

Chica Card Printer

User's Guide



1. Chapter 1

Setting up

Introduction

We congratulate you on having made the Chica printer your choice !

The Chica is the ideal solution for all your plastic card printing requirements, such as identification badges, access control cards, membership and loyalty cards, etc.

1. Unpacking my printer

Verify whether the following parts have been supplied with your printer :

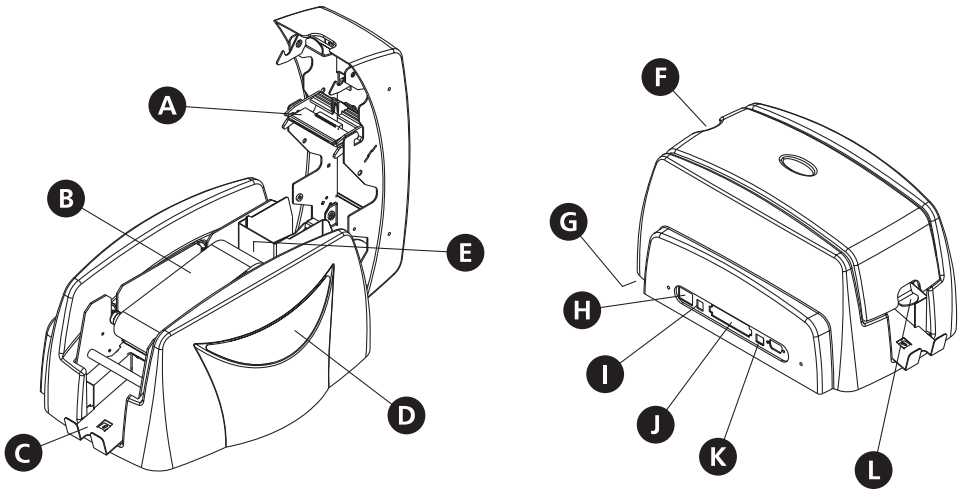
- Power supply and power supply cable
- Printer interface cable
- User guide
- Maticard software CD



IMPORTANT !

The printer must be placed on a level surface, in a dust free environment. It is essential to be able to access the printer from all sides for its installation.

2. Description of the printer and its functions



Description of the printer :

- Ⓐ Thermal print head
- Ⓑ Ribbon Spindles
- Ⓒ Card Output Hopper
- Ⓓ Control Panel
- Ⓔ Cleaning Roller
- Ⓕ Card Feeder
- Ⓖ Identification label
- Ⓗ Electrical connector
- Ⓘ Switch
- Ⓚ Parallel Port
- Ⓛ USB Port (optional)
- Ⓛ Cover lever

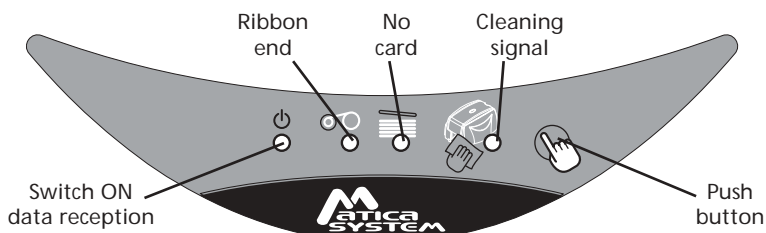
Functions

- For printing cards.
- For installing the ribbon in the printer.
- Collects the cards ejected from the printer.
- Shows the printer activity.
- Removes any dust before printing the card.
- Holds the cards to be printed.
- Gives the printer model and serial number.
- For connecting the printer to the power supply.
- On/Off switch.
- Enables data to be received and sent "from" and "to" the computer.
- Enables data to be received and sent "from" and "to" the computer.
- Allows the printer cover to be opened and closed.

Printer control Panel

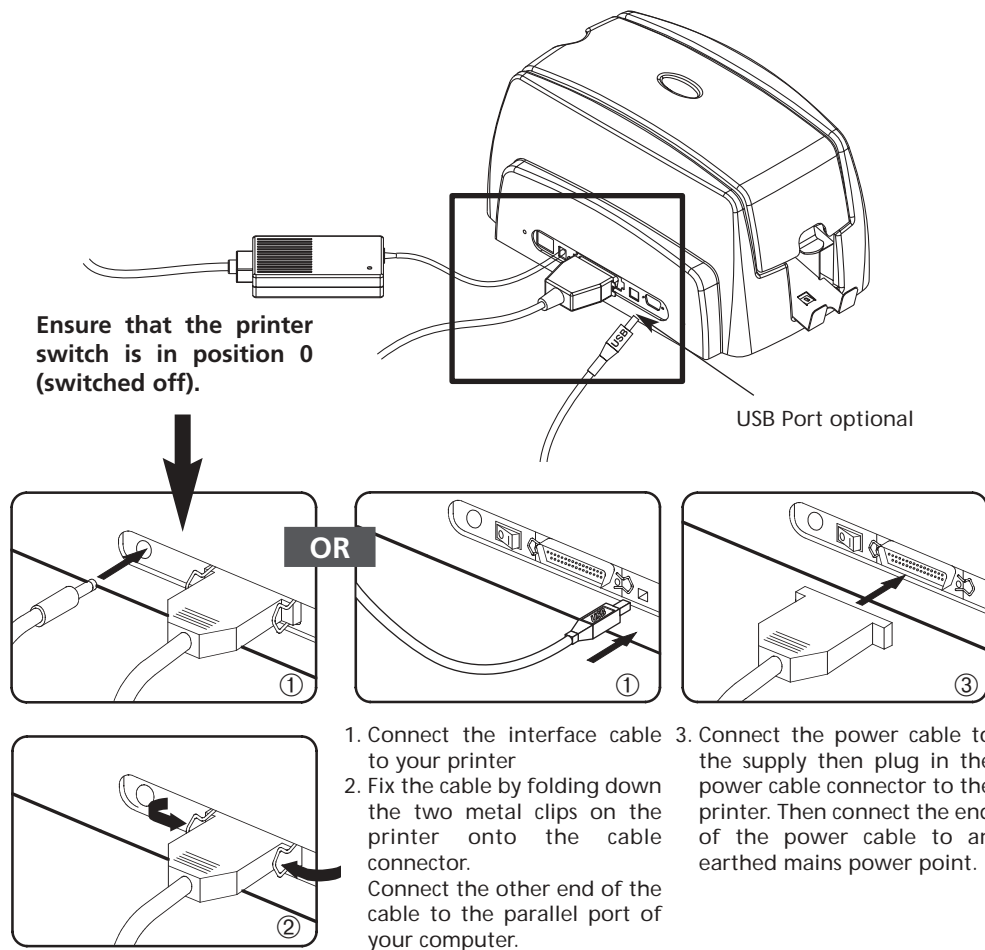
There is a Control Panel on the front side part of the printer.

Four warning lights are associated with symbols showing the activity during printing. These lights indicate :



3. Installing my printer

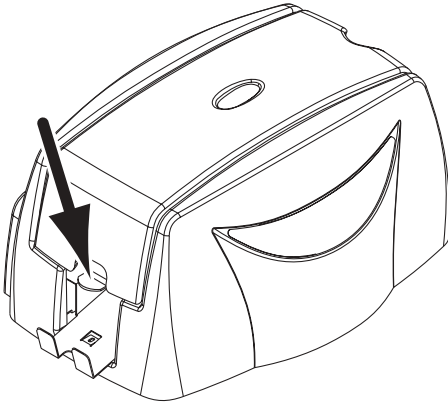
a) Installation of the interface and supply cables:



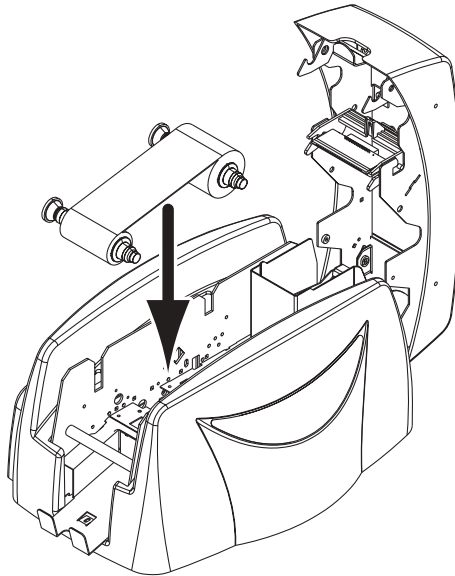
IMPORTANT !

To disconnect this product, pull the plug out of the socket, which should remain easily accessible.
This product must be connected to an electrical installation correctly protected and equipped with a protective earth.

b) Installation of the ribbon



1. Open the printer cover by pressing on the opening lever, then pivoting it.



2. Replace the new ribbon in the printer as shown.
3. Close the printer cover.



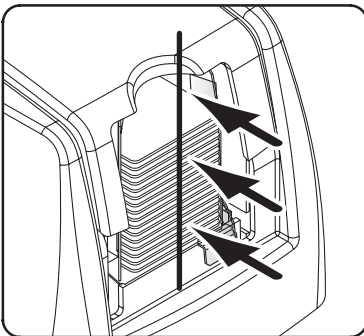
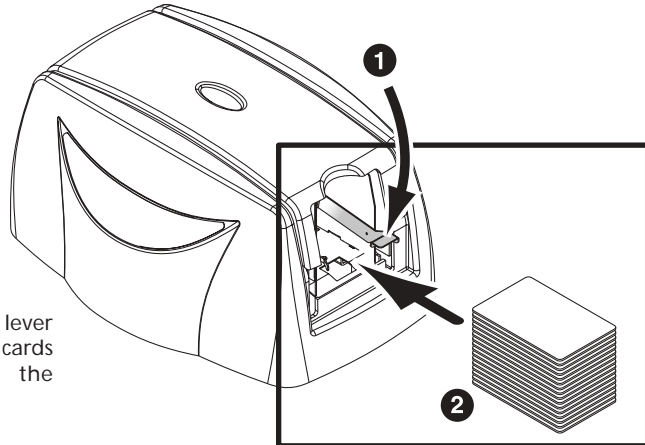
WARNING

The ribbon must be correctly installed for the printer to function. Only use IDWarehouse approved printer ribbons. ID Warehouse accepts no responsibility if the printer is damaged following the use of an unapproved ribbon.

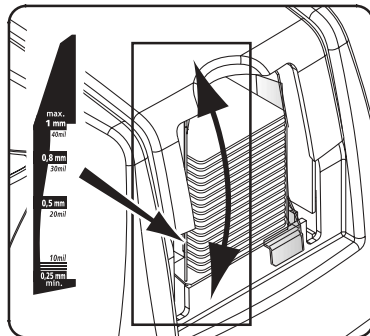
The ribbon is automatically positioned each time the cover is closed.

c) Loading of cards

1. Push and keep the lever down and place 100 cards max. (0.76mm) in the feeder.



2. Ensure that the stack of cards is correctly aligned with the edge of the feeder.



3. Move the lever up and down as shown to adjust the card thickness (factory setting is 0.76mm-30mil).



IMPORTANT !

Advice about selecting cards :

- Only use the types of card appearing in the Specifications page of this manual
- Do not touch the printable surface of the cards ; the print quality may be affected by this
- Do not use damaged or folded cards or cards which have previously been embossed
- Always store blank cards in a clean, dust free location

Card thickness :

- The Chica printer accepts cards from 0.25mm (10mil) to 1mm (40mil) thick.

2 Chapter 2

Printing

1. Installing my printer driver

Before using your Chica printer, you must install its printer driver.

Reminder : Chica driver and printers operate under Windows 95/98/2000/Me/NT 4.0 and Xp.



NOTE !

The Matica CD Software includes a utility which automates the installation of the printer driver. This utility installs the driver that is suitable for your configuration, in the Windows operating language.

Printer driver installation procedure

1. Start Windows, ensuring that no other Windows application is running.
2. Place the Starter CD in the CD Rom drive of your computer. The program runs automatically.
3. Click on the option **Chica driver installation** from the menu. The installation of the driver runs automatically.

However, if the installation program does not run automatically, proceed as follows :

1. Start Windows, ensuring that no other application is running.
2. Insert the Starter CD in the CD ROM drive
3. Click on **Start** in the Windows, select **Settings** then **Printers**.
4. Double-click on the **Add Printer** icon.
5. Click on **Next** until the list of makers is displayed.
6. Click on Have Disk then on **Install from...**
Select the drive letter corresponding to your CD ROM drive
Click on **Browse**.
7. In the tree diagram of the CD ROM drive, double-click on the **Drivers directory**
8. **Double-click on the directory** corresponding to your Windows environment.
9. Select the file " matica.inf " .
10. Click on **OK**. The name of the printer manager appears.
11. Continue the installation by following the instructions displayed on the screen.

Note that the installation of a printer driver under NT may be subject to authorisation by the administrator as a function of "login system"

2. Configuring the printing settings

Your printer has numerous setting functions in the print manager.

These printing settings are accessible :

- from **Start** in the Windows bar, **Settings** then **Printers**
 1. Select **Chica**
 2. In **File**, in the bar of the Windows window menus, select **Properties** (for Windows 95/98/2000) or **Default Document** (for Windows NT 4.0).
- From your Windows software.
In **File**, from the menu bar of your application, select **Print** or **Printing Configuration**.

Note that the procedures vary according to the type of software used and the Operating System (95/98 /2000 or NT)



IMPORTANT !

Before using the printer, check that it has been selected as the default printer.

Default Chica Printer

To select the Chica printer as the default, proceed as follows :

1. Click on Start, in the Windows bar, select Settings then Printers.
2. Click on the Chica Printer icon then point to File in the menu bar.
3. Select Set as Default and close the window.

Chica Properties

Different dialog boxes allow you :

- to carry out adjustments such as orientation and print quality.
- to manage the different printing and use modes of the appropriate ribbons.
- to select the printer port.
- to activate the various printer control and maintenance functions.

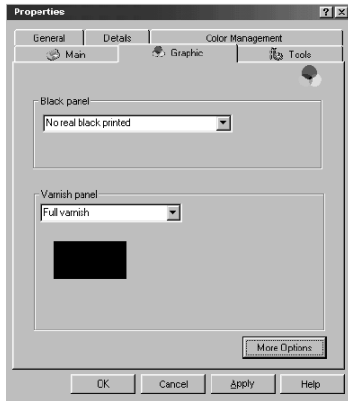
On line help

A help file guides you in the use of each of the print management settings according to the various printing modes and criteria entered. In order to familiarise yourself with these various settings, we recommend that you consult this help before making any changes.

"Characteristics" Dialog Box

This dialog box enables the selection of :

1. the type of ribbon
2. the orientation of the printing (Portrait or Landscape)
3. the number of copies of the card you wish to print

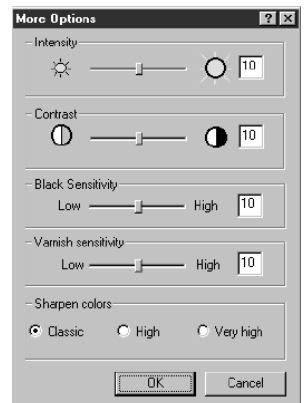


"Graphic" Dialog Box

In "5 panel ribbon" mode enables the management of :

1. the use of the black panel when "5 panel ribbon" has been previously selected as the ribbon type
2. the removal of the gloss panel of a colour ribbon as a function of a deliberate choice or of a type of card requiring a covering reserve.

More options enables some print settings with a "5 panel ribbon" film ribbon additional





"Utilities" Dialog Box

This dialog box allows support and 1st level maintenance for your printer. We recommend that you print a "Test Card" at the first use and keep it. This card records the information likely to be required at the time of an service call.

"General" Dialog Box

This dialog box is a Windows information window. It enables a test page to be printed for the sole purpose of checking the communication between the computer and the printer.

"Details" Dialog Box

This dialog box is a Windows control window enabling the printer port to be selected and to check the use of the appropriate printer driver. The displayed settings must only be changed by an experienced person.

"Colour Management" Dialog Box

This dialog box enables the printing to be associated with a defined colour management profile.

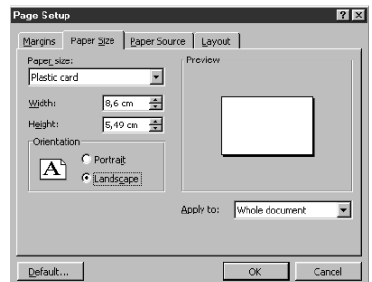
3. My first cards

A large number of Windows applications allow document printing (Word – Access – Excel, for example). In order to familiarize you with the page setup of a card and the printer settings for it, we offer you the following example.

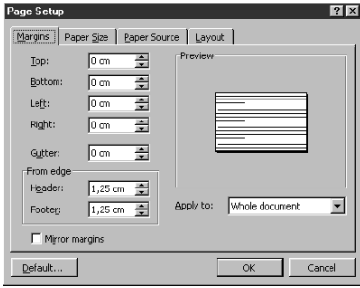
Under Microsoft Word

After having previously registered the Chica printer as the default

1. Run Word and in **File** click on **Page Setup**.
2. The dialog box offers :
 - **"Paper Format "** select **Card**
 - **"Orientation"** select **Landscape**

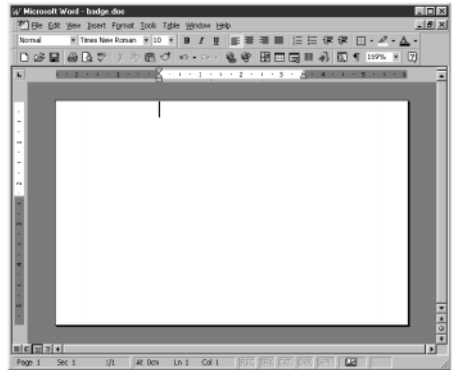


¹ See paragraph 2 of this chapter



3. The "Margins" dialog box offers "printing margins" • Select 0 cm

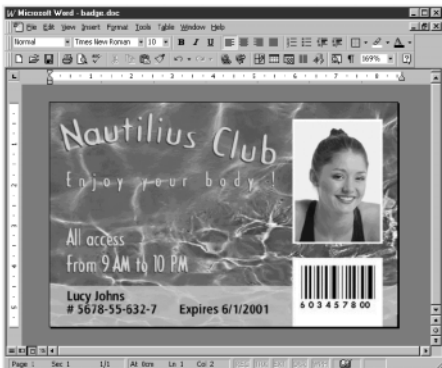
Your Word window should now appear like this



You are ready to personalize your card by introducing the various composition elements :

- Logo and Illustration
- Identity photo
- Permanent texts and Variables (Identity)
- Etc..

Example :

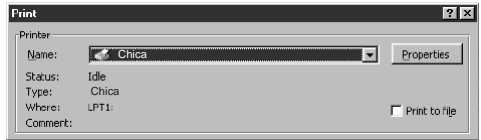


Note that this example does not claim to introduce the operator to the Word application. Its only objective is to establish a relationship between the graphics of a card and the Chica Card Printer management settings necessary for printing it.

Chica Card Printer Driver Settings

To access the settings from the Word window :

1. In the menu bar point to **File** and select **"Print"**
2. The dialog box shows you that the Matica printer is selected. Then click on **Properties**.
3. The dialog box of the **Chica** driver opens². Do not forget to refer to the help for each dialogue box

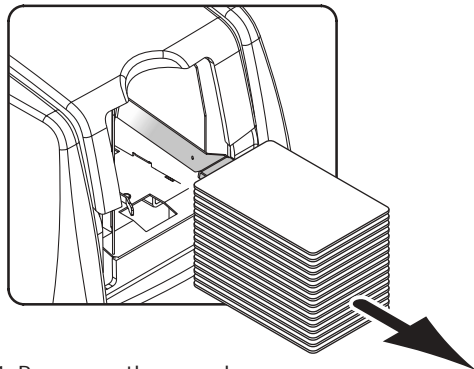


The print settings for this graphic example are :

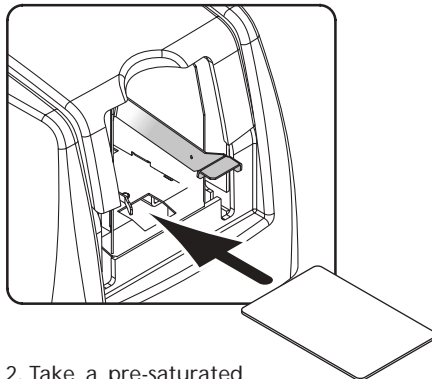
1. **"Characteristics" Dialog Box** select :
 - 5 panel ribbon
 - Landscape orientation
 - Copy (number)
2. **"Graphic" Dialog Box** select :
 - **Black Panel** : "Only the Black Characters"
 - **Varnish Panel** : "Full varnish"
3. Click on **Apply**, if you change a setting, then on **OK** to successively close each dialog box.
4. On returning to the main window click on **OK** to start printing.

² Go over paragraph 2 again if necessary

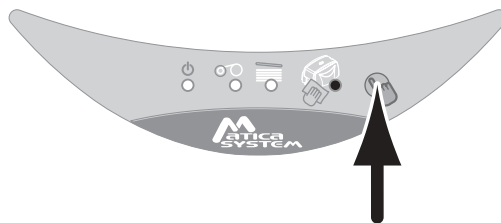
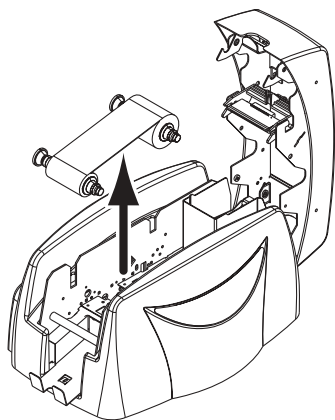
To start auto-cleaning the printer:



1. Remove the cards from the feeder.



2. Take a pre-saturated cleaning card and place it in the feeder.



3. Remove the ribbon from the printer then close the cover. Press the control panel push button for a few seconds. The automatic cleaning starts.



WARNING !

After a cleaning cycle, wait 2 minutes for the cleaning fluid to evaporate completely before using the printer.



NOTE !

It is also possible to start an automatic cleaning sequence without waiting for the printer light signal. This is done by pressing on the Control Panel push button for a few seconds. In this case, first repeat operations 1, 2 and 3 quoted above.

2. Print head maintenance



WARNING !

The print head is a fragile component of your printer. To avoid damaging it, never put the print head in contact with pointed and/or metal objects. Also avoid touching the print head surface with the fingers. Changed print quality or even permanent degradation of the print head could result.

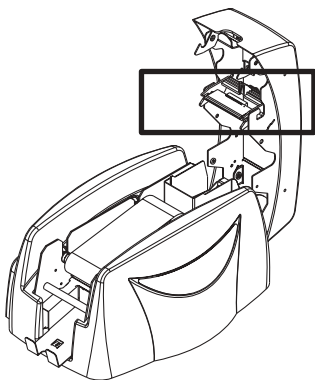
The print head is cleaned during the automatic cleaning of your printer (see previous section). However, in order to preserve the original print quality and to reduce problems caused by an excess of ink on the print head surface, it is recommended that you clean it regularly (about every 1000 cards) using a cleaning swab (available from ID Warehouse on 1300 301 748)

To carry out print head maintenance :

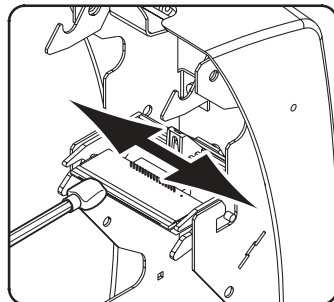


IMPORTANT !

Before cleaning the print head, unplug the printer from the power supply.



1. Open the printer cover and locate the print head
2. Take a cleaning swab



3. Gently rub the swab from front to rear on the print head for a few seconds



WARNING !

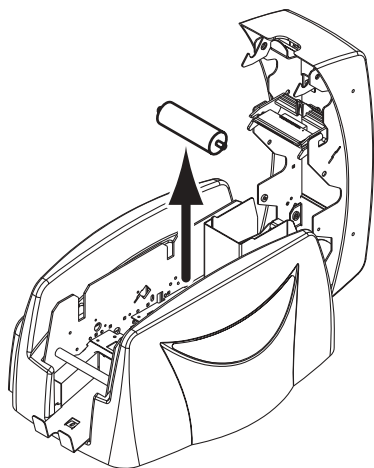
After a cleaning cycle, wait 2 minutes for the cleaning fluid to evaporate completely before using the printer.

3. Cleaning of the dust-removing roller

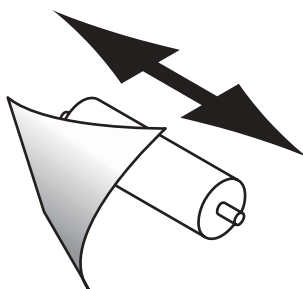
Your Chica printer has a dust-removing roller. Its adhesive surface retains the dust when cards run through.

Although the cleaning of this roller is carried out during the automatic cleaning of the printer, it is nevertheless recommended that you clean it regularly and simply with a cleaning cloth in order to ensure that the card surface is perfectly clean.

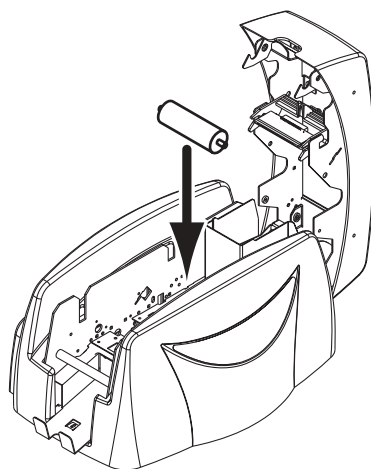
To carry out the maintenance of the dust removing roller :



1. Open the printer cover.
2. Locate the roller and remove it from the printer



3. Clean the roller with a cleaning cloth. Remove all the dust by rubbing lightly with the cloth over the whole surface of the roller. Wait for 2 minutes for the cleaning fluid to evaporate completely. If necessary, the cleaning roller can be cleaned under (cold) running water then dried with a fluff-free cloth or with a neutral gas dust-removing spray

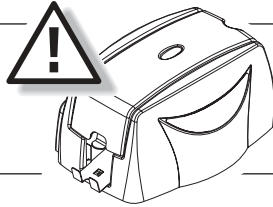


4. Once dry replace the roller in the printer then close the cover.

2. Troubleshooting

The information below will help you to resolve possible problems that occur when you are using your printer. If, in spite of this information, you are not able to resolve the problem, contact your Matica Reseller or an approved Matica service provider.

○ Nothing prints



1. Check the power supply

Ensure that:

- The power supply cable is correctly connected to the printer and to a mains plug which is functioning.
- The printer is switched on (position 1). The green control panel warning light must be on.

2. Check the card feeder and the card in the printer

- Check the presence of cards in the feeder.
- Check that no jamming has occurred.
See page 4.4 of this chapter for how to cure jamming.

3. Check the ribbon

- Check that the ribbon has been correctly installed and that the printer cover is properly closed.

4. Print a test card

- Ensure that there is a ribbon in the printer.
- Switch off the printer.
- Press the control panel push button
- Switch on the printer again, whilst holding the pressure on the push button
- The green warning light comes on
- Release the button as soon as the green warning light flashes
If the test card prints, the problem is not in the printer.

5. Check the printer interface cable

- Check the connection to the computer and to the printer.
- Test with another cable of the same type.

6. Check the printer driver

- Check the presence of the Chica Card Printer driver in the Windows settings

7. Check the computer printing settings

- Ensure that the Chica printer is selected as default printer.
See " Changing the printing settings " of the Printing chapter page 2.2.

8. Check the network configuration

If your printer is connected to a network, check that it is correctly configured in the network environment. See the documentation relative to your network for more information.

○ **A blank card is ejected from the printer**



1. Check the ribbon

- Check that the ribbon has not run out or cut. Replace or reinstall the ribbon, if necessary.

2. Check the printer interface cable

- Check the connection to the computer and to the printer.
- Test with another cable of the same type.

3. Elements of the print head may be damaged.

- Print a test card (See above)

If the test card does not print, contact your retailer for a replacement print head.

○ **The print quality is not satisfactory**



1. The contrast and luminosity settings must be modified

- Lack of contrast and color saturation; increase the contrast and luminosity settings in the printer driver configuration.

2. The type of card used may be inappropriate

- Check if the type of card used corresponds to the required specifications See chapter "*Specifications*" page 5.1 for more information.
- The texture of the card is rough or not perfectly flat.
- Print test with another type of card.

5 Chapter 5

Specifications

| | |
|------------------------------------|--|
| Printing Mode | Thermal Transfer and Sublimation Edge-to-edge printing as standard |
| Printing Speed | 140 cards/hour in color up to 1000 cards/hour in mono color |
| Resolution | 300 DPI |
| Windows™ drivers | For Windows™ 95 / 98 / Me / NT 4.0 / 2000 and Xp |
| Warranty | Printer: 2 years Print head: 2 years, unlimited number of prints ¹ |
| Ribbon Type | 5 Panel Color Ribbon (YMCKO): 200 cards/roll 2 Panel Monochrome Ribbon (black TT + varnish): 500 cards/roll Mono Color Ribbon: 1000 cards/roll |
| Other printer models | Chica MAG <i>Printer with HICO / LOCO Magnetic Stripe Encoder– ISO 7811</i> Chica SMART <i>Printer with Smart Card Contact Station – ISO 7816-2</i> |
| Card Types | All PVC and Composite cards |
| Card Format | ISO CR-80 – ISO 7810 (53.98mm x 85.60mm) ISO CR-90 (60.33mm x 92.07mm) optional |
| Card Thickness | 0.25mm (10mil) to 1mm (40mil) |
| Card Feeder Capacity | 300 cards (0.25mm-20mil) 100 cards (0.76mm-30mil) |
| Card Output Hopper Capacity | 90 cards (0.25mm-20mil) 30 cards (0.76mm-30mil) |
| Printer Size | Height: 186mm Width: 225mm Depth: 386mm |
| Printer Weight | 6.8kg |
| Communication Interface | Centronics Parallel (cable supplied) USB port optional (cable supplied) |
| Electrical | 110~230 Volts CA, 60~50 Hertz |
| Environmental | Min / Max operating temperatures: 15°C / 30°C Humidity: 20% to 65% non-condensing Min / Max storage temperatures: -5°C / +70°C Storage humidity: 20% to 70% non-condensing Operating ventilation: free air |

¹ - Clause governing the use of Matica consumables

6 Chapter 6

Matica System warranty

1. Extent of the warranty

1. Matica System warrants its products, to the end customer, against all manufacturing defects for a limited period starting from the date of purchase by the customer. The limited warranty period is indicated below. The customer must be able to supply proof of the purchase or the registration of the product.
2. Matica System warrants the print head for a period of two years only on condition of the use of Matica approved ribbons, standardized cards and of adequate maintenance.
3. The limited warranty only covers problems occurring during normal use of the product and does not apply in the following cases :
 - a. Poor maintenance of the printer
 - b. Unauthorised technical modification of the printer
 - c. Use of interfaces not supplied by Matica System
 - d. Use of non-approved materials
 - e. Use outside the specified conditions.
4. Concerning the software products, this warranty only applies to the medium on which the product has been recorded. Matica does not warranty that these products will work continuously or fault-free.
5. If a breakdown or damage occur, caused by the use of ribbons not supplied by Matica System, Matica System will invoice the customer for the repair of the breakdown or damage at the standard price list of the labour and of the replacement parts.
6. If, during the warranty period, Matica System is notified of a plastic card or ribbon manufacturing defect, Matica System will replace the defective product. If, during the warranty period, Matica System is notified of a hardware fault, Matica System will repair or replace the product in question, at its discretion.
7. If, depending on the circumstances, Matica System is unable to repair or replace the defective product covered by the warranty, Matica System will reimburse its purchase price within a reasonable time, on rapid return of the product.
8. Matica System is not under any obligation to repair, replace or reimburse if the customer has not returned the defective product.
9. The replacement product can be new or second-hand, if its functionality is at least the equivalent of the original product that it replaces.

2. After Sales Service in the warranty period

In the event of hardware breakdown, and after agreement, Matica System offers the following assistance options:

- **Matica authorized Reseller** : send the printer to a Matica authorized reseller.
- **Matica authorized service provider**: send the printer to a Matica authorized after sales service.

Do not forget to enclose proof of purchase with each dispatch.

WARNING !

The customer is responsible for all damage sustained due to inadequate packaging when returning goods. As far as possible, re-use the original packaging.

3. After Sales Service outside the warranty period

In the event of breakdown outside the warranty period, contact your Matica authorized reseller or a Matica authorized service provider. If you have taken out a maintenance contract, Matica System will repair the hardware in accordance with the clauses of the contract.

7. Chapter 7

Supplies

Matica System has a choice of ribbons and various accessories. You will find below the list of supplies available from your authorized Matica reseller.

Mono Color Ribbons

| | |
|---|--------------|
| Black Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2011 |
| Blue Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2012 |
| Red Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2013 |
| Green Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2014 |
| White Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2015 |
| Gold Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2016 |
| Silver Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2017 |
| Scratch Off Monochrome Ribbon 1000 cards/ribbon | Ref. M.R2018 |

Multi-Panel Ribbons

| | |
|--|--------------|
| 5 Panel Color Ribbon - YMCKO 200 cards/ribbon | Ref. M.R3011 |
| 2 Panel Ribbon – Black TT + Varnish 500 cards/roll | Ref. M.R3012 |
| 3 Panel Color Ribbon – YMCKO 400 cards/ribbon | Ref. M.R3013 |

Accessories

***UltraClean* Cleaning Kit**

5 Pre-Saturated Cleaning Cards, 5 Swabs,
1 box of 40 Pre-Saturated Cleaning Cloths

Ref. M.A5011

Printer Options

MAG Option

HICO – LOCO Magnetic Stripe Encoder

Ref. M.O5011

A **Appendix A**

Magnetic Stripe Encoding

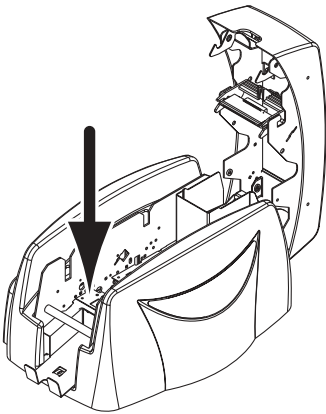
Introduction

Chica printers equipped with a magnetic strip encoder are known as Chica MAG printers. The way that a Chica MAG printer works is identical to that of a Chica printer.

The magnetic encoder encodes ISO strips 1, 2 and 3 in a single movement before carrying out data verification.

Chica MAG printer encoders can be set for high coercivity (HICO) or for low coercivity (LOCO) simply by clicking on the Windows driver, but they leave the factory set by default for high coercivity (HICO), unless specifically requested otherwise when ordering.

1. Position of the magnetic encoder

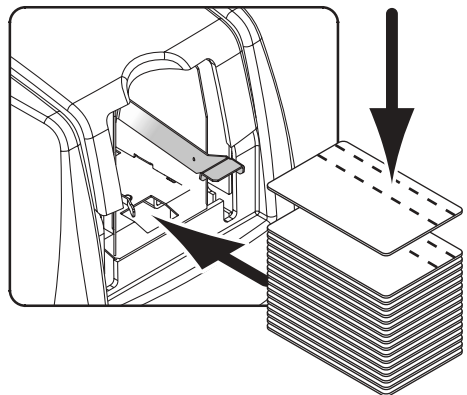


The magnetic encoder is a unit fitted in Chica MAG printers in the factory. The read/write head is positioned below the path taken by the cards and after the print head.

NOTE: the encoding sequence of a card is always performed before a print session.

2. Position of cards

The magnetic stripe cards must be installed in the loader in such a way that the magnetic stripe is on the underside and as close as possible to the back of the printer (see opposite):





IMPORTANT !

Use only magnetic stripe cards that comply with ISO Standards 7810 and 7811.

In order to function correctly, the magnetic stripe must be moulded to the card.

Never use a card with a glued magnetic stripe.

3. Setting Windows Driver

During the first installation of the Windows Driver, it is essential to define the functions of the magnetic stripe encoder.



"Encoder Settings" Button

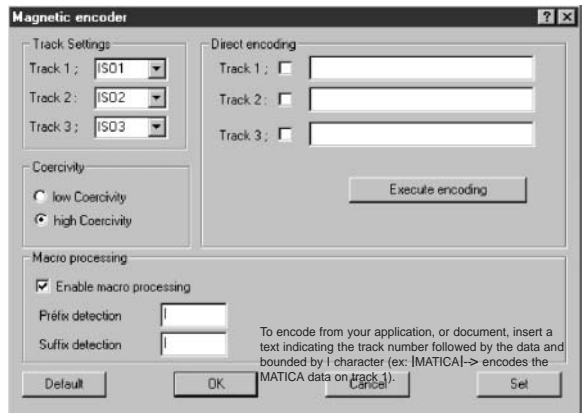
The magnetic stripe encoder functions are accessible via the "Tools" dialogue box of the Windows driver by clicking on the "Encoder Settings" button.

"Magnetic Encoder" dialogue box

The "Magnetic Encoder" dialogue box is opened by selecting the "Encoder Settings" button.

Track Settings allows the ISO Standard desired for each stripe to be selected. **ISO1** accepts up to 76 alphanumeric characters, from A to Z and from 0 to 9 as well as the ASCII characters between 20 and 95.

ISO2 accepts up to 37 numeric characters from 0 to 9 as well as the ASCII characters between 48 and 62.



ISO3 accepts up to 104 numeric characters from 0 to 9 as well as the ASCII characters between 48 and 62.

Coercivity defines the magnetic encoder at high or low coercivity. An encoded magnetic stripe at high coercivity is more resistant to exterior disturbances than an encoded magnetic stripe at low coercivity.

Direct Encoding allows the magnetic stripes to be directly encoded using this window.

Enable Macro processing allows magnetic stripe cards to be encoded from Windows applications. A text field delimited by the characters “|” and “|” (or other characters may be defined by the user) will be interpreted as an encoding command by the driver.

4. Cleaning of magnetic stripe encoder

The head of the magnetic encoder requires regular maintenance in order to ensure the integrity of the encoded data on the cards.

The cleaning of the magnetic encoder is carried out by running an auto – cleaning sequence with the pre-saturated Printer Clean cards (see Chapter 3 of this manual for more detailed information). The repeated passage of the cleaning card within the printer cleans the card transport rollers, the dust roller and the print head as well as the read/write head of the magnetic encoder.

If, between two printer cleaning sessions (all of the 1000 cards inserted), the read/write process has failed with more than one card, it is recommended to launch a printer cleaning sequence manually (see Chapter 3 of this manual for the relevant procedure).

B

Appendix B

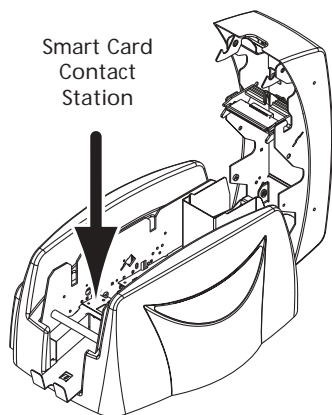
Smart Card Contact Station

Introduction

Chica printers equipped with a Smart Card Contact Station are known as Chica SMART. The way that a Chica SMART printer works is identical to that of a Chica printer.

The Smart Card Contact Station allows to program the ISO 7816 chips.

1. Position of the Smart Card Contact Station



The Smart Card Contact Station is a device fitted in Chica SMART printers in the factory. The contact station is positioned above the path taken by the cards, after the print head.

NOTE : the personalisation of a chip is always performed before a printing session.



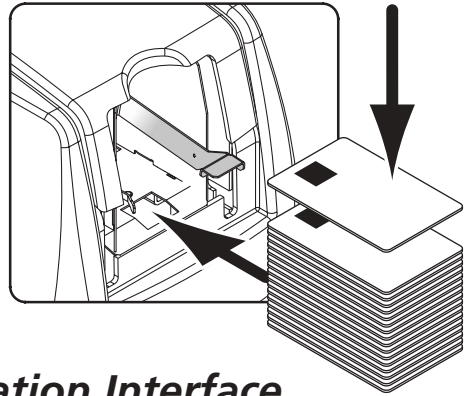
IMPORTANT !

Use only Smart Cards that comply with ISO Standard 7816-2.

Do not print on the chip of the card.

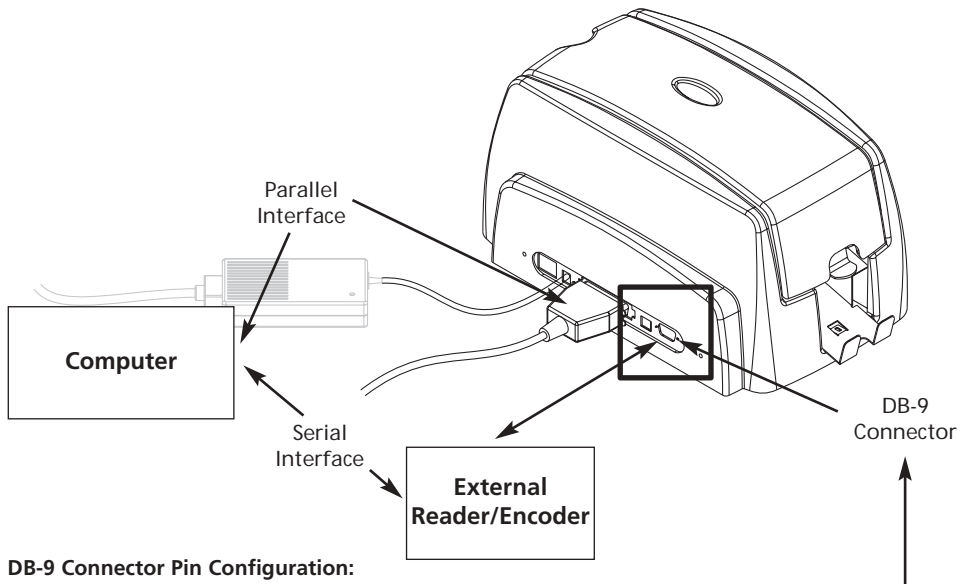
2. Orientation of the cards

The Smart Cards must be installed in the feeder with the chip on top with the chip first (see opposite).



3. Smart Card Contact Station Interface

The Chica SMART Printer is equipped with a DB-9 connector at the back of the printer. This connector, which is directly linked to the Smart Card Contact Station inside the printer, is to be linked to an external reader/encoder to program the chip.



DB-9 Connector Pin Configuration:

| DB-9 Pins | Contacts on Smart Card |
|-----------|--|
| 1 | C1 (V c.c.) |
| 2 | C2 (reset 0) |
| 3 | C3 (clock) |
| 4 | C4 (reserved) |
| 5 | C5 (ground) |
| 6 | C6 (Vpp) |
| 7 | C7 (E-S) |
| 8 | C8 (reserved) |
| 9 | C9 Ground when the chip is commutated to the station |

A command needs to be sent via the printer interface to insert the card inside the printer and to position it under the Smart Card Contact Station.

The command is described as follow:

Sis = Moves the card to the direction of the Contact Station and stops underneath.

A contact is established between the chip and the Contact Station.

Remark: please see the Programming Guide of the Chica Printer for more complete information about programming.

