

# **TOSHIBA**

TOSHIBA TEC Bar Code Printer

**B-SX4T/B-SX5T/B-SA4T Series**

**Z-MODE Setting Tool Specification**

1st Edition: May 31, 2009  
2nd Edition: September 30, 2009  
3rd Edition: January 20, 2010

**TOSHIBA TEC CORPORATION**

## Table of Contents

1. GENERAL DESCRIPTION .....	1
2. SYSTEM REQUIREMENT .....	1
3. OUTLINE OF THE FUNCTIONS .....	1
4. INSTALLATION PROCEDURE .....	2
5. START-UP OF THE TOOL .....	2
6. OPERATING PROCEDURE .....	3
6.1 Start Screen.....	3
6.2 Printer setting screen .....	4
6.3 System parameter setting screen.....	5
6.4 Initial values & table setting screen .....	7
6.5 Dowload screen .....	19
6.6 Tool screen.....	21
6.7 Options Screen .....	22

## **Trademark Acknowledgements**

Microsoft and Windows are trademarks of Microsoft Corp.

Zebra, ZPL, ZPL II, ZebraNET are registered trademarks of Zebra Technologies Corp.

TrueType is a registered trademark of Apple Computer, Inc.

All other company or product names are registered trademarks or trademarks of their respective companies.

Each company's registered trademarks and trademarks are not marked with <sup>TM</sup> or <sup>®</sup>.

COPYRIGHT© 2010 TOSHIBA TEC Corporation All rights reserved.

## **Software License Agreement**

Please read the following terms and conditions of this Agreement carefully before using this Software. This is a legal agreement between you and TOSHIBA TEC. By installing this Software on your computer, you are agreeing to be bound by the terms and conditions of this Agreement.

1. You may use this Software on a single TOSHIBA TEC barcode printer acquainted from affiliated company, dealer or distributor of TOSHIBA TEC.
2. You shall not grant a sub-license, distribute, transfer, lend or otherwise dispose of this Software, in whole or in part, for the use of any third party other than you except as otherwise expressly provided herein.
3. You shall not modify, reverse engineering, reverse compile or reverse disassemble this Software, in whole or in part, except as otherwise expressly provided herein.
4. You shall not copy or make a duplicate (or backup copy) of this Software, in whole or in part, except as otherwise expressly provided herein.
5. All title and copyrights in and to this Software are owned by TOSHIBA TEC or its licensor.
6. TOSHIBA TEC or its licensor makes no representation or warranty, expressed or implied, including but not limited to the correction of any error or failure, maintenance and support relating to this Software.
7. IN NO EVENT SHALL TOSHIBA TEC OR ITS LICENSOR BE LIABLE TO YOU OR ANY THIRD PARTIES FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGE ARISING OUT OF THE USE OR INABILITY TO USE THIS PROGRAMS, EVEN IF TOSHIBA TEC HAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, NOR FOR ANY CLAIMS BY A THIRD PARTY.
8. TOSHIBA TEC or its licensor will terminate this Agreement if you fail to comply with any of this terms and conditions. Upon the termination of this Agreement, you agree to uninstall the Software and return it to TOSHIBA TEC.
9. This Agreement shall become effective upon the installation or use of this Software by You. By installing or using this Software you hereby indicate your acceptance of these terms and conditions.

## 1. GENERAL DESCRIPTION

This tool is Windows application software which enables parameter settings and program download to the printer when the TOSHIBA TEC bar code printer is operating in Z-MODE. It is also possible to save the parameter settings to a file and download this file to the printer to reflect the settings in the printer.

Note: This tool is designed for the persons who are familiar with the printer settings. Care must be taken when using this tool.

## 2. SYSTEM REQUIREMENT

OS:	Windows XP (SP2/SP3), Windows Vista (Without SP/SP1)
Language:	Japanese or English (English will be selected for the non-Japanese OS.)
Screen size:	1024 x 768 or larger
Applicable printer:	B-SX4T (with MAIN4 PC board), B-SX5T (with MAIN4 PC board), and B-SA4T
Printer firmware version:	<ul style="list-style-type: none"><li>• Setting Tool version B001.001 or before: B-SX4T/SX5T: C5.3 to C5.5</li><li>• Setting Tool version B001.002 or greater: B-SX4T/SX5T: C5.6 or greater B-SA4T: C1.9A or greater</li></ul> <p>Note: Any combinations other than above may cause a printer error.</p>
Interface:	COM (RS-232C) USB *Not supported. LAN (Socket) LPT (Centronics) * Data send only

## 3. OUTLINE OF THE FUNCTIONS

### 1. Printer setting

Enables a selection of a printer model and interface. (B-SX4T, B-SX5T, or B-SA4T only)

### 2. System parameter setting

Enables setting initial values for the label size, sensor type, etc.

Available parameters and their options are common to those provided in the printer system mode.

### 3. Initial values & table setting

Initial values:	Enables setting an initial value for each ZPL parameter.
Font conversion table:	Enables setting a correction value related to font printing.
Drive mapping table:	Enables setting a TPCL drive corresponding to the ZPL drive.
Response command:	Enables setting response data for status request commands of ZPL.

#### **4. Download**

Enables download of the firmware or BASIC program, transmission of a parameter setting file or test file, etc.

#### **5. Tool**

Enables activating/inactivating the Z-MODE and starting the TTF downloader.

#### **6. Options**

Enables setting the properties of this tool.

\* Basically, do not change the settings.

### **4. INSTALLATION PROCEDURE**

Execute the ZMSTINST.EXE.

After the install wizard is displayed, follow the instruction on the screen.

### **5. START-UP OF THE TOOL**

Click on the "Start" menu, select "Program", "TOSHIBA TEC", and "Z-MODE Setting Tool".

Note: If a message indicating that "XMLLITE.DLL" is missing appears while the Z-MODE Setting Tool is started, please obtain an appropriate XMLLite from Microsoft website on the Internet and install it.

## 6. OPERATING PROCEDURE

### 6.1 START SCREEN

Printer Setting screen is displayed on the start screen.

By clicking on an icon in the Views area on the left, the corresponding menu screen appears.

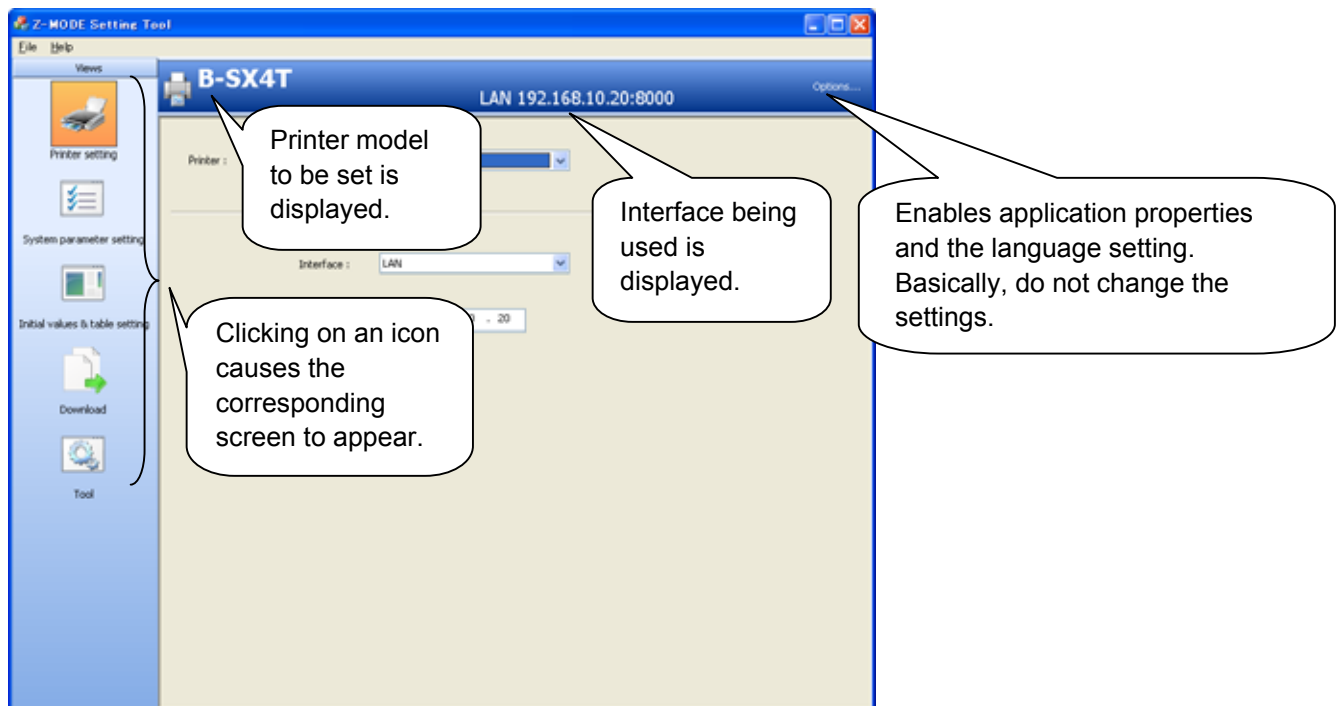
#### Menu bar

##### File menu

Exit: Exits the Z-MODE Setting Tool.

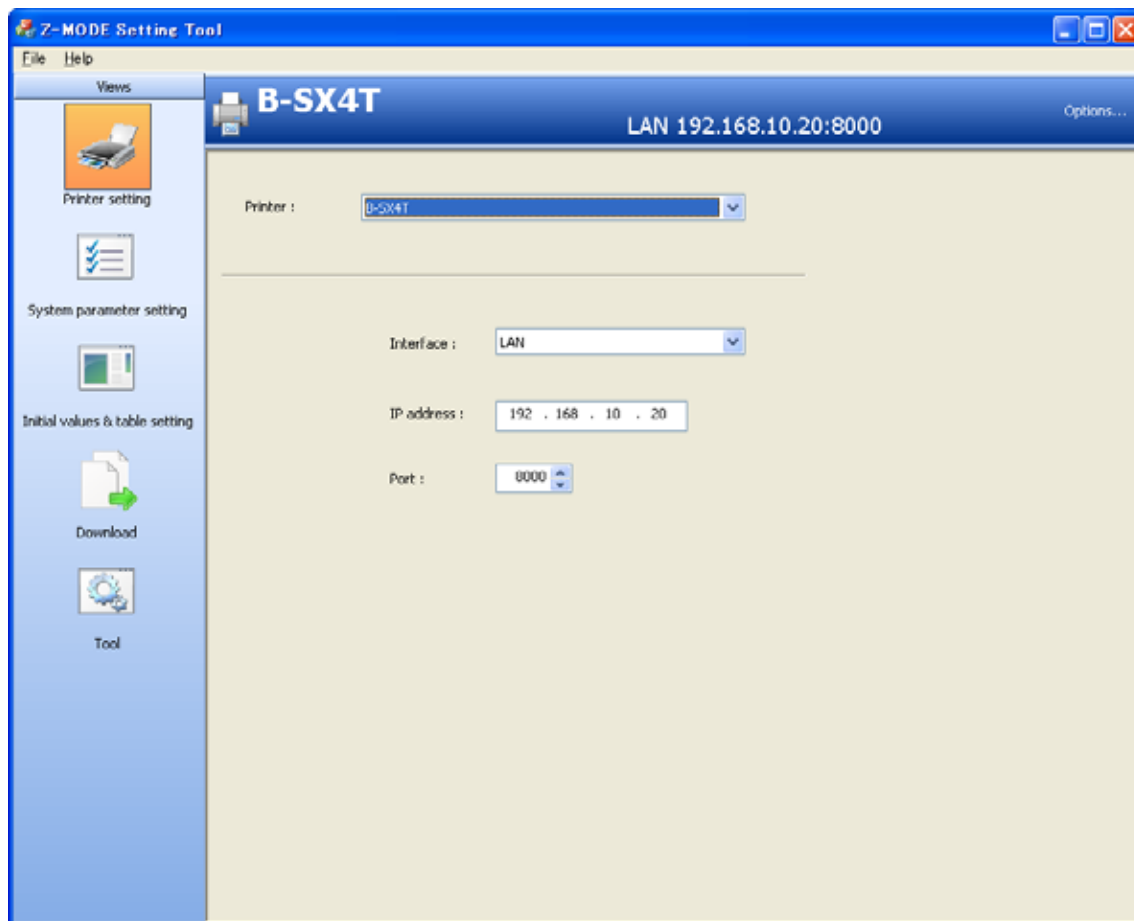
##### Help menu

About Z-MODE Setting Tool: Shows the version information.



## 6.2 PRINTER SETTING SCREEN

A printer model to be configured by the Z-MODE Setting Tool and an interface to be used are selected.



**Printer:** Only the B-SX4T, B-SX5T, or B-SA4T is selectable. Other models are provided for future use.

**Interface:** An interface type recognized by the Z-MODE Setting Tool is selectable. The parameters are shown in accordance with the selected interface, and they need to be set according to the printer settings.

**Note:** If the same interface is specified for the printer driver and this tool, change the output port of the printer driver. Failure to do this may prevent the proper downloading.

## 6.3 SYSTEM PARAMETER SETTING SCREEN

System mode parameters in Z-MODE are configured. Programmable parameters and their options are common to those provided in the printer system mode.

For details of each parameter, refer to the Z-MODE Specification (Z-MODE\_Spec\_4th.pdf).

### <Supplementary explanation for the parameter setting>

- For the parameters setting the length or width, only numerals and a space are acceptable. (Decimal point is not necessary.)
- For the RFID tag position adj. and the LABEL SHIFT parameters, the number of digits is fixed (–000.0 to +000.0) and a positive (+) or negative (-) symbol needs to be entered in the first digit.
- For the parameters in the Code Setting area, enter hexadecimal numbers in the parentheses.

#### Button

Load: Reads the settings from a specified file.

Save: Saves the settings in a specified file.

Download: Downloads the settings to the printer.

The Download screen appears to enable the following settings.

StartBlock: Specifies the block number where the data is started to be saved. (Usually, the default is used.)

Activate Z-MODE after download:

When checked, the Z-MODE will be activated after downloading.



Get printer param: Retrieves the settings from the printer.

Note: If no Z-MODE settings have been done on the printer before or no system parameter files have been sent to the printer before, no data is obtained from the printer.

Reset to default: Restores the all settings to the default.

**<Precaution>**

When sending the saved file to the printer using the BASIC V2 File Loader, use the following settings:

File name: **ZEBRAPRM.TXT** (If other file name is used, the settings are not reflected in the printer.)

FILE TYPE: **DATA**

BLOCK NUMBER: **3 (B-SX4T/SX5T)** or **2 (B-SA4T)**

## 6.4 INITIAL VALUES & TABLE SETTING SCREEN

### <Precaution>

Setting values for the “Initial values”, “Font Conversion table”, and “Drive mapping” are all saved in the same file.

When sending the saved file to the printer using the BASIC V2 File Loader, use the following settings:

File name: **ZDEFAULT.TXT** (If other file name is used, the settings are not reflected in the printer.)

FILE TYPE: **DATA**

BLOCK NUMBER: **4 (B-SX4T/SX5T)** or **3 (B-SA4T)**

### Initial values tab

The initial values of each ZPL parameter and the converter internal operation are set in the case a command or parameter is omitted in the Z-MODE. Basically, do not change the settings.

The screenshot shows the 'Z-MODE Setting Tool' window for the 'B-SX4T' printer, connected via LAN at 192.168.10.20:8000. The 'Initial values' tab is selected, showing a grid of settings. On the left, a sidebar contains icons for Printer setting, System parameter setting, Initial values & table setting (highlighted), Download, and Tool. The main area is divided into sections: BarCode (BY) with settings for Default height (10), Module size (2), and Narrow to wide bar ratio (3.0); Field (FP) with Text rotation (Normal), Inter-character space (0), and INC/DEC (1); Serialization (SN) with Zero suppress checked; Unit (MU) with Unit set to dot; Field block (FB) with Field width (0), Number of lines (1), Space dot between lines (0), Alignment (Align left), and X position correction (0); Graphic (GB/GC/GD) with Line weight (1) and Tone fine adj. value (0); Label (LH/LS/PM/PO/PF/LT) with Character set (0), X and Y positions of label home position (0), X position offset (0), and Label rotation/Mirror print (Bottom first); Print (PQ) with Print count (1) and Cut interval (0); and GETCMDZB with Format data area (0) and Get data from (Receive buffer). A 'Reset to default' button is in the top right. At the bottom are buttons for Load, Save, Download, and Get printer param.

BarCode (BY):

---

Print (PQ):

Sets the initial values for the parameters of each command. (Basically, do not change the settings.) For details of each command and parameter, please refer to ZPL Manual.

#### PC Save Area Allocate:

Format data area: Specifies the memory size (number of blocks) for storing the format data used in the Z-MODE. The PC save area of the TPCL is used. In the Z-MODE, the PC save area is divided into two. One is used for format data and the other is used for the graphic data.

Specify the number of blocks used for storing the commands. The remaining blocks are used as the graphic data area.

If "0" is specified, the format data and the graphic data share the PC save area half and half.

#### GETCMDZB:

Get data from:

Receive buffer: Standard option for the Z-MODE. (Basically, do not change the setting.)  
The converter firmware analyzes the data in the receive buffer and converts into a command.

BASIC Application: If data cannot be converted into a command in the Z-MODE, BASIC application is used to modify a received command so that the converter firmware can convert it into a command.

Note: When this option is selected, BASIC application needs to be changed.

#### Button

Load: Reads the settings from a specified file. (Settings of all pages)

Save: Save the settings in a specified file. (Settings of all pages)

Download: Downloads the settings to the printer. (Settings of all pages)

The Download screen appears to enable the following settings.

StartBlock: Specifies the block number where the data is started to be saved.

(Usually, the default is used.)

Activate Z-MODE after download:

When checked, the Z-MODE will be activated after downloading.

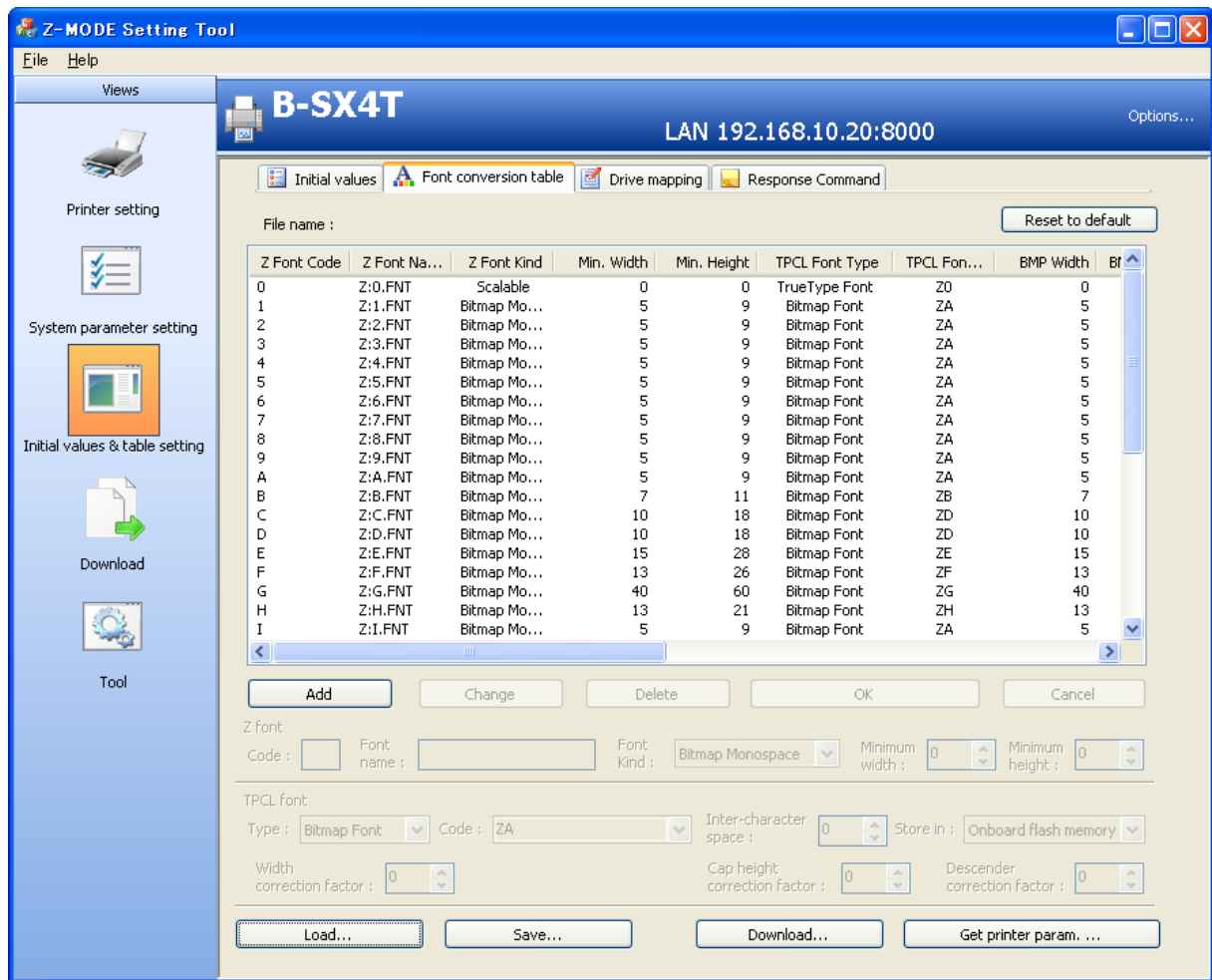
Get printer param: Retrieves the settings from the printer. (Settings of all pages)

Note: If no Initial Values & Table files have been sent to the printer before, no data is obtained from the printer.

Reset to default: Restores the all settings to the default.

## Font conversion table tab

Font size and position in the Z-MODE are adjusted.



For the items to set, refer to the following pages. For details of the font adjustment, please refer to the Supplementary Document for Z-MODE Setting Tool (Zebra Converter font fine adjustment with the font conversion table).

### Button

- Add:** Adds a new line to the font conversion table.
- When a font code (a character from 0 to 9 and A to Z) assigned to an added font is not determined (in the case CW command is used), add a new line and enter an appropriate value for the added font.
- Change:** Changes an existing setting.
- First select the line to be changed, then click on the Change button.
- Delete:** Deletes a line added by the Add button.
- First select the line to be deleted, then click on the Delete button.
- Note: Only the lines added by the Add button can be deleted.
- Save:** Update the display to reflect the changes in the table.
- Cancel:** Cancels the changes made by the Add or Change button.

Load: Reads the settings from a specified file. (Settings of all pages)

Save: Save the settings in a specified file. (Settings of all pages)

Download: Downloads the settings to the printer. (Settings of all pages)  
 The Download screen appears to enable the following settings.  
 StartBlock: Specifies the block number where the data is started to be saved.  
 (Usually, the default is used.)  
 Activate Z-MODE after download:  
 When checked, the Z-MODE will be activated after downloading.

Get printer param: Retrieves the settings from the printer. (Settings of all pages)

Reset to default: Restores the all settings to the default.

## Items to set in the Font Conversion Table

### Z font

Item	Description
Z Font Code	Font code for Zebra font (0 to 9, A to Z) is displayed.
Z Font Name	Specify a file name of the Zebra font. Note: Storage location of the file must be specified, like "Z:A.FNT". Z:ROM,R:RAM,B:FLASH CARD,E:COMPACT FLASH,A:ON BOARD FLASH
Z Font Kind	Select a Zebra font type from the following three: S: Scalable (0 font) M: Bitmap Monospace (A to H font) P: Bitmap Proportional (P to V) Note: Set a proper value according to the ZPL II Specification.
Minimum width	Set the minimum width of the selected font in units of dots. Note 1: Set a proper value according to the ZPL II Specification. Note 2: Be sure to set "0" for the scalable font.
Minimum height	Set the minimum height of the selected font in units of dots. Note 1: Set a proper value according to the ZPL II Specification. Note 2: Be sure to set "0" for the scalable font.

### TPCL font

Item	Description
Font type	Select a TEC font type from the following 4 types: B: Bitmap O: Outline G: Writable character T: TrueType
Font Code	Specify a TEC font which the Zebra font is converted into. Note: Set a proper value according to the External Equipment Interface Specification (TPCL command manual).
BMP Width correction factor	Set the minimum width of the selected TEC bitmap and writable character in units of dots. Basically, the width of the original sized font (no magnification) should be specified. Note: Be sure to set "0" for the outline/TTF.
BMP Cap height correction factor	Set the minimum cap height of the selected TEC bitmap and writable character in units of dots. (*1) Basically, the cap height of the original sized font (no magnification) should be specified. Note: Be sure to set "0" for the outline/TTF.
BMP Descender	Set the minimum descender size of the selected TEC bitmap and writable

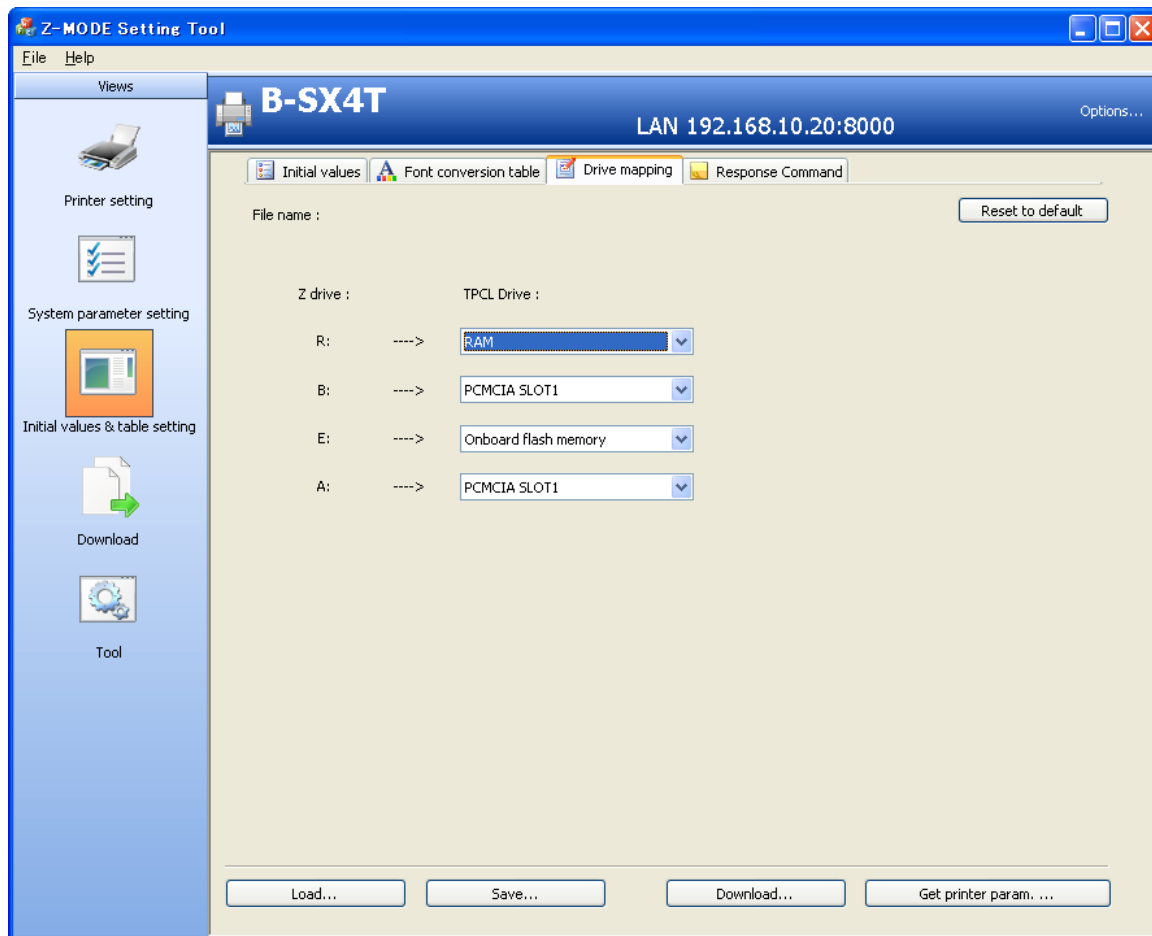
Item	Description
correction factor	character in units of dots. (*2) Basically, the descender size of the original sized font (no magnification) should be specified. Note: Be sure to set "0" for the outline/TTF.
Outline Cap height correction factor	Set the ratio of the cap height to the height of the selected TEC outline and TrueType font in units of percentage. (1= 0.1%) Note 1: The sum of this value and that of the descender correction factor below must be 1000. Note 2: Be sure to set "0" for the bitmap/writable character.
Outline Descender correction factor	Set the ratio of the descender size to the height of the selected TEC outline and TrueType font in units of percentage. (1= 0.1%) Note 1: The sum of this value and that of the cap height correction factor above must be 1000. Note 2: Be sure to set "0" for the bitmap/writable character.
Outline Width correction factor	Set the width correction factor for the selected TEC outline and TrueType font in units of percentage. (1= 1%, Range: 50 to 300, 100% = No correction) Note: Be sure to set "0" for the bitmap/writable character.
Outline height correction factor	Set the height correction factor for the selected TEC outline and TrueType font in units of percentage. (1 = 1%, Range: 50 to 300, 100%= No correction) Note: Be sure to set "0" for the bitmap/writable character.
BMP Inter-character space	Set the inter-character space correction factor for the selected TEC bitmap and writable characters in units of dots. (0 dot= No correction) Note: Be sure to set "0" for the outline/TTF.
Outline inter-character space	Set the ratio of the inter-character space correction factor to the character width of the selected TEC outline and TrueType font in units of percentage. (1= 0.1%, 0%= No correction) Note: Be sure to set "0" for the bitmap/writable character
Drive (Store in)	Specify the storage location of the selected TEC font. Note: Set a proper value according to the External Equipment Interface Specification (TPCL command manual).

Note 1: Cap height is the height of characters above the baseline

Note 2: Descender is the height of characters below the base line.

## Drive mapping tab

A TPCL drive corresponding to the ZPL drive is specified.



TPCL Drive: Specifies the TPCL drives corresponding to the ZPL's.

### Button

Load: Reads the settings from a specified file. (Settings of all pages)

Save: Save the settings in a specified file. (Settings of all pages)

Download: Downloads the settings to the printer. (Settings of all pages)  
The Download screen appears to enable the following settings.

StartBlock: Specifies the block number where the data is started to be saved.  
(Usually, the default is used.)

Activate Z-MODE after download:

When checked, the Z-MODE will be activated after downloading.

Get printer param: Retrieves the settings from the printer. (Settings of all pages)

Reset to default: Restores the all settings to the default.

## Response Command tab

Data returned in response to the ZPL's query commands is set.

HI Command:

Sets response data for various query commands of ZPL. The following table shows the data format for each query command. (Basically, do not change the settings.)

HQUI Command

For details of each command and parameter, please refer to ZPL Manual.

ZPL Command	Character string	Data length	Response data
HI	Printer model name – print head resolution (dpi)	Variable length Omissible	(e.g.) “B-SX4-200dpi” Max. 63 bytes
		1	Comma
	Version information	Variable length Omissible	(e.g.) “C5.4” Max. 63 bytes
		1	Comma
	Dots/mm	Variable length Omissible	8 12 Only numeric value is effective.
		1	Comma



ZPL Command	Character string	Data length	Response data
	Memory	Variable length Omissible	"512KB" "1024KB" "2048KB" "4096KB" "8192KB"
		1	Comma
	Option information	Variable length Omissible	"CUTTER DETECTED": When the cutter module is fitted. Max. 63 bytes
HM	Total RAM size	Variable length Omissible	(e.g.) "8192" Only numeric value is effective.
		1	Comma
	Max. RAM size	Variable length Omissible	(e.g.) "8192" Only numeric value is effective.
		1	Comma
	Currently available RAM size	Variable length Omissible	(e.g.) "8192" Only numeric value is effective.
HS String 1	Communication Setting	3 Omissible	For details, refer to ZPLI II Manual. Enter bit data in the decimal ASCII format. (e.g.) 7 <sup>th</sup> bit is ON. Hex.: 0x80 → Decimal: 128 Data to be sent is "128" Only numeric value is effective.
		1	Comma
	Paper out flag	1 Omissible	0 1: No paper Only numeric value is effective.
		1	Comma
	Pause flag	1 Omissible	0 1: In pause state Only numeric value is effective.
		1	Comma
	Label length	Variable length Omissible	Label length Only numeric value is effective.
		1	Comma
	Number of formats in receive buffer	Variable length Omissible	0 to 999 XA to XZ Number of the formats Only numeric value is effective.
		1	Comma
	Buffer full flag	1 Omissible	0 1: Buffer full Only numeric value is effective.
		1	Comma
	Communications diagnostic mode flag	1 Omissible	0 1: In dump mode Only numeric value is effective.
		1	Comma
	Partial format flag	1 Omissible	0 1: Command is being analyzed. Only numeric value is effective.

ZPL Command	Character string	Data length	Response data
		1	Comma
	Unused	3 Omissible	000 Only numeric value is effective.
		1	Comma
	Corrupt RAM flag	1 Omissible	0 1 Only numeric value is effective.
		1	Comma
	Temperature range	1 Omissible	0 1: Abnormal (Under temperature) Only numeric value is effective.
		1	Comma
	Temperature range	1 Omissible	0 1: Abnormal (Over temperature) Only numeric value is effective.
HS String 2	Function settings	3 Omissible	For details, refer to ZPLI II Manual. Enter bit data in the decimal ASCII format. (e.g.) 7 <sup>th</sup> bit is ON. Hex.: 0x80 → Decimal: 128 Data to be sent is "128" Only numeric value is effective.
		1	Comma
	Unused	1 Omissible	0 Only numeric value is effective.
		1	Comma
	Head up flag	1 Omissible	0: Print head is closed. 1: Print head is opened. Only numeric value is effective.
		1	Comma
	Ribbon out flag	1 Omissible	0 1: No ribbon Only numeric value is effective.
		1	Comma
	Thermal transfer mode flag	1 Omissible	0 1: Thermal transfer Only numeric value is effective.
		1	Comma
	Print mode	1 Omissible	0: Rewind 1: Peel-off 2: Tear-off 3: Cutter 4: Applicator 5: Delayed cut 6: Reserved ** 7: Reserved ** Only numeric value is effective.
		1	Comma
	Print width mode	1 Omissible	6 Only numeric value is effective.
		1	Comma

ZPL Command	Character string	Data length	Response data
	Label waiting flag	1 Omissible	0 1: Waiting for the printed label removed. Only numeric value is effective.
		1	Comma
	Labels remaining in batch	Variable length Omissible	The number of labels unprinted Only numeric value is effective.
		1	Comma
	Format while printing flag	1 Omissible	1 Only numeric value is effective.
		1	Comma
	Number of graphic images stored in memory	Variable length Omissible	The number of stored graphics Only numeric value is effective.
HS String 3	Password	4 Omissible	(e.g.) "1234" Fixed to 4 bytes
		1	Comma
	Static RAM	1 Omissible	0: Static RAM not installed. 1: Static RAM installed. Only numeric value is effective.
HQMA	Head replacement interval	Variable length Omissible	50 Only numeric value is effective.
		1	Comma
	Head replacement frequency	Variable length Omissible	0 Only numeric value is effective.
		1	Comma
	Head cleaning interval	Variable length Omissible	0 Only numeric value is effective.
	Head cleaning frequency	Variable length Omissible	0 Only numeric value is effective.
		1	Comma
	Print replacement alert	Variable length Omissible	"NO" Max. 63 bytes
		1	Comma
	Print cleaning alert	Variable length Omissible	"NO" Max. 63 bytes
HQMI			
	Clean message	Variable length Omissible	"PLEASE CLEAN PRINT HEAD" Max. 63 bytes
		1	Comma
HQOD	Replace message	Variable length Omissible	"PLEASE REPLACE PRINT HEAD" Max. 63 bytes
	Total nonresettable	Variable length Omissible	Printing distance Only numeric value is effective.
		1	Comma
	User resettable CNTR1	Variable length Omissible	Printing distance Only numeric value is effective.

ZPL Command	Character string	Data length	Response data
		1	Comma
	User resettable CNTR2	Variable length Omissible	Printing distance Only numeric value is effective.
HQPH	Last cleaned	Variable length Omissible	Printing distance Only numeric value is effective.
		1	Comma
	Distance 1	Variable length Omissible	Printing distance Only numeric value is effective.
HQES	Errors	Character string 19 bytes	Error information (e.g.) 1 00000000 0000000B
		1	Comma
	Warnings	Character string 19 bytes	Warning information (e.g.) 1 00000000 00000001
HQHA	MAC address	Character string 17 bytes	MAC address (e.g.) 12:34:56:78:90:AB
HQJT	Print head test result	Character string 18 bytes	Print head test result (e.g.) 1,M,0250,1200,0032
HQPP	MFG	Character string Max. 30 bytes	Manufacturer
		1	Comma
	CMD	Character string Max. 30 bytes	Command
		1	Comma
	MDL	Character string Max. 30 bytes	Model name
HQSN	Serial number	Character string Max. 35 bytes	Printer serial number
HQUI	PID	Character string 4 bytes	PID of USB
		1	Comma
	Release version	Character string 5 bytes	Release version

#### Button

Load: Reads the settings from a specified file. (Settings of all pages)

Save: Save the settings in a specified file. (Settings of all pages)

Download: Downloads the settings to the printer. (Settings of all pages)  
The Download screen appears to enable the following settings.

StartBlock: Specifies the block number where the data is started to be saved.  
(Usually, the default is used.)

Activate Z-MODE after download:

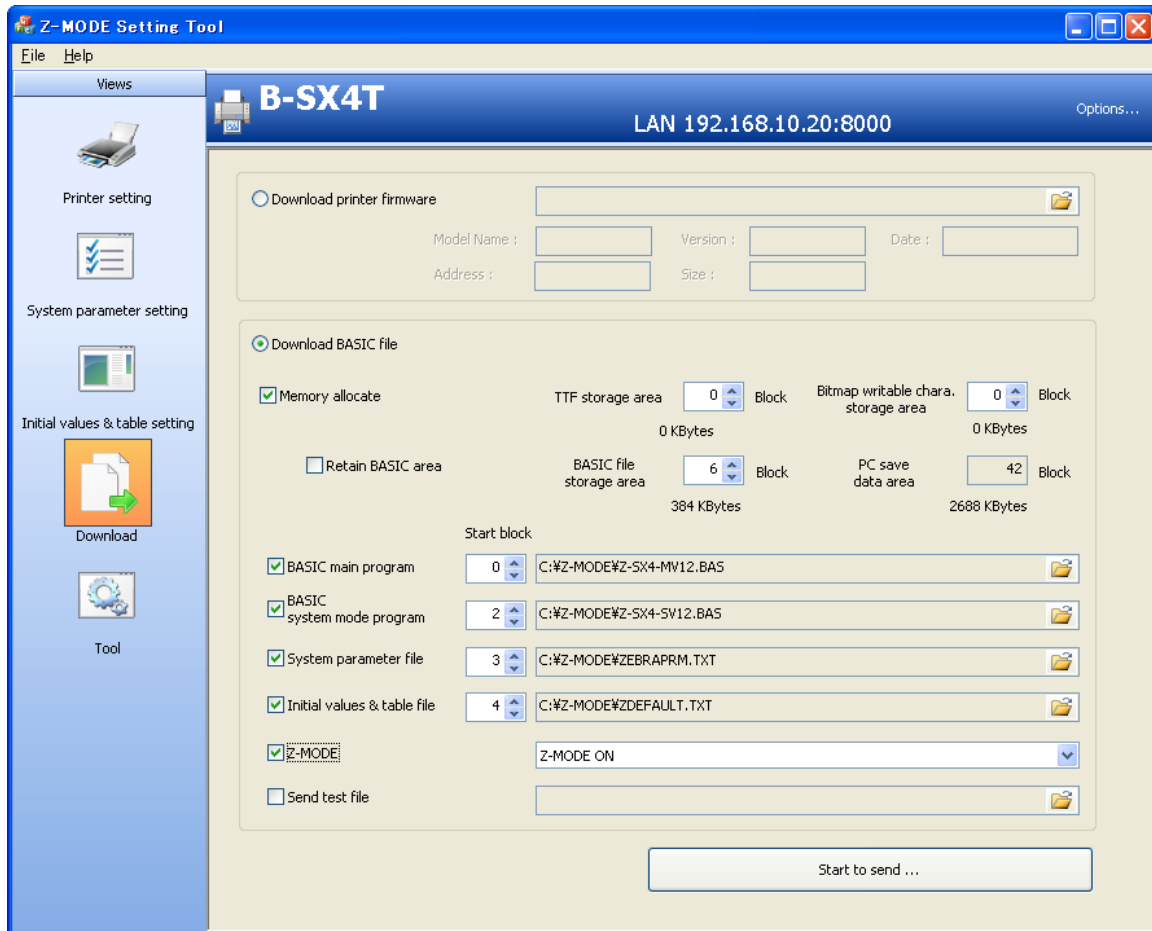
When checked, the Z-MODE will be activated after downloading.

Get printer param: Retries the settings from the printer. (Settings of all pages)

Reset to default: Restores the all settings to the default.

## 6.5 DOWNLOAD SCREEN


Printer firmware designed for the Z-MODE, the BASIC application, or parameter setting file saved with this system is downloaded.



### Radio button

- ☐ Download printer firmware: Downloads the printer firmware.
- ☐ Download BASIC File: Downloads the BASIC program or parameter setting file.

### ● Download printer firmware

Click on the  button and select a file to be downloaded. When a file is selected, various firmware information is displayed.

Note: Firmware downloading should be conducted under a direction of an engineer. In case the firmware downloading fails, the printer may not start again.

Before downloading files, place the printer in the download mode. Acceptable interface types are Centronics and RS-232C.


Start to send: Starts downloading and displays the progress of the downloading. When the downloading is completed, this button will be changed to the OK button.

## ● Download BASIC File


Check the checkbox of the items to be downloaded.

Memory allocate: Sends a flash memory allocate command.  
When this command is executed, data in the flash memory is all deleted.  
When using the Z-MODE, specify 6 or more blocks (4 or more blocks in the case of the B-SA4T) for the BASIC file storage area.  
In the Z-MODE, the PC save area is used for storing format data and graphic data, so sufficient areas should be secured. (At least 2 blocks or more)  
For other areas, set as needed basis.


BASIC main program: Sends the BASIC main program for the Z-MODE.

Specify "0" for the start block. Pressing the  button enables a selection of a file.

BASIC system mode program: Sends the BASIC system mode program for the Z-MODE.


Specify "2" ("1" in the case of the B-SA4T) for the start block.  
Pressing the  button enables a selection of a file.

System parameter file: Sends the file containing the parameter settings saved on the System parameter setting screen.

Specify "3" ("2" in the case of B-SA4T) for the start block.  
Pressing the  button enables a selection of a file.


Note: Regardless of the specified file name, this file is always sent under the name of "ZEBRAPRM.TXT".

Initial values & table file: Sends the file containing the initial values & table settings saved on the Initial values & table setting screen.

Specify "4" ("3" in the case of the B-SA4T) for the start block. Pressing the  button enables a selection of a file.

Note: Regardless of the specified file name, this file is always sent under the name of "ZDEFAULT.TXT".

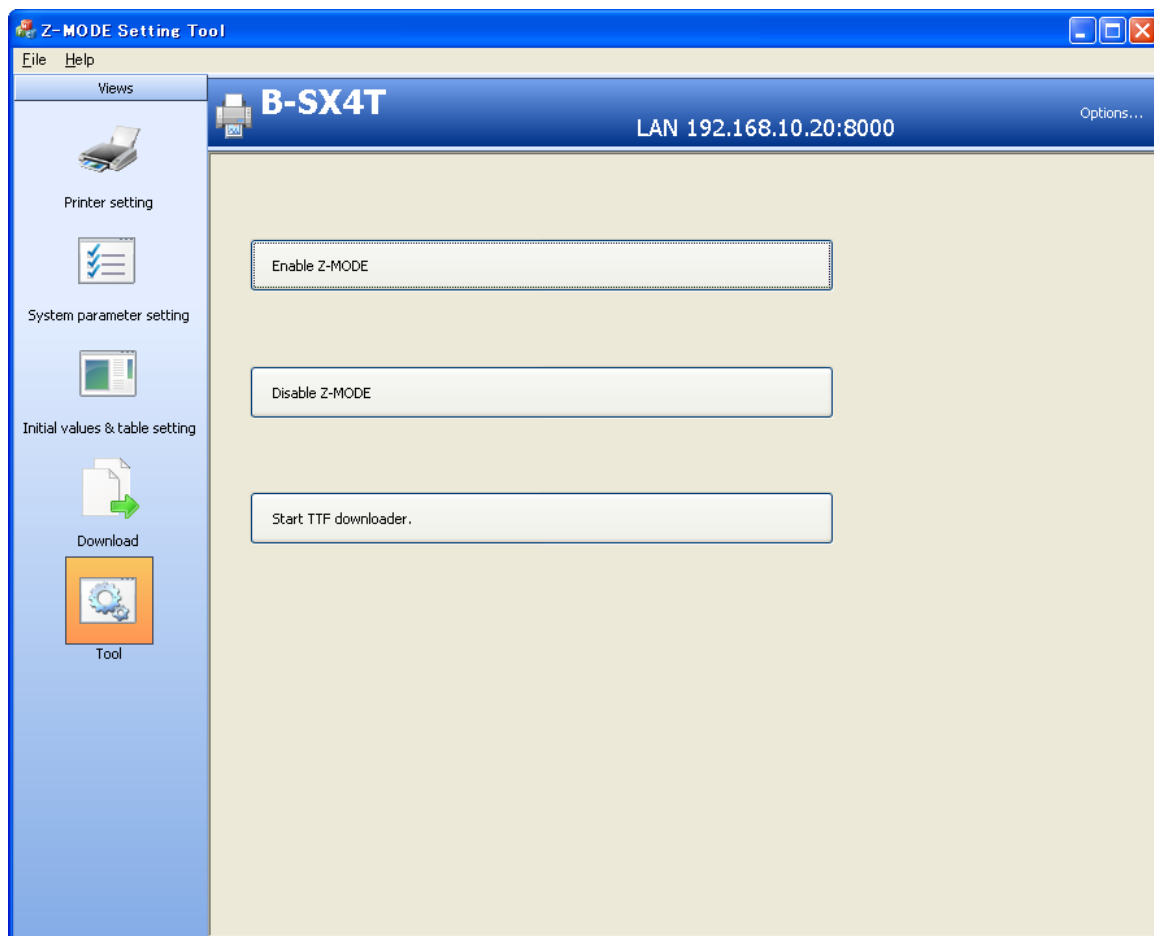
Z-MODE: Sends a Z-MODE ON/OFF command.

Send test file: Sends a specified file without change.  
Pressing the  button enables a selection of a file.

Start to send: Consecutively sends the files or commands of which checkbox is checked.  
Before sending the files or commands, turn off the Z-MODE.  
When the downloading is started, the progress of the downloading is displayed.  
When the downloading is completed, this button will be changed to the OK button.

## 6.6 TOOL SCREEN

Whether to turn on or off the Z-MODE is selected and the TTF Downloader is started.



Enable Z-MODE: Enables the Z-MODE on the printer.

Disable Z-MODE: Enables the TPCL mode on the printer.

Start TTF downloader: Starts the TTF downloader.

Note: The TTF downloader needs to be installed separately.



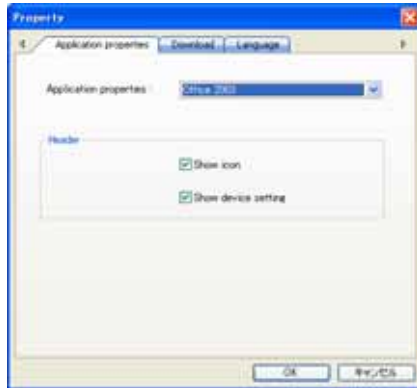
## 6.7 OPTIONS SCREEN

The behavior or appearance of this tool can be changed.

Note: Basically, do not change this setting.

### Application properties tab

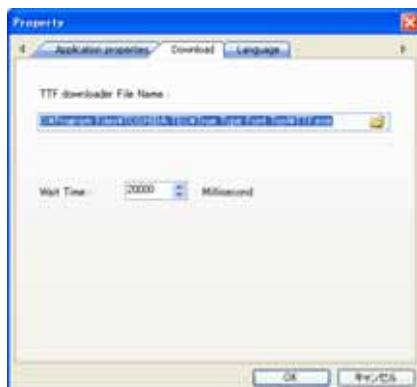
Color or appearance of the screen is changed.



### Download tab

TTF downloader File Name: Specifies a program that is started by the Start TTF downloader button.

Wait Time: Specifies the wait time of communication in units of milliseconds.  
Note: Do not change this value.



### Language tab

A language (Japanese or English) used to display the screen of this tool is selected.

