

100NEO

User Guide



100NEO Card Printer – User Guide

CONTENTS

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE	4
PRINTER LIMITATIONS	4
SAFETY INSTRUCTIONS	4
PRINTER SPECIFICATION	5
PRINTER EXTERNAL FEATURES	6
THE PRINTER USER INTERFACE PANEL	7
OPERATION OF THE USER INTERFACE BUTTONS	10
DRIVER INSTALLATION	11
WINDOWS	11
MACINTOSH	12
Mac OS Quickstart Guide	17
Customising the Settings and Features	18
Enabling the CUPS Interface on a Mac	21
CHOOSING THE CORRECT FILM AND CARDS	22
DYE FILM TYPES	22
CARD TYPES	23
Self Adhesive Cards	24
Rewriteable Cards	24
INITIAL PRINTER SETUP	25
ETHERNET SETUP	25
Setting up a Static IP Address	25
PRINTER MAINTENANCE	28
CLEANING THE PRINTER	28
The Recommended Cleaning Kit	28
Using the Cleaning Pen	29
PRINTER ERROR CODES	30
1: LID OPENED	30
2: OUT OF CARDS	30
3: NO HAND FEED	30
4: CARD JAM	30
5: OUT OF FILM	32
6: FILM INVALID	33
7: REMOVE FILM	33
8: CAM JAM	33
10: FILE INVALID	34
11: SOFTWARE OUTDATED	36
12: SENSOR FAILURE	36
13: INTERNAL ERROR	36
14: SD CARD UNSIGNED	38
17: UPGRADE INVALID	38
18: UPGRADE NOT AUTH	38

100NEO Card Printer – User Guide

19: SOFTWARE INVALID	39
20: SD WRITE FAILED	39
21: INSTALL FAILED	39
24: FILM NO COLOUR	39
25: FILM NO OVERCOAT	39
26: MOTOR FAULT	39
27: CLEAN REQUIRED	40
28: NO PRINthead	40
29: NO SD CARD	40
31: COLOUR DISABLED	40
32: DPI600 DISABLED	40
33: FILM NO NPANEL	40
34: FILM NO PPANEL	40

100NEO Card Printer – User Guide

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

Magocard Ltd. shall not be liable for errors contained herein or for incidental consequential damages in connection with the furnishing, performance or use of this material.

This document contains proprietary information belonging to Magocard Ltd. and may not be wholly or partially copied, stored in a data retrieval system, or used for any purpose other than that for which it was supplied, without the express written authority of Magocard Ltd. All rights are reserved.

The Holokote feature is protected by US PATENT No: 5,990,918 and by EUROPEAN PATENT SPECIFICATION EP 0 817 726 B1.

Microsoft and Windows Vista and Windows 7, 8, 10 and 11 are trademarks of Microsoft Corporation.

Copyright © 2011 Magocard Limited.

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 1000 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, it produces an over-the-edge sized image consistent with reverse transfer printing which allows the entire card surface can be covered with a “bleed”.

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.

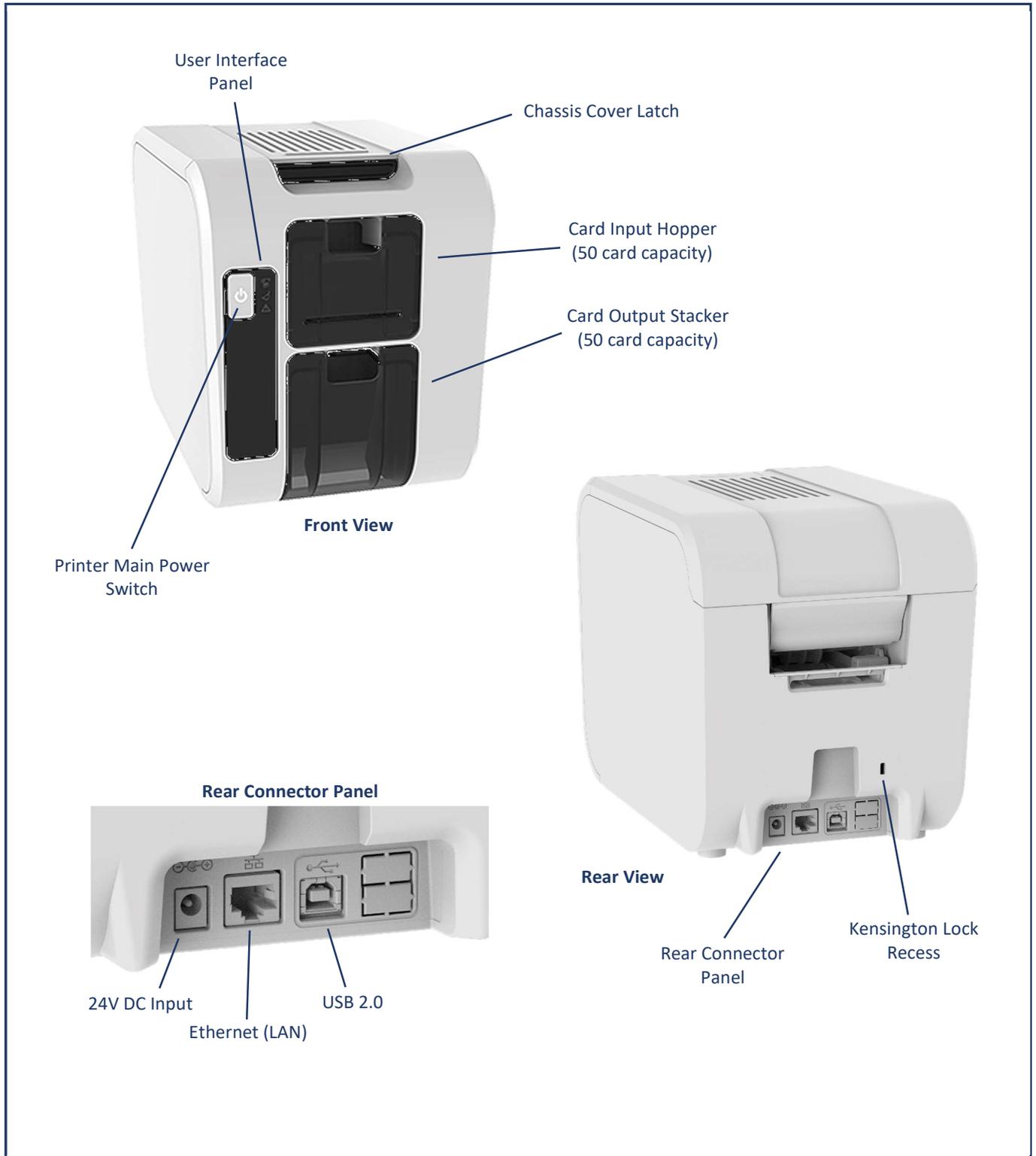
100NEO Card Printer – User Guide

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:	50 Cards (0.76mm/0.029")
Card Stacker Capacity:	50 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 Type:	MP100
Dye Film Prefix:	MP
Front Panel Display:	Multi-function LEDs
Dimensions (L x W x H):	255 x 180 x 208 mm (10 x 7 x 8.2 inches)
Estimated Weight:	2.9 kg (6.3 lbs)
Power Source:	100-240V AC, 3.75A, 50-60 Hz. 90W
Interface:	USB 2.0, 10 BASE-T/100 BASE-T Ethernet
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:	3 Years Limited Warranty (may vary between region and variant)
Internal Memory Size:	512 MB
Printer security:	Kensington lock
Security watermark:	Holokote (3 options), Holopatch
Printer Variants:	Pronto 100, Pronto 100E, 100NEO

100NEO Card Printer – User Guide

PRINTER EXTERNAL FEATURES



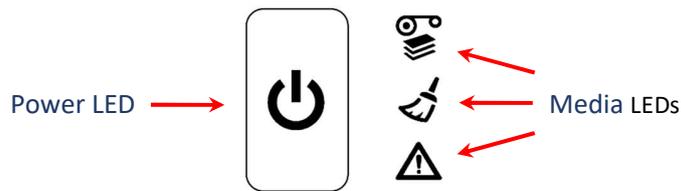
100NEO Card Printer – User Guide

THE PRINTER USER INTERFACE PANEL

UI Error Indication

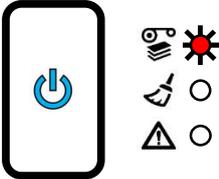
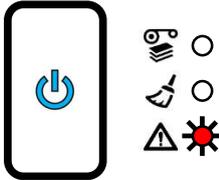
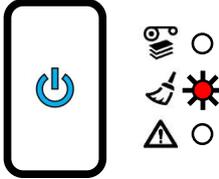
Each error type is indicated by illuminating the appropriate indicator from the three available LEDs shown below.

Each LED can be off, steady on or flashing at controlled intervals (set within software and therefore modifiable).

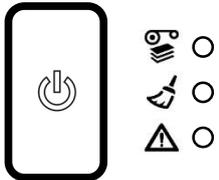
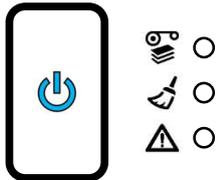


LED CONFIGURATION	LED BEHAVIOUR	ERROR CATEGORY	ERROR CODES
	INFORMATION LED STEADY	GENERAL_ERROR	01:XX 08:XX 10:XX 11:XX 12:XX 15:XX 16:XX 17:XX 18:XX 19:XX 31:XX 32:XX
	MEDIA LED STEADY	MEDIA_CARDS	02:XX 04:XX

100NEO Card Printer – User Guide

	<p style="text-align: center;">MEDIA LED FLASHING</p>	<p style="text-align: center;">MEDIA_FILM</p>	<p style="text-align: right;">05:XX 06:XX 07:XX 24:XX 25:XX 33:XX 34:XX</p>
	<p style="text-align: center;">INFORMATION LED FLASHING</p>	<p style="text-align: center;">CRITICAL_ERROR</p>	<p style="text-align: right;">13:XX 14:XX 20:XX 21:XX 26:XX 28:XX 29:XX</p>
	<p style="text-align: center;">CLEANING LED EQUAL FLASH</p>	<p style="text-align: center;">CLEAN_REQUIRED</p>	<p style="text-align: right;">27:XX</p>

UI Status Indication

LED CONFIGURATION	POWER LED BEHAVIOUR	INFO LED BEHAVIOUR	PRINTER STATUS
	<p style="text-align: center;">OFF</p>	<p style="text-align: center;">OFF</p>	<p style="text-align: center;">OFF</p>
	<p style="text-align: center;">STEADY</p>	<p style="text-align: center;">OFF</p>	<p style="text-align: center;">IDLE</p>

100NEO Card Printer – User Guide

 <p>Every 6sec</p> 	SHORT PULSE EVERY 6sec	OFF	STANDBY
 <p>Every 1sec</p> 	EQUAL FLASH EVERY 1sec	OFF	BUSY
 	EQUAL FLASH EVERY 1sec	EQUAL FLASH (About 0.5 secs)	WAITING FOR CLEANING CARD
 	EQUAL FLASH EVERY 1sec	STEADY ON	CLEANING
 <p>Every 1sec</p> 	HEARTBEAT DOUBLE PULSE EVERY 1sec	OFF	SOAK TESTING (Self Calibrating Routine)
 <p>Every 1sec</p> 	EQUAL FLASH EVERY 1sec	EQUAL FLASH EVERY 1sec (1Hz)	UPGRADING (Firmware Upgrade in Progress)

100NEO Card Printer – User Guide

Operation of the User Interface Buttons

The following functions are available:

- **Standby Mode**

Example operation: Press and hold the button for approximately 2 seconds to put the printer into Standby mode. Press the button again (momentary press) to wake the printer.

- **Printer Power On/Off**

Press and hold for approximately 8 seconds to power off the printer. Press the button again (momentary) to power the printer back on.

- **Initiate Soak Routine**

With the Dye Film removed and the Lid closed, press the button 4 times to begin the Soak routine. (Self Calibration Routine).

- **Print an internal Test Card**

With the Dye Film fitted and the Lid closed, press the button 4 times in quick succession to begin printing a test card (the main button should begin to flash at this point).

- **Clear Error**

A momentary press of the button will cancel the current operation (when the “Cancel” option is available).

- **Initiate a Cleaning Cycle**

With the Lid open, press the power button 2 times in quick succession to begin a cleaning routine.

100NEO Card Printer – User Guide

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.

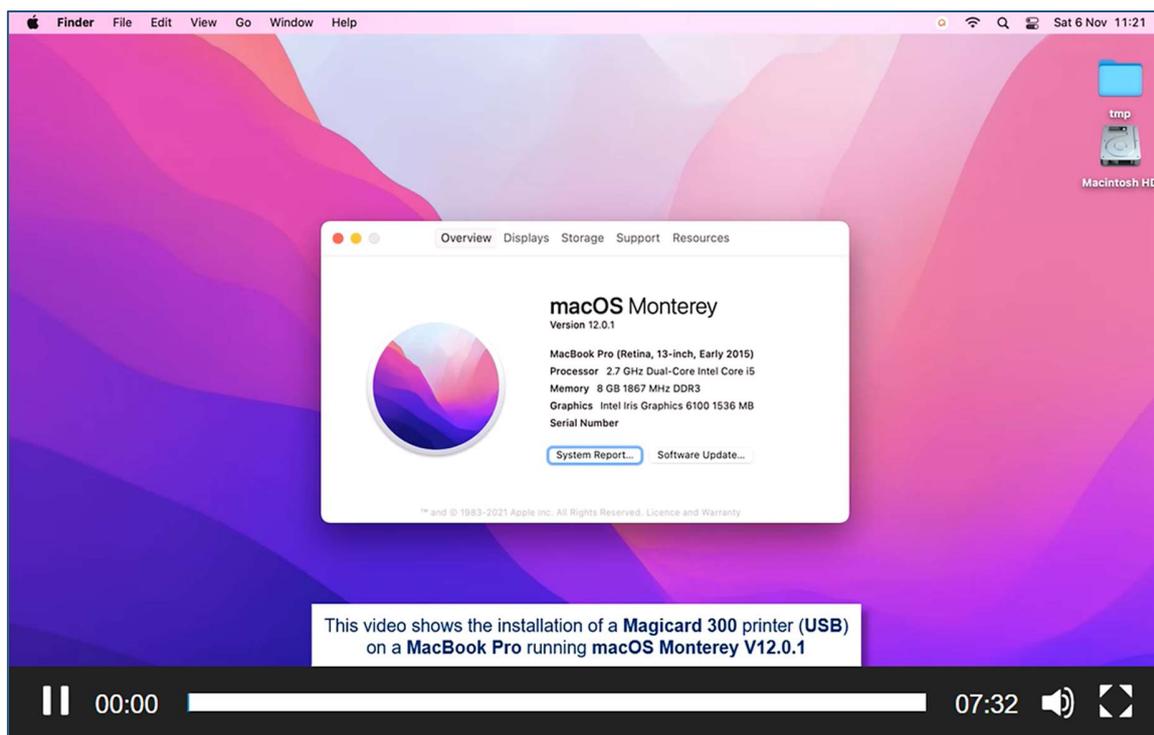
100NEO Card Printer – User Guide

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.

NOTE: **Before** installing the Mac Driver, it is first recommended to watch the **Video Guide for Download and Installation** (see below).



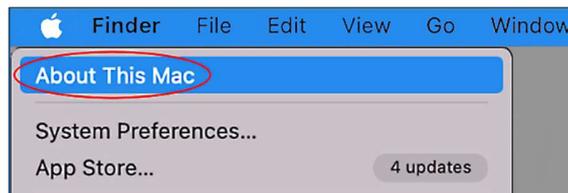
The Macintosh Driver Install Video

100NEO Card Printer – User Guide

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



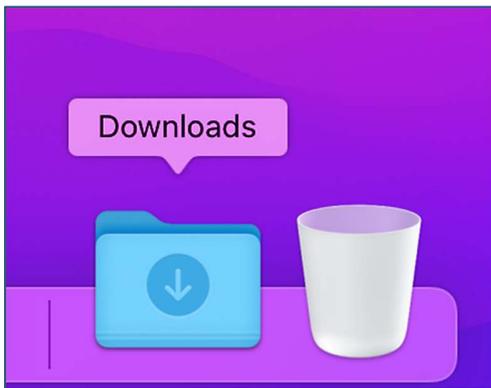
The ARM Driver Option

100NEO Card Printer – User Guide

The Macintosh Driver Installation

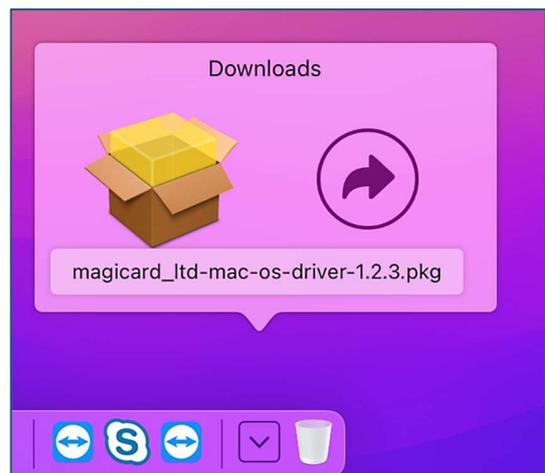
The Driver download is shown below, but in addition to this, the user will also be guided by on-screen instructions through each stage of the process.

1



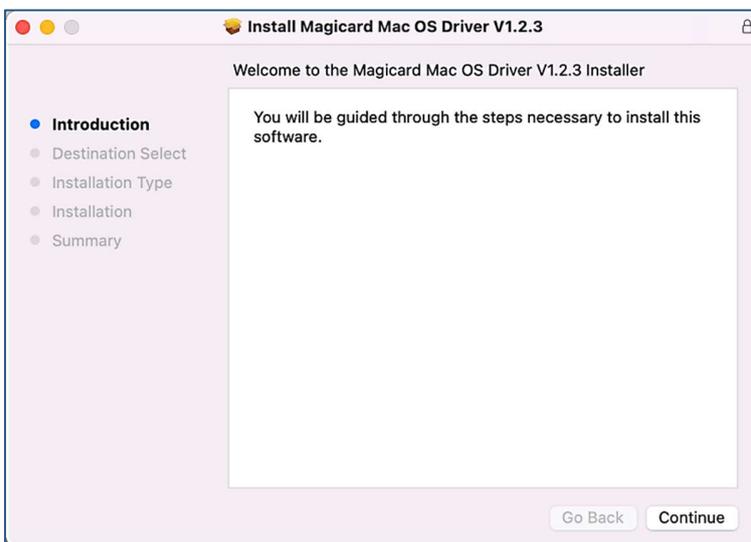
1. Open the Downloads folder

2



3. Click on the Mac OS Driver

3

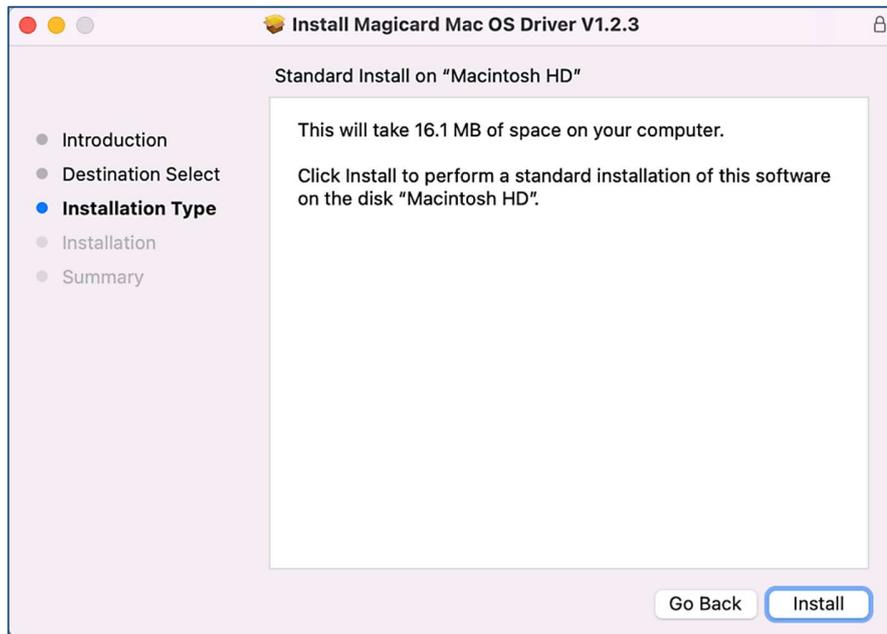


2. The Installer Introduction – Click 'Continue'

100NEO Card Printer – User Guide

The Macintosh Driver Installation (continued)

4



4. Click "Install"

5

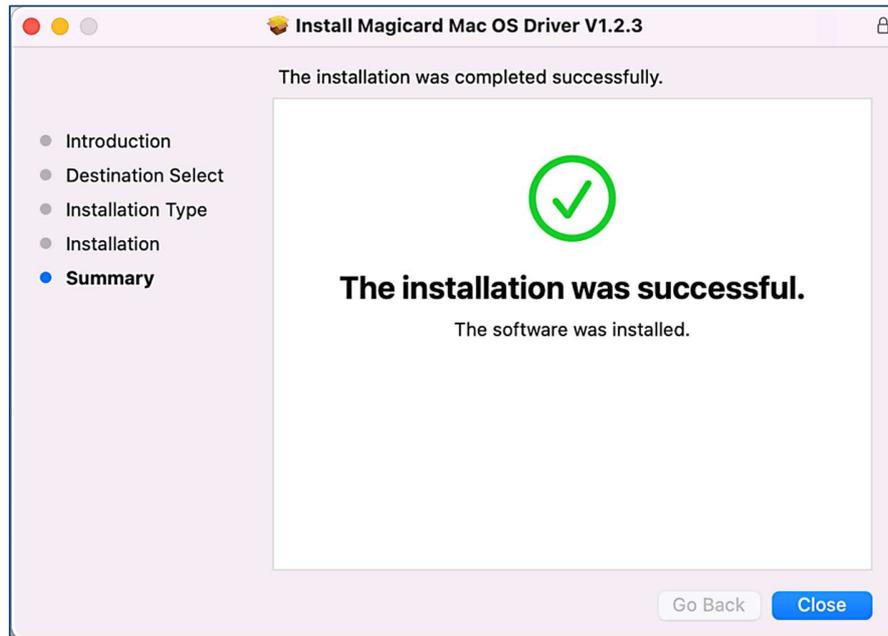


Enter your admin credentials and click 'Install Software'

100NEO Card Printer – User Guide

The Macintosh Driver Installation (continued)

6



5. Installation successful. Click 'Close' to finish

100NEO Card Printer – User Guide

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.

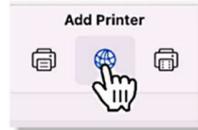


By default, your printer will obtain an IP address automatically via DHCP.

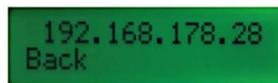
1. Click Add



2. Select IP option



3. Obtain your printer's IP Address



4. Enter the IP Address

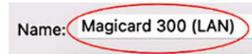


Consult the **QuickStart Guide** or **User Manual** for your printer on how to obtain the IP address.

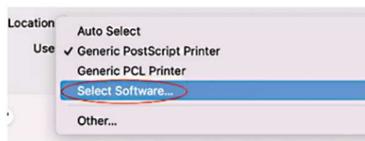
5. Select 'HP Jetdirect - Socket' protocol



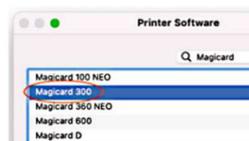
6. Enter a name for the printer



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



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



9. Click Add

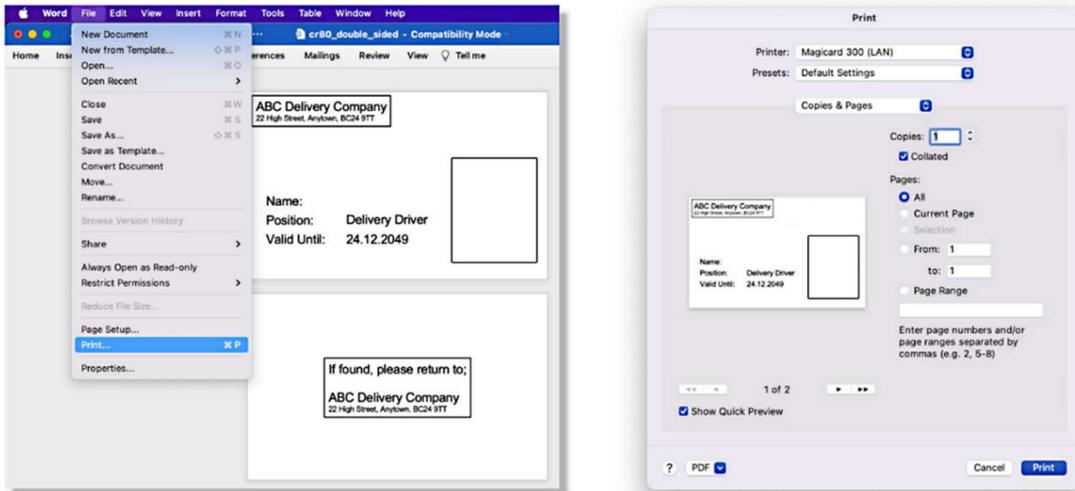


Installation is complete.

100NEO Card Printer – User Guide

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.

100NEO Card Printer – User Guide

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).

100NEO Card Printer – User Guide

Configuring Settings and Features (continued)

Advanced

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

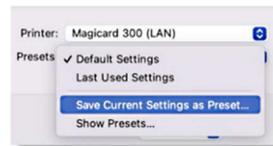
- Feature Sets:** Advanced (dropdown)
- Colour correction:** Absolute colorimetric (dropdown) **a**
- Sharpness:** 0 (spin button) **b**
- Printhead Power (YMC):** 0 (spin button) **c**
- Printhead Power (Black resin):** 0 (spin button) **d**
- Printhead Power (Overcoat):** 0 (spin button) **e**
- Status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

Callout details:

- a:** Points to the 'Absolute colorimetric' option in the 'Colour Correction' dropdown menu.
- b:** Points to the '0' value in the 'Sharpness' spin button.
- c:** Points to the '0' value in the 'Printhead Power (YMC)' spin button.
- d:** Points to the '0' value in the 'Printhead Power (Black Resin)' spin button.
- e:** Points to the '0' value in the 'Printhead Power (Overcoat)' spin button.
- f:** Points to the 'Enable' option in the 'Status Polling' dropdown menu.

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.



100NEO 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:

```
cupscctl 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/>

100NEO Card Printer – User Guide

CHOOSING THE CORRECT FILM AND CARDS

Dye Film Types

100NEO COLOUR DYE FILM		
Dye Film Type	Card Print Capacity	Product Part Number
100YMCKO Colour	100 images	MP100YMCKO/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	

100NEO Card Printer – User Guide

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 Printers 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 Cards front & PVC back

100NEO Card Printer – User Guide

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.

INITIAL PRINTER SETUP

Ethernet Setup

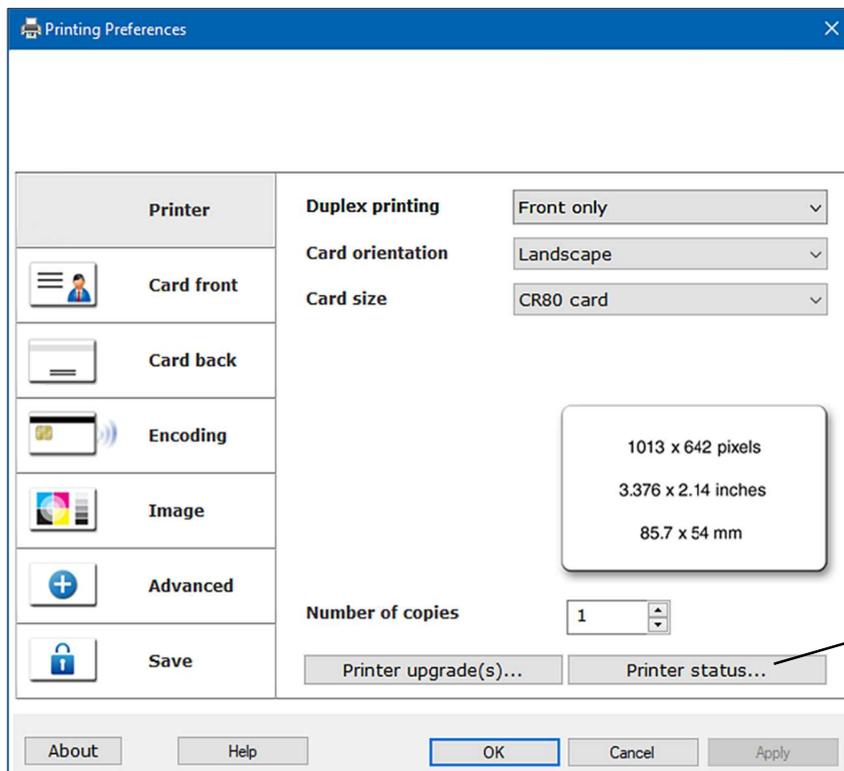
Setting up a Static IP Address

NOTE: This process is mandatory for Ethernet printing on both Windows and Mac.

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).

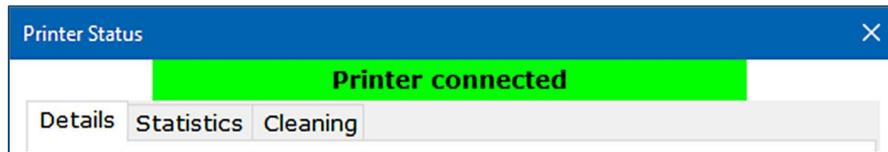
First, ensure the printer has a communication link (or Status) with the PC. This can be done as follows:

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

100NEO Card Printer – User Guide

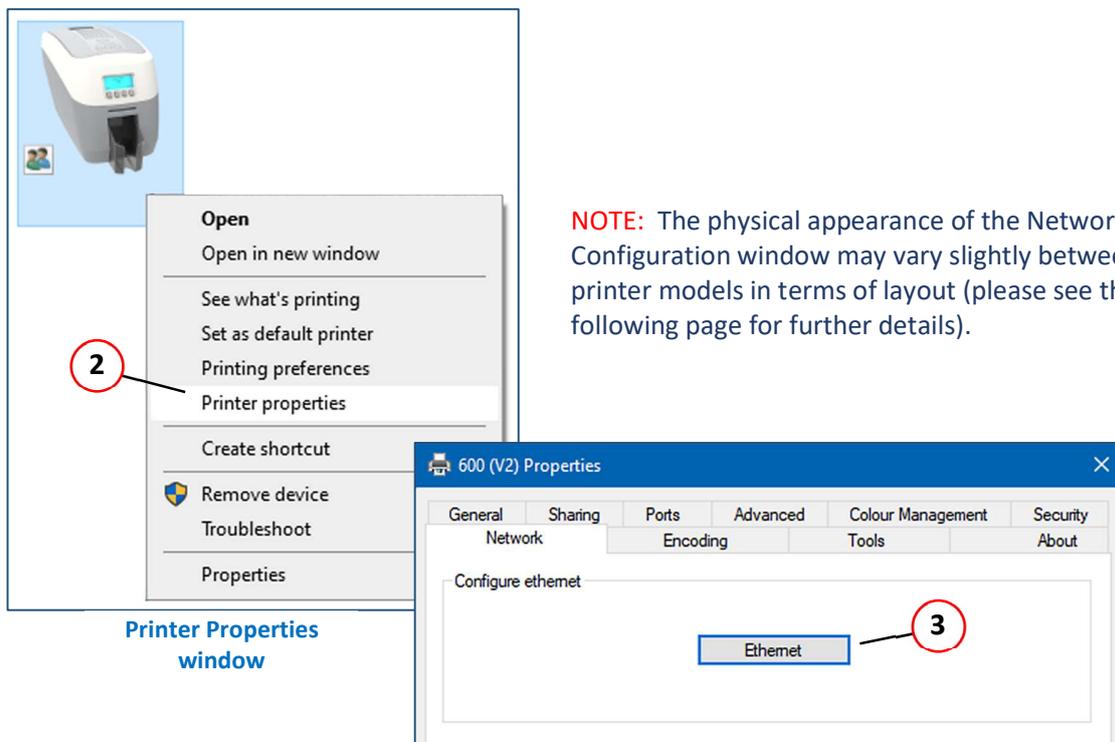


Printer Status – Connected

With the “connected” status, further information will also be available to the user such as printer details and 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** button (**3**). The Network configuration dialogue box should now be displayed.

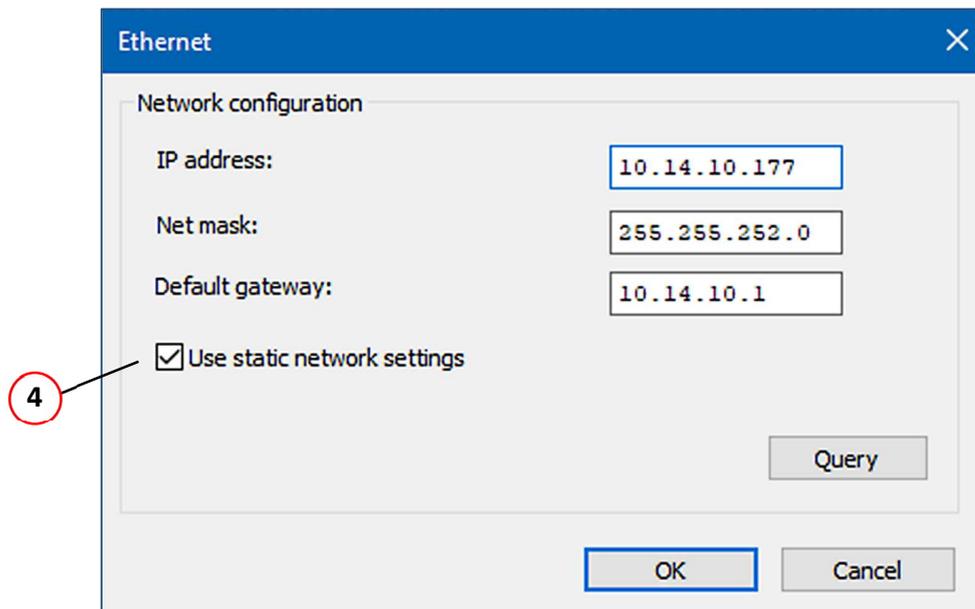
The procedure is identical for the 100NEO.



NOTE: The physical appearance of the Network Configuration window may vary slightly between printer models in terms of layout (please see the following page for further details).

100NEO Card Printer – User Guide

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 fully initialise.

PRINTER MAINTENANCE

Cleaning the Printer

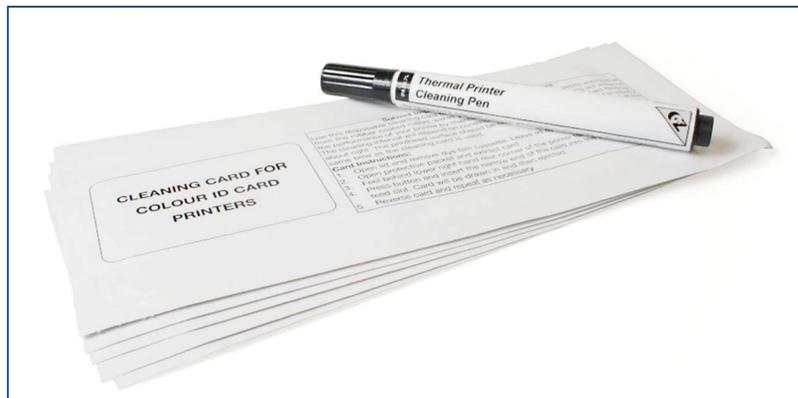
Your printer is designed to give many years of trouble-free service provided the printer is regularly cleaned and maintained.

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 Print Head 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!)

The Recommended Cleaning Kit

The recommended cleaning kit (Pt. E9100) comprises of ten cleaning Cards and a cleaning pen. Replacement kits can be ordered from your Dealer or printer supplier.



The Recommended Cleaning Kit

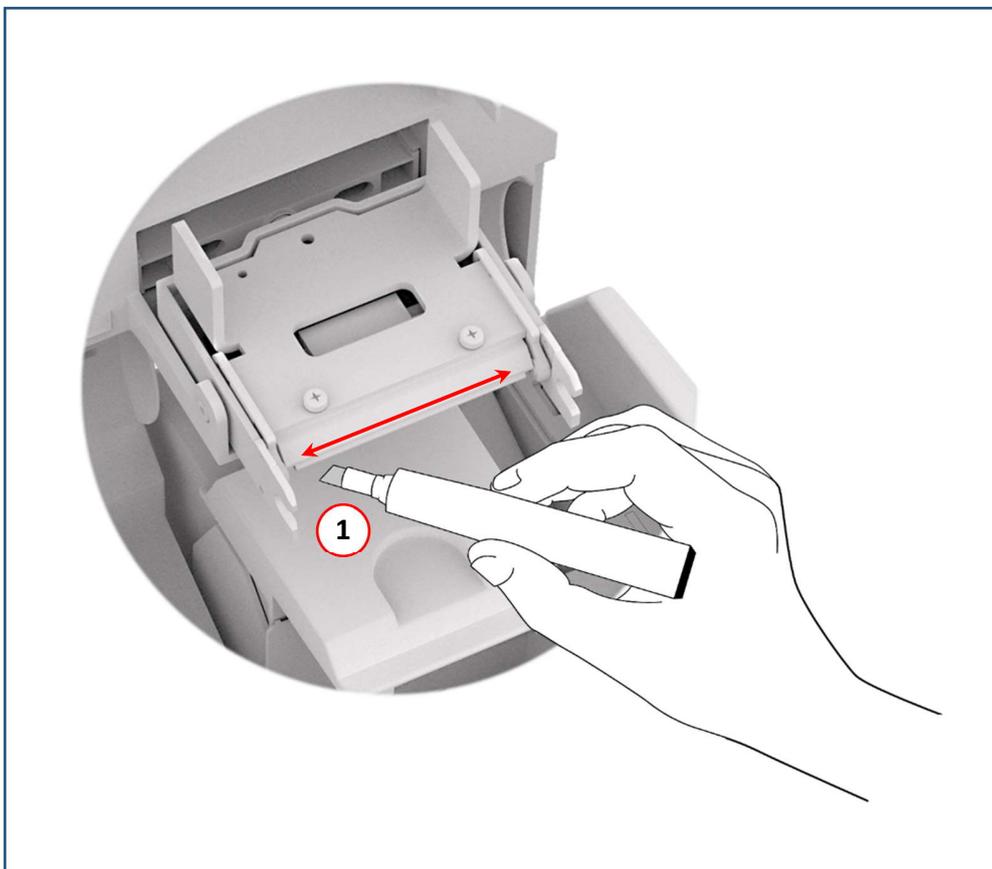
100NEO Card Printer – User Guide

Using the Cleaning Pen

The Cleaning Pen (supplied with the Cleaning Kit (Pt. E9100) 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

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.

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.

100NEO Card Printer – User Guide

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.

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.

100NEO Card Printer – User Guide

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.

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 tachometer sensor counts. The film has probably either run out or snapped.

100NEO Card Printer – User Guide

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.

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.

100NEO Card Printer – User Guide

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.

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.

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.

100NEO Card Printer – User Guide

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.

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.

100NEO Card Printer – User Guide

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.

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.

100NEO Card Printer – User Guide

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.

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.

100NEO Card Printer – User Guide

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.

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.

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.

100NEO Card Printer – User Guide

19: SOFTWARE INVALID

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.

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

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.

100NEO Card Printer – User Guide

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.

31: COLOUR DISABLED

Error code 31:0

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

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