Enduro™

ID card printer

User Manual

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www.magicard.com

Ultra ELECTRONICS

MAGICARD

Secure ID card printers

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CCC Declaration

声 明

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

WARNING:
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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 nearest MAGICARD® Service Centre.
Use only a power source within the limits marked on the bottom panel.
Take care not to spill any liquid on the printer.
Ensure that the power supply cord is not 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.

PRINTER INSTALLATION

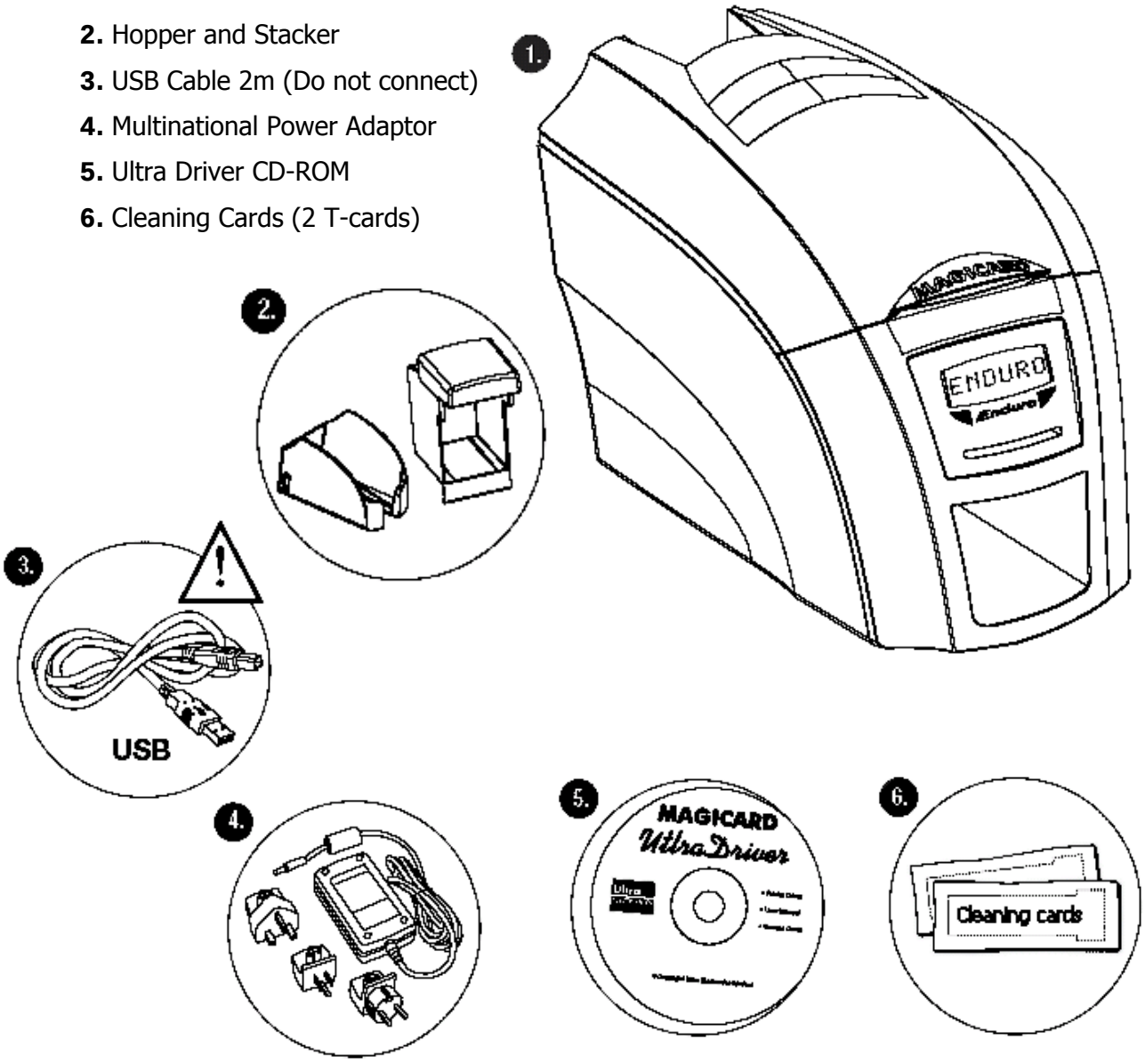
Welcome to Magicard

Thank you for choosing the Magicard Enduro printer as your secure ID card printer.
Before setting up your Enduro printer using the Ultra 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.

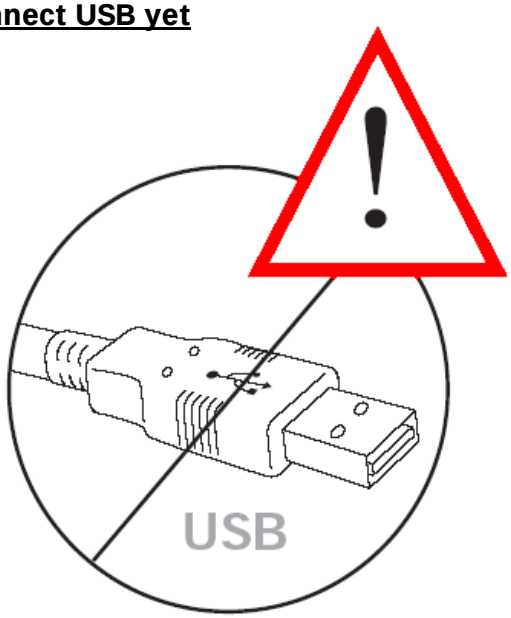
Unpacking

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

1. Enduro Printer
2. Hopper and Stacker
3. USB Cable 2m (Do not connect)
4. Multinational Power Adaptor
5. Ultra Driver CD-ROM
6. Cleaning Cards (2 T-cards)



IMPORTANT – do not connect USB yet

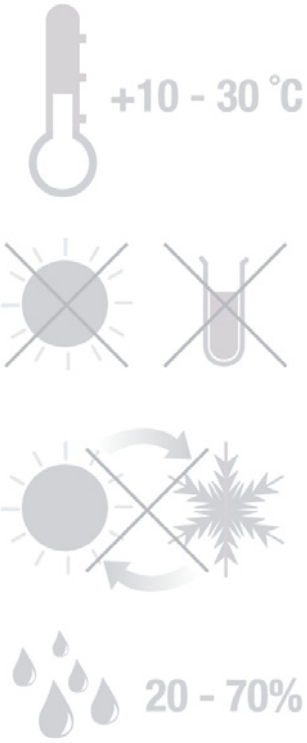


It is important to install the Ultra driver CDROM first, before connecting the USB cable between your PC and Enduro printer.

Printer location requirements:

Normal office environment with:

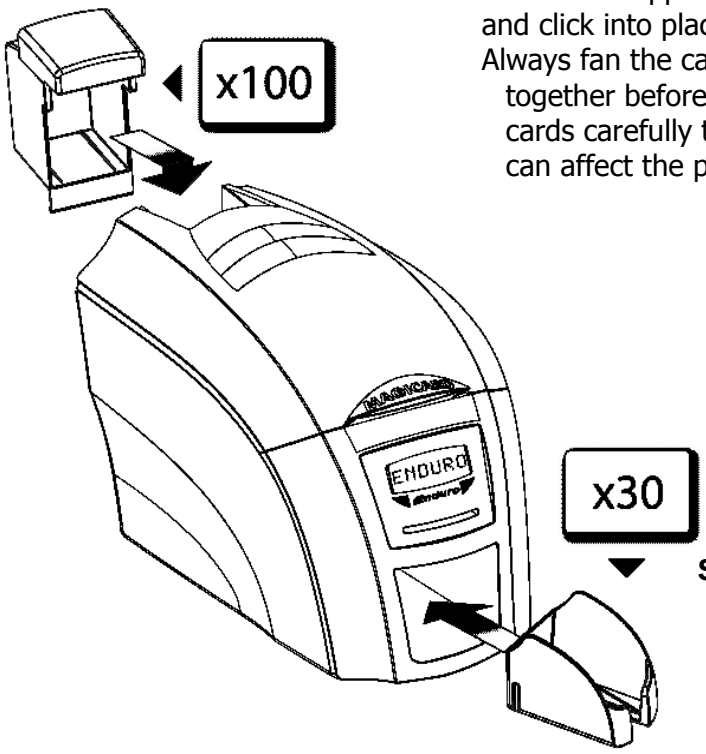
- A properly grounded power supply
- Ambient temperature +10 to 30OC (50 to 86OF)
- Protection from direct sunlight and chemicals
- Protection from abrupt temperature changes
- Relative humidity 20 - 70%
- Sufficient space for:
  - opening the top cover
  - cable access at the rear

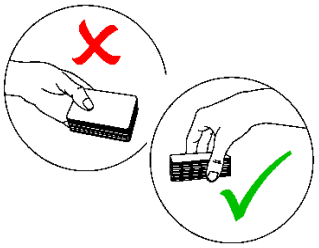


Hopper & Stacker

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 30, 20mil to 40mil (0.51mm to 1.02mm) thick cards. The printer can be operated without the stacker.

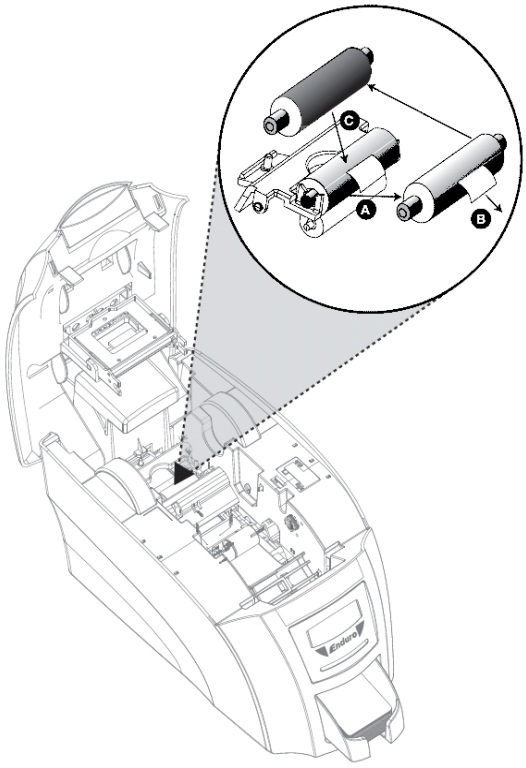
Prepare the cleaning roller

Open printer, then:

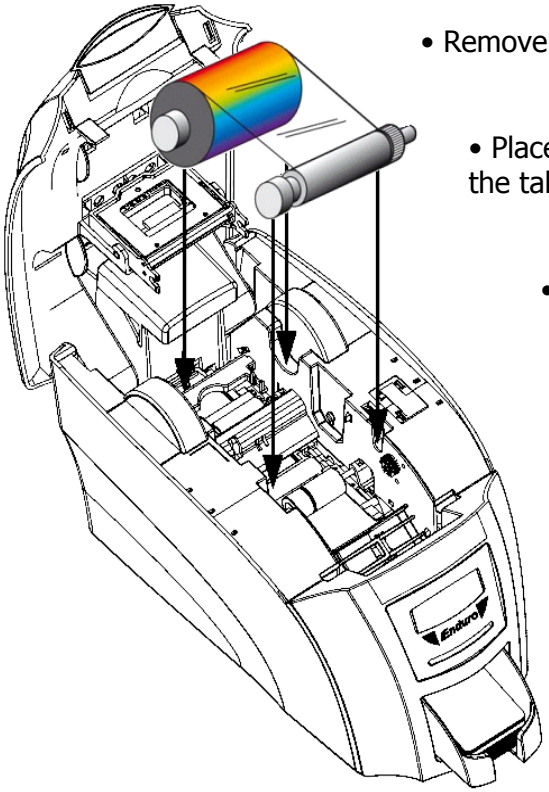
A. Pull out the unused cleaning roller.

B. Peel off white protective layer carefully to reveal tacky surface.

C. Place cleaning roller back into printer.



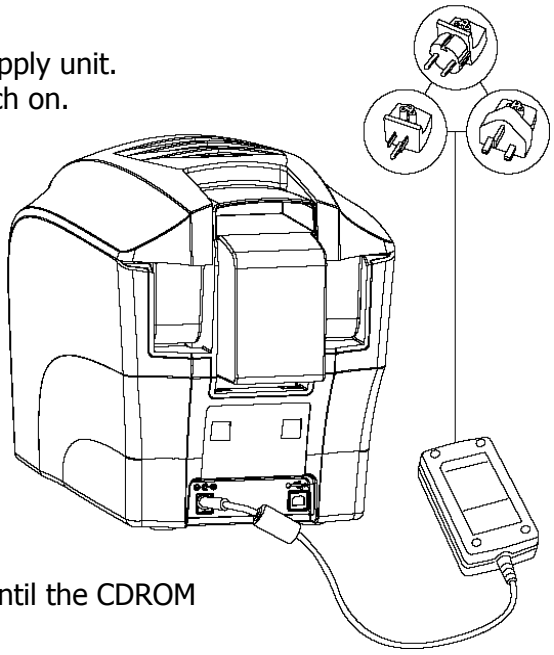
Install the dye film

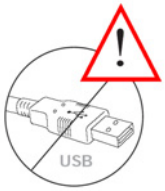


- Remove the dye film its packaging.
- Place the loaded spool into the rear slots and the take-up spool into the front slots.
- Close the printer.

Connect the power supply

Select the adapter 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.



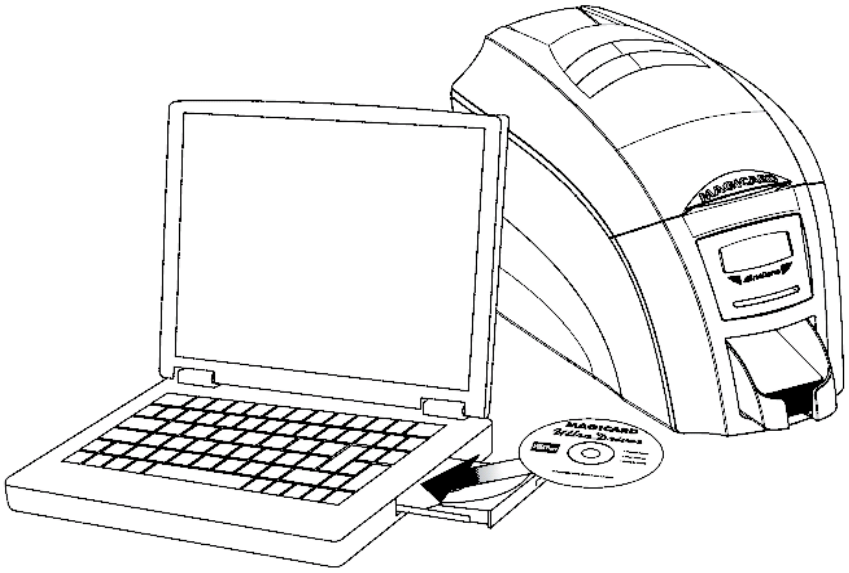


IMPORTANT: Please do not connect the USB until the CDROM has been installed.

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.



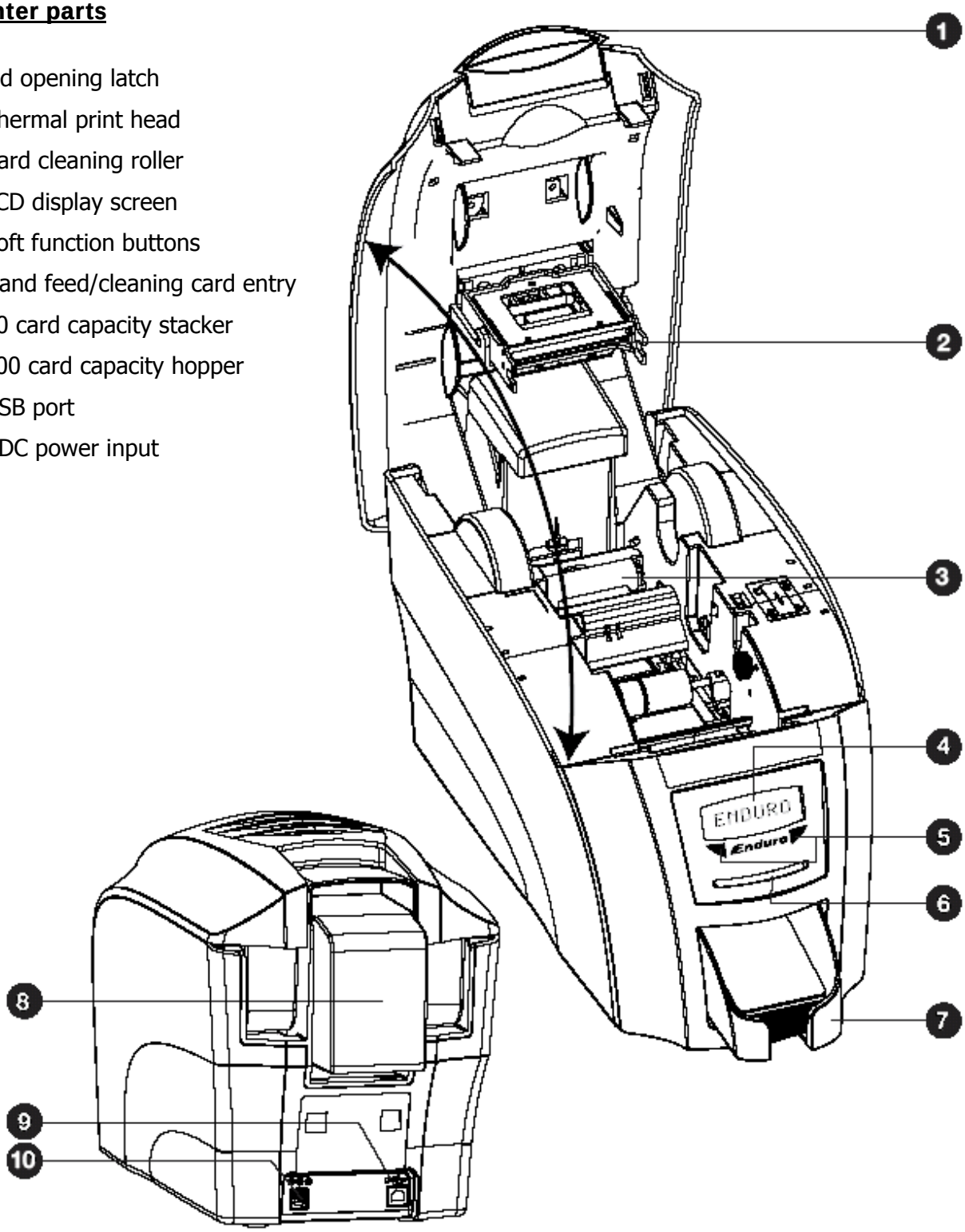
3. On completion of installation, connect your Enduro printer to the PC with the USB cable.

Now your Enduro is ready to print.

USING YOUR ENDURO PRINTER

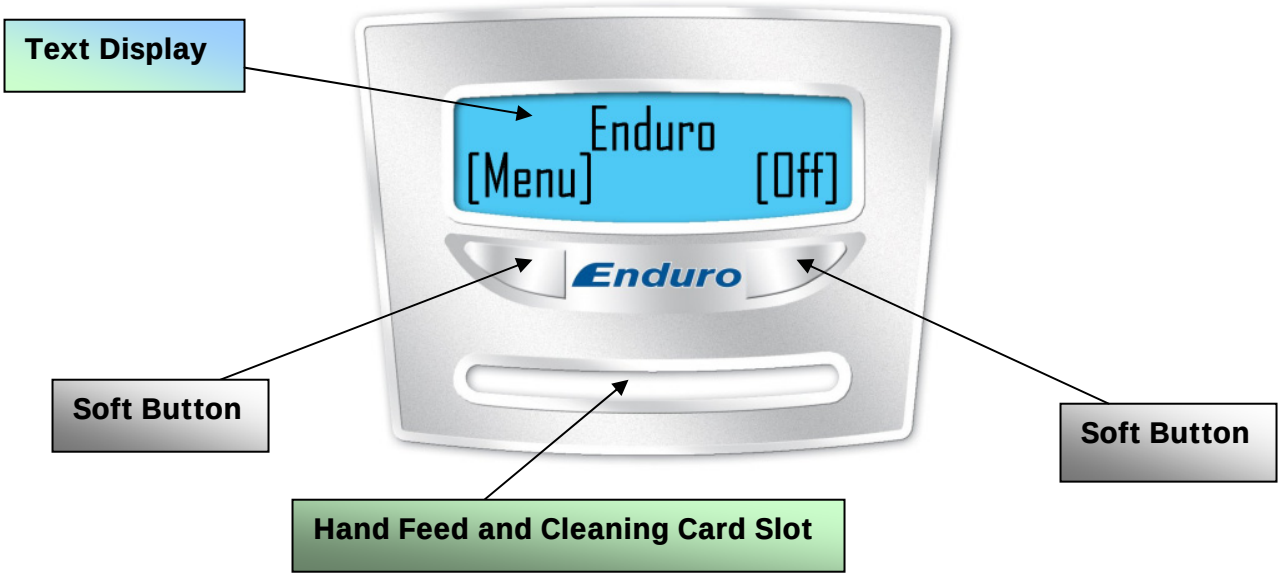
Printer parts

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 entry
7. 30 card capacity stacker
8. 100 card capacity hopper
9. USB port
10. DC power input



Front display panel

The Enduro front panel has a text display and 2 push buttons. These buttons act as 'soft' buttons – i.e. their function varies depending on the text displayed in the square brackets ([_ _ _ _]) immediately above each button.

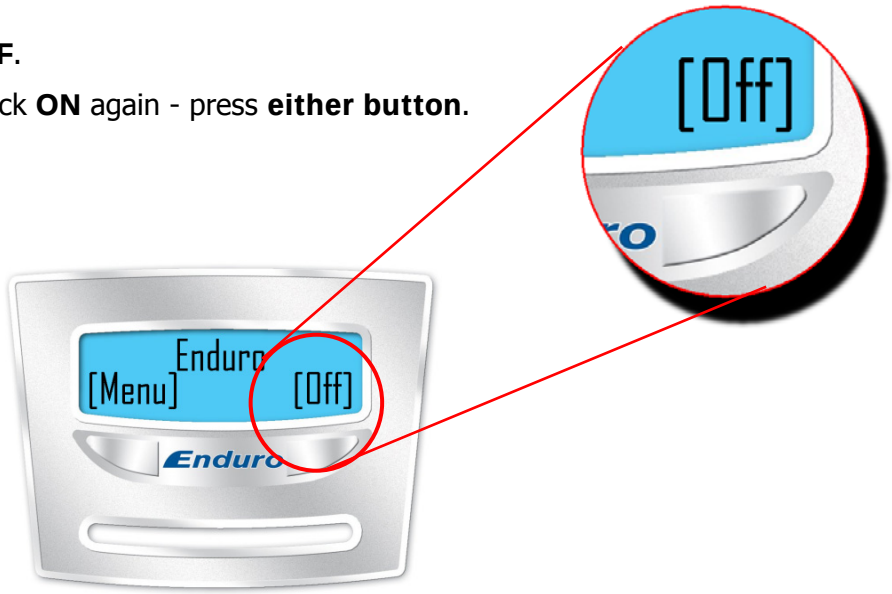


The menu options for the soft buttons are explained in the following pages .....

Off button

Switches the printer **OFF.**

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

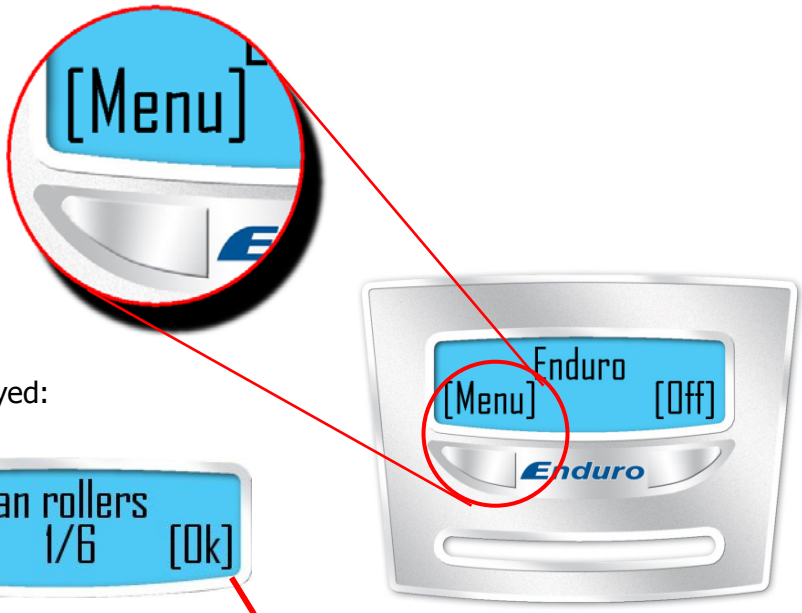


Menu options

Press the 'Menu' button ……

The first menu option will be displayed.

Press the 'Next' button to step through each option in the menu…



The following menu options will be displayed:

1 of 6 – Clean rollers

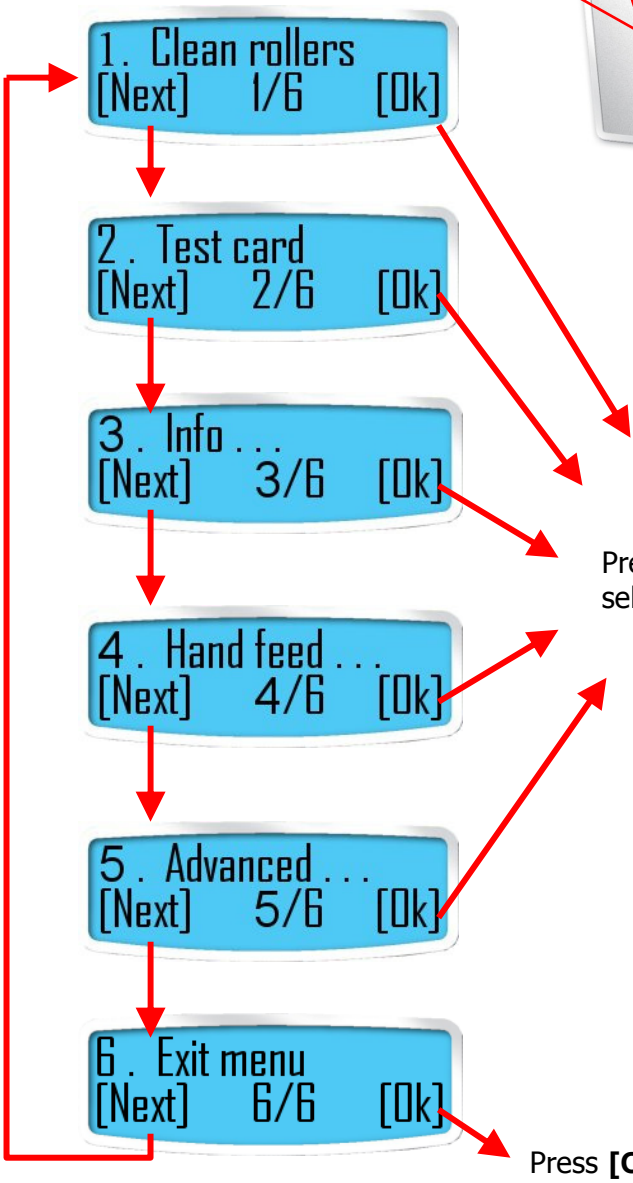
2 of 6 – Test card

3 of 6 – Info ….

4 of 6 – Hand Feed …

5 of 6 – Advanced …

6 of 6 – Exit Menu



Press **[OK]** to enter the selected option.

Press **[OK]** to return to the main screen.

Options 1 to 5 are explained below:

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 22 to 25

Test card - select **[Ok]** on this option if you wish to verify the operation of the printer.

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:-

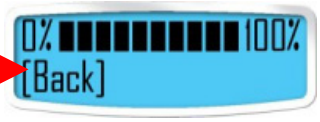
- The type of dye film fitted & how much has been used.
- The firmware version loaded in the printer.
- The total number of cards printed.
- The printer's serial number.

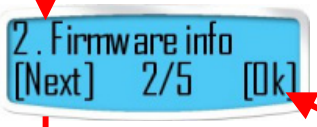
Select **[OK]**.

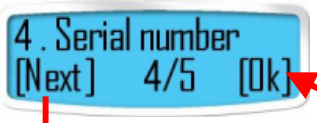
Step through each option using the **[Next]** button.

To view an option, press **[OK]**

Then press **[Back]** to return to this menu







Press **[OK]** to return to the previous menu option (**Info...**)

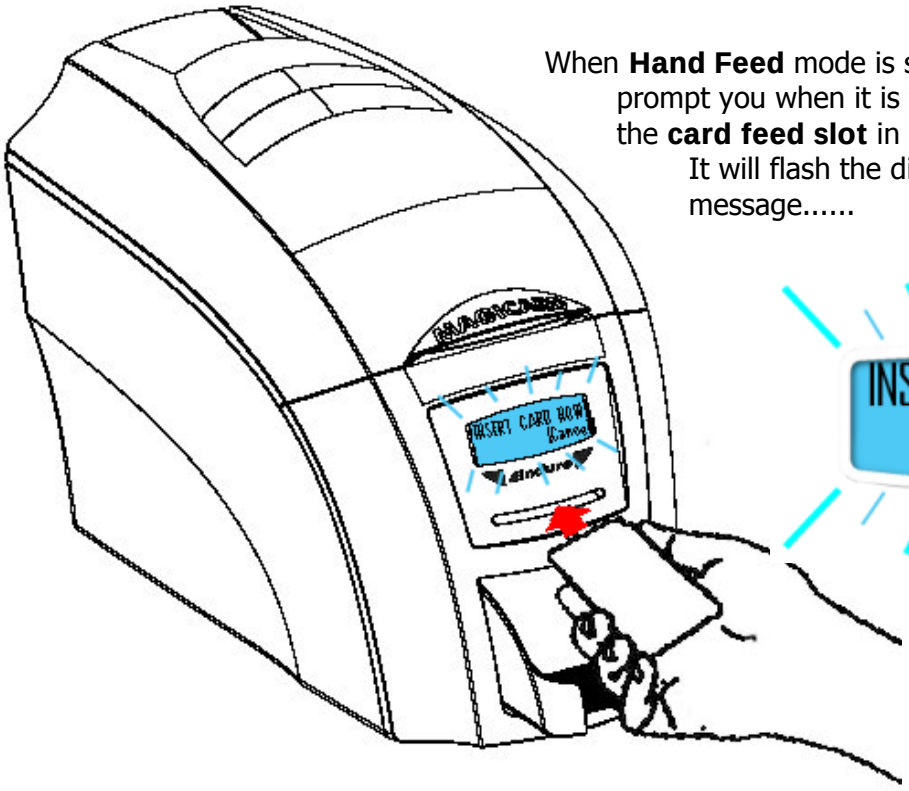
Hand feed

This feature enables you to select whether cards should be fed into the Enduro 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:-

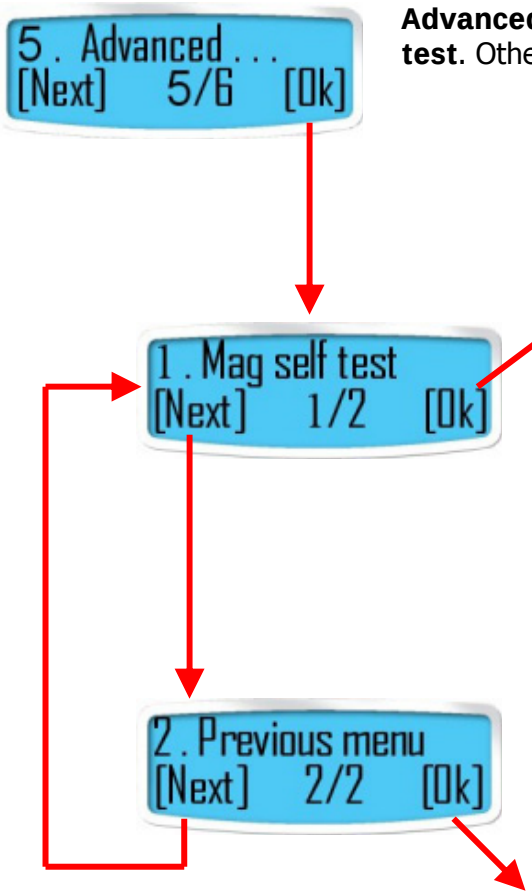
- **[OFF]** - This is the default setting. Cards will be fed automatically from the card hopper.
- **[ON]** – At the start of each print the Enduro will request you to feed a card through the card feed slot in the front of the printer.
  Note: Cards will not be fed from the card hopper.

Press the **[Change]** button to toggle the mode between **[ON]** and **[OFF]**

Once the desired mode is selected, press the **[Save]** button



When **Hand Feed** mode is set to **[ON]** the Enduro will prompt you when it is time to place a card through the **card feed slot** in the front of the printer.
It will flash the display and show a text message.....



Advanced – this option currently contains a single item – **Mag self test**. Other items may be added in the future.

Mag self test - select **[Ok]** on this option if you wish to verify the magnetic encoding 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!"**

Press **[OK]** to return to the previous menu option (**Advanced**)

CHOOSING THE RIGHT DYE-FILM RIBBON

Note:

- MA300YMCKO dye-film is generally the appropriate choice for colour printing with both Enduro and Enduro Duo printers.
- MA250YMCKOK dye-film, for the Enduro Duo models only, is more economic when printing in colour on the front side and black on the rear.
- MA1000K & MA600KO 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.

Printer model	Type of images you want to print	Cards per ribbon	Ribbon Panel Layout *	Part Number
Enduro & Enduro Duo	Colour (1 side only)	300 (printing on 1 side only)	YMCKO	MA300YMCKO
Enduro	**Monochrome:** Black Red Blue Green Gold Silver White Scratch	1000 (printing on 1 side only)	K	MA1000K-n (n = colour)
Enduro	Black + Overcoat	600 (printing on 1 side only)	KO	MA600KO
Enduro Duo	Colour front & Black back	250 (printing on 2 sides)	YMCKOK	MA250YMCKOK
Enduro Duo	Colour front & colour back	150 (printing on 2 sides)	YMCKO	MA300YMCKO

*** 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 Magicard dealer.

Card size

- Standard (CR80) = 3.375" x 2.125" (86.5 mm wide x 53.98mm high).

Card thickness

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

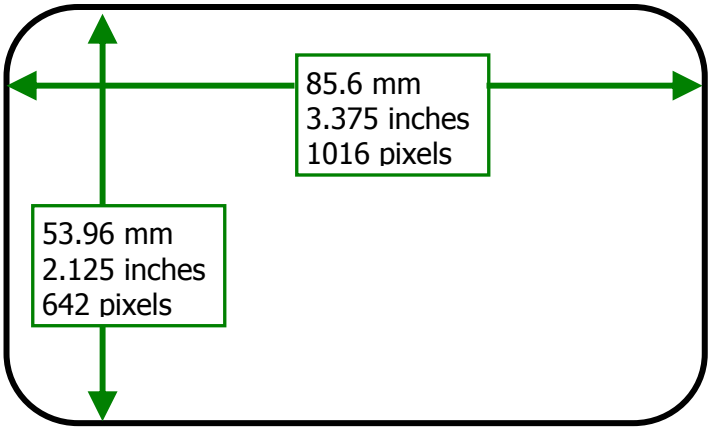
To obtain good quality prints the card must be:

- 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

Both the Enduro and Enduro Duo printer offer 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.



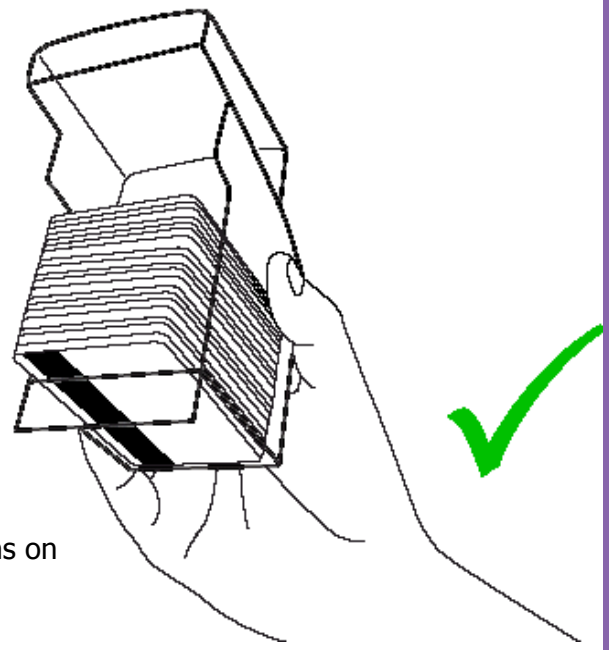
When setting up your card design using your graphics software on your PC, you should use a maximum page size of 1016 pixels (3.45"/87.5mm) x 642 pixels (2.13"/54mm).

Using Magnetic stripe cards

If you have an Enduro Mag 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 Enduro Mag 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 Ultra Electronics via your Magicard dealership.

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.

PRINTER DRIVER SOFTWARE (THE 'ULTRADRIVER')

Note : As part of our continuous improvement program, the UltraDriver software and the printer firmware for Enduro printers is being updated on a regular basis.

To ensure you get the best performance from your Enduro printer, we recommend that you regularly check the Magicard website for the latest driver software and firmware at:-

www.magicard.com/support/technical-support

Installing the 'UltraDriver'

1. **Important** – before loading the driver, make sure the USB cable is **NOT** connected to the printer.

Load the driver CD ROM into the PC you have connected to the printer.
If the CD does not run automatically, click the start button, and then click on "run". Type "D:\autorun" (where D is the drive letter for your CD drive), then press the return key.

2. Select the language you wish to use.

3. Select the 'Enduro' option.

4. Select 'Install Software'

5. Then select 'Install Driver'

The driver will now start to install .....

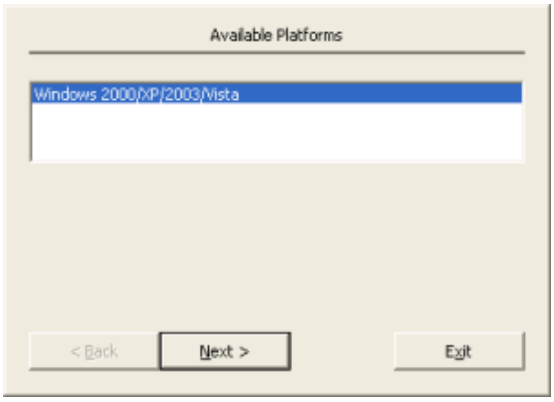
..... turn to next page

.....continued from previous page.

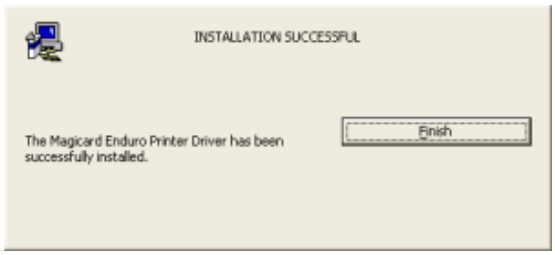
The 'Available Platforms' screen shows which operating systems the driver can be used with:

- Windows 2000
- Windows XP
- Windows 2003 Server
- Window Vista

If your operating system is one of these, click Next>



The driver files will now be installed on the PC.
Click Finish when the 'Installation successful' screen appears.



Note: You are not finished yet !!!

The driver is **not fully installed until** the Enduro **printer is connected to the PC** via the USB cable, and powered **ON**.

When the printer is detected by the PC, the driver installation will be completed and the printer will be ready to use.

CAUTION:- If the computer you are using has at some time run another manufacturer's printer (e.g. Eltron C-Series printer), a Windows file necessary for the Magicard installation could be missing.

(The symptoms of this are that the computer does not seem to detect the Magicard printer's USB connection)

Recover the file as follows:-

1. Navigate to **c:\windows\inf** (Windows XP) or **c:\winnt\inf** (Windows 2000).
2. Find the file named **usbprint.in**, and then rename it to **usbprint.inf**.
3. Reconnect the USB cable.

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**"
2. **Right** mouse **click** on the **Magicard Enduro** printer and select the "**Printing Preferences...**" option.

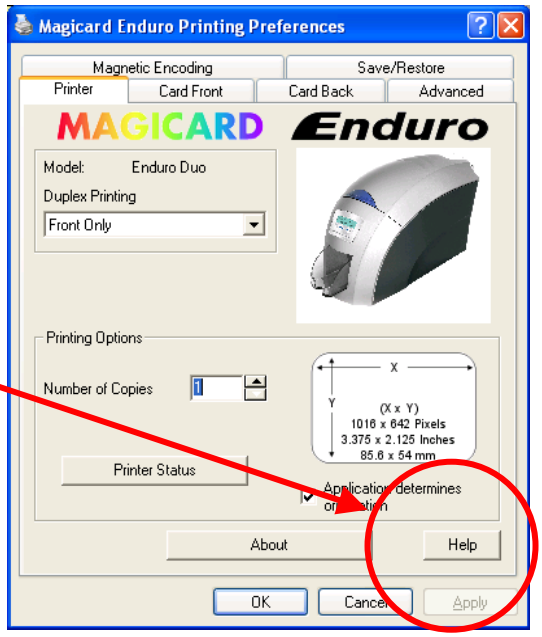
To access the printer driver settings in **Windows Vista:**

1. On the PC, go to the Windows logo then "**Control Panel**"
2. Select "**Printers**"
3. **Right** mouse **click** on the **Magicard Enduro** printer 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 in any of the tabs.

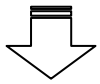


Uninstalling the UltraDriver

To uninstall the printer driver from **Windows 2000 and XP**:

1. On the PC, go to "**Start**" then "**Control Panel**"

1. In the **Control Panel**, select "**Add or Remove Programs**".



3. Select the "**Magicard Enduro**" entry, and click on "**Change/Remove**"

4. Now just follow the prompts from the Printer Uninstall application.

To uninstall the printer driver from **Windows Vista:**

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

2. In the **Control Panel**:-
   - if in 'category view' - select "**Uninstall a program**"
   - if in 'classic view' – select "**Programs and features**"

3. Select the "**Magicard Enduro**" entry, and click on "**Uninstall/Change**"

4. Now just follow the prompts from the Printer Uninstall application.

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.
- Magicard 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, large particles of dirt can damage the printhead.
- A clean printer produces better quality magnetic encoding.

THE MAGICARD 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 after every 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 below……

Cleaning supplies

Two cleaning cards and a cleaning roller (sleeve & bar) are bundled with each new Enduro 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.

A. Select Menu option **[1. Clean rollers]**, press **[Ok]** and follow the on-screen instructions:-

B. **[Remove the cards!]** – lift out the (rear) feed hopper and then press **[Next].**

And .....

[Remove film] – open the lid and lift out the dye film. Leave the lid open and press **[Next]**.

C. **[Ready to clean?]** - Take a new cleaning card from its packaging and then press **[Yes].**

D. **[Insert cleaning card into slot]** – when prompted, place the narrow end of the cleaning card into the front card feeder slot. The card will automatically enter the printer and the rollers will be cleaned.

When the cleaning cycle is finished, the cleaning card will be ejected.

[Clean again?] – for maximum cleaning effect it is recommended that you turn the cleaning card over and select **[yes]**, then repeat step **D.**

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:-*

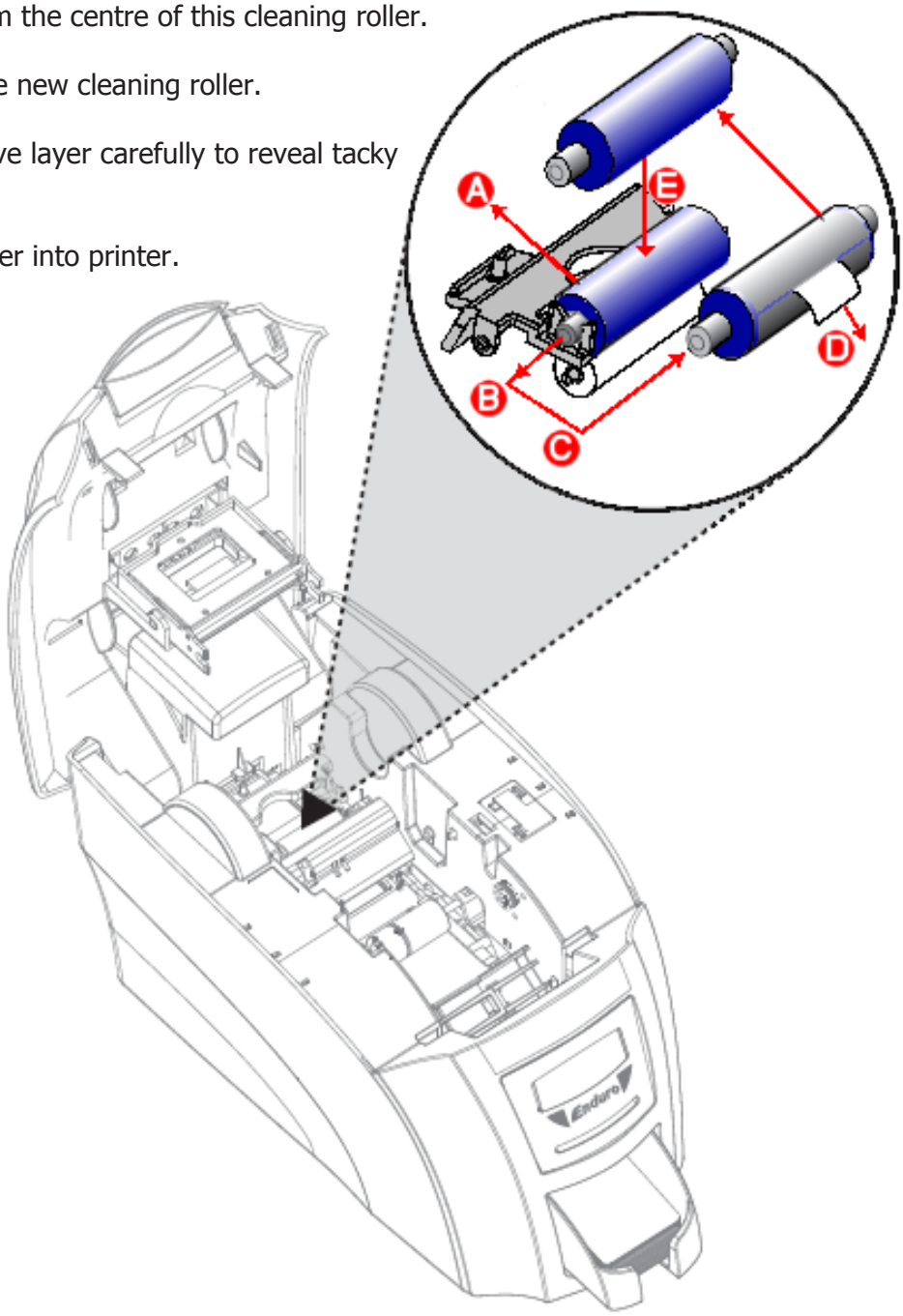
A. Pull out the used cleaning roller.
(This is the blue roller positioned behind and below the rear dye-film spool).

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.

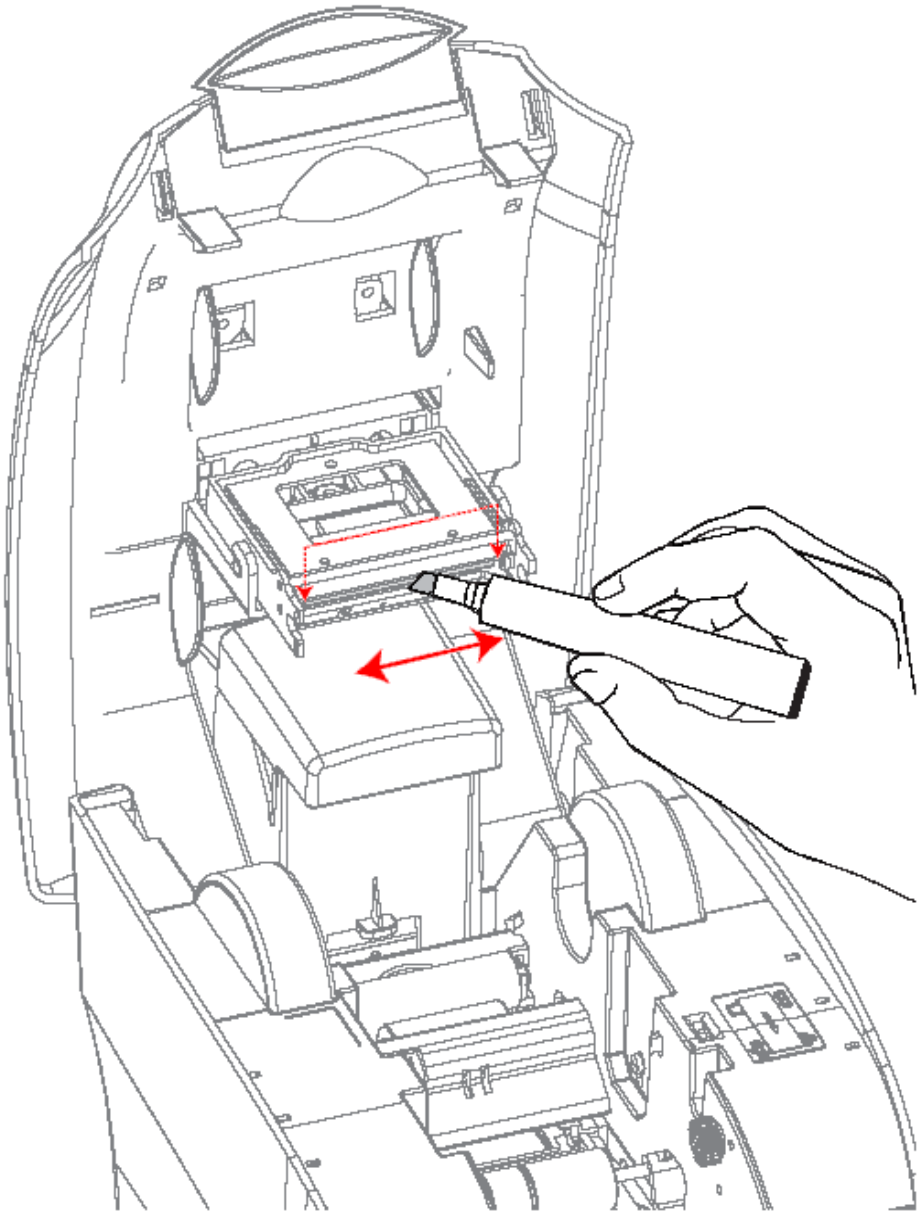
E. Place the new cleaning roller into printer.



Cleaning the printhead using the Cleaning Pen

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

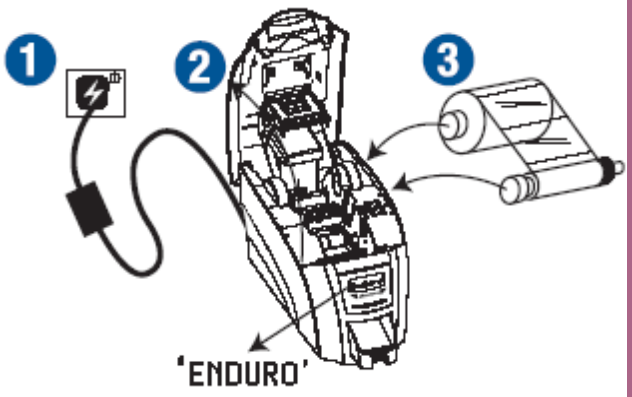
- Take the cleaning pen from your Enduro cleaning kit.
- Open the printer and carefully rub the pen several times, along the complete length of the print head.



UPGRADING TO DOUBLE-SIDED:

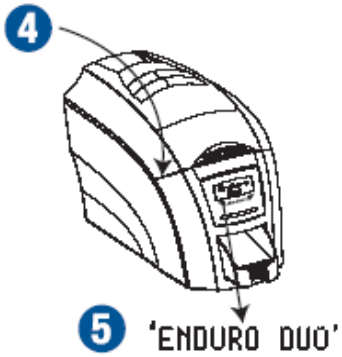
For users with a single-sided Enduro printer, a double-sided upgrade kit can be purchased from your Magicard Dealer **- Part No. 3633-0052.**

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



STEP 1 - Power-up your printer, display shows "Enduro".

STEP 2 - 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 3 - Load the special dye film supplied with the Upgrade Kit.

STEP 4 - Close the lid.

STEP 5 - The display now shows "Enduro Duo". Start duplex printing!

Upgrade FAQs

1. **Q: Do I need any tools or mechanical knowledge?**

   A: Not at all. You just need to load the upgrade dye film roll and the printer does everything else automatically.

2. **Q: How does it work?**

   A: All Enduro printers have a card flipper mechanism. The RFID tag in the special upgrade dye film roll tells the printer to permanently change itself into a double-sided Enduro Duo.

3. **Q: Can I use this upgrade on other Enduro printers?**

   A: No, once used in a printer it cannot be used to upgrade other machines.

4. **Q: Do I have to keep this special upgrade dye film or spool for future use?**

   A: Just use the film from this special upgrade kit to print cards as normal.

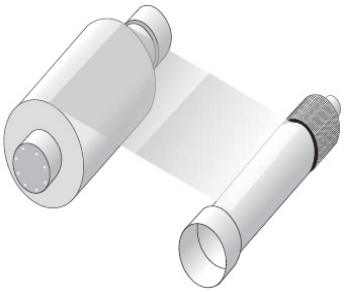
   Keep the empty blue upgrade spool for reference and warranty confirmation.

5. **Q: What kind of dye film should I use now?**

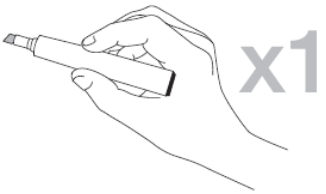
   A: The upgrade dye film will work the same as the standard MA**250**YMCKOK dye film, which is used to print color on the front and resin black on the rear of a card. You can also use the MA**300**YMCKO to print color on both sides of the card if you prefer. You will need to adjust your Driver settings depending on your requirements.

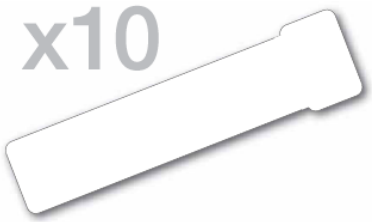
AVAILABLE CONSUMABLES

Product Code	Description
Dye film	
• **MA300YMCKO**	YMCKO 5 panel dye film 300 images.
• **MA250YMCKOK**	YMCKOK 6 panel dye film 250 images.
• **MA600KO** -	KO 2 panel black resin dye film 600 images.
• **MA1000K** -	Monochrome black resin 1000 images. (Various monochrome colors available).



Product Code	Description
Magicard Cleaning Kit	
• **3633-0053** -	Contains 10 cleaning cards and 1 pen.
• **3633-0054** -	Contains 5 cleaning roller sleeves and 1 roller bar.





Product Code	Description
Upgrade Kit	
• **3633-0052** -	Double-sided (duplex) Upgrade Kit.

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 01:09	The lid is open either during a print job or when there is a print job pending.	- 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.	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.	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 04:11	If the printer is in hand feed mode:- Card is jammed in the flipper mechanism	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	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 06:19	The card has failed to move into the correct position in the printer.	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	1. Make sure you are using genuine Magicard film. 2. Install a new roll of film.
Out of dye film, please load a new roll of film to continue. Code = 08:00 to 08:11	While advancing the dye-film to the correct starting position, the printer does not see the film advance.	1. Make sure you are using genuine Magicard film. 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.	1. Make sure you are using genuine Magicard film. 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 Magicard 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 11:01	The printer cannot find the requested color panel within 8 panels of its starting point	1. Make sure you are using genuine Magicard film. 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 Magicard power supply is connected.
Overheat error, switch printer off and allow printhead to cool. Code = 14:00	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 with in 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 Magicard 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 Magicard 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 Magicard power supply is connected
Mag Verify Fail, Press Retry or Cancel to continue. Code = 19:00 to 19:01	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	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 Magicard 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 23 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 Magicard Tech Support 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 Magicard Tech Support 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 23 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-

Table 5 Driver Related Problems

Problem	Probable Cause	Solution
Slow Information download from computer to printer	1. Computer polling access control system in background 2. Corrupted Driver or spooler	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	1. Incorrect printer driver selected in the Windows 'Printers & faxes' panel. 2. Incorrect port selected. 3. Driver corrupted	1. Select the correct printer driver ("Magicard Enduro") in the Windows 'Printers & faxes' panel. 2. Check port selection in driver properties. 3. Update with latest printer driver.
Prints stuck in spooler	1. Print spooler paused. 2. Printer communication blocked. 3. Damaged file is at front of print queue.	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.	1. Driver name has been changed, and the PC has not yet been re-started. 2. Corrupted printer driver file.	1. Shut down and then re-start the PC. 2. Un-install the printer driver (see page 21) and then re-install (see page 18)

WARRANTY INFORMATION

1). **Coverage:** Ultra Electronics Ltd Warrants that the MAGICARD printer shipped with this Warranty statement will conform to the manufacturers specifications and be free from defects in materials or workmanship for a period of **2 years** in **E.U.** and **USA** (1 year elsewhere) from the date of original purchase by the user, but there are additional conditions on the printhead Warranty (see paragraph 2).

2). **Limited Printhead Warranty:** Ultra warrants that, under normal use and service, thermal printheads will be free from defects in material and workmanship for a period of **2 years** in **E.U.** and **USA** (1 year elsewhere) from the date of original purchase or for a quantity of 10,000 printed cards, whichever comes first, provided that Ultra-approved card media is utilised. If a Warranty claim is submitted for a defective printhead, Ultra will have the right to inspect the printhead and samples of the printed and blank ID cards used with it for the purpose of verifying that the claimed defect has not been caused by non- Ultra approved media, or by foreign particles or substances which have caused chemical or physical damage. Ultra's decision in any such claims shall be final.

3). **Warranty Claims:** If the MAGICARD printer proves defective during this period, please contact the Ultra Service Center, at the address and telephone/fax number given below. The Ultra Service Center personnel may first ask you to carry out certain simple checks to confirm the nature of the problem, and if a return is appropriate they will give you a Return Authorisation Number and consignment instructions to the appropriate repair center. Ultra will, at its option, repair or replace the defective parts at no charge to the customer.

4). **Warranty Limitations:** The Warranty does not apply to MAGICARD printers that have been:

- Damaged through physical or electrical mishandling.
- Damaged through operation in environments which are outside normal office conditions in terms of corrosive atmosphere, temperature, humidity, shock or vibration.
- Improperly installed or interfaced to other products which may exhibit software problems or expose the MAGICARD to improper voltages or control signals.
- Fitted with dye film rolls from any source other than Ultra Electronics, or have been used to print on anything other than card surfaces which are approved by Ultra and which will generally be made of PVC, be completely flat, and be free of harmful particles or substances.
- Serviced or interfered with by anyone other than an Ultra Authorised Service provider.

5). **Shipping:** Insurance and shipping costs incurred in sending the MAGICARD printer for Warranty service are the responsibility of the customer. Whenever possible Ultra Service Centres will use the same class of shipping service selected and paid for by the customer to return the printer. Return shipping costs from Ultra to the customer will be at Ultra's expense. After obtaining the Return Authorisation Number as described above, the printer should be securely packed in its original packaging with proof of date of purchase and a note describing the problem and quoting the Return Authorisation Number. The printer must be sent to the service center address supplied with the Return Authorisation Number by the main service center. This address may be different to the address listed below, but will generally be closer to you. Please also mark the Return Authorisation Number on the outside of the shipping carton. All customs duties and taxes, if applicable, are the responsibility of the customer.

6). **Applicability:** The Warranty and remedy provided above are exclusive and in lieu of all other warrants, either express or implied, including but not limited to, implied warranties of merchantability and fitness for a particular purpose. Any statements or representations made by any other person or firm are void. Neither Ultra Electronics Ltd nor its affiliates shall be liable for any loss, inconvenience, or damage, including direct, special, incidental, or consequential damages, resulting from the use or inability to use the Ultra product, whether resulting from breach of Warranty or other legal theory even if Ultra has been advised of the possibility of such damage or loss.

7). This Warranty is governed by the laws of England. Any dispute arising out of or relating to this Warranty shall be submitted for arbitration of this dispute or disputes pursuant to the rules and regulations of the UK Arbitration Act. This Warranty gives you specific legal rights, and you may also have other legal rights which vary from country to country so the above limitations and exclusions may not apply to all customers.