All information contained in this document is subject to change without prior notification.
NBS Technologies©. All rights reserved.
NBS Technologies & NBS Technologies logo are registered trademarke of NBS Technologies Limited in Canada and USA. Javelin & Javelin logo are registered trademarks of NBS Technologies Limited in the European Union, USA and other countries.

NBS Technologies™ Card Printer

Javelin *DNA*™

User guide manual

JAVELIN

www.nbstech.com

Contents

Safety Precautions ---- 06

Getting Started ---- 09

Product Overview ---- 09

In the Box ---- 09

Names of Parts ---- 10

JAVELIN DNA (Manual Feeding, Single-sided Printing) ---- 10

JAVELIN DNA (Manual Feeding, Double-sided Printing) ---- 12

JAVELIN DNA Pro (Auto Feeding, Single-sided Printing, 1 Input hopper) ---- 14

JAVELIN DNA Pro (Auto Feeding, Single-sided Printing, 2 Input hoppers) ---- 16

JAVELIN DNA Pro (Auto Feeding, Double-sided Printing, 1 Input hopper) ---- 18

JAVELIN DNA Pro (Auto Feeding, Double-sided Printing, 2 Input hoppers) ---- 20

Load Cleaning Roller & Ribbon ---- 22

Load Cleaning Roller ---- 22

Load Ribbon ---- 23

Load Cards ---- 24

Place Cards in the Input Hopper ---- 24

Place Cards after Removing the Input Hopper ---- 25

Print Single Card ---- 27

Magnetic Cards ---- 28

Input Hopper & Ribbon Lock ---- 29

Input Hopper Lock ---- 29

Ribbon Lock ---- 29

Install/Remove Output Stacker ---- 30

Open the Output Stacker Cover and Remove the Cards ---- 30

Use the Spring Load to Remove a Small Quantity of Cards ---- 31

Remove the Output Stacker and the Cards ---- 31

Connect Power & Communication Cables ---- 32

Install Program ---- 33

System Requirements ---- 33

① Supported Operating System ---- 33

② Recommended Specifications ---- 33

Install Software ---- 33

① Install Software Using Local Port (USB) ---- 33

② Install Software for Network Printer ---- 35

③ Configure Networking Settings ---- 40

1)Network Configuration Window ---- 40

2) DHCP (Dynamic Host Configuration Protocol)? ---- 41

3)Network Settings - Automatic (DHCP supported) ---- 41

4)Network Settings - Manual ---- 44

④ Install Software from the List of Connected Devices ---- 47

Uninstall Program ---- 49

Print Cards ---- 49

Set as Default Printer ---- 49

Change Printer Port (Using the Printer Driver) ---- 50

Select Input Hopper in the Printer Settings ---- 52

Select Input Hopper 1/2 from External Program (Windows Preview) ---- 54

Print Using Application Programs & Configure Driver Settings ---- 55

Print Using Application Programs ---- 55

Configure Printer Default Settings in Application Programs ---- 55

① Layout ---- 56

② Output ---- 57

③ Output-Option ---- 58

④ Image ---- 59

⑤ Magnetic ---- 60

⑥ Control ---- 61
⑦ About ---- 62

Check IP Address & Print Test Card ---- 62

Check IP Address ---- 62
Print Self-Test Card ---- 64
① If Connected to a PC ---- 64
② If Not Connected to a PC: User Mode ---- 65

Maintenance Instructions ---- 67

Supported Cards ---- 67
① Size ---- 67
② Thickness ---- 67
③ Acceptable Cards ---- 67
④ Unacceptable Cards ---- 67

Clean the Printer ---- 67

Clean the Exterior ---- 67
Clean Inside the Printer Using Cleaning Kit ---- 68
① Cleaning Kit & Use ---- 68
② Clean the Printer Using CR80 Cleaning Card / Long-T Cleaning Card ---- 68
1) Check the Proper Use of CR80 Cleaning Card / Long-T Cleaning Card ---- 68
2) Not Connected to a PC: User Mode ---- 69
3) Connected to a PC ---- 72
③ Clean the Printer Using Alcohol Swab ---- 73
1) Clean the Inside of the Printer Using Alcohol Swab ---- 73
2) Clean the Printer's TPH Using Alcohol Swab ---- 74
Clean the Blue Cleaning Roller ---- 75

Troubleshooting ---- 75

Errors ---- 75
① TPH ---- 75
1) Replace the TPH ---- 76
② Card Feeding ---- 78
1) Remove Jammed Card (Single-sided Printing) ---- 78
2) Remove Jammed Card (Double-sided Printing) ---- 79
③ Ribbon ---- 81
④ Card ---- 81

⑤ Miscellaneous ---- 81
Warning ---- 82
① Card ---- 82
② Ribbon ---- 82
③ SAM ---- 82
④ Miscellaneous ---- 83
Additional Errors ---- 83

Ribbon Specifications ---- 83

Colour Ribbons ---- 83
Monochrome Ribbons ---- 83

Printer Specifications ---- 84

Product Features ---- 84
Standard Specifications ---- 84
① Printing Type ---- 84
② Printing Function ---- 84
③ Resolution ---- 84
④ Printing Speed ---- 84
1) Colour Printing ---- 84
2) Monochrome Printing ---- 84
⑤ Card Capacity ---- 85
Optional Accessories ---- 85
Printer Specifications ---- 85
① Dimensions (Width x Length x Height) & Weight ---- 85
1) JAVELIN DNA (Manual Feed) ---- 85
2) JAVELIN DNA Pro (Auto Feed) ---- 85
② Power Adapter ---- 85
③ Font ---- 85
④ Memory ---- 86
⑤ Interface ---- 86
⑥ PC Specifications ---- 86
⑦ Software ---- 86

Warranty Certificate ---- 86

Regulatory ---- 87

Safety Precautions

Before using this product, please make sure that you have read the safety precautions described below. The safety precautions noted on this page are categorized as Warning, Caution, Attention,and Note. We are not responsible for any injuries or damage when the product is not used in compliance with these precautions.

Warning

These warnings must always be followed; otherwise, this may result in serious injury or damage.

Caution

Not following this caution can cause service interruption or product damage.

Important

Use this information to check and inspect for the proper operation of the product.

Note

This is a note that provides more details or information that is useful for users.

-Warning

These warnings must always be followed; otherwise, serious injury may result.

Power

- Do not use a damaged plug or loose outlet.
- Do not pull the cable to unplug or touch the plug with wet hands.
- Do not bend the cable by force or place any heavy objects on it.
- Keep it unplugged if not in use for an extended period of time or in case of lightning or thunder.

Installation / Storage

- Do not install the printer in a place where it may be subjected to moisture, dust, or splashes of water (rain).
- Keep the printer away from heat sources, as well as lit candles and cigarettes.
- Unplug the printer when moving it.
(If the printer is moved while plugged, the cable may be damaged and cause electric shock.)

Cleaning

- Keep the power plug clean, away from dust and water.
- Unplug when cleaning, and do not spray water or use benzene or thinner.
-Keep any inflammable liquid, gas, and aerosol away from the printer.

Misc.

- Do not place metal objects, chemicals, or anything with water on it.
- If you observe strange smoke, odor, or noise from the printer, unplug it immediately and contact your dealer.
- Use only the specified adapter.

※ Do not use adapters from other devices, e.g. laptop, monitor, game console.

-Caution

Not following this caution can cause service interruption or product damage.

Installation/ Storage

- Do not install the printer on an unstable surface.
- Do not place the printer under direct sunlight as it may cause a malfunction.

Misc.

- Do not remove any cover or protective device that is attached with screws.
- Do not operate the printer while your hand is placed inside.
- Clean and maintain the printer according to the user instructions.
- Do not disassemble, repair, or modify the printer arbitrarily.

Getting Started

-Product Overview

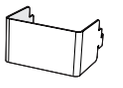
Thank you for purchasing the JAVELIN DNA, JAVELIN DNA Pro.

This printer is designed to print cards quickly and easily according to your specifications. It supports IC and RF cards (optional feature) as well as magnetic cards and can print high quality colour images on the surface of the card using the dye-sublimation method. In addition, the user can edit and print various types of barcodes, magnetic cards, and photos using software.
This printer is suitable for printing membership cards, rewards cards, employee ID cards, and access cards as it prints directly to PVC cards for faster and more efficient printing.

-In the Box

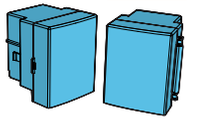
Output Stacker
(*DNA* Pro™ only)

OPTION

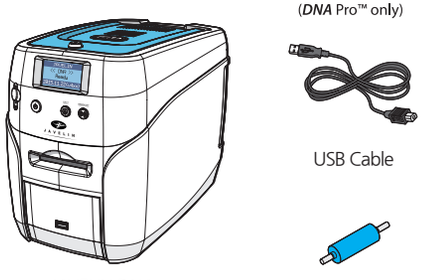


Input Hopper Lock
(*DNA* Pro™ only)

OPTION



Input Hopper
(*DNA* Pro™ only)



JAVELIN DNA
(Single Card Printing)

USB Cable

Power Cable

Power Adaptor

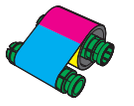
Cleaning Roller

Installation CD

Javelin Designer

JAVELIN DNA Pro
(Multiple Card Printing)

Cleaning Kit



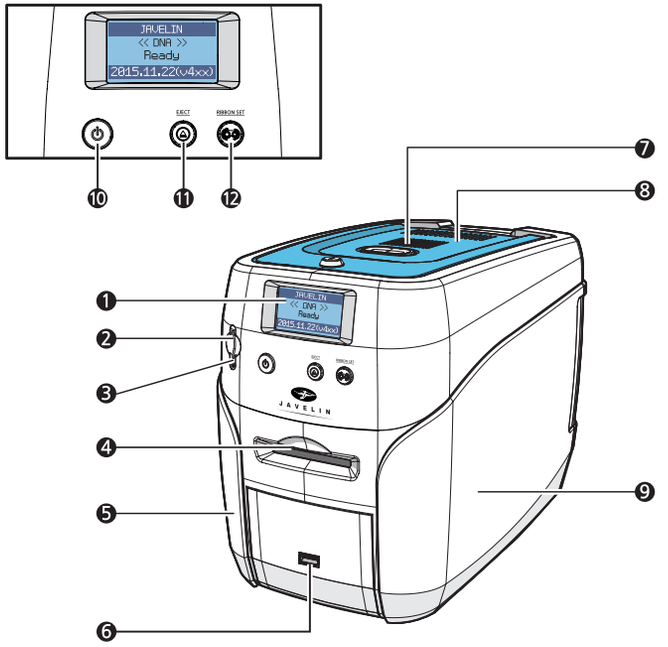
Dye flim

Important

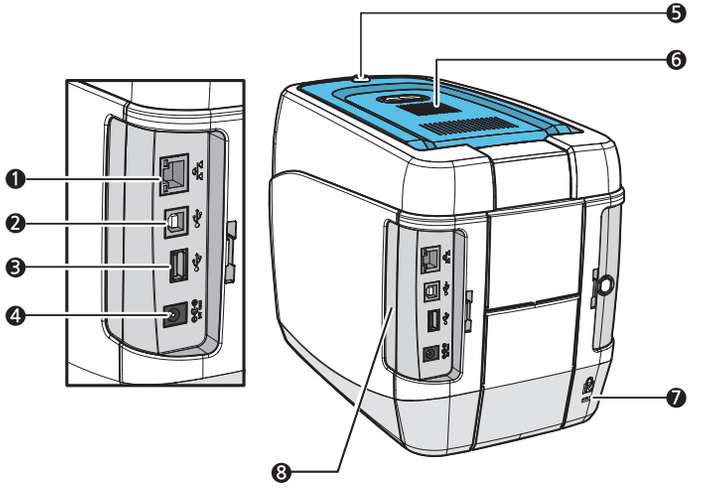
Please make sure that all the components and accessories are included in the box. If there are missing or damaged items, then please contact your dealer for assistance.

Names of Parts

-JAVELIN DNA (Manual Feeding, Single-sided Printing)

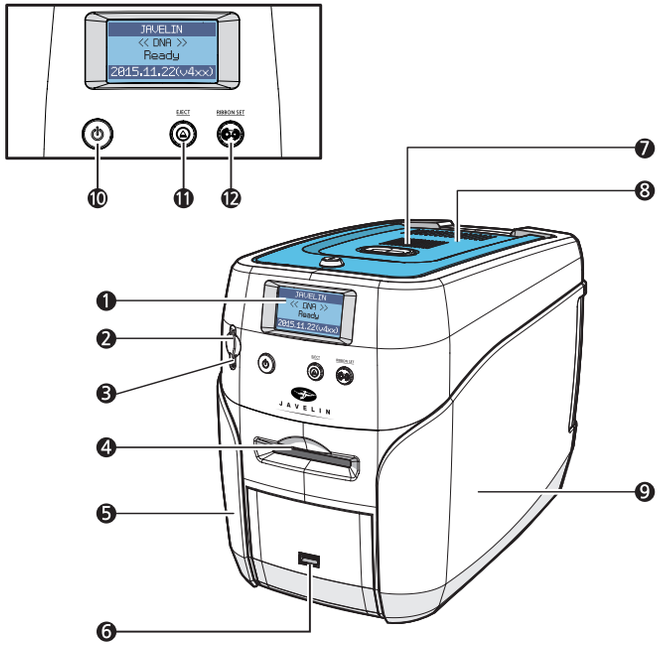


	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to place optional accessories or fix errors.
OPTION	❻ USB Socket	Used to insert USB memory media or to connect to a PC.
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Releases the card inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

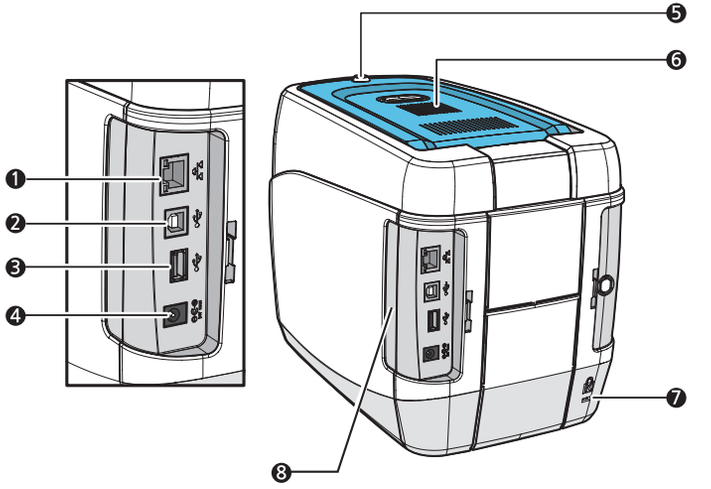


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ External RF	Recognizes an RF card.
OPTION	❼ Printer Lock	Use this to mount a security lock.
	❽ Side Cover Open Section	Press to open the Side Cover.

-JAVELIN DNA
(Manual Feeding, Double-sided Printing)

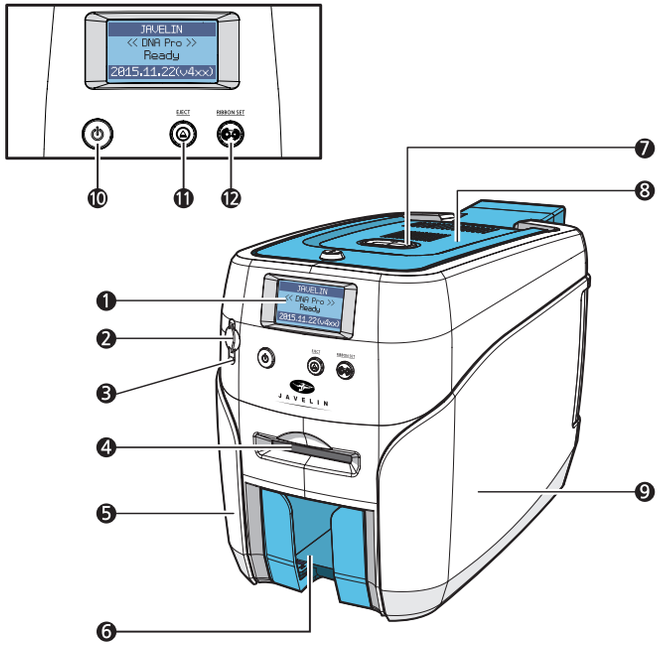


	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to place optional accessories or fix errors.
OPTION	❻ USB Socket	Used to insert USB memory media or to connect to a PC.
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Releases the card inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

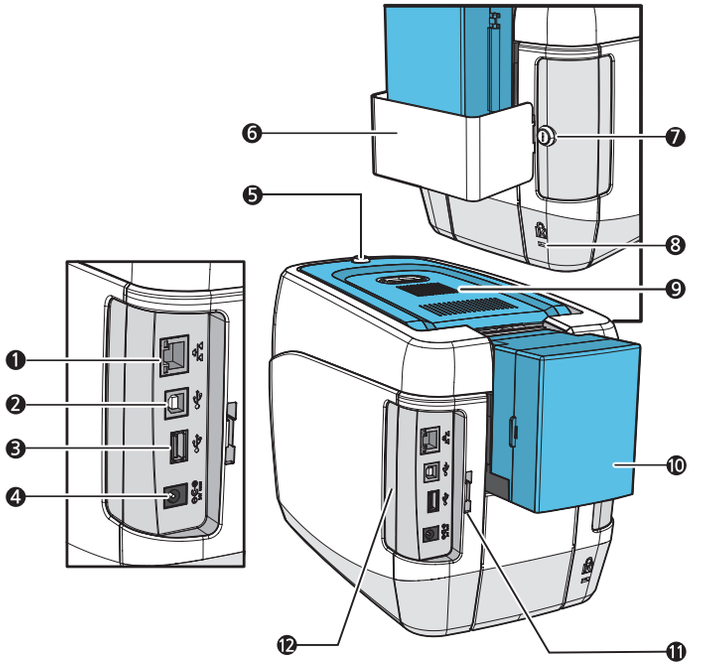


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ External RF	Recognizes an RF card.
OPTION	❼ Printer Lock	Use this to mount a security lock.
	❽ Side Cover Open Section	Press to open the Side Cover.

-JAVELIN DNA Pro
(Auto Feeding, Single-sided Printing, 1 Input hopper)

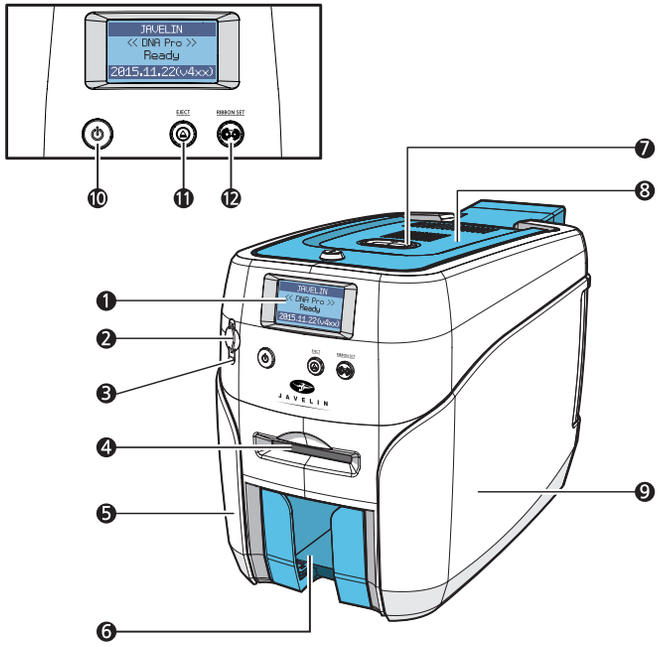


	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to Install optional accessories or fix errors.
	❻ Output Stacker	Stores printed cards (max. 60 cards).
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Release the card inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

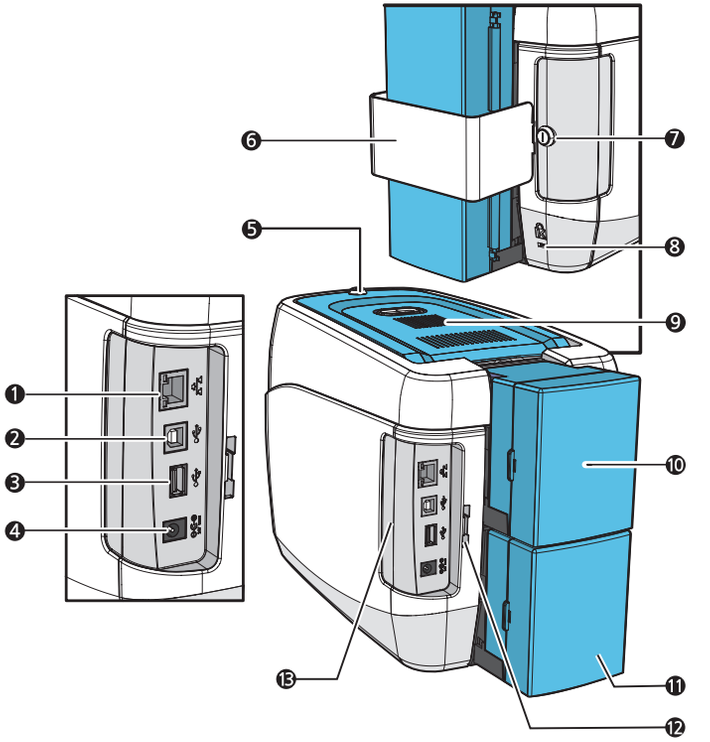


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ Input Hopper Lock	Used to lock the Input Hopper for security.
OPTION	❼ Input Hopper Lock Key	Locks/unlocks the input hopper.
OPTION	❽ Printer Lock	Use this to mount a security lock.
OPTION	❾ External RF	Recognizes an RF card.
	❿ Input Hopper (Standard)	Stores cards to print (max. 100 cards).
	⓫ Lock Connector Link	Used to connect the Back Cover to the Input Hopper Lock.
	⓬ Side Cover Open Section	Press to open the Side Cover.

-JAVELIN DNA Pro
(Auto Feeding, Single-sided Printing, 2 Input hoppers)

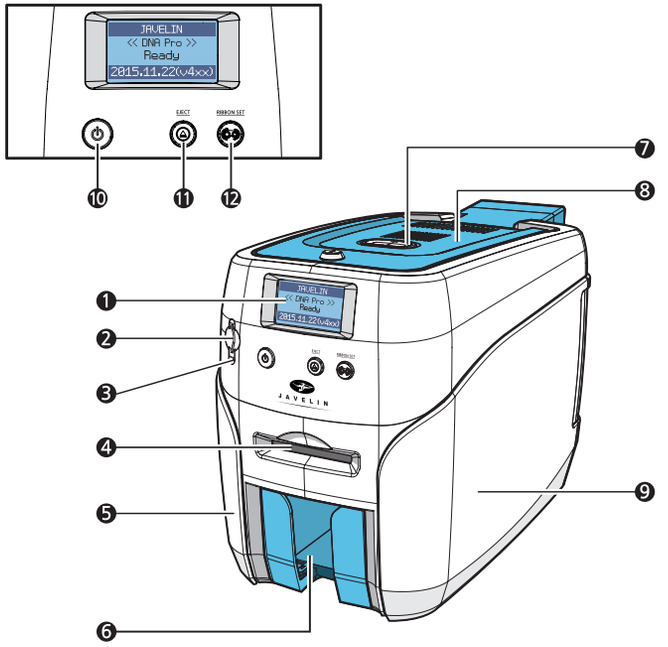


	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to Install optional accessories or fix errors.
	❻ Output Stacker	Stores printed cards (max. 60 cards).
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Release the card from inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

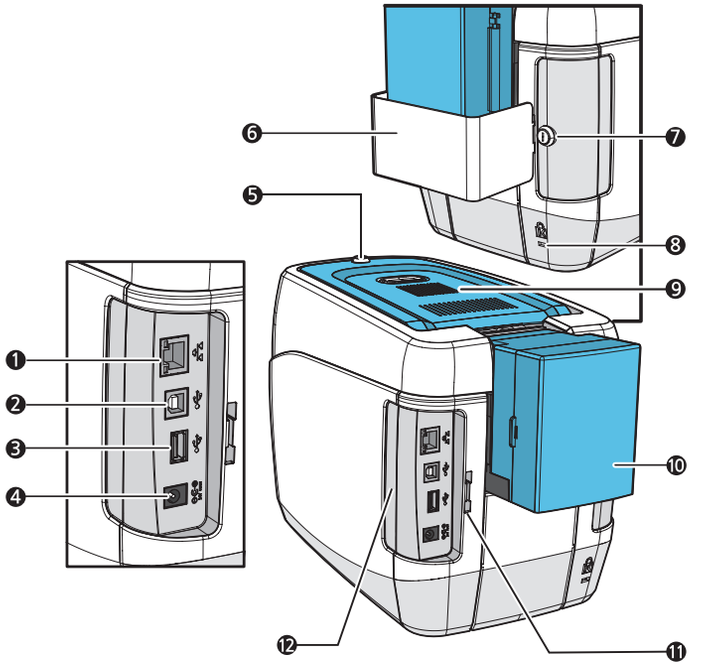


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ Input Hopper Lock	Used to lock the Input Hopper for security.
OPTION	❼ Input Hopper Lock Key	Locks/unlocks the input hopper.
OPTION	❽ Printer Lock	Use this to mount a security lock.
OPTION	❾ External RF	Recognizes an RF card.
	❿ Input Hopper (Standard)	Stores cards to print (max. 100 cards).
OPTION	⓫ Input Hopper (Optional)	Stores additional cards (Standard+Optional: max. 200 cards)
	⓬ Lock Connector Link	Used to connect the back cover to the Input Hopper Lock.
	⓭ Side Cover Open Section	Press to open the Side Cover.

-JAVELIN DNA Pro
(Auto Feeding, Double-sided Printing, 1 Input hopper)

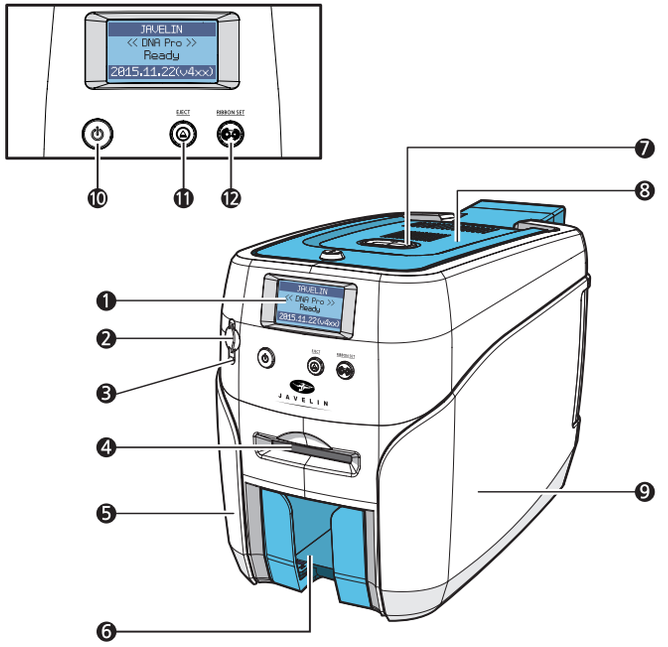


	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to Install optional accessories or fix errors.
	❻ Output Stacker	Stores printed cards (max. 60 cards).
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Release the card inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

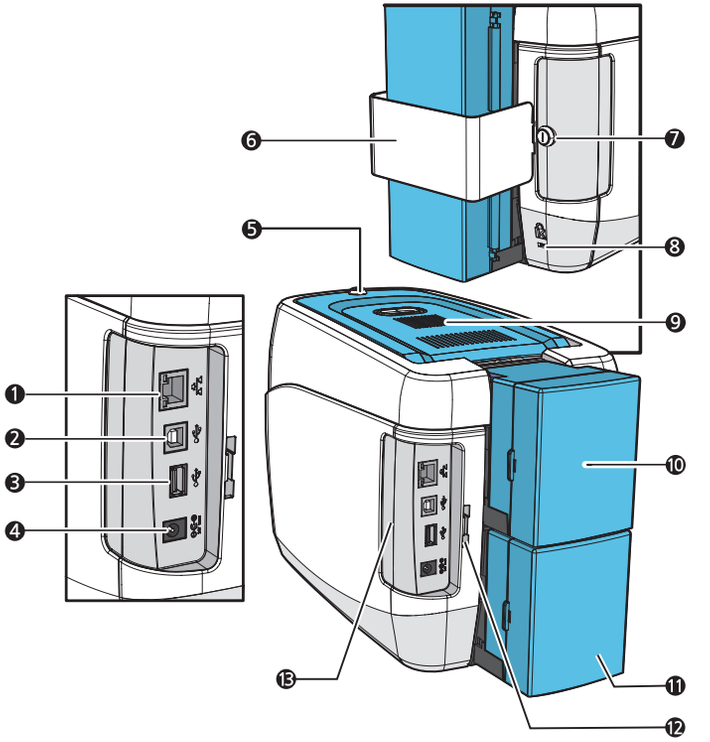


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ Input Hopper Lock	Used to lock the Input Hopper for security.
OPTION	❼ Input Hopper Lock Key	Locks/unlocks the input hopper.
OPTION	❽ Printer Lock	Use this to mount a security lock.
OPTION	❾ External RF	Recognizes an RF card.
	❿ Input Hopper (Standard)	Stores cards to print (max. 100 cards).
	⓫ Lock Connector Link	Used to connect the Back Cover to the Input Hopper Lock.
	⓬ Side Cover Open Section	Press to open the Side Cover.

-JAVELIN DNA Pro
(Auto Feeding, Double-sided Printing, 2 Input hoppers)



	Name	Description
	❶ LCD Display	Displays the printer's operation status on the LCD screen.
OPTION	❷ Mobile Connector	Used for inserting mobile chips.
OPTION	❸ Mobile Connector LED	Indicates the mobile chip status.
	❹ Single Card Slot	Used to insert or release a single card.
	❺ Left Side Cover	Open to Install optional accessories or fix errors.
	❻ Output Stacker	Stores printed cards (max. 60 cards).
	❼ Top Cover Button	Opens the Top Cover.
	❽ Top Cover	Open to replace the cleaning roller.
	❾ Right Side Cover	Open to replace the main board or fix errors.
	❿ Power Switch	Turns the printer on/off.
	⓫ Card Eject Button	Release the card from inside the printer.
	⓬ Ribbon Set Button	Replace or reposition the ribbon.

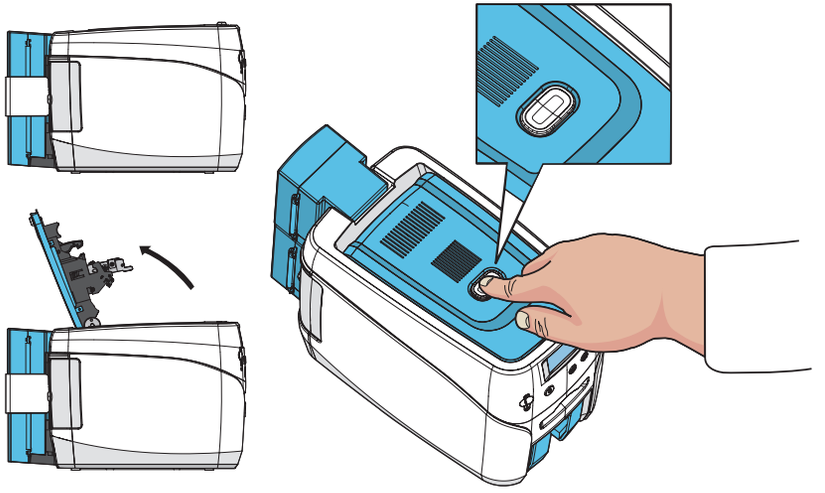


	Name	Description
	❶ Ethernet Port	Used to connect to a network using a LAN cable.
	❷ USB Port	Used to connect to a PC using a USB cable.
	❸ USB Socket	Used to insert USB memory media or to connect to a PC.
	❹ Power Supply Port	Connects to the power supply.
OPTION	❺ Top Cover Lock Key	Locks/unlocks the Top Cover.
OPTION	❻ Input Hopper Lock	Used to lock the Input Hopper for security.
OPTION	❼ Input Hopper Lock Key	Locks/unlocks the input hopper.
OPTION	❽ Printer Lock	Use this to mount a security lock.
OPTION	❾ External RF	Recognizes an RF card.
	❿ Input Hopper (Standard)	Stores cards to print (max. 100 cards).
OPTION	⓫ Input Hopper (Optional)	Stores additional cards (Standard+Optional: max. 200 cards)
	⓬ Lock Connector Link	Used to connect the back cover to the Input Hopper Lock.
	⓭ Side Cover Open Section	Press to open the Side Cover.

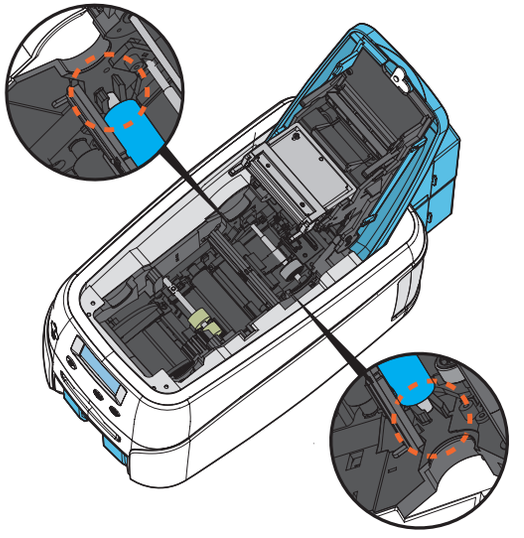
Load Cleaning Roller & Ribbon

-Load Cleaning Roller

1. Press the “Open” button and lift the Top Cover all the way as shown in the picture.



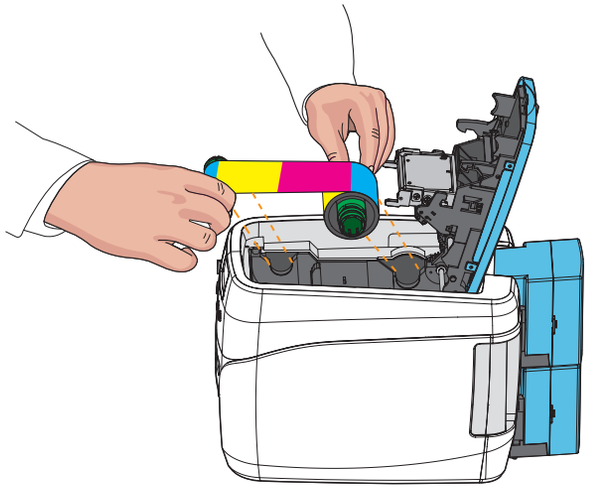
2. Place the (blue) cleaning roller into the **“U-shaped holder”** and push it down.



Caution

- Wash the cleaning roller using running water & dry every 7 days if the printer is used frequently or when replacing the ribbon.
- If the cleaning roller is not cleaned properly, then the card may be printed unevenly or with marks across the card. This may also cause serious damage to parts (e.g. print head).

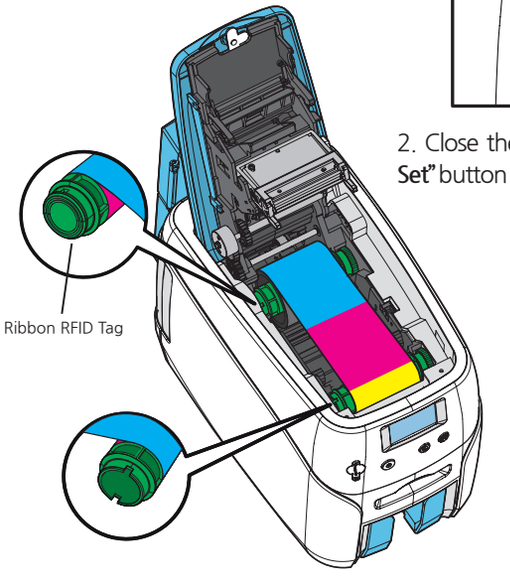
-Load Ribbon

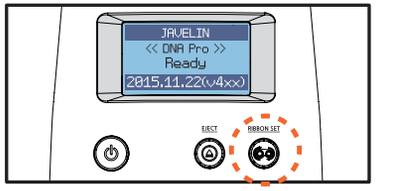


Caution

- Do not close the cover by force when the ribbon is not placed properly as this may cause damage.
- If the Top Cover is not closed, the printer may not print properly (make sure it is closed completely).
- Make sure that the Ribbon RFID Tag is positioned correctly.

1. Make sure that the ribbon is positioned correctly for loading and rolling.



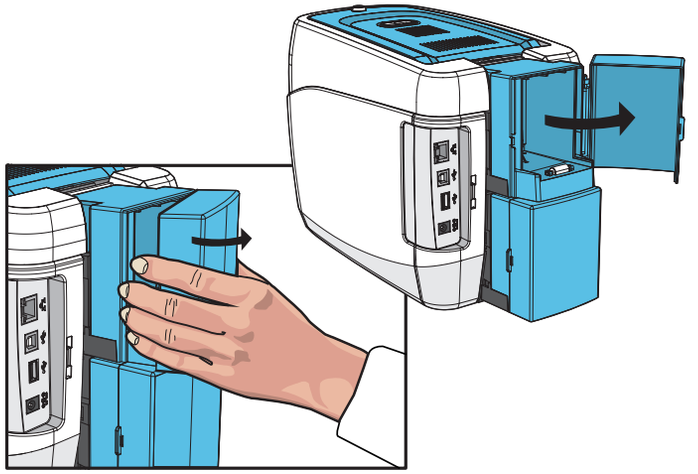


2. Close the cover and press the **“Ribbon Set”** button to complete the process.

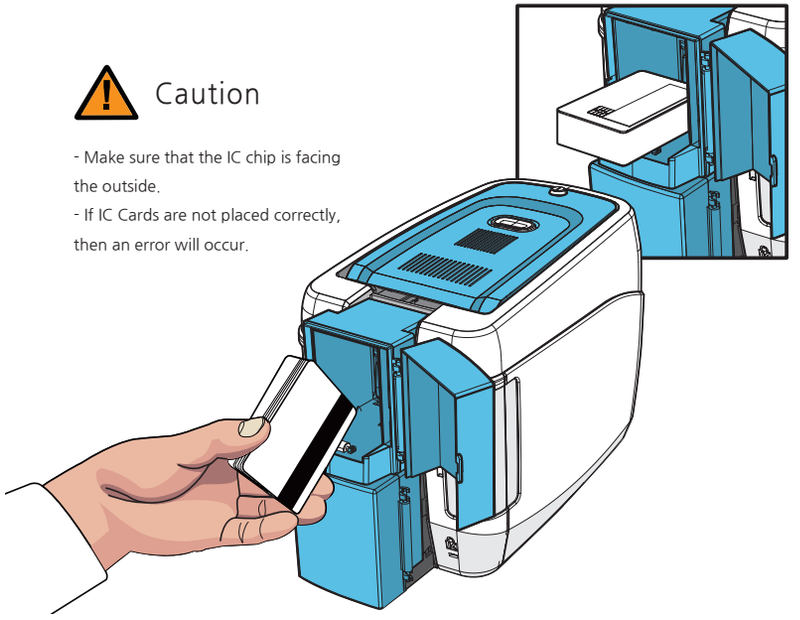
Load Cards

-Place Cards in the Input Hopper

1. Open the Input Hopper by pulling it sideway.



2. Place the cards inside the Input Hopper as shown in the picture.

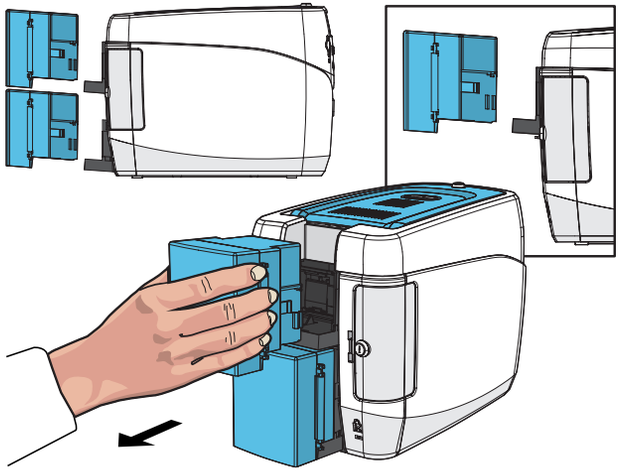


Caution

- Make sure that the IC chip is facing the outside.
- If IC Cards are not placed correctly, then an error will occur.

-Place Cards after Removing the Input Hopper

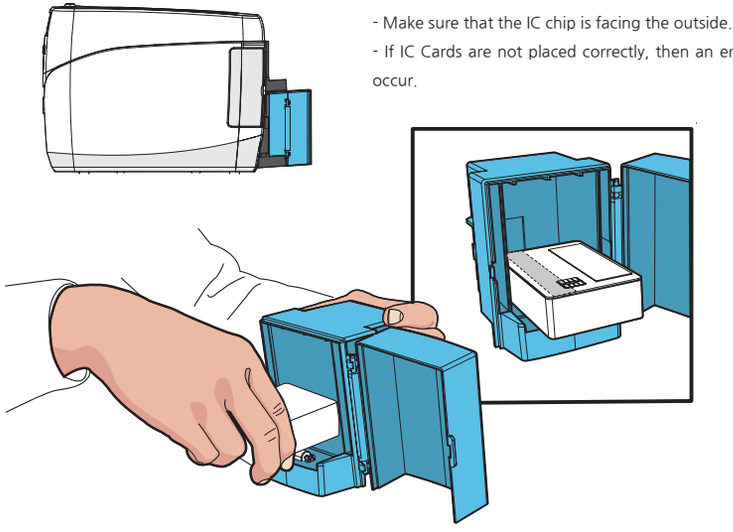
1. Hold the Input Hoppers by the sides, and pull it backward to remove it.



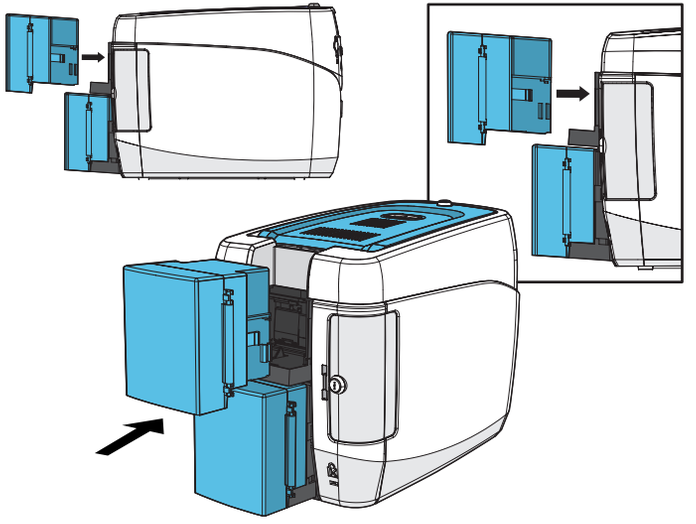
2. Hold the backside of the Input Hopper with one hand and open the cover with the other. Then, place the cards inside as shown in the picture.

Caution

- Make sure that the IC chip is facing the outside.
- If IC Cards are not placed correctly, then an error will occur.

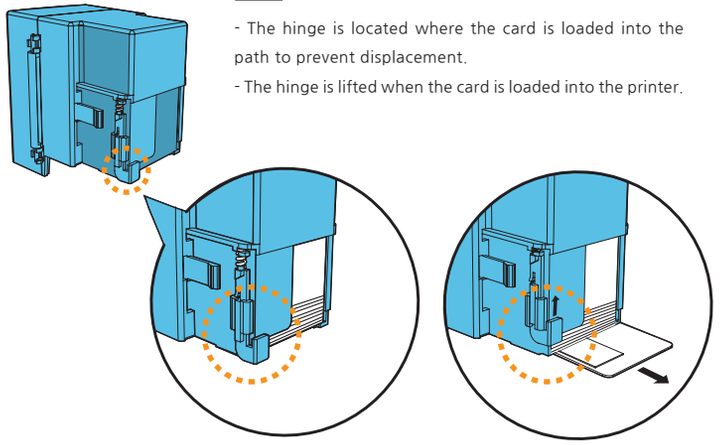


3. Close the cover, and place the Input Hopper in the tray.



Note

- The hinge is located where the card is loaded into the path to prevent displacement.
- The hinge is lifted when the card is loaded into the printer.

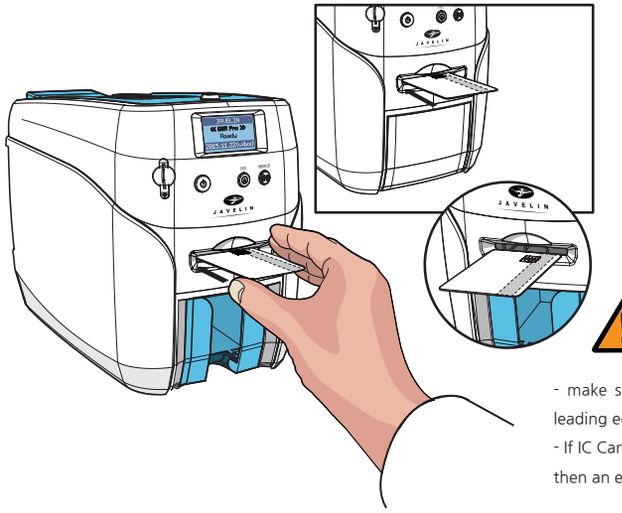


Before the card is loaded

When the card is loading

Print Single Card

1. Insert a card into the front single card slot as shown in the picture.

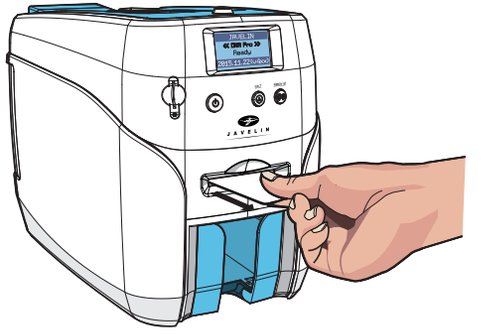


Caution

- make sure the IC Chip is on the leading edge into the printer.
- If IC Cards are not placed correctly, then an error will occur.

2. Use the software to print the card.
The card loaded in the single card slot is printed first, even if there are cards in the Input Hopper.

3. Wait until the card is printed.
This feature is intended for printing both a large quantity of cards (e.g. standard cards) and a small quantity of cards (e.g. VIP membership cards) without removing the cards loaded in the input hopper.

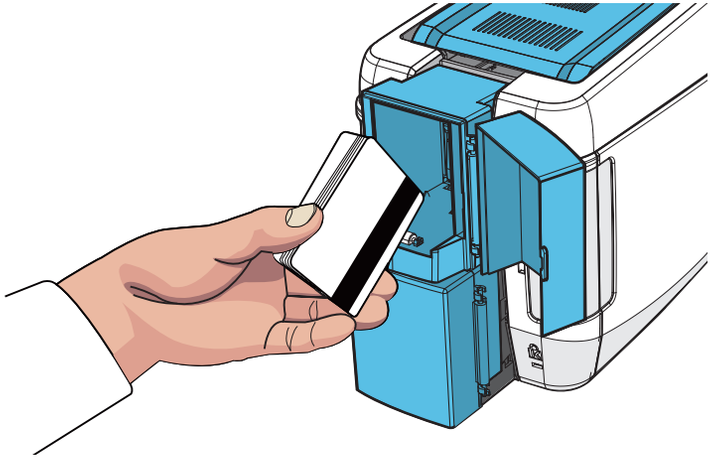


Magnetic Cards

If the printer has the MS module (Single/Triple Track Head), it can encode information on the Mag. Stripe card. (ISO 7811 track 1,2,3, Hi-Co/Lo-Co)

Magnetic Card Standard		: ISO 7811		
ISO 7811	Track	Track 1	Track 2	Track 3
	Recording Density	210 BPI	75 BPI	210 BPI
	Capacity	79 Characters	40 Characters	107 Characters
		(7 bit code)	(5 bit code)	(5 bit code)
	Start / End code	%/?	;/?	;/?

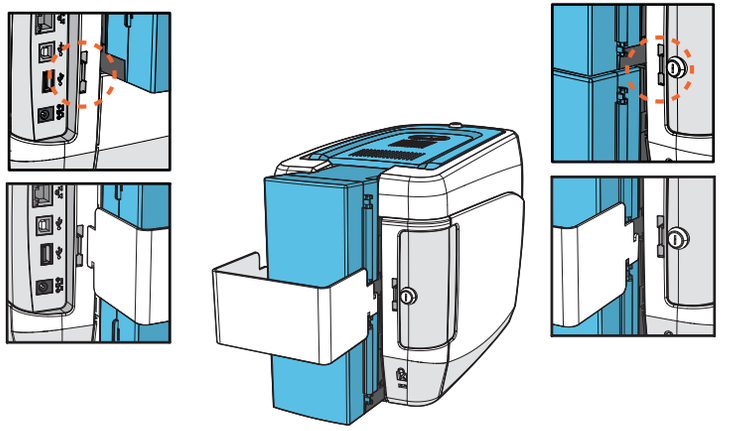
When loading Mag. stripe cards, make sure the magnetic stripe is facing down and on the left side as shown in the pictures.



Input Hopper & Ribbon Lock

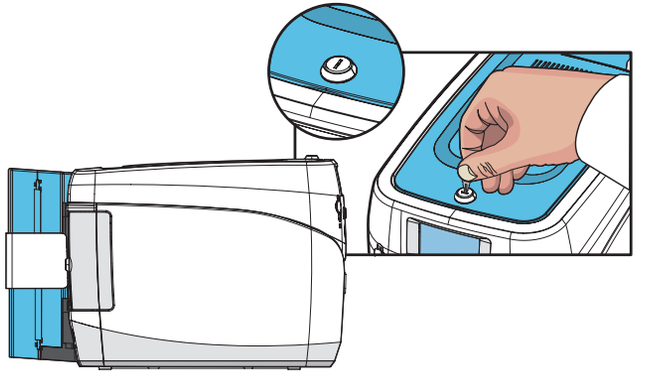
OPTION -Input Hopper Lock

1. Place the Input Hopper Lock in the area highlighted in the circle and push it down to fix. Then, use the Lock Key to lock it.



OPTION -Ribbon Lock

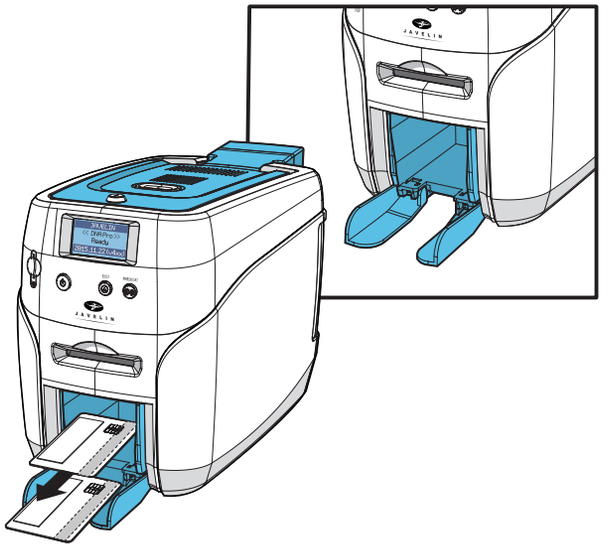
1. Use the Lock Key to lock the Top Cover.



Install/Remove Output Stacker

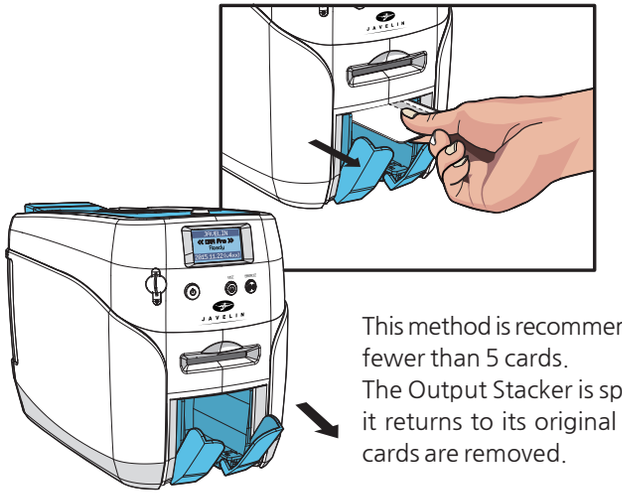
The Output Stacker can be installed or removed as follows:
Option 1: Open the Output Stacker cover and remove the cards.
Option 2: Use the spring load to remove a small quantity of cards.
Option 3: Remove the Output Stacker and the cards.

-Open the Output Stacker Cover and Remove the Cards



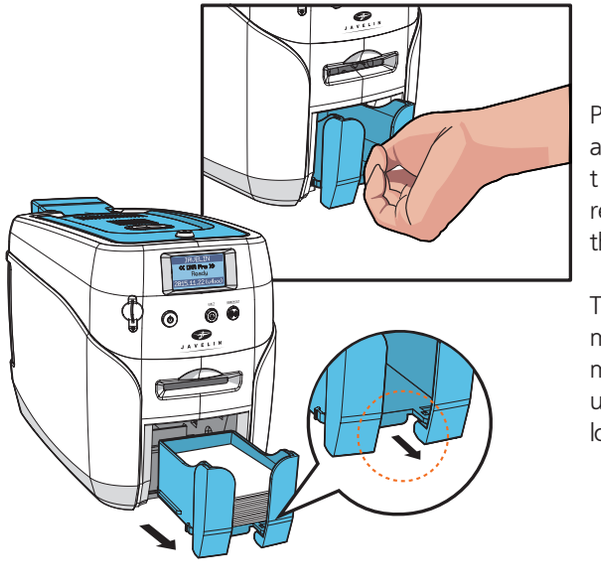
Lower the Output Stacker cover until it latches as shown in the picture.
Use this method when printing a small quantity of cards and check the results right away.

-Use the Spring Load to Remove a Small Quantity of Cards.



This method is recommended when printing fewer than 5 cards.
The Output Stacker is spring loaded so that it returns to its original position when the cards are removed.

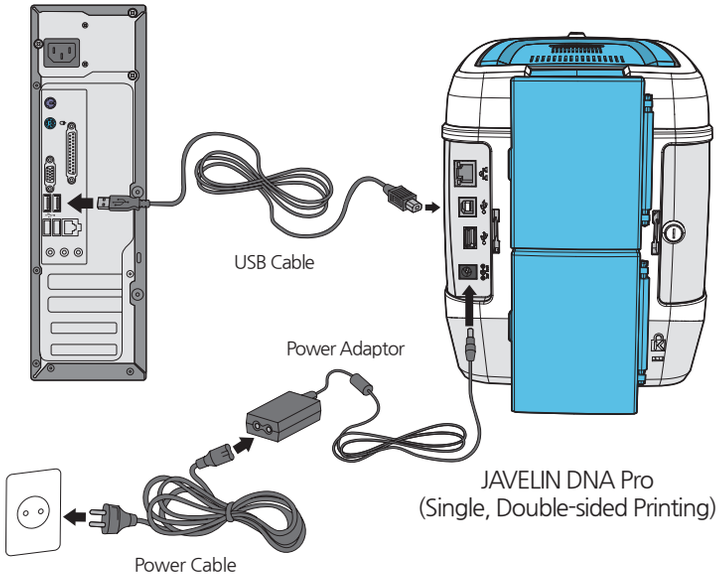
- Remove the Output Stacker and the Cards.

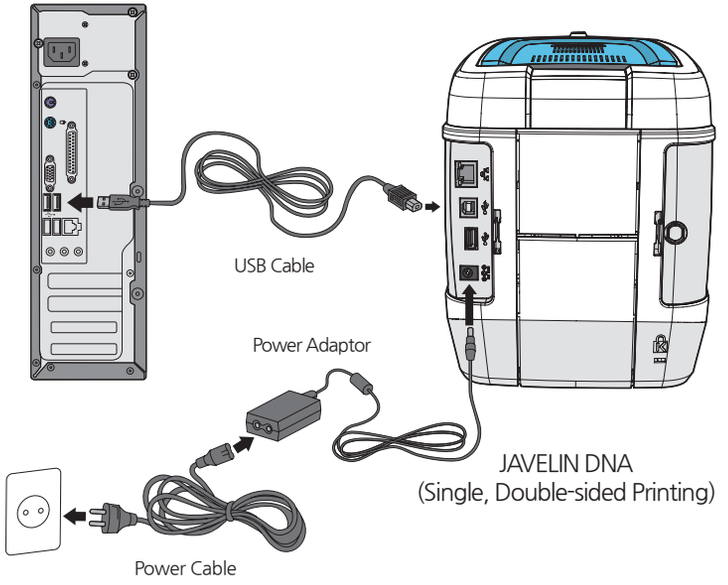


Push the Output Stacker and pull it forward and then pull it back to remove it as shown in the picture.

This method is recommended for printing more than 50 cards, and up to 60 cards can be loaded in this way.

Connect Power & Communication Cables





Install Program

-System Requirements

① Supported Operating Systems

- Windows 2000
- Windows XP (32/64bit)
- Windows Vista (32/64bit)
- Windows 7 (32/64bit)
- Windows 8 (32/64bit)
- Windows 10 (32/64bit)
- Windows 2012 R2 Server
- Windows 2008 Server
- Windows 2003 Server (32/64bit)

② Recommended Specifications

- CPU: Pentium III 1 Ghz (Pentium IV 1.5 Ghz is recommended)
- Memory: 128 MB (512 MB is recommended)
- HDD: 1 GB (5 GB is recommended)
- Internet Explorer 5.5 or higher (6.0 is recommended)

Note You need to log in as an Administrator to install or uninstall the driver on Windows 2000/XP/Vista/7/8/10.

-Install Software

Caution It is recommended to close all programs before installing the software.

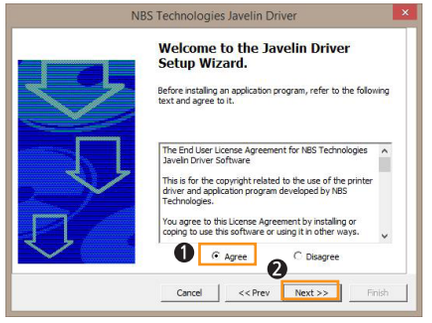
① Install Software Using Local Port(USB)

1. Insert the CD into the PC's CD-ROM drive, and the setup program will start automatically. If the program does not start automatically, then go to the CD-ROM drive's root directory and run **"install.exe"** manually.

2. The initial screen of the Javelin Printer driver is displayed as shown in the picture. Click **“Start”** to install the driver.

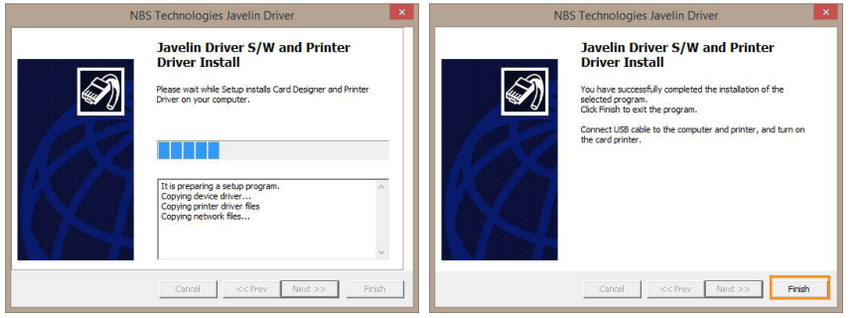
3. Select the option to install and click **“Next”** to proceed. (Printer driver will be installed by default, for Network driver tick both options)

4. Read the Terms of Use and check **“Agree”**. Then, click **“Next”** to proceed.



5. Specify the Port Type and click **“Next”**.
(Select **“CITIUSB”** when connecting the printer directly to the PC using a USB cable.)

6. Click **“Finish”** to complete the installation process.



7. Go to “Devices and Printers” and make sure **“NBS Technologies Javelin Driver”** has been installed.

② Install Software for Network Printer

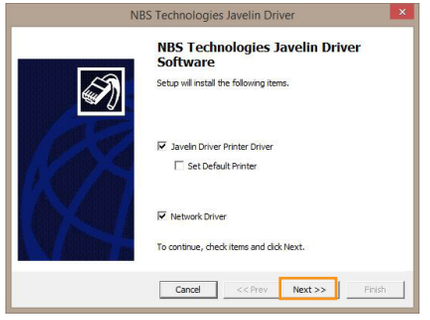
Caution

Connect the LAN cable between the Ethernet port and the router/server.
PC should be connected to network.

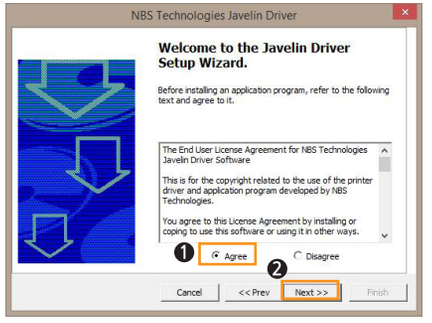
1. Insert the CD into the PC’s CD-ROM drive and the setup program will start automatically. If the program does not start automatically, then go to the CD-ROM drive’s root directory and run **“install.exe”** manually.

2. The initial screen of the Javelin Printer Driver is displayed as shown in the picture. Click **"Start"** to install the program.

3. Select the Printer driver & Network driver options to install the and click **"Next"** to proceed.(Connect a LAN cable Javelin DNA series and select **"Network Software"**)



4. Read the Terms of Software and check **" Agree"**. Then, click **"Next"** to proceed.

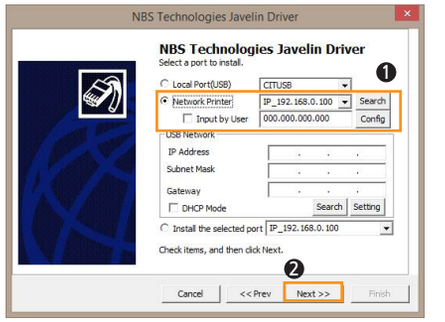


5. Click **"Finish"** to complete the installation process. Finish.

5. Install Network Printer

5-1. Auto Installation

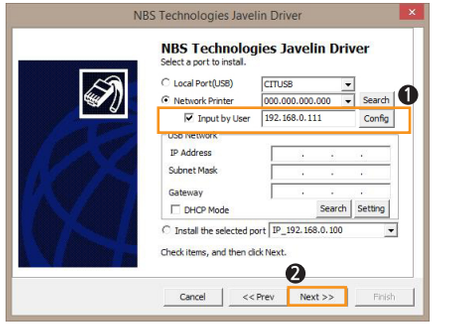
Select **"Network Printer"** and the the printer IP address will be displayed if it is connected to the network. Click **"Next"** to continue.



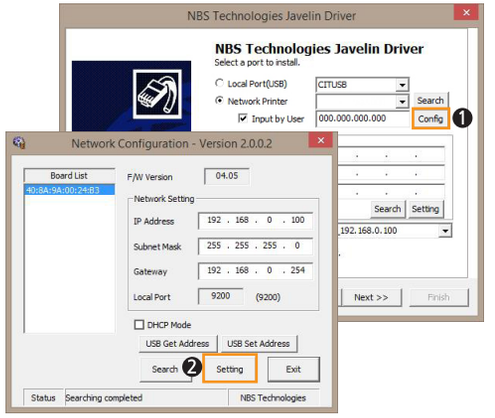
5-2. Manual Installation

If the printer's IP address is not shown as in the picture, then check the following.
(Make sure that the printer is in the same IP range.)

(1) If they are in the same IP range
For example, if your PC's IP address is 192.168.0.xxx, then the printer's IP address must be 192.168.0.yyy.
If they are not in the same IP range, check **"Input by user"** and enter the printer's IP address. Then, click **"Next"** to proceed.



(2) If they are in the same IP range, but the printer cannot be found
Check **“Input by user”** and click **“Setting”**.



When the Network Configuration window pops up, the available printers will be displayed.

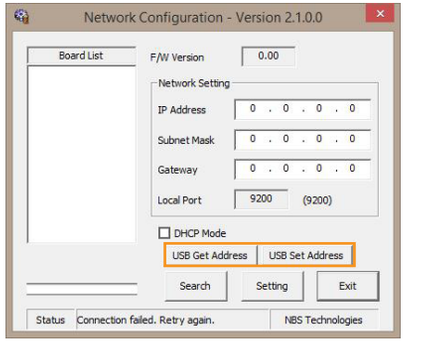
Check the IP Address, Subnet Mask and Gateway and click **"Setting"**.

Check DHCP to enable DHCP mode and click **“Setting”**. If the settings are entered correctly, the printer will initialize.

If the IP address and Board List are not specified in the Network Configuration window, then they may be in a different IP address range or the printer is not connected to the network. You will need to check your network settings.

5-3. Manual Installation (Connect to the printer using a USB connection)

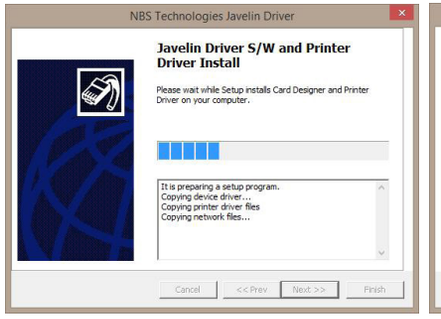
If the printer is not automatically detected, connect to the printer using a USB connection and configure the network settings.

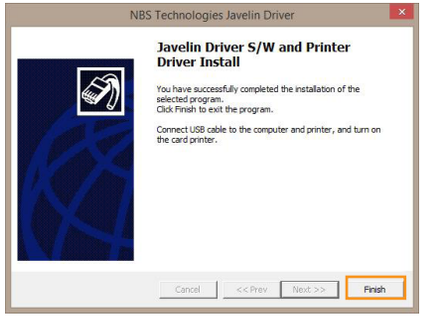


(1) Retrieve Address via USB
Connect the printer to a PC using USB connection and click **"USB Get Address"** to check the device's IP Address, Subnet Mask, Gateway and MAC address.

(2) Set Address via USB
Check the values retrieved through **“Retrieve Address via USB”**.
Enter the IP Address, Subnet Mask, and Gateway, and click **"Set Address via USB"**.

6. Click **“Finish”** to complete the installation process.



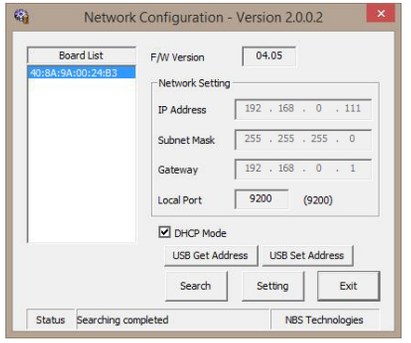


③ Configure Network Settings

After installing the printer driver, go to the following path to configure network settings. (This feature is only supported by some models.)

"Start → All Programs → NBS TECHNOLOGIES → Network"
"Start → Apps(by name)→ NBS Technologies→ Network setting"

1) Network Configuration Window



Item		Description
Board List		Displays a list of detected printers.
Firmware Version		Displays the firmware version of the selected network board.
Network Setting	IP Address	Displays the IP address of the selected network board.
	Subnet Mask	Displays the subnet mask of the selected network board.
	Gateway	Displays the gateway of the selected network board.
	Local Port	Sets the port of the network printer.
DHCP Mode		Sets the IP address automatically for network environments that support DHCP. Otherwise, you need to retrieve the allocated IP address and enter manually.
USB Get Address		Retrieves the printer's network address USB.
USB Set Address		Sets the printer's network address via USB.
Search		Searches the printer's network.
Setting		Saves the new network information to the printer. After the settings are applied, the printer reboots. This reboot takes about 10 seconds.
Exit		Exit the program.

2) DHCP (Dynamic Host Configuration Protocol)?

DHCP (Dynamic Host Configuration Protocol)?

DHCP is a network protocol that automatically allocates TCP/IP to the client PC.

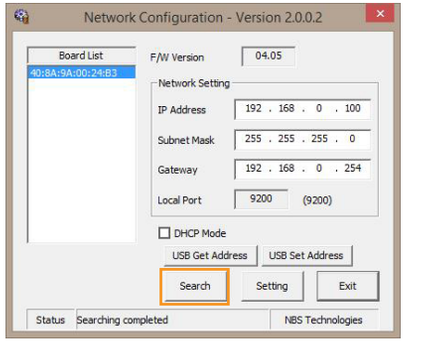
The DHCP server sends the client's network settings (e.g. IP address, subnet mask, gateway, DNS server) automatically.

If **"Obtain an IP address automatically"** is set in your TCP/IP settings, it means that DHCP Mode is enabled.

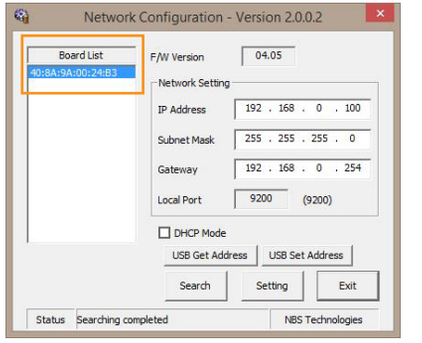
3) Network Setting - Automatic (DHCP supported)

1. Go to **"Start → All Programs → NBS TECHNOLOGIES → Network"** and click OK to open the settings window.

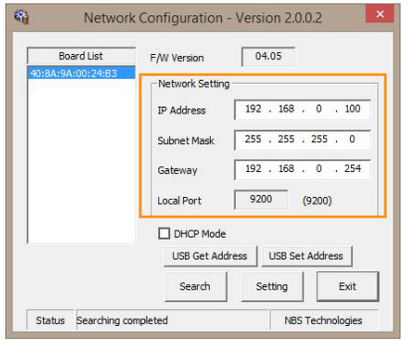
2. In the Network Configuration window, click **"Search"** to search the connected network board.



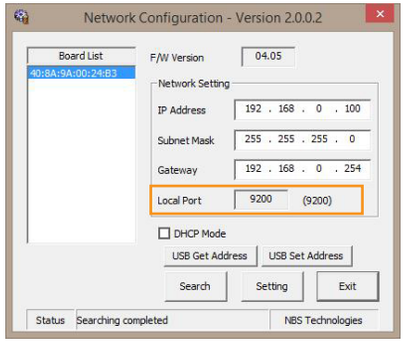
3. Select the MAC Address from the Board List.



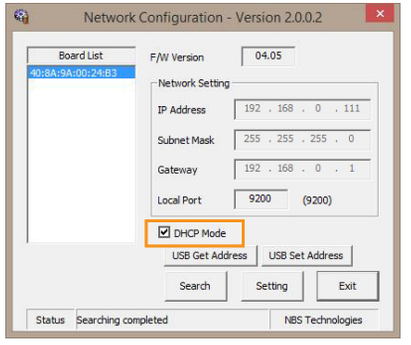
4. The IP address, subnet mask and gateway are allocated automatically by the DHCP server, and there is no need to set the values.



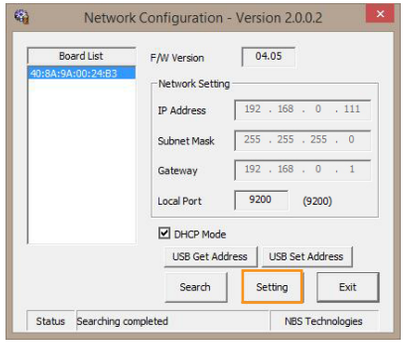
5. Set the Local Port to 9200 (cannot be changed).

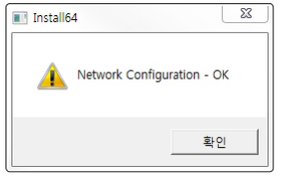


6. Check the DHCP Mode.

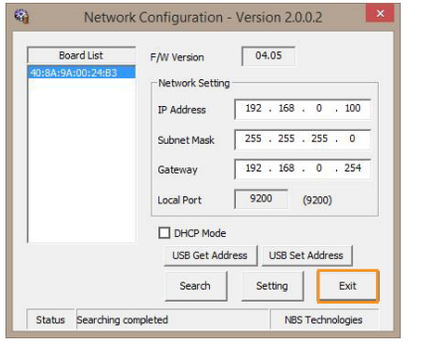


7. Click **"Setting"**. This takes about 30 seconds.
When the settings complete, the printer reboots automatically and retrieves a new IP address from the server.





8. Click **"Exit"** to complete the network configuration process.

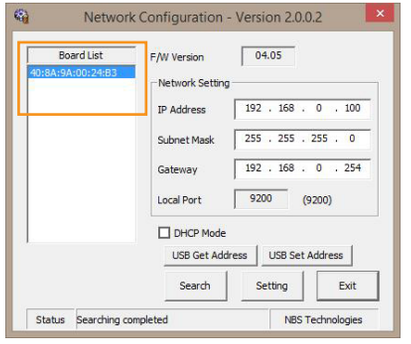


4) Network Setting - Manual

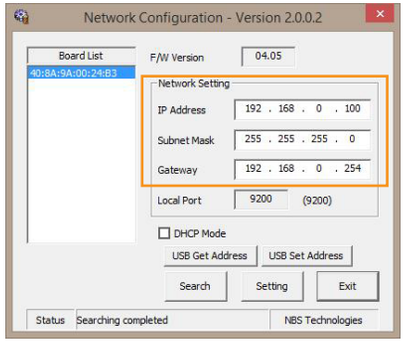
Retrieve the IP Address, Subnet Mask and Gateway to be used by the printer from the network administrator.

1.Go to **"Start → All Programs → NBS TECHNOLOGIES → Network"** and click **"OK"** to open the settings window.

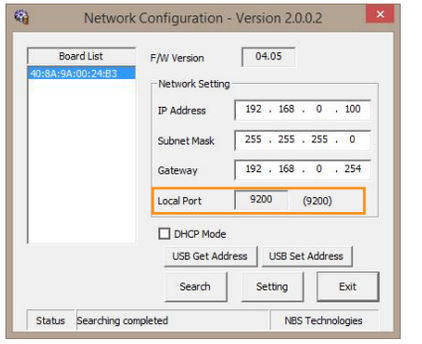
2. Select the MAC address from the Board List.



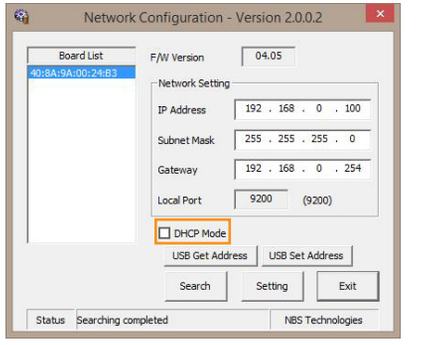
3. Enter IP Address, Subnet Mask and Gateway.



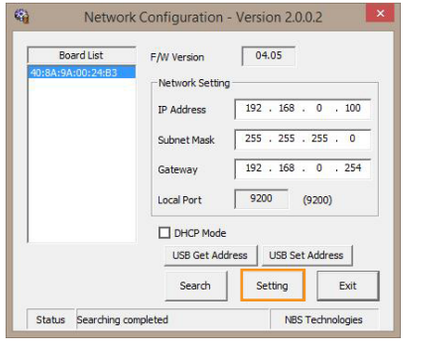
4. Set the Local Port to 9200 (cannot be changed).

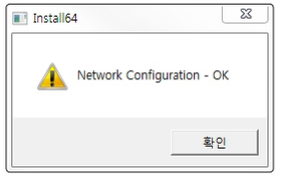


5. Do not check the DHCP Mode. Make sure to leave the box unchecked.

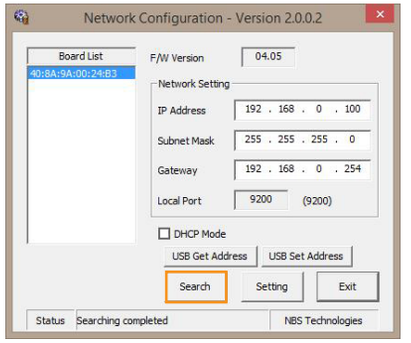


6. Click **"Setting"**. This takes about 30 seconds. When the settings complete, the printer reboots automatically.

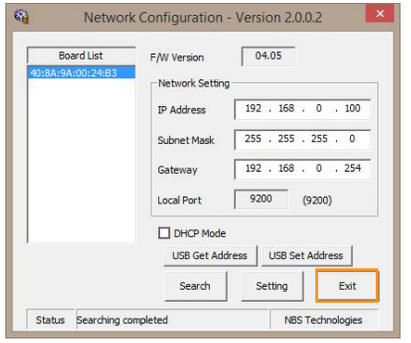




7. Click **"Search"** to check the network configuration.



8. Click **"Exit"** to complete the network configuration process.



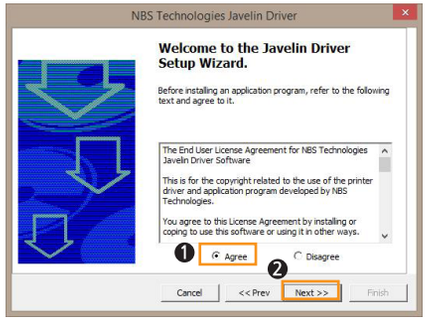
④ Install Software from the List of Connected Devices

1. Insert the CD into the PC's CD-ROM drive and the setup program will start automatically. If the program does not start automatically, then go to the CD-ROM drive's root directory and run **"install.exe"** manually.

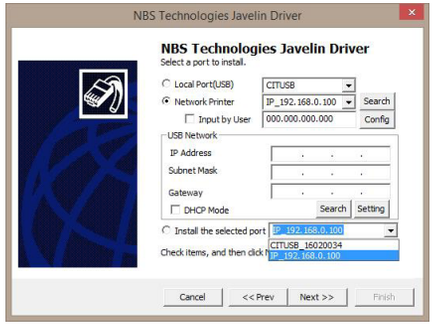
2. The initial screen of the Javelin Printer Driver is displayed as shown in the picture. Click **"Start"** to install the program.

3. Select the option to install and click **"Next"** to proceed.

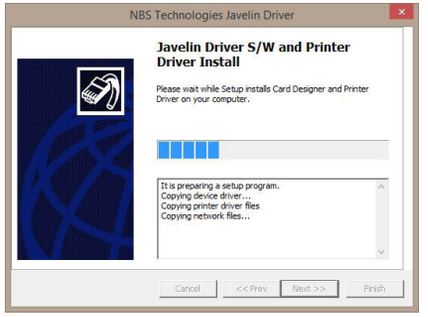
4. Read the Terms of Use and check **"Agree"**. Then, click **"Next"** to proceed.

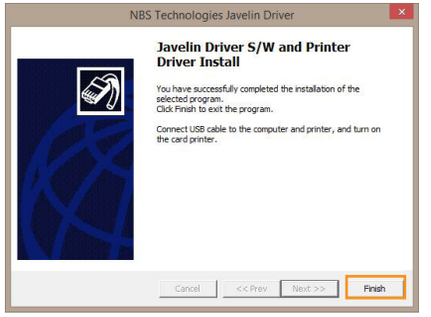


5. Select **“Install the Selected port”** and it displays the printers that can be connected to a PC. Printers on other networks are not included in the list. Click **“Next”** to proceed.



6. Click **“Finish”** to complete the installation process.

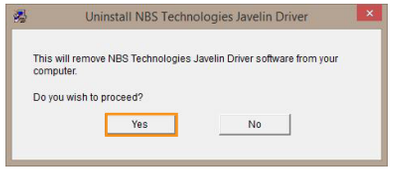


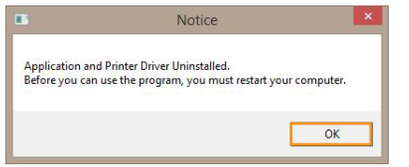


7. Go to “Devices and Printers” and make sure **“NBS Technologies Javelin Driver”** has been installed.

Uninstall Program

Go to Control panel → Uninstall Program → Select NBS Technologies Javelin Driver on the list → Select uninstall.





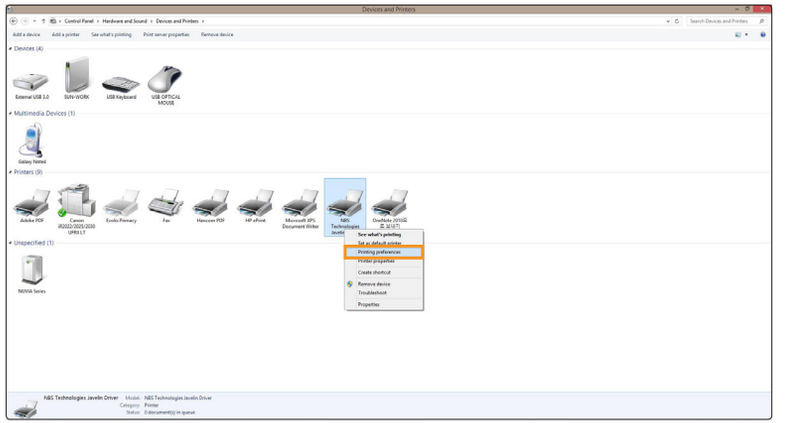
Print Cards

-Set as Default Printer

You can change the printer settings using the functions provided by the printer driver.

1. Go to **“Hardware and Sound → Devices and Printers”** in the **“Control Panel”**.

2. Right-click **“NBS Technologies Javelin Driver”** and select **“Set as default printer”**.

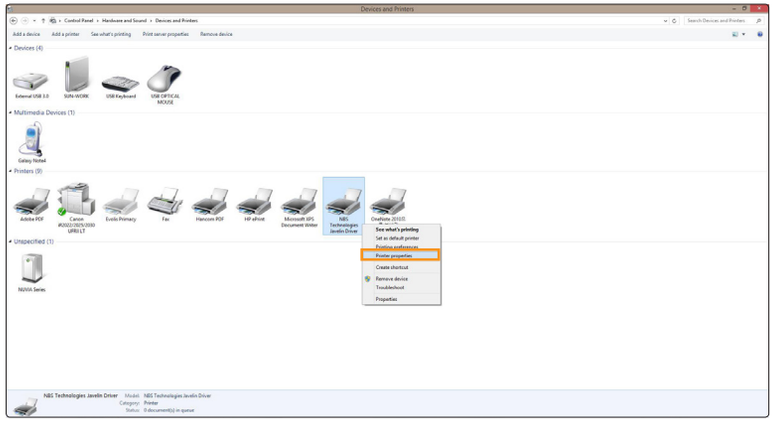


Note Use this printer settings when there are no other printers connected to your PC.

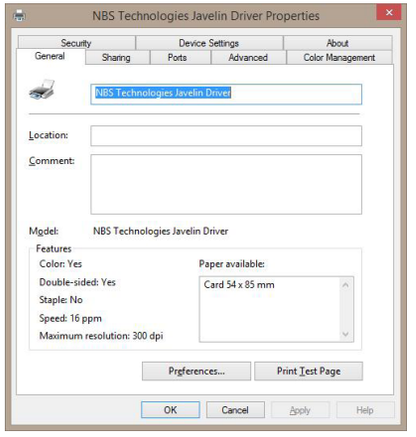
-Change Printer Port (Using the Printer Driver)

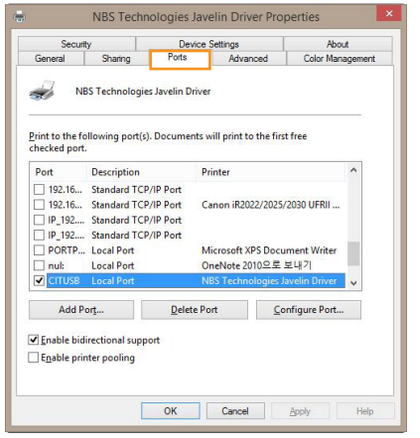
1. Go to “Hardware and Sound → Devices and Printers” in the “Control Panel”.

2. Right-click **“NBS Technologies Javelin Driver”** and select **“Properties (or Printer Properties)”.**



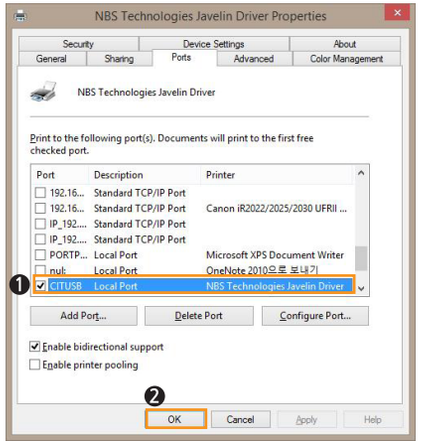
3. Select **“Ports (or Advanced)”** tab in the **“Card Printer Properties”**.



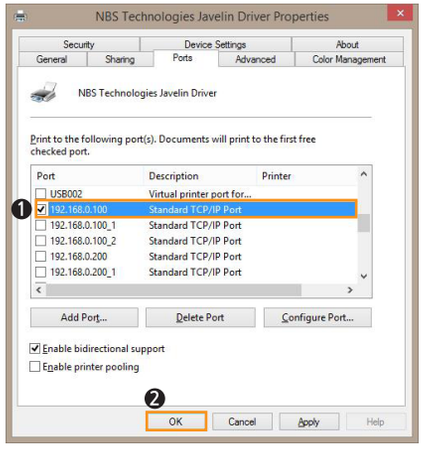


4. Select the port you want to use and click **“OK”**.

USB Port: CITUSB (Local Port)



Network Port: Refer to **"Configure Network Settings"** (P40) and select the port (IP Address) accordingly.



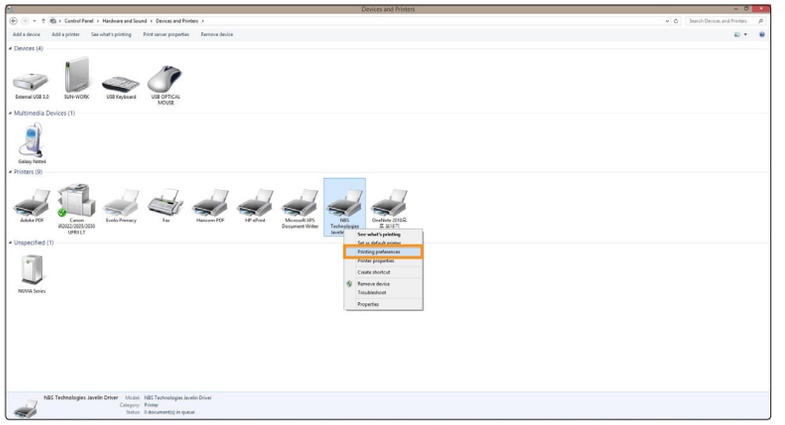
Note

When the driver is installed successfully, **"Enable bidirectional support"** will be selected automatically. If there is any problem printing through the network port, make sure to disable **"Enable bidirectional support"**.

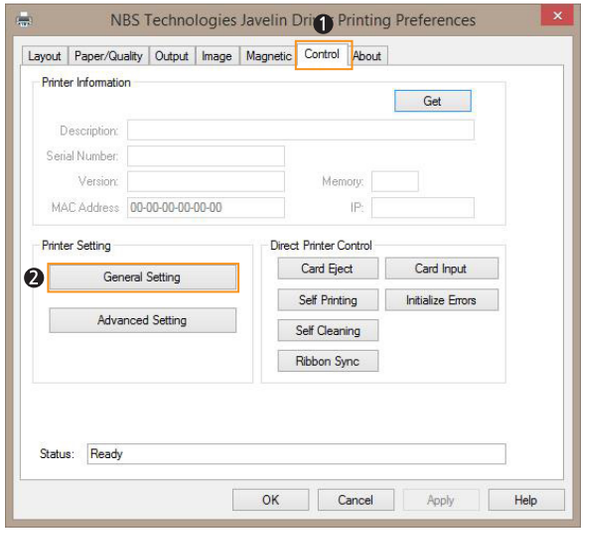
-Select Input Hopper in the Printer Settings

1. Go to **"Hardware and Sound → Devices and Printers"** in the **"Control Panel"**.

2. Right-click **"NBS Technologies Javelin Driver"** and select **"Printing Preferences"**.



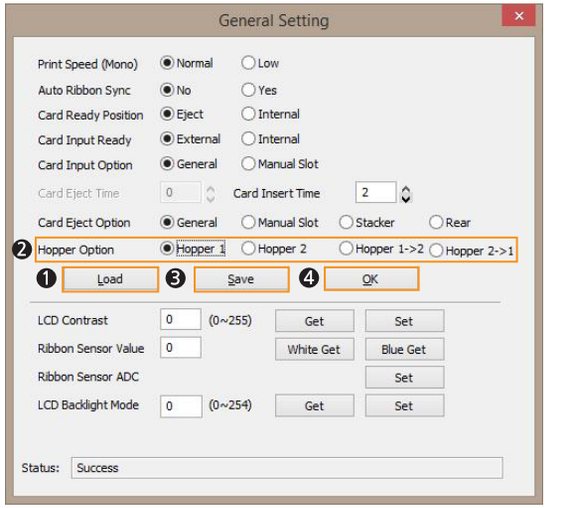
3. Go to **"Printer Setting → General Setting"** in the **"Control"** tab.



3. Make sure that the printer is on, and click **"Load"** to activate the Input Hopper Option.

4. Select **"Hopper Option"** and click **"Save"** to save the new settings.

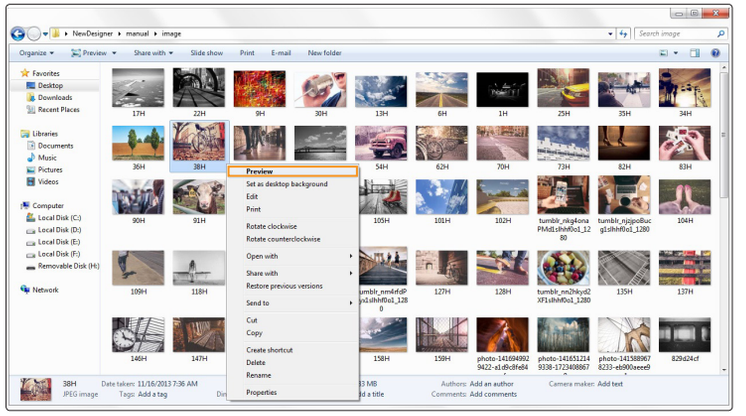
5. Click **"OK"** to close the General Setting tab.



Item		Description
Load		Load the General Settings of the printer.
Hopper Option	Hopper 1	Feed cards only from the upper Input Hopper.
	Hopper 2	Feed cards only from the lower Input Hopper.
	Hopper 1→2	Feed cards from the upper Input Hopper first. When it is empty, the printer feeds cards from the lower Input Hopper.
	Hopper 2→1	Feed cards from the lower Input Hopper first . When it is empty, the printer feeds cards from the upper Input Hopper.
Save		Save the General Settings of the printer.
OK		Close the General Settings window.

- Select Input Hopper 1/2 from External Program (Windows Preview)

1. Right-click the image you want to print and select **"Preview"**.

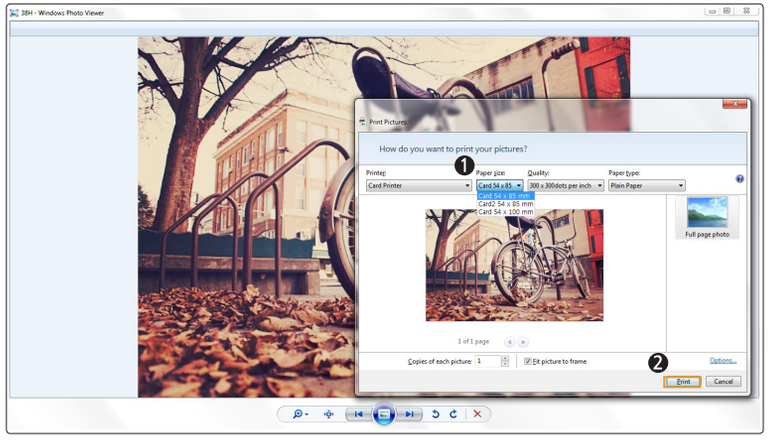


2. Select **"Print"** on the Windows Photo Viewer to open the print window. Make sure that the NBS Technologies Javelin Driver is selected and specify the Input Hopper using the paper size menu.

Card 54x85mm → Feed the cards from the upper Input Hopper.

Card2 54x85mm → Feed the cards from the lower Input Hopper.

After specifying the Input Hopper, click **"Print"** to start printing.



Print Using Application Programs & Configure Driver Settings

-Print Using Application Programs

1. Specify the paper as 53.98mm x 85.60mm to print cards using application programs e.g. Excel, Word.

2. **Click "Print"** in the **"File"** menu to open the print settings.Select **"NBS Technologies Javelin Driver"** in the settings and click **"Print"** or **"OK"** to print.

Make sure that the orientation of the image matches the print settings. You can use the preview option to confirm the print output.

Note

- You can cancel print jobs from either the application program or print spooler.
- If the card is jammed while printing, then press the **"EJECT"** button in the front side of the printer.

-Configure Printer Default Settings in Application Programs

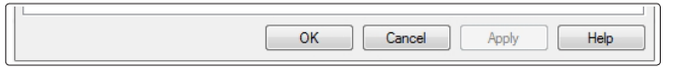
Each time you change the print settings in the application program, it will be reset to the default settings when you exit the program.

Click **"Print"** in the **"File"** menu to open the print settings.
Go to **"Printer Properties → NBS Technologies Javelin Driver Document Properties"** in the printer section and change the settings in the "Layout, Output, Image, Magnetic, Control, and About" tabs. (Click each tab to open the settings.)

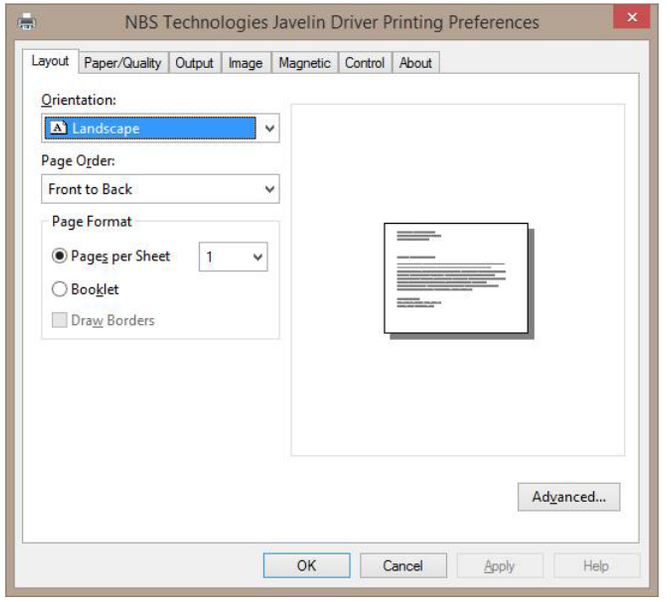
Caution

The card printer does not use the "Paper/Quality" tab in the Card Printer Document Properties.

Click **"OK"** to complete the process.

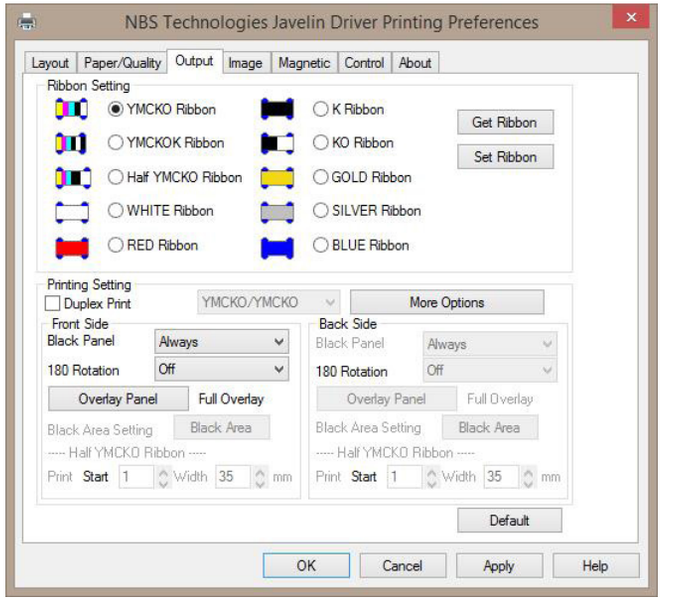


① Layout



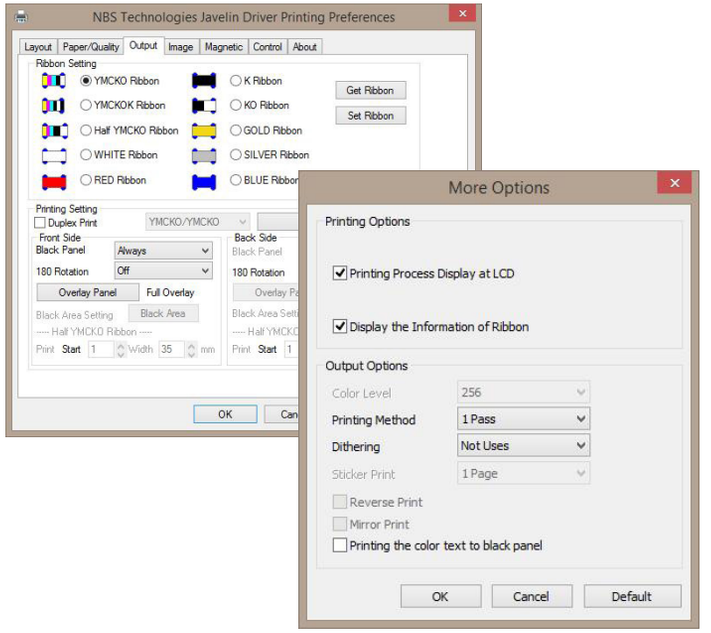
Item	Description
Orientation	Sets the card orientation (Landscape, Portrait)
Page Order	Sets the page sequence
Page Format	Not applicable

② Output



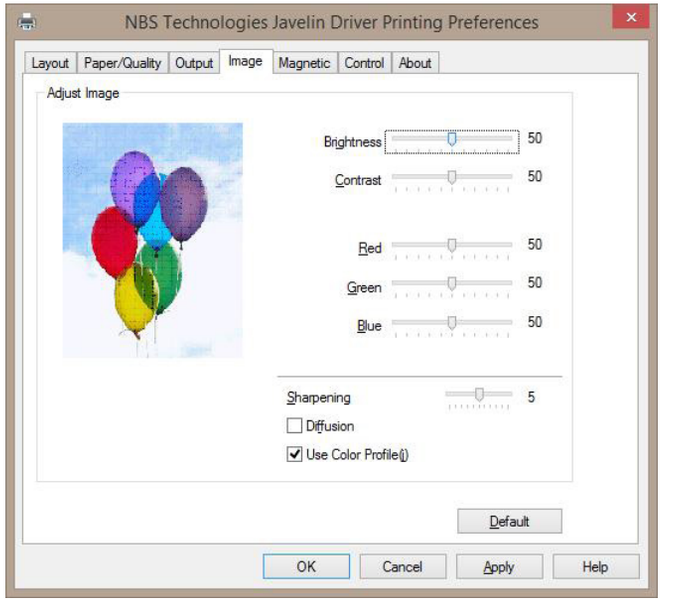
Item		Description
Ribbon Setting		Sets the type of ribbon.
Printer Setting	Duplex Print	Prints on both sides of the card.
	Black Panel	Selects the K panel for printing black text and black & white images included in the document.
	180 Rotation	Rotates the document 180 degrees.
	Overlay Panel	Sets the type of overlay panel for protecting the printed card. -Full Overlay /No Overlay /Selected Area /Use Image File -Smart Card ISO /Smart Card AFNOR /Magnetic Card
Using the printer command (TPCL) 2.0		Check the box for more stability when using Javelin DNA series.

③ Output-Option



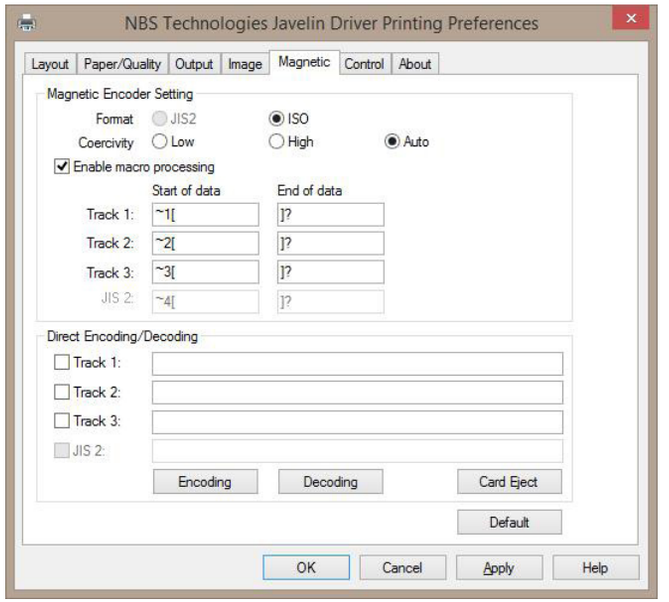
Item		Description
Printing Options	Printing Process Display on LCD	Printing Process Display on LCD
	Display the information of ribbon	Displays residual count of ribbons. This information is only available for ribbons with an RFID tag, and the value is 40 or less.
Output Options	Colour Level	Sets the number Colours used for printing.
	Printing Method	Sets the print mode for ribbon's movement while printing. 1-pass: All YMCKO data is transmitted before printing. 3-pass: All YMCKO data is transmitted, and the transmitted ribbon is printed.
	Dithering	Dithering only applies to the data transmitted to the black panel of the ribbon.
	Reverse Print	Reverse the document.
	Mirror Print	Print a mirror image of the document (flipping the image horizontally).
	Printing the color text to black ribbon(K)	Prints any Colour text in black.

④ Image



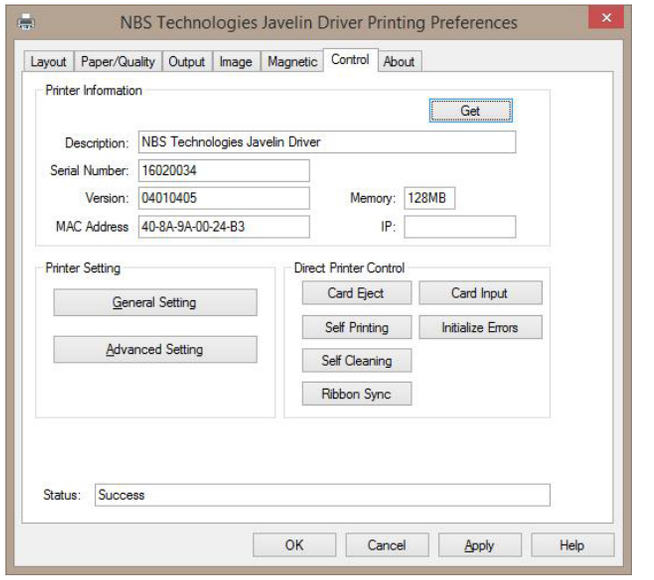
Item		Description
Adjust Image	Brightness	Sets the brightness of the printed card.
	Contrast	Sets dark areas as darker and bright areas as brighter.
	Sharpening	Increases the contrast of adjacent pixels to make the image look sharper.. This filter adjusts the contrast of the edge details and creates brighter and darker lines on each plane of the edge, resulting in a sharper image with clearer outlines.
	Diffusion	Mixes the pixels of an image and makes it look blurry. This filter mixes pixels in such a way to minimize the change of colours.
	Use Color Profile	Supports more colour by using the colour profile.

⑤ Magnetic



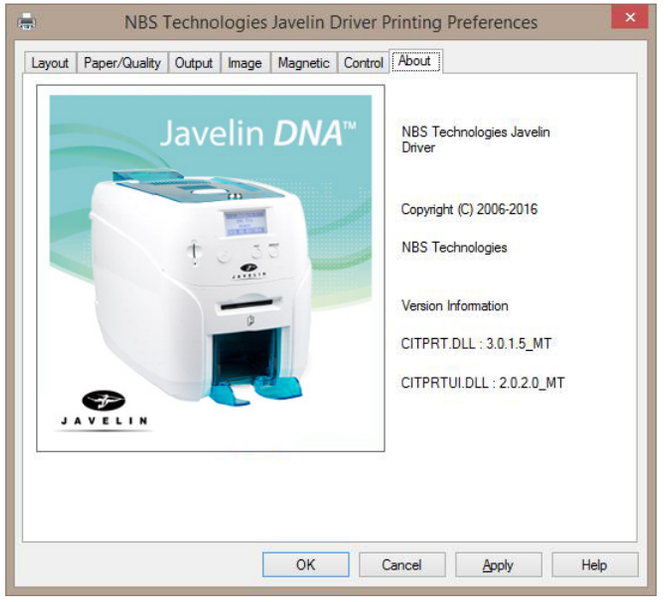
Item		Description
Magnetic Encoder Settings	Format	Sets the encoder format of the magnetic stripe.
	Coercivity	Sets the coercivity type of magnetic stripe.
	Enable macro processing	Sends data to the magnetic stripe. When enabled, it detects the start and end of the encoding data from text format and processes it with Magnetic Stripe Encoding data.
Direct Encoding /Decoding	Encoding	Writes the data of selected track to the magnetic stripe. Track 1, 2, 3: Inputs the data to write on the magnetic stripe card.
	Decoding	Reads the data of the selected track from the magnetic stripe. Track 1, 2, 3: Displays the data read from the magnetic stripe card.
	Card Eject	Ejects any card inside the printer.

⑥ Control



Item		Description
Printer Infomation	Get	Retrieves and displays the information from the printer.
Printer Setting	General Setting	Retrieves/changes the printer settings. - Print Speed (Mono): Normal, Low - Auto Ribbon Sync: No, Yes - Card Ready Position: Eject, Internal - Card Input Option: External, Internal - Card Eject Time: 0 - 30 seconds - Card Insert Time: 2 - 20 seconds
	Advanced Setting	Retrieves/changes the printer settings. -TPH Resistance: 2400 ~ 3600 -TPH Model: KEE, KPE, KPE2 - Card Margin Setting: X-Start, X-End, Y-Offset - Intensity: Color/Mono Ribbon
Direct Printer Control	Card Eject	Ejects the card inside the printer.
	Card Input	Inserts the card placed in the slot.
	Self Printing	Prints a self-test card.
	Self Cleaning	Initializes the cleaning cycle.Make sure that the cleaning card is available.
	Ribbon Sync	Synchronizes the ribbon. It performs the same function as the **"RIBBON SET"** button.
	Initialize Errors	Removes the error status of the printer. This does not solve any errors, but only removes the status so it can process the next command.

⑦ About

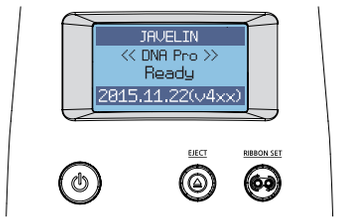


This tab displays the version information.

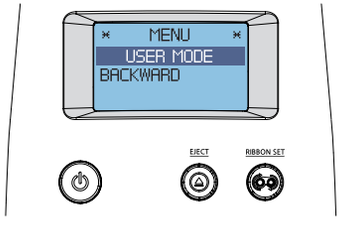
Check IP Address & Print Test Card

-Check IP Address

1. Hold down both the **"EJECT"** and **"RIBBON SET"** buttons until **"USER MODE"** is indicated on the LCD display.

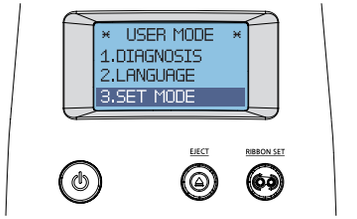


STAND-BY MODE



USER MODE

2. When **"USER MODE"** is indicated in the LCD display, press the **"RIBBON SET"** button to go into **"3. SET MODE"**. Then, hold down the **"RIBBON SET"** button.

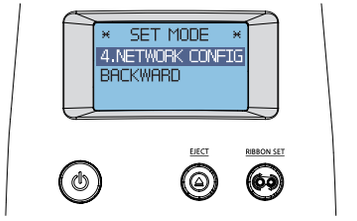


SET MODE

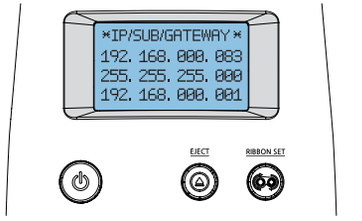
Check

Go up the menu: Press the **"EJECT"** button.
Go down the menu: Press the **"RIBBON SET"** button.

3. When **"SET MODE"** is indicated in the LCD display, press the **"RIBBON SET"** button several times to go to **"4. NETWORK CONFIG"**. Then, hold down the **"RIBBON SET"** button until the IP address displays on the screen.

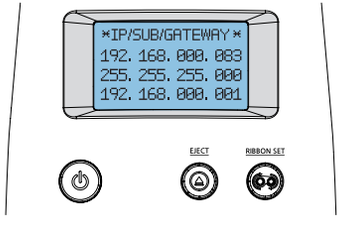


NETWORK CONFIG

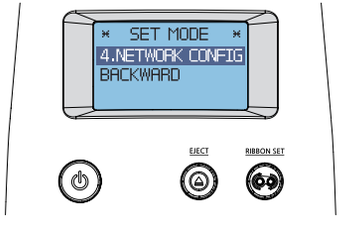


IP/SUB/GATEWAY

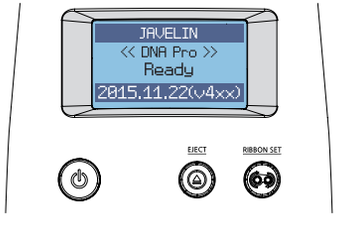
5. To go into STAND-BY mode, hold down both the **"EJECT"** button and **"RIBBON SET"** button together to go to the previous menu (**"4. NETWORK CONFIG"**). Then, hold down the **"EJECT"** button to enter **STAND-BY mode**.



IP/SUB/GATEWAY



NETWORK CONFIG



STAND-BY MODE

-Print Self-Test Card

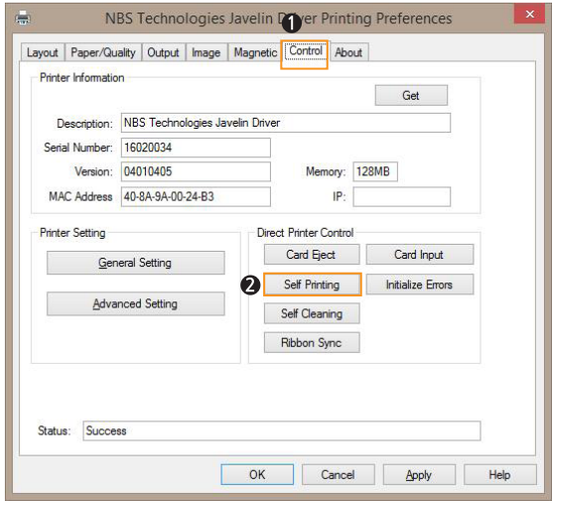
① If Connected to a PC

1. Turn on the printer connected to a PC.

2. Load the ribbon and press the **"RIBBON SET"** button.

3. Insert a single card into the slot or load it on the Input Hopper.

4. Right-click **"NBS Technologies Javelin Driver→ Printing preferences→ Control tab→ Direct Printer Control → Self Printing"**



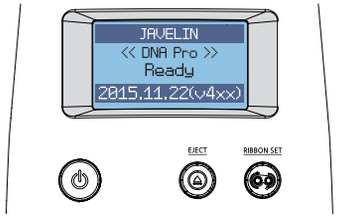
5. **"Self Printing"** is indicated on the LCD display as a test card is printed so that you can check the printing quality.

② If Not Connected to a PC: User Mode

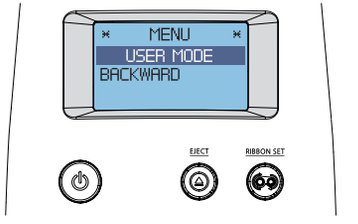
1. Turn on the printer (there is no need to connect it to a PC).

2. Insert a single card into the slot or load it on the Input Hopper and load the ribbon.

3. Hold down both the **"EJECT"** and **"RIBBON SET"** buttons until **"USER MODE"** is indicated on the LCD display.

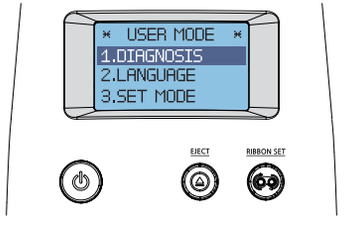


STAND-BY MODE



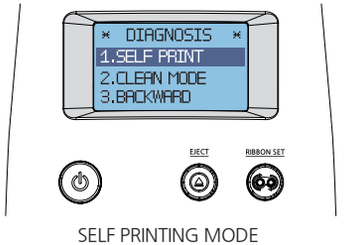
USER MODE

4. Hold down the **"RIBBON SET"** button in the USER MODE, and go into the **"1. DIAGNOSIS"** menu.

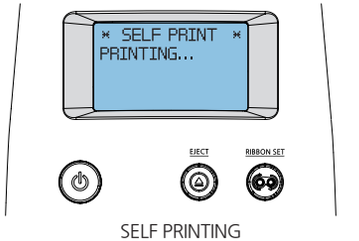


DIAGNOSIS

5. Hold down the **"RIBBON SET"** button in the **"DIAGNOSIS → 1. SELF PRINT"** menu to start printing a test card.

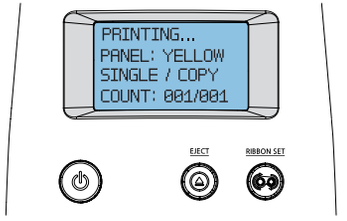


SELF PRINTING MODE

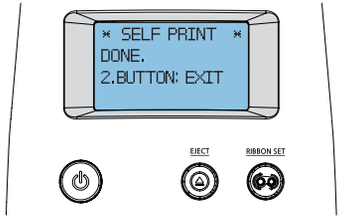


SELF PRINTING

6. The printing progress is indicated on the LCD display. The card will be ejected when the printing is completed.

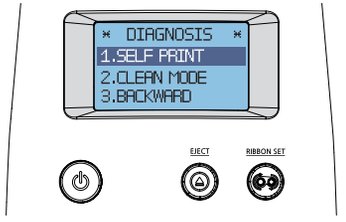


SELF PRINTING

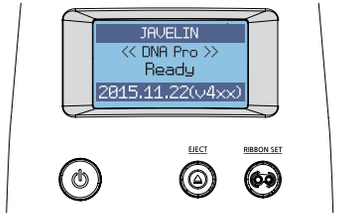


SELF PRINTING DONE

7. When the **"SELF PRINTING DONE"** message displays, hold down both the **"EJECT"** and **"RIBBON SET"** buttons to go back to the **"DIAGNOSIS-SELF PRINT MODE"** mode. To go into **STAND-BY mode**, hold down the **"EJECT"** button.



SELF PRINTING MODE



STAND-BY MODE

Maintenance Instructions

-Supported Cards

This card printer may not support certain types of PVC cards.
Please use the following PVC cards to prevent any issues and achieve the highest printing quality.

① Size

- International Standard (ISO CR80-ISO7810)
- 53.98mm (W) x 85.60mm (L)/3.375”x2.215”

② Thickness

- Minimum: 0.4mm
- Standard: 0.76mm
- Maximum: 1.2mm

③ Acceptable Cards

- Glossy white
- Free of dirt or grease
- Not contaminated
- Free of scratches or dents
- Completely flat
- Static free

④ Unacceptable Cards

- Heavily damaged
- Stained or contaminated
- Scratched
- Bent or deformed
- Embossed

Caution

Do not load or use cards considered as unacceptable as they may damage the parts including the head, sensor, TPH, and roller.

Clean the Printer

-Clean the Exterior

- Clean the printer with a soft, damp cloth. Make sure to unplug the power adapter before cleaning it.
- Do not allow any liquid to drip inside the printer.
- Make sure that the printer is dry before turning it on.

Caution

Do not use any liquid/gel containing a high content of alcohol or solvent to clean the printer as it may cause discoloration or fissure on its surface.

-Clean Inside the Printer Using Cleaning Kit

Clean inside the printer using the cleaning kit every month or every 1000 cards

Make sure to follow the instructions provided below on a regular basis as dusts or contaminants may affect the printing quality or damage the parts.

① Cleaning Kit & Use

1) CR80 Cleaning Card:
Use for cleaning the printer path, roller, and feeding roller.

2) Long T Cleaning Card:
Use for cleaning the printer path, roller, and feeding roller.

3) Alcohol Swab:
Use for cleaning the interior case and sensor.

② Clean the Printer Using CR80 Cleaning Card / Long-T Cleaning Card

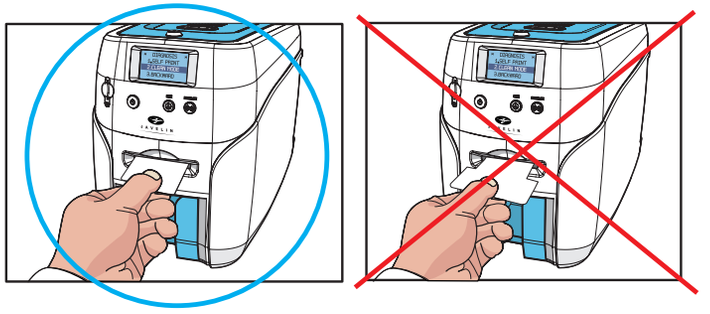
Caution

CR80 Cleaning Card : insert the card to the Single Card Slot.
Long-T Cleaning Card : remove the Input Hopper and insert the card through the tray.
Using these cards in any other way may cause an error.

1) Check the Proper Use of CR80 Cleaning Card / Long-T Cleaning Card

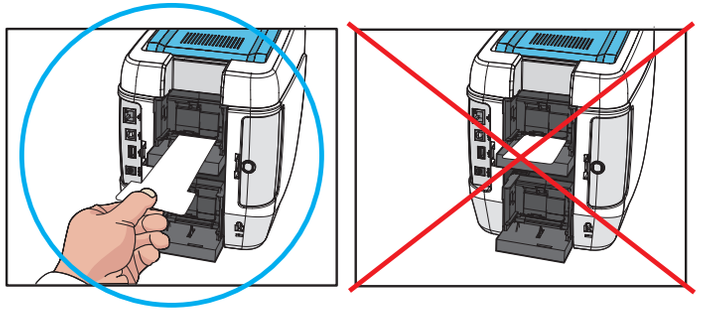
CR80 Cleaning Card

Insert the CR80 Cleaning Card to the Single Card Slot as shown in the picture.



Long-T Cleaning Card

Insert one third of the Long-T Cleaning Card to the card tray as shown in the picture.
(Make sure to remove the Input Hopper before inserting it.)



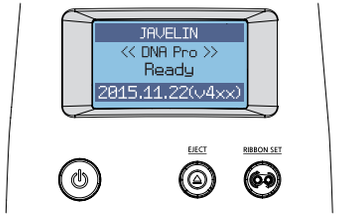
2) Not Connected to a PC: User Mode

1. Open the Top Cover and remove the ribbon. Close the cover.

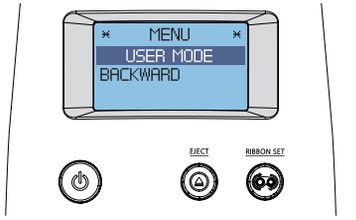
2. Press the **"EJECT"** button located in front of the printer to eject any card inside the Single Card Slot. For the cards in the Input Hopper, open the cover to remove them.

3. Insert the cleaning card to the feeding slot
(Single Card Slot, Input Hopper).

4. Hold down both the **"EJECT"** button and **"RIBBON SET"** button together until the LCD display indicates that the printer is in **"USER MODE".**

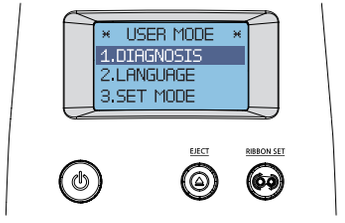


STAND-BY MODE



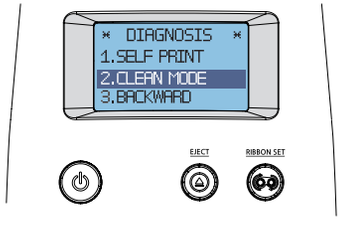
USER MODE

5. Hold down the **“RIBBON SET”** button in the **“USER MODE”** to go into **“1. DIAGNOSIS”.**



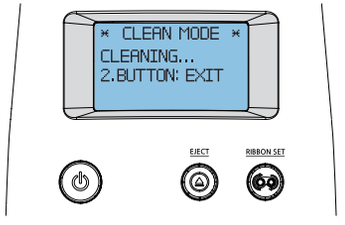
USER MODE

6. When the LCD display indicates **"1. DIAGNOSIS"**, press the **"RIBBON SET"** button to go into **"2. CLEAN MODE"**.



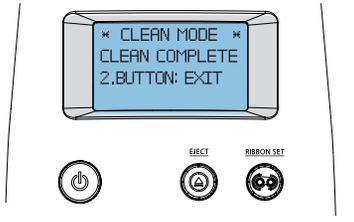
DIAGNOSIS

7. Hold down the **“RIBBON SET”** button until cleaning starts. The cleaning card will be ejected after it moves back and forth 10 times.

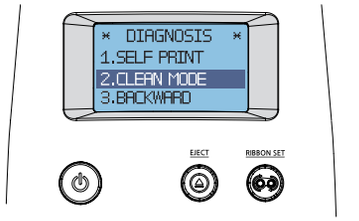


CLEANING

8. When the LCD display indicates **“CLEAN COMPLETE”**, remove the cleaning card. Then, press both the **“EJECT”** and **“RIBBON SET”** buttons to go back to the **“DIAGNOSIS”** menu.



USER MODE

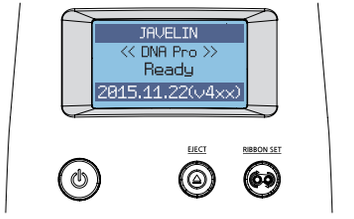


DIAGNOSIS

Caution

Do not use the printer for 2-3 minutes until the alcohol solution is fully dried.

9. Hold down the **"EJECT"** button to go into **Stand-by Mode**.



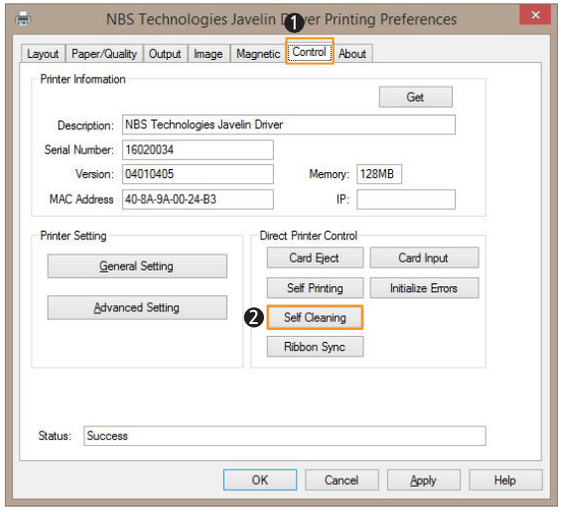
STAND-BY MODE

3) Connected to a PC

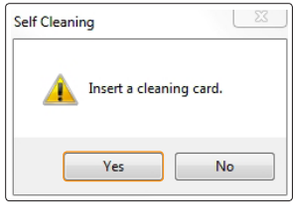
1. Open cover, remove ribbon and all cards and close the cover.

2. Go to **"Control Panel → Hardware and Sound → Devices and Printers"** and right-click the **"NBS Technologies Javelin Driver"** driver icon. Then, select **"Printing preferences"**.

3. Go to **"Card Printer Printing preferences → Control"** and click **"Self-Cleaning"**.



4. Insert a cleaning card when prompted by the **"Insert a cleaning card"** message, and then click **"Yes"**.



5. The cleaning card will be ejected after it moves back and forth 10 times.

6. Do not use the printer for 2-3 minutes until the alcohol solution is fully dried.

③ Clean the Printer Using Alcohol Swab

You can clean the printer's TPH and sensor and wipe the ink and dusts using an alcohol swab.

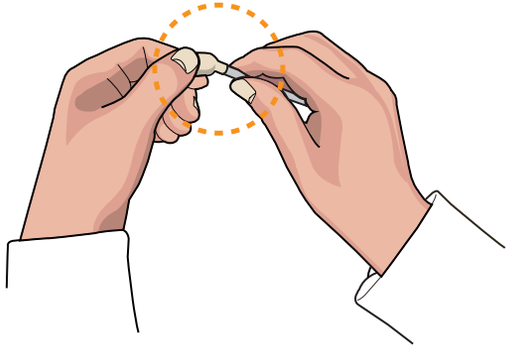
Caution

Do not use any liquid/gel containing a high content of alcohol or solvent to clean the printer as it may cause discoloration or fissure on its surface. Make sure to use authorized alcohol swabs only.

1) Clean the Inside of the Printer Using Alcohol Swab

1. Open the Top Cover and remove the ribbon. Press the **"EJECT"** button located in front of the printer to eject any card inside the printer.

2. Turn off the printer connected to a PC, and unplug the power adapter.



3. Then, clean places in the printer where you cannot reach with your hands.

Caution

Do not use the printer for 2-3 minutes until the alcohol solution is fully dried.

2) Clean the Printer's TPH Using Alcohol Swab

It is recommended to clean the printer at least once a month or whenever you replace the ribbon.

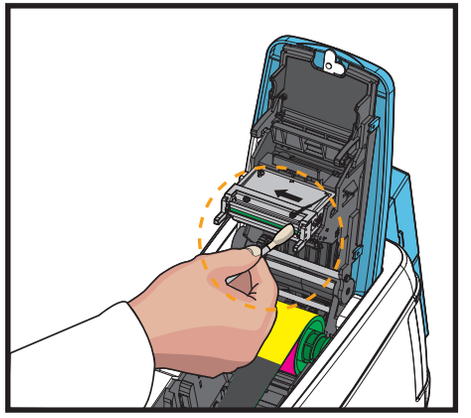
1. Turn off the printer connected to a PC and unplug the power adapter.

2. Clean the main body of the TPH using the cotton swab before cleaning its head.

3. Make sure to clean the ceramic edge of the printhead, as shown in the picture.

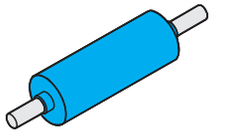
Caution

Do not touch the TPH head with your hands as this can damage it.



4. Make sure that the TPH is fully dried before turning the printer on; otherwise, the TPH may get damaged.

-Clean the Blue Cleaning Roller



Blue Cleaning Roller

This cleaning tool is designed to remove any unwanted materials from the surface of cards, and it can be used semi-permanently since it can be washed. It is recommended to clean it at least once every two weeks or every 200 cards.

1. Remove the cleaning roller from the printer.

2. Wash it under running water.

3. Make sure that it is fully dried before installing it into the printer.

Troubleshooting

Some of the problems you may encounter while using the printer can be fixed by referring to the following troubleshooting guide. If the problem persists, then please contact your local dealer.

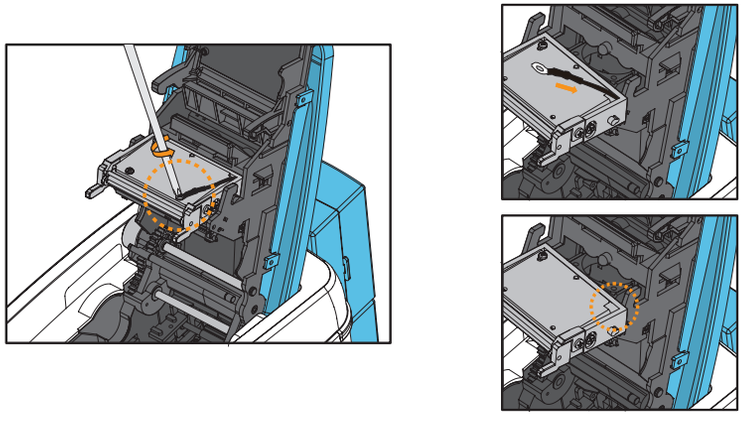
-Errors

① TPH

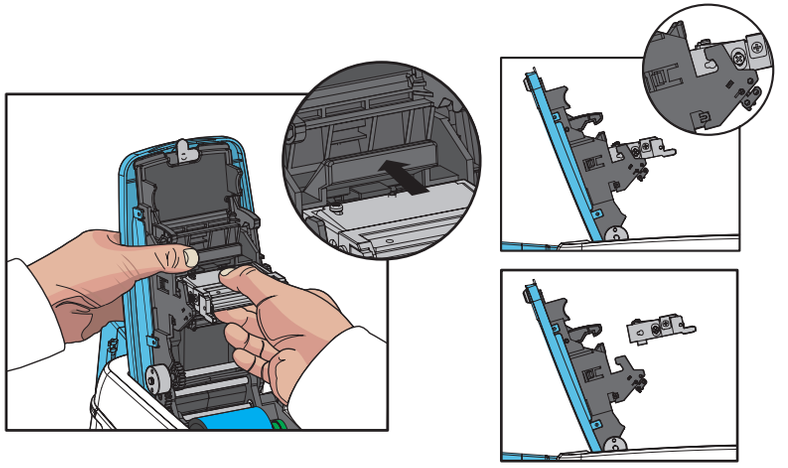
Code	Code Name	Description	Solution
10	Top Cover (TPH Module)	The cover opens while printing.	Check that the cover is closed properly. Replace the TPH open checking sensor.
11	TPH Up/Down Failure	The TPH up/down movement fails or is interrupted.	Check the TPH up/down module.
13	Abnormal TPH Thermistor Temperature	The TPH thermistor Temperature is abnormal.	Check the temperature of the TPH thermistor (operating temp.: 0c°~70c°). Replace the TPH.

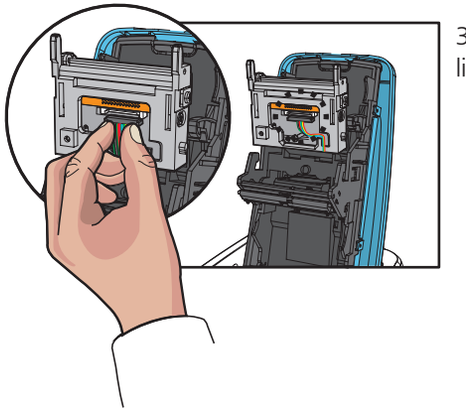
1) Replace the TPH

1. Detach the earth cable on TPH as shown in the below pictures.

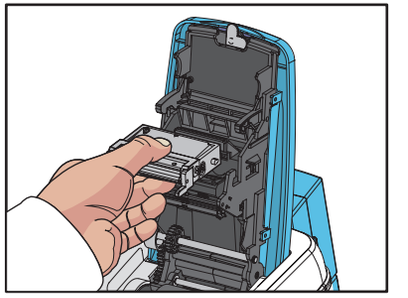


2. While pressing down the black bar above printhead, push the TPH by its body upwards and forwards. Taking care not to touch the ceramic edge of the printhead.





3. Remove the TPH's connector by lifting it.



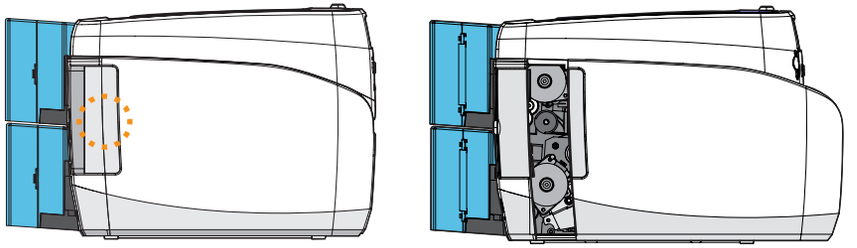
4. Pull it towards you to remove, and then replace it with a new one. (Install the TPH in reverse order of the removal steps.)

② Card Feeding

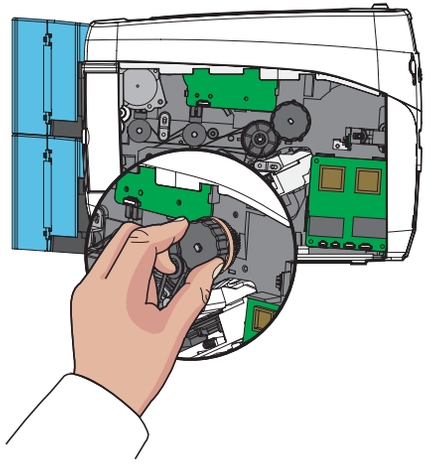
Code	Code Name	Description	Solution
12	Card Jammed	The card is jammed in the path.	Check the path to see if the card is jammed.

1) Remove Jammed Card (Single-sided Printing)

1. Open the side cover by holding the area highlighted by the circle and pushing it towards the front of the printer as shown in the picture.

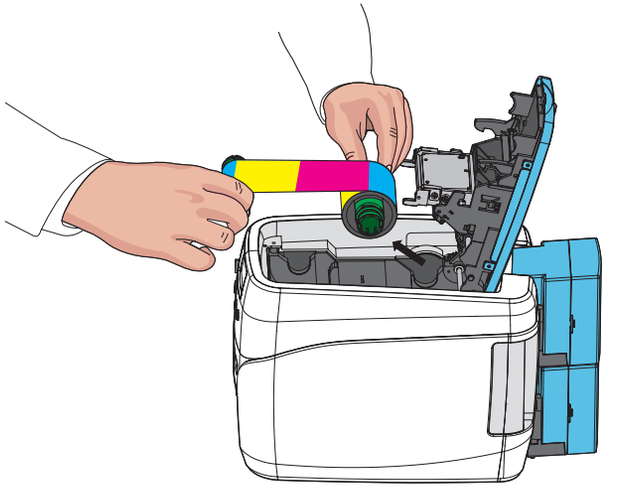


2. Rotate the knob to remove any jammed card inside the path as shown in the picture.
This method can only be used for single-sided printing models (without the flipper) only.

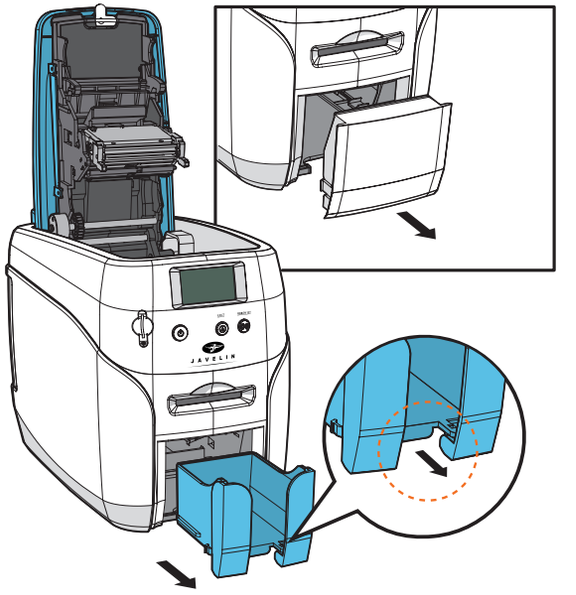


2) Remove Jammed Card (Double-sided Printing)

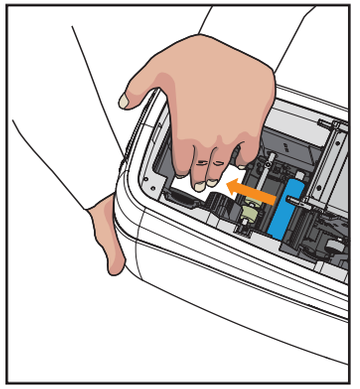
1. Turn off the printer and open the cover. Remove the ribbon inside.

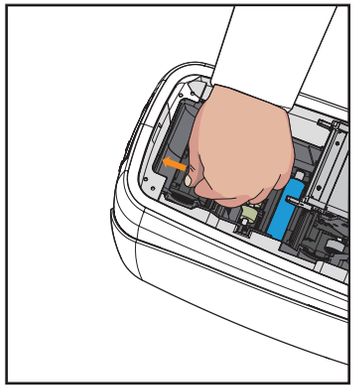


2. Keep the cover open and remove the output card hopper(stacker).
(For Javelin DNA, remove the front cover deco)



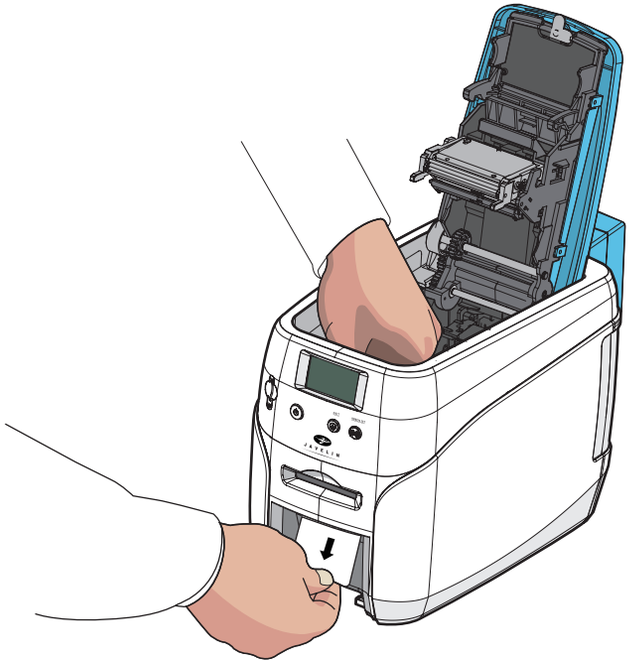
3. Push the card to the front of the printer and then press the card to down.
Tilt the card 70~90 degree down in order to eject the card easily.





Caution When the flipper is rotating, a card can be moved back and forth. Hold a card tightly in order to prevent any movement of a card.

4. Pull out the card inside manually as shown in the below pictures.



③ Ribbon

Code	Code Name	Description	Solution
14	Ribbon Encoder Error	Disconnected ribbon, Ribbon end or encoder error occurs.	Check the Ribbon and Ribbon encoder status.

④ Card

Code	Code Name	Description	Solution
17	IC Module Up/ Down Error	IC Content module position error occurs.	Repair service is required.
50	[Changer] Module Response Timeout	Flipper communication error occurs.	Turn off → Remove any cards → Reboot
51	[Changer] Module Transmission Timeout	Flipper communication error occurs	Turn off → Remove any cards → Reboot
52	[Changer] Home Position Failure	An error occurs at the Flipper home position.	Turn off → Remove any cards → Reboot
53	[Changer] Card Flipper Failure	An error occurs at the Flipper turn up.	Turn off → Remove any cards → Reboot
54	[Changer] Card Input Timeout	The printer stops when the card is entering the Flipper.	Turn off → Remove any cards → Reboot
55	[Changer] Card Input Jam	The card fails to enter the Flipper on time.	Turn off → Remove any cards → Reboot
56	[Changer] Card Output Jam	A card is jammed in the Flipper.	Turn off → Remove any cards → Reboot
57	[Changer] Card Exist	An abnormal card is found in the Flipper.	Turn off → Remove any cards → Reboot

⑤ Miscellaneous

Code	Code Name	Description	Solution
15	Media Error	The media error occurs.	Check the card (media) and path sensor status.
16	EEPROM Error	An EEPROM read/ write error occurs.	Reboot or replace the EEPROM.

-Warning

①Card

Code	Code Name	Description	Solution
23	[IC] Contact Error	IC fails to make contact.	Check the IC contact module.
24	[MS] Encoder Error	An MS encoding error occurs.	Check the MS module.
25	[MS] Read Error	All 3 MS tracks fail to read.	Check the MS module.
26	[MS] Read STX Error	No STX is found in the MS reading.	Check the MS feeding.
27	[MS] Read Parity Error	A parity error occurs in the MS reading.	Check the MS feeding
28	[MS] Read ETX Error	No ETX is found in the MS reading.	Check the MS feeding.
29	[MS] Read LRC Error	LRC is inconsistent in the MS reading.	Check the MS feeding and replace the MS card.
30	IC Module Response Timeout	IC module communication fails.	Check the IFM B/D.
31	RF Module Response Timeout	RF module communication fails.	Check the IFM B/D.
33	Card Eject Error	Flipper module communication fails.	Check the Flipper and Flipper B/D.
34	Card Input Timeout	The card input is interrupted.	Check the Input Hopper and for any jammed cards.

② Ribbon

Code	Code Name	Description	Solution
35	Ribbon Life Low	The ribbon life is reduced to 10% or less.	Prepare to replace the ribbon.
36	No Ribbon Life	The ribbon is fully consumed.	Replace the ribbon with a new one.
38	RF Tag Ribbon Error	The ribbon is not installed properly.	Check the ribbon and tag authentication.

③ SAM

Code	Code Name	Description	Solution
32	SAM Module Response Timeout	SAM module communication fails.	Check the SAM B/D interface and SAM B/D.

④ Miscellaneous

Code	Code Name	Description	Solution
20	Command Error	The command is not compliant with the specifications.	Send compliant command.
21	Parameter Error	The parameter is not valid.	Send the parameter command.
22	Main Communication Part Timeout	The command is not sent on time.	Send the command.

Caution

One of the following steps must be taken to recover the printer from the error state:

1) Press the **"RIBBON SET"** button with the ribbon installed.
2) Press the **"EJECT"** button.
3) Turn off and on the power.

-Additional Errors

Errors	Solution
The ribbon is frequently cut at the top of the card.	- Check the X-coordinate in the printer driver. - The recommended starting value for the X-coordinate is 14 ± 2.
The printer is unable to find the Javelin Designer or other programs.	- Make sure that the printer driver is installed correctly. - Check the connections of communication cables. - Reboot the PC.

Ribbon Specifications

-Colour Ribbons

Ribbon Type	Specifications	J200i/J230i	DNA Series
YMCKO	200 Prints/Roll	O	O
1/2YMCKO	400 Prints/Roll	O	O
YMCKO-K	167 Prints/Roll	O	O

-Monochrome Ribbons

Ribbon Type	Specifications	J200i/J230i	DNA Series
Blue	1000 Prints/Roll	O	O
Black	1000 Prints/Roll	O	O
Red	1000 Prints/Roll	O	O
Green	1000 Prints/Roll	O	O
White	1000 Prints/Roll	O	O
Metallic gold	1000 Prints/Roll	O	O
Metallic silver	1000 Prints/Roll	O	O
KO(black overlay)	500 Prints/Roll	O	O

Printer Specifications

-Product Features

2 Input Hoppers

- Load up to 200 cards with an optional Input Hopper.
- Load 2 different types of cards at the same time.
(The card type can be selected before printing.)

Compact & Light

- Only requires a small space.
- Easy to carry (JAVELIN DNA Pro: 4.5kg)

High Level of Security

- The ribbon and card input hopper can be locked with an optional Kensington lock as a physical locking device (high level of security for card printers)

Versatile Usage

- Support PCs, smartphones, tablet PCs, and other mobile devices
(Wi-Fi option is required)

-Standard Specifications

① Printing Type

- Thermal Transfer/Dye-sublimation

② Printing Function

- Single/Double-Sided, Edge-to-Edge Printing

③ Resolution

- 300 dpi (11.8 DPM), 16.7 Million Colours

④ Printing Speed

(1) Colour Printing

- Single-Sided: 180~200 cards/hr.
- Double-Sided: 100 cards/hr.

(2) Monochrome Printing

800 cards/hr.

⑤ Card Capacity

- Auto Feed Input: 100 standard format cards (0.76mm)
Up to 200 cards with optional input hopper.
- Auto Feed Output: 60 cards (0.76mm)
- Single Card Printing Input/Output: 1 card

-Optional Accessories

-Optional Accessories
-Optional Input Hopper(increase the capacity from 100 to 200 cards)
- Input Hopper Lock (JAVELIN DNA Pro)
- Ribbon Lock
- Kensington Lock (for theft prevention of the printer)
- Wi-Fi

-Printer Specifications

① Dimensions (Width x Length x Height) & Weight

1) JAVELIN DNA (Manual Feed)

- Dimensions: 305.6mm (L) x 184mm (W) x 228mm (H)
- Weight: 3.7kg

2)JAVELIN DNA Pro (Auto Feed)

- Dimensions: 366mm (L) x 184mm (W) x 228mm (H)
- Weight: 4.5kg

② Power Adapter

- Manufacturer: CHANNEL WELL TECHNOLOGY
- Model No.: KLP-060M-VI
- Input: 100-240V ~ 50/60Hz 1.7A /Output: + 24V 2.5A 60W

Caution

Only use power adapters provided by the manufacturer; otherwise, it may affect the printing quality.

③ Font

- MS Windows Type Fonts

④ Memory

- 128 MB RAM

⑤ Interface

- USB 2.0 (High-Speed), RS-232 (Only Debugging), Built in 10/100 Ethernet

⑥ PC Specifications

- Windows 2000, Windows XP (32/64bit), Windows Vista (32/64bit), Windows 7 (32/64bit), Windows 8 (32/64bit), Windows 10 (32/64bit), Windows 2012 R2 Server, Windows 2008 Server, Windows 2003 Server (32/64bit)

⑦ Software

- Javelin Designer

Warranty Certificate

Product		Name of Customer	
Model No.		Address	
Manufacture No.		Date of Purchase	(YYYY/MM/DD)
Size		Warranty Period	(30 months) from the date of purchase

Purchase	
Dealer	Address: TEL)

-Repaired at cost if any of the following apply.

- The warranty has expired.
- The product is damaged by the negligence or misuse of the consumer (e.g. impact, water, fire).
- The product is damaged by a natural disaster (e.g. earthquake, flood).
- The product is damaged from unauthorized repair or modification.
- Consumable parts are consumed (according to the company policy).
- The product is damaged by the use of unsupported cards.

Regulatory

-FCC

FCC IDENTIFIER : XTNNUVIA
Name of Grantee : TIT ENG Co.,Ltd.
Equipment Class : Part 15 Low Power Communication Device Transmitter
Notes : ID Card Printer

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 B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to 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 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.

-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 requirement and other relevant provisions of Directive 1999/5/EC.

CE 1177

-RoHS

We hereby guarantee that all products that POINTMAN will deliver directly or through any third party to you, do not contain Pb, Cd, Hg, CR+6, PBB, PBDE to the beat of our knowledge, Thereby our products are in accordance with RoHS2 Directive.

- Directive 2002/95/EC
- Directive 2005/717/EC
- Directive 2005/747/EC

This document is the copyright of NBS TECHNOLOGIES Co., Ltd. and may not be reproduced in full or in part by any means, electronic or otherwise, without the prior written consent of NBS TECHNOLOGIES Co., Ltd.

The Company would be very grateful if any accidental inaccuracies could be pointed out to us, as well as any other constructive criticism which might lead to a better understanding.

JAVELIN

www.nbstech.com