HID® FARGO® HDP®5000e

High Definition Card Printer/Encoder
Model: X002700
User Guide

PLT-07581, A.1
December 2024

Copyright

Trademarks

Contacts

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

What's new

Date	Description	Revision
December 2024	Adds content for lamination.	A.1

A complete list of revisions is available in **Revision history**.

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 .

1.1.6 Mexico

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

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 Security hardening guidelines

These security guidelines, in conjunction with the intended use and operating environment specifications, can help protect sensitive data, prevent unauthorized access, and maintain the security of your HID FARGO® printer, driver, or printer SDK.

1.3.1 General security guidelines

<table>
<tr><th>Category</th><th>Description / Actions</th></tr>
<tr><td>Intended use and operating environment</td><td>• The HID FARGO printer is intended for use within a local area network (LAN) environment only and is not designed to connect directly to the internet.
• Where applicable, the HID FARGO printer SDK is a library working as a part of the client application. Therefore, the customer is responsible for the security of the application.
• It is expected that the customer IT policy provides additional protection, especially when printing sensitive information.</td></tr>
<tr><td>Access control</td><td>• Only authorized personnel should have access to configure printer settings or access print jobs.
• The HID FARGO printer SDK and the printer driver works with the printer instances administered by the customer according to the customer IT policy.
• The printer is shipped with a default admin password. On first use, it is recommended to change the admin password.
• Use strong, unique passwords for the printer admin account and regularly update the passwords, according to the customer IT policy.</td></tr>
<tr><td>Network security</td><td>• The printer should be connected to a secure LAN with firewall protection.
• HID FARGO disables unused network protocols and services to minimize attack surfaces.
• Utilize print job encryption to protect data transmission between the printer and devices.
• HID FARGO printer open network ports:
<table>
<tr><th>Port</th><th>State</th><th>Service</th></tr>
<tr><td>80/tcp</td><td>open</td><td>HTTP web page</td></tr>
<tr><td>9100/tcp</td><td>open</td><td>Printer communication</td></tr>
<tr><td>9102/tcp</td><td>open</td><td>Printer communication</td></tr>
</table></td></tr>
<tr><td>Print job security</td><td>• Print job encryption is enabled by default. The HID FARGO printer and driver utilizes strong AES-256 encryption to protect the print job sensitive data.
• Although the option is available, HID does not recommend disabling encryption.
• For information on enabling and disabling encryption, select Advanced menu tab > Print Image > Security.</td></tr>
<tr><td>Firmware updates</td><td>• Keep the printer firmware up to date to patch security vulnerabilities and improve overall device security.
• Authentic HID FARGO printer firmware upgrade files are encrypted and signed by HID, and only authentic files are accepted by the printer.
• For information related to firmware upgrades, see 3.5.3 Update manager.</td></tr>
<tr><td>Physical security</td><td>• To prevent unauthorized access, the printer and printing supplies should be physically secured in a locked room or cabinet.
• To deter theft or tampering, security cables or locks can also be used.</td></tr>
</table>

Category	Description / Actions
Training and awareness	Educate users about best practices for printer security, such as avoid leaving sensitive documents unattended at the printer.
Reporting security issues	• Encourage users to report any suspicious activity or security incidents related to the printer immediately to the customer site IT/security personnel. • Report printer vulnerabilities and security issues to HID. HID Security Center: https://www.hidglobal.com/security-center Contact Support: https://support.hidglobal.com/call-us

1.3.2 Handling personal data guidelines

Category	Description/Actions
Data usage	• The HID FARGO printer, driver, and printer SDK is designed to only process customer supplied input data for printing purposes. • Personal data submitted for printing, such as documents or images, is not examined, stored, or retained by the printer, driver, or printer SDK. • Print data is deleted/ replaced after printing completion, or on a printing error.
Data security	• Personal data sent to the printer is treated with confidentiality and is not accessible or retrievable from the printer SDK, driver memory, or the printer storage after printing. • Data transmission between the printer SDK, driver, and the printer is encrypted to protect personal information during transfer.
Data retention	• The printer does not retain copies of printed documents containing personal data in its internal storage. • Users are encouraged to retrieve their printed documents promptly to minimize the risk of unauthorized access.

1.4 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 (86 mm x 54 mm / 3.38" × 2.13") 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 × W × D)	Printer: 292 mm × 313 mm × 280 mm (11.50" × 12.25" × 11.0") Printer + Dual-Sided Module: 292 mm x 445 mm x 280 mm (11.50" × 17.50" × 11.0") Printer + Single-Sided Lam Module: 324 mm × 635 mm × 280 mm (12.75" × 25" × 11.0") Printer + Dual-Sided Module + Dual-Sided Lam Module: 324 mm × 762 mm × 280 mm (12.75" × 30" × 11.0") Lam Module: 324 mm × 313 mm × 280 mm (12.75" × 12.25" × 11.0") Dual Input Hopper: 305 mm × 127 mm × 140 mm (12" × 5" × 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, and the access door to the laminator.
Memory	1 GB RAM
MS Windows Compatibility	• Windows 10 (32- and 64-bit) • Windows 11 (64-bit) • Windows Server 2016 (64-bit) • Windows Server 2019 (64-bit) • Windows Server 2022 (64-bit)
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 125kHz and 13.56 MHz encoding options • Contact chip encoding option • Door and cartridge locks • Printer cleaning kit
Overlaminate Options	All overlaminate 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 overlaminate 0.25 mil thick, 500 prints • PolyGuard™ overlaminate, 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
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.

Component	Description
Print Ribbon Options	Prints or Images: • YMCK* 500 prints • YMCKK* 500 prints *Indicates the ribbon type and the number of ribbon panels printed where Y=Yellow, M=Magenta, C=Cyan, and K=Resin Black.
Print Speed in Normal Mode	• YMCK single-sided - 35 seconds per card/ 103 cards per hour • YMCKK - 52 seconds per card/ 69 cards per hour • YMCK+Lam - 40 seconds per card/ 90 cards per hour • YMCKK+Lam - 58 seconds per card/ 62 cards per hour
Print Speed in Performance Print Mode	Note: Performance is most suitable for minimal color and mostly resin text. • YMCK - 26 seconds per card/ 137 cards per hour • YMCKK - 38 seconds per card/ 93 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	Printer: 10.3 kg (22.7 lbs.) Printer + Dual-Sided Module: 13.4 kg (29.5 lbs.) Printer + Single-Sided Lam Module: 15.7 kg (34.6 lbs.) Printer + Dual-Sided Module + Dual-Sided Lam Module: 18.8 kg (41.4 lbs.)
One-Wire Encoding Options	• 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
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: Four year (One year On-Call Express, U.S. only). • Four (4) 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 Introduction

This section describes finding a good location for your printer, driver installation information, and general card usage for the HDP5000e card printer.

2.2 Inspection of the card printer

While unpacking your printer, inspect the carton to ensure that damage has not occurred during shipping. Make sure that all supplied accessories are included with your unit.

See the *HDP5000, HDP5000e Card Printer/Encoder Install Guide* (PLT-01058) for information about installing the HDP film cartridge, print ribbon cartridge, card cleaning roller, card input cartridge, card output hopper, and connecting the power to the printer.

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 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 Driver installation instructions

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

1. Visit www.hidglobal.com/drivers and search for **HDP5000e**.
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 HDP5000e 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.
6. The **Select Setup Language** screen is displayed. Select the preferred language and click **OK**.
7. The **Welcome to the HDP5000e Card Printer Setup** screen is displayed. Click **Next**.
8. Read the license terms and conditions. Select **I accept the license agreement** 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. Select the type of connection for the printer.
    - If you are connecting to the 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**.
11. The **Ready to Install** window is displayed. Click **Install** to begin the installation.
12. If you are using a local connection (USB), the **Connect the USB cable to the PC** 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.
13. 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**.

2.6 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 FARGO 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.

The input cartridge hold 100 cards. If using cards with a magnetic stripe, cards must be loaded into the input cartridge with the stripe facing up and towards the front of the printer.

Cards are ejected into the output hopper or reject hopper.

Section 03

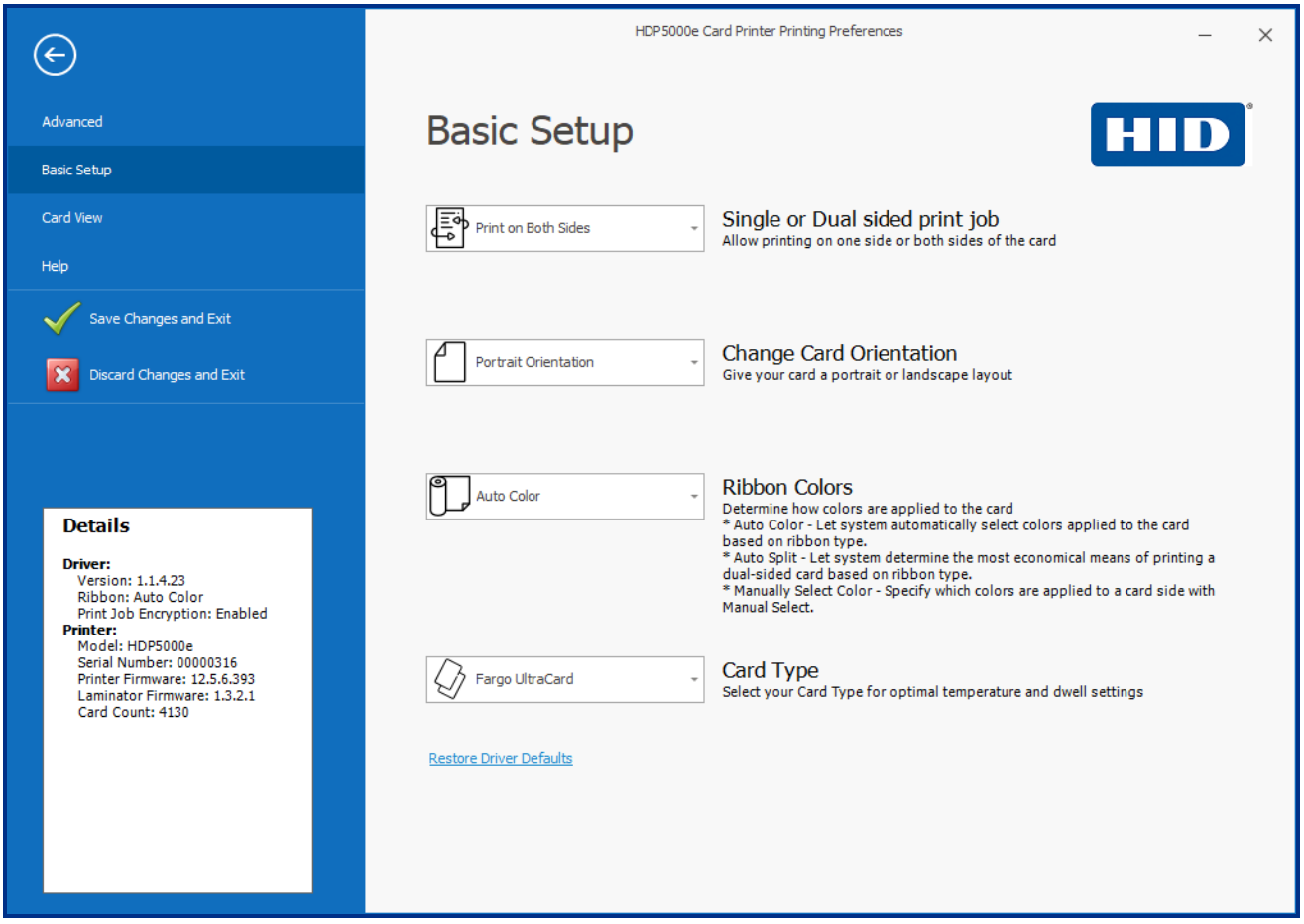
Printing preferences

3.1 Introduction

All print driver operations and printing preferences are managed through the HDP5000e 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** > **HDP5000e 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

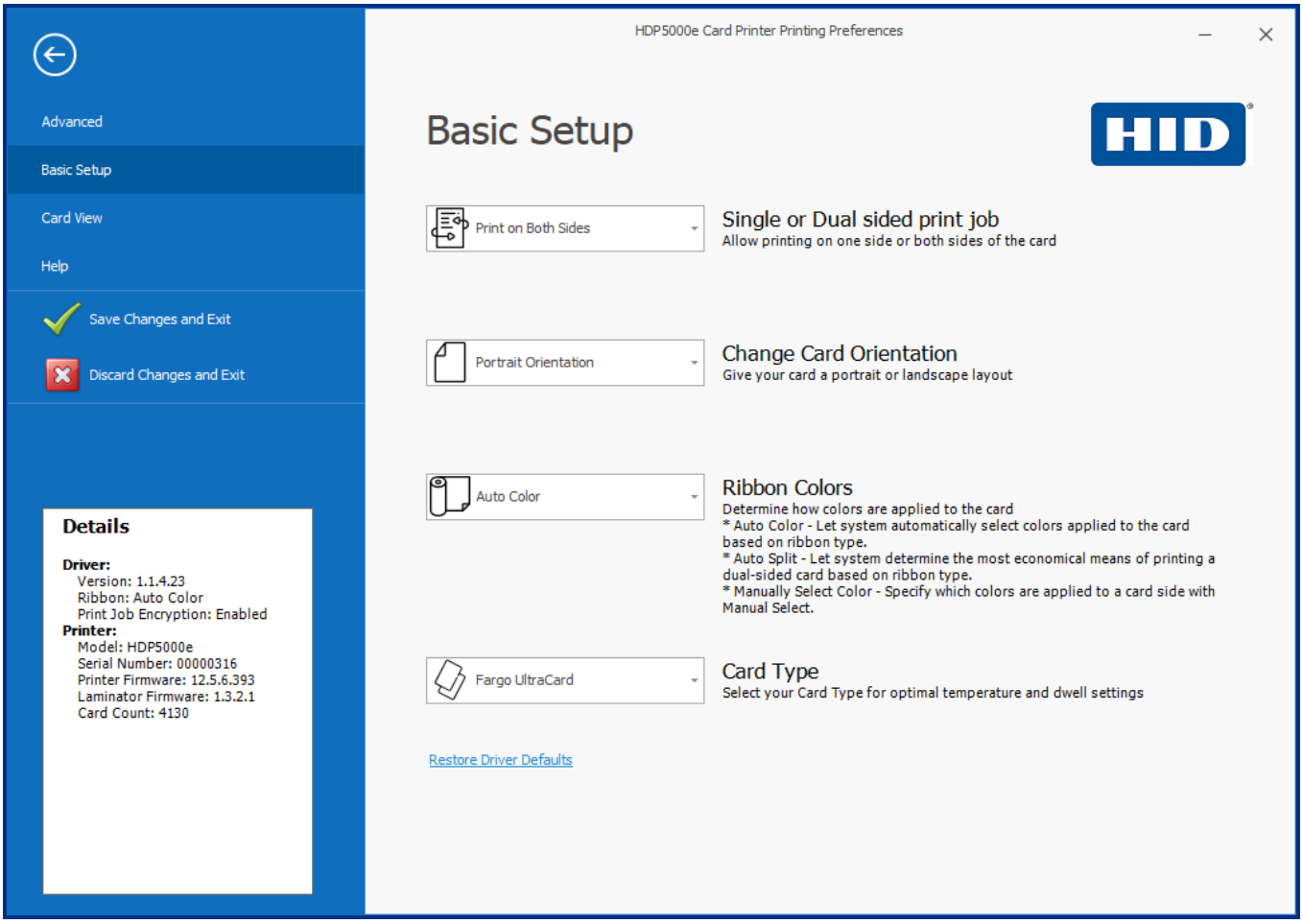
This tab allows you to view driver details and basic printer specifications. You can also restore driver default settings, save changes to your preferences, or discard changes before exiting the printing preferences.

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 HDP5000e card printer.
- **Save Changes and Exit** - Saves any changes made within the HDP5000e Card Printer Printing Preferences screens and exits the program.
- **Discard Changes and Exit** - Cancels any changes made within the HDP5000e Card Printer Printing Preferences screens and exits the program.
- **Details** - Displays the driver version number, ribbon color, print job encryption, and print mode 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.

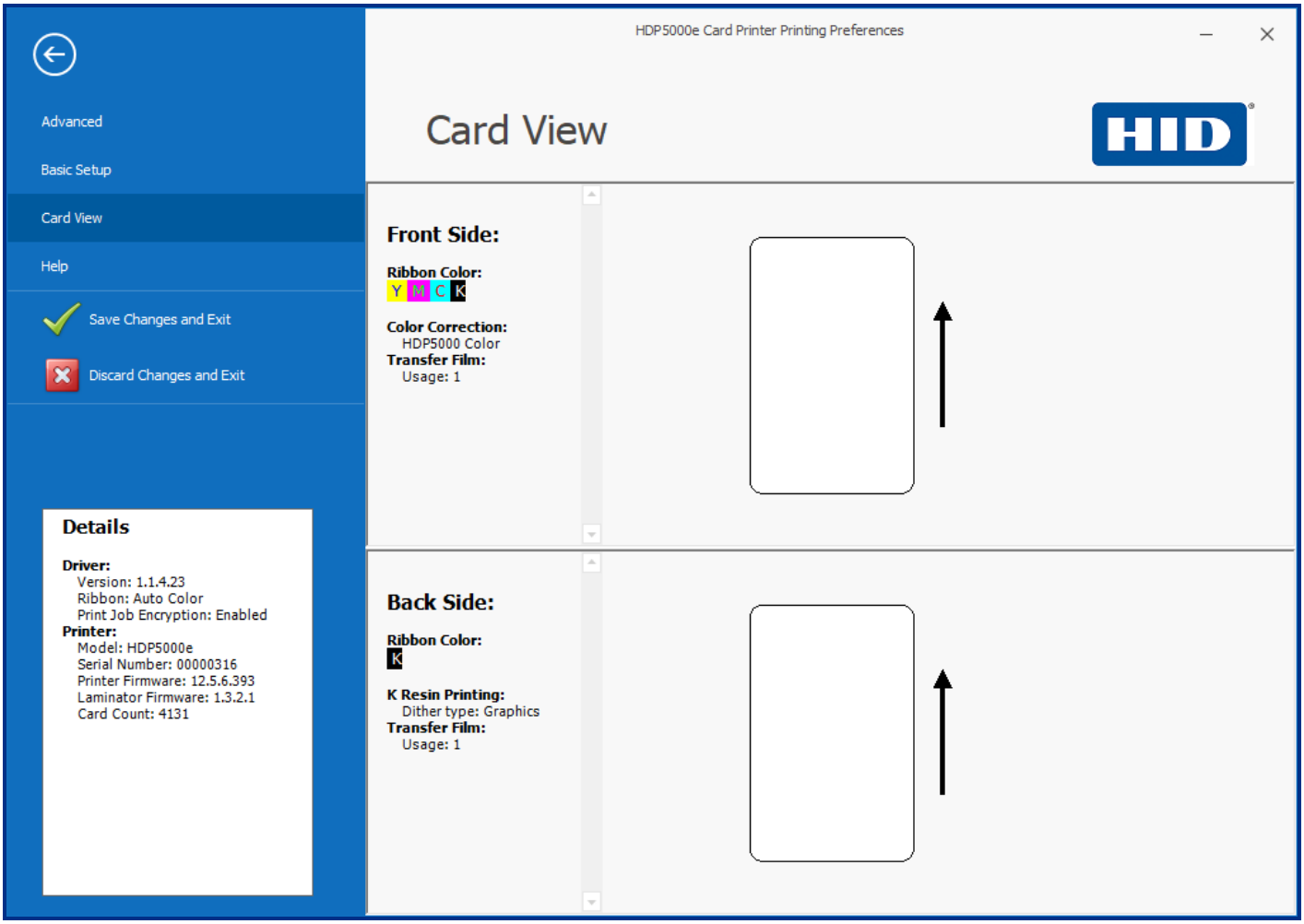


Field	Definition
Single or Dual sided print job	Defines whether to print on one side or both sides. If a dual-sided module is not detected, this selection is not available. Selections available are: **Print on One Side** or **Print on Both Sides**.
Change Card Orientation	Defines whether the card orientation is vertical or horizontal. Selections available are **Landscape** or **Portrait**.
Ribbon Colors	Automatically or manually select the colors that print. Options are: • **Auto Color:** The system automatically selects the colors applied to the card based on the ribbon type. • **Auto Split:** The system determines the most economical means of printing a dual-sided card based on the ribbon type. • **Manual Select:** You can specify which colors are applied to a card side.

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

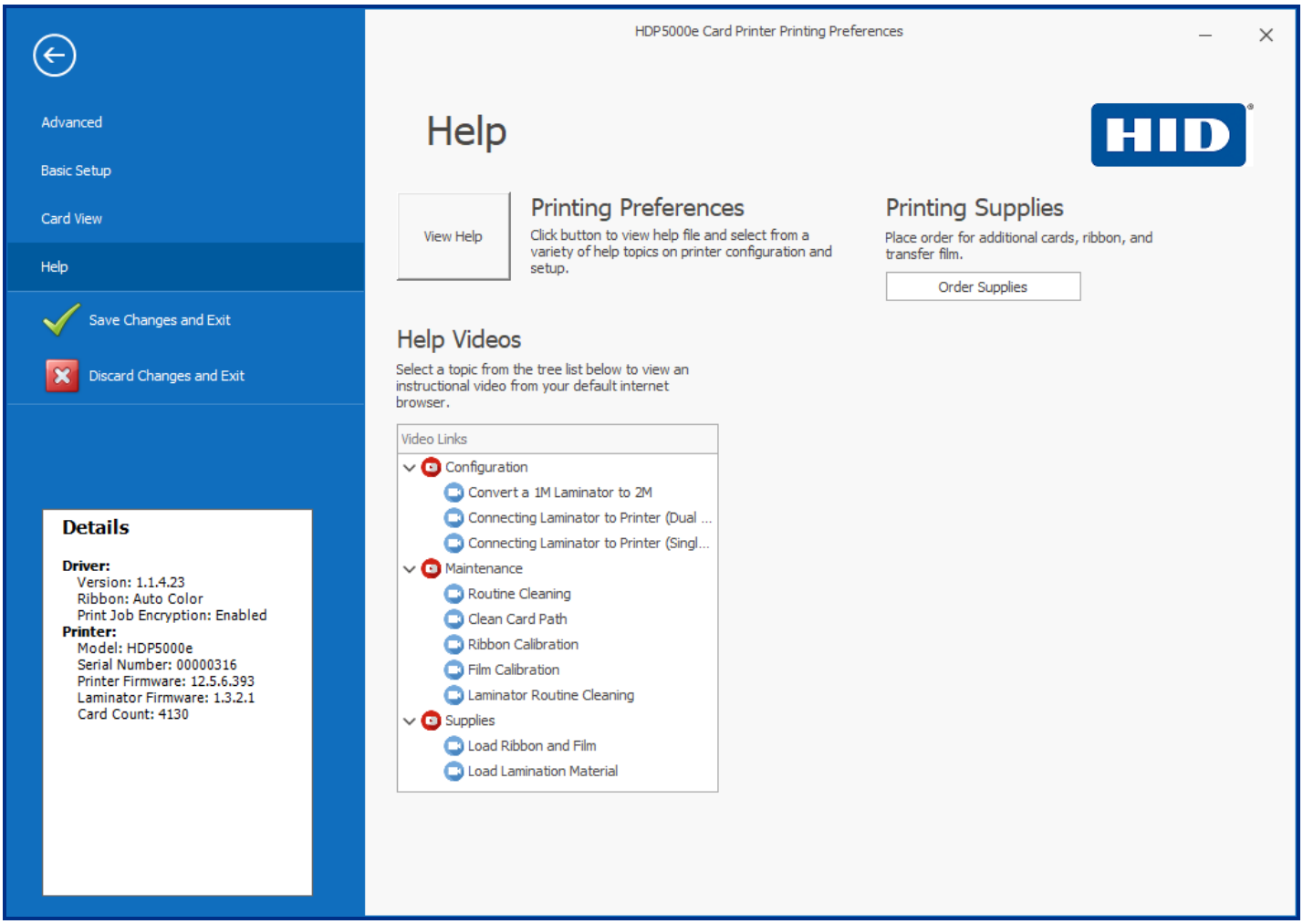
This page displays a representation of the currently selected card options.



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 HDP5000e card printer



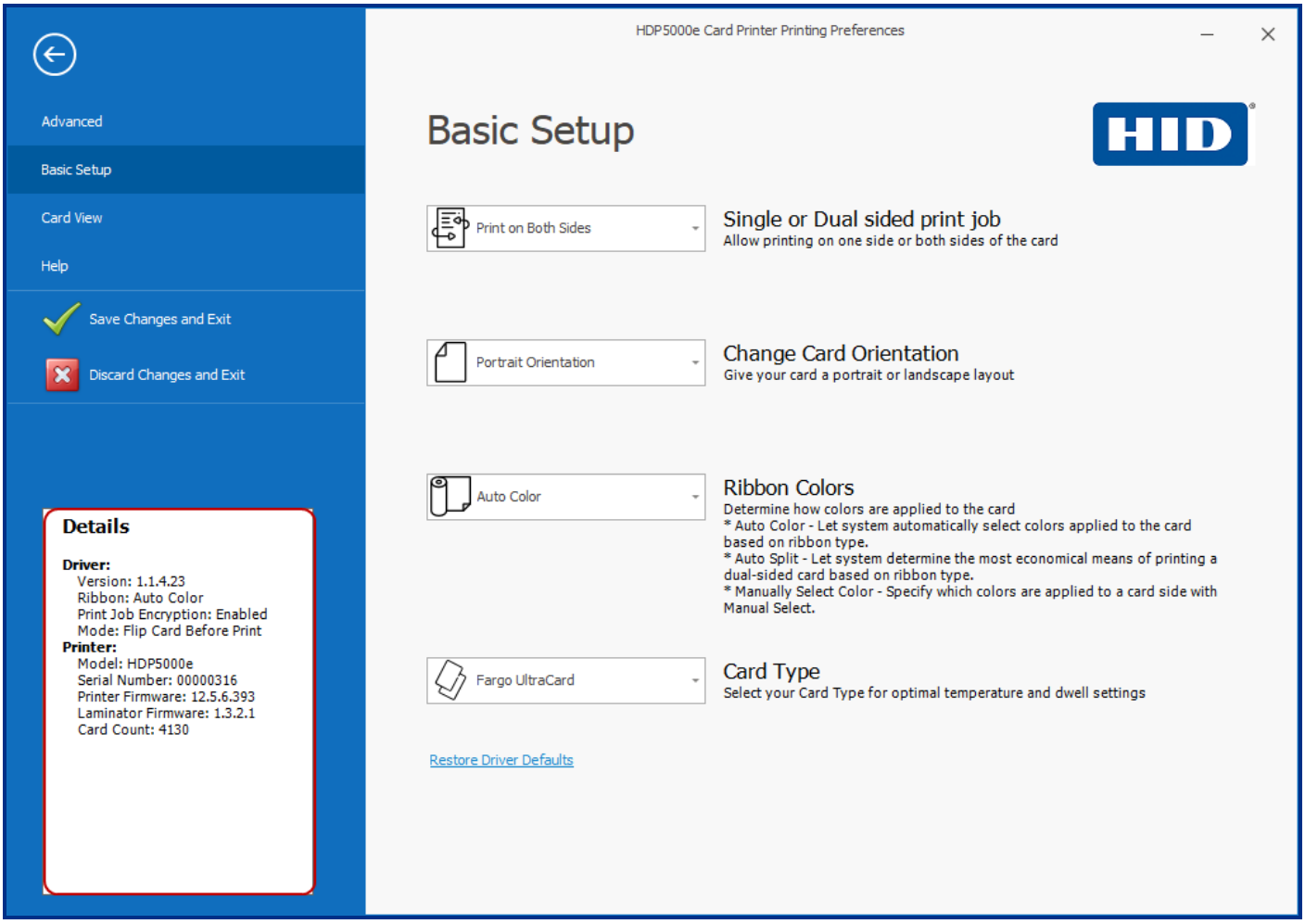
3.2.4 Exit options

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

- **Save Changes and Exit** - Saves any changes made within the HDP5000e card printer printing preferences screens and exits the program.
- **Discard Changes and Exit** - Cancels any changes made within the HDP5000e card printer printing preferences screens and exits the program.

3.2.5 Details window

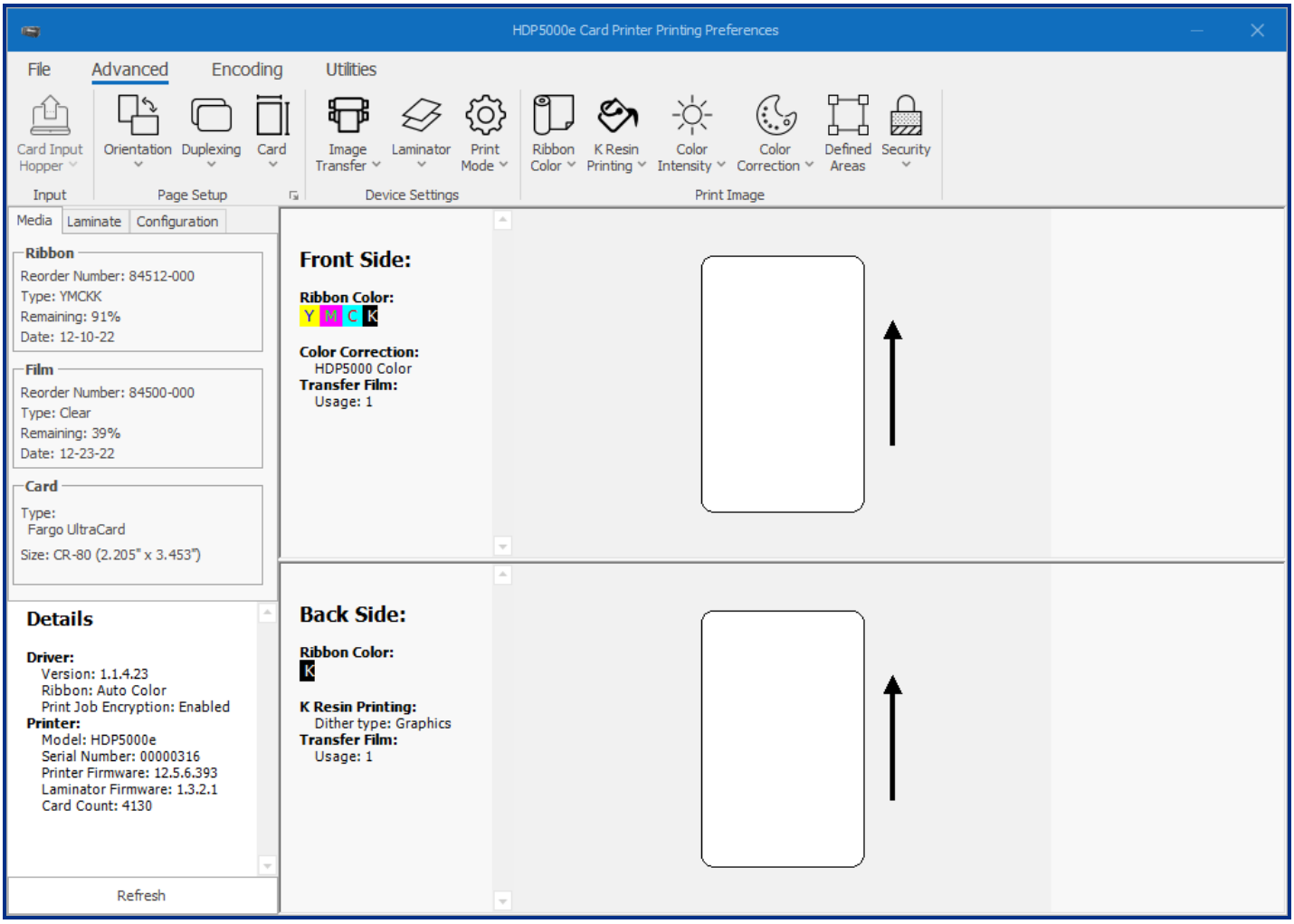
This window displays basic information about the driver and the printer connected to your PC. This information is also displayed on all pages and menu tabs throughout the interface.



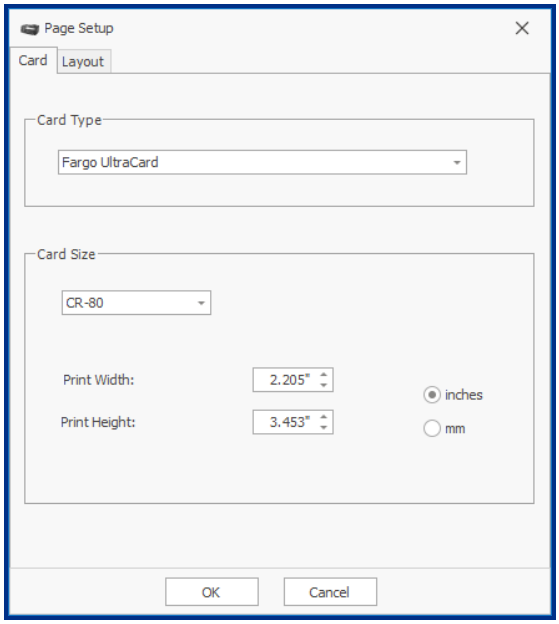
Field	Definition
Details	Displays the driver and printer information. **Driver:** • **Version:** The installed printer driver version. • **Ribbon:** The detected ribbon color. • **Print Job Encryption:** This is displayed if the print job encryption option is enabled. • **Mode:** This is displayed if one or both **Flip Card Before Print** or **Disable Printing** options are selected. • **Print Mode:** This is displayed if the **Performance** print mode is selected. **Printer:** • **Model:** The printer model. • **Serial Number:** The serial number of the printer. • **Printer Firmware:** The installed printer firmware version. • **Laminator Firmware:** The installed laminator firmware version. • **Card Count:** The number of cards printed.

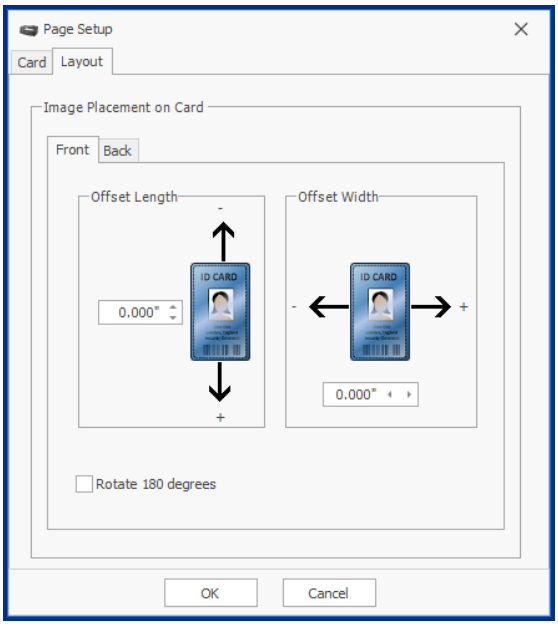
3.3 Advanced menu tab

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



Page Setup	
Menu option	**Description**
Card Input Hopper	Displays options for additional input hoppers, if more than one card hopper is present.
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.

Page Setup	
Menu option	**Description**
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 (default) • FARGO UltraCard PC • FARGO UltraCard Premium • HID Tech Card Composite • HID Tech Card PVC
	More Card Settings: Opens the **Page Setup** window to define the card type and size.  Select a **Card Type** to print: • FARGO UltraCard (default) • FARGO UltraCard PC • FARGO UltraCard Premium • 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**.

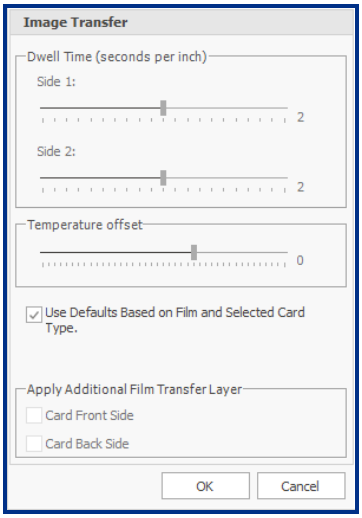
Page Setup	
Menu option	**Description**
	Select the **Layout** tab to set the **Offset Length** and **Offset Width** for the image placement on the front and back of the card. **Note:** If **Duplexing** is set to **Single Sided**, the Back tab is not available on this window.  Adjust the image position 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 (Slider value)	Performance mode transfer settings (Slider value)
FARGO UltraCard Premium	Temperature = 185 (10) Dwell 1 = 2.0 Dwell 2 = 2.0	Temperature = 190 (15) Dwell 1 = 1.2 Dwell 2 = 1.2
FARGO UltraCard	Temperature = 175 (0) Dwell 1 = 2.0 Dwell 2 = 2.0	Temperature = 190 (15) Dwell 1 = 1.2 Dwell 2 = 1.2
FARGO UltraCard PC	Temperature = 190 (15) Dwell 1 = 3.0 Dwell 2 = 3.0	Temperature =190 (15) Dwell 1 = 3.0 Dwell 2 = 3.0
HID Tech Card Composite	Temperature = 165 (-10) Dwell 1 = 3.0 Dwell 2 = 2.0	Temperature =165 (-10) Dwell 1 = 3.0 Dwell 2 = 2.0
HID Tech Card PVC	Temperature = 160 (-15) Dwell 1 = 2.0 Dwell 2 = 1.5	Temperature = 160 (-15) Dwell 1 = 2.0 Dwell 2 = 1.5

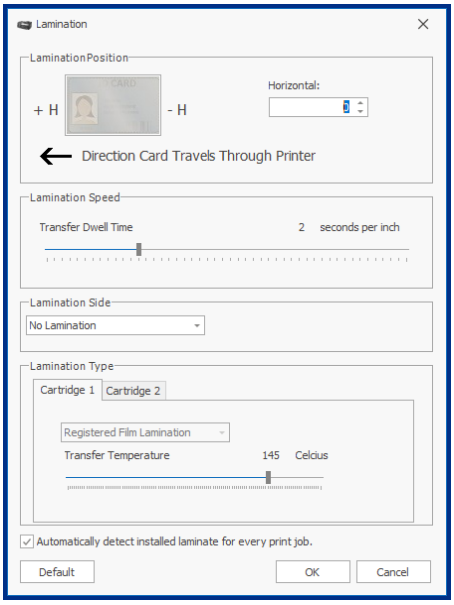
When the **Use Defaults Based on the Film and Selected Card Type** option is selected, the printer driver automatically optimizes these settings according to the card type and film type previously selected. Changes made to the **Dwell Time** and **Temperature offset** settings are saved for the selected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



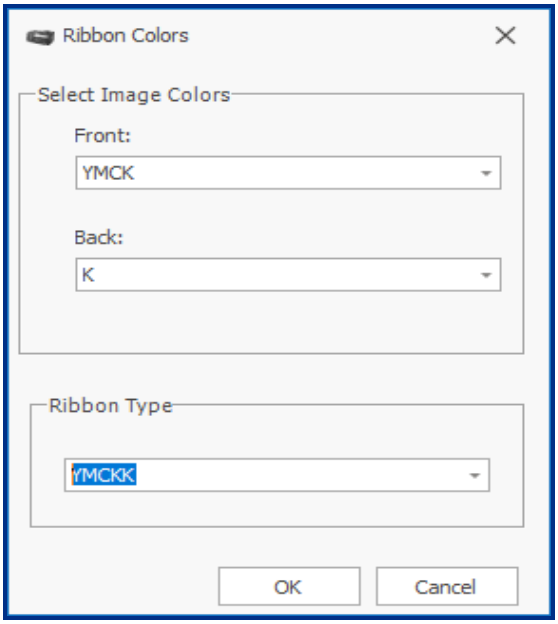
Dwell Time (seconds per inch): Sets the speed at which the printed image is transferred from the HDP film to the card in seconds per inch for each side of the card.

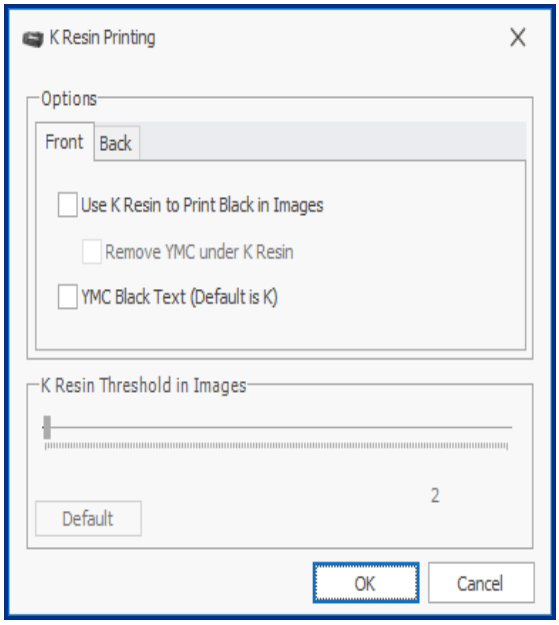
- Lower limit = 1 second per inch
- Upper limit = 3 seconds per inch

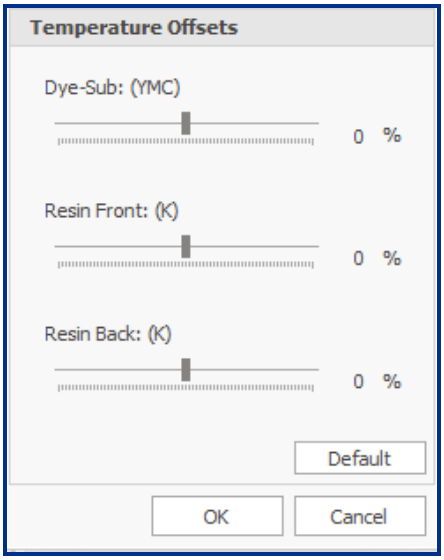
Device Settings	
Menu option	**Description**
	Temperature offset: Sets the temperature (in Celsius) at which the printed image is transferred from the HDP film to the card. • Lower limit: -25 • Upper limit: +15 **Use Defaults Based on the Film and Selected Card Type:** This option is automatically selected. 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. **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.

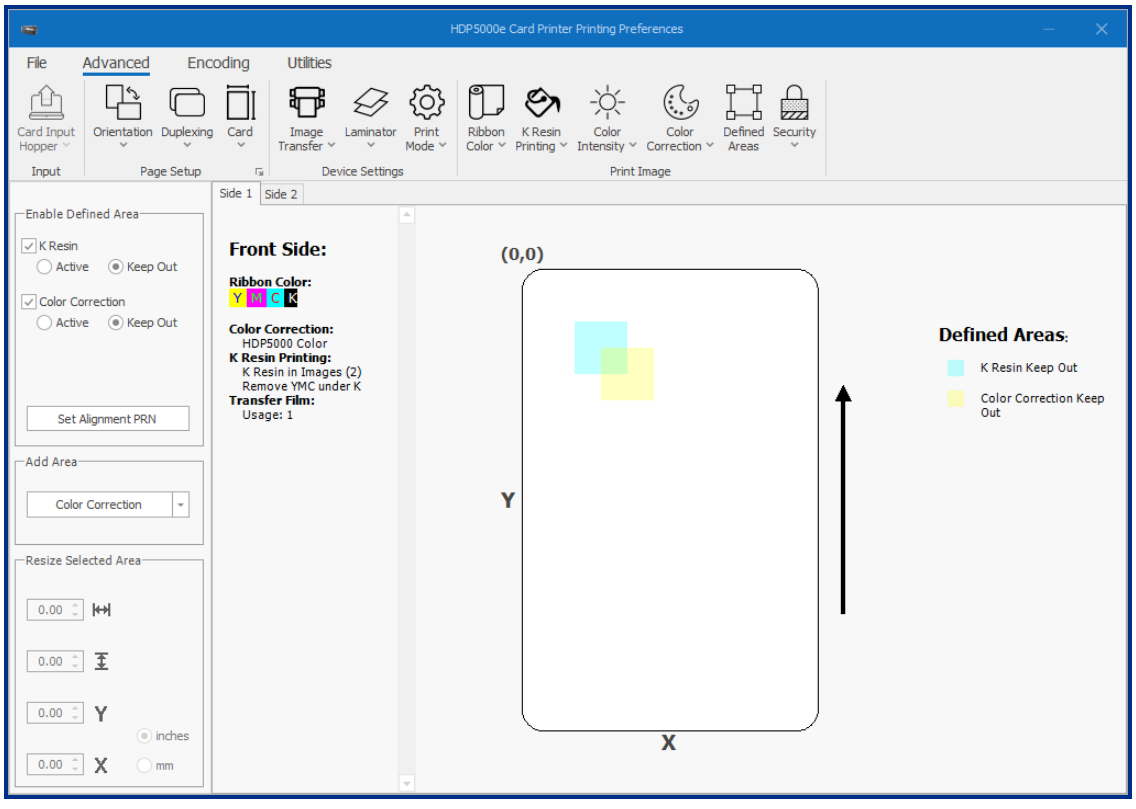
Device Settings	
Menu option	**Description**
Laminator	This setting controls the printer lamination process. **Lamination Side:** Specifies the side of the card to laminate. Available settings are: • No Lamination (if the laminator is not to be used) • Front Side • Back Side • Both Sides • Opposite Sides **More Settings:** Opens the **Lamination** window to define the lamination settings. The card lamination module accepts either: • Thermal transfer film: This is a relatively thin material which covers a card edge-to-edge and provides a medium level of card durability and security. • PolyGuard Overlaminate: This is a thicker material which does not cover edge-to-edge, but provides an extremely high level of card durability and security. **Note:** PolyGuard is available in either a 1.0 or .6 mil thickness and should always be used for those applications requiring the highest degree of card durability and security. PolyGuard is available in clear or holographic patch.  **Lamination Position:** adjusts the horizontal position of the laminate. Available settings are -100 - 100. • To move the laminate toward the printer output side, enter a positive number. • To move the laminate toward the printer input side of the printer, enter a negative number.

Device Settings	
Menu option	**Description**
	Lamination Speed: adjusts the throughput speed (Transfer Dwell Time) of a card in seconds per inch. Available settings are: 0.8 - 5.5 seconds per inch (the default is 2 seconds). Lamination Side: specifies the side of the card to laminate. • No Lamination • Front Side • Back Side • Both Sides • Opposite Sides Lamination Type: Select one of the lamination type options Cartridge 1 or Cartridge 2 according to which type of lamination media is installed. Two types of overlaminates, film and PolyGuard are supported by the driver. Available selections are: • Film Lamination: Select if the thermal ttransfer film overlaminate type is installed in the lamination module. • .06 PolyGuard Lamination: .06 is the patch thickness. • 1.0 PolyGuard Lamination: 1.0 is the patch thickness. Note: The two PolyGuard Lamination patches require different heat settings and lamination speeds. Select the appropriate option according to the thickness of the PolyGuard material in use. • Registered Film Lamination • Holographic Film Lamination Transfer Temperature: If the check box to auto detect is selected, the temperature is automaticlly set. The slider can change the temperature if a different one is required. Temperature range: 50 - 170 (Celcius) Automatically detect installed lamintate for every print job: Select this option for auto detection of the laminate installed. The default is selected. In the firmware, the values are updated on initialization and cover closing. If values in the PRN file do not match the selected ones, the LCD shows a laminate error.
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. If Disable Printing is selected, graphics are skipped when printing a card. Performance: Select this option to reduce the transfer temperature and speed to enhance the image quality. When Performance is selected, the Details window is updated to reflect Print Mode: Performance.

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 **Ribbon Type:** Available options are: • YMCK • YMCKK

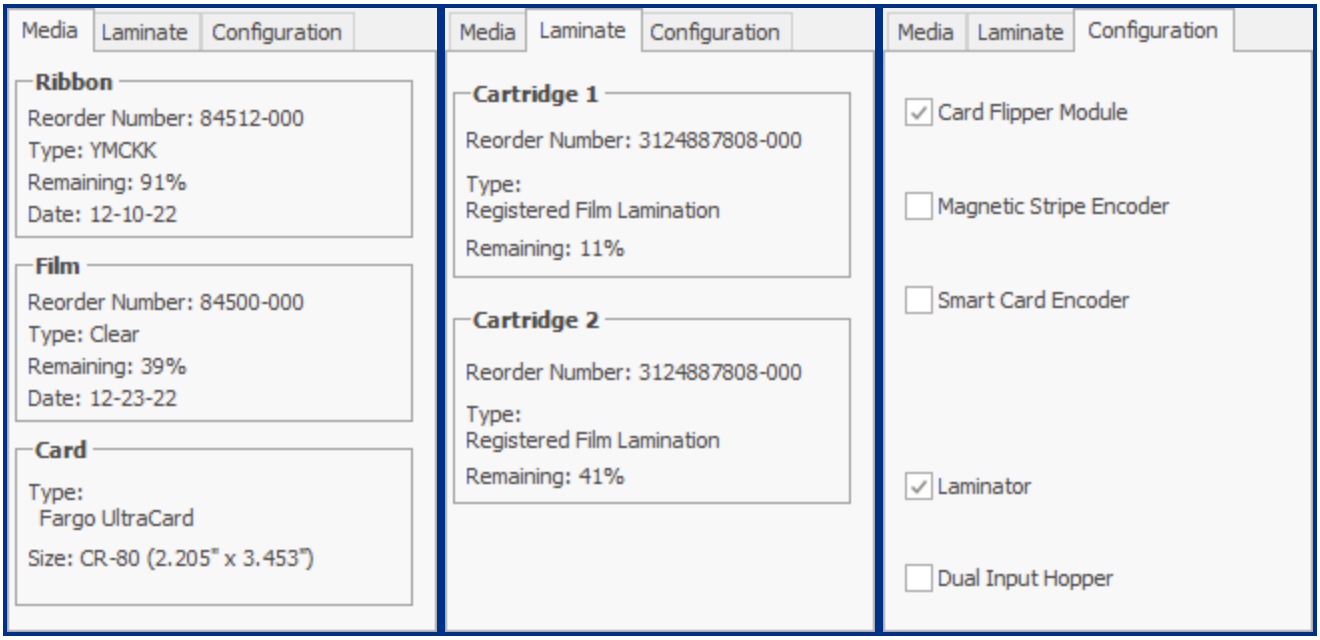
Print Image	
Menu option	**Description**
K Resin Printing	This option controls where the resin black (K) panel of a full-color ribbon is printed. Resin black is desirable for text and bar codes due to its sharp, saturated color. It is generally not recommended for pictures, borders, or areas that are 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 YMCK 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: This option prints 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**
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 Front: (K) / Resin Back: (K):** The heat is controlled for both front and back of the card. 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	**HDP5000 Color:** Attempts to duplicate the HDP5000 color settings. **None:** Uses the uncorrected output from the print head.

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. **Encrypt Print Job**: AES256 encryption protects the data passed from the computer to the printer. This is enabled by default.

3.3.1 Information panel

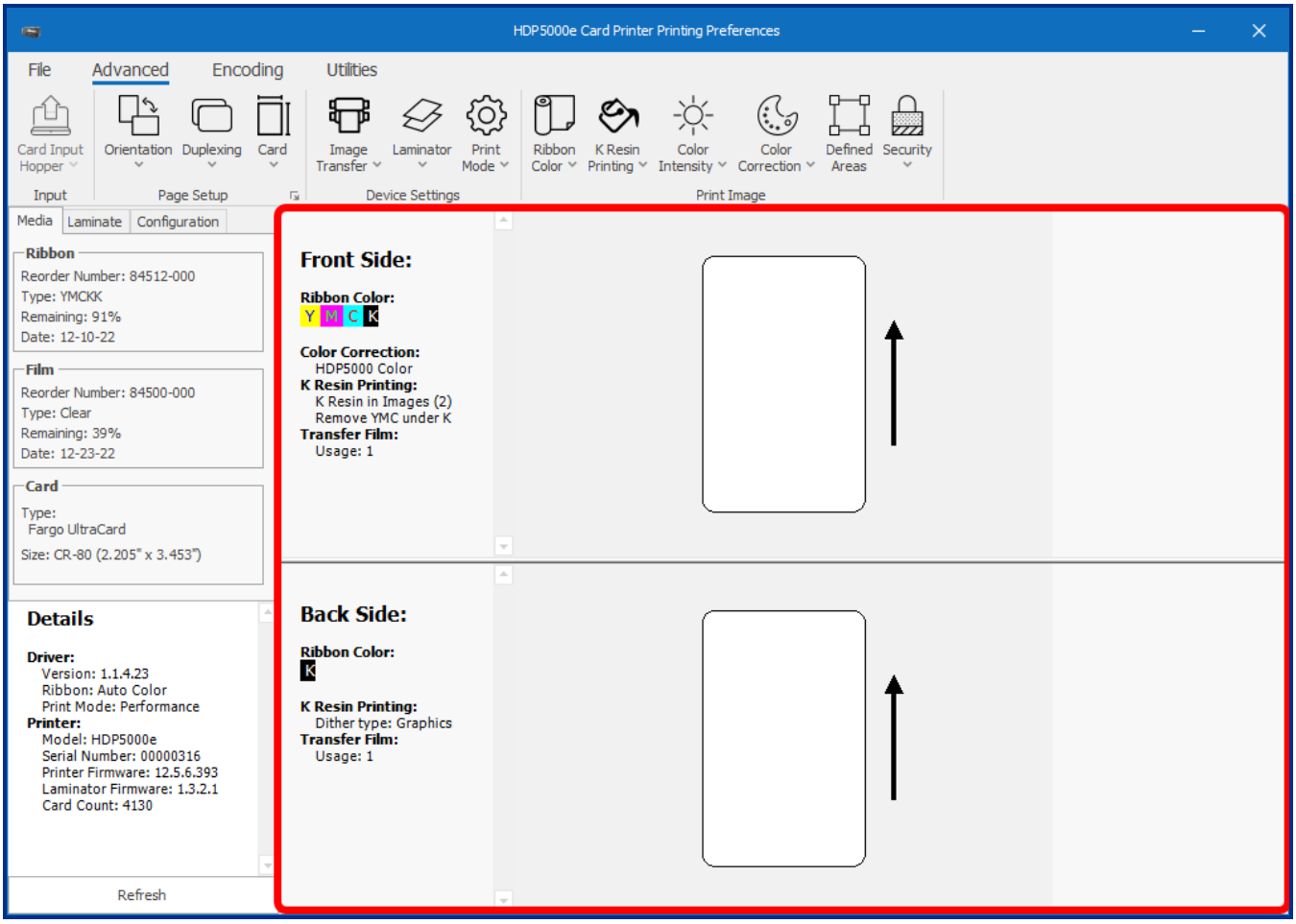
This panel is displayed on the left side of the **Advanced**, **Encoding**, and **Utilities** menu tabs.



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.
Laminate tab	Displays the cartridge information for lamination.
Reorder Number	Displays the reorder number of the laminate material.
Type	Displays the type of laminate material
Remaining	Displays the percentage of the laminate material available.
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) • Magnetic Stripe Encoder • Smart Card Encoder • Laminator • Dual Input Hopper
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

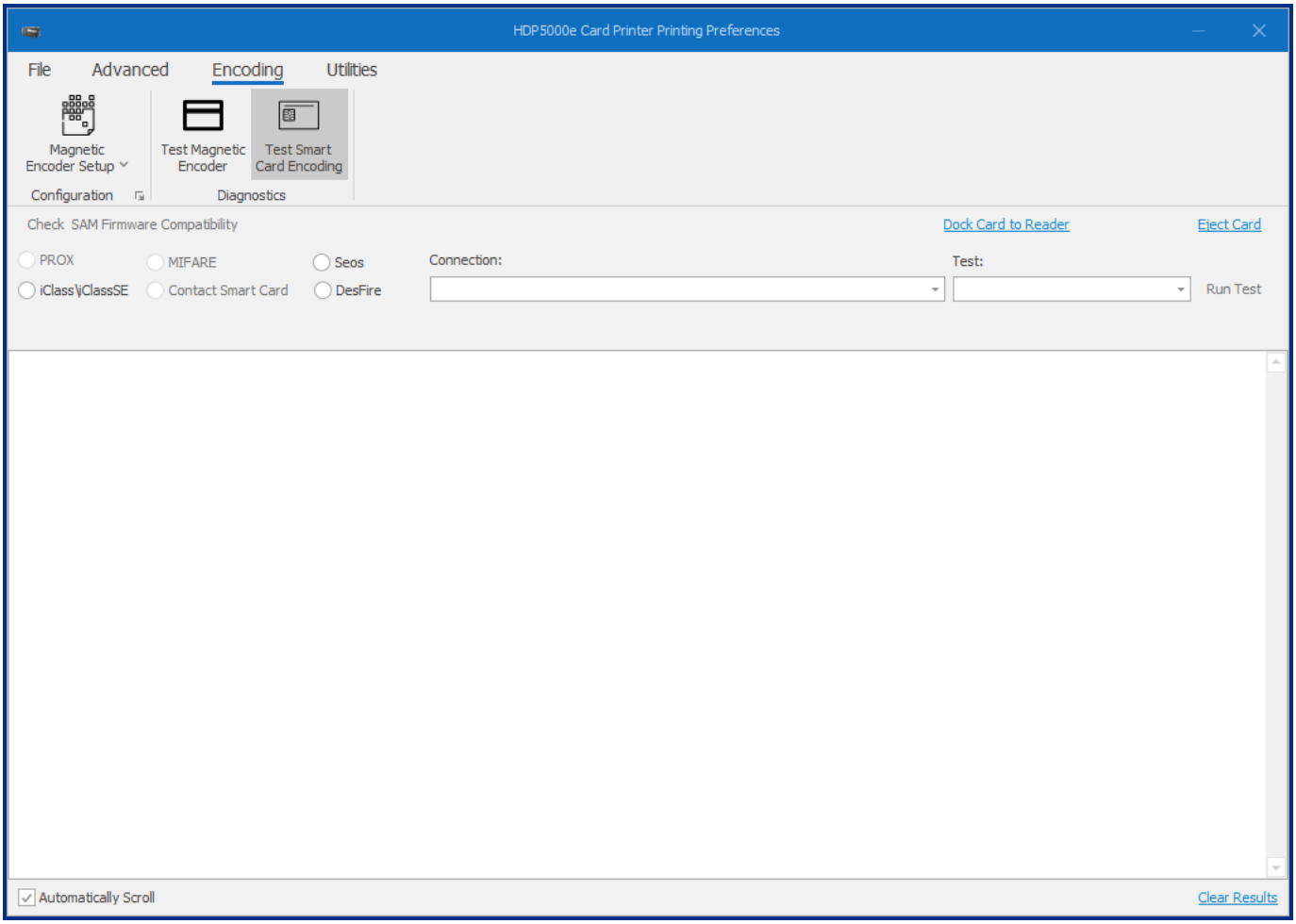
The card image area displays a representation of the selected card options. The options include card side, ribbon color descriptor, image transfer settings, defined areas legend (if specified), and single-sided or dual-sided print area images.



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.
K Resin Printing	Displays any defined **K Resin Printing** 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.
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

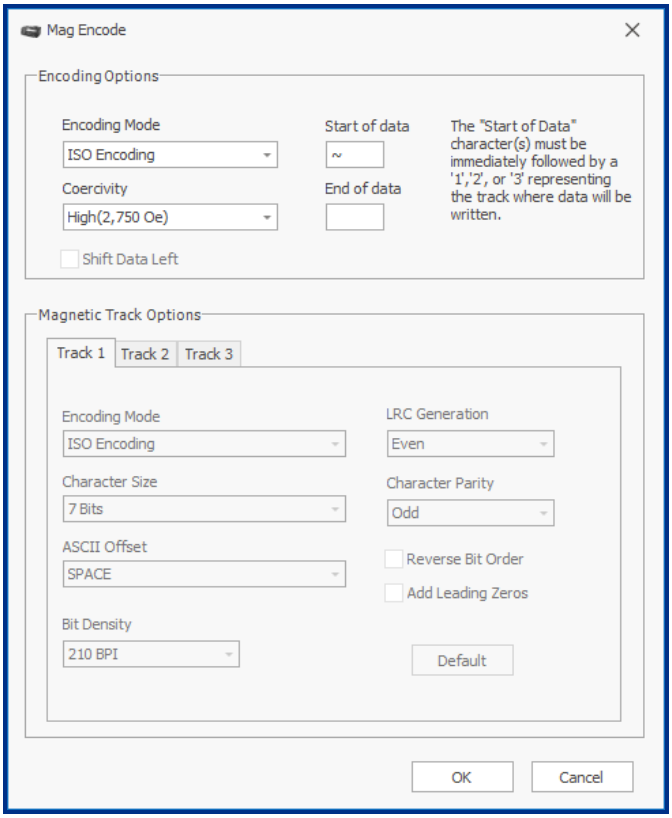
This tab contains the options for controlling the magnetic stripe encoding process. If the printer does not automatically detected these features or if communication with the printer does not exist, these configuration items can be manually selected from the configuration tab in the Information panel.



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.
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.

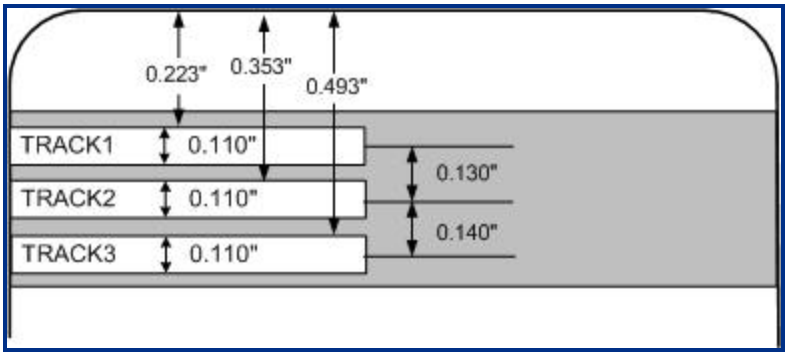


Field	Description
Encoding Options	Set the Encoding Mode and Coercivity or modify the ISO standards for Tracks 1, 2 and 3. • ISO Encoding: sends a formatted set of characters to the encoding module. The magnetic track tabs are inactive and display ISO defaults for each track. This is the default. See 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 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.

> **Note:** For ISO mode, start and end sentinels are automatically added to the input string if they do not exist.

Reviewing the sample string

Track 1: ~1%JULIEANDERSON^1234567890?
Track 2: ~2;12345678909876543 21?
Track 3: ~3;12345678909876543 21?

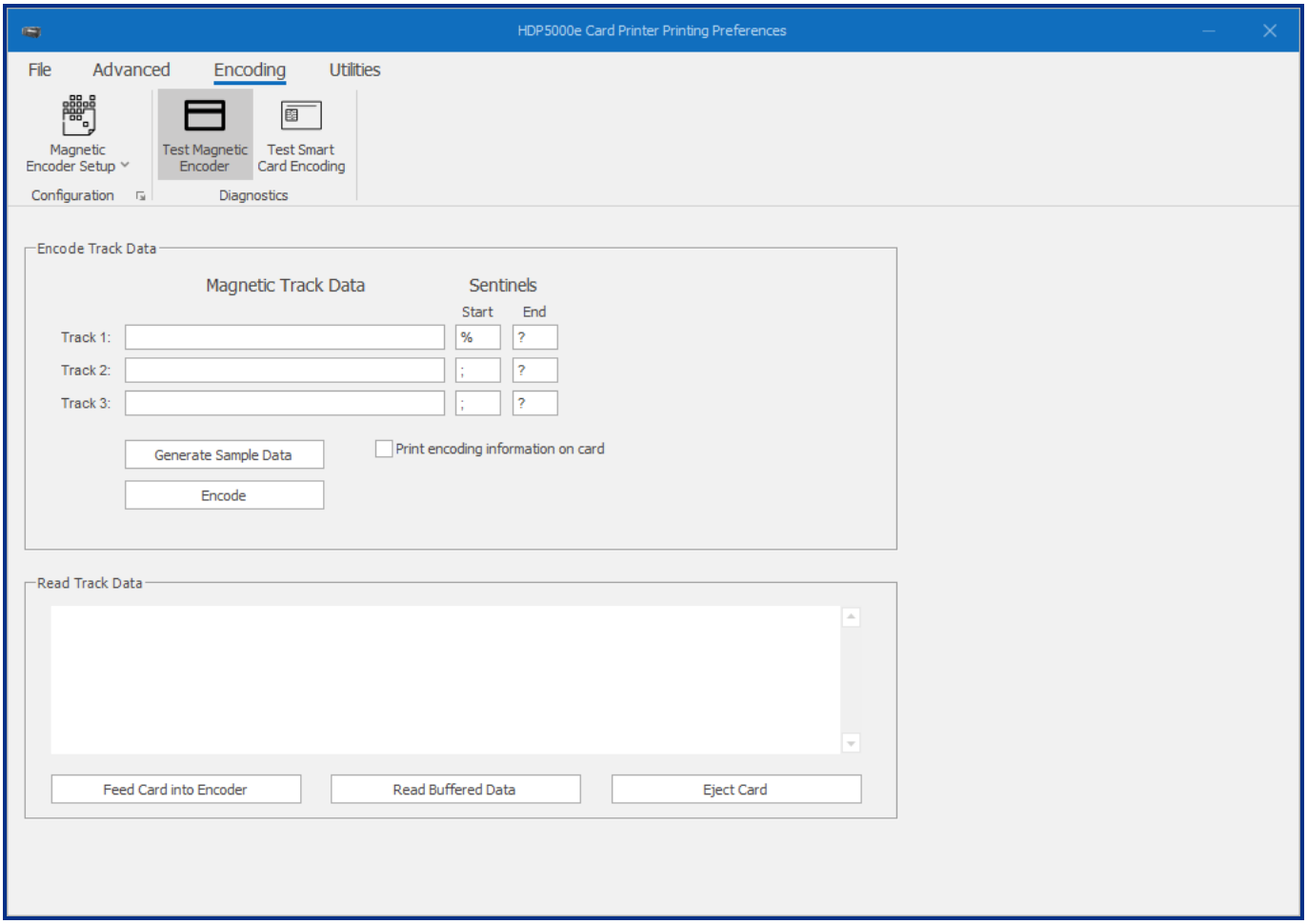
Track	Start sentinel	End sentinel	Field separator	Valid characters	Maximum number of characters
Track 1	%	?	^	ASCII 32-95 (See the table)	78
Track 2	;	?	=	ASCII 48-63 (See the table)	39
Track 3	;	?	=	ASCII 48-63 (See the table)	106

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
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

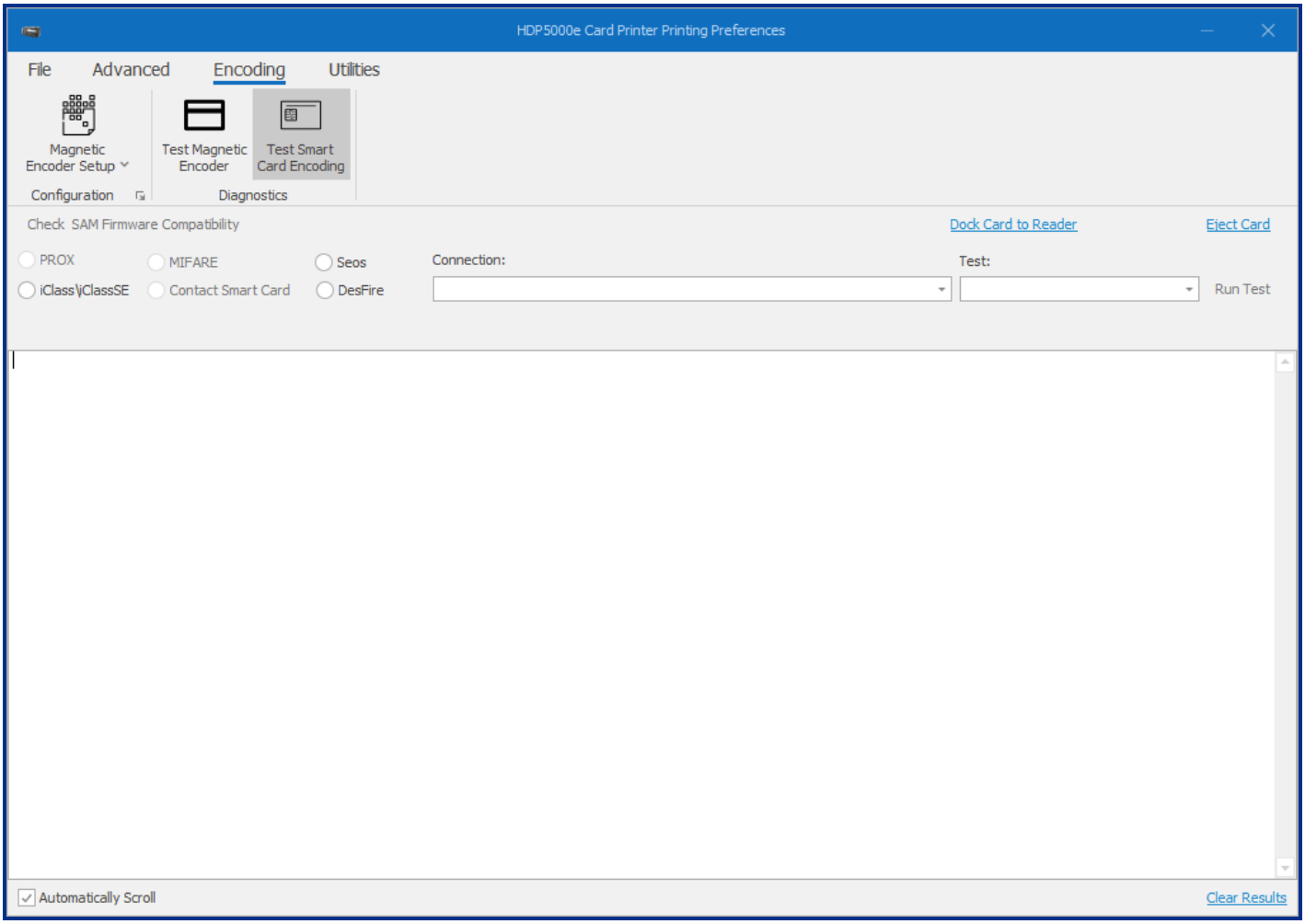
Exercises the printer's magnetic encoding functionality independent of image or application.



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.

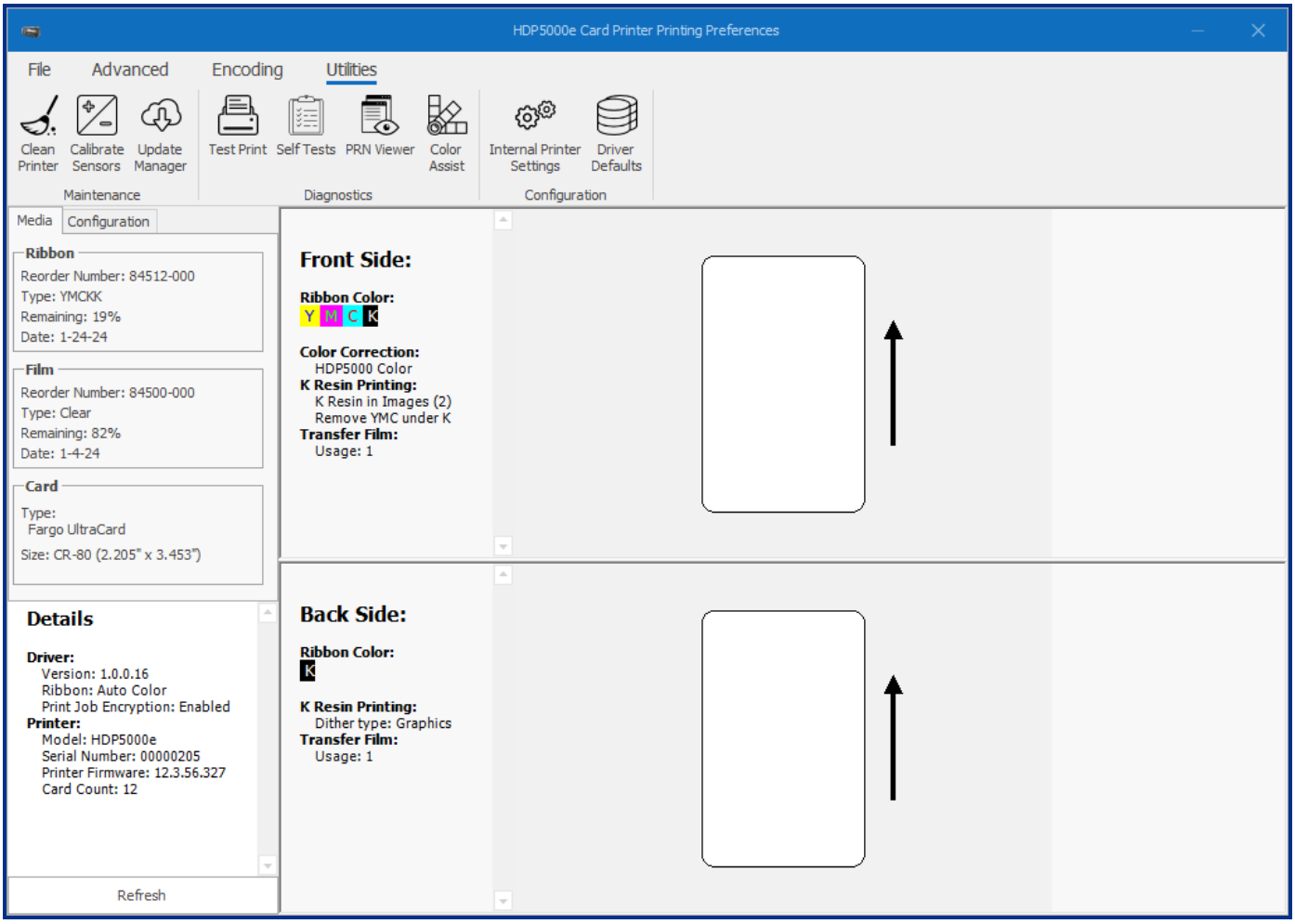


Field	Description
Check SAM Firmware Compatibility	
View installed technology	Available options are: • PROX • iCLASS / iCLASS SE™ • MIFARE • Contact Smart Card • Seos® • DesFire
Dock Card to Reader	Select this link to instruct the printer to dock the card to the magnetic encoder.
Eject Card	Select this 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.

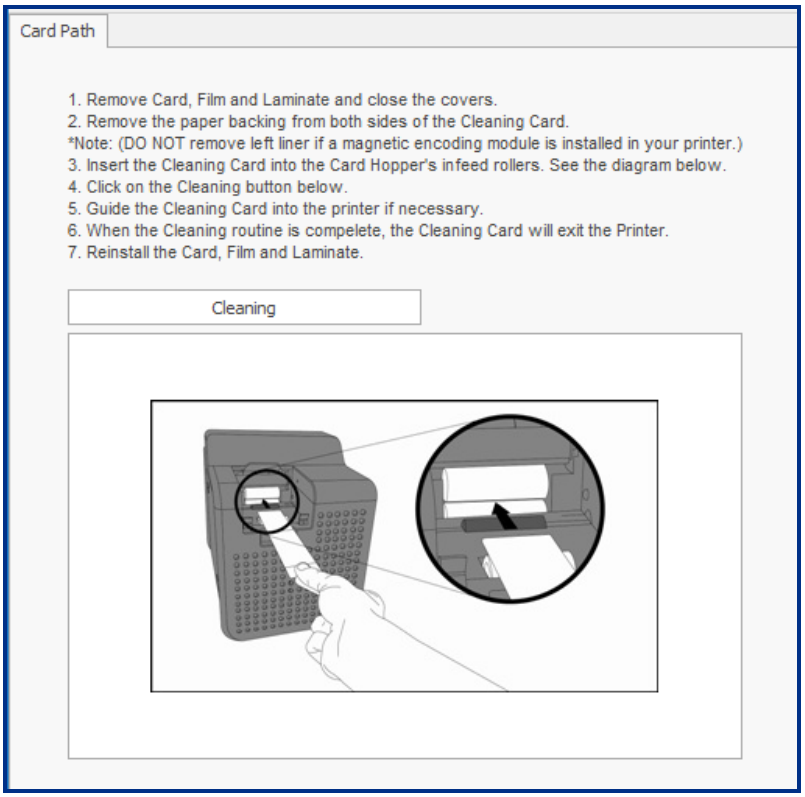


Field	Definition
Maintenance	
Clean Printer	Specifies how to clean the printer using a cleaning card.
Calibrate Sensors	Specifies how to calibrate the ribbon and film sensors.
Update Manager	Checks, manages, and downloads updates for printer firmware and drivers.
Diagnostics	
Test Print	Sends sample 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

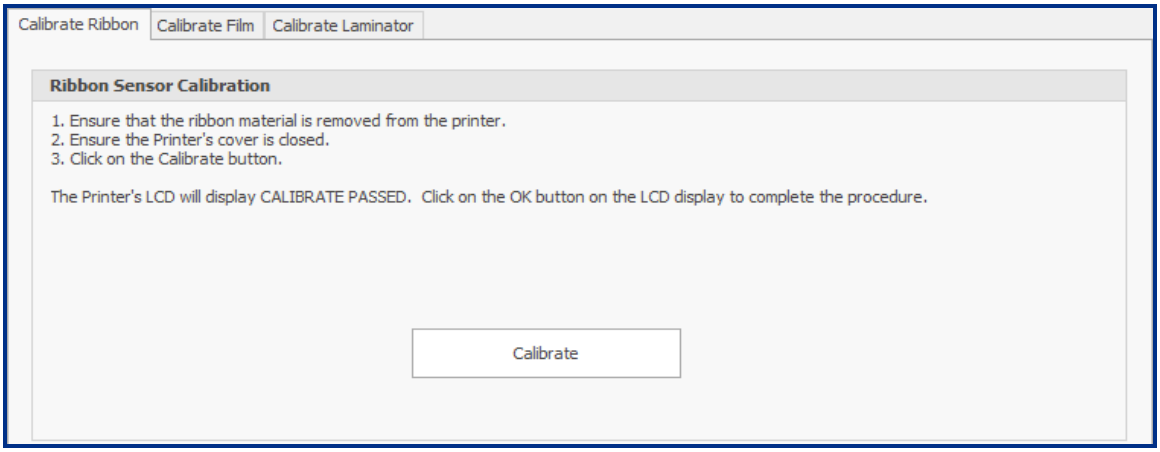
Follow the instructions on the page to clean the printer. The cleaning routine begins after all current print jobs have completed.

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

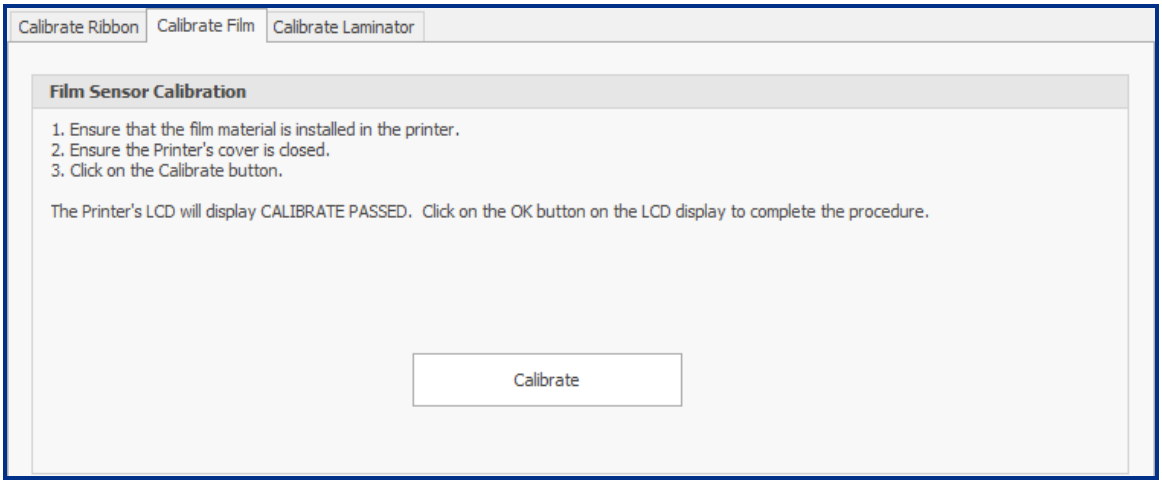


3.5.2 Calibrate sensors

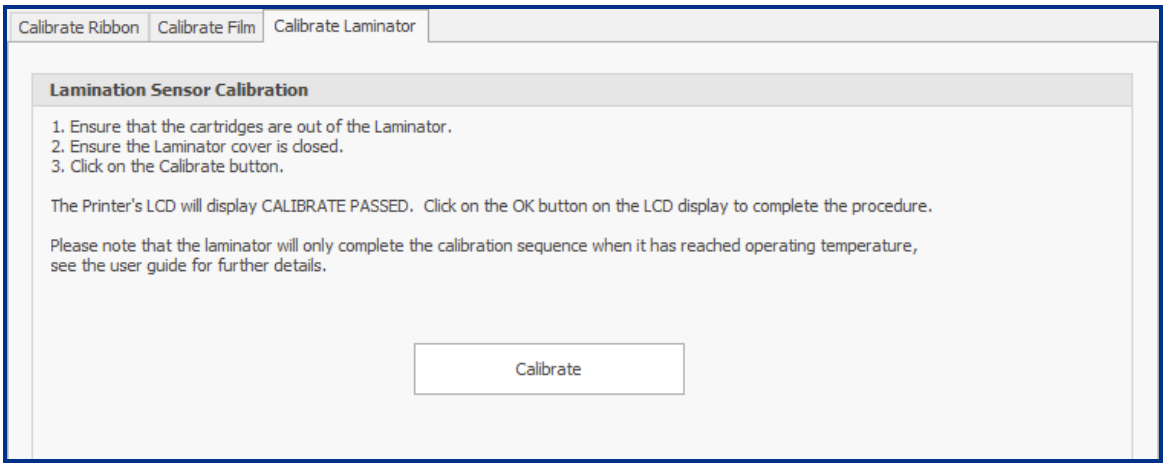
The **Calibrate Ribbon** option sends the calibrate ribbon command to the printer. Follow the instructions on the page for calibration of the ribbon sensor.



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

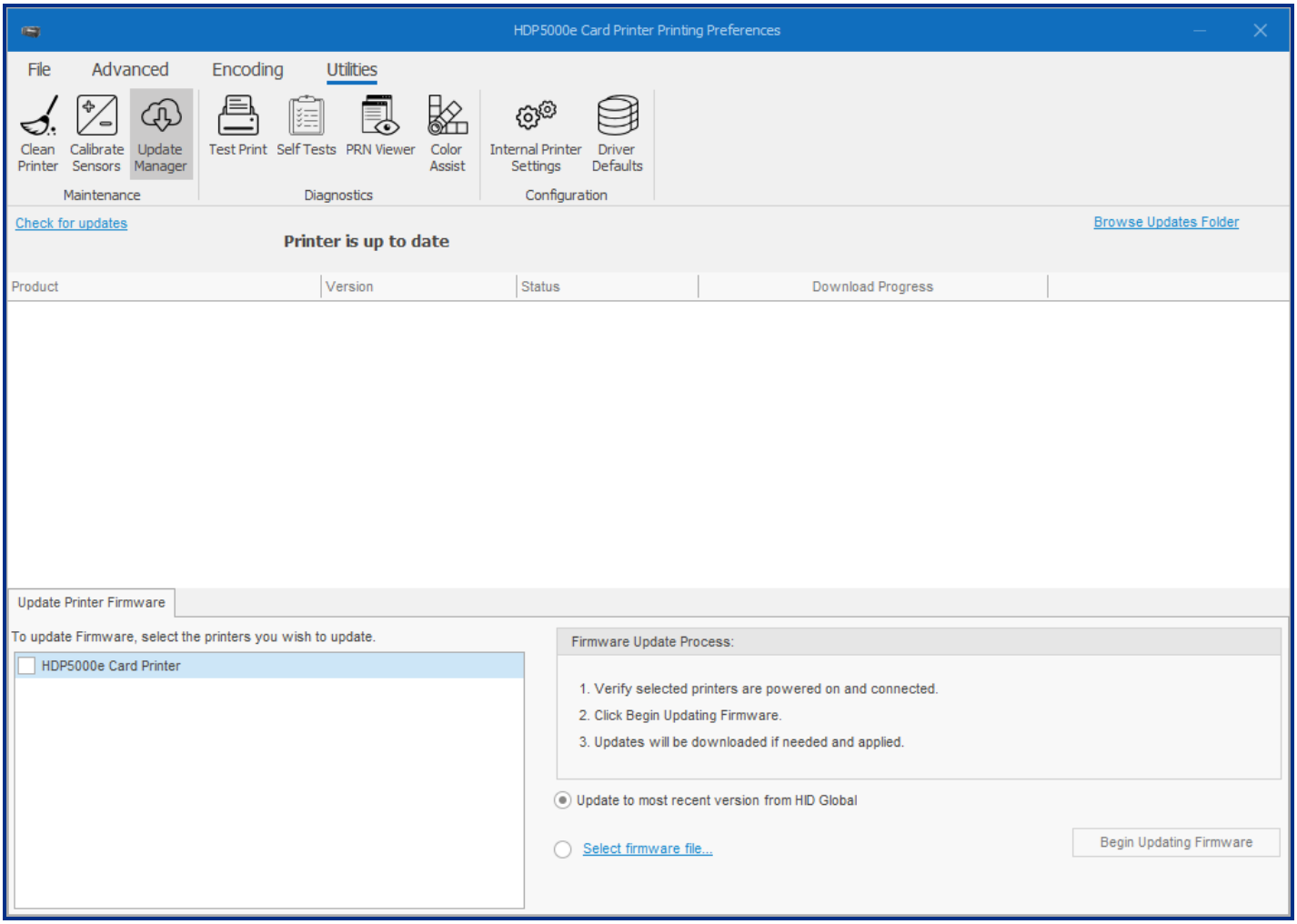


The **Calibrate Laminator** option sends the calibrate laminator command to the printer. Follow the instructions on the page for calibration of the laminator sensor.



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.

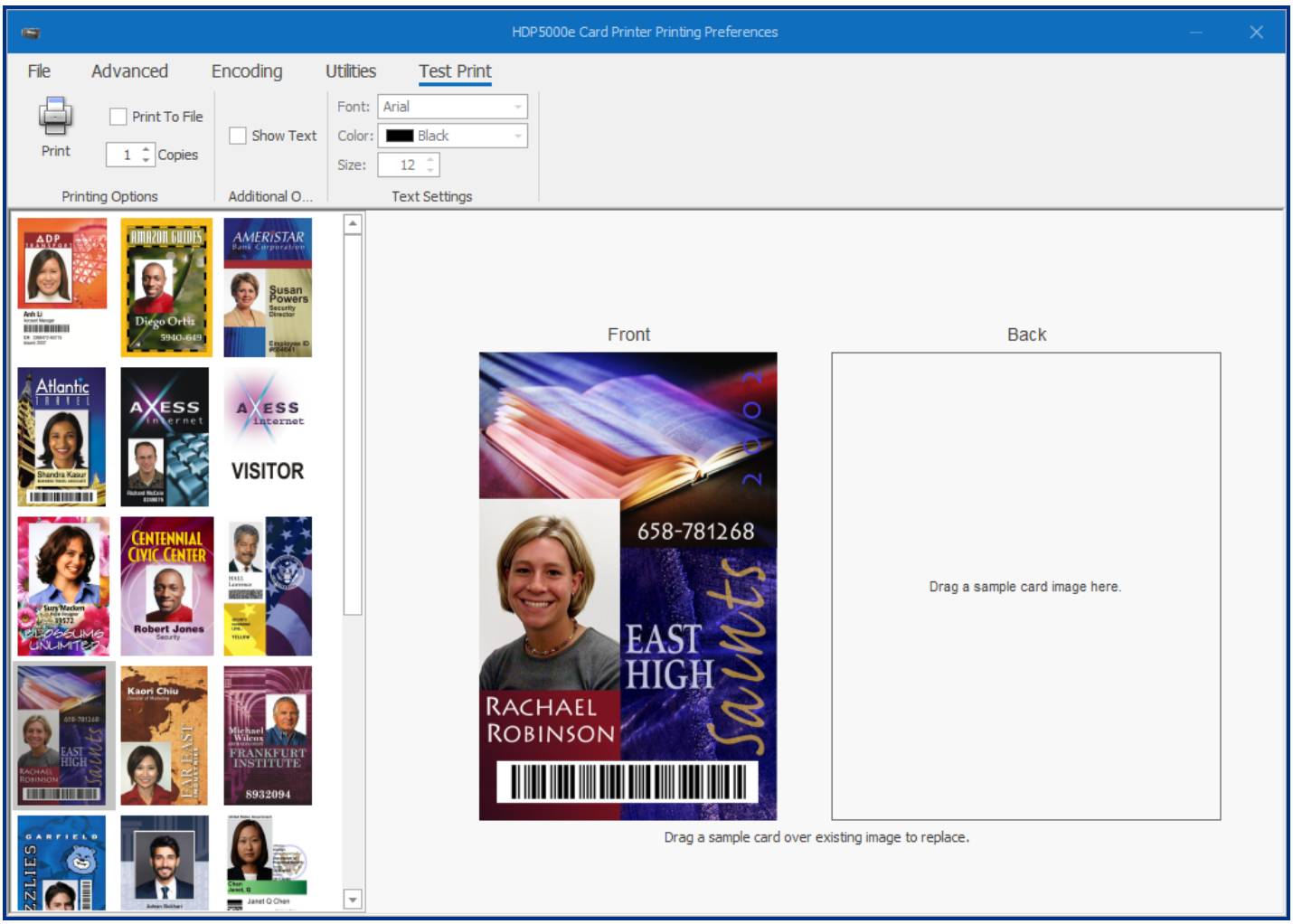


Field	Description
Check for updates	Click this link to check for any available firmware and printer driver updates. Available updates are displayed by product, version, status, and download progress.
Browse Updates Folder	Click this link to open a window to browse the updates folders stored on your PC or available network.
Update Printer Firmware tab	Lists available HID printers connected to your computer. Select the printer you wish to update.
Firmware Update Process	Describes the steps to update your printer firmware.
Update to most recent version from HID Global	The most recent firmware file available is automatically selected.
Select firmware file	Click this link to open 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.

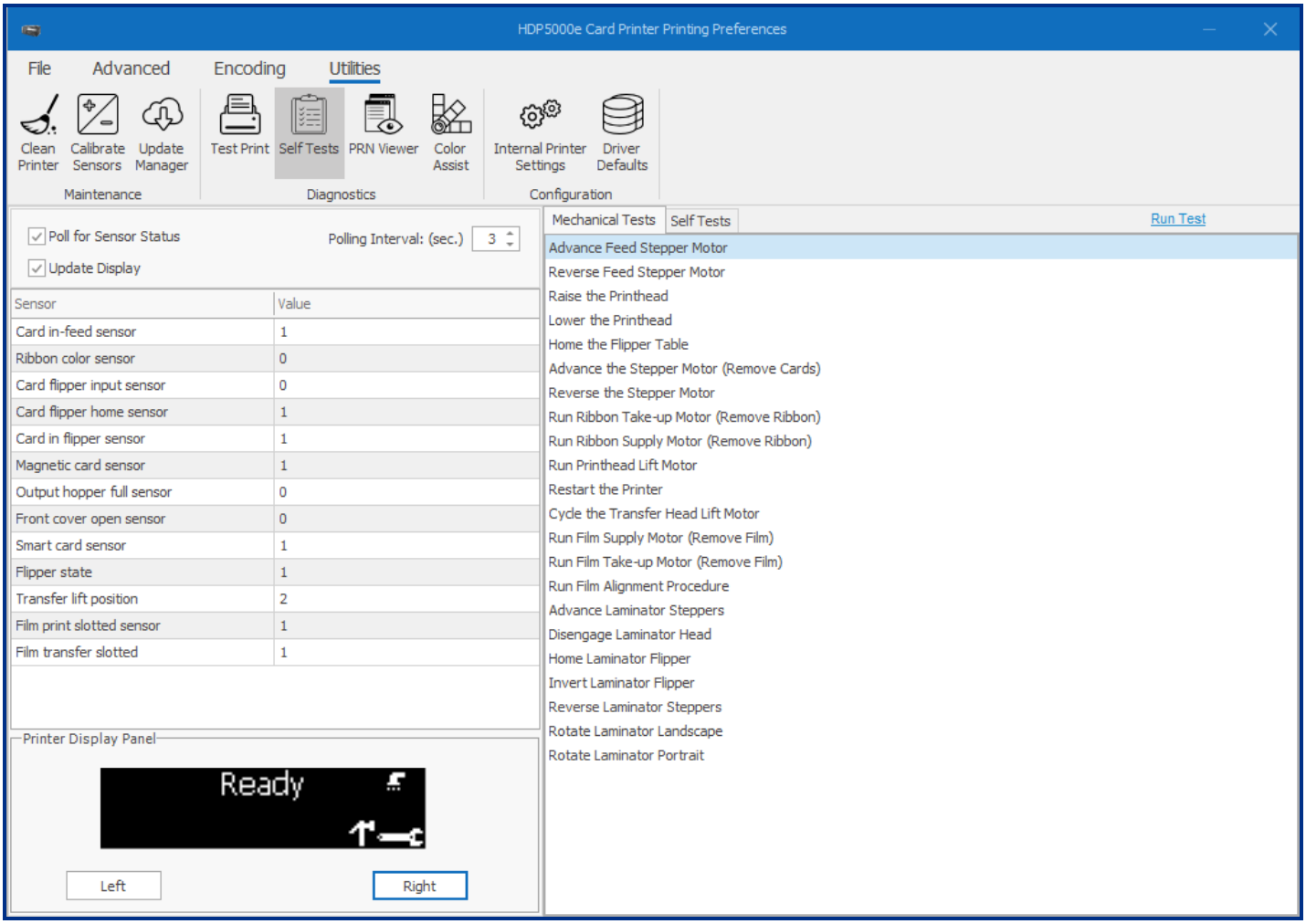


Field	Description
Front	Click and drag a sample card from the left side of the screen to the card outline on the right side of the screen. Cards images can be changed by dragging additional sample cards to the existing image. If a dual-sided module is detected, a Back card outline is displayed.
Print	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.

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.

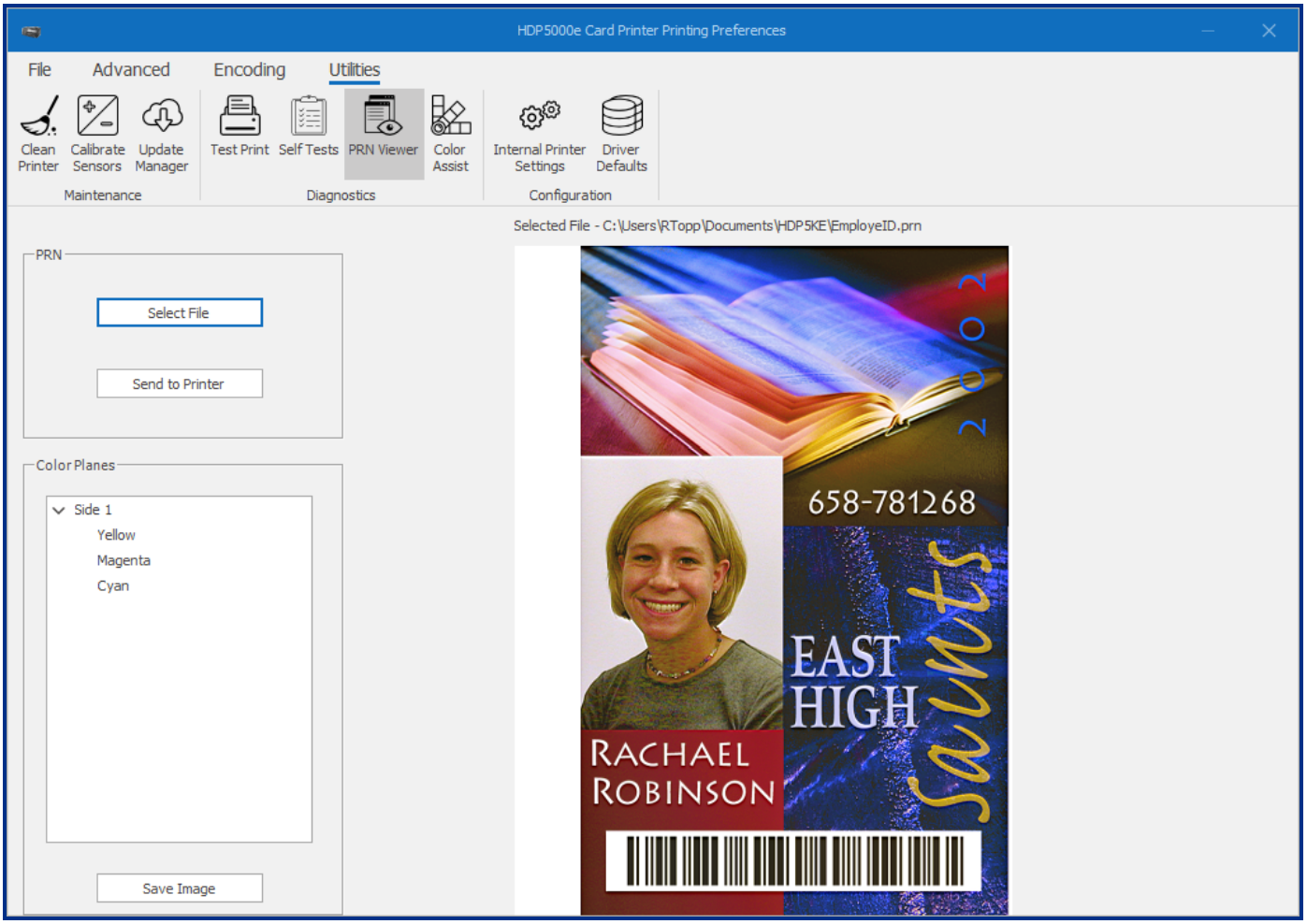


Field	Description
Poll for Sensor Status	When selected, each sensor is checked at the interval specified by the **Polling Interval: (sec.)** field.
Update Display	When selected, the **Printer Display Panel** reflects what is shown on the printer display.
Polling Interval: (sec.)	Sets the number of seconds to wait before each check of the printer status. Available values are 1 to 30 seconds.

Field	Description
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.
Mechanical Tests	Lists the available mechanical tests. • Advance Feed Stepper Motor • Reverse Feed Stepper Motor • Raise the Printhead • Lower the Printhead • Home the Flipper Table • 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 • Restart the Printer • Cycle the Transfer Head Lift Motor • Run Film Supply Motor (Remove Film) • Run Film Take-up Motor (Remove Film) • Run Film Alignment Procedure • 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 • YMCK Self Test • Device Settings Self Test • Resin Self Test • Magnetic Self Test • Laminator Self Test
Run Test	Click this link to run the selected mechanical or self test.

3.5.6 PRN viewer

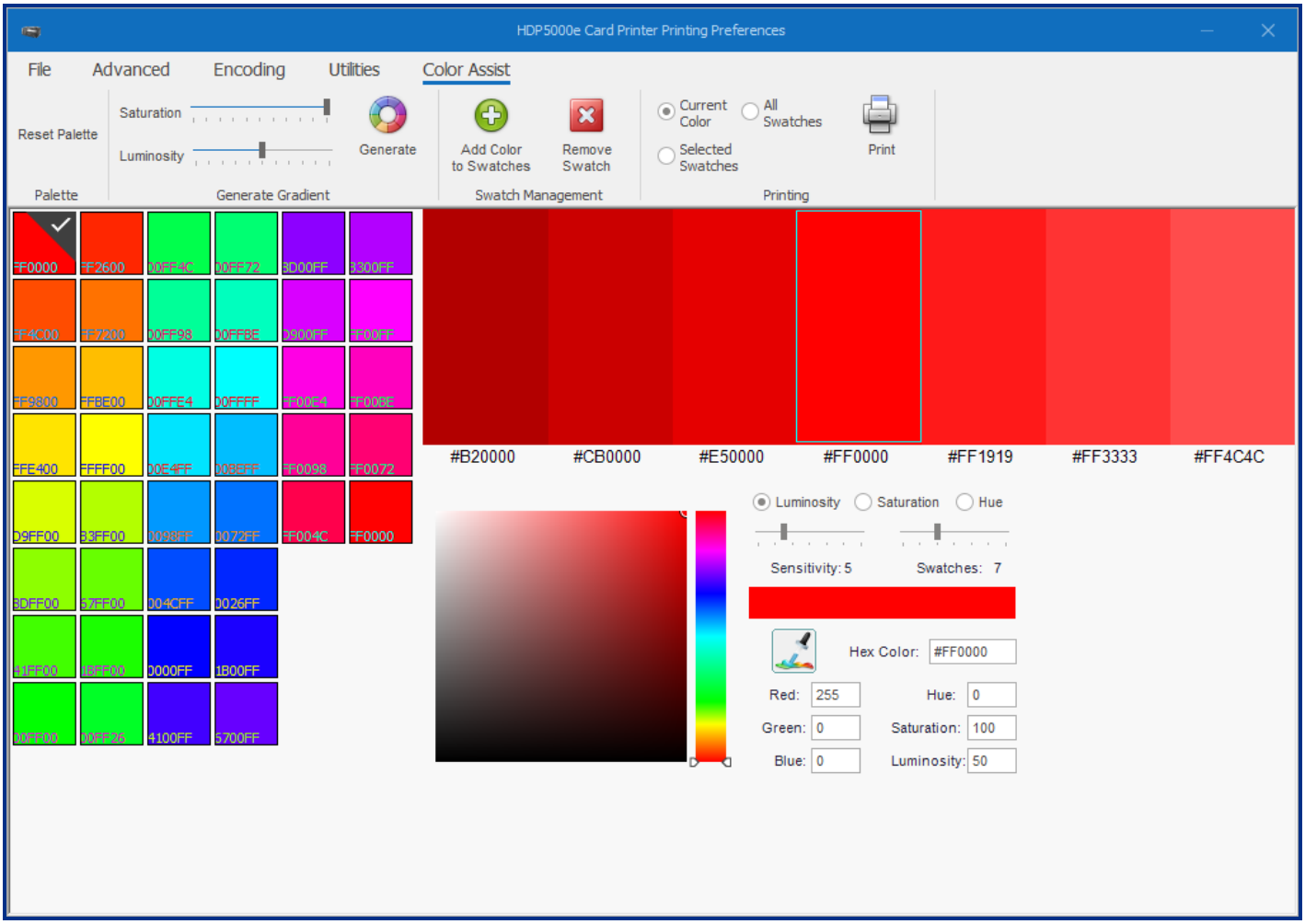
The PRN viewer provides the ability to view a print file (PRN) as an image. You can send print files to the printer to view proper layout, determine if image defects are part of the file going to the printer, and verify the printer driver settings are the same as the PRN file. You can also print copies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



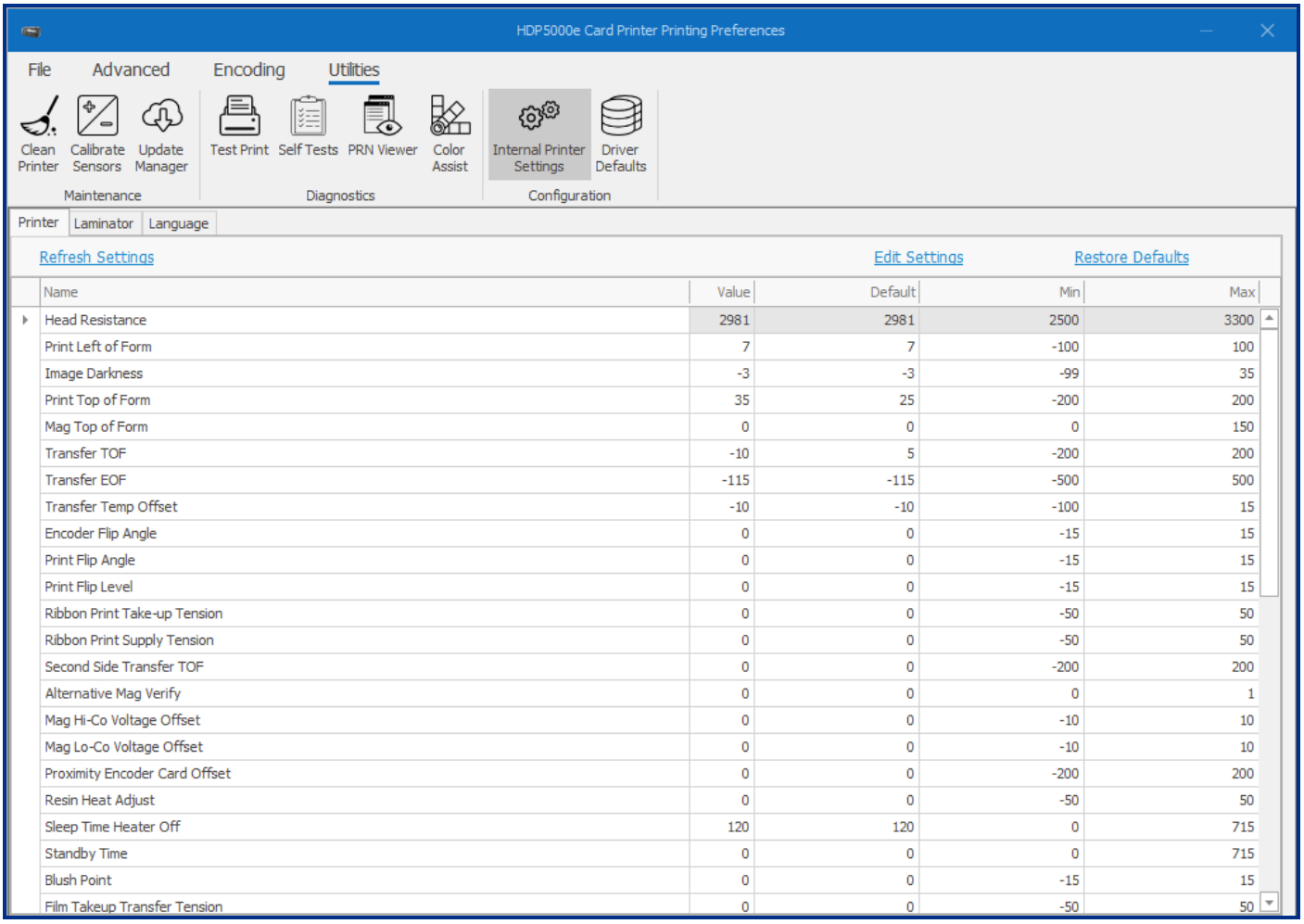
Field	Description
Palette	
Reset Palette	Resets your palette for new or future work.
Generate Gradient	
Saturation	Adjusts the intensity of the color. As the saturation increases, the colors appear more pure. As the saturation decreases, the colors appear more washed out gray.
Luminosity	Adjusts the 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).

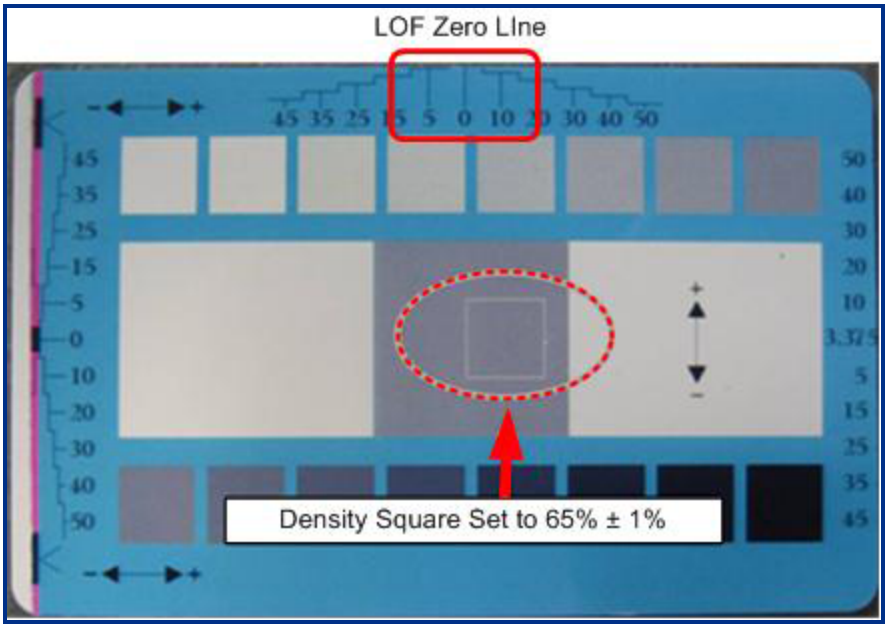
> **Note:** Any changes affect the settings for the firmware.

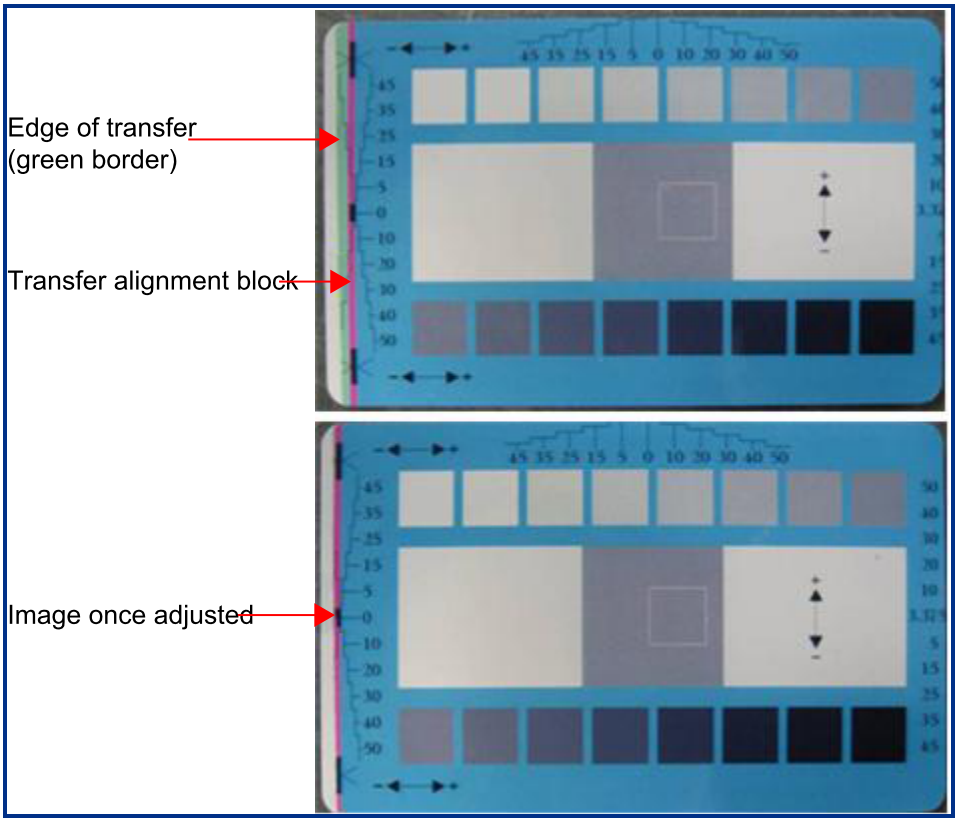


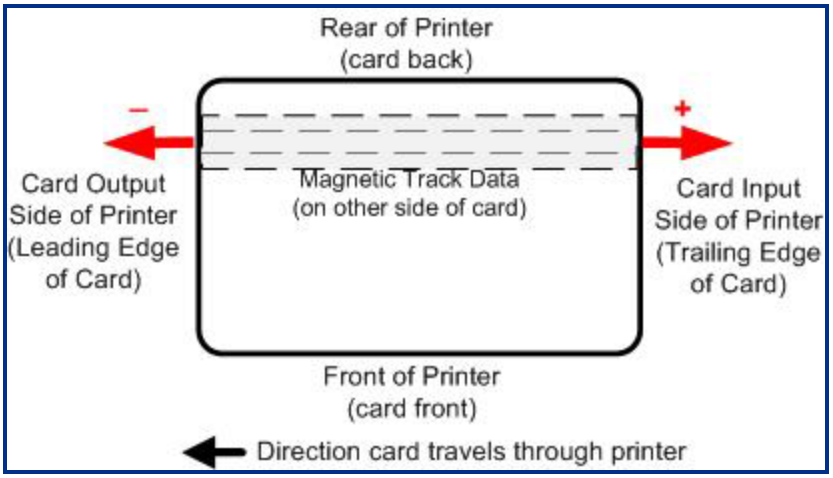
Field	Description
Name	Displays the label for each setting.
Value	Displays the current value for the setting.
Default	Displays the factory default value for the setting.
Min	Displays the minimum value available for the setting.
Max	Displays the maximum value available for the setting.
Refresh Settings	Click this link to refresh the values.
Edit Settings Save 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.

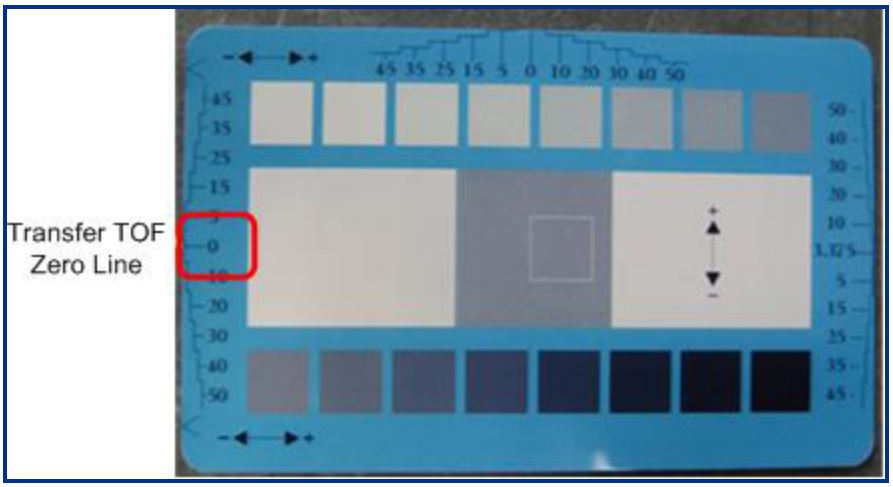
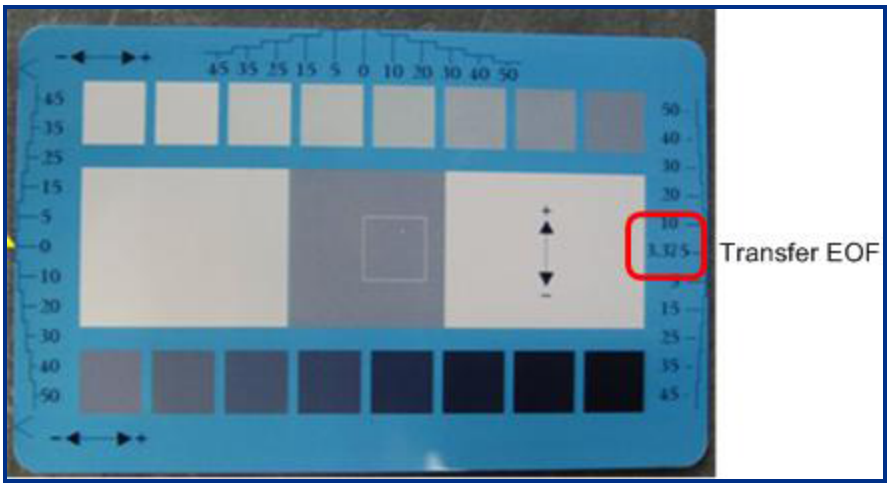
To change a setting, click the **Edit Settings** link. In the value column, change the numeric value in the row. When all updates are correct, click the **Save Settings** link.

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%. 
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. 

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. 

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.
Second Side Transfer TOF	After adjusting the transfer TOF, if the image on the backside of the card is still off this setting can be used to bring it in.
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 Hi-Co Voltage Offset	Fine tunes the mag drive current for high-coercivity/super coercivity cards. Adjust if mag verify errors start occurring with new card stock.

Setting	Description
Mag Lo-Co Voltage Offset	Fine tunes the mag drive current for low-coercivity/medium-coercivity cards. Adjust if mag verify errors start occurring with new card stock.
Proximity™ Encoder Card Offset	Fine tunes the docked position of the card when it is in the contactless encoder.
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.
Standyby Time	This is the time in seconds that elapse when the printer is idle before it will reduce the heater termperature to save energy.
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.
Film Transfer Cooling 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 temperature. • 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.
Resin Print Top Of Form	This setting is used to bring the printed resin into better alignment with the color printing.
Standby Temperature	This option changes the temperature used when the printer is in standby mode.
Mag Flipper Angle Offset	This setting fine tunes the position of the flipper relative to the mag encoder. Only use if a mag encoder is installed.

Setting	Description
Enable Ribbon and Film Saving	This setting enables power up ribbon/film savings. When enabled, the ribbon and film will not skip to a new set of panels after a power up. Cover open/close behavior is unaffected, so upon a cover close, the ribbon and film will skip a set of panels. Settings are: • Disabled (0) (default) • Enabled (1)
Transfer Cooling Delay	This setting adjusts the delay (in seconds) before transferring to the second side of the card.
Film Print Takeup Tension	**Important: The film drive sets the baseline for the film tension and should not be adjusted by the seller or the end user.** **Note:** Adjustments moderately change the image length.
Transfer 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
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 some restart printing.
Ribbon Queuing 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.
Preheat Enable	When set to true, this will start warming up the hot roller when the printer is woken up with a button push.
Transfer Lift PWM Adjust	Adjust transfer roller up/down speed. Do not adjust unless motor has stalling or position issues.
Chipping Temp Adjust	An offset to the transfer temperature for the first few cards after a power up. Used to reduce occurance of chipping.
Warming Time Delay	This option adds a delay (in minutes) between when the hot roller is first up to temperature and the start of transfer. Increasing this setting can help with chipping. This setting can be set between 0 and 100 with each unit adding a 1 minute delay.
Performance Transfer Mode	Adjusts transfer release parameters that can help with flash. Settings are: • 0 = disabled • 1 = enabled for first 12 cards after warm up • 2 = on all the time
Enable Alternate Transfer Release	Adjusts when print disengages during transfer. When set to true, the print head disengages after transfer release occurs.
Film Supply Transfer Tension	Adjustments significantly change image length. Because of sensitivity, only small adjustments are recommended. **Note:** Adjustments affect flash and smudge.

Laminator settings

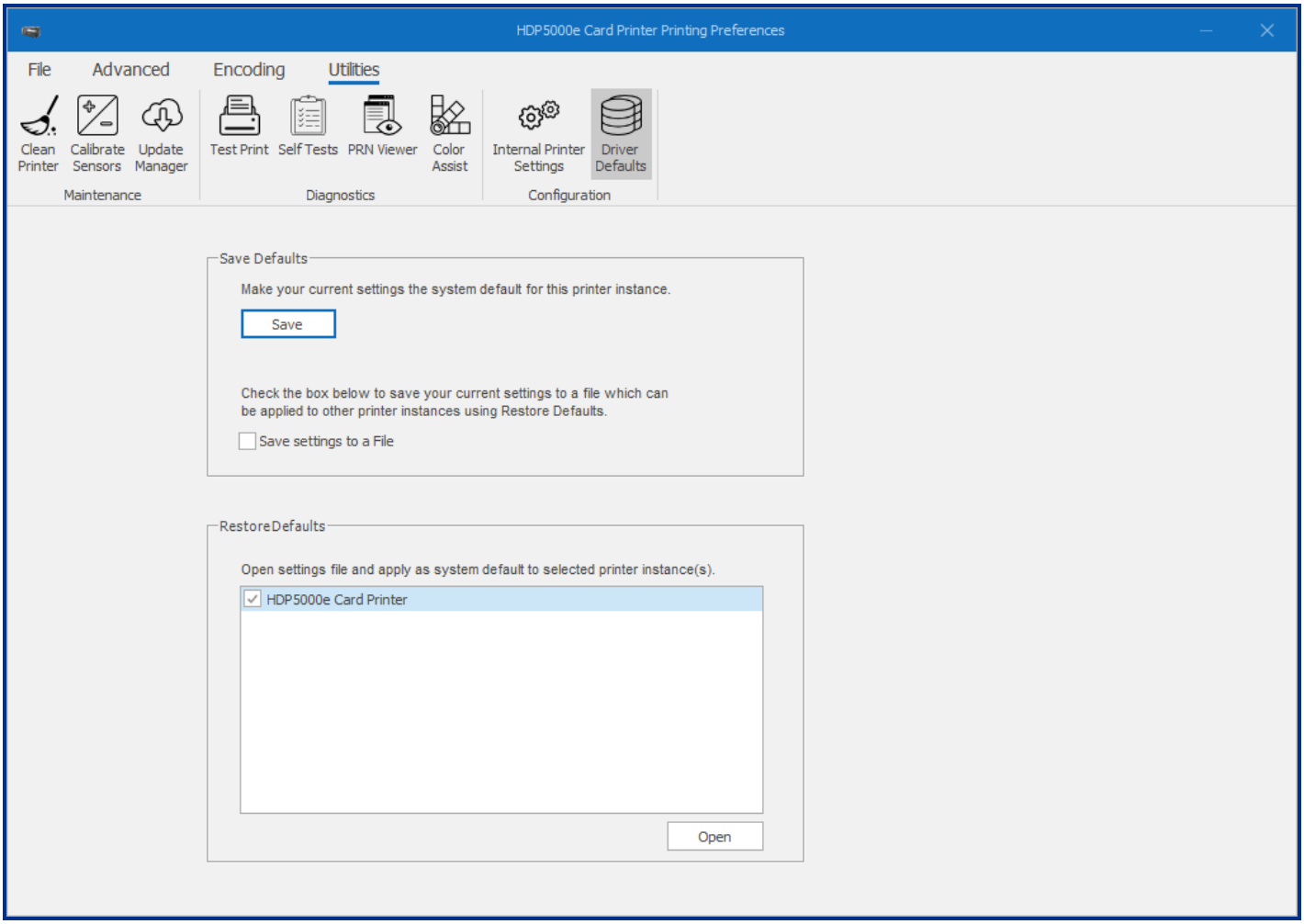
Setting	Description
Lamination Top of Form	This option changes head lift at the front of the card.
Lamination End of Form	This option changes head lift at the end of card.
Lamination Bottom Takeup	This option changes tension of laminate roller 1.
Lamination Top Takeup	This option changes tension of laminate roller 2.
Lamination Card Backup	This option changes the distance a card backs up after lamination pressure is first applied.
Lamination Card Length	This option dictates card length and hsould not be adjusted.
Lamination Fan Speed	This option adjusts the fan speed level to replicate printer fan speed control. • 0 = 100% • 1 = 75% • 2= 50% • 3 = 25% • 4 = 0%

Language settings

Setting	Description
LCD Language	Sets the language on the printer display. Available options are: • Chinese (Simplified, PRC) • French (France) • German (Germany) • Japanese (Japan) • Portuguese (Brazil) • Spanish (Spain) • Korean (Korea) • English (United States)

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. 1. Select the check box and click **Save**. 2. At the prompt to confirm this action, click **Yes**. 3. 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

HID Status Monitor

4.1 Introduction

The HID Printer Status Monitor displays information about your card printer print jobs. During the installation of the printer driver, you were prompted with the recommended option to install the HID Printer Status Monitor.

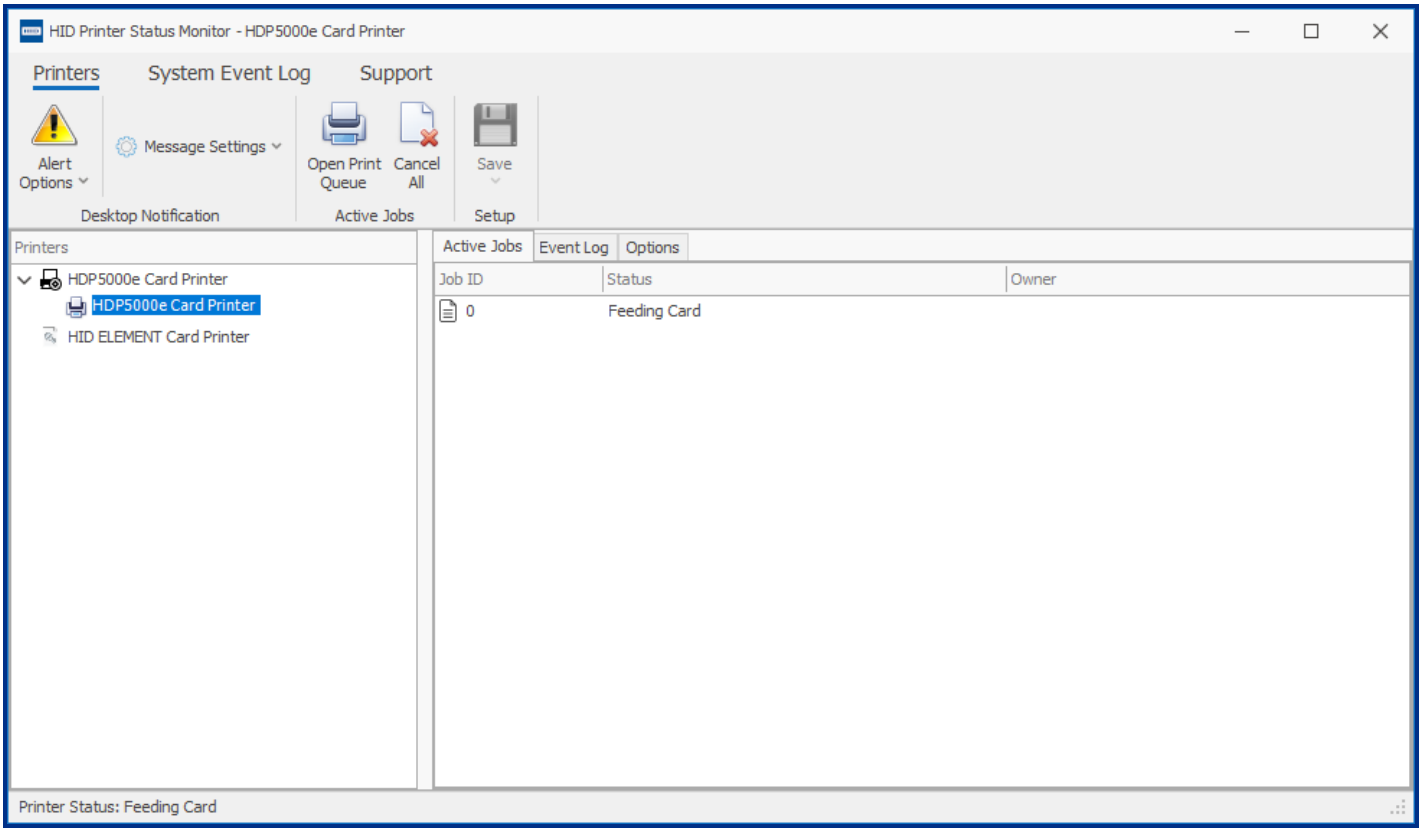
After installation, the Status Monitor is set to launch on start up. It can be accessed through a short cut in your startup folder or an icon in the notification area (which may be hidden). To make the HID Status Monitor icon be more visible on your PC, you can pin it to your taskbar or use the Windows settings to always show the icon on the taskbar.

Features of the Status Monitor include enabling and customizing desktop notifications, saving or opening a system log event, canceling a print job, and submitting a technical support case.

The Status Monitor can monitor all printers that are connected to your PC, either through a network connection (Ethernet) or through a USB cable. The printers are shown in a folder structure also known as a device tree with groups of printers at the top level and printer instances in subgroups. Each node and each instance can be configured and monitored.

4.2 Printers tab

This tab allows you to set up how you are notified of print job statuses per printer instance.



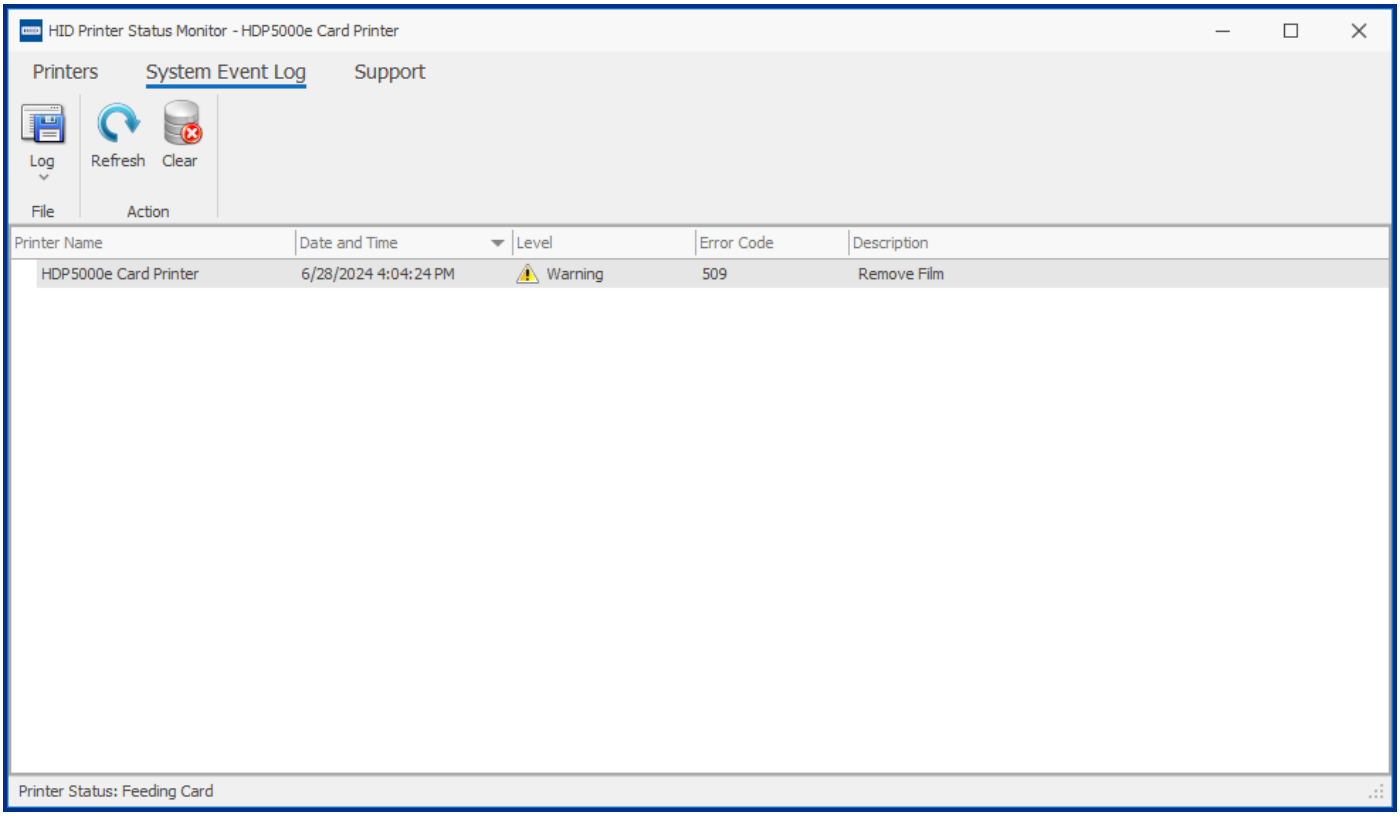
You can select either the printer node or the printer instance in the device tree. If you select the printer node on the left side of the screen, any changes to the selections on the Options tab on the right side of the screen affect all instances of that printer type. If you select the individual printer instance, you can modify the options individually.

Field	Description
Desktop Notification	Alert Options: Specifies how notification of alerts are displayed. Options are: • Desktop Message: Displays a small window on the right left side of the main screen. • Icon Alert: Displays an icon in the task bar. When an alert is active, the icon blinks. • Audible Alert: Notifies you with an a sound that can be heard. Message Settings: Sets the characteristics of the desktop message. Settings are: • Duration: Sets the amount of time the error message is displayed on your screen when an error occurs. Available setting is 3-30 seconds. Default is 3 seconds. • Transparency: Sets the background color of the message displayed on the screen. Values available are 0-80%. If set to a lower number, the background of the message window is more opaque. Default is 50%. • Preview message: Displays the desktop message using the currently selected settings.
Active Jobs	This selection is displayed when the Active Jobs tab is selected. Open Print Queue: Displays a window that lists all the active print jobs for the selected printer. Cancel All: Removes all jobs waiting in the print queue area.

Field	Description
Setup	Save: Saves the selected options for this printer instance. • Save: Saves the settings that are currently set. • Save And Exit: Saves the settings and closes the HID Printer Status Monitor.
Printers	Lists the printer drivers that are currently installed. Select the printer you wish to monitor.
Active Jobs tab	Lists the print jobs for the selected printer.
Event Log tab	Lists the events for the selected printer. Log levels include: Print Error, Warning, Information, and Print Jobs.
Options tab	Lists the available logging and notifications. Select the type of logging or notification you wish to view through the HID Printer Status Monitor.

4.3 System event log tab

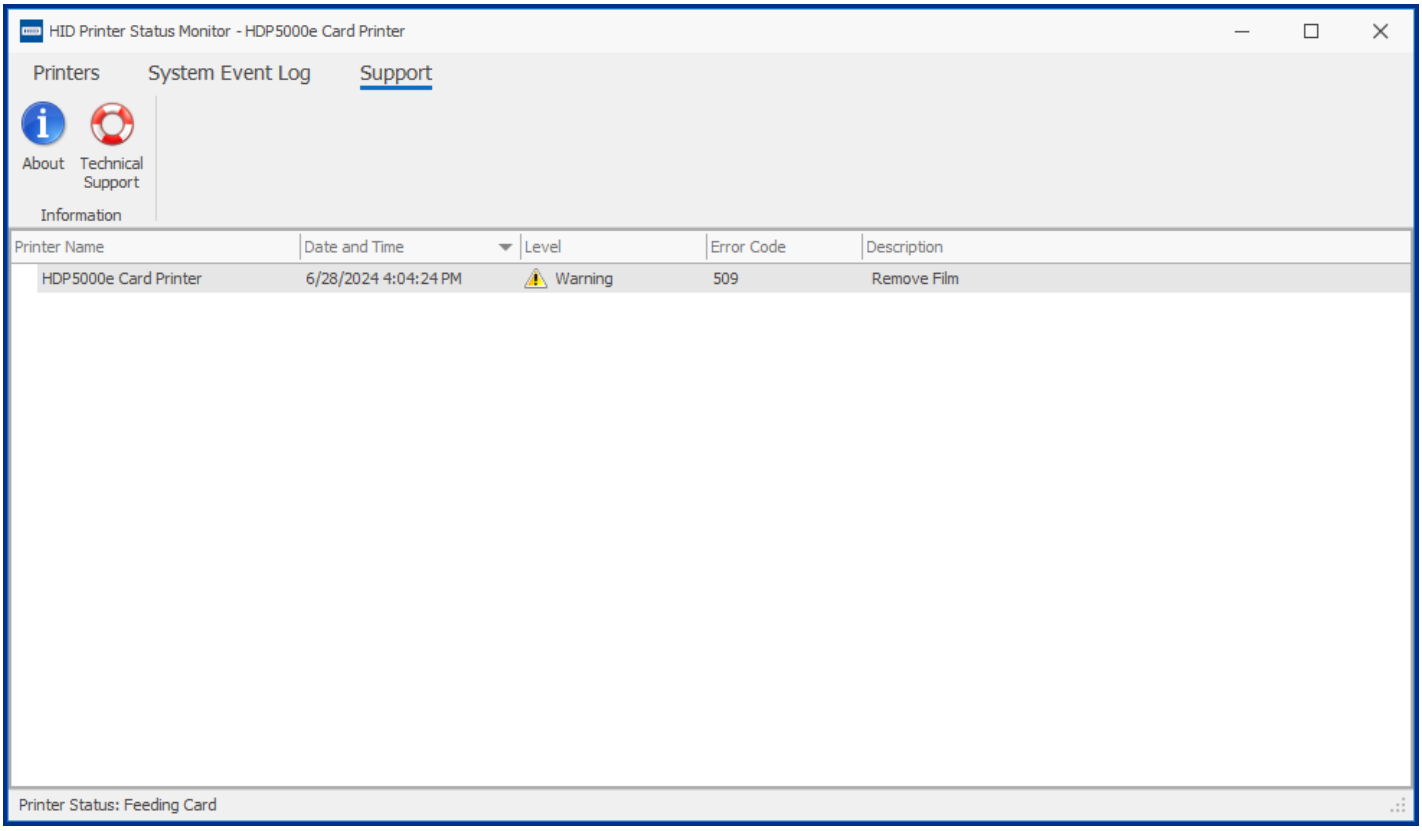
This tab lists all the printing events (print error, warning, information, or print job) since the last time the log has been cleared. The event log can be saved as an EVTX file that can be viewed with the Windows Event Viewer. The system event log is a good way to send information to HID Technical Support.



Field	Description
Log	Saves the current log file or opens a saved log file. Options are: Save As: Opens a new window to choose the location to save the event log. Open Saved Log: Open a new windows to browse to the location of the saved event log.
Refresh	Updates the system event log and redisplays the current log information.
Clear	Removes all entries in the system event log. To clear the log, you may be prompted to re-launch the HID Printer Status Monitor with administrator privileges.

4.4 Support tab

This tab shows the options for obtaining help with the HID Printer Status Monitor application.



Field	Description
Help	Opens a link to the online help file.
About	Opens a window that displays the print driver version and copyright information for the HID Status Monitor.
Technical Support	Opens a link to HID Technical Support to submit a technical support case.

Section 05

Troubleshooting

5.1 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.

This section also includes troubleshooting topics for printer instances, printer driver errors, and set up errors.

5.2 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 the 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 and 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 error message tables, contact **https://www.hidglobal.com/customer-service**.

5.2.1 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.

5.2.2 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. 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 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 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, 237	Material in cartridge 1 of the laminator does not match the material type specified by the job.	Make sure driver material matches what is in the laminator.
Lam2 Wrong Film PC Error Message No. 234, 238	Material in cartridge 2 of the laminator does not match the material type specified by the job.	Make sure driver material matches what is 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.
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.

Printer display error message	Cause	Solution
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. 211	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.
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.

Printer display error message	Cause	Solution
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.
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 oress 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.

Printer display error message	Cause	Solution
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 rrinter 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.
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.

5.3 HDP hard error messages

Hard errors cause active print jobs to cease and the error must be cleared before the printer resumes operation.

Message number	Printer display	Cause	Action
430	See Manual	The card handler has received an illegal command.	Card script does not exist between current and destination card position. Please verify destination card position is valid.
431	See Manual	An undefined error occurred. Reboot printer.	Reboot printer. If problem persists, replace printer main board.
432	See Manual	The panel printer module suffered a fatal error. Reboot the printer.	Reboot printer. If problem persists replace printer main board.
433	See Manual	The panel printer module suffered a fatal error during the startup. Reboot the printer.	Reboot printer. If problem persists replace printer main board.
434	Head Resistance	Invalid head resistance value.	To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer. Enter correct head resistance value.
435	Printhead Voltage Error	A print head voltage error has occurred.	Printer could not achieve requested print head voltage. Reduce **Image Darkness** EE setting and reboot. If problem persists, a fault exists on the printer main board.
436	Headlift Error	The headlift sensor is not detecting movement from the headlift cam.	Reboot the printer by cycling the power. To cancel the print, press the **Cancel Print** button from the driver display dialog or the **Cancel** button on the printer.
437	Headlift Error	The headlift sensor is not detecting movement from the headlift cam.	Reboot the printer by cycling the power. To cancel the print, press the **Cancel Print** button from the driver display dialog or the **Cancel button** on the printer.
438	See Manual	Print head temperature error	Print head is overheated. Turn off power and wait 10 minutes. If problem persists, the ambient temperature is too high or there is a print head thermistor problem and print head will requrie replacement.
439	Check ribbon	A ribbon error has been detected inside the printer.	Open the printer cover and remove the print ribbon. Tape the ends of the ribbon together and wind any excess onto the take-up spool of the printer ribbon. Re-install the print ribbon, close the printer cover and press the **Resume** button on the printer.
440	Printhead Voltage Error	A print head voltage error has occurred.	The printer could not achieve requested print head voltage. Reduce **Image Darkness** EE setting and reboot. If problem persists, a fault exists on the printer main board.
441	Ribbon Temp Error	The ribbon temperature sensor is out of range.	Reboot the printer. If the problem persists, check the cable between main board and ribbon sensor board. If no problem is found, replace the ribbon sensor board.

Message number	Printer display	Cause	Action
442	Error in moving printhead down	The head lift sensor is not detecting movement from the head lift cam.	Remove the ribbon and film cartridges. Check for any obstructions in the print head area or mechanism. Remove any obstructions. Cycle the print head up and down from the driver. If the print head cycles normally, reinstall the cartridges. If failure persists, either the printer main board or print head motor is faulty and needs to be replaced.
443	Error in moving printhead up	The head lift sensor is not detecting movement from the head lift cam.	Remove the ribbon and film cartridges Check for any obstructions in the print head area or mechanism. Remove any obstructions. Cycle print head up and down from the driver. If the print head cycles normally, reinstall the cartridges. If failure persists, either the printer main board or print head motor is faulty and needs to be replaced.
444	See Manual	Error when starting panel burn.	Reboot printer.
446	No ECard Encoder	Requested ecard module not installed.	Install required ecard module and send job again.
451	See Manual	The Utility Command Manager suffered a fatal error. Reboot the printer.	Reboot the printer. If a problem persists, replace the printer main board.
452	See Manual	The Utility Command Manager suffered a fatal error. Reboot the printer.	Reboot the printer. If a problem persists, replace the printer main board.
453	See Manual	The Utility Command Manager was unable to run the utility command successfully.	Reboot the printer. If the problem persists replace printer main board.
455	Failed To Initialize	An error during the printer startup has occurred.	Make sure the flipper, laminator or other attached devices are fully connected and reboot the printer. If the problem persists, replace the printer main board.
456	Failed To Initialize	An error during the printer startup has occurred.	Make sure the flipper, laminator or other attached devices are fully connected and reboot the printer If the problem persists, replace the printer main board.
457	See Manual	A general printer error has occurred.	Printer will reboot.
458	Options File Error	There is a problem with the printer options file.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
464	Card jam	A card has become jammed in the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.

Message number	Printer display	Cause	Action
465	Card Not Found	The printer is unable to find the card.	Please check the printer for a card or other obstruction, remove the card, and cancel the print by pressing the **Cancel Print** button from the driver display dialog box or the **Canccel** button located on the printer.
466	Card Jam	A card has become jammed in the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
467	Card Jam	A card has become jammed in the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
469	Card Jam: Smart Card	A card has become jammed in the contact station.	Press **Retry** on the printer. Otherwise, open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
471	Card Jam	A card has become jammed in the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
474	Unable to Feed Card	The printer is unable to feed a card.	Ensure that cards are available and loaded correctly. Press the **Resume** button on the printer to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer.
475	Multiple Cards Fed	Multiple cards fed into the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
476	Card Jam	A card has become jammed in the printer.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.

Message number	Printer display	Cause	Action
480	Card Jam (Flipper)	A card has become jammed in the printer flipper table.	Open the printer front cover and remove the print ribbon. Clear any cards in the flipper table by using the **Forward** and **Reverse** buttons on the printer. Re-insert the print ribbon and close the printer front cover. Press the **Resume** button on the printer.
481	Card Jam (Flipper)	A card has become jammed in the printer flipper table.	Open the printer front cover and remove the print ribbon. Clear any cards in the flipper table by using the **Forward** and **Reverse** buttons on the printer. Re-insert the print ribbon and close the printer front cover. Press the **Resume** button on the printer.
482	No Flipper Module	The printer is unable to communicate with the flipper module.	Verify that the flipper module is connected to the printer. If no flipper module is present, ensure that the **Print Both Sides** option in the driver is set correctly. Press the **Resume** button on the printer top cover to continue printing. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
483	No Laminator	Missing lamination module for this print job.	Cancel print job and set driver properties to no lamination.
484	Card Jam	A card has become jammed in the mag module.	Open the printer cover, clear any cards in the printer by using the **Forward** and **Reverse** buttons on the printer. Close the printer cover. Press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer to cancel.
485	See Manual	The mag encoder module suffered a fatal error. Reboot the printer.	Reboot the printer. If a problem persists, replace the printer main board.
486	No Magnetic Encoder Installed	A printer job with magnetic encoding was sent with no magnetic encoder installed in the printer.	Ensure that no encoding data is being sent with the print job and reprint the card.
487	Mag Verify Error	The printer is unable to verify encoded data.	Check the cards and click **Cancel Print**.
488	Flipper Jam	The flipper module has jammed.	Click **Cancel Print**.
490	Reject Hopper Error	Reject hopper is full.	
492	Print Film is not Installed	No print film is installed in the printer.	No film installed or film RFID tag is corrupted. Replace with a known good film. If the error persists, the RFID circuitry is broken and either the main board or film RFID antenna board needs to be replaced.
493	Invalid Print 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 to continue printing. To cancel, press the **Cancel Print** button or the **Cancel** button on the printer.

Message number	Printer display	Cause	Action
494	Wrong Print 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 located on the printer to continue printing. To cancel, press the **Cancel Print** button or the **Cancel** button located on the printer.
498	Print Film is not Installed	No print film is installed in the printer.	Install the film and press **Resume**. To cancel the print, press the **Cancel Print** button or the **Cancel** button located on the printer.
499	Print Film Out	The print film installed in the printer is empty.	Install new film and press the **Resume** button to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog or the **Cancel** button located on the printer.
500	Check Film	The film has become jammed or the wrong number of film marks were seen during film alignment.	Remove the film and check for any damage ot the film.
501	Check Film	The film has become jammed or the wrong number of film marks were seen during printing.	Remove film and check for any damage to the film. Scroll film to unused panel, install film cartridge and cancel last print job.
504	Calibrate Film	The film sensors need to be calibrated.	Install film and run the film calibration routine from the driver.
506	Check Film	The film has become jammed or the wrong number of film marks were seen during the transfer phase.	Remove film and check for any damage to the film.
518	No Ribbon Installed	No print ribbon is installed in the printer.	Install a certified print ribbon and press the **Resume** button on the printer to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer.
519	Wrong Ribbon Installed	An incorrect ribbon has been installed or a driver setting is incorrect.	Ensure that the appropriate print ribbon is installed and press the **Resume** button on the printer to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer.
520	Wrong Ribbon Installed	An incorrect ribbon has been installed or a driver setting is incorrect.	Ensure that the appropriate print ribbon is installed and press the **Resume** button on the printer to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer.
523	Ribbon Break/Jam	A ribbon break/jam has been detected inside the printer.	Open the printer cover and remove the print ribbon. 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.

Message number	Printer display	Cause	Action
524	No Ribbon	No ribbon installed in the printer or bad RFID tag.	No ribbon installed or ribbon RFID tag is corrupted. Replace with a known good ribbon. If the error persists, the RFID circuitry is broken and either the main board or film RFID antenna board needs to be replaced.
526	Ribbon Out	The print ribbon installed in the printer is empty.	Install a new print ribbon and press the **Resume** button on the printer to continue printing. To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer.
527	Ribbon Sensor Errir	The ribbon sensor is not calibrated.	To cancel the print, press the **Cancel Print** button from the driver display dialog box or the **Cancel** button on the printer. Run the ribbon calibration routine and then rerun the print job.
530	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 to continue printing.
535	Ribbon Sensor Calibration Failed	The printer cannot calibrate the ribbon sensor.	Verify that the ribbon is not installed. Reboot the printer and try again. If the problem persists, replace the ribbon LED board.
544	Data ERror	A problem was found in the incoming job data.	Clear the current print job from the spooler. reboot. If the problem persists, try a known good USB or Ethernet cable.
547	See Manual	An undefined error occurred. Reboot printer.	Reboot printer. If the problem persists, replace the printer main board.
548	General Error	The image transfer module suffered a fatal error during startup. Reboot the printer.	Reboot the printer. If the problem persists, replace printer main board.
551	Heater Error	The transfer roller could not get up to the goal temperature within the timeout period.	Heater or RTD is malfunctioning. Check heater and RTD connections.
552	Check Film/Card	A film or card jam occurred during transfer.	Remove card from card path and verify film is not damaged.
553	Headlift Error	Error in moving transfer roller down.	Remove ribbon and film cartridges. check for any obstructions in the transfer roller or mechanism. Remove any obstructions. Cycle transfer roller up and down from the display. If transfer cycles normally, reinstall cartridges. Check transfer sensor.

Message number	Printer display	Cause	Action
554	Headlift Error	Error in moving transfer roller down.	Remove ribbon and film cartridges. Check for any obstructions in the transfer roller or mechanism. Remove any obstructions. Cycle transfer roller up and down from the display. If transfer cycles normally, reinstall cartridges. Check transfer sensor.
555	Headlift Error	Error in moving transfer roller up.	Remove ribbon and film cartridges. Check for any obstructions in the transfer roller or mechanism. Remove any obstructions. Cycle transfer roller up and down from the display. If transfer cycles normally, reinstall cartridges. Check transfer sensor.
556	Headlift Error	Error in moving transfer roller up	Remove ribbon and film cartridges. Check for an obstructions in the transfer roller or mechanism. Remove any obstructions. Cycle tranfer roller up and down from the display. If transfer cycles normally, reinstall cartridges. Check transfer sensor.
562	Incompatible Ribbon Detected	RFID tag was read but the material was not recognized. Possible legacy ribbon.	Please use HDP5000e compatible ribbon.
563	Incompatible Film Detected	RFID tag as read but the material was not recognized. Possible legacy film.	Please use HDP5000e compatible film.

5.4 HDP soft error messages

Soft errors are informational in nature and will not prevent normal printer operation. However, using the printer while there is a soft error may cause a hard error to be generated. For example a **Check Film** soft error, which means that there may be something wrong with the film will lead to a **Check Film** hard error if a print job is sent.

Message number	Printer display	Cause	Action
25	No Ribbon	Ribbon not installed in the printer on a cover close.	Install a valid ribbon.
28	No Film	Film not installed in printer on cover close.	Install a valid film.
61	Calibrate Passed	Laminator sensor calibration successful.	None. Informational.
458	Check Options File	Printer not set up correctly or hardware failure.	Reset the printer and try again.
459	Success	Option file change successful.	None. Informational.
463	Card In Printer	Printer is idle and there is a card in the printer on cover close.	Remove the card.
497	Check Film	Film calibration requested, but film is out.	Install a new roll of film and press Resume to continue or Cancel to reset.
503	Low Film icon	The film is running low. 5% or less left.	None. Informational.
505	Check Film	The film has failed to be positioned correctly on cover close.	Open the cover and try again. If the issue persists, reset the printer and try again.
507	Calibrate Passed	Film calibration successful.	None. Informational.
508	Calibrate Failed	Film calibration failed.	Verify the film is installed correctly and there is not a ribbon installed. Reset the printer. Make sure film is installed correctly. Try again.
509	Remove Film	Clean printer routine requested but film is installed.	Remove the installed film from the printer.
528	Low Ribbon icon	The ribbon is running low. 5% or less is left.	None. Informational.
533	Remove Ribbon	Ribbon calibration is requested, but ribbon is still loaded.	Remove the installed ribbon from the printer.
534	Calibrate Passed	Ribbon calibration has passed.	None. Informational.
536	Please Install film and close cover	Film calibration is requested, but film is not loaded.	Install a roll of film.
540	Clean Printer icon	Clean printer routine needs to be run.	Run the clean printer routine.
541	Calibrate Passed	Smart card postiion calibration passed.	None. Informational.
542	Calibrate Failed	Smart card position calibration failed.	Reset the printer and try again.

Message number	Printer display	Cause	Action
543	Rerun Test	Smart card position calibation failed, rerun test.	Reset the printer and try again.
545	Card Calibration Ok	Card track sensor calibration succeeded.	None. Informational.
546	Card Calibration Failed	Card track sensor calibration failed.	Rest the printer and try again.
561	Reject Bin Full	The reject bin in full. Empty the cards from the reject bin.	Remove the large number of rejected cards from the reject bin. Press OK to clear the notification message. In some cases, rejected cards are incomplete or pose a security risk and should be disposed of properly.
564	New	Incompatible Ribbon Info (Info message)	RFID tag was read but the material was not recognized. Possible legacy ribbon. Please use HDP5000e compatible ribbon.
565	New	Incompatible Film Info (Info message)	RFID tag was read but the material was not recognized Possible legacy film. Please use HDP5000e compatible film.
604	Film Out	On a cover close, the film is out or not installed and printing cannot commence.	Install a new film cartridge.

5.5 Resolving communication errors

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

5.5.1 Confirm that the system meets the minimum 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
- Microsoft Windows compatibility:
  - Windows 10 (32- and 64-bit)
  - Windows 11 (64-bit)
  - Windows Server 2016 (64-bit)
  - Windows Server 2019 (64-bit)
  - Windows Server 2022 (64-bit)
- USB port (optional Ethernet connection)

5.5.2 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**.

5.5.3 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.

5.5.4 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 on the **General** tab of the driver.
3. Using WordPad, go to the **File** menu and select **Page setup**.
4. Click 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.

5.6 Resolving additional errors

5.6.1 Multiple or invalid printer instances issue

Issue summary

On certain systems, particularly Windows 10, users may encounter duplicated or invalid instances of the printer in the **Printers & scanners** and **Devices and printers** settings. These instances may appear non-functional or display outdated information. However, accurate status information can still be viewed in Print Management. This issue has been noted in multiple discussions on Microsoft forums.

Resolution

As of the publication of this document, the recommended solution is for the printer administrator to manually remove any invalid or duplicate printer instances.

If additional assistance is needed, please visit: **https://support.hidglobal.com**.

5.6.2 HDP5000e driver error when OMNIKEY 5127 is installed

Issue summary

The HDP5000e printer driver may experience an error when the HID OMNIKEY 5127CK Mini card reader module is installed. This issue occurs due to a conflict with the OMNIKEY driver. In some cases, the system defaults to using the standard Microsoft driver for the OMNIKEY reader because the OMNIKEY driver is not recognized as compatible hardware. Notably, this issue is not directly related to the HDP5000e printer driver and can be resolved by manually updating the OMNIKEY smart card reader driver.

Resolution

To correct this issue, the printer administrator can manually update the OMNIKEY smart card reader driver by following these steps:

1. Open the **Device Manager**.
2. Locate the **Smart Card Readers** > **OMNIKEY encoder**.

3. Right-click on the encoder and select **Update driver**.
4. Choose **Browse my computer for drivers**.
5. Select **Let me pick from a list of available drivers on my computer**.
6. If HID Global is not visible, clear the **Show compatible hardware** box.
7. Select **HID Global** and then **HID OMNIKEY 5127CK** from the list.
8. Click **Next** and, if prompted with a warning, select **Yes** to proceed with the installation.

Following these steps should resolve the driver conflict, allowing the HDP5000e printer and OMNIKEY 5127 mini to function correctly.

If additional assistance is needed, please visit: **https://support.hidglobal.com**.

5.6.3 Setup Incomplete. Connect to the Internet error

Issue summary

The **Setup incomplete. Connect to the Internet** error may appear in the **Printers & scanners** settings. This error is not associated with the HDP5000e printer driver installation. Despite the error message, the printer drivers should operate correctly, and all printer functions should perform as expected.

Recommended action

This issue appears to stem from the internal processes of the operating system. If the error persists, the printer administrator may investigate system network configurations or perform a routine check to ensure that all system settings are appropriately configured for printer operation.

If additional assistance is needed, please visit: **https://support.hidglobal.com**.

Revision history

Date	Description	Revision
December 2024	Adds content for lamination.	A.1
August 2024	Initial release.	A.0

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

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