

# SMART-70

## User Manual



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Before returning any equipment for in-warranty or out-of warranty repair, contact an IDP Reseller or an IDP Service Center for a Return Materials Authorization (RMA) number.

Repack the equipment in the original packing material and mark the RMA number clearly on the outside of the box. For more information about RMA or IDP warranty statements, refer to the Warranty booklet on the quick install guide.

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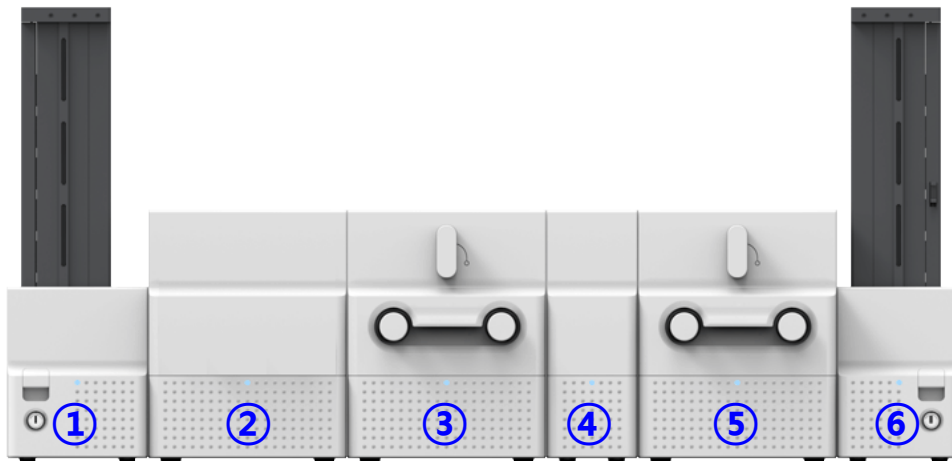
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# 1. Introduction

## 1.1 Overview

SMART-70 is a high-performance large capacity ID card printer designed by the unique modular concept that can support various printer configurations to meet different user requirements. 500 cards can continuously be printed, laminated and encoded on various card. SMART-70 consists of 6 different modules (① Input Hopper, ② Encoding station, ③ Printer, ④ Flipper, ⑤ Laminator, ⑥ Output Hopper) that can be configured in various combinations according to different customer requirements. Required modules can easily be added to extend functions depending on your needs.



**Figure 1 Combination of SMART-70**

Key features of SMART-70 are as follows.

- Convenience

SMART-70 is sleekly designed, such as modern household appliances, to provide user-friendly environment with the maximum convenience. Status LED on all modules can indicate the status of each module at all times. Also, LCD and buttons on Printer and Laminator are for user to check the status and set the configuration. Card, print ribbon and other consumables can be changed in intuitive way, and all modules are equipped

with physical locks to provide high security feature.

- Clear printing

SMART-70 can print clear images on card by using IDP's FINE Technology that can exquisitely control the heat of print head depending on the picture.

- High Speed

SMART-70 can print 200 cards/hour for color (YMCKO) and 1,000 cards/hour for monochrome. Since each module can independently work, multiple cards can be simultaneously printed, encoded and laminated by the pipeline processing for enhancing issuance speed.

- High Capacity

SMART-70 is designed to support 500 cards capacity in Input Hopper, Printer, Laminator and Output Hopper. Once card, print ribbon and laminating film are replaced, 500 cards can be continuously issued. Also, cards can be loaded and stacked the up to 3000 cards by using multiple Input / Output Hopper.

- Encoding

SMART-70 can encode magnetic stripe and smart cards by using Encoding Station or the encoding options installed into Printer module. In case of using Encoding station, magnetic stripe card, contact and contactless smart card can be encoded and 1D & 2D barcode on card can be scanned. Also, magnetic stripe and contactless smart card encoder can be installed in Printer module.

- Energy Saving

In order to save energy, SMART-70 is designed to minimize unnecessary power consumption when the system doesn't work. Since SMART-70 Laminator uses the instant direct heating mechanism developed by IDP, it requires no warming-up for laminating and no additional power consumption for maintaining the temperature of the laminate head while on standby.

- Reliability

Since the metal frame, stainless steel shaft and ball bearing is used for the high durability, SMART-70 can be stably operated under the harsh environments of the massive issuance environment.

- Scratch Free

SMART-70 can protect a card surface while the card is in SMART-70 for printing and encoding. 500 cards can be loaded in Input Hopper but the cards can be taken out from Input Hopper without scratch by using the patented load distribution structure of IDP. Also, it is designed that inserted cards don't get in contact with any other components except the rollers for card feeding in Printer, Laminator and other module. In Output Hopper, the stacked cards are lifted up for preventing scratch when a new card is inserted into Output Hopper.

- Software

Since the card design and DB (Database) software for card issuance as well as the printer driver is provided free of charge, users will not need to purchase additional software. Utility programs for adjusting the configuration and checking the status of Printer and powerful SDK (Software Development Kit) for easily developing customized applications are also provided without cost.

## 1.2 Modules

SMART-70 can organize the card issuing system by combining the 6 different modules. In this case, Printer communicates with the PC and controls the other modules. If Laminator is used without Printer, Laminator will control other modules. This chapter shows the features of each module.

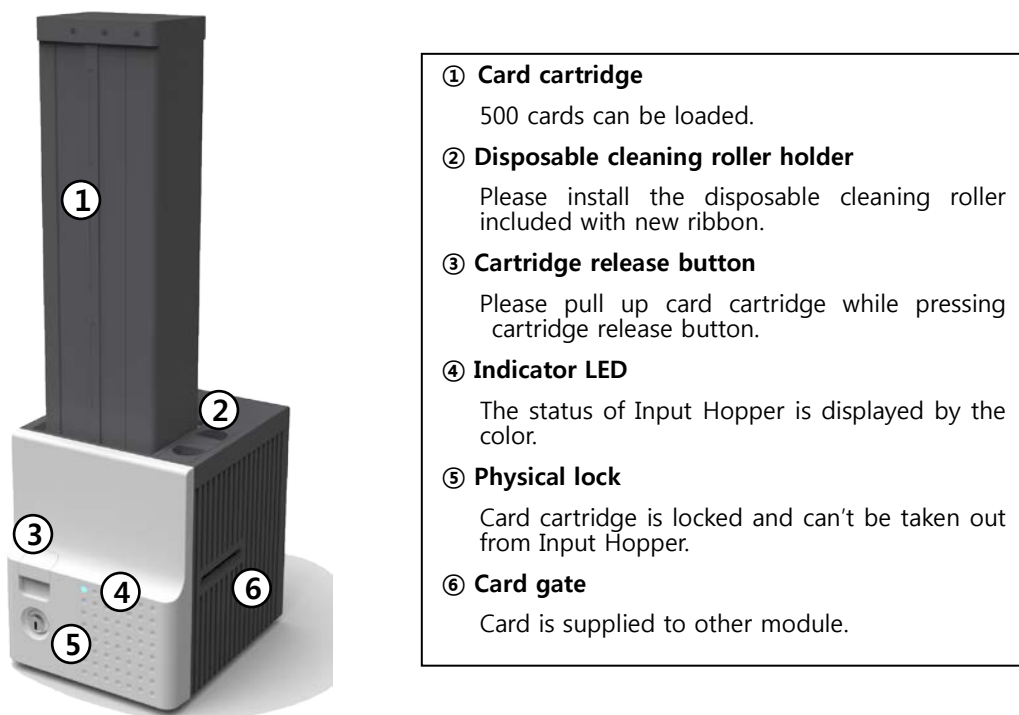
### 1.2.1 Input Hopper

SMART-70 Input Hopper can be loaded up to 500 cards and supply a card at a time. SMART-70 Input Hopper has the following features.

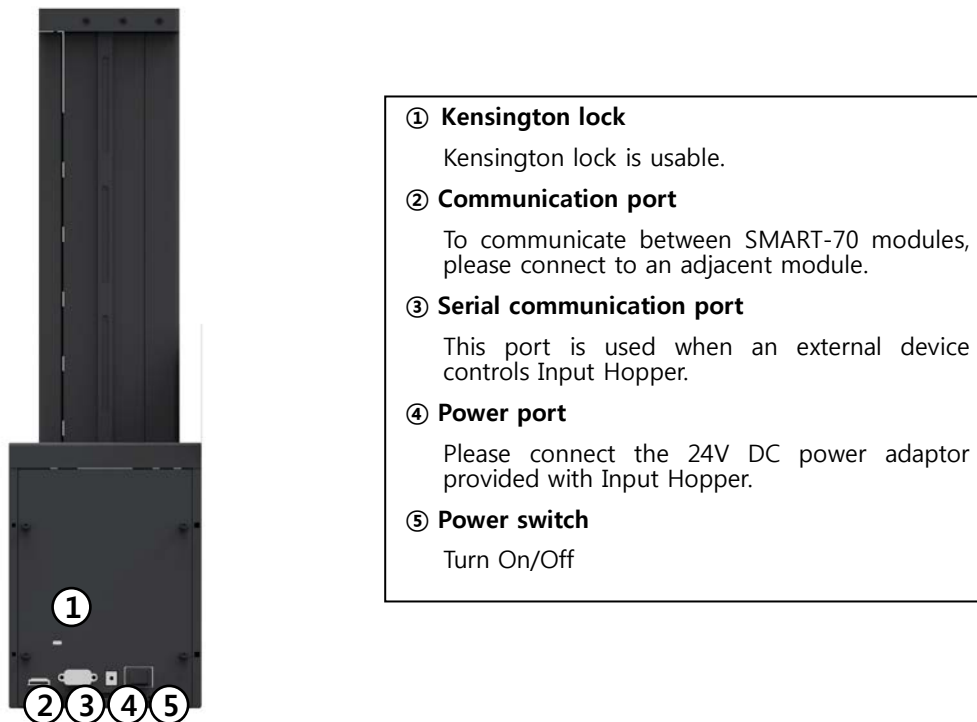
- Cards can be conveniently loaded by using large capacity card cartridge which 500 CR80 cards (card thickness 0.8mm) can be loaded.
- The gate of card cartridge can be easily adjusted depending on the thickness of card.
- When card cartridge is taken out from Input Hopper, the gate of cartridge is

automatically closed for preventing the loss of cards.

- In order to prevent the theft of cards, physical locking mechanism can prevent card cartridge from being taken out from Input Hopper.
- For solving the problem caused by dust, both sides of card are cleaned when the card is supplied.
- The cleaning device is easily managed by changing the disposable cleaning roller included in new print ribbon package whenever print ribbon is changed.
- Since cards in cartridge pushed by special structure of IDP's patented technology, cards are stably supplied even if the cards are stuck by the static.
- 500 cards are loaded, but the loaded cards don't make scratch because the weight of loaded cards is dispersed when the lowest card has to be supplied.
- When card cartridge is empty, Input Hopper can automatically check and notify the status.



**Figure 2 Front side of Input Hopper**



**Figure 3 Rear side of Input Hopper**

## 1.2.2 Encoding station (Being developed)

SMART-70 Encoding Station is designed to read barcode printed on card and support various types of encoding. By using Encoding Station, multiple cards can be simultaneously printed and encoded to enhance issuance speed.

Various optional encoders can be installed in Encoding Station as below. Optional encoding modules can be purchased according to your needs.

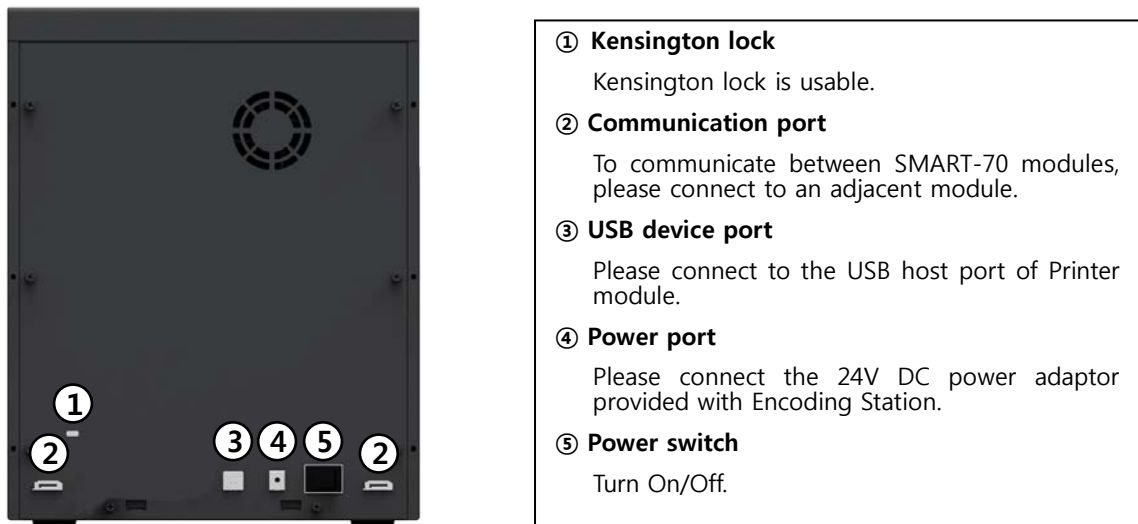
- Barcode reader
  - ✓ 1D Barcode: Code32, Code39, Code93, Code128, Codaba, EAN 128, ...
  - ✓ 2D Barcode: PDF417, MicroPDF417, MaxiCode, DataMatrix, QR Code, ...
- Magnetic encoder
  - ✓ ISO7811 HiCo / LoCo Card
  - ✓ JIS2 Card
- Contact smart card encoder
  - ✓ ISO 7816 A/B/C Card

- ✓ ISO 7816 1/2/3/4 microprocessor Cards
- Contactless smart card encoder
  - ✓ ISO 14443 A/B Card
  - ✓ Mifare, DESFire Card
  - ✓ ISO 18092(NFC) Card
  - ✓ Felica Card



- |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>① <b>Control panel LCD</b><br/>The status of Encoding Station is displayed.</p> <p>② <b>Control panel buttons</b><br/>Buttons are used to check configuration or status.</p> <p>③ <b>Physical lock</b><br/>Front cover is locked and can't be detached.</p> <p>④ <b>Indicator LED</b><br/>The status of Encoding Station is displayed by the color.</p> <p>⑤ <b>Card gate</b><br/>Card gate is to convey cards from module to module.</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Figure 4 Front side of Encoding Station**



**Figure 5 Rear side of Encoding Station**

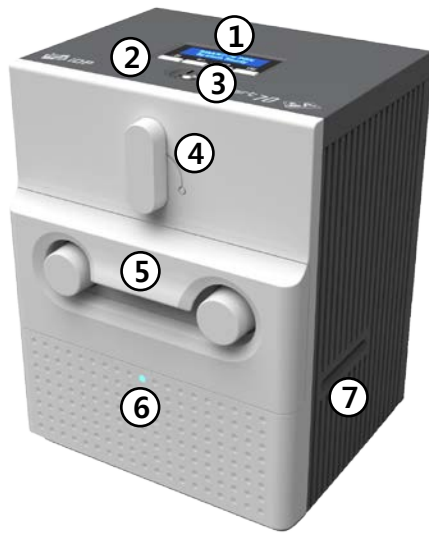
### 1.2.3 Printer

SMART-70 Printer is the high-end printer which the IDP's printing technologies are concentrated. SMART-70 Printer can continuously print 500 cards of color or 3000 cards of mono, and the magnetic stripe and contactless encoding option can be installed.

SMART-70 Printer has the following features.

- LCD and 4 buttons on the control panel of Printer are for user conveniences and users can easily check the status of Printer and adjust the configuration.
- Indicator LED on the front side of Printer displays the status of Printer by using the color, so user can intuitively check the status of Printer.
- For improving the convenience of changing print ribbon, ribbon cartridge is designed as the drawer type and the print ribbon can easily be changed.
- By using ribbon cartridge lock lever, ribbon cartridge can easily be locked and print head can be moved up and down for the convenience of maintenance.
- For the prevention of thefts, physical locking mechanism and Kensington lock are designed and applied to Printer.
- Ethernet port is installed by default and user can print and encode cards via network.

- For massive card issuance, metal frame, stainless steel shaft, ball bearing and high quality materials are used to increase the stability and reliability of Printer.
- In order to prevent scratch on cards, Printer is designed that cards don't get in contact with any other components except rollers when cards are being fed in Printer.
- High printing speed and improved printing algorithm can guarantee a more vivid and fine printing quality.
- Since card design and DB (Database) software for card issuance as well as printer driver and utility programs are provided free of charge, additional software is not needed to purchase.



① **Control panel LCD**

The status of Printer is displayed.

② **Control panel buttons**

Buttons are used to adjust configuration and check status.

③ **Physical lock**

Physical lock is to lock Printer and ribbon cartridge.

④ **Ribbon cartridge lock lever**

To pull out ribbon cartridge, please turn lever to the right 90 degrees for taking.

⑤ **Ribbon cartridge**

Color ribbon for 500 cards or mono ribbon for 3000 cards is loaded into ribbon cartridge.

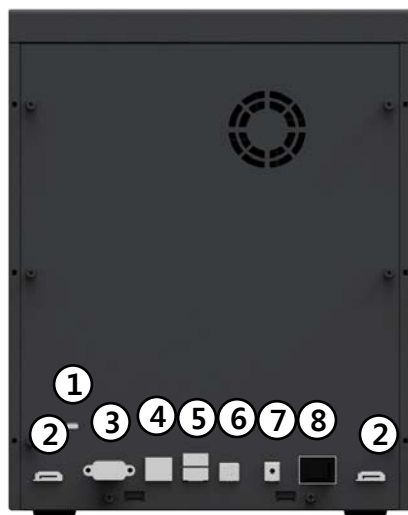
⑥ **Indicator LED**

The status of Printer is displayed by the color.

⑦ **Card gate**

Card gate is to convey cards from module to module.

**Figure 6 Front side of Printer**



- ① **Kensington lock**  
Kensington lock is usable.
- ② **Communication port**  
To communicate between SMART-70 modules, please connect to an adjacent module.
- ③ **Serial communication port**  
This port is to communicate with external device except SMART-70 modules.
- ④ **Ethernet port**  
This port is for network communication.
- ⑤ **USB host port**  
This port is for connecting to the USB device port of Encoding Station.
- ⑥ **USB device port**  
To communicate with PC, please connect to PC.
- ⑦ **Power port**  
Please connect the 24V DC power adaptor provided with Input Hopper.
- ⑧ **Power switch**  
Turn On/Off.

Figure 7 Rear side of Printer

Control panel of Printer consists of 2 lines LCD and 4 buttons. The 4 buttons have the functions as shown in the figure 8.



Figure 8 Control panel of Printer

The menus of the control panel of Printer are as below table.

| Menu             | Submenu            | Description                                                                                              |
|------------------|--------------------|----------------------------------------------------------------------------------------------------------|
| >System Config.  | >>Combination      | To set module combination. Refer to the chapter 2.1.10 for modules combination setting.                  |
|                  | >>Operation Mode   | To set Printer as a Master device. Default is Master.                                                    |
|                  | >>Insert Dir       | To set the direction of Card In. Default is the left.                                                    |
|                  | >>Eject Dir        | To set the direction of Card Out. Default is the right.                                                  |
|                  | >>Auto Card In     | To set the automatic card feeding when the card is detected at the direction of Card In. Default is OFF. |
|                  | >>UserCounterClear | To reset user issue count.                                                                               |
| >Network Config. | >>DHCP             | To set whether to use DHCP function. Default is On.                                                      |
|                  | >>IP Address       | IP address to be used when DHCP is OFF.                                                                  |
|                  | >>Network Mask     | Network Mask to be used when DHCP is OFF.                                                                |
|                  | >>Gateway          | Gateway address to be used when DHCP is OFF.                                                             |
| >Print Config.   | >>XStartPosition   | To set the start position of the printing on the card's X-axis (shorter side).                           |
|                  | >>YStartPosition   | To set the start position of the printing on the card's Y-axis (longer side).                            |
|                  | >>YEndPosition     | To set the end position of the printing on the card's Y-axis.                                            |
|                  | >>YScale           | To set the length of printed image on the card's Y-axis.                                                 |
|                  | >>TotalDensity     | To set the total printing density.                                                                       |
|                  | >>ColorDensity     | To set the color density                                                                                 |
|                  | >>BlackDensity     | To set the resin black density.                                                                          |
|                  | >>OverlayDensity   | To set overlay density.                                                                                  |

|              |                  |                                                                                                                                      |
|--------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|              | >>RMP+           | To adjust the force for pulling print ribbon during printing when the residual quantity of print ribbon is in its maximum quantity.  |
|              | >>RMP-           | To adjust the force for pulling print ribbon during printing when the residual quantity of print ribbon is in its minimum quantity.  |
|              | >>RMM+           | To adjust the force for pulling print ribbon during alignment when the residual quantity of print ribbon is in its maximum quantity. |
|              | >>RMM-           | To adjust the force for pulling print ribbon during alignment when the residual quantity of print ribbon is in its minimum quantity. |
|              | >>HeadResister   | To set resistance value of TPH (Thermal Print Head).                                                                                 |
| >Operation   | >>Print Sample   | To print a sample card.                                                                                                              |
| >Information | >>Printer Serial | To show the serial number of Printer.                                                                                                |
|              | >>Firmware Ver.  | To show the firmware version of Printer.                                                                                             |
|              | >>Head Serial    | To show the serial number of TPH.                                                                                                    |
|              | >>Ribbon Balance | To show the print ribbon type and balance.                                                                                           |
|              | >>IP Address     | To show the current IP address of Printer.                                                                                           |
|              | >>Network Mask   | To show the current Network mask of Printer.                                                                                         |
|              | >>Gateway        | To show the current Gateway of Printer.                                                                                              |
|              | >>MAC Address    | To show the MAC address of Printer.                                                                                                  |
|              | >>User Count     | To show the number of issued cards that user can reset.                                                                              |
|              | >>Factory Count  | To show the number of accumulated issued cards after factory shipment.                                                               |

## 1.2.4 Flipper

SMART-70 Flipper can flip over a card for dual sided printing and laminating. The error card bin in Flipper can collect 30 error cards (encoding failed cards) and the collected cards can be taken out by opening the front cover of Flipper.



① **Physical Lock**

Physical lock is to lock Flipper cover.

② **Flipper cover**

To take out error cards or fix problem, please open Flipper cover by pulling out.

③ **Indicator LED**

The status of Flipper is displayed by the color.

④ **Card gate**

Card gate is to convey cards from module to module.

Figure 9 Front side of Flipper



① **Kensington lock**

Kensington lock is usable.

② **Communication port**

To communicate between SMART-70 modules, please connect to an adjacent module.

③ **Power port**

Please connect the 24V DC power adaptor provided with Flipper.

④ **Power switch**

Turn On/Off

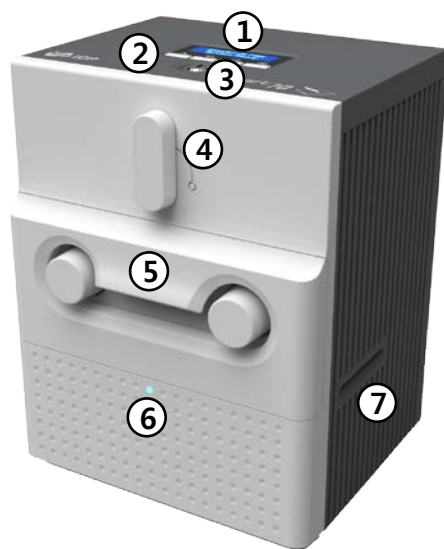
Figure 10 Rear side of Flipper

## 1.2.5 Laminator

SMART-70 Laminator is the high performance laminator which cards are can be laminated with high quality without warming-up by using the patented technology of the IDP's "Instant direct heating mechanism". One roll of the holographic or clear laminating film can laminate 500 cards.

SMART-70 Laminator has following features.

- LCD and 4 buttons on the control panel are for user conveniences and users can easily check the status of Laminator and adjust configuration.
- Indicator LED on the front side of Laminator displays the status of Laminator by using the color, so user can intuitionally check the status of Laminator.
- For improving the convenience of changing a laminating film, film cartridge is designed as the drawer type and laminating film can easily be changed.
- By using film cartridge lock lever, film cartridge can easily be locked and laminate head can be moved up and down for the convenience of maintenance.
- For the prevention of thefts, physical locking mechanism and Kensington lock are designed and applied to Laminator.
- For massive card issuance, metal frame, stainless steel shaft, ball bearing and high quality materials are used to increase the stability and reliability of Laminator.
- Conventional laminators must be needed warming-up time before laminating, but SMART-70 Laminator can immediately laminate without having to wait by using IDP's Instant direct heating mechanism.
- Instant direct heating mechanism of IDP uses bar-type laminate head to instantly increase the temperature of laminate head and to reduce energy consumption to one-seventh level compared with conventional method and to increase the lifespan of laminate head.
- In order to prevent scratch on cards, Laminator is designed that cards don't get in contact with any other components except rollers when cards are being fed in Laminator.



**① Control panel LCD**

The status of Laminator is displayed.

**② Control panel buttons**

Buttons are used to adjust configuration and check status.

**③ Physical lock**

Physical lock is to lock Laminator and film cartridge.

**④ Film cartridge lock lever**

To pull out film cartridge, please turn lever to the right 90 degrees.

**⑤ Film cartridge**

Laminating film for 500 cards is loaded into cartridge. Ribbon cartridge in Printer can't be used for Laminator.

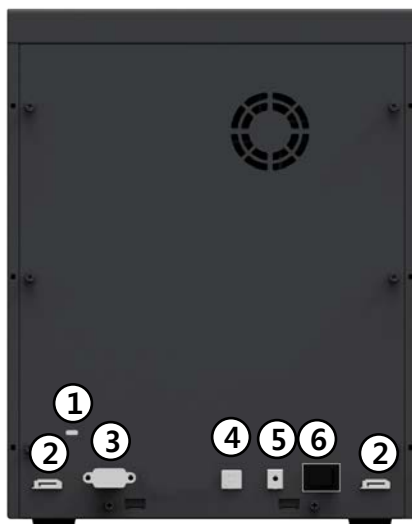
**⑥ Indicator LED**

The status of Laminator is displayed by the color.

**⑦ Card gate**

Card gate is to convey cards from module to module.

**Figure 11 Front side of Laminator**



**① Kensington lock**

Kensington lock is usable

**② Communication port**

To communicate between SMART-70 modules, please connect to an adjacent module.

**③ Serial communication port**

This port is to communicate with external device except SMART-70 modules.

**④ USB device port**

When Laminator is used without the Printer, this port is to communicate with PC.

**⑤ Power port**

Please connect the 24V DC power adaptor provided with Laminator.

**⑥ Power switch**

Turn On/Off

**Figure 12 Rear side of Laminator**

## 1.2.6 Output Hopper

SMART-70 Output Hopper can stack with 500 cards after printing, laminating and encoding.

SMART-70 Output Hopper has the following features.

- Cards can be conveniently collected by large capacity cartridge which 500 CR80 cards (card thickness 0.8mm) can be loaded.
- When card cartridge is taken out from Output Hopper, the gate of card cartridge is automatically closed for preventing the loss of cards.
- In order to prevent the theft of cards, physical locking mechanism can prevent card cartridge from being taken out from Output Hopper.
- When card cartridge is full, Output Hopper can automatically check and notify the status.
- When a card is inserted into Output Hopper, stacked cards are lifted up by the support beam what is operated by internal CAM to protect card from scratch.
- Same card cartridge is used for Input Hopper and Output Hopper, so card cartridge can be shared.



- |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>① <b>Card cartridge</b><br/>500 cards can be loaded.</p> <p>② <b>Cartridge release button</b><br/>Please pull up card cartridge while pressing cartridge release button.</p> <p>③ <b>Indicator LED</b><br/>The status of Output Hopper is displayed by the color.</p> <p>④ <b>Physical lock</b><br/>Card cartridge is locked and can't be taken out from Output Hopper.</p> <p>⑤ <b>Card gate</b><br/>Card is inserted from other module.</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Figure 13 Front side of Output Hopper



- ① **Kensington lock**  
Kensington lock is usable.
- ② **Serial communication port**  
This port is used when external device needs to control Output Hopper.
- ③ **Power port**  
Please connect the 24V DC power adaptor provided with Output Hopper.
- ④ **Power switch**  
Turn On/Off.
- ⑤ **Communication port**  
To communicate between SMART-70 modules, please connect to an adjacent module.

Figure 14 Rear side of Output Hopper

## 1.2.7 Stacker

If Output Hopper is not needed, 100 cards can be ejected and loaded by using the Stacker provided with Input Hopper.



Figure 15 Stacker

## 2. Installation and operation

### 2.1 Hardware installation

#### 2.1.1 Placement of Modules

SMART-70 modules need to be placed on a flat table. Order of placing modules from left to right is Input Hopper, Encoding Station, Printer, Laminator and Output Hopper. When some module is not required, please remove unnecessary modules from above placing order. For example, if Encoding Station and Laminator are not needed, Input Hopper, Printer, Flipper and Output Hopper can be placed.



Figure 16 SMART-70 Placement of modules

## 2.1.2 Module fastening

Binding cramp can fasten between SMART-70 modules. Please place the cramp on floor and put a module on the cramp as shown as figure.



Figure 17 Module fastening

## 2.1.3 Module connection

Please connect the red communication cables provided with the modules to each module.



Figure 18 Module connection

## 2.1.4 Power connection

Please connect the 24V DC power adaptors provided with each module to all modules. Printer must be connected to the 24 DC power adaptor provided with Printer.

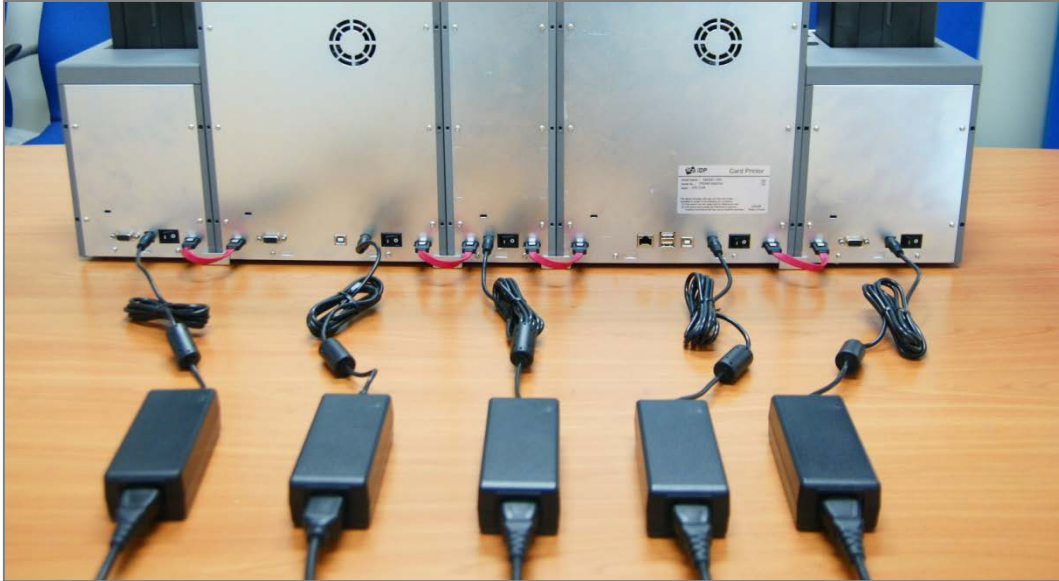


Figure 19 Power connection

## 2.1.5 Print ribbon and laminating film installation

A. Please turn ribbon / film cartridge lock lever to the clockwise 90 degrees.



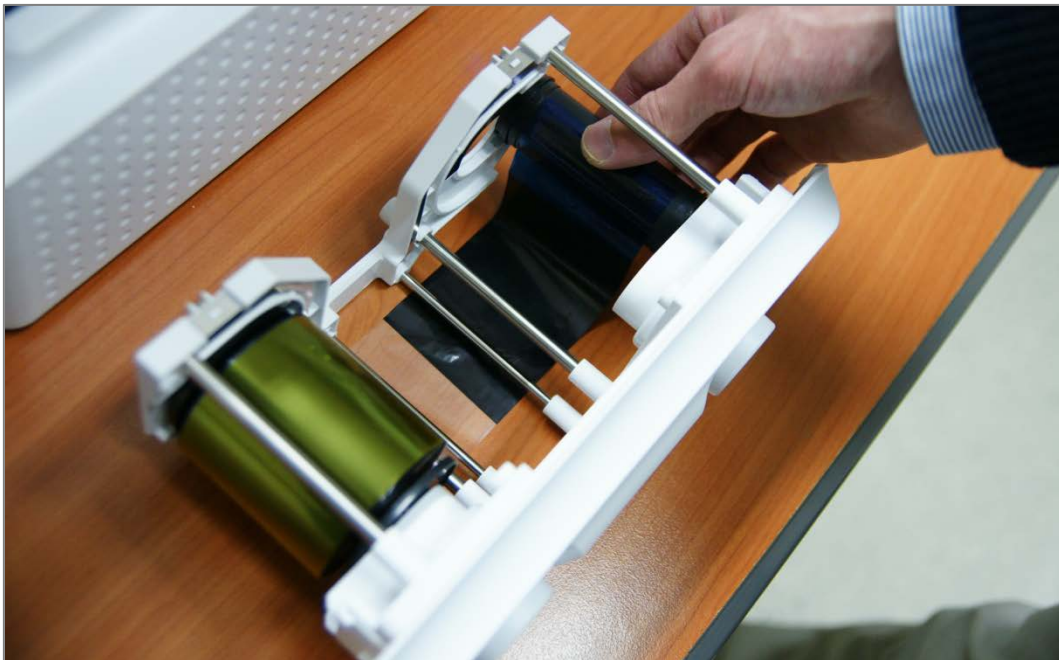
Figure 20 Ribbon / film cartridge unlocking

**B.** Please pull out ribbon / film cartridge.



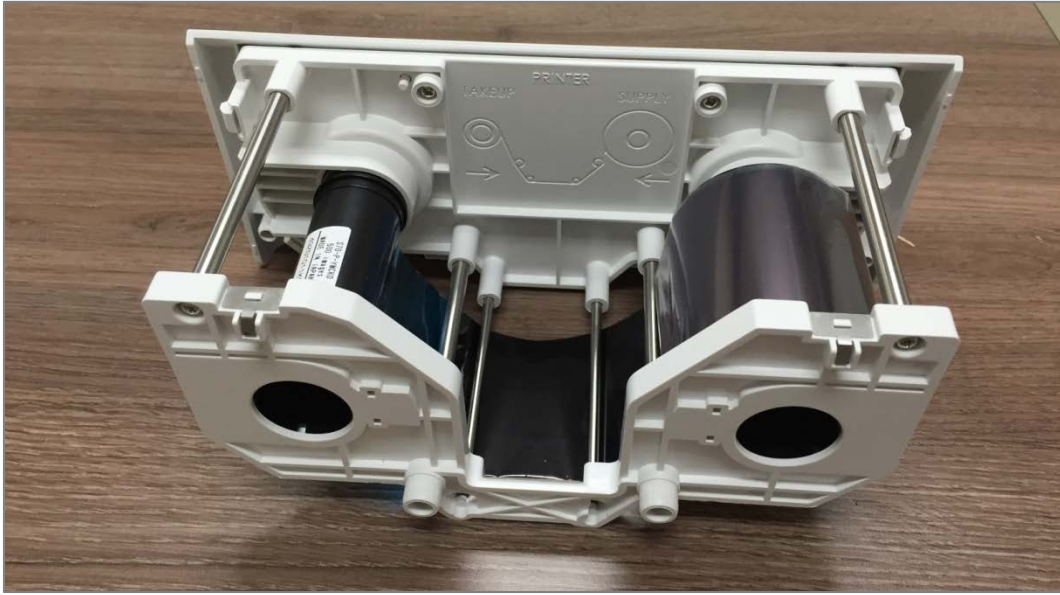
**Figure 21 Pulling out ribbon / film cartridge**

**C.** Please mount print ribbon / laminating film by pushing cores into cartridge from the side of cartridge as figure. To properly mount print ribbon or laminating film, please refer to the install guideline on the print ribbon or laminating film box. Ribbon cartridge in Printer is different with film cartridge in Laminator, so the cartridges can't be shared. The ribbon cartridge must be used in Printer and the film cartridge must be used in Laminator.



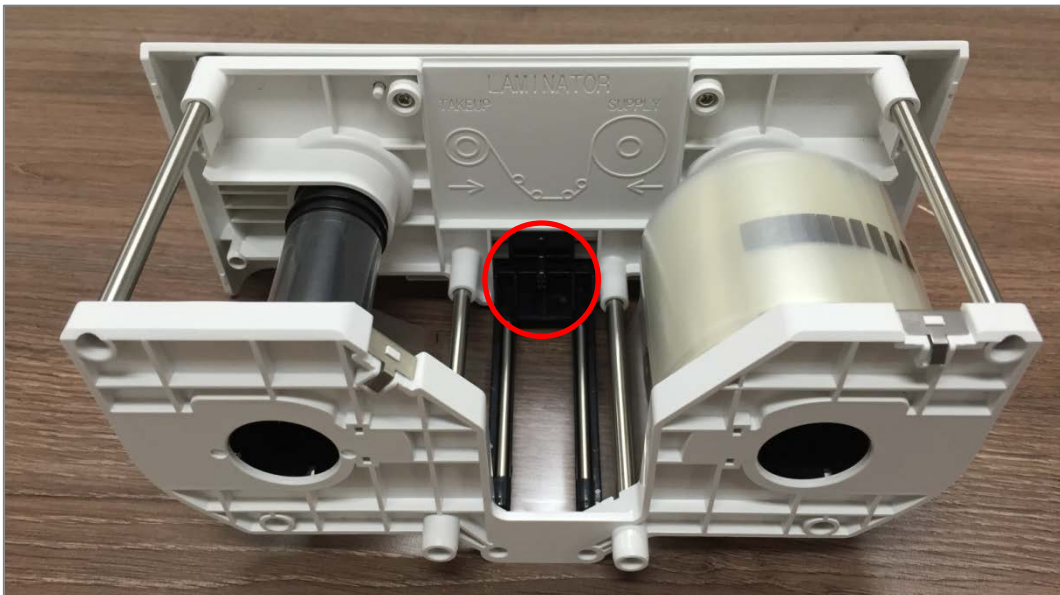
**Figure 22 Print ribbon / laminating film mounting**

When print ribbon is being mounted, please refer to the mounting instruction on the inside of ribbon cartridge as shown as figure.



**Figure 23 Print ribbon mounting**

When laminating film is being mounted, please refer to the mounting instruction on the inside of film cartridge as figure. If vertical laminating position on card is needed to adjust, please use the lever marked by red circle.



**Figure 24 Laminating film mounting**

**D.** Please turn the dial on the right side of cartridge to tension print ribbon or laminating film as figure.



**Figure 25 Print ribbon / laminating film alignment**

**E.** Please push ribbon or film cartridge into Printer or Laminator.



**Figure 26 Ribbon / film cartridge insertion**

F. Please turn ribbon / film cartridge lock lever to the counterclockwise 90 degrees, so the lever is returned to the vertical.



Figure 27 Ribbon / film cartridge locking

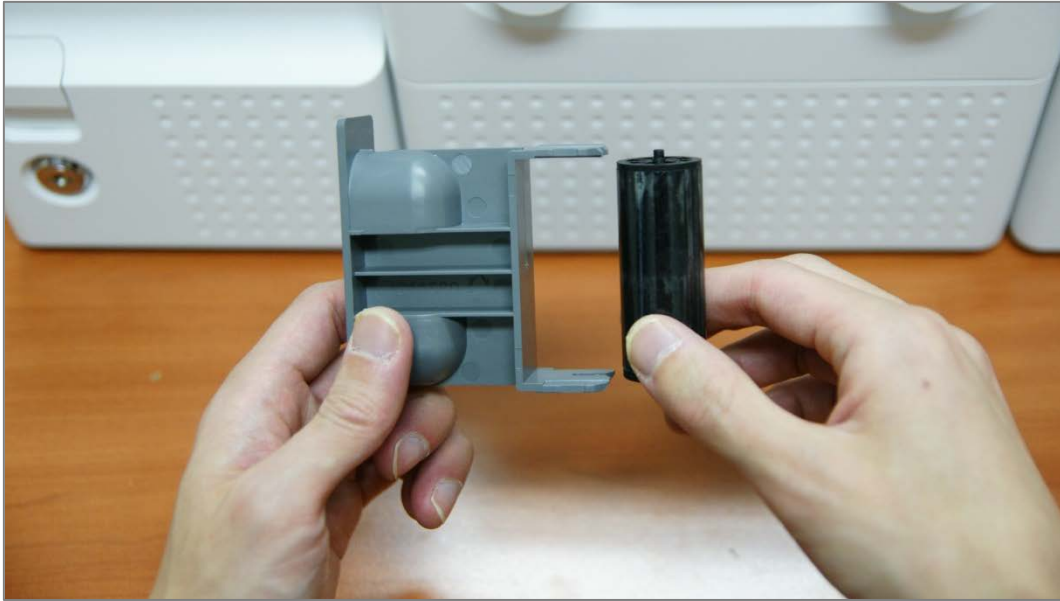
## 2.1.6 Disposable cleaning roller installation

A. Please detach disposable cleaning roller holder from Input Hopper as figure.



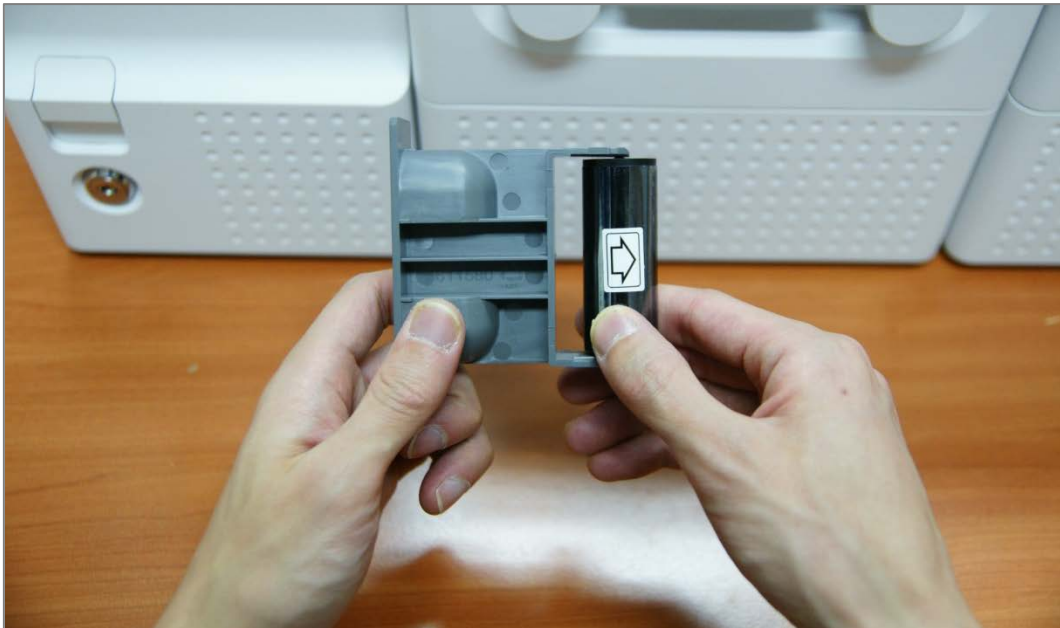
Figure 28 Detachment of disposable cleaning roller holder

**B.** Please remove used disposable cleaning roller from holder.



**Figure 29 Used disposable cleaning roller removal**

**C.** Please mount a new disposable cleaning roller.



**Figure 30 New disposable cleaning roller mounting**

**D.** Please peel off the protector of disposable cleaning roller.



**Figure 31 Removal of new disposable cleaning roller protector**

**E.** Please install disposable cleaning roller holder into Input Hopper as figure.



**Figure 32 Installation of disposable cleaning roller holder**

## 2.1.7 Cards Loading

**A.** Please pull up card cartridge while pressing cartridge release button.



**Figure 33 Card cartridge release from Input Hopper**

**B.** Please adjust the gate of card cartridge depending on card thickness by using control lever.



**Figure 34 Cards thickness adjustment**

**C.** Please push the button on card cartridge down and open cartridge cover as figure.



**Figure 35 Card cartridge open**

**D.** Please remove the tape for fixing the weight in card cartridge as figure.



**Figure 36 Removal of the tape for fixing the weight**

E. Please pull up the weight and fix it to the top.



**Figure 37 Card cartridge's weight fixing**

F. Please take care not to touch the surface of cards and load the cards into cartridge.



**Figure 38 Card loading**

**G.** Please put down the weight on loaded cards as figure.



**Figure 39** Putting down the card cartridge's weight

**H.** Please close card cartridge cover and put card cartridge into Input Hopper until click is heard.



**Figure 40** Loading card cartridge into Input Hopper

## 2.1.8 Loading card cartridge into Output Hopper

Please put an empty card cartridge into Output Hopper until click is heard. In order to take card cartridge out, please pull up the cartridge while pressing cartridge release button.



Figure 41 Loading card cartridge into Output Hopper

## 2.1.9 Power on

Please turn on the power switch on the rear side of all modules.



Figure 42 Power on

## 2.1.10 Module combination setting

Since SMART-70 is operated by the combination of multiple modules, the configuration for multiple modules combination must be set during the first installation of the modules. Printer module acts as master who is responsible to communicate with PC and control other modules, and if Printer module is not connected, Laminator module will act as master. The configuration for multiple modules combination can be set in the control panel of Printer module as below. SMART-70 Printer searches connected modules in booting, if the combination of connected modules is different with the configuration for multiple modules combination, Indicator LED is turned to yellow and the message for checking modules combination is displayed. Please follow below steps to set the configuration for multiple modules combinations for initial setting.

- A.** The modules combination is IPFLO (Input Hopper + Printer + Flipper + Laminator + Output Hopper) but the configuration is different with the actually connected modules, so the configuration for multiple modules combination must be set again.

Please press the [Select] button indicated by red arrow.



Figure 43 Modules combination checking

- B.** Existing modules combination is shown. Please press the [Select] button indicated by red arrow to adjust the configuration for multiple modules combination.



Figure 44 Existing modules combination

- C. The detected modules combination is shown. Please press the [Select] button indicated by red arrow to save the configuration for detected multiple modules combination.



Figure 45 Adjusted modules combination

- D. The saved multiple modules combination is shown.



Figure 46 Saved module combination

- E. Please wait a while until system is ready.



Figure 47 Completed module combination

### 2.1.11 System status check

Please check that indicator LEDs on all modules are blue and the status of Printer and Laminator is ready.



Figure 48 System status checking

### 2.1.12 Sample card printing

A. Please press the "Menu" button indicated by red arrow on Printer.



Figure 49 Printer menu

B. On "System Config" menu, please press the [→] button indicated by red arrow.



Figure 50 Printer menu (System Config)

C. On "Network Config" menu, please press the [→] button indicated by red arrow.



Figure 51 Printer menu (Network Config)

D. On "Printer Config" menu, please press the [→] button indicated by red arrow.



Figure 52 Printer menu (Printer Config)

E. On "Operation" menu, please press the [Select] button indicated by red arrow.



Figure 53 Printer menu (Operation)

F. On "Print Sample" menu, please press the [Select] button indicated by red arrow.



Figure 54 Printer menu (Print Sample)

G. Please wait a while until sample card is printed as figure.

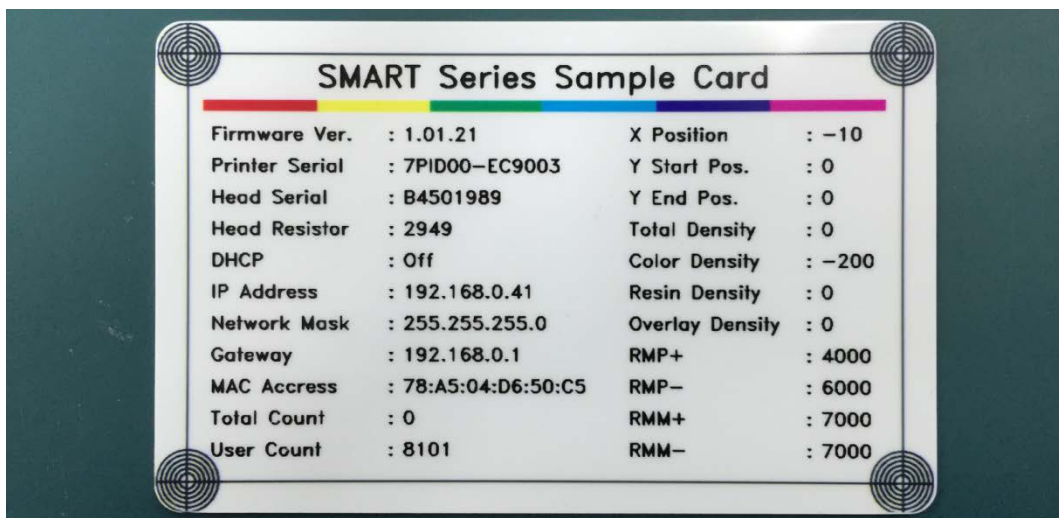


Figure 55 Sample Card

## 2.2 Software installation (Windows Vista/7/8)

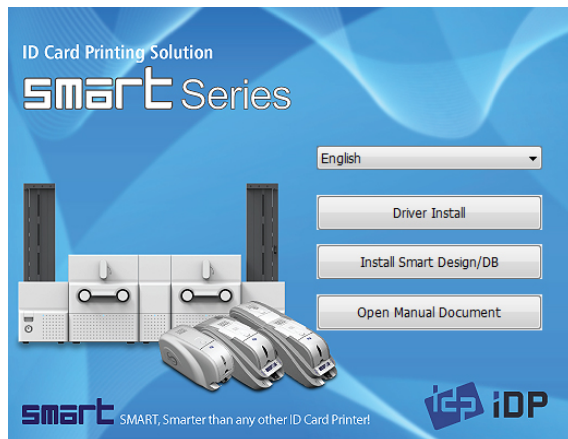


Figure 56 Printer driver installation 1

### 2.2.1 Start-up window

Please insert the installation CD provided with Printer and choose the language and click "Driver Install" button.

*\*) When you want to install printer driver for USB, please turn off Printer before installation. When you want to install printer driver for network, please turn on Printer.*

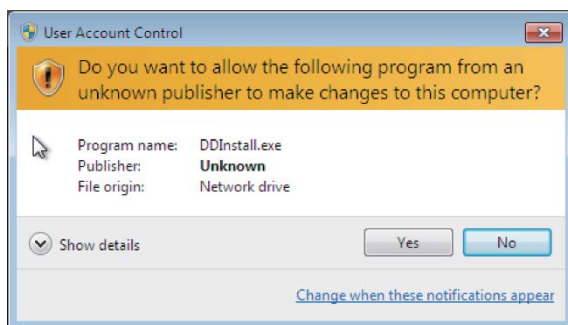


Figure 57 Printer driver installation 2

### 2.2.2 User Account Control

When "User Account Control" window is opened, please click "Yes".

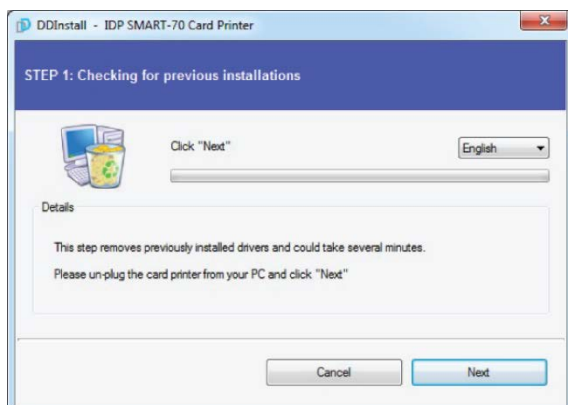
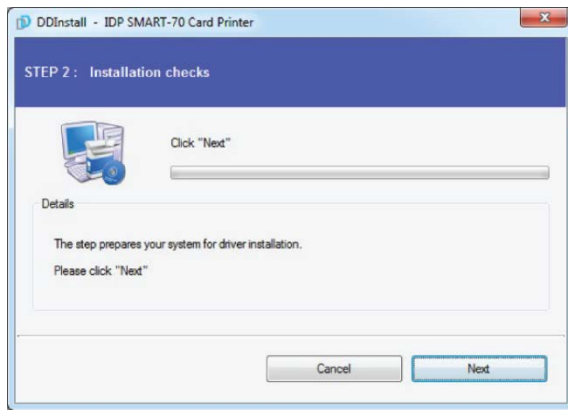


Figure 58 Printer driver installation 3

### 2.2.3 Driver Installation STEP 1

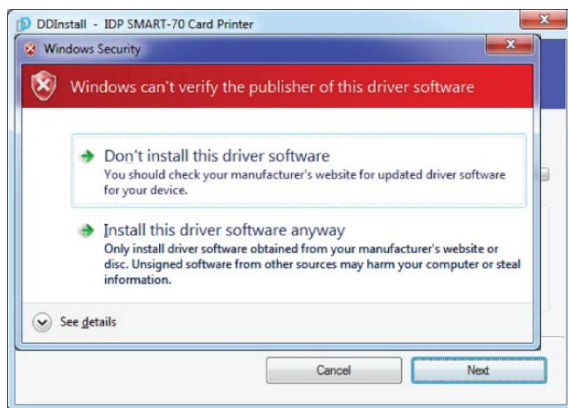
Please choose the language and click "Next". In STEP 1, previous installed printer driver is automatically checked and removed.



**Figure 59 Printer driver installation 4**

## 2.2.4 Driver Installation STEP 2-1

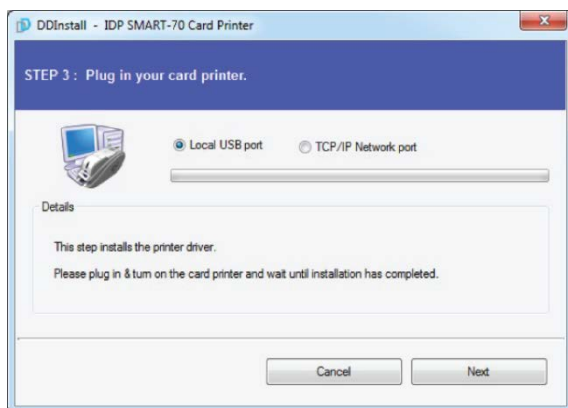
When "Next" is clicked, printer driver installation is prepared.



**Figure 60 Printer driver installation 5**

## 2.2.5 Driver Installation STEP 2-2

Please click "Install this driver software anyway" when Windows Security window comes up,



**Figure 61 Printer driver installation 6**

## 2.2.6 Driver Installation STEP 3-1

Please click "Next" when your Printer is connected via USB.

If you want to install the printer driver for network, please select the "TCP/IP Network port" and select a proper Printer as shown in the next step (2.2.7).

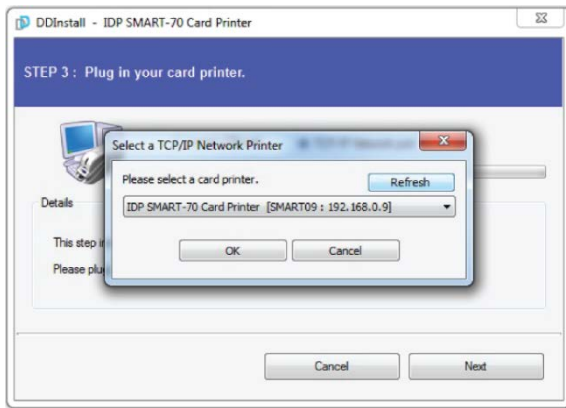


Figure 62 Printer driver installation 7

## 2.2.7 Driver Installation STEP 3-2

Please select a proper Printer on the list and click "OK".

(If Printer is not on the list of the network printer select window, Printer is not connected to network. So, please check the status of network connection.)



Figure 63 Printer driver installation 8

## 2.2.8 USB port connection

Please connect USB cable to Printer.

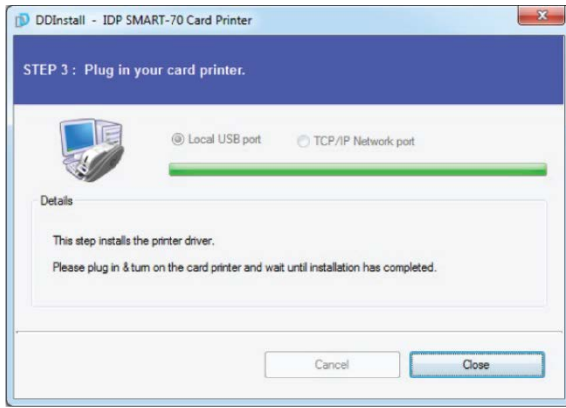
(If your Printer is connected to network, please check the status of network connection.)



Figure 64 Printer driver installation 9

## 2.2.9 Power on

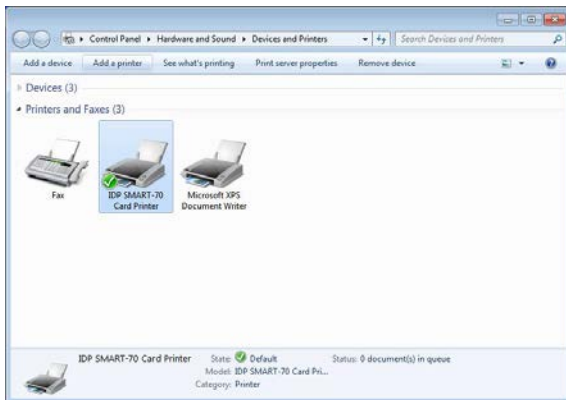
Pease turn on all the modules.



**Figure 65 Printer driver installation 10**

## 2.2.10 Driver installation completion

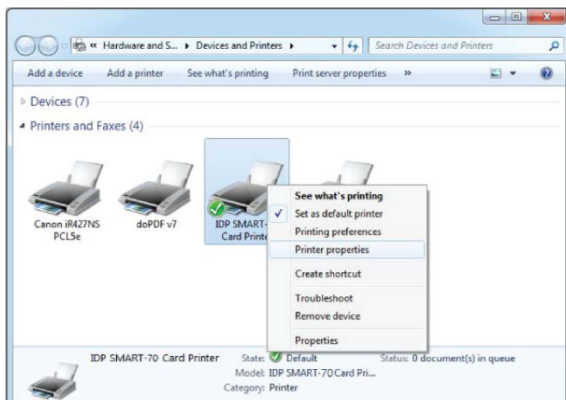
Printer driver installation is completed after turning on Printer. When driver installation is completed, please click "Close".



**Figure 66 Printer driver installation 11**

## 2.2.11 Driver installation check 1

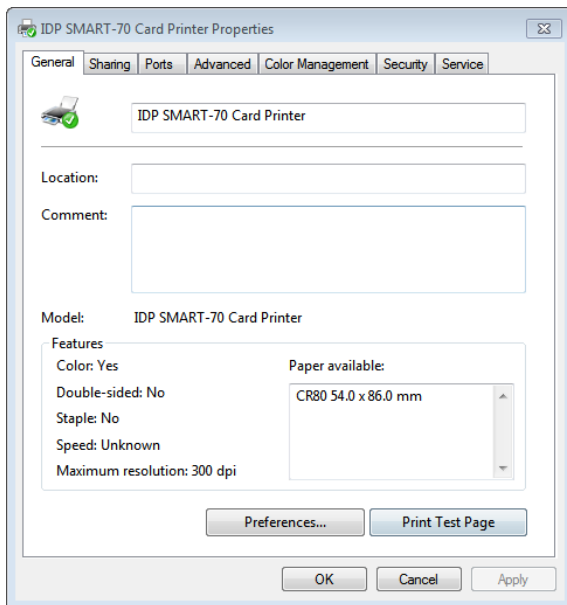
Please open "Devices and Printers" window and check that "IDP SMART-70 Card Printer" is created properly.



**Figure 67 Printer driver installation 12**

## 2.2.12 Driver installation check 2

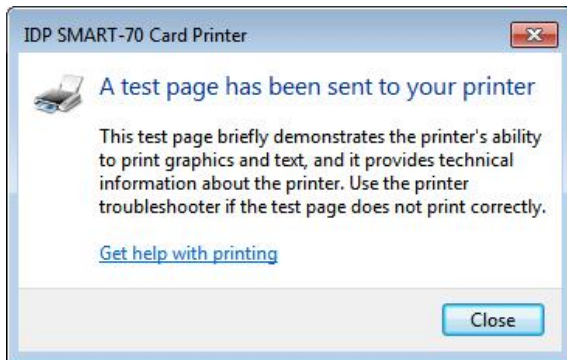
Please right click on "IDP SMART-70 Card Printer" and select "Printer Properties".



**Figure 68 Printer driver installation 13**

### 2.2.13 Driver installation check 3

Please select the "General" tab on "IDP SMART-70 Card Printer" properties and click "Print Test Page".



**Figure 69 Printer driver installation 14**

### 2.2.14 Driver installation check 4

When test page is being printed, the widow for checking printing status comes up. After checking printed test card, if the test card is properly printed, please click "Close".



**Figure 70 Application installation 1**

### 2.2.15 Application installation 1

After printer driver installation, please install SMART Design and DB by clicking "Install Smart Application".