* Printing Preferences
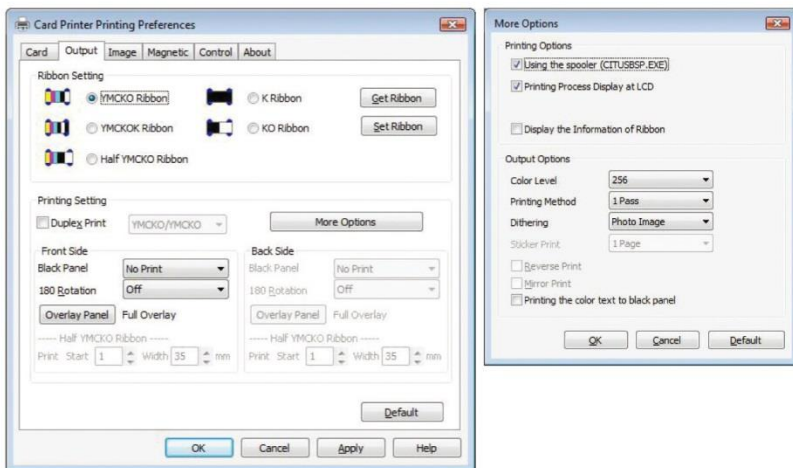
1 Card tab
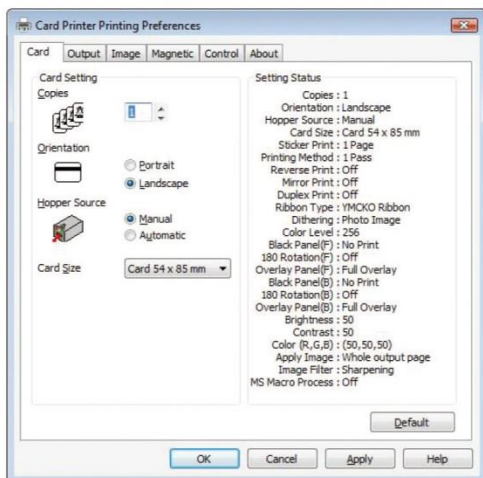
Items	Description
Copies	Set the number of copies: 1 to 999.
Orientation	Set the card orientation.
Hopper Source	Set the source of the card supply in printer.
Card Size	Set the size of card.

NOTE:
Please refer to the instruction for choosing the right cards at page 53

2 **Output** tab

Items	Description
Ribbon Setting	Set the type of ribbon. *Please Refer to Note at Page 33
Duplex Print	It prints the contents of a document on both sides.
Black Panel	This is an option to select K panel for the printing black colored text and black image included in the printing file.
180 Rotation	It prints the contents of output data by rotation in a 180 degree.
Overlay Panel	It sets up overlay panel for protect a printed card. - Full Overlay / No Overlay / Selected Area / Use Image File - Smart Card ISO / Smart Card AFNOR / Magnetic Card
Using the spooler	Set the method of transmitting data to printer.
Printing Process Display at LCD	It displays the printing process at LCD.
Display the Information of Ribbon	It displays the residual counts of ribbons. This information can be displayed if the ribbon has RFID tag and the residual counts is below 40.
Color Level	When printing, it decides the number of colors.
Printing Method	During printing, it is the print mode for color ribbon movement. - 1 pass: Transfer all data of YMCKO and then print. - 3 pass: Transfer corresponding data of each panel and then print.
Dithering	Dithering is applied to only the data transmitted to black ribbon when printing on the black ribbon of color ribbon.
Sticker	Print same image in sticker format for 1, 2, 4 sheets.
Reverse Print	Reverse RGB and print.
Mirror Print	Mirror the printing data and print.
Printing the color text to black panel	Print the color text to black panel.

> **NOTE:**
> *You do not need to set the ribbon type manually for YMCKO/ YMCKOK/ YMC (Half)KO ribbons. However, in case using Mono / KO ribbon, you should set the ribbon type manually on Card Printer Printing Preference.*

3 **Image** tab

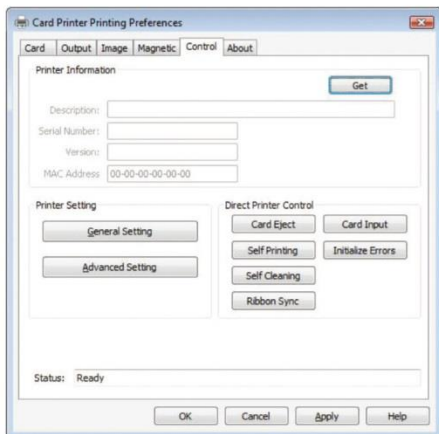| Items	Description
Brightness	Set the whole brightness of a printing document.
Contrast	Set a dark place as darker and a bright place as brighter.
Sharpening	It increases the contrast of the neighboring pixels and it makes the blurred image sharply.
Diffusion	Mixes the pixel of the image and does make seem like the blurred image.
Print Color Adjust	Set the color adjustment when printing.

4 **Magnetic** tab

You can write or read track information in the magnetic strip.
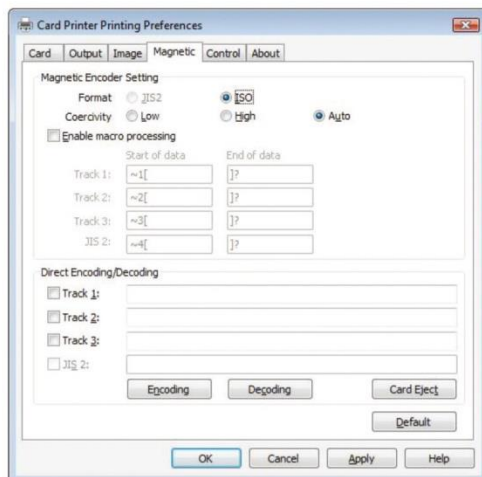
Items	Description
MS Format	Set the encoder format of the magnetic strip.
MS Coercivity	Set the coercivity type of magnetic strip.
Enable macro processing	Send a data to the magnetic strip. When this function is set, it detects the start and end of data from text, and it processes with MS data.
Encoding	Write the data of selected track to the magnetic strip.
Decoding	Read the data of selected track from the magnetic strip.
Card Eject	Eject a card when the card remains inside the printer.

5 **Control** tab

Items	Description
Get	It gets the information of a card printer and displays it.
General Setting	It gets/changes the current setting of the printer. - Printing Speed (Mono): Normal, Low - Auto Ribbon Sync: No, Yes - Card Ready Position: Eject, Internal - Card Input Option: External, Internal - Card Eject Time: 0 ~ 30sec - Card Insert Time: 2 ~ 20sec
Advanced Setting	It gets/changes the current setting of the printer. - TPH Resistance: 2400 ~ 3600 - TPH Model: KEE, KPE, KPE2 - Card Margin Setting: X-Start, X-End, Y-Offset - Intensity: Color/Mono Ribbon Intensity
Card Eject	It ejects a card when the card remains inside the printer.
Card Input	It inserts the card being ready at the feeding entrance.
Self Printing	It starts Self Printing
Self Cleaning	It starts Self Cleaning. Please remember to have a cleaning card.
Ribbon Sync	It sets Ribbon Sync. It conducts the same operation as [RIBBON SET] button.
Initialize Errors	It initializes the errors when error is occurred and "Error LED" is on. The error is not settled by normal printer's operations . It just removes the error state of the printer to process the next commands.

If Auto Ribbon Sync is set to "YES", the ribbon will be repositioned each time ribbon is out of the place more than 3 seconds.

6 About tab

It shows version and other information.
If you click the image, the website of our company will be opened on internet browser.
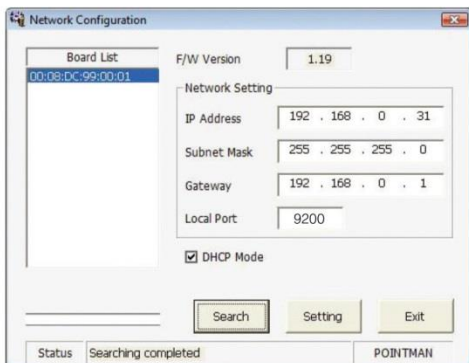

2.8 Network Configuration Settings (Option)

> *This function is supported on the specific models.*

* Network Configuration (Configure.exe)

1 Go to **Start** ⇒ **All Program** ⇒ **POINTMAN** ⇒ **Network** ⇒ **Network Setting**.

2 The network configuration window will open.

Items	Description
Board List	It lists the searched network printers.
F/W Version	It shows F/W version of the selected network board.
IP Address	It shows IP address of the selected network board.
Subnet Mask	It shows subnet mask address of the selected network board.
Gateway	It shows gateway address of the selected network board. 9200
Local Port	It sets a printing port through network printer. Please select .
DHCP Mode	If the network system supports DHCP, IP address is automatically set. If not, you should directly change IP address after being assigned. And then you set it in order to use network printer.
Search button	Search network of a card printer.
Setting button	It saves the changed network information. After change, a card printer will be reset. You can use this after 10 seconds.
Exit button	Exit the program.

* What is DHCP(Dynamic Host Configuration Protocol)?

- Dynamic Host Configuration Protocol (DHCP) is a computer networking protocol being used by the client computer to assign TCP/IP information automatically.
- The DHCP server automatically sends the Client's network configuration such as IP address, Subnet mask, Gateway and DNS server.
- If TCP/IP setting on a PC is set as "obtain an IP address automatically", it means DHCP is supported.

* Network Setting – Auto Setting (DHCP supported)

1 Search the connected Network Board by clicking Search button.

2 Select MAC address on Board List.

3 Because IP Address, Subnet Mask, Gateway are automatically assigned from DHCP server, you do not need to input the data. However, you may input Subnet Mask and Gateway when they should be set separately.

4 Set Local Port for **9200** (You can't change this value)

5 Select DHCP Mode.

6 Click **Setting** button. It takes about 30 seconds for this setting. If it is set, please reboot the printer in order to get a new IP address from the server.

7 If you click **Search** button, you can check the new setting.

* Network Setting – Manual Setting

IP Address, Subnet Mask, Gateway should be assigned by Network administrator.

1 Search the connected Network Board by clicking Search button.

2 Select MAC address on Board List.

3 Input IP Address, Subnet Mask.

4 Set Local Port for **9200** (You can't change this value)

5 DHCP Mode should not be selected. You should un-select this option in the manual setting.

6 Click **Setting** button. It takes about 30 seconds for this setting. If this setting is done, please reboot the printer.

7 If you click **Search** button, you can check the new setting.

2.9 Useful function of Pointman Card Printer

2.9.1 Printing One Card at a time

> **NOTE:**
> **This function is available for printing single cards using the TP-9200 printer.**

1 Insert a single card into a single card feeding slot at the front.

2 Go to your card issuing software and print a single card.

3 Wait until the printer prints the card. If you need to print another card of a different design, then follow these steps again.

2.9.2 Printing a self-test card

* No PC connection

1 Power on the printer (PC connection is not necessary)

2 Make sure a ribbon is installed and a card is in the input hopper or in the single card feed slot.

3 Press and hold for one second both the EJECT and RIBBON SET buttons at the front of the printer.

4 Printer will then display Self Printing

5 A Printer self-test card is then printed.

* PC Connection

1 Power on the printer and connect the printer to PC with a communication cable.

2 Make sure a ribbon is installed and a card is in the input hopper or in the single card feed slot.

3 Go to Card Printer Printing Preference ⇒ Control tab ⇒ Direct Printer control ⇒ Click Self Printing

4 Printer will then display Self Printing
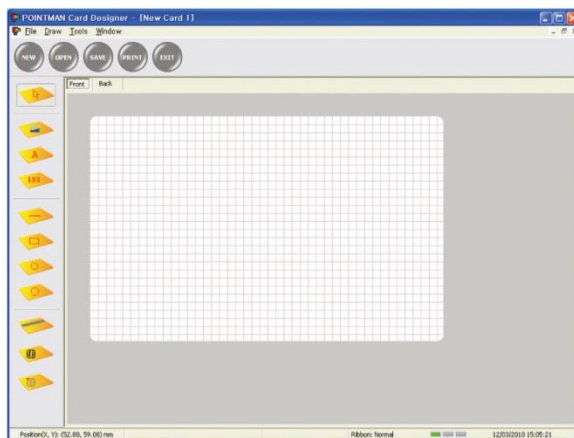
5 A Printer self-test card is then printed.

3 Software Operation

3.1 Getting Started

CardDesigner 1.0 is software that allows user to design and issue cards.
Follow the steps below to create cards.

Go to **Start** ⇒ **All Programs** ⇒ **POINTMAN** ⇒ **Card Designer**
⇒ **Card Designer**


3.2 Description on Features

- NEW : Design new card. Up to 10 windows can be created at the same time.
- OPEN : Read a saved card design.
- SAVE : Save a card design.
- ISSUE : Print a card.
- EXIT : Terminate the window.

3.3 Designing Card

CardDesigner 1.0 is software that allows user to design and issue cards.
Follow the steps below to create cards.

* IMAGE designing

1) Select [icon] icon to start image designing in The Designer.
2) Drag mouse on the range where image is positioned on card.
3) When window of "Properties-Image" opens, Click "Select Image" button or "Cam" button. Select image you wish to insert.
4) Click "Save", then the selected image is inserted.
5) You can change properties of the inserted image.
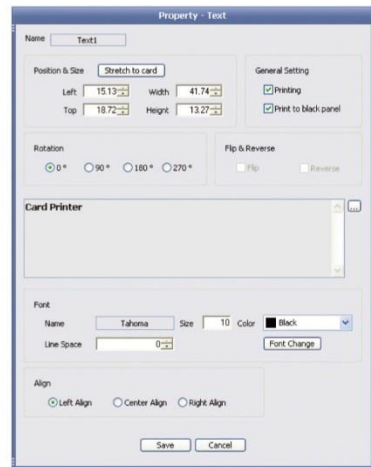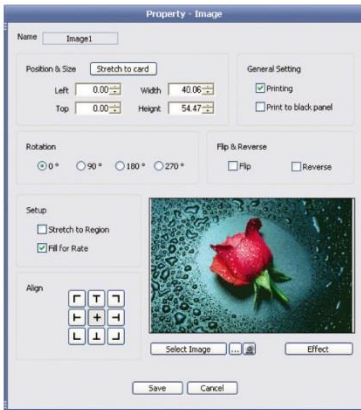
* TAXT designing

1) Select [icon] icon to start bar code designing in The Designer.
2) Drag mouse on the range where barcode is positioned on card.
3) When window of "Properties-barcode" opens, insert "Code" you wish to insert.
4) Click "Save", then the bar code is inserted.
5) If you wish to change properties of the inserted text, double click on the bar code.

* BARCODE designing

1) Select [icon] icon to start bar code designing in The Designer.
2) Drag mouse on the range where barcode is positioned on card.
3) When window of "Properties-barcode" opens, insert "Code" you wish to insert.

4) Click "Save", then the bar code is inserted.
5) If you wish to change properties of the inserted text, double click on the bar code.


* DIAGRAM designing

1) Select icon to start diagram designing in The Designer.
2) You can draw Diagram; Circle, Rectangle, Oval.
3) If you wish to change properties of the diagram, double click on the diagram.
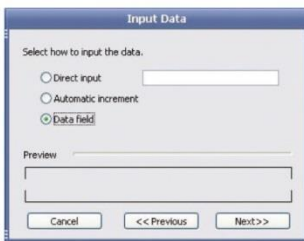
* MAGNETIC CARD

1) Select icon to start diagram designing in The Designer.
2) Magnetic stripe is displayed within the range of card.
3) If you wish to input data into magnetic stripe, double click the magnetic stripe and input data in the relevant track.

* IC CARD

1) Select 🔲 icon to start diagram designing in CardDesigner.
2) IC chip is displayed within the range of card. Set each item you want to write in the IC properties.
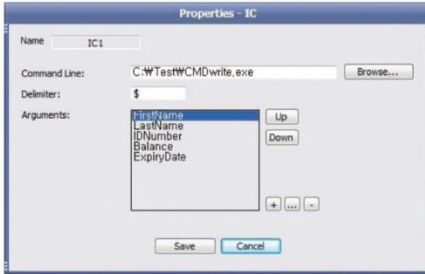
3) Select the IC encoding program file which will be used for IC encoding by clicking [Browse…] button.
4) Input Delimiter for each Argument at Delimiter box. (1 byte).
5) You can add or delete the arguments with "+" and "-" button.
 - You can add the arguments with ([+]) button or change the property of the argument with ([...]) button
 - You can delete the arguments with ([-]) button.

6) When you print and encode a IC chip with calling the IC encoding program on TheDesigner , the arguments will be sent in the format as the example below.
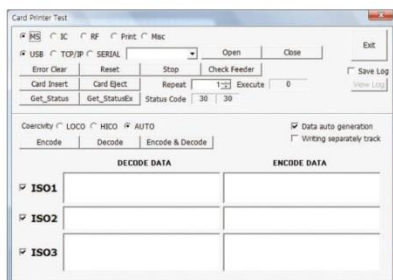
[Calling example] C:\Test\CMDWrite.exe FirstName$LastName$IDNumber$Balance$ExpiryDate
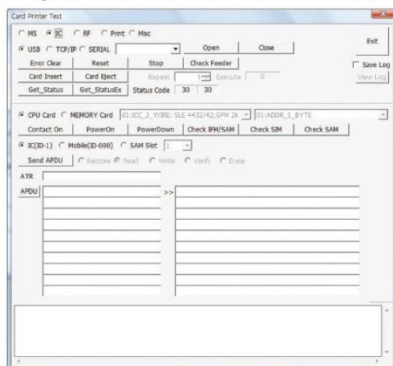
3.4 Tools

* Magnetic card

After input of data to be written on magnetic track, click "Write".
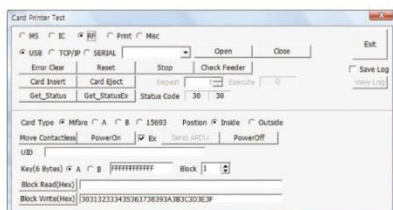Click "Read" to read the saved data on each track.

* IC CARD

Select "IC" and click "Read" button.
Progress bar will show communication status with IC chip.
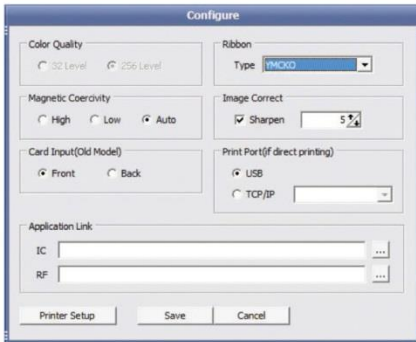

* RF CARD

Click "Card Read". The progress will show communication status with RF card.
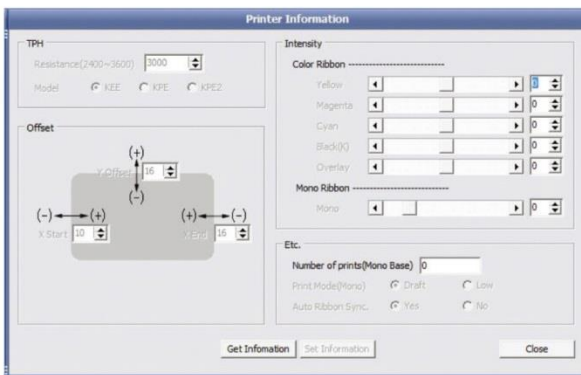
3.5 Configuration

* Configure

When issuing card, user can set the type of ribbons, the card orientation and dithering for black ribbon. When issuing IC card or RF card, user can set the external program necessary.

* Printer Information

You can change set-up of a printer at configure by clicking Printer Setup.

3.6 Data Synchronizing

> *Data Synchronizing will help user to synchronize data created in Microsoft Excel or Microsoft Access with what will be used in card issuing software for card creation. User can make card effectively in shorter time.*

* Data Connect Wizard

1 The Designer "Tool" ⇒ "Data Connect" ⇒ "Data Connect wizard"
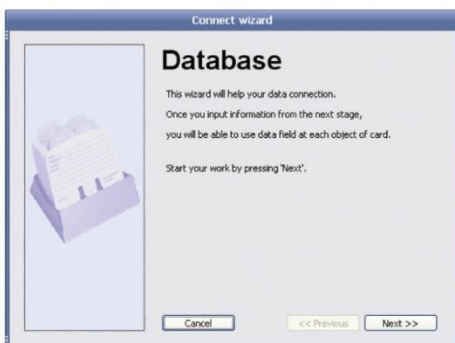
2 Select target database to synchronize.
(Select Excel Worksheet if target DB is in Excel Copy & Paste method.)
If you select "Microsoft Excel worksheet (Copy & Paste)", you should input the numbers of column you will use.
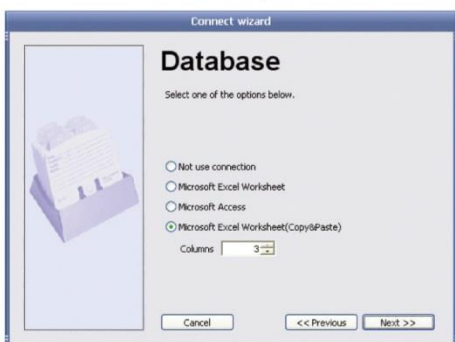
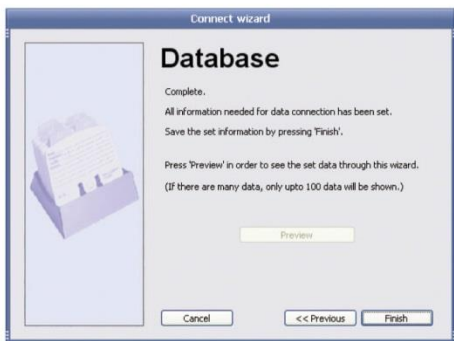3 Please select the Database file or/and Image file folder being used for database connection. The searching window will be executed with clicking "…" button.
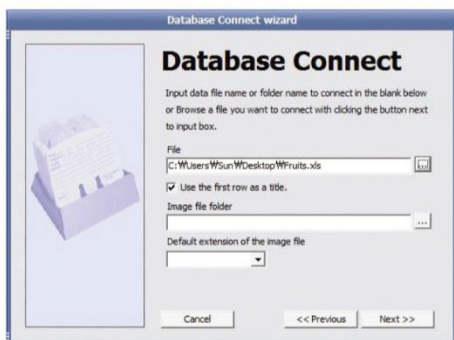
> **NOTE:**
> *When you set the image file folder for database connection, all image files in the folder should have the same format. The file in different format would not be printed.*

4 Choose Sheet to be used in database.

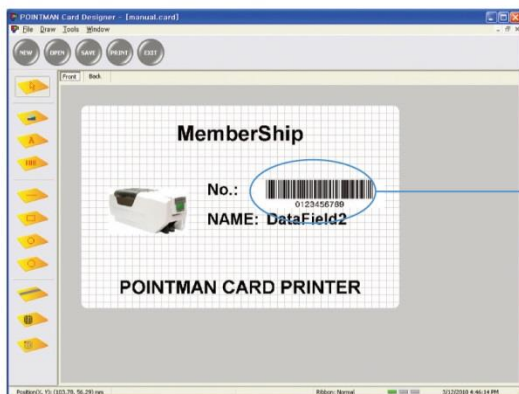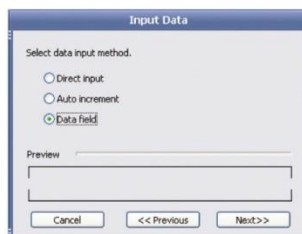*<Completing synchronizing>*

* Synchronizing data on the card with database (ex.Staff number)

1 Double click Barcode on database to synchronize.

*Artcle for DataField 1:
Double click*

2 Click "Data Field Connection" button(…). "Data field" for data input. Select "Staff number" for data field. Click "+" to add data for staff number. Click "Finish".

Data Field Connection Button

* Synchronizing data on the card with database (ex.Staff name)

1 Double click Name on database to synchronize.

Artcle for DataField 2: Double click

2 Click "Data Field Connection" button(…). Select "Data field" for data input. Select "Staff Name" for data field. Click "+" to add data for staff number. Click "Finish". And Click "Save".
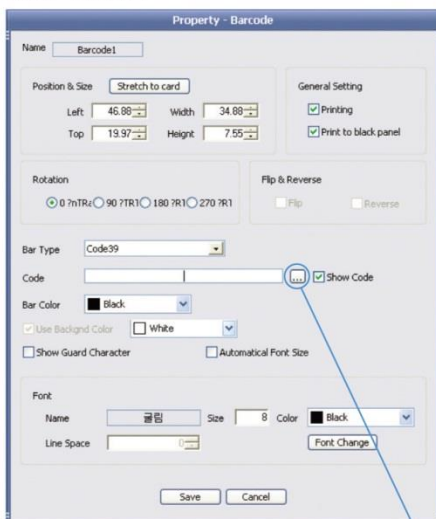

Data Field Connection Button

* Synchronizing data on the card with database (ex.Staff picture)

1 Double click Picture on database to synchronize.

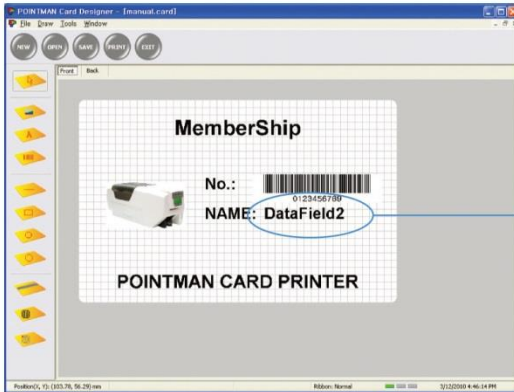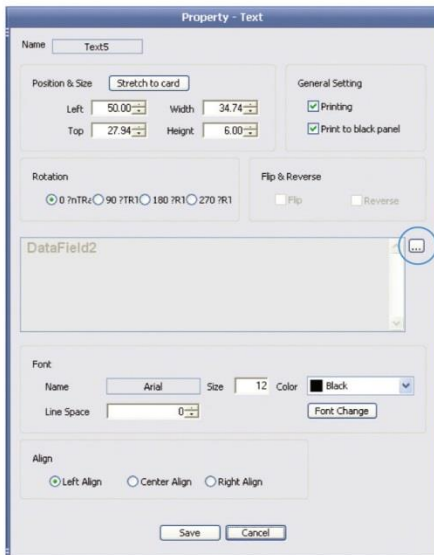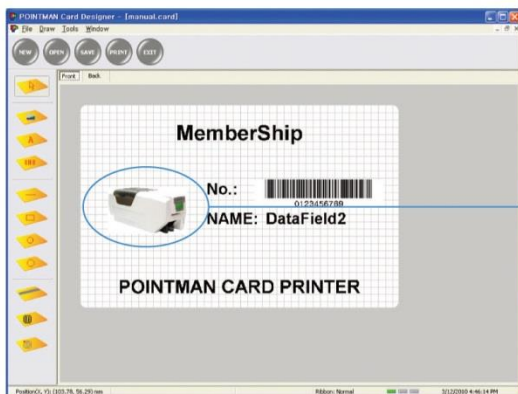*Artcle for DataField 3: Double click*

2 Click "Data Field Connection" button(…). Select "Data Field" for data input. Select "Staff Picture" for data field. Click "+" to add data for staff number. Click "Finish". And Click "Save".
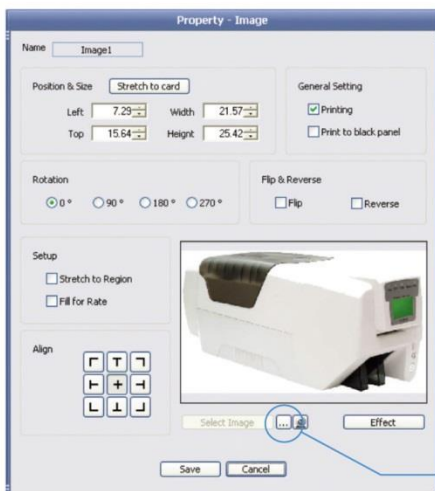
Data Field Connection Button

3.7 Card Printing

* Card Issue(Normal)

1 If you click "Issue" on TheDesigner, window below will open.

2 Select the type of printer (Driver or Direct).

3 Make a print with "Issue" button after finishing the setup of ribbon and other details

* Card Issue(Data Field Connection)

1 If you click "Issue" on TheDesigner, window below will open.
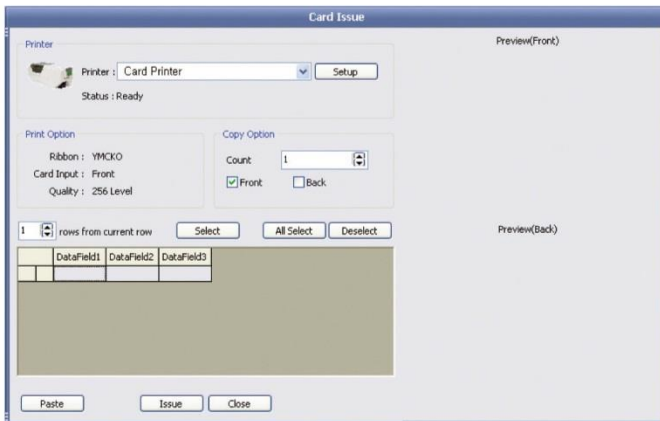
2 Execute Microsoft excel ⇒ Select the data area and copy them.

3 When you use Microsoft Excel worksheet (Copy&Paste) mode, click "Paste" button or click the marked area with mouse right button and click Paste at pop-up menu, then data will show up.

4 Check at the left of data which you will print and Click "issue" to make a print.

4 Instructions on Maintenance

4.1 Maintenance of Product

4.1.1 Choosing the right Cards

You can't use all white plastic cards in Pointman card printer. In order to get the best image quality and avoid Card Jam Error, please use the high quality grade PVC cards.

* Card Size
- Standard (ISO CR80-ISO 7810)
  = 53.98mm W x 85.60 mm L / 3.375" x 2.125"

* Card Thickness
- Minimum - 0.40mm.
- Standard - 0.76mm
- Maximum - 1.2mm

* Card should be:
- Glossy white.
- Free from the dirt and grease.
- Free from surface contamination.
- Free from pits and bumps in the surface .
- Free from burrs at the edge of the card
- Completely Flat

* Card should not be
- Heavy damaged card
- Card with heavy dirt
- Card with scratch
- Bended or deformed card

4.2 How to Clean the Printer

Cleaning is important factor to obtain the high grade quality printing, good operation and longevity. We recommend that you clean the roller and TPH with each roll of ribbon.

4.2.1 CR-80 Cleaning Card

1 Turn the power off and remove card and ribbon cartridge.

2 **- PC Connection**

Go to Card Printer Printing Preference ⇒ Control tab ⇒ Direct Printer control ⇒ Click Self Cleaning

When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.

- No PC Connection

Turn the power on with pressing "Eject" button at the same time. When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.

3 After completing cleaning, cleaning card is ejected automatically. And the cleaning card is reusable.

4 Leave the printer for 2 ~ 3 minutes until alcohol cleanser evaporates.

Power on   **Cleaning operating**   **Cleaning Completed**

4.2.2 Long T shape Cleaning Card

1 Turn the power off and remove card and ribbon cartridge.

2 **- PC Connection**
Go to Card Printer Printing Preference ⇒ Control tab
⇒ Direct Printer control ⇒ Click Self Cleaning

When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.

- No PC Connection

Turn the power on with pressing "Eject" button at the same time.
When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.

3 After completing cleaning, cleaning card is ejected automatically.
And the cleaning card is reusable.

4 Leave the printer for 2 ~ 3 minutes until alcohol cleanser evaporates.

Ready for card slot   **Inserting Card to card slot**   **Eject**
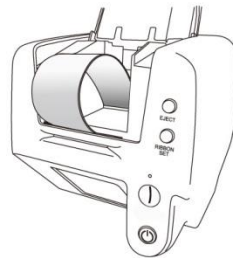
4.2.3 Washing the Cleaning Roller

Wash a used cleaning roller with each roll of printer ribbon.

1 Remove the cleaning roller from the printer.

2 Wash the cleaning roller in flowing water.

3 When the cleaning roller gets dry, insert it into the printer.

4.2.4 Cleaning the Thermal Print Head (TPH)

Clean the TPH when changing the ribbon (1000 passes) or each month, whichever occurs first.

1 Turn off the card printer and open the top cover

2 Tilt the TPH cleaner swab, so the bubble is at the opposite end to the foam head

3 Press the tube to force the alcohol to impregnate the foam head

4 Use alcohol impregnated foam head to clean the TPH. Do not touch the black part of the print head (clean only above the green line)
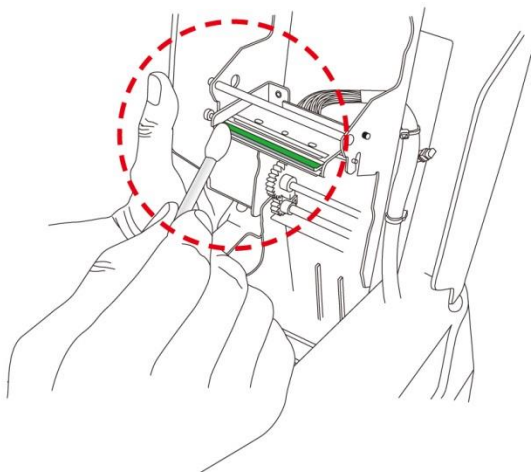
4.3 Troubleshooting

* 1. In case front LED keeps on flashing or always on all the time.

- Description of Error code

a) Fatal Error

Code	Code name	Description	Proper measures
10	TPH OPEN	- TPH Module Open in process of printing.	- Check the status of TPH Module Open or Change TPH Open Checking Sensor.
11	TPH Up/Down Fail	- Fail in TPH Up or Down	- Check TPH Up / Down Module
12	Path Jam	- Card Jam on the Path	- Check the status of the Path or Jam on the path.
13	TPH Temp Error	- Disorder in TPH temperature	- Check the temperature of working condition. Operating temp. : 0℃ ~ 70℃
14	Ribbon Encoder Error	- Ribbon Broken or Ribbon End or Encoder Error	- Check the status of Ribbon and Ribbon Encoder.
15	Media Error	- Error in Media	- Check the status of card (media) and Path Sensor.
16	EEPROM Fail	- Error in EEPROM Read / Write	- Reboot or Change EEPROM.
17	IC Contact Module Error	- Error in the location of IC Contact Module	
50	Card Flipper Timer Out	- Error in Card Flipper Communication	- Power off -> Remove Cards (media) -> Reboot
51	Card Flipper Ack Timeout	- Error in Card Flipper Communication	- Power off -> Remove Cards (media) -> Reboot
52	Card Flipper Home Position Error	- Error occurred in the Card Flipper Home Position	- Power off -> Remove Cards (media) -> Reboot
53	Card Flipper Turn Up Error	- Error in Card Flipper Turn Up	- Power off -> Remove Cards (media) -> Reboot
54	Card Flipper Card Input Time out	- Time out during entering the card into Card Flipper	- Power off -> Remove Cards (media) -> Reboot
55	Card Flipper Card Input Jam	- Jam occurred at the time of entering the card into Card Flipper	- Power off -> Remove Cards (media) -> Reboot
56	Card Flipper Card Jam	- Card Jam in the Card Flipper	- Power off -> Remove Cards (media) -> Reboot
57	Changer Card Exist	- Abnormal card is detected in the Changer.	- Power off -> Remove Cards (media) -> Reboot

b) Warning

Code	Code name	Description	Proper measures
20	Command Error	- Receiving command out of Format	- Send command corresponding to Format
21	Invalid Parameter	- Receiving Parameter out of Format	- Set Parameter corresponding to Format.
22	Time Out	- Command Timeout	- Send Command.
23	IC Contact Error	- IC Contact is not working.	- Check IC Contact Module.
24	Ms Encode Error	- Error in Ms Encoding.	- Check MS Feeding.
25	Ms Read Error	- Failure in reading 3 tracks all in Ms All Track Reading.	- Check MS Feeding.
26	Ms Read STX Error	- STX not found in Ms Reading.	- Check MS Feeding.
27	Ms Read PARITY Error	- Parity Error in Ms Reading.	- Check MS Feeding.
28	Ms Read ETX Error	- ETX not found in Ms Reading.	- Check MS Feeding.
29	Ms Read LRC Error	- Discordant LRCM in MS Reading.	- Check MS Feeding.
30	IC Module Timeout	- Failure in IC Module communication.	- Check IFM B/D Interface. Check IFM B/D.
31	RF Module Timeout	- Failure in RF Module communication.	- Check RF B/D Interface. Check RF B/D.
32	SAM Module Timeout	- Failure in SAM Module communication.	- Check SAM B/D Interface. Check SAM B/D.
33	Card Flipper ModuleTimeout	- Failure in Card Flipper Module communication.	- Check Card Flipper B/D Interface. Check SAM B/D.
34	Card Input Timeout	- Card Input Time Out	- Check Hopper. Insert Card within pertinent timing.
35	Ribbon Near End	- Left ribbon is not so much	- Considering exchanging Ribbon
36	Ribbon End	- Perceiving End Mark of YMCKO Ribbon.	- Exchange Ribbon
38	Ribbon Error	- Abnormal Ribbon installed.	- Check Ribbon and Install certificated Ribbon.

* If you still have the troubles after you first action, you should contact your dealer for the maintenance

Caution:
After the trouble above is resolved, perform one of three below to get printer into normal operation.
1) Press reset button with ribbon cartridge correctly loaded.
2) Press "EJECT" button
3) Place power switch in OFF position, and ON position.

* 2. Other Troubles

Trouble	Solution
Found frequently ribbons cut in the front edge of card when printing	- Check that X-Start co-ordinate value on the printer driver is set correctly The recommendation of X-coordination vauel is 12
Found frequently ribbons cut in the rear edge of card when printing	- Check that X-Start co-ordinate value on the printer driver is set correctly The recommendation of X-coordination vauel is 12
Printer not found in The Designer or application software	- Check that printer driver is correctly installed. - Check that communication cable is properly connected - Reboot your PC.
Other than power LED, 4 Front LEDs continuously flash in sequence	- Check out www.titeng.co.kr for firmware download. - Download t latest version of firmware for the printer. - Perform install using firmware install program.

4.4 Technical Specifications

Specifications Card Printer TP-9200

Item	Sub Item	Description	
		TP-9200	
Print	Print Method	Dye-Sublimation (Color), Resin Thermal Transfer (Mono)	
	Print Speed	Mono : 4 sec/ pc, Single Color : 17 sec/pc, Dual Color: 30 sec/pc	
	Print Mode	Single & Dual Side Print	
	TPH	Resolution : 300 dpi(11.8 dpm)	
		Pulsed Life : 1 x 108 Pulses / Abrasion : 50Km	
	Color	16.7 Million Color	
	Ribbon	KO-500 prints/roll, YMCKO-200 prints/roll, YMCKOK-167 prints/roll	
		K, Silver, Gold, Red, Blue, White- 1000 prints/roll	
		Protection by RFID Tag	
Card	Card Type	PVC, Composite PVC	
	Card Thickness	0.4mm ~1.2mm	
	Card Format	ISO CR-80-ISO 7810 (53.98mm W X 85.60 mm L / 3.375" X 2.125")	
Feeding Method	Single Feeding	Single-Card Feeding	
	Auto Feeding	No	Hopper-100 cards Stacker - 50 cards
	Motor	Step Motor Driven	
Encoding (Option)	Magnetic Stripe Card	ISO7811(track 1,2,3), Coercivity : HiCo/LoCo	
		Head Life : 4,000,000 pass	
	Contact (IC) Card	ISO7816, EMV, K-cash, Contact Landing Type	
		IC Contact Life : 1,000,000 pass (PC/SC-compliant)	
	SAM	PLCC 1 (Extra-2 sockets), SIM 4 sockets	
	Mobile Chip Card	Default, ISO 7816	
	Contacless(RF) Card	Mifare,ISO 14443 A,B, ISO15693	
Barcode		Code 39, code 128 B & C with & Without check digit / 2 of 5 interleaved /UPC-A, EAN 8 & EAN 13	
		PDF-417 2D bar code and other symbologies can be printed via Window drivers	
Font		True Type fonts via Window drivers	
CPU		32 bit processor	
Memory		1Gb RAM	
Interface		USB2.0 (High-Speed), RS-232C, Built in 10/100 Ethernet	
Operating System For Printer Driver		All 32-bit and 64-bit compatible: Windows 7, Windows Vista®, XP, Windows 2008 Server, Windows 2003 Server	
		Microsoft Windows Hardware Quality Labs (WHQL) Certified	
POINTMAN Software		TheDesigner™	
Warranty		Printer : Two years, Printerhead : Two years or 100,000 printings whichever comes first	
		*Subject to observance of specific conditions and use of Pointman genuine ribbons	
Environmental	Operating Environment	Sheltered office environment 0℃ ~ 50℃ , 20~90% RF Non-condensing humidity	
	Storage Environment	-25℃ ~ 70℃, 20~90% RF Non-condensing humidity	
Power	External Power Supply	Input : 100V~250V, 50/60Hz, Output : DC 24V	
Size	Dimention(mm)	Single : 292(L) x 196(H) x 192 (W)	Single : 403(L) x 202(H) x 192 (W)
		Dual : 359(L) x 196(H) x 192 (W)	Dual : 471(L) x 202(H) x 192 (W)
	Net Weight	Single : 4.5 kg / Dual 5.0 kg	Single : 5.5 kg / Dual 6.5 kg

* Data subject to change without notice.

MEMO

EU

This product is CE marked according to the provision of the R&TTE Directive (99/5/EC). Here by T.I.T ENG Co.,Ltd.. declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

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FCC STATEMENT

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class Bdigital 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, uses and can radiate radio frequency energy and,if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -- Consult the dealer or an experienced radio/TV technician for help.

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