

Quick Start Guide

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Contents

1. Getting started with Diagnostic Utility1
1.1 Start the Diagnostic Utility1
1.2 Select the PC interface connected with bar code printer2
2. Configure the printer settings
2.1 Explore the printer settings4
2.2 Change the printer settings4
2.3 Save the printer settings to a file4
2.4 Load the saved printer setting file4
2.5 Clear the printer settings in the Diagnostic Utility4
3. Individual printer functions4
4. Polling printer status
5. File manager
5.1 File download group6
5.2 File information group6
5.3 File format group7
6. Bitmap font manager7
7. Command Tool9

Diagnostic Utility Quick Start Guide

1. Getting started with Diagnostic Utility

The 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 PAL Plus programs to the printer. With this convenient tool, users can explore the printer status and settings at a glance and makes it easier to troubleshoot problems.

Note: This utility works with printer firmware V6.711 and later versions.

1.1 Start the Diagnostic Utility

Double click on the Diagnostic utility icon DiagToolexe to start the software.

There are four tabs (Printer Configuration, File Manager, Bitmap Font Manager, Command Tool) included in the Diagnostic utility.

🖻 Diagnostic Tool 📃 🗖 🔀				
About				
Language English			USB	Setup
Printer Configuration File	e Manager Bitmap Font M	anager Command Tool		1
Printer Function	Printer Configuration			
Calibrate Sensor	Printer Infomation		Chook Sum	Unit
Ethernet Setup	version			
RTC Setup	Milage	Km	Serial NO.	O mm
Print Test Page	TSPL/E Z D			
Reset Printer	Speed		Ribbon	▼
Factory Default	Density	-	Code Page	_
Dump Text	Paper Width	Unit	Country Code	· ·
Ignore AUTO.BAS	Paper Height	Unit	Head-up Sensor	· ·
Configuration Page	Media Sensor	•	Reprint After Error	▼
- Brinker Chalus	Gap	Unit	Gap Inten.	
Ready	Gap Offset	Unit	Bline Inten.	
Head Open	Post-Print Action	•	Continuous Inten.	
Paper Jam	Cut Piece		Baud Rate	-
Out of Paper	Reference		Data Bits	
Ribbon End Err.	Direction		Paritu	
Pause	Officet		Chen Dit(a)	
Printting	Unset		2 IOD BIES	· · · · · · · · · · · · · · · · · · ·
Other Error	Shift×			
	Shift Y			
Get Status	Clear	Load Save		Set Read
			J	

1.2 Select the PC interface connected to the printer

Interface	
USB 💌	Setup
COM	
LPT ETHERNET	

- The default setting is the USB interface.
- If you use an RS-232 port is selected, select the COM interface. The printer's default serial settings are 9600 baud, no parity, 8 data bits, 1 stop bit and RTS flow control.

🖨 RS232 Setup		
COM Port	COM1	•
Baud Rate	9600	•
Data Bits	8	•
Parity Check	None	•
Stop Bit(s)	1	•
Hardware Handshaking	RTS	•
Software Handshaking	None	▼
		Set
		Cancel

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

■ If Ethernet is selected, you need to select the applicable printer.

Printer Nmae	MAC	IP Address	Model Name	Status	IP Setting
PS-FF563F	00:1B:82:FF:56:3F	10.0.2.45	DT024-XX	READY	Port 9100
			and I was	Salar I	F

1.3 To connect to the utility, click the "Ignore AUTO.BAS" button. This allows the printer and Diagnostic tool to communicate.

TSPL/E Z D				
Speed		Ribbon	-	
Density	-	Code Page		•
Paper Width	Unit	Country Code		•
Paper Height	Unit	Head-up Sensor	-	
Media Sensor	•	Reprint After Error	-	
Gap	Unit	Gap Inten.		
Gap Offset	Unit	Bline Inten.		
Post-Print Action	•	Continuous Inten.		
Cut Piece		Baud Rate		•
Reference		Data Bits		•
Direction		Parity		•
Offset		Stop Bit(s)		•
Shift×				
Shift Y				
Clear	Load Save		Set	Read

2. Configure the printer settings

2.1 Explore the printer settings

Click the "Read" button to get the printer settings.

2.2 Change the printer settings

Select the printer emulation tab (i.e. TSPL/E, D or Z). Select TSPL for PAL. The settings can be changed by entering a new value in the text box or by selecting a different value from the options. Click the "Set" button to save the new settings.

2.3 Save the printer settings to a file

The printer settings can be saved to a file by clicking 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 field in the Printer Setup group.

3. Individual printer functions

The detail functions in the Printer Function Group are listed as below.

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

4. Polling printer status

	Printer Status	When connecting printer with a USB or RS-232 interface,
	Ready	the "Get Status" button will be visible to poll the printer
	Head Open	status
	Paper Jam	
	Out of Paper	
	Ribbon End Err.	If the printer is blinking red, the printer status will be
	Ribbon Encoder Err.	indicated with red.
	Pause	
	Printting	
	Other Error	
	Get Status	
1		

5. File manager

File Manager feature tab is used to help users to generate the file header, download new firmware, explore what files are downloaded in the printer memory and delete all files in the memory.

Printer Configuration	File Manager	Bitmap Font Man	age	er Command To	ool			
File Download				File Infomation				File Format
File Type	True Type Font	Browse		Memory Device C DRAM	• 🖲 FLASH	C CARD		Memory Device
File Name						Physical Space		
							KB	FLASH
File Size		Bytes				Free Space		
Memory Device	FLASH	•					КВ	C CARD
Font View		Download				Get		Format

5.1 File download group

File Download		Select the file type then click
File Type File Name	True Type Font Browse BMP PCX True Type Font	"Browse" button to select the file for download.
File Size Memory Device	Bitmap Font Printer BASIC File Bytes Data File Firmware File TCF File	NOTE: BMP graphic files need to be in Black & White monochrome format. Gravscale files are not supported
Font View	Download	
File Download		Specify the memory device to
File Download File Type	True Type Font Browse	Specify the memory device to download the file.
File Download File Type File Name	True Type Font Browse	Specify the memory device to download the file. Click "Download" button to start the
File Download File Type File Name File Size	True Type Font Browse Browse Bytes	Specify the memory device to download the file. Click "Download" button to start the download of the file.
File Download File Type File Name File Size Memory Device	True Type Font Browse Browse Browse Bytes FLASH FLASH CARD	Specify the memory device to download the file. Click "Download" button to start the download of the file.

5.2 File information group

File Infomation	This feature lists what files are
Memory Device C DRAM © FLASH C CARD Physical Space: KB Free Space:	downloaded in the specified memory device. Select the memory device then click
Get	the "Get" button to list the files saved in the specified memory.

5.3 File format group

File Format Memory Device O DRAM FLASH C CARD	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. To delete a PAL Plus program, select Flash, then click the "Format" button.
C CARD	To delete a PAL Plus program, select Flash, then click the "Format" button. <i>NOTE: Prior to downloading a new or updated PAL,</i> <i>existing PAL applications need to first be deleted using</i> <i>the FORMAT button.</i>

6. Bitmap font manager

Bitmap Font Manager tab is used to convert the selected TTF font into a printer format bitmap font. Both fixed pitch and variable pitch bitmap fonts are supported.

Printer Configuration	File Manager Standard En Standard En Asian Font E Encode by T Encode by T	Bitmap Font Mar code ncode able able (Asian)	Fon Cha	Command Tool	ard Mapping 💌 32 127	
Windows Font Name Font Size ABCD	Arial	Select Font	Asia © © ©	an Font Encode Traditional Chinese Simplified Chinese Korean Japanese		
Printer Font Name Font Width Font Height Italic Width	Font001 13 16 0	Preview Font		by Table By File	Load	Save Font Download Font

1	Font Select		Select "Standard Encode" "Variable		
	Font Encode	Standard Encode	pitch" font. Specify the destination		
	Printer Device	Asian Font Encode Encode by Table Encode by Table (Asian)	name and specify the font height then		
	Mindows Fort Moreo	Arial	click "Download Font" button to		
	Font Size	10	download the converted bitmap font		
	ABCD	Select Font	The converted bitmap font can also		
		Preview Font	Font" button.		

7. Command Tool

The Command Tool tab is used to download PAL Plus programs and data files.

To load a PAL Plus program click the "Send File" button, locate the file and send.

To test the PAL Plus program with the matching data file, go to the Printer Configuration tab. Click on the "Reset Printer" button to cycle the power of the printer and activate the newly loaded PAL Plus program.

Go back to the "Command Tool" tab, click the "Send File" button, locate the data file that the PAL program was written for and send.

				USB -	Setup
Printer Co	nfiguration File M	anager Bitmap Font Mana	ger Command Tool		
Edit					
• 1					
C 2					
C 3					
O 4					
O 5					
0.6					
O 7					
C 8					
O 9					
C 10					
O 11					
O 12					
	Load	Save		Send File	Send