



GESTIGYM



SECURION

evolis

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Icons

Throughout this manual, different icons highlight important information, as follows:



Indicates information that emphasizes or supplements important points of the main text.



Advises you of information that is essential to complete a task, or points out the importance of specific information in the text.



Advises you that failure to take or avoid a specific action could result in physical harm to you, or could result in physical damage to the hardware.

Warranty Information

Refer to the Warranty booklet enclosed with your Evolis printer for terms and conditions.

Return Materials Authorization

In order to make a warranty claim you must contact an Evolis Reseller. You will be responsible for packaging the printer for shipment and the costs of shipping and insurance of the printer from the point of use of the printer to the Evolis Reseller. The Evolis Reseller will bear the costs of shipping and insuring the printer from the repair location to the address from which the printer was shipped.

Before returning any equipment for in-warranty or out-of warranty repair, contact an Evolis Reseller or an Evolis Repair Center (ERC) for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside of the box. For more information about RMA or Evolis warranty statements, refer to the Warranty booklet enclosed with your Evolis printer.

Product Disposal

WEEE Directive



This symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling.

By not discarding this product along with other household-type waste, the volume of waste sent to incinerators or landfills will be reduced and natural resources will be conserved. Your Evolis printer should be recycled according to your local standards. For more information, please contact Evolis at: info@evolis.com.

Thanks for choosing Evolis SECURION to personalize and laminate your badges

Using the latest printing and encoding technologies, Evolis Securion offers its users both performance and quality.

Evolis Securion, fully adapted to both small and mid-volume runs, combines simplicity of use and functional richness: high quality printing and laminating, magnetic encoding, encoding of both contact and contactless smart cards.

The 'Evolis Genuine Product' line of consumables linked to the printer was specifically developed and optimized to guarantee the highest quality of printing and laminating.

Using these consumables increases the life span of your badges and of your Securion printer.

As for all Evolis products, particular care has been used in writing this manual. But if an error has still managed to slip into these pages without our wanting it, please let us know by sending an e-mail to info@evolis.com. Evolis will then do everything in its power to correct the problem and give you complete satisfaction.



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Install the Evolis Securion printer

The aim of this first part is to assist you, step-by-step, in discovering your new printer and putting it to work for you. By taking the time to review these few pages, you will get more detailed knowledge about Securion and its capabilities, while optimizing the time needed to install and start using the product.

Technology and benefits

Evolis Securion is for all users who want to personalize highly secure badges. The personalization cycle includes a series of operations that are consistent with the nature of the requirements.

For example, after a first and optional card encoding stage (magnetic stripe, contact or contactless chip), personalization continues with printing on one or both sides of the card.

The printing process is completed by a lamination cycle that involves putting a protective film on one or both sides of the card.

The use of holographs (holograph ribbons) makes it possible to combat fraud and counterfeiting of the badges. Evolis offers a wide range of consumables that can be adapted to the needs of an enterprise as requested.

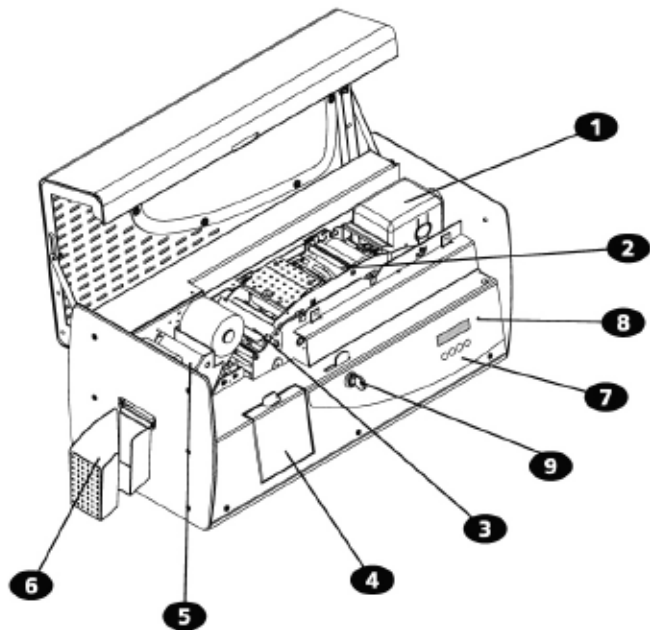
In addition to great security, plastic lamination means greater badge durability, generally between 5 and 10 years, depending on the quality of the components and the manner in which they will be used.

Evolis Securion is an ideal personalization solution for company badges, student badges, drivers' licenses, identity cards and, more generally, for any badge requiring a very high quality of printing combined with total security.

Initial approach

The Evolis Securion printer is comprised of the following components referenced on the diagram:

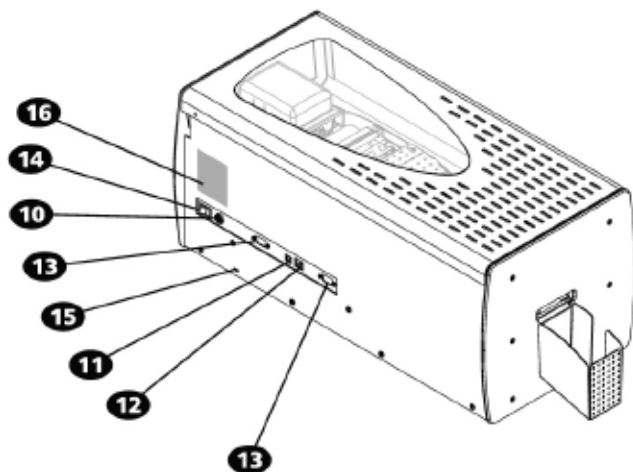
1. 100-card feeder
2. Encoding and printing station
3. Flip-over station
4. Defective card reject box with a capacity for 15 cards
5. Card laminating station
6. 100-card capacity hopper
7. 4-button control panel and 2-line LCD display
8. LED indicator light for displaying printer activity
9. Centralized locking of the cover to secure all internal components



The following items are located behind the printer:

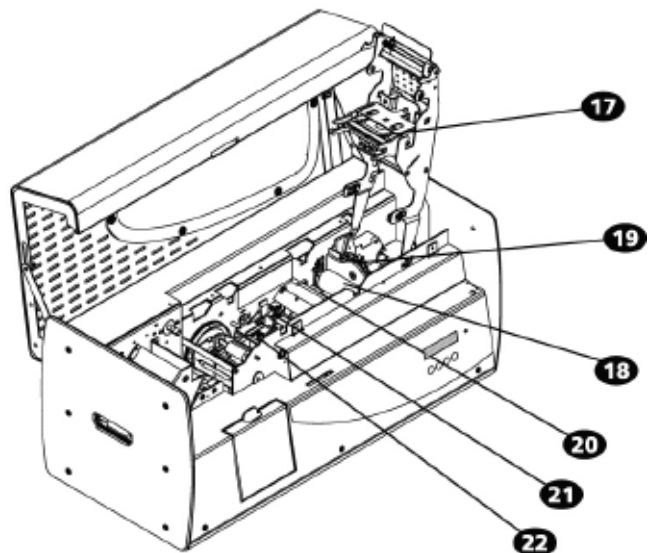
10. Power supply connector
11. USB computer connector
12. RJ45 Ethernet connector
13. DB9 connector(s) (option)
14. Power switch
15. Location of Kensington® type bolt

You will also find the identification label (16), specifically containing the serial number of the unit and its MAC address (necessary for hooking up to the Ethernet network - TCP/IP).



Finally, the encoding and printing module includes a number of components, including:

17. 300 dpi thermal color-printing head
18. Card cleaning roller (absorption of residual dust on cards)
19. Gauge for adjusting card thickness from 0.25 mm (10 mil) to 1 mm (40 mil)
20. Magnetic encoding head option
21. Smart card contact station
22. Contactless card encoding antenna (RFID)



Install your printer

The Evolis Securion printer must be set up in a dry, well-ventilated location protected against dust and air currents.

In point of fact, during the lamination operation, the temperature of the module can attain a peak of 180°, it is therefore recommended that the instructions regarding the operating environment be followed.

In addition, make sure you install your Securion on a sturdy flat surface that can support its weight of around 15 kg (33 Lbs).

Finally, it is essential to allow free access to the connectors and to the power switch located in back of the unit.



Because of the weight of the entire unit (15 kg - 33 Lbs), and to prevent any physical damage, do not attempt to install the machine by yourself.

Check the items shipped

The Evolis Securion printer is shipped with a set of accessories that we invite you to examine. Please take note that this list may vary in terms of the geographic area where you are located.

Securion is shipped in an original container specially designed to ensure that the product is protected against any risk of damage during shipment.

In the event of visible damage at the time of delivery, do not hesitate to carry out all required steps as far as the shipper is concerned, and immediately contact your Evolis dealer who will provide you with all necessary assistance.

Evolis has paid particular attention to the quality of this shipping material, and we urge you to keep it in a clean, dry space.



*This packaging material will be required to return equipment.
During the manufacturer's guarantee period, returning material without the original Evolis packaging could cause you to lose the benefit of this guarantee !*

The following parts are furnished with the Securion printer:

- Power supply unit - VP ELECTRONIQUE type PAC150M
- Main power cable
- USB cable (length 1:80 m) - Item # A5017
- CD-Rom Driver & Documentation
- CD-Rom eMedia Card Designer, badge design and personalization software including the utilization of an Excel source data base
- Cleaning kit
- Evolis Limited Guarantee document (must be consulted)

In the absence of one of these components, please contact your Evolis dealer.



*Only use the power supply delivered with your Securion:
VP ELECTRONIQUE type PAC150M.*

Pre-installation activation

Before installing the printer, please perform the following operations:

Connect the printer to the main power supply

Connecting to the electrical system



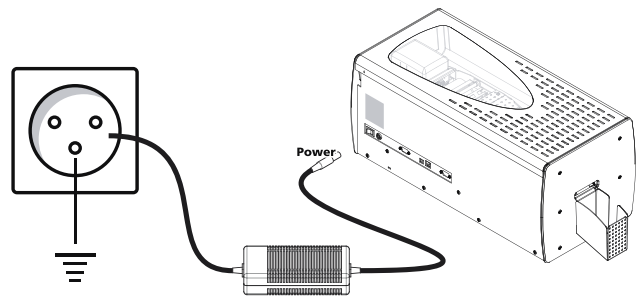
Before hooking up to the electrical system, make sure the switch on the back of the printer is on OFF (0). Turn off the printer by pulling the plug out of the socket, which must always be accessible.

This product must be connected to an electrical installation that is correctly protected and grounded.

FI: Laite on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan

NO: Apparatet må tilkoples jordet stikkontakt

SE: Apparaten skall anslutas till jordat uttag



1. Connect the power supply cord to the power supply, then attach the power cord connector to the printer.
2. Then connect the end of the power supply cord to a grounded system outlet.
3. Power up the printer by turning the switch to ON (1).
4. The control panel display lights up and the message **INITIALIZATION** is displayed. Once the start-up sequence is completed, the menu displays **READY** and the driver LED is green and must be steady. If the display does not light up when the power is turned on, or if the LED is not green and/or if it flashes, this means that the installation was not done correctly or possibly that the printer is not operating properly. Check the installation.



Prior to any maintenance action, always turn the power switch to OFF (0) and disconnect the power supply cable.

For your own safety, these two components must remain accessible at all times to permit emergency action



This product must be connected to a correctly protected and grounded electrical installation

Connecting the data cable

The data cable (USB, Ethernet or other) must never be connected before the installation of the printer driver has been completed.

Refer to Chapter 2.1 and carefully follow these instructions.

Installing the ribbons

The Evolis Securion printer uses two types of ribbons:

- Color or monochrome ribbons for the printing module: identifiable by their core which is equipped with a toothed wheel
- Special films for the laminating module characterized by their hollow core



The Evolis original ribbons and films are specially designed to guarantee optimum operation of your equipment without any risk of damage. The use of films or ribbons from any other source than Evolis could seriously damage the print head and the heating roller of the laminating station, consequently entailing the immediate interruption of the factory warranty.

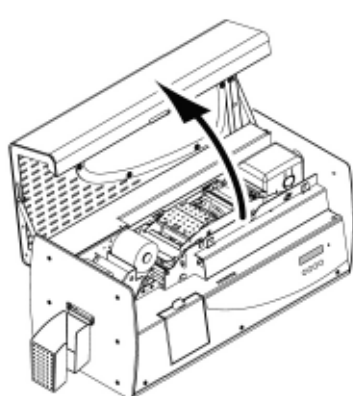
For optimum printing and laminating quality, Evolis recommends cleaning all the equipment each time a ribbon is changed. It is up to the user to make this determination, provided, however, that he makes sure to comply with the mandatory cleaning cycles in order to keep the equipment in perfect operating conditions (consult the chapter on Ordinary Maintenance).



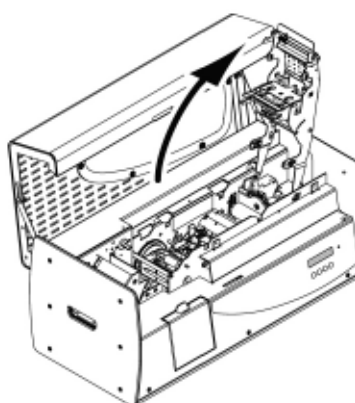
The validity of the factory guarantee is conditional upon compliance with these cleaning cycles (cf. Limited Evolis Warranty document).

Monochrome or color ribbon

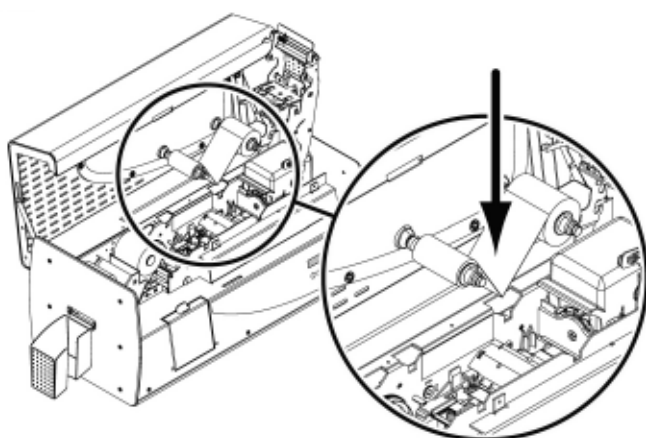
To install a monochrome or color ribbon in the print module, proceed as follows:



- 1.** Open the printer cover



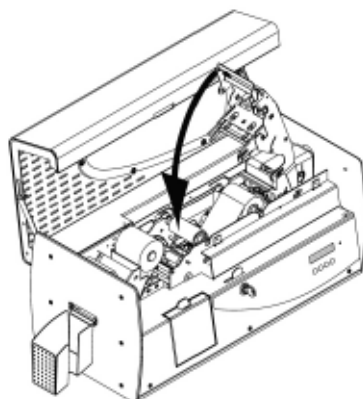
- 2.** Press the latch to unlock the print head bracket and rotate it to the right until it is in vertical position. If applicable, remove the existing ribbon



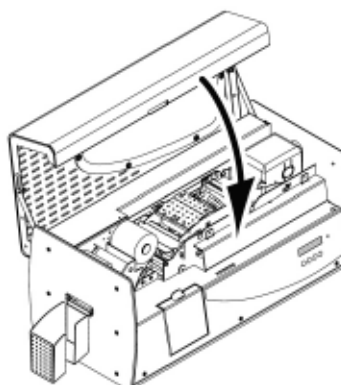
- 3.** Install the new ribbon in the position indicated in the diagram:
- Toothed wheel toward the rear of the printer
 - Part including the new ribbon located on the right side (card feeder)



The ribbon is automatically positioned after the print head bracket is locked



- 4.** Lower the print head bracket and lock it.

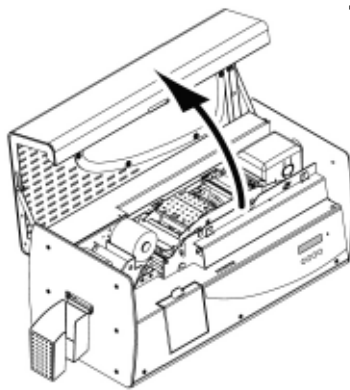


- 5.** Reclose the printer cover.

Film for lamination

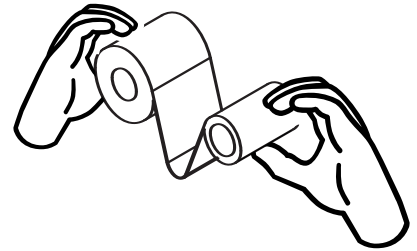


The lamination unit includes components heated to high temperatures. Make sure not to put your fingers inside the module. Follow the safety instructions

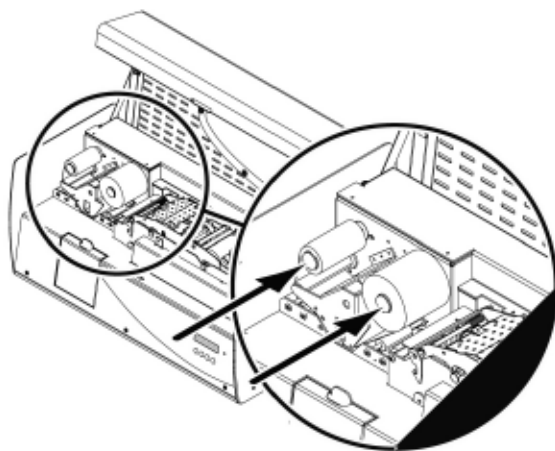
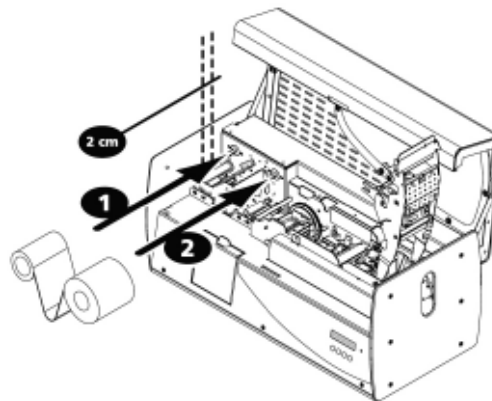


- 1.** Open the printer cover

- 2.** If necessary, carefully remove the existing film, taking care not to bend or twist it. Introduce your film, holding it in both hands with the full spool in the right hand. Hold the ribbon as indicated in the diagram.

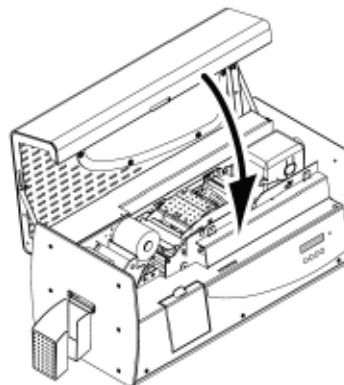


- 3.** Insert the two cores about 1 inch onto the brackets



- 4.** Position the film, engaging it in the film guide provided for this purpose, taking care not to damage it.
- 5.** Once the film is in place, carefully push each core back gradually until it comes to a stop on the bottom of the bracket. Then make sure the film moves freely, without creasing.

- 6.** Reclose the printer cover



Installation of the print ribbons and laminating films must be accompanied by adequate defining of the parameters of the print driver. Please refer to the chapters on Properties of the Driver for additional details.

Installing the cards

Types of cards

The Securion printer supports PVC cards varying in thickness between 0.25 mm (10 mil) and 1 mm (40 mil). For optimum quality, these cards must comply with ISO Standard 7810.

They are of a number of types:

- Blank cards
- Magnetic stripe cards
- Contact smart cards
- Contactless smart cards
- Smart cards and magnetic stripe

Correct positioning of the magnetic stripe cards and of the contact smart cards in the feeder must be scrupulously observed. Failure to comply with the direction of insertion would prevent the encoding option from functioning.

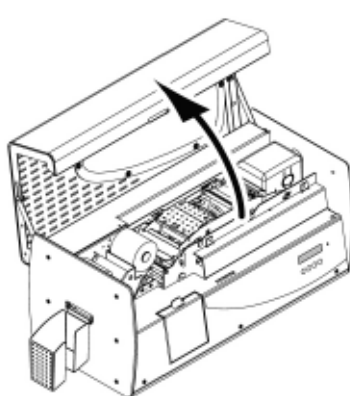
In the most common procedure, the cards are laminated after printing. This operation requires that the card be heated to a high temperature, which could cause it to be slightly deformed due to the heat and the stresses created by the film when it cools.

Evolis recommends the use of cards specially designed for lamination.

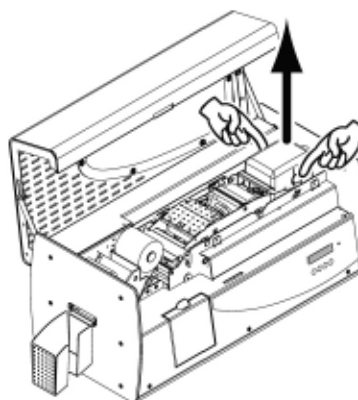
For more information, contact your Evolis dealer who will provide guidance in making the choice.

Installation in the feeder

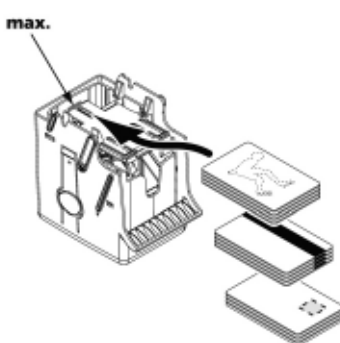
The cards are installed in the feeder as follows:



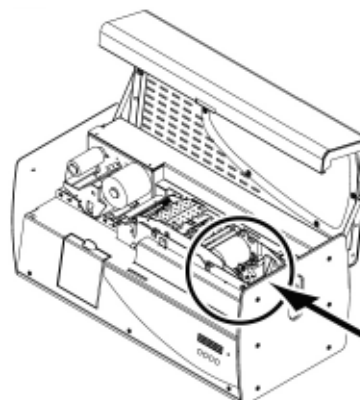
1. Open the printer cover



2. Remove the feeder as indicated.

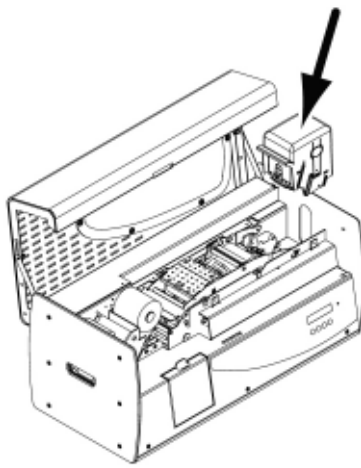


3. Insert the cards into the feeder as indicated, printable face down.

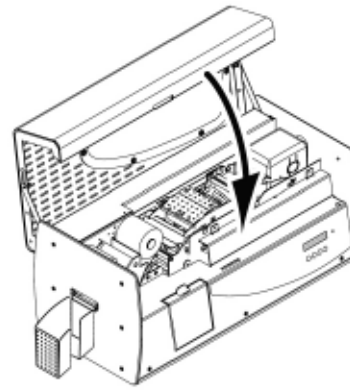


4. Adjust the gauge setting in terms of the thickness of your cards.





5. Put the feeder back into place in the printer until it "Clicks" in place.



6. Reclose the printer cover.



*Use only the types of cards on the List of Consumables in this manual.
Do not touch the printable surface of the cards: the printing quality depends on this.
Do not use cards that are damaged, bent or that have an embossed texture.
Always store the blank cards in a clean and dust-free location.*

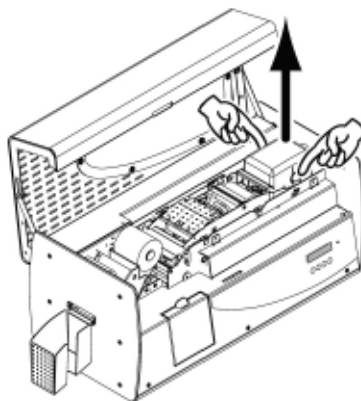
Adjustment of the thickness

The Securion printer is equipped with a manual system for setting the thickness of the cards, which is accessible either through the feeder frame, or through the inside of the printing module when the print head bracket is open.

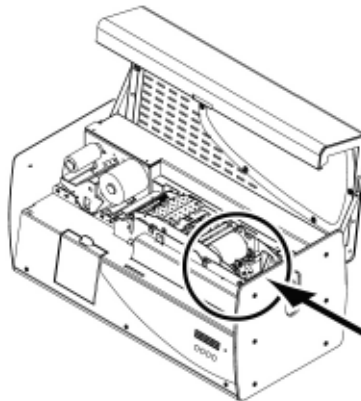


*The Securion printer accepts card thickness between 0.25 mm (10 mil) and 1 mm (40 mil).
The factory thickness setting of the cards is 0.76 mm (30 mil).*

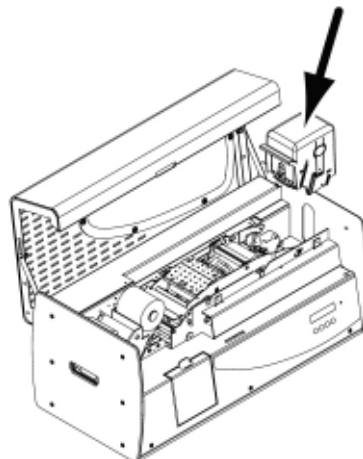
To adjust the thickness of the cards using the feeder frame



1. With the cover open, remove the feeder from the printer as indicated.

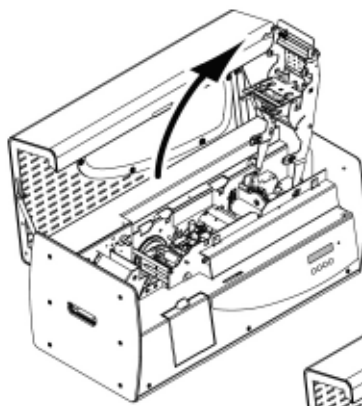


2. Adjust the thickness of the cards used by moving the operating handle from right to left to the desired card thickness.

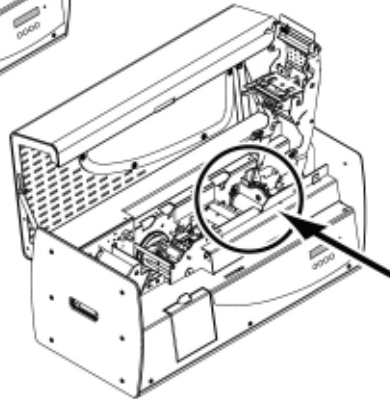


3. Replace the feeder in the printer. Then press on the top of the feeder until a CLICK is heard. Close the cover.

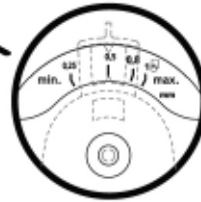
To adjust the thickness of the cards from the inside of the printer:



1. Open the cover of the printer by pressing on the opening handle and turning it.

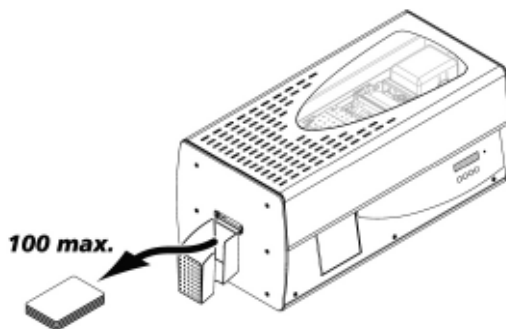


2. Remove the ribbon if it is in the printer. Then adjust the thickness of the cards used by moving the handle from right to left to the desired card thickness.



3. Re-install the ribbon in the printer, then close the cover.

Removing the personalized cards



Once the personalization cycle is completed, the card is delivered in the hopper located on the left side of the unit.

The user can choose from among 3 ways of ejecting the card:

- Front face visible - First card under the stack
- Rear face visible - First card on top of the stack
- Ejection in the position of the card as it comes out of the lamination station.



The definition of this method is done through the Properties menu of the print driver. Please refer to the Chapter on Drive Properties for more information.

2 Setting parameters

Defining the parameters of the printer and of its driver is a highly important step and requires very special attention. As a matter of fact, a poorly-defined film, or improper settings, are factors that have a negative impact on the quality of personalization.

It is therefore essential to proceed in stages, changing the parameters only when you are completely sure.

Evolis gives you at all times the ability to return to the 'factory' settings if the adjustments made do not give the expected results.



The application of an improper lamination station heating temperature can result in the destruction of the card and of the film, and, in extreme cases, can affect the station itself. Be careful about defining the personalized parameters and do not hesitate to contact your Evolis dealer to get the necessary advice and assistance prior to any modification.

Windows print driver

The Evolis Securion printer works on Microsoft Windows platforms:
Windows XP, 2003 and Vista 32 and 64-bits

Installation of the print driver

To install your print driver, you will need the CD-Rom 'Drivers and Documentation' shipped with your Securion printer.



Please make sure the data cable is disconnected before starting this procedure.

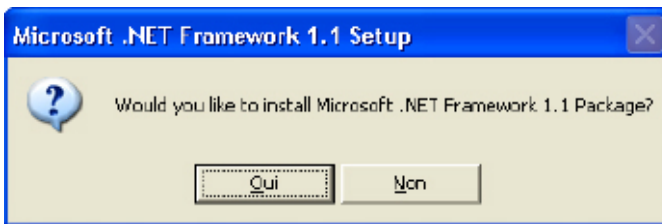


The installation program automatically selects the version to be installed in terms of your operating system.

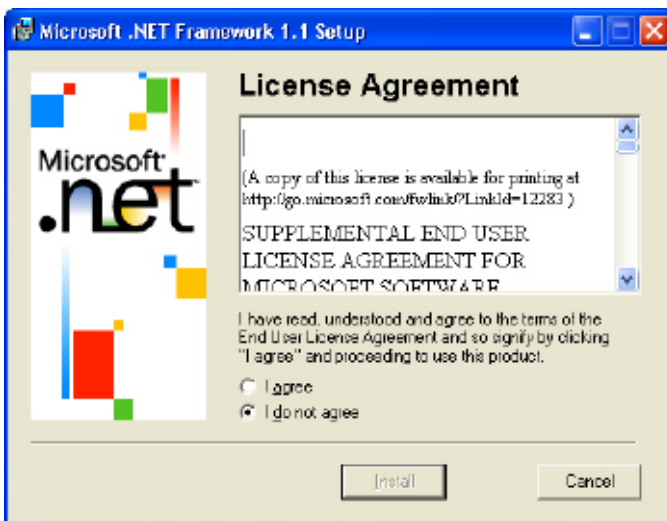
1. Load the 'DRIVERS & DOCUMENTATIONS' CD-Rom in your CD drive.
2. Wait a few seconds until the welcome screen asks you to choose your language. If the CD-Rom does not launch automatically, double click on the setup.exe file located in the DRIVERS directory on the CD-Rom
3. Select your language by clicking on the appropriate flag.
4. Click the "Install Driver" option to launch the setup program
5. Windows XP or 2003 platforms may require the Microsoft.NET package to be installed. Click OK to confirm and start this installation.



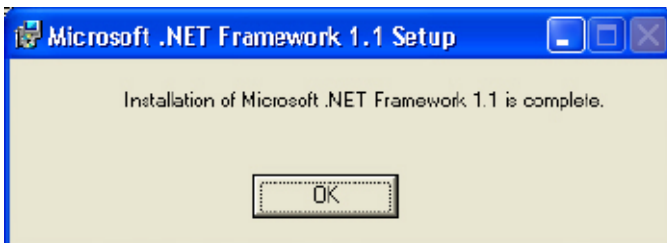
Confirm your willing to proceed with the installation of Microsoft.NET by clicking on Yes.



Then continue the installation process 'til it is complete.

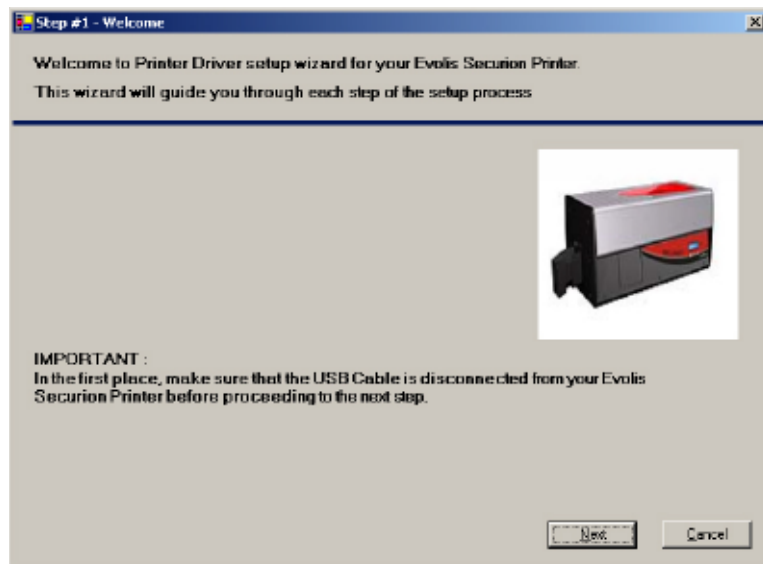


The installation process is now complete. Click on OK to continue with the driver's setup.

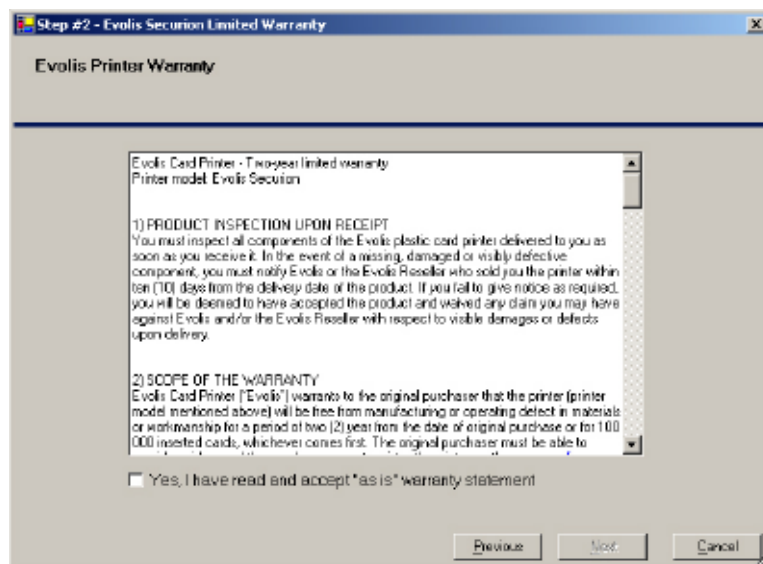


6. Setup is performed through a seven-step process. Make sure you stick precisely to the installation guidelines.

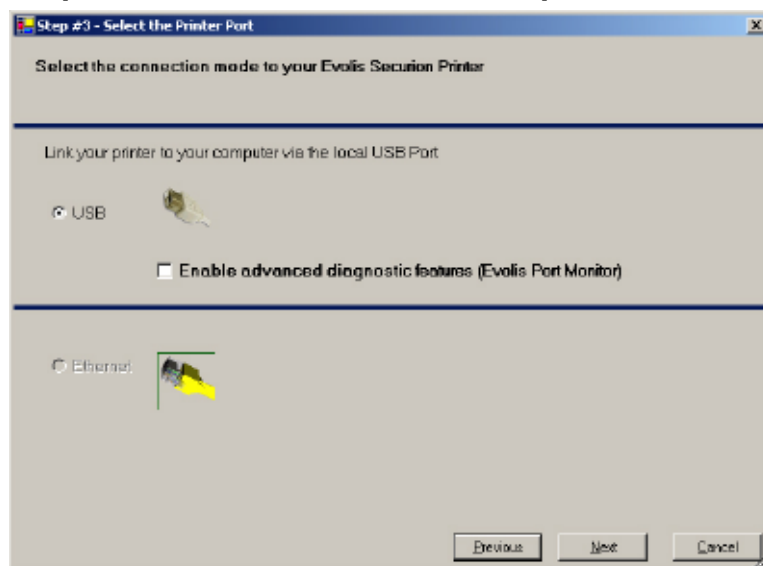
Step 1: disconnect the data cable



Step 2: accept the limited warranty conditions



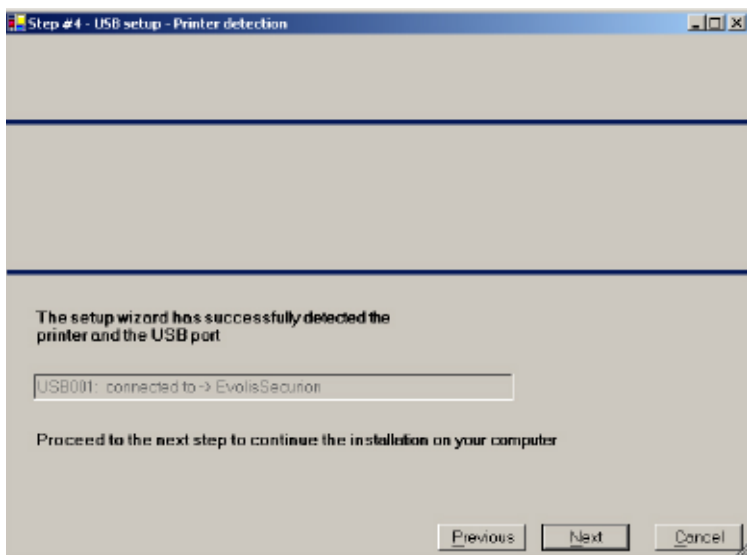
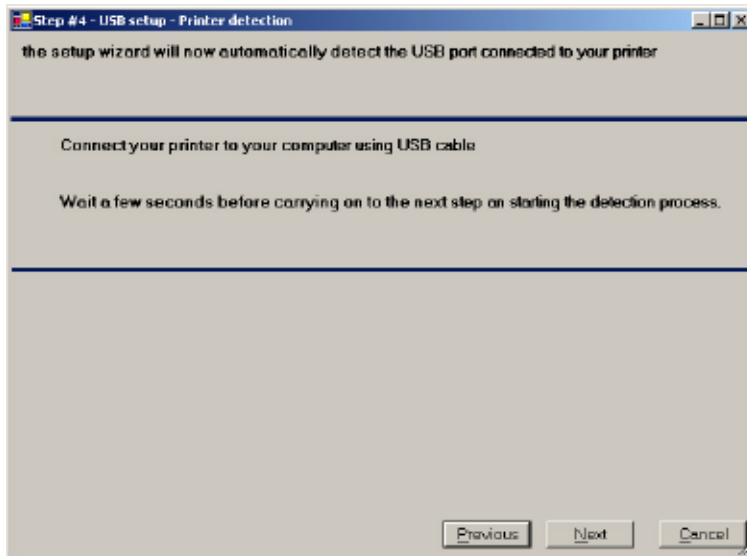
Step 3: select the communication port



If you install your PC in USB mode, you can choose to activate the Port Monitor, an application that displays all operating error messages on the PC screen.

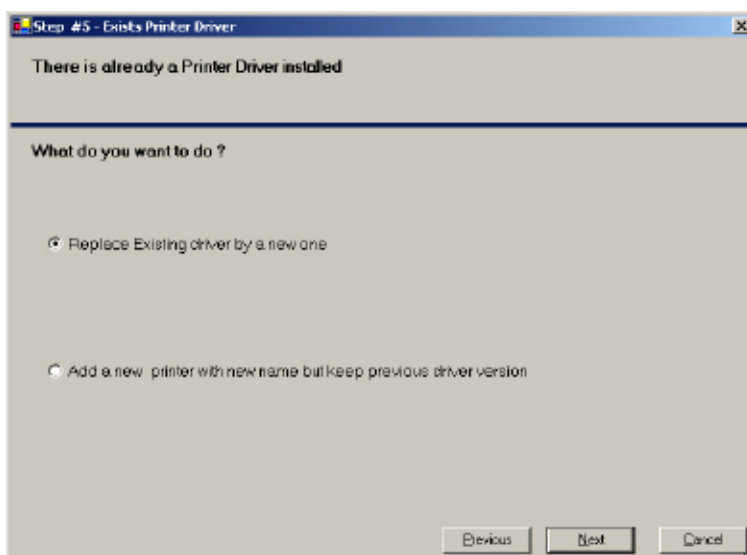
Step 4: detect communication port

Wait until the setup wizard detects the communication port with your printer to carry on to the next step.



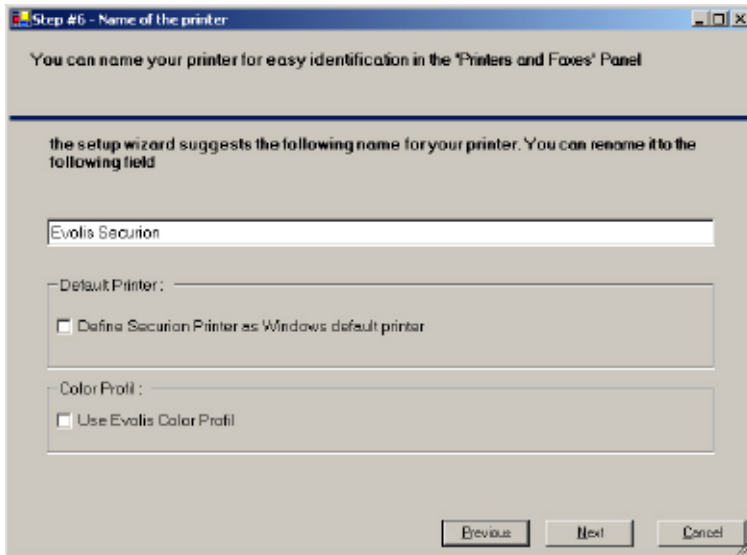
Step 5: replacing an existing driver

This phase will occur only if an existing driver is detected on the system.



Step 6: personalize your printer

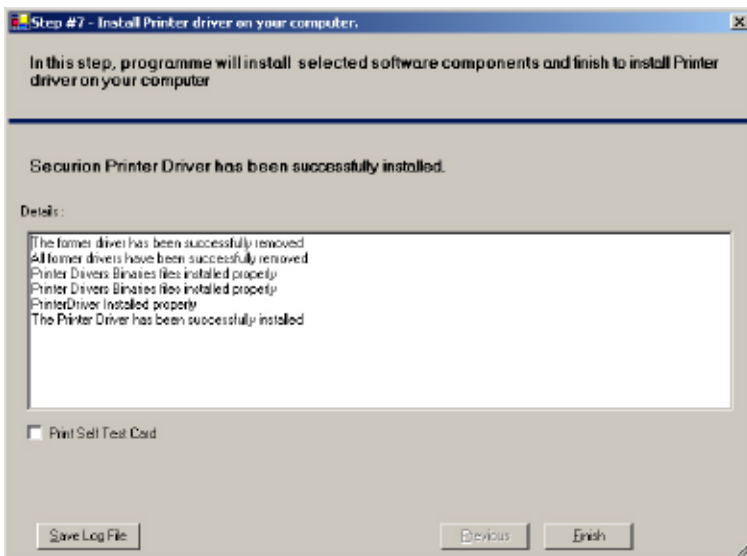
During this step, you can set a personalized name to your printer.



The printer can also be defined as default printer.

You may then select the Evolis Color Profile. In selected cases, the color profile will provide color textures very similar to what you will actually get.

Step 7: install driver and end of process



When the installation process is over, print a test card to make sure your printer operates suitably. You are now ready to use your printer.

If you choose to install your printer via an Ethernet TCP/IP port, please download an additional guide "Securion - User Guide - Ethernet Setup" from www.evolis.com/en/superservices/download_UGQ0.asp

Select "Securion", then "Ethernet Setup". Choose the appropriate language and click the download button.

Properties of the driver

Before using your printer, you must determine your personalized parameters:

- Type of ribbon for printing the cards
- Type of film for laminating
- Default parameter settings
- Adjustment of encoding parameters



You will find more detailed information on Evolis ribbons and films in the 'Evolis Genuine Product' Consumables List section



In general, it is recommended to retain the default parameters determined by the print driver. Modification of these parameters by an uninformed user could lead to a poor quality of personalization as well as to hardware damage.

So, stay alert and contact your Evolis dealer, who will guide you in adjusting these parameters if applicable

These printing parameters are accessible:

- From the **Start** button located at the bottom left on the Windows task bar: select **Printers and Faxes**.
- Choose your printer by left-clicking with the mouse, for example **Evolis Securion**
- Click again but with right mouse key to bring up a menu, and select **Properties**

An initial screen for setting the equipment properties parameters now appears.

The principal tabs for defining parameters are '**Graphics**', '**Lamination**', '**Main**' and '**Tools**'.



'Graphic' tab

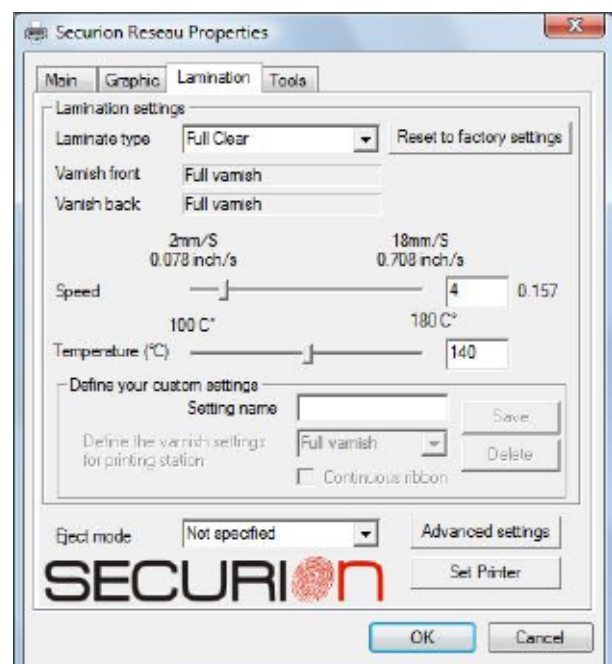
Choice of printing mode and of the associated ribbons

Choice of the lamination mode

Dual-side parameter

Adjustment of the ribbon parameters: color, black panel, overlay panel options

(depend on the print ribbon selected)



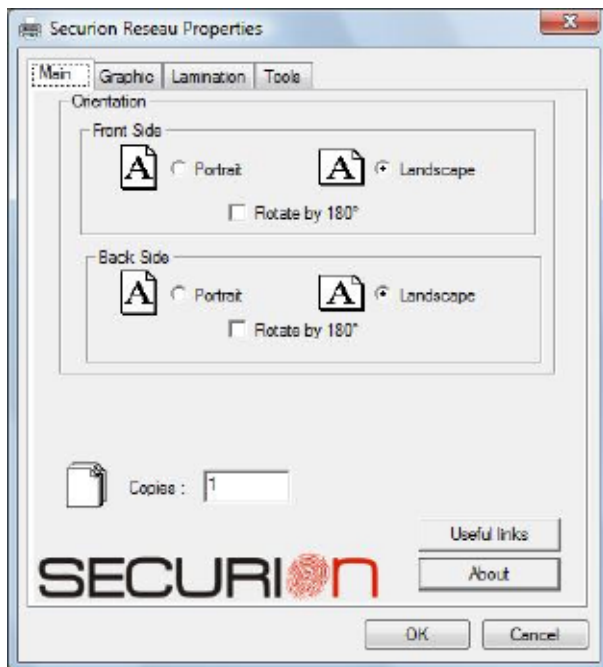
'Lamination' tab

Choice of the type of film

Setting of lamination parameters

Personalized configuration

Selection of the card eject mode



'Main' tab

Orientation of the printed card
Number of copies



'Tools' tab

Setting parameters and testing
of the magnetic encoding options
Testing and diagnostic tools

On-line help

A help file guides you in using each of the parameters of the print manager in terms of the different print modes and criteria selected.

To familiarize yourself with these different parameters, we recommend that you consult this help feature before making any changes.

Print a test card (Tools tab)

We recommend that you print a **Test Card** at the time of the first use, and that you **save** it. This card stores data that you may be asked to provide if you call Sales Service.

Default printer

Depending on your application, it may be important to define your Evolis printer as a default printing peripheral device.



In that event, all your print work (not just cards but office documentation) will be sent to the Evolis printer.

To define your default printer, proceed as follows:

- Using the Start button at the bottom left of the Windows task bar, select Printers and Faxes
- Select your printer with a left mouse click, for example Evolis Securion
- Click again using the right mouse key to bring up a menu, and choose Define as default printer

Other tabs

- **'General' tab:** Windows information window that allows you to print a test page to monitor the computer-printer communication.
- **'Ports' tab:** Windows control window that allows you to select the printing port and to validate use of the appropriate print driver.
The parameters displayed should be changed only by a person with advanced computer skills.
- **'Color management' tab:** This dialog box makes it possible to associate the printing with a specific color profile. It is reserved for future use.
- **'Security', 'Sharing', 'Advanced' tabs:** Windows and Network parameters reserved for the system administrator of your computer system.
Do not change without prior approval.

Card printing configuration in an office automation application

A large number of Windows applications permit the printing of a document (for example, the tools of the Microsoft office suite: MS-Word, MS-Access, MS-Excel, MS-Power Point).

To help you familiarize yourself with formatting a card and setting the parameters for its formatting and printing, we offer the following example:

Using Microsoft® Word

After first setting up the Evolis Securion default printer:

- Start the MS-Word application
- Click **File** on the menu bar, then click on **Formatting**
- The **Paper** tab proposes **Paper format**; select type '**Evolis Card CR80**'
- Under the **Margins** tab, set all the margins to '**0**', then under **Orientation**, select Landscape.
- Close the window by clicking on **OK**.

Your Word window should now look like this:

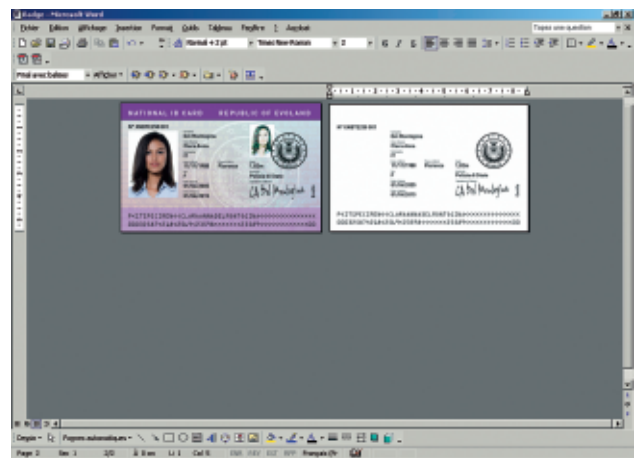
You are ready to personalize your card by entering the different composition components:

- Logo and illustration
- Identification photo
- Fixed and variable text
- Bar code, etc.

Example:



Please note that this example does not propose to initiate the operator on operating the MS-Word application. Its purpose is simply to establish a relationship between the graphics of a card and the parameters of the Evolis Securion driver that are necessary for the printing operation.



Setting the parameters of the Evolis Securion print driver from MS-Word

- Click on **File** on the menu bar, then click on **Print**
- The dialog box informs you that the Evolis printer has been selected. Now click on **Properties**. The Evolis Securion drive dialog box appears.

The printing parameters for this graphics example are:

'Characteristics' tab

- Orientation - Front: landscape
- Orientation - Back: landscape
- Number of copies: 1

'Graphics' tab

- Type of ribbon: 6 panel color ribbon (YMCKOK)
- Dual-side printing

Click on **Apply** if you change a parameter, then on **OK** to close each dialog box in succession.

When you are back to the main window (MS-Word Printing), click on **OK** to start printing.

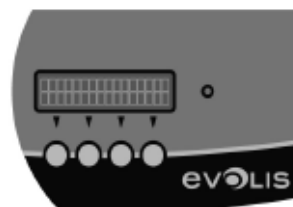
Printer menus

The Evolis Securion printer has an LCD display combined with a light-emitting diode (LED) that allows the operator to visualize the operating condition of the equipment and to set the most common parameters.

Discovering the printer menu

The Evolis Securion printer control panel has 3 groups:

- 1 LCD display with 2 lines of 16 characters each, backlit for better readability of the information
- 4 scroll keys to go through the menu, confirming or deleting the choices
- 1 two-color LED: green for normal operation, red in a situation requiring the attention of the operator



In the standby mode, after a short period following power-on, the control panel is in the following condition:

During operation, the information display varies:

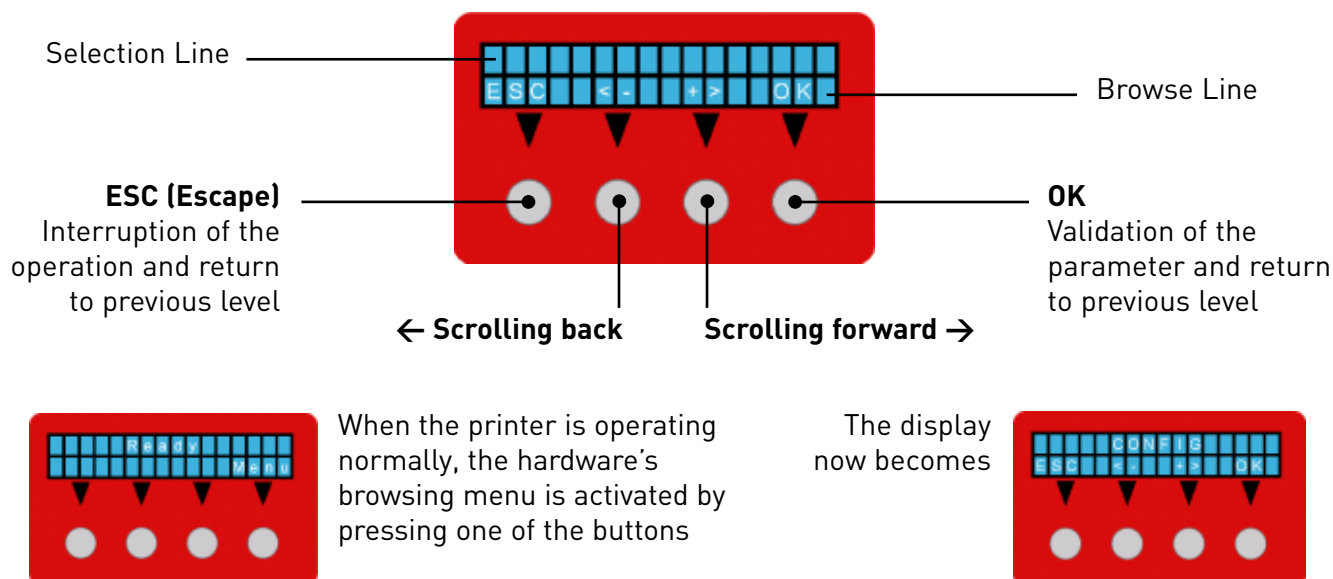
- Top line - Status of the printing station
- Bottom line - Status of the lamination station
- Fixed green diode - On hold
- Flashing green diode - Transfer of data with PC or printing in progress
- Fixed or flashing red diode - posting of an alert or of an error message

In the event of the intervention of the operator who activates the menu, the LCD display becomes a parametering dialog and help interface.

Architecture of the menu

The bottom line on the display makes it possible to specify at any time the function of the corresponding key in the context menu.

In general, and unless otherwise indicated, this is how the browsing is done:



This configuration menu gives access to most of the printer's parameters.

The following diagram shows the tree structure of this menu, the options that can be parametered as well as the browsing mode to be applied to get a menu or activate a parameter.

Level 1		Level 2		Level 3	
→	CONFIG				
	[OK]	LAMINATION	[OK]	Display lamination type	[OK]
	→	CARD EXIT	[OK]	Display Card exit mode	[OK]
	→	REJECT BOX		# of Cards	
			→	Reset	[OK]
			→	# of Cards	[OK]
	→	STANDBY MODE		Disable	
			→	1-99	[OK]
			←	99-Disable	[OK]
	PRINTER				
	[OK]	RIBBON TYPE	[OK]	Display ribbon type	[OK]
	→	MAGNETIC OPT	[OK]	Display Magnetic option type	[OK]
→	LAMINATOR				
	[OK]	FILM TYPE	[OK]	Display Film type	[OK]
	→	TEMP. (°C)	[OK]	Printer temperature	[OK]
	→	SPEED	[OK]	Lamination speed	[OK]
	→	OFFSET	[OK]	Patch offset	[OK]
→	CLEANING				
	[OK]	PRINTER	[OK]	Start cleaning process	
	→	ADVANCED	[OK]	Start rollers	
→	SERVICE				
	[OK]	STATUS			
		[OK]	Pr Serial #	[OK]	Serial Number
		→	Printer Type	[OK]	Type of Printer
		→	Pr Head ID	[OK]	Print head Identification
		→	Pr. Firmware	[OK]	Printer firmware version
		→	Lam. Firmware	[OK]	Laminator firmware version
		→	Next Cleaning	[OK]	xxxx cards to go
	[OK]	TECH. CARDS			
		[OK]	Self test	[OK]	Start issuing a test card
		→	Printer Status	[OK]	Start issuing a printer status card
	[OK]	LCD			
		[OK]	LANGUAGE		English
			→	Custom	[OK]
			→	English	[OK]
		[OK]	BACKLIGHT		80%
			→	Decrease value	[OK]
			←	Increase value	[OK]
		[OK]	CONTRAST		80%
			→	Decrease value	[OK]
			←	Increase value	[OK]
	[OK]	NETWORK			
		[OK]	IP ADDRESS	[OK]	Display current IP Address
		→	MAC ADDRESS	[OK]	Display MAC Address
		→	DHCP MODE	[OK]	Display DHCP configuration
		→	SUBNET MASK	[OK]	Display Subnet Mask Address
		→	GATEWAY	[OK]	Display Gateway Address

Parameters

In the following table, you will find all the parameters of the menu, classified in the order of display, along with their meanings. The **Default** indication means that this parameter is factory-activated.



*Make sure not to change their parameters at random.
This could affect the correct performance of your Evolis Securion printer.*

In order to prevent problems linked to connecting your printer to the local network, the DHCP mode is factory-activated.

Configuration parameters		Description		Factory Parameters
CONFIG.	→LAMINATION	Off	No lamination	Default
		Front	Lamination on front of card only	
		Back	Lamination on back of card only	
		Dual-side	Lamination on both sides of the card	
	→CARD EXIT	Front visible	Card ejected with front face visible	Default
		Back visible	Card ejected with back side visible. The first card printed is on top of the pile in the hopper	
		Default	The card is ejected in the position it has in the lamination station	
	→REJECT BOX	Reinitialize	Initialization of internal counter indicating the number of cards rejected	Default value: 0
		# of cards	Indicates the number of cards rejected since the last reinitialization	
	→STANDBY MODE	Deactivated 1-99	The printer never goes into standby mode In minutes Duration of inactivity prior to printer going on standby	Default
Display of printer information				
PRINTER	→RIBBON TYPE		Display of type of ribbon parametered through the print driver menu	
→MAGNETIC OPT			Type of magnetic encoder installed in machine	
Parameters of the lamination station				
LAMINATOR	→FILM TYPE	Patch	Deposits a thick PET film on the surface of the card. This type of film does not cover the entire card	Default
		Continuous overlay	Deposits a fine overlay over the entire surface of the card.	
		Off	No lamination	
	→TEMP (°C)		Display of temperature of the lamination station in ° Celsius	
	→SPEED		Indicates the scrolling speed of the card in the lamination station. Parameter set in the print driver	
	→OFFSET		Indicates the time lag set in the print driver (also called Offset)	
Selection of maintenance cycles				
CLEANING	→PRINTER		Starts after a cleaning card has been inserted into the feeder. Starts the cleaning cycle of the entire card feeder system	
	→ADVANCE		Reserved to a knowledgeable operator. Makes it possible to start rotation of the feed rollers in order to do a complete manual maintenance. Please watch out for rotating components.	
Technical parameters				
SERVICE	→STATUS	Pr Serial #	Display of printer serial number	
		Printer Ttype	Display of printer type	
		Pr head ID	Display of print head serial no.	
		Pr Firmware	Display of pre-loaded version of printer software (Firmware)	
		Lam. Firmware	Display of pre-loaded version of lamination station software(Firmware)	
		Next Cleaning	Counter showing the number of printable cards prior to the next mandatory cleaning cycle. The displayed value is the number of cards before cleaning. Failure to perform these cleaning cycles entails invalidation of the guarantee.	
Technical parameters				
	→TECH. CARDS	Self-Test	Printing of a test card to check the correct operation of your Evolis Securion printer	Default
	→DISPLAY	Printer Status	Printing of a technical card with data pertaining to the printer	
		LANGUAGE	English - Selection of English language Custom - Selection of downloaded language	
	→BACKLIGHT		Increasing or decreasing backlighting intensity	80%
	→CONTRAST		Increase or decrease in display contrast	80%
	→NETWORK	IP ADDRESS	Display of the IP address of the machine	Défaut
		MAC ADDRESS	Display of machine's MAC address	
		DHCP MODE	On - Activation of DHCP mode Off - Deactivation of the DHCP mode	
		SUBNET MASK	Display and modification of the Subnet Mask address	
		GATEWAY	Display and modification of the Gateway (link) address	

3 Error messages and diagnostics

While the Evolis Securion printer was designed to work independently, keeping your involvement to a minimum, it may nevertheless be useful to become familiar with the main alert messages.

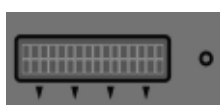
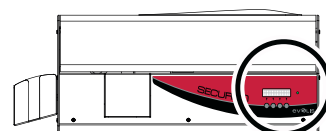
Notification of messages

LCD display and LED indicator

The control panel includes two display lines and a LED-type diode. In general, the messages break down into three categories:

- Equipment condition messages
- Alert messages with no interruption of work
- Alert messages with interruption of on-going work

These messages are given as follows through the display and the LED diode.



- Top line: : Messages linked to the printing station
- Bottom line : Messages linked to the laminating station



- Fixed green LED : Rated operation
- Flashing green LED : Rated operation, dialogue with the PC or work in progress
- Fixed red LED : Non-blocking operator alert, work continues
- Flashing red LED : Operator alert to incident, work interrupted.

Port Monitor

The Port Monitor is a software component that helps you monitor your Evolis printer on a day-to-day basis. When installed on your computer, it enables you to visualize the activity of your Evolis Securion unit from your work station.

No need to move: the Port Monitor will alert you as soon as an important message is sent by the printer.

For more information on this function, consult the www.evolis.com site and download the documentation relative to installation, parameter setting and operation.











Interpretation of messages

There are three major categories of messages. They inform you about the status of your Securion printer.

- The status messages inform you about the on-going printer activity.
- The alert messages notify you of the non-blocking alarms detected during operation
- The error messages call for operator intervention.

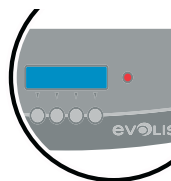
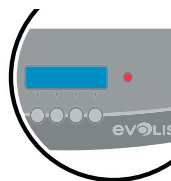
Status messages

These messages indicate the status of the printer during processing. They are displayed to inform the operator and do not require any particular action.


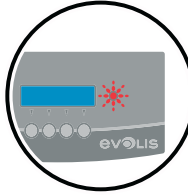
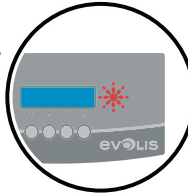

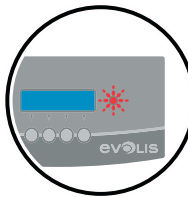
Message	Description	Led
Initializing...	Startup under way	
Ready	Printer ready and waiting for print work	
Cooling...	Cooling of print module under way	
Printing...	Printing under way	
Laminating...	Laminating under way	
Warming Up...	Preheating of the laminating module under way	
Waiting...	Waiting for the end of processing	
Processing...	Processing under way	
Cleaning...	Cleaning procedure under way	
Downloading...	Loading of Firmware under way	
	<i>Do not disconnect the printer or the PC connection to permit proper performance of this operation</i>	
Restarting...	The printer restarts after loading of the Firmware	

Alert messages

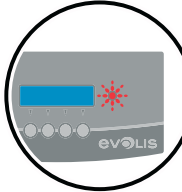
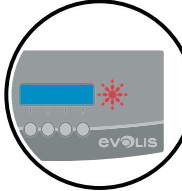

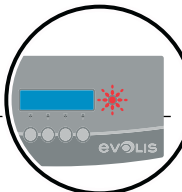
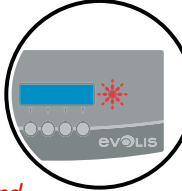
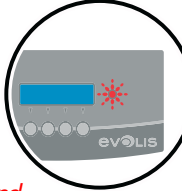
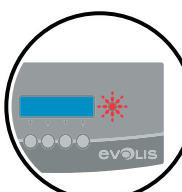
The alert messages, in turn, require operator intervention to resolve the cause of this alert. They do not in any way block the proper completion of processing under way. However, we recommend that you intervene quickly in order to prevent any future difficulties.

Message	Description	Led
Need cleaning	<p>The printer has detected that a cleaning cycle will be required shortly. You have printed more than 800 cards since the last maintenance. The acceptable limit between two maintenances is 1000 cards. Make sure your equipment is well maintained by interrupting your printing work as soon as possible in order to do a cleaning.</p> <p><i>Warning: failure to clean leads to damage to your equipment and the systematic invalidation of all factory warranties</i></p>	
Reject Box full	<p>The internal printer counter has detected that the box containing rejected cards is full. Please open the printer cover, lower the cover giving access to this box and remove the cards. Go into the display menu, select CONFIG, then REJECT BOX and confirm Reset</p>	

Error messages

Message	Description	Led
Feeder empty	<p>The printer indicates the absence of a card in the feeder.</p> <p>Open the printer cover, remove the card feeder, insert new cards, carefully observing the direction of introduction, then replace the feeder.</p> <p>Close the cover.</p> <p>The printer resumes its activity.</p>	
Ribbon error	<p>The printer has detected an error linked to the print ribbon.</p> <p>Open the cover, loosen the print head bracket and turn it vertically to provide free access to the ribbon.</p> <p>Replace the ribbon if it has been fully used.</p> <p>If not, rewind the ribbon on the receiving roller, making several turns. Make sure there is good tension between the feed roller and the receiving roller.</p> <p>Lower the print head bracket and make sure it is locked.</p> <p>Close the cover. The printer resumes operation.</p>	
Lam. Rib. error	<p>Film error in the lamination unit.</p> <p>Open the printer cover to get access to the lamination station.</p> <p>If the film has reached the end, replace it.</p> <p>Otherwise, release the film carefully by pulling it toward you. Be careful not to damage the equipment by pulling violently.</p> <p>Rewind part of the new film on the receiving roller (the left-hand roller), then put it in place making sure it is correctly engaged, against the back stop.</p> <p>Reclose the cover.</p> <p>The printer resumes operation.</p>	
Need cleaning	<p>The printer has detected that a cleaning cycle is required.</p> <p>You have disregarded the alert messages given by the equipment.</p> <p>Immediately maintain your equipment correctly, stopping all printing in order to proceed with the cleaning.</p> <p><i>If you personalize more than 5 cards, the factory warranty will be invalidated because you have not done maintenance at the times specified by the warranty clauses in the manual furnished with your equipment.</i></p>	
Reject box full	<p>The printer's internal counter has detected that the box containing the rejected cards is full.</p> <p>The printer must reject one more card and it cannot perform that task. The work is therefore interrupted.</p> <p>Open the printer cover, lower the cover giving access to this box, and remove the cards found there.</p> <p>Go into the display menu, select CONFIG, then REJECT BOX and confirm the Reset selection.</p>	

Error messages

Message	Description	Led
Head brckt open	The head bracket supporting the printer's print head is not correctly locked in place. Open the equipment cover, press down on the head bracket until there is a 'Click', then close the cover. The printer resumes operation.	
Printhead error	The printer has detected a problem with the print head. Printing process is on hold. Contact your Evolis dealer to get help.	
Mechanical error	The printer has detected a problem with feeding the card into the print module or the flipover station. Lift the equipment cover, and move the head bracket into vertical position. Remove the ribbon. Carefully remove the blocked card, making sure not to damage the printer and its components. Close the equipment cover. The printer resumes operation.	
Lamin. mech error	The lamination module has detected a serious mechanical error. Turn off your Securion printer and contact your dealer to get help.	
Lamin. temp. error	The lamination module has detected an overheating problem. Turn off your Securion printer and contact your dealer to get help.	
Laminator error	The printer has detected a problem involving the feeding of cards into the lamination module. Open the equipment cover. Press any key on the control panel to activate ejection of the card to the hopper. <i>Never use a tool (screwdriver, pointed object...) to free the card. This risks causing serious damage to the rollers and in particular to the unit's hot roller. This type of damage would not be eligible for a request for coverage under the warranty!</i> Once the card is free, make sure the film is well-positioned then close the printer cover. The printer resumes operation.	
Lamin. Rib. error	The printer has detected a problem linked to the film in the lamination module. Open the equipment cover. Check the film position and, if necessary, replace it if you feel it is necessary. Close the equipment cover. The printer resumes operation.	

Diagnostics assistance

In this chapter, you will find all the information required to perform certain simple procedures that you may be asked to do by your Evolis dealer to provide you with the most effective assistance.

Print and interpret a test card

The printing of a test card makes it possible to gather certain technical data proper to your printer and to confirm that the printer is working properly.

We recommend that you print it as soon as you put your printer into service and keep it available. Your dealer may ask you for it.

Printing of a test card:

1. Wait until all the printing work is finished.
2. Make sure there is a ribbon and a card in the printer.
3. Go into the display menu by pressing one of the keys.
4. Scroll through the menu choices using the key until you come to the SERVICE option, then confirm by pressing OK.
5. Scroll through the menu using the key until the TECH CARDS menu is displayed, then confirm by pressing OK.
6. The Auto-Test option is displayed: confirm by pressing OK to start printing the test card

Interpretation of a test card:



The test card allows you to validate the correct autonomous operation of your equipment (not linked to a PC or any other computer):

- Correct printing of colors as well as single-color black
- Correct positioning of the ribbon in the print module
- Correct removal of the protective film
- Correct positioning of the protective film in the laminating module

Additionally, this test card also provides you with some essential information such as:

- The printer model
- The printer serial number
- The serial number of the print head kit
- The Firmware version installed on the printer
- The MAC address of the unit (local network operation)
- The IP address of the unit as well as its mode of attribution (Manual or DHCP)

You will be asked for this test card if you request service under the warranty.

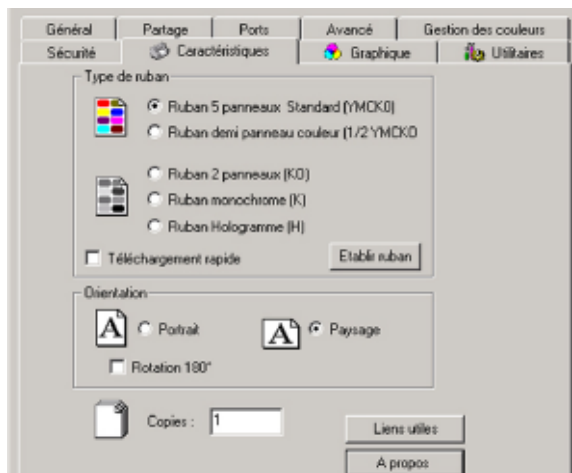
It is also a very precise source of information for your Evolis dealer in remote support service calls.

Identify the software versions installed

As indicated above, you can simply identify the software version loaded into your printer thanks to the test card (Firmware no.).

You can also identify the version of the print driver installed as follows:

- Go into the driver properties (on the print driver logo, right-click and choose Properties)
- Characteristics tab
- About button



4 Servicing and Maintenance

In this chapter, we suggest that you identify the ordinary service operations for your Evolis Securion that will enable you to ensure a very high quality of personalization of your plastic cards.



Keep your Warranty in effect !

The factory warranty is subject to strict compliance with ordinary maintenance instructions, and specifically to compliance with the equipment cleaning cycle intervals.

Failure to comply with the procedures described in this chapter entails cancellation of the warranty on your printer and its print head.

Evolis will not be liable if the printer is used under non-approved maintenance conditions

Ordinary maintenance

Evolis provides you with the following maintenance items, available under the following reference item

A5011 - UltraClean cleaning kit:

- Five cleaning cards pre-saturated with 99% isopropyl alcohol
- Five 99% isopropyl-based cotton swabs
- A dispenser box of 40 pre-saturated cleaning wipes

Clean the card feed module

Cleaning cycle: every 800 cards printed



Maximum interval between two cleaning cycles: 1000 printed cards



Maintenance accessory: pre-saturated cleaning cards

When a cleaning of the card feed module is necessary (every 800 cards inserted), the message **Cleaning required** appears on the display and the LED turns red.

This message is an alert that indicates to the operator that it is necessary to perform the cleaning cycle. If the printer is not cleaned after the LED illuminates, the message **Cleaning required** will remain displayed and the LED will start to flash when 200 additional cards have been inserted.

In that event, immediately stop the work in progress and proceed with the cleaning.



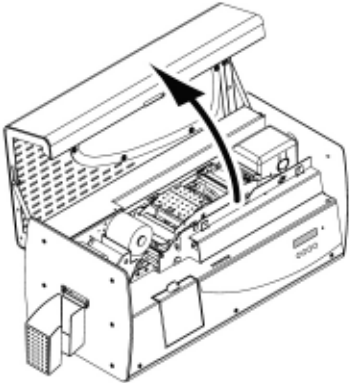
If there is no maintenance action on your part, the message will remain posted and the factory warranty will be implicitly invalidated for failure to comply with the contractual maintenance requirements.

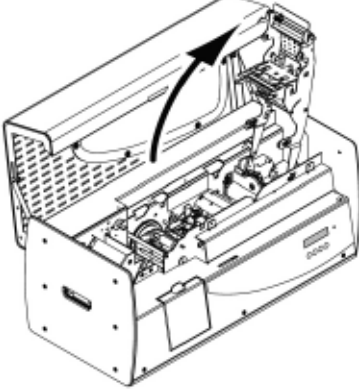
To service the printer card feed system, obtain a pre-saturated cleaning card specially designed for the printer.

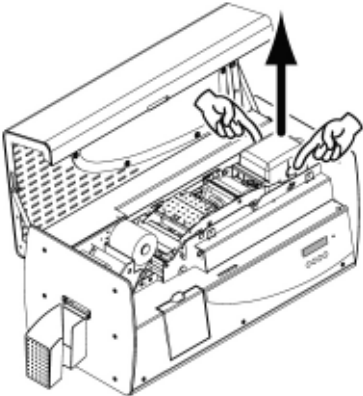
A cleaning kit including samples of these cards is shipped with your Securion printer.

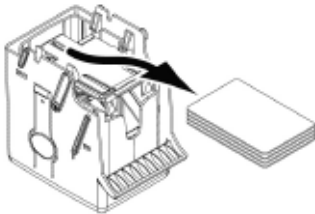
Repeated running of the card in the printer cleans the card feed rollers, the cleaning rollers, the print head and the magnetic head (if your device has one).

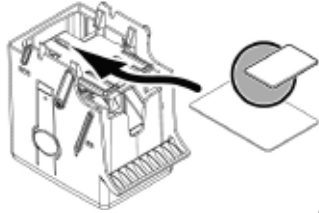
Proceed as follows:

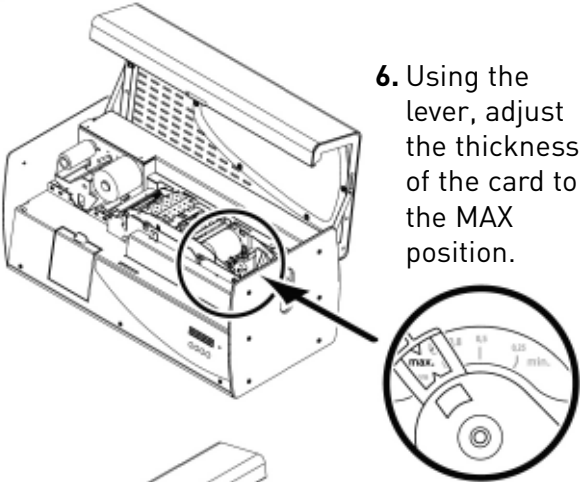
- 

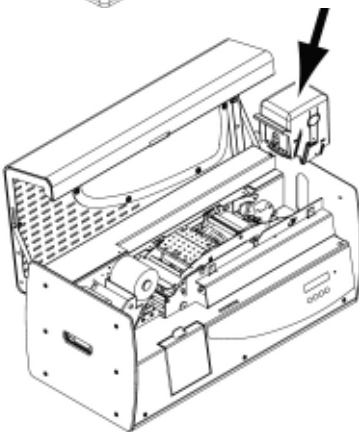
1. Open the printer cover
- 

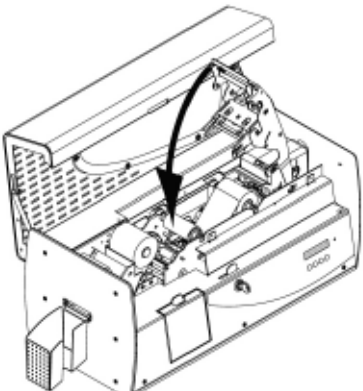
2. Press the latch to loosen the print head bracket and turn it to the right until it is in a vertical position. Then remove the print ribbon (in the print module)
- 

3. Remove the print feeder as indicated.
- 

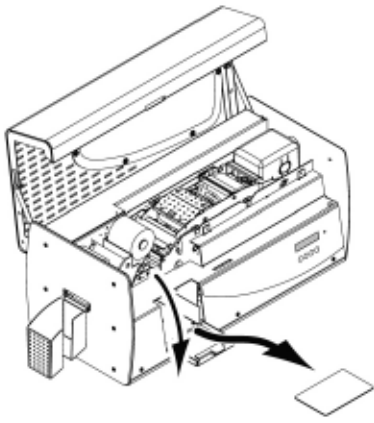
4. Remove the cards that are in the feeder
- 

5. Insert the cleaning card in the feeder as indicated.
- 

6. Using the lever, adjust the thickness of the card to the MAX position.
- 

7. Put the feeder back into the printer than press on the top part of the feeder until the 'click' is heard.
- 

8. Lower the print head bracket and make sure it is locked.
- 9.** Go into the display men by pressing one of the keys
- 10.** Select the CLEANING menu, confirm by pressing OK then select PRINTER and confirm by pressing OK.
- 11.** The cleaning cycle is activated; the display shows Cleaning...



12. At the end of the cycle, the card is ejected into the reject box
13. Shift the print head bracket into the vertical position, adjust the gauge, replace the ribbon, put the cards back into the feeder, lower and lock the print head bracket.
14. Close the cover. The printer is again ready to operate.



Following a cleaning cycle, wait 2 minutes until all the cleaner is completely evaporated before using the printer.



Take advantage of this interruption to empty the reject box and clean our print head (see below)

Recommendations



Maintenance of the card feed module ensures a high quality of printing. Evolis recommends that you perform servicing on each ribbon change. Without waiting for a message to be displayed, proceed as described above.

Service the cleaning roller

The function of the cleaning roller is to eliminate any residual dust on the front and rear faces of the cards before they enter the feeder system.

This roller, blue in color, therefore systematically becomes dirty. This is a sign of its efficacy. If this roller remains clean, we suggest that you check its quality by contacting your Evolis dealer in order to replace it, if applicable.

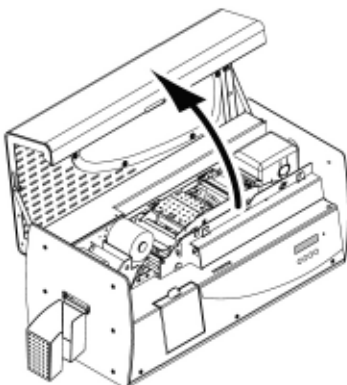
To supplement the servicing of the card feeder system which is intended to clean it, you can obtain a saturated cleaning cloth and clean this component thoroughly.



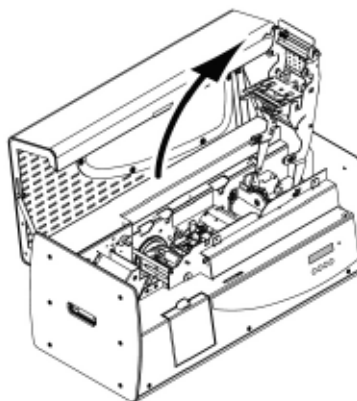
Cleaning cycle: on each ribbon change



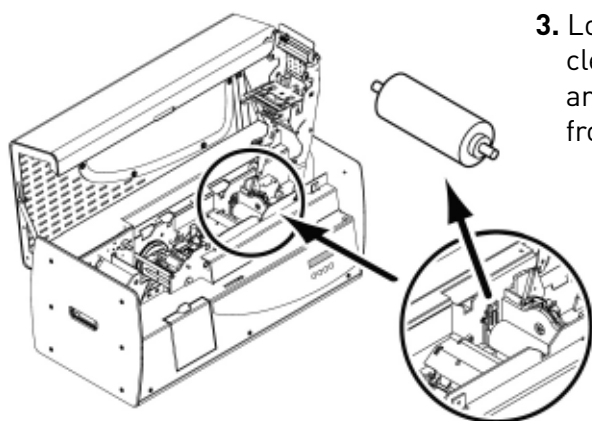
Maintenance accessory: cleaning cloths



1. Open the printer cover

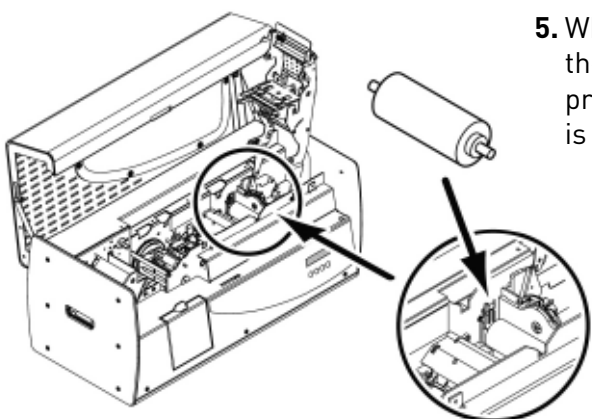


2. Place the print head bracket into a vertical position. Then remove the print ribbon (in the print module)



3. Locate the cleaning roller and release it from its seat

4. Clean the roller with a cleaning cloth from your cleaning kit. Eliminate all dust by rubbing the cloth lightly over the entire surface of the roller.



5. When it is dry, replace the roller into the printer, making sure it is properly positioned

6. Put the ribbon back in its place, lower and lock the print head bracket

7. Close the cover. The printer is again available for use.



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

Clean the print head



Cleaning cycle: at each ribbon change



Maintenance accessory: cotton swab saturated with isopropyl alcohol

The print head is cleaned at the time the inside of the printer is cleaned (see above).

However, in order to preserve the original printing quality and to reduce the incidents created by the presence of surplus ink on the surface of the print head, it is recommended that the print head be cleaned regularly (at each ribbon change) using the cotton swabs supplied with the UltraClean cleaning kit.



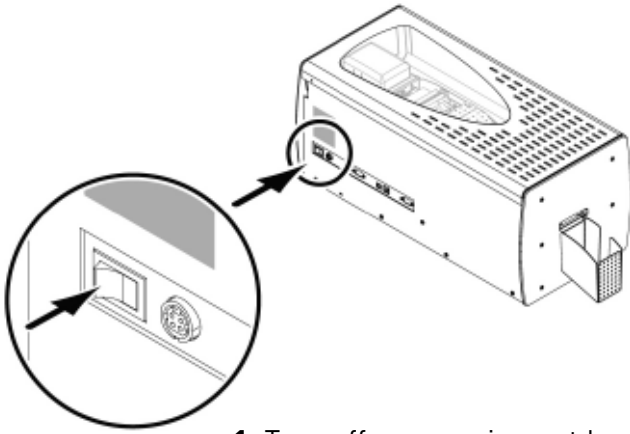
It is very important to protect the print head and any other related component handled against any electrostatic discharge.



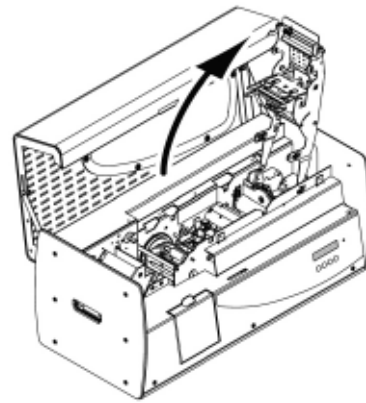
The print head is a fragile component of your printer. To prevent any damage to it:

- *Before cleaning the print head, disconnect the printer from its power supply.*
- *Comply with the cleaning cycles.*
- *Never put the print head into contact with pointed and or metal objects.*
- *Avoid direct contact between the surface of the print head and the fingers. This could result in an altered print quality, or even permanent damage to the print head.*

Clean the print head in accordance with the following instructions:



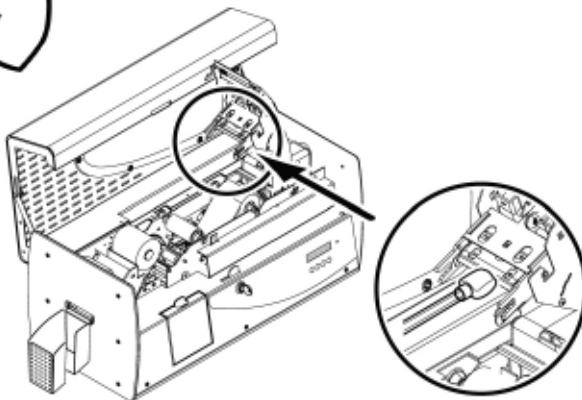
1. Turn off your equipment by pushing the ON/OFF button on the rear panel.



2. Open the printer cover, loosen the print head bracket and put it into the vertical position



3. Take a cotton swab and press the middle of the tube until a click is heard. The cotton becomes saturated with alcohol.



4. Locate the print head and carefully rub the cotton swab from right to left along the print head for a few seconds.
5. Lower and lock the print head bracket.
6. Close the cover. The printer is again ready for operation..



After a cleaning cycle, wait 2 minutes until all the cleaning fluid evaporates before using the printer.

Remove the cards from the reject box

Your Securion printer is equipped with a reject box whose function is to separate the correctly personalized cards from the incorrect cards.

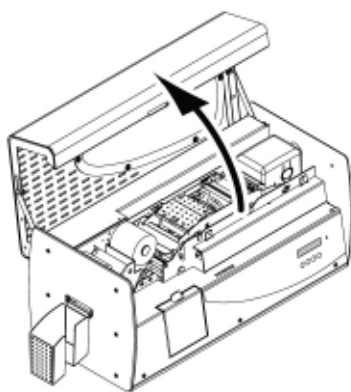
The incorrect cards are automatically stored in a reject box with a capacity of 15 cards.

This reject box must be emptied regularly in order to prevent any jamming of the work in progress.

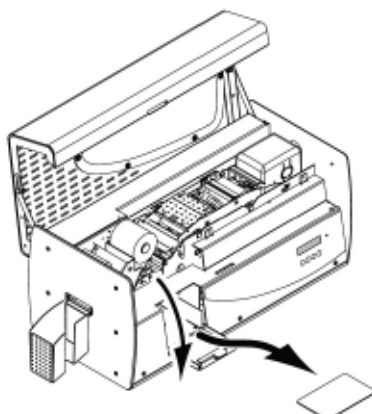
This operation is done in two phases:

1. Removal of the cards.
2. Zero-resetting of the rejected card counter (to allow the printer to know the fill level of this box)

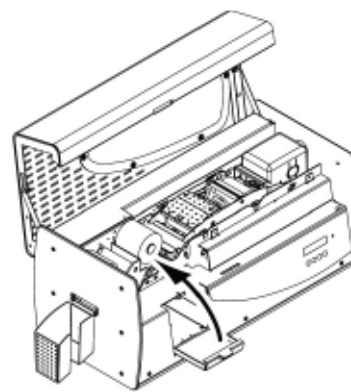
To empty the box and re-initialize the counter, proceed as follows:



1. Open the cover of your printer.



2. Open the reject box by tilting the door to the front and remove the cards that are there.



3. Reclose the reject box door.

4. Press a key on the control panel to access the menu.
5. Select **CONFIG** and confirm by pressing **OK** then scroll through the menu until **REJECT BOX** is displayed. Confirm by pressing **OK**.
6. Select **Reset** on the menu and confirm by pressing **OK**.
7. Get out of the menu.
8. Close the cover.



Evolis recommends that you empty this box regularly, for example at each ribbon change or during maintenance

Maintenance

The Evolis printers are designed to offer the user quality of personalization, ease of use and equipment longevity.

However, depending on the type and volume of personalized cards as well as the operating environment, certain elements are able to be exchanged by the user.

Moreover, it is common in the computer world to do regular upgrades of the software components: the firmware and the print drivers.

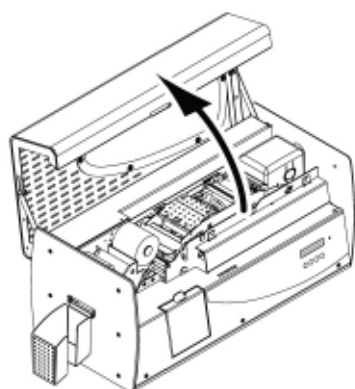
The following chapters provide information on the ordinary maintenance operations that make it possible to keep your Evolis printer in perfect working order.

Replace the cleaning roller

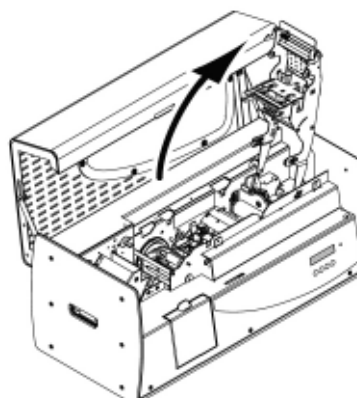
In the event your cleaning roller becomes less efficient despite regular maintenance, it needs to be replaced in order to keep the print head from becoming clogged and ultimately permanently damaged. (See the chapter on Service the Cleaning Roller).

The cleaning roller is available as a consumable from your Evolis dealer.

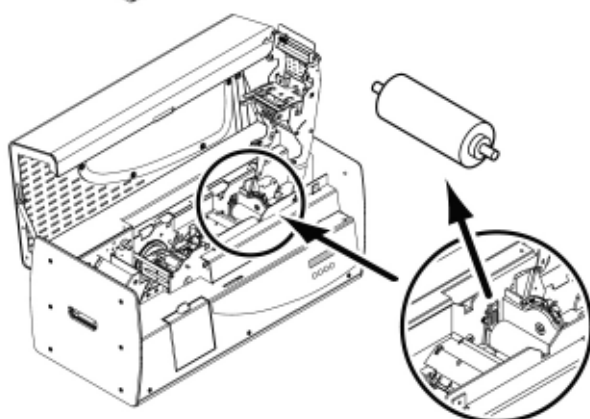
To replace the roller, proceed as follows:



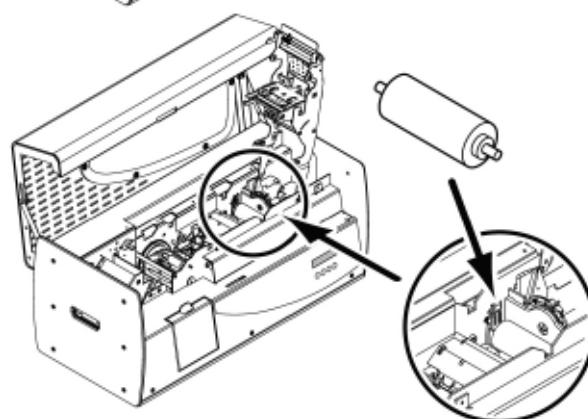
1. Open the printer cover.



2. Shift the print head bracket into vertical position then remove the print ribbon (in the print module)



3. Locate the cleaning roller and release it from its seat



4. Install the new roller into the printer, making sure that it is correctly positioned in its seat

5. Replace the ribbon, lower and lock the print head bracket in place.

6. Close the cover. The printer is ready for operation.

Replace the print head

The print head is a sensitive component of your equipment. It determines the print quality, and its regular maintenance as well as the absence of dust in the immediate environment guarantee its longevity.

However, it can happen that this head needs to be replaced. Evolis has designed a unique device that allows the user to proceed to this exchange without using any tools by simply following the instructions very carefully.

Before doing anything else, please contact your Evolis dealer in order to check with him whether it is advisable to replace the print head. If applicable, the dealer will furnish you with a replacement print head.



During the printer warranty period, Evolis has put in place a program for the replacement of defective print heads. Your equipment is eligible for this program if:

- *You use only Evolis consumables (ribbons and maintenance products)*
- *You have scrupulously complied with the equipment maintenance cycles*
- *You work in a dust-free environment in accordance with technical specifications*
- *You use flat cards without any rough areas that could damage the surface of the print head*

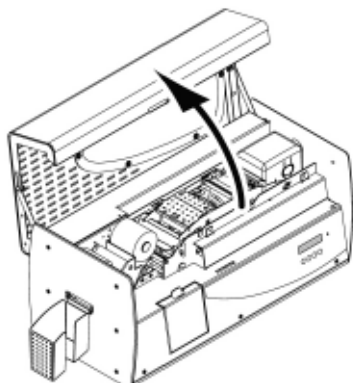
To complete the exchange of the print head, proceed as follows:



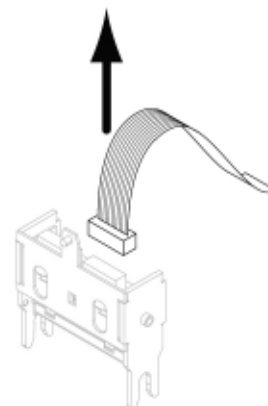
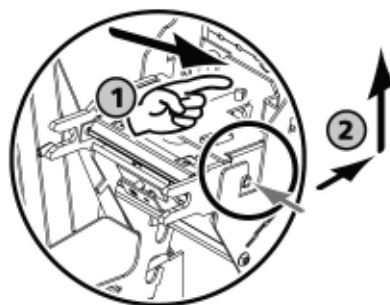
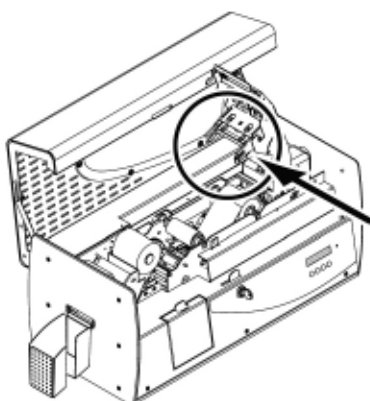
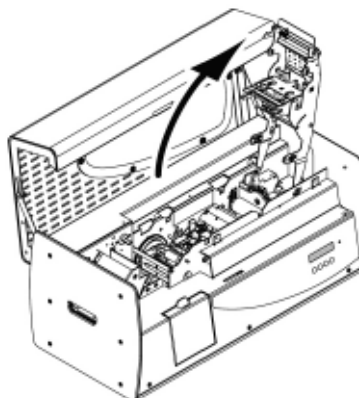
Before changing a print head, make sure the printer is OFF (0).

Step 1 - Removing the defective print head

1. Open the equipment cover.



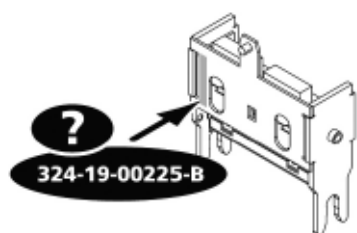
2. Loosen the print head bracket and put it into a vertical position and locate the print head.



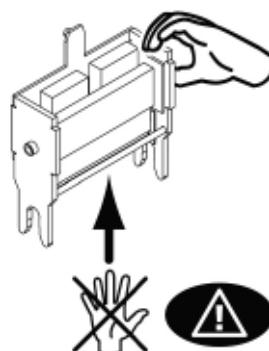
3. Press down on the metal piece at the bottom as indicated in order to release the lugs of the holding forks, then pull the lugs out from their seat

4. Turn the head carefully and disconnect the connector linked to the cable without forcing the mechanism

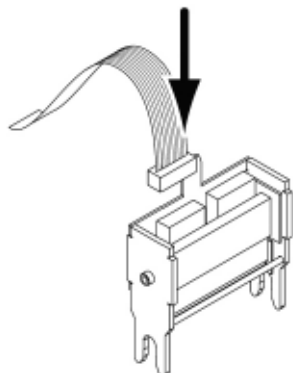
Step 2 - Installing the new print head



1. Note the code indicated on the white ticket affixed to the print head. You will be asked for this code in Stage 3

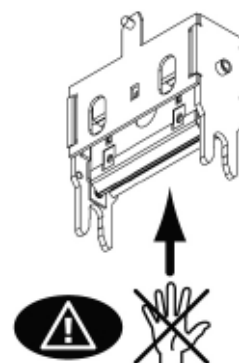


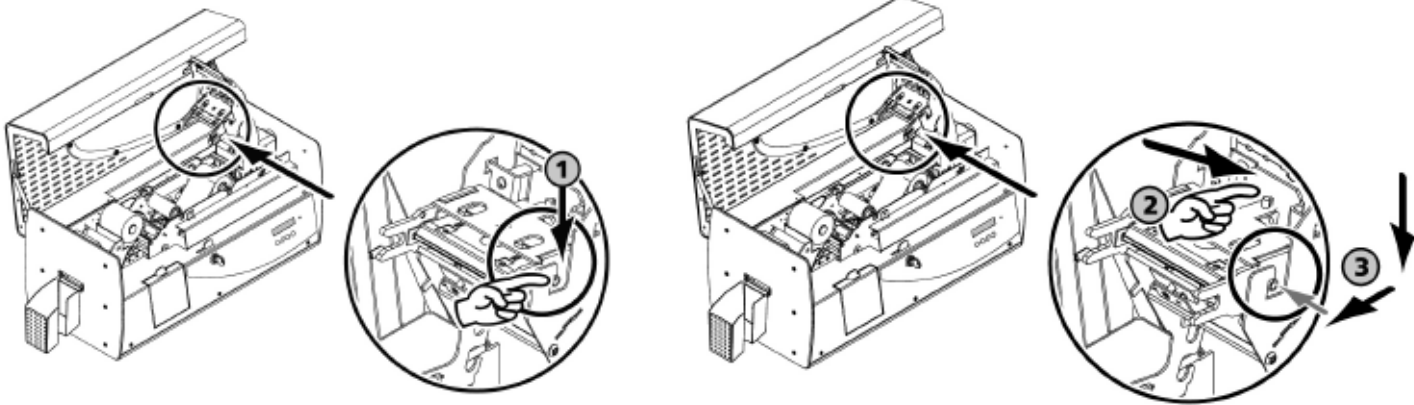
2. Pick up the new print head and turn it toward you, with the white connector visible.



3. Connect the cable into its seat, making sure it is in the correct direction. Do not force the mechanism, as this part is relatively sensitive.

4. Turn the head so that the notice is visible: the connector is no longer visible.





5. Insert the head vertically into the two guides so as to lock the fork lugs into their seats.

6. Turn the print head by pressing the top of the metal piece in order to clip it into the spring-mounted part.

7. The head is put back in place.

8. Close the printer cover. The print head is now installed.

Step 3 - Setting the parameters of the new print head

1. Power up the printer and make sure it is properly connected to a computer on which the Securion printer print driver is installed.
2. Under print driver Properties, click on the "Tools" dialogue box.
3. In the "Dialogue with the printer" portion, enter the following command: **Pkn;x**

X = the print head kit number that you read in Step 2

Example: if the print head kit number is: 179-004-00048, you must enter the command: Pkn;179-004-00048



If the print head kit number is not entered correctly, printer malfunctions can occur.

Step 4 - Cleaning the printer



On the printer display, the message Need Cleaning appears. Cleaning is absolutely required after a print head change. No printing should be started before this operation has been completed.

Refer to the Clean Card Feed Module chapter to perform this operation. Also service the cleaning roller and replace cards and ribbons.

Your Evolis printer is again ready to personalize your cards.

Update the Firmware

Updating the Firmware is a simple operation, but if is not carried out fully, the result can be a disabled.



Prior to any update, please contact your Evolis dealer who can advise you as to whether or not it is appropriate to carry out this operation. In general, this type of update is required only in case of a problem or malfunction clearly identified by your Evolis dealer.

In order to download an update from the www.evolis.com/en/supservices/access.asp site, you must first have registered your product with Evolis (see chapter Register your product in order to benefit from updates).

1. Enter your login and password: a page is displayed.
2. Select the Securion printer model and the Firmware selection
3. Accept the download and register the file in a directory on your hard disk

The file is stored in compressed zip. file. You must extract it and save it in a temporary directory.

4. Then double-click on the file in the directory to start the download.
5. When asked by the program, click on the Download button to start the operation.
The downloading is in process, the message Downloading appears on the control panel display.
6. After about thirty seconds, the Firmware has been transferred to the printer, and the operation is complete.
7. The printer restarts and the message Restarting appears, followed by the message Ready.

The update is complete, and your equipment is ready to personalize your cards.



*Never interrupt the transfer between the PC and the printer during the Important downloading phase (by turning off the printer or the PC, or disconnecting a cable). The result would be the total inability to restart the printer.
If this ever occurs, please contact your Evolis dealer, who will replace your printer's processor card.*

Update the print driver

The updating of the print driver is required in order to solve malfunction problems.

Prior to any update, contact your Evolis dealer who can advise you as to whether or not it is appropriate to carry out this operation.



In order to download an update from the www.evolis.com/en/supservices/access.asp site, you must first have registered your product with Evolis (see chapter Register your product in order to benefit from updates).

1. Enter your login and password: a page is displayed.
2. Select the Securion printer model and the Drivers selection
3. Accept the download and register the file in a directory on your hard disk

The file is stored in compressed zip. file. You must extract it and save it to a temporary directory.

4. Then double-click on the file (Setup.exe) that you have just extracted in order to start the downloading process.

For more details on procedures, please consult the chapter on Installing the Print Driver.

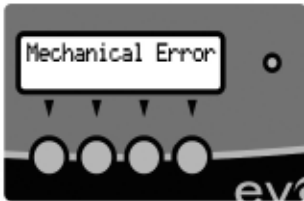
Troubleshooting

In this chapter, you will find out how to resolve certain problems that can arise while you are working.



Never use a metal tool or object to work on your equipment: you run the risk of hurting yourself or damaging all or part of the equipment.

Free a card jammed in the printing unit

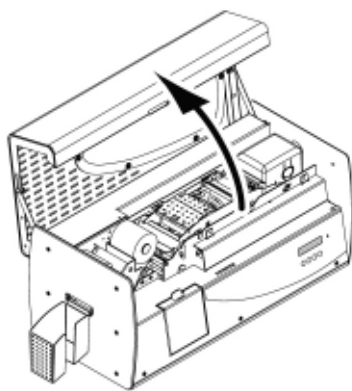


When a card is jammed in the printing unit, the message Mechanical error appears on the control panel display.

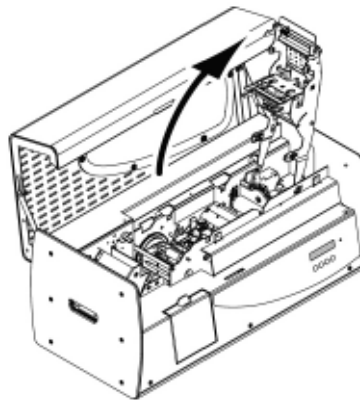
Work is interrupted.



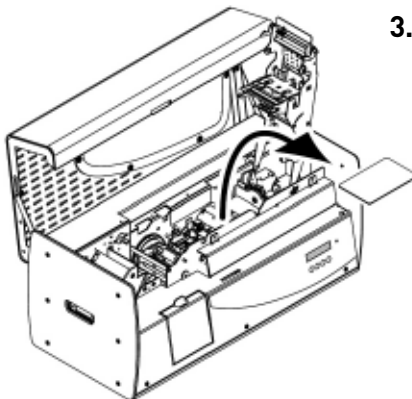
Do not turn off the unit: this would lead to a loss of the printing jobs in progress that are stored in the printer's memory.



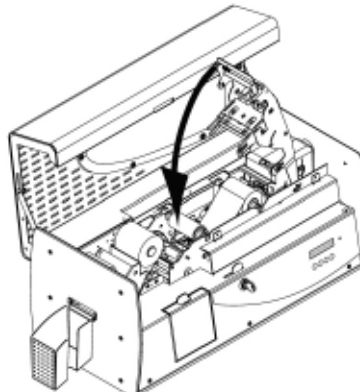
1. Open the equipment cover.



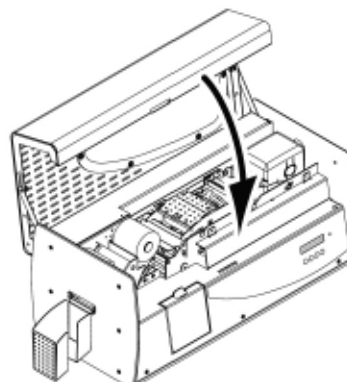
2. Put the print head bracket in a vertical position and remove the ribbon.



3. Carefully remove the jammed card, taking care not to damage the printer and its components.



4. Replace the ribbon, close the print head bracket, making sure to lock it in place.



5. Close the equipment cover.

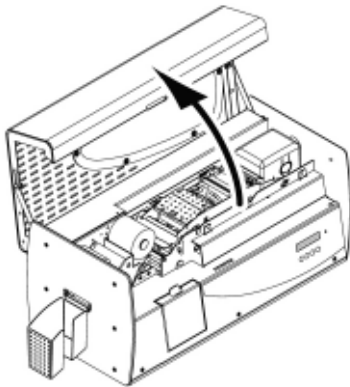
The printer resumes operation.

Free a card jammed in the laminating unit

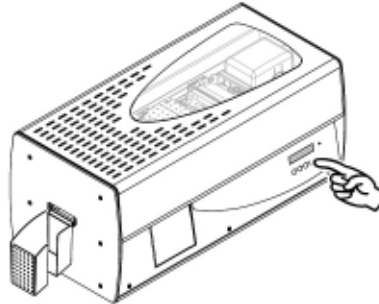
When a card is jammed in the lamination unit, the message Laminator Error appears on the control panel display. Work is interrupted.



Do not turn off the unit: this would lead to a loss of the printing jobs in progress that are stored in the printer's memory



1. Open the equipment cover.



2. Press any key on the control panel to eject the card into the box.

3. Repeat this operation a number of times if necessary.

4. If the ejection has not produced any result, try to free the card manually making sure not to touch the hot surfaces on the lamination unit,



If the lamination unit is too hot, turn off the printer and wait for the module to cool off (it will take several hours). Again try to free the card manually.

If, despite all your attempts, the card continues to be jammed, contact your Evolis dealer who can provide a specialized technician to help you on site.

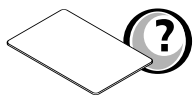


*Never use a tool (screwdriver, pointed object...) to free the card. You would risk serious damage to the rollers, and specifically the unit's hot roller.
This damage would not be eligible for any coverage under the warranty!*

Once the card is free, make sure the film is correctly positioned, then close the printer cover. The printer resumes operation.

Upgrade the print quality

The following information will help you solve potential print quality problems that can arise when using your printer. If, despite this information, you cannot solve the problem, contact your Evolis dealer.



Nothing prints

1. Check your equipment's power supply.

Make sure that:

- The power cord is correctly connected to the printer and to a working outlet.
- The switch on the back of the printer is ON (1)
- The printer is powered. The display must show the Ready message and the status LED must be fixed green in color
- The power supply used is the one shipped with the printer

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

- Verify the presence of cards in the feeder
- Check that there is no jamming. In that case, the status LED would be red

3. Check the ribbon and the laminating film

- Make sure the ribbon and the laminating film are correctly installed and that the printer head bracket is tight.

4. Print a test card

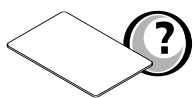
See the chapter "Print and interpret a test card"

5. Check the printer's interface cable

- Check the connection to the computer and to the printer.
- Try using another cable of the same type.

6. Check the print driver

- Check for the presence of the print driver of the Securion printer in the Windows parameters
- Check the computer's printing parameters
- Make sure the Securion printer is selected as the default printer.



A blank card is ejected from the printer

1. Check the ribbon

- Make sure the ribbon is not finished or cut. Replace or reinstall the ribbon, as necessary.

2. Check the printer interface cable

- Check the printer's interface cable
- Check the connection to the computer and to the printer
- Try using another cable of the same type.

3. Components of the print head are perhaps damaged

- Print a test card.

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



The print quality is not sufficient

1. The contrast and brightness parameters must be modified.

- Lack of contrast and color saturation: increase the contrast and brightness parameters in the print driver configuration

2. The type of card used may be inappropriate

- Make sure the type of cards used corresponds to the required specifications
See the "Technical Card" chapter in this manual for more information



The texture of the card is rough or not perfectly flat

Try to print using another type of card.



Partial or incorrect printing

1. Check the parameters defined for the printing

- Make sure no element of your formatting is outside the print margins
- Check the orientation of the document selected in the configuration of the print driver (Landscape or Portrait)

2. Check the printer interface cable

- If some unusual characters print out, make sure you are using the interface cable appropriate for your printer
- Check the connection to the computer and to the printer
- Try using another cable of the same type.

3. Make sure the printer is clean

- Clean the inside of the printer, the cleaning rollers and the print head, if necessary
See the "Maintenance" chapter of this manual.

4. Make sure the cards are clean

- Make sure they are stored in a dust-free location.

5. Make sure the print head is clean

See the procedure for cleaning the print head in the "Maintenance" chapter of this manual.

6. Check the ribbon

- Make sure its position in the printer is correct
- Make sure it is unrolling correctly

7. Check the print head

- If horizontal (white) lines appear on the card, some components of the print head may be dirty or damaged
- Clean the print head
Consult the "Maintenance" chapter for more information
- Si le problème n'est pas résolu après nettoyage, contactez votre revendeur pour un remplacement de la tête d'impression



In order to assist you on a day-to-day basis, Evolis has structured its customer service around a network of specialized partners.

Moreover, to let you get answers to your questions 24/7 and 7/7, the Internet site www.evolis.com includes a number of elements linked to the day-to-day operation of your Securion.

Network of Evolis partners

For any unresolved technical problem, contact an Evolis dealer. If you do not know of an Evolis dealer, go onto the www.evolis.com site and send us your request. Evolis will give you the address of the Evolis dealer closest to you. When you call an Evolis dealer, you must be next to your computer and be prepared to provide the following information:

- The type and serial number of your printer
- The type of configuration and the operating system you are using
- A description of the problem that has occurred
- A description of the steps you have taken to solve the problem.

Look for information on www.evolis.com

If you need additional technical aid, you will find a large amount of information relative to the utilization and troubleshooting of the Evolis printers under the heading Support & Services on the Evolis Internet site.

This item offers the downloading of the most recent versions of Firmware, print drivers and user manuals, Evolis printer use and maintenance and an FAQ* item to provide answers to the most frequently-asked questions.

**FAQ : Frequently-asked Questions*

Register your product to benefit from updates

To benefit from driver and Firmware updates, you must pre-register on the www.evolis.com site.

Register for download

Please enter your personal and company informations then submit the form. Your request will be validate by an Evolis sales representative and you will receive an e-mail with your credentials.

For more information please contact the Evolis customer services Department support@evolis.com.

The fields in red are required.

.....

Title:	<input type="text" value="- Please select a title -"/>
First name:	<input type="text"/>
Last name:	<input type="text"/>
Position:	<input type="text"/>
E-mail:	<input type="text"/>
E-mail confirmation:	<input type="text"/>
Printer Serial Number:	<input type="text"/>
Language:	<input type="text" value="- Please select a language -"/>
Company:	<input type="text"/>
Department:	<input type="text"/>
Address:	<input type="text"/>

Enter the following address into your browser in order to get access to the registration form.



Please fill out the entire form, making sure to complete correctly the fields in red.

You will receive a return confirmation e-mail including your personal access codes.



Characteristics

This chapter covers technical specifications and certifications for the Evolis printer

Declaration of Conformity

Concerning Safety and Electromagnetic Compatibility

Manufacturer's Name: Evolis Card Printer
Manufacturer's Address: 29, avenue de la Fontaine - Z.I. Angers Beaucouzé - 49070 Beaucouzé - France
Material Designation: Securion
Year of Manufacture: 2007

I, the undersigned, Serge Olivier,

Declare that I have received the assumption of the above material, used and installed in accordance with the notice, with the essential requirements of Directives 73/23/CEE and 89/336/CEE, modified by 92/31/CEE and 93/68/CEE by the application of the following regulations:



EN 60950-1 of 2001
EN 55022 Class B of 1998: A1 (2000), A2 (2003)
EN 55024 of 1998 : A1 (2001), A2 (2003)
EN 61000-3-2 of 2000
EN 61000-3-3 of 2000 +A1 of 2001

Full name: Serge Olivier
Title: Technical Manager

Signature:
Date: January 2007

EUROPE: Norway Only: This product is designed for IT power system with phase-to-phase voltage 230V. Earth grounding is via the polarized, 3-wire power cord. **FI:** "Laite on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan"

SE: "Apparaten skall anslutas till jordat uttag". **NO:** "Apparatet må tilkoples jordet stikkontakt"



FCC Statement (For U.S.A.)

Federal Communications Commission Radio Frequency Interferences Statement

Securion models conform to the following specifications: FCC Part 15, Subpart A, Section 15.107(a) and Section 15.109(a) Class B digital device.

Supplemental information:

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's by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

Use of a shielded cable is required to comply within Class B limits of Part 15 of FCC Rules.

Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by Evolis Card Printer may cause, harmful interference and void the FCC authorization to operate this equipment.

VCCI (For Japan)



This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI).

If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

End of life product disposal



This symbol indicates that Waste Electrical and Electronic Equipment (WEEE) must be disposed of separately from normal household waste in order to promote reuse, recycling and other forms of recovery and to reduce the quantity of waste to be eliminated through landfill. WEEE includes accessories such as remote control, batteries, AC adaptor, etc. When you dispose of such products, please contact your distributor or Evolis at info@evolis.com.

Printer specifications

General features

- Metal housing with a locker restricting the access to the consumables
- Detachable card feeder - 100 cards - Ruby
- 300 dpi print head with enhanced colour management system allowing high quality picture printing
- Flip-over unit available for both printing and lamination modules
- Reject box - 15 cards
- Output hopper - 100 cards
- Control panel with 2-line LCD and status LED
- 16 MByte Ram allowing storage of two full dual-sided card designs
- Data Ports: Securion is delivered with an USB and an Ethernet ports. A 6" (1.80 m) long USB cable is delivered with each printer
- Slot to host a Kensington® security mechanism

Printer specifications

- Color printing module and laminating unit
- 300 dpi print head (11.8 dots/mm)
- USB & Ethernet TCP-IP connection
- 16 Mb RAM allowing two card storages (front & back)
- Flip-over station for dual-sided printing or laminating
- Detachable feeder with a capacity of 100 cards (0.76 mm or 30 mil)
- Output hopper with a capacity of 100 cards (0.76 mm or 30 mil)
- Reject box for 15 cards (0.76 mm or 30 mil)
- Two-line LCD display and a status LED
- Locking system to secure access to blank cards, ribbons, films and rejected cards
- Support for a Kensington® locking system

Print Mode

- Color dye sublimation and monochrome thermal transfer
- Enhanced color management system for high quality pictures
- Dual-sided and edge-to-edge printing

Lamination Mode

- Full card varnish and patch films
- Dual-sided lamination
- Speed range: 2 mm/s to 18 mm/s (0.08 inch/s to 0.71 inch/s)
- Temperature range: 100°C to 180°C (212°F to 356°F)

Printing and laminating speed

Personalization throughput will depend on card design and lamination speed settings

- YMCK-K, 1.0 mil patch single-side - 85 to 105 cards/hour
- YMCK, 1.0 mil patch single-side - 95 to 120 cards/hour

Supported platforms

- Windows™ XP, 2003 and Vista, 32 & 64-bits

Ribbon types for the printer module

- 2-panel KO black monochrome ribbon - 500 cards/roll
- 5-panel YMCKO color ribbon - 200 cards/roll
- 6-panel YMCKO-K color ribbon - 200 cards/roll
- 1/2-panel YMCKO color ribbon - 400 cards/roll
- Monochrome ribbons - 1,000 cards/roll: available in black, red, green, blue, white, gold and silver

Types of film for lamination

- Generic thin holographic overlay film, full card surface - 400 cards/roll
- Clear patch 1 mil film - 200 cards/roll
- Clear patch 0.6 mil film - 200 cards/roll
- Special patches and thin overlay films upon request

Options

- Encoding options (can be combined)
 - Magnetic stripe encoder ISO 7811 or JIS2 - HiCo/ LoCo
 - Smart contact station - ISO 7816-2
 - Smart contact station and encoding unit - PC/SC, EMV 2000-1
 - Contactless encoding unit - ISO 14443A, B, ISO 15693, Mifare, DesFire, HID iCLASS
 - Other types upon request
- 100-card additional feeder: Ruby, Lagoon, Glacier

Warranty

Use Evolis Genuine products for best performance and extended lifespan of your printer

- Printer, lamination module, print head, and lamination hot roller: a 2-year warranty with a maximum of 100 000 inserted cards, whichever comes first*

** Subject to observance of specific conditions and use of Evolis genuine consumables*

Card types	All PVC, Composite PVC cards
Card format	ISO CR-80 - ISO 7810 (53.98 mm x 85.60 mm - 3.375" x 2.125")
Card thickness	From 0.25 mm (10 mil) to 1 mm (40 mil) No lamination under 0.50 mm (20 mil), recommended from 0.76 mm (30 mil min.)
Card feeder capacity	100 cards (0.76 mm - 30 mil)
Card output hopper capacity	100 cards (0.76 mm - 30 mil)
Printer size	Without card hopper: L 562.7 mm x W 262.16 mm x H 274.64 mm (L 22.15" x W 10.32" x H 10.81") With card hopper: L 658.2 mm x W 262.16 mm x H 274.64 mm (L 25.91" x W 10.32" x H 10.81")
Printer weight	15.4 Kg (33.15 Lbs)
Connections	USB and Ethernet ports (USB Cable supplied)
Electrical	Power supply: 110-230 Volts AC, 2 A, 60-50 Hertz Printer: 24 Volts DC, 6.25 A
Environmental	Min/Max operating temperature: 15° / 30°C (59° / 86° F) Humidity: 20% to 65% non-condensing Min/Max storage temperature: -5° / +70°C (23° / 158° F) Storage humidity: 20% to 70% non-condensing Operating ventilation: free air

Printer options

Part Number	Product Description
E7001E BASIC	Securion Basic Basic printer & laminator without option, USB and Ethernet
E7002E MAG ISO	Securion Mag ISO Printer & Laminator with Dual HICO/LOCO Magnetic Stripe Card Encoder, USB and Ethernet
E7003E SMART	Securion Smart Printer & Laminator with Smart Card Contact Station, USB and Ethernet
EOMN7007E SMART & C'TLESS	Securion Smart & Contactless with Dual Chip Encoder Printer with Smart Contact Station, Contactless Antenna, Dual Chip Encoder, USB and Ethernet, USB driven encoder
EOMN7000E MAG ISO, SMART & C'TLESS	Securion Mag ISO, Smart & Contactless with Dual Chip Encoder Printer with Dual HICO/LOCO Magnetic Stripe Card Encoder, Smart Contact Station, Contactless Antenna, Dual Chip Encoder, USB and Ethernet, USB driven encoder

List of “Evolis Genuine Product” consumables

Part Number	Product Description
Multi Panel Color Ribbons	
R3314	6 Panel Color Ribbon - YMCKOK - 200 cards/roll
R3013	5 Half-Panel Color Ribbon - 1/2 YMCKO - 400 cards/roll
R3011	5 Panel Color Ribbon - YMCKO - 200 cards/roll
R3012	2 Panel Monochrome - KO - 500 cards/roll
Security & Laminator Films	
R4711	Clear Patch 0.6 mil - Box of 10 rolls - 200 cards/roll
R4721	Clear Patch 1.0 mil - Box of 10 rolls - 200 cards/roll
R4832	Full card varnish - Generic Hologram - Security - Box of 10 rolls Continuous film - around 400 cards/roll
Monochrome Ribbons	
R2011	Black Monochrome Ribbon - 1000 cards/roll
R2012	Blue Monochrome Ribbon - 1000 cards/roll
R2013	Red Monochrome Ribbon - 1000 cards/roll
R2014	Green Monochrome Ribbon - 1000 cards/roll
R2015	White Monochrome Ribbon - 1000 cards/roll

For specific security requirements as per your application, Evolis and its Partners are willing to consider supplying lamination films that are not listed above. Please contact your Evolis reseller for more details.

Magnetic encoding

Securion printers with a magnetic stripe card encoder are called Securion Mag printers. The operating mode of a Securion Mag printer is identical to that of a Securion printer.

The magnetic encoder encodes tracks ISO 1, 2 and 3 in a single passage and then checks the data.

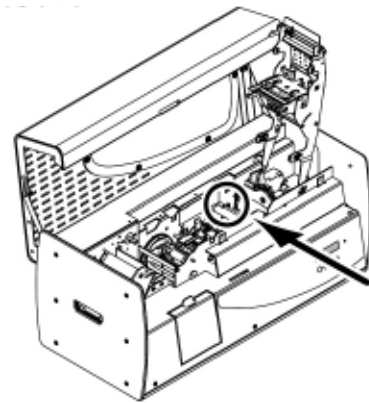
Set in high coercivity (HICO) or in low coercivity (LOCO) with a simple click from the Windows driver, however, the encoders of the Securion Mag are sent adjusted to high coercivity (HICO) by default, unless specifically requested on the order.

Location of the magnetic encoder

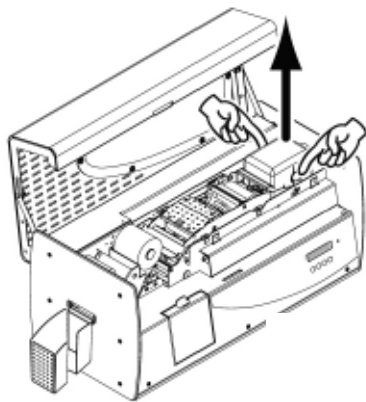
The magnetic encoder is a module installed in the factory on Securion Mag printers. The writing and reading head is placed under the path of the cards and after the print head.



The encoding sequence of a card is still carried out before printing.

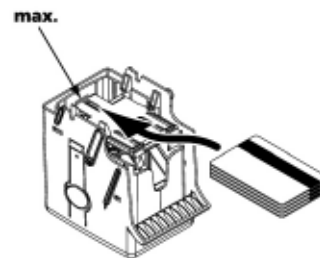


Card orientation

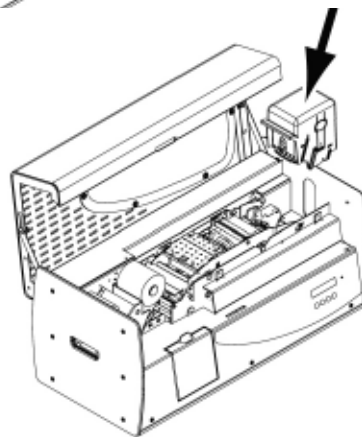


Cards with a magnetic track must be installed in the feeder so the magnetic strip faces upwards, as follows:

1. Remove the feeder from the printer as shown.



2. Lower the spring system as shown and insert 100 magnetic cards of 0.76 mm (30mil) at most.

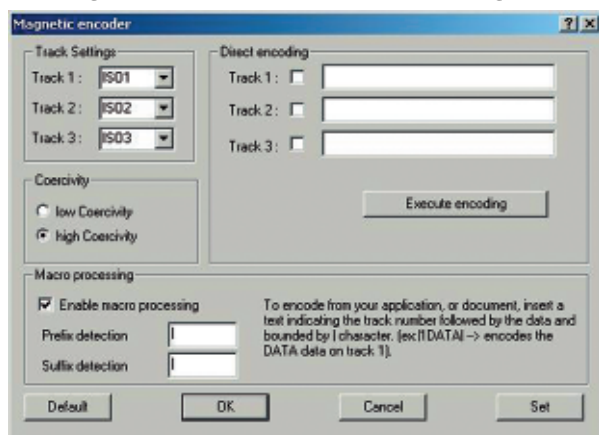


3. Put the feeder back in the printer. Then press on the top of the feeder until it clicks.

Setting the Windows Driver

When first installing the Windows driver, it is necessary to parameterise the functions of the magnetic encoder. The functions of the magnetic encoder are accessible from the **Tools** dialog box of the driver by clicking the **Encoding Definition** button.

“Magnetic Encoder” dialog box



The **Magnetic Encoder** dialog box opens on selecting the **Encoding Definition** button.

Track format allows us to choose the ISO standard required for each track. See the table in this Annexe for the information concerning the ISO 7811 standards.

Coercivity parameterises the magnetic encoder in high (HICO) or low (LOCO) coercivity. A magnetic track encoded in high coercivity is more resistant to exterior disturbances than a magnetic track encoded in low coercivity.

Direct encoding allows the direct encoding of one or more magnetic tracks from this window simply by selecting them and entering the data to be encoded. Click on the « **Execute encoding** » button to start the encoding cycle.

Automatic extraction allows cards with magnetic tracks to be encoded from Windows applications (such as Word for example). A text field surrounded by the characters “|” and “|” (or another character to be defined by the user) may be interpreted as an encoding command by the driver.



Only use cards with magnetic tracks conform to ISO 7810 and ISO 7811.

To work properly, the magnetic track must be moulded in the card. Never use a card with a glued magnetic track.

Cleaning of the magnetic encoder

The head of a magnetic encoder needs regular cleaning to be able to assure the integrity of the data encoded in the cards.

The magnetic encoder is cleaned when the printer is the object of a cleaning sequence with the pre-saturated cards (refer to the « Cleaning » chapter in this manual for further information).

Repeated passages of the cleaning card inside the printer clean the card transport rollers, the cleaning roller and the reading / writing head of the magnetic encoder.

If between two printer cleaning sessions (every 1000 cards inserted), the reading / writing process has failed with more than one card, it is recommended to manually start a printer cleaning process (refer to the « Cleaning » chapter of this manual for the procedure to be followed).

ISO 7811 encoding standards

Track no.	Field separator	Track density	Types of characters	Number of characters
Track 1	^	210 bpi ¹	Alphanumeric (ASCII 20- 95) ²	79 ³
Track 2	=	75 bpi ¹	Numerical (ASCII 48-62) ²	40 ³
Track 3	=	210 bpi ¹	Numerical (ASCII 78-62) ²	107 ³

¹ Bit(s) per inch

² Except the “?” character

³ Including the Start, Stop and LRC characters. The magnetic encoder generates these characters automatically.

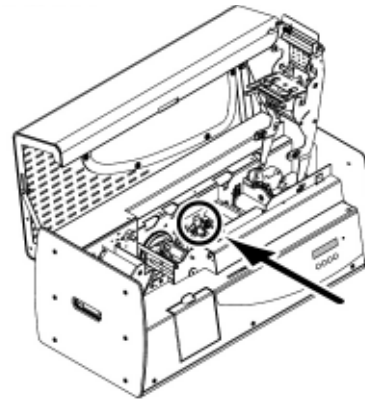
Smart Card Contact Station

Securion printers with a Smart Card Contact Station are called Securion Smart printers. The working mode of a Securion Smart printer is identical to that of a Securion printer. The Smart Card Contact Station of the Securion Smart enables the chips to be programmed to the ISO 7816-2 standards.

Location of the contact station

The Contact Station is a module installed in the factory on Securion Smart printers.

The Contact Station is positioned over the path of the cards and before the print head. To contact the Station, the chip card is placed under it and is pushed up.



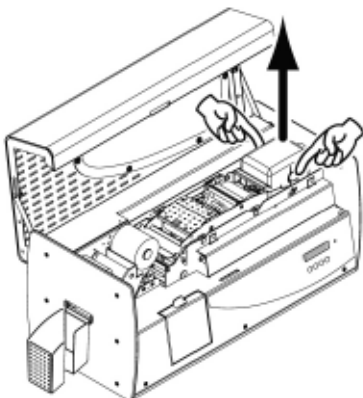
The programming sequence of a chip is always carried out before the card is printed.



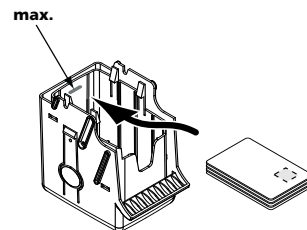
*Only use chip cards conform to ISO 7816-2.
Never print on the chip.*

Card orientation

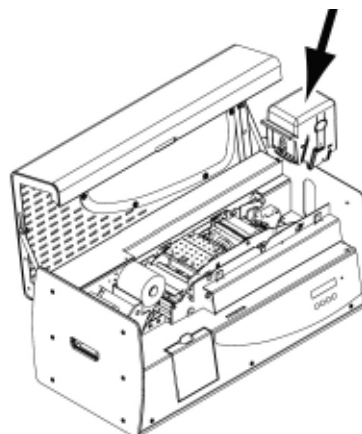
Chip cards must be installed in the card feeder so that the chip is downwards, as shown below:



1. Remove the feeder from the printer as shown.



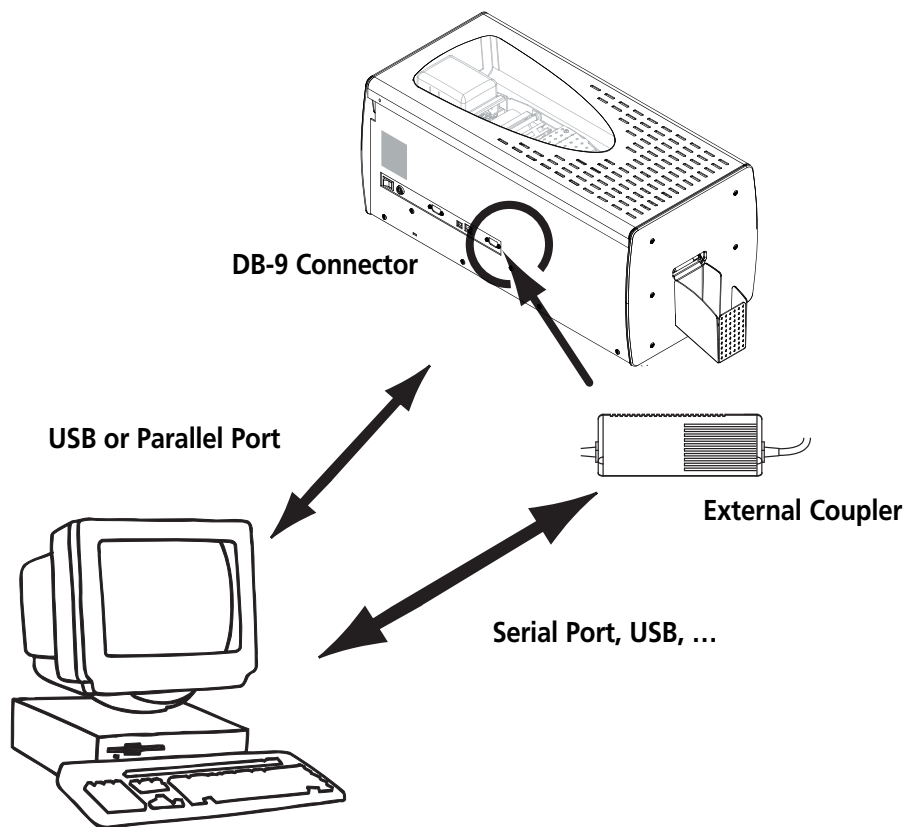
2. Lower the spring system as shown and insert 100 chip cards of 0.76 mm (30mil) at most (chip downwards).



3. Put the feeder back in the printer. Then press on the top of the feeder until it clicks.

Interface of the Contact Station

The Dualys is fitted with a DB-9 female connector on the back of the printer. This connector, directly connected to the Contact Station inside the printer, is also connected to an external coupler to program the chip.



DB-9 Connector pins	Chip card contact points
1	C1 (V c.c.)
2	C2 (reset to 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 commuted with the Contact Station

A sequence of commands must be sent via the interface of the printer to insert a card in the printer and then place it under the Station to establish contact

The command sequence is the following:

Sending the "Sis" sequence

- One card is moved from the feeder to the Contact Station and stops under it.
- The card is pushed up to come into contact with the Station.
- The printer connects the Contact Station to the DB-9 connector.
- The chip may be programmed via the serial or USB interface of the computer and the external coupler.



Check the Programming Guide of the Dualys printer to obtain more complete information on how to program a chip card.

