

FARGO® HDP®5000e
High Definition Card Printer/Encoder
Model: X002700
User Guide

PLT-07581, A.0_r.0
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Contacts

For technical support, please visit: <https://support.hidglobal.com>.

What's new

Date	Description	Revision
May 2024	Initial release.	A.0_r.0

A complete list of revisions is available in [Revision history](#).

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Section 01

Specifications

1.1 Regulatory compliance

The purpose of this section is to provide specific information on the Regulatory Compliances, Agency Listings, Technical Specifications and Functional Specifications for the HDP®5000e card printer/encoder.

Agency	Regulatory compliance
UL	The card printer is listed under UL 62368-1, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) File number: E145118 Note: This product is intended to be supplied by a listed power unit marked Class 2 and rated for 24 Vdc, 3.3 A minimum.
CSA	The printer manufacturer has been authorized by UL to represent the card printer as CSA certified under CSA standard CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) File number: E145118
FCC	The card printer complies with the requirements in Part 15 of the FCC rules for a Class A digital device. FCC ID: JQ6-X002700HDP
CE	The card printer has been tested and complies with EN55032, EN55035, EN6000-3-2, EN6000-3-3, EN300-330-1, EN300-330-2, EN301-489 Note: Based on the above testing, the printer manufacturer declares that the card printer complies with the following European directives and has placed the CE mark on the card printer.
Additional Agency Listing	BIS, WPC, MIC, VCCI, NCC, IFTEL, NOM DGN, ENACOM
Environmental	RoHS, REACH

1.1.1 United States

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference; in which case, correction of the interference is at your expense.

Important: Changes or modifications to an intentional or unintentional radiator not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

1.1.2 Canada

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

1.1.3 Taiwan

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

1.1.4 Japan

この装置は総務省の型式指定を受けています。"(総務省指定番号は第 AC-12056 号です)
本製品は電波を使用した RFID 機器の読み取り・書き込み装置です。
そのため使用する用途・場所によっては、医療機器に影響を与える恐れがあります

1.1.5 Korea

이 기기는 업무용 (A 급) 전자파 적합기기로서 판매자 또는 사용자는 이 점을 주의하시길 바라며, 가정 외의 지역에서 사용하는 것을 목적으로.

1.2 Safety messages

1.2.1 Safety messages - United States

Symbol	Critical Instructions for safety purposes
Danger 	Failure to follow these guidelines results in personal injury or death. To prevent personal injury or death: • Reference the following safety messages before performing an operation. • Always remove the power cord prior to performing repair procedures, unless otherwise specified. • Ensure only qualified personnel perform these procedures.
ESD 	This device is electrostatically sensitive. Damage to the device may occur if exposing it to static electricity discharges. To prevent damage: • Reference the following safety messages before performing an operation. • Observe all established Electrostatic Discharge (ESD) procedures while handling cables in or near the circuit board and print head assemblies. • Always wear an appropriate personal grounding device. • Always remove the ribbon and cards from the printer before making any repairs, unless otherwise specified. • Remove jewelry and thoroughly clean hands before working on the printer.
Caution 	This symbol warns of an electrical hazard that could result in personal injury or death.
Caution 	For safety purposes, do not use Ethernet for a direct connection outside of the building.

1.2.2 Safety messages - French Canada

Symbole	Instructions critiques visant la Sécurité
Danger 	Si ces directives ne sont pas suivies les résultats peuvent être des lésions corporelles ou la mort. Pour éviter des lésions corporelles ou la mort: • Rapportez-vous aux avis suivants de sécurité avant de procéder à une opération. • Retirez toujours le câble d'alimentation avant d'effectuer des procédures de réparation, sauf spécification contraire. • Assurez-vous qu'uniquement des personnes qualifiées réalisent des procédures.
ESD 	Ce dispositif est sensible à l'électricité statique. Il peut souffrir des dommages s'il est exposé à des décharges électrostatiques. Pour éviter des dommages: • Rapportez-vous aux messages suivants avant de procéder à une opération. • Suivez toutes les procédures de Décharges Electrostatiques (ESD) en vigueur durant le maniement des câbles dans ou à proximité des Ensembles de Cartes de Circuit Imprimé et Tête d'Impression. • Portez toujours un dispositif de mise à la terre personnelle appropriée. • Retirez toujours le ruban et les Cartes de l'Imprimante avant d'effectuer toute réparation, sauf spécification contraire. • Retirez tous bijoux et lavez soigneusement vos mains avant de travailler à l'Imprimante.
Attention 	Ce symbole est un avis de péril électrique passible de résulter en lésion corporelle ou mort.
Attention 	Pour des motifs de sécurité, n'utilisez pas Ethernet pour une connexion directe hors du bâtiment.

1.2.3 Safety messages - Taiwan

繁體中文 射頻發射及安全指令 安全訊息 (小心檢查)

標記	重要的安全事項說明
危險 	未按照說明安裝可能造成人員傷亡。 在可能產生潛在安全問題的地方有警示標記。 (如左圖所示)。 為了避免人員傷害,在進行有此警示標記的操作前,請先參考安全資訊提示。 為了避免人員傷害,在沒有特別說明的情況下,修理前請關掉電源開關。
小心 	此設備對靜電很敏感。如果受到靜電放電,設備會損壞。 在可能產生潛在靜電安全問題的地方有警示標記。 (如左圖所示)。 為了避免損壞設備,在進行有此警示標記的操作前,請先參考安全資訊提示。 為了避免損壞設備,在排放電路板和印刷頭聯合裝置裡面或附近的電線時,請注意觀察所有的靜電放電設備。 為了避免損壞設備,請隨時佩戴合適的接地裝置(比如:手腕上戴一個高品質的接地手腕帶以免受到可能的傷害)。 為了避免損壞設備,如果沒有特殊說明,在做任何修理前,請取下印表機上的色帶和卡。為了避免損壞設備,在使用印表機之前,請摘下戒指和手上飾品,並仔細清洗手上的油脂。
	警告使用者: 這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻干擾,在這種情況下,使用者會被要求採取某些適當的對策措施

1.2.4 Safety messages - China

安全消息 (请仔细阅读)

符号	涉及安全的重要过程
危险 	如果不遵循这些安装指南进行操作,可能会导致重伤,甚至死亡。可能引发安全问题的信息由警告符号(如左图所示)来表示。 为了确保人身安全,在执行前面带有此符号的操作之前,请先阅读下面的安全消息。为了确保人身安全,除非另有规定,否则在执行维修过程前,始终应断开电源。
小心 	此设备为静电敏感设备。如果暴露在静电电流下,可能会损坏设备。可能引发静电安全问题的信息由警告符号(如左图所示)来表示。 为了防止设备或介质受损,在执行前面带有此符号的操作之前,请先阅读下面的安全消息。 为了防止设备或介质受损,请在处理电路板和打印头部件中或附近的电缆时,遵守所有规定的静电放电 (ESD) 过程。 为了防止设备或介质受损,请始终佩带适当的个人接地设备(例如,已接地避免出现潜在损坏的高质量腕带)。为了防止设备或介质受损,除非另有规定,否则在执行任何维修过程前,始终应将色带和证卡与打印机分离。 为了防止设备或介质受损,在操作打印机前,请取下手指和手上的珠宝饰物,并将手上的油渍和污渍彻底清洗干净。
	仅适用于海拔2000m 以下地区安全使用 Use only at altitudes not more than 2000m above sea level.
	仅适用于非热带气候条件下安全使用
	环境保护(中国-RoHS) 环保使用期是基于本产品用于办公环境。 Environmental Protection Use Period is based on the product being used in an office environment.
	警告: 此为A级产品, 在生活环境中, 该产品可能会造成无线电干扰。在这种情况下, 可能需要用户对其干扰采取可行的措施。

1.3 Technical specifications

Component	Description
Card Cleaning	Replaceable cleaning roller (included with each print ribbon)
Card Materials and Types	• ABS • Laminated PVC • Mag stripe cards • Optical memory cards • PET • PETG • 100% polycarbonate • Smart cards Able to accept HDP retransfer.
Card Sizes Supported	These card printers accept standard CR-80 sized cards (85.6 mm x 54 mm / 0.370" x 2.125") with a thickness of 0.762 mm - 1.27 mm (30-50 mil). The laminator accepts card thickness of 30-50 mil. Dual hopper limited to 30-40 mil.
Dimensions (H x W x D) Updates needed	Printer: 292 mm x 313 mm x 235 mm (11.50" x 12.25" x 9.25") Printer + Dual-Sided Module: 292 mm x 445 mm x 235 mm (11.50" x 17.50" x 9.25") Printer + Single-Sided Lam Module: 324 mm x 635 mm x 235 mm (12.75" x 25" x 9.25") Printer + Dual-Sided Module + Dual-Sided Lam Module: 324 mm x 762 mm x 235 mm (12.75" x 30" x 9.25") Lam Module: 324 mm x 313 mm x 235 mm (12.75" x 12.25" x 9.25") Dual Input Hopper: 305 mm x 127 mm x 140 mm (12" x 5" x 5.5")
Display	OLED Graphical Display
Encoding Options	• Single-wire encoding options (USB or Ethernet) - field technician upgradeable • ISO compliant magnetic stripe encoding, dual high- low-coercivity, Tracks 1, 2, and 3 • JIS 2 Mag Encoding • Custom & Raw Encoding • Contact and contactless smart card (OMNIKEY® 5122 and 5127)
FARGO® Certified Supplies	Important: FARGO card printers require highly specialized print ribbons to function properly. To maximize printer life, reliability, printed card quality and durability, you must use only FARGO certified supplies. For this reason, your FARGO warranty is void, where not prohibited by law, if you use non-FARGO certified supplies. To order additional materials, please contact your authorized reseller.
Hopper Capacity - Input	• 100 cards, 30 mil cards- standard hopper • 200 cards, 30-40 mil cards - dual-input hopper optional
Hopper Capacity - Output	• 200 card output hopper capacity, 30-40 mil • Reject hopper 5 cards minimum, 30 mil (with flipper module)
Interface	• USB 2.0 (high speed) • Ethernet with internal print server • Interfacing information for E-card options

Component	Description
InTM Film Options	Clear film, 1,500 prints Standard holographic (500 prints) Custom holographic, special order (500 prints)
InTM Film Storage Temperature	25°C (77°F) or lower for no longer than 1.5 years.
Locks	Hardware locks are a optional feature. • Mechanical and key locks are used to secure the doors on the input card cartridges, the access door to the printer, the access door to the laminator and the output card hopper. • The input card cartridges are manually secured to the printer mechanism through the toggle latch located inside the access door of the printer. • The printer and laminator include a compatible hole with a Kensington lock.
Memory Updates needed	16 MB RAM 64 MB (HDP5600 only)
MS Windows Compatibility Updates needed	• Windows XP • Server 2003 • Vista (32- and 64-bit) • Windows Server 2008 (32- and 64-bit) • Windows 7 & 8, 8.1, 10 (32- and 64-bit) • Windows Server 2008 R1, 2008 R2 • Windows Server 2012 R2
Operating Conditions	Operating Temperature: 18 to 32°C (65 to 90°F) Humidity: 20 - 80% non-condensing
Options	• Card lamination module - single-sided or double-sided • Flipper module • Magnetic stripe encoding • Dual input hopper • Smart card encoding (contact/contactless) • Contactless 13.56 MHz encoding option • Contact chip encoding option • Door and cartridge locks • Printer cleaning kit
Overlamine Options	All overlamine options are available in either clear, holographic globe design or custom holographic design. They can also be optimized for use with smart cards and magnetic stripes. Here are the options: • Thermal transfer overlamine 0.25 mil thick, 500 prints • PolyGuard™ overlamine, 1.0 mil and 0.6 mil thick, 250 prints (clear, standard holographic and custom holographic)
Print Area	Over-the-edge on CR-80 cards.
Print Colors	Up to 16.7 million and 56 shades per pixel
Print Method	HDP dye sublimation/ resin thermal transfer

Component	Description
Print Modes	Print head options: • Normal print mode (default) • Performance print mode is faster with lower image quality and is most suitable for minimal color with mostly resin text. Note: Both Normal and Performance are 300 DPI in both the short and long dimensions of the card.
Print Resolution	300 dpi (11.8 dots per mm) continuous tone 600 dpi (HDP5600 only)
Print Ribbon Options	Prints or Images: • YMC, 750 prints • YMCK* 500 prints • YMCKK* 500 prints • YMCFK, 500 prints • Premium Black Resin (K) 3000 prints *Indicates the Ribbon type and the number of Ribbon panels printed where Y=Yellow, M=Magenta, C=Cyan, K=Resin Black, and F=Fluorescing
Print Speed in Normal Mode Updates needed	• YMC - 29 seconds per card/ 124 cards per hour • YMCK - 35 seconds per card/ 103 cards per hour • YMCKK - 49 seconds per card/ 73 cards per hour • YMCK+Lam - 40 seconds per card/ 90 cards per hour • YMCKK+Lam - 55 seconds per card/ 65 cards per hour
Print Speed in Performance Print Mode Updates needed	Note: Performance is most suitable for minimal color and mostly resin text. • YMC - 24 seconds per card/ 150 cards per hour • YMCK - 29 seconds per card/ 124 cards per hour • YMCKK - 40 seconds per card/ 90 cards per hour • YMCK+Lam - 34 seconds per card/ 106 cards per hour • YMCKK+Lam - 48 seconds per card/ 75 cards per hour
Power Source Voltage, Amp & Frequency	Supply Voltage/Amp: 100-240 VAC, 1.6 A Max Supply Frequency: 50 Hz and 60 Hz
Resin Scramble Option	The system can hide any information printed with the resin panel.
Ship Weight Updates needed	Printer: 7.3 kg (16 lbs.) Printer + Dual-Sided Module: 10 kg (22 lbs.) Printer + Single-Sided Lam Module: 12.7 kg (28 lbs.) Printer + Dual-Sided Module + Dual-Sided Lam Module: 16.4 kg (36 lbs.)
Single Wire Encryption Options Updates needed	• Contactless Smart Card Encoder (HID iCLASS® and MIFARE) • Contact Smart Card Encoder reads from and writes to all ISO7816-1 and 2 and 3 and 4 memory and microprocessor smart cards (T=0, T=1) as well as synchronous cards • Prox™ Card Reader (HID read-only) (USB only)
Supply Frequency	50 Hz / 60 Hz
Supply Voltage	120-240 VAC

Component	Description
System Requirements	x86 based PC or compatible • 500 MHz computer with 256MB of RAM or higher • 500MB free hard disk space or higher x64 based PC or compatible • 1 GHz computer with 512MB of RAM or higher • 32GB hard disk drive
Warranty	Printer: Three year (One year On-Call Express, U.S. only). • Three (3) year factory warranty • Covers parts and depot repair • First year On-Call-Express (loaner printer U.S. only) • 2nd year On-Call-Express available for a fee. This must be purchased before the first year On-Call-Express expires. Print head: Lifetime; unlimited pass with Fargo-certified cards

Section **02**

Setup and installation procedures

2.1 Inspection - card printer

This came from the previous document (L000950 4.4 - FARGO HDP5000, HDP5600, and HDPii Plus User Guide). If no longer accurate/needed just let me know.

- While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit.
- Reference the Card Printer Quick Start Guide for information on how to load the print ribbon, transfer InTM film, overlaminates, and card stock.
- See the Installation Guide for connecting the power to the printer and lamination module.

Important: Do not plug in the USB cable until prompted to do so during the installation of the printer driver. Follow the prompts to install the driver.

From the HDP6600 User Guide

2.2 Introduction

This section describes the setup and installation for the HDP6600 card printer.

If you have a lamination unit to set up, see the HDP6600 Lamination Installation Guide (PLT-04395) that is included with the lamination unit for information.

2.3 Selecting a good location

The following guidelines help to ensure optimal printing performance:

- Place the unit in a location with adequate air circulation to prevent internal heat buildup.
- Use the dimensions of the printer as a guideline for the minimum clearances to the unit.
- Allow for adequate clearance in front of the unit to accommodate the unit with its covers open.
- Do not install the unit near heat sources such as radiators or air ducts or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.

2.4 Moisture condensation

If the unit is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense inside the unit. Should this occur, print quality may not be optimal.

Leave the unit unplugged in a warm, dry room for several hours before using to allow any moisture to evaporate.



Caution: For safety purposes, Ethernet is not intended for a direct connection outside of the building.

Attention: Pour des raisons de sécurité, Ethernet n'est pas conçu pour une connexion directe à l'extérieur du bâtiment.

2.5 Unpacking and inspection

While unpacking the printer, inspect the carton to ensure that damage did not occur during shipping.

Make sure that all supplied accessories are included with the unit:

- US/EU power cable
- Card input cartridge
- Card output hopper

- Ferrite
- USB cable

Make sure you have these accessories that are supplied separately:

- HDP film
- Print ribbon
- Cards

2.6 Installing the HDP film

FARGO® High Definition printers require highly specialized supplies to function properly. This printer uses a refillable HDP film drawer. To maximize the printer durability, reliability and printed card quality, you must use only FARGO®-certified supplies. If not using FARGO-certified supplies, your FARGO warranty is void, where not prohibited by law.

1. Open the front door.



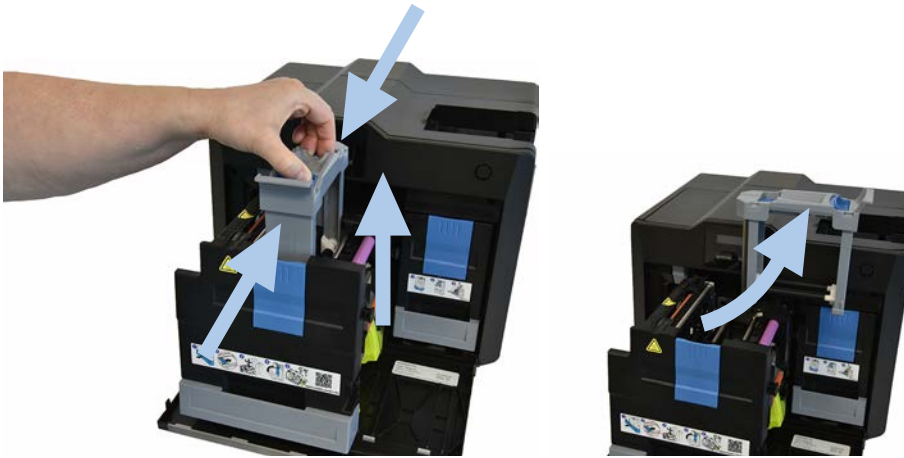
2. Slide out the HDP film drawer by pulling on the gray handle.



Caution: Be careful not to touch the hot roller surface identified with this symbol.



3. Unlatch and raise the accumulator unit. Twist the accumulator unit 90° to the right.



4. Pull down the HDP film loading handle.

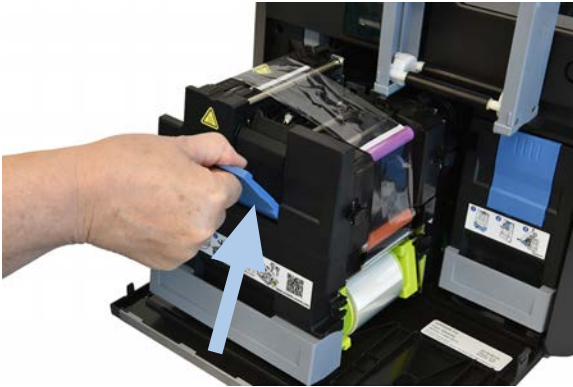


5. Load the HDP film, ensuring that each spool is correctly fitted to the corresponding color cartridge, and the film is not loose.

Note: Used film should have used panels to the left of the purple roller and new panels to the right of the purple roller.



6. Push up the HDP film loading handle.



7. Twist the accumulator unit 90° to the left. Push down in the center of the accumulator unit until it clicks into place.



8. Slide the HDP film drawer in until the gray handle clicks/latches.



9. Close the printer front cover.



2.7 Installing the print ribbon

Important: Do not connect the power supply or communication cable (USB or Ethernet) at this stage.

FARGO High Definition printers require highly specialized supplies to function properly. This printer uses a refillable ribbon drawer. To maximize the printer durability, reliability and printed card quality, you must use only FARGO-certified supplies. If not using FARGO-certified supplies, your FARGO warranty is void, where not prohibited by law.

Each print ribbon includes a replaceable cleaning roller. The recommended cleaning cycle is after every 2,000 cards printed.

1. Open the printer front cover.



2. Slide out the ribbon drawer by pulling on the gray handle.



3. Pull down the loading handle.



4. Load the ribbon, ensuring that each spool is correctly fitted to the corresponding color cartridge, and the ribbon is not loose.



5. Push up the ribbon loading handle.



6. Slide in the ribbon drawer until the handle clicks/latches.



7. Close the printer front cover.



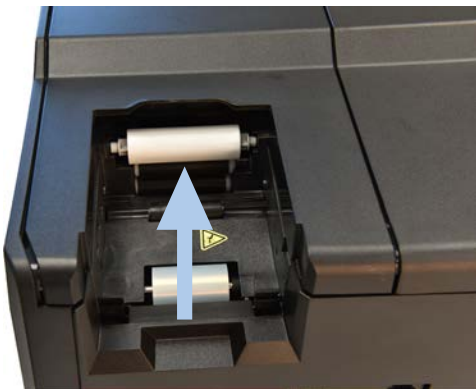
2.8 Installing the cleaning roller

Every HDP print ribbon contains a cleaning roller. Each time a new HDP print ribbon is inserted, a new cleaning roller should be installed.

1. Remove the protective sleeve from the cleaning roller.



2. Insert the cleaning roller into the card input area.



3. Attach the card input cartridge to the printer.



2.9 Installing blank cards into the input card hopper

Load the cards with the print side down and (if applicable) the magnetic stripe up and towards the front of the printer.

Note:

- FARGO UltraCard™ Premium card types are recommended (see [2.9.1 General card information](#)).
- Cards eject into the output hopper or reject hopper.
- Each input hopper holds 100 cards.

1. Press the button to open the card input cartridge.

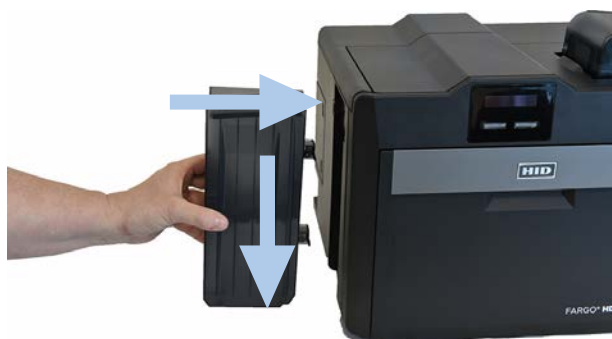


2. Load blank cards then close the card input cartridge.

Note: If using cards with a magnetic stripe, load the cards with the stripe facing up and towards the front of the printer.



3. Close the input card hopper door.
4. Attach the card output hopper to the printer.



2.9.1 General card information

Important: For the best results and ISO card specification compliance, composite PVC is recommended over straight PVC.

- The printer prints onto any card with a clean level, and polished PVC surface.
 - Suitable cards must have a polished PVC surface free of fingerprints, dust, or any other types of embedded contaminants.
 - For best results, HID recommends UltraCard™, UltraCard stock has a glossy PVC laminate on top and bottom and is optically inspected to provide the cleanest, most scratch and debris-reduced cards possible. Two types of UltraCard card stock are available.
 - **UltraCard** stock has a PVC core and offers medium card durability.
 - **UltraCard Premium** stock has a 40% polyester core and offers high durability (recommended).
- Both types of UltraCards produce printed images with a glossy, photo-quality finish.

2.10 Printer power

Important: Do not connect the printer USB cable until prompted during the printer driver installation.

Important: If connecting by Ethernet, add the ferrite (supplied with the printer) before plugging in the Ethernet cable.

To connect power to the printer:

1. Plug the power cable into the back of the printer.



2. Plug the wall power cable into a standard 100-240 VAC power outlet.
3. Switch on the printer.



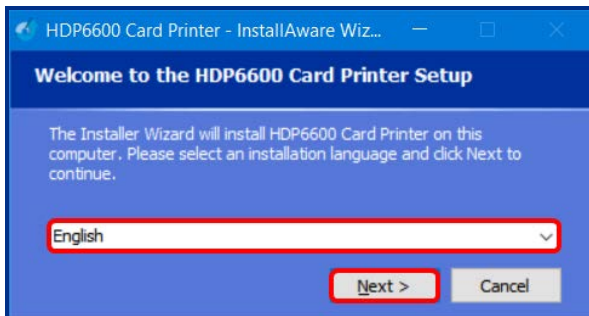
Note: If the physical switch is left on and the printer is left idle, the printer enters a low power state. When a print job is sent, the printer restores full power and the print job commences.

2.11 Driver installation instructions

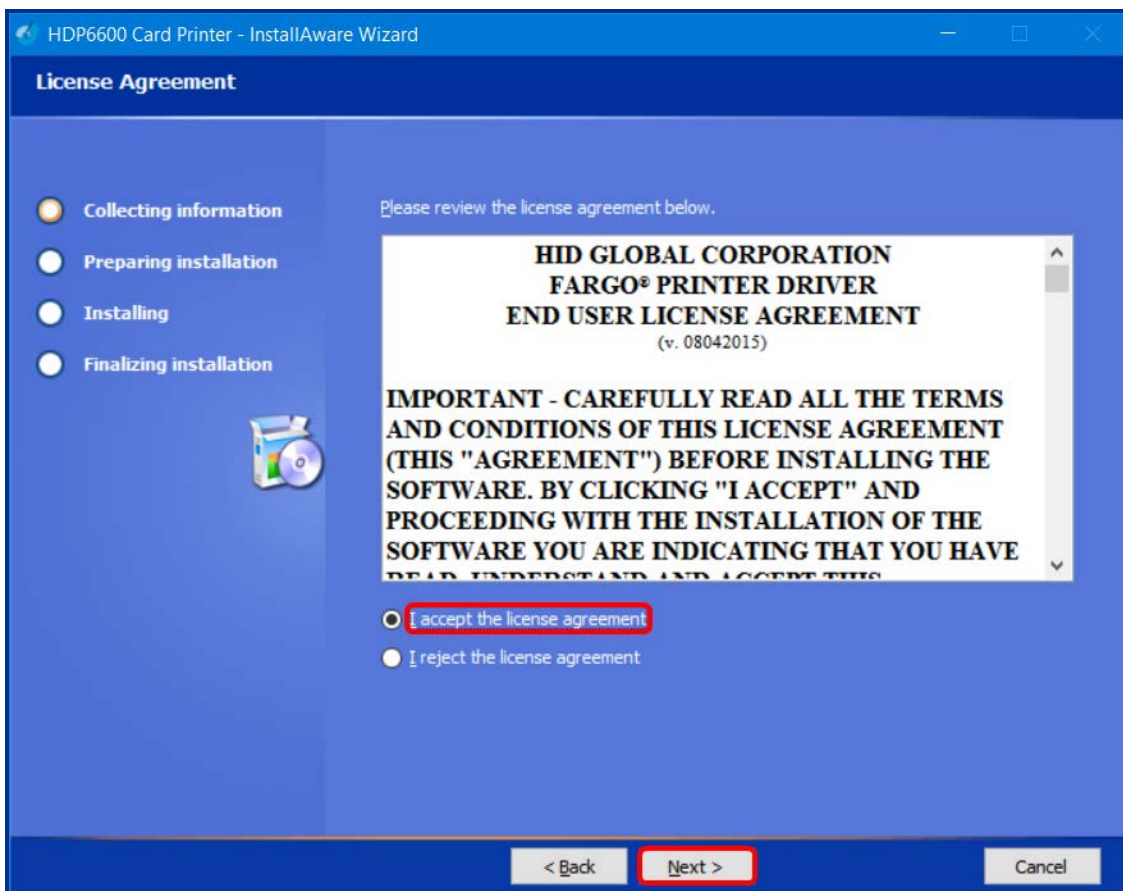
Before beginning the installation, cancel or wait for all prints to be completed for any printer attached to the PC. You should also shut down all card printing applications, such as Asure ID.

To download and install the HDP6600 driver file:

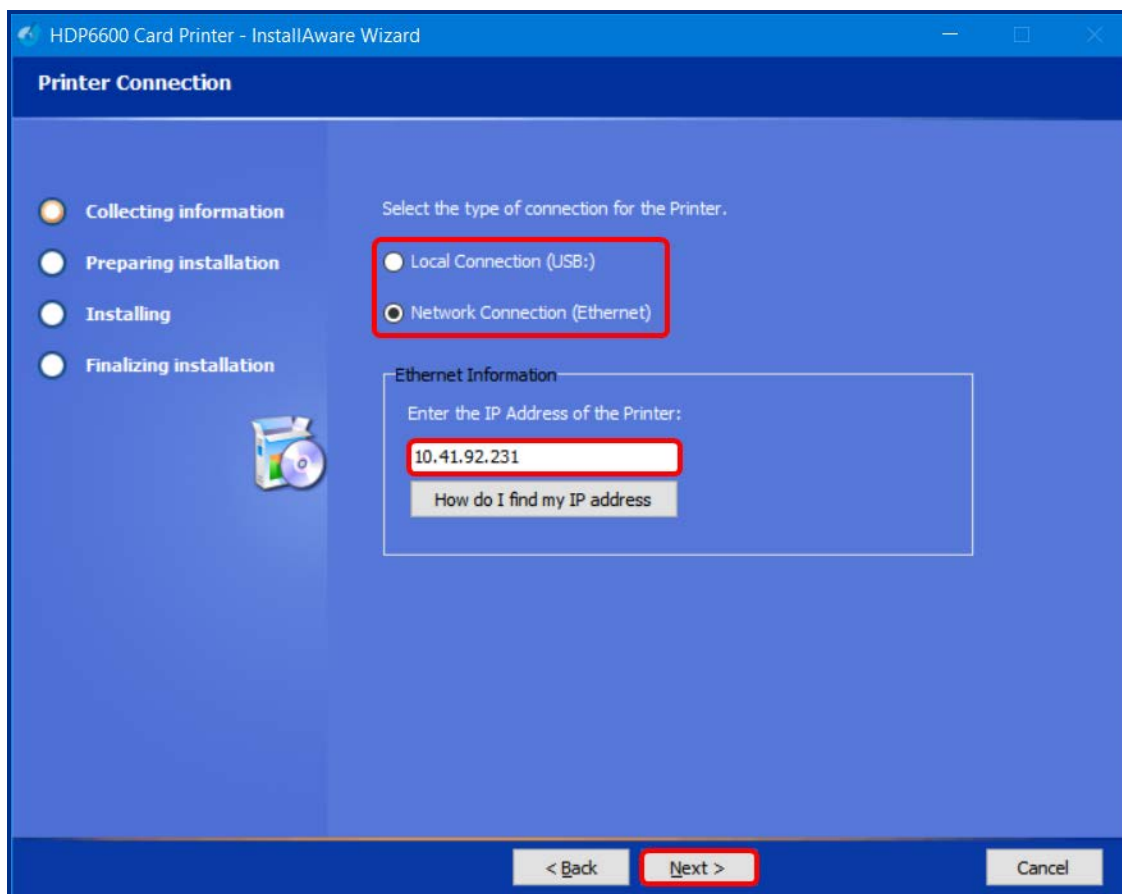
1. Visit www.hidglobal.com/drivers and search for HDP6600.
2. Click **DOWNLOAD** from the search results and click **I ACCEPT** to accept the End User License Agreement.
3. Once the driver file has downloaded, double-click the .exe file to install the HDP6600 driver.
4. The installer verifies the contents of the setup package and the installation begins. Follow the on-screen instructions to complete the driver installation. Select your required language. Click **Next**.



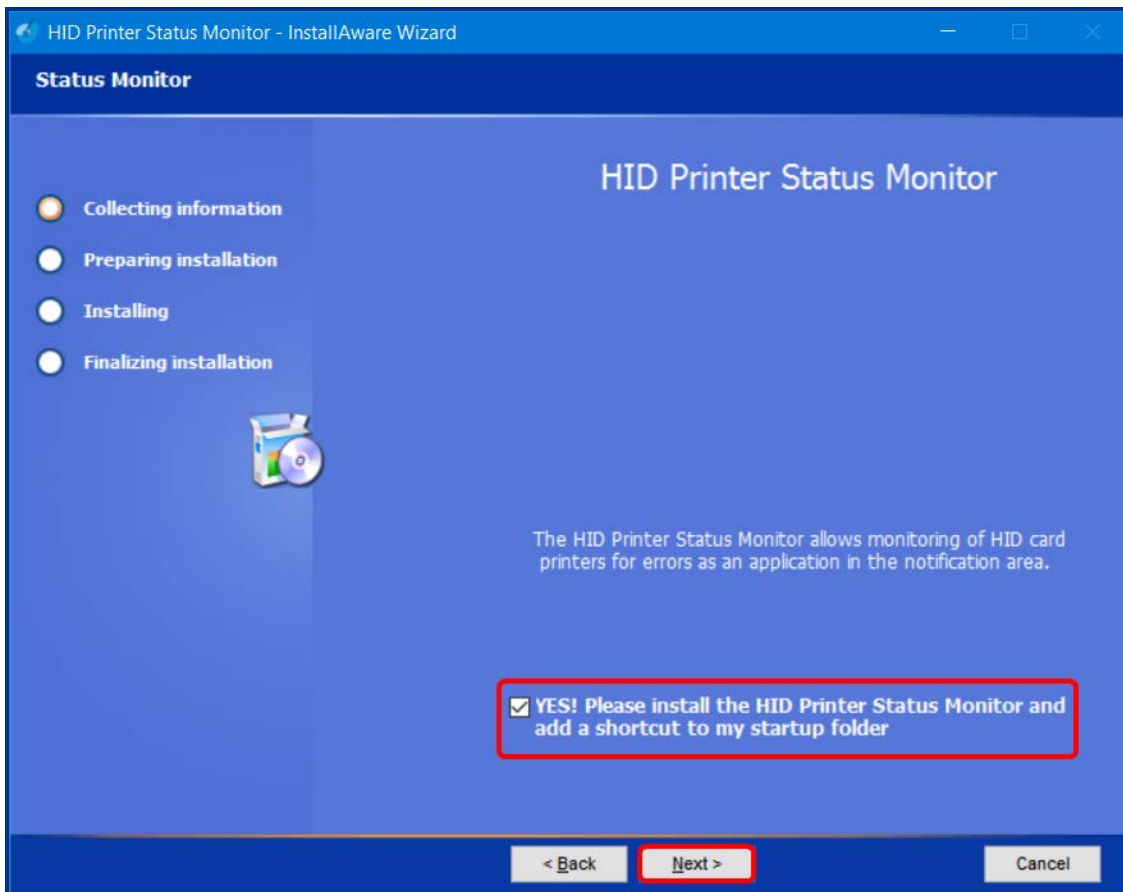
5. The Welcome to HDP6600 Card Printer Install screen is displayed. Click **Next**.
6. Read the license terms and conditions. Select **I accept the license agreement** and click **Next**.



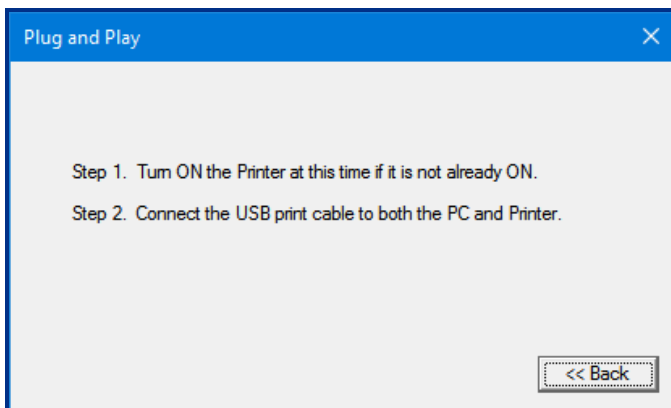
7. Select the type of connection for the printer.
- If you are connecting to a local connection, select **Local Connection (USB)** and click **Next**.
 - If you are connecting to a network, select **Network Connection (Ethernet)** and do the following:
 - a. Connect the Ethernet cable to the printer.
 - b. Enter the IP address of the printer.
 - c. Connect the printer to a power source and turn it on.
 - d. Click **Next**.



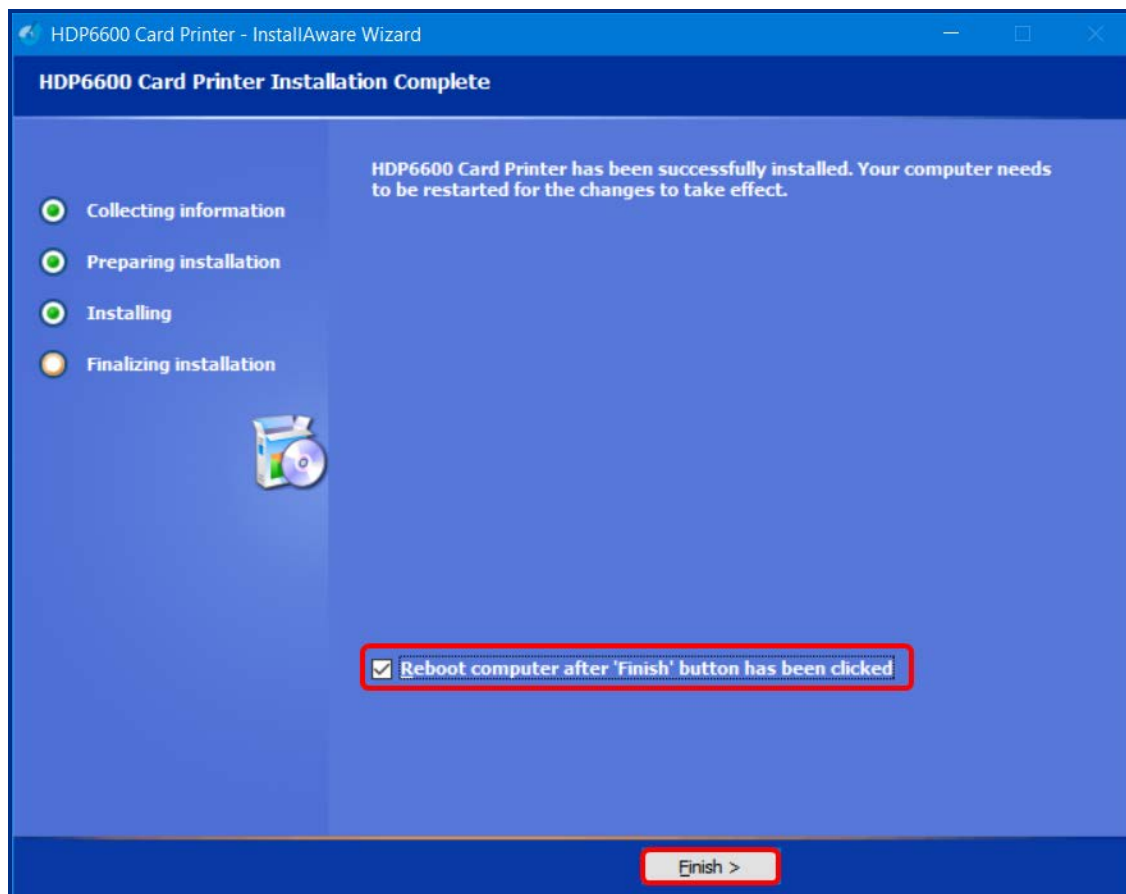
8. The HID Printer Status Monitor can be installed with the driver. This is recommended and the checkbox is selected by default. The HID Status Monitor is used to provide information about the printers connected to this computer. Click **Next**.



9. The Ready to Install window is displayed. Click **Next** to begin the installation.
10. If you are using a local connection (USB), the Plug and Play window is displayed to prompt you to turn on the printer and connect the USB print cable. When the connections are recognized, the installation continues.



11. When the installation is completed, the PC may need to be restarted for the changes to take effect. If the check box to Reboot the computer is displayed, select the check box to restart your computer and click **Finish**.



Lukasz - more recent documents use this kind of installation instructions (gets rid of specific printer name dialog boxes) and streamlines the installation. This is what I recommend for use in this document. Those installation dialogs can get tricky to capture.

2.12 Driver installation instructions

Important: Do not connect the printer Ethernet cable to your computer until prompted during the printer driver installation.

1. Visit www.hidglobal.com/drivers and search for **ELEMENT**.
2. Find the appropriate selection and click **DOWNLOAD** from the search results.
3. Click **I ACCEPT** to accept the End User License Agreement.
4. Once the driver file has downloaded, double-click the .exe file to install the **HID ELEMENT** driver.
5. The installer verifies the contents of the setup package, and the installation begins. Follow the on-screen instructions to complete the driver installation. Click **Next**.
6. The **Welcome to the HID ELEMENT Card Printer Install** screen is displayed. Click **Next**.
7. Read the license terms and conditions. Select **I accept the license agreement** and click **Next**.
8. Enter the IP address of the printer and click **Next**.

9. The HID Printer Status Monitor can be installed with the driver. This is recommended and the check box is selected by default. The HID Status Monitor is used to provide information about the printers connected to this computer. Click **Next**.
10. The **Ready to Install** window is displayed. Click **Next** to begin the installation.
11. When the installation is completed, the PC may need to be restarted for the changes to take effect. If the check box to Reboot the computer is displayed, select the check box to restart your computer and click **Finish**.

Section 03

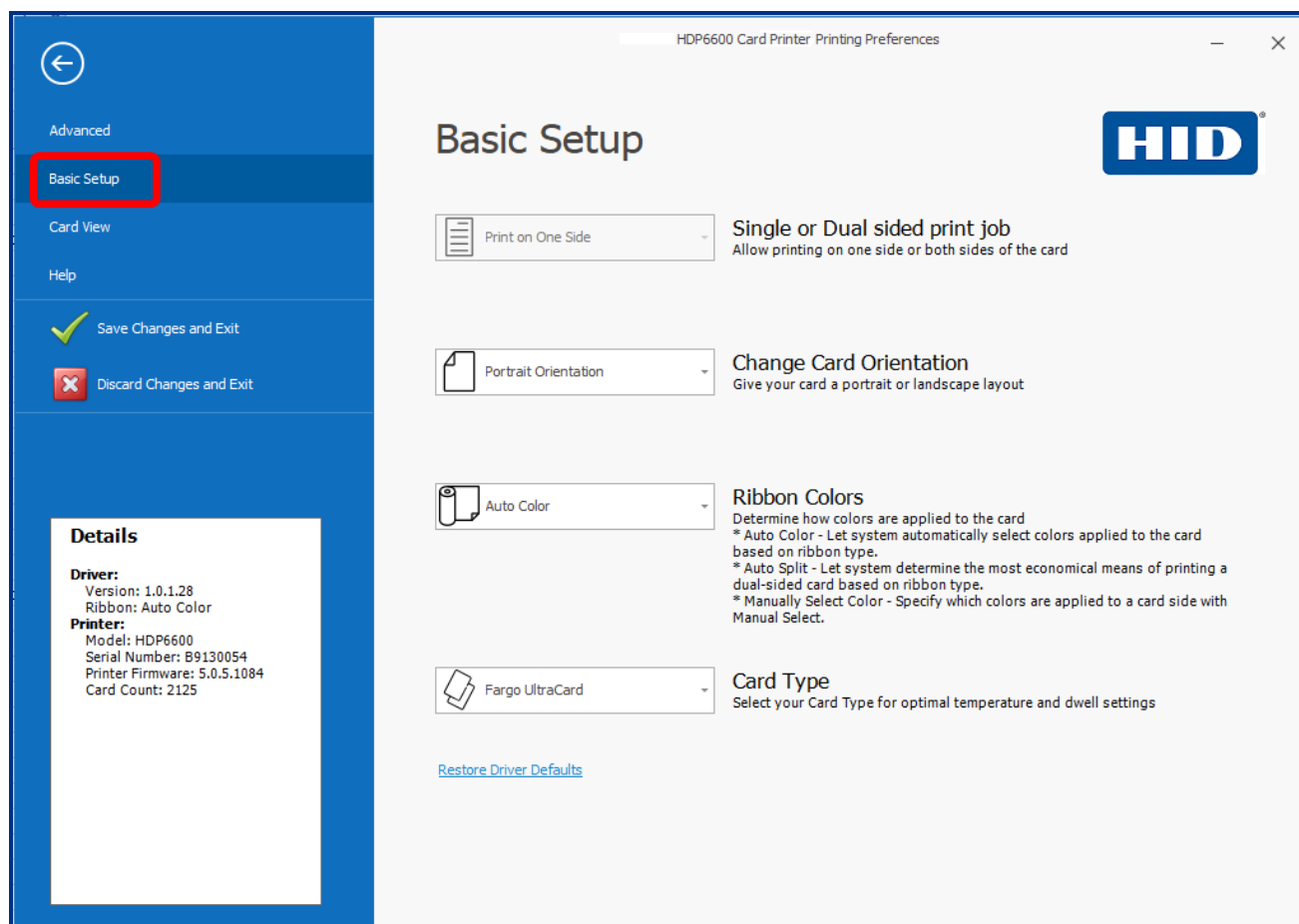
Printing preferences

3.1 Introduction

All print driver operations and printing preferences are managed through the HDP6600 Card Printer Printing Preferences. Accessing the printing preferences varies by Microsoft Windows operating system. For example, if you are running Microsoft Windows 10, the printing preferences are accessed by selecting **Settings > Devices > HDP6600 Card Printer > Manage > Printing preferences**.

All information is controlled through the **File**, **Advanced**, **Encoding**, and **Utilities** menu tabs. When you first access the preferences, the **File** menu is opened to the **Basic Setup** page.

The **File** menu allows you to save and restore system settings, set up global printer settings, and establish printer setting profiles.



3.2 File menu tab

This tab allows you to view driver details and basic printer specifications. You can also restore driver default settings, save changes to your preferences, or discard changes before exiting the printing preferences.

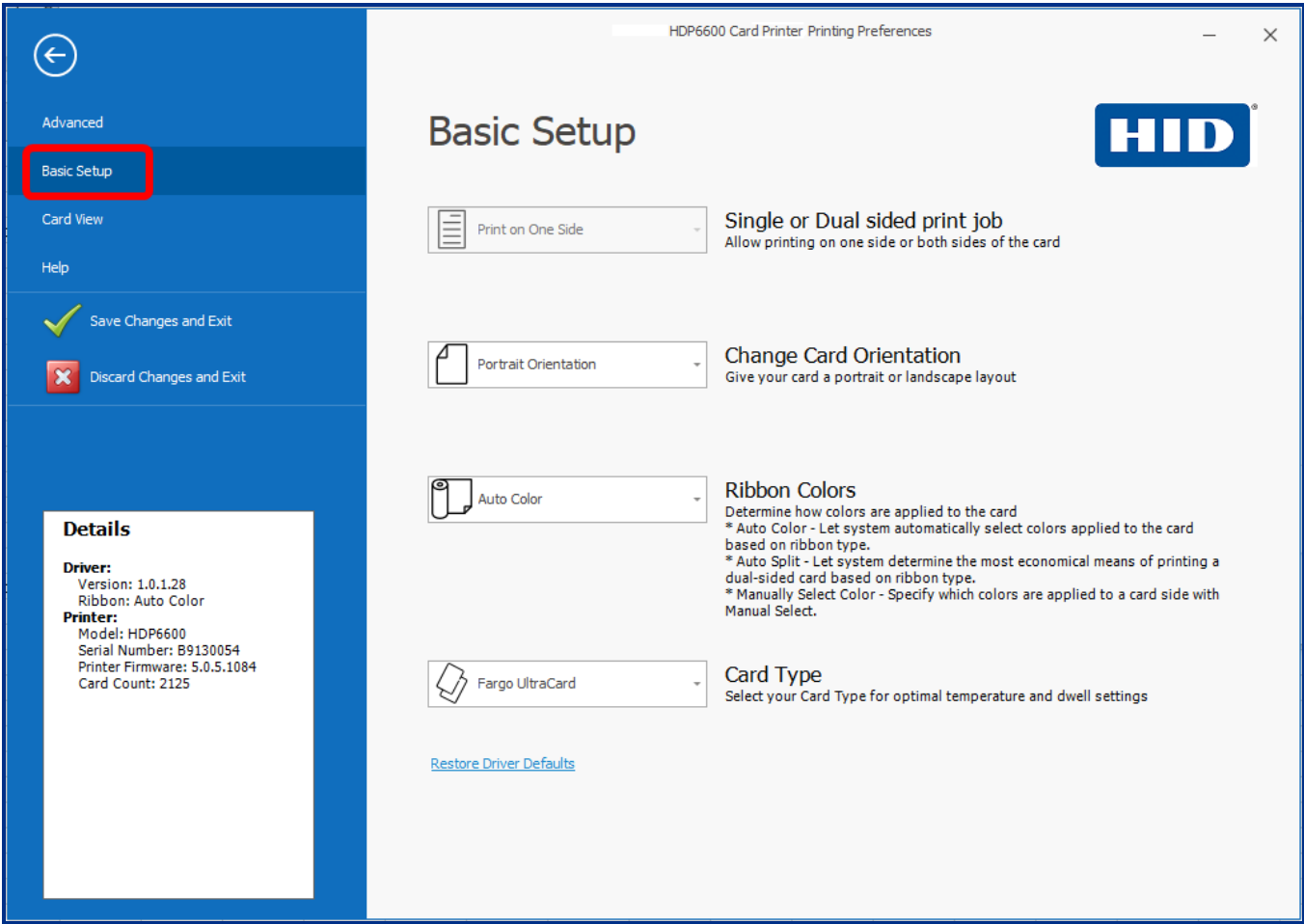
The **File menu** includes selections for the following pages and two exit options:

- **Basic Setup** - Displays selections for printer settings, ribbon specifications, card type, and a link for restoring driver defaults.
- **Card View** - Displays a representation of the currently selected card options.
- **Help** - Displays links to available help files and videos for the maintenance of the HDP6600 card printer.

- **Save Changes and Exit** - Saves any changes made within the HDP6600 Card Printer Printing Preferences screens and exits the program.
- **Discard Changes and Exit** - Cancels any changes made within the HDP6600 Card Printer Printing Preferences screens and exits the program.
- **Details** - Displays the driver version number and ribbon color as well as the printer specifications for model, serial number, firmware, and card count. This information is displayed on all pages and menu tabs throughout the interface.

3.2.1 Basic setup page

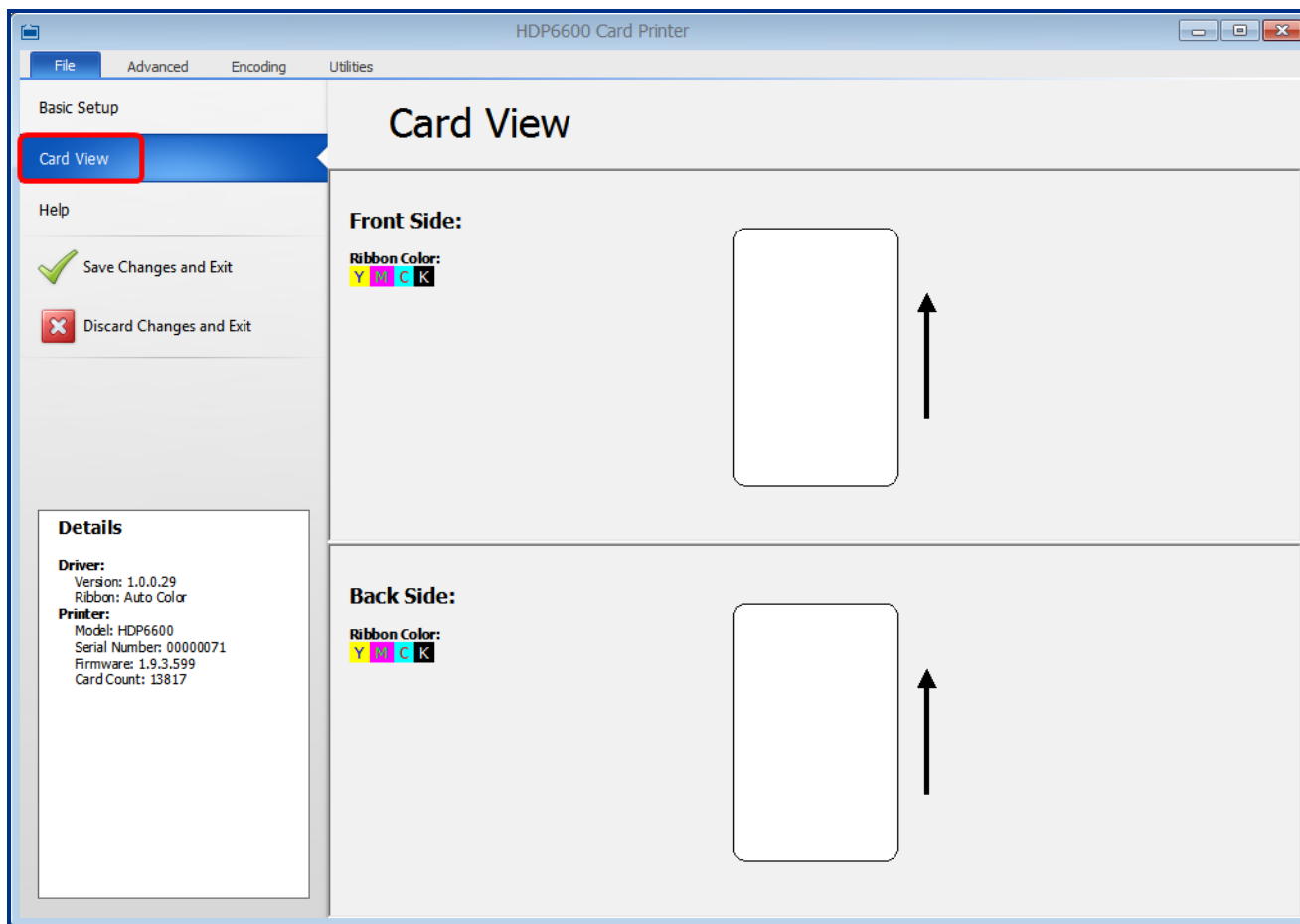
This page displays selections for printing on one or both sides of a card, card orientation, ribbon colors, and card types. It also includes a Details pane and a link for restoring the driver defaults.



Field	Definition
Card Type	Specify the card type for optimal temperature and dwell settings. Options are: - FARGO UltraCard™ Premium - FARGO UltraCard (default) - FARGO UltraCard PC - HID Tech Card Composite - HID Tech Card PVC
Restore Driver Defaults	Displays a prompt to reset all selections in the driver file to the default settings. Click Yes to reset or No to cancel.

3.2.2 Card view page

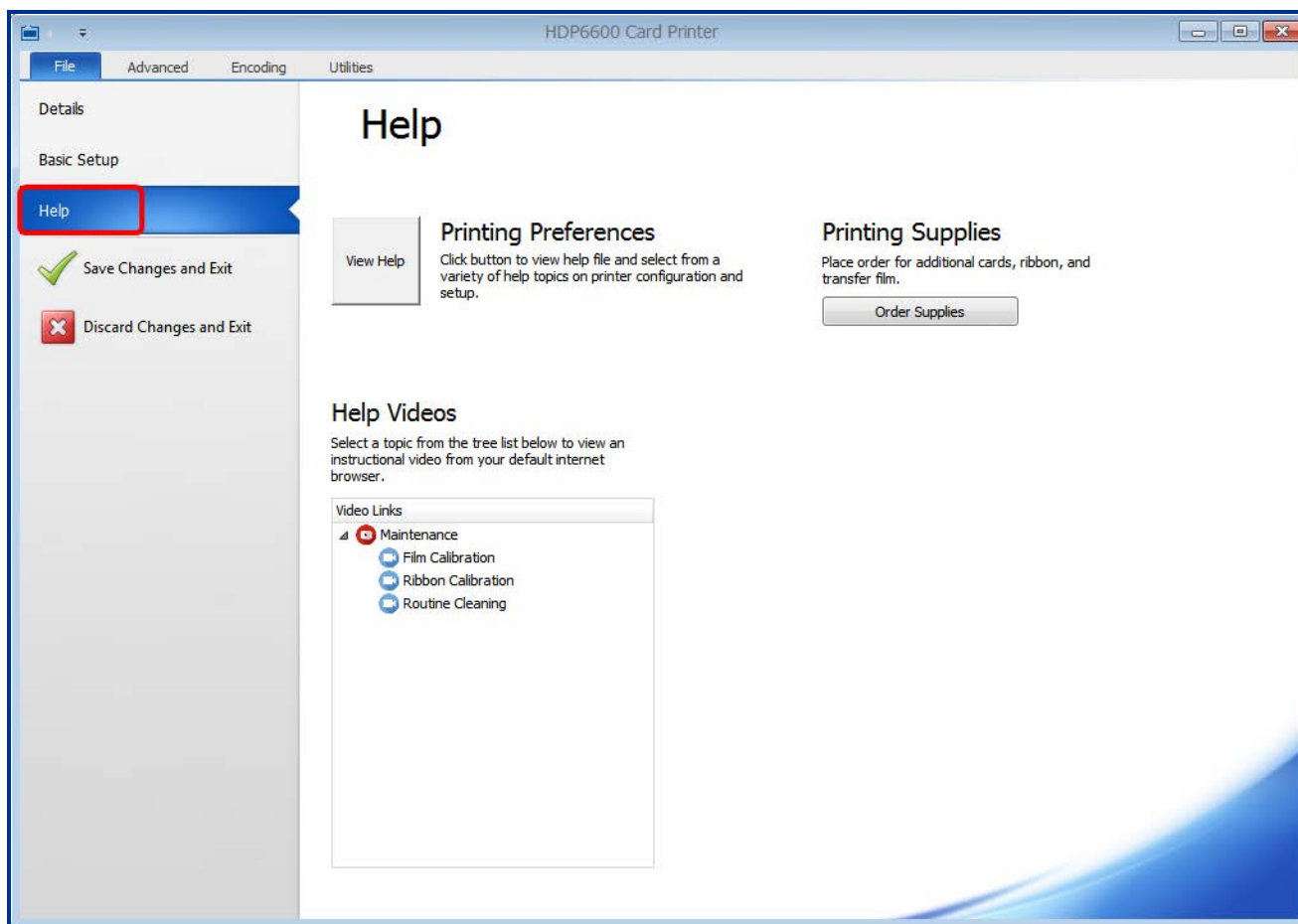
This page displays a representation of the currently selected card options.



3.2.3 Help page

This page displays links to:

- Available help files for the printing preferences
- Order printing supplies
- Instructional videos for the maintenance of the HDP6600 card printer



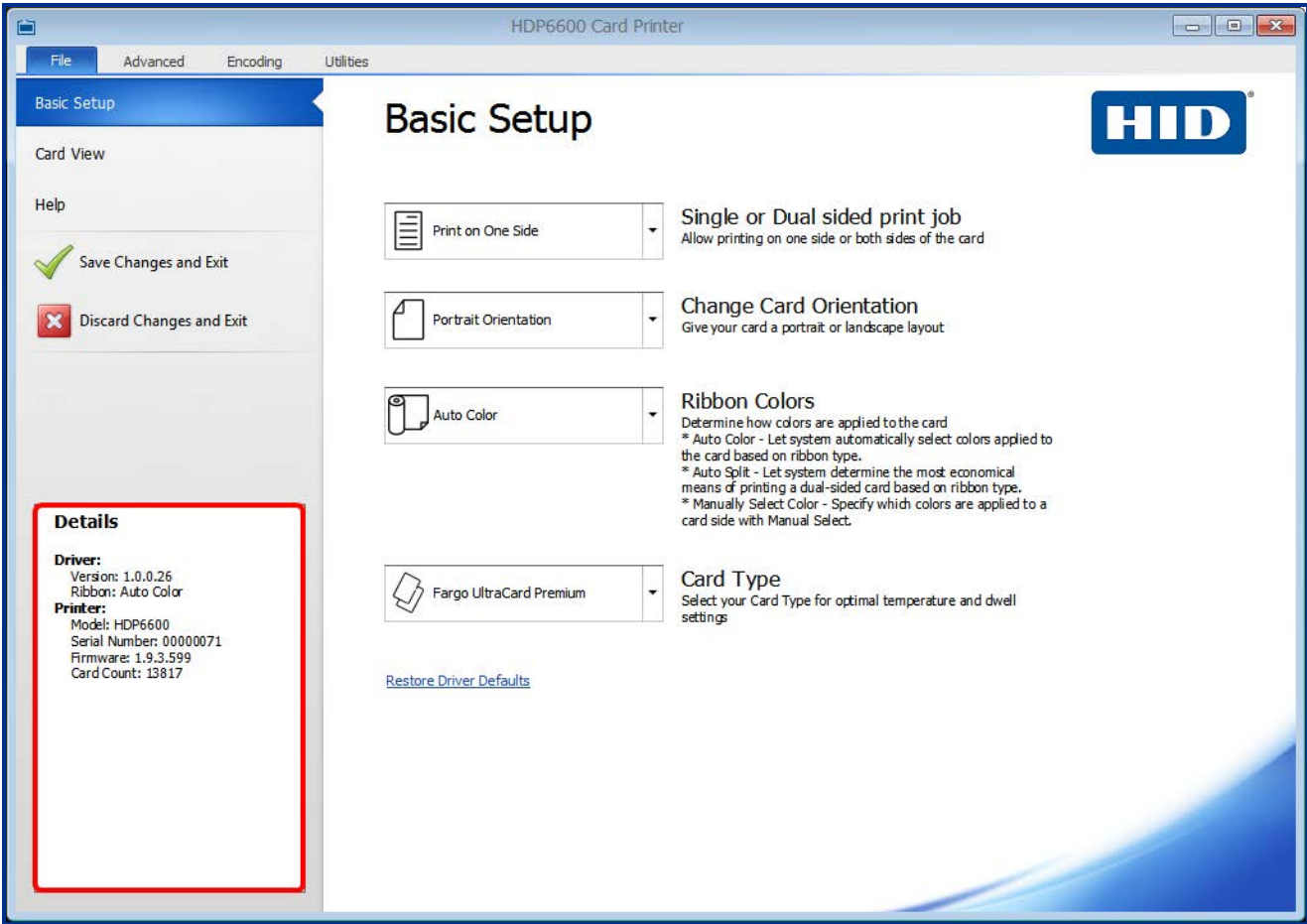
3.2.4 Exit options

To exit the Printing Preferences, choose one of the following:

- **Save Changes and Exit** - Saves any changes made within the HDP6600 card printer printing preferences screens and exits the program.
- **Discard Changes and Exit** - Cancels any changes made within the HDP6600 card printer printing preferences screens and exits the program.

3.2.5 Details window

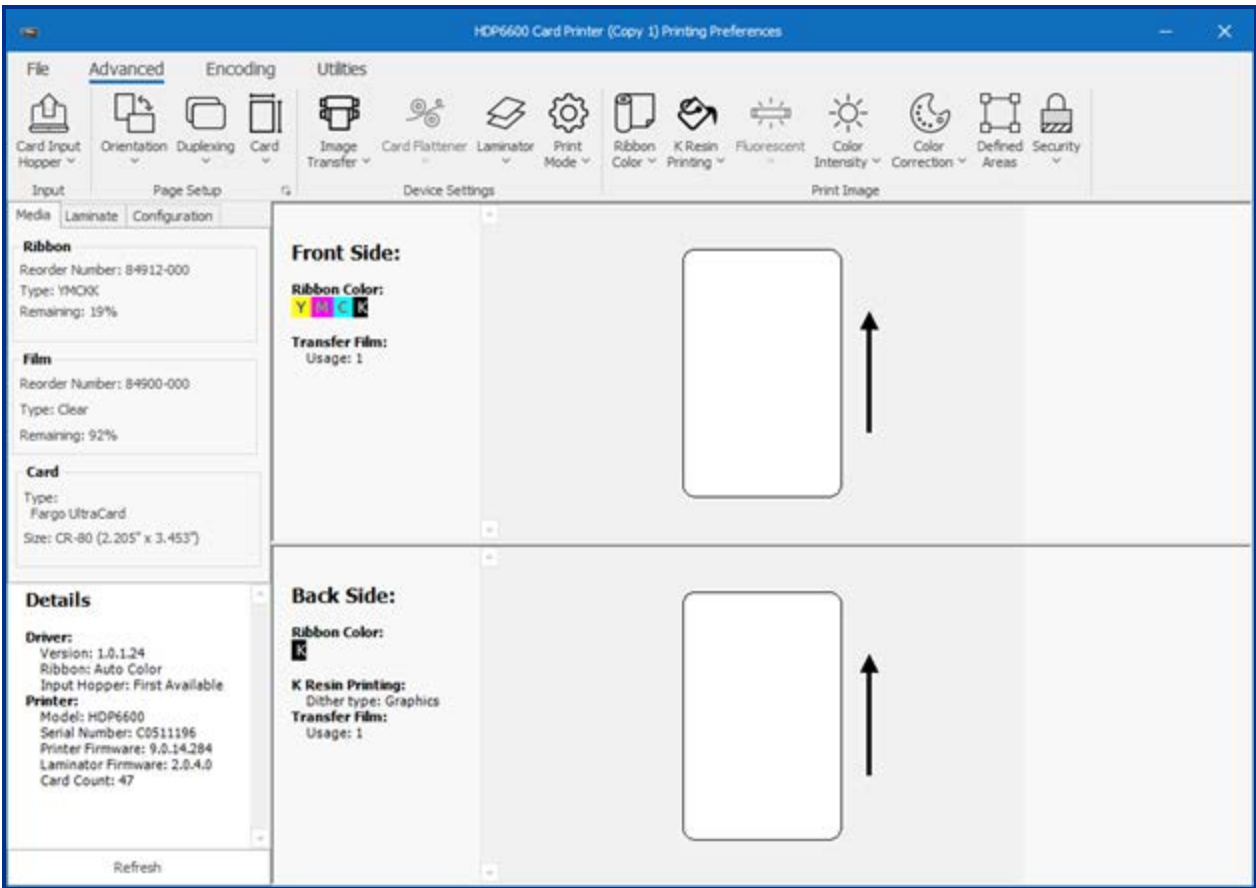
This window displays basic information about the driver and the printer connected to your PC. This information is also displayed on all pages and menu tabs throughout the interface.



Field	Definition
Details	Displays the driver and printer information. Driver: Version: The installed printer driver version. Ribbon: The detected ribbon color. Mode: This is displayed if a dual-sided module is detected and if the card is set to flip before being printed. Printer: Model: The printer model. Serial Number: The serial number of the printer. Firmware: The installed firmware version. Card Count: The number of cards printed.

3.3 Advanced menu tab

This tab allows you to select page setup options, printing options, diagnostic settings, and calibration settings.



Page Setup	
Menu option	Description
Card Input Hopper	This option is grayed out if a dual hopper configuration is not selected. Select which bay the card comes from. Available options are: First Available , Top , or Bottom .
Orientation	Sets the card orientation. Select Portrait to print the card vertically. Select Landscape to print horizontally.
Duplexing	Note: This option is grayed out if a dual-sided module is not detected. Single Sided: Select this option to print only on one side of the card. This includes printing on the backside of preprinted cards that must have their magnetic stripe or smart card chip encoded. Dual Sided: This option is used for cards printed on both sides.
Card	Selects the type of card to print and optionally set up the card size and offset the print layout. Options are: Type: Select the type of card to print: - FARGO UltraCard Premium - FARGO UltraCard (default) - FARGO UltraCard PC - HID Tech Card Composite - HID Tech Card PVC

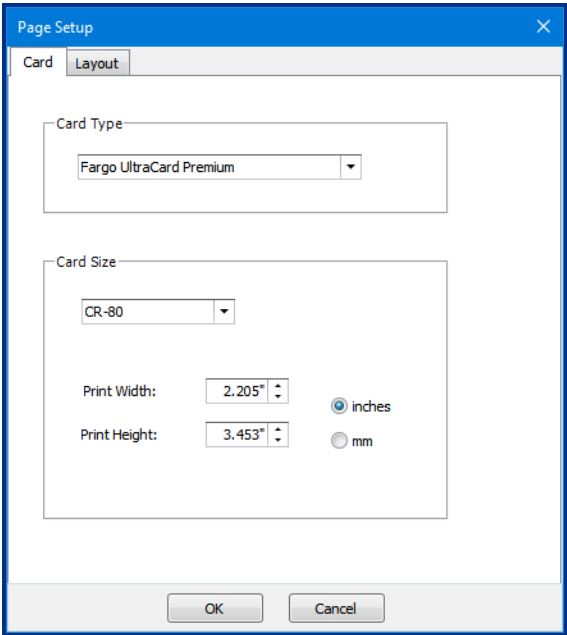


Page Setup

Menu option

Description

More Card Settings: Opens the **Page Setup** window to define the card type and size.



Select a **Card Type** to print:

- FARGO UltraCard Premium
- FARGO UltraCard (default)
- FARGO UltraCard PC
- HID Tech Card Composite
- HID Tech Card PVC

Select a **Card Size**:

- **CR-80:** This is the default. This card printer accepts standard CR-80 sized cards (3.41" x 2.165", 86.6 mm x 55 mm).
- **Custom:** This selection is used to create a custom card size. Use the Print Width/Print Height adjustment arrows to set the dimensions of the total print area for each card size. Set the option for **inches** or **mm**.

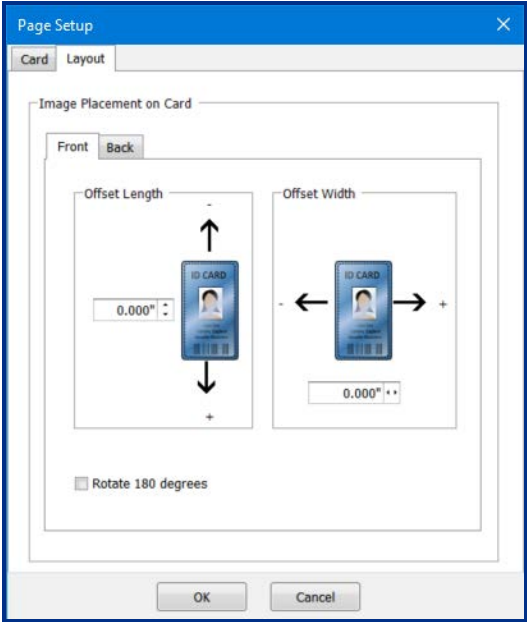
Page Setup

Menu option

Description

Select the **Layout** tab to set the **Offset Length** and **Offset Width** for the image placement on the front and back of the card.

Note: If **Duplexing** is set to **Single Sided**, the **Back** tab is not available on this window.



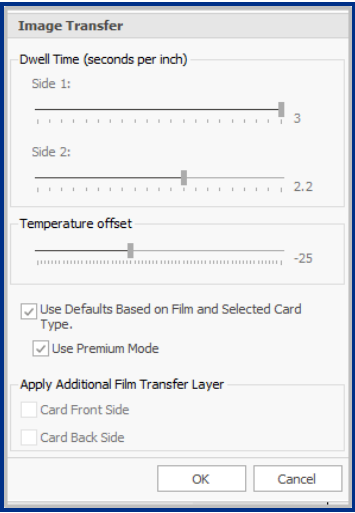
Adjust the image position values by clicking the **Offset Length** and **Offset Width** adjustment arrows. The image position changes according to the selection of portrait or landscape.

Rotate 180 Degrees: Select this option to rotate the image on the front or back 180 degrees when printed.

Device Settings

Menu option	Description		
Image Transfer	This setting controls the speed and temperature at which printed images are transferred from the film to the card. These settings vary depending on the card type.		
	Card type	Default transfer settings +/- temperature offset	Premium mode transfer setting +/- temperature offset
	FARGO UltraCard Premium	Temperature = 215 - 0 = 215 Side 1 = 1.5 Side 2 = 1.2	Temperature = 215 - 25 = 190 Side 1 = 3.0 Side 2 = 2.2
	FARGO UltraCard (default)	Temperature = 215 - 0 = 215 Side 1 = 1.5 Side 2 = 1.2	Temperature = 215 - 25 = 190) Side 1 = 3.0 Side 2 = 2.2
	FARGO UltraCard PC	Temperature = 215 + 15 = 230 Side 1 = 2.5 Side 2 = 2.5	Temperature = 215 + 15 = 230 Side 1 = 2.5 Side 2 = 2.5
	HID Tech Card Composite	Temperature = 215 - 0 = 215 Side 1 = 1.5 Side 2 = 1.5	Temperature = 215 - 25 = 190 Side 1 = 3.0 Side 2 = 2.2
	HID Tech Card PVC	Temperature = 215 - 0 = 215 Side 1 = 1.5 Side 2 = 1.5	Temperature = 215 - 25 = 190 Side 1 = 3.0 Side 2 = 2.2

When the **Use Defaults Based on the Film and Selected Card Type** option is selected, the printer driver automatically optimizes these settings according to the card type and film type previously selected. Changes made to the **Dwell Time** and **Temperature offset** settings are saved for the selected card type option upon exiting the printer driver setup.

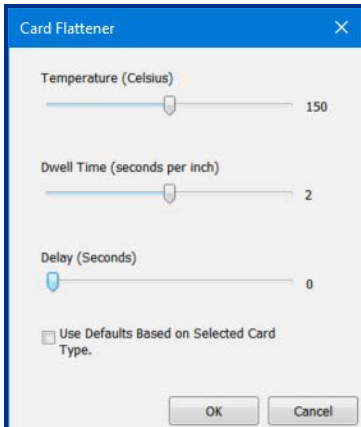


Dwell Time (seconds per inch): Sets the speed at which the printed image is transferred from the HDP film to the card in seconds per inch for each side of the card.

- Lower limit = 1 second per inch
- Upper limit = 3 seconds per inch

Device Settings	
Menu option	Description
	Temperature offset: Sets the temperature (in Celsius) at which the printed image is transferred from the HDP film to the card. - Lower limit: -50 - Upper limit: +15 Use Defaults Based on the Film and Selected Card Type: This option is automatically selected. The printer driver software has different default temperatures and dwell time settings that deliver the best transfer for each of these card types. These defaults are automatically configured, based on the card type, ribbon type, and whether printing single- or dual-sided. Note: If you select the wrong option, the incorrect dwell time and temperature may be used during the image transfer process which results in poor adhesion of the HDP film or card warping. Use Premium Mode: Select this option to reduce the transfer temperature and speed to enhance the image quality. Apply Additional Film Transfer Layer: This option allows composite and polycarbonate cards to have an additional film transfer layer applied to either the front or back side of the card. This option is grayed out for PVC-based cards.

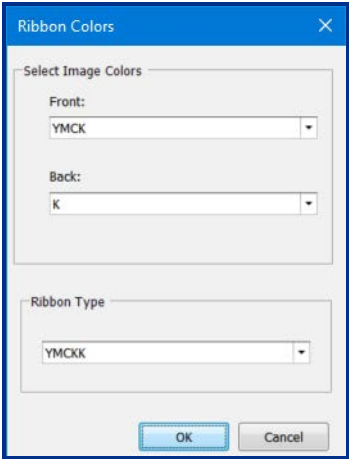
Device Settings

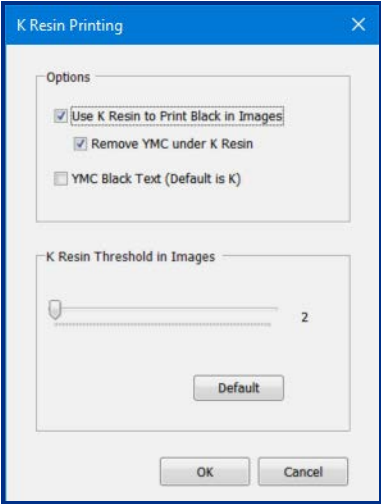
Menu option	Description																		
Card Flattener	This option is available only for single-sided card printing and is grayed out if a card flattener is not detected. This setting controls the temperature applied to the opposite side of the card after a single-sided print transfer to maintain a flat card. Enabled: Select this option to enable the flattener. Advanced Settings: This option is grayed out unless the Enabled option is selected. When selected, the Card Flattener window is displayed.  Temperature (Celsius): • Lower limit: 100 • Upper limit: 200 Dwell Time (seconds per inch): Sets the Dwell Time for the flattening process. • Lower limit = 1 second per inch • Upper limit = 3 seconds per inch Delay (Seconds): Sets the Delay for the flattening process. • Lower limit = 0 • Upper limit = 15 Use Defaults Based on Selected Card Type: This option is automatically selected. Clear this box to set the options in this window. When selected, the printer uses a flattener temperature depending on the card selection. <table><tr><th>Card type</th><th>Default flattener settings</th><th>Premium mode flattener settings</th></tr><tr><td>FARGO UltraCard Premium</td><td>Temperature = 170 Dwell = 2</td><td>Temperature = 185 Dwell = 3</td></tr><tr><td>FARGO UltraCard (default)</td><td>Temperature = 170 Dwell = 2</td><td>Temperature = 185 Dwell = 3</td></tr><tr><td>FARGO UltraCard PC</td><td>Temperature = 150 Dwell = 2</td><td>Temperature = 150 Dwell = 2</td></tr><tr><td>HID Tech Card Composite</td><td>Temperature = 170 Dwell = 2</td><td>Temperature = 185 Dwell = 3</td></tr><tr><td>HID Tech Card PVC</td><td>Temperature = 170 Dwell = 2</td><td>Temperature = 185 Dwell = 3</td></tr></table>	Card type	Default flattener settings	Premium mode flattener settings	FARGO UltraCard Premium	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3	FARGO UltraCard (default)	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3	FARGO UltraCard PC	Temperature = 150 Dwell = 2	Temperature = 150 Dwell = 2	HID Tech Card Composite	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3	HID Tech Card PVC	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3
Card type	Default flattener settings	Premium mode flattener settings																	
FARGO UltraCard Premium	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3																	
FARGO UltraCard (default)	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3																	
FARGO UltraCard PC	Temperature = 150 Dwell = 2	Temperature = 150 Dwell = 2																	
HID Tech Card Composite	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3																	
HID Tech Card PVC	Temperature = 170 Dwell = 2	Temperature = 185 Dwell = 3																	

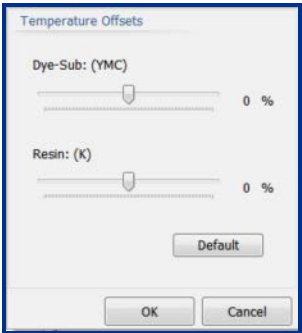
Device Settings	
Menu option	Description
	Note: If you select the wrong option, the incorrect dwell time and temperature may be used in the flattening process which may result in card warping.
Laminator	This option allows control of the printer lamination process. When a laminator is not detected, the lamination option is grayed out. Available options are: Front Side / Back Side: Specify the side of the card to laminate: - No Lamination - Use Left LAM - Use Right LAM - First Available More Settings: When selected, the Lamination window is displayed. Lamination Mode Front Side / Back Side: Specify the side of the card to laminate. Available options are: - No Lamination - First Available - Use Right LAM - Use Left LAM

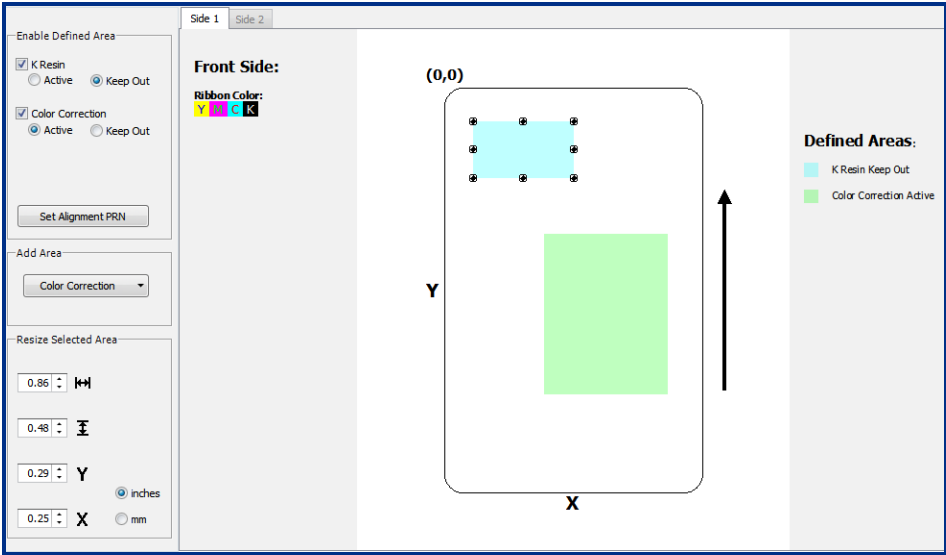
Device Settings	
Menu option	Description
	Left/Right Lamination Type: The type of laminate affects the temperature required for lamination. Available options are: • Clear Whole PolyGuard • Clear Whole UV Blocking PolyGuard • Holographic Orbit View PolyGuard • Holographic Whole PolyGuard • Clear Chip Cutout PolyGuard (left bay only) • Clear Chip Cutout UV Blocking PolyGuard (left bay only) • Holographic Chip Cutout PolyGuard (left bay only) • Clear Polyguard, Half Patch (right bay only) • Holographic PolyGuard, Half Patch (right bay only) Lamination Position: Click the arrows to adjust the horizontal position of the laminate. The default is 0. The adjustment arrows point in the direction the patch moves on the card. The maximum horizontal value is 100 pixels (10 pixels=0.03" [0.8 mm]) Lamination Temp offset: The lamination process starts when the heat roller reaches the default temperature of 185 Celsius plus or minus the value set here. • Lower limit = -20 • Upper limit = 18 Flatten Card Enable: Select this option to enable the flattener. Dwell Time (seconds per inch): Sets the Dwell Time for the flattening process. • Lower limit = 1 second per inch • Upper limit = 3 seconds per inch
Print Mode	If Flip Card Before Print is selected, the reverse side of the card is printed first. Note: This option is available only for dual-sided card printing and is grayed out if a dual-sided module is not detected.

Print Image

Menu option	Description
Ribbon Color	This option allows the printer to automatically select the colors to print or allows you to specify card colors. This setting is determined by the ribbon detected in the printer and the selection of single- or dual-sided printing. Auto Color: Automatically detects the ribbon type and splits the panel set when applicable. When Auto Color is selected, Manual Select is disabled. Auto Split: If a dual-sided module is detected, prints YMCK on the front and K on the back. Manual Select: Displays the Ribbon Colors window for you to select from the list of available colors.  Select Image Colors Front / Back: Available options are: • YMCK • YMC • K • YMCKH • YMCH • KH • YMCF • YMCFK Ribbon Type: Available options are: • YMCK • YMCKK • YMCKH • YMCFK • K Premium Resin

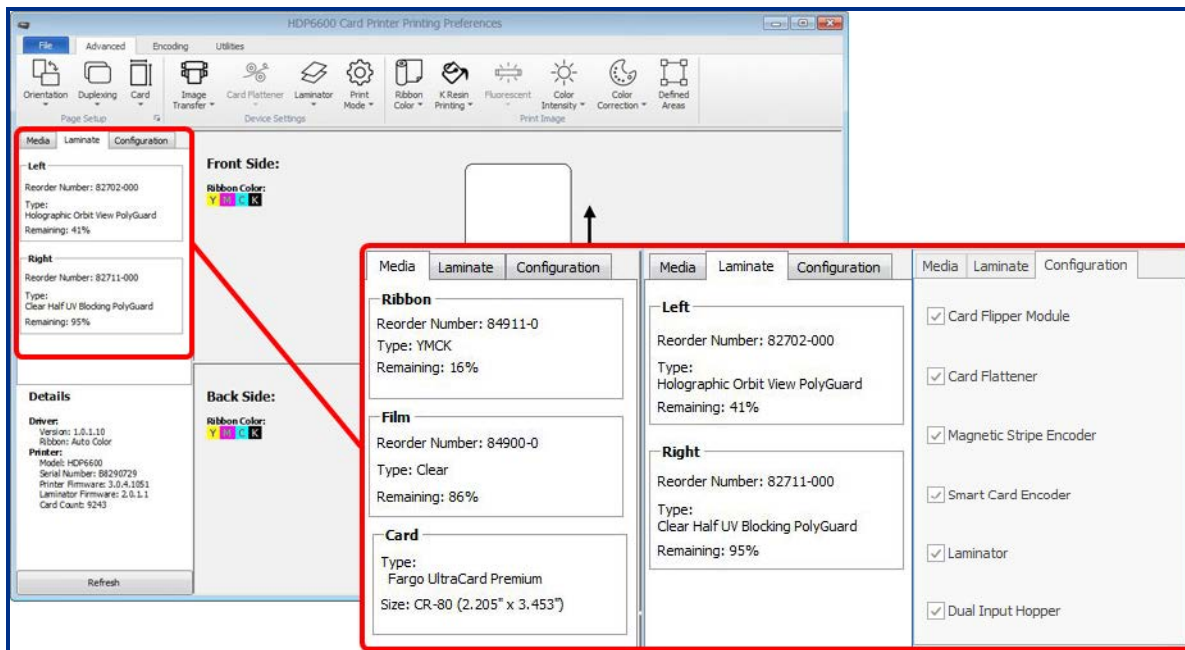
Print Image	
Menu option	Description
K Resin Printing	This option controls where the resin black (K) panel of a full-color ribbon is printed. Resin black is desirable for text and barcodes due to its sharp, saturated color. It is generally not recommended for pictures, borders, or areas that are normally colored. Available options are: Dither Type: - Graphics - Graphics 2 - Photos More Settings: This option is available when Ribbon Color is set to Auto Color or Manual Select. This option is only available with YMC-K panel combinations. This option opens the K Resin Printing window and provides the ability to: - Print black in image using K-panel resin (white background) - Print black in image using K-panel resin (color background) - Remove resin from image in selected area (keep out). See the Defined Areas option. - Print black in selected area of image. See the Defined Areas option.  Use K Resin to Print Black in Images: Prints black in images using K-panel resin (white or color backgrounds) and automatically selects Remove YMC under K Resin. Remove YMC under K Resin: Select this option to print black with the K resin panel only. YMC Black Text (Default is K): This option prints black text with YMC instead of K. K Resin Threshold in Images: When Use K Resin to Print Black in Images is selected, this option sets the K resin usage limit. - Lower limit = 1 - Upper limit = 255 Default: Click this button to return the listed threshold to the factory setting.

Print Image	
Menu option	Description
Fluorescent	This option is available when the YMCFK Ribbon Type is selected on the Ribbon Colors window. Available options are: Invert Image: Causes light or white areas of the image to fluoresce and dark colors to remain dark on the printed card. Dual-transfer: The fluorescing dye can be applied to a separate panel of HDP film. This enhances visibility. Note: Dual-transfer is not an option if a PVC card type is selected. Image on Next Page: Fluorescent print image is on the following page in the print job. This means the application must print an extra page. (For example, single-sided = page 2, dual-sided = pages 2 and 4).
Color Intensity	Controls the overall darkness and lightness of the printed color.  Dye-Sub (YMC): This slider controls the overall darkness and lightness of the dye-sub printed image. Any adjustments only affect those images printed with dye-sublimation (YMC-type) ribbon panels. - Moving the slider to the left causes less heat to be used; the prints are lighter. - Moving the slider to the right cause more heat to be used; the prints are darker. Resin (K): The heat is controlled for both front and back of cards. This control can be helpful for fine-tuning the sharpness of resin text and bar codes. This slider controls amount of heat the printer uses when printing with the resin black panel. - Moving the slider to the left causes less heat to be used; the resin images are lighter or less saturated. - Moving the slider to the right causes more heat to be used; the resin images are darker or more saturated. Default: Returns the listed percentages to the factory settings.
Color Correction	Default: Sets the optimal and most accurate color setting for this device. Legacy: Attempts to duplicate the HDP5000 color settings. Vibrant: Provides a vibrant color matching profile. None: Uses the uncorrected output from the printhead.

Print Image	
Menu option	Description
Defined Areas	Adds and removes defined areas for K resin and color correction. Enable Defined Area: Select the type of area to add. Each defined area is represented by the following colors: K Resin: - Active: Gray - Keep Out: Cyan Color Correction: - Active: Green - Keep Out: Yellow Set Alignment PRN: Click this button to retrieve a saved print file to verify the defined locations on your card. Add Area: Defines additional areas. Select K Resin or Color Correction from the drop-down list. Resize Selected Area: Defined areas can be moved or re-sized by selecting the area and either dragging one of the handles to the desired size or by manually setting the horizontal, vertical, X, and Y coordinates. You can also change the area sizes to be inches or mm. To remove defined areas, select the area and press Delete. 
Security	Secures print job information. Resin Scramble: The system can hide any information printed with the resin panel. Encrypt Print Job: AES256 encryption protects the data passed from the computer to the printer.

3.3.1 Information panel

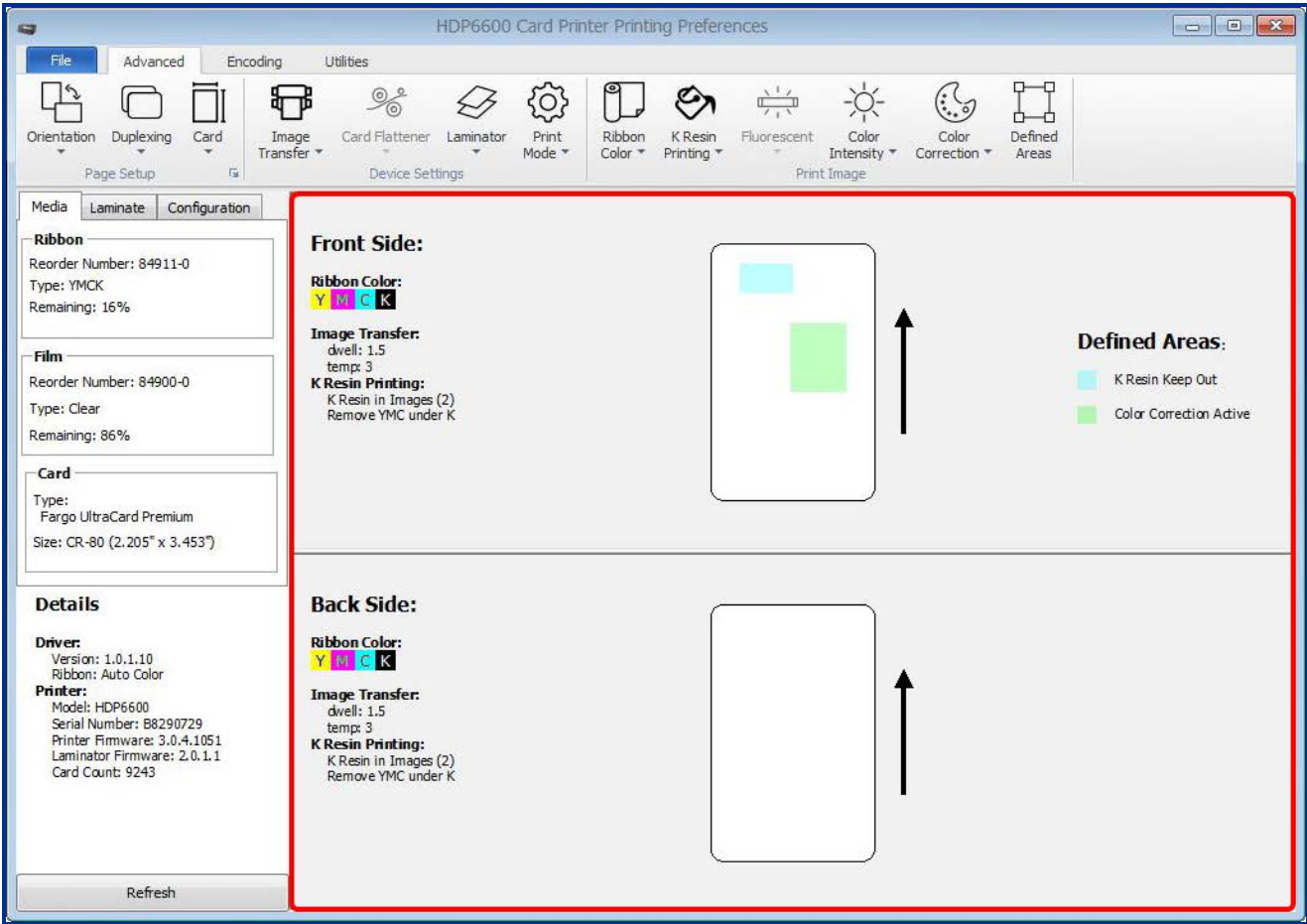
This panel is displayed on the left side of the **Advanced**, **Encoding**, and **Utilities** menu tabs.



Field	Definition
Media tab	Automatically detects the materials in the printer such as the ribbon, film, and cards.
Ribbon	Displays the reorder number, type, and remaining ribbon level detected.
Film	Displays the reorder number, type, and remaining film level detected.
Card	Displays the card type and card size detected in the printer.
Configuration tab	Displays any automatically detected features in your printer. Features are present when check boxes are selected. If communication with the printer does not exist, these configuration items can be manually selected. Available options are: • Card Flipper Module (dual-sided module) • Card Flattener • Magnetic Stripe Encoder • Smart Card Encoder • Laminator • Dual Input Hopper
Laminate tab	This tab is displayed when Laminator is selected on the Configuration tab.
Left	Displays the reorder number, type, and remaining laminate level detected.
Right	Displays the reorder number, type, and remaining laminate level detected.
Details	Displays the driver and printer information. See 3.2.5 Details window for a description of these fields.

3.3.2 Card image area

The card image area displays a representation of the selected card options. The options include card side, ribbon color descriptor, image transfer settings, defined areas legend (if specified), and single-sided or dual-sided print area images.

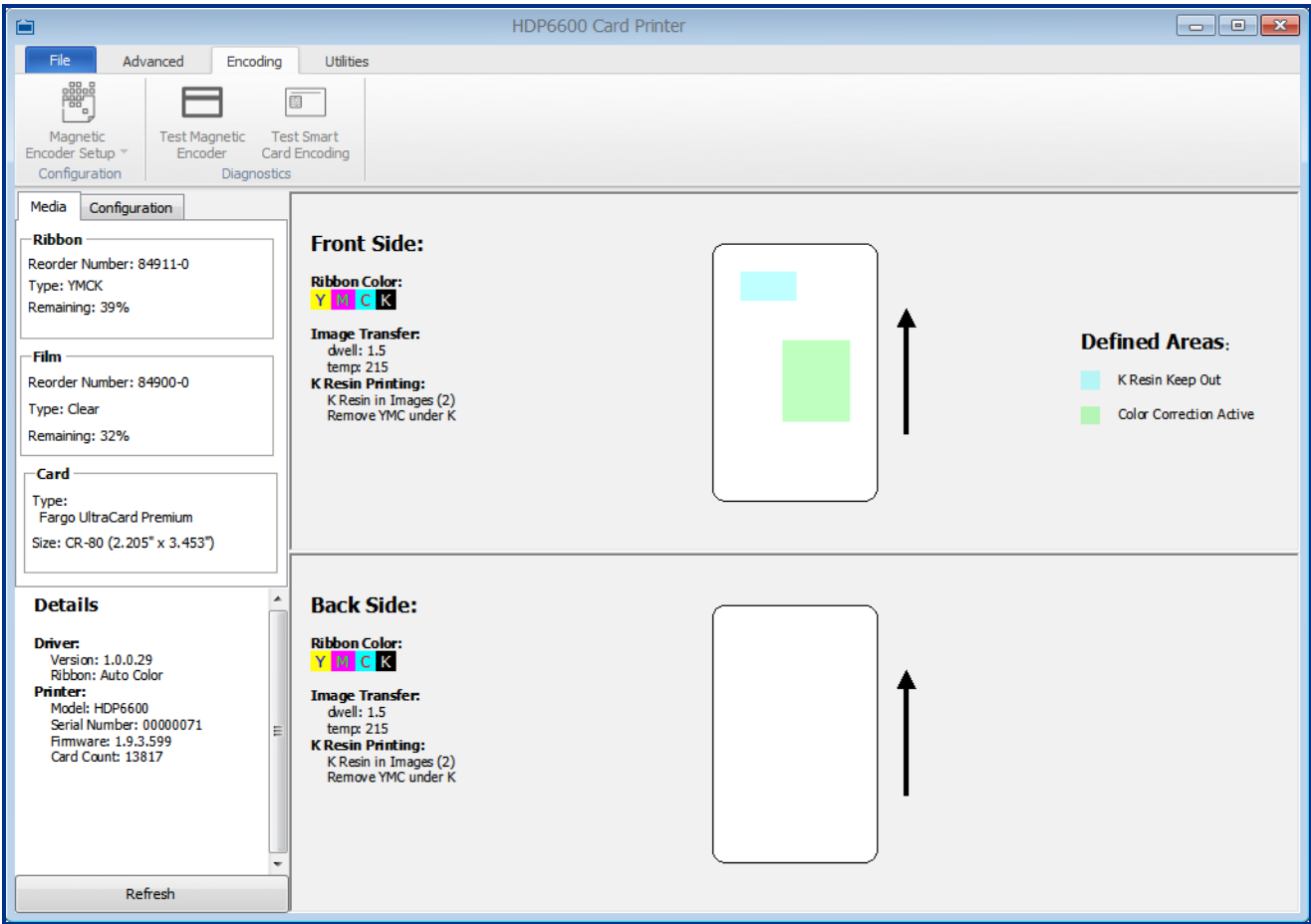


Field	Definition
Front Side/Back Side	Displays a single- or dual-sided card in a portrait or landscape orientation. This is determined by the selections made in the Page Setup area on the Advanced tab. If Single Sided is selected, this window displays all fields for Front Side. If Dual Sided is selected, this window displays all fields for Front Side and Back Side.
Ribbon Color	Displays the color descriptors for the card side. These are the detected ribbon colors. In addition, objects visually display how the ribbon is split (as shown in Advanced tab > Ribbon Color).
Image Transfer	Displays any customized Image Transfer settings.
Fluorescent	Displays any defined Fluorescent settings.
K Resin Printing	Displays any defined K Resin Printing settings.
Laminator	Displays any defined Laminator settings.
Color Correction	Displays any defined Color Correction settings.
Transfer Film	Displays any defined Transfer Film settings (as shown in Advanced tab > Image Transfer). Usage displays how many film panels will be used on the indicated side.

Field	Definition
Card Flattener	Displays any defined Card Flattener settings.
Print Direction	Specifies the direction the card travels through the printer.
Defined Areas	Displays any defined Active or Keep Out selections for the K Resin and Color Correction options specified in Defined Areas .

3.4 Encoding menu tab

This tab contains the options for controlling the magnetic stripe encoding process.

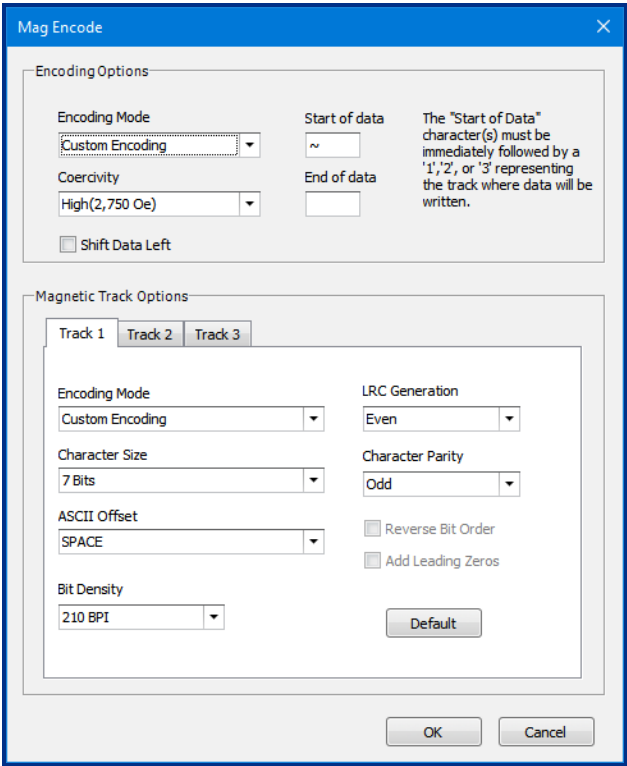


Field	Definition
Configuration	
Magnetic Encoder Setup	Specifies magnetic encoder setup. Available options are: - ISO (default) - Custom - JSII - Raw Binary - More Settings displays the Mag Encode window. See 3.4.1 Magnetic encoder setup configuration.

Field	Definition
Diagnostics	
Test Magnetic Encoder	Tests magnetic encoder in the printer. See 3.4.4 Test magnetic encoder .
Test Smart Card Encoding	Tests smart card encoder in the printer. See 3.4.5 Test smart card encoding .

3.4.1 Magnetic encoder setup configuration

The **Mag Encode** window contains options for controlling the magnetic stripe encoding process.

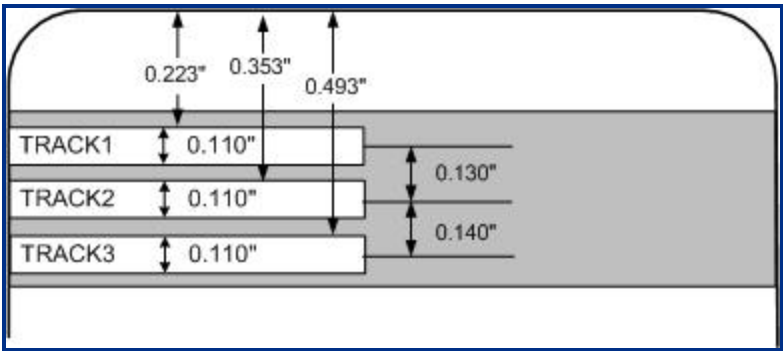


Field	Description
Encoding Options	Set the Encoding Mode and Coercivity or modify the ISO standards for Tracks 1, 2 and 3. ISO Encoding: sends a formatted set of characters to the encoding module. The magnetic track tabs are inactive and display ISO defaults for each track. This is the default. See 3.4.2 ISO track locations. Custom Encoding: all magnetic track options are active and can be changed. Raw Binary Encoding: sends a raw binary string rather than a formatted set of characters to the encoding module. Some magnetic track options are enabled. JIS II Encoding: specific standards are used. The magnetic track tabs are inactive and display JIS II defaults for each track. Coercivity: Select the Coercivity option (Oersted [Oe]) for the Magnetic Stripe type for the Card Type. - Super High Coercivity = 4,000 Oe - High Coercivity = 2,750 Oe (HID high coercivity UltraCard IIIs are 2750 Oe) - Medium Coercivity = 600 Oe - Low Coercivity = 300 Oe Shift Data Left: This option shifts the recorded magnetic data to the left-hand side of the magnetic stripe on the card. This is used when cards require insert type readers.

Field	Description
Magnetic Track Options	If these options are enabled, the user can specify how tracks are to be configured. All tracks display the same options. Encoding Mode: Displays the encoding mode selected. Character Size: Sets the character data size (bits per character) used to encode the magnetic data on the currently selected track. Note: This character size includes the parity bit (if enabled). When the drop-down list is enabled, selections vary for the selected encoding mode: - Custom encoding: 5 and 7 bits - Raw binary encoding: 4 and 8 bits ASCII Offset: Sets the character ASCII offset used to encode the magnetic data on the currently selected track. Options are: NULL, SPACE, and ZERO. Note: This character-offset value is subtracted from the ASCII value of each magnetic stripe data character prior to encoding on the track. Bit Density: Sets the bit recording density (bits per inch) used to encode the magnetic data on the currently selected track. Options are: 75 and 210 BPI. LRC Generation: Sets the LRC generation mode used to encode the magnetic data on the currently selected track. Options are: No LRC, Even Parity, and Odd Parity. Character Parity: Sets the encoding mode used to encode the magnetic data on the currently selected track. Options are: No Parity, Even Parity, and Odd Parity. Reverse Bit Order: This option is used to reverse the character bits for the encryption of data in specific programs. Add Leading Zeros: This option is used to add a set number of leading zeros to the magnetic string to move the starting point of the encoded data in specific programs for encryption of data. Default: Resets defaults for the current track.

3.4.2 ISO track locations

The magnetic encoding module encodes onto tracks in accordance with an ISO/IEC 7811-2 magnetic stripe.



3.4.3 Sending track information

Magnetic track data is sent in the form of text strings from the application software to the printer driver.

The printer driver must be able to differentiate between magnetic track data and the rest of the printable objects, specific characters must be added to encode the magnetic data. These characters specify the data that is to be encoded, the tracks to encode, and marks the start and stop of the data string.

In some cases, these specific characters are automatically added to the string of track data by ID software applications.

In most cases the user must carefully add these characters to the string of data. If these characters are not added to the track data, the text intended for the magnetic track appears as printed text on the card. To avoid this, track information must be entered as described here.

When entering track data, the ~ (tilde) character is entered first, followed by the track number (1, 2 or 3) on which the data should encode. This is followed by the data to be encoded.

The first character of this data string must be the track's specific Start Sentinel (SS) and the last character must be the specific End Sentinel (ES).

The characters or data in between the SS and ES can include all of the valid characters specific to each track.

- The number of these characters, however, is limited by each track's maximum character capacity.
- When segmenting track data, the appropriate Field Separator (FS) must be used. The [ASCII code and character table](#) shows the SS, ES, FS and the valid characters defined for each track.

Reviewing the sample string

Track 1: ~1%JULIEANDERSON^1234567890?

Track 2: ~2;1234567890987654321?

Track 3: ~3;1234567890987654321?

Track	Start sentinel	End sentinel	Field separator	Valid characters	Maximum number of characters
Track 1	%	?	^	ASCII 32-95 (See the table)	78
Track 2	;	?	=	ASCII 48-63 (See the table)	39
Track 3	;	?	=	ASCII 48-63 (See the table)	106

ASCII code and character table

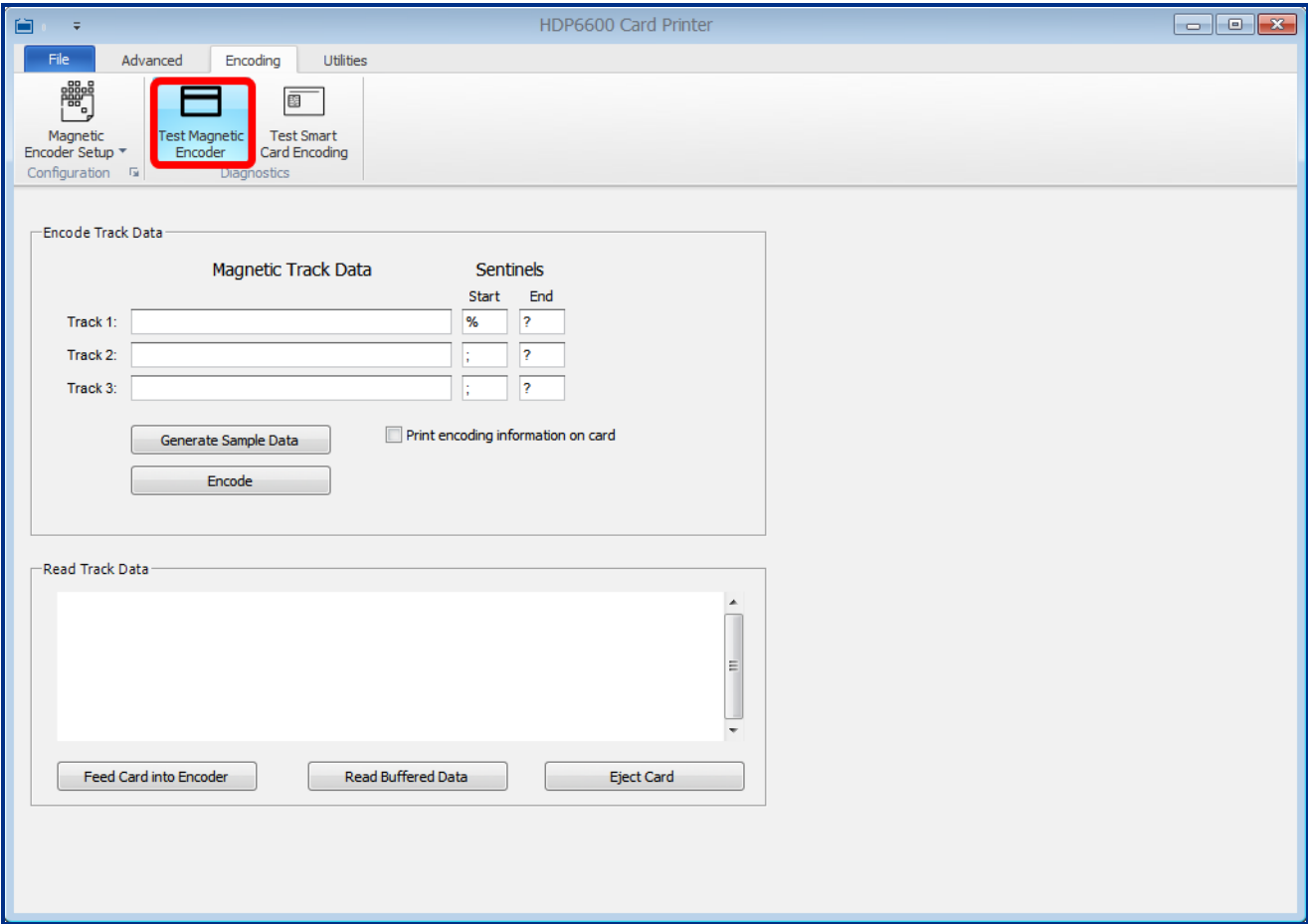
ASCII code	Character	ASCII code	Character	ASCII code	Character
32	space	54	6	76	L
33	!	55	7	77	M
34		56	8	78	N
35	#	57	9	79	O
36	\$	58	:	80	P
37	%	59	;	81	Q
38	and	60	<	82	R
39	'	61	=	83	S



ASCII code	Character	ASCII code	Character	ASCII code	Character
40	(	62	>	84	T
41	)	63	?	85	U
42	*	64	@	86	V
43	+	65	A	87	W
44	'	66	B	88	X
45	-	67	C	89	Y
46	.	68	D	90	Z
47	/	69	E	91	[
48	0	70	F	92	\
49	1	71	G	93	]
50	2	72	H	94	^
51	3	73	I	95	_
52	4	74	J		
53	5	75	K		

3.4.4 Test magnetic encoder

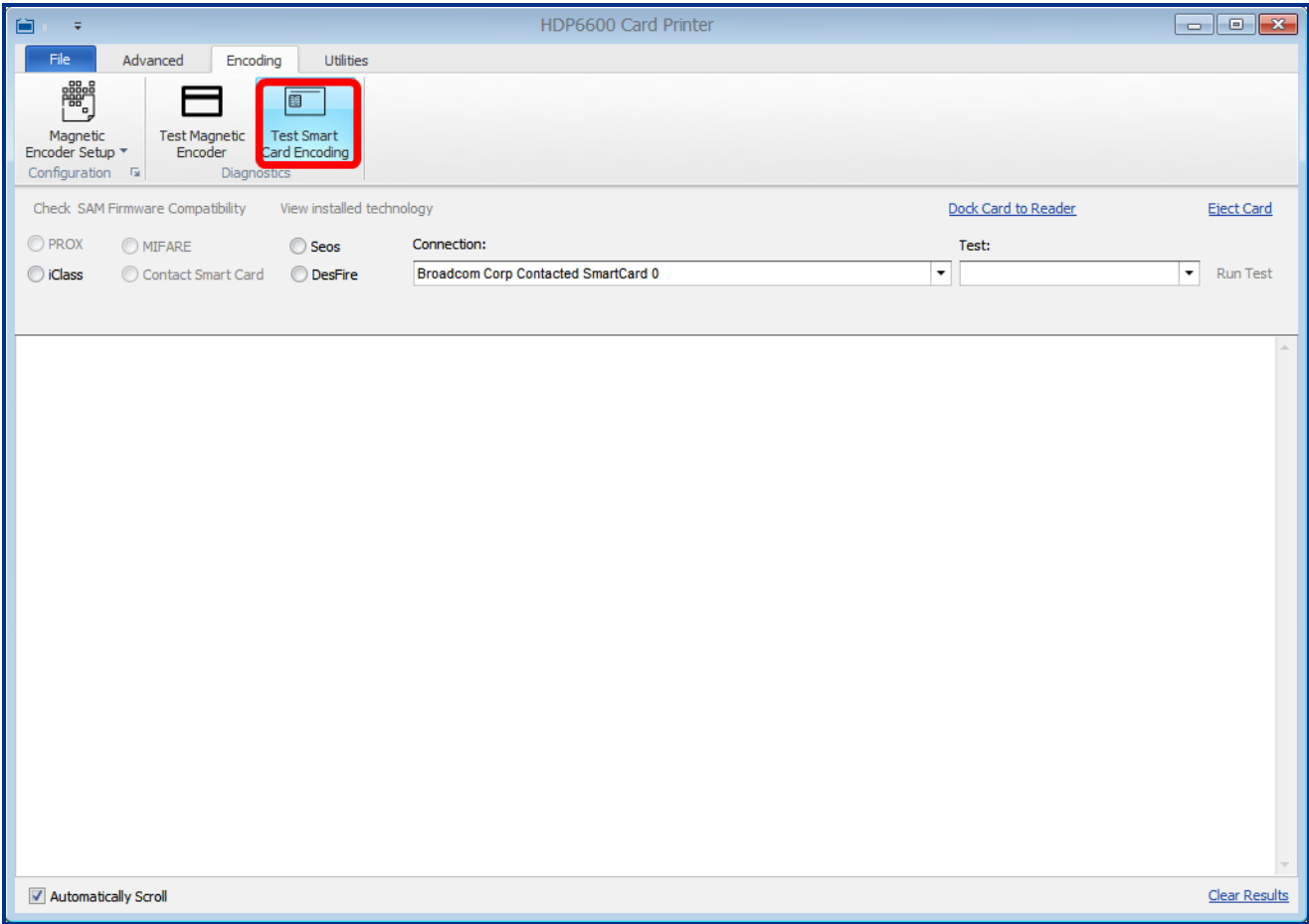
Exercises the printer's magnetic encoding functionality independent of image or application.



Field	Description
Encode Track Data	Magnetic Track Data: - Track 1: - Track 2: - Track 3: Sentinels: - Start: - End: General Sample Data: Encode: Print encoding information on card:
Read Track Data	Feed Card into Encoder: Read Buffered Data: Eject Card:

3.4.5 Test smart card encoding

Provides the ability to test the smart card encoder in the printer.

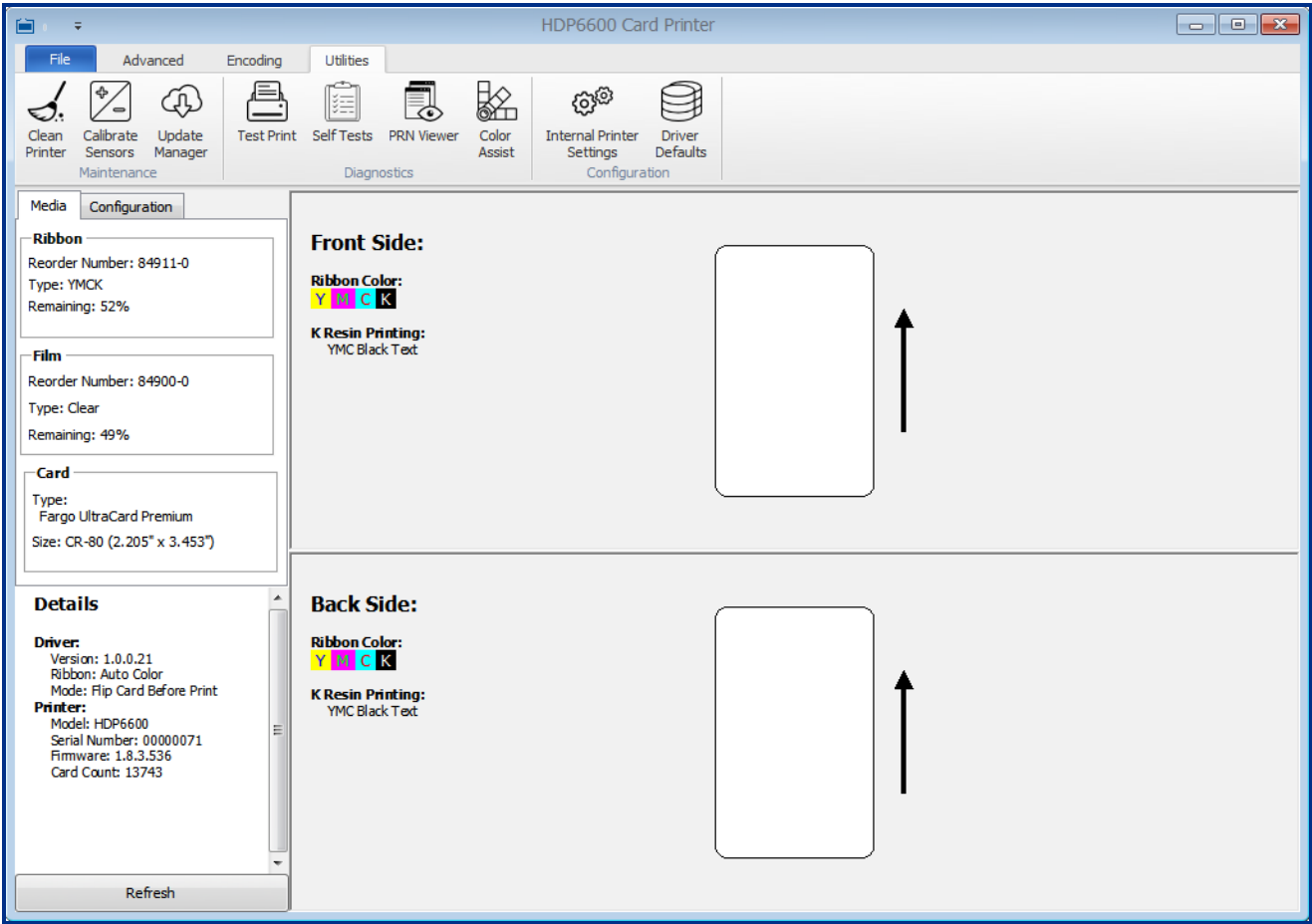


Field	Description
Check SAM Firmware Compatibility	
View installed technology	Available options are: • PROX • iCLASS / iCLASS SE™ • MIFARE • Contact Smart Card • Seos® • DesFire
Dock Card to Reader	Select this link to instruct the printer to dock the card to the magnetic encoder.
Eject Card	Select this link after the test has been performed to eject the card from the printer.
Connection	Select the type of encoder from the list.

Field	Description
Test	Select the test you wish to run. Available options are: - Perform Reader Test - Get Vendor Name - Get Vendor IFD Version - Get Vendor IFD Type - Get Reader System Name - Get Reader Friendly Name - Get Reader Max Data Rate Click Run Test to perform the test.
Automatically Scroll	Select this box to allow the test results in the status window to automatically scroll as new information is obtained.
Clear Results	Select this link to clear the test results in the status window.

3.5 Utilities tab

This tab provides several maintenance, diagnostic, and configuration settings for your printer.



Field	Definition
Maintenance	

Clean Printer	Specifies how to clean the printer using a cleaning card.
Calibrate Sensors	Specifies how to calibrate the ribbon and film sensors.
Update Manager	Checks, manages, and downloads updates for printer firmware and drivers.
Diagnostics	
Test Print	Sends sample cards to the printer using the current driver settings.
Self Tests	Sends commands to activate on-board self-tests in the printer.
PRN Viewer	Views a print file (PRN) as an image or send the file to the printer.
Color Assist	Create swatches of sample colors that can be printed and used for color matching.
Configuration	
Internal Printer Settings	Modifies settings stored in the printer.
Driver Defaults	Saves and restores printer instance default settings.

3.5.1 Clean printer

Follow the instructions on the page to clean the printer. The cleaning routine begins after all current print jobs have completed.

The **CardPath** option sends the cleaning routine to the printer. Follow the instructions on the page to clean the card path.

Card Path

Film Roller

Laminator

1. Remove Card, Film and Laminate and close the covers.
2. Remove the paper backing from both sides of the Cleaning Card.
- *Note: (DO NOT remove left liner if a magnetic encoding module is installed in your printer.)
3. Insert the Cleaning Card into the Card Hopper's infeed rollers. See the diagram below.
4. Click on the Cleaning button below.
5. Guide the Cleaning Card into the printer if necessary.
6. When the Cleaning routine is complete, the Cleaning Card will exit the Printer.
7. Reinstall the Card, Film and Laminate.

Cleaning

The **Film Roller** options sends the cleaning routine to the printer. Follow the instructions on the page to clean the film roller.

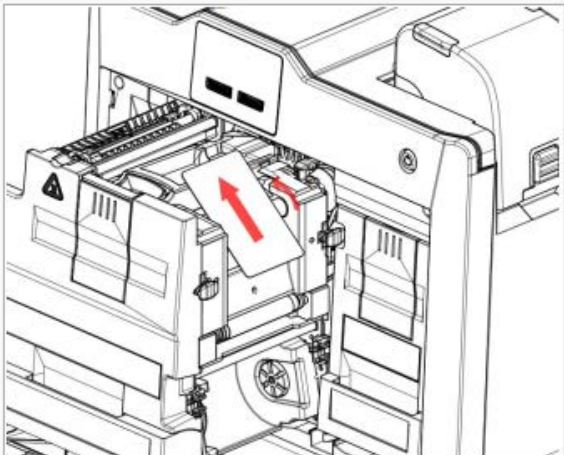
Card Path

Film Roller

Laminator

1. Click the cleaning button below
2. Press the right enter button to start the cleaning routine, or left button to exit.
3. When prompted, open cover and remove film, leave film drawer in open position.
4. Press the right button to clear remove film message.
5. Press the right enter button to start the cleaning routine, or left button to exit.
6. Roller will start rotating for cleaning.
7. When routine completed, press the right enter button to restart the cleaning routine, or left button to exit.
8. When prompted, reinstall film, close film drawer and front cover.

Cleaning



The **Laminator** option sends the cleaning routine to the printer. Follow the instructions on the page to clean the laminator.

Card Path

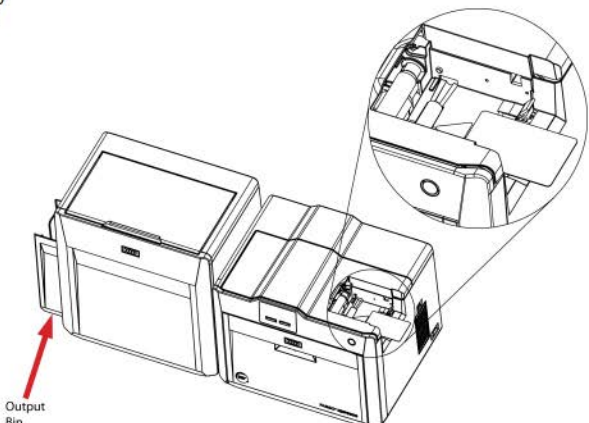
Film Roller

Laminator

1. Remove input card hopper from the printer
2. Take out the print ribbon and InTM film from the printer
3. Close the ribbon and film door
4. Please use the CR-80 Cleaning Card (Part Number - 082139). Remove the paper backing from both sides of the Cleaning Card. *Note: DO NOT remove small liner strip if a magnetic encoding module is installed in your printer.
5. Insert the Cleaning Card into the Card Hopper's in-feed rollers. See the diagram below.
6. Click on the Clean button below
7. Guide the Cleaning Card into the printer if necessary.
8. When the Cleaning routine is complete, the Cleaning Card will exit into the outp
9. Open the ribbon and film door and reinstall the print ribbon and InTM film rolls.
10. Close the ribbon and film door.

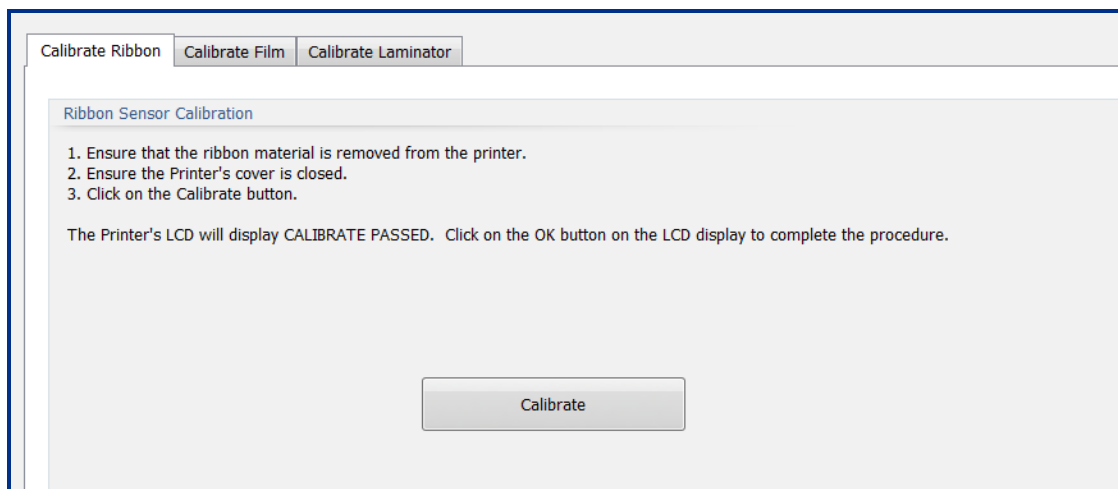
Note: The Cleaning routine will begin after all current print jobs have completed.
A standard CR80 size cleaning card must be used.

Cleaning



3.5.2 Calibrate sensors

The **Calibrate Ribbon** option sends the calibrate ribbon command to the printer. Follow the instructions on the page for calibration of the ribbon sensor.



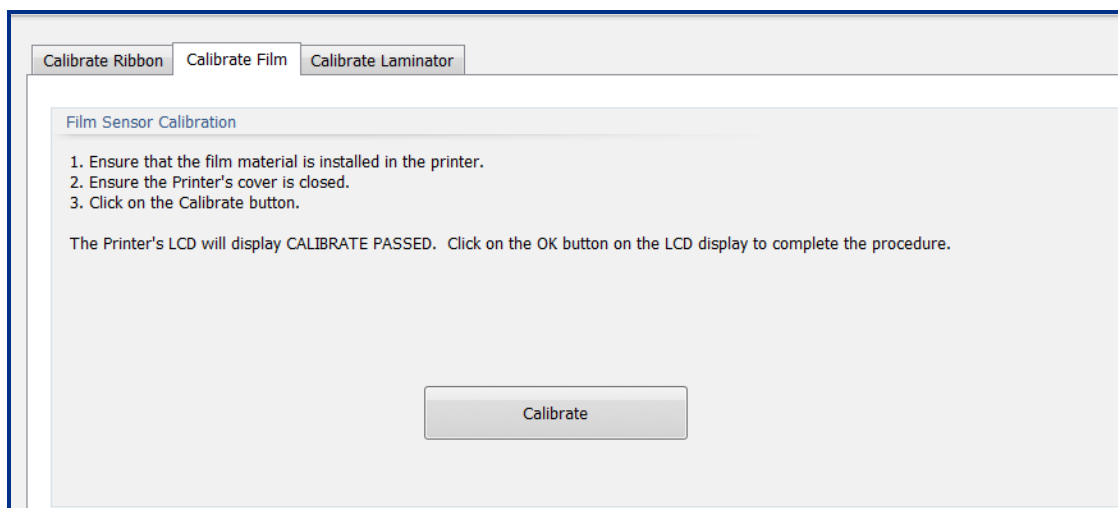
The screenshot shows a software interface with three tabs at the top: "Calibrate Ribbon", "Calibrate Film", and "Calibrate Laminator". The "Calibrate Ribbon" tab is selected. Below the tabs, the title "Ribbon Sensor Calibration" is displayed. The instructions are as follows:

1. Ensure that the ribbon material is removed from the printer.
2. Ensure the Printer's cover is closed.
3. Click on the Calibrate button.

The Printer's LCD will display CALIBRATE PASSED. Click on the OK button on the LCD display to complete the procedure.

At the bottom center, there is a button labeled "Calibrate".

The **Calibrate Film** option sends the calibrate film command to the printer. Follow the instructions on the page for calibration of the film sensor.



The screenshot shows a software interface with three tabs at the top: "Calibrate Ribbon", "Calibrate Film", and "Calibrate Laminator". The "Calibrate Film" tab is selected. Below the tabs, the title "Film Sensor Calibration" is displayed. The instructions are as follows:

1. Ensure that the film material is installed in the printer.
2. Ensure the Printer's cover is closed.
3. Click on the Calibrate button.

The Printer's LCD will display CALIBRATE PASSED. Click on the OK button on the LCD display to complete the procedure.

At the bottom center, there is a button labeled "Calibrate".

The **Calibrate Laminator** option sends the calibrate laminator command to the printer. Follow the instructions on the page for calibration of the laminator sensor.

Calibrate Ribbon

Calibrate Film

Calibrate Laminator

Lamination Sensor Calibration

1. Ensure that the laminate materials are installed in all stations to be calibrated.

2. Ensure the Laminator lid is closed.

3. Click on the Calibrate button.

The Printer's LCD will display CALIBRATE PASSED. Click on the OK button on the LCD display to complete the procedure.

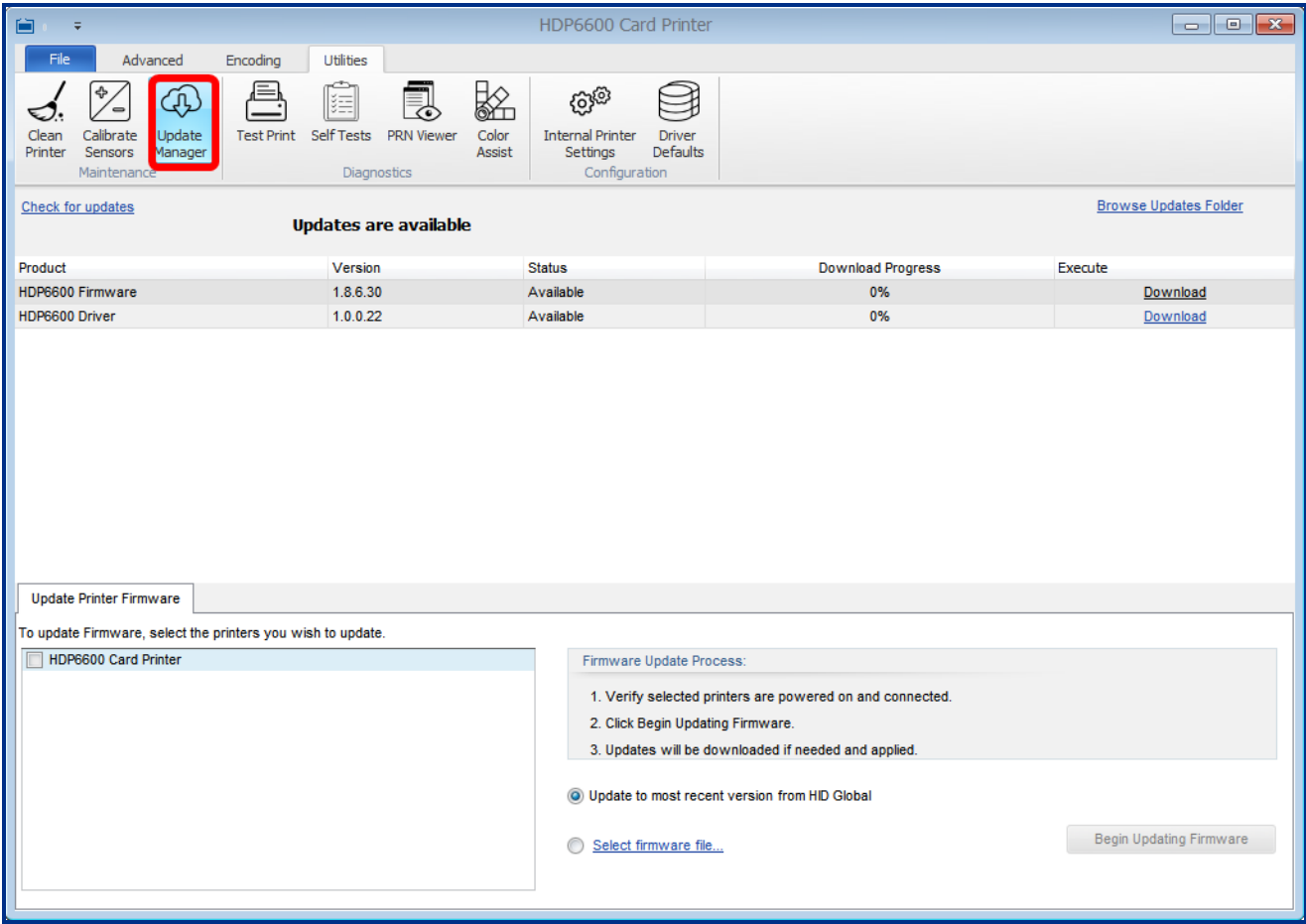
Please note that the laminator will only complete the calibration sequence when it has reached operating temperature, see the user guide for further details.

Calibrate Left LAM

Calibrate Right LAM

3.5.3 Update manager

This selection allows you to check, manage, browse, and download updates for printer firmware and drivers. Each update is identified by product, version, status, and download progress.

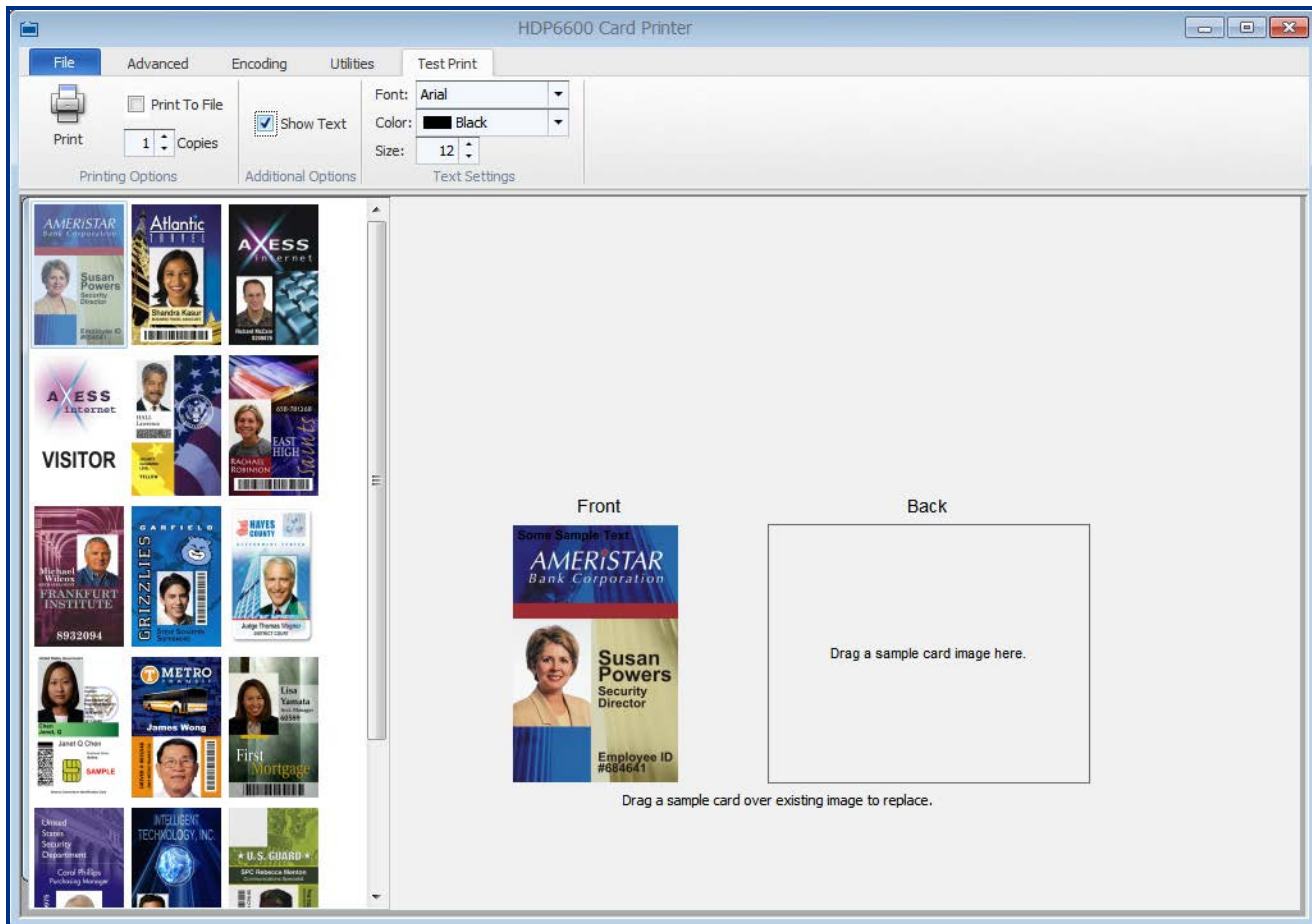


Field	Description
Check for updates	Click this link to check for any available firmware and printer driver updates. Available updates are displayed by product, version, status, and download progress.
Browse Updates Folder	Opens a window to browse the updates folders stored on your PC or available network.
Update Printer Firmware tab	Lists available HID printers connected to your computer.
Firmware Update Process	Describes the steps to update your printer firmware.
Select firmware file	Opens a window to browse for saved firmware files.
Begin Updating Firmware	Click this button to begin updating the firmware on the selected printer.

3.5.4 Test print

Print a sample card based on the selected settings.

Card images are displayed according to the **Advanced** tab > **Orientation** (Portrait / Landscape) and **Advanced** tab > **Duplexing** (Single Sided / Dual Sided) selections. See [3.3 Advanced menu tab](#). These selections provide accurate test prints.

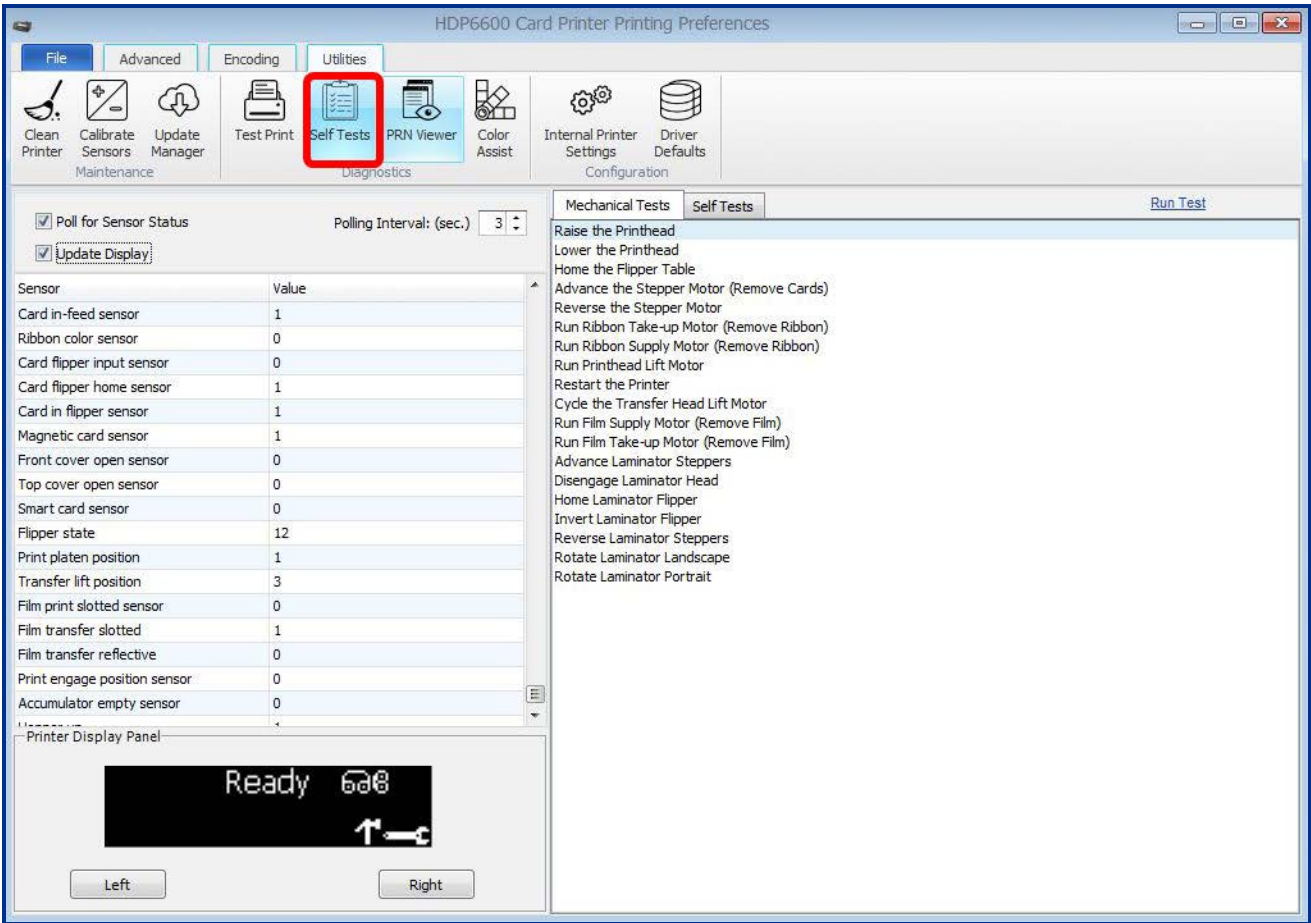


Field	Description
Front	Click and drag a sample card from the left side of the screen to the card outline on the right side of the screen. Cards images can be changed by dragging additional sample cards to the existing image. If a dual-sided module is detected, a Back card outline is displayed.
Print	Once a sample card is selected, click this icon to print the sample card. If the Print To File check box is selected, this option opens a new window to specify the file location and file name.
Print To File	Saves the sample card image as a .prn file.
Copies	Sets the number of sample cards to print. Use the arrows to specify the number of cards to print. Available values are 1-99.
Show Text	Select this option to display Some Sample Text at the top of the sample card. When this option is selected, the Font , Color , and Size options can be adjusted.
Font	Changes the font of the sample text on the card. This field is available when the Show Text option is selected.
Color	Changes the color of the sample text on the card. This field is available when the Show Text option is selected.

Size	Changes the font size of the sample text on the card. This field is available when the Show Text option is selected.
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3.5.5 Self tests

Provides the ability to run control feature commands resident in the firmware to exercise motors and sensors in the printer. These tests allow you to isolate printer functions and run them to determine operational status.

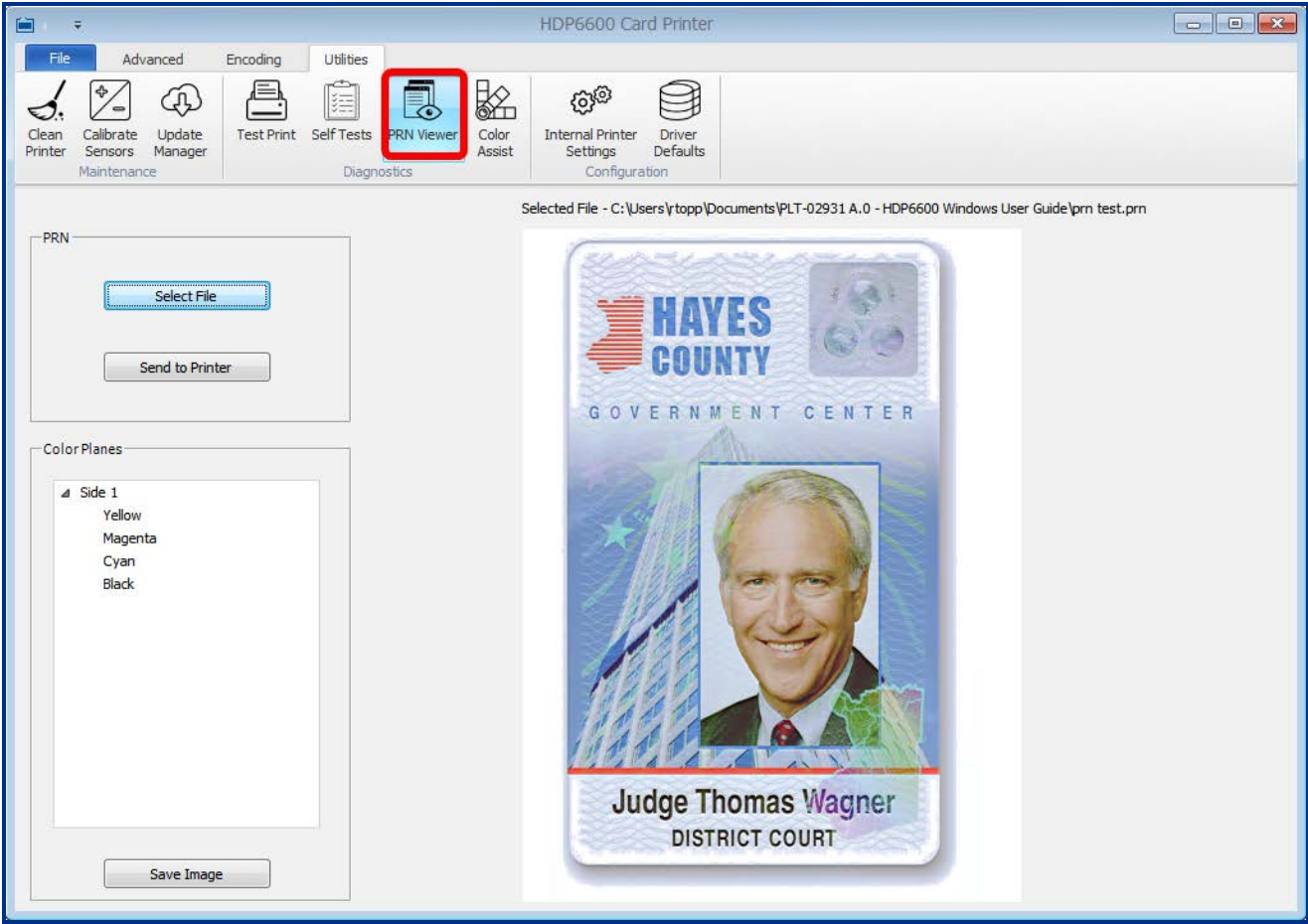


Field	Description
Poll for Sensor Status	When selected, each sensor is checked at the interval specified by the Polling Interval: (sec.) field.
Update Display	When selected, the Printer Display Panel reflects what is shown on the printer display.
Polling Interval: (sec.)	Sets the number of seconds to wait before each check of the printer status. Available values are 1 to 30 seconds.
Sensor/Value	Shows the list of printer sensors and their default values.
Printer Display Panel	Shows the current printer display. This window updates as the printer status changes.

Field	Description
Mechanical Tests	Lists the available mechanical tests. • Raise the Printhead • Lower the Printhead • Home the Flipper Table • Ribbon Sensor Calibration (Remove Ribbon) • Advance the Stepper Motor (Remove Cards) • Reverse the Stepper Motor • Run Ribbon Take-up Motor (Remove Ribbon) • Run Ribbon Supply Motor (Remove Ribbon) • Run Printhead Lift Motor • Calibrate the Film Sensors • Restart the Printer • Cycle the Transfer Head Lift Motor • Run Film Supply Motor (Remove Film) • Run Film Take-up Motor (Remove Film) • Advance Laminator Steppers • Disengage Laminator Head • Home Laminator Flipper • Invert Laminator Flipper • Reverse Laminator Steppers • Rotate Laminator Landscape • Rotate Laminator Portrait
Self Tests	Lists the available tests. • Alignment Self Test • Device Settings Self Test • Resin Self Test • Color Photo 1 • Color Photo 2 • Laminator Self Test
Run Test	Click this link to run the selected mechanical or self test.

3.5.6 PRN viewer

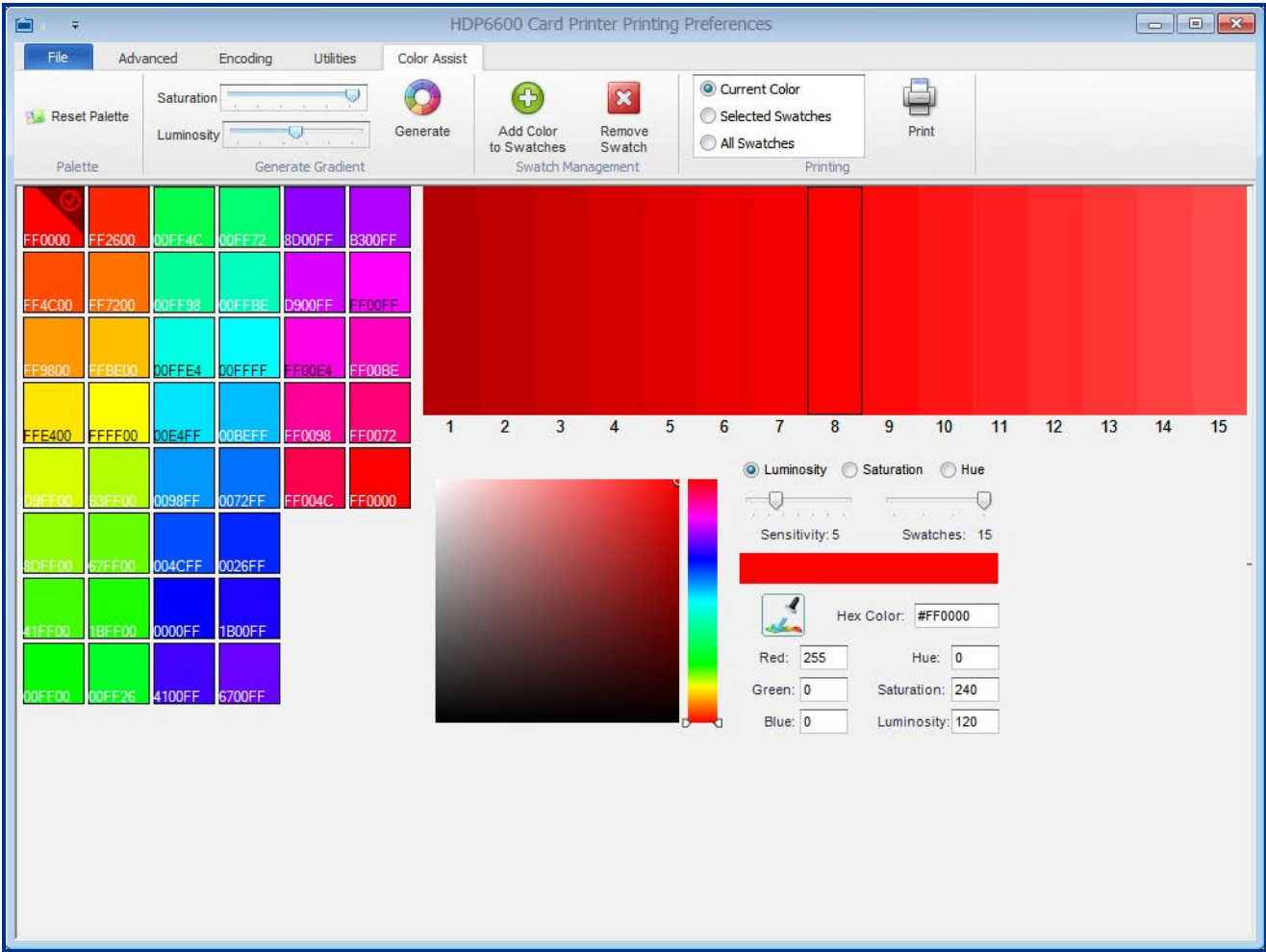
The PRN viewer provides the ability to view a print file (PRN) as an image. You can send print files to the printer to view proper layout, determine if image defects are part of the file going to the printer, and verify the printer driver settings are the same as the PRN file. You can also print copies of these for samples or troubleshooting.



Field	Description
PRN	
Select File	Click this button to browse for any saved printer file on your computer. The path and filename are displayed above the file image.
Send to Printer	Click this button to send the file to the printer.
Color Planes	
Side 1 / Side 2	Open the menu to view each color plane for this card to determine if there are any image defects.
Save Image	Click this button to save any of the color planes as .bmp files.

3.5.7 Color assist

Opens the **Color Assist** tab to define the RGB values to accurately depict the colors to print on your cards.



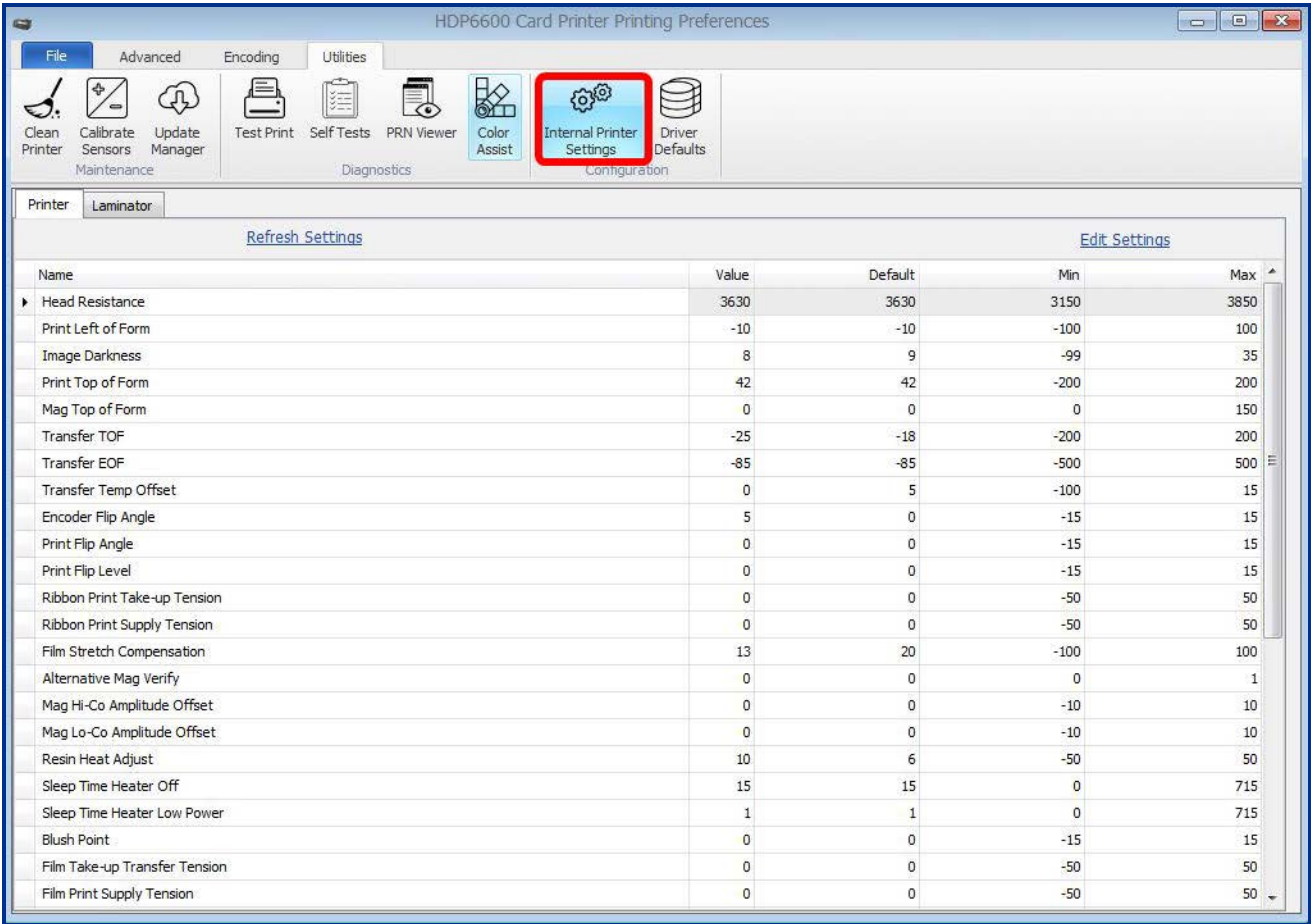
Field	Description
Palette	
Reset Palette	Resets your palette for new or future work.
Generate Gradient	
Saturation	Adjusts the intensity of the color. As the saturation increases, the colors appear more pure. As the saturation decreases, the colors appear more washed out gray.
Luminosity	Adjusts the brightness with a scale of white to black.
Generate	Click this icon to create the color gradient of the swatches based on the Saturation and Luminosity selected.
Swatch Management	
Add Color to Swatches	Click this icon to add the selected color to the visual list of color swatches.
Remove Swatch	Click this icon to remove the selected color from the visual list of color swatches.

Field	Description
Printing	
Current Color Selected Swatches All Swatches	Select one of these options to print: Current Color: Prints the currently selected color swatch. Selected Swatches: Allows you to select multiple swatches from the visual list. All Swatches: Selects all the swatches in the visual list.
Print	Prints the color swatches according to the selected option.

3.5.8 Internal printer settings

Use this option for adjusting the internal printer settings. These settings have been customized for the printer at the factory. These printer settings are HID advanced settings based on Electrically Erasable Programmable Read-Only Memory (EEPROM).

Note: Any changes affect the settings for the firmware.



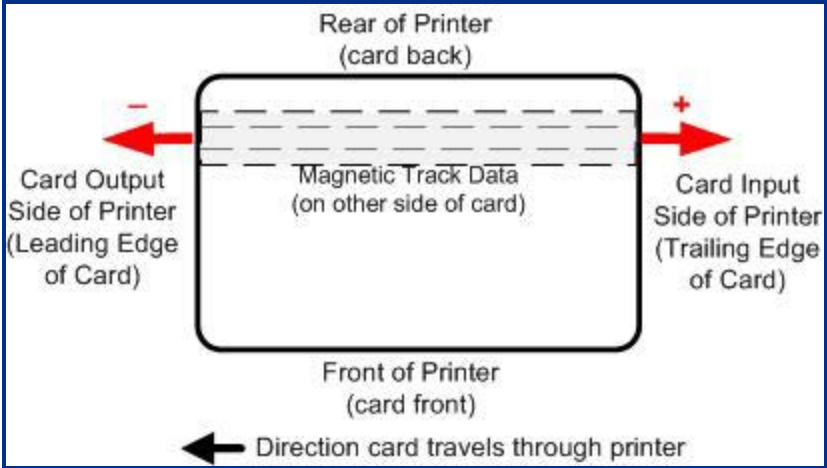
Field	Description
Name	Displays the label for each setting.
Value	Displays the current value for the setting.
Default	Displays the factory default value for the setting.
Min	Displays the minimum value available for the setting.
Max	Displays the maximum value available for the setting.
Refresh Settings	Click this link to refresh the values.
Edit Settings	This link toggles between editing and saving. Click this link to edit the settings in the Value column. When all updates have been made, click the link again to save your updates.
Save Settings	

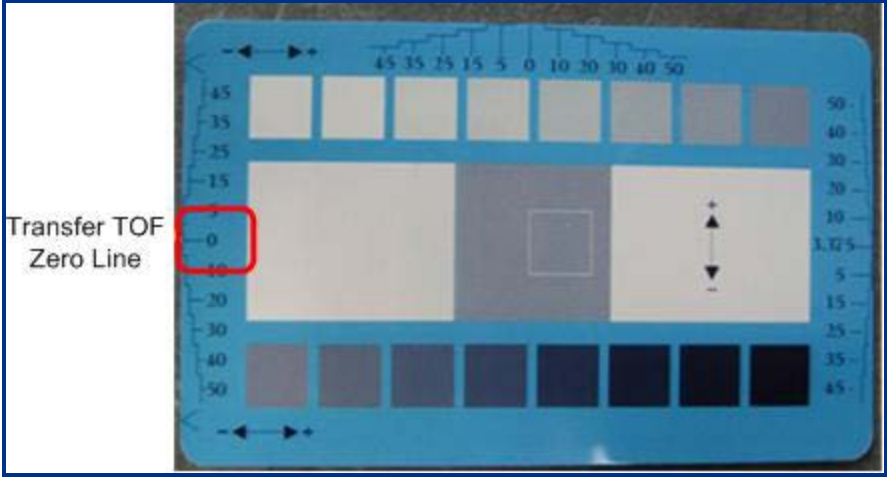
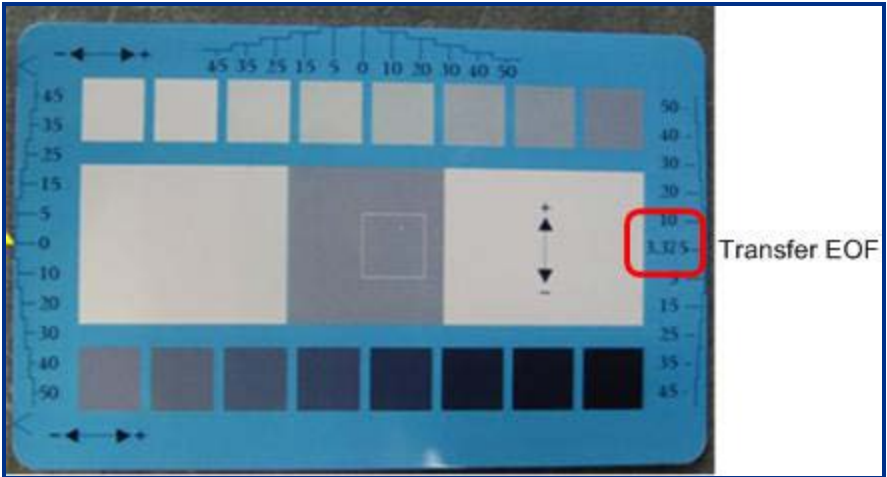
To change a setting, click the **Edit Settings** link. In the value column, change the numeric value in the row. When all updates are correct, click the **Save Settings** link.

Printer settings

Setting	Description
Head Resistance	This is factory set. If the main board or the printhead is replaced, then adjust this number. Locate the printhead setting number on the bottom of the printhead. The number reads: R=XXXX.
Print Left Of Form	Prints the alignment self-test card. Adjust the Print Left of Form up or down until the border of the left of form zero line is showing on the edge of the card. Measure the density square. Adjust the image density to 65% ± 1%. The image shows an alignment self-test card. At the top, a red box highlights the 'LOF Zero Line' scale, which ranges from 45 to 50. Below this, there are several gray squares of varying sizes. A red dashed circle highlights a specific square, and a red arrow points to it from a text box that reads 'Density Square Set to 65% ± 1%'. The card also features a vertical scale on the left and right sides, ranging from 45 to 50, and a central area with a grid of squares.
Image Darkness	Use this option to set the overall darkness of the printed image by increasing or decreasing the amount of heat the printhead uses while printing. Use the up and down arrows to increase or decrease the amount of heat. Important: If the value is set too high, the ribbon may jam or break.

Setting	Description
Print Top of Form	Print the alignment self-test card. Adjust the Print Top of Form until the green border is eliminated and the entire transfer alignment block is as shown in the bottom graphic Note: Due to variation in roller alignment, the green border may appear at a slight angle on the top of the card. Edge of transfer (green border) Transfer alignment block Image once adjusted

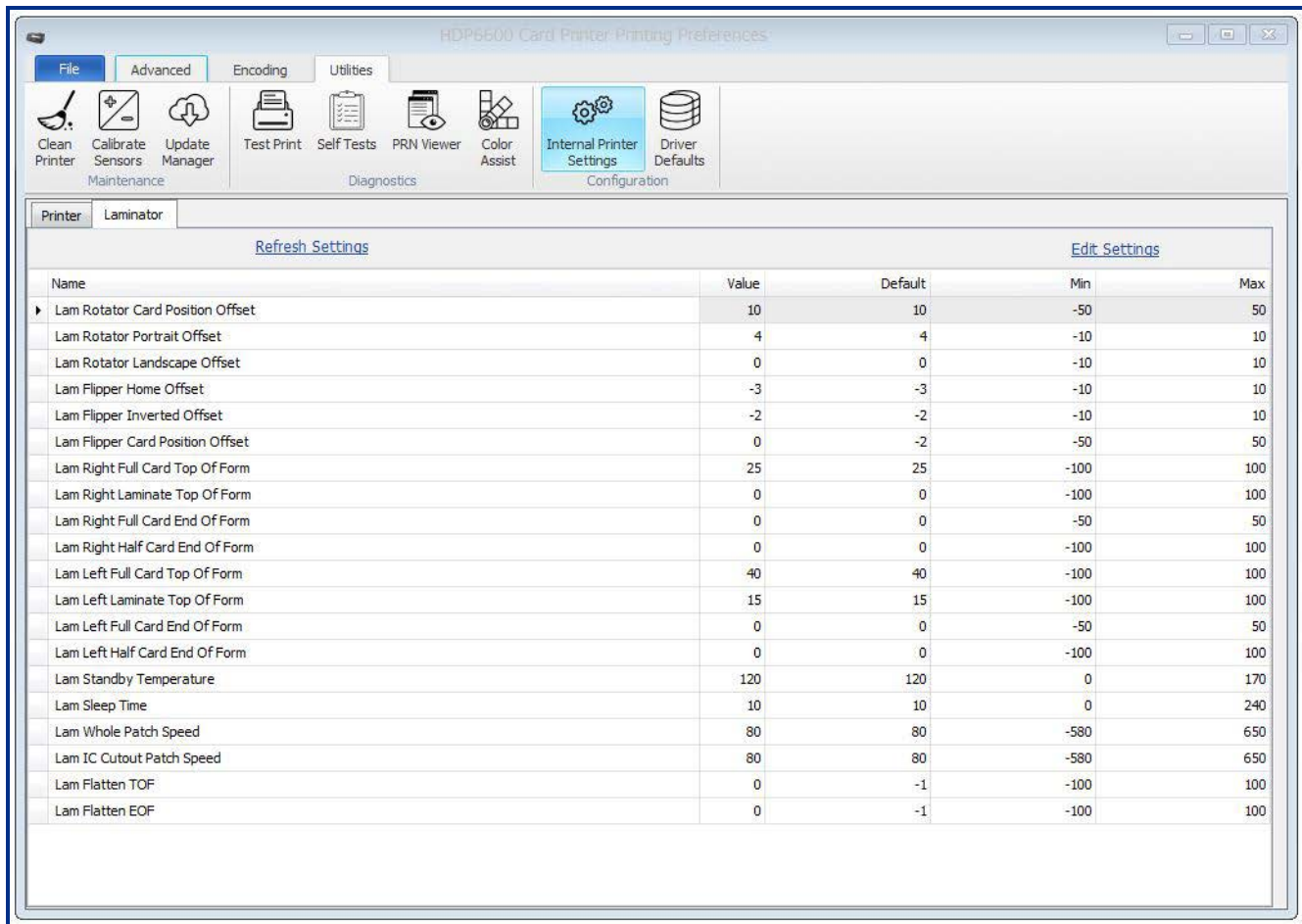
Setting	Description
Mag Top of Form	This option is only for the built-in magnetic stripe encoder. Use this option to shift the starting point of where the printer begins encoding the magnetic track data on a magnetic stripe of the card. When adjusting this value, keep in mind that a card and its magnetic stripe always remains in the same relative position as the card travels through the printer. Magnetic Data Direction The arrows on these buttons indicate the direction the magnetic data moves on the magnetic stripe on the card. Enter a positive value to move the start of the magnetic data toward the trailing edge of the card or the card input side of the printer. Maximum Adjustment Range The maximum adjustment range is 0-120. As a rule, 20 equals .030" (0.8 mm). Note: If the negative value is set too high, the printer may start encoding before the magnetic stripe on the card reaches the encoding head.  The diagram illustrates the card's path through the printer. A central rectangle represents the card, with 'Rear of Printer (card back)' at the top and 'Front of Printer (card front)' at the bottom. A dashed line across the middle is labeled 'Magnetic Track Data (on other side of card)'. A red arrow on the left points left, labeled 'Card Output Side of Printer (Leading Edge of Card)' with a minus sign. A red arrow on the right points right, labeled 'Card Input Side of Printer (Trailing Edge of Card)' with a plus sign. A black arrow at the bottom points left, labeled 'Direction card travels through printer'.

Setting	Description
Transfer TOF	Print the alignment self-test card. Adjust the Transfer TOF until the TOF zero line is located on the edge of the card. If the Transfer TOF is made too negative, the transfer roller can engage in front of the card causing a transfer jam. 
Transfer EOF	Print the alignment self-test card. Setting the Transfer EOF to a positive number causes the image length to grow. Setting the Transfer EOF to a negative number causes the image length to shorten. 

Setting	Description
Transfer Temp Offset	Both the printer and the printer software driver control the built-in transfer roller. To change the temperature of the transfer roller, adjust the temperature through the Image Transfer selection within the Advanced tab of the printer preferences. Once adjusted, the new temperature setting is sent down with the next print job along with the rest of the printer driver information. Before printing begins, the transfer roller automatically adjusts to the new temperature setting. This new temperature setting remains programmed within the printer until it is once again changed within the printer driver or until the printer is turned off. Whenever the printer is turned OFF, the transfer roller automatically resets and returns to the default temperature the next time the printer is turned ON. Disconnect the printer power supply. Technician Note: Cycling the printer power supply serves to reset the transfer roller to its default temperature. The temperature setting within the printer driver, however stays the same until it is changed.
	DANGER: THE PRINTER TRANSFER ROLLER CAN REACH TEMPERATURES EXCEEDING 350°F (175°C). USE EXTREME CAUTION WHEN OPERATING THE TRANSFER ROLLER. NEVER TOUCH THE TRANSFER ROLLER UNLESS THE PRINTER POWER HAS BEEN TURNED OFF FOR AT LEAST 20 MINUTES. DANGER: LE ROULEAU DE TRANSFERT DE L'IMPRIMANTE PEUT ATTEINDRE DES TEMPÉRATURES SUPÉRIEURES À 350°F (175°C). SOYEZ EXTRÊMEMENT PRUDENT LORSQUE VOUS UTILISEZ LE ROULEAU DE TRANSFERT. NE TOUCHEZ JAMAIS LE ROULEAU DE TRANSFERT À MOINS QUE L'ALIMENTATION DE L'IMPRIMANTE A ÉTÉ ÉTEINT PENDANT AU MOINS 20 MINUTES.
Encoder Flip Angle	Use this setting to fine tune the position of the flipper. Note: Only used if encoder is present.
Print Flip Angle	Use this setting to fine tune the home position of the flipper if cards have difficulty moving from the printer into the flipper.
Print Flip Level	Use this option to set the position of the flipper so it is level with the card path after a flip operation.
Ribbon Print Take-up Tension	This controls the tension of the color ribbon during printing. Adjust the ribbon tension if ribbon wrinkle is appearing on the card. Note: Adjustments moderately change the image length.
Ribbon Print Supply Tension	This controls the supply side tension of the color ribbon during printing. Adjust the ribbon tension if ribbon wrinkle is appearing on the card.
Film Stretch Compensation	When printing, the position of the image on the film can vary depending on whether the previous film panel is used or not. Adjust this setting if the first card after an error is shifted from the rest.
Alternative Mag Verify	If set to 1, enables a quicker mag verification step of just looking for any data encoded on the card. If set to 0 verifies all data written to the card.
Mag Hico DAC Adj	Fine tunes the mag drive current for high-coercivity/super coercivity cards. Adjust if mag verify errors start occurring with new card stock.
Mag Loco DAC Adj	Fine tunes the mag drive current for low-coercivity/medium-coercivity cards. Adjust if mag verify errors start occurring with new card stock.

Setting	Description
Resin Heat Adjust	Print the resin self-test card. Use this adjustment for black resin text and barcodes that appear faded or too light or dark.
Sleep Time Heater Off	This setting adjusts how many minutes after the printer goes idle or enters a low power state that the printer goes into a heater off power state.
Sleep Time Heater Low Power	This setting adjusts how many minutes after the printer goes idle, the printer goes into a low power state.
Blush Point	The blush point is compensation during printing: • There is no dye transfer. • There is no light gray line on a portion of the card. • It should be white.
Film Takeup Transfer Tension	• Negative adjustments can cause card jams. • Positive adjustments can help stop jamming. Note: Adjustments affect flash and smudge.
Film Print Supply Tension	Important: The film drive sets the baseline for the film tension and should not be adjusted by the reseller or the end user. Adjustments moderately change the image length.
Cleaning Rate	This adjustment changes the cleaning rate from 2000 to the new setting.
Transfer Heat Dissipation Level	This setting adjusts when the transfer fan turns on. • 0, 1, and 2 - Transfer fan is on only during transfer. • 3 - Transfer fan turns on when transfer roller comes up to temp. • 4 - Transfer fan always on when not in sleep mode.
EAT Disable	Environmentally Adaptive Transfer (EAT) automatically adjusts the transfer temperature based on the ambient air conditions within the printer. This is an ON (1) or OFF (0) switch. Note: Settings can increase or decrease the transfer roller temperature by as much as 68°F (20°C) in extreme conditions.
Beep Disable	This setting disables the beep the printer generates after an EE setting is updated.
eSTANDBY_TEMP	This option changes the temperature used when the printer is in standby mode.
Flipper Offset Mag	This setting fine tunes the position of the flipper relative to the mag encoder. Only use if a mag encoder is installed.
Image Length	Fine tunes the length of the image on the card. Increase this value if the image length is too short. Decrease this value if the image length is too long.
Internal Encoder offset in mm	Fine tunes the position of the card when docking into Bay 0.
Flattener TOF offset	Adjusts the position of the card when the flattener roller engages.
Job Canceling Timeout Period	Slower PCs can have difficulty canceling all print jobs. Increase this value if all print jobs do not get canceled and instead some restart printing.
Ribbon Queueing Position Offset	Fine tunes the position of the ribbon prior to printing. Adjust if printing starts in the previous panel or goes off into the next panel.
Mag Verify	If set to 1, enables verification of encoded mag data.

Laminator settings

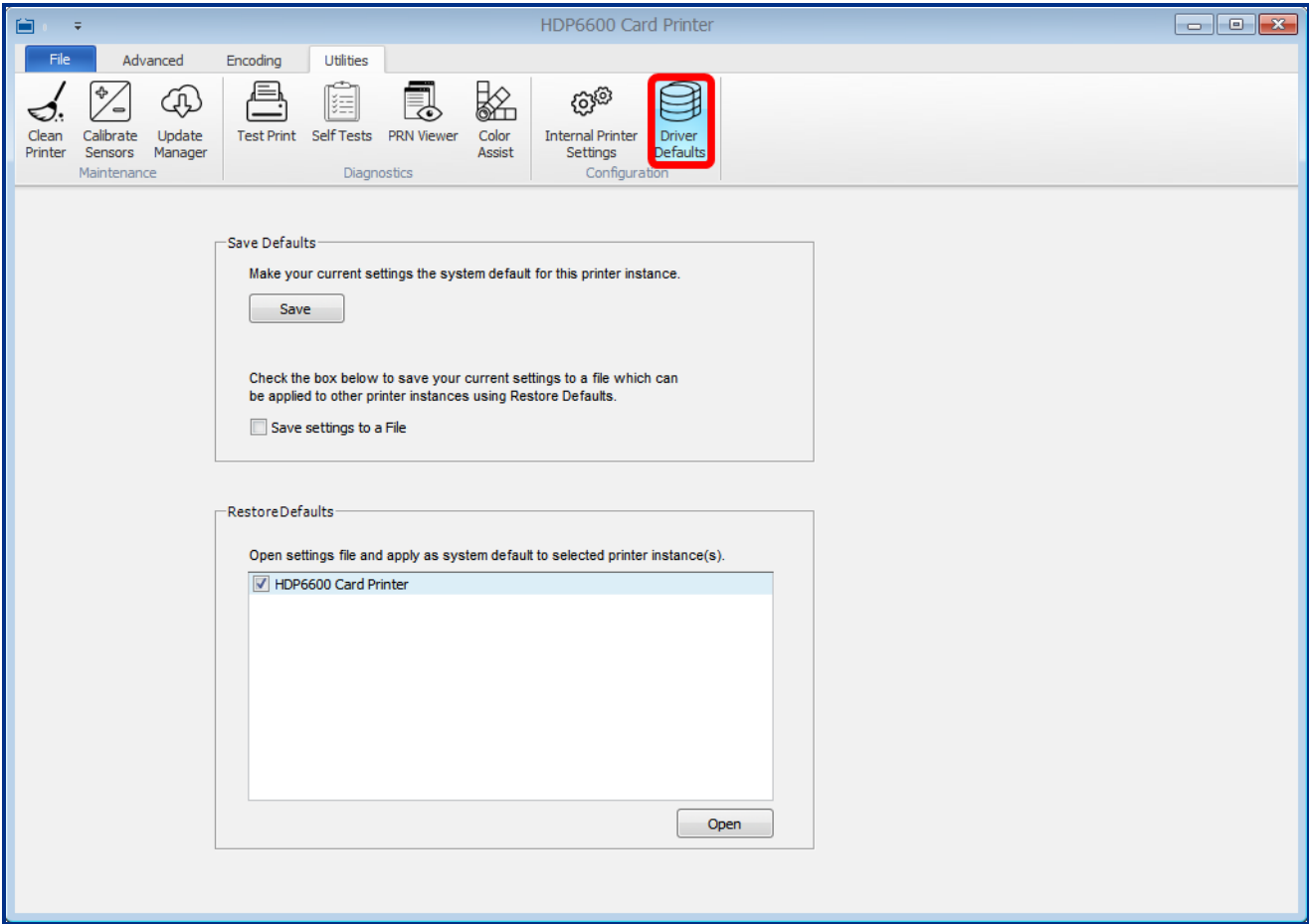


Setting	Description
Lam Rotator Card Position Offset	Position of the card on the rotator. 1 = .0014 inches.
Lam Rotator Portrait Offset	Angle of the rotator in the portrait position. 1 = 1°
Lam Rotator Landscape Offset	Angle of the rotator in the landscape position. 1 = 1°
Lam Flipper Home Offset	Flipper angle at the home position (plastic pinch rollers facing up). 1 = .75°
Lam Flipper Inverted Offset	Flipper angle opposite the home position (rubber driver rollers facing up) 1 = .75°
Lam Flipper Card Position Offset	Position of the card on the flipper table. 1 = .0076 inches.
Lam Right Full Card Top Of Form	Controls the card's leading edge position relative to the hot roller. 1 = .0014 inches.
Lam Right Laminate Top Of Form	Controls the right side lam patch leading edge position relative to the card. 1 = .0014 inches.
Lam Right Full Card End Of Form	Position of the end a lamination. 1 = .0014 inches.
Lam Right Half Card End Of Form	Position of the end of a half patch lamination. 1 = .0014 inches.
Lam Left Full Card Top Of Form	Card's leading edge position relative to the hot roller. 1 = .0014 inches.
Lam Left Laminate Top Of Form	Controls the right side lam patch leading edge position relative to the card. 1 = .0014 inches.
Lam Left Full Card End Of Form	Position of the end a lamination. 1 = .0014 inches.

Setting	Description
Lam Left Half Card End Of Form	Position of the end of a half patch lamination. 1 = .0014 inches.
Lam Standby Temperature	Hold temperature between jobs. 1 = 1°C.
Lam Sleep Time	Time in minutes before going to sleep. 1 = 1 minute.
Lam Whole Patch Speed	Patch speed (tension) during lamination. 1 = 1 step/sec.
Lam IC Cutout Patch Speed	IC Cutout patch (tension) speed during lamination. 1 = 1 step/sec
Lam Flatten TOF	Adjusts the position of the card when the flattener roller engages the card. 1 = .0014 inches.
Lam Flatten EOF	Adjusts the position of the card when the flattener roller disengages from the card. 1 = .0014 inches.
Enable Lam Registration Pass	Enable registration pass for card.

3.5.9 Driver defaults

This setting allows you to save the current settings for this printer instance as the default. The settings can be saved to a file and be applied to other printer instances of the same printer model.



Field	Description
Save Defaults	Click Save to make the current settings the system default for this printer instance. If you want to save these settings to a file. - Select the check box and click Save. - At the prompt to confirm this action, click Yes. - Select a file location and name the file. Click Save.
Restore Defaults	Allows you to open a saved system default file and apply it to the selected printer. The printers must be the same model.

Section 04

Troubleshooting

4.1 Introduction

The purpose of this section is to provide specific procedures relating to the messages shown on the printer display, communication errors, card feeding errors, encoding errors, printing process errors, transfer process errors, and diagnosing the image problems for the printer.

4.2 Troubleshooting - printer display and printer driver error message tables

The printer display shows the current status of the printer. Refer to the cause and solution tables in this section for all possible printer display messages.

This section provides two troubleshooting tables for the printer display error messages and the printer driver error messages. Each table uses a 3-column presentation to present a specific printer display or printer driver error message, its cause and its solution.

- This allows the troubleshooter to identify the error and its cause, and then perform the procedure (provided in the solution column).
- This standard mode of identifying the problem and its solution should provide an efficient method of troubleshooting this printer.
- If you encounter problems beyond the capabilities of these two error message tables, contact <https://www.hidglobal.com/customer-service>.

4.2.1 How to use the printer display error message table

The first column of the printer display error message table contains:

- The error message shown on the display of your printer
- The error message number shown in the lower left corner of the PC error message window

Use this error message information to troubleshoot your printer as needed.

LCD Error Message	Cause	Solution
Unable to Feed Card PC Error Message No. 14 , 81	The printer is unable to feed a card from the card cartridge.	Verify there are cards in the cartridge. Verify cards are not stuck together or jammed, and they are the correct thickness.



4.2.2 Troubleshooting with the printer display error message table

Printer display error message	Cause	Solution
Calibrate Failed PC Error Message No. 155, 170	Film or ribbon calibration has failed.	Verify the film is installed correctly and there is not a ribbon installed. If this problem persists, call for technical assistance.
Calibrate Film PC Error Message No. 159	Film sensors need to be calibrated.	Press the Cancel button and then perform the film calibration procedure.
Calibrate Ribbon PC Error Message No. 128, 170	The print ribbon sensor is out of calibration.	Press the Cancel button and then perform the ribbon calibration procedure.
Card Feed Stop PC Error Message No. 137	The front cover of the printer was opened. This caused the card transfer to stop or the Pause button was selected.	Press the Resume or Cancel buttons.
Card Jam PC Error Message No. 82, 112, 200	A card is jammed in the print station or card flipping area of the printer.	Clear the jam.
Card Jam: Prox PC Error Message No. 86	A card is jammed in the Prox card encoding area of the printer.	Clear the jam.
Card Jam: Smart PC Error Message No. 85	A card is jammed in the smart card encoding area of the printer.	Clear the jam.
Card Jam: Trans PC Error Message No. 83	Card became jammed in the printer during transfer.	Clear the jam.
Card Not Found PC Error Message No. 69	Card cannot be found in the printer.	Verify card not jammed in printer and press the Cancel button.
Check Film PC Error Message No. 244	The film is not able to move correctly. Check for jams/breaks.	Check for obstruction. If the problem persists, call for technical assistance.
Check Laminate 1 PC Error Message No. 213, 231	The laminator was unable to find the mark on the material in cartridge 1.	Make sure there are no obstructions to the sensor, and recalibrate the laminator sensor.
Check Laminate 2 PC Error Message No. 232	The laminator was unable to find the mark on the material in cartridge 2.	Make sure there are no obstructions to the sensor, and recalibrate the laminator sensor.
Clean Printer PC Error Message No. 71	For best printer performance, replace the cleaning roller tape and clean the printer feed rollers and print head at this time.	Review the cleaning section.
Cover is Open PC Error Message No. 46	The cover was left open.	Ensure that the cover is properly closed.
E-Card Startup Error PC Error Message No. 141	A problem was detected during printer start-up.	Reset the printer and try again. If this problem persists, call for technical assistance.

Printer display error message	Cause	Solution
EEPROM Corrupt PC Error Message No. 38, 39, 40, 144	EEPROM restored with factory default values.	If changes were made, then go into the setting values and reset these numbers.
Ejecting Card PC Error Message No. 72	The card has been ejected already.	Press the OK button to clear the message. Verify that a card has been sent to the reject bin or is out of the printer.
Empty Reject Bin PC Error Message No. 265	The reject bin is full.	Remove the rejected cards from the reject bin. Press the OK button to clear the message. Note: In some cases, rejected cards are incomplete or pose a security risk, and should be disposed of properly.
Failed To Initialize PC Error Message No. 141	A problem was detected during printer start-up.	Reset the printer and try again. If this problem persists, call for technical assistance.
Film Align Error PC Error Message No. 26, 176	The film is not able to move correctly. Check for jams/breaks.	Check for obstruction. If the problem persists, call for technical assistance.
Film Break/Jam PC Error Message No. 158	The film is not able to move correctly. Check for jams/breaks.	Check for obstruction. If the problem persists, call for technical assistance.
Film Low PC Error Message No. 156	The HDP film will soon run out.	If printing a large number of cards, replace the film now or monitor the printer until the film is gone and install a new film.
Film Out PC Error Message No. 156, 157	The HDP film has run out.	Install a new roll of film and press the Resume button to continue or press the Cancel button to reset.
Film: Wrong Material PC Error Message No. 173	The HDP film is not installed properly or has been damaged.	Verify the correct film is installed in the film cartridge.
Flipper Jam PC Error Message No. 74, 199	A card is jammed in the card flipper area of the printer.	Open the printer flipper module cover. Clear any cards in the flipper module by opening the printer cover and pressing the Forward and Back buttons. Ensure that the flipper module can rotate freely. Close the printer flipper module cover. Press the Resume button to continue printing. To cancel the print, press the Cancel button.
Head Loading PC Error Message No. 111	An unrecoverable error has occurred during printing.	Reset the printer and try again. If this problem persists, call for technical assistance.

Printer display error message	Cause	Solution
Head Resistance PC Error Message No. 6	The EE setting in driver for head resistance is out of range.	Enter a value for head resistance in the EE settings in the driver. Reset the correct value according to the steps in the Troubleshooting section. If this problem persists, call for technical assistance.
Head Sensor Error PC Error Message No. 8	The print head temperature sensor is not functioning or is not connected properly. or The print head is not cooling properly.	If the problem persists, call for technical assistance.
Head Voltage Err PC Error Message No. 103, 105	A hardware fault has prevented setting the correct print head voltage.	Reset the printer and try again. If this problem persists, call for technical assistance.
Headlift Error PC Error Message No. 102, 103, 104, 105	This is a problem with the print head lift or transfer roller head lift.	Reset the printer and try again. If this problem persists, call for technical assistance.
Heater Error PC Error Message No. 161	The transfer heater roller is too hot.	Reset the printer and try again. If this problem persists, call for technical assistance.
Invalid Film PC Error Message No. 94, 95, 96, 164, 165, 166	An unauthorized film is installed in the printer.	Get the correct film from your dealer.
Invalid Password PC Error Message No. 136	Printing disabled at this time.	Press the Cancel button to abort this print job and then check security settings at host computer.
Invalid Ribbon PC Error Message No. 93	An unauthorized ribbon is installed in the printer.	Get the correct ribbon from your dealer.
Job Data Error PC Error Message No. 106	The print data sent to the printer is corrupt or has been interrupted.	Reset the printer and try again. If this problem persists, call for technical assistance.
Lam 1 Tag Err PC Error Message No. 259	A RFID read or write error occurred on cartridge 1.	Retry, and if it fails again the material cannot be used.
Lam 2 Tag Err PC Error Message No. 260	A RFID read or write error occurred on cartridge 2.	Retry, and if it fails again the material cannot be used.
Lam Async Error PC Error Message No. 245	The printer timed out waiting for communication from the laminator.	Check the laminator power/connections and restart the printer.
Lam Card Jam PC Error Message No. 53, 212, 214, 215	A jam occurred between the printer and the laminator.	Open the covers and clear the obstruction/jam.
Lam Check Card PC Error Message No. 213	A jam occurred inside the laminator.	Open laminator cover and clear the obstruction.

Printer display error message	Cause	Solution
Lam Com Error PC Error Message No. 246	There was a communication failure between the printer and laminator.	Check laminator power/connections and restart the printer.
Lam Error PC Error Message No. 237, 238	A generic unknown error as occurred.	Reset the printer and try again. If this problem persists, call for technical assistance.
Lam Card Not Ejected PC Error Message No. 216	The card is not ejected from the laminator.	The lamination material is stuck to the card.
Lam Handler Startup Error PC Error Message No. 66	A problem was detected during printer start-up.	Reset the printer and try again. If this problem persists, call for technical assistance.
Lam Handler Startup Error PC Error Message No. 141	After powering up the printer, the laminator was detected, but an error occurred which would prevent its use.	Check laminator power and connections and restart the printer.
Lam Internal Error PC Error Message No. 48	A generic unknown error as occurred in the laminator.	Check laminator power and connections and restart the printer.
Lam No Film PC Error Message No. 157	There is no material loaded in the laminator.	Load laminator material.
Lam Timeout PC Error Message No. 247	The printer timed out while processing information related to the laminator.	Check laminator power/connections and restart the printer.
Lam1 Wrong Film PC Error Message No. 233	Material in cartridge 1 of the laminator does not match the material type specified by the job.	Make sure driver material matches what is actually in the laminator.
Lam2 Wrong Film PC Error Message No. 234	Material in cartridge 2 of the laminator does not match the material type specified by the job.	Make sure driver material matches what is actually in the laminator.
Laminate 1 Bad PC Error Message No. 259, 261	The lamination material in cartridge 1 is not valid for this laminator.	Install valid material.
Laminate 1 Jam PC Error Message No. 229	A jam occurred with the laminator material in cartridge 1.	Open laminator cover and clear the obstruction
Laminate 1 Low PC Error Message No. 239	The material is getting low in lamination cartridge 1.	Make sure more is on hand for when it runs out.
Laminate 1 Out PC Error Message No. 208	The laminate in cartridge 1 has run out.	Replace it with a new roll of material.
Laminate 2 Bad PC Error Message No. 260, 262	The lamination material in cartridge 2 is not valid for this laminator.	Install valid material.
Laminate 2 Jam PC Error Message No. 230	A jam occurred with the laminator material in cartridge 2.	Open laminator cover and clear the obstruction.
Laminate 2 Low PC Error Message No. 240	The material is getting low in lamination cartridge 2.	Make sure more is on hand for when it runs out.

Printer display error message	Cause	Solution
Laminate 2 Out PC Error Message No. 209	The laminate in cartridge 2 has run out.	Replace it with a new roll of material.
Lm1 Headlift Err PC Error Message No. 217	The laminator failed to move or sense the lower (lam module 1) head.	Check head connections and call for service/repair.
Lm2 Headlift Err PC Error Message No. 218	The laminator failed to move or sense the upper (lam module 2) head.	Check head connections, call for service/repair.
Mag Encoder Paused PC Error Message No. 143	The magnetic encoder is in a pause state.	Reset the printer and try again. If this problem persists, call for technical assistance.
Mag Encoder Startup Error PC Error Message No. 63, 141	A problem was detected during printer start-up.	Reset the printer and try again. If this problem persists, call for technical assistance.
Mag Verify Error PC Error Message No. 30	Print could not verify the magnetic stripe write. or The magnetic stripe was not encoded properly.	Check the cards and press the Cancel button.
Multiple Feed PC Error Message No. 70	Multiple cards were fed into the printer.	Remove all cards and try again.
No E-card Encoder PC Error Message No. 202	You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.
No Film PC Error Message No. 28	Film is not installed in the printer . or The film RFID tag is bad.	Install the film and press the Resume button. To cancel the print, press the Cancel button.
No Flip Module PC Error Message No. 201	Two-sided job sent to a one-sided printer.	Verify the printer has flipper capabilities through the printer display menu. If flipper capabilities are present, ensure that the Print Both Sides option in the printer driver is set correctly. Press the Resume button to continue printing. To cancel the print, press the Cancel button.
No Flip Module PC Error Message No. 45, 201	The desired lamination requires a flipper module.	Change the cartridge location of the lamination material (if it is dual-sided), or buy a flipper module.
No iCLASS Encoder PC Error Message No. 177	You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.
No Mag Module PC Error Message No. 31	A magnetic encoding job was sent to printer without a magnetic encoder. You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.



Printer display error message	Cause	Solution
No MIFARE Encoder PC Error Message No. 203	You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.
No Prox Encoder PC Error Message No. 32	You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.
No Ribbon PC Error Message No. 25	No ribbon is installed in the printer. or The ribbon RFID tag is bad.	Install the correct ribbon and press the Resume button. To cancel the print, press the Cancel button.
No Smart Encoder PC Error Message No. 33	You are trying to send encoding data, but the printer is not configured with this encoder type.	To cancel, press the Cancel button.
Printing Error PC Error Message No. 107	An error was detected during printing.	Reset the printer and try again. If this problem persists, call for technical assistance.
Reboot Required PC Error Message No. 9, 65, 67, 163	Unspecified system error detected by the printer firmware.	Reset the printer and try again. If this problem persists, call for technical assistance.
Reinsert Ribbon PC Error Message No. 141	The ribbon must be reinserted for proper functioning of the printer.	Reinsert the ribbon or press the Resume button.
Remove Card PC Error Message No. 68	A card is jammed in the print station or card flipper area of the printer.	Clear the jam and press the Cancel button.
Remove Ribbon PC Error Message No. 139	The print ribbon is not installed properly or has been damaged.	Verify the correct ribbon is installed in the ribbon cartridge. Remove it and replace it with the correct ribbon.
Remove Lam Material PC Error Message No. 210	Single-sided lamination job specified but the material is loaded in both modules.	Remove either lamination cartridge.
Remove Lam1 Mtl PC Error Message No. 204	Single-sided lamination on the back side is specified but material is loaded in the lamination 1 module.	Remove cartridge 1.
Remove Lam2 Mtl PC Error Message No. 205	Single sided lamination on the front side is specified but material is loaded in the Lam 2 Module.	Remove cartridge 2.
Ribbon Break/Jam PC Error Message No. 99, 108, 109	The ribbon is not able to find the next panel correctly. Check for jams/breaks.	If jammed, clear the jam. If broken, repair by taping the ribbon back on to the take-up core. Press the Resume button to continue or press the Cancel button to abort.
Ribbon Low PC Error Message No. 92	The print ribbon will soon run out.	If printing a large number of cards, replace the ribbon now or monitor the printer until the ribbon is gone and install a new ribbon.

Printer display error message	Cause	Solution
Ribbon Miscue PC Error Message No. 97	The ribbon is not able to find the next panel correctly. Check for jams/breaks.	If jammed, clear the jam. If broken repair by taping the ribbon back on to the take-up core. Press the Resume button to continue or press the Cancel button to abort.
Ribbon Out PC Error Message No. 91, 100, 101	The print ribbon has run out.	Install a new ribbon and press the Resume button to continue.
Ribbon Tension PC Error Message No. 98	The ribbon tensions may be out of range.	Check and adjust the setting through the ToolBox under the Advanced Settings tab. If this problem persists, call for technical assistance. Press the Resume button to continue or press the Cancel button to abort.
Ribbon: Wrong Material PC Error Message No. 93, 122, 172	The print ribbon is not installed properly or has been damaged.	Verify the correct ribbon is installed in the ribbon cartridge.
System Fault PC Error Message No. 164	Unspecified system error is detected by the printer firmware.	Reset the printer and try again. If this problem persists, call for technical assistance.
Unable to Feed Error Message No. 14, 81	The printer is unable to feed a card from the card cartridge.	Verify there are cards in the card cartridge. Verify cards are not stuck together or jammed, and they are the correct thickness.
Utility Error PC Error Message No. 129	Command resulted in an error.	See the Communication Errors section.
Waiting for Data PC Error Message No. 147	The printer has stopped receiving data from the PC.	Reset the printer and try again. If this problem persists, call for technical assistance.
Wrong Film PC Error Message No. 162, 163	The print film installed in the printer does not match the film type selected in the printer driver. or A self-test job cannot be printed with the print media installed.	Replace film in the printer with type specified in the driver. A reboot is required.
Wrong Ribbon PC Error Message No. 93	The print ribbon installed in the printer does not match the ribbon type selected in the printer driver. or A self-test job cannot be printed with the print media installed.	Replace ribbon in printer with type specified in the driver.
Wrong Job DPI Menu PC Error Message No. 590	The print job data does not match the print head capability (for example, a 600 DPI print job is being sent to a 300 DPI print head).	Verify the print head resolution through the printer display. Then verify the print.

Printer display error message	Cause	Solution
Invalid Print Head PC Error Message No. 591	The print head configuration setup on the main PCB does not match the installed print head (for example, a 600 DPI print head has been installed into a 300 DPI a 600 PDI print head has been installed into a 300 DPI configured printer).	Install the correct resolution print head into the printer.

4.3 Troubleshooting the printer error message table

Printer error message	Cause	Solution
General Error	A general printer error has occurred.	Click Cancel Print from the dialog box or press the Cancel button on the printer display.
Card Not Found	The printer is unable to find the card.	Check the printer for a card or other obstruction. Remove the card and cancel the print. Click Cancel Print from the dialog box or press the Cancel button on the printer display.
Cover Open	The printer cannot start printing because the cover is open.	Close the cover to continue printing.
Unable to Feed Card	The printer is unable to feed a card from the card cartridge.	Ensure that cards are available and loaded correctly, press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.
Card Jam	A card has become jammed in the printer.	Open the printer front cover and remove the print ribbon and film cartridges. Clear any cards in the printer by pressing the Forward and Back buttons on the printer display. Re-insert the ribbon and close the printer front cover. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.
Card Jam (Encoder)	A card has become jammed in the printer encoding station.	Open the printer front cover and remove the print ribbon. Open the printer flipper module cover. Clear any cards in the encoding module by pressing the Forward and Back buttons on the printer display. Re-insert the print ribbon and close the printer front cover. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.

Printer error message	Cause	Solution
Card Jam (Flipper)	A card has become jammed in the printer flipper table.	Open the printer front cover and the flipper module cover. Clear any cards in the flipper table by pressing the Forward and Back buttons on the printer display. Close the printer front cover. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Card Jam (Laminator)	A card has become jammed in the printer lamination module.	Open the printer module front cover and remove the overlaminates. Clear any cards in the lamination module by pressing the Forward and Back buttons on the printer display. The printer front cover must be open for use of the Forward and Back buttons. Re-insert the overlaminates and close the lamination module front cover. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Card Eject Error	The printer is unable to eject a card.	Check the printer for a card jam or other obstruction and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Flipper Jam	The flipper table has jammed while either aligning itself or flipping a card.	Open the printer flipper module cover. Clear any cards in the flipper module by pressing the Forward and Back buttons on the printer display. Ensure that the flipper table can rotate freely. Close the printer flipper module cover. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box.
No Flipper	The printer does not have flipping capabilities.	Verify the printer has flipper capabilities by way of the LCD menu. If flipper capabilities are present, ensure that the Print Both Sides option in the driver is set correctly. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Ribbon RFID Error	The ribbon tag information is corrupted or incorrect.	Check that the ribbon is installed properly. Cancel is the only option. Click Cancel Print from the dialog box or press the Cancel button on the printer display.

Printer error message	Cause	Solution
Wrong Ribbon Installed	An incorrect ribbon has been installed or a driver setting is incorrect.	Check that the ribbon is correct for the printer and job. Press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
No Ribbon Installed	No print ribbon is installed in the printer.	Install the correct ribbon and press the Resume button on the printer display.
Ribbon Out	The print ribbon installed in the printer is empty.	Install a new ribbon and press the Resume button on the printer display.
Ribbon Break/Jam	A ribbon break/jam has been detected inside the printer.	The printer has determined that the installed ribbon has either jammed or broken. Open the printer cover and remove the print ribbon. If ribbon is jammed, remove jam and tighten ribbon. Clear any cards in the printer by pressing the Forward and Back buttons on the printer display. Tape the ends of the ribbon together and wind any excess onto the take-up spool of the print ribbon. Re-install the print ribbon, close the printer cover and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.
Ribbon Miscue	A ribbon miscue has been detected inside the printer.	Open the printer cover and remove the print ribbon. Check the ribbon and see if it is broken. If the print ribbon is not broken, re-install the print ribbon, close the printer cover and press the Resume button on the printer display to continue printing. If the print ribbon is broken, tape the ends of the print ribbon together and wind any excess onto the take-up spool. Re-install the print ribbon, close the printer cover and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print on the dialog box or press the Cancel button on the printer display.
Ribbon Sensor Error	The printer cannot find the next panel on the print ribbon.	Recalibrate the ribbon sensor using the Calibrate Ribbon tab within the ToolBox. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.



Printer error message	Cause	Solution
Invalid Ribbon	An incorrect print ribbon has been installed in the printer. (This is if you are using a SecureMark ribbon).	A non-SecureMark ribbon is installed in a SecureMark printer. Replace with the appropriate SecureMark ribbon and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display. Install a certified print ribbon and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.
Ribbon Error	The print ribbon caused a general error.	To continue, press the Resume button on the printer display. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
No Magnetic Encoder Installed	A print job with magnetic encoding was sent to a printer without a magnetic encoder installed in the printer.	Ensure that no encoding data is being sent with the print job and reprint the card.
Mag Verify Error	The printer is unable to verify encoded data.	Check the cards and click Cancel Print from the dialog box.
No Mag Strip Present	The printer is unable to find a magnetic stripe on the card.	Check the cards and click Cancel Print from the dialog box.
No Smart Card Encoder	No smart card encoder is installed in the printer.	To cancel, click Cancel Print from the dialog box.
No Prox Card Encoder	No Proximity™ card encoder is installed in the printer.	To cancel, click Cancel Print from the dialog box.
Headlift Error	The head lift sensor is not detecting movement from the head lift cam.	Reboot the printer by cycling power. To cancel, click Cancel Print from the dialog box.
Invalid Password	The password entered is not a valid password.	Press OK to enter another password. To cancel, click Cancel Print from the dialog box.
Laminator (General Error)	The laminator has reported a general fault.	To continue, press the Resume button on the printer display. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Laminator (Check Power)	The laminator power is off.	Ensure that the laminator power cord is properly connected, cycle power and press Resume on the printer display to continue. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Laminator (Heater Off)	The laminator heater is off.	To continue press the Resume button on the printer display. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.

Printer error message	Cause	Solution
Laminator (Heater Timed Out)	The laminator cannot reach the desired operating temperature.	Reboot the printer by cycling power. Check the laminator settings in the printer driver. Click Default on the Lamination tab of the driver to set the laminator settings to the factory default. Resend the print job. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
No Laminator Film Installed	No laminator film is installed in the laminator unit.	Ensure that the appropriate laminator film is installed. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Wrong Laminator Film Installed	An incorrect laminator film has been installed or a driver setting is incorrect.	Ensure that the appropriate laminator film is installed and press the Resume button on the printer display to continue printing. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Laminator Film Out	The film installed in the laminator is empty.	Install the film and press the Resume button on the printer display.
Laminator Film Break/Jam	A film break/jam has been detected inside the laminator.	The printer has determined that one or both overlamine films have either jammed or broken. Open the laminator cover and remove the laminator cartridges. If overlamine is jammed, remove jam and tighten the material. Clear any cards in the printer by pressing the Forward and Back buttons on the printer display. Tape the ends of the overlamine together and wind any excess onto the take-up spool of the overlamine. Re-install the laminator cartridges, close the laminator cover and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box and press the Cancel button on the printer display.
Laminator Film Sensor Error	The laminator cannot find the next panel on the film.	Check that the film is installed properly and press the Resume button on the printer display. To cancel, click Cancel Print on the dialog box or press the Cancel button on the printer display.
Remove Laminator Film	To continue, remove the laminator film.	Open the laminator front cover. Remove the film and close the laminator front cover.
Laminator Film Out	The film installed in the printer is empty.	Install new film and press the Resume button on the printer display to continue printing. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.



Printer error message	Cause	Solution
Laminator Film is not Installed	No film is installed in the printer.	Install the film and press the Resume button on the printer display. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Laminator Film Sensor Error	The printer cannot find the next panel on the print film.	Check that the print film is installed properly and press the Resume button on the printer display. To cancel the print, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Wrong Laminator Film Installed	An incorrect print film has been installed or a driver setting is incorrect.	Ensure that the appropriate print film is installed and press the Resume button on the printer display to continue printing. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Invalid Laminator Film Installed	The print film installed does not match the SecureMark configuration of the printer.	A non-SecureMark film is installed in a SecureMark printer. Replace with the appropriate SecureMark film and press the Resume button on the printer display to continue printing. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.
Laminator Film Error	The print film caused a general error.	Ensure that the appropriate print film is installed and press the Resume button on the printer display to continue printing. To cancel, click Cancel Print from the dialog box or press the Cancel button on the printer display.

4.4 Resolving communication errors

Symptoms include incorrect output, communications error on PC or printer, stalling, no response from printer, no job printed, "paper out" error.

4.4.1 Confirm that the system meets the minimum requirements

- IBM PC or compatible
- Windows XP, Windows Vista, Windows 7, Windows 2008, Pentium class 500 MHz computer with 256 MB of RAM or higher
- 500 MB free hard disk space or higher
- USB port (optional Ethernet connection)

4.4.2 Confirm the correct installation of the printer driver

- Close the software program and check the printer driver.
- Reboot the computer.
- Ensure the printer driver is installed correctly.

Note: This especially pertains if an obsolete driver was recently removed.

Ensure the correct setup options within the printer driver are selected. Confirm that the driver is current by checking at <https://www.hidglobal.com/drivers>.

4.4.3 Confirm the correct installation of the flipper table module assembly

1. Reboot the computer.
2. Ensure that the print both sides option in the printer driver is set correctly.
3. Verify the flipper table module assembly is functioning properly by printing out cards in a test run.

4.4.4 Determine the problem with printing from the application

1. Print a self-test from the printer by pressing **Options > Menu > Select > Print** on the printer LCD screen to ensure that the printer is functioning properly.
2. Print the Windows test page that is located in the general tab of the driver.
3. Using WordPad, go to the file menu and select page setup.
4. Click on the printer button and select the HDP Card Printer.
5. Click OK and reset all four margins to zero.

Note: WordPad automatically replaces the values with its minimum margins.

6. Open the program and type: "This is a Test." then, go to file on the menu bar and select **Print**.

Determine whether there is adequate hard drive space.

Note: A large volume of temporary files on the computer can cause communications errors.

Delete the temporary files.

Revision history

Date	Description	Revision
May 2024	Updated regulatory information.	A.0_r.0
August 2019	Remove half panel ribbon support.	4.3
May 2019	Added Apply Additional Film Transfer Layer option.	4.2
April 2016	General updates.	4.1
February 2016	Added 600 DPI Print Head option.	4.0
July 2013	New Inhibit Panel functionality and updated Advanced Settings section. French translations added for agencies and safety.	3.0
December 2012	Combined HDP5000 & HDPii Plus User Guide, adding new functionality.	2.0



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