



## Summary of Printer Firmware Changes

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## **V 8.00**

If you would like to update the firmware V8.00 EZ for the printer, please note that:

1. Your data in the printer's FLASH memory will be cleared out after updating V8.00 EZ from the version which is older than V6.95EZ (not include).
2. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).

### **TSPL2**

- \* Fix Denmark keyboard capital/small letter issue
- \* Support Codepage:
  - PC-850
  - CP1250 - Latin 2 (Central Europe)
  - CP1251 - Cyrillic
  - CP1252 - Latin 1 (Western Europe)
  - CP1253 - Greek
  - CP1254 - Latin 5 (Turkish)
  - CP1255 – Hebrew
- \* Modify replace command string failed issue
- \* Fix Data Matrix shut down issue
- \* Add LABELRATIO command

### **EPL emulator**

- \* Fix ImageBuffer issue

### **ZPL emulator**

- \* Fix ^PQ & ^PP conflict issue
- \* Remove UTF8 for #define IS\_BIDI\_TYPE (AgfaText.c) → Solve Arabic printing issue

### **SBPL emulator**

- \* Add built-in X20 ~ X24 Bitmap font
- \* Modify EZS File system flash address form 0x160000 to 0x1A0000, add 256Kbyte code buffer

### **System**

- \* Support French LCD display for TTP-225/TTP-323 series
- \* Fix Ethernet delay bug
- \* Modify Ribbon THRESHOLD for TTP243Pro/TTP342Pro series

## **V 7.09**

If you would like to update the firmware V7.09 EZ for the printer, please note that:

1. Your data in the printer's FLASH memory will be cleared out after updating V7.09 EZ from the version which is older than V6.95EZ (not include).
2. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).

## TSPL2

- \* Disable Imm-commands when parser the Bitmap command
- \* Add SET RESPONSE ON/OFF/BATCH
- \* Support Denmark keyboard
- \* Add UPCE1 Barcode

## EPL emulator

- \* Modify Thai-font printing issue
- \* Modify GW bitmap command issue
- \* Modify LINE Shift issue (when  $X < 0$ )
- \* Modify EAN128 issue (when ratio  $\leq 2$ ;  $90^\circ$  &  $270^\circ$ )
- \* Modify UTF16 LITTLE END & BIG END printing problem
- \* Add ^FWr,z command (z justification)

## DPL emulator

- \* Modify SOH D SOH B SOH C issue
- \* Modify serial printing  $270^\circ$  barcode issue

## V 7.08

**If you would like to update the firmware V7.08 EZ for the printer, please note that:**

- 3. Your data in the printer's FLASH memory will be cleared out after updating V7.08 EZ from the version which is older than V6.95EZ (not include).**
- 4. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).**

## System

- \* Fix the issue for Code16K barcode
- \* Disable the line mode power-on utility function
- \* Add the Serbian language shown on LCD for TTP-2410M series

## TSPL2

- \* Fix the issue for Code93 ascii '-' character
- \* Modify the SET VERIFIER command
- \* Fix the issue that "@" global variable can't be set
- \* Fix the issue for LOB() command
- \* Add PUTBMP command to support .GRF format
- \* Fix the issue for daylight saving time
- \* Fix the @MONTH, @DATE, @HOUR, @MINUTE, @SECOND commands to support two-digit format

### ZPL2 emulator

- \* Fix the issue for Datamatrix ECC200
- \* Add MXML command
- \* Add ~JE command (exit dump mode)
- \* Add ~JR command (power-on reset)
- \* Fix the ~DB character code
- \* Fix the issue that ~DB command & FontMult Height isn't correct

### EPL2 emulator

- \* Fix the TD command
- \* Fix the issue that code128 decode the FUN1~FUN4 isn't correct
- \* Fix the DataMatrix 2D Barcode
- \* Ignore it if all the bytes are 0x20

## **V 7.06**

**If you would like to update the firmware V7.06 EZ for the printer, please note that:**

- 5. Your data in the printer's FLASH memory will be cleared out after updating V7.06 EZ from the version which is older than V6.95EZ (not include).**
- 6. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).**

### System

- \*The LPR command supports TSPL immediate commands, but there is no any feedback message.
- \* Retrieve the information of the SNMP mileage, label mileage & printer status from the SNMP protocol (mib: 1.3.6.1.4.1.51966.2.6.3.3311.1~3)
- \* As long as the ribbon encoder sensor detects ribbons, the ribbon end sensor will be enabled automatically for TTP268M and TTP366M.
- \* Fix the issue that the rewinder of the TTP-366M will stop working when printing a long label.
- \* Read the ribbon flag and change the unit of mileage from mm to cm from the SNMP protocol.
- \* Add the print speed of 1 IPS for the TTP-644M.
- \* Fix the deadlock problem for the Datamatrix encoding.
- \* Diagnostic Tool supports the reading of the current IP, Mask, Gateway addresses for the external WiFi module.
- \* Fix the Polish characters shown on LCD problem.
- \* Add the feature of the auto sensor calibration in the functional page of the Web-interface.
- \* Increase the file name length of the flash and ram systems from 15 to 32 characters.
- \* Disable the D-cache for the TTP-366M and TTP-268M.
- \* Fix the Central Europe fonts shown on LCD issue.

- \* Fix the issue for QR Code and Datamatrix when the image size is larger than 60K. (Increased to 192K.)
- \* Enable SD Card power save mode for TTP-268M and TTP-384M series.

#### TSPL2

- \* Add the extra parameters for the SET RIBBON\_I command to modify the silver ribbon reference.
- \* Add the FORMAT\$(Number,"###.##") command.
- \* Fix the issue for the INPUT FILTER command when the filtered string is part of the contents.
- \* Fix the issue when the name of a BAS file is beginning with TT and TD.

#### ZPL2 emulator

- \* Modify the Maxicode to ignore ',' in U.S. Style Postal Code parameter.
- \* Increase the file name length of ZPL system from 8 to 32 characters.
- \* Fix the issue for the ~DG command when the download file width is larger than TPH width, there will be an error for the download data.
- \* Fix the issue for the FB function when the content is only one line.

#### EPL2 emulator

- \* For a Maxicode, if there is no class code, set the class code to 0.
- \* For a Datamatrix, if the 'r' parameter is used before the 'c' parameter, it will be ignored.
- \* EPL expression will be finished when there is a space, tab, CR or LF.
- \* Ignore the spaces in the front of the number as a parameter.

## **V 7.05**

**If you would like to update the firmware V7.05 EZ for the printer, please note that:**

- 7. Your data in the printer's FLASH memory will be cleared out after updating V7.05 EZ from the version which is older than V6.95EZ (not include).**
- 8. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).**

#### System

- \* The LPR command supports TSPL immediate commands, but there is no any feedback message.
- \* Retrieve the information of the SNMP mileage, label mileage & printer status from the SNMP protocol (mib: 1.3.6.1.4.1.51966.2.6.3.3311.1~3)
- \* As long as the ribbon encoder sensor detects ribbons, the ribbon end sensor will be enabled automatically for TTP268M and TTP366M.
- \* Fix the issue that the rewinder of the TTP-366M will stop working when printing a long label.
- \* Read the ribbon flag and change the unit of mileage from mm to cm from the SNMP protocol.

- \* Add the print speed of 1 IPS for the TTP-644M.
- \* Fix the deadlock problem for the Datamatrix encoding.
- \* Diagnostic Tool supports the reading of the current IP, Mask, Gateway addresses for the external WiFi module.
- \* Fix the Polish characters shown on LCD problem.
- \* Add the feature of the auto sensor calibration in the functional page of the Web-interface.
- \* Increase the file name length of the flash and ram systems from 15 to 32 characters.
- \* Disable the D-cache for the TTP-366M and TTP-268M.
- \* Fix the Central Europe fonts shown on LCD issue.
- \* Fix the issue for QR Code and Datamatrix when the image size is larger than 60K. (Increased to 192K.)

## TSPL2

- \* Add the extra parameters for the SET RIBBON\_I command to modify the silver ribbon reference.
- \* Add the FORMAT\$(Number,"###.##") command.
- \* Fix the issue for the INPUT FILTER command when the filtered string is part of the contents.
- \* Fix the issue when the name of a BAS file is beginning with TT and TD.

## ZPL2 emulator

- \* Modify the Maxicode to ignore ',' in U.S. Style Postal Code parameter.
- \* Increase the file name length of ZPL system from 8 to 32 characters.
- \* Fix the issue for the ~DG command when the download file width is larger than TPH width, there will be an error for the download data.
- \* Fix the issue for the FB function when the content is only one line.

## EPL2 emulator

- \* For a Maxicode, if there is no class code, set the class code to 0.
- \* For a Datamatrix, if the 'r' parameter is used before the 'c' parameter, it will be ignored.
- \* EPL expression will be finished when there is a space, tab, CR or LF.
- \* Ignore the spaces in the front of the number as a parameter.

## **V 7.04**

**If you would like to update the firmware V7.04 EZ for the printer, please note that:**

- 9. Your data in the printer's FLASH memory will be cleared out after updating V7.04 EZ from the version which is older than V6.95EZ (not include).**
- 10. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95 EZ (not include).**

## System

- \*The LPR command supports TSPL immediate commands, but there is no any feedback message.
- \* Retrieve the information of the SNMP mileage, label mileage & printer status from the SNMP protocol (mib: 1.3.6.1.4.1.51966.2.6.3.3311.1~3)
- \* As long as the ribbon encoder sensor detects ribbons, the ribbon end sensor will be enabled automatically for TTP268M and TTP366M.
- \* Fix the issue that the rewinder of the TTP-366M will stop working when printing a long label.
- \* Read the ribbon flag and change the unit of mileage from mm to cm from the SNMP protocol.
- \* Add the print speed of 1 IPS for the TTP-644M.
- \* Fix the deadlock problem for the Datamatrix encoding.
- \* Diagnostic Tool supports the reading of the current IP, Mask, Gateway addresses for the external WiFi module.
- \* Fix the Polish characters shown on LCD problem.
- \* Add the feature of the auto sensor calibration in the functional page of the Web-interface.
- \* Increase the file name length of the flash and ram systems from 15 to 32 characters.
- \* Disable the D-cache for the TTP-366M and TTP-268M.
- \* Fix the Central Europe fonts shown on LCD issue.
- \* Fix the issue for QR Code and Datamatrix when the image size is larger than 60K. (Increased to 192K.)

## TSPL2

- \*Add the extra parameters for the SET RIBBON\_I command to modify the silver ribbon reference.
- \* Add the FORMAT\$(Number,"###.##") command.
- \* Fix the issue for the INPUT FILTER command when the filtered string is part of the contents.
- \* Fix the issue when the name of a BAS file is beginning with TT and TD.

## ZPL2 emulator

- \* Modify the Maxicode to ignore ',' in U.S. Style Postal Code parameter.
- \* Increase the file name length of ZPL system from 8 to 32 characters.
- \* Fix the issue for the ~DG command when the download file width is larger than TPH width, there will be an error for the download data.
- \* Fix the issue for the FB function when the content is only one line.

## EPL2 emulator

- \* For a Maxicode, if there is no class code, set the class code to 0.
- \* For a Datamatrix, if the 'r' parameter is used before the 'c' parameter, it will be ignored.
- \* EPL expression will be finished when there is a space, tab, CR or LF.
- \* Ignore the spaces in the front of the number as a parameter.

## **V 7.00**

**If you would like to update the firmware V7.00 EZ for the printer, please note that:**

- 1. Your data in the printer's FLASH memory will be cleared out after updating V7.00 EZ from the version which is older than V6.95EZ (not include).**
- 2. If you use USB interface, you will need to install the driver again after updating this firmware from the version which is older than V6.95EZ (not include).**

### **TSPL2**

- \* Modified DMATRIX (DataMatrix) command to support rotation 0, 90, 180, and 270 degree.
- \* Modified DMATRIX (DataMatrix) command for GS1 rule.
- \* Modified BITMAP command to support gray-scale graphic printing.
- \* Modified INPUT command which didn't work fine in TTP-225 LCD model with USB keyboard.
- \* Added new command <ESC>!F to feed an empty label just like pressing FEED button.
- \* Added new command <ESC>!. to cancel all print jobs in printer's buffer.
- \* Added optional parameters in command LIMITFEED for simplifying sensor calibration of preprinted label.
- \* Supported CODEPAGE 864 (Arabic).
- \* Fixed the return value of global RTC variables DAY and WEEK.

### **EPL2 emulator**

- \* Modified oR command for printing Euro sign.
- \* Modified the height of barcode EAN 13 and EAN 8.

### **ZPL2 emulator**

- \* Modified the internal fonts to support Windows codepage 125x.
- \* Modified the human readable characters of barcode ^BC (UCC/EAN 128) which can auto adjust the position by barcode width.
- \* Modified if ^A@ was not specified the font name, it will use font which was specified by ^CF.
- \* Modified (enlarged) the width of dash (-) symbol.
- \* Modified ^BQ (QR code) to support binary mode.



- \* Supported ^MMD and ~JK commands.
- \* Supported ~JA to cancel all print jobs in printer's buffer.
- \* Fine tune the vertical printing position of Font 0.

#### Network

- \* Modified the ping loss and packet loss issues.
- \* Modified NET NAME command. If the name is not changed, the printer will not restart itself.
- \* Supported FTP file system mode.

#### LCD display

- \* For industrial printers, a **Reprint** mode was added into ZPL2 setting menu. Once it is enabled, the <UP> key can be used for reprinting the last label.

#### Others

- \* Modified SELFTEST page from 4" to 2" width.
- \* Supported UTF-16 data format.
- \* Supported External Wi-Fi module. (Please use DiagTool V1.54)
- \* Supported External Bluetooth module. (Please use DiagTool V1.54)\*

## V 6.95

**If you would like to update the firmware V6.95 EZ for the printer, please note that:**

- 11. Your data in the printer's FLASH memory will be cleared out after updating V6.95 EZ from the older version.**
- 12. If you use USB interface, you will need to install the driver again after updating this firmware V6.95 EZ.**

#### TSPL2

- \* Added barcode CODABLOCK (Codablock F only).
- \* Added barcode DPI (Deutsche Post Identcode) and DPL (Deutsche Post Leitcode).
- \* Added barcode LOGMARS which symbol is the same as CODE 39.
- \* Added barcode TELEPEN (Telepen), TELEPENN (Telepen number), PLANET (Planet) and CODE49 (Code 49).
- \* Added barcode TLC39 to support TCIF Linked Bar Code 3 of 9
- \* Added CODEPAGE 857(Turkish) and 8859-7(Greek)

- \* Added CODEPAGE 861, 855, 866, 737, 851 and 869.
- \* Added command BLOCK.
- \* Added command DATEADD (interval\$, number, date) to convert the new date/time.
- \* Added command ELLISE to draw the oval.
- \* Added command GET to read the data with one byte.
- \* Added command INP(number) to receive 1-byte data from communication interface.
- \* Added command PUT to write 1-byte data into file.
- \* Added command SELFTEST PATTERN to print the print head test pattern.
- \* Added command SET BLINE REVERSE/OBVERSE to reverse/obvert the function of black mark sensor.
- \* Added command SET RIBBONEND ON/OFF to enable/disable the ribbon end sensor.
- \* Added command SET VERIFIER
- \* Added command VERIFYTRIGGER for barcode verifier usage.
- \* Added condition FAULT VERIFIER in command SET GPO.
- \* Added global variable NOW to return the real time.
- \* Added internal Baltic bitmap font.
- \* Added parameters for command OUT to return message from the specific interface. (OUT PORT "Data", PORT can be set for COM, NET and USB).
- \* Fixed AZTEC command to support data with specific length.
- \* Fixed BITMAP command to support grayscale printing. (For direct thermal printing mode only)
- \* Fixed INPUT FILTER command to support empty string.
- \* Fixed multiplication factor of TEXT command to support float data type.
- \* Fixed SIZE command issue. If the setting of label width is larger than the width of print head, the label width will be the same as print head.
- \* Fixed the issue of accuracy when converting float data.
- \* Fixed the issue of conditional command IF.
- \* Fixed the issue of the BITMAP image if it is over the label size.
- \* Fixed the rule of EAN14 generation.
- \* For SET VERIFIER, the printer sends ETX out when verification is finished.
- \* When command error happens, printer returns syntax error message to PC via RS232 only.

#### EPL2 emulator

- \* Fixed MAXICODD to support AIM ITS mode in mode2 and mode3.
- \* Fixed PDF417, DataMatrix, and AZTEC to support variable command V.
- \* Fixed the counter command C to support +/- operations.
- \* Fixed the issue of human readable in Code 128 UCC serial shipping container code.
- \* Fixed the relationship between variables V and RTC.
- \* Fixed the rule of barcode generation in command B.

- \* Fixed the rule of CODE30 generation in command B when printing it in 90 and 180 degree.
- \* Revised the internal bitmap fonts (FONT1 to FONT5).

### ZPL2 emulator

- \* Added ^BL command
- \* Added ^FC command
- \* Added ^GE command
- \* Added ^MU command
- \* Fixed ^BZ to support postal code type 3 (USPS Intelligent Mail bar code).
- \* Fixed ^FB issue when printing it in 90 and 180 degrees.
- \* Fixed ^FN to support 100 filed numbers.
- \* Fixed ^FT issue when printing internal TTF font 0.
- \* Fixed ^PQ to support the parameter p (labels between pauses).
- \* Fixed ~SD## and ~TA### formats.
- \* Fixed rule of ^FB when it includes spaces.
- \* Fixed the decoding rule of ^CI14.
- \* Fixed the font type of human readable characters in UPC/EAN.
- \* Fixed the issue, the last command line will be ignored, when running \*.ZPL format.
- \* Fixed the rule of ^BX generation. If parameter h hasn't been set in ^BX, it uses the setting of ^BY instead.
- \* Fixed the rule of ^GF. The parameter "binary byte count" can be omitted.
- \* Fixed the rule of code128 generation in auto mode.
- \* Fixed the rule of RSS14 barcode generation.
- \* Fixed the rule when using fonts P, Q, R, S, T, U and V.
- \* Fixed the size of human readable characters in barcode ^BS (UPC/EAN).
- \* If the value of parameter is discontinuous in ZPL command, the discontinuous part will be ignored.
- \* If the value of parameter is with space in ZPL command, the space will be ignored.
- \* If the wrong font name has been used in ZPL, printer uses A.FNT instead.
- \* Redefined the escape sequence control character from underscore '\_' to tilde '~' in barcode ^BX (DataMatrix).

### Network

- \* Added NET MODE SPEED,DUPLEX to change the communication rate and multiplexer mode. SPEED = 10/100/AUTO, DUPLEX = FULL/HALF
- \* Fixed the lease time issue.
- \* Fixed the network FTP server to support ftp -n printing

### Power-on utility

- \* Added power on key function, manual sensor calibration to support PREPRINTED label  
[MENU] + [UP] for preprinted label with gap.  
[MENU] + [DOWN] for preprinted label with black mark.  
[MENU] + [SELECT] for continuous preprinted label.
- \* Added the function to initialize the Ethernet setting while opening top cover. (For desk series printer)
- \* Added the function to switch line mode and page mode while opening top cover. (For desk series printer)

#### USB communication

- \* Enable USB serial number function. (The feature may cause PC to install a copy-1 driver if a driver has been installed already.)
- \* Improve the USB communication issue, especially user turns on PC while printer is in on-line mode.

#### LCD display

- \* Revised Russian menu in LCD display.
- \* Added Czech menu in LCD display.
- \* Added Portuguese menu in LCD display.
- \* Added the "Format Convert" item in ZPL2 LCD menu for converting the resolution.
- \* Added the date/time setting item in LCD menu.
- \* Added the function to cancel print jobs in PAUSE mode. (For industrial series printer)

#### Others

- \* Canceled the function of head open sensor in TTP-244M Pro/342M Pro series printer.
- \* Canceled the function to add FNC1 into EAN128 barcode automatically.
- \* Changed the direction of self-test page for easy read.
- \* Changed the scale of print speed adjustment from 1 IPS to 0.5 IPS in desktop printers.
- \* Cut the text if its position is over the beginning of label.
- \* Decrease the torque of DC motor in TTP-234 series printer while backing labels.
- \* Fixed RTC issue when setting the parameter YEAR over 2000.
- \* Fixed the deadlocked issue in printing DATAMATRIX barcode.
- \* Fixed the encoding issue of the code 128 if the data length is too long.
- \* Fixed the peel-off sensor issue, especially when user does sensor calibration on peel-off mode.
- \* Fixed the rule of EAB128 generation.
- \* Fixed the rule when printing truncated PDF417.
- \* Fixed the sampling time of sensor calibration in TTP-243 Pro series printer.
- \* Increase the FLASH memory to 1.5MB for firmware usage. (The printer clears all the data in FLASH after updating V6.95EZ from the older version.)
- \* Increased the max. printing length to 100 inches for TTP-644M series printer.

- \* Increased the max. printing length to 1000 inches for TTP-2410M series printer.
- \* Increased the max. printing length to 200 inches for TTP-384M series printer.
- \* Increased the max. printing length to 450 inches for TTP-346M series printer.
- \* Move the print head test pattern to bottom of self-test page.
- \* Optimized the rule of CODE128 generation.
- \* Supported 1.5 IPS as the minimum printing speed in TT(D)P-245/245C/225 series printer.
- \* Supported 2 IPS as the minimum printing speed in TTP-2410M series printer.
- \* Revised the AI table for EAN128.
- \* Revised the condition of NO PAPER.
- \* Added new command <ESC>!P to pause printer, and use <ESC>!O to cancel pause mode.
- \* Supported the cursive (Handwriting) font, ex: Arabic.

## **V 6.86**

### [Basic System Command]

- \* Added new command AUTODETECT to detect the sensor type and measure the label length.

### [EPL]

- \* Fixed if the coordinate is ignored, it will be set as 0.
- \* Fixed the content of EAN2 and EAN5 add-on barcode if the data length is too long.
- \* Fixed the definition of q (set label width) command. If the setting of q command is larger than the width of print head, the q command equals to the width of print head.
- \* Fixed the height of EAN2 and EAN5 add-on barcode if the human-readable value is disable.
- \* Fixed the image buffer of EPL emulation is the half of total image buffer.
- \* Fixed Code 128 to support function characters F1 as FNC1, such as F1"42092626".
- \* Fixed the letter l in font 1 of 300 dpi printer.
- \* Fixed the letter J k l in font 1 of 300 dpi printer.
- \* Fixed the LS command. If the length of horizontal is larger than vertical, using the horizontal slash.
- \* Support Aztec.
- \* Support US command.
- \* UCC/EAN 128 uses ASCII 06 as FNC1 to delimit variable length fields.
- \* Use overwrite mode to generate barcode.

### [TSPL]

- \* Added new command FORMAT\$( ) to return the format string of date and time.
- \* Added new command NOW\$( ) to return the printer's date and time.
- \* Added new command STRCOMP(STR1\$, STR2\$[, COMP]) to return the result of a string comparison.
- \* Added new command LTRIM\$(STR\$[,LIST\$]) to return a string containing a copy of a specified string with no leading spaces or specify characters.

- \* Added new command RTRIM\$(STR\$[,LIST\$]) to return a string containing a copy of a specified string with no trailing spaces or specify characters.
- \* Added new command TRIM\$(STR\$[,LIST\$]) to return a string containing a copy of a specified string with no leading or trailing spaces or specify characters.
- \* Added new command LOC() to return the current position within an open file.
- \* Added new command SET AUTORUN to define the auto-run file.
- \* Added new command POSTINPUT.
- \* Added new command PREINPUT.
- \* Added new command SET FILTER.
- \* Fixed the data type of numerical variable as double.
- \* Fixed the definition of EAN128. For the unknown AI, the default length of AI is 2 and the default length of data is 6.
- \* Fixed the WEEK command to return the correct information.
- \* Enlarge the maximum reading length of READ command to 16 Kbytes.
- \* Enlarge the string variables from 50 to 200.
- \* Internal bitmap font 1 to 5 support UTF-8 encoding.
- \* Internal bitmap font 1 to 5 support CODEPAGE 1251 and 1253.
- \* Fixed internal bitmap font "LATIN CAPITAL LETTER I WITH DOT ABOVE (U+0130)" in font 1 to 4.
- \* Fixed internal bitmap font "LATIN CAPITAL V (U+0056) and GREEK CAPITAL LAMDA (U+039B)" in font 3.
- \* Fixed the AUTO.BAS priority. DRAM>CARD>FLASH
- \* Fixed the DIAGONAL command. If the length of horizontal is larger than vertical, using the horizontal slash.
- \* Support CODEPAGE 862 for downloading true type font.

#### [ZPL]

- \* Base64 has the added benefit of avoiding the caret(^) and tilde(~)
- \* Fixed ^B3 (code 39) to filter out invalid asterisk(\*).
- \* Fixed ^BC (code 128) UCC check digit.
- \* Fixed ^BD (UPS MaxiCode Bar Code) of mode 3.
- \* Fixed ^BX(Data Matrix Bar Code) to support escape sequence control character.
- \* Fixed ^IS (image save) command to save the correct image.
- \* Fixed ~DB (Download Bitmap Font) to support ZebraDesigner Font Downloader
- \* Fixed the barcode to support printing empty string.
- \* Fixed the maximum number of bytes per row of ~DG (Download Graphic) command to 32000.
- \* Fixed the no selected mode and UCC/EAN Mode of ^BC (code 128).
- \* Fixed the origin is wrong in ^PON and ^MNY.
- \* Font A to H support UTF-8 encoding.
- \* Ignore the invalid control character in ZPL format.

- \* Fixed the ^FB (field block) to correct the Carriage-Return issue.
- \* Support ^BB (single row only)
- \* Support ^MNA (auto-detects the type of media during calibration)
- \* The internal TTF supports printing NULL character.

#### [Others]

- \* List files in printer's web page.
- \* Supported downloading files through printer's internal web page.
- \* Added password protection on printer's internal web page.
- \* Added the function of using the printer's internal web page to send file to the printer.
- \* Added the functions of delete file, run file and format memory device from printer's internal web page .
- \* Fixed the issue of updating firmware file from the printer's internal web page.
- \* Added the function to set the auto-run file from the front panel (LCD display).
- \* Added the function to set the date and time information from the front panel (LCD display).
- \* Added the Korean language for the front panel (LCD display).
- \* Updated the Chinese language for the front panel (LCD display).
- \* Updated the German language for the front panel (LCD display).
- \* Support ignoring AUTO.BAS by pressing MENU key when turn on the printer.
- \* Support printing printer serial number on SELFTEST label.
- \* Make the settings of TSPL SHIFT and OFFSET commands to effect ZPL format.
- \* Fixed the error when printing DATAMATRIX with NULL character.
- \* Fixed the problem of Ethernet loses the last data packet.
- \* Support Hebrew printing (right to left).
- \* Support UTF-8 representation of the BOM (byte order mark).
- \* Fixed the bi-directional communication issue of USB.
- \* Solve the issue of IP is changed after firmware update.
- \* Support care label cutter module function.
- \* Change the cutter error condition to "if the cutter is not equipped, the cutter error doesn't occur."

## **V 6.79**

### **TTP-384M Model**

- \* Modify the torque of ribbon supply spindle.

### **TTP-644M Model**

- \* Modify the print head missing printing dot problem.

## **V 6.78**

### **New Features**

#### **[TSPL]**

- \* Add the codepage UTF-8. (Unicode character set)
- \* Add the **LSTRIM\$(STR\$)** function to remove the 0x00~0x20 characters front the variable string.
- \* Add the **RSTRIM\$(STR\$)** function to remove the 0x00~0x20 characters rear the variable string.
- \* Add the **STRIM\$(STR\$)** function to remove the 0x00~0x20 characters front and rear the variable string.
- \* Add the **OUTR** command, sends data through the printer RS-232 port.

#### **[EPL]**

- \* Add the codepage 737, 851, 869 and 1253 build fonts. (Font 1 ~ 5)
- \* Add the codepage 855, 866 and 1251 build fonts for 200 dpi. (Font 1 ~ 5)

#### **[COMMON]**

- \* Add the **<ESC>!Q** command, the printer can be restart and skip AUTO.BAS program when running the basic file.

### **Issues Corrected**

#### **[TSPL]**

- \* Modify the 2D Barcode data can not use <CR> <LF> problem.
- \* Modify the COUNTER from @51~@55 to @51~@60, those variables will be save when turn off the power.
- \* Modify the EAN128 that can use the !102 to insert the FNC by manual.
- \* Modify the EAN128 that will auto check AI code to insert the FNC1.
- \* Modify the **OPEN** command that can open the designate device.
- \* Modify the **TEXT** command that can select the parameter to align left, center or align right.
- \* Modify the @ global variables will be updated real time when printing.

#### **[TPLE]**

- \* Modify **I** command (Character set selection) to support 7 bit data.

#### **[TPLZ]**

- \* Support the **^B0** (Aztec Bar Code)
- \* Support **^JM** (Set Dots per Millimeter)
- \* Support **~DY** (Download Objects) Incomplete.
- \* Support LZ77/ Base 64(Z64) decode.
- \* Modify **^BK** (ANSI Codabar Bar Code), filter out invalid data source.
- \* Modify **^BP** (Plessey Bar Code)
- \* Modify **^BY** (Bar Code Field Default), module width accepted values: 1 to 32000.
- \* Modify **^BY** (Bar Code Field Default), module width takes floating to round off.
- \* Modify **^CI** (Change International Font), add ^CI28 to ^CI36.
- \* Modify **^CI17** (Deprecated - UCS-2 Big Endian) as UTF-8 encoding.
- \* Modify **^CM** (Change Memory Letter) setting value can be saved by ^JUS.
- \* Modify **^FB** (Field Block) Incomplete, support \& (carriage return/line feed)
- \* Modify **^XG** (Recall Graphic), If Y-axis not be specified than it will be X-axis.
- \* Modify **~HS** (Host Status Return) added labels remaining in batch.

#### **[COMMON]**

- \* Modify the D-Link DP-G310 print server USB port issue.
- \* Modify the peel-off mode setting, check if label has been removed during the printing to avoid peel off error issue.

## **V 6.73**



## Issues Corrected

[TSPL]

- \* Modify the printing content shift problem.

## **V 6.69**

## Issues Corrected

- \* Modify the Menu Key can not enter problem.
- \* Modify the Cutter I/O control setting.

## **V 6.65**

## New Features

[TSPL]

- \* Add Network HTTP Server function.
- \* Add E-mail notification for printer error messages function.
- \* Add Network LPQ function.
- \* Define command BLINE 0,0 to detect the continuous label by BLACK MARK sensor.

## Issues Corrected

[TSPL]

- \* Modify the Thai font to correct some characters not print problem.
- \* Modify if the label length is larger than LIMITFEED setting, the error paper jam occurs when printing.
- \* Modify the total downloading files into DRAM for 50 to 256.
- \* Keep the IP settings when restoring the printer to factory default settings.

[TPLE]

- \* Modify the command FR issue.
- \* Modify the MAXICODE printing issue.
- \* Modify the rule of using the command R and q together.

[TPLZ]

- \* Modify the ^CI command.
- \* Modify the problem when using the command ^FR and ^FN together.
- \* Modify the DATAMATRIX (^BX) printing issue.
- \* Modify the rules of commands ^FO ^FT and ^FM.
- \* Modify the rule of CODE39.
- \* Modify the problem when using the commands ^IL and ^LH together.

**Note: This printer firmware V6.65 works with DiagTool V1.16 and later versions**

## **V 6.62**

**It is for use with the following printer models:**

- \* TTP-2410M

**New Features**

[TSPL]

- \* Add Network HTTP Server function.
- \* Add E-mail notification for printer error messages function.
- \* Add Network LPQ function.
- \* Define command BLINE 0,0 to detect the continuous label by BLACK MARK sensor.

**Issues Corrected**

[TSPL]

- \* Modify if the label length is larger than LIMITFEED setting, the error paper jam occurs when printing.
- \* Modify the total downloading files into DRAM for 50 to 256.
- \* Keep the IP settings when restoring the printer to factory default settings.

[TPLE]

- \* Modify the command FR issue.
- \* Modify the MAXICODE printing issue.
- \* Modify the rule of using the command R and q together.

[TPLZ]

- \* Modify the problem when using the command ^FR and ^FN together.
- \* Modify the DATAMATRIX (^BX) printing issue.
- \* Modify the rules of commands ^FO ^FT and ^FM.
- \* Modify the rule of CODE39.
- \* Modify the problem when using the commands ^IL and ^LH together.

## **V 6.60**

**It is for use with the following printer models:**

- \* TTP-2410M series
- \* TTP-245 Plus series
- \* TDP-245 Plus series
- \* TTP-245C series
- \* TTP-244 Plus series

**New Features**

[TSPL]

- \* Add LTRIM\$() function to remove the redundant spaces before the string.
- \* Add RTRIM\$() function to remove the redundant spaces at the right side of string.
- \* Add TRIM\$() function to remove the redundant spaces at left side and right side of the string.
- \* Add cancel printing job feature. (TTP-2410M series only)
- \* Support PS/2 barcode scanner. (TTP-2410M series only)
- \* Add command to work with Diagnostic V1.12 Ethernet interface.
- \* Ethernet improvement. Add Ethernet printer name setting.
- \* Ethernet improvement. Add Network printer name to IP address.
- \* Support PS-utility V3.0. Users can use 245 internal print server PS-utility to setup 2410M series print

server.

[TPLZ]

- \* Support Base64-only (B64) graphic encoding.

**Issues Corrected**

[TSPL]

- \* Modify TEXT command x-multi and y-multi parameter for TTF font.
- \* Modify AZTEC barcode format.
- \* Modify SHIFT command to let the setting take effect since first label printing.
- \* Modify IF command. If "IF" statement is written in one line, no need to include this statement in the DOWNLOAD...EOP header and footer.
- \* Correct Thai font rotation 180 and 270 degree not correct problem.
- \* INSTR\$([START, STR1\$, STR2\$) function to return the searched string location.
- \* Modify PS/2 keyboard <F1> file list display menu. (TTP-2410M series only)
- \* Modify PS/2 keyboard Num lock, Caps lock, Scroll lock LEDs function. (TTP-2410M series only)
- \* Modify USB sometimes can't be detected by PC if connected with USB hub issue.
- \* Modify paper empty criteria. Change the criteria from 80 dots to 10 dots.
- \* Improve Ethernet sometimes disconnect issue if there are 2 or 3 threads access the print server at the same time.

[TPLE]

- \* Modify I command to support KDU Country Code.

[TPLZ]

- \* Modify ^B1 ^B2 ^B3 ^BA ^BK ^BM ^BP ^BZ to support interpretation line above code.
- \* Modify ^LT(Label Top) to effect printing position since first label printing.
- \* Modify ^PQ(Print Quantity), If cut value parameter of ^PQ is not set, it is cut batch.