



USER GUIDE

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PRIMACY

I AMINATION

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TRADEMARKS

Primacy, Evolis Premium Suite® and Evolis High Trust® are trademarks of Evolis. All other trademarks belong to their respective holders.

WARRANTY

Please refer to the warranty notice supplied with your printer for the terms and conditions and limitations.

ENVIRONMENTAL INFORMATION

Evolis is committed to helping the environment by reducing the energy consumption of its products.

RECYCLING END-OF-LIFE PRODUCTS

Manufacturing the equipment that you have purchased required the extraction and use of natural resources. This equipment may contain materials that are hazardous to health and the environment.

To prevent the dispersal of such materials into our environment and reduce pressure on our natural resources, we recommend that you use existing collection facilities. These facilities will re-use or recycle most of the materials in your end-of-life equipment in an appropriate way.



The crossed-out dustbin symbol on your device is a reminder to use these facilities.

For further information on collection, re-use or recycling systems, please contact your local or regional waste management body. Please do not hesitate to contact us to find out more by visiting our website at **www.evolis.com** or by emailing the following address: **info@evolis.com**.



ABOUT YOUR NEW PRINTER

Using your new Evolis printer, you can create a wide variety of high-quality cards and personalized badges that can be printed and laminated in various thicknesses, colors, and styles. This printer uses consumables and accessories available from Evolis. For further details, visit our website at **www.evolis.com**.

PRIMACY LAMINATION

WARRANTY REGISTRATION

Please register online at www.evolis.com to receive our special offers and general information.

Once on the website, click **Drivers and Support** then **Register your printer** and fill out all the fields, specifying the model and serial number found on your printer.

GETTING STARTED

The purpose of this user guide is to support you, step by step, in discovering your printer and how it works. Please take some time to read it in order to better understand your printer and its features, and to save time during installation and use.

As with all Evolis products, a great deal of care has been taken over this manual. Should you find an error, however, please let us know by emailing us at **info@evolis.com**.



Please read this manual carefully.

CONTENTS

The bookmarks found at the top left of your screen can be used to navigate between the various chapters in this user guide.

ICONS

The following icons are used in this manual to highlight important information:



Information providing further details or depth about certain points in the main text.



Indicates that failing to take the recommended action is likely to damage your printer.



This symbol indicates that a video showing the procedure is available on the www.evolis.com website and clicking on it takes you straight to online help.



This symbol links to Evolis Print Center, accessible from your computer, which you can use to administer and manage your printer and change its settings.



1 – GETTING STARTED

UNPACKING

Your printer and its lamination module are supplied with several accessories that should be checked on receipt. The list of accessories may vary depending on your location.

The printer and its lamination module are shipped in special packaging designed to prevent any damage in transit. If you notice any visible damage, please contact the shipping company and immediately inform your Evolis reseller, who will tell you the procedure to follow. Evolis takes great care over the quality of its packaging and we ask that you keep this packaging somewhere clean and dry.



You will be asked for the full original packaging (outer box, inner wedges, and protective bags) in the event that the printer and/or the lamination module are returned without their original packaging and any components are damaged in transit, these components will no longer be covered by the warranty. You will be charged for new packaging to ship the system back to you.

Accessories supplied with your printer:

- Power supply unit SWITCHBOX Type F10723-A, CWT type KPL-065M or CWT type KPL-065M-VI.
- Mains power cable.
- USB cable.
- Reject hopper.
- Installation, documentation and software CD-ROM.
- Starter cleaning kit.
- Quick installation guide.
- Warranty notice.

Accessories supplied with your lamination module:

- Power supply unit FSP FSP150 AAAN2.
- Mains power cable.
- Connector module between the printer and the lamination module.
- Output hopper.
- Starter cleaning kit.
- Quick installation guide.



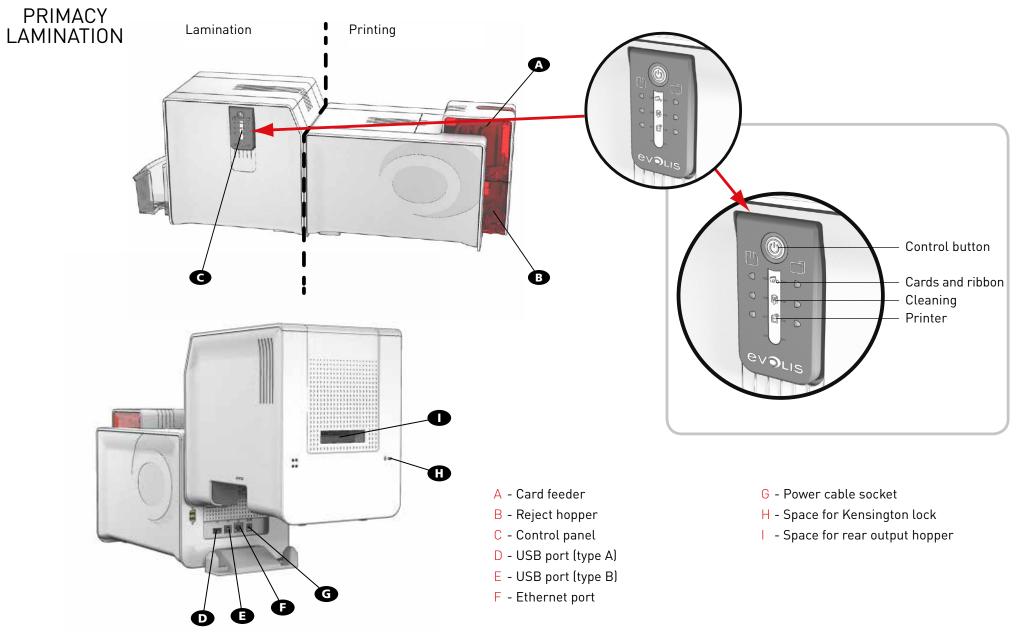
If any of these components are missing, please contact your Evolis reseller. Use only the power supply units provided with your Evolis system: For the printing module: SWITCHBOX Type F10723-A, CWT type KPL-065M or CWT type KPL-065M-VI. For the lamination module: FSP FSP150 – AAAN2. Use only the USB cable supplied with your Evolis printer.

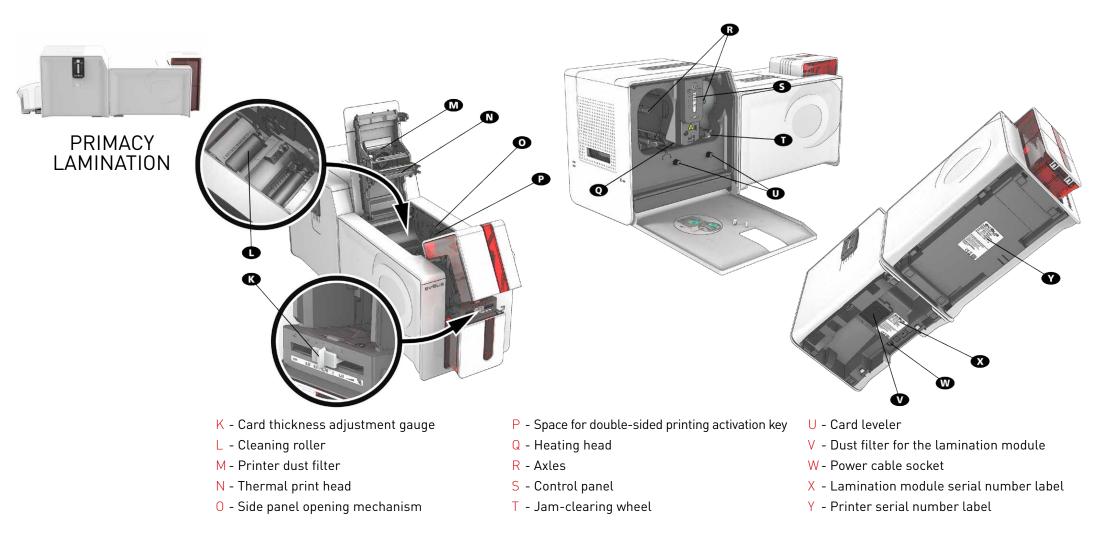


The printer and the lamination module must be placed in a dry location, protected from dust and drafts but well-ventilated. Please ensure you keep the complete system on a flat, sturdy surface able to bear its weight.



DESCRIPTION OF THE PRINTER AND ITS FUNCTIONS







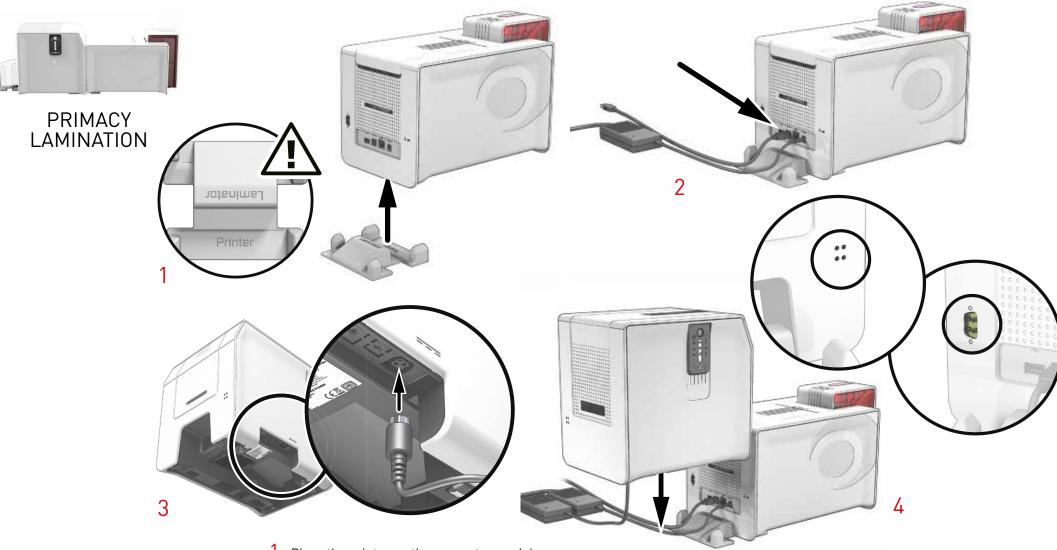
Your machine may be supplied with an LCD screen instead of the control panel. Please refer to the LCD screen user guide on how to operate it.



Access to the side panels of the machine and the option module installation/removal areas is restricted to your retailer/installer or to experienced users. The machine should always be disconnected from the power supply (unplugged) before carrying out any work on it.



Please watch the getting started video described in the following chapter.



- 1 Place the printer on the connector module.
- 2 Connect the power cable to the power supply unit, then plug the power cable connector into the printer. Attach all the cables required (USB, network, etc.) to connect the printer as indicated in the diagram.
- 3 Connect the power cable to the lamination module power supply, then plug the power cable connector into the lamination module.
- 4 Carefully place the lamination module onto the connector module, retaining the routing of the cables. The printer and the lamination module communicate through infra-red connectors.



It is important that the print module and the lamination module are placed on a flat surface.



INSTALLATION

Connecting the Printer

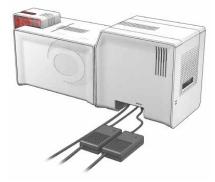
Connection to the power supply

PRIMACY LAMINATION



The printer must be connected to a properly protected and earthed electrical installation. FI: Laite on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan. NO: Apparatet må tilkoples jordet stikkontakt. SE: Apparaten skall anslutas till jordat uttag. DK: Printeren skal tilsluttes til en korrekt beskyttet og jordforbundet el-installtion.

- The print and lamination modules should be connected to their power supplies before proceeding.
- The ends of the 2 power cables should then be plugged into 2 earthed power sockets.
- The system is powered on: the Primacy Lamination control panel lights up showing that the system is working properly. If the control panel does not light up, then either the installation has not been carried out correctly or the printer is not working properly. Check the installation.





Before attempting any maintenance, always ensure that the power cables are unplugged. For your personal safety, ensure that the cable and power supply unit remain easy to access, especially in the event of an emergency.



To save energy, the printer and the lamination module will automatically switch to standby mode after 10 minutes of inactivity. They will switch to hibernation mode after 30 minutes in standby mode.

The standby times can be configured in the Evolis Print Center. In standby mode, sending a print request restarts the printer, and briefly pressing the control button (for 1 second) takes the printer out of hibernation mode.

Connecting the USB cable



Under no circumstances should you connect the USB data cable before the installation of the driver is complete.

Please refer to the section on driver installation in this chapter for further details, and follow the instructions carefully.



PRIMACY

LAMINATION

Printing Ribbons

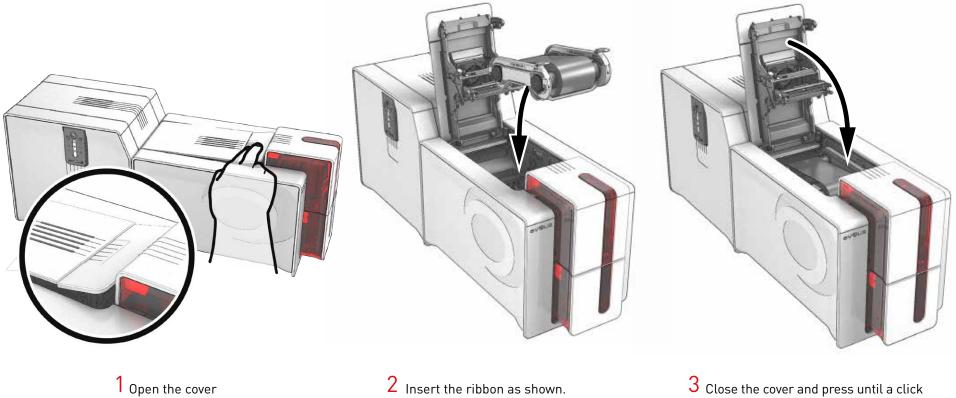
Evolis original High Trust[®] ribbons optimize the operation of your printer and avoid causing damage to it. The use of ribbons from other suppliers is liable to damage your printer and may void the manufacturer's warranty for the printer.

For optimum print quality, Evolis recommends that the printer is fully cleaned every time the ribbon is changed. See the Servicing and Maintenance chapter of this manual.

Fitting the ribbon

NOTE

The printer automatically recognizes the ribbon inserted.



³ Close the cover and press until a click is heard.



PRIMACY

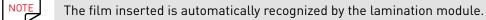
LAMINATION

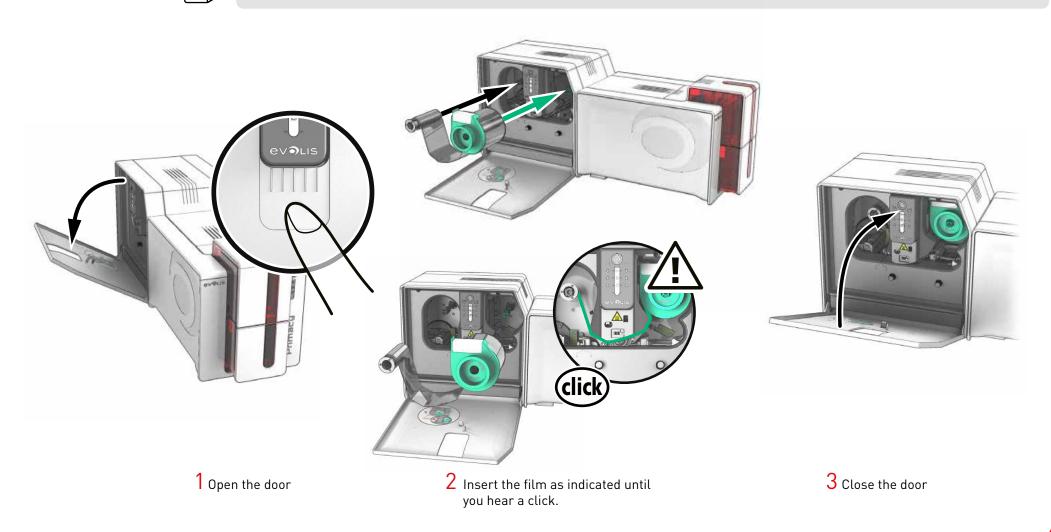
Film for Lamination

Evolis original High Trust[®] film optimize the operation of your lamination module and avoid causing damage to it. The use of film from other suppliers is likely to damage your printer and may void the manufacturer's warranty for the printer.

For optimal lamination quality, Evolis recommends cleaning the lamination module during the advanced cleaning cycle. See the Servicing and Maintenance chapter of this manual.

Fitting the film



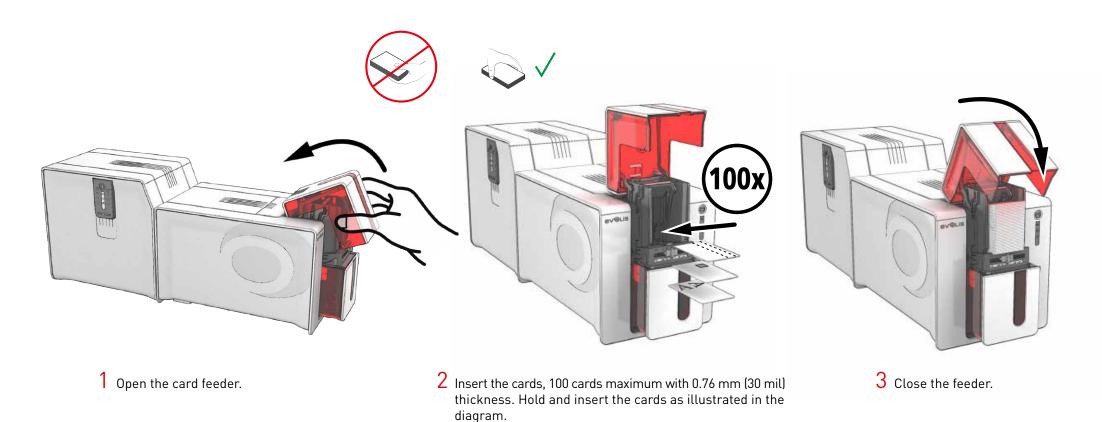




For optimum quality, the cards used must be ISO 7810 certified. Use only the card types recommended by Evolis. Avoid touching the printable surface of the cards in order to preserve print quality. Do not use cards that have been damaged, folded, embossed, or dropped on the floor. Keep your cards protected from dust.

Loading the cards

NOTE

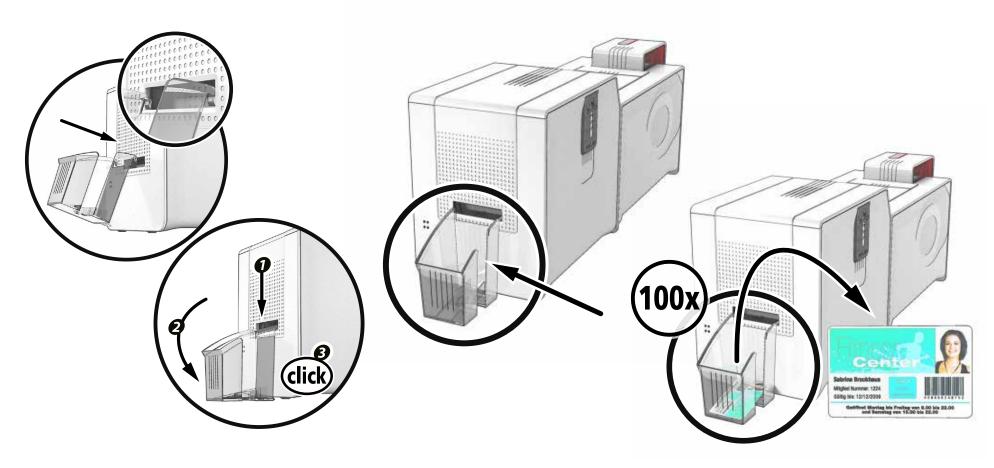




Removing printed cards

Once the print and lamination cycle is complete, the cards are issued into the output hopper at the back of the Primacy Lamination. This output hopper is designed to collect the printed cards that are laminated and/or encoded. Primacy Lamination has an output hopper with capacity for 100 cards maximum with 0.76 mm (30 mil) thickness.

PRIMACY LAMINATION

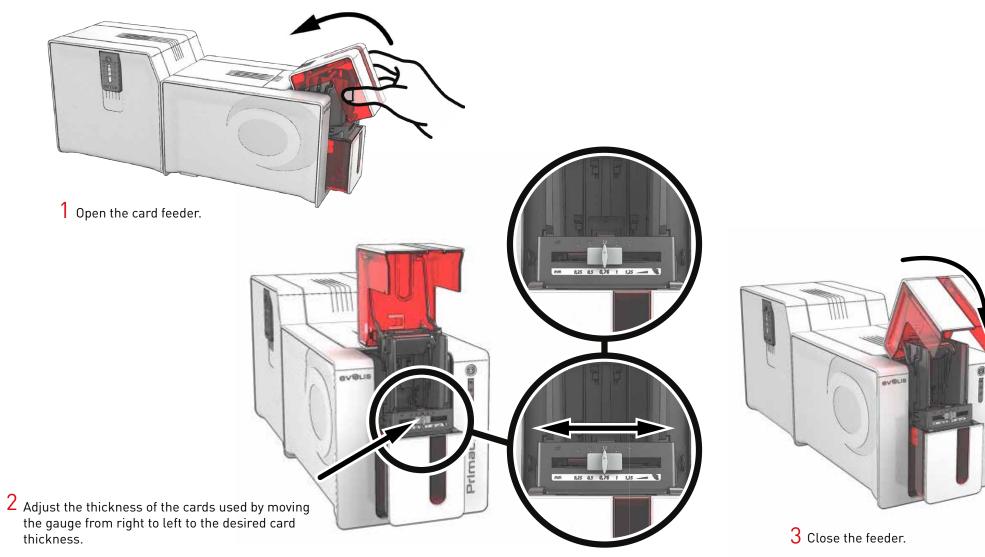




Adjusting the card thickness

The printer is equipped with a manual card thickness adjustment system which can be reached through the feeder when it is open. The printer accepts cards between 0.25 mm and 1.25 mm thick (10 to 50 mil). The factory setting for card thickness is 0.76 mm (30 mil).

PRIMACY LAMINATION

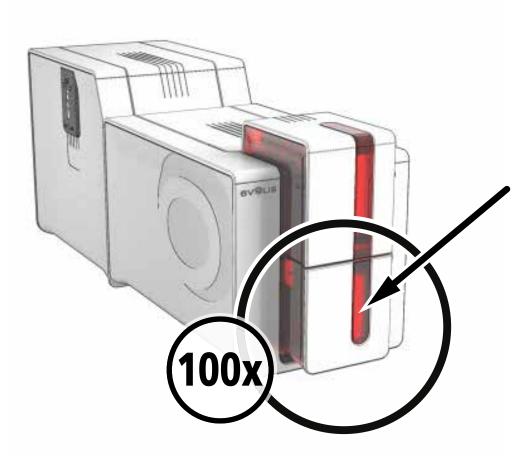




Reject/rear hopper management

Primacy Lamination has a reject hopper with capacity for 100 cards maximum (0.76 mm - 30 mil) positioned in front of it. To empty it, you just need to open the reject hopper and remove any cards it contains. Evolis recommends that you empty it regularly.







2 – PRINTING

INSTALLING THE PRINT DRIVER

New advanced functions automate complete printer configuration after the print driver has been installed. Your printer is supplied with a CD including Evolis Premium Suite® software, which contains the print drivers for Windows® platforms.

Evolis Premium Suite[®] is an all-in-one software solution for printer drivers that enriches the user experience by making interaction between the printer and the computer more intuitive.

It is also:

- A printing center that monitors printers and their modules: indicating the printer status, remaining capacity of the ribbon, film, etc.
- A powerful tool to support printer configuration.
- A notification center that alerts users when intervention is required.
- A printer maintenance and administration point.
- A series of wizards to guide you through operations of cleaning, encoding, etc.
- An encoding system (magnetic encoding, etc.).
- Diagnostic tools.

To install the print driver:

On PC: insert the CD into your computer and select the print driver menu. A program will guide you through the entire installation process.



Do not connect your USB cable to your computer until prompted to do so by the installation program. For the connection procedure, see the section on Connecting the Printer in this chapter.



Follow the installation procedure carefully. All versions of Windows® require the user to have administrator rights to install the driver.

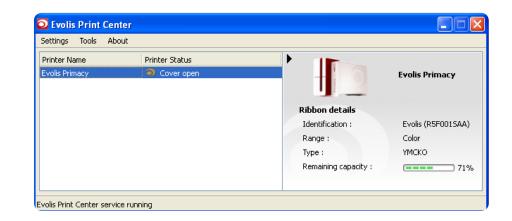


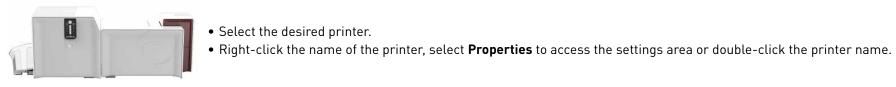
MANAGING PRINT SETTINGS

PRIMACY LAMINATION Once the ribbon has been installed, your Evolis printer will automatically adapt its parameters and settings to suit the ribbon. A graphic application called Evolis Print Center is available to help you if necessary to change certain predefined settings.

To access this application:

- From the Start button on the bottom left of your screen in the Windows[®] task bar, select All Programs, Evolis Card Printer, Evolis Premium Suite, Evolis Print Center.
- The application displays all installed Evolis printers.





Evolis Primacy - Properties					>	
Printing	Settings					
Lamination						
Settings	Lamination module :	First lamina	ation module		- 43	
Device details	Lamination mode :	Front side lamination 🔹				
Maintenance	Lamination settings	✓ Parallel	mode		Help	
Tools	Film details :	Clear Patch	1.0mil			
Encoding	Card type :	Current se	ttings	-	+ -	
Cleaning	First side adjustmer Speed :	nt Min		Max	10	
System details	Temperature :	Min	-	Max	10	
Maintenance	Second side adjustment					
Administration	Speed : Temperature :	Min — Min —		Max Max	10	
Standby settings	Lamination position :	Left —		Right	10	
Network settings	Aj	pply settings	Get settings	-		
	Printer varnish informat	ion				
		No varnish				
	Back side :	Full varnish				
	ОК	Cancel	Apply	Reset to defa	ault settings	



Pay attention to the settings defined under the print driver properties and do not hesitate to contact your Evolis reseller for any advice and assistance needed before making any changes.



Please refer to the online Help for more details on the meanings of each of the settings.



NOTIFICATION OF MESSAGES AND WARNINGS

The Evolis Printer Manager has an additional function allowing the printer to communicate with the user through notifications.

PRIMACY LAMINATION

There are several types of notification:

- Messages about the maintenance of the printer.
- Messages and alerts associated with the ribbons, their compatibility with your printer, and the nature of your print requests.
- Alerts about problems that have prevented printing.

When the **Evolis Printer Manager** is active, a small icon is displayed in the bar on the bottom right of your screen:



The color of the icon varies according to the status of the printer:

- Green: Printer and lamination module ready.
- Orange: Notification of an information message printing stopped.
- Red: Notification of a warning message printing stopped.
- Grey: Printer in hibernation mode, disconnected or communication interrupted printing stopped.

When a notification is issued, it is displayed in a window of the following type:



The **Evolis Printer Manager** can be disabled by right-clicking the Evolis icon in the status bar.



The Evolis Printer Manager is the best way of monitoring your printer activity effectively from your workstation.



PRINTING A CARD



A large number of Windows[®] applications allow documents to be printed (for example the tools in the Microsoft Office suite, i.e. MS Word, MS Access, MS Excel, MS PowerPoint).

To familiarize yourself with the layout of a card and how to configure its format and printing, we provide the following example.

In Microsoft® Word

After having set the Evolis printer as the default:

- Start the MS-Word application.
- Under Orientation, select **Landscape**.
- Change the size of your document by selecting type **CR80** (or by customizing the document to dimensions of 8.6 cm x 5.4 cm).

You are ready to customize your card by adding the various items that go to make up a card:

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

When it is ready, click on **File** then **Print**.



Your printer is supplied with the cardPresso software that allows you to create and personalize cards.



DOUBLE-SIDED PRINTING

PRIMACY LAMINATION

Follow the procedure below:

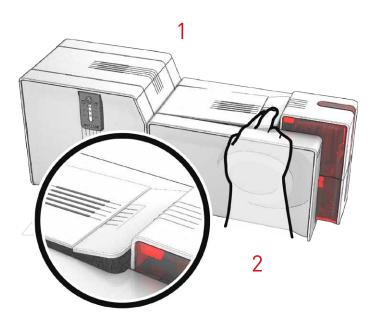


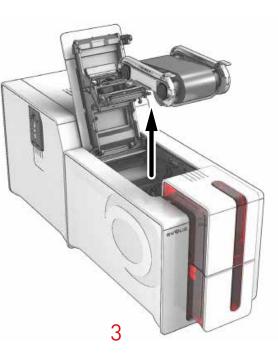
1 Switch on your printer. It should not be switched off or in standby/hibernation mode.

The update kit is an activation key that you insert into the printer. This operation is quick and easy.

If your printer is single-sided and you want to print double-sided, you can buy a double-sided printing update kit by contacting your Evolis reseller.

- 2 Open the printer cover.
- **3** Remove the ribbon from the printer.
- 4 Insert the key as shown in the diagram.

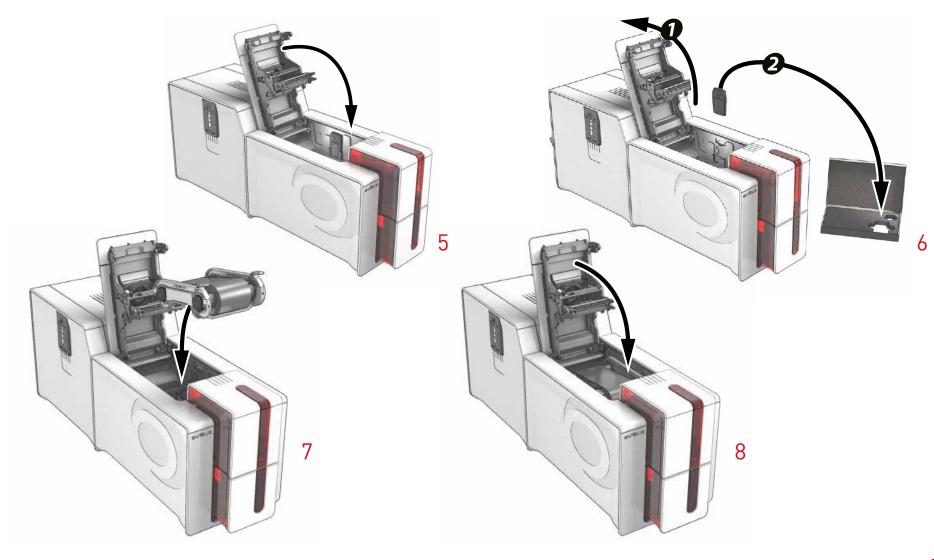








- 5 Close the cover again. The 3 LED lights of the control panel for the printer will begin to flash in sequence for 5 to 10 seconds. The activation is complete when the 3 LED lights remain lit for a few seconds then switch off.
- 6 Open the cover **1** and remove the activation key **2**.
- 7 Replace the ribbon.
- 8 Close the cover.





CONNECTING TO A NETWORK (ETHERNET AND WI-FI)

PRIMACY LAMINATION

All Evolis printers have the benefit of a TCP/IP network connection solution. This functionality is available as standard with Primacy. Out of the box, the printer comes configured in DHCP mode (Dynamic Host Configuration Protocol), which means that its IP address is supplied by the network. In addition to these basic settings, the network administrator has the option of configuring the printer differently in order to comply with the constraints imposed by the corporate LAN:

- Printer connected in a subnet, in DHCP.
- Printer connected within a subnet with fixed IP address, with WINS resolution.
- Printer connected within a subnet with fixed IP address, without WINS resolution.

The printer may be identified on the network in two ways:

- By its hostname (NETBIOS).
- By its IP address.

In addition, the Ethernet connection wizard will automatically detect all the Evolis printers installed.

The configurable settings are:

- Printer IP address.
- Subnet mask.
- Gateway.
- WINS server.



Evolis printers with a TCP/IP network interface have an http server on board.



Changing the printer's basic settings, without prior knowledge of the layout of the LAN in question or without genuine technical knowledge may result in a malfunction of the printer, and may even extend to a more widespread failure of all or part of the LAN. Please contact your System and Network Administrator before connecting to or changing the settings for your local area network.



For further details, please refer to the "Configuration of Evolis printers on a TCP/IP (Ethernet) LAN" manual.



PRIMACY

3 – MAINTENANCE

GENERAL WARRANTY INFORMATION

Your Evolis printer and lamination module have been designed for long service and only require minimal regular maintenance. Please comply with the instructions given below to ensure that it runs satisfactorily.

Keep your warranty cover!



The manufacturer's warranty is subject to strict adherence to the routine servicing and maintenance instructions, and in particular the printer cleaning cycles.

Any failure to follow the maintenance and servicing procedures described in this chapter voids the print head warranty.

Evolis declines any liability where there has been a failure to carry out required maintenance on the printer.

The print head is a wearing part and an extremely sensitive printer component. Its useful life can be seriously curtailed by the presence of dust, liquids or solids in the printer's immediate environment, on the print head or on the cards. The user must take all necessary precautions to insert into the machine only clean, dust-free cards that are free of foreign bodies.

The frequency and quality of cleaning are decisive factors enabling users to extend the print head's useful life and to ensure excellent print quality. Particular care must therefore be taken with cleaning. Users must comply with the servicing and maintenance instructions as fully described in this chapter. In addition, the use of Evolis brand ribbons ("Evolis High Trust®") ensures that your equipment operates properly. Use of ribbons not approved by Evolis may as a consequence affect the quality and reliability of print jobs, produce low quality printed output and even affect the printer's operation. The manufacturer's warranty does not cover physical damage or quality problems caused by using non-Evolis approved ribbons.

Evolis supplies the maintenance items and consumables that you can find on the website **www.evolis.com**.



ROUTINE PRINTER CLEANING

Printer Servicing





The print head warranty is directly linked to routine cleaning of your printer. If you do not carry out this cleaning at the required times, the print head warranty will cease to be valid.



Recommended cleaning cycle: whenever the ribbon is changed. Mandatory cleaning cycle: when the cleaning warning is triggered. Servicing accessory: adhesive cleaning card.



Your printer is fitted with a cleaning warning system which is triggered after a certain number of cards have been inserted. You should proceed with the routine cleaning of your printer as soon as the warning is triggered. If you continue to run the printer despite the warning and if the warning light remains lit, the print head warranty will be automatically voided owing to a failure to comply with your contractual maintenance obligations.

Printer	Printer cleaning required after: (warning light flashing)	Number of cards remaining before warranty voided: (warning light flashing)	Warranty invalid after: (warning light steady)
Primacy LAMINATION	1000 cards	200 cards	1200 cards

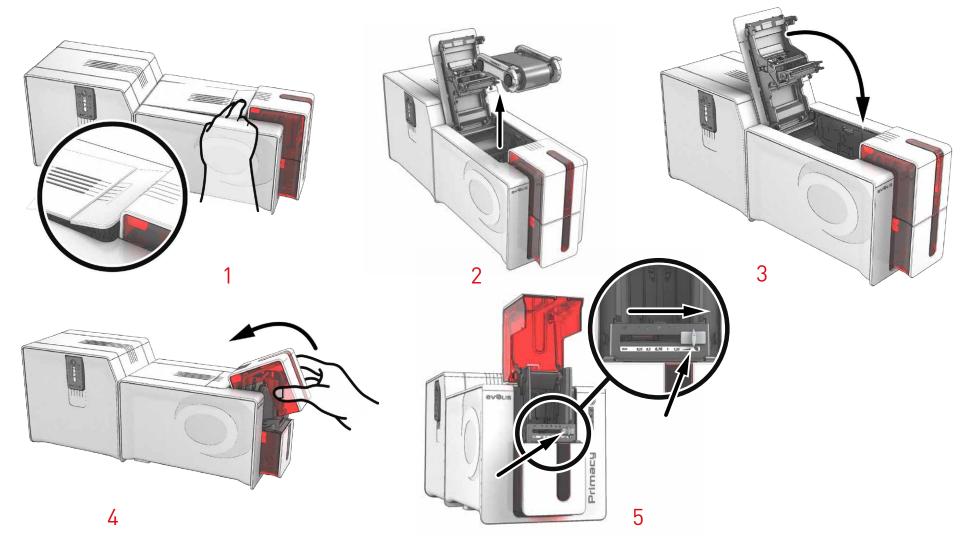


Please follow the procedure below to validate your routine cleaning:

Repeatedly running the adhesive card through the printer cleans the cleaning rollers in order to maintain print quality and extend the service life of the print head.

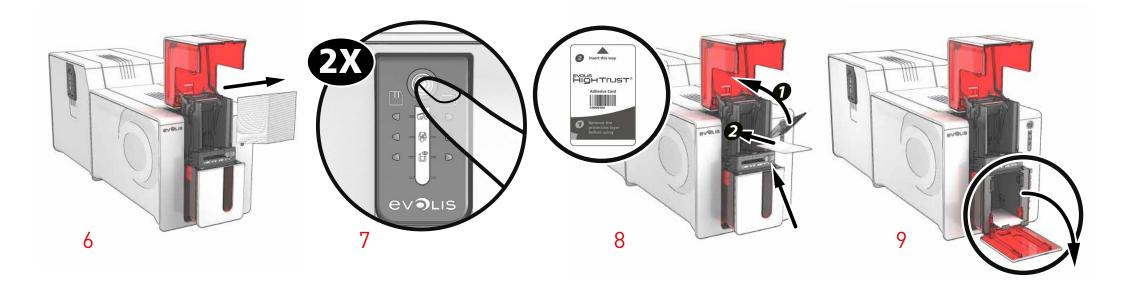
PRIMACY LAMINATION

- 1 Open the printer cover.
- 2 Remove the ribbon as shown on the diagram.
- **3** Close the cover and check it has clicked shut.
- 4 Open the card feeder.
- 5 Using the gauge, set the card thickness to the MAX position.





- 6 Remove any cards present in the feeder.
- 7 Double-click the cleaning button on the control panel before inserting the cleaning card.
- 8 Remove the film from the adhesive card **1** and insert the cleaning card into the feeder as shown, adhesive side up **2**. The cleaning begins.
- 9 The used cleaning card will be automatically ejected into the reject hopper.





Routine cleaning may also be launched from Evolis Premium Suite[®].



Before using your printer, remember to reset the gauge to the desired card thickness.



Servicing the Print Head



Recommended cleaning cycle: whenever the ribbon is changed. Servicing accessory: Special cotton swab soaked in isopropyl alcohol.

To maintain the original print quality and to absorb any surplus ink on the print head, we recommend that you regularly clean the print head (whenever the ribbon is changed and during routine cleaning) using the cotton swabs supplied by Evolis. You must also protect the print head and its components from any discharge of static electricity.



Unplug the printer from its power supply before cleaning the print head.

Follow the cleaning cycles scrupulously.

Avoid any contact between the print head and any metal or sharp objects.

Avoid touching the print head directly with your fingers, as this could affect print quality or permanently damage the print head.

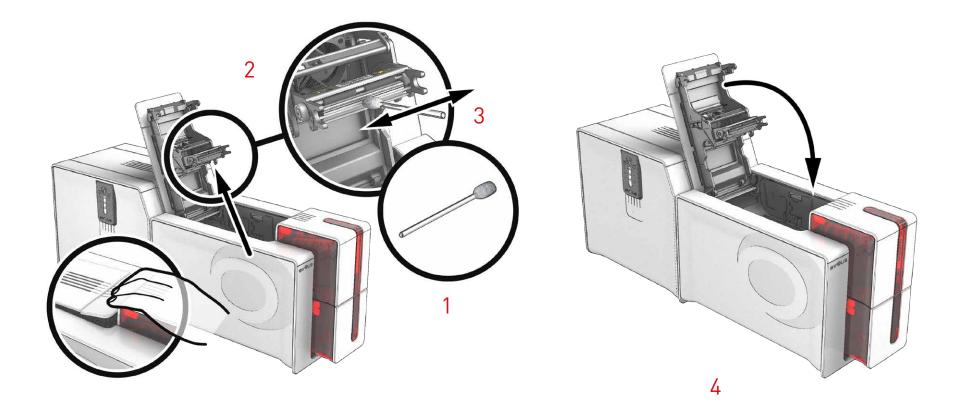


Follow the procedure below:

- 1 Take an Evolis cotton swab and press the middle of the tube until the end of the swab is soaked in alcohol.
- 2 Unplug the power supply, open the cover, and find the print head.

PRIMACY LAMINATION

- **3** Gently rub the swab from left to right along the print head for a few seconds.
- 4 Close the cover. Reconnect the printer.





Wait for 2 minutes after cleaning before using your printer.



ADVANCED CLEANING

PRIMACY LAMINATION

For a more in-depth clean, we recommend carrying out an advanced clean every 5 routine cleaning cycles.

Evolis provides an Evolis High Trust[®] maintenance kit consisting of adhesive cards, alcohol-soaked "T" shaped cards, a cleaning pen, a box of wipes and a specific cleaning card for your lamination module. The "T" shaped card is used to clean the transport rollers and the head of the magnetic encoder. To ensure advanced cleaning is carried out properly, the procedure given below must be followed.

Printer servicing

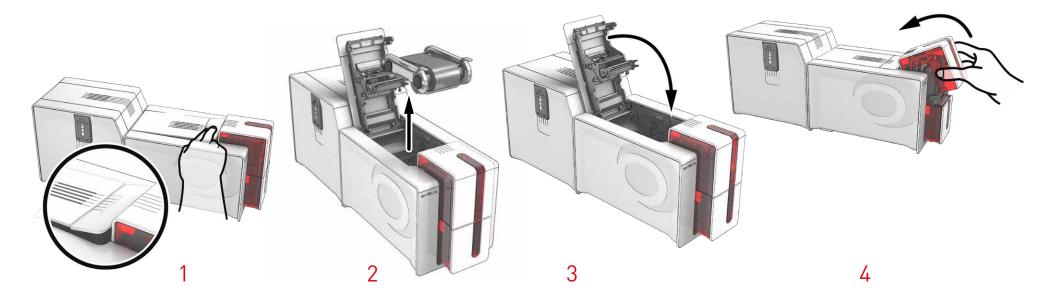


Recommended cleaning cycle: every 5 routine cleaning cycles. Servicing accessory: alcohol-soaked "T" shaped card and adhesive card.

Follow the procedure below:

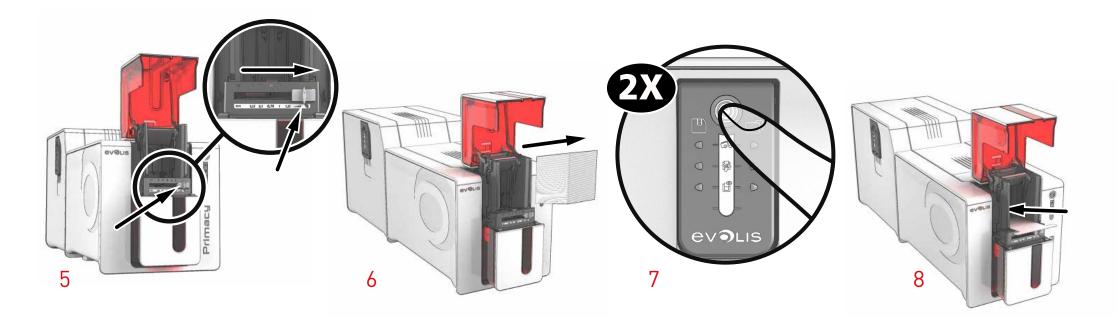


- 1 Open the printer cover.
- 2 Remove the ribbon as shown on the diagram.
- 3 Close the cover and check it has clicked shut.
- 4 Open the card feeder.





- 5 Using the gauge, set the card thickness to the MAX position.
- 6 Remove any cards present in the feeder.
- 7 Double-click the control button before inserting the "T" card.
- 8 Take the "T" shaped cleaning card and insert it into the feeder as shown when the printer card/ribbon LED light flashes. The cleaning begins.





- 9 Remove the "T" card then remove the film from the adhesive cleaning card and insert it into the feeder as shown, adhesive side up. Cleaning will begin.
- 10 The used adhesive card is automatically ejected into the reject hopper.





Advanced cleaning may also be launched from Evolis Premium Suite® by clicking on "Start cleaning."



Please note the "T" shaped card must be used immediately after the bag is opened.



Wait for 2 minutes after cleaning before using your printer. Before using your printer, remember to reset the gauge to the desired card thickness.



Maintaining the lamination module

NOTE

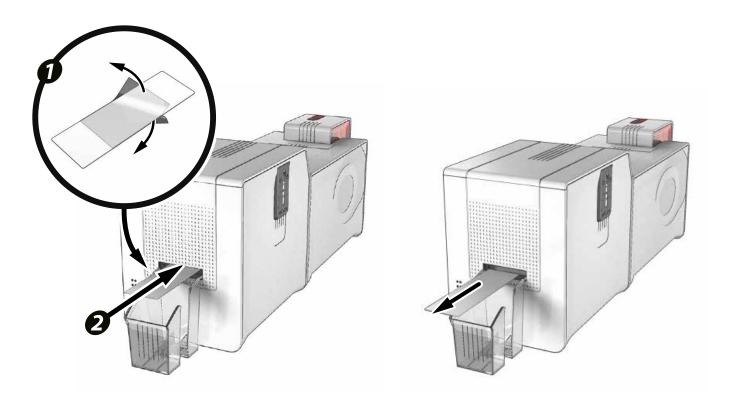
PRIMACY LAMINATION

Recommended cleaning cycle: every 5 routine cleaning cycles. Servicing accessory: special adhesive cleaning card.

Take the special adhesive cleaning card and remove the two protective films from the front and the back of the card. Check that there is no film in the lamination unit. If necessary, carefully remove it. Launch the lamination module cleaning wizard via Evolis Premium Suite[®]. Insert the adhesive cleaning card into the opening above the output hopper on the left hand side. The card will pass inside the printer. F



Insert the adhesive cleaning card into the opening above the output hopper on the left hand side. The card will pass inside the printer. Repeated passing of the card through the lamination module will give it a deep clean and eliminate the particles of film and dust on the transport rollers. Once the cleaning cycle is complete, the used card is ejected from the printer. Collect it and throw it away. Reinstall the film in the lamination unit. Close the door of the lamination unit. The printer is ready to operate again.





Servicing the Print Head



Recommended cleaning cycle: every 5 routine cleaning cycles. Servicing accessory: cleaning pen.



Unplug the printer from its power supply before cleaning the print head. Follow the cleaning cycles scrupulously. Avoid any contact between the print head and any metal or sharp objects. Avoid touching the print head directly with your fingers, as this could affect print quality or permanently damage the print head.

The cleaning pen can be used up to 8 times for cleaning the print head.

Follow the procedure below:

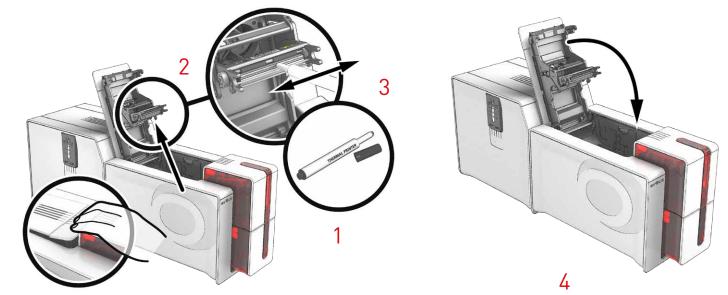


1 Take the cleaning pen and remove the cover.

2 Unplug the power supply, open the cover, and find the print head.

3 Gently rub the pen from left to right along the print head as indicated for a few seconds.

4 Close the cover. Reconnect the printer.





Wait for 2 minutes after cleaning before using your printer.



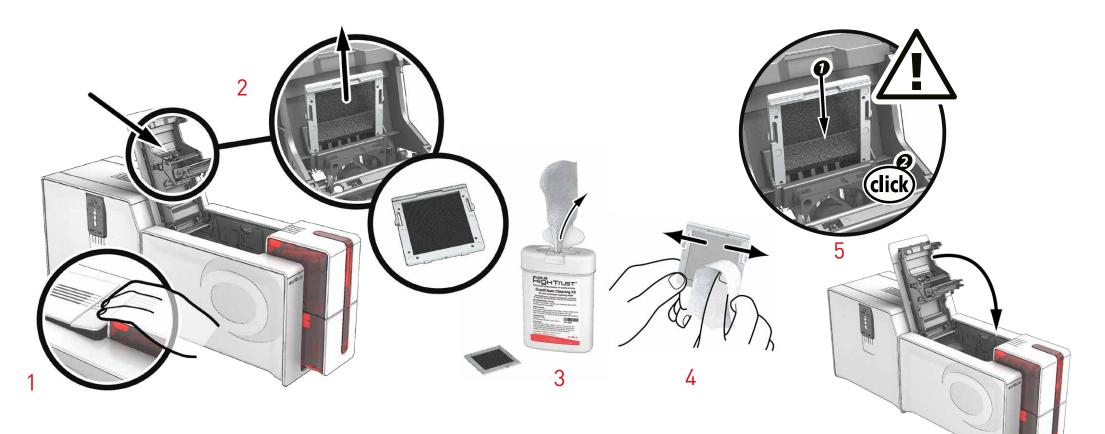
Maintaining the Dust Filter of the Printing Unit

The dust filter is located above the ventilator for the print head. This filter can get dirty over time. We recommend cleaning it once a year or after 10,000 cards, depending on your work environment.



•••••

- 1 Open the printer cover. Locate the dust filter.
- 2 Remove the filter by pulling it up and sliding to release it completely.
- 3 Once the filter has been removed from its place, take one of the cleaning wipes supplied by Evolis.
- 4 Clean the filter by brushing it with the wipe on each side.
- 5 To put it back, insert it in place (groove facing you) and push it down until it clicks into position.
- 6 Close the cover.



6



Maintaining the dust filter of the lamination unit

The dust filter is located below the lamination unit. This filter can get dirty over time. We recommend cleaning it once a year or after 10,000 cards, depending on your work environment.



- Unplug the lamination module and disconnect it from the printing module.
- 2 Put the lamination module back and locate the dust filter.
- **3** Remove the filter by pulling it up and sliding to release it completely.
- 4 Once the filter has been removed from its place, take one of the cleaning wipes supplied by Evolis.
- 5 Clean the filter by brushing it with the wipe on each side.
- **6** To put it back, insert it in place (groove facing you) and push it down until it clicks into position.
- 7 Plug it in again and reconnect the lamination module to the printing unit.





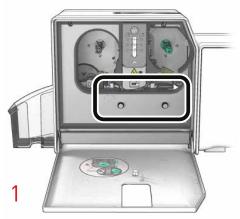
PRIMACY

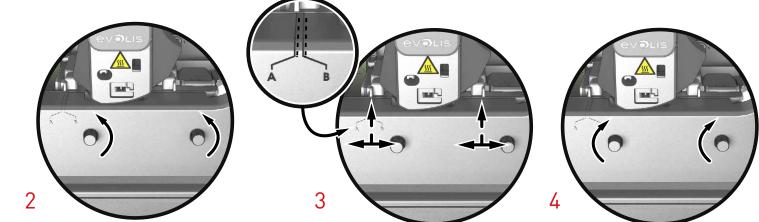
LAMINATION

USING THE LEVELER

With the leveler of the lamination module you can make up for any natural bending of the card from the lamination process. Cards can be more or less misshapen depending on the type of card and film used. Two block support positions for the card (A and B) are available to ensure the cards are perfectly flat. **Follow the procedure below:**

- 1 Open the door of the lamination module.
- 2 Loosen the two wheels as shown in the diagram.
- **3** Depending on the type of card and film used, place the block support on position A or B (see the table below).
- 4 Tighten the two wheels and close the door of the lamination module.





		PVC Cards	PET-F Cards	PC Cards
1 mil transparent patch	Single-sided	В	А	В
	Double-sided	В	В	В
1 mil holographic patch	Single-sided	А	А	В
	Double-sided	В	В	В
0.5 mil transparent patch	Single-sided	А	А	В
	Double-sided	А	А	В
0.6 mil holographic patch	Single-sided	А	А	В
	Double-sided	А	А	В
Varnish	Single-sided	А	А	В
	Double-sided	В	В	В
Holographic varnish	Single-sided	А	А	В
	Double-sided	В	В	В



4 – HELP

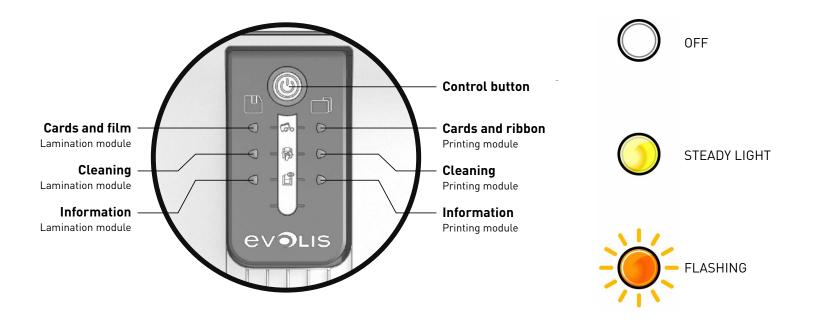
This chapter provides suggestions for identifying problems that may arise when using your printer. If you do not manage to solve your problem, this chapter also explains how to contact Evolis technical support.

WARNINGS AND DIAGNOSTICS

Although Primacy Lamination was designed to work independently, keeping user involvement to a minimum, it may prove useful to be aware of the main warning messages.

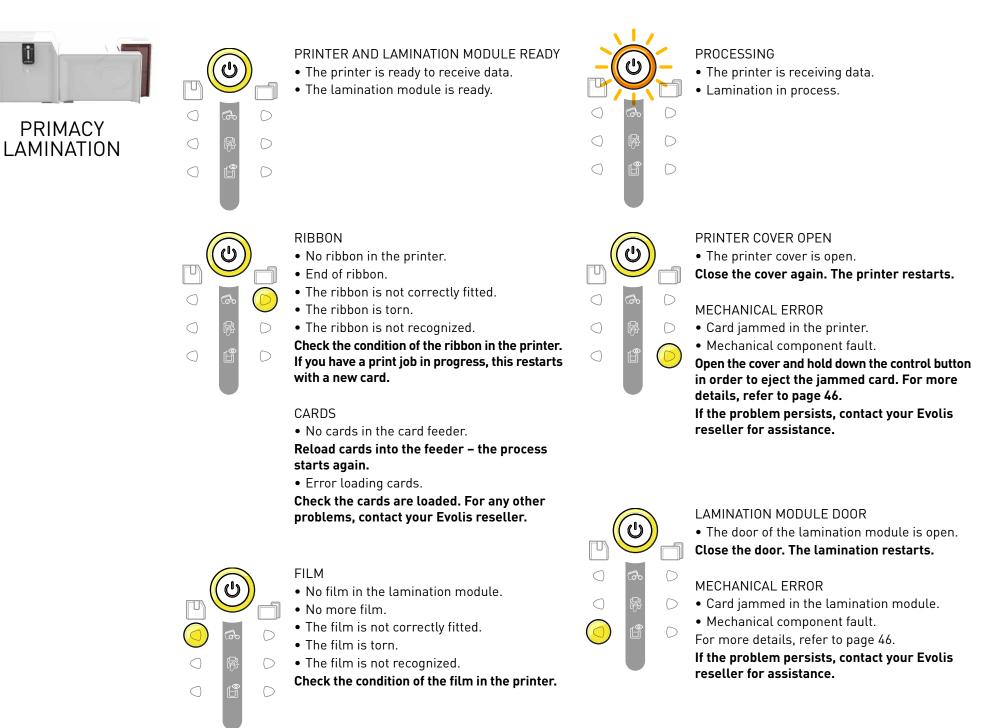
Control panel alerts

See Chapter 1 – Description of the Printer and its Functions (p.5) for further details about the control panel.





Your machine may be supplied with an LCD screen instead of the control panel. Please refer to the LCD screen user guide on how to operate it.



2

PRIMACY





ROUTINE CLEANING

(after 1,000 cards inserted)

• The printer must be cleaned. (see page 23)

ADVANCED CLEANING

• The printer requires advanced cleaning. (see page 23)



CLEANING (after 1,200 cards inserted) • The printer must be cleaned to avoid the risk of the warranty being voided.

(see page 23)



WAITING FOR CARD INSERTION OR REMOVAL

• The printer is waiting for a card to be inserted or removed.

Insert a card or remove the card from the manual feeder.

(see page 4)



COOLING MODE

• The cooling system has been activated.

The printer pauses for a few seconds and restarts once it has returned to its normal operating temperature.



FIRMWARE UPDATE

• The printer is updating its firmware. The printer will be operational again following the update.





ADVANCED CLEANING

• The lamination module requires advanced cleaning.



REGULATING TEMPERATURE

• The lamination module heats up for a few seconds and is reactivated when the required temperature is reached.



FIRMWARE UPDATE

• The lamination module is updating its firmware.

The printer will be operational again following the update.



DIAGNOSTIC HELP

PRIMACY LAMINATION In this chapter, you will find all the information you need to carry out a few simple checks that you may be asked to run by your Evolis reseller to help you as effectively as possible.

Printing a Technical Test Card

The technical test card must be printed when you receive the machine to ensure that your printer is working properly. This card shows various items of technical information about the machine (serial number, firmware, cleaning operations, print head, etc.). You may be asked for these by your reseller.

Printing a technical test card

- 1 Wait for any current print jobs to finish.
- 2 Check that there is a ribbon and card in the printer.
- 3 Press the control button (on the Primacy) until it goes out.
- 4 Press the control button (on the Primacy) again and hold.
- 5 The control button light (on the Primacy) comes on.
- 6 Release the control button (on the Primacy) once the light flashes.
- 7 The test card is printed (in color if a color ribbon is fitted in the printer, or monochrome if the ribbon is monochrome, and on both sides if the double-sided printing function has been enabled).
- 8 The printed card is ejected into the hopper.

EPC

Printing the technical test card can also be launched from Evolis Premium Suite®.

Printing a Graphic Test Card

The graphic test card is used to check the print quality in color or monochrome, the offsets and whether the ribbon is synchronized correctly. To print the graphic test card, check first of all that a ribbon and card are present in the printer.

Go to **Evolis Print Center**, select **System information** and click the **Test cards** tab. Then click on the **Graphical test card** button. The card is printed and the printed card is ejected into the output hopper.



Printing the graphic test card can only be launched from Evolis Premium Suite®.



Identifying Installed Software Versions

You can directly identify the system versions installed (driver, setup, etc.):

1 From the Evolis Premium Suite[®], double-click the printer name to access its **Properties**.

2 Click System details, then System details.

PRIMACY LAMINATION



TROUBLESHOOTING



Do not attempt to use tools or other items to repair your printer in the event of problems, in case major damage is caused.

Printing Problems

No printing

Check the print driver

Check that there is a driver for your printer in the Windows^ $^{\otimes}$ settings. Check that the printer is selected as the default printer.

2 Check the printer power supply

Check that the power cable is correctly connected to the printer and to a working electrical socket. Check that the printer is switched on and the control button is lit. Make sure you are using the power supply unit provided with the printer.

3 Check the USB cable

Check that the printer is connected to your computer via the USB cable.

4 Check the ribbon

Check that the ribbon is fitted correctly and that the cover is closed.

5 Check the cards

Check that there are cards in the card feeder. Check that no cards are jammed in the printer.

6 Print a test card

See elsewhere in this chapter for the procedure to be followed.

Blank card ejected

Check the ribbon

Check that the ribbon is not finished or damaged. Replace it or re-install it if necessary.

2 The print head may be damaged

Print a test card.

If the test card does not print, contact an Evolis reseller for technical support or visit the website at **www.evolis.com**.



LAMINATION

Poor print quality

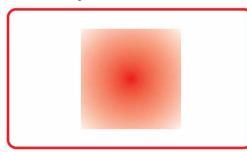
Small blemishes on the card



Horizontal white lines



Blurred image



The ribbon is not correctly fitted.

Check that the ribbon is correctly positioned in the printer.

Check that there are no wrinkles on the ribbon surface.

- **Poor ribbon synchronization.** Open and close the printer cover to synchronize the ribbon.
- Dirty printer or cleaning rollers. Clean the printer.
- Use of incompatible cards. Check that the cards used match the specifications.



We recommend that you obtain your cards from an Evolis reseller. Use of third party cards is likely to adversely affect print quality and/or damage the print head.

• Print head dirty or damaged. Clean or replace the print head.

• The ribbon is not correctly fitted.

• The card surface may be dirty.

Launch a cleaning cycle.

• Cleaning roller or print head dirty.

Use new cards.

Check that your cards are perfectly clean.



Partial or incorrect printing

1 Check the print settings

Check that no area of the card design to be printed is outside the print margins. Check the document orientation (portrait or landscape) in the Evolis Premium Suite® configuration.

2 Check the interface cable

If irregular characters are printed, check that you are using the USB cable supplied with your printer. Check the connection between the computer and the printer. Try using another cable of the same type.

3 Check that the printer is clean

Clean the printer, especially the cleaning roller. See the maintenance chapter.

4 Check that the cards are clean

Keep your cards protected from dust.

5 Check the ribbon

Check that the ribbon is fitted correctly. Check that the ribbon spools freely.

6 Check the print head

If straight horizontal lines appear on the printed cards, it is likely that the print head is dirty or damaged.

See the chapters on maintenance and troubleshooting. If the problem persists, contact an Evolis reseller or visit the website at **www.evolis.com**.



<u>_</u>

Do not turn your printer off, as this cancels pending print jobs in the printer memory.

If there is a mechanical error in the printing module, remove the card as follows:

- Open the printer cover and remove the ribbon.
- 2 Press the control button to activate the card transport rollers. If the card is still stuck inside the printer, slide it manually towards the printer output. If there is more than one card, always push the top one first.
- 3 Replace the ribbon, then close the printer cover.

If there is a mechanical error in the lamination module, remove the card as follows:

- 1 Open the door of the lamination module and remove the film.
- 2 Use the jam-clearing wheel to access the card and remove it.
- **3** Replace the film, then close the door of the lamination module.

To prevent card jams:

- 1 Check that the card thickness gauge is correctly adjusted.
- 2 Check that the thickness of the cards used matches the specifications set out in Appendix A "Technical specifications" in this manual.
- 3 Check that the cards are flat. Keep them flat.
- 4 Check that the cards are not stuck together.





LAMINATION

Replace the print head

The print head is a sensitive component of your equipment. It determines the print quality. The immediate environment should be free from dust or other particles and the print head should be regularly maintained to ensure durability. However, it may sometimes need to be replaced. Evolis has designed a unique device for carrying out such replacement with no tools needed, simply by following the instructions very carefully.

Before you do, please contact your Evolis reseller in order to check the advisability of replacing the print head. The dealer will supply a new print head if required, in compliance with the terms of the warranty.



For more information about the print head warranty, see the Evolis warranty booklet.



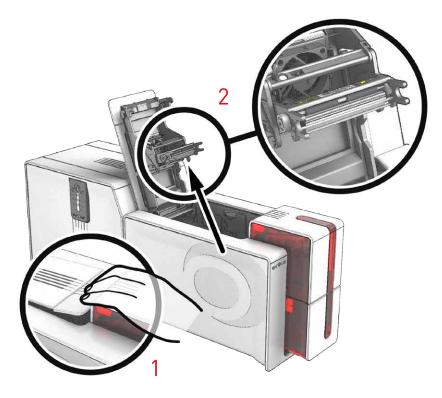


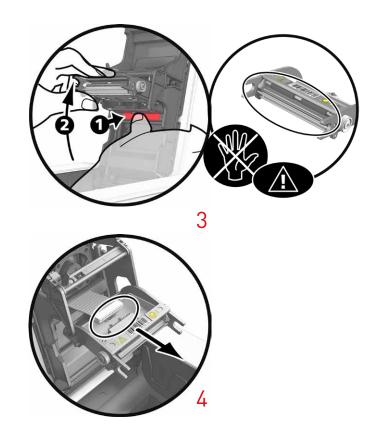
To replace the print head, please proceed as follows:

Before changing the print head, make sure you unplug the power cable.

Step 1 - Removing the defective print head

- 1 Open the printer cover.
- 2 Locate the print head.
- 3 Press on the plastic part behind the head (pressure plate) and pull on the head with the other hand as shown in the diagram in order to free the lugs from the holding fork, then remove the lugs from their slots.
- 4 Tilt the head carefully downwards and disconnect the connector linked to the cable without using force on the mechanism.



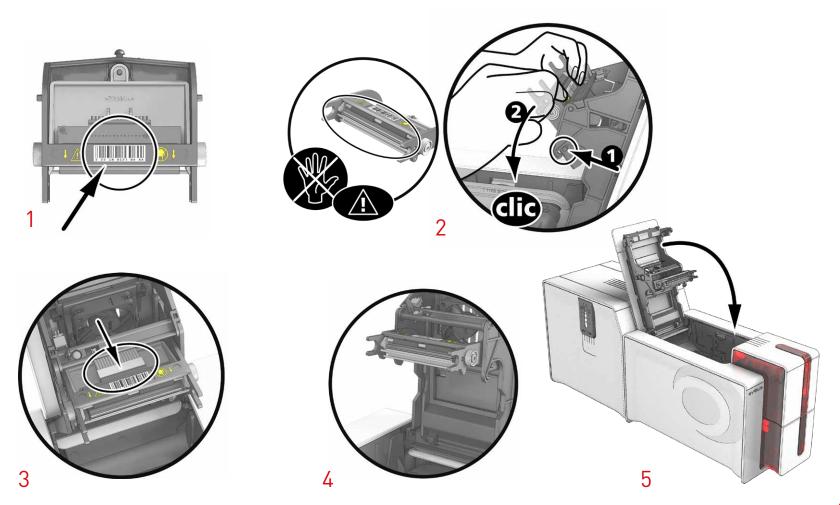




Step 2 – Installing the new print head

PRIMACY LAMINATION

- 1 Note down the code shown on the white label stuck on the print head. You will be asked for this code in Step 3.
- 2 Take the new head and insert it vertically (white connector upwards) raising it in the two guides so as to trap the lugs of the fork in their slots 1. Then lower it by pressing on the two forks 2, a click will be heard.
- 3 Connect the cable into its socket, making sure it is the right way round. Do not use force, as this part is relatively fragile. Press down on each side of the connector to ensure the connection is made.
- 4 The head is back in position.
- 5 Close the cover. The print head is now fitted.





Step 3 – Configuring the new print head

- Power up the printer and check that it is properly connected to a computer on which the printer's Evolis Suite Premium® is installed.
- Under the Maintenance heading of the Evolis Print Center, click the Change Print Head tab. 2
- 3 Enter the PKN number of the print head kit under Enter PKN no., the number you noted down in step 2. Then click Confirm.

If the print head kit number is not entered correctly, printer malfunctions may occur and the warranty may be voided.

Step 4 – Cleaning the printer

On your printer's control panel, the **CLEANING** light is lit:





Cleaning is absolutely necessary after changing the print head. No print jobs can be run until the cleaning operation has finished. Refer to chapter 3 - Maintenance to carry out cleaning.

Once cleaning has been carried out, your printer is once again ready to customize your cards.



Wait for 2 minutes after cleaning before using your printer.



I AMINATION

Updating the Firmware (with Windows®)

Updating the firmware is a simple operation but one which, if not properly completed, can result in the breakdown of your printer and lamination module. Before any update, please contact your Evolis reseller for guidance on the advisability or otherwise of carrying out an upgrade. In general, these updates are only required in the event of a problem or malfunction that has been clearly identified by your Evolis reseller.

The firmware update is done with Evolis Premium Suite[®].

The update can be done automatically or manually.

We recommend using the update verification wizard. This wizard will first find the available update for the software suite. Once the software suite has been updated, run this wizard again to verify the updates of the printer firmware. To launch this wizard, go to **Evolis Print Center > Tools > Update verification wizard**. An internet connection is required for the wizard to run.

If you wish to update your firmware manually, you can run the update wizard for the printer firmware.

Before starting, you should download the firmware update files from the **www.evolis.com** website:

- 1 Go to **Support**, then select your printer model.
- 2 Under **Drivers** and **Firmware**, click the file for the corresponding Firmware.
- 3 Accept the download then save the file in a directory on your hard drive.
- 4 Now open the Evolis Print Center and double-click the name of your printer. The **Properties** window opens.
- 5 Then go to Maintenance > Firmware Update (or Lamination > Maintenance > Firmware Update for the lamination module) and click "Start the printer Firmware update wizard."
- 6 When prompted by the program, follow the instructions and select the **.firm** file that you have just downloaded to your computer.
- 7 This operation can take up to 1 minute. When the firmware is installed on your printer, it will restart. The update is complete and your equipment is ready for use.
- 8 If the printer is not showing the **Ready** status, this means that the update has not been carried out correctly or, possibly, that the printer is not working properly. Check the connection cables and run a new update.

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

However, if you experience problems while updating the firmware with Evolis Print Center, please contact your Evolis reseller who can provide a new file to install the firmware.



Updating the Primacy firmware is strongly recommended, or even essential, if you want to install the CLM (Card Lamination Module) on a single Primacy. Never interrupt the transfer between the computer and printer during the download phase (powering off the printer or computer, unplugging a cable). This would result in a complete inability to restart the printer. Should such an incident occur, please contact your Evolis reseller, who will replace your printer's processing board.



The update of the firmware can be carried out from the Evolis Print Center.



Updating the Driver

Updating the driver is a task that is required in order to fix malfunctions or gain the benefit of new options.



Before any update, please contact your Evolis reseller for guidance on the advisability or otherwise of carrying out an upgrade.

Updates can be downloaded from the website at **www.evolis.com**:

- 1 Go to **Drivers & Support**, then select your printer model, and click the **Drivers & Firmware** link.
- 2 Then click on the file for the corresponding print driver.
- 3 Accept the download then save the file in a directory on your hard drive. The firmware is stored compressed as a zip file. You will need to extract it.
- 4 Then double-click the setup.exe file that you have just downloaded.



The printer driver can also be updated in Evolis Premium Suite[®] with the update verification wizard.



For more details about this procedure, please see the Installing the Driver chapter.



TECHNICAL SUPPORT

PRIMACY LAMINATION If you are having difficulties configuring and using your system, please read this manual carefully. If you do not manage to solve your problem, you can obtain further information and help from the Evolis partner network.

Evolis Partner Network

For any unresolved technical problem, contact an Evolis reseller. If you do not know any Evolis resellers, visit the **www.evolis.com** website and send us your question. Evolis will pass on the contact details of your nearest Evolis reseller. When calling an Evolis reseller, you do need to be close to your computer and ready to provide the following information:

- 1 The type and serial number of your printer and your lamination module.
- 2 The configuration and operating system that you are using.
- 3 A description of the incident that has occurred.
- 4 A description of the steps that you have taken to resolve the problem.

In addition, to enable you to find answers to your questions 24/7, the **www.evolis.com** website includes a number of aspects related to day-to-day use of your printer.

Get more information at www.evolis.com

If you need additional technical help, you will find a great deal of information on using and troubleshooting Evolis printers under the **Drivers and Support** section on the Evolis website at **www.evolis.com**.

This section offers downloads of the latest versions of firmware, print drivers, and user manuals, videos about using and maintaining Evolis printers, and an FAQ* section giving answers to the most frequently asked questions.

*FAQ: Frequently Asked Questions



APPENDIX A

TECHNICAL SPECIFICATIONS

PRIMACY LAMINATION

This section presents your printer's technical printing properties.

General features

- Single-sided print module, edge-to-edge printing.
- Color sublimation and monochrome thermal transfer.
- Print head: 300 x 600 dpi (monochrome and color printing) or 300 x 1200 dpi (monochrome printing only).
- 16 million colors.
- 32 Mb of RAM 64 Mb on request.
- Double-sided lamination module (with a duplex module).

Print and lamination speed

Full card print

- CMYK (single-sided printing single-sided lamination) 188 cards/hour
- CMYK-K (double-sided printing single-sided lamination) 140 cards/hour 110 cards/hour
- CMYK-K (double-sided printing double-sided lamination)

Maximum speed (under special conditions).

• 1/2 YMCK (single-sided printing – single-sided lamination) up to 215 cards/hour (single-sided)

Card management and specifications

- Feeder capacity: 100 cards (0.76 mm 30 mil).
- Output hopper capacity (rear): 100 cards (0.76 mm 30 mil).
- Reject hopper/output hopper (front): 100 cards (0.76 mm 30 mil).
- Card thickness: 0.76 to 1.00 mm (30 to 40 mil), adjustment using the gage.
- Card types: PVC and composite PVC cards, PET, recycled PET cards, ABS¹ and special varnished cards¹.
- Card format: ISO CR80 ISO 7810 (53.98 mm x 85.60 mm).

¹ Under specific conditions



I AMINATION

Ribbons

To maximize the quality and lifetime of the printed cards, the service life of your print head and the overall reliability of your printer, use Evolis High Trust® ribbons.

- Automatic detection and configuration.
- Ribbon inserted in a cartridge for easier handling.
- Graphic notification of the ribbon level (almost finished, finished).

200 prints/roll

- Integrated ribbon saving for monochrome printing.
- Ribbon:
 - 200 prints/roll - YMCKO:
 - YMCKO: 300 prints/roll
 - YMCKO-K:
 - 1/2 YMCKO:
 - 400 prints/roll 250 prints/roll - 1/2 YMCKO-KO:

- K0:
- SOK0:
- Monochrome ribbons:
- Hologram ribbon:
- 600 prints/roll 250 prints/roll 1000 prints/roll¹ 400 prints/roll

¹ In special conditions

Film

To maximize the guality and lifetime of the printed cards and the overall performance of the lamination module, use Evolis High Trust[®] film.

600 prints/roll

600 prints/roll

600 prints/roll

600 prints/roll

- Automatic detection and configuration.
- Ergonomic insertion for easier handling.
- Graphic notification of the film level (almost finished, finished).
- Film:
 - Transparent patch (0.5 or 1 mil):
 - Patch (0.6 or 1 mil) holographic:
 - Patch with contact chip cut-out (0.5 or 1 mil):
 - Patch with magnetic stripe cut-out (0.5 or 1 mil):
- Ports/connectivity
- USB (1.0, 1.1, 2.0, 3.0).
- Ethernet TCP-IP, 10BaseT, 100BaseT (Traffic Led).
- Optional 802.11b/g wireless connection.

Display

- | FDs
- Graphic printer notifications¹:
 - Feeder empty/almost empty.
 - Cleaning alerts.
 - No more ribbon or film alert.
 - Etc.
- Optional LCD
- ¹ Depending on your version of Windows

- Transparent varnish:
- Continuous holographic varnish:
- Registered holographic varnish:
- Other films available on request
- 1200 prints/roll 1200 prints/roll 1200 prints/roll



I AMINATION

Software

- Supplied with Evolis Premium Suite® for Windows®:
 - Printer driver.
 - Evolis Print Center for administration, management, and configuration of the printer.
 - Evolis Printer Manager for two-way graphic notification¹.
 - Compatible with Windows® (from XP SP3).
- PRIMACY LAMINATION supplied with cardPresso XXS. CLM (Card Lamination Module) not supplied with cardPresso XXS.
- Linux platform on request.
- Evolis Premium SDK available on request.
- ¹ Requires .net 4.0 client profile version

Warranty conditions

- 3 years' warranty (printer, lamination unit and print head)¹.
- Extended warranty available (contact your Evolis reseller).

¹ Warranty subject to strict compliance with specific usage and maintenance conditions and use of Evolis High Trust® ribbons

Dimensions and weight

- Dimensions (H x W x L): 269 x 205 x 753 mm.
- Weight: 10 kg.

Security

- Space for Kensington[®] security lock.
- Data encryption for magnetic encoding.

Contents of the Primacy Lamination packaging

- Printer.
- Lamination module.
- CD-ROM with printer driver, user manuals.
- cardPresso XXS software.
- Cleaning material for printer and lamination module.
- USB cable.
- Output hopper and reject hopper (for PRIMACY without the lamination module).
- 2 x Power supply units.
- 2 x Power supply leads (differs according to region).
- Mechanical connector "fork."
- 1 warranty booklet.

Contents of the CLM packaging (Card Lamination Module – lamination module sold as an optional standalone extra)

- Lamination module.
- CD-ROM with printer driver, user manuals.
- Cleaning material for the lamination module.
- Output hopper.
- 1 x Power supply unit.
- 1 x Power supply lead (differs according to region).
- Mechanical connector "fork."
- 1 infrared connection kit.
- 1 warranty booklet.



LAMINATION

Options & accessories

- Colors available: Flame red.
- Double-sided upgrade kit.
- Encoding options:
 - Can be combined, fitted on site using additional modules.
 - Magnetic stripe encoder.
 - Chip contact station.
 - Smartcard encoder.
 - Contactless card encoder.
 - Others on request.
- LCD.
- Additional lamination module for managing different types of film.

Certification and declaration of conformity

- CE, FCC, ICES, VCCI, CCC, KC, BIS.
- RoHS.
- 13.56 MHz, PLL/ASK/semi-duplex operation.

Power supply

- Printer power supply unit: AC 100-240 Volts, 50-60 Hz 1.7 A / DC 24 Volts 2.71 A.
- Lamination power supply unit: AC 100-240 Volts, 50-60 Hz 2 A / DC 24 Volts 6.25 A.

Environment

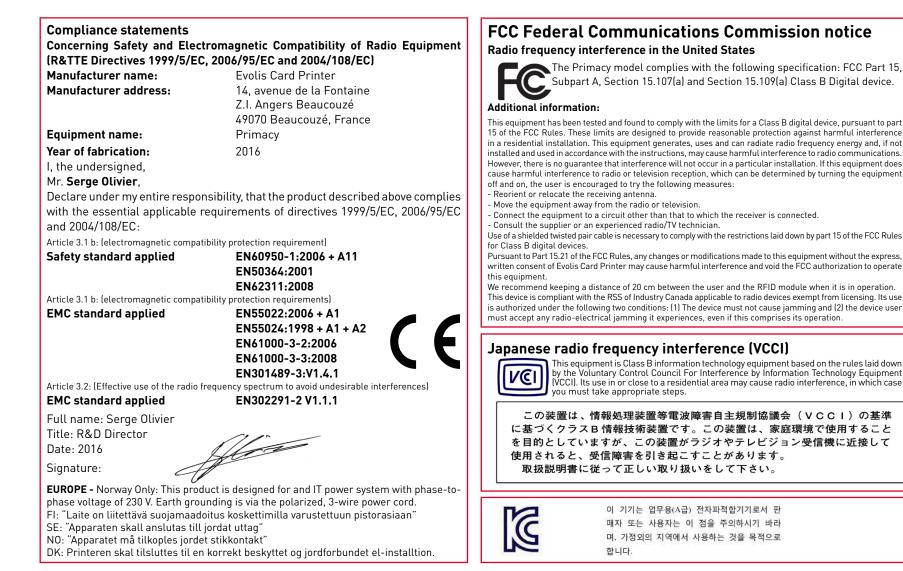
- Min./max. operating temperature: 15 °C / 30 °C (59 °F / 86 °F).
- Humidity: 20% to 65% non-condensing.
- Min./max. storage temperature: -5 °C / +70 °C (23 °F / 158 °F).
- Storage humidity: 20% to 70% non-condensing.
- Ventilation while in operation: free air circulation.



APPENDIX B

COMPLIANCE STATEMENTS

In this section, you will find the certification for your Evolis printer.





Some models of Evolis printers are equipped with encoding systems that are used to personalize magnetic stripees, and contact and contactless smartcards.

You can install up to three types of encoder in the printer (magnetic, contact and contactless).

Magnetic Stripe Encoding

A printer fitted with a magnetic encoder works in exactly the same way as a basic card printer.

The Evolis encoder encodes the magnetic stripees in one go then runs a data check.

Configurable as high coercivity (HiCo) or low coercivity (LoCo) by a simple click in the Evolis Print Center, Evolis magnetic encoders are shipped with a default setting of high coercivity (HiCo), except in the case of the JIS2 encoder.

Placement of the magnetic encoder

The magnetic encoder is a module that is either fitted in the factory or on site by your Evolis reseller. The read-write head is located under the path taken by the cards and in front of the print head. The encoding sequence for a card is always carried out before printing.



Use only magnetic stripe cards that comply with ISO 7810 and ISO 7811 standards and JIS2. To function correctly, the magnetic stripe must be molded into the card. Never use cards with a glued-on magnetic stripe.



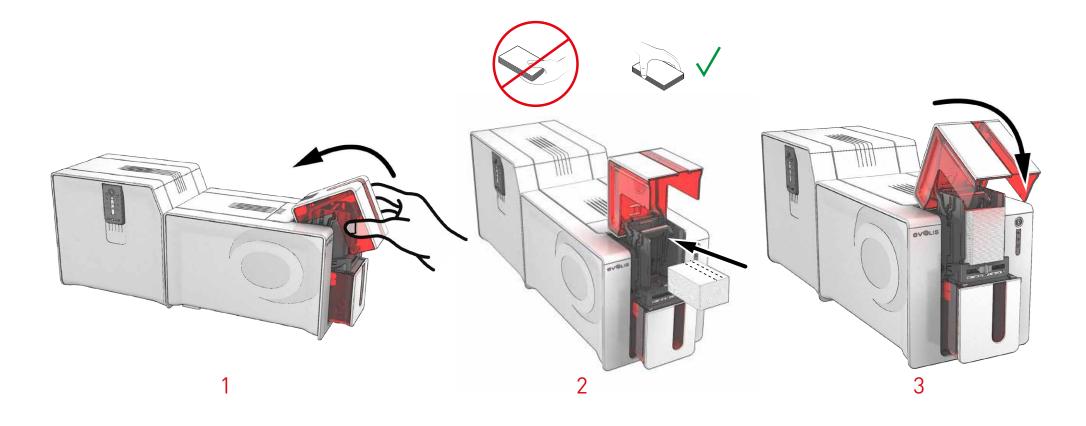
Card positioning

Magnetic stripe cards must be placed in the card feeder so that the magnetic stripe is facing downwards as shown below:

1 Open the card feeder as shown.

PRIMACY LAMINATION

- 2 Insert up to 100 magnetic cards maximum, of 0.76 mm. Ensure the cards are positioned as illustrated in the diagram (magnetic stripe on the right).
- **3** Close the feeder.





Configuring Evolis Print Center

When first installing the Evolis Print Center, the magnetic encoder functions may need to be configured. The magnetic encoder functions are accessible from the Evolis Print Center by right clicking on the printer name, then clicking on Properties.

PRIMACY LAMINATION

"Magnetic Encoder" dialog box

Printing	Magnetic
Magnetic Magnetic Gleaning System details Maintenance Administration	Track settings I Auto-Id Track 1: 1501 v Track 2: 1502 v Track 3: 1503 v
	Coercivity High coercivity
	Standard Lead-in code : I Tral-in code :
	Hele
	OK Cancel Apply Reset to default setting

The Magnetic Encoder dialog box is opened by selecting Encoding then Magnetic.

Configure stripees allows you to select the desired format for each stripe. See the table in this Appendix for information regarding ISO 7811 standards.

Coercivity sets the magnetic encoding to high (HiCo) or low (LoCo) coercivity.

Encoding via an application allows cards with magnetic stripees to be encoded from Windows[®] applications (such as Word for example). A text field enclosed within "|" and "|" characters (or some other character which the user can define) will be interpreted as an encoding command by print driver.

Printing	Magnetic encoding prompting
🐇 Encoding	
🚮 Cleaning	Direct communication
🕜 System details	Printer command
📸 Maintenance	Command :
Printer commands prompting	Answer :
Magnetic encoding prompting	Send Eject card
Installable options	Magnetic encoding
Print head replacement	
Firmware update	Track 2 :
Administration	
	Track 3 :
	Eject card Encode track(s) Read track(s)

Under **Maintenance** then **Magnetic encoder dialog**, **Magnetic encoding** is used to directly encode one or more magnetic stripees from this window simply by selecting them and entering the data to be encoded according to the stripe settings. Click on the **Encode stripe(s)** button to run the encoding cycle.



LAMINATION

Cleaning the magnetic encoder

The magnetic encoder head requires regular maintenance in order to ensure the integrity of the data encoded onto cards. Cleaning of the magnetic encoder is carried out when the printer runs an advanced cleaning cycle with pre-soaked "T" cards (see the "Maintenance" chapter

of this manual for further information).

Repeatedly running the cleaning card through the printer cleans the card feed rollers, the cleaning rollers, the print head and the magnetic encoder read-write head.

If, in between two routine printer cleaning sessions, the read-write process fails with more than one card, it is advisable to run a printer cleaning sequence manually (please see the "Maintenance" chapter of this manual for the procedure to follow).

Stripe number	Separator	Stripe density	Type of characters	Number of characters
TRACK 1	۸	210 dpi ¹	Alphanumeric (ASCII 32-95)²	79 ³
TRACK 2	=	75 dpi¹	Numeric (ASCII 48-62) ²	40 ³
TRACK 3	=	210 dpi ¹	Numeric (ASCII 48-62)²	107 ³

Magnetic encoding standard ISO 7811

¹Dot(s) per inch

²Except the character "?"

³ Includes the characters Start, Stop, and LRC. These characters are generated automatically by the magnetic encoder



Contact smartcard encoding

A printer fitted with a smartcard contact station works in exactly the same way as a basic card printer. The Evolis smartcard contact station is used to program chips to ISO 7816-2 standards.

PRIMACY LAMINATION

The Evolis product catalog also has printers equipped with a chip contact station and a built-in encoder. These encoders are connected to your PC via a USB interface, which means encoding cannot be done with an Ethernet connection.

Contact station location

The contact station is a module that is either fitted in the factory or on site by your Evolis reseller. It is located over the path taken by the cards and behind the print head. To make contact with the smart card, the contact station descends mechanically and presses against the card. The programming sequence for a smartcard is always carried out before printing.



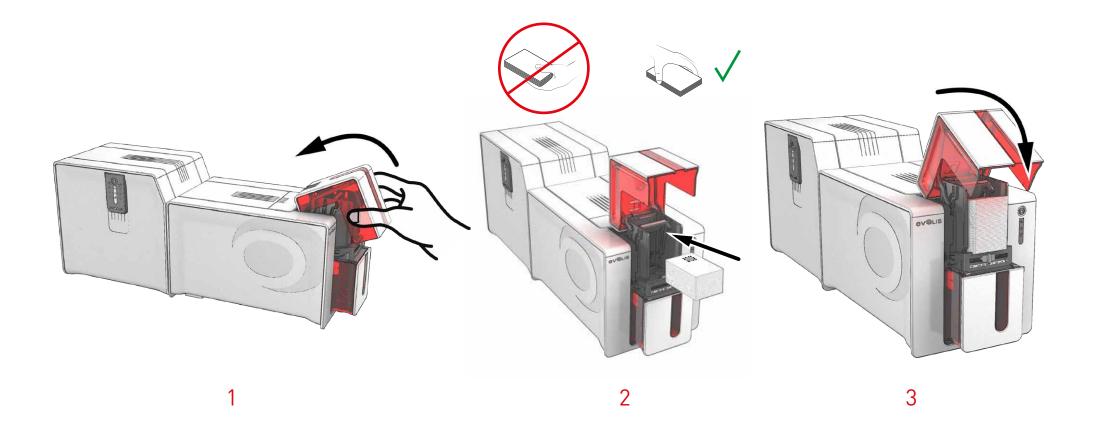
Use only smartcards compliant with the ISO 7816-2 standard. Never print over the chip.



Card positioning

Smartcards must be placed in the card feeder so that the chip is facing upwards as shown below:

- 1 Open the card feeder as shown.
- 2 Insert up to 100 smart cards maximum, of 0.76 mm (chip facing up). Hold and insert the cards as illustrated in the diagram.
- **3** Close the feeder.







Please refer to the Evolis printer Programming Guide for further details on programming smartcards and the option installation manual for configuration of the card presence signal.





To encode a contact smartcard, you can use the cardPresso software or use the Evolis Premium SDK and the encoder SDK.



When printing you should not print on the chip, as it may be damaged.



I AMINATION

Contact smartcard encoding

Evolis printers may be equipped with an encoding device for contactless smartcards (RFID). This consists of an encoding module and an integrated antenna. Integration of such a module must be carried out by specialist. The Evolis product catalog has printers equipped with a built-in encoder for contactless chips. This encoder is connected to your PC via a USB interface, which means encoding cannot be done with an Ethernet connection.

There is a very wide variety of contactless cards, and each card has specific technical properties associated with an equally specific type of encoder. See your Evolis reseller for further information.

Location of the antenna (or the encoder including an antenna)

Using a specific command, the card is positioned close to the antenna so that the card lies within its radio range.

From this time, reading data from or writing data to the card can begin.

The programming sequence for a smartcard is always carried out before printing.

Card positioning

There are no restrictions on card positioning when programming in contactless mode (apart from cards that include other encoding technology: magnetic and/or contact chip).

However, the ongoing reduction in size of components has resulted in cards that are fitted with mini-antennae.

In this situation, please see your card supplier for further information about where such mini-antennae are located within the card, in order to place the card as close as possible to the encoder's antenna. This operation will allow optimum card encoding.



Computer connection

If your encoder is supplied with an USB interface, it will either be connected to the printer's internal USB Hub, or equipped with a USB cable to connect to your computer directly.

In the first case, your printer's USB cable is used to drive firstly the printer and secondly the encoder from the computer.





Please refer to the Evolis printer Programming Guide for further details on programming contactless smartcards.



To encode a contactless smartcard, you can use the cardPresso software or use the Evolis Premium SDK and the encoder SDK.