HiTi Card Printer

CS-310/320

User Manual

HiTi V.2007.11

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SAFETY INSTRUCTIONS

1. Read these instructions carefully. Keep these instructions for future reference. Follow all warnings and instructions as marked on the product.

2. Unplug this product from the wall outlet before cleaning. Do not use liquid detergents or aerosol cleaners. Use a damp cloth for cleaning.

3. Do not use this product near water.

4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

5. Openings in the cabinet and at the bottom provide ventilation; to ensure a reliable operation of the product and to protect it form overheating, these openings should not be blocked or covered. Placing the product on a bed, sofa, rug, or other similar surface may never block the openings. These products should never be placed near or over a radiator or a heat register, or in a built-in installation, unless proper ventilation is provided.

6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult with your dealer or with the local power company.

7. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the ampere rating of the extension cord. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.

8. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other harmful risks. Refer all servicing to qualified service personnel.

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Instruction

Thank you for choosing HiTi Card Printer. We hope this will just be the beginning of our long-term and successful association. With this HiTi card printer, you can easily and conveniently print high quality plastic cards, such as personalized ID cards/credit cards, membership cards,….etc. Please read this manual carefully and complete the installation before operating the printer.

HiTi Card Printer CS-310/320 Features

- **Supports double-side printing*.**
- **High quality printing.**
- **Supports multiple ribbon types.**
- **Supports various card types.**
- **Compatible with HiTi Card Desiree CS professional software.**

***CS-310 supports single-side printing only.

Chapter 1 Hardware Installation

1-1 Check Accessories

Please make sure the following items are included when you unpack the card printer.

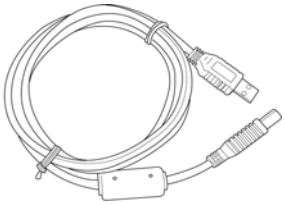
1.Card Output Hopper



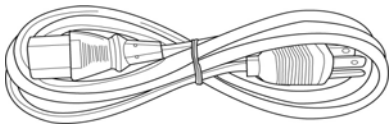
2. Weight



3. USB Cable



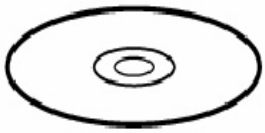
4. Power Cord



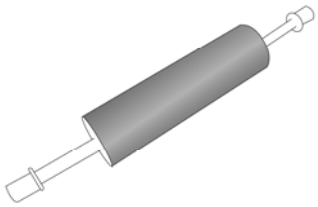
5. User Manual



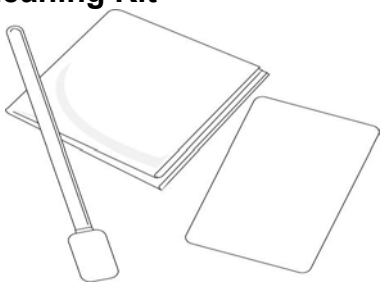
6. CD



7. Cleaning Roller



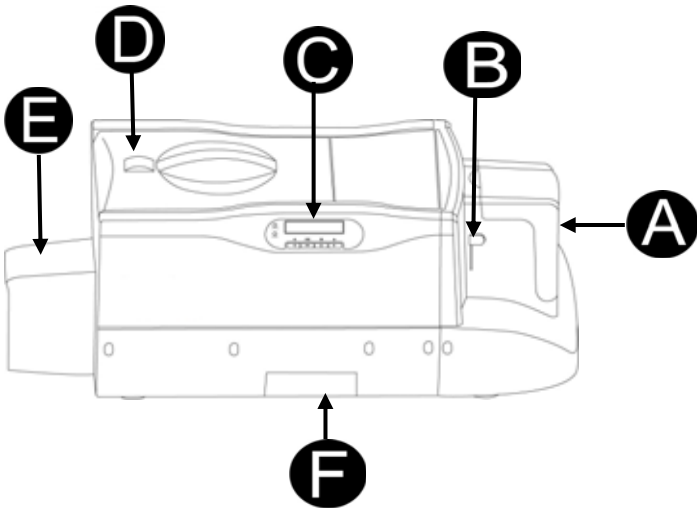
8. Cleaning Kit



If any of the above items is missing, please contact your nearest HiTi customer-support facility or your local HiTi distributor. For detailed information, please refer to ***Appendix D****:* Customer *Service Information.*

1-2 Appearance of CS-310/320

● CS-310/320 Front side*



A. Card Input Hopper
This is the Card Input Hopper for storing blank cards. Please insert the blank cards gently and remember to shield them with the built-in cover to avoid any dust entering in there.

B. Card thickness selection button
HiTi CS-310/320 provides four selections for thickness: 0.3 mm (10 mil), 0.5 mm (20 mil), 0.8 mm (30 mil) and 1.0 mm (40 mil). Please move and slide the selector for thickness to the correct thickness position, which matches the thickness of the cards in the Card Input Hopper.
Remark: The Thickness tolerance of cards are 03mm +/-0.02mm (0.28 ~ 0.32mm), 0.5mm +/-0.03mm (0.47 ~ 0.53mm), 0.8mm +/-0.04mm (0.76 ~ 0.84mm), 1.0mm +/-0.05mm (0.95 ~ 1.05mm). If your card thickness is out of the above specification, it may cause significant damage to HiTi ribbon; may reduce the life span of HiTi Card Printer; may damage print head; and may cause unsatisfactory color performance.

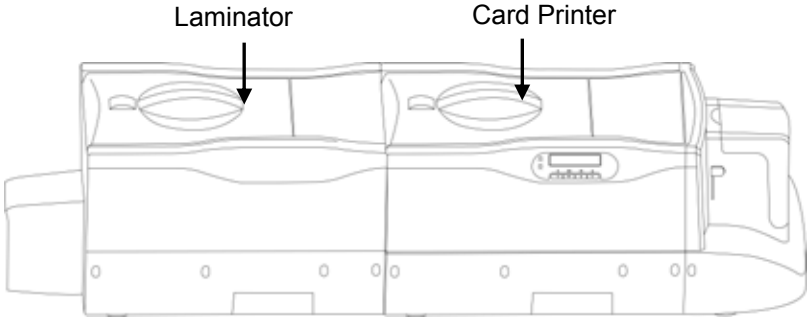
C. LCD Display:
The status of the printer is displayed on the LCD screen, you can use [◄], [►], [OK], [ESC] buttons to control the operation of the printer and for troubleshooting.

D. ID Button
To replace ribbon cartridges, please gently slide the ID button on the top of the printer to open the ribbon door.

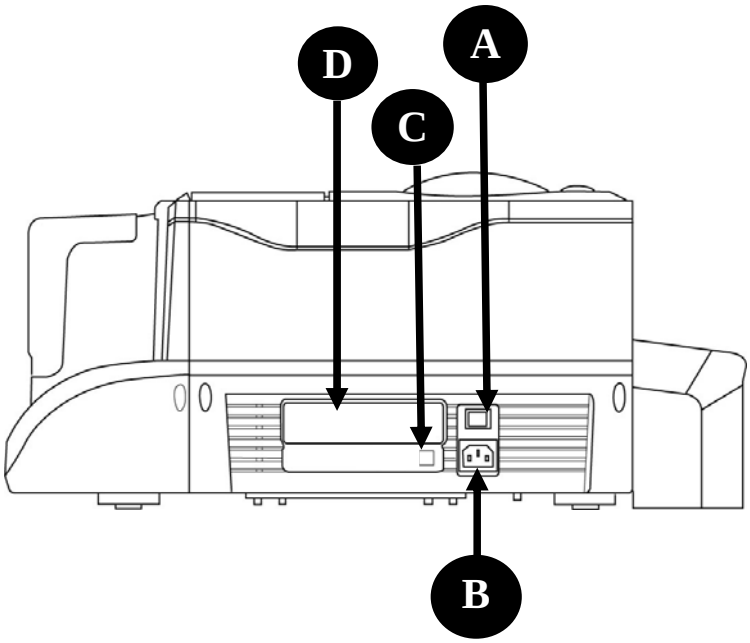
E. Rejected box
When an error occurs during the reading/writing process for smart chips and/or magnetic cards, these cards are ejected into a rejected box, which holds about 20 cards. The system will show an error message when cards accumulate to around 20 pieces in the rejected box. Please remove these cards to continue the printing task.

F. Card Output Hopper
The printed cards will be placed here.

*For CS310i / CS320i (Card Printer + Laminator), the front view is shown as follows.



● CS-310/320 Back side*



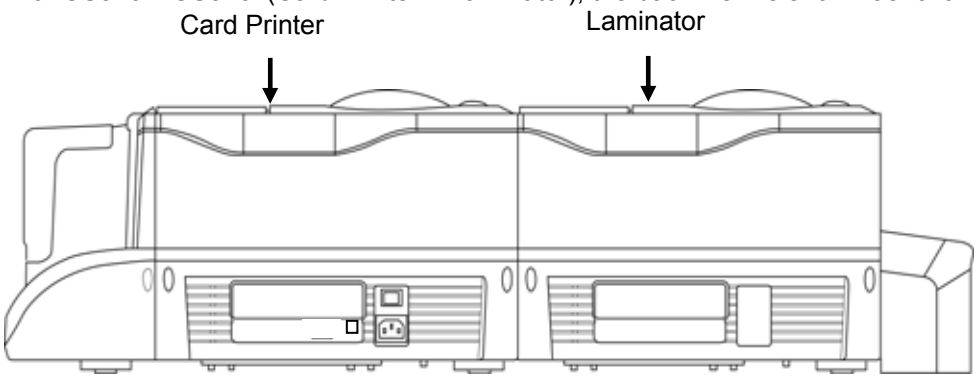
A. Power Switch
This switch turns the power of the printer on or off.

B. Power Socket
Connect your power cord here.

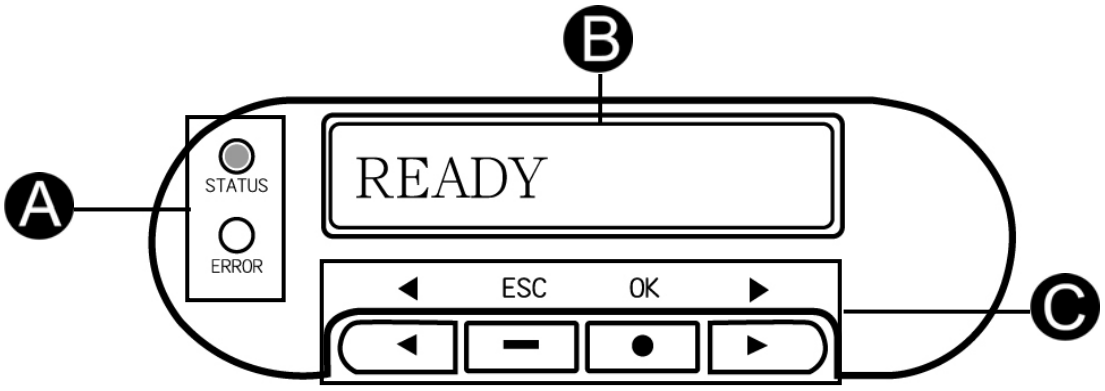
C. USB Connector
Please connect the printer to a controlling device, such as a PC or a laptop, hereby using the build-in USB connector.

D. Specification Label
Printer specification and detail information display label.

*For CS310i / CS320i (Card Printer + Laminator), the back view is shown as follows.



- **Control Panel.**



A. LED Light

Turn the power on. The printer will automatically initiate a system check and turn on the green LED light to indicate that the printer status is normal. If an error occurs, an error message will be shown on the LCD display and flash the LED. Please refer to “Chapter 5 Troubleshooting” for resolving this error message.

Status Light: Green LED means that the status of the card printer is normal.
Error Light: Red LED means that an error has occurred. Please begin the troubleshooting procedures.

B. LCD display

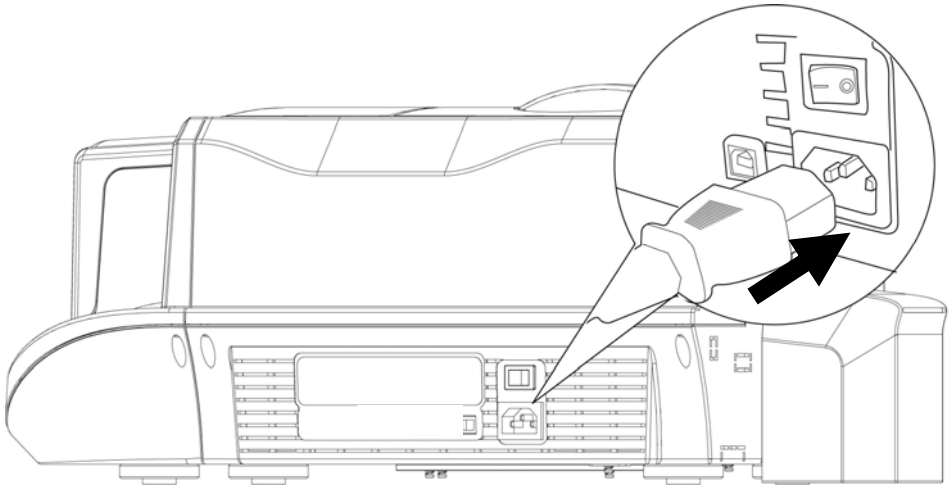
The device status and error messages are displayed on this LCD display.

C. Control Button

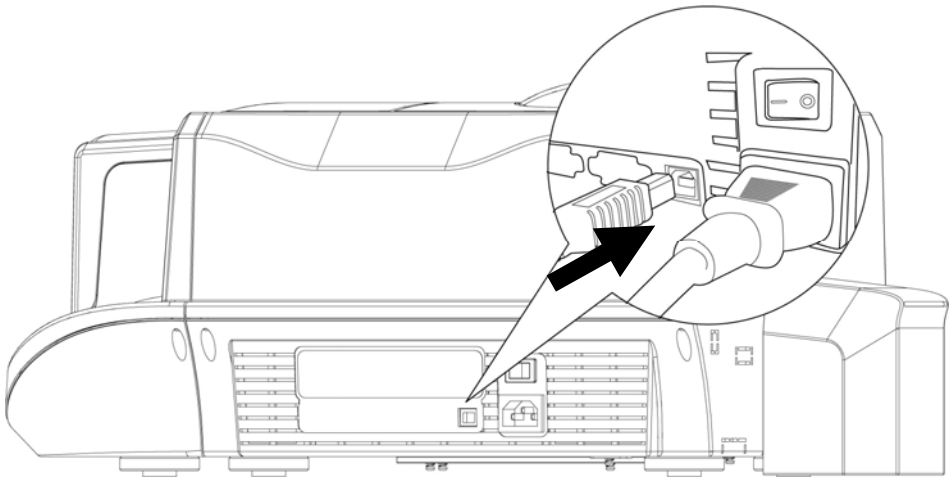
You can use **[◄]**, **[►]**, **[OK]**, **[ESC]** buttons to check the information and the status of the printer or use these buttons to initiate the cleaning process.

1-3 Install Power Cord & USB Cable

1. Connect the printer to the AC power outlet using the supplied power cord.



2. Please connect the printer to a PC using the supplied USB Cable.

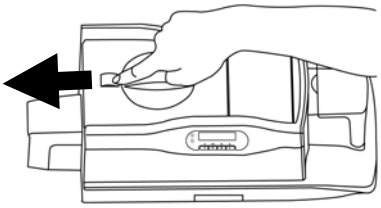


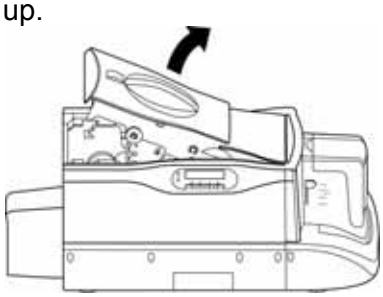
3. Turn on the “Power Switch". Before you turn on the “Power Switch”, please make sure that you have already installed the printer driver. Please refer to Chapter 2.
4. You will see a "New Hardware Found" message display on the PC screen. Then it will automatically initiate the printer driver.
5. The card printer will automatically check the printer status when you turn on the power. If the “status LED” lights stable green; that would indicate that the printer is ready. If the “error LED” lights on, please check the ERROR message displayed on the LCD display and look it up in the troubleshooting procedures.
6. Hardware and driver installation are finished.

1-4 Install Cleaning Roller*

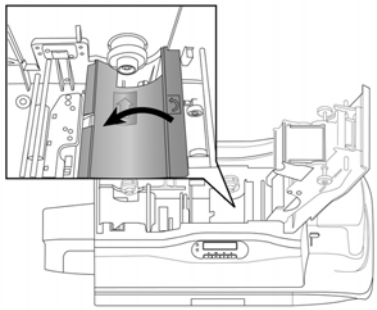
※Please install the cleaning roller before using the card printer.

. Slide the ID button and lift the ribbon door up.

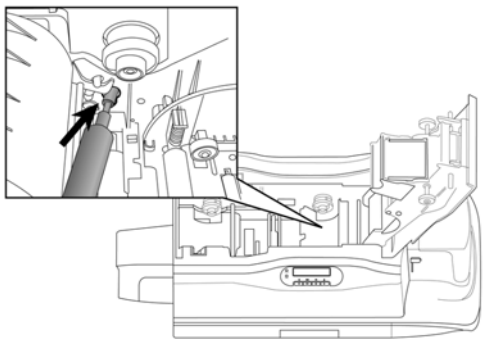


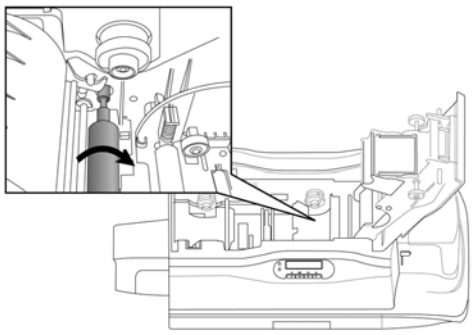


2. Open the cover of the cleaning module, as illustrated.

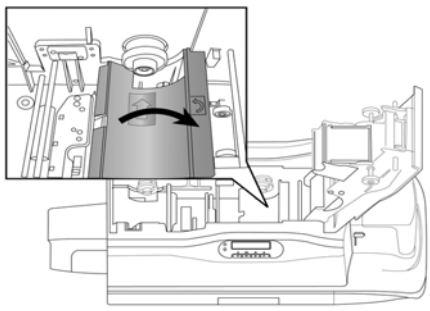


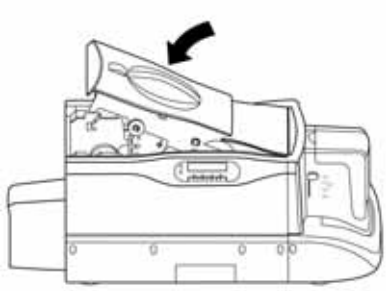
3. While holding the cover of the cleaning module open, insert the cleaning roller spool into the spool receivers. Turn the cleaning roller after its installation; if it turns smoothly, then the installation of the cleaning roller should be correct. If it does not turn smoothly, please re-install the cleaning roller.





4. Please close the cover of the cleaning module and close the ribbon door to finish the installation of the cleaning roller.





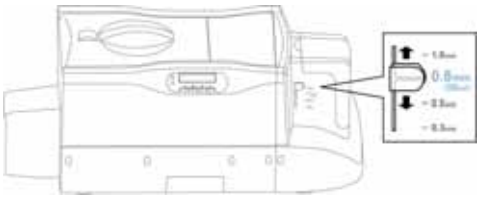
*Remark: For CS310i/CS320i (Card Printer + Laminator), please install the second cleaning roller into the laminator as above procedures, after installing the first one into the card printer.

1-5 Install Card & Ribbon

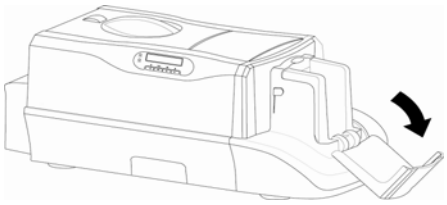
※ The HiTi card printer package does not include cards and ribbons. You can contact your local HiTi distributor or refer to Appendix E for consumer ordering information.

- The Card Installation

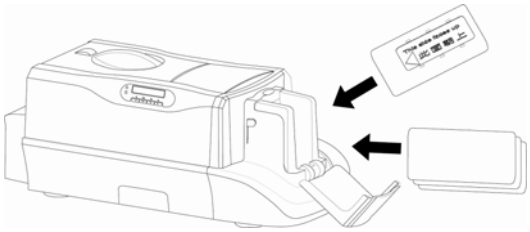
1. Please move and slide the selector for thickness to the correct thickness position which matches the thickness of the card to be printed.



2. Open the door of the Card Input Hopper.



1. Insert a blank card, place the weight on the top and close the door of the Card Input Hopper. Please refer to the instruction on the weight to position the weight properly, as illustrated.



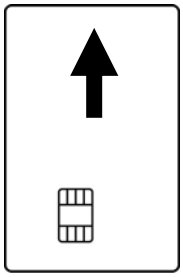


Notes:

1. The card should be inserted horizontally into the Card Input Hopper. The contact smart card and magnetic stripe card need to be inserted in a specific way, as illustrated.
2. If the cards in the Card Input Hopper can not be picked up smoothly by the printer, please make sure the cards are not sticking to each other by loosening or shuffling the cards with your finger.

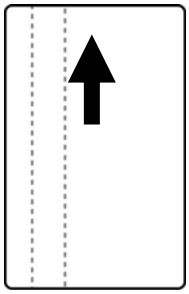
***The contact smart card installation:**

The smart card chip faces up. Then please insert it horizontally into the Card Input Hopper as the instructions indicate on the Card Input Hopper.



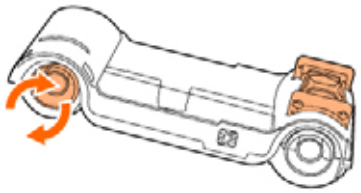
***The magnetic stripe card installation:**

The magnetic stripe faces down. Then please insert it horizontally into the Card Input Hopper as the instructions indicate on the Card Input Hopper.

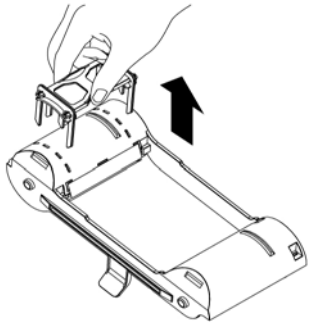


- The Ribbon Installation*

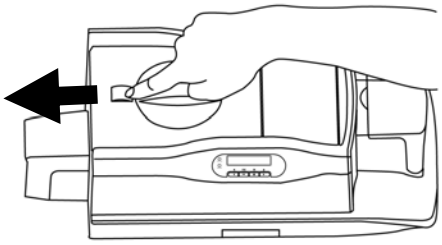
1. Remove the ribbon slack by rotating the spool as illustrated.

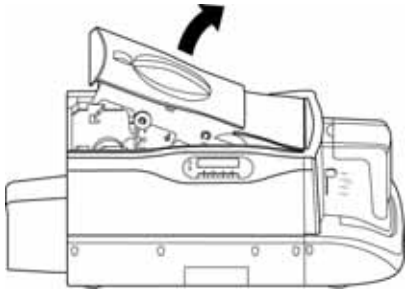


2. Remove the fastener on the ribbon as illustrated

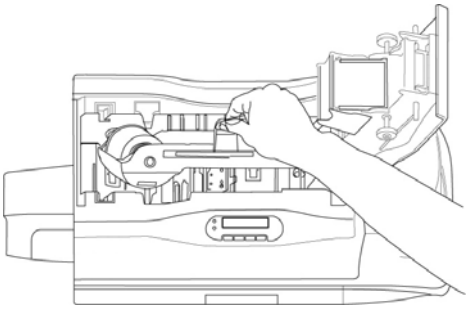


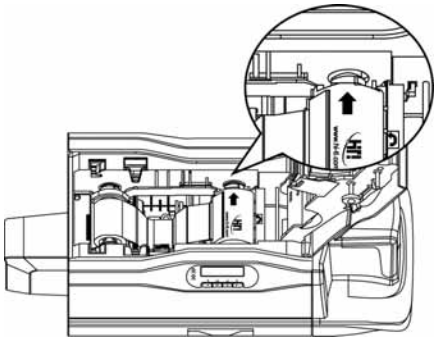
3. Slide the ID button and lift the ribbon door up.



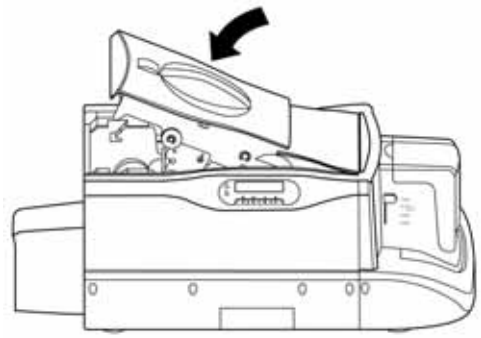


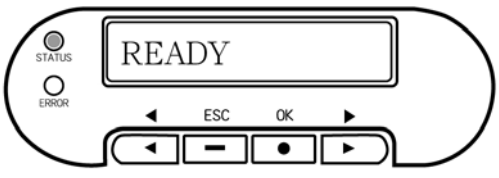
4. Hold the ribbon cartridge handle and insert it into the printer as illustrated. Please make sure the drive gear is properly seated against the ribbon spool.





5. Close the ribbon door. Make sure the STATUS LED displays green light and the LCD display shows “READY”.





***Remark:** For CS310i / CS320i, please install the lamination ribbon into the laminator as above illustrated.

Chapter 2 Software Installation*

System Requirements

Please make sure your PC conforms to the following requirements.

- Intel Pentium or compatible PC
- Windows 2000/XP/Vista
- 128 MB RAM or higher
- Available USB port
- 100 MB or more free hard disk space
- CD-ROM Drive

*For CS310i / CS320i, please follow the below procedures to install software.

⚠ **Notice!!**

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2. Pentium is a U.S. registered trademark of the Intel Corporation.
3. Brands and product names are trademarks or registered trademarks of their respective companies.

2-1 Install Driver (Windows 2000/XP/Vista)

1.Insert the “Driver CD” into the CD-ROM drive. If the installation doesn’t start automatically; run the “autorun.exe” in the disk.

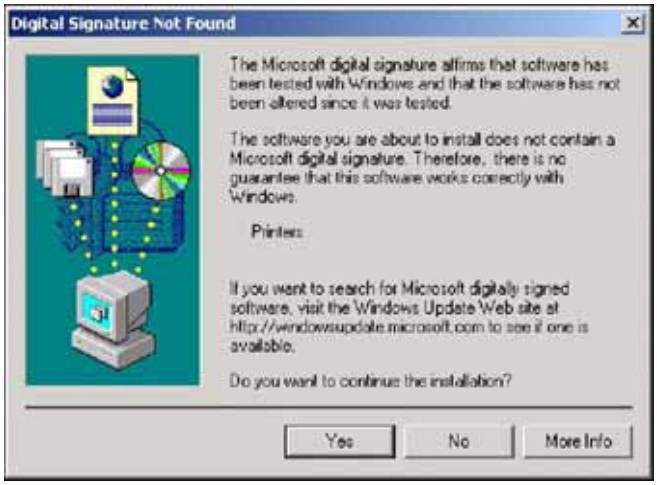
2.Please select “Driver / HiTi CS-310 / CS-320” and install.



3.Click the “Start” button to install the driver.

4.Connect the printer to the PC using the USB cable and turn the printer on.

5. In Windows 2000 or Windows XP, if there’s message dialog showing “Digital Signature Not Found” or “Driver Incompatibility”, please click “Yes” to continue to install the driver.



6. After copying several files, the Windows 2000 / XP system recognizes this printer and the installation will be finished.

2-2 Uninstall Driver

1. Under Control Panel/ Add Remove Programs, you can find “HiTi CS-310/320” Card Printer”.

2. Select [Remove] option, then the system will begin to uninstall the “HiTi CS-310/320” driver.

3. The Uninstall program will now prompt you to restart Windows.

2-3 Install CardDesiree CS

1. Insert the “Driver CD” into the CD-ROM drive, if the disc doesn’t auto start, then please execute the “autorun.exe” in the disc.

2. Select **"Software / CardDesiree CS"** and install.



3. Select language and destination; then press the “Start” button.

4. When the installation is finished, a pop-up message will appear to ask whether or not to place a **"Card Desiree CS"** icon on the Windows Desktop?

5. The **"Card Desiree CS"** installation is finished.

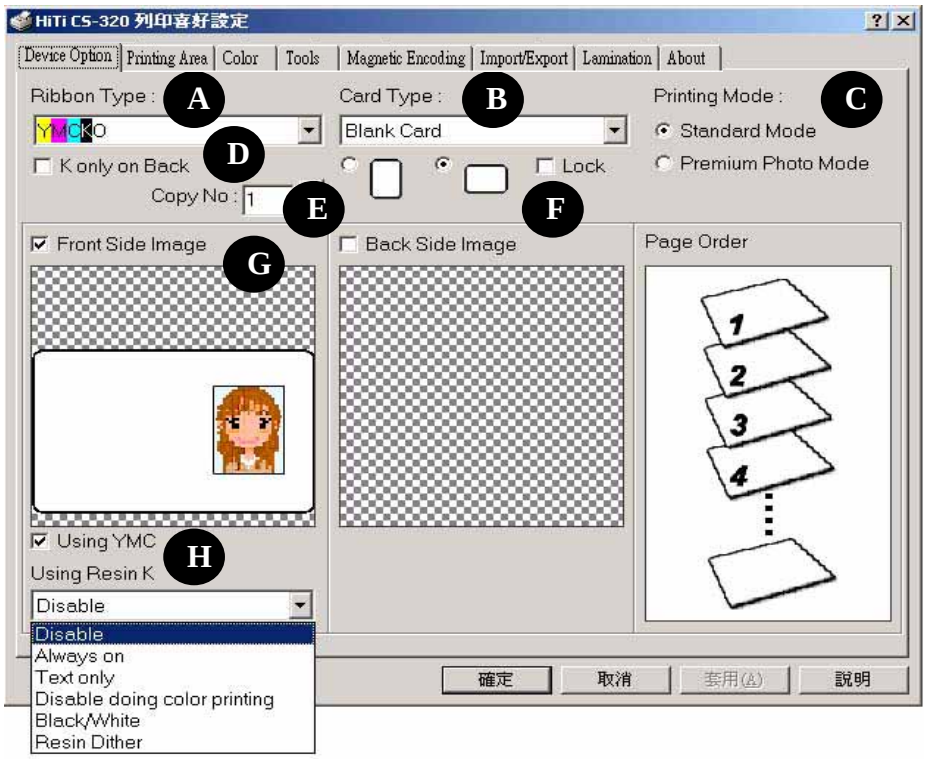
2-4 Driver Instruction

You can access the driver settings in **Control Panel-> Printers**. Select **HiTi CS-310/320** and right-click the mouse button, then select “Printing Preferences”. The printer driver is divided into seven different categories (not including general properties) integrated in a main page. The seven different categories list as below:

1. Device Option
2. Printing Area
3. Color
4. Tools
5. Magnetic Encoding
6. Import/Export
7. Lamination (This function is available for CS310i / CS320i only)
8. About

[Device Option]

You can modify the settings of the card printer in this page.



A. **Ribbon Type:** Select the ribbon type you want to use. 1. YMCKO ribbon,2. Resin K ribbon, 3. YMCO ribbon, 4. KO ribbon or 5. YMCKOK ribbon.

B. **Card Type:** Select the card type you want to use. You may choose “Blank Card”, “6-pin Smart Chip Card”, “8-pin Smart Chip Card”, “Magnetic Stripe Card”, “Chip/Magnetic Card”, and “Adhesive Card”. (Default setting: “Blank Card”)*

***Remark**: The Thickness tolerance of cards are 03mm +/-0.02mm (0.28 ~ 0.32mm), 0.5mm +/-0.03mm (0.47 ~ 0.53mm), 0.8mm +/-0.04mm (0.76 ~ 0.84mm), 1.0mm +/-0.05mm (0.95 ~ 1.05mm). If your card thickness is out of the above specification, it may cause significant damage to HiTi ribbon; may reduce the life span of HiTi Card Printer; may damage print head; and may cause unsatisfactory color performance.

C. **Printing Mode:** Standard Mode is the default setting. If you select Premium Photo mode, the printing quality will be enhanced but printing speed will be a little bit lower.

D. **K only on Back:** This option is available only for YMCKO ribbons. When it is marked, the front side of the card will be printed by YMC of YMCKO; meanwhile, the back side will be printed by K of YMCKO. Then the user can print out one double-side card by one set of YMCKO (YMC for the front side; K for the back side).

E. **Copies:** Set the number of copies to print. (Default setting: 1)

F. **Printing Direction:** You can select “Portrait” or “Landscape”. (Default setting: “Landscape”)

Lock: If you are using a 3rd party software application other than **Card Desiree CS** and the default printer of your computer is not CS-310/320, then please enable “**Lock**” to fix the printing direction.

G. **Front/ Back side setting:** Setup which side you want to print.

H. **Printing Parameters:** Select the printing parameters. When you change the Ribbon type, it will automatically return to the default setting. If ☐**Using YMC** is unmarked, only the Resin K and O portion of the YMCKO ribbon will be applied during the printing process.

※When you select the YMCKO ribbon as your ribbon type, several options for Resin K will be available.

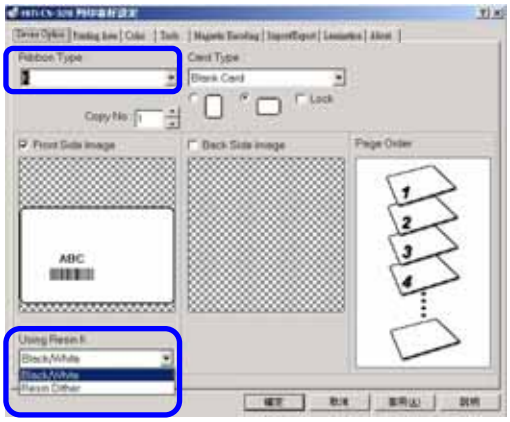
Disable	The "Resin K" within YMCKO ribbon will not be applied to print the black section and the black (RGB = 0, 0, 0) in graphical objects. It means the color in black (RGB = 0, 0, 0) will always be composed by Y, M and C.
Always on	The "Resin K" within the YMCKO ribbon will be applied to print all of the black (RGB = 0, 0, 0) in the images.
Text only	The "Resin K" within YMCKO ribbon will be applied to print the graphical object- "Text" which is transmitted by GDI command, but will not be applied to the black part in the images or the black (RGB = 0, 0, 0) of the graphical objects transmitted by the GDI command. For example, the Barcode is transmitted by the GDI command, but this option will not apply to Resin K within the YMCKO ribbon to the Barcode.
Disable when doing color printing	The "Resin K" within the YMCKO ribbon will be applied to print all the black (RGB = 0, 0, 0) graphical objects that are transmitted by the GDI command, but will not be applied to all the black (RGB=0, 0, 0) parts in the images.
Black/White	The "Resin K" ribbon will represent the color graphic/texts in black (RGB=0, 0, 0) and white printing style.
Resin Dither	Resin Dither applies different density of black-white mixing to transfer color graphic to different black level. If the text is the black (RGB=0, 0, 0) graphical object transmitted by GDI, then the text will not be shown by mixing color, but by the actual contents.

NOTE:

1. **G**raphical **D**evice **I**nterface, a Windows standard for dividing the images to many graphical objects and transmitting them to output devices, such as monitors and printers.
2. It is recommended to select "Disable doing color printing" if you are not going to use Card Désirée CS to print.

※When you select Resin K ribbon or KO ribbon as your ribbon type, then 2 options for the Resin K / KO ribbon will be available: **Black/White** and **Resin Dither**.

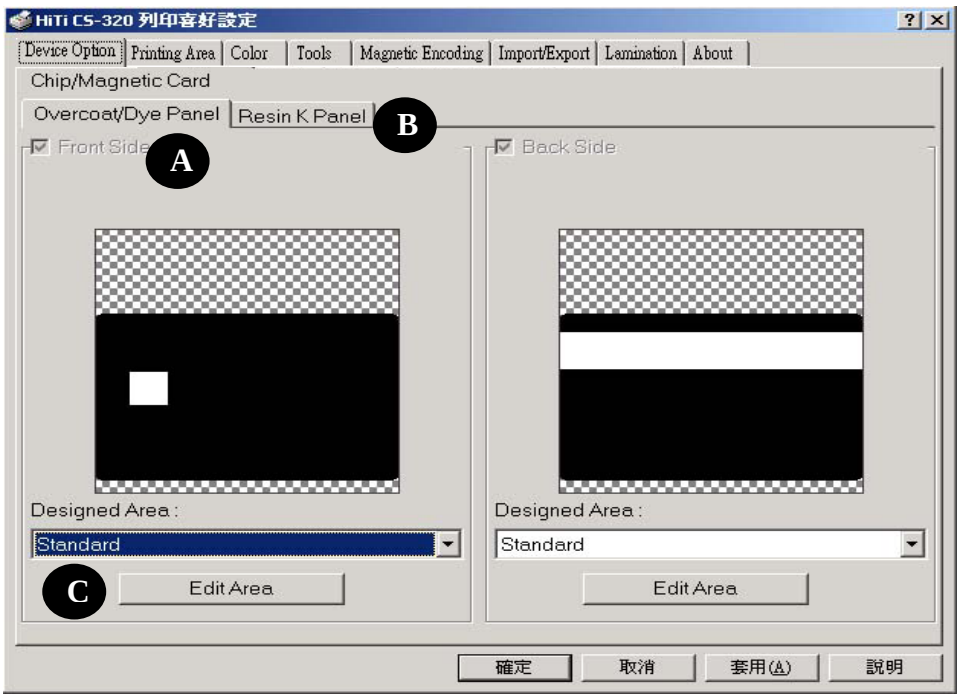
Black/White	The "Resin K" ribbon will represent the color graphic/texts in black (RGB=0, 0, 0) and white printing style.
Resin Dither	Resin Dither applies different density of black-white mixing to transfer color graphic to different black level. If the text is the black (RGB=0, 0, 0) graphical object transmitted by GDI, then the text will not be shown by mixing color, but by the actual contents.



[Printing Area Setting]

In this page, you may modify printing areas which will be covered and uncovered by the ribbon. You can design printing areas, such as the following instructions.

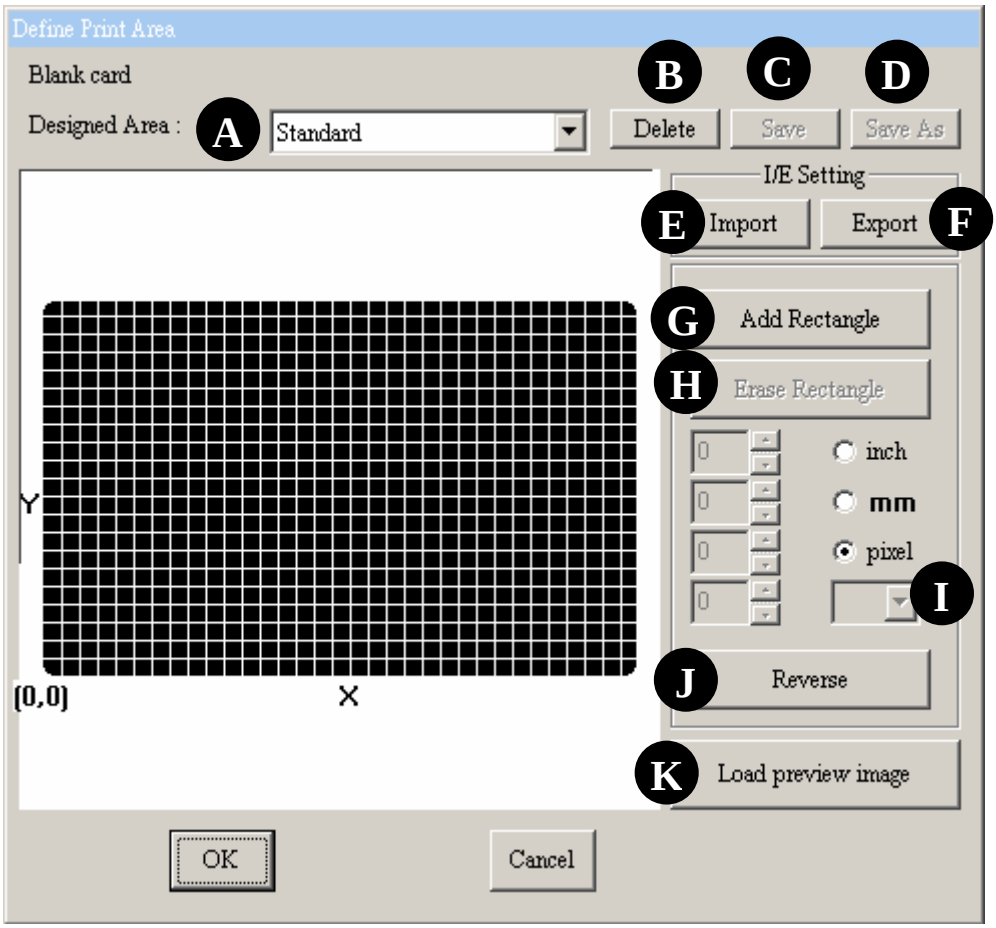
The dark area represents the area which will be covered by the ribbon, and the blank area represents the area where the ribbon will not cover anything. For example, if you select magnetic/chip cards and select [**Printing Area**]→**Overcoat/Dye Panel,** the chip area in the front side and magnetic stripe area in the back side will be shown as the white/blank areas, that the ribbon will not be covered by the Over coating and YMC within the YMCKO ribbon during the printing process. In other words, if you do not want an area to be covered by the ribbon, you can use this function to edit the printing area. If you do not want one area to be printed by Resin K within the YMCKO ribbon or the Resin K ribbon, please select [**Resin K Panel**] to edit the printing area.



A. Overcoat/Dye Panel:When you click [Overcoat/Dye Panel], you can edit the area which will be covered (black) and uncovered (white) by the over coating and YMC within the YMCKO ribbon.
B. Resin K Panel:When you click [Resin K Panel], you can edit the area which will be covered and uncovered by the Resin K ribbon or Resin K within the YMCKO ribbon.
C. Designed Area: You can select **Standard** and press [Edit Area] to create and to assign a printing area or you can select a template file with a designed area through the drop-down list and press [Edit Area] to edit the designed area. Please refer to the next page for further details.

※**Notice**: When you apply [**Printing Area**] for printing tasks, the **Card Type** settings in [**Device Option**] must be identical to the **Card Type** settings in Card Désirée CS. Meanwhile, the chosen template formats from the drop-down list must match the Card Type you selected in both [**Device Option**] and Card Désirée CS.

[Edit Area]



A. Designed Area: You can choose the default layout setting or the custom layout previously designed and saved through the drop-down list. If you would like to create a new layout, please select [**User defined**].

B. Delete: Delete the layout setting file.

C. Save: Save the layout setting file in a particular folder after editing.

D. Save As: Save the layout setting file in any location after the modification.

E. Import: Import the layout setting file from any location for editing.

F. Export: Export the layout setting file to any location.

G. Add Rectangle: Add a non-printing area. You can set the width, height and position of this area.

H. Erase Rectangle: Delete a non-printing area.

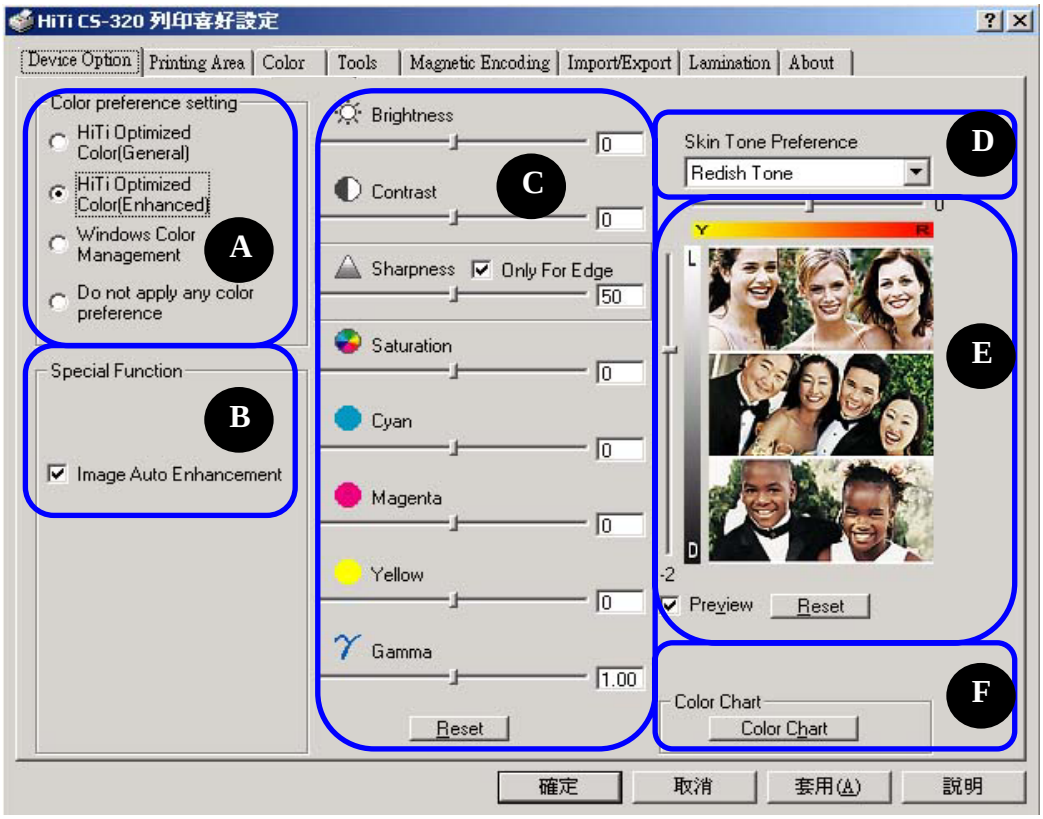
I. Rectangle list: You can select a different rectangle from the rectangle list.

J. Reverse: You can inverse all no-printing areas to be printing areas by pressing this button.

K. Load Preview Image: You can load any image to adjust the position of the card and preview the effect after its adjustment.

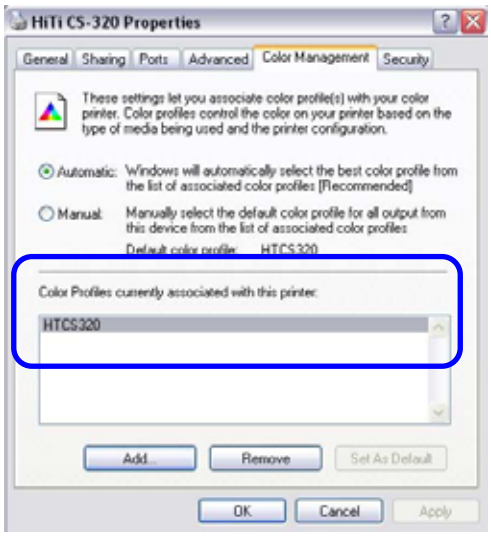
[Color]

You may set the printing color of your preference in this page.



A. Color preference setting: There are four options.

1. HiTi Optimized Color (General): The standard color presentation.
2. HiTi Optimized Color (Enhanced): Stronger contrast.
3. Windows Color Management: When applying this option, please follow the procedures as below:
   a. Please check whether the “HTCS310” / “HTCS320” file exists or not.
   [Control Panel]→Printers and Faxes→HiTi CS-310/320→Properties→Color Management.



b. Please press the “**Reset**” buttons in **C. Printer Color Adjuster** and **E. Skin Tone Adjuster** respectively.
c. Meanwhile, unmark ☐**Image Auto Enhancement** in **“B. Special Function”.**

4. Do not apply any color preference: Select this option and follow the steps below to acquire the maximum color space.
a. Please press the “**Reset**” buttons in “**C. Printer Color Adjuster”** and “**E. Skin Tone Adjuster”** respectively. Also, please set Gamma as 0.75.
b. Meanwhile, unmark ☐**Image Auto Enhancement** in **“B. Special Function”.**

B. Special Function: Image Auto Enhancement (Default selected). This function increases color the performance of the printing.

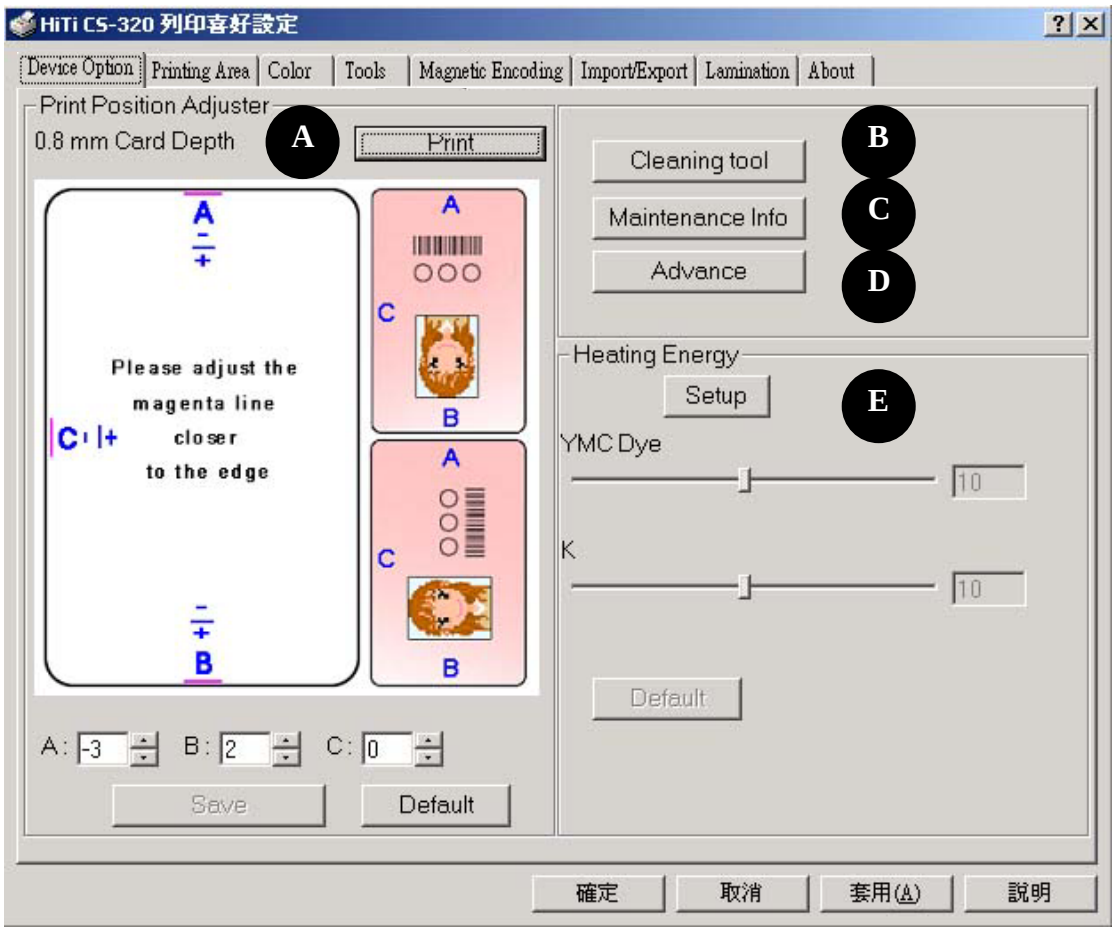
C. Printer Color Adjuster: You may adjust the printing color performance and sharpness via 8 slider bars or use the “Default” button to return to the default settings.

D. Skin Tone Preference: You may adjust the skin tone to your preference through this function.
Preference 1.: relatively Red color performance
Preference 2.: relatively Yellow color performance

E. Skin Tone Adjuster:
- Yellow/Red Adjuster bar (Y/R bar): The adjustment scale ranges from-5 to 5 and displays a range of adjustment between Yellow and Red.
- Light / Dark Adjuster bar (L/D bar): The adjustment scale ranges from-5 to 5 and displays a range of adjustment between Light and Dark.
- Preview: This displays the variation of Skin Tone after adjusting these bars.
- Reset: Return to the original settings.

F. Color Chart: You may select a color range and print out a color chart to check the color preference of the printing.
- You can print out the standard color chart for your reference according to the settings in “A. Color Preferences”, “C. Printer Color Adjuster”, and “D. Skin Tone Preference”
- Please unmark ☐**Image Auto Enhancement** in “B. Special Function” before you print out the color chart.
- If you would like to print out the same colors as the ones you selected from the standard color chart, then please do not change the settings in A., C., D. for the standard color chart. Otherwise, the colors you print will not be the same as the ones you selected from the standard color chart.
- If you would like to obtain a maximum color space for the color chart, then please select **“Do not apply any color preference”** in **“A. Color Preference Setting.”** Please refer to the description in **“A. Color Preference Setting”** for further details.

[Tools]



A. Printing Position Adjuster: You may set the thickness of the card and print out a test chat, then modify parameter [A] or [B] or [C] to adjust the printing position.

※Notice:

1. Please make sure the position of the thickness adjuster on the printer matches the thickness of the card before proceeding to modify parameter [A] or [B] or [C] to adjust the printing position.
2. When you modify the printing position, please note that the red line is not too close to the edge of the card in order to avoid any ribbon damage.

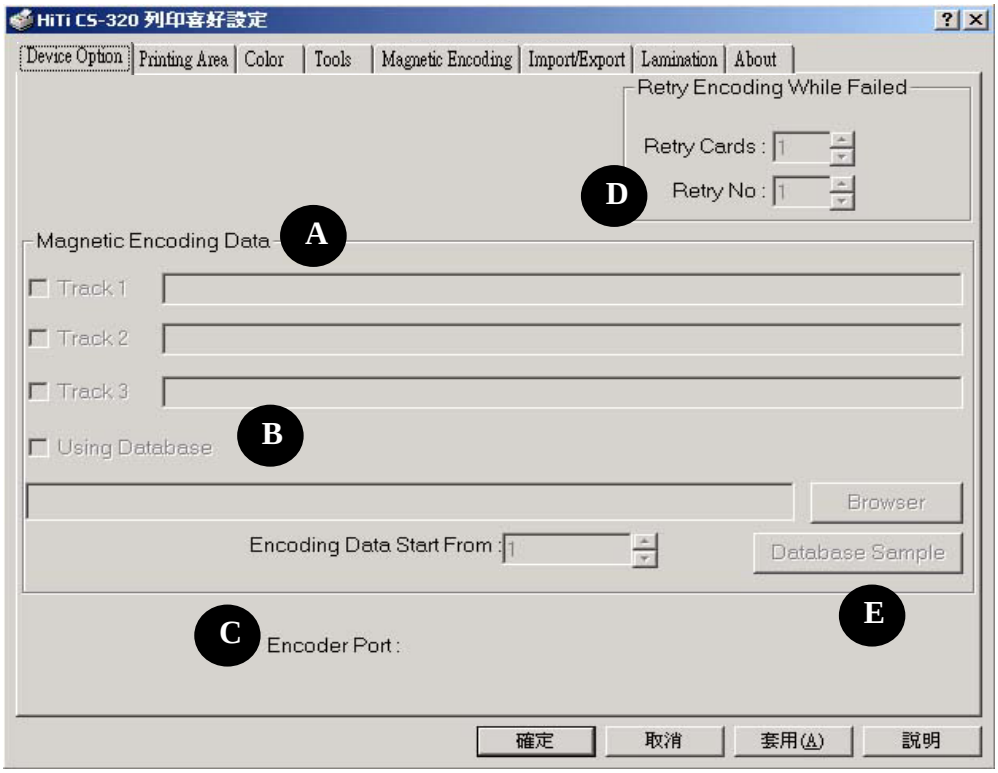
B. Cleaning Tool: You can use the cleaning mode to clean your printer. (Use cleaning cards from HiTi.)

C. Maintenance Info: This function will display cleaning/maintenance records and show the procedure for the print head replacement.

D. Advance: To show Progress Bar or not.

E. Heating Energy: You can set "**YMC Dye**", "**K**" parameters, ranging from 1 to 10 to decide the color intensity. If you use the YMCKO ribbon, then you can adjust the parameters for YMC and Resin K within the YMCKO ribbon; however, if you decide to use the Resin K ribbon, only Resin K parameters can be adjusted.

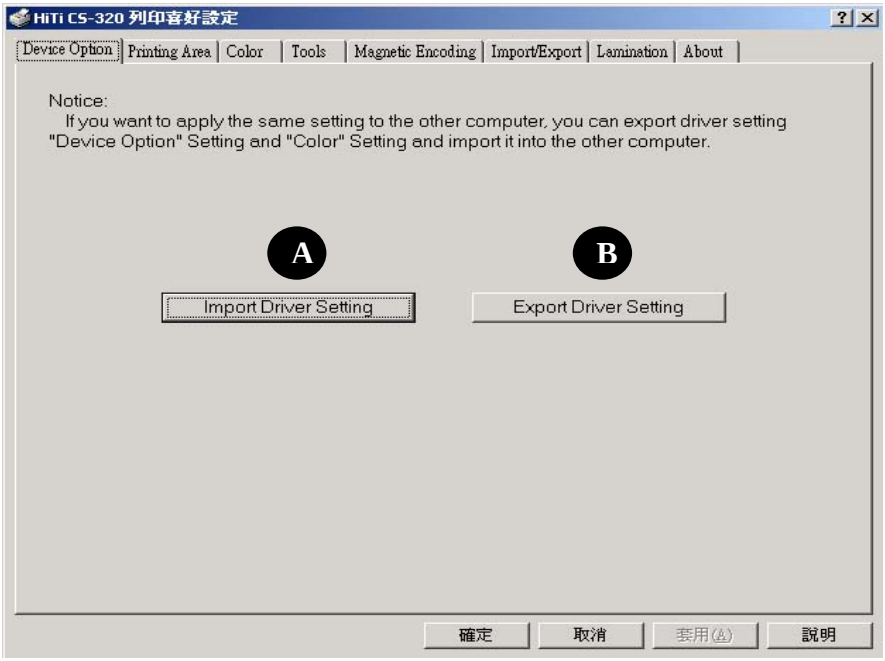
[Magnetic Encoding]



A	**Magnetic Encoding Data:** Input Magnetic Data directly. When you are not using the database, you can manually enter data for the encoding of the magnetic stripe. *There are three tracks within the magnetic stripe. The first track includes alphanumeric characters and other simple symbols. The second and the third tracks accept numeric characters only.* When you mark ☐Track 1, ☐Track 2, ☐Track 3 for data encoding, the function of ☐Using Database will be disabled. When you mark ☐Using Database for data encoding, ☐Track 1, ☐Track 2, ☐Track 3 will be disabled.
B	**Using Database:** Apply database for encoding. **Browse:** browse the path for a database. **Encoding Data Start From:** Decide which data to start encoding from a database. ※Notice: The database function is for the user who needs encoding by database but is not using Card Desiree CS as their application program.
C	**Encoding Port:** The information about the connection port.
D	**Times of Retrying:** After finishing encoding, the encoder will automatically read the data for verification purposes. If the reading fails, the device can be set to repeat the process according to the setting of the user.
E	**Database Sample:** There is a **Database Sample** for your reference. The format of a database must match this sample. After expressing this button, it will show the data samples as follows: 1 ABCDEFRG 2 12345678 3 2468024680

	4 HIJKLMN 12345678 5 12345678 2468024680 6 HIJKLMN 2468024680 7 HIJKLMN 2468024680 0987654321 a. 1 ABCDEFRG –this format is for encoding the 1st track only – ex: 1 xxxxxxxx b. 2 12345678 – this format is for encoding the 2nd track only – ex: 2 11111111 c. 3 2468024680 –this format is for encoding the 3rd track only – ex: 3 00000000 d. 4 HIJKLMN 12345678 - this format is for encoding both the 1st & the 2nd tracks ex: 4 xxxxxxxx 11111111 e. 5 12345678 2468024680 - this format is for encoding both the 2nd & the 3rd tracks, ex: 5 11111111 00000000 f. 6 HIJKLMN 2468024680 - this format is for encoding both the 1st & the 3rd tracks, ex: 6 xxxxxxxx 00000000 g. 7 HIJKLMN 2468024680 0987654321 - this format is for encoding all of the 3 tracks, ex: 7 xxxxxxxx 111111111 00000000

[Import/Export]



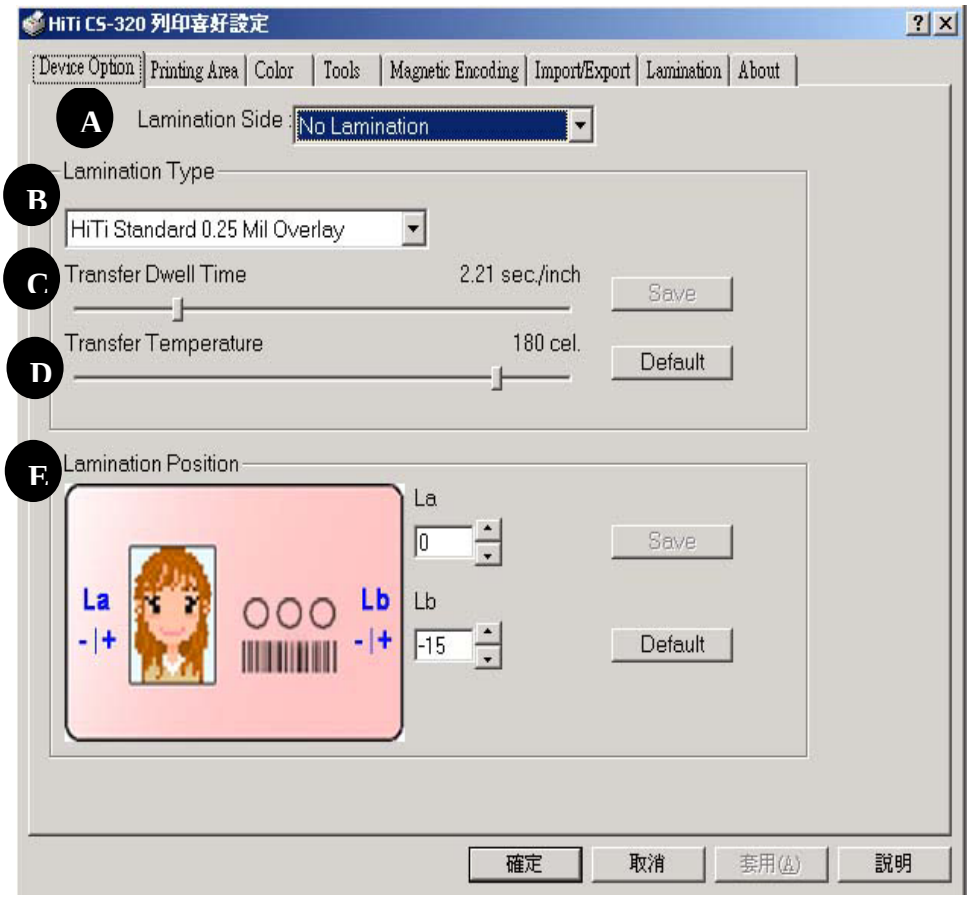
A. Import Driver Setting: You can import [**Device**] and [**Color**] settings from other computers to your computer.

B. Export Driver Setting: You can export the [**Device Option**] and [**Color**] settings from your computer to other computers.

※**Notice**: The **Import/Export** function on this page covers the settings for [**Device Option**] and [**Color**] and excludes the parameters you set in [**Printing Area**], please note. Please refer to page **22** for importing/Exporting the settings of the [**Printing Area**].

[Lamination]

This function is available for CS310i / CS320i only.

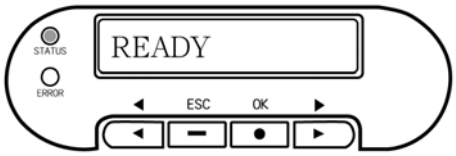


A: Lamination Side: 4 options to do lamination: No Lamination, Front Side Lamination, Back Side Lamination, Double Side Lamination.
B: Lamination Type: Lamination ribbon options.
C: Transfer Dwell Time: The speed of the transfer to do lamination.
D: Transfer Temperature: The temperature of the transfer to lamination.
E: Lamination Position: To adjust the initial / terminal positions of lamination.

[About]

This section describes the detailed information of this driver and website address for any inquiries.

Chapter 3 Operation Instruction



In this Chapter, you will find a detailed introduction about the operation through the LCD display.

3-1 LCD display instruction

The printer is equipped with an LCD Display and four buttons, which give access to printer menus. Turn the printer power switch on, the printer system will detect the printer status and feedback the error messages on the LCD display if any error would occur. Some errors may be resolved by troubleshooting instructions from the LCD display. If everything is normal, then the LCD display will display: “Ready”.

[◄] : Return to the previous option

[►] : Go to the next option

[OK] / [●] : Go to the next setting menu

[ESC] / [—] : Return to the previous setting menu

3-2 Operation instruction

When the LCD display shows “READY”, you can press ”OK” button to check the printer status or to clean the printer. It will go to the main setting menu as follows.

Main Menu	Sub Menu	Description
. DEVICE INFO	. . RIBBON TYPE	The ribbon type in the printer.
	. . CARD TYPE	The card thickness setting for the printer.
	. . MODEL NAME	The printer model name.
	. . FW VERSION	The firmware version.
	. . IC CARD R/W	The IC card reading/writing function. (YES/NO)
	. . MAG CARD R/W	The magnetic stripe card reading/writing function. (YES/NO)
	. . RF CARD R/W	The contactless card reading/writing function. (YES/NO)
	. . RIBBON CH1	The ribbon sensor switch. You can select the sensor CH1 or CH2 here. (CH1/CH2)

	. . CARD OUT SNR	The sensor for cards in the card-insert mechanism. (ENABLE / DISABLE). The default setting is [DISABLE]. However, once you switch [DISABLE] to [ENABLE] and there are no cards in the Card Input Hopper, the error message [CARD OUT] will be shown on the LCD display. If the [Card Out] message continues to exist, even after you have inserted cards into the Card Input Hopper and restart your computer, then please switch [ENABLE] to [DISABLE] and refer to Chapter 5 Troubleshooting→ "The Error Message shown on the Computer Monitor and the Solutions"→ "Card out or feeding error" **OR** "The Error Message shown on the LCD Display and the Solutions" → "CARD OUT". After above procedures if this error message still persists, please contact the HiTi customer service center.
	. . ADF SENSOR SEL	The sensors for card (ADF SENSOR 1/ADF SENSOR 2). When the card feeding process fails, you can try to switch ADF SENSOR 1 or ADF SENSOR 2 for troubleshooting. If the problem can not be resolved, please refer to Chapter 5 Troubleshooting→ "The Error Message shown on the Computer Monitor and the Solutions"→ "Card out or feeding error" **OR** "The Error Message shown on the LCD Display and the Solutions" → "CARD OUT". After above procedures fail and if the card feeding process still fails, please contact the HiTi customer service center.
. CLEANING MODE	. . PUT CLEANING KIT & OPEN THE DOOR & CLEAN PROCESSING	Please follow the instruction on the LCD Display. Remove the peel-off film from the cleaning card. Insert the cleaning card and open the ribbon door. Press [OK] button to initiate the cleaning process.

Chapter 4 How to maintain your printer*

In order to preserve the performance of the printer and the print quality, please remember to maintain your card printer regularly. We will introduce a detailed cleaning procedure in the following sections.

Please pay attention to the following when you use the printer.

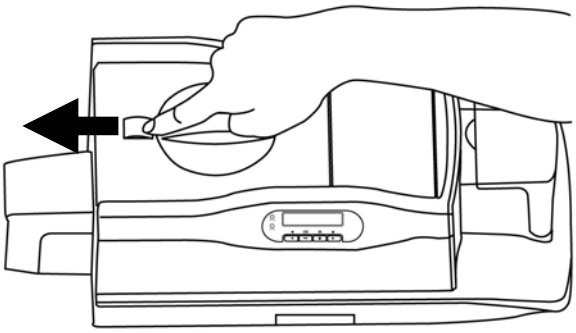
1. For a better printing quality, we highly recommend to use the printer in an indoor- and air conditioned environment, and when storing the card printer, please put it into plastic bag or use a dust cover to avoid dust accumulation.
2. Please don't touch the Thermal Printing Head or use any type of liquid detergent to clean it.
3. Please turn off the power after use to avoid printing head damage.
4. Please do NOT re-use any ribbons and cards that have already been printed on, or ribbons or cards not manufactured by HiTi. It may cause a card jam or a printing error, and subsequently cause damage the printer. In that case, the warranty of your printer would become void.
5. Please use the HiTi cleaning kit to clean the printer after every 400 prints.

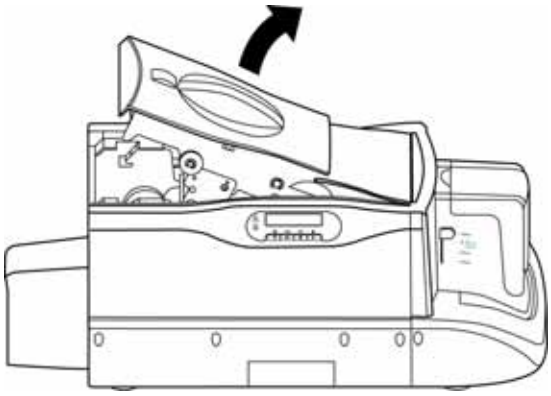
***Remark:** Please follow the above instructions to maintain CS310i / CS320i.

4-1 Clean Cleaning Roller

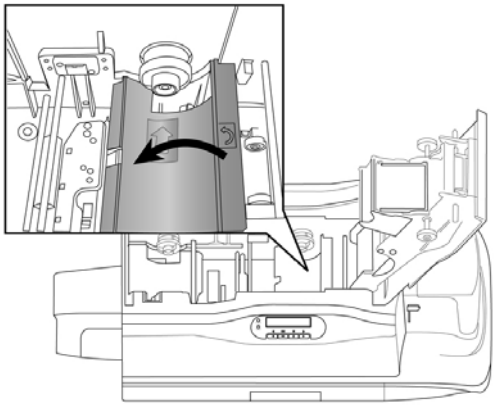
1. Switch the card printer off.

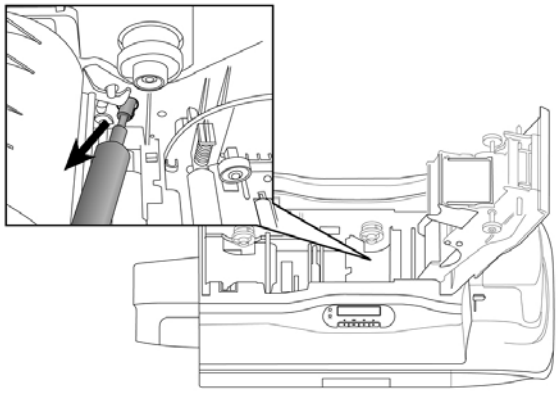
2. Slide the ID button and lift the ribbon door up.





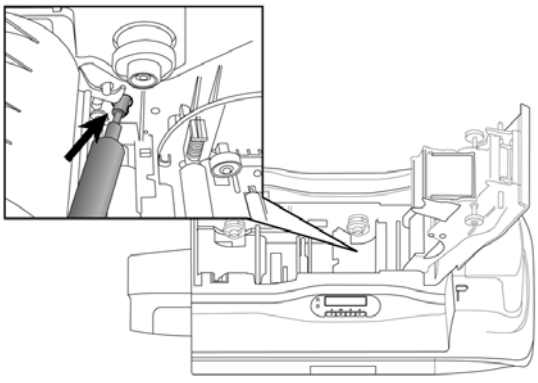
3. Open the cover of the cleaning module and take the cleaning roller off, as illustrated.

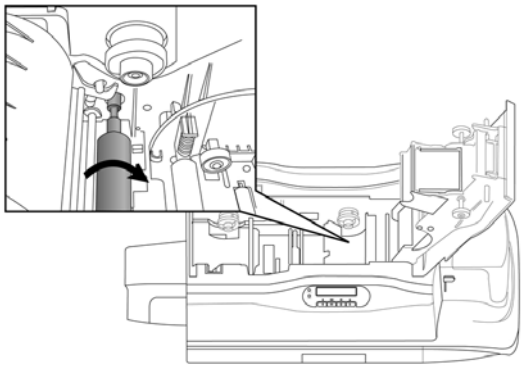




4. Roll the cleaning roller against the adhesive side of the cleaning card or against the adhesive tape to remove the dust from the cleaning roller.

5. Please insert the cleaning roller spool into the spool receivers. Turn the cleaning roller after installation; if it turns smoothly, the installation of the cleaning roller is correct. If it does not turn smoothly, please re-install the cleaning roller.





4-2 Clean Print Path

● In Stand alone mode

1. Turn the power switch of the printer on.
2. The printer will check the system status automatically, and show “Ready” on the LCD display.
3. Click the [<] or [>] button, and select [Cleaning mode] to begin the cleaning process.
4. The cleaning process will be displayed on the LCD display. Please follow the instructions step by step.
   a. Take off the ribbon cassette.
   b. Please remove the 3M peel-off film on both sides of the cleaning card and put it into the Card Input Hopper.
   c. Press the [OK] button to begin the cleaning process.
5. The Cleaning process is finished.

*For CS310i / CS320i, HiTi recommends users to implement the above procedures to clean the print path of the card printer before cleaning the print path of the laminator.
The procedures for cleaing the print path of the laminator are shown as follows:

a. Follow Step 1 – 3 and the LCD will show [Cleaning Path].
b. Press [<] or [>] button to select [Lamination Cleaning Path], then press [OK]
c. Follow Step 4 – 5 to complete the cleaing process.

● In PC link mode

1. Turn the power switch of the printer on.
2. Connect the printer to the PC with the USB cable.
3.Find the driver settings under **Control Panel/ Printers**. Choose **HiTi CS-310/320** and right-click mouse button, and select “**Properties**”.
4. Select the **[Tools]** and press the **[Cleaning Tools]** button.
5. Follow the cleaning process,
   a. Open the cover of the printer.
   b. Take off the ribbon cassette.
   c. Put the cleaning card into the Card Input Hopper. Please remove the release paper from the cleaning card and put the cleaning card into the Card Input Hopper.
   d. Press the **[Cleaning]** button to begin the cleaning process.
6. The Cleaning process is finished.

* Clean print path in PC link mode is available for Card printer only NOT for CS310i / CS320i.

⚠ Notices:

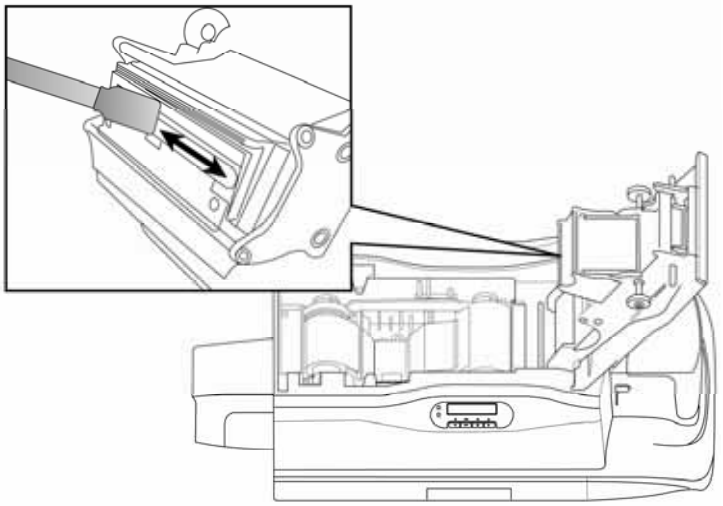
1. Do not put your hand into the card printer during the cleaning process.
2. Do not close the cover of the printer during the cleaning process.
3. Do not turn off the power or unplug the USB cable during the cleaning process.

4-3 Clean TPH Head*

1. Please turn off the power before cleaning the TPH head.

2. Open the ribbon door, the TPH head is attached to the ribbon door module.

3. Please use the sponge cleaning swab to clean the TPH head.



※ **Notices:**

1. **Please do not touch the TPH head with your hand.**
2. **Do not use any liquid detergents or aerosol cleaners to clean the thermal printing head.**

4. Please close the ribbon door, make sure the STATUS LED displays green and LCD display displays “READY”. The cleaning process is finished.

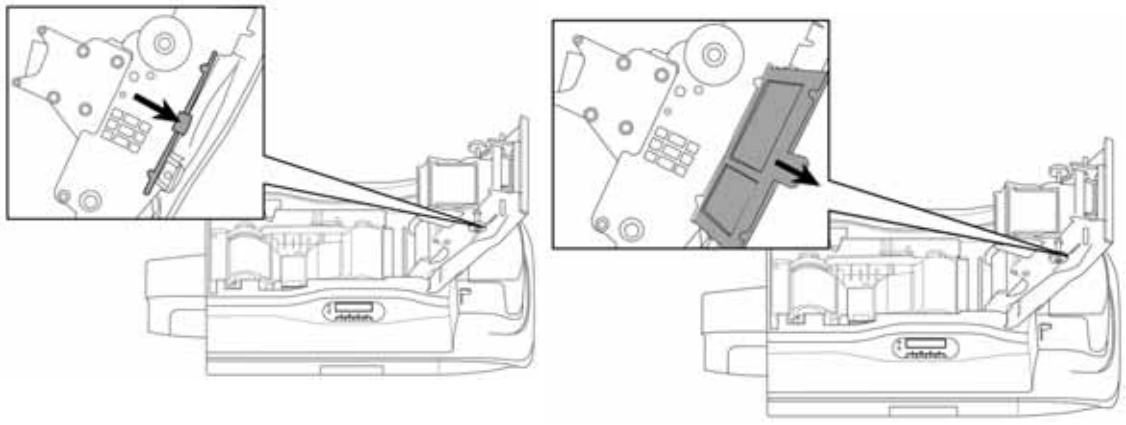
*The above procedures are for the TPH of the card printer only NOT for the TPH of the laminator.

4-4 Clean Air Filter

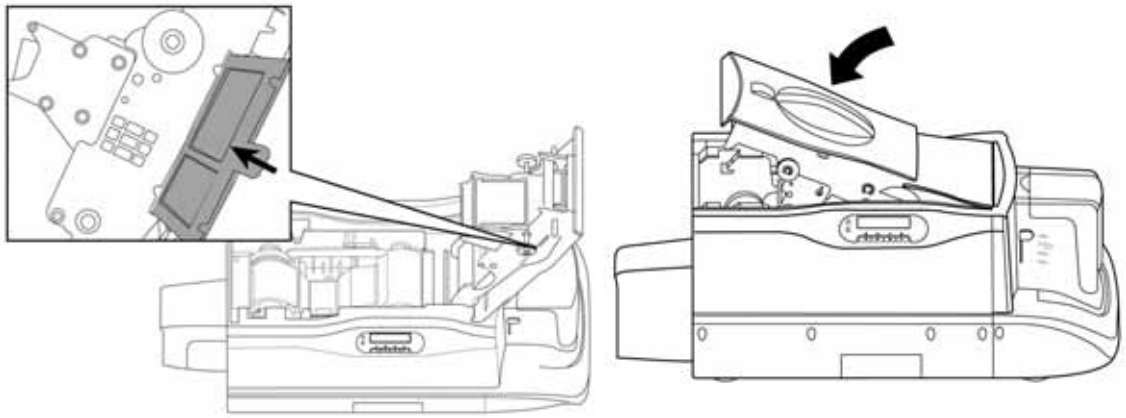
1. Switch the card printer off.

2. Open the ribbon door.

3. Slide the air filter out from the side of ribbon door and clean the dust on the filter, as illustrated.



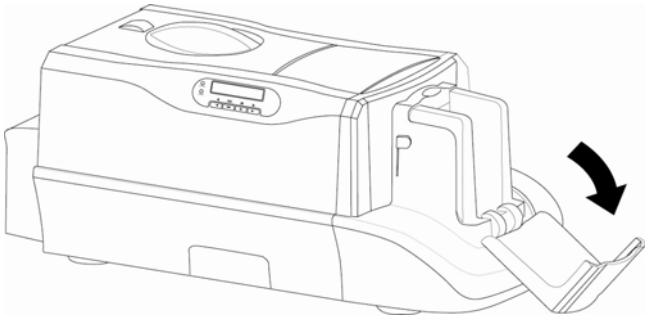
4. Insert the air filter into the ribbon door and close the ribbon door. The cleaning process is finished.



4-5 Cleaning Card-insert Mechanism

1. Switch the card printer off.

2. Open and empty the Card Input Hopper. After removing all the cards and the weight, please use the sponge cleaning swab to clean the rollers and the sensor on the card-insert mechanism.



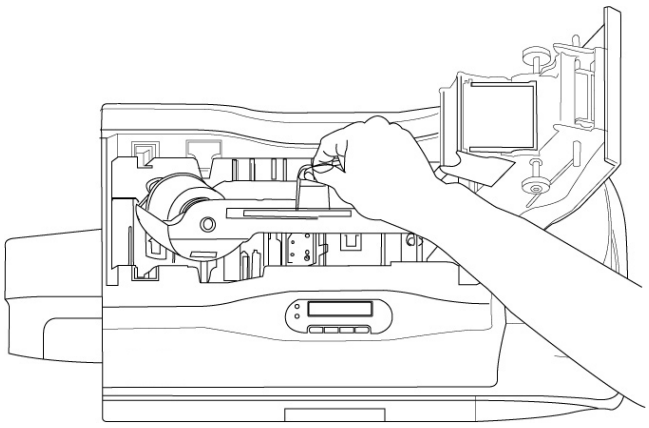


4.6 Clean Ribbon Sensors

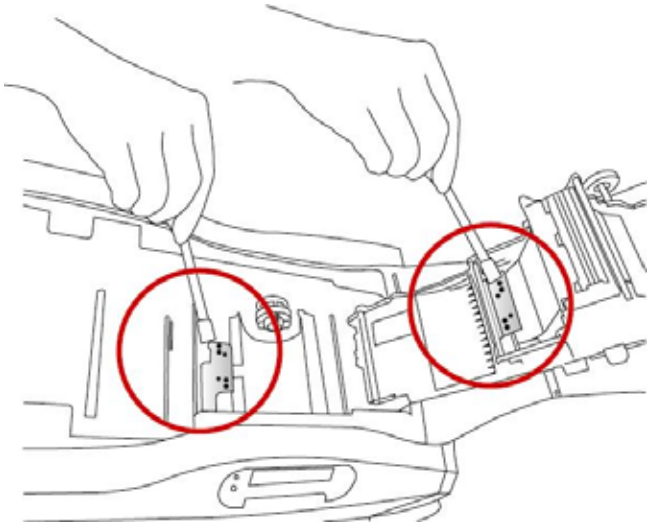
1. Switch the card printer off.

2. Open the ribbon door.

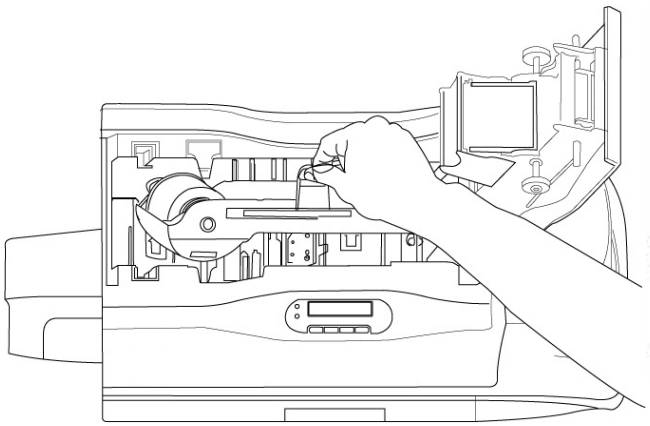
3. Remove the ribbon cassette.

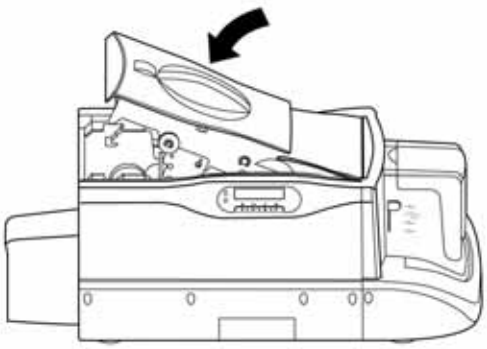


4. Please use the sponge cleaning swab to clean the ribbon sensors, as shown.



5. Please re-insert the ribbon cassette and close the ribbon door.





Chapter 5 Troubleshooting

If there is any error message displayed on the LCD screen, please record the message first; do not press **[OK]** immediately. Please follow the instructions below for troubleshooting.
※Notice: After you press **[OK]** in the error message dialogue, the printer will reset and the error message may be erased after “Reset”.

5-1 Error Message and Solution

- The Error Message shown on the Computer Monitor and the possible Solutions

The Error Message	Possible Causes	Solutions
Printer is off-line	1. The power switch is in off position 2. The power cord is not connected to the power outlet 3. The USB cable is not connected to a PC or to the card printer.	**Check the power cord** 1. Check if the power cord is properly connected to the power outlet, and make sure the power switch is turned ON. 2. If the power is ON and all functions are normal, then the status light will display solid green. **Check USB Cable** 1. Check if the USB cable is properly connected to a PC. 2. Please check if the USB cable is properly connected to the printer.
Printer doesn’t exist	The driver has not been installed.	Please follow the instruction from the HiTi Card Printer User Manual to install the driver. You can download the latest driver from the HiTi website: http://www.hi-ti.com
Card out or feeding error	There are no cards in the Card Input Hopper or an error occurs during the feeding process.	1. Please check if the Card Input Hopper is empty. Please check if the thickness of the card in the Card Input Hopper matches the selected card thickness. 3. Please whether the weight is placed on the cards or not. 4. Please make sure the cards are not sticking to each other. If you still can not resolve the problem, please refer to the following procedures: 1. If the error message appears after you place the cards with printed back side into the Card Input Hopper, then please switch CARD OUT SNR to [DISABLE] through the LCD display. 2. The error occurs after feeding a card, ● If you use a magnetic stripe card, please confirm whether the card direction is correct. ● If you use double-magnetic cards or a card with printed back side, please switch the ADF SENSOR to SENSOR2 through LCD display.
Card mismatch	The card size is not correct.	Please insert the standard CR-80 cards.

Ribbon out	The ribbon has been used up.	1. Please install a new ribbon. 2. Please follow the instructions from the LCD display to switch the ribbon sensors (Please refer to Chapter 3, section 2, the description of RIBBON 1) If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
Ribbon missing	The card printer does not detect the ribbon.	1. Please make sure the ribbon is present. 2. Please make sure the ribbon has been installed properly. 3. Please clean the chip on the side of the ribbon and re-install the ribbon to the card printer. 4. Please close the ribbon door properly. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
Door open	The ribbon is not installed or the ribbon is installed in an improper position or the ribbon door is in the correct position.	1. Please check if the ribbon is present. 2. Please make sure the ribbon has been properly installed, remove and re-install the ribbon if necessary. 3. Please close the ribbon door to the proper position.
Ribbon IC R/W error	An error occurs in the chip.	1. Please remove the ribbon. 2. Please clean the chip in the side of the ribbon and re-install the ribbon. 3. If the error message still exists, please install a new ribbon. 4. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
Unsupported ribbon	Wrong ribbon for this printer.	Please install the correct ribbon.
Unknown ribbon	The ribbon can not be recognized.	Please install the correct ribbon.

<table>
<tr><td>Card jam in card path</td><td rowspan="2">Card jam in the device.</td><td rowspan="2">Please remove the card by following the instructions on the LCD monitor of the printer before continuing the print job. Please press [OK] to get step by step instructions.
1. OPEN THE DOOR: Open the ribbon door to see whether the card and the ribbon are sticking together or not.
2. TAKE OFF THE RIBBON: Remove the ribbon.

There are three options jammed card removal. Please press [<] or [>] to select one of these options:
● AUTO REMOVE CARD: Press [OK], the card printer will show “MOVING CARD” and remove the card automatically.
● SEMI-AUTO REMOVAL: Press [OK]. The LCD display will show “CONTROL BUTTON”, press [<] or [>] to remove the card. After removing the cards, press [OK] to clear the error message.
● MANUAL REMOVAL: Press [OK], the LCD display will “REMOVE BY HAND”. After removing the card, press [OK] to clear the error message.
※NOTICE！During “SEMI-AUTO REMOVAL” or the “MANUAL REMOVAL” process, please DO NOT put your hands into the card printer.

※NOTICE！If the LCD display does not show “NEXT” below the “CARD JAM” message, please empty the rejected box and continue the troubleshooting process on the computer monitor.

※NOTICE！If the card printer is printing on either side of a card, and the “Card jam” error occurs after printing the first side printing, then please follow the previous instructions to remove the card and check if the cleaning roller is installed properly. If not, please follow the instruction in“1-4 Install Cleaning Roller” to install the cleaning roller.</td></tr>
<tr><td>Card jam in a flipper</td></tr>
<tr><td>Card jam in rejected box</td><td>Card jam in the rejected box</td><td>If the LCD display does not show “NEXT” below the “CARD JAM” message, please empty the rejected box and then continue the troubleshooting process.</td></tr>
<tr><td>R/J Box full</td><td>The rejected box is full of cards</td><td>Please empty the rejected box or follow the instructions from the LCD display and press [NEXT] →[IGNORE THE ERROR] to clear this error condition.</td></tr>
<tr><td>R/J Box missing</td><td>The rejected box is not placed in the proper position</td><td>Please check if the rejected box has been properly installed or please follow the instruction on the LCD display and press [NEXT] → [IGNORE THE ERROR] to clear this error condition.</td></tr>
</table>

Cam TPH error	The error occurs in the mechanism.	Press the 'Cancel" button to restart the card printer. Or download the latest version of firmware from HiTi website and follow the instructions from the HiTi Card Printer User Manual to re-install the firmware. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
Cam pinch error		
Cam flipper error		
Cam Mag error		
Check sum error - SDRAM	The version of the firmware is not correct.	
Check sum error – SRAM		
Check sum error – FLASH		
Check sum error – Wrong firmware		
Nvram R/W error	The error occurs due to memory inside the card printer.	Please restart the card printer. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
Nvram CRC error		
Command sequence error	The error occurs due to command sequence.	Please restart the card printer or download the latest Firmware from HiTi website and follow the instruction from HiTi Card Printer User Manual to re-install the firmware. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://www.hi-ti.com
USB connection was broken	Your PC adopts USB 1.1 Host Controller, and uses other USB devices (Including other HiTi printers) at the same time.	1. Please do not use any other USB devices at the same time to avoid USB compatibility problems if your PC is using a USB 1.1 Host Controller. 2. To avoid any kind of USB compatibility problem, please upgrade your PC to USB 2.0 Host Controller. **Notice:** You can check version of the Host Controller via "Control Panel/ System/ Hardware/ Device Manager/ USB Universal Host Controller". It is USB 2.0 Host Controller if you see "xxx xxxx **Enhanced Host Controller** xxxx".
Trying to re-connect to the device, please wait a moment	Some USB devices and HiTi printer plug into the same USB 1.1 host controller, and both work at the same time, there might be some kind of USB conflict and this may interrupt the printing job.	1. You can either upgrade your computer to USB 2.0 or stop operating the other USB device while the HiTi printer is printing. 2. You can try to switch the other USB device into a different USB port and use the program, CheckUsb.exe, to check if there is any conflict in the USB connection. (For CheckUsb.exe, please contact HiTi customer service center.)

Thermal print head overheat	1. The printer will detect the printing temperature automatically. When the temperature is overheated, the printer will stop printing temporarily and cool the temperature down. The card printer will continue until the temperature will be below 60 ℃. 2. When you continue printing more than 5 to 10 pages, the temperature might be higher so that the printer must cool down its temperature. 3. This message also occurs when the temperature is overheated in the operating environment.	1. Please wait a while until the thermal printing head cools down, and the printer will restart automatically. 2. Please use the card printer in an indoor environment with air conditioning.

When an internal error occurs, an error message will display this error on the LCD display. The error messages and their solutions are listed below:

- The Error Message is displayed on the LCD Display and on the Solutions

The Error Message	Possible Causes	Solutions
CARD OUT	There is no card in the Card Input Hopper.	1. Please check if there is any card in the Card Input Hopper; 2. Please check if the selected thickness of the card matches the card. 3. Verify the weight used. 4. Please make sure the cards are not sticking to each other. If you still can not solve this problem, please refer to the following procedures: 1. If this error message appears after you place the cards with printed back side into the Card Input Hopper, please switch CARD OUT SNR to [DISABLE] through the LCD display. 2. The error occurs after feeding a card, ● If you are printing a magnetic stripe card, please confirm that the card feeding direction is correct. ● If you use double-magnetic cards or the card with printed back side, please switch ADF SENSOR to SENSOR2 through LCD display.
CARD MISMATCH	The card size is not correct.	Please insert the standard CR-80 cards.
RIBBON OUT	The ribbon has been used up.	1. Please replace it with a new ribbon. 2. Please follow the instructions from the LCD display to switch the ribbon sensors (Please refer to Chapter section 2, the description of RIBBON 1) If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website:http://hi-ti.com
RIBBON MISSING	The card printer does not detect the ribbon.	1. Please check if the ribbon is present. 2. Please make sure the ribbon is in the proper position. If you are not sure, please remove and

		carefully re-install it to its proper position. 3. Please clean the chip on the side of the ribbon and re-install the ribbon. 4. Please make sure the ribbon door is closed. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://hi-ti.com
RIBBON IC ERROR	An error occurs in the chip.	1. Please clean the chip on the side of the ribbon and re-install the ribbon on the card printer. 2. If the error message still exists, please install a new ribbon. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website:http://hi-ti.com
RIBBON UNSUPPORTED	The wrong ribbon is used on this printer.	Please install the correct ribbon.
RIBBON UNKNOWN	The ribbon can not be recognized.	Please install the correct ribbon.
DOOR OPEN	The ribbon door is open or does not close well.	Please close the ribbon door again.
CARD JAM / NEXT	Card jam in the device.	Please remove the card by following the instructions on the printer LCD monitor before continuing the print job. Please press [**OK**] to get step by step instructions. 1. **OPEN THE DOOR:** Open the ribbon door to see if the card and the ribbon are sticking together. 2. **TAKE OFF THE RIBBON:** Remove the ribbon. There are three options for the removal of a jammed card. Please press [<] or [>] to select one of these options: ● **AUTO REMOVE CARD:** Press [**OK**], the card printer will show "**MOVING CARD**" and remove the card automatically. ● **SEMI-AUTO REMOVAL:** Press [**OK**], the LCD display will show "**CONTROL BUTTON**", press [<] or [>] to remove the card. After removing the cards, press [**OK**] to clear the error message. ● **MANUAL REMOVAL:** Press [**OK**], the LCD display will display "**REMOVE BY HAND**". After removing the card, press [**OK**] to clear the error message. **※NOTICE！During "SEMI-AUTO REMOVAL" or "MANUAL REMOVAL" process, please DO NOT put your hands into the card printer.** **※NOTICE！If the LCD display does not show "NEXT" below the "CARD JAM" message, please empty the rejected box and then continue the troubleshooting process through the computer monitor.** **※NOTICE！If the card printer is performing the double-side printing, and any "Card jam" error occurs after printing the first side, please follow then the previous instructions to remove the card and check if the cleaning roller is installed properly. If not, please follow the instructions in "1-4 Install Cleaning Roller" to install the cleaning roller.**

RJ-BOX FULL	The rejected box is full of cards	Please remove the invalid cards from the rejected box or follow the instructions from the LCD display and press [**NEXT**] → [**IGNORE THE ERROR**] to clear this error condition.
RJ-BOX MISSING	The rejected box is not placed in the proper position	Please make sure the rejected box is installed properly. Or please follow the instructions on the LCD display and press [**NEXT**] → [**IGNORE THE ERROR**] to clear this error condition.
PRINT FAIL	The printing process fails.	Please restart the card printer. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service department. Website: http://hi-ti.com
CAM TPH ERROR	The error occurs in the mechanism.	If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website:www.hi-ti.com
CAM PINCH ERROR		
CAM FLIP ERROR		
CAM MAG ERROR		
CHECKSUM ERROR	The version of the firmware is not correct.	Please restart the card printer. Or download the latest version of Firmware from the HiTi website and follow the instructions from the HiTi Card Printer User Manual to re-install the firmware. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website: http://hi-ti.com
NVRAM R/W ERROR	The error occurs due to memory inside the card printer.	Please restart the card printer. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website:http://hi-ti.com
NVRAM CRC ERROR		
CMD SEQUENCE ERROR	The error occurs due to a command sequence.	Please restart the card printer or download the latest Firmware from the HiTi website and follow the instructions from the HiTi Card Printer User Manual to re-install the firmware. If the error message still occurs, please contact your nearest HiTi distributor or HiTi customer service center. Website:www.hi-ti.com

Appendix A CS-310/320 Specification

Model Name	CS-310	CS-320
Print Method	Photo-quality dye sublimation Thermal Transfer Dual-side Printing*	
Resolution	300dpi x 300dpi , 256 levels per color	
Display	LCD control panel	
Memory	32MB, 1MB Flash	
Print Speed	Standard Mode : 25 seconds / single side ; Premium Photo Mode : 32 sec / single side	
Print Area	CR-80 edge-to-edge 86 mm(L) x 54 mm(W) / 3.375"(L) x 2.125"(W)	
Accepted card Specification	Size : CR-80 edge-to-edge 86 mm(L) x 54 mm(W) / 3.375"(L) x 2.125"(W) Thickness : 0.3 mm to 1.0 mm (10 mil to 40 mil)	
Input hopper card capacity	100 cards (30 mil thickness)	
Output hopper card capacity	100 cards (30 mil thickness)	
Software driver	Windows 2000 / XP/Vista	
Communication Interface	USB 1.1/ USB 2.0 full speed	
System request	IBM-PC or compatible, Windows 2000/XP/Vista, Pentium® class 133MHz computer with 128 MB of RAM or higher, 100MB free hard disk space or higher.	
Ribbon Options	YMCKO (200 Prints), YMCO (200 Prints)**, YMCKOK(170 Prints)** Resin K (1.000 Prints), KO (500 Prints) ** Lamination (350 Prints)** Gold (1.000 Prints) ** Silber (1.000 Prints) **	
Dimensions	275 mm (W) x 508 mm (L) x 251 mm (H) / 10.83”(W) x 20”(L) x 9.88”(H)	
Weight	9.1 kg / 20lbs	
Supply Voltage	100~240 VAC	
Supply Frequency	50 Hz ~60 Hz	
Operating Temperature	15° to 32° C / 59° to 89.6° F	
Operating Humidity	20 - 75% non-condensing	
Optional Module	ISO Magnetic Stripe Encoding Module**, dual high- and low-coercively, Tracks 1, 2, and 3, Contact-less Smart Card Encoding Module**,Contact Smart Card Encoding Module**, Lamination Module**	
Cleaning tool	HiTi Card Printer Cleaning Kit, HiTi Card Printer Cleaning Module	

*CS-310 supports single-side printing only.

**Please contact the Sales Department or the Customer Service Department for any further information.

Appendix B Safety Instructions

Read these instructions carefully. Save these instructions for future reference. Follow all warnings and instructions marked on the product.

1. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
2. Do not use this product near water.
3. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
4. Openings in the cabinet and the bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. Placing the product on a bed, sofa, rug, or any other similar surface should never block the openings. These products should never be placed near or over a radiator or a heat register, or in a built-in installation unless proper ventilation would be provided.
5. This product should be operated with the type of power indicated on the marking label. If you are not sure about the available power source, consult your dealer or the local power company.
6. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the ampere rating of the extension cord. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

Appendix C FCC Compliance Statement

FCC Information

The Federal communication Commission Radio Frequency Interference Statement includes the following paragraph:

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, use and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If these equipment doses cause harmful interference to radio or television reception, which can be determined by interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Never push objects of any kind into these products through cabinet openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.
4. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
5. The users should not modify or change this equipment without written approval from this company. Modification could void authority to use this equipment.

Certificate of Conformity

The products

EUT : CARD PRINTER
Trade Name : HITI
Model No. : PAVO 3xx: CS-3xxx (x=0-9, A-Z or Blank)

which produced by

Hi-Touch Imaging Technologies Co., Ltd.
3F, No.31, Shuang-Shih Rd. Sec. 3, Pan-Chiao City,
Taipei County 220, Taiwan, R.O.C.

Regulation Applied : FCC Rules and Regulations Part 15 Subpart B (2005) / CISPR 22
ET Docket No. 95-19 (Doc Procedure)

I HEREBY CERTIFY THAT : The data shown in this report were made in accordance with the procedures given in ANSI C63.4 and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Will Yauo

Signature
Will Yauo
Manager of EMC Testing Department II
Electronics Testing Center, Taiwan

Report Number :ET94R-09-090-02

Note : 1. **The result of the testing report relate only to the item tested.**
2. **The testing report shall not be reproduced expect in full, without the written approval of ETC.**
3. **The report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.**

ELECTRONICS TESTING CENTER, TAIWAN
NO. 34, LIN 5, DING FU TSUN,
LINKOU HSIANG, TAIPEI
TAIWAN, R.O.C.

TEL:(02)26023052
INT:+886-2-26023052
FAX:(02)26010910
INT:+886-2-26010910

NVLAP LAB CODE: 200133-0

FEDERAL COMMUNICATIONS COMMISSION

Declaration of Conformity (DoC)

The following equipment:

Product Name : CARD PRINTER

Trade Name : HITI

Model Number : PAVO 3xx ; CS-3xxx (X=0~9, A~Z or Blank)

is herewith confirmed to comply with the requirements of FCC Part 15 Rules.
The operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesire operation.

The result of electromagnetic emission has been evaluated by ETC EMI Laboratory (NVLAP LAB CODE:200133-0) and showed in the test report: ET94R-09-090-02

It is understood that each unit marketed is identical to the device as tested, and any changes to the device which could adversely affect the emission characteristics will require retest.

The following importer/manufacturer is responsible for this declaration:

Company Name : Hi-Touch Imaging Technologies (America), Inc.

Company Address : 285 S. Dupont Ave. Suite #104 Ontario, CA 91761

Telephone : +1-909-974-0099 Facsimile: +1-909-974-0011

Person in responsible for marking this declaration:

KUO-YI YEN	General Manager
Name (Full Name)	Position/Title
Kuo Yi Yen	Nov 30 2005
(Legal Signature)	Date

- **CE Information**

Certificate of Conformity

in accordance with the council directive 89/336/EEC, 92/31/EEC, 93/68/EEC

The products

EUT : CARD PRINTER
Trade Name : HITI
Model No. : PAVO 3xx; CS-3xxx (x=0-9, A-Z or Blank)

which produced by

Hi-Touch Imaging Technologies Co., Ltd.
3F, No.31, Shuang-Shih Rd. Sec. 3, Pan-Chiao City,
Taipei County 220, Taiwan, R.O.C.

Has been tested by Electronics Testing Center, Taiwan ETC
And was found to comply with the EMC requirements on the basis of

EN 55022:1998/A1:2000/A2:2003(Class B)
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001

EN 55024:1998/A1:2001/A2:2003
IEC 61000-4-2:1995/A1:1998/A2:2000
IEC 61000-4-3:2002
IEC 61000-4-4:1995/A1:2000/A2:2001
IEC 61000-4-5:1995/A1:2000
IEC 61000-4-6:1996/A1:2000
IEC 61000-4-11:1994/A1:2000

EMC TESTING DEPARTMENT II
ELECTRONICS TESTING CENTER TAIWAN ETC

Will Yauo
Signature
Will Yauo
Manager of EMC Testing Department II
Electronics Testing Center, Taiwan

Report Number :ET94R-09-090-01

Note : 1. The results of the Test Report relate only to the items tested.
2. The Test Report shall not be reproduced except in full, without the written approval of ETC.
3. Together with the applicant's own documented production control, the applicant (or his European authorized representative) could draw up an EC Declaration of Conformity and affix the CE marking.

ELECTRONICS TESTING CENTER, TAIWAN
NO. 34, LIN 5, DING FU TSUN,
LINKOU HSIANG, TAIPEI
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TEL:(02)26023052
INT:+886-2-26023052
FAX:(02)26010910
INT:+886-2-26010910

CE

CE Declaration of Conformity

For the following equipment:

Card Printer PAVO 3xx; CS-3xxx (X=A~Z, 0~9 or blank) (Brand: HiTi)

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC).For the evaluation regarding the electromagnetic compatibility, the following standards were applied:

EN 55022: 1998/A1:2000/A2:2003(Class B)	**EN 55024:1998/A1:2001/A2:2003**
EN 61000-3-2:2000	**IEC 61000-4-2:1995/A1:1998/A2:2000**
EN 61000-3-3:1995/A1:2001	**IEC 61000-4-3:2002**
	IEC 61000-4-4:1995/A1:2000/A2:2001
	IEC 61000-4-5:1995/A1:2000
	IEC 61000-4-6:1996/A1:2000
	IEC 61000-4-11:1994/A1:2000

The following importer/manufacture is responsible for this declaration:

Hi-Touch Imaging Technologies Netherlands BV	**Hi-Touch Imaging Technologies (Suzhou) Co.,Ltd.**
(Company Name, Importer)	(Company Name, Manufacturer)
Esp 206, 5633 AC, Eindhoven, The Netherlands	**No.18 QunXing Rd. One ,Suzhou Industrial Park , Suzhou 215006 P.R. China**
(Company Address, Importer)	(Company Address, Manufacturer)
Person responsible for this declaration: **Mike Yang**	Person responsible for this declaration: **Alan Yao**
(Name, Surname, Importer)	(Name, Surname, Manufacturer)
General Manager	**Associate Vice President**
(Position/Title)	(Position/Title)
(Legal Signature)	Alan Yao (Legal Signature)
The Netherlands **Nov. 30,2005**	**China** **Nov. 30,2005**
(Place) (Date)	(Place) (Date)

Appendix D Customer Service Information

If your printer does not function normally, please refer to the following procedures for assistance.

- **•Support Process**

  Before you contact HiTi customer support, please try the following:

  1. You have consulted the Quick Installation Guide.
  2. You have consulted the troubleshooting tips in the manual.
  3. You may also consult your printer's distributor for assistance.

- **•Web Support**

  If the above procedures can not solve your problem, please visit HiTi's website for online customer support section. The latest driver, firmware and software applications are also available on HiTi's websites.

- **•Contact Information**

Taiwan (Headquarters)

HiTi Digital, Inc.
HiTi Digital, Inc. 9F, No.225, Sec. 3, Beixin Rd., Xindian Dist.,
New Taipei City 231, Taiwan
Tel: +886-2-2912-6268
Fax: +886-2-2912-6118
Web:http://www.hiti.com

North America

HiTi Digital America, Inc.
727 Brea Canyon Rd. Suite#2 Walnut, CA 91789, USA
Tel :+1-909-594-0099
Fax :+1-909-598-0011
Web :http://www.hiti.com/us

Europe. Russia

HiTi Digital Europe B.V.
Ekkersrijt 1331, 5692 AJ Son, The Netherlands
Tel: +31 4.99.46.28.60
Fax: +31 4.99.46.12.99
Web :http://www.hiti.com

Middle East. Africa

HiTi Digital, Inc. MEA
No. 1608, Indigo Icon Tower, JLT, Dubai - U.A.E.
Tel: +971-4-3674547
Fax: +971-4-3674221
Web: http://www.hiti.com

Latin America

HiTi Digital,Inc. (Mexico)
Agustin Gonzalez de Cossio No. 1-202 Col. Del Valle, C.P. 03100,
Mexico, D. F. Mexico
TEL: +52-55-50253671, +52-55-50253672
FAX: +55-55-11076206
Web: http://www.hiti.com/latinamerica

Appendix E Order Information

If you would like to purchase HiTi Printer or accessories. Please contact our dealer or visit HiTi Website http://www.hi-ti.com for quickly order service.

Taiwan

HiTi Digital, Inc.
20F., No.100, Sec. 2, Roosevelt Rd.,
Taipei City 100 , Taiwan
Tel : +886-2-2363-8833
Fax: +886-2-2362-1319
Web:http://www.hi-ti.com/

China

Hi-Touch Imaging Technologies (Suzhou)
Building C, 36# QiHong Road, Suzhou Industrial Park,
Jiangsu Province, PRC
Tel :+86-512-8717-1688
Fax :+86-512-6760-1186
Web:http://www.hi-ti.com.cn/

America

Hi-Touch Imaging Technologies (America), Inc.
285 S. Dupont Ave, Suite #104 Ontario, CA 91761 U.S.A.
Tel :+1-909-974-0099
Fax :+1-909-974-0011
Web :http://www.hitouchimaging.com

Netherlands

Hi-Touch Imaging Technologies Netherlands B.V.
ESP 206, 5633 AC, Eindhoven, The Netherlands
Tel :+ 31-(0)40-256-5166
Fax :+ 31-(0)40-290-3176 & + 31-(0)40-290-3287
Web :http://www.hi-ti.nl

Middle East & North Africa

Hi-Touch Imaging Technologies (Middle East)
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Dubai-United Arab Emirates
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FAX: +971-4-3674221
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Latin America

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TEL: +52-55-50253671, +52-55-50253672
FAX:+52-55-11076206 ext. 111
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India

Hi-Touch Imaging Technologies - New Delhi Liaison Office
401/402, 4th floor, 96, Siddharth Building, Nehru Place, New Delhi 110019, India
TEL: +91-11-4180-8191
FAX: +91-11-4180-8193
Web :http://www.hi-ti.com