

ID CARD PRINTER

User Manual



ID Card Printer – User Manual

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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. In the event of malfunction, refer servicing to your printer's 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.

Ensure that the power supply cord is no longer than 2 metres in length and includes a properly grounded connection.

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.

When handling the printer avoid touching the thermal printing edge of the thermal print head. Any grease and contamination will shorten its life.

Before transporting the printer, remove the dye film & card hoppers and pack the printer in its original packaging.

FCC DECLARATION:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced Radio/TV technician for help.

CAUTION:

Unapproved changes or modifications could void the Users authority to operate the equipment and affect any related warranty claim.

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CCC DECLARATION:

PRINTER INSTALLATION

Welcome

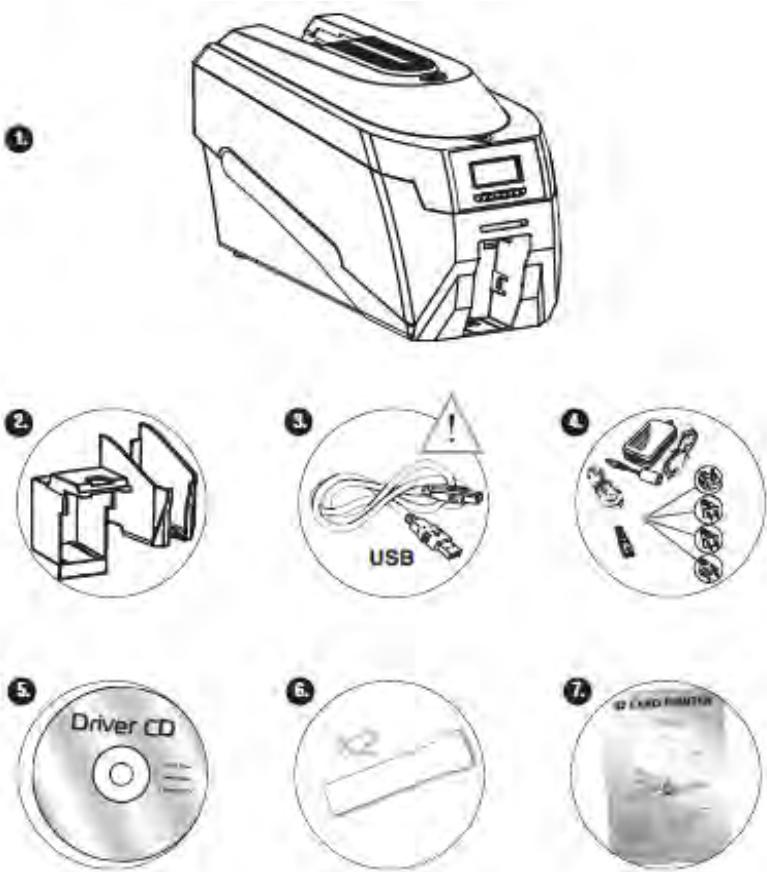
Thank you for choosing this ID Card Printer.

Before setting up your printer using the Driver CD-ROM, please follow the simple steps in this guide on installing your printer. This guide helps you make your printing experience more enjoyable and secure.

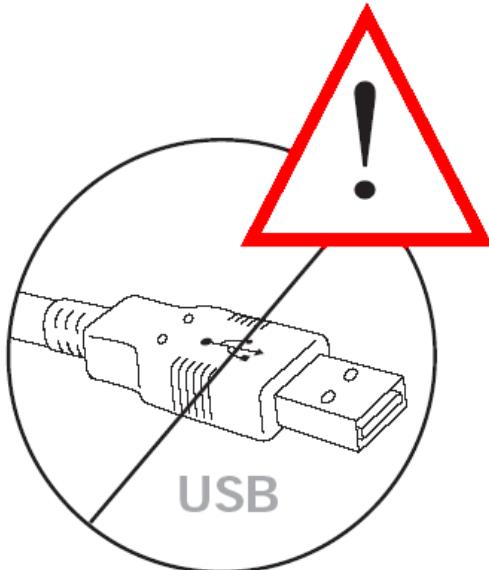
Unpacking

Please ensure you have all the items listed before you start installation.

1. ID Card Printer
2. Hopper and Stacker
3. USB Cable (2m)
4. Power Adaptor & Leads
5. Driver CD-ROM
6. Cleaning Cards (2 T-cards)
7. Quick Start Guide



IMPORTANT – Do not connect the USB yet

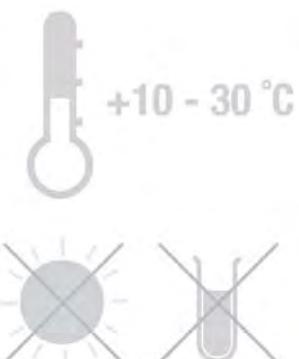


It is important to install the printer's Driver CDROM first, before connecting the USB cable between your PC and ID Card Printer.

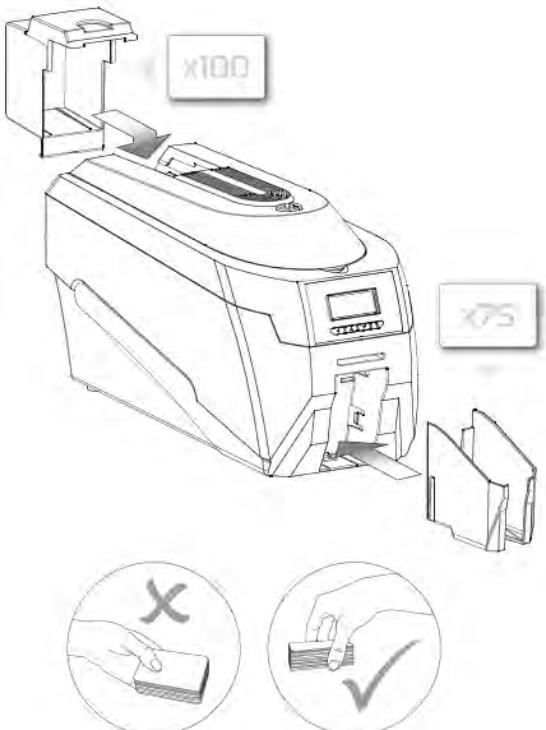
Printer location requirements:

Normal office environment with:

- A properly grounded power supply
- Ambient temperature +10 to 30°C (50 to 86°F)
- Protection from direct sunlight and chemicals
- Protection from abrupt temperature changes
- Relative humidity 20 - 70%
- Sufficient space for:
 - opening the top cover
 - cable access at the rear



Hopper & Stacker



HOPPER: Insert the hopper into the aperture at the back of the printer and click into place.

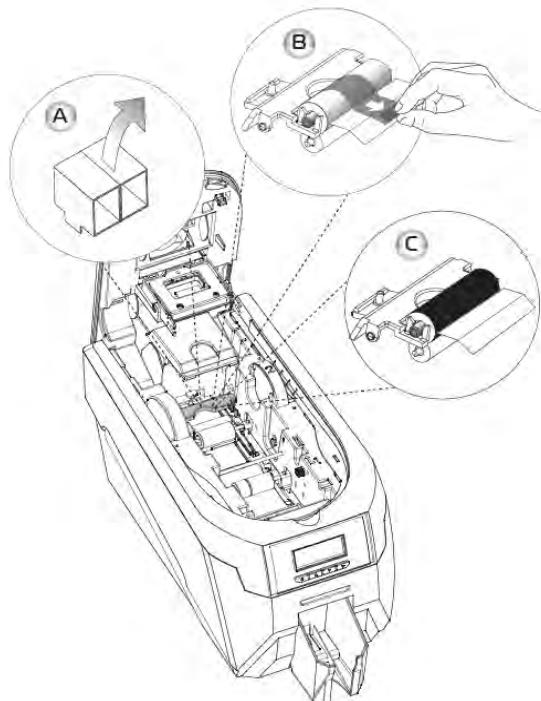
Always fan the cards to ensure the cards are not sticking together before inserting into the hopper, and handle the cards carefully to keep the surfaces clean, as finger marks can affect the print quality

STACKER: Insert the stacker into the aperture in the front panel and click into place. The stacker can hold up to 75, 20mil to 40mil (0.51mm to 1.02mm) thick cards. The printer can be operated without the stacker.

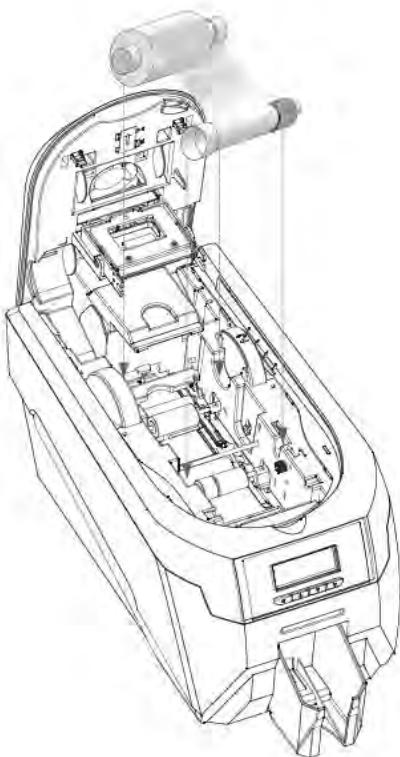
Prepare the cleaning roller

Open printer, then:

- A. Pull out the unused cleaning roller.
- B. Peel off white protective layer carefully to reveal tacky surface.
- C. Place cleaning roller back into printer.



Install the dye film



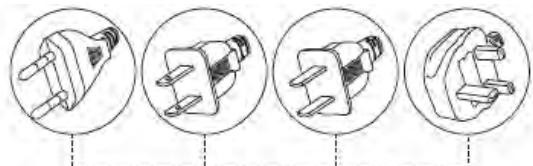
- Remove the dye film from its packaging.
- Place the loaded spool into the rear slots and the take-up spool into the front slots.
- Close the printer's Lid.

Connect the power supply

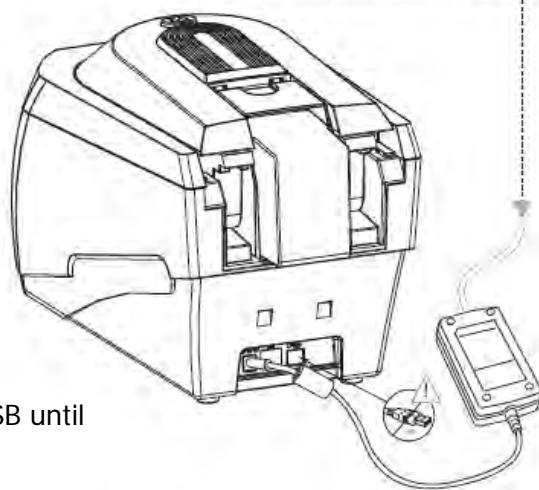
Select the connector for your region and connect to Power Supply unit.

Plug in and connect to printer which will automatically switch on.

Display should show the model and "Soft" button options.



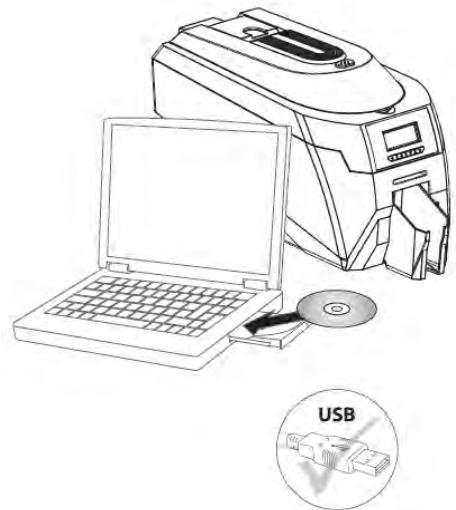
IMPORTANT: Please do not connect the USB until the CDROM has been installed.



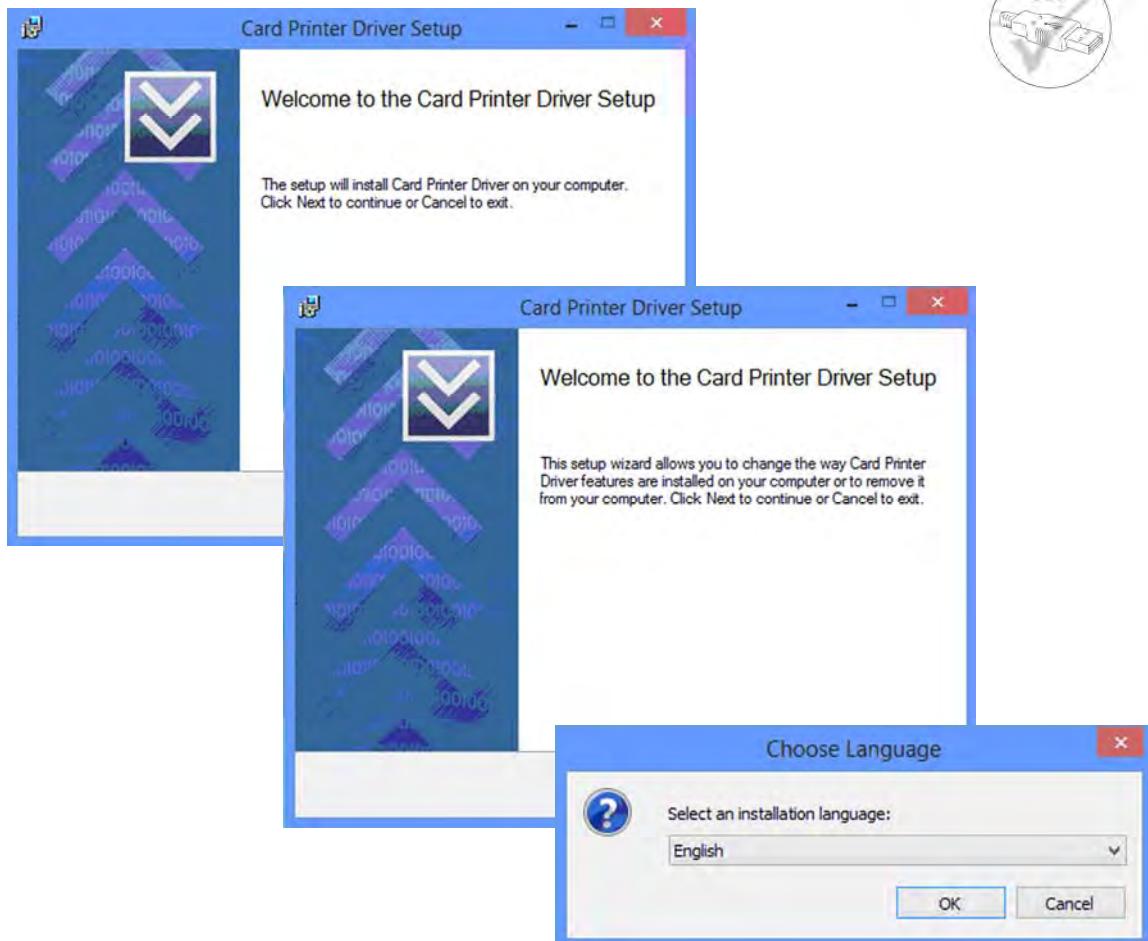
Load the Driver CD in to your PC

- 1.** Load the driver CD ROM into the PC.

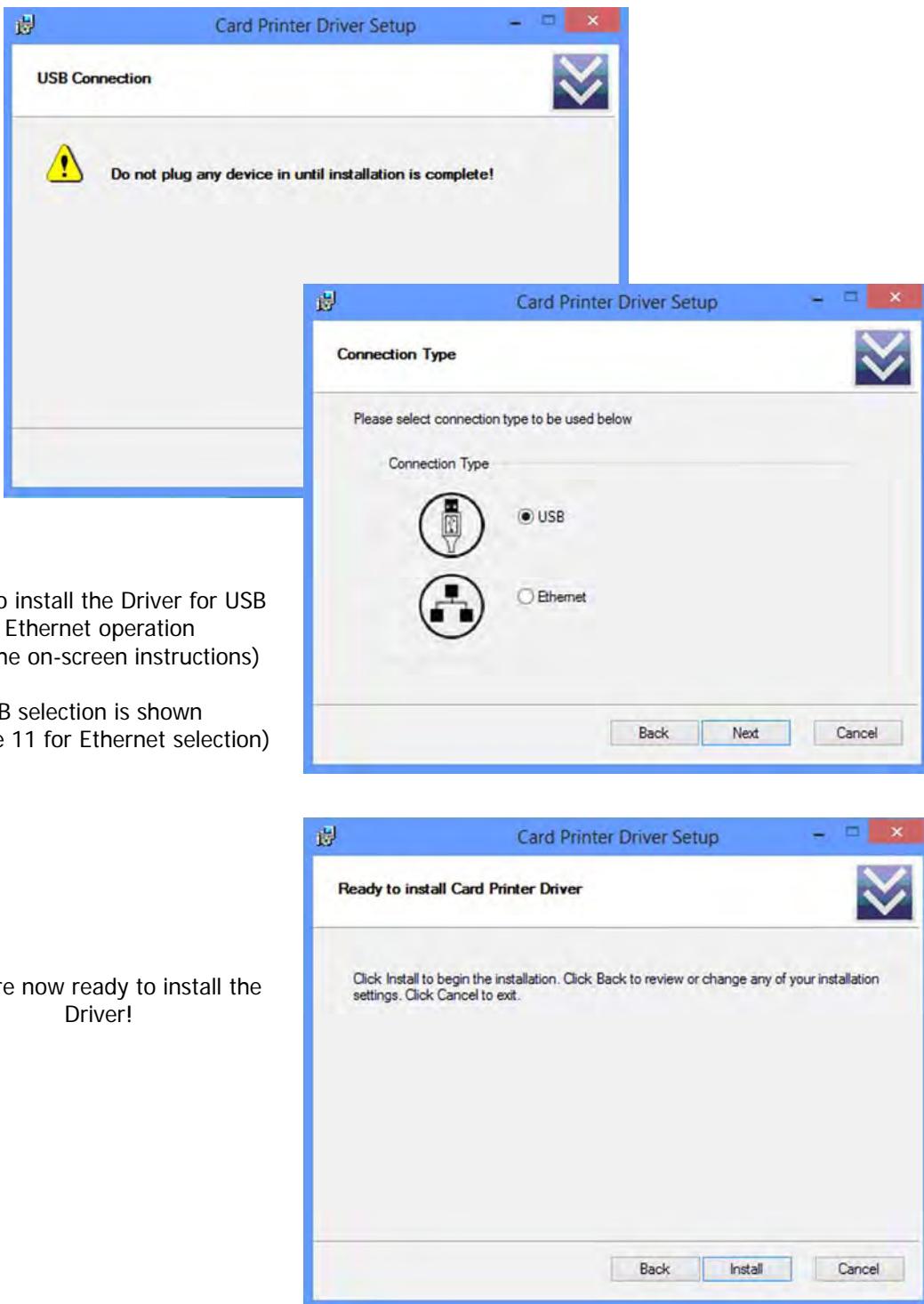
Note: If the CD does not run automatically, click the start button, then click on "run". Type "D:\autorun", where D is the drive letter for your CD drive, then press the return key.



- 2.** Now follow the on screen instructions to install the printer Driver (please see below):



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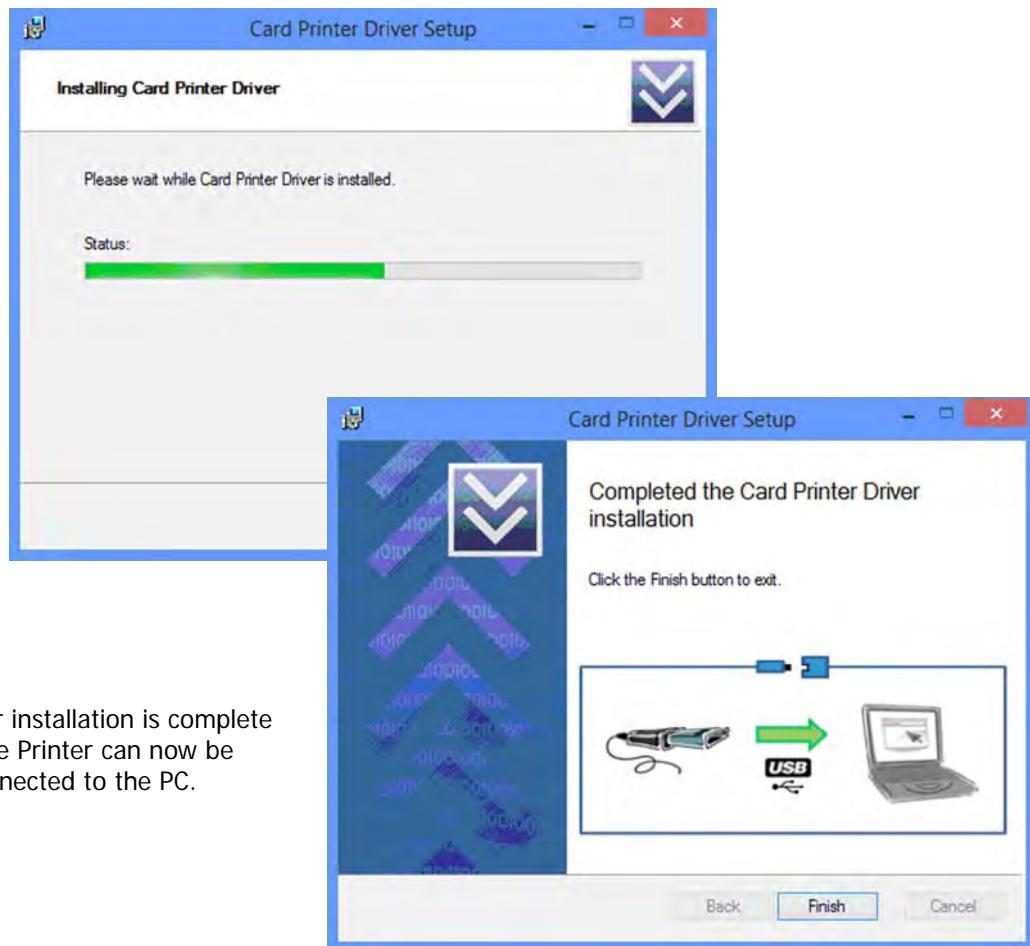


Choose to install the Driver for USB
or Ethernet operation
(follow the on-screen instructions)

USB selection is shown
(See Page 11 for Ethernet selection)

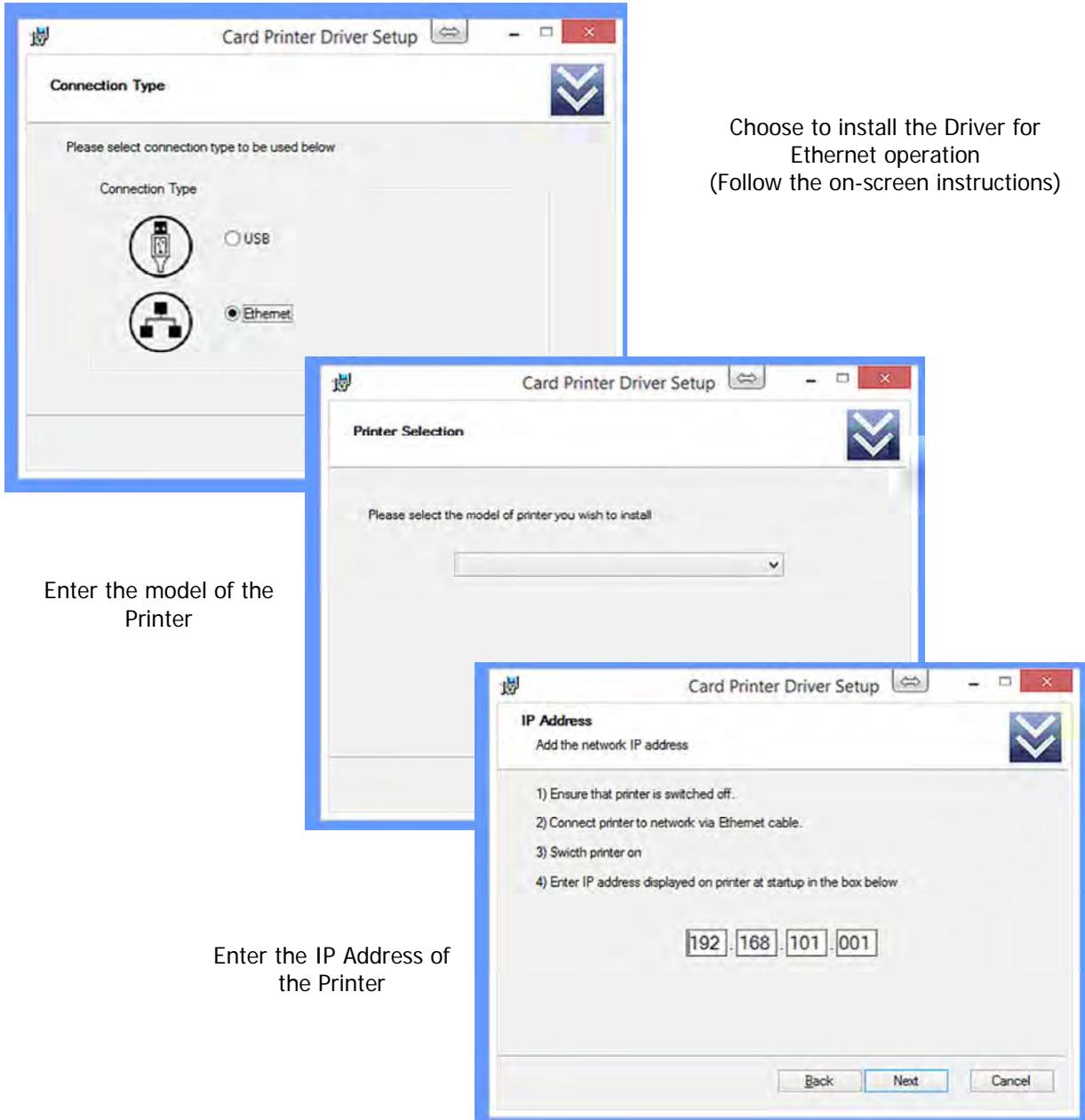
You are now ready to install the
Driver!

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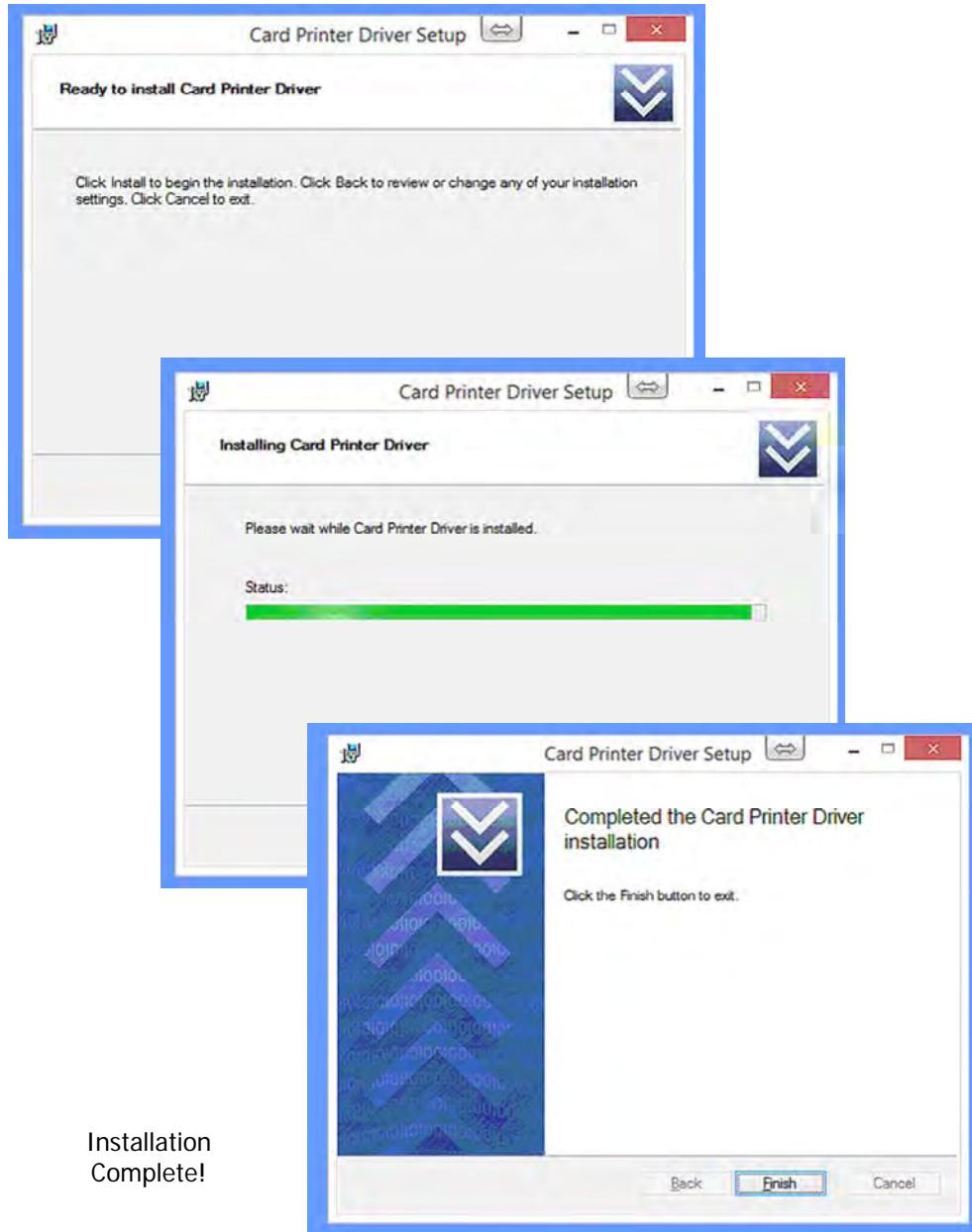
The Driver installation is complete
and the Printer can now be
connected to the PC.

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NOTE: The Rio Pro 360 is designed to retrieve a "Dynamic" IP Address.
"Static" mode and IP Address configuration can be updated using the
ID Printer Support Utility.

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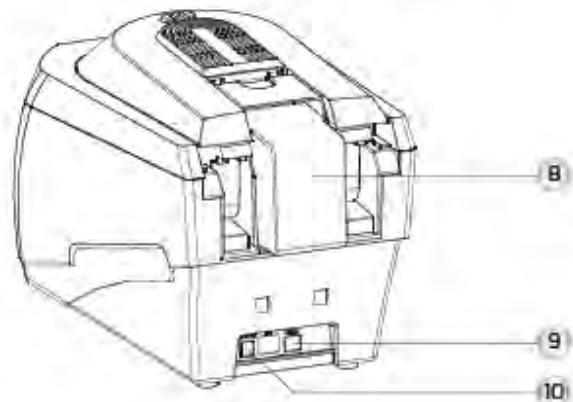
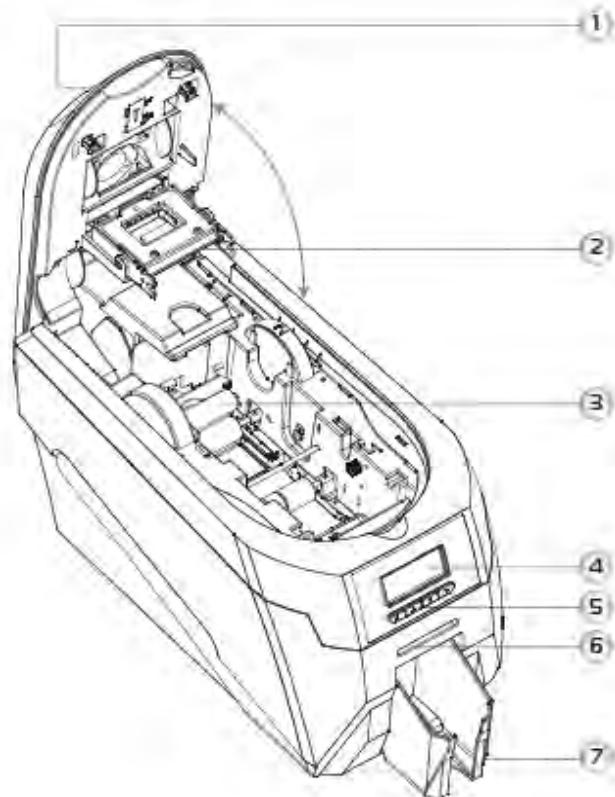


NOTE: You may now need to restart your PC.

USING YOUR ID CARD PRINTER

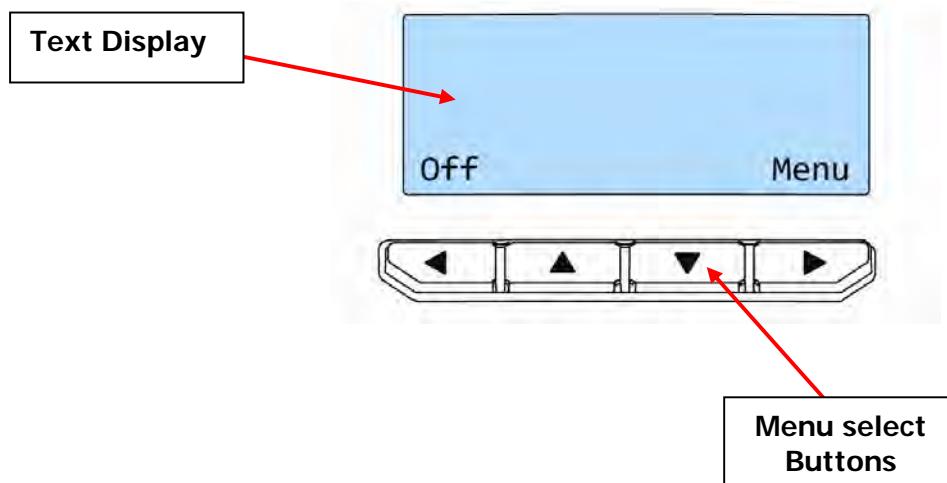
Printer parts

1. Lid opening latch
2. Thermal print head
3. Card cleaning roller
4. LCD display screen
5. Soft function buttons
6. Hand feed/cleaning card en
7. 75 card capacity stacker
8. 100 card capacity hopper
9. USB port
10. DC power input



Front display panel

The front display panel has a text display and 4 push buttons. These buttons act as 'soft' buttons – i.e. their function varies depending on the text displayed immediately above each button.

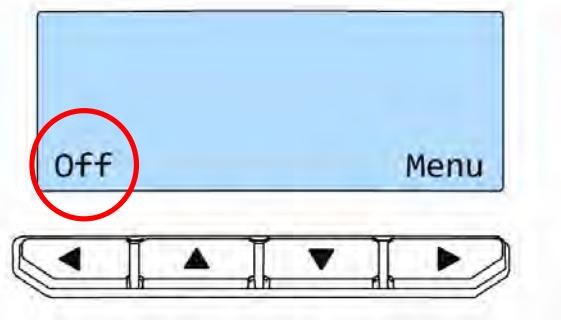


The menu options for the soft buttons are explained in the following pages...

Off button

Switches the printer **OFF**.

To switch the printer back **ON** again - press **any button**.



Menu options

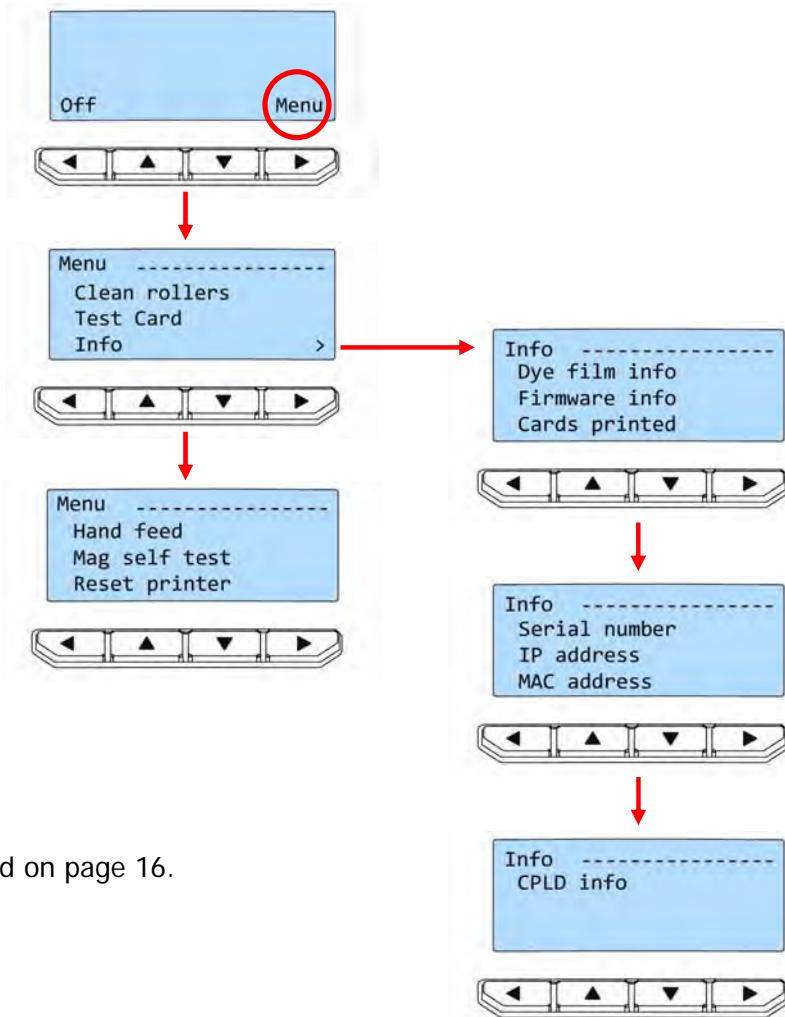
Press the “Menu” button...

The first menu option will be displayed.

Press the “>” button (where indicated) to step through each option in the menu...

The following menu options will be displayed:

- 1 of 6 – Clean rollers**
- 2 of 6 – Test card**
- 3 of 6 – Info**
- 4 of 6 – Hand feed**
- 5 of 6 – Mag self test**
- 6 of 6 – Reset printer**



Options 1 to 6 are explained on page 16.



Clean rollers -

IMPORTANT: To prevent the cards slipping on the rollers during printing, we recommend that you clean your printer using a cleaning card **each time you replace the dye-film**.

For detailed instructions on how to clean your printer please turn to pages 21 to 24.

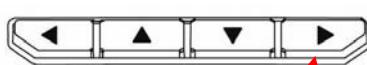
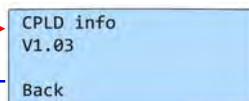
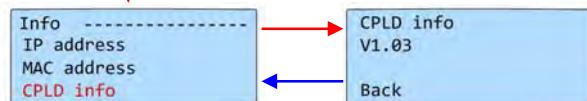
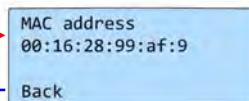
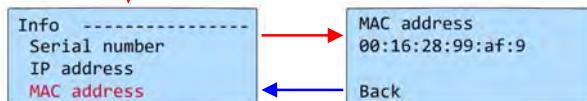
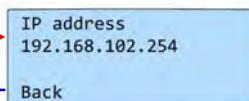
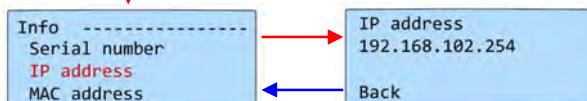
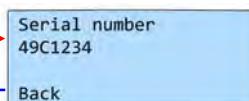
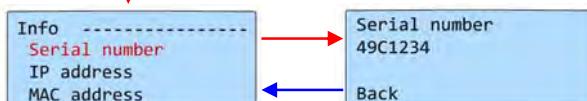
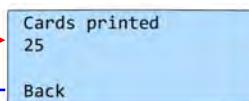
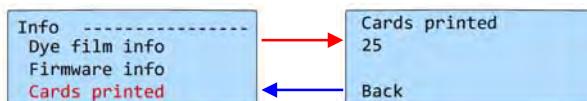
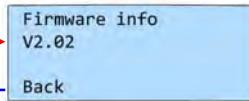
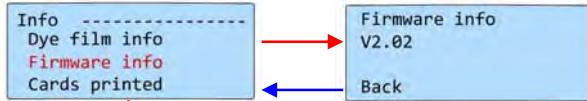
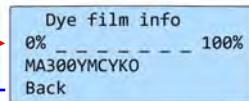
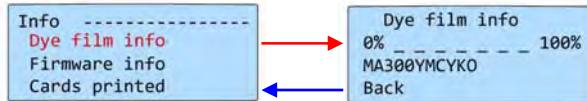
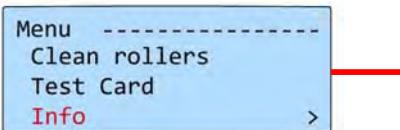


Test card -

Having selected this option, you will be asked to confirm that you wish to print a test card.

If you select “**Yes**”, the printer will feed a card from the hopper and print an internally generated test image on it.

Info... - this option provides you with information about the printer:-



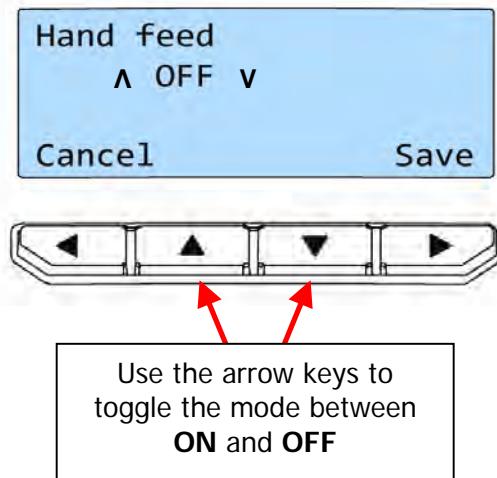
Step through each option using the right-most “arrow” button.

Use the “Back” button to return to a previous menu

Hand feed -

This feature enables you to select whether cards should be fed into the printer from the Card hopper (at the rear of the printer), or by hand (one-at-a-time) from the front of the printer. There are 2 settings:-

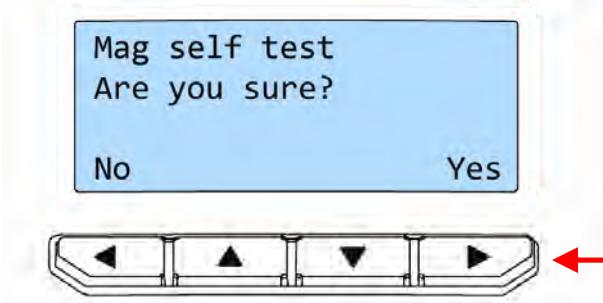
- **OFF** - This is the default setting. Cards will be fed automatically from the card hopper.
- **ON** - At the start of each print the printer will request you to feed a card through the card feed slot in the front of the printer.
Note: Cards will not be fed from the card hopper.



When **Hand Feed** mode is set to "**ON**" the printer will prompt you when it is time to place a card through the card feed slot in the front of the printer.

Once the desired mode is selected, press the "**Save**" button

Mag self test -



Mag self test – select “**Yes**” on this option if you wish to verify the magnetic operation of the printer.

You will be asked to confirm that you wish to encode and print a test card.

If you select “**Yes**”, the printer will feed a card from the hopper, encode the magnetic stripe and print an internally generated test image on it.

NOTE: if your printer does NOT have a magnetic encoder fitted, it will be unable to conduct this test, and will instead display the message:- “**Mag not fitted!**”

Reset printer -

Reset printer will force the printer to re-initialise (the same effect would be seen if the printer’s DC Power cable were removed and re-fitted).

CHOOSING THE RIGHT DYE-FILM RIBBON

Note:

- 300YMCKO dye-film is generally the appropriate choice for colour printing with both single-sided and double-sided (duplex) printers.
- 250YMCKOK dye-film, for duplex models only, is more economic when printing in colour on the front side and black on the rear.
- 1000K & 600KO dye-film – where cost is critical, monochrome printing is a fraction of the cost of colour printing.

The table below is a guide to selecting the best dye-film to use for any intended application.

ID Card Printer type	Type of images you want to print	Cards per ribbon	Ribbon Panel Layout *	Part Number ** = 2 digit supplier code
Single-sided & Duplex	Colour (1 side only)	300 (printing on 1 side only)	YMCKO	**300YMCKO
Single-sided	Monochrome: Black Red Blue Green Gold Silver White Scratch	1000 (printing on 1 side only)	K	**1000K-n (n = colour)
Single-sided	Black + Overcoat	600 (printing on 1 side only)	KO	**600KO
Duplex	Colour front & Black back	250 (printing on 2 sides)	YMCKOK	**250YMCKOK
Duplex	Colour front & colour back	150 (printing on 2 sides)	YMCKO	**300YMCKO

* Ribbon Panel Layout Key: Y=yellow, M=magenta, C=cyan, K=resin, O=overcoat (No Colour)

CHOOSING THE RIGHT CARDS

Card material

Not all white plastic cards are the same. For best image quality always use high quality video grade PVC cards.

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 dealer should provide the appropriate type for direct to card printing.

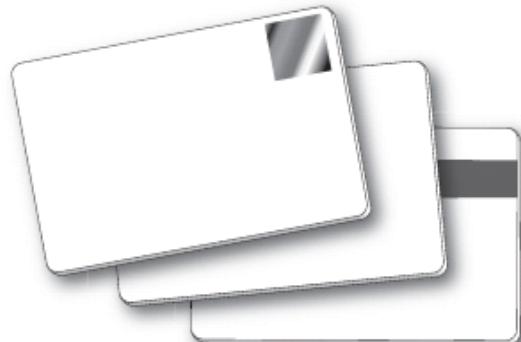
For good consistent results, stick to a single variety of good quality cards, such as those available from your ID Card Printer's supplier.

Card size

- CR80 (Standard) = 3.375" x 2.125" (86.5 mm wide x 53.98mm high).
- CR79 = 3.03" x 2.051" (83.90 mm wide x 51.0 mm high).

Card thickness

- Minimum - 0.015" (0.38mm).
- Standard - 0.030" (0.76mm).
- Maximum - 0.063" (1.60mm).



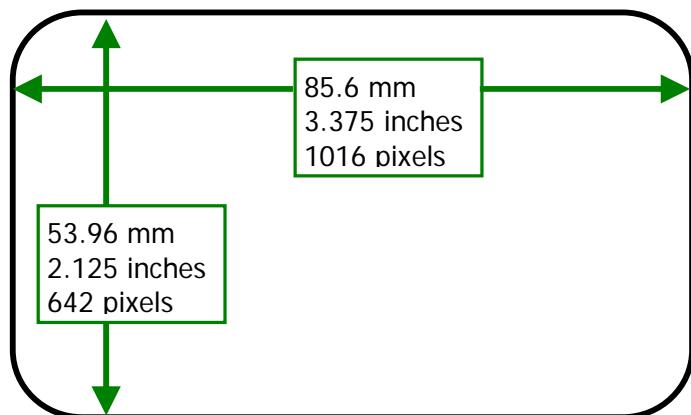
To obtain good quality prints the card must be:

- Glossy white.
- Free from dirt and grease.
- Free from surface contamination.
- Free from pits and bumps in the surface.
- Free from burrs at the edge of the card.
- Completely flat.

Printable area of the card

This ID Card Printer offers high quality edge to edge (full bleed) printing.

Dye cut PVC cards typically have an edge roll off (bevel) which can result in a fine white line around the edge of full bleed printed cards.



When setting up your card design using your graphics software on your PC, you should use a maximum page size of 1016 pixels (3.45"/87.5mm) x 642 pixels (2.13"/54mm).

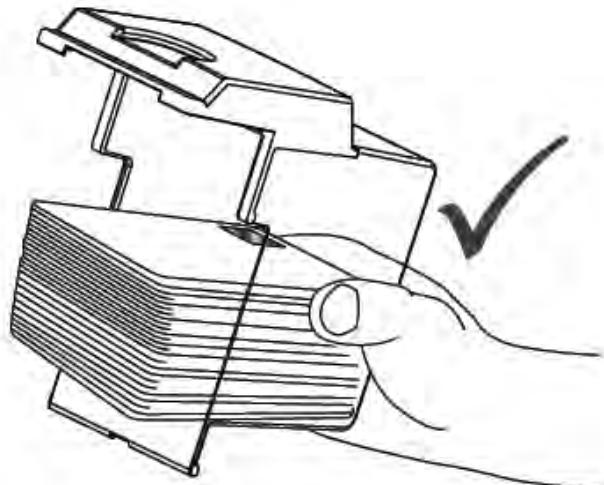
Using Magnetic stripe cards

If you have a printer fitted with the optional magnetic encoding module, you can simultaneously print and encode the magnetic stripe on the rear of a magnetic stripe card.

The magnetic encoding module can encode HiCo and LoCo type magnetic stripe cards



When loading magnetic stripe cards, make sure the stripe is on the left and underneath when viewing from the front of the printer.



Refer to your PC Badge printing application for instructions on how to print and encode a magnetic stripe card.

Using self-adhesive cards

We recommend **only** self adhesive cards supplied by Magicard via your ID Card Printer supplier.

There are many different types of self-adhesive cards. Thorough investigation and testing has shown that poorer quality or incorrect card types will cause problems in the printer. These problems range from poor image quality; failure to feed from the card hopper; dye-film being cut and cards getting jammed in the roller mechanism.

THE PRINTER DRIVER SETTINGS

To access the printer driver settings in **Windows 2000 and XP**:



1. On the PC, go to “**Start**” then “**Printers and Faxes**”



1. **Right mouse click** on the ID Card Printer’s driver and select the “**Printing Preferences...**” option.

To access the printer driver settings in **Windows Vista/Windows 7 and 8**:



1. On the PC, go to the Windows logo then “**Control Panel**”



2. Select “**Printers**”

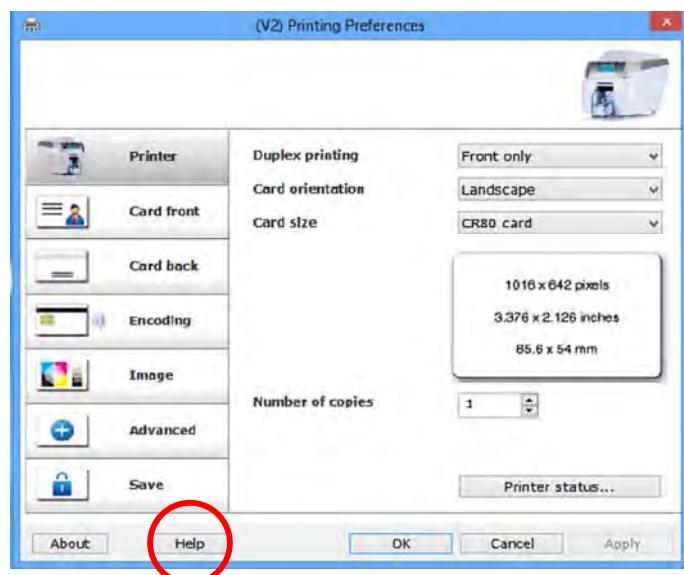


3. **Right mouse click** on the ID Card Printer’s driver and select the “**Printing Preferences...**” option.

Understanding each individual driver setting :

The printer Driver contains a built-in help file (in HTML format) – this file gives an excellent, clear explanation of each driver setting.

To view the Driver’s help file, go to the printer preferences (as described above), and click on the “Help” button.



CARING FOR YOUR PRINTER



CLEANING IS IMPORTANT !!!

- Printer care is an important factor of your printer's good operation and longevity.
- Maintaining a regular cleaning routine will give you optimum print quality and prevent down time.
- We recommend that you clean the rollers and print head each time you fit a new roll of dye film.

CLEANING IS EASY AND INEXPENSIVE

If you have not already done so, **order a cleaning kit** - see the 'Cleaning Supplies' box on the next page.

- A clean printer produces better quality cards, as dust and dirt are not present when the card is being printed.
- A clean printer is much less likely to require factory maintenance, and the print head in your printer will last for many years of normal use. Remember, particles of dirt can damage the printhead.
- A clean printer produces better quality magnetic encoding.

THE CLEANING 'SYSTEM'

There are three main parts to your printer's cleaning system:

1. Clean the rollers using the Cleaning Cards:

You use a Cleaning Card to remove dirt from the print path. This should be used each time you replace your dye-film (every 250 to 300 prints). If you print only a few cards a day, we recommend that you clean the printer more often.



2. Clean your PVC cards using the Cleaning Roller:

There is a disposable Cleaning Roller fitted inside the printer to remove dust & debris from the surfaces of the PVC cards.

This will prolong the life of the printhead and will help maintain image quality. It should be replaced every time you replace your dye-film. A replacement Cleaning Roller is supplied free with every new roll of dye-film.

3. Clean the printhead using the Cleaning Pen:

There is also a Cleaning Pen, which is used to clean the printhead. We recommend you use this if any lines are seen on printed cards.

To clean your printer, follow the three main steps on next page.

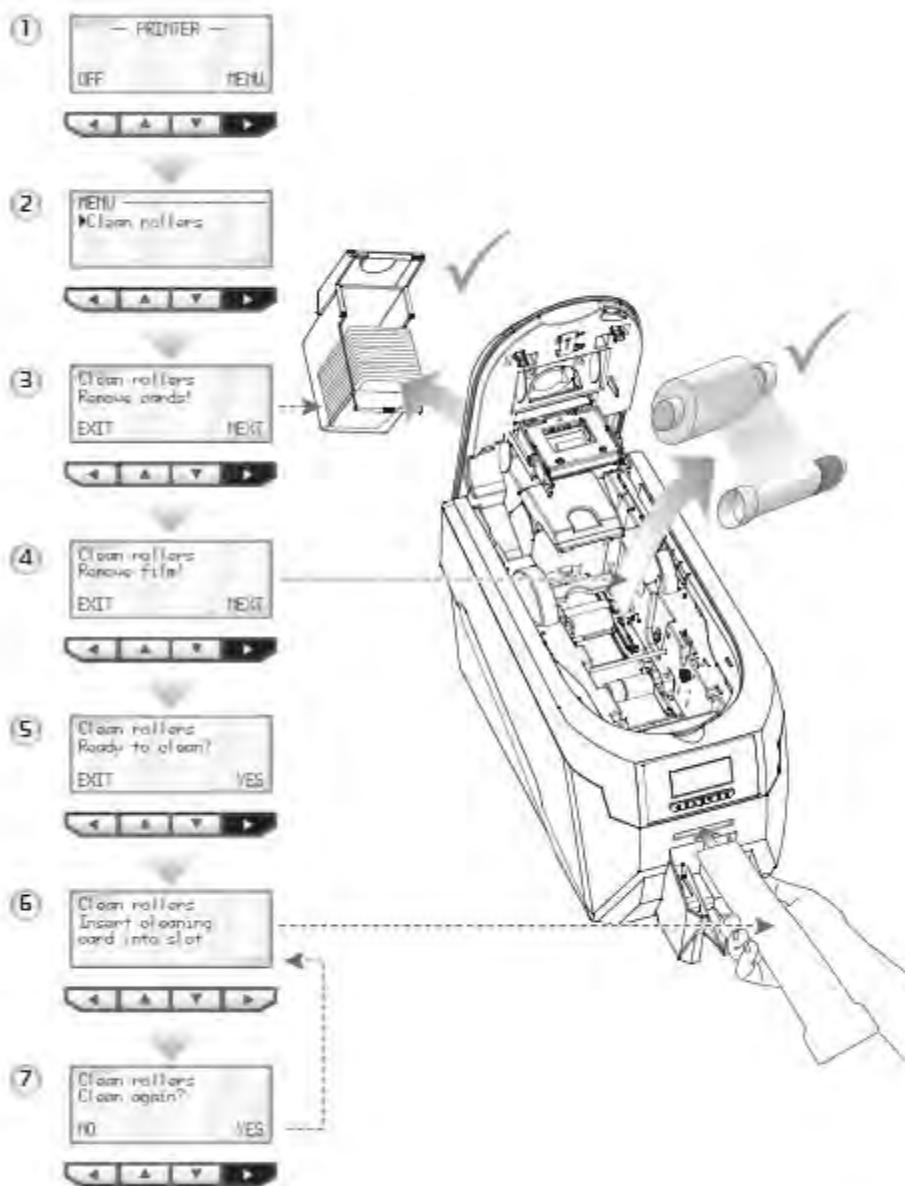
Cleaning supplies

Two cleaning cards and a cleaning roller (sleeve & bar) are bundled with each new ID Card Printer. You can also purchase additional cleaning kits, which include cleaning cards, rollers and pens:-

- | | | | | |
|-----------------------|---------------------------|---|---------------|-----------|
| • Cleaning Kit | (10 cards, 1 pen) | - | Part number - | 3633-0053 |
| • Cleaning Roller Kit | (5 sleeves, 1 roller bar) | - | Part number - | 3633-0054 |

Cleaning the printer rollers with the Cleaning Card

To prevent the PVC cards slipping on the rollers during printing, we recommend that you clean your printer using a cleaning card each time you replace the dye-film.

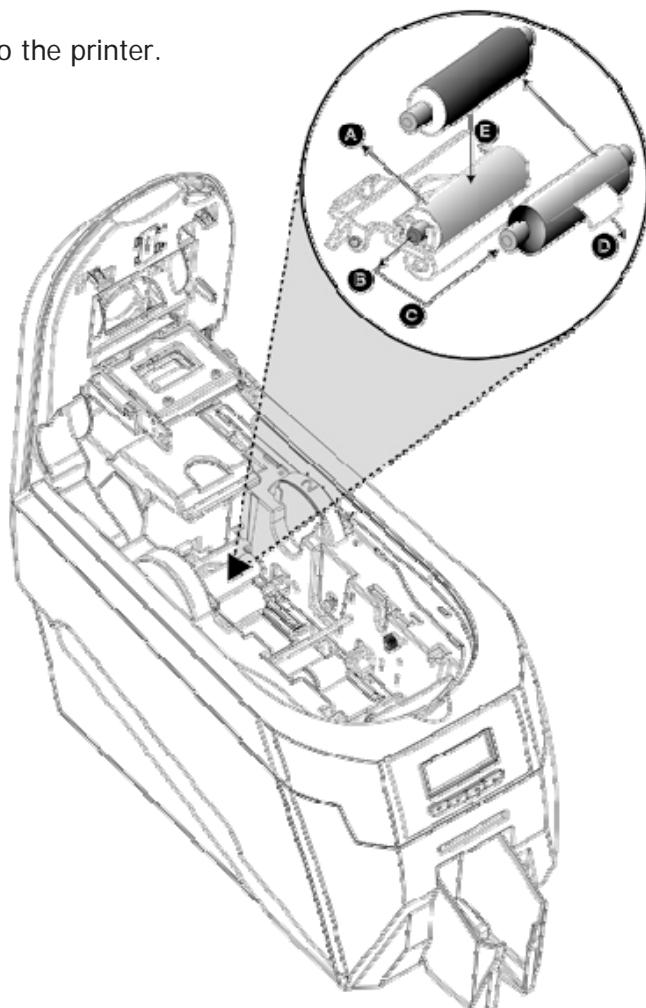


Replacing the cleaning roller

A new cleaning roller is supplied with every new dye film roll.

– Open the printer and remove the used dye film, then:-

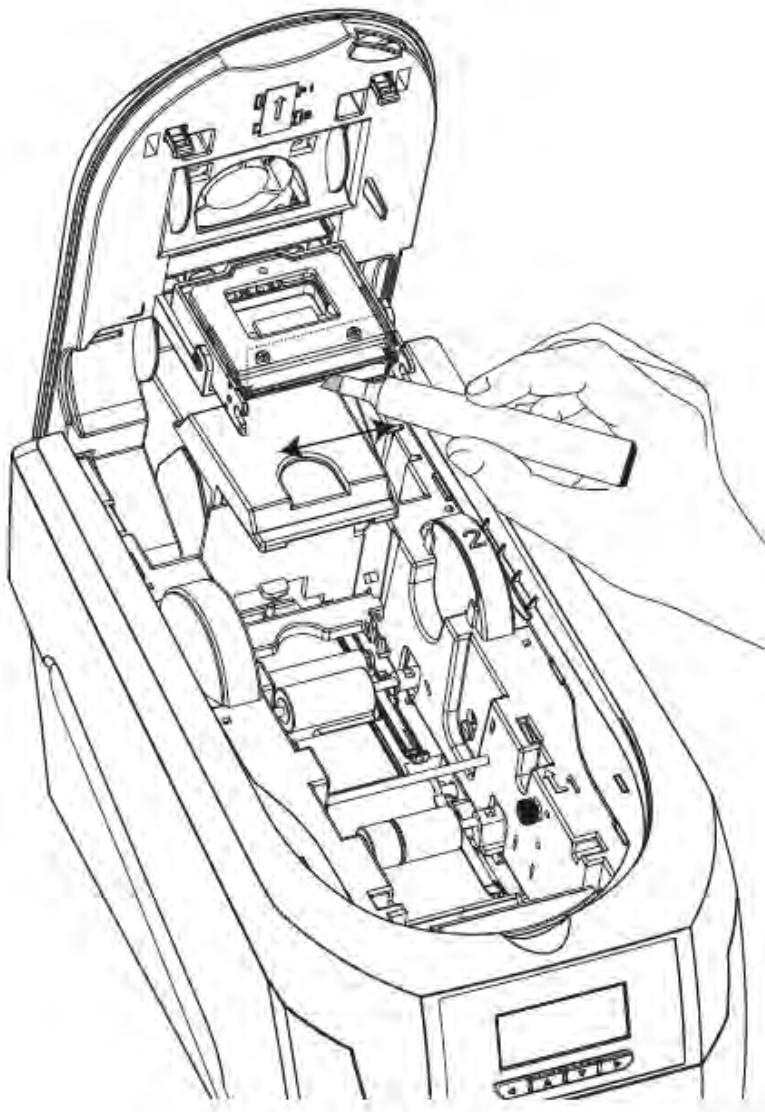
- A.** Pull out the used cleaning roller.
(This is the blue roller positioned behind and below the rear dye-film spool).
- B.** Remove the metal bar from the centre of this cleaning roller.
- C.** Slide the metal bar into the new cleaning roller.
- D.** Peel off the white protective layer carefully to reveal tacky surface.
- E.** Place the new cleaning roller into the printer.



Cleaning the printhead using the Cleaning Pen

We recommend that you clean the print head each time you replace the dye-film.

- Take the cleaning pen from your Cleaning Kit.
- Open the printer and carefully rub the Pen several times, along the complete length of the print head.
- The tip of the Cleaning Pen can itself be cleaned using an old “used” Cleaning Card. The Pen can then be reused until the Cleaning Kit has expired.



UPGRADING TO DOUBLE-SIDED:

For users with a single-sided ID Card Printer, a double-sided upgrade kit can be purchased from your ID Card Printer's.

With this simple drop-in kit you can change your single-sided printer into a double-sided printer and be printing double-sided (Duplex) cards in seconds!



STEP 1 - Connect Power Unit to Mains supply.

STEP 2 - Plug Supply Lead into Printer.

STEP 3 - Open the lid and remove any dye film that may have been previously installed
(this can be used again after the upgrade has been completed).

STEP 4 - Load the special dye film supplied with the Upgrade Kit.

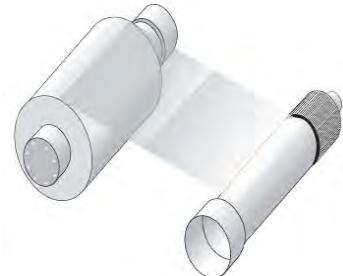
STEP 5 - Close the lid.

The display now shows "Duo". Start duplex printing!

AVAILABLE CONSUMABLES

<u>Product Code</u>	<u>Description</u>
Dye film	
• **300YMCKO	YMCKO 5 panel dye film, 300 images.
• **250YMCKOK	YMCKOK 6 panel dye film, 250 images.
• **600KO	KO 2 panel black resin dye film, 600 images.
• **1000K	Monochrome black resin, 1000 images. (Various monochrome colors available).

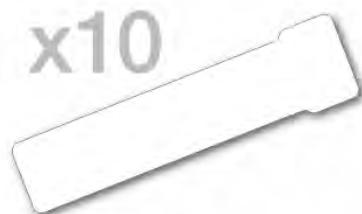
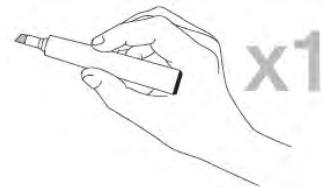
- **300YMCKO YMCKO 5 panel dye film, 300 images.
- **250YMCKOK YMCKOK 6 panel dye film, 250 images.
- **600KO KO 2 panel black resin dye film, 600 images.
- **1000K Monochrome black resin, 1000 images.
(Various monochrome colors available).



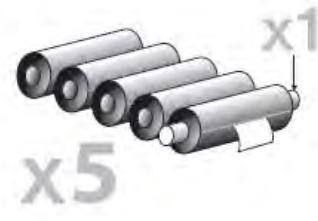
(** = 2 digit supplier code)

<u>Product Code</u>	<u>Description</u>
Cleaning Kit	

- 3633-0053 - Contains 10 cleaning cards and 1 pen.



- 3633-0054 - Contains 5 cleaning roller sleeves and 1 roller bar.



Cards

- All standard **PVC ISO CR80** sized cards.
- **HoloPatch®/Magstripe** cards are available.

Card thickness: 0.51mm to 1.02mm (20mil to 40mil)



TROUBLESHOOTING

Table 1 - Printer Error Messages

Error Message	Probable Cause	Solution
Lid Open, please close to continue. Code = 01:00 to 01:12	The lid is open either during a print job or when there is a print job pending.	<ul style="list-style-type: none"> - Close the lid to continue - Do not open the lid while the printer is printing or if there is a print job being sent to the printer.
Out of cards, please refill the hopper and press retry. Code = 02:00	The printer can not feed a card from the input hopper.	<ol style="list-style-type: none"> 1. Make sure your card hopper has cards in it and is seated correctly. 2. Take the card stock out and fan them and also make sure they are not warped. 3. Make sure your card stock is within the printer's specifications. 4. Clean the printer rollers.
Hand feed error, please select and try again. Code = 03:00	The printer is in hand feed mode and has not detected a card inserted in the front for ten seconds.	<ol style="list-style-type: none"> 1. Ensure the card is being fed into slot in the front when the printer display asks you to. 2. Ensure card is inserted far enough into the slot for printer's rollers to grab it. 3. Do not pre-stage a card in the printer before printing.
Flipper Card Jam, please clear printer mechanism. Code = 04:00 to 04:12	If the printer is in hand feed mode:- Card is jammed in the flipper mechanism	<ol style="list-style-type: none"> 1. Open the lid and remove the card from the flip mech. 2. Make sure the flip mechanism rotates freely. 3. Do not pre-stage a card in the printer before printing. 4. Ensure the card is being fed into slot in the front when the printer display asks you to. 5. Ensure card is inserted far enough into the slot for printer's rollers to grab it.
	If the printer is feeding from the hopper:- Card is jammed in the flipper mechanism	<ol style="list-style-type: none"> 1. Remove card from flip mechanism and insure the flip mechanism rotates freely. 2. Make sure your card stacker tray is empty. 3. Make sure your card stock is within the printers recommended specifications.

Table 1 - Printer Error Messages (continued.....)

Error Message	Probable Cause	Solution
Card Jam, please clear printer mechanism. Code = 06:00 to 06:27	The card has failed to move into the correct position in the printer.	<ol style="list-style-type: none"> 1. Open the lid and remove the card if possible. (Note - You can use the arrow buttons on the front to try and move the card). If not close the lid and see if the card will eject. 2. Once removed make sure your cards are within the printers recommended specification. 3. Clean the printer rollers
No film detected please load a new roll of film to continue. Code = 07:00	The printer detects an invalid RFID film tag	<ol style="list-style-type: none"> 1. Make sure you are using genuine film from the original printer supplier (cheaper clone supplies can cause this problem). 2. Install a new roll of film.
Out of dye film, please load a new roll of film to continue. Code = 08:00 to 08:18	While advancing the dye-film to the correct starting position, the printer does not see the film advance.	<ol style="list-style-type: none"> 1. Make sure you are using genuine film from the original printer supplier (cheaper clone supplies can cause this problem). 2. Check there is dye film installed, if not - install a roll of film. 3. Check whether the dye film has been completely expended, if so - install a new roll. 4. Make sure your dye film gear is meshing with the film teeth. 5. Make sure you have the correct power supply plugged into the printer. 6. Try installing a new roll of ribbon.
Unsupported film, please load different film to continue. Code = 09:00	The printer has validated the dye-film but the configuration of colors is unsupported.	<ol style="list-style-type: none"> 1. Make sure you are using genuine film from the original printer supplier (cheaper clone supplies can cause this problem). 2. This could be a new film type for the printer so a firmware upgrade might be needed. Download the latest firmware from our website and install it. 3. This could be genuine film, but the incorrect type for your printer - check with your supplier.

Table 1 - Printer Error Messages (continued.....)

Error Message	Probable Cause	Solution
Wrong film type. Please load different film to continue or press cancel to clear print job. Code = 10:00 to 10:06	Can arise if sending a color print or overcoat print job to a single color (monochrome) film.	1. Make sure you have the right film type fitted in your printer. 2. Check that your driver settings are correct. 3. Reinstall the printer driver. (Note - If printing prn's to the printer it can bypass the driver settings and can produce this error).
Can't find panel. Please check film and printer mechanism, or press cancel to clear print job. Code = 11:00 to 11:02	The printer cannot find the requested color panel within 8 panels of its starting point	1. Make sure you are using genuine film from the original printer supplier (cheaper clone supplies can cause this problem). 2. Make sure your dye film gear is meshing with the film teeth. 3. Make sure you have the correct power supply plugged into the printer 4. Try installing a new roll of ribbon.
RFID PCB Missing. Reconnected PCB to continue. Code = 12:00	The printer does not detect the RFID PCB	1. Make sure you have the correct power supply plugged into the printer. 2. Try installing a new roll of ribbon.
Print Head Error, switch printer off and reconnect print head. Code = 13:00	The printer detects that the print head cable is not correctly connected.	1. Turn off the power, then make sure the printhead cable is connected. 2. Check to make sure the correct power supply is connected.
Overheat error, switch printer off and allow printhead to cool. Code = 14:00 to 14:01	The print head temperature is out of range or is too hot.	1. Turn off the printer so to allow the printhead to cool down. 2. Check to make sure your room temperature is within the recommended specifications. 3. Make sure your printer has proper air flow around it. 4. Your printer driver settings for Print Head Power might be set to high. Reset them to 50.
Image too dark, Please cancel print job and reduce driver printhead power settings to try again. Code = 15:00	Your printer driver settings for Print Head Power are set to high.	1. Reduce the Print Head Power settings in the driver to 50. 2. Make sure the correct power supply is connected.
Can't Lift Head, Check Printer Mechanism. Code = 16:00 to 16:08	The printer is attempting to move internal mechanical parts, but does not detect any movement	1. Check the inside of the printer for obstructions. 2. Check to make sure the correct power supply is connected.

Table 1 - Printer Error Messages (continued.....)

Error Message	Probable Cause	Solution
Can't Drop Head, Check Printer Mechanism. Code = 17:00 to 17:01	The printer is attempting to move internal mechanical parts, but does not detect any movement	1. Check the inside of the printer for obstructions. 2. Check to make sure the correct power supply is connected
Mag Verify Fail, Press Retry or Cancel to continue. Code = 19:00 to 19:02	The printer does not detect the RFID PCB	1. Make sure you have the correct power supply plugged into the printer. 2. Try installing a new roll of ribbon.
Clean Required, Please clean rollers to avoid deterioration. Code = 21:00 to 20:01	The printer has printed more than 700 cards since the rollers were last cleaned. It needs to be cleaned to prevent deterioration of print performance.	1. Clean the print rollers.
Wrong PSU? Please switch printer OFF and check the power supply. Code = 23:00	The printer detects a low level of output from the Power Supply Unit.	1. Make sure the correct power supply is connected.

Table 2 - Dye Film Problems

Problem	Probable Cause	Solution
Dye film cutting during the print operation	1. Ribbon sticking to card 2. Image printing over the ends of the card.	1. Ensure cards are not already used. Then lower the printhead power settings. 2. Adjust either the image start if cutting at beginning of film panel, or the image end if cutting at rear of film panel.
Image is printed outside the colour panels. (Puts a coloured band across one end of card).	1. A used roll of dye-film has been fitted. 2. Take up spool wound too loosely.	1. Fit a new roll of film. 2. Remove loose film.
Areas of Dye film peeling off card. Dark 'mosaic' like image.	1. Card has been used and has overcoat layer on it.	1. Use only brand new cards not ones which failed to print fully.
Cards printed incorrectly after switching between YMCK and black film	1. Failure to re-set driver settings 2. A used roll of dye-film has been fitted.	1. Set correct the driver settings for Colour Format. 2. Replace dye film with a new roll.

Table 3 - Printer Prints but with Image Quality Problems

Problem	Probable Cause	Solution
Mis-registration of Colours (Ghosting on Photographs etc)	1. Card is slipping due to dirty rollers.	1. Clean all rollers.(See page 20 of this document).
Small Areas of Wrong Colour (Small areas where 1 or more colour layers have been missed from the image).	1. Dust and debris on surface of the card. (white ovals) 2. Contaminated with oily deposits (darker blotches) 3. Card surface uneven (White patches) 4. Slight cutting of dye film due to Printhead density set too high (Jagged scratches)	1. Ensure cards are kept clean, and protected from dust & debris. 2. Replace cards with clean ones and do not handle print surface. 3. Replace cards. 4. In the driver, reduce printhead power setting, or determine which end of card is cutting the film & adjust image start or end position accordingly in the driver.
Dark or lighter vertical lines on card (always in the same place)	1. Card striking something during the print process. 2. Card not running smoothly along the platen runway.	1. Check print path is clear 2. Contact your supplier's Technical Support department for advice on clearing the platen.
Vertical white line down one or both ends of card.	1. Incorrect driver setting. 2. Image page size incorrect. 3. Incorrect image start or end position settings.	1. Ensure the driver is not set to white border. 2. Ensure page size 86.9mm x 54mm with margins at 0 in badging application. 3. Adjust settings in driver.
White line along length of all cards (always in the same place).	1. Printhead has damaged heating elements	1. Contact your supplier's Technical Support department for advice on printhead cleaning or replacement.

Table 4 - Magnetic Encoding Problems

Problem	Probable Cause	Solution
Magnetic Encoding results are inconsistent	1. Card slipping when moving over the recording head. 2. Incorrect cards fitted Hi-Co / Lo-Co	1. Clean all rollers are clean. (See page 20 of this document). 2. Ensure the correct cards (Hi-Co or Lo-Co) are being used.
Cards do not encode	1. Card incorrectly oriented when fed into printer. 2. Driver selections are incorrect for encoding. 3. Incorrect or defective cards.	1. Position card with the stripe underneath and to the left when inserting into printer. 2. Check the Printer driver settings are correct. 3. Ensure the correct cards (Hi-Co or Lo-Co) are being used.

Table 5 Driver Related Problems		
Problem	Probable Cause	Solution
Slow Information download from computer to printer	<ol style="list-style-type: none"> 1. Computer polling access control system in background 2. Corrupted Driver or spooler 	<ol style="list-style-type: none"> 1. Operate from a dedicated PC 2. Update with latest driver.
No information download between PC and Printer but printer can print internal test cards	<ol style="list-style-type: none"> 1. Incorrect printer driver selected in the Windows 'Printers & faxes' panel. 2. Incorrect port selected. 3. Driver corrupted 	<ol style="list-style-type: none"> 1. Select the correct printer driver in the Windows 'Printers & faxes' panel. 2. Check port selection in driver properties. 3. Update with latest printer driver.
Prints stuck in spooler	<ol style="list-style-type: none"> 1. Print spooler paused. 2. Printer communication blocked. 3. Damaged file is at front of print queue. 	<ol style="list-style-type: none"> 1. Un-pause the print spooler. 2. Clear the spooler and reset the printer. 3. Delete the damaged print if necessary, and reset the printer.
Print spooler will not automatically 'un-pause' after each print.	<ol style="list-style-type: none"> 1. Driver name has been changed, and the PC has not yet been re-started. 2. Corrupted printer driver file. 	<ol style="list-style-type: none"> 1. Shut down and then re-start the PC. 2. Un-install the printer driver and then re-install.

