

**Diagnostic Utility**

**Quick Start Guide**

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# Diagnostic Utility Quick Start Guide

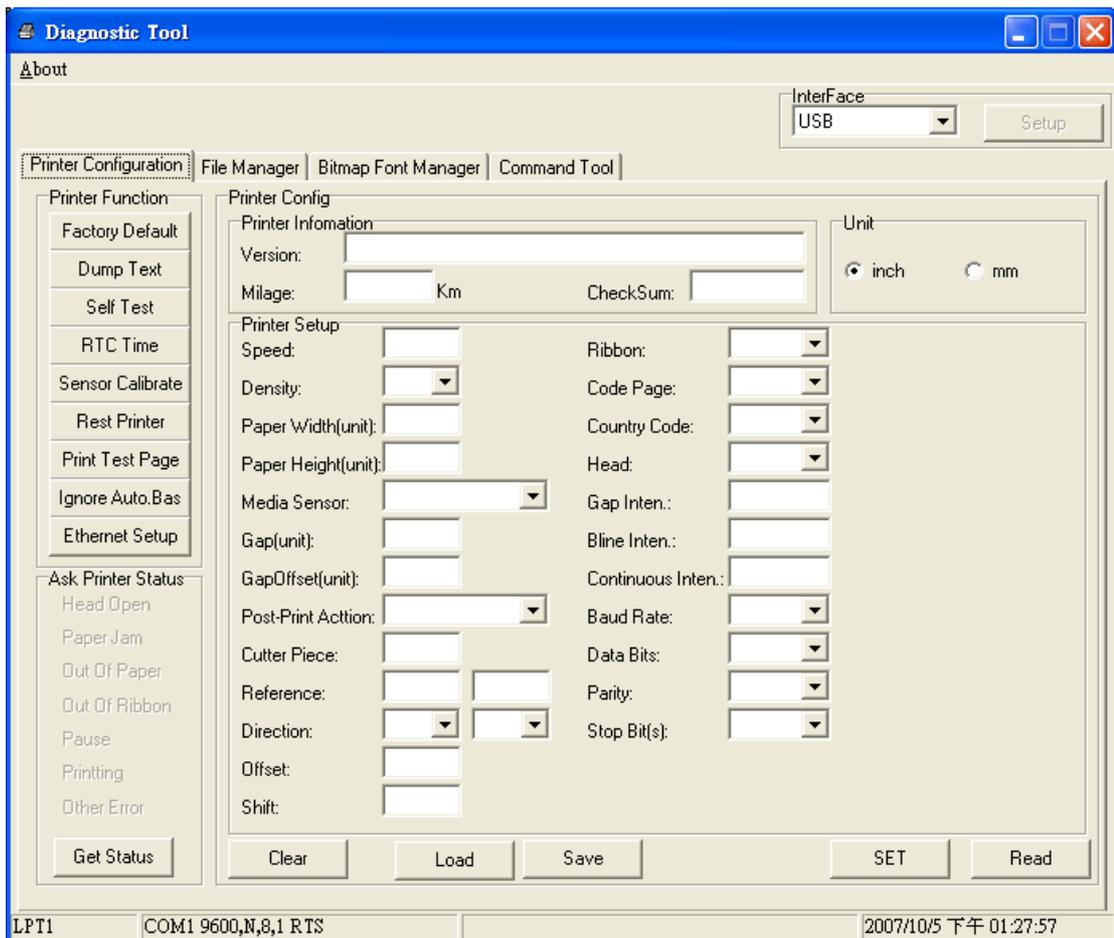
## 1. Getting started with Diagnostic Utility

Diagnostic Utility is an integrated tool that includes the features to explore the printer settings/status, change the printer settings, download graphics, fonts, firmware, create printer bitmap font and the tool to send additional commands to printer. By this convenient tool, users can explore the printer status and settings at instance and it will be more easier to troubleshoot the printer.

**Note: This utility works with printer firmware V6.00 and later versions.**

### 1.1 Start the Diagnostic Utility

Double click on the Diagnostic utility icon  `DiagTool.exe` to start the software. There are four features (Printer Configuration, File Manager, Bitmap Font Manager, Command Tool) included in the Diagnostic utility.



## 1.2 Select the PC interface connected with bar code printer

- Default setting is USB interface. No further setting is required.
- If RS-232 port is selected, further setup is required to select the serial port, baud rate, parity check, data bits, stop bit and flow control.
- If parallel port is selected, need to further select the parallel port (LPT1, LPT2...) that connected with bar code printer.

**Note: Printer parallel interface does not support bi-directional communication. Printer settings and status will not be available by parallel port connection.**

## 2. Configure the printer settings

The image shows a 'Printer Setup' dialog box with the following fields and controls:

Speed:	<input type="text"/>	Ribbon:	<input type="text"/>
Density:	<input type="text"/>	Code Page:	<input type="text"/>
Paper Width(unit):	<input type="text"/>	Country Code:	<input type="text"/>
Paper Height(unit):	<input type="text"/>	Head:	<input type="text"/>
Media Sensor:	<input type="text"/>	Gap Inten.:	<input type="text"/>
Gap(unit):	<input type="text"/>	Bline Inten.:	<input type="text"/>
GapOffset(unit):	<input type="text"/>	Continuous Inten.:	<input type="text"/>
Post-Print Action:	<input type="text"/>	Baud Rate:	<input type="text"/>
Cutter Piece:	<input type="text"/>	Data Bits:	<input type="text"/>
Reference:	<input type="text"/>	Parity:	<input type="text"/>
Direction:	<input type="text"/>	Stop Bit(s):	<input type="text"/>
Offset:	<input type="text"/>		
Shift:	<input type="text"/>		

Buttons at the bottom: Clear, Load, Save, SET, Read

### 2.1 Explore the printer settings

After setup the interface, turn on printer power then click “Read” button to get the printer settings.

### 2.2 Change the printer settings

After read back the printer settings, the settings can be changed by enter new value in the text box or select different value from the options then click “Set” button to take effect the settings.

### 2.3 Save the printer settings to a file

Once read the printer settings from printer, the settings can be saved by click the “Save” button. The default filename extension is .DCF.

### 2.4 Load the saved printer setting file

The saved printer setting file (.DCF) can be retrieved by clicking on the “Load” then click “Set” button to change the printer settings.

### 2.5 Clear the printer settings in the Diagnostic Utility

Click the “Clear” button to clear the settings in each filed in the Printer Setup group.

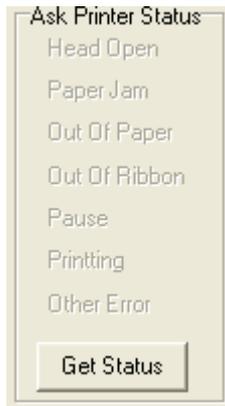
## 3. Individual printer functions

In the past, the printer self-test, sensor calibration, initialization, ignore AUTO.BAS ... etc. must be operated by printer power-on utilities. Now these functions are available in the Diagnostic utility without press any button by printer FEED button. The detail functions in the Printer Function Group are listed as below.



Function	Description
Factory Default	Initialize the printer and restore the settings to factory default.
Dump Text	To activate the printer dump mode.
Self Test	Print printer configuration
RTC Time	Synchronize printer Real Time Clock with PC
Sensor Calibrate	Calibrate the sensor specified in the Printer Setup group media sensor field
Reset Printer	Reboot printer
Print Test Page	Print a test page
Ignore AUTO.BAS	Ignore the downloaded AUTO.BAS program
Ethernet Setup	Setup the IP address, subnet mask, gateway for the on board Ethernet

## 4. Polling printer status



Ask Printer Status

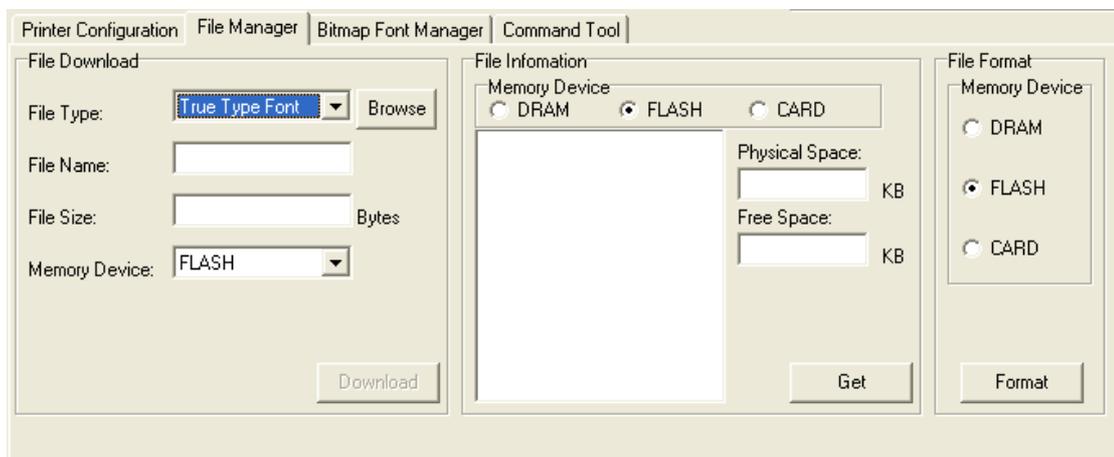
- Head Open
- Paper Jam
- Out Of Paper
- Out Of Ribbon
- Pause
- Printing
- Other Error

Get Status

When connecting printer with USB or RS-232 interface, the “Get Status” button will be visible to polling printer status. Whenever printer is blinking with red, click “Get Status” then the printer status will be indicated with red.

## 5. File manager

File manager feature is to help users to generate the file header, download the file into printer, explore what files are downloaded in printer memory and delete all files in the memory.



Printer Configuration | File Manager | Bitmap Font Manager | Command Tool

**File Download:**

File Type:  Browse

File Name:

File Size:  Bytes

Memory Device:

Download

**File Information:**

Memory Device:  DRAM  FLASH  CARD

Physical Space:  KB

Free Space:  KB

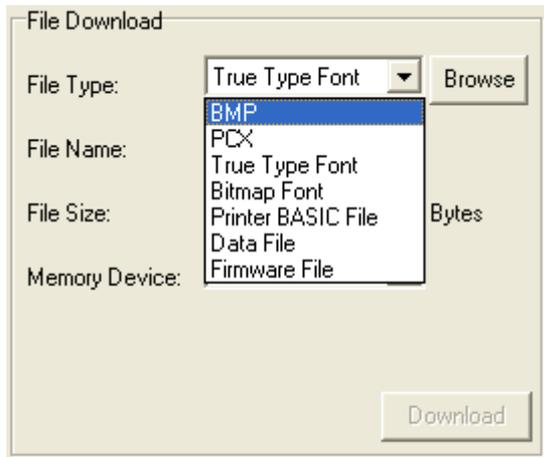
Get

**File Format:**

Memory Device:  DRAM  FLASH  CARD

Format

## 5.1 File download group



File Download

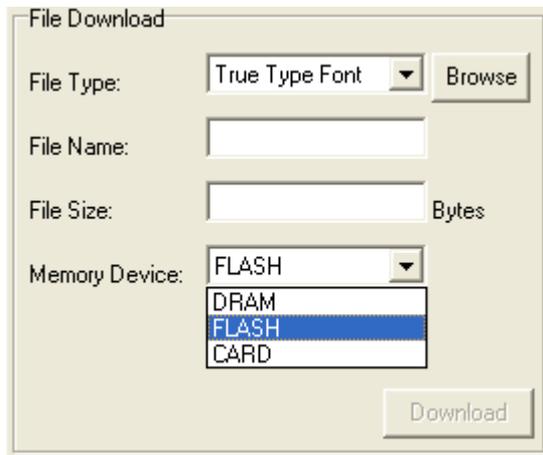
File Type: True Type Font

File Name:

File Size: Bytes

Memory Device:

Select the file type then click “Browse” button to select the file for download.



File Download

File Type: True Type Font

File Name:

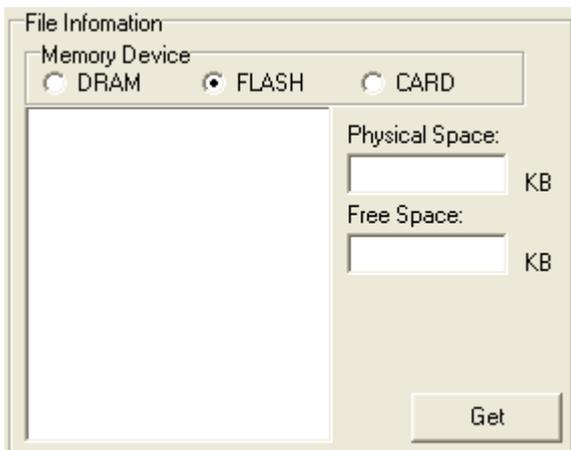
File Size: Bytes

Memory Device: FLASH

Specify the memory device to download the file.

Click “Download” button to start to download the file.

## 5.2 File information group



File Information

Memory Device

DRAM  FLASH  CARD

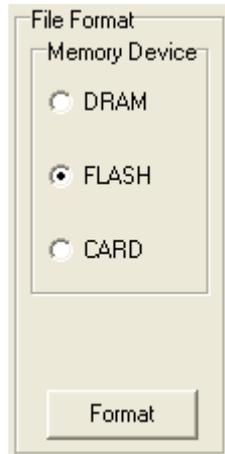
Physical Space: KB

Free Space: KB

This feature is to list what files are downloaded in the specified memory device.

Select the memory device then click “Get” button to list the files saved in the specified memory.

## 5.2 File format group



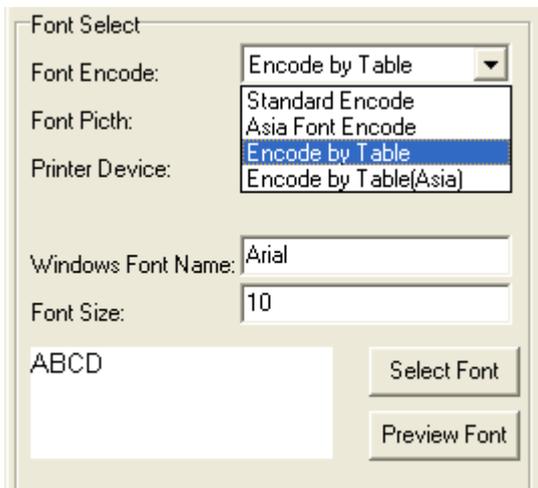
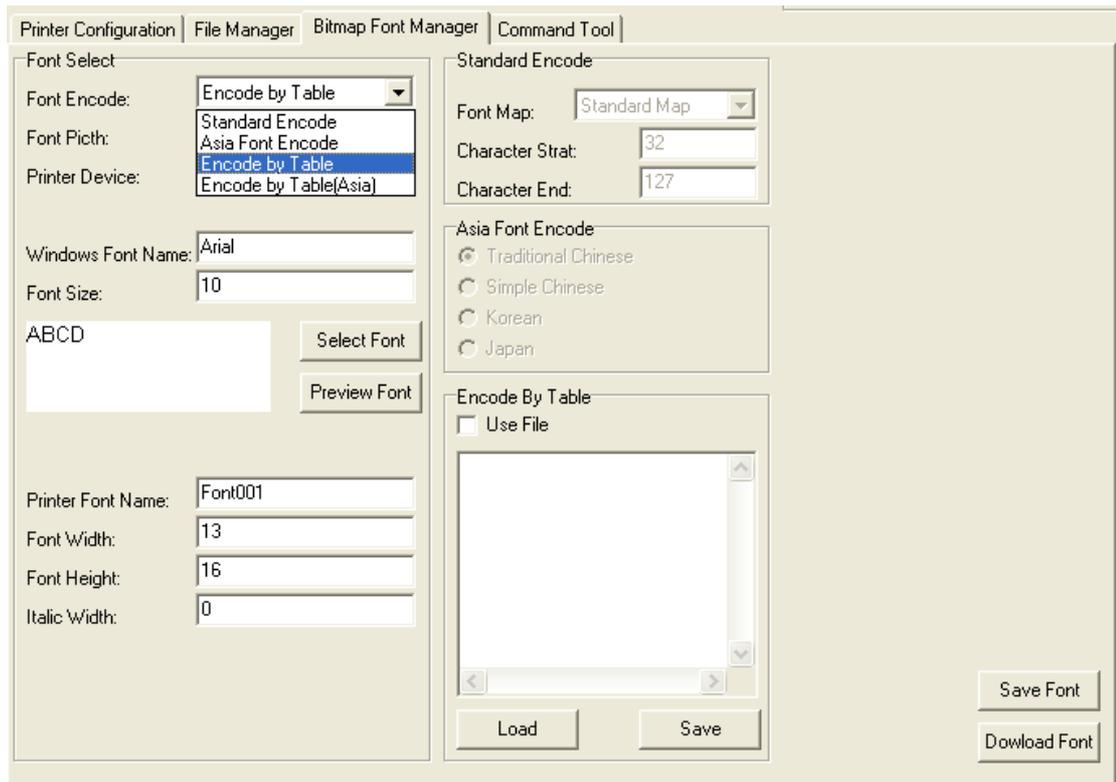
The image shows a dialog box titled "File Format". Inside the dialog, there is a section labeled "Memory Device" which contains three radio button options: "DRAM", "FLASH", and "CARD". The "FLASH" option is selected, indicated by a filled circle. Below the "Memory Device" section, there is a "Format" button.

This feature is used to delete all the files for the specified memory device.

Select the memory device then click "Format" button to delete all the files in the specified memory.

## 6. Bitmap font manager

Bitmap font manager is used to convert the selected TTF font into printer format bitmap font. Both fixed pitch and variable pitch bitmap font are supported.



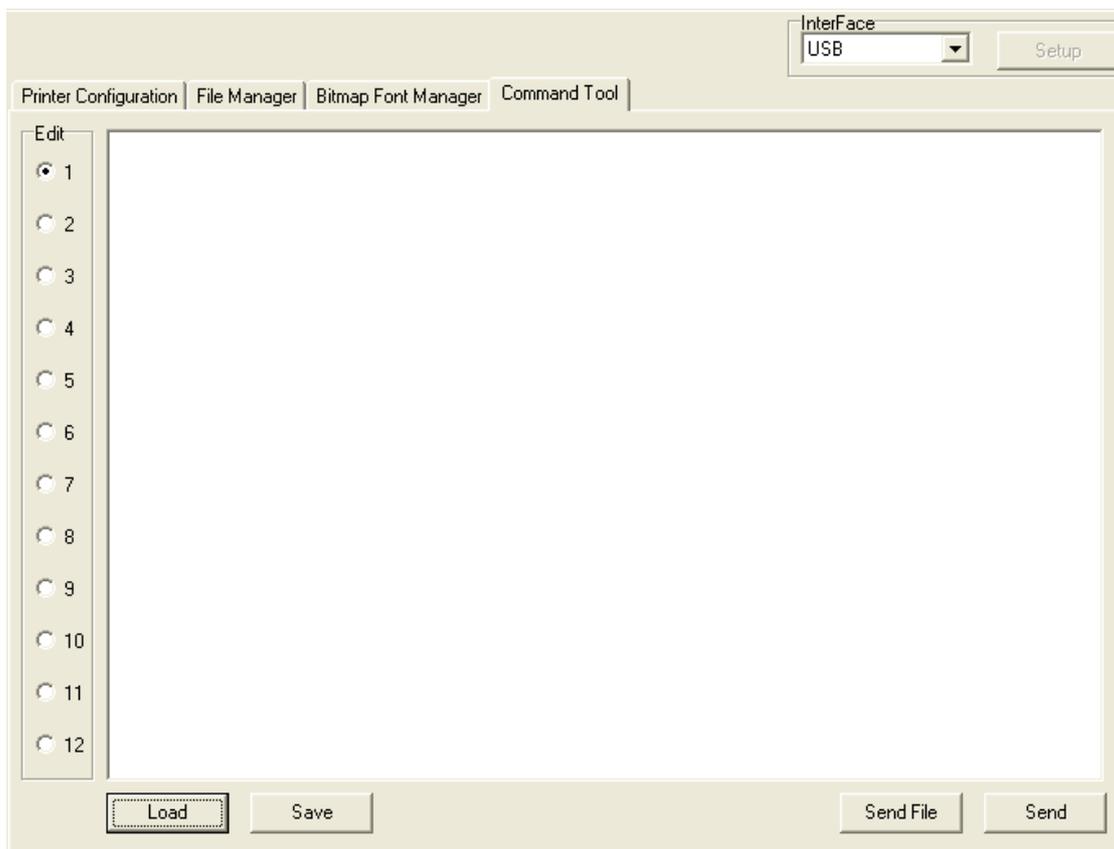
Select “Standard Encode”, “Variable pitch” font. Specify the destination memory to save the bitmap font, font name and specify the font height then click “Download Font” button to download the converted bitmap font into printer memory.

The converted bitmap font can also save to a file by clicking “Save Font” button.

## 7. Command Tool

The additional features that are not yet supported in the Diagnostic Utility can be sent out by printer commands to printer from the Command Tool. Select the interface. Specify the text box and enter the commands in the text box. Please be reminded to hit the enter key at the end of each command line. Click the “Send” button to send out the commands in the specified text box to printer. You can also send a command file by clicking “Send File” button.

Click “Save” button to save the commands in the specified text box. You can also open the file to the text box by clicking “Load” button then click “Send” button to send the data to printer.



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