensor to block.

Error code 4:1

Reason: While moving the card backwards from the front sensor to the contactless encoding position, it took too long for the front sensor to unblock.

Error code 4:2

Reason: While feeding a card from the smart encoder to the flipper, it took too long for the smart extract sensor to indicate that the card was free of the encoder.

Error code 4:3

Reason: While moving a card from the flipper into the smart encoder, it took too long for the smart insert sensor to trigger.

Error code 4:4

Reason: While moving the card from the flipper to the standby position, it took too long for the mid sensor to block.

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Error code 4:7

Reason: While feeding a card from the hopper, and having seen the card reach the rear sensor, it took too long for the mid sensor to block.

Error code 4:8

Reason: While feeding a card from the hopper, and having seen the card reach the mid sensor, it took too long to clear the rear sensor by rewinding the feed motor.

Error code 4:9

Reason: While moving the card forwards to feed into the flipper, it took too long for the card's leading edge to block the front sensor.

Error code 4:13

Reason: While moving the card from the front sensor to the standby position, it took too long for the front sensor to unblock.

Error code 4:14

Reason: While moving the card from the rear sensor to the standby position, it took too long for the rear sensor to unblock.

Error code 4:15

Reason: While moving a card from the flipper into the smart encoder, it took too long for the smart extract sensor to trigger. This may mean that there is no encoder actually fitted.

Error code 4:16

Reason: While moving the card past the front sensor, having seen the card arrive at the sensor and having moved the card most of the way past that sensor, it took too long for the sensor to unblock.

Error code 4:17

Reason: While moving the card into position for a printing or encoding operation, it took too long for the reference edge of the card to move in front of the sensor used for positioning. In the case of extended mono prints, this means the mid sensor took too long to block. In other cases, this means it took too long for the rear sensor to unblock.

Error code 4:18

Reason: While moving the card into position for a printing or encoding operation, it took too long for the reference edge of the card to move behind the sensor used for positioning. In the case of extended mono prints, this means the mid sensor took too long to unblock. In other cases, this means it took too long for the rear sensor to block.

Error code 4:19

Reason: While trying to eject the card, it took too long for the leading edge of the card to block the front sensor.

Error code 4:20

Reason: While trying to eject the card and having seen the leading edge of the card reach the front sensor, it took too long for the front sensor to unblock.

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Error code 4:21

Reason: While moving the card from the flipper to the standby position, and having seen the card reach the mid sensor, it took too long for the mid sensor to unblock.

Error code 4:22

Reason: While trying to feed a card from the hopper, and having seen the card reach the front sensor, it took too long for the front sensor to unblock.

Error code 4:23

Reason: While moving the card backwards to feed into the flipper, it took too long for the card to block the mid sensor.

Error code 4:24

Reason: While moving the card from the mid sensor to the standby position, it took too long for the mid sensor to unblock.

Error code 4:25

Reason: While moving the card to the front sensor, it took too long for the front sensor to block.

Error code 4:26

Reason: While moving the card to the rear sensor, it took too long for the rear sensor to block.

5: OUT OF FILM

Error code 5:0

Reason: While moving a dye panel edge from the dye sensor to the printhead, it took too long for the tachometer wheel to move the required amount. The film has probably either run out or snapped.

Error code 5:1

Reason: While advancing to the next dye panel, it took too long for the next panel boundary to be detected.

Error code 5:2

Reason: It took too many attempts for the printer to find a particular panel of dye film (possibly because the dye sensor needs calibration).

Error code 5:3

Reason: A valid dye film RFID tag was found, but no physical ribbon could be detected while trying to take up the film slack.

Error code 5:4

Reason: A valid dye film RFID tag was found, but there were no shots remaining.

Error code 5:5

Reason: After printing a card, the printer was unable to decrement the number of remaining prints on the dye film RFID tag.

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Error code 5:6

Reason: When about to print a panel, the printer detected the end-of-film marker.

Error code 5:7

Reason: While moving the dye film, too great a time elapsed between tacho sensor counts. The film has probably either run out or snapped.

Error code 5:8

Reason: While trying to take up the film slack, no tacho pulses were observed within a reasonable amount of time.

Error code 5:9

Reason: After completing a print job, the printer detected the end-of-film marker.

Error code 5:10

Reason: While trying to move past the transition region between two dye panels, it took too long for the dye motor to move the required amount.

Error code 5:11

Reason: Just before starting to print a panel, the printer detected the end-of-film marker.

6: FILM INVALID

Error code 6:0

Reason: The fitted dye film had an invalid RFID tag. Either the tag was not programmed correctly or there is a problem with the RFID tag reader.

Error code 6:1

Reason: A dye film ribbon was detected, but a valid dye film RFID tag could not be found. This printed is not configured to permit tagless film.

Error code 6:2

Reason: The fitted dye film does not have the right region code for this printer. Try another roll of film.

Error code 6:3

Reason: The fitted dye film does not have the right dealer code for this printer. Try another roll of film.

Error code 6:4

Reason: The fitted dye film does not have the right project code for this printer. Try another roll of film.

Error code 6:5

Reason: The fitted dye film does not have the right grade code for this printer. Try another roll of film.

7: REMOVE FILM

Error code 7:0

Reason: The printer detected film was loaded when trying to calibrate dye LEDs and dye motor.

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Error code 7:3

Reason: The printer detected film was loaded when trying to carry out an operation that requires no film to be present.

8: CAM JAM

Error code 8:0

Reason: While moving the printhead cam to the closed position, it took too long to detect the trailing edge of the cam pulley flag.

Error code 8:1

Reason: While initialising the cam, it took too long to detect the leading edge of the cam pulley flag.

Error code 8:2

Reason: While initialising the cam and having detected the leading edge of the cam pulley flag, it took too long to detect the trailing edge of the flag.

Error code 8:3

Reason: While moving the printhead cam to the open position, it took too long to detect the leading edge of the cam pulley flag.

9: FLIP JAM

Error code 9:0

Reason: While initialising the flipper, it took too long to detect the start of the blocked region of the flange.

Error code 9:1

Reason: While initialising the flipper and having detected the start of the blocked region of the flange, it took too long to detect the start of the unblocked region (the start of the slot).

Error code 9:2

Reason: While moving the card backwards to feed into the flipper and having seen the card arrive at the mid sensor, it took too long for the mid sensor to unblock.

10: FILE INVALID

Error code 10:0

Reason: The printer received a print job. The side number specified for one of the sides of the image data was invalid. This probably means the print job file was corrupt.

Error code 10:1

Reason: The printer received a print job. The format specified for the image payload was not supported. If updating the firmware does not fix this, it may be that the print job file is corrupt.

Error code 10:2

Reason: The printer received a print job containing magnetic track data. One of the tracks specified an invalid track number.

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Error code 10:3

Reason: The printer received a print job containing magnetic track data. The number of bits specified for one of the tracks was out of range. This probably means that the print job file was corrupt.

Error code 10:4

Reason: The printer received a print job containing magnetic track data. The number of bits specified for one of the tracks was too great for the provided payload size. This probably means that the print job file was corrupt.

Error code 10:5

Reason: The printer received a print job containing magnetic track data. The bit density specified for one of the tracks was out of range. This probably means that the print job file was corrupt.

Error code 10:6

Reason: The printer received a print job. The panel ID specified for one of the panels was invalid. This probably means that the print job file was corrupt.

Error code 10:7

Reason: The printer received a print job. The width or height specified for the card was out of range. This probably means the print job file was corrupt.

Error code 10:8

Reason: The printer received a print job. The payload provided was not large enough to hold the image width specified. This probably means the print job file was corrupt.

Error code 10:9

Reason: The printer received a print job. The power adjustment for one of the panels was out of range. This probably means the print job file was corrupt.

Error code 10:11

Reason: The printer received a print job. The number of copies specified was less than 1. This means that the print job file is corrupt.

Error code 10:12

Reason: The printer received a print job containing magnetic track data. The number of encoding attempts requested was less than one.

Error code 10:13

Reason: The printer received a print job containing magnetic track data. The number of verification attempts requested was less than zero.

Error code 10:14

Reason: The printer received a print job. The x adjustment specified for a panel was out of range. This probably means the print job file was corrupt.

Error code 10:15

Reason: The printer received a print job. The y adjustment specified for a panel was out of range. This probably means the print job file was corrupt.

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Error code 10:16

Reason: The printer received a print job. An area or hole setting for one of the panels was missing a required element. This probably means the print job file was corrupt.

Error code 10:17

Reason: The printer received a print job. An area or hole setting for one of the panels had an out-of-range value. This probably means the print job file was corrupt.

Error code 10:18

Reason: The printer received a print job. The X coordinate for the HoloCode is out of range. This probably means the print job file was corrupt.

Error code 10:19

Reason: The printer received a print job. The Y coordinate for the HoloCode is out of range. This probably means the print job file was corrupt.

Error code 10:20

Reason: The printer received a print job. The module size for the HoloCode is out of range. This probably means the print job file was corrupt.

Error code 10:21

Reason: The printer received a print job. The margin for the HoloCode is out of range. This probably means the print job file was corrupt.

Error code 10:22

Reason: The printer received a print job. The format for the HoloCode is unsupported. This probably means the print job file was corrupt.

Error code 10:23

Reason: The printer received a print job. The data for the HoloCode is either empty or too long. This probably means the print job file was corrupt.

11: SOFTWARE OUTDATED

Error code 11:0

Reason: The fitted dye film has a data format which the printer could not understand. The printer software needs to be upgraded in order to support this type of dye film.

12: SENSOR FAILURE

Error code 12:0

Reason: While hand feeding a card, the rear sensor blocked before the front one.

Error code 12:1

Reason: While hand feeding a card, and having seen the card reach the front sensor, the rear sensor blocked before the front sensor unblocked.

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Error code 12:3

Reason: While feeding a card from the hopper, the front sensor blocked before the mid one.

Error code 12:4

Reason: While feeding a card from the hopper, the front sensor blocked before the rear one.

Error code 12:5

Reason: While trying to feed a card from the hopper, the mid sensor triggered before the front one.

13: INTERNAL ERROR

Error code 13:1

Reason: The printhead took too long to reach a temperature suitable for printing. There may be a fault with the printhead temperature sensor.

Error code 13:2

Reason: The mag PCB MCU reported that an error occurred while trying to carry out an operation or interpret a command.

Error code 13:3

Reason: The mag driver reported that an error occurred while trying to carry out an operation.

Error code 13:4

Reason: Communication with the print engine microcontroller failed. If rebooting the printer does not fix this problem, try updating the firmware. If that does not work, there is probably a hardware fault.

Error code 13:5

Reason: The print engine microcontroller reported an error. If rebooting the printer does not fix this problem, try updating the firmware. If that does not work, there is probably a hardware fault.

Error code 13:6

Reason: During initialisation the printer could not program the FPGA. Ensure the printer is running the latest software, reboot the printer, and try again. If this does not work there is either a bug in the printer software or a hardware fault.

Error code 13:7

Reason: The printhead driver was not initialised.

Error code 13:8

Reason: Communication with the mag encoder microcontroller failed. If rebooting the printer does not fix this problem, try updating the firmware. If that does not work, there is probably a hardware fault.

Error code 13:9

Reason: The mag encoder microcontroller reported an error. If rebooting the printer does not fix this problem, try updating the firmware. If that does not work, there is probably a hardware fault.

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Error code 13:11

Reason: While updating the dye control calibration, the printer detected that the blue duty cycle was out of range.

Error code 13:12

Reason: While updating the dye control calibration, the printer detected that the green duty cycle was out of range.

Error code 13:13

Reason: While updating the dye control calibration, the printer detected that the green and blue duty cycles were out of range.

Error code 13:14

Reason: While updating the dye control calibration, the printer detected that the red duty cycle was out of range.

Error code 13:15

Reason: While updating the dye control calibration, the printer detected that the red and blue duty cycles were out of range.

Error code 13:16

Reason: While updating the dye control calibration, the printer detected that the red and green duty cycles were out of range.

Error code 13:17

Reason: While updating the dye control calibration, the printer detected that the red, green and blue duty cycle were out of range.

Error code 13:18

Reason: While updating the dye control calibration, the printer detected that the motor current was out of range.

Error code 13:19

Reason: While updating the dye control calibration, the printer detected that the motor current and blue duty cycle were out of range.

Error code 13:20

Reason: While updating the dye control calibration, the printer detected that the motor current and green duty cycle were out of range.

Error code 13:21

Reason: While updating the dye control calibration, the printer detected that the motor current and green and blue duty cycles were out of range.

Error code 13:22

Reason: While updating the dye control calibration, the printer detected that the motor current and red duty cycle were out of range.

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Error code 13:23

Reason: While updating the dye control calibration, the printer detected that the motor current and red and blue duty cycles were out of range.

Error code 13:24

Reason: While updating the dye control calibration, the printer detected that the motor current and red and green duty cycles were out of range.

Error code 13:25

Reason: While updating the dye control calibration, the printer detected that the motor current and red, green and blue duty cycle were out of range

14: SD CARD UNSIGNED

Error code 14:0

Reason: The internal SD card did not have a valid signature.

15: HOLOKOTE INVALID

Error code 15:0

Reason: While attempting to validate a Holokote file, the printer found that the file was not in the right format. Either it is not the right type of file, or the data has been corrupted.

16: HOLOKOTE NOT AUTH

Error code 16:0

Reason: While attempting to validate a Holokote file, the printer found that the file was not licensed for this printer. It is possible that the file was intended for a different printer.

17: UPGRADE INVALID

Error code 17:0

Reason: While attempting to validate an upgrade file, the printer found that the file was not in the right format. Either it is not the right type of file, or the data has been corrupted.

Error code 17:1

Reason: While attempting to validate an upgrade file, the printer found that the file was not in the right format. Either it is not the right type of file, or the data has been corrupted.

Error code 17:2

Reason: While attempting to validate an upgrade file, the printer could not interpret the file's upgrade commands. Either it is not the right type of file, or the data has been corrupted.

18: UPGRADE NOT AUTH

Error code 18:0

Reason: While attempting to validate an upgrade file, the printer found that the file was not licensed for this printer. It is possible that the file was intended for a different printer.

19: SOFTWARE INVALID

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20: SD WRITE FAILED

Error code 20:0

Reason: While performing a system software update, an error occurred while trying to write temporary update data to the SD card.

Error code 20:2

Reason: While attempting to apply an upgrade, the printer was unable to create the upgrade directory on the SD card. Either the SD card is missing, unformatted or functioning incorrectly.

Error code 20:3

Reason: While attempting to install a custom Holokote image, the printer was unable to create the overcoat directory on the SD card. Either the SD card is missing, unformatted or functioning incorrectly.

Error code 20:4

Reason: While attempting to update the system image, the printer was unable to create the system upgrade directory on the SD card. Either the SD card is missing, unformatted or functioning incorrectly.

Error code 20:5

Reason: While attempting to format the SD card at the start of a soak routine, the formatting process failed.

Error code 20:6

Reason: While attempting to back up the printer settings to the shipped store, the printer failed to write the settings file to the SD card. Either the SD card is missing, unformatted or functioning incorrectly.

21: INSTALL FAILED

Error code 21:0

Reason: While performing a system software update, an error was reported by the software update script.

22: DUPLEX DISABLED

Error code 22:0

Reason: The printer received a double-sided print job but does not have duplex printing enabled.

23: MAG DISABLED

Error code 23:0

Reason: The printer received a print job which required mag encoding but does not have mag encoding enabled.

24: FILM NO COLOUR

Error code 24:0

Reason: The printer received a colour print job but does not have colour film fitted.

25: FILM NO OVERCOAT

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26: MOTOR FAULT

Error code 26:0

Reason: The print engine MCU reported a dye film motor fault.

Error code 26:1

Reason: The print engine MCU reported a card feed motor fault.

Error code 26:2

Reason: The print engine MCU reported a printhead cam motor fault.

Error code 26:3

Reason: The print engine MCU reported a flip position motor fault while moving the card. Note that this is the flipper motor which drives the card, not the rotation motor.

Error code 26:4

Reason: The print engine MCU reported a flip position motor fault while rotating the flipper. Note that this is the flipper motor which drives the card, not the rotation motor.

Error code 26:5

Reason: The print engine MCU reported a flip rotation motor fault. Note that this is the flipper motor which rotates the flipper, not the one which drives the card.

Error code 26:6

Reason: The print engine MCU reported a main card drive motor fault.

27: CLEAN REQUIRED

Error code 27:0

Reason: On start-up, the printer detected that it was overdue for cleaning.

28: NO PRINTHEAD

Error code 28:0

Reason: The printhead does not seem to be fitted.

29: NO SD CARD

Error code 29:0

Reason: The internal SD card could not be detected.

30: MAG VERIFY FAILED

Error code 30:0

Reason: While attempting to verify mag data after an encoding operation, the printer found that the data read back from the mag stripe did not match the data written.

31: COLOUR DISABLED

Error code 31:0

Reason: The printer received a colour print job but does not have colour printing enabled.

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32: DPI600 DISABLED

33: FILM NO NPANEL

Error code 33:0

Reason: The printer received a job with neutral panel options, but the fitted dye film does not have neutral panels.

34: FILM NO PPANEL

35: NO MAG DATA

Error code 35:0

Reason: Mag options were provided to the printer, but not mag data was present in the print job payload. If mag encoding is required, at least one mag track should be non-empty.