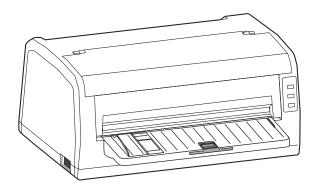
User's Manual

Documax 5380

Printer



About Trademark

Corporation names and product names are the registered trademarks or commodity names of the corporation.

- * EPSON and ESC/PK2 are the registered trademarks of Seiko Epson Corporation.
- * OKI and OKI 5530SC are the registered trademarks of OKI Data Corporation.
- * Windows is a registered trademark of Microsoft Corporation.

Important Safety Instructions

Read all of these instructions carefully and thoroughly and save them for later reference. The unauthorized operation would lead to malfunction or accident. Manufacturers have no responsibilities for the problems which are led by misoperations.

- 1. Follow all warnings and instructions in the manual as well as marked on the product.
- 2. Do not touch the print head if the printer has just been recently used as the print head may be hot.
- 3. Do not put your fingers under the left and right tractor sprocket covers of the tractor when installing the tractor paper.
- 4. Unplug this product from the power outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- 5. Do not use this product near water.
- 6. Do not place this product on an unstable cart, stand or table. The product may fall, causing serious damage to you or the product.
- 7. Slots and openings on the cabinet and the back or bottom are provided for air ventilation. To ensure reliable operation of the product and to protect it from overheating, do not block or cover these openings. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heater. This product should not be placed in a built-in installation or kiosk stand unless proper ventilation is provided.
- 8. This product should never be placed near or over a radiator or heat origin, and should avoid of direct sunshine.
- 9. Do not locate this product where the cord would be walked on. When the cord or the plug is mangled, please stop using and get a new one replaced. Make sure the old one is far away from the printer, so it can avoid someone who does not know the inside story getting damage.
- 10. Do not use in locations subject to high humidity or dust levels. Excessive humidity and dust may cause equipment damage or fire.
- 11. Never push objects of any kind into this product though cabinet slots as they may touch dangerous voltage dots or short out parts.
- 12. Don't remove the printer's out-cover and repair the printer. When needed, call or take it to the professional.
- 13. To ensure safety, please unplug this product prior to leaving it unused for an extended period. The wall outlet you plan to connect to should be nearby and unobstructed.
- 14. Unplug this product from the power outlet and leave servicing to qualified service personnel under the following conditions:
 - A. When the power cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally when the operating instructions are followed.
 - E. If the product has been dropped or the cabinet has been damaged.
 - F. If the product exhibits a distinct change in performance, it indicates a need for service.

Note: The contents of this manual are subject to change without notice.

* All parts of the printer can be recycled. When it is abandoned, we can call it back freely. Please contact us when you abandon it.

FCC 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 provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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Chapter 1 Overview

1.1 Features

This versatile, 24-pin, flatbed High speed Bill printer is ideal for a wide range bill printing requirements, elaborated design in speed, copy capability and paper thickness applicability. Especially for value-added tax invoice, common invoice, various service trade invoices, narrow card printing and continuously bill printing.

Flatbed Paper-feed Mechanism

Flatbed paper-feed mechanism can avoid crease caused by tractor rolling. So that some document papers, such as multi-copy report, multi-copy bill, envelope, postcard and label and so on, can smoothly in and out without jam

Automatic paper Load/Eject Function

Cut sheet may be fed from the front of the printer automatically. Finish printing, the paper may be automatically fed back to the front of the printer. Tractor paper is installed on the tractor. Press **LOAD/EJECT** key, paper may be fed to print position automatically. Finish printing, the paper may be fed to the front of the printer in order to tear conveniently.

Zero tear-off Function

This causes tractor paper to be automatically fed to the tear-off position at the edge of the window cover, for easy tear-off at the perforations after printing. This zero tear-off capability helps eliminate paper wastage.

Paper Eject Function

This function allows users pressing the facility function button on the control panel to eject the cut sheet or tractor paper from the printer.

High Resolution Graphics

A maximum resolution of 360 × 360 DPI enables the printer to produce fine, sharp graphics.

Emulation

The printer supports the OKI 5530SC and Epson ESC/PK2 emulation as standard.

Large Capacity Data Buffer Area

132 KB large capacity data buffer area can minimize the employing time of your computer, it allows your computer to release the printing buffer area to other work.

Contain Letter Character Font

This print contain variously font of Roman, Sans Serif, Courier, Prestige, Script, OCR-A&B, Orator and so on which making printed document prettier.

Bar Code Function

The printer contains the following standard bar codes: EAN-13, EAN-8, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Code 39, Code 128 B, Code 128 C, NW-7.

User- Friendly Control Panel

Current print status and access to all printer functions is available via simple commands from the control panel. In addition, the control panel is used to access the menu setup mode with complete control over the printer's set-up functions.

Automatic Interface Switching

The Documax 5380 includes a parallel interface, an Ethernet interface, an USB interface or serial

interface. (According to specific interface standards) The printer automatically detects the type of data transfer received from the computer and switches to the corresponding interface type.

Compressing Printing

You can set compress print proportion through modifying the Menu setup mode of the printer. (Caution: High Speed mode and Super High speed mode is invalidated while the printer in Compress printing mode.) In addition, you can set the compress printing through driver. (Only set the compress printing through driver can High Speed printing mode and Super High Speed printing mode are still valid in Compress printing mode.) The compress proportion of these two setting methods is in compress relationship.

Optional of Automatic Paper edge Detection, Any Position Paper feed Printing

User can choose automatic paper edge detection, any position paper feed printing optionally. Here, printer can detect the borderline of both sides automatically in order to ensure all the printing content is within the printable area. Also, it supports to feed the paper in any position of the paper feed path.

Automatic Paper Skew Detection

The printer can detect the lean of the paper. If it is over the set lean, the printer will eject the paper automatically so that you can ensure the printing quality.

Contain Break Pin Compensation Function

User can set the printer to print using the pin which is in good condition to compensate the break pin.

Pin Switch Printing mode

User can set pins to switch while printing form transverse line in order to improve print head life.

Chapter 2 Preparation

2.1 Unpacking & Checking

Check the following items in the package, if any of these items is missing, please contact your dealer.

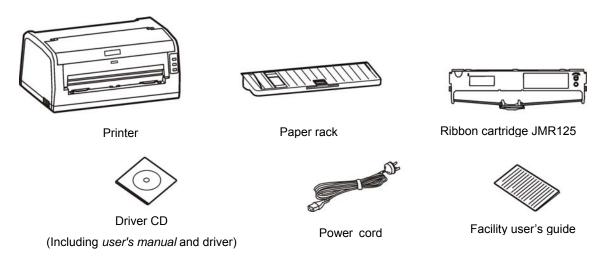


Figure 2-1 Packing list

2.2 Removing the Protective Materials

- 1. Open the packing box, take out the printer, tear off the fiber tape around the printer cover as shown in Figure 2-2.
- 2. Save all the original packing materials, so that they can be used when transporting the printer.

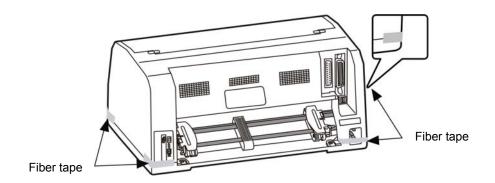


Figure 2-2 Tearing off the fiber tape

2.3 Parts Identification

Figures 2-3 and 2-4 highlight the main components of the printer.

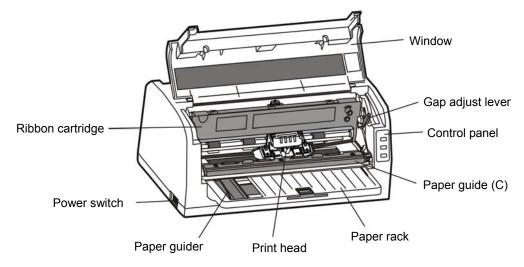


Figure 2-3 Main parts of printer (front view)

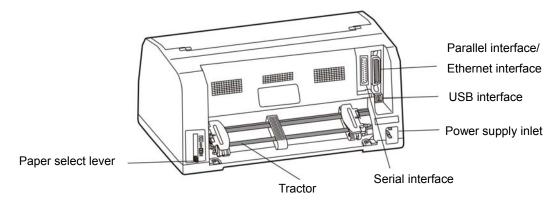


Figure 2-4 Main parts of printer (rear view)

Note: According to the specific interface standards

2.4 Installing the Printer

Before placing the printer in your chosen location, consider the following guidelines:

- 1. This printer should be placed on a normal table or desk. Be sure that the surface is level; to avoid an uneven load on the carriage as it operates.
- 2. This printer should be placed on a normal table or desk. Be sure that the surface is level; to avoid an uneven load on the carriage as it operates.
 - The place is overheating or humidity.
 - The place is shaking.
- 3. Do not install the printer where it may be subjected to:
 - Where there is excessive dust.
 - Where it may be splattered with oil or metallic dust.
 - Where it may be exposed to direct sunlight.
 - Where it may be accidentally splashed with water.

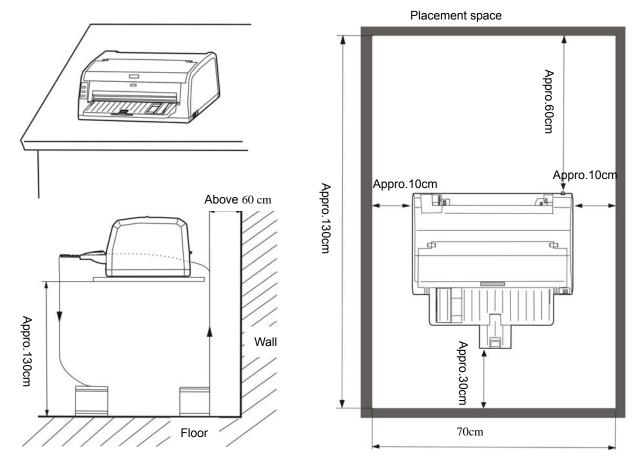


Figure 2-5 Printer placement

2.5 Installing and Removing the Paper rack

2.5.1 Installing the Paper Rack

As Figure 2-6 shown, open the window, aim the A, B, C at the printer responding A, B, C slots, and then press to fasten it.

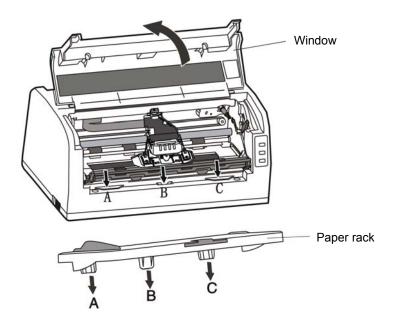


Figure 2-6 Installing the paper rack

2.5.2 Removing the Paper Rack

Hold both sides of the paper rack, lift it up and then take it out.

2.6 Installing the Ribbon Cartridge

- 1. Make sure the printer is turned off.
- 2. Open the printer window.
- 3. Move the gap adjust lever to the highest position.
- 4. Move the print head to the middle of the printer.

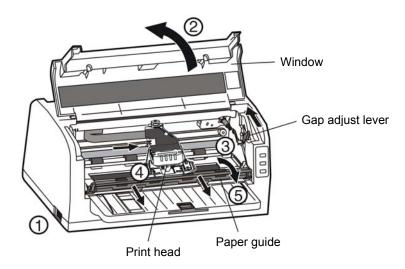


Figure 2-7 Before installing the ribbon cartridge

Caution: Never remove the print head when printer is on, or else the printer may get damaged.

Besides, do not touch the print head if the printer has just been recently used as the print head may be hot.

- 5. Pull out the paper guide and turn it upwards.
- 6. Take out the ribbon cartridge, hold the ribbon cartridge with the ribbon knob facing upwards. Turn the ribbon knob in the direction of the arrow to remove any slack from the ribbon so it is easier to install.

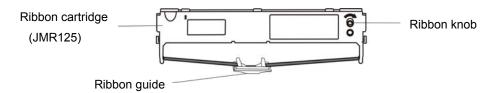


Figure 2-8 Ribbon cartridge

7. As Figure 2-9 shown, hold both sides of the ribbon cartridge, aim the buckles of the ribbon cartridge at the mounting slots of the printer, then push it forwards until it lock in place.

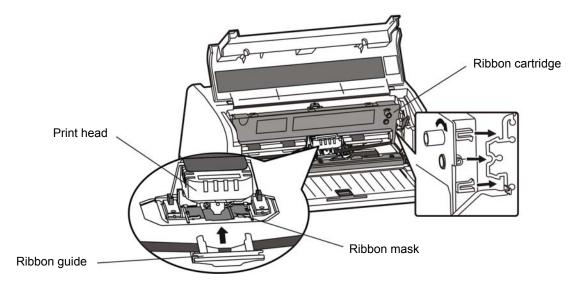


Figure 2-9 Installing ribbon cartridge

- 8. Insert the ribbon guide between the print head and ribbon mask. Turn the ribbon knob to help feed the ribbon into place, it should not be twisted or creased.
- 9. Slide the print head from side to side to make sure it moves smoothly.
- 10. Having installed the ribbon, lower the paper guide and pull the gap adjust lever back to the former position. Then close the window.
- Note: 1. When your print becomes faint, you need to replace the ribbon cartridge. Otherwise, the print quality will be affected and the print head may be damage.
 - 2. To remove the old ribbon cartridge, first make sure the printer is turned off, move the print head to the center of the printer. Firstly, take out the ribbon guide and then hold both sides of the ribbon and pull it frontwards to take out the ribbon cartridge. Install a new one as the above steps.
 - 3. Please use the original JMR125 ribbon cartridge only. Manufacturer will not honor warranty when using unauthorized ribbon cartridge.

2.7 Connecting the Printer to Your Computer

Your printer contains parallel interface, USB interface, Ethernet interface or serial interface. (According to the specific interface standard) Connect the printer to your computer with the correct cable. (As Figure 2-10, 2-11, 2-12 and 2-13 shown)

Note: Before connecting the parallel interface or the serial interface, please make sure the power of the printer is shut down. Must after tightening the cable you may turn on the power, or it will damage the printer.

2.7.1 Connecting to the Parallel Interface

- 1. Turn off both the computer and the printer. Plug the parallel cable securely into the printer's parallel interface. Squeeze the wire clips together until they lock in place on either side. (As shown in Figure 2-10)
- 2. Plug the other end of the cable into the computer's parallel interface, and then tighten the screws on either side.

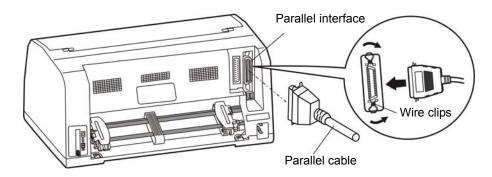


Figure 2-10 Connecting to the Parallel interface

2.7.2 Connecting to the Ethernet Interface

Plug the RJ-45 crystal plug of the Ethernet cable into the Ethernet interface of the printer, and plug the other end into the LAN. (Shown as Figure 2-11)

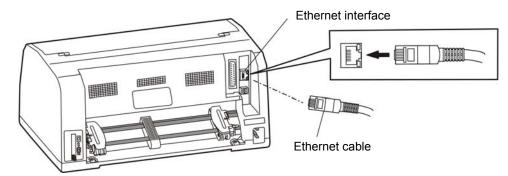


Figure 2-11 Connecting to the Ethernet interface

Note: The details of network settings please refer to the relative parts in this User's Manual.

2.7.3 Connecting to the USB Interface

- 1. Plug the USB cable A end (flat shape) into the computer's USB interface.
- 2. Plug the USB cable B end (square shape) into the printer's USB interface. (As Figure 2-12 shown)

Note: Don't impact the USB cable after connecting it.

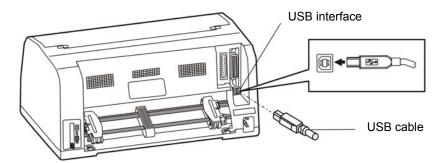


Figure 2-12 Connecting to the USB interface

2.7.4 Connecting to the Serial Interface

- 1. Turn off both the computer and the printer. Plug the serial cable connector securely into the printer's serial interface. Squeeze the wire clips together until they lock in place on both side of the connector. (As shown in Figure 2-13)
- 2. Plug the other end of the cable into the computer's serial interface, make sure it connects tightly.

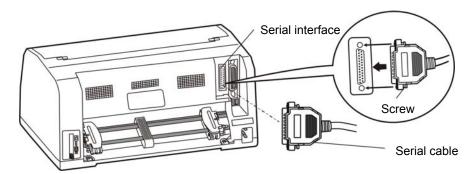


Figure 2-13 Connecting to the serial interface

2.8 Connecting to the Power Cord

- 1. As Figure 2-14 shown, make sure the printer is turned off. (The pressed down side of the power switch with "O" marks denotes the printer is off.)
- 2. Make sure the voltage required by the printer matches that of your electrical outlet.
- 3. Plug one end of the power cord into the printer's power supply inlet.
- 4. Plug the other end of the power cord into a properly grounded electrical outlet.

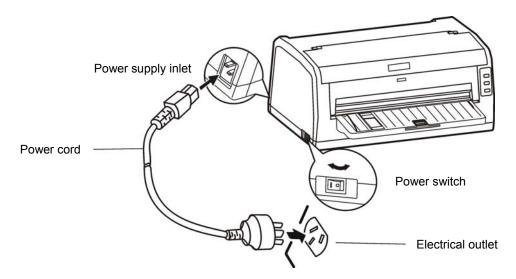


Figure 2-14 Connecting the power cord to the printer

- To turn the printer ON, press the I mark at the side of the power switch.
- To turn the printer OFF, press the **O** mark at the side of the power switch.

Caution: 1. If the rated voltage doesn't match the outlet voltage, contact your dealer for assistance. Do not plug in the power cord.

2. Use the electrical outlet connecting the ground properly.

2.9 Installing Driver

Please use the cable to connect computer with printer, then turn on the computer and the printer, put the driver CD into the CD-ROM. Install driver by the following way:

Auto-installing way

Double click the file "Setup.exe" in the driver disc, install driver by the following direction.

Note: Auto-installing way just work in operating system of Windows2000 or above.

Hand-operated installing way

Note: The hand-operated installing ways of serial interface and parallel interface are the same.

- 1) The installing steps of parallel interface for Windows 2000/XP/Vista are as follows:
- 1 Click "Start" → "Settings" → "Select Printers".
- 2. Click "Add Printer", then it pops up a window of "Add Printer Wizard", click "Next", then please read the select guide carefully, such as, select "Local printer" in the "Local or Network Printer" window, then click "next".
- 3. A window of "Select a Printer Port" pops up, select a usable port. Such as, select "LPT1: (Recommended Printer Port)", click "Next".
- 4. A window of "Install Printer Software" pops up, click "Have Disk...", click "Next".
- 5. A window of "Install From Disk" pops up. Please according to the operating system environment, you should select the path as follow: CD-ROM → "Driver" → "WIN2000 (XP-Vista-Win7)", click "Open", then click "OK" to return to the window of "Install Printer Software", select the respective model, click "Next".
- 6. Follow the guide click "Next" gradually till the installation is finished.

2) The installing steps of parallel interface for Windows 7 are as follows:

- 1. Click "Start" → "Device and Printers".
- 2. Click "Add Printer", then it pops up a window of "Add Printer Wizard", click "Next", then please read the select guide carefully, such as, select "Local printer" in the "Local or Network Printer" window, then click "next".
- 3. A window of "Select a Printer Port" pops up, select a usable port. Such as, select "LPT1: (Recommended Printer Port)", click "Next".
- 4. A window of "Install Printer Software" pops up, click "Have Disk...", click "Next".
- 5. A window of "Install From Disk" pops up. Please according to the operating system environment, such as Windows XP operating system, you should select the path as follow: CD-ROM → "Driver" → "WIN2000 (XP-Vista-Win7)", click "Open", then click "OK" to return to the window of "Install Printer Software", select the respective model, click "Next".
- 6. Follow the guide click "Next" gradually till the installation is finished.

3) The USB interface installing steps for Windows 2000/XP/Vista/Win7 are as follows:

The following steps are used Windows XP as example. There are slight differences among different operating systems.

- 1. Connect the printer to computer with an USB cable and turn on the printer.
- 2. After the computer find out new hardware and finish searching, pop up a window of "Found New Hardware Wizard", choose "Install from a list or specific location (Advanced)", click "Next".
- 3. A window of "Found New Hardware Wizard" "Please choose your search and installation options" pops up, choose "Don't search, I will choose the driver to install", click "Next".
- 4. A window of "Add Printer Wizard" pops up, click "Have Disk...", click "Browse".
- 5. A window of "Install From Disk" pops up. Please according to the operating system environment, you should select the path as follow: CD-ROM → "Driver" → "WIN2000 (XP-Vista-Win7)", click "Open", then click "OK" to return to the window of "Add Printer Wizard", select the respective model, click "Next".
- 6. Follow the guide click "Next" gradually till the installation is finished.

4) The installing steps for Windows 98 are as follows:

(1) The installing steps with a parallel cable or a serial cable:

- 1. Click "Start" → "Settings" → "Printers".
- 2. Click "Add Printer", then a window of "Add Printer Wizard" pops up, click "Next", then please read the select guide carefully, such as, select "Local printer" in the "Local or Network Printer" window, then click "Next".
- 3. A window of "Click the manufacturer and model of your printer" pops up, click "Have Disk...", please click "Browse", select the path as follow: CD-ROM → "Driver" → "WIN98 (WINME)", then click "OK".
- 4. A window of "Install From Disk" pops up, click "OK, return to a window of "Add Printer", select the respective model, and then click "Next".
- 5. A window of "Printer port" pops up, select "Available ports", such as, select "LPT1: Printer Port", click "Next", and then show the printer's name. If the system is not installed by other printer driver process, the printer is treated as default printer by the application process of Window98 environment, click "Next". Otherwise according to prompt, choose the printer is default: "Yes", click "Next", choose "Yes-(recommended)", click "Finish". A window of "Printer test page completed" pops up, click "Yes".
- 6. The printer driver process is installed successfully.
- (2) The installing steps with an USB cable:
- Note: 1. As the system of Windows 98/ME doesn't have integrated USB driver control, please install USB driver before using USB interface printing. Then install USB printer driver.
 - 2. If it has installed the USB driver, please install the USB printer driver directly as the following steps.

USB driver installing steps:

- 1. Connect an USB cable and turn on the printer.
- 2. After the computer find out new hardware and finish searching, a window of "Add New Hardware Wizard" pops up, click "Next".
- 3. A window of "Add New Hardware Wizard" "Windows operation" pops up, choose "Search the best driver for the device (recommended)", and click "Next".
- 4. A window of "Search for new drivers" pops up, check "Specify a location", click "Browse", select the path as follows: CD → ROM → "Driver"-"[WIN98 (WINME) \ USBdriver]", then click "OK".
- 5. Return to a window of "Search for new drivers", click "Next"; a window of "Windows driver file search for the device" pops up, click "Next".
- 6. After the system finishing installing the file automatically, a window of "USB Print Supported" pops up, click "Finish".
- 7. The printer USB driver process is installed successfully.

USB printer driver installing steps:

- 1. Click "Start" → "Settings" → "Printers".
- 2. Click "Add Printer", then a window of "Add Printer Wizard" pops up, click "Next".
- 3. A window of "Click the manufacturer and model of your printer" pops up, click "Have Disk...", please click "Browse", select the path as follow: CD-ROM → "Driver" → "WIN98 (WINME)", and then click "OK".
- 4. A window of "Install From Disk" pops up, click "OK", return to a window of "Add Printer", then click "Next".
- 5. A window of "Printer port" pops up, select "Available ports", select "JMUSB", click "Next", and then show the printer's name. If the system is not installed by other printer driver process, the printer is treated as default printer by the application process of Window98 environment, click "Next". Otherwise according to prompt, choose the printer is default: "Yes", click "Next" choose "Yes-(recommended)", click "Finish". A window of "Printer test page completed" pops up, click

"Yes".

6. The printer driver process is installed successfully.

2.10 Ethernet Settings

Caution: The network printing function needs the operation system of Windows2000 or above.

2.10.1 Connecting Printer

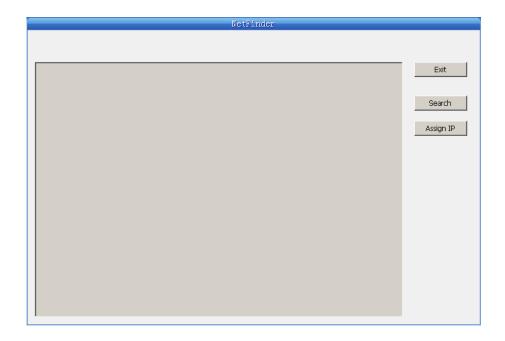
Power on the printer, connect with the Ethernet cable which has been connected to LAN, and look into the information of Ethernet LED indicator to ensure the printer has entered into the normal connection.

Yellow LED	Green LED	Description
ON	Blink	Connecting to network
OFF	OFF	Not connecting to network

2.10.2 Setting IP Address

1. Run NetFinder Software

Double click NetFinder.exe in the PC which connects the printer in the same LAN. The figure of the software is shown as follows:



Button description:

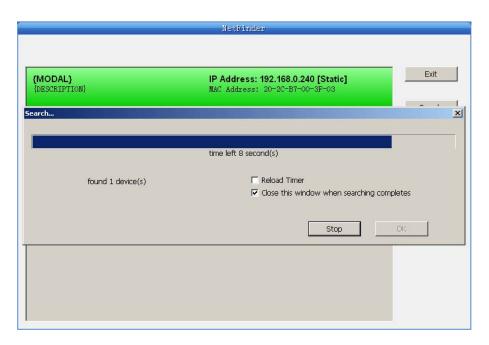
Exit — Exit from the software

Search — Search printers in the same LAN

Assign IP — Modify the IP address and other settings for the specified printer.

2. Search printer

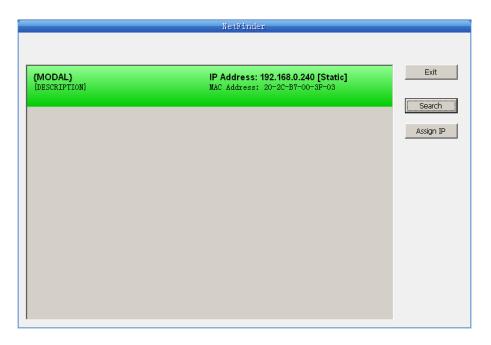
Click "Search" button in the main interface, the dialog box appearing will begin searching automatically and show appearance, listing a printer in the main interface if found. The time is counting down in the progress bar (10s in total) and the search will finish as soon as the time is over. When going on searching, press "search" button again.



If the printer still can not be found out when the network connection is correct in the same network, please check whether the network fire wall on the PC opens or not. If there is fire wall, please close it temporarily, open again after finishing searching and setting a printer completely.

3. Setting printer's IP address

The printer's information is listed in the main interface, the left side of which is the model and description and the right are the IP address and MAC address. What's more, the assign mode (dynamic/static) is noted behind the IP address.



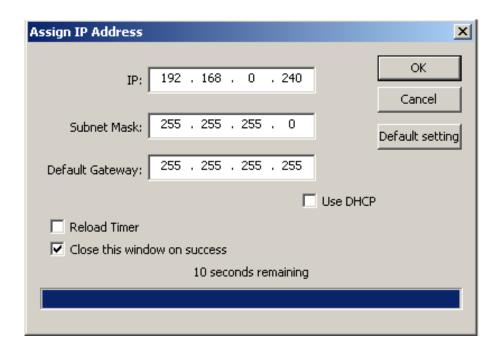
1) Correlative description for IP address settings

In order to search and set printer's IP address conveniently for the first time, the factory default setting is DHCP mode which assigns IP address dynamically. If there is no DHCP server in the connected LAN and printer is set to DHCP mode as well, then it will use the internal pre-set address (IP: 10.0.0.1, Subnet Mask: 255.255.255.0) automatically.

It is suggested that printer's IP set to static in actual usage, which can cut down the time when initializing the Ethernet interface as the printer is turned on and prevent IP conflicts (The dynamic address used in printer may conflict with another one). The network segment part of the IP address and Subnet Mask must be the same as those of PC connecting with a printer. For example, the address of working PC is 192.168.0.1/255.255.255.0 (IP/Subnet Mask), then which of printer should be set to 192.168.0.x/255.255.255.0 (x=2~254 and should avoid the IP in used. It is not restricted for NetFinder to search printers in the same network but different segment parts (can not stride gateway). Relative glossary of IP address may refer to corresponding information.

2) Setting printer's IP address

Select the printer information to be modified (black frame appears), click "Assign IP" button. Set the IP in the dialog box appearing.



Check the "Use DHCP" if need to assign dynamic address, the settings above will be disabled automatically. Please make sure there is a DHCP server in the network, or the printer can not receive an effective IP address.

When to specify static address, uncheck "Use DHCP" and fill in "IP address", "Subnet Mask" and "Default Gateway". If there is no gateway in the network, fill 255.255.255.255 in the "Default gateway". "IP address" and "Subnet Mask" should obey the assigning rules of local LAN (Ethernet), please enquire the administrator of networks which the printer connects to for more details.

Click "OK" to send address setting information to the specified printer. The printer takes response after "Close this window on success" is checked, and then this dialog is closed automatically. Select "Reload Timer" then the software will wait for the printer's response. Generally, printer will take response in a circle time if network connection is correct.

Click "Cancel" if you abandon the modification.

Click "Search" in the main interface again to update printer information after modifying the printer's IP address.

3) Report printer's IP address

Report the printer's IP address, which will be used in the section "Newly-install printer network driver" or "Upgrade-install printer network driver (setting driver's network port)".

2.10.3 Installing Printer Network Driver

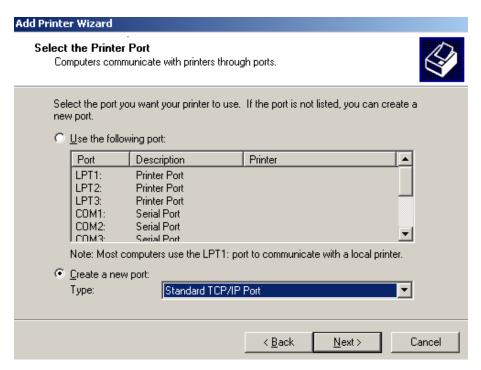
The ways of installing network driver are classified into Newly-install way and Upgrade-install way according to whether the PC installs the printer driver or not.

If the printer driver hasn't been installed on the PC, adopt newly-install way whose steps are shown in "Newly-install printer network driver".

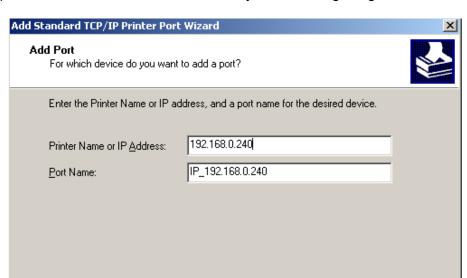
If the printer driver has been installed on the PC, adopt Upgrade-install way whose steps are shown in "Upgrade-install printer network driver".

1. Newly-install printer network driver

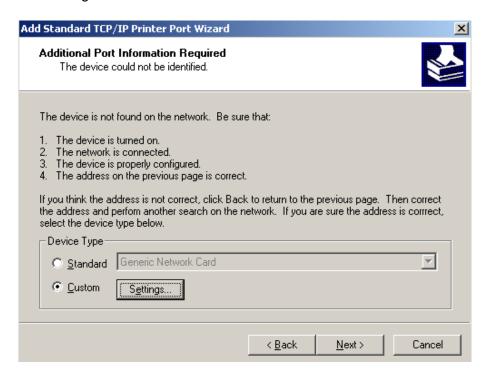
- 1) Click "Start" → "Settings" → "Select Printers".
- 2) Click "Add printer", then a window of "Add Printer Wizard" pops up, click "next", then please read the select guide carefully. Such as, select "Local or Network Printer", then click "next".
- 3) A window of "Select the Printer port" pops up, select a port you want your printer to use. For example, select "Create a new port", select "Standard TCP/IP Port" in the port, click "next".



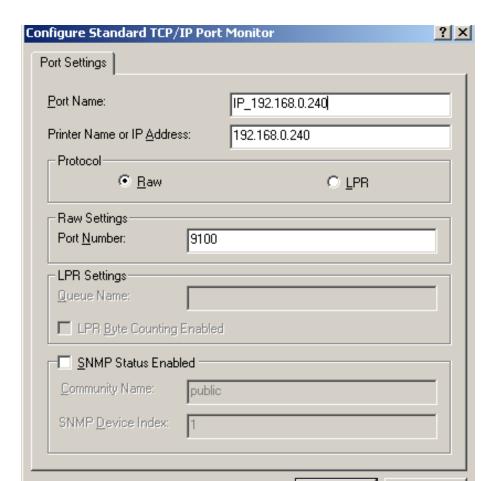
- 4) A window of "Add standard TCP/IP Printer Port Wizard", click "Next".
- 5) A window of "Add Port" pops up, enter the IP address reported by the "Setting printer's IP address" in the "Printer Name or IP Address" column. Take IP address "192.168.0.240" for example. "Port Name" is created automatically after finishing filling in IP address.



6) A window of "Additional Port Information Required" pops up, select "Custom" in the "Device Type", then click "Settings".



7) A window of "Port Settings" pops up. Affirm that "Port name" and "Printer name or IP address" are correct, "Protocol" is "RAW" and "Port Number" is "9100", click "OK".

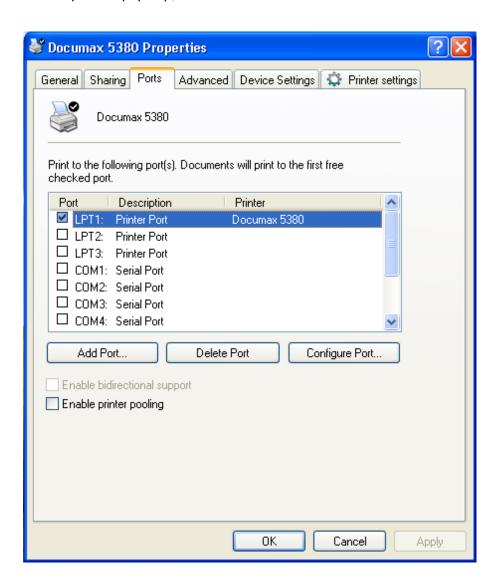


- 8) Return to "Additional Port Information Required", click "Next".
- 9) A window of "Completing the Add Standard TCP/IP Printer Port Wizard" pops up, click "Finish".
- 10) In the selection of "Manufacturers/Printers", click "Have Disk", and then click "Next".
- 11) A window of "Install From Disk" pops up. Please according to the operating system environment, such as Windows 2000/XP/Vista/Win7 operating system you should select the path as follows: CD-ROM → "Driver" → "WIN2000 (XP-Vista-Win7)", click "open", then click "OK", then return to the window "install printer software", select the corresponding model, click "next".
- 12) Follow the direct click "next" gradually till the installation is finish. At this time, printer network driver is installed completely.

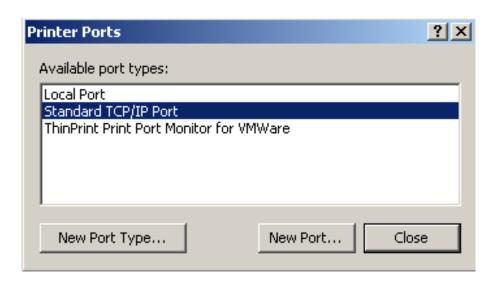
2. Upgrade-install printer network driver (setting driver's network port)

If PC has installed the printer's driver, set driver's network port to carry out network printing. The concrete steps are shown below:

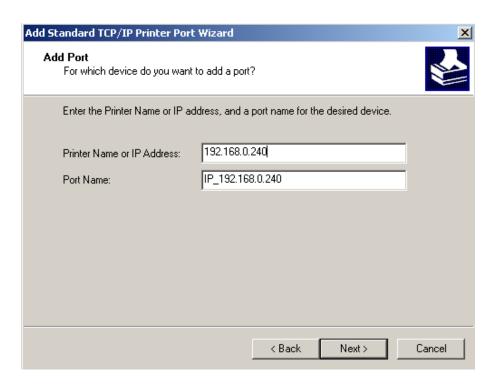
- 1) Click "Start" → "Settings" → "Select Printers"
- 2) Right click Documax 5380 driver, click "Properties" on the window popping up.
- 3) A window of "Properties" pops up, click "Ports" and "Add Ports".



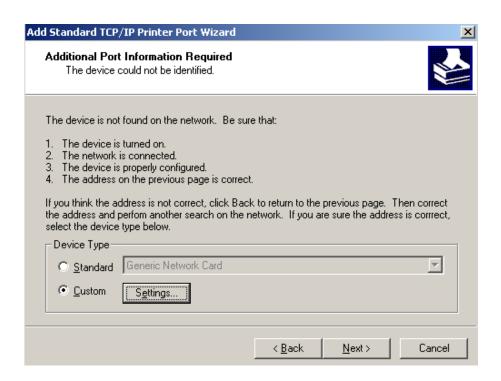
4) A window of "Printer port" pops up, select "Standard TCP/IP Port", click "New port".



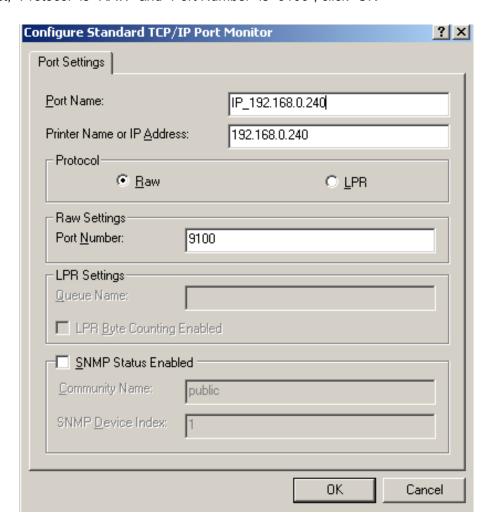
- 5) A window of "Add Standard TCP/IP Printer Port Wizard" pops up, click "Next".
- 6) A window of "Add a port" pops up, import the IP address reported by the "Setting printer's IP address" in the "Printer name or IP address" column. Take IP address "192.168.0.240" for example. "Port name" is created automatically after finishing filling in IP address. Click "Next".



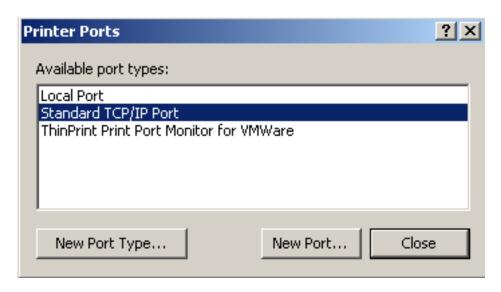
7) A window of "Additional Port Information Required" pops up, select "Custom" in the "Device Type", then click "settings".



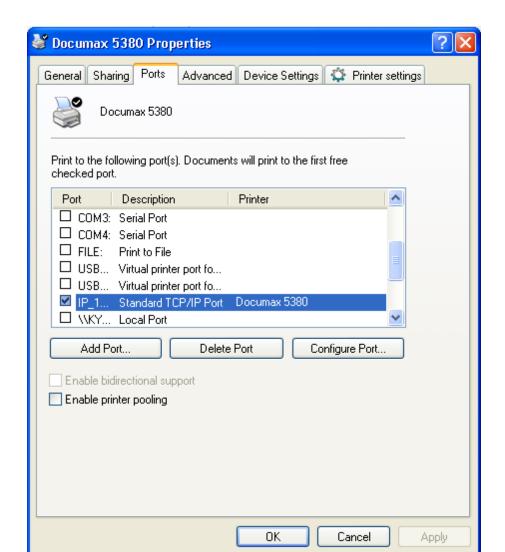
8) A window of "Port Settings" pops up. Affirm that "Port name" and "Printer name or IP address" are correct, "Protocol" is "RAW" and "Port Number" is "9100", click "OK"



- 9) Return to "Additional Port Information Required", click "Next".
- 10) A window of "Completing the Add Standard TCP/IP Printer Port Wizard" pops up, click "Finish".
- 11) Return to "Printer Ports", click "Close".



12) Return to "Properties", make sure the network port is selected, click "Apply", and then click "Close". Thus, printer's network port setting is finished.



Chapter 3 Loading Paper

3.1 Paper Thickness Adjustment

■ Adjusting the gap adjust lever

Before loading cut sheet or tractor paper, you have to adjust the gap adjust lever on the front right side of the printer. To feed thicker papers through the printer, you need to move the gap adjust lever from its standard position. The lever moves the print head relative to the platen so that there is more room for the paper.

To obtain good quality printing and prevent problems (paper jam etc.), adjust the gap adjust lever to corresponding position through the paper thickness. (As Figure 3-1 shown)

Table 3-1 Paper thickness setting

F		
PAPER TYPE		POSITION
OTHER		7 ~ 9
6 ~ 7	٥	5 ~ 6
5	FANFOLD	4
4	AN	3
2 ~ 3	ш	2
CUT SHE	ET	0 ~ 1

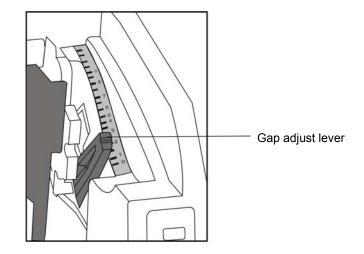


Figure 3-1 Setting the gap adjust lever

3.2 Loading Cut Sheet Paper

3.2.1 Setting Cut Sheet Printing Mode

Set paper select lever at the position of cut sheet printing mode as shown in Figure 3-2.

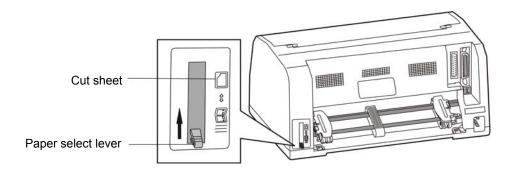


Figure 3-2 Setting the paper select lever (cut sheet)

Caution: When switching the paper type to print, please pull the paper select lever to the end and ensure the paper select lever is at the position of cut sheet printing mode.

3.2.2 Loading Cut Sheet Paper

- 1. Turn on the printer.
- 2. Set paper select lever at the position of cut sheet printing mode.
- 3. Position the left paper guider by referring to the marking on the paper rack.

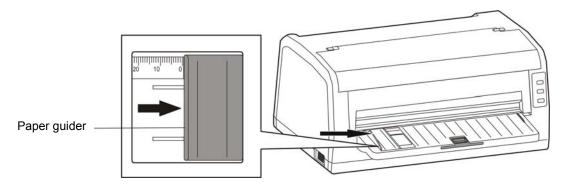


Figure 3-3 Adjusting the paper guider

Caution: Ensure the printing contents are within the printable area, or may cause the print head breaks pins.

4. Please pull out the small extension tabs if the size of paper is long and requires extra support, as shown in Figure 3-4.

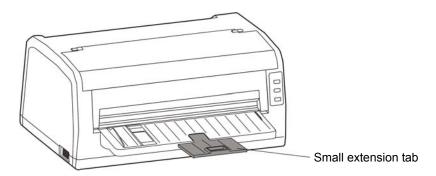


Figure 3-4 Pull out the Small extension tab

5. Insert the paper as shown in Figure 3-5, the paper is fed into the printer automatically.

NOTE

If the printer is set the LOADING at Menu Setup Mode as PUSH KEY, the printer will not feed the paper automatically to printing position when paper is in. But pressing LOAD/EJECT key can feed the paper to printing position. See details about changing printer settings in Chapter 4.

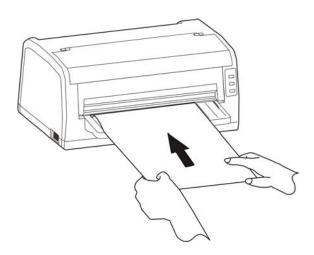


Figure 3-5 Loading cut sheet

3.3 Using Tractor Paper

This printer feeds tractor paper from the rear of the printer to the front. (As Figure 3-6 shown)

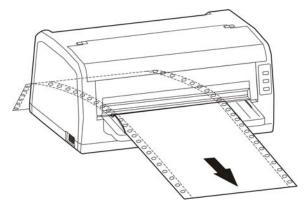


Figure 3-6 Feeding direction of tractor paper

3.3.1 Loading Tractor Paper

- 1. Connect the power cord to the printer and electrical outlet.
- 2. Set paper select lever at the position of tractor paper as shown in Figure 3-7.

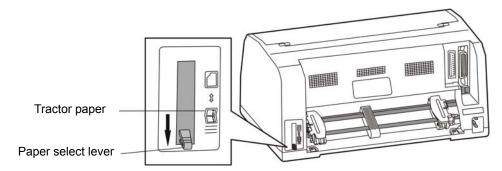


Figure 3-7 Setting the paper select lever (tractor paper)

Caution: When switching paper type to print, please pull the paper select lever to the end and ensure the paper select lever at the position of tractor paper.

Suggestion: Move the paper guider to the leftmost of the paper rack, for fear not to affect the tractor paper feeding.

3. Loosen the left and right tractor locks. (As shown in Figure 3-8)

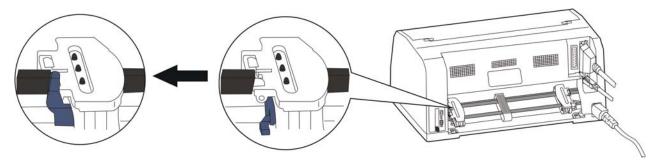


Figure 3-8 Loosen the left tractor lock

4. Move the tractor left lock to the proper position in the left ("▽" denotes the transverse printing home position). Press down the tractor left lock to lock the left tractor. Then move the right tractor to the proper position. (As shown in Figure 3-9)

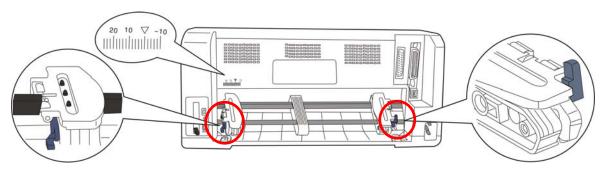


Figure 3-9 Adjusting the tractor position

5. Move the paper guide slider to the middle of the tractor. (As Figure 3-10 shown)

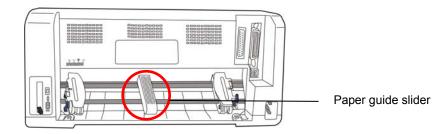


Figure 3-10 Adjusting the paper guide slider

6. Open the sprocket covers and place the paper on the sprocket pins. (As Figure 3-11 shown)

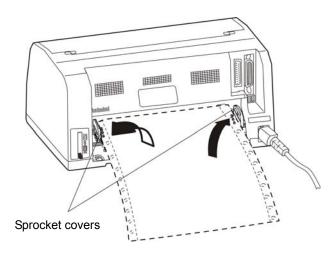


Figure 3-11 Placing the paper on the tractor

7. Close the sprocket covers and adjust the right tractor to ensure the paper is flat. Then press down the lock lever. (As Figure 3-12 shown)

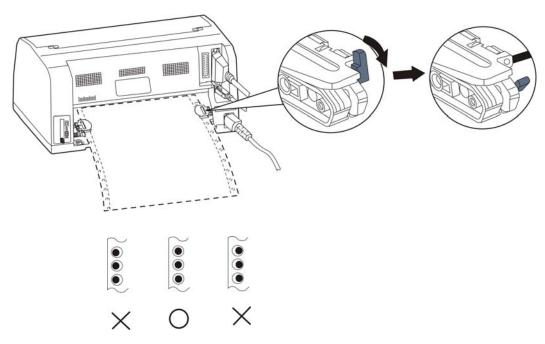


Figure 3-12 Adjusting the right tractor position

Note: Do not make the tractor paper too tight or too loose.

3.3.2 Tearing off Tractor Paper

When the printer leaves factory, the function of feeding paper to tear off position has been opened. After finish printing, the printer will feed the tractor paper to tear off position automatically. Paper can be torn off along the window edge. (As Figure 3-13 shown) If the printer default setting is changed, the function of feeding paper to tear off position is closed. After finish printing, press **ONLINE** key can feed the paper to tear off position. Before tearing off tractor paper, if the margin doesn't aim at the window edge, please adjust the tear off position. (Please refer to Tear-off Adjustment Mode on Chapter 4 Control Panel)

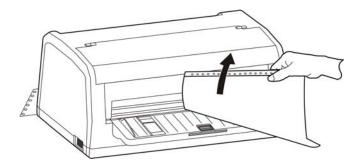


Figure 3-13 Tearing off tractor paper

Chapter 4 Control Panel

4.1 Control Panel Keys and LEDs

4.1.1 Control Panel

The control panel consists of three keys and three LEDs as shown in Figure 4-1.

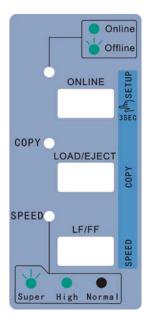


Figure 4-1 The printer control panel

4.1.2 Indicator LEDs

Indicator LED	Off	On	Blink
ONLINE (green)		Lights when the printer is online.	The printer is offline or error state
COPY (green)	The printer is in the normal mode.	The printer is in the copy 1 mode.	The printer is in the copy 2 mode.
SPEED (green)	The printer is in the letter quality mode.	The printer is in high speed mode.	The printer is in super high speed mode

4.2 Basic Control Panel Operations

You can use the three keys on the control panel to operate your printer.

ONLINE	Press the ONLINE button, switch between ONLINE and OFFLINE modes.
LOAD/EJECT	When offline, press LOAD/EJECT key can control cut sheet or tractor paper feeding. In cut sheet mode, if you press LOAD/EJECT key when offline, the paper will be ejected. In tractor paper mode, if the tractor paper is in installing position, press LOAD/EJECT key when offline, the printer will be fed to the printing home position. The printer now being in the online mode. You need to change it into the offline mode again, then press LOAD/EJECT key, paper will be fed to the tear position. Press it one more time, paper will again back to the ready position, repetition. In online mode, hold on pressing LOAD/EJECT key for about 3 seconds, the printer can eject the paper in micro steps.

COPY	In the offline mode, hold on pressing ONLINE key for 3 seconds, the printer will enter quick menu setup mode. Press LOAD/EJECT key can switch the printer among the normal mode, copy 1 mode and copy 2 mode.
LF/FF	In the offline mode, press the LF/FF key to feed the paper line by line. Alternatively, hold the LF/FF key down, the printer will eject the cut sheet, or feed the tractor paper one page.
	In the online mode, hold on pressing the LF/FF key for about 3 seconds can feed the paper in micro steps.
SPEED	In the offline mode, pressing the LF/FF key for about 3 seconds, the printer will enter quick menu setup mode. Press LF/FF key can switch the printer among the letter quality mode, high speed mode and super high speed mode.

Note: Paper out when using tractor paper, after finish loading tractor paper, please use LOAD/EJECT key or LF/FF key to feed paper.

4.3 Top of Form Adjustment and Black Mark Position

The top of form setting determines the margin between the top of paper and the first printed line (the top margin). The top of the first printing line is the zero position. The printing advance direction is positive value, the reverse direction is negative value.

When the menu setup mode has specified the left black mark or right black mark, black mark position is the distance from the black mark to the left or right edge.

Note: The left and right PH sensors are located at both sides of the print head, which are in the black boxes on both sides of the carriage slider.

Adjusting method:

Install paper correctly, press **LOAD/EJECT** key to feed paper to printing position. In the **ONLINE** mode, press the **LOAD/EJECT** key and **LF/FF** key for about 3 seconds at the same time, **ONLINE LED** and **COPY LED** blinks alternately which denotes the printer enters the top of form adjustment mode.

When the black mark function is ON (left black mark or right black mark), the current adjustment mode is black mark position adjustment mode, enter Step A.

When the black mark function is OFF, the current adjustment is the top of form adjustment mode, enter Step B directly.

A. Press **LOAD/EJECT** key and **LF/FF** key can move the print head left and right, which make the left sensor or right sensor aim at the paper black mark position.

LOAD/EJECT: Every step moves 1/20 inch. You can increase the margin to a maximum of +80 increments (+80/20 inch) from the factory setting.

LF/FF: Every step moves 1/20 inch. You can decrease the margin to a minimum of 0 (0/20 inch) from the default setting.

Press the **ONLINE** key after adjusting, the **COPY LED** and **ONLINE LED** blink simultaneously twice with two beeps, the newly setting will be saved and the printer will enter the top of form adjustment mode, enter step B, then press ONLINE key again to exit the adjustment mode entirely.

B. Press **LOAD/EJECT** key and **LF/FF** key can change the top of form position. (The maximum removable size of top of form position is based on the default zero position.)

LOAD/EJECT: Increase the top of form by 1/60 inch. You can increase the margin to a maximum of +60 increments (+60/60 inch) from the factory setting.

LF/FF: Decrease the top of form by 1/60 inch. You can decrease the margin to a minimum value of 0 (-19/60 inch) from the default setting.

Press the **ONLINE** key to exit and save your new setting. The **COPY LED** and **ONLINE LED** blink simultaneously twice with two beeps, and then the **ONLINE LED** will be on.

Note: When the top of form position (black mark position) is maximal, press LOAD/EJECT key, the printer will not increase any more.

When the top of form position (black mark position) is minimal, press LF/FF key, the printer will not decrease any more.

NOTE

To exit without saving, just turn the printer OFF.

4.4 Tear-off Adjustment Mode

There is a tear-off bar at the edge of the window cover. When you have finished printing, you can advance the tractor paper on the tracker to the tear-off bar by the tear-off function to easily tear off the perforated sheets. The tear-off setting determines the distance between the perforation of tractor paper and the tear-off bar.

Adjusting method:

After installed the tractor paper correctly and ensure the paper select lever is in tractor paper position. Press **LOAD/EJECT** key to feed the paper to printing position, then press **ONLINE** key to enter into offline mode, press **LOAD/EJECT** key to feed the paper to tear off position. With the printer online, press both the **LOAD/EJECT** and **LF/FF** keys for about 3 seconds to get the printer to enter the tear-off adjustment mode. When the printer enters this mode, the **ONLINE LED** and the **COPY LED** blink alternately.

Use the **LOAD/EJECT** and **LF/FF** keys to alter the tear-off setting (The maximum removable size of tear off position is based on the default zero position.):

LOAD/EJECT: Press the **LOAD/EJECT** key to adjust the distance in 1/60 inch increments. You can maximum increase to +100/60 inch.

LF/FF: Press the **LF/FF** key to adjust the distance in 1/60 inch decrements. You can maximum decrease to -40/60 inch.

To exit and save your new setting, press **ONLINE** key. The **COPY LED** and the **ONLINE LED** blink simultaneously twice with two beeps, then the **ONLINE LED** will be on. Your new tear-off setting value is saved.

Note: When the tear off position is maximal, press LOAD/EJECT key, the printer will not increase any more.

When the tear off position is minimal, press LF/FF key, the printer will not decrease any more.

NOTE

To exit without saving, just turn off the printer.

4.5 Changing the Printing Settings

Documax 5380 printers divide printer settings into three sections: Quick menu setting, Menu setup mode and Online-aptitude Parameter Settings.

4.5.1 Quick Menu Setting

Press **ONLINE** key for about 3 seconds when the **ONLINE LED** blinks, the printer beeps once and enter into quick menu setting.

Facility key for copy mode:

Press LOAD/EJECT key once can switch between copy modes. The COPY LED off denotes the

normal mode, the **COPY LED** on denotes the Copy 1 mode, the **COPY LED** blinks denotes the Copy 2 mode.

Facility key for speed mode:

Press **LF/FF** key once can switch between speed modes. The **SPEED LED** off denotes the letter quality mode, the **SPEED LED** on denotes the high speed mode, the **SPEED LED** blinks denotes the super high speed mode.

4.5.2 Using Menu Setup Mode

The default setting is usually set for the users. If you want to know the current default, please print out the Current Setting Report according to the following steps.

- 1. Turn the printer off.
- 2. If using the tractor paper, please fix the tractor paper properly.
- 3. Hold down both the LOAD/EJECT and LF/FF key at the same time. Turn the printer on.

The printer automatically loads paper and prints the current settings. An example print out is shown in Figure 4-2.

Caution

- 1. The items printed in shadow are the current settings. If the initialization of "Language" is "English", saving the setting and operating the upper steps again, and it will print the current settings in English. The way of changing the settings is in the next section.
- 2. When choose high speed mode in the menu settings system, compress printing settings on the setup menu system will not be valid.

Current Setting

MAC: XX-XX-XX-XX-XX DHCP: YES IP: 10.0.0.1 Subnet: 255. 255. 255.0 gateway: 255.255.255.255

						gatettaj		
SYSTEM SETUP								
LANGUAGE	ENGLISH	CHINESE						
EMULATION	EPSON	OKI						
CHAR. MODE	ASCII	CHINA						
CHARACTER								
FONT	ROMAN	SANS SER	COURIER	PRESTIGE	SCRIPT	OCR-B	OCR-A	ORATOR
ENG PITCH	10 CPI	12 CPI	15 CPI	PROPORTION		00112	001171	0.0
CHI PITCH	6.7 CPI	7.5 CPI			·			
SLASH ZERO	OFF	ON						
INTL CHAR SE	U. S. A.	FRANCE	GERMANY	U.K.	DENMARK1	SWEDEN	ITALY	SPAIN 1
	JAPAN	NORWAY	DENMARK2		LATIN AM	KOREA		
	TURKEY							
GHAR. SET	ITALICS	GRAPHICS						
PAGE LAYOUT								
LINE SPACING	6 LPI	8 LPI						
FORM LENGTH	3 INCH	11/3 INCH	3.5 INCH	4 INCH	5 INCH	5.5 INCH	6 INCH	7 INCH
	LETTER	A4	12 INCH	14 INCH				
FORM LOCK	OFF	ON						
PAGE SKIP	OFF	ON						
COMPRESS PRT	NORMAL	AUTO	75%	66%	50%			
LEFT MARGIN	0/10 INGH	1/10 INCH	2/10 INCH	3/10 INCH	4/10 INCH	5/10 INGH	1	
BLACK MARK	OFF	LEFT MARK	RIGHT MAR					
PRINT SETUP								
PRINT DIR	BI-DIR	UNI-DIR	AUTO-DIR					
HIGH DENSITY	OFF	ON						
QUIET MODE	OFF	ON						
AUTO LF	OFF	ON						
LOADING	PUSH KEY	0.5 SEC.	1.0 SEC.	2.0 SEC.				
EJECT	FRONT	REAR						
PIN SWITCH	OFF	ON						
MARGIN DETEC	OFF	ON						
SKEW DETECT	OFF	001	002	003	004	005	006	007
SERIAL 1/F								
BAUD RATE	19200 BPS	9600 BPS	4800 BPS	2400 BPS	1200 BPS			
PARITY	NCNE	ODD	EVEN					
DATA BITS	8 BITS	7 BITS						
STOP BITS	1 BIT	2 BITS						
PROTOCOL	XON/XOFF	DTR						
HEAD PIN								
PIN 1	LIVE	BROKEN						
PIN 2	LIVE	BROKEN						
PIN 3		BROKEN						
PIN 4	LIVE	BROKEN						
PIN 5	LIVE	BROKEN						
PIN 6———	LIVE	BROKEN						
PIN 7	LIVE	BROKEN						
PIN 8	LIVE	BROKEN						
PIN 9	LIVE	BROKEN						

BROKEN

PIN 10 — LIVE

PIN	11 ———	LIVE	BROKEN
PIN	12	LIVE	BROKEN
PIN	13 ———	LIVE	BROKEN
PIN	14	LIVE	BROKEN
PIN	15 ———	LIVE	BROKEN
PIN	16 ———	LIVE	BROKEN
PIN	17	LIVE	BROKEN
PIN	18	LIVE	BROKEN
PIN	19	LIVE	BROKEN
PIN	20	LIVE	BROKEN
PIN	21	LIVE	BROKEN
PIN	22	LIVE	BROKEN
PIN	23 ———	LIVE	BROKEN
PIN	24	LIVE	BROKEN

Figure 4-2 Current setting report

Caution: 1. The items printed in shadow are the current settings.

2. If the printer doesn't install Ethernet, the relative Ethernet information, such as MAC, IP and so on, will not be printed out in self-testing and menu setup mode.

■ Entering the Menu Setup Mode

- 1. Make sure the printer is online.
- 2. Keep pressing the **LOAD/EJECT** key and **ONLINE** key for 3 seconds.

The **POWER LED** and **ONLINE LED** blink twice simultaneously, which indicates the printer enters into menu setup mode.

It prints out the title and the first menu firstly (as Figure 4-3 shown). The underlined items are the default settings. The print head will stop at the default setting.

Documax 5380 SETUP MENU SYSTEM

Use the **LOAD/EJECT** key to point the print head to the desired setting.

Use the LF/FF key to confirm the current setting.

Use the **ONLINE** key to go back the previous menu.

Press and hold the **ONLINE** key to save settings and exit.

Current settings are <u>UNDERLINED</u> New settings will be **FILLED**.

MAC: XX-XX-XX-XX-XX DHCP: YES IP: 10.0.0.1 Subnet: 255. 255. 255.0 gateway: 255.255.255.255

MAIN MENU <u>SYSTEM SETUP</u> CHARACTER PAGE LAYOUT PRINT SETUP SERIAL I/F BREAK PIN

Figure 4-3 Menu Setup Mode

3. Using the following keys to modify the Bill type and speed setting:

LOAD/EJECT Select the menu option or menu setting value.

LF/FF Enter into submenu or confirm menu setting value.

Note: Newly setting option will be shown in FILLED

ONLINE Return to upper menu (Hold on pressing ONLINE key will return to main menu

directly and save the setting)

4. Give up the settings just modified, just turn off the printer directly. If you need to save the newly

setting, hold on pressing **ONLINE** key to save and exit the menu setup mode.

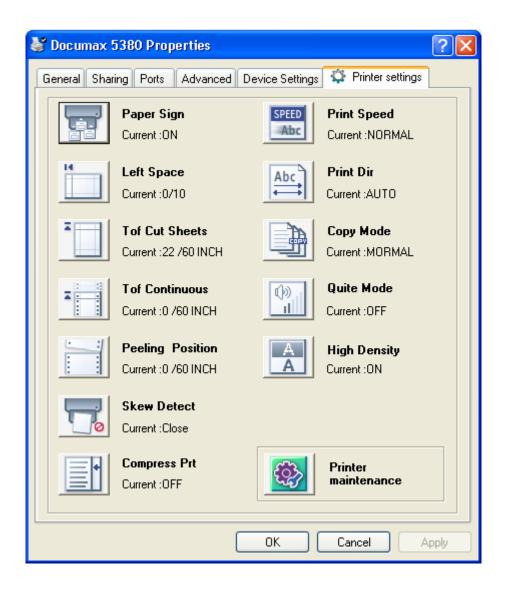
5. Turn off and restart the printer, newly settings are in operation.

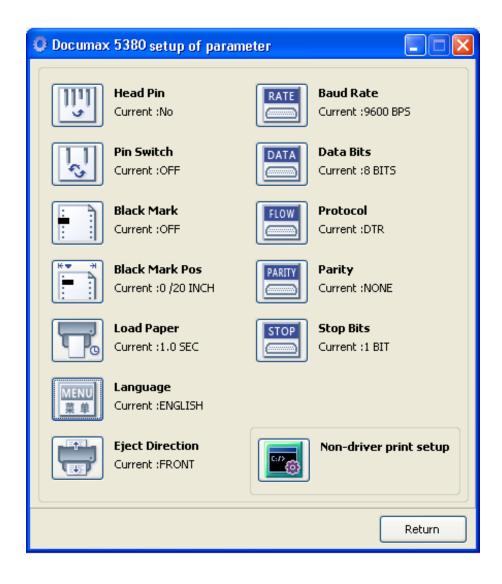
4.5.3 Online-aptitude Parameter Settings

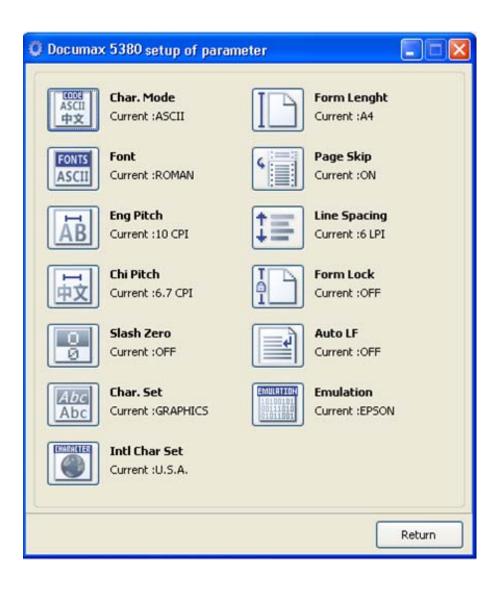
Documax 5380 supports the function of online-aptitude parameter settings, which can be set in the PC with the driver installed in.

The concrete setting steps are shown as follows:

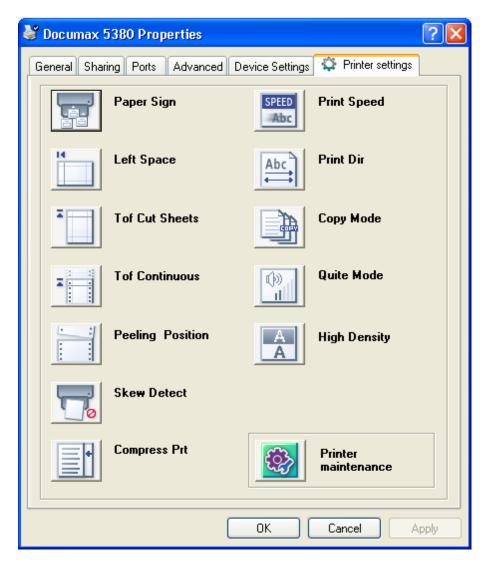
- 1. Make sure that the computer and the printer are connected with USB cable and both the computer and the printer are turned on, the printer should be in normal working condition as well.
- 2. Click "Start" → "Settings" → "Printers".
- 3. Right click "Documax 5380", select "Properties".
- 4. Click "Printer settings" in the property page.
- 5. Printer settings are classified into three levels: the first level is the normal items, the second level is maintenance items and the third level is non-driver settings. Items shown in Printer Settings are normal items; Click Printer maintenance button in "Printer settings", the items which in the popped out window of "Printer maintenance" are the maintenance items; Click Non-driver print setup button in "Printer maintenance", the items which in the popped out window of "Non-driver print setup" are the non-driver settings.







6. The left side of each items is the parameter icon, the top right is the item name and the bottom right is the current setting. The current settings of the printer will be loaded automatically when opening each parameters settings window. If the printer doesn't online or use the wrong port, the current settings will be blank, therefore, please make sure the printer is in ONLINE mode and the printer should connect the computer with the correct port.



7. When setting the parameter, please click the parameter icon firstly to open the parameter setting window. In the parameter setting window, there are parameter options, item explanation and control buttons. After selecting the corresponding parameter, click "Set", the printer will change the setting at the moment it receives the change command. Click "Cancel" to return to the upper window. Click "Default" can show the default setting of this item.



- 8. If you need to change multi-items, please refer the upper steps to modify them one by one.
- 9. After finishing setting, click "OK" to exit the Properties window.

4.6 Explaining Menu Terms

Options	Description
SYSTEM SETUP	
LANGUAGE	Specify the printer menu language as English or Chinese.
EMULATION	Specify printer's control commands.
CHAR. MODE	Select ASCII or Chinese character mode to print when printer receives character printing task.
CHARACTER	
FONT	Specify a kind of ASCII fonts to print when printer receives character printing task. If the print data with font instruction, printer gives priority to print data instruction. (Only valid when CHARACTER MODE is choosing ASCII)
ENG PITCH	Specify the ASCII character spacing in characters per inch (cpi).
CHI PITCH	Specify the Chinese character spacing in characters per inch (cpi).
SLASH ZERO	Select the printing character for zero with a slash (/) or without, to distinguish it from the letter O.
INTL CHAR SE	Specify the printer internal character set according to different using circumstances of international characters.
CHAR. SET	Specify character set as Italic Character or Graphic Character.
PAGE LAYOUT	
LINE SPACING	Specify the line spacing in lines per inch (lpi). If the print data with vertical pitch instruction, printer would give priority to print data instruction.
FORM LENGTH	Specify the page length of the form, for both cut sheet and continuous paper. Printer feeds to next page according to the specified page length. If the print data with page length instruction, printer would give priority to print data instruction.
FORM LOCK	After selecting this function on, printer would lock the page length setting. Printer feeds to next page according to the current setting parameter and would not affected by the page length instruction of the print data.
PAGE SKIP	After selecting this function on, printer would leave one inch (25.4mm) margin at the perforation of the tractor paper automatically. If the print data with page margin instruction, printer would give priority to print data instruction.
COMPRESS PRT	After selecting this function on, printer would print out transverse compressed content according to the specified percentage in normal speed. When auto-compress mode is selected, printer would detect paper width automatically and choose the proper percentage to print.
LEFT MARGIN	Specify the distance between paper left edge and printing home position. (Only valid when ANY POSITION PAPER FEED function is on.)
BLACK MARK	After selecting this function on, printer would carry out black mark detect instruction so that to make the vertical positioning printing precisely. (Bills or papers should have black mark on the surface.)
PRINT SETUP	,
PRINT DIR	Select the printing direction of the print head: unidirectional, bidirectional or selected via software.
HIGH DENSITY	After selecting this function on, printing definition would enhance while the print speed reduce.
QUIET MODE	Disable or enable the low noise function, when this function is on, print speed would be reduced.

AUTO LF	If this function is on, printer would advance the paper one line automatically after receiving every carriage return instruction.	
LOADING	Specify the wait time between cut sheet is put into the paper guide and it is fed int the printer. Choose to wait specify time or press LF/FF key to feed paper.	
EJECT	Specify paper eject direction when loading paper from front.	
PIN SWITCH	After selecting this function on, printer would switch different pins to print table line automatically.	
MARGIN DETECT	After selecting this function on, printer would detect the paper edge automatically after feeding paper, and start to print from the position according to the left margin setting.	
SKEW DETECT	After selecting this function on, printer would auto detect paper skew when feeding cut sheets. If the slant degree is beyond the set parameter, printer would eject paper automatically.	
SERIAL I/F		
BAUD RATE	Specify the printer serial data transfer rate.	
PARITY	Specify the parity bit for serial data transfer.	
DATA BITS	Specify the serial data bits.	
STOP BITS	Specify the serial data transfer stop bit.	
PROTOCOL	Specify the protocol of printer serial data transfer as software control (XON/XOFF) or hardware control (DTR).	
HEAD PIN	Select the broken pin. Printer would automatically replace it with other pin to print.	

4.7 Using the Self- Test Functions

■ Pin Test

Press the **ONLINE** key and **LOAD/EJECT** key while turning on the printer. It will run the Pin Test when paper is in. Contrarily, it will run the Aging Test when paper out.

■ ASCII Test Mode

Continuous printing of ASCII pattern is performed by turning power on while pressing the **ONLINE** key. Pressing the **ONLINE** key can stop printing, and reboot the printer to exit ASCII test mode.

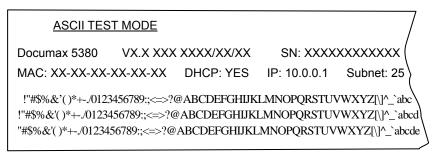


Figure 4-4 ASCII Self-test

■ Hex Dump Mode

Turn power on while pressing the **LOAD/EJECT** key, which causes the printer to enter Hex Dump mode. In this mode, the data which are sent from computer will print with Hex mode. Pressing the **ONLINE** key can stop printing, and reboot the printer to exit Hex Dump mode.

The results of the hex dump printing will be shown as follows.

***** HEXADECIMAL DUMP *****

(0000) 1B 34 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E .4ABCDEFGHIJKLMN (0010) 4F 50 51 52 53 54 55 56 57 58 59 5A 0D 0A 1B 35 OPQRSTUVWXYZ...5 (0020) 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F 50 ABCDEFGHIJKLMNOP (0030) 51 52 53 54 55 56 57 58 59 0D 0A QRSTUVWXYZ...

Figure 4-5 The hexadecimal dump printing

■ Alignment Adjust Mode

Enter the alignment adjust mode to improve the print quality when the printer is used for a long time.

The steps to adjust the alignment are shown as below:

- 1. Make sure the tractor paper has loaded and turn on the printer.
- 2. In the online mode, press and hold on the **LF/FF** key and **ONLINE** key for about 3 seconds, the printer prints out the current alignment state and enters the alignment adjust mode.
- 3. After entering the alignment adjust mode, press the following keys to adjust the degree of make columns:

EJECT/LOAD: Each press this key, the even line will move left with one step (The adjusted value is increase)

LF/FF: Each press this key, the even line will move right with one step (The adjusted value is decrease)

- 4. Press the **ONLINE** key to select the setting and the printer will print the setting. If the printout result accords with your request, press **ONLINE** key to enter to the Speed Alignment Adjustment; If the printout result is not what you want, just adjust it according to step 3.
- 5. Restart the printer and exit the alignment adjust mode.

Note: Alignment adjust mode will affect the printing quality, think over before adjust it and strict to the instructions while adjusting.

Appendix A Printer Maintenance

A.1 Clean the Printer

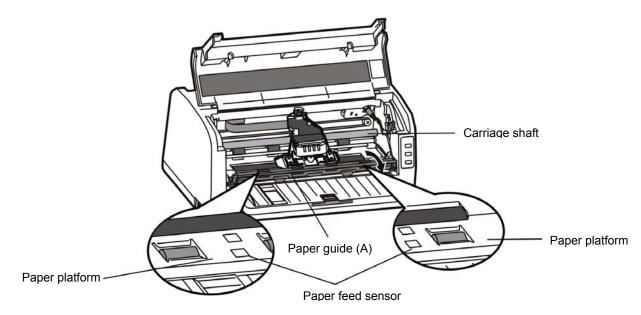


Figure A-1 Clean the printer

Cleaning periodically and the cleaning tool

Periodical cleaning: every six months or every 300 working hours once.

Cleaning tool: dry cloth (please use soft cloth to clean metal parts.)

Clean the paper feed platform

Pull out the paper guide (A) and turn it over. Please wipe off wasted paper and cleaning dirt and dust. Then pull the paper guide (A) to the former position.

Clean the carriage shaft

There is a layer of oil covered on the carriage shaft which guarantees the carriage runs smoothly. But the oil is easy to absorb dust, please clean the dust with soft cloth first, and then add proper lube (180 lube of NYE Company is recommended), move print head back and forth to make lube scattered.

Cleaning the photoelectric sensor part

As the paper feed sensor use a correlation photoelectric sensor. You should clean the parts periodically.

Clean the photoelectric sensor's protect shield every three months.

Note: 1. Turn off printer and pull out the power cord before cleaning.

- 2. Being used under dust circumstance, the carriage shaft may stack much dust and affect the print quality.
- 3. If you have just finished using the printer, let the print head cool for a few minutes before you touch it.
- 4. Please use a soft cloth for cleaning, do not use combustible solvent.

A.2 Problems and Solutions

1) Print head overheating

Phenomenon: The **ONLINE LED** blinks, print head traverse automatically but nothing is printed.

Cause: The print head is overheated.

Solutions: Wait patiently, the printer would resume to work after the print head temperature

decreases.

2) Paper select lever error

Phenomenon: The **ONLINE LED** blinks.

Cause: The paper select lever is in wrong position when paper in. Solutions: Remove the paper select lever to the correct position.

3) Home position sensor error

Phenomenon: The printer beeps and the **ONLINE LED** blinks.

Cause: The home position sensor error.

Solutions: Turn off the power and turn it on again.

4) Paper out or paper jam

Phenomenon: The **ONLINE LED** blinks.

Cause: The printer is out of paper or jamming.

Solutions: Load paper or remove the jammed paper.

Appendix B Specification

B.1 General Specification

Item	Description			
Туре	24-Pin Flatbed Dot Ma	ıtrix Impact Printer		
Print direction	Bidirectional logical se	eking		
Printing width	80 columns (10 CPI)/2	03.2 mm		
		ASCII		
	speed	10 CPI	12 CPI	
Print speed	Normal speed	142 CPS	170 CPS	
	High speed	275 CPS	330 CPS	
	Super high speed	300 CPS	360 CPS	
Print head	Diameter of wire: 0.22	mm		
Resolution	360 x 360 dpi (Max.)			
Character set	ASCII: 17 international character sets (U.S.A, FRANCE, GERMANY, U.K, DENMARK1, SWEDEN, ITALY, SPAIN1, JAPAN, NORWAY, DENMARK2, SPAIN2, LATIN AM, KOREA, LEGAL, NETHER, TURKEY)			
Code Page	U.S.A, MULTI, PORTUGAL, CANADA, NORWAY, EAST EURO, CYRILLIC, RUSSIAN, HUNGARY, KAMENICKY, TURKEY, ICELAND, BULGARIA, MAZOVIA, GRK 437, GRK 851, GRK8859-7, GRK 1253, ARAB NLS, ARAB EXT, WIN LAT1, WIN LAT2, ISL LTN1, ISO LTN2, TUR8859-9, ISO LTN9, KBL, LATIN 7			
	ASCII: Draft, Roman, Sans Serif, Courier, Prestige, Script, OCR-A, OCR-B, Orator			
Fonts	Note: In high speed mode or super high mode, printer would automatically change the ASCII font to Draft when printing ASCII characters.			
Bar code	EAN-13, EAN-8, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Code 39, Code 128 B, Code 128 C, NW-7			
Character pitch	ASCII: 10 CPI, 12 CPI, 15 CPI, proportional			
Line space	1/6 inch, 1/8 inch, programmable in 1/360 inch increments			
Paper feeding speed	Max. 101.6mm/sec			
	Paper feed one line	Cut sheet: 4.23 ±0.5 mm		
Paper feed precision	Paper leed one line	Tractor paper: 4.23 ±0.8 mm		
	Paper feed accumulative error: less than 2.1mm			
Paper type	Cut sheet, tractor pape	er, envelope, adhesive sticker		
Emulation	ESC/PK2, OKI 5530S0	C		
Interface	Parallel interface: Centronics (IEEE1284 NIBBLE) Ethernet interface: 10/100Base-T USB interface: 2.0 Full-Speed Serial interface: RS-232C Note: Only one parallel interface or Ethernet interface is supplied, you can choose either according to your requirement. (According to specific interface standards)			
Input Buffer	132 KB			
Ribbon	Model: JMR125			
RIDDOII	Life: 8 million characters (draft mode)			
Noise	<52 dB (A) (ISO7779 standard)			
Control Panel	3 keys and 3 indicator lights			
Daner food to a	Cut sheet: Load/eject from front, Load from front and eject from rear			
Paper feed type	Tractor paper: Load from eject and eject from front			

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Paper thickness adjust	Adjust through the gad adjust lever			
		Width: 70 ~ 257 mm		
	Cut sheet, postcard	Length: 80 ~ 536 mm		
		Weight: 45 ~ 250 g/m ²		
Paper specification	Width: 60 ~ 254 mm			
	Tractor paper	Weight (single paper): 52 ~ 128	B g/m ²	
		Multi-ply paper (each sheet) : 4	10 ~ 64 g/m²	
Max paper thickness	0.53 mm			
	Original + 6 copies			
	normal mode: Origin	$al + 1 \sim 3$ copies (0	0.065 mm/page) (print once)	
Сору	copy 1 mode: Origina	al + 3 ~ 6 copies (0	0.065 mm/page) (print once)	
	copy 2 mode: Original + 4 ~ 6 copies (0.065 mm/page) (print twice)			
	Note: Print twice will be completed in one paper loading action.			
Automatic function	Document Skew detection, Automatic document border detection, Black mark detection, Full slot position paper loading and printing (feeding width ≥ 148mm)			
Compress set	Support graph and character printing			
Especial functions	Pin Break Compensation, Pin Rotation Replacement, Automatic Emulation Match, Online Parameter Setting			
Physical dimensions	370 (width) × 303 (depth) × 168 (height) mm			
Weight	Approx. 4.8 Kg			
	Operating environment	Temperature: 5 ~ 35°C		
Environmental	Operating environment	Humidity: 25 ~ 80%RH (No condensation)		
conditions	Storage environment	Temperature: -40 ~ 55°C	Temperature: -40 ~ 55 °C	
	Storage criviloriment	Humidity: ≤93%RH (40°,	No condensation)	
Power requirements	Rated voltage range: 120 V (AC)			
1 ower requirements	Rated frequency range: 50 ~ 60 Hz			
	① Working power: 70W; ② Largest power: 150W; ③ Sleep mode power: 3.5 W.			
Power	Caution: Only when the product is unconnected with outer power supply, it can achieve zero energy consumption state.			
EMI	Grade B			

B.2 Paper Specifications

Cut sheet, post card		
Width	70 ~ 257 mm	
Length	80 ~ 536 mm	
Total Thickness	≤ 0.53 mm	
Thickness	0.065 ~ 0.39 mm	
Maight	Single sheet: 45 ~ 90 g/m ²	
Weight	Multilayer sheet (each sheet): 40 ~ 64 g/m ²	
Tractor paper		
Width	60 ~ 254 mm	
Length	110 ~ 558.8 mm	
Thickness	0.065 ~ 0.39 mm	
Maight	Single sheet: 52 ~ 128 g/m ²	
Weight	Multilayer sheet (each sheet): 40 ~ 64 g/m ²	
Туре	Single sheet, Multilayer sheet	
Sticky label		
Si-o	Mount width: 80 ~ 254 mm	
Size	Minimum label: 63.5 mm × 23.8 mm	
Thickness	Mount: 0.07 ~ 0.09 mm	
Thickness	Total thickness: 0.16 ~ 0.19 mm	
Weight	64 g/m ²	

B.3 Printable Area

Note: 1. For assurance of the print quality, please insure print contents all are in printable area.

2. If print contents to outrun the printable area, it may cause the print head to break needle.

B.3.1 Printable area of Cut Sheet and Post Card

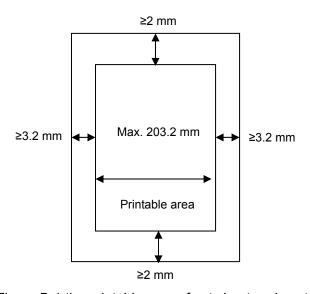


Figure B-1 the printable area of cut sheet and post card

B.3.2 Printable Area of Tractor Paper

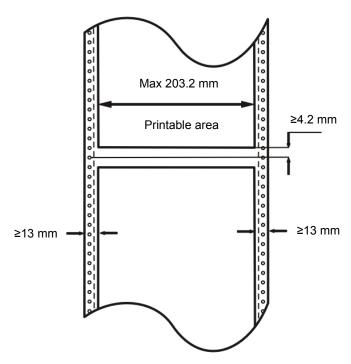


Figure B-2 the printable area of tractor paper

B.4 Interface Specification

This Documax 5380 printer can be configured with 2.0 Full-Speed USB interface, Centronics (IEEE1284 NIBBLE) parallel interface, RS-232 serial interface or 10/100Base-T Ethernet interface. You can connect the printer to computer according to your requirement.

B.4.1 Parallel Interface

Standard Centronics (IEEE1284 NIBBLE) parallel interface connector is DB-36 pin type connector. Its pin numbers are as Figure B-3 shown.

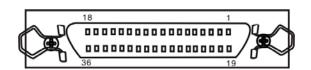


Figure B-3 Parallel interface connector pin number

The parallel interface has the following characteristics:

Data format: 8-bit

Synchronization: STROBE pulse

Handshaking: BUSY and ACKNLG signals

Signal level: TTL compatible

Connector Pin Assignments

Signal Pin No.	Return Line Pin No.	Signal Name	Signal Direction
1	19	/STROBE	Printer ← Host
2 ~ 9	20 ~ 27	DATA	Printer ← Host

10	28	/ACK	Printer → Host
11	29	BUSY	Printer → Host
12	30	PE	Printer → Host
13		SELECT	Printer → Host
14		/AUTO FEED	Printer ← Host
15		NC	NC
16		SIGNAL GND	Printer ↔ Host
17		CHASSIS GND	Printer ↔ Host
18		+5V	Printer → Host
31		/PRIME	Printer ← Host
32		/ERROR	Printer → Host
33		SIGNAL GND	Printer ↔ Host
34		NC	Printer → Host
35		PULLED UP 5V	Printer → Host
36		/SELECT IN	Printer ← Host

B.4.2 Ethernet Interface

10/100 Base-T Ethernet interface, can connect to 10/100M Ethernet.

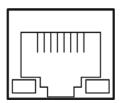


Figure B-4 Ethernet interface

B.4.3 USB Interface

USB 2.0 Full-Speed.

The following table provides the standardized contact terminating assignments for Series "A" and Series "B" connectors.

Ordinal number	Name	Color
1	VBUS	Red
2	D-	White
3	D+	Green
4	GND	Black

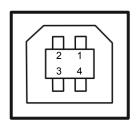


Figure B-5 USB-B type connector

B.4.4 Serial Interface

RS-232 serial interface's working way is set by the toggle switch on the main board. Interface connector is DB-25 hole-type connector. Its connector pin numbers are as follow figure shown:

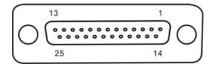
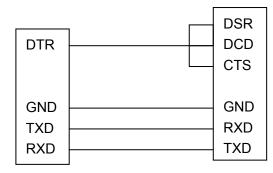


Figure B-6 connector pin numbers

The connection figure of printer and computer

The connection figure of printer and computer as B-7 shown:



Printer 25 PIN connector

HOST 9 PIN connector

Figure B-7 The connection of printer and host

Pin Description

RS-232 serial pin description is shown as table B-2:

Table B-2 RS-232 serial pin description

Pin	Signal Name	Direction
1	FG Frame Ground	
2	TXD Transmit Data	OUT
3	RXD Receive Data	IN
4	RTS Request to Send	OUT
5	CTS Clear to send	IN
6	DSR Data set ready	IN
7	GND Ground	
8	DCD Data carrier Detect	IN
20	DTR Data terminal ready	OUT

Signal description

The practically used pin number:

Input signal: RXD and DSR Output signal: TXD and DTR

Signal description

RXD: The printer receives data

DTR: High level denotes that the printer is ready to receive the data from the HOST; contrarily, denotes the printer is BUSY and it is forbidden to receive the data from the HOST.

TXD: The printer sends data

Data bit format:

Data bit is fixed 8 bits, Stop bit is fixed 1 bit.

Baud Rate

Serial communication baud rate can be set through menu setting:

1200 bps, 2400 bps, 4800bps, 9600bps, 19200 bps

Interface Protocol

The DTR from printer controls the data stream between printer and HOST. When DTR is high level, it means the printer is READY, it can receive the data from HOST. DTR is high level in the following conditions:

- The printer is online
- The data buffer area of the printer is larger than limited value.
- The printer has no error

When the DTR is low level, it means the printer is BUSY, it can not receive the data from HOST. DTR is low level in the following conditions:

- The printer is offline
- The data buffer area of the printer is smaller than limited value
- The printer has error

X-ON/X-OFF Protocol

Send the X-ON (11H) code to the HOST from the printer through TXD, which indicates the printer is FREE and can receive data from HOST. In the situation of the printer buffer area is larger than limited value, the below two conditions can make the printer send X-ON code.

- The printer becomes FREE from BUSY
- The printer becomes ONLINE from OFFLINE

Send the X-OFF (13H) code to the HOST from the printer through TXD, which indicates the printer is BUSY and can not receive data from HOST. In the following five conditions, printer sends X-OFF code to printer:

- The printer becomes BUSY from FREE
- The printer becomes OFFLINE from ONLINE
- The printer buffer area is smaller than limited value
- The printer has error
- The printer is paper out

Serial Specification

Serial data consists of Original bit (1 bit) + data bit (8 bits) + check bit (1 bit) + stop bit (1 bit). (As Figure B-8 shown)

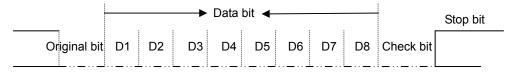


Figure B-8 Serial data format