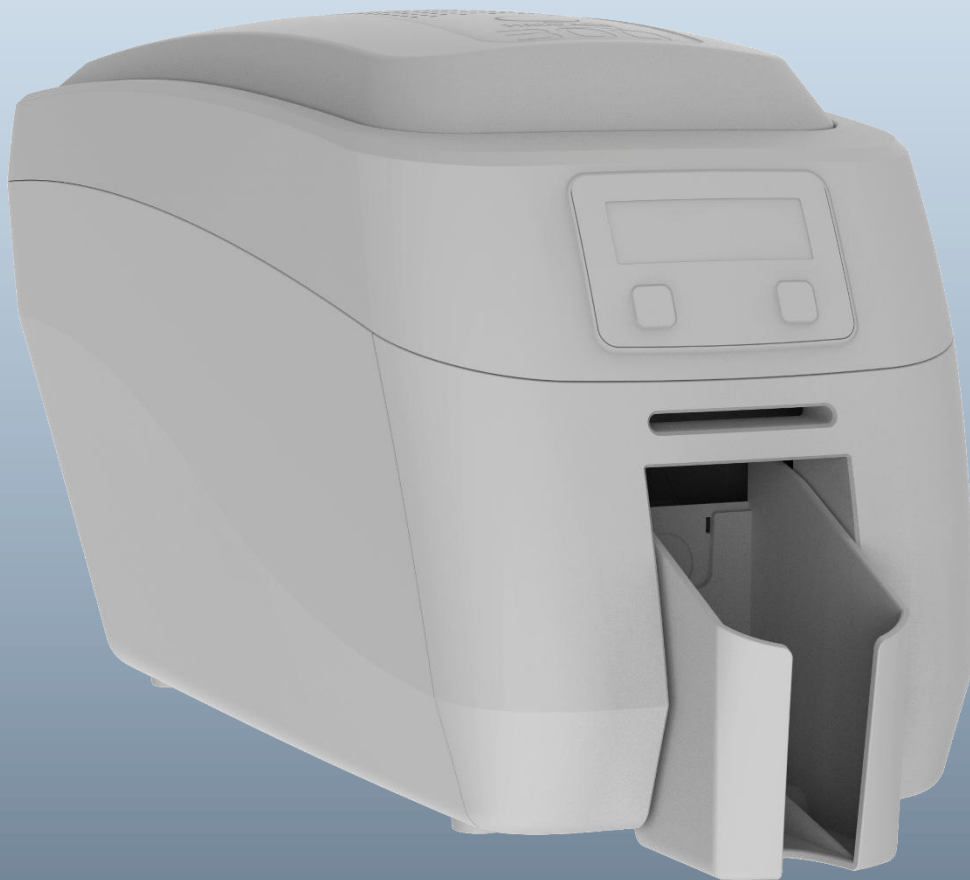


# ***300 Card Printer User Guide***



# 300 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 AND DYE FILM ENVIRONMENTAL REQUIREMENTS.....	6
PRINTER MAIN EXTERNAL FEATURES.....	7
THE PRINTER USER INTERFACE .....	8
PRINTER MENU OPTIONS.....	9
The User Menu .....	9
The Maintenance Menu .....	11
DRIVER INSTALLATION.....	12
WINDOWS.....	12
MACINTOSH .....	13
Mac OS Quickstart Guide .....	18
Customising the Settings and Features .....	19
Enabling the CUPS Interface on a Mac .....	22
CHOOSING THE CORRECT FILM AND CARDS.....	23
DYE FILM TYPES.....	23
CARD TYPES.....	24
Magnetic Stripe Cards .....	25
Self-Adhesive Cards .....	25
Rewriteable Cards .....	25
INITIAL PRINTER SETUP.....	26
ETHERNET SETUP .....	26
Setting up a Static IP Address.....	26
INSTALLING UPGRADES.....	29
Duo Operation.....	29
Custom Holokotes .....	32
PRINTER MAINTENANCE .....	34
CLEANING THE PRINTER.....	34
The Recommended Cleaning Kit .....	34
Using the Cleaning Pen.....	35
Replacing the Blue Sticky Roller .....	37
PRINTER ERROR CODES.....	38
1: LID OPENED.....	38
2: OUT OF CARDS .....	38
3: NO HAND FEED.....	38
4: CARD JAM.....	38
5: OUT OF FILM .....	40
6: FILM INVALID .....	41

## 300 Card Printer – User Guide

7: REMOVE FILM .....	41
8: CAM JAM.....	42
9: FLIP JAM .....	42
10: FILE INVALID.....	42
11: SOFTWARE OUTDATED .....	44
12: SENSOR FAILURE .....	44
13: INTERNAL ERROR .....	45
14: SD CARD UNSIGNED.....	47
15: HOLOKOTE INVALID .....	47
16: HOLOKOTE NOT AUTH .....	47
17: UPGRADE INVALID .....	47
18: UPGRADE NOT AUTH .....	47
19: SOFTWARE INVALID .....	47
20: SD WRITE FAILED.....	48
21: INSTALL FAILED .....	48
22: DUPLEX DISABLED .....	48
23: MAG DISABLED.....	48
24: FILM NO COLOUR.....	48
25: FILM NO OVERCOAT.....	48
26: MOTOR FAULT.....	49
27: CLEAN REQUIRED .....	49
28: NO PRINthead.....	49
29: NO SD CARD .....	49
30: MAG VERIFY FAILED .....	49
31: COLOUR DISABLED .....	49
32: DPI600 DISABLED .....	50
33: FILM NO NPANEL.....	50
34: FILM NO PPANEL.....	50
35: NO MAG DATA .....	50
<b>CE DECLARATION.....</b>	<b>51</b>
<b>FCC DECLARATION.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>FCC SDOC: .....</b>	<b>54</b>

# *300 Card Printer – User Guide*

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

Magicard 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 Magicard 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 Magicard 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 Magicard 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 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 Pronto 100: 1016 x 642 Pixels or 85.6 x 54mm.

For Magicard 300, 600 and D and K Series: 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 printhead. 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. Magicard is not responsible for printers/items inadequately packaged.

### **If using this printer in Germany:**

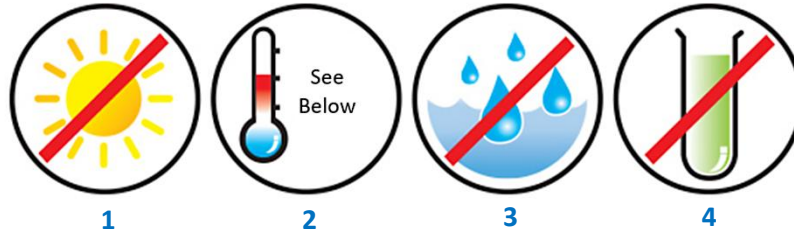
To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16 Amp circuit breaker. Bei Anschluß des Druckers an die Stromversorgung muß sichergestellt werden, daß die Gebäudeinstallation mit einem 16 A-Überstromschalter abgesichert ist.

# 300 Card Printer – User Guide

## PRINTER SPECIFICATION

<b>Print Resolution:</b>	300 dpi
<b>Colour Depth:</b>	256 levels (8 bit)
<b>Print Speed:</b>	YMCKO 18s (approximately). Measured as 'click to card' K only 5s (approximately). Measured as 'click to card'
<b>Card Feeder Capacity:</b>	100 Cards (0.76mm/0.029")
<b>Card Stacker Capacity:</b>	70 Cards (0.76mm/0.029")
<b>Card Thickness:</b>	0.50mm to 1.27mm (20 mil to 50 mil)
<b>Card Size:</b>	CR79/CR80
<b>Card Material:</b>	PVC
<b>Dye Film Type:</b>	May vary between region and printer model or variant
<b>Dye Film Prefixes:</b>	300 (MC), 360 (MA), D-K (MZ), 600 (MB)
<b>Front Panel Display:</b>	Multi-function Colour LCD
<b>Dimensions (L x W x H):</b>	May vary according to printer model
<b>Estimated Weight:</b>	May vary according to printer model
<b>Power Source:</b>	100-240V AC, 3.75A, 50-60 Hz. 90W
<b>Interface:</b>	USB 2.0, Ethernet (10 BASE-T/100 BASE-T)
<b>System Requirements:</b>	Windows 8.1, 10, 11 (32/64bit). Windows Server 2008, 2012, 2016 GNU/Linux and Mac OS X 10.9.0 upwards
<b>Printer/Printhead Warranty:</b>	May vary between region and printer model or variant
<b>Internal Memory Size:</b>	512 MB
<b>Printer security:</b>	Kensington lock
<b>Magnetic Encoding options:</b>	HiCo and LoCo (ISO 7811)
<b>Security watermark:</b>	Holokote (4 options) - User customisable. Holopatch
<b>Printer Variants:</b>	May vary according to Geographic Region

### PRINTER AND DYE FILM ENVIRONMENTAL REQUIREMENTS

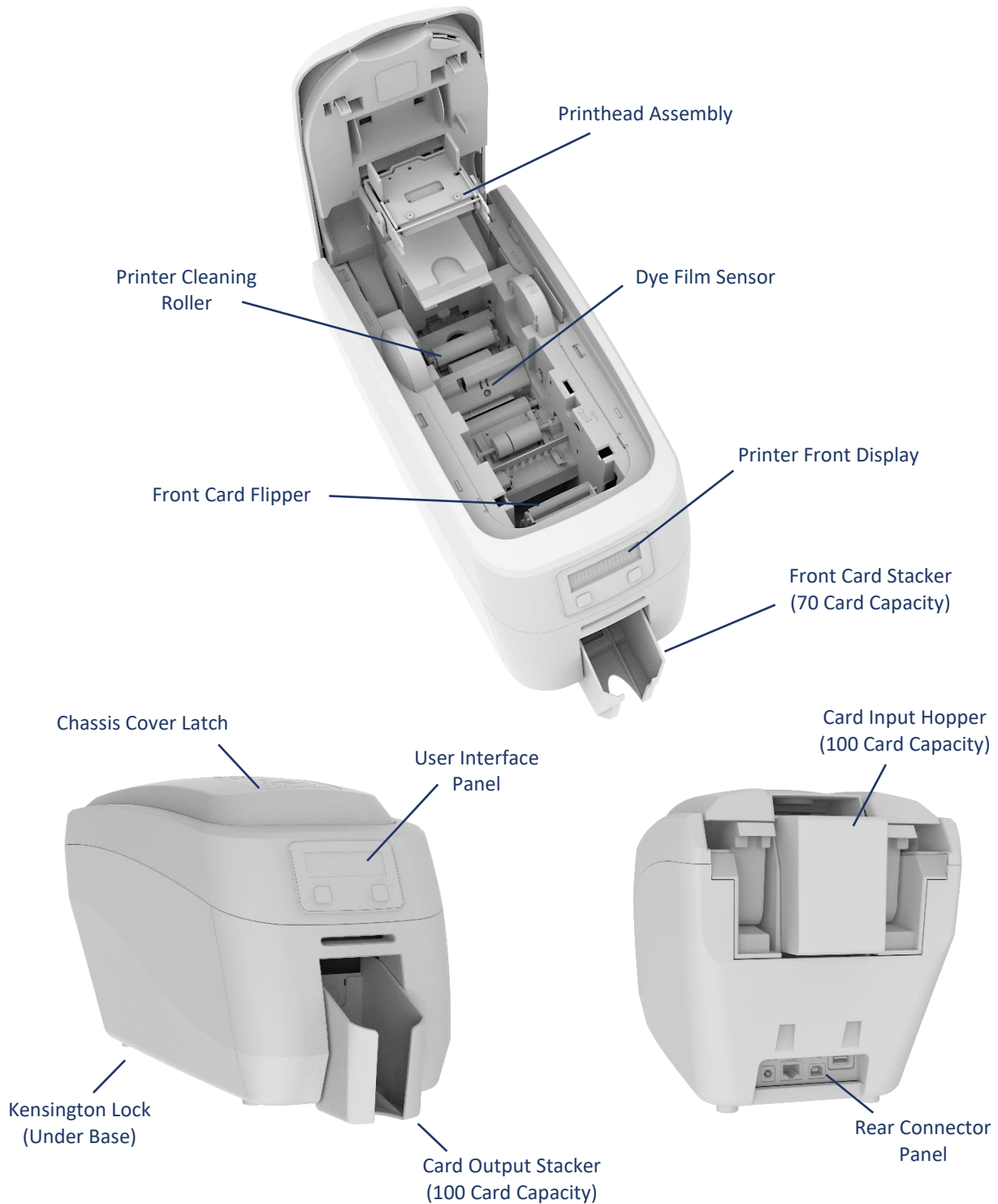


It is recommended that the printer is installed and used in a normal office environment with:

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.

# 300 Card Printer – User Guide

## PRINTER MAIN EXTERNAL FEATURES

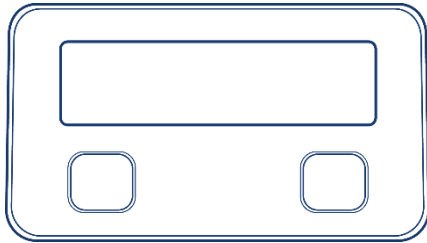


# 300 Card Printer – User Guide

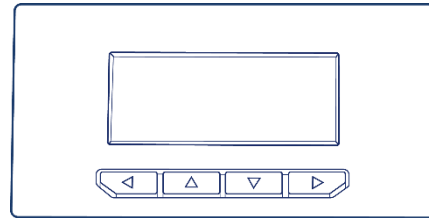
## THE PRINTER USER INTERFACE

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

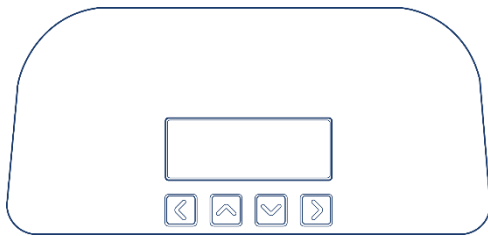
In each case, the front panel buttons are used (in conjunction with the front panel display) to navigate through the various printer User and Maintenance menu options (please see pages 9 - 11 for details).



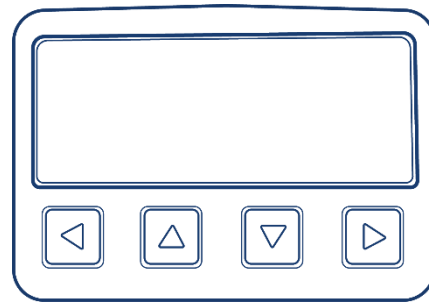
300 Front Panel



360 Front Panel



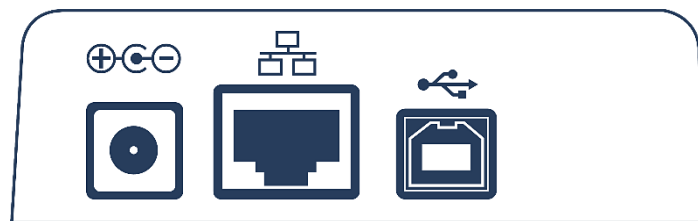
D and K Front Panel



600 Front Panel

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

### REAR USER INTERFACE PANEL



300 Rear Panel



## 300 Card Printer – User Guide

### 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 >

## 300 Card Printer – User Guide

	>	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	XXXXXXX
	>	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

- 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.
- 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.
- Standby Time:** Using the +/- keys, Standby time can be selected for 15, 60, 600 minutes or OFF.

## 300 Card Printer – User Guide

### The Maintenance Menu

MAINTENANCE MENU					
<b>TOP LEVEL</b>		<b>Sub Level 1</b>		<b>Sub Level 2</b>	<b>Comments</b>
<b>Turn Rollers</b>	>		>	Use Up/Down Keys	
<b>Calibrate</b>	>	Remove Film	>	Calibrating...	
<b>Soak Test</b>	>	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
<b>Sensor Test</b>	>	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 >	

## 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/>

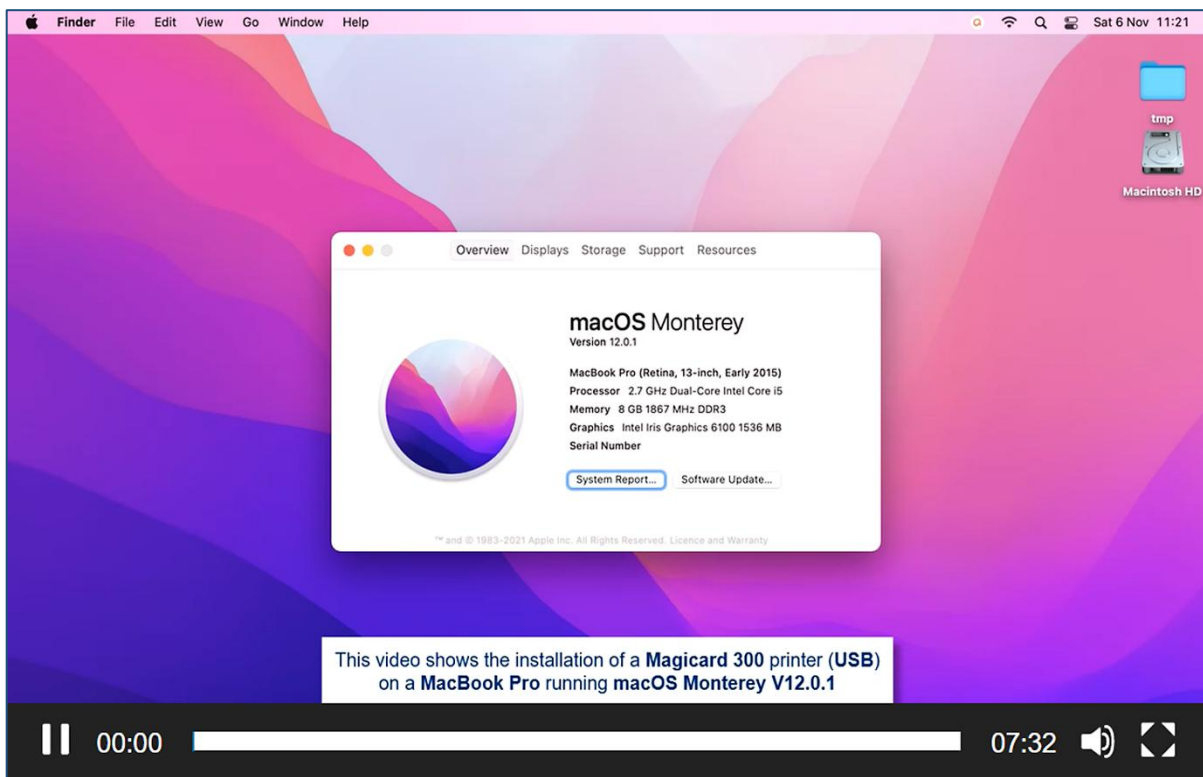
This document will guide the user through each stage of the printer driver, explaining the various options available. The guide can also be downloaded as a separate document if required.

# 300 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.
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).



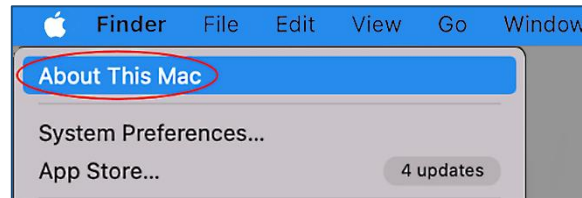
The Macintosh Driver Install Video

## 300 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



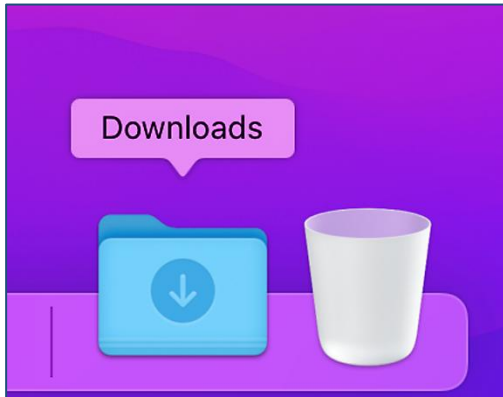
The ARM Driver Option

# 300 Card Printer – User Guide

## The Macintosh Driver Installation

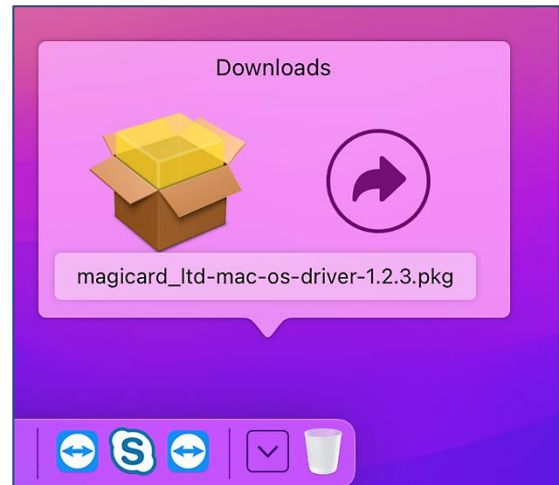
The driver download is shown below, but in addition to this, the user will also be guided by on-screen instructions through each stage of the process.

1



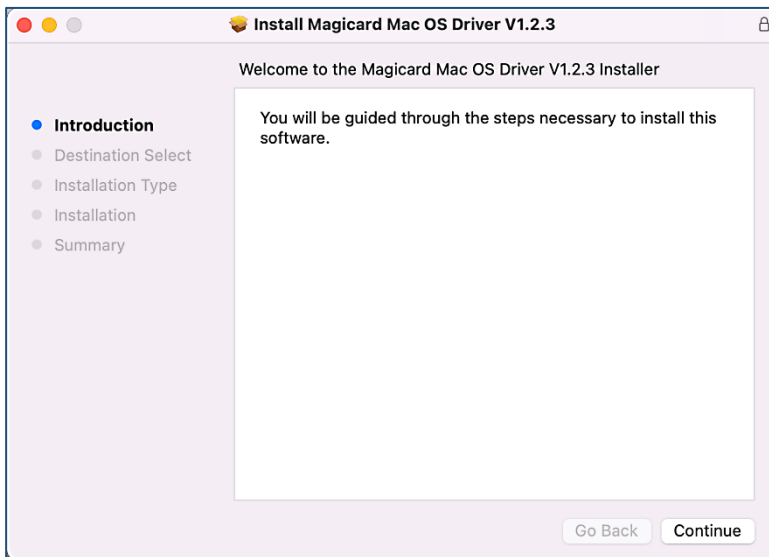
1. Open the Downloads folder

2



3. Click on the Mac OS Driver

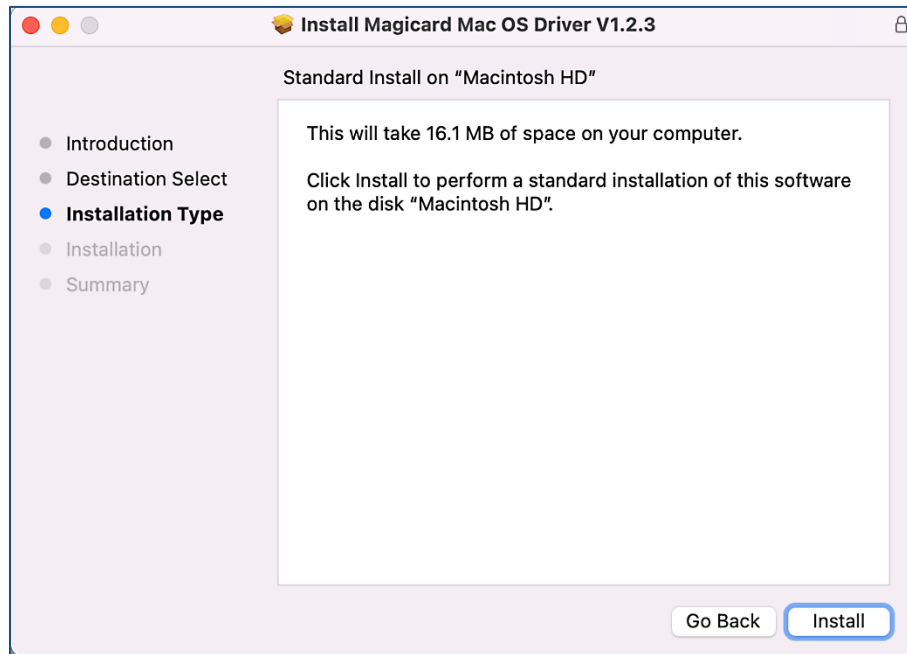
3



2. The Installer Introduction – Click 'Continue'

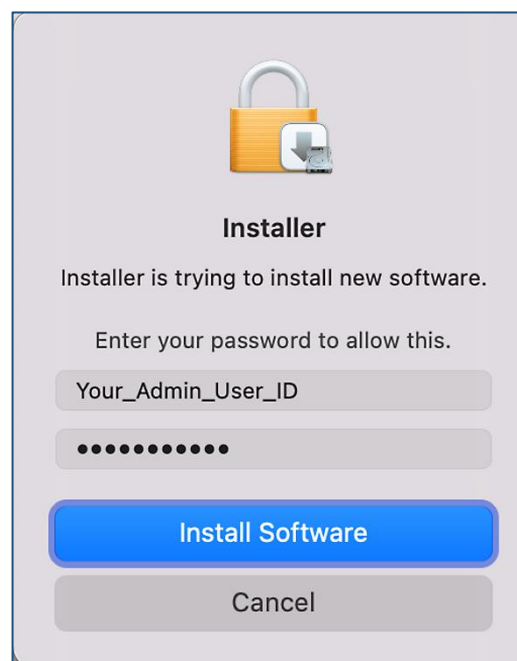
### The Macintosh Driver Installation (continued)

4



4. Click 'Install'

5

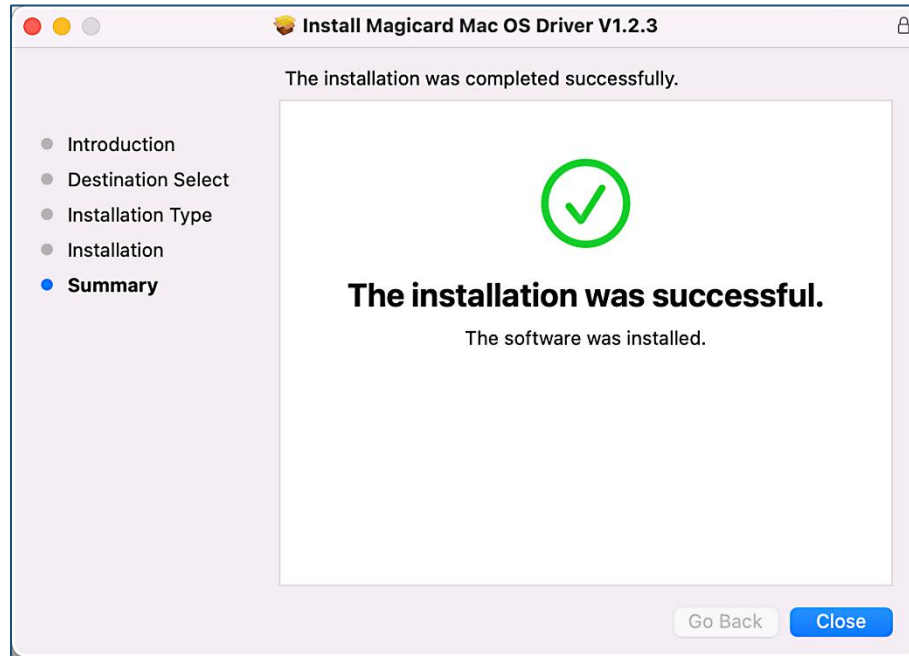


Enter your admin credentials  
and click 'Install Software'



### The Macintosh Driver Installation (continued)

6



5. Installation successful. Click 'Close' to finish

# 300 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



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

#### 4. Enter the IP Address



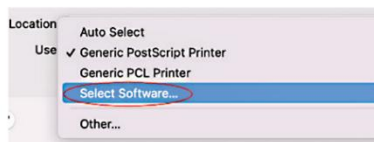
#### 5. Select 'HP Jetdirect - Socket' protocol

Protocol: **HP Jetdirect - Socket**

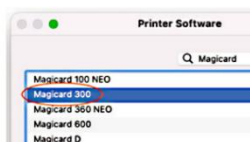
#### 6. Enter a name for the printer

Name: **Magicard 300 (LAN)**

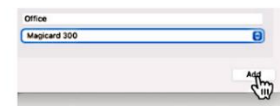
#### 7. In the Use drop-down choose **Select Software...**



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



#### 9. Click Add

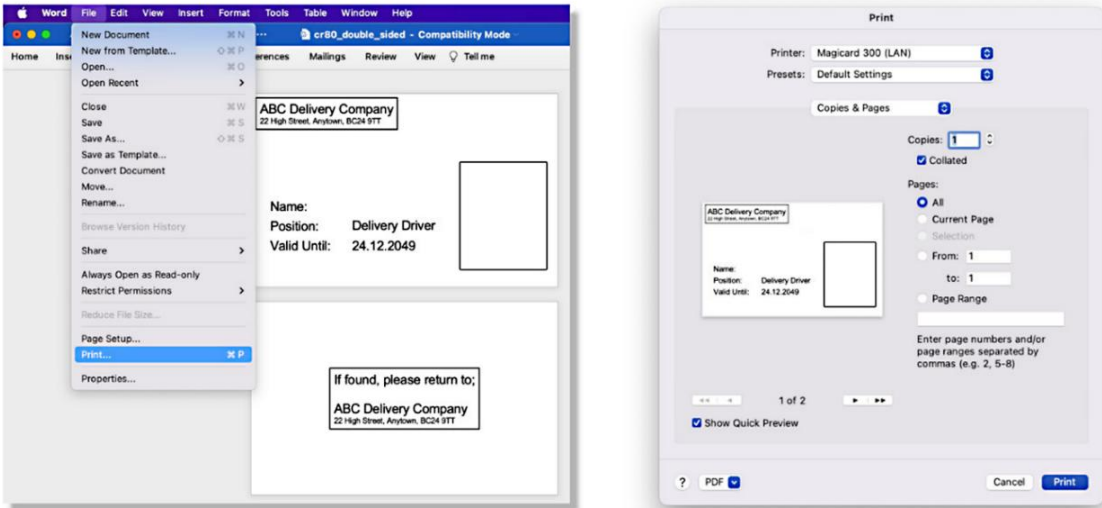


Installation is complete.

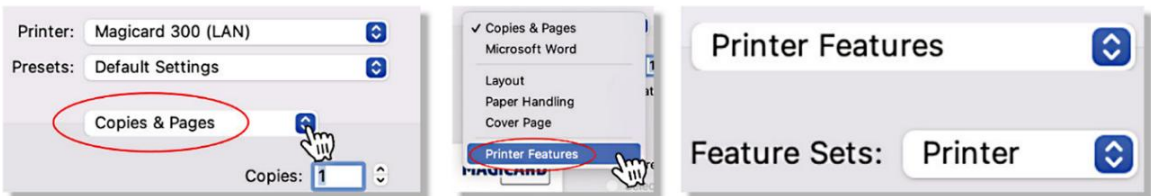
# 300 Card Printer – User Guide

## 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;

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

### General

300 DPI  
600x300 DPI

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

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

# 300 Card Printer – User Guide

## 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).

# 300 Card Printer – User Guide

## Configuring Settings and Features (continued)

### Advanced

**Colour Correction**

None  
Driver managed  
Perceptual  
Saturation  
Relative colorimetric  
Absolute colorimetric

**Sharpness**

-2  
-1  
☒ 0  
1  
2

**Printhead Power (YMC)**

-2  
-1  
☒ 0  
1  
2

**Printhead Power (Black Resin)**

-2  
-1  
☒ 0  
1  
2

**Printhead Power (Overcoat)**

-2  
-1  
☒ 0  
1  
2

**Status Polling**

Disable  
Enable

### Saving your printer settings as a Preset

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

Printer: Magicard 300 (LAN)

Presets

- ☒ Default Settings
- ☐ Last Used Settings
- ☐ Save Current Settings as Preset...
- ☐ Show Presets...

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

Feature Sets: Card Front

Preset Name:

Preset Available For: ☒ Only this printer  
☐ All printers

Cancel OK

Card Front Rotation: 0 degrees

Your preset is available for future use.

**Print**

Printer

Presets

- ☒ my\_printer\_settings
- ☐ Default Settings
- ☐ Last Used Settings
- ☐ Save Current Settings as Preset...
- ☐ Show Presets...

## 300 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/>

## 300 Card Printer – User Guide

### CHOOSING THE CORRECT FILM AND CARDS

#### Dye Film Types

300 PRINTER DYE FILMS		
Dye Film Part Numbers	Card Print Capacity	Product Part Number
MC600 YMCKO	300 Images	MC300YMCKO/2*
MC600 YMCKO	300 Images	MC300YMCKO/3*
MC600 YMCKO	200 Images	MC200YMCKO/2*
MC600 YMCKO	200 Images	MC300YMCKO/3*
MC600 YMCKOK	250 images	MC250YMCKO/2*
MC600 YMCKOK	250 Images	MC250YMCKO/3*
MC600 KO	600 images	MC600KO/2*
MC600 KO	600 images	MC600KO/3*
MA1000	1000 images	MA1000K

**NOTE:** \* = Region Codes: “/2” = USA “/3” = Europe, Japan, South Korea and Australia.

The 300 printer model only uses Dye film with the **MC** prefix (e.g. **MC600YMCKO** – please also see above).

#### MA1000 Film Variations

MA1000 films consist of one continuous film (no panels) and are available in a variety of colours as shown below. These can be ordered through a printer dealer or supplier.

Scratch films apply a removable film to the card’s surface which can easily be removed by the user.

SINGLE SIDED MONOCHROME PRINTER DYE FILMS	
Dye Film Part Numbers	Product Variant
MA1000K < Colour >	Black
	Red
	Blue
	Green
	Silver
	Gold
	White
	Scratch



# 300 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)

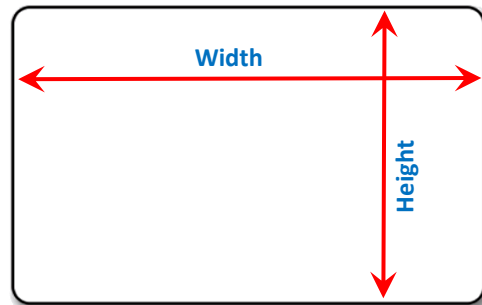
**CR79** = 3.303" x 2.051" (83.9 mm x 51.0 mm) (w x h)

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 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 Cards front & PVC back



# 300 Card Printer – User Guide

## 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.

## INITIAL PRINTER SETUP

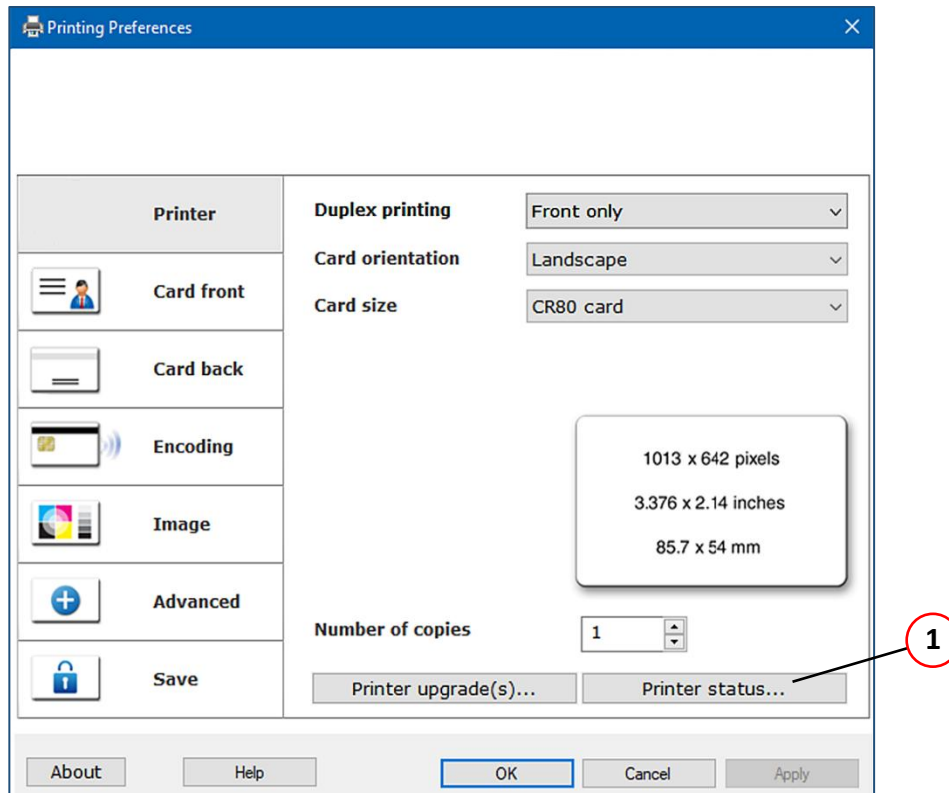
### Ethernet Setup

#### 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.

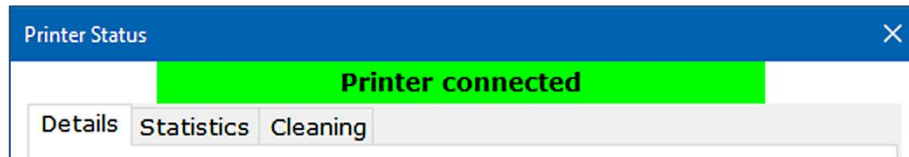
After the printer has been setup for networking, the USB cable can be disconnected and the network (Ethernet) connector fitted. First, ensure the printer has a communication link (or Status) with the PC. This can be done as follows:

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

## 300 Card Printer – User Guide

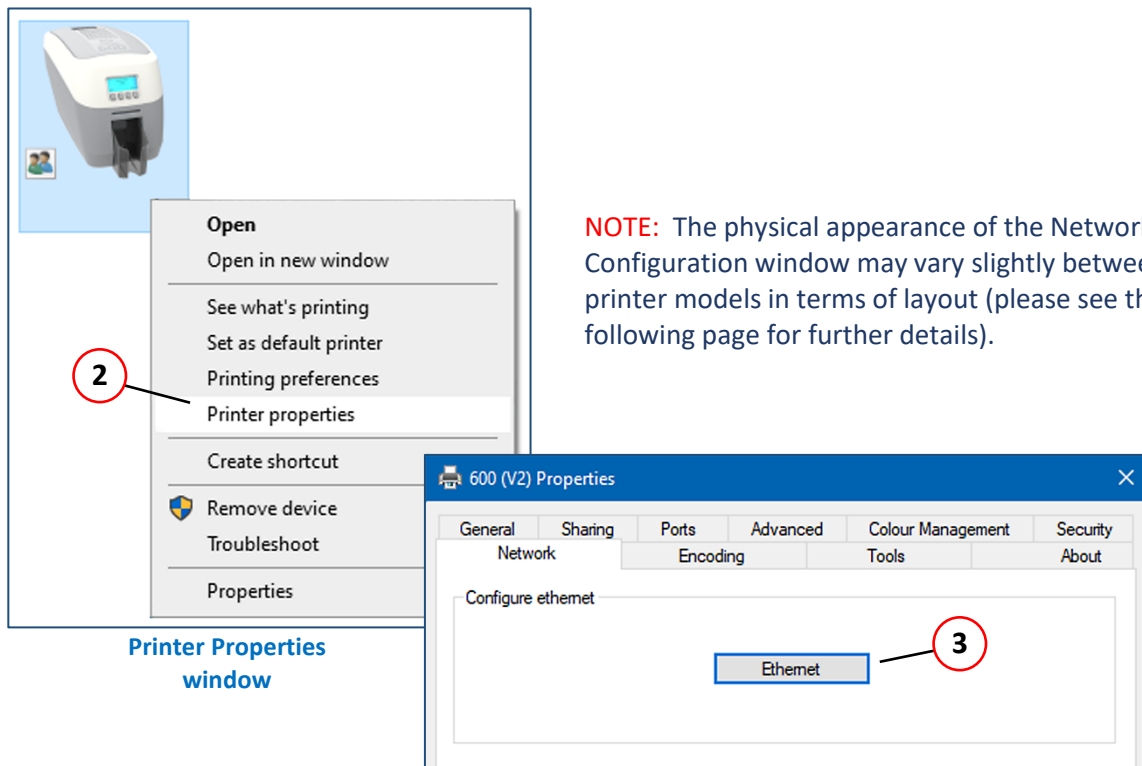


Printer Status – Connected

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.

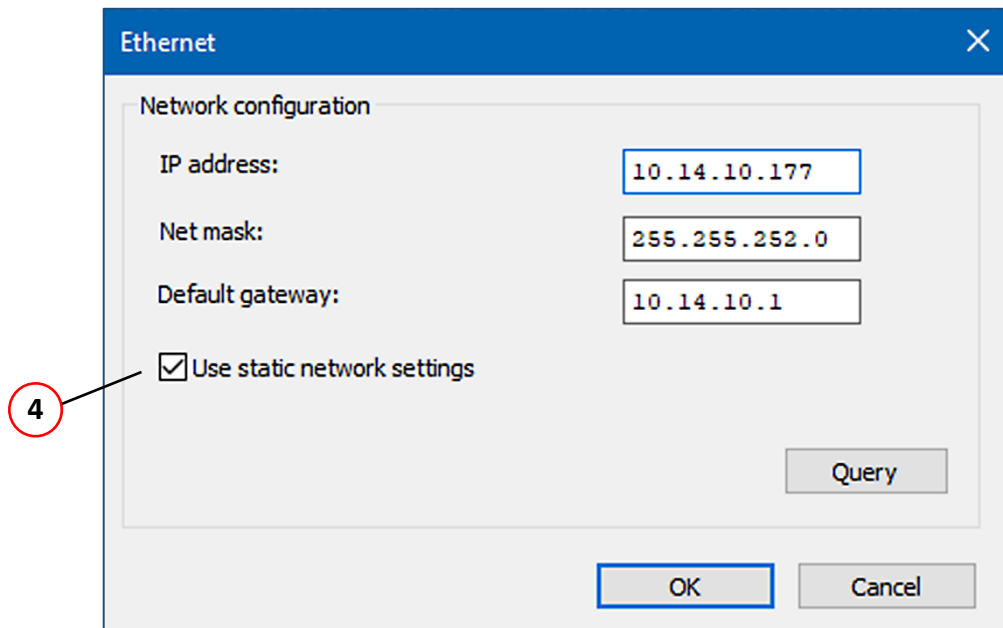
**NOTE:** The procedure below shows the 600 printer model. The procedure is identical for the 300 model.



**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).

## 300 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

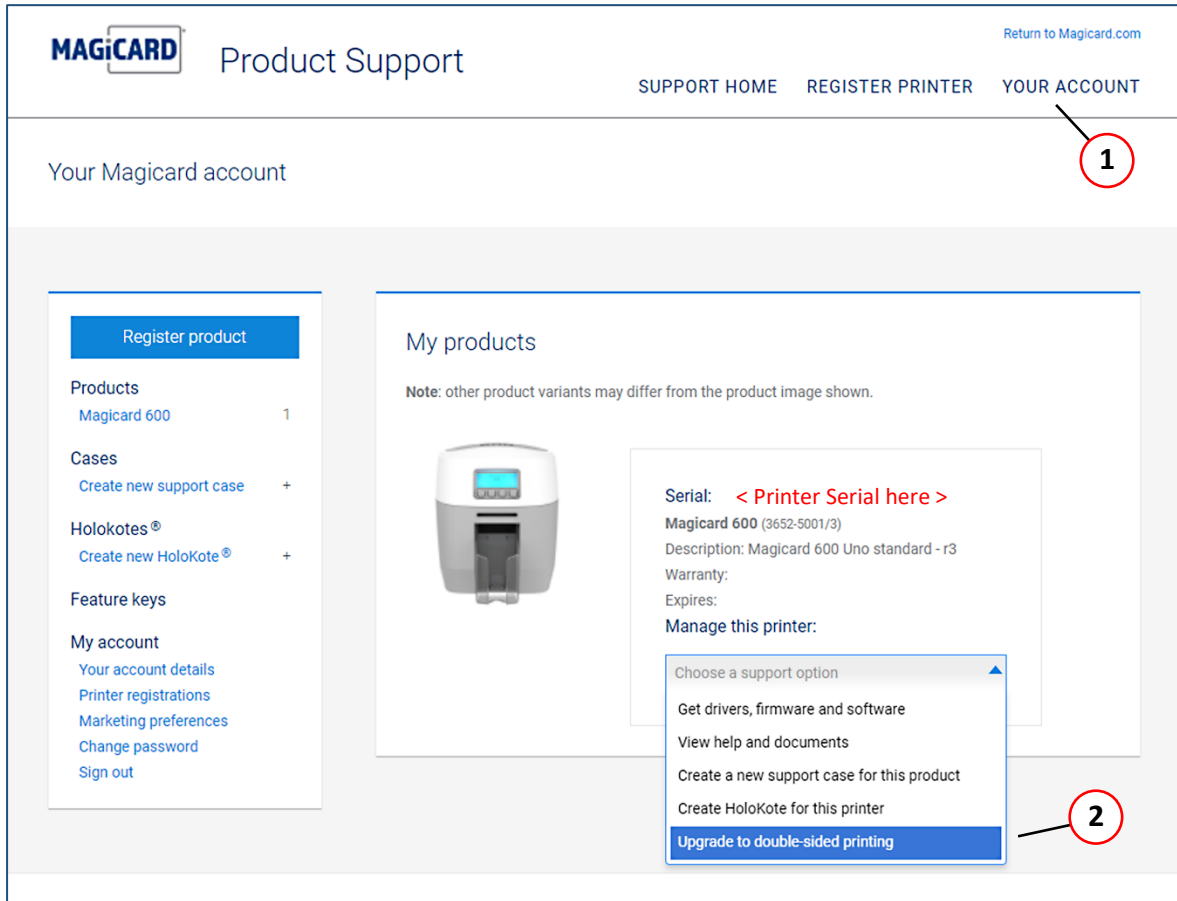
6. Select the **Use Static Network settings** option (4) (together with the other network settings applicable to the user's network).
7. Click the **OK** button. This will exit the setup windows and save the user's settings.  
Finally, connect the network (LAN) cable to the Ethernet port of the rear of the printer and then power-cycle the printer (remove the power supply connector and then refit. Allow the printer fully initialise).
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).

# 300 Card Printer – User Guide

## 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](http://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).

## 300 Card Printer – User Guide

**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

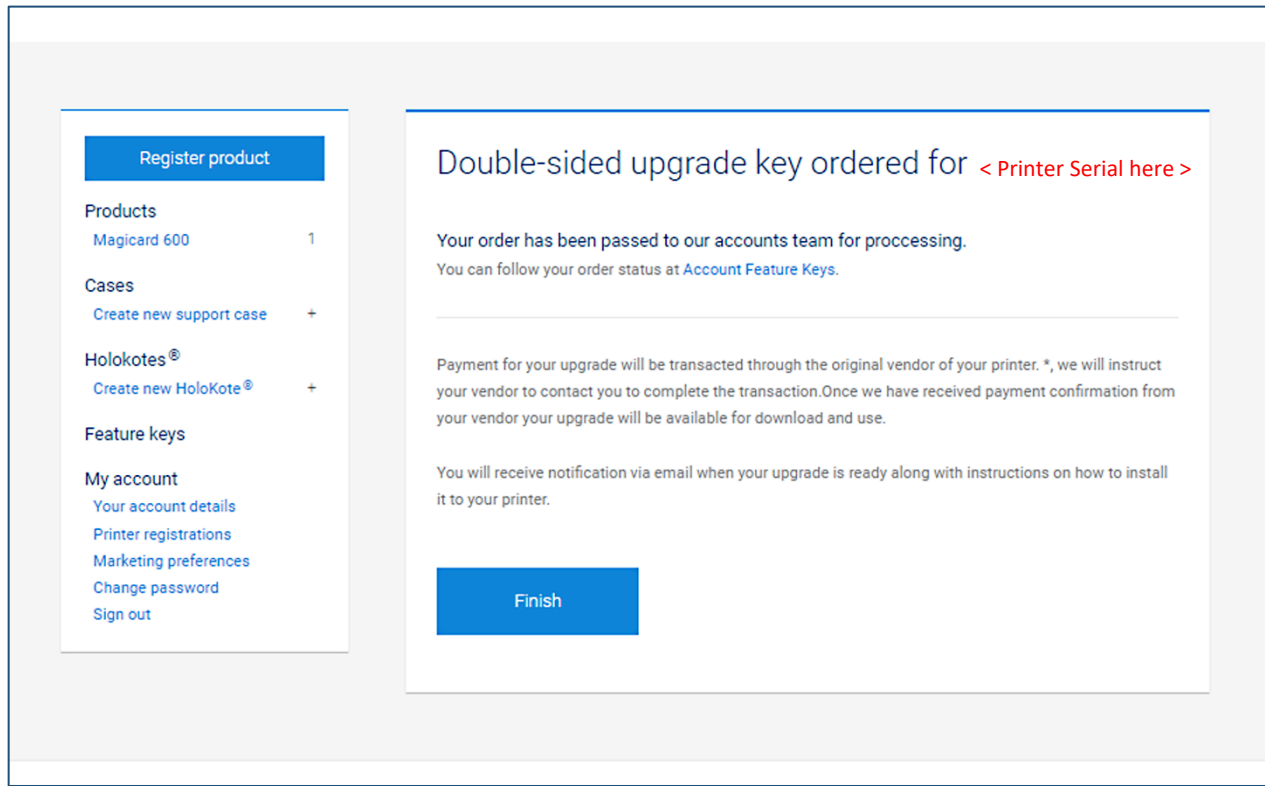
☒ I agree to the terms and conditions

**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.

## 300 Card Printer – User Guide



**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.

# 300 Card Printer – User Guide

## 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 four custom images on the 300 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

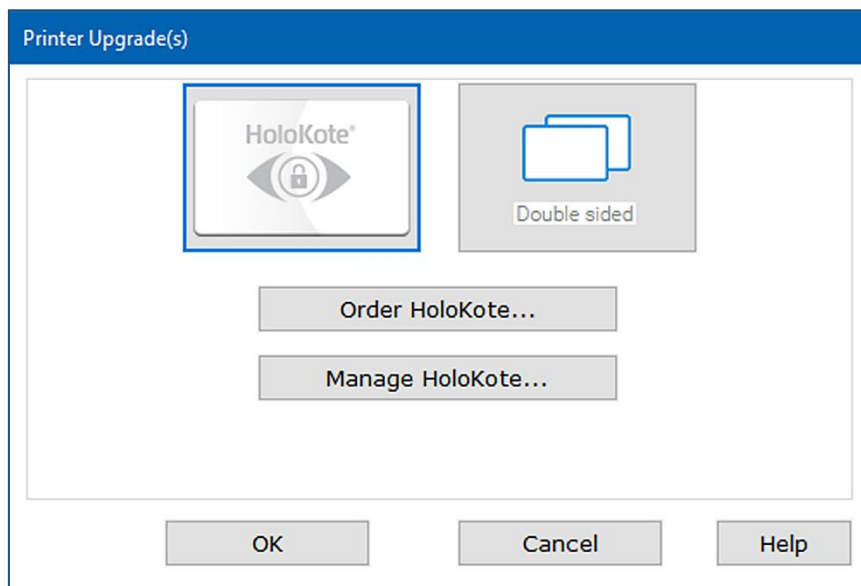
A custom HoloKote can be ordered from the driver **Printing Preferences / Printer Tab / Printer Upgrade(s)...** button. When the Printer upgrades button is selected, the user will see the option to order the Holokote.

#### Order Holokote...

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

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

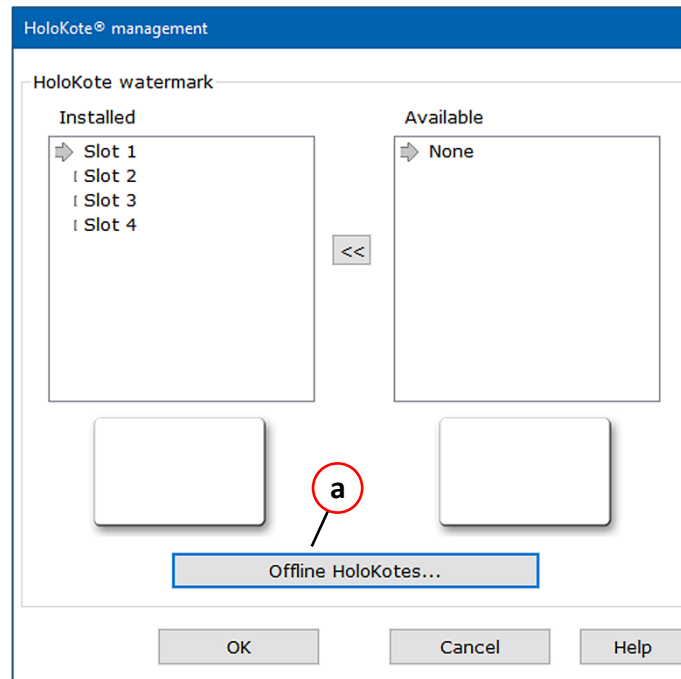
Once a Magicard Support Account is created and the printer Registered, the user will be able to order their custom Holokote via the online process built into the Support Account. Once the creation process is complete, Magicard will process the order and where applicable, payment will be taken via the 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).





## 300 Card Printer – User Guide

### 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 the computer's 'Browse' option.

The custom Holokote can then be allocated a slot in the left (**Installed**) pane 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).

## PRINTER MAINTENANCE

### Cleaning the Printer

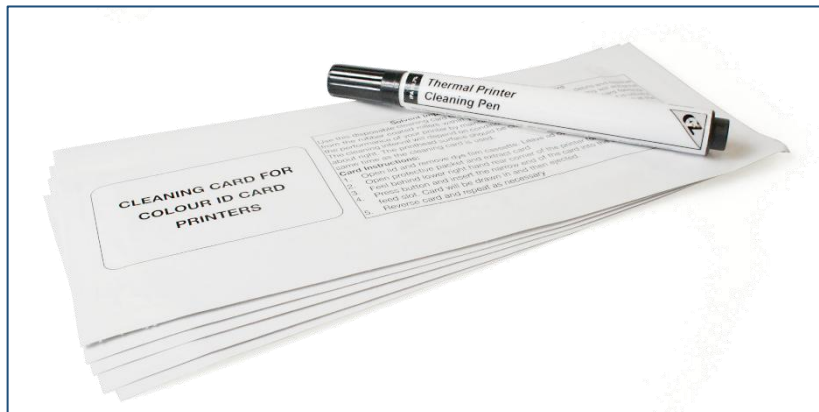
Your printer is designed to give many years of trouble-free service provided the printer is regularly cleaned and maintained.

Generally, it is recommended the printer is cleaned (using an approved cleaning kit) each time 700 cards are printed or whenever the printer's 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 printhead and cause permanent damage!)
- Increased reliability when magnetic encoding 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**

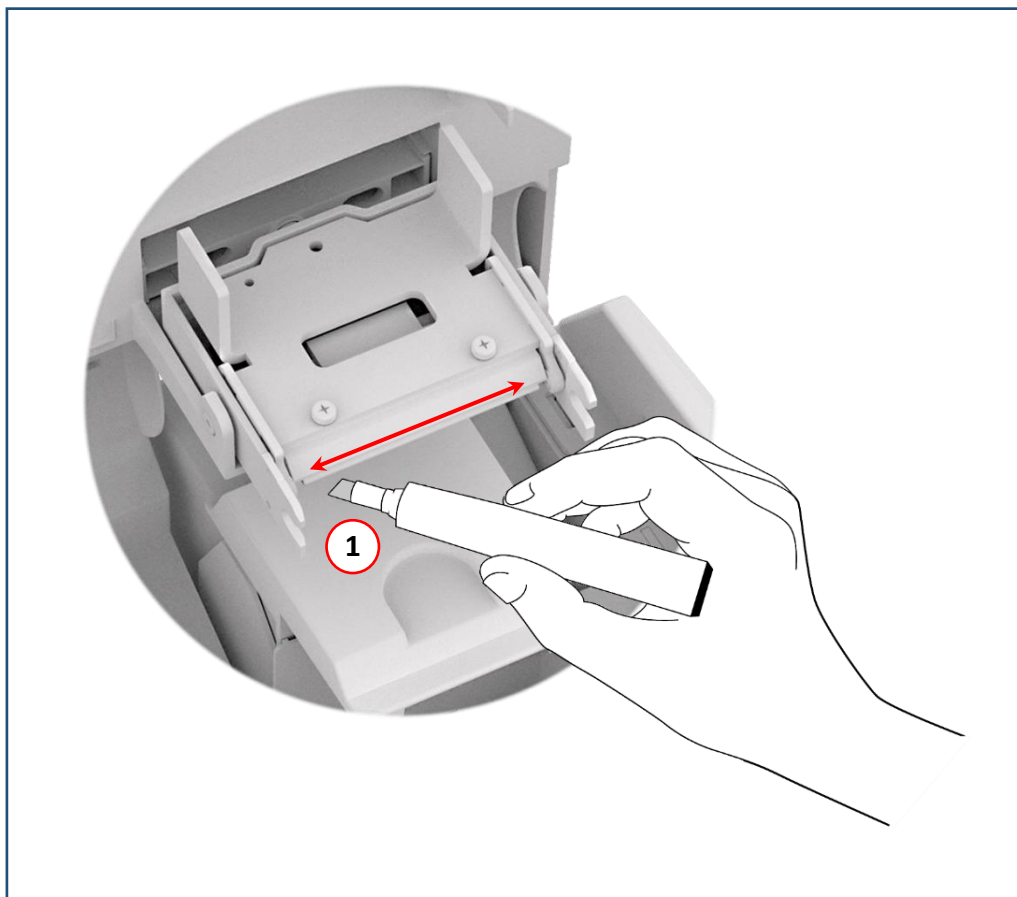
## 300 Card Printer – User Guide

### Using the Cleaning Pen

The cleaning pen supplied with the cleaning kit (Pt. 3633-0053) is used to clean the face of the printhead. The pen contains Isopropyl Alcohol (IPA) and is very effective at removing light contamination (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

## 300 Card Printer – User Guide

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.

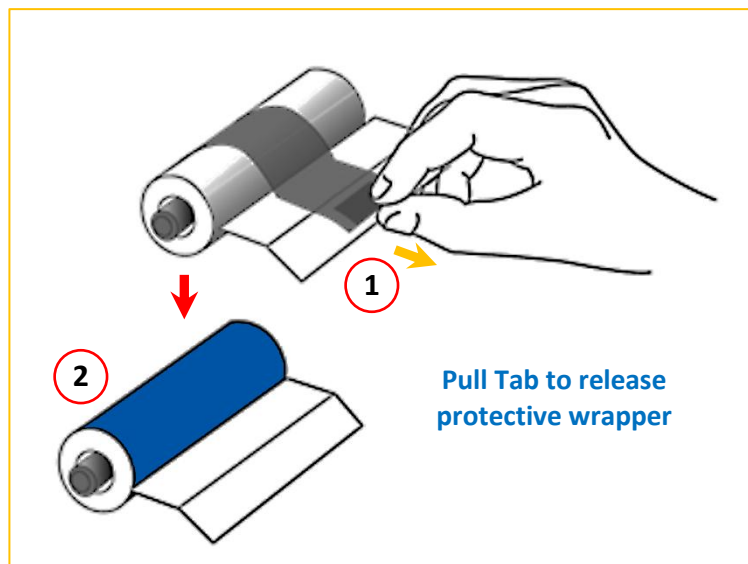
The purpose of the blue roller is to collect and retain the dust/debris collected from the orange roller (please see previously). The blue roller is then replaced as part of the printer cleaning process. (Please refer to the following page for replacing the blue roller). A new blue roller is supplied 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).

### 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 all 360 family printers.

# 300 Card Printer – User Guide

## 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.

## 300 Card Printer – User Guide

### 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.

## 300 Card Printer – User Guide

### 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.



## 300 Card Printer – User Guide

### 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.

## 300 Card Printer – User Guide

### 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.

## *300 Card Printer – User Guide*

### 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.

## 300 Card Printer – User Guide

### 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.

## 300 Card Printer – User Guide

### 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.

## *300 Card Printer – User Guide*

### 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.

## 300 Card Printer – User Guide

### 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

## 300 Card Printer – User Guide

### 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



## 300 Card Printer – User Guide

### 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.

## *300 Card Printer – User Guide*

### 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.

# 300 Card Printer – User Guide

## CE Declaration



## EU Declaration of Conformity (DoC)



Authorized Representative: Brady NV  
Postal address: Poldergotestraat 9  
Postcode: 9240  
City: Zele, Belgium  
Telephone number: +32 52 45 78 01  
Contact E-Mail address: regulatory\_compliance\_emea@bradycorp.com

We, Magicard Ltd. declare that the DoC is issued under our sole responsibility and belongs to the following products:

Product Names: Rio Pro 360, Magicard 600, Magicard 300, Magicard D, Magicard K, Magicard E+, Pronto 100, Pronto, Neo variants

Product Description: Card Printer, accessories and spare parts of.

### Objects of the declaration (identification of apparatus allowing traceability):

3652-3001x-xx/x	3652-3028x-xx/x	3652-6023x-xx/x	3652-5026x-xx/x	4500-0001x-xx/x
3652-3002x-xx/x	3652-3029x-xx/x	3652-6024x-xx/x		4500-0002x-xx/x
3652-3003x-xx/x	3652-3031x-xx/x	3652-6025x-xx/x	3300-0001x-xx/x	4500-0003x-xx/x
3652-3004x-xx/x	3652-3032x-xx/x	3652-6026x-xx/x	3300-0002x-xx/x	4500-0004x-xx/x
3652-3005x-xx/x	3652-3033x-xx/x		3300-0003x-xx/x	4500-0021x-xx/x
3652-3008x-xx/x	3652-3034x-xx/x	3652-5001x-xx/x	3300-0004x-xx/x	4500-0022x-xx/x
3652-3009x-xx/x	3652-3035x-xx/x	3652-5002x-xx/x	3300-0005x-xx/x	4500-0023x-xx/x
3652-3011x-xx/x		3652-5003x-xx/x	3300-0006x-xx/x	4500-0024x-xx/x
3652-3012x-xx/x	3652-6001x-xx/x	3652-5004x-xx/x	3300-0021x-xx/x	4500-0028x-xx/x
3652-3013x-xx/x	3652-6002x-xx/x	3652-5005x-xx/x	3300-0022x-xx/x	4500-0029x-xx/x
3652-3014x-xx/x	3652-6003x-xx/x	3652-5006x-xx/x	3300-0023x-xx/x	
3652-3015x-xx/x	3652-6004x-xx/x	3652-5021x-xx/x	3300-0024x-xx/x	3100-0001x-xx/x
3652-3021x-xx/x	3652-6005x-xx/x	3652-5022x-xx/x	3300-0025x-xx/x	3100-6001x-xx/x
3652-3022x-xx/x	3652-6006x-xx/x	3652-5023x-xx/x	3300-0026x-xx/x	
3652-3023x-xx/x	3652-6021x-xx/x	3652-5024x-xx/x		3649-0001x-xx/x
3652-3024x-xx/x	3652-6022x-xx/x	3652-5025x-xx/x		

Where x-xx/x refers to optional "white label" variants (cosmetic / branding differences only)

The objects of the declaration described above are in conformity with the relevant Union harmonisation legislation:

Radio Equipment Directive 2014/53/EU

Directive on the Restriction of the use of certain Hazardous Substances (RoHS) 2011/65/EU

The following harmonised standards and technical specifications have been applied:

### Title and Date of standard/specification:

EN 62368-1:2014/AC:2015 Audio/video, information and communication technology equipment

- Part 1: Safety requirements (IEC 62368-1:2014, modified)

EN 62311:2020 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields.

EN 55032:2015 Electromagnetic compatibility of multimedia equipment - Emission Requirements + A11:2020

EN 55035:2017 Electromagnetic compatibility of multimedia equipment - Immunity requirements

EN 63000:2018 – Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

ETSI EN 301-489-3:V2.3.2 - SRD Operating on frequencies between 8kHz and 246 GHz.

Notified body (where applicable):

Not applicable

4 digit notified body number:

...

Reference number of the certificate of notified body: n/a

Additional information:

Signed for and on behalf of Magicard Ltd:

Weymouth, United Kingdom

09/12/2024

Steve Lawton, Engineering Manager

Place of issue

Date of issue

Name

function

signature:

Document No. EXT-10129, Issue 9.00

# 300 Card Printer – User Guide

## United States

### FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at his own expense.

In instances where interference is experienced, the following measures are recommended to assist in mitigation:

- Reorient or reposition the equipment relative to the interference.
- Increase the separation distance between the equipment and the interference.
- Connect equipment to a separate power circuit than the interference if applicable.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and, (2) this device must accept any interference received, including interference that may cause undesired operation.

**RF exposure guidelines / Important note:** This equipment complies with FCC SAR exemption limits set forth for an uncontrolled environment when properly used as instructed.

**RF exposure statement:** The radiated output power of this device meets the limits of FCC/ISED Canada radio frequency exposure limits. This device is not intended to be nor shall it be worn on a person's body. This device should be operated with a minimum separation distance of 20 cm (8 inches) between the equipment and a person's body.

### Canada

#### ***Innovation, Science and Economic Development (ISED)***

CAN ICES-3 (A)/NMB-3(A)

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSSs. Operation is subject to the following two conditions:

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

**RF Exposure Guidelines/Important Notes:** This equipment complies with the limits of exposure to ISED radiation defined in the RSS-102 standard established for an environment uncontrolled when properly used according to instructions.

**RF exposure statement:** The radiated output power of this device meets the limits of FCC/ISED Canada radio frequency exposure limits. This device should be operated with a minimum separation distance of 20 cm (8 inches) between the equipment and a person's body.

Le présent appareil est conforme aux CNR Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage;
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**Directives sur l'exposition RF/ remarques importantes:** cet équipement est conforme aux limites d'exposition aux rayonnements ISED définies dans la norme RSS-102 établies pour un environnement non contrôlé lorsqu'il est correctement utilisé selon les instructions.

**L'exposition à l'énergie radiofréquence:** La puissance de sortie rayonné de cet appareil est conforme aux limites de la FCC/ISDE Canada limites d'exposition aux fréquences radio. Cet appareil n'est pas destiné à être porté sur le corps d'une personne, et ne doit pas l'être. Cet appareil doit être utilisé avec une distance minimale de séparation de 20 cm entre l'appareil et le corps d'une personne.

## *300 Card Printer – User Guide*

### **FCC SDOC:**

**Supplier's Declaration of Conformity  
47 CFR § 2.1077 Compliance Information**

**Unique Identifier:**     **Magocard 600, 3652-5001x-xx/x, 3652-5002 x-xx/x, 3652-5021x-xx/x & 3652-5022x-xx/x**  
**(where “x-xx/x” refers to optional “white label” variants (cosmetic / branding differences only))**

**Responsible Party: Magocard Inc.**

**12919 – NE 126<sup>th</sup> Place,  
Suite B244,  
Kirkland,  
WA,  
98034,  
USA**

**FCC Compliance Statement**

**This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.**

NOTE: This product is not marketed for use in a residential environment.