[ZPL Linux SDK]

[Printer ZPL Command Development Manual v2.0.4]

1. Information of the Manual

This SDK manual provides the so file information for Linux application development. We continuously promote and update the function and quality of all our products. Any change to the product specification and the manual will be without any further notice.

2. Operation System

Linux debian 5.10.0 and above.

3. Remark

1. When error code Return Value is greater than 0, it is the internal error of Linux system, please refer to related help file.
2. The printer resolution is 200 dpi,1 mm=8 dot;The printer resolution is 300 dpi,1 mm=12 dot.
3. The SDK references third-party libraries: libserialport, libusb-1.0. Please install it in the operating system in advance.
4. Serial port connection requires root privileges.

4. Method

4.1.InitPrinter

Set up the target printer of specified model (the printer object must be created before any printer operation).

```
void* InitPrinter (
        const TCHAR* model
);
```

Parameter:

const TCHAR model*

[in] Specify the model of target printer.

Return Value:

success:Returns a handle to the printer object

fail:Return NULL

4.2.ReleasePrinter

The method is to release the resources of the printer object (the created printer object must be released after the operation is completed).

```
int ReleasePrinter (
        void* hPrinter
);
```

Parameter:

void hPrinter*

[in] Handle to the target printer object that needs to be released

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

4.3.OpenPort

Open the communication port and connect with the printer. After successfully connected, other functions can be used. If failed connecting, please check the error information. Currently it supports USB, internet, serial interface.

```
int OpenPort (
        void* hPrinter,
        const TCHAR* setting
);
```

Parameter:

void hPrinter*

[in] The created target printer object.

const TCHAR setting*

[in] Set the communication port parameters to connect to the target printer. See the table below for details:

Configuration List:

Type	Configuration	Description	Sample
USB	USB,path	USB,USB path	USB,/001/007
NET	NET, IP address (IPV4)[,port]	Spacify the IPAddress and port.If no port is specified,The default port is 9100.	NET,192.168.1.10 NET,192.168.1.10,9100
COM	COM,path,rate	Specify the connected serial port path and baud rate.	COM10,19200

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_USB_DEVICE_NOT_FOUND	-17	Failed, device not found
ERROR_IO_OPEN_FAILED	-8	Failed to open port

4.4.ClosePort

This function is to close the communication port and disconnect with the printer.

```
int ClosePort (
        void* hPrinter
);
```

Parameter:

void hPrinter*

[in] The created target printer object.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-3	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-2	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

4.5.WriteData

This function is to send data to the printer.

```
int WriteData(
        void* handle,
        unsigned char* buffer,
        unsigned int size
);
```

Parameter:

void handle*

[in] The created target printer object.

unsigned char buffer*

[in] The data sent to the printer (hex string).

unsigned int size

[in] The length of the sent data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

4.6.ReadData

This function is to read the printer data.

```
int ReadData(
        void* handle,
        unsigned char* buffer,
        unsigned int size
);
```

Parameter:

void handle*

        [in] The created target printer object.

unsigned char buffer*

        [in] Printer data to be read.

unsigned int size

        [in] The length of the data to be read.

Return Value:

Code	Value	Description
>0	>0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_OPEN_FAILED	-8	Failed to open port

4.7. ZPL_StartFormat

This function is to indicate the beginning of a new label format.

```
int ZPL_StartFormat(
        void* handle
);
```

Parameter:

void handle*

        [in] The created target printer object.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.8. ZPL_EndFormat

This function is to indicate the end of a label format.

```
int ZPL_EndFormat(
        void* handle
);
```

Parameter:

void handle*

        [in] The created target printer object.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.9. ZPL_ScalableFontText

This function is to print scalable fonts.

```
int ZPL_ScalableFontText(
        void* handle,
        int xPos,
        int yPos,
        char fontName,
        int orientation,
        int fontWidth,
        int fontHeight,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

char fontName

[in] Font(range: A-Z and 0-9).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int fontWidth

[in] Font width.

int fontHeight

[in] Font height.

const TCHAR text*

[in]Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.10. ZPL_Text

This function is to print text.

```
int ZPL_Text(
        void* handle,
        int xPos,
        int yPos,
        int fontNum,
        int orientation,
        int fontWidth,
        int fontHeight,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

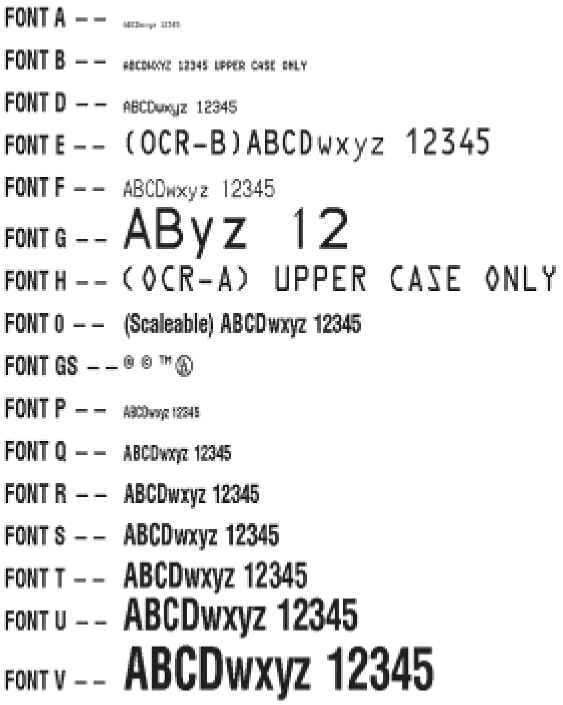
int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int fontNum

[in] Font.

0 : FONT 0 - Scalable font
1 : FONT A - Bitmap font
2 : FONT B - Bitmap font
3 : FONT D - Bitmap font
4 : FONT E - Bitmap font
5 : FONT F - Bitmap font
6 : FONT G - Bitmap font
7 : FONT H - Bitmap font
8 : FONT P - Bitmap font
9 : FONT Q - Bitmap font
10 : FONT R - Bitmap font
11 : FONT S - Bitmap font
12 : FONT T - Bitmap font
13 : FONT U - Bitmap font
14 : FONT V - Bitmap font



int orientation

[in] Print direction.

0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int fontWidth

[in] Font width.

int fontHeight

[in] Font height.

Note: When FONT A is selected, the minimum width and height are 5*9, and can only be multiplied.

FONT	H x W（in dots）
A	9 x 5
B	11 x 7
D	18 x 10
E	28 x 15

F	26 x 13
G	60 x 40
H	21 x 13
GS	24 x 24
P	20 x 18
Q	28 x 24
R	35 x 31
S	40 x35
T	48 x 42
U	59 x 53
V	80 x 71
0	15 x 12

const TCHAR text*

[in]Text data.

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.11. ZPL_BarCode39

This function is to print Barcode39 barcodes.

```
int ZPL_BarCode39(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        char digit,
        const TCHAR* text
);
```

Parameter：

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.

0 : normal

90 : Rotate 90 degrees clockwise

180: Rotate 180 degrees clockwise

270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.

'N': not print

'Y': print

char lineAboveCode

[in] The comment line above the barcode.

'N': not print above the barcode

'Y': print above the barcode

char digit

[in] Check Digit.

'N': do not print check digit

'Y': print check digit

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.12. ZPL_Pdf417

This function is to print the Pdf417 code.

```
int ZPL_Pdf417(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        int securityLevel,
        int column,
        int rows,
        char truncate,
        const TCHAR* text
);
```

Parameter:

void handle*

[in]The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.

0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth
[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight
[in] Bar code height(range: 1-32000,unit:dot).

int securityLevel
[in] Security level (range:1-8).

int column
[in] The number of columns to encode.

int rows
[in] The number of rows to encode.

char truncate
[in] Truncated layer indication and stop mode.
'N': not truncated
'Y': execution truncation

const TCHAR text*
[in] QR code data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.13. ZPL_CodeEan8

This function is to print CodeEan8 barcodes.

```
int ZPL_CodeEan8(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        const TCHAR* text
);
```

Parameter:

void handle*
[in]The created target printer object.

int xPos
[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos
[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation
[in] Print direction.

0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth
[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight
[in] Bar code height(range: 1-32000,unit:dot).

char line
[in] Comment line.
'N': not print
'Y': print

char lineAboveCode
[in] The comment line above the barcode.
'N': not print above the barcode
'Y': print above the barcode

const TCHAR text*
[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.14. ZPL_UpceCode

This function is to print UPC- E barcodes.

```
int ZPL_UpceCode(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        const TCHAR* text
);
```

Parameter:

void handle*
[in]The created target printer object.

int xPos
[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos
[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation
[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise

180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.
'N': not print
'Y': print

char lineAboveCode

[in] The comment line above the barcode.
'N': not print above the barcode
'Y': print above the barcode

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.15. ZPL_BarCode93

This function is to print Barcode93 barcodes.

```
int ZPL_BarCode93(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        char digit,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise

270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.

'N': not print

'Y': print

char lineAboveCode

[in] The comment line above the barcode.

'N': not print above the barcode

'Y': print above the barcode

char digit

[in] Check Digit.

'N': do not print check digit

'Y': print check digit

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.16. ZPL_BarCode128

This function is to print Barcode128 barcodes.

```
int ZPL_BarCode128(
    void* handle,
    int xPos,
    int yPos,
    int orientation,
    int moduleWidth,
    int codeHeight,
    char line,
    char lineAboveCode,
    char checkDigit,
    char mode,
    const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.
'N': not print
'Y': print

char lineAboveCode

[in] The comment line above the barcode.
'N': not print above the barcode
'Y': print above the barcode

char checkDigit

[in] UCC check Digit.
'N': do not print check digit
'Y': print check digit

char mode

[in] Mode.
'N': no choice mode
'U': UCC matching mode
'A': automatic mode
'D': UCC/ EAN mode

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.17. ZPL_CodeEan13

This function is to print CodeEan13 barcodes.

```
int ZPL_CodeEan13(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        const TCHAR* text
);
```

Parameter:

void handle*

[in]The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.
‘N’: not print
‘Y’: print

char lineAboveCode

[in] The comment line above the barcode.
‘N’: not print above the barcode
‘Y’: print above the barcode

const TCHAR text*

[in] Text data.

Return Value:

Code	**Value**	**Description**
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.18. ZPL_MicroPdf417

This function is to print MicroPdf417 codes.

```
int ZPL_MicroPdf417(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        int mode,
        const TCHAR* text
);
```

Parameter:

void handle*

[in]The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.

0 : normal

90 : Rotate 90 degrees clockwise

180: Rotate 180 degrees clockwise

270: Rotate 270 degrees clockwise

int moduleWidth

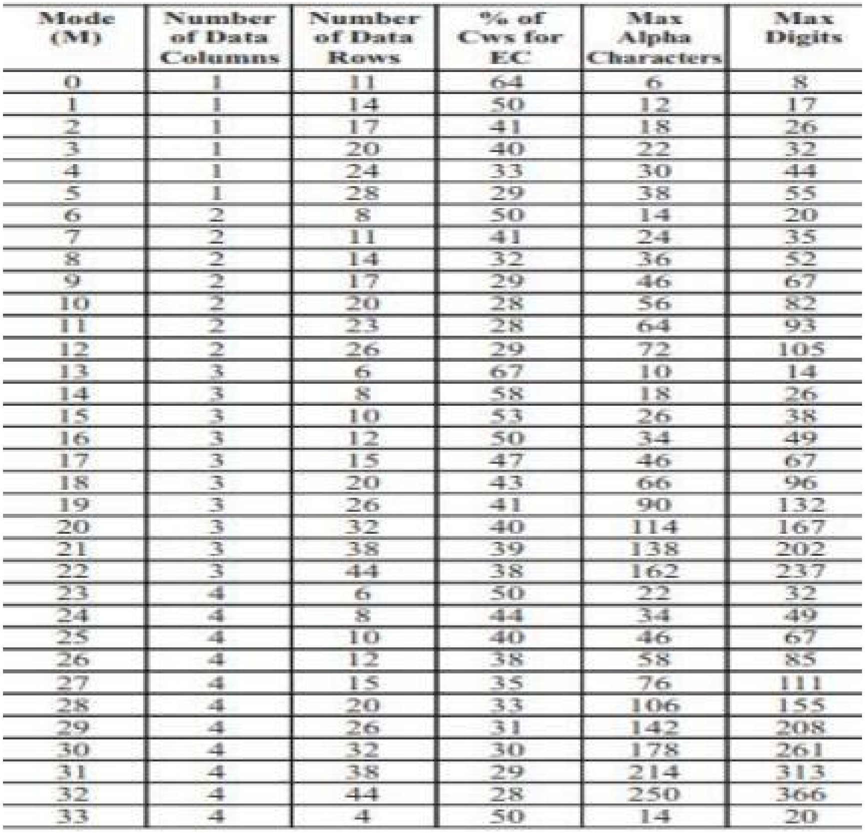
[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

int mode

[in] Mode(range: 0-33).



Mode (M)	Number of Data Columns	Number of Data Rows	% of Cws for EC	Max Alpha Characters	Max Digits
0	1	11	64	6	8
1	1	14	50	12	17
2	1	17	41	18	26
3	1	20	40	22	32
4	1	24	33	30	44
5	1	28	29	38	55
6	2	8	50	14	20
7	2	11	41	24	35
8	2	14	32	36	52
9	2	17	29	46	67
10	2	20	28	56	82
11	2	23	28	64	93
12	2	26	29	72	105
13	3	6	67	10	14
14	3	8	58	18	26
15	3	10	53	26	38
16	3	12	50	34	49
17	3	15	47	46	67
18	3	20	43	66	96
19	3	26	41	90	132
20	3	32	40	114	167
21	3	38	39	138	202
22	3	44	38	162	237
23	4	6	50	22	32
24	4	8	44	34	49
25	4	10	40	46	67
26	4	12	38	58	85
27	4	15	35	76	111
28	4	20	33	106	155
29	4	26	31	142	208
30	4	32	30	178	261
31	4	38	29	214	313
32	4	44	28	250	366
33	4	4	50	14	20

const TCHAR text*

[in] Text data.

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.19. ZPL_QRCode

This function is to print a QR code.

```
int ZPL_QRCode(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int model,
        int dpi,
        char eccLevel,
        char input,
        char charMode,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int model

[in] Set the QR code version (1 : original version, 2 : enhanced version).

int dpi

[in] Magnification factor (range: 1- 10).

char eccLevel

[in] Error correction level.
H : Ultra high reliability
Q: High reliability
M : standard level
L : high density level

char input

[in] Input mode。
A :Automatic Input
M : Manual Input

char charMode

[in] character Mode。
N: Numeric
A:Alphanumeric
B :8-bit byte mode
K : Kanji ,handles only Kanji characters in accordance with the Shift JIS system based on JIS X 0208. This means that all parameters after the character mode K should be 16- bit characters. If there are any 8-bit characters (such as ASCII code), an error occurs.

const TCHAR text*

[in] data.Only when charMode is B, the first four digits of the data should be the data size, for example, if the data is qrcode, pass 0006qrcode.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data

ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.20. ZPL_UpcExtensions

This function is to print UPC extended barcodes.

```
int ZPL_UpcExtensions(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        const TCHAR* text
);
```

Parameter:

void handle*

[in]The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.
‘N’: not print
‘Y’: print

char lineAboveCode

[in] The comment line above the barcode.
‘N’: not print above the barcode
‘Y’: print above the barcode

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the

		Linux system

4.21. ZPL_UpcaBarcode

This function is to print UPC-A barcodes.

```
int ZPL_UpcaBarcode(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int moduleWidth,
        int codeHeight,
        char line,
        char lineAboveCode,
        char digit,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int moduleWidth

[in] Bar code width (range: 0- 10,unit:dot).

int codeHeight

[in] Bar code height(range: 1-32000,unit:dot).

char line

[in] Comment line.
'N': not print
'Y': print

char lineAboveCode

[in] The comment line above the barcode.
'N': not print above the barcode
'Y': print above the barcode

char digit

[in] Check Digit.
'N': do not print check digit
'Y': print check digit

const TCHAR text*

[in] Text data.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data

ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.22. ZPL_SetChangeFontEncoding

This function is to select an international character set.

```
int ZPL_ SetChangeFontEncoding(
        void* handle,
        int encodeType
);
```

Parameter:

void handle*

[in] The created target printer object.

int encodeType

[in] Character set type (range: 0-31, 33-36).
0 : single byte encoding - US 1 character set
1 : Single-byte encoding - US 2 character set
2 : Single Byte Encoding - British Character Set
3 : Single Byte Encoding - Dutch Character Set
4 : Single-byte encoding - Danish/Norwegian character set
5 : Single-byte encoding - Swedish/Finnish character set
6 : Single byte encoding - German character set
7 : Single-byte encoding - French 1 character set
8 : Single-byte encoding - French 2 character set
9 : Single-byte encoding - Italian character set
10 : Single Byte Encoding - Spanish Character Set
11 : Single Byte Encoding - Miscellaneous Character Set
12 : Single-byte encoding - Japanese character set
13 : Code Page 850
14 : Double Byte Asian Code
15 : Shift-JIS
16 : EUC-JP and EUC-CN
17 : Not recommended - UCS-2 Big Endian
18-23 : Reserved
24 : Single Byte Asian Code
25 : Reserved
26 : Multibyte Asian Code
27 : Code Page 1252
28 : Unicode (UTF-8 encoding) - Unicode character set
29 : Unicode (UTF- 16 Big- Endian encoding) - Unicode character set
30 : Unicode (UTF- 16 Little- Endian encoding) - Unicode character set
31 : Code Page 1250
33 : Code page 1251
34 : Code page 1253
35 : Code page 1254
36 : Code page 1255
39 : Vietnam Character Set

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.23. ZPL_SetChangeCaret

This function is to change the format command prefix.

```
int ZPL_SetChangeCaret(
        void* handle,
        char charactor
);
```

Parameter：
void handle*
[in] The created target printer object.
char charactor
[in] Format command prefix.

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.24. ZPL_SetChangeDelimiter

This function is to change the separator.

```
int ZPL_SetChangeDelimiter(
        void* handle,
        char charactor
);
```

Parameter：
void handle*
[in] The created target printer object.
char charactor
[in] Separator.

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

Other values	Other values	the error code returned by the Linux system

4.25. ZPL_SetChangeTilde

This function is to change the control command prefix.

```
int ZPL_SetChangeTilde(
        void* handle,
        char charactor
);
```

Parameter:

void handle*

[in] The created target printer object.

char charactor

[in] Control command prefix.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.26. ZPL_GraphicBox

This function is to draw a graphic box.

```
int ZPL_GraphicBox(
        void* handle,
        int xPos,
        int yPos,
        int width,
        int height,
        int thickness,
        int rounding,
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int width

[in] The width of the box (range: 1-32000, unit: dot).

int height

[in] The height of the box (range: 1-32000, unit: dot).

int thickness

[in] Boundary thickness (range: 1-32000, unit: dot).

int rounding

[in] Degree of rotation (range: 0-8).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.27. ZPL_GraphicCircle

This function is to draw a graphic circle.

```
int ZPL_GraphicCircle(
        void* handle,
        int xPos,
        int yPos,
        int diameter,
        int thickness,
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int diameter

[in] Round diameter(range:3-4095,unit:dot).

int thickness

[in] Boundary thickness(range:1-4095,unit:dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.28. ZPL_GraphicDiagonalLine

This function is to draw diagonals.

```
int ZPL_GraphicDiagonalLine(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int width,
        int height,
        int thickness
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] The direction of the diagonal.

0x52(R or /) : right slanted diagonal

0x4c (L or \) : left slanted diagonal

int width

[in] The width of the box (range: 1-32000, unit: dot).

int height

[in] The height of the box (range: 1-32000, unit: dot).

int thickness

[in] Boundary thickness (range: 1-32000, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.29. ZPL_GraphicEllipse

This function is to draw a graphical ellipse.

```
int ZPL_GraphicEllipse(
        void* handle,
        int xPos,
        int yPos,
        int width,
        int height,
        int thickness
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int width

[in] Ellipse width (range: 3-4095, unit: dot).

int height

[in] Ellipse height (range: 3-4095, unit: dot).

int thickness

[in] Boundary thickness (range: 2-4095, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.30. ZPL_PrintImage

This function is to print image(Only supports monochrome bmp format).

```
int ZPL_PrintImage(
        void* handle,
        int xPos,
        int yPos,
        const TCHAR* imgName
);
```

parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

const TCHAR imgName*

[in] The path to the image.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.31. ZPL_GraphicSymbol

This function is to generate registered trademarks, copyright symbols and other symbols.

```
int ZPL_GraphicSymbol(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int width,
        int height,
        const char symbol
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int orientation

[in] Print direction.
0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int width

[in] Symbol width.

int height

[in] Symbol height.

const char symbol

[in] Data string.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.32. ZPL_SetDiagnosticsMode

This function is to start the diagnostic mode.

```
int ZPL_SetDiagnosticsMode(
        void* handle,
        int isEnable
);
```

Parameter:

void handle*

[in] The created target printer object.

int isEnable

[in] Whether to enable the diagnostic mode.
1 : Turn on diagnostic mode
0 : Cancel diagnostic mode

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.33. ZPL_SetLabelHome

This function is to set the label home position.

```
int ZPL_SetLabelHome(
        void* handle
        int xPos,
        int yPos
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.34. ZPL_SetLabelLength

This function is to set the label length.

```
int ZPL_SetLabelLength(
        void* handle,
        int length
);
```

Parameter:

void handle*

[in] The created target printer object.

int length

[in] Label length (range: 1-32000, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.35. ZPL_SetLabelShift

This function is to move the contents of the label to the left.

```
int ZPL_SetLabelShift(
        void* handle,
        int shift
);
```

Parameter:

void handle*

[in] The created target printer object.

int shift

[in] The value to move to the left (range: -9999–9999, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.36. ZPL_SetLabelTop

This function is to move the position of the label up or down a short distance relative to the top edge of the label.

```
int ZPL_SetLabelTop(
        void* handle,
        int top
);
```

Parameter:

void handle*

[in] The created target printer object.

int top

[in] Maximum degree (range: - 120– 120, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.37. ZPL_SetPrintMode

This function is to set the action the printer performs after printing a label or label group.

```
int ZPL_SetPrintMode(
        void* handle,
        char mode,
        char prePeelSelect
);
```

Parameter:

void handle*

[in] The created target printer object.

char mode

[in] Operating mode.
‘T’: tear open
‘P’: stripping (depending on the printer model)
‘R’: rewind (depending on the printer model)
‘A’: applicator (depending on printer model)
‘C’: cutter (depending on printer model)
‘D’: cutter delay
‘F’: RFID
‘L’: reserved
‘U’: reserved
‘K’: Kiosk

char prePeelSelect

[in] select.
‘N’: not execute
‘Y’: execute

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

Other values	Other values	the error code returned by the Linux system

4.38. ZPL_SetMediaType

This function is to select the type of media used in the printer.

```
int ZPL_SetMediaType(
        void* handle,
        char type
);
```

Parameter:

void handle*

[in] The created target printer object.

char type

[in] Media type.

' T' : thermal transfer media

'D' : direct thermal media

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.39. ZPL_SetPrintingMirrorImage

This function is to print the entire printable area of the label as a mirror image.

```
int ZPL_SetPrintingMirrorImage(
        void* handle,
        char enable
);
```

Parameter:

void handle*

[in] The created target printer object.

char enable

[in] Whether to open.

'N': not open

'Y': open

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.40. ZPL_SetPrintOrientation

This function is to flip the label format 180 degrees.

```
int ZPL_SetPrintOrientation(
        void* handle,
        int orientation
);
```

Parameter:

void handle*

[in] The created target printer object.

int orientation

[in] Whether to flip.

0 : don't flip

180: perform a flip

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.41. ZPL_SetPrintRate

This function is to set the print speed.

```
int ZPL_SetPrintRate(
        void* handle,
        int printSpeed,
        int slewSpeed,
        int backfeedSpeed
);
```

Parameter:

void handle*

[in] The created target printer object.

int printSpeed

[in] Print speed. (unit: inches/sec)

int slewSpeed

[in] Swing speed. (unit: inches/sec)

int backfeedSpeed

[in] Feedback speed. (unit: inches/sec)

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.42. ZPL_SetPrintWidth

This function is to set print width.

```
int ZPL_SetPrintWidth(
        void* handle,
        int width
);
```

Parameter:

void handle*

[in] The created target printer object.

int width

[in] Set the print width (range: 2-944, unit: dot).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.43. ZPL_SetSerialCommunications

This function is to change the serial communication parameters.

```
int ZPL_SetSerialCommunications(
        void* handle,
        int baudRate,
        int wordLength,
        char parity,
        int stopBits,
        char protocolModo,
);
```

Parameter:

void handle*

[in] The created target printer object.

int baudRate

[in] Bandwidth frequency. The scope is as follows:

110	300	600	1200	2400
4800	9600	14400	19200	28800
38400	57600	115200		

int wordLength

[in] Word length: 7-8, unit: data bits.

char parity

[in] as follows:
'N': means: none.
'E': means: even.
'O': means: odd.

int stopBits

[in] Range: 1-2.

char protocolModo

[in] as follows:
'X': indicates: XON/XOFF.
'D': indicates: DTR/ DSR.
'R': indicates: RTS.
'M': indicates: DTR/ DSR XON/XOFF r.
remark：1 、XON/XOFF (transmitter on/transmitter off)
2 、DTR (Data Terminal Ready)
3 、DSR (Data Set Ready)
4 、RTS (Request To Send)

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.44. ZPL_SetPrintDarkness

This function is to set print darkness.

```
int ZPL_SetPrintDarkness (
        void* handle,
        int darkness
);
```

Parameter：

void handle*

[in] The created target printer object.

int darkness

[in] Print darkness(Range: 0-30, unit: dot).

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.45. ZPL_SetTearOffAdjustPosition

This function is to set the position where the label is torn away.

```
int ZPL_SetTearOffAdjustPosition (
        void* handle,
        int position
);
```

Parameter:

void handle*

[in] The created target printer object.

int position

[in] Peel off position (range: - 120~+ 120).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.46. ZPL_PrintConfigurationLabel

This function is to generate a printer configuration label.

```
int ZPL_PrintConfigurationLabel(
        void* handle
);
```

Parameter:

void handle*

[in] The created target printer object.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.47. ZPL_GetPrinterIpAddress

This function is to get the printer IP address.

```
int ZPL_GetPrinterIpAddress(
void* handle
        char* ipAddress
);
```

Parameter:

void handle*

[in] The created target printer object.

char ipAddress*

[in] Printer's IP address.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.48. ZPL_GetPrinterStatus

This function is to get the status of the printer.

```
int ZPL_GetPrinterStatus (
        void* handle,
        int* status
);
```

Parameter:

void handle*

[in] The created target printer object.

*int * status*

[in,out] The status of the printer.

Status	Value	Bit
Normal	0	-
The print head is opened	1	0
Paper jam	2	1
Out of paper	4	2
Out of ribbon	8	3
Print pause	16	4
Printing	32	5
Cover opened	64	6
Other error	128	7

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.49. ZPL_GetLabelLength

This function is to get the length of the label.

```
int ZPL_GetLabelLength (
        void* handle,
        char* length
);
```

Parameter:

void handle*

[in] The created target printer object.

char length*

[in] The length of the label.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.50. ZPL_GetLabelWidth

This function is to get the width of the label.

```
int ZPL_GetLabelWidth(
        void* handle,
        char* width
);
```

Parameter:

void handle*

[in] The created target printer object.

char width*

[in] The width of the label.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.51. ZPL_GetPrinterSeriesNumber

This function is to get the printer serial number.

```
int ZPL_GetPrinterSeriesNumber(
        void* handle,
        char* sn
);
```

Parameter:

void handle*

[in] The created target printer object.

char sn*

[in] Printer serial number.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.52. ZPL_GetPrinterMacAddress

This function is to get the printer's MAC address.

```
int ZPL_GetPrinterMacAddress(
        void* handle,
        char* macAddresss
);
```

Parameter:

void handle*

[in] The created target printer object.

char macAddress*

[in] The MAC address of the printer.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.53. ZPL_GetPrinterName

This function is to get the printer's name.

```
int ZPL_GetPrinterName(
        void* handle,
        char* name
);
```

Parameter:

void handle*

[in] The created target printer object.

char name*

[in] The name of the printer.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.54. ZPL_GetPrinterFirmwareVersion

This function is to get the firmware version number of the printer.

```
int ZPL_GetPrinterFirmwareVersion(
        void* handle,
        char* version
);
```

Parameter:

void handle*

[in] The created target printer object.

char version*

[in] The firmware version number of the printer.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.55. ZPL_GetPrinterDpi

This function is to get the resolution of the printer.

```
int ZPL_GetPrinterDpi(
        void* handle,
        char* dpi
);
```

Parameter:

void handle*

[in] The created target printer object.

char dpi*

[in] The resolution of the printer.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.56. ZPL_GetPrinterModel

This function is to get the model of the printer.

```
int ZPL_GetPrinterModel(
        void* handle,
        char* model
);
```

Parameter:

void handle*

[in] The created target printer object.

char dpi*

[in] The model of the printer.

Eg:

```
        char model[100] = { 0 };
        ZPL_GetPrinterModel(printer, model);
        printf("printer model is:%s\n", model);
```

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.57. ZPL_LearnLabel

This feature is used for automatic label learning.

```
int ZPL_LearnLabel(
        void* handle,
);
```

Parameter:
void handle*
[in] The created target printer object.
(The interface needs to be called before ZPL_StartFormat)

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.58. ZPL_SetReprintAfterError

This function is to reprint the labels that failed to print due to an error (error conditions include Ribbon Out, Media Out, Head Open).

```
int ZPL_SetReprintAfterError(
        void* handle,
        char* pEnable
);
```

Parameter:
void handle*
[in] The created target printer object.
char pEnable*

[in] Whether to enable reprint.
“on” : turn on reprint switch
“off” : close reprint switch
(The interface needs to be called before ZPL_StartFormat)

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.59. ZPL_SetMediaTracking

This function is to specify the media type being used and the black mark offset.

```
int ZPL_SetMediaTracking(
        void* handle,
        char mediaType,
        int offset
);
```

Parameter:

void handle*

[in] The created target printer object.

char mediaType

[in] Media Type.
‘N’: continuous media(continuous paper)
‘Y’: non-continuous media web sensing(label paper)
‘W’: non-continuous media web sensing(label paper)
‘M’: non-continuous media mark sensing(black mark paper)
‘A’: auto-detects the type of media during calibration
‘V’: continuous media, variable length(Same as continuum, but if the portion of the printed label exceeds the defined label length, the label size will automatically expand to include them)

int offset

[in] Black mark offset (unused, set to 0) .

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.60. ZPL_SetUserFontName

This function is to Set user-defined fonts,use for print text

```
int ZPL_ SetPrintDefaultGateway (
        void* handle
        const TCHAR* text,
        char alias
);
```

Parameter:

void handle*

[in] The created target printer object.

const TCHAR text*

[in] Font name

char alias

[in] *alias*

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.61. ZPL_Text_Block

This function is to print text block.

```
int ZPL_Text_Block(
        void* handle,
        int xPos,
        int yPos,
        int fontNum,
        int orientation,
        int fontWidth,
        int fontHeight,
        int textBlockWidth,
        int textBlockHeight,
        const TCHAR* text
);
```

Parameter:

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000,unit:dot).

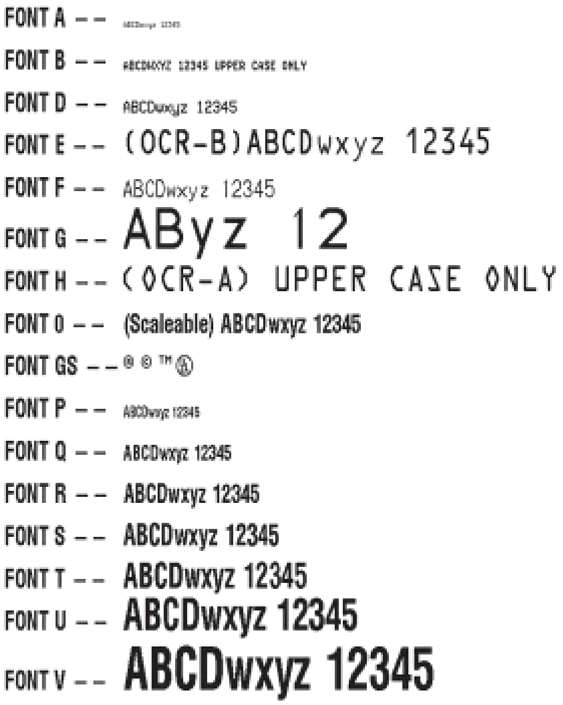
int yPos

[in] Vertical starting position (range: 0-32000,unit:dot).

int fontNum

[in] Font.

0 : FONT 0 - Scalable font
1 : FONT A - Bitmap font
2 : FONT B - Bitmap font
3 : FONT D - Bitmap font
4 : FONT E - Bitmap font
5 : FONT F - Bitmap font
6 : FONT G - Bitmap font
7 : FONT H - Bitmap font
8 : FONT P - Bitmap font
9 : FONT Q - Bitmap font
10 : FONT R - Bitmap font
11 : FONT S - Bitmap font
12 : FONT T - Bitmap font
13 : FONT U - Bitmap font
14 : FONT V - Bitmap font



int orientation

[in] Print direction.

0 : normal
90 : Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int fontWidth

[in] Font width.

int fontHeight

[in] Font height.

FONT	H x W（in dots）
A	9 x 5
B	11 x 7
D	18 x 10
E	28 x 15
F	26 x 13
G	60 x 40
H	21 x 13
GS	24 x 24
P	20 x 18
Q	28 x 24
R	35 x 31
S	40 x35
T	48 x 42
U	59 x 53
V	80 x 71
0	15 x 12

int textBlockWidth

[in] Text block width

int textBlockHeight

[in] Text block height

const TCHAR text*

[in]Text data.

Note: The data does not support Chinese at this time

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

Other values	Other values	the error code returned by the Linux system

4.62. ZPL_SetPrintQuantity

This function is to gives control over several printing operations. It controls the number of labels to print, the number of labels printed before printer pauses, and the number of replications of each serial number.

```
int ZPL_SetPrintQuantity(
        void* handle,
        int totalQuantity,
        int pauseAndCutValue,
        int replicatesOfEachSerialNumber,
        char overridePauseCount
);
```

Parameter:

void handle*

[in] The created target printer object.

int totalQuantity

[in] total quantity of labels to print (range: greater or equal to 1).

int pauseAndCutValue

[in] pause and cut value (range: greater or equal to 0,0 Means no pause).

int replicatesOfEachSerialNumber

[in] replicates of each.(range: greater or equal to 0).

char overridePauseCount

[in] Cut paper or pause.
'N': pause
'Y': Cut paper

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.63. ZPL_DataMatrixBarcode

This function is to print Data Matrix.

```
int ZPL_DataMatrixBarcode(
        void* handle,
        int xPos,
        int yPos,
        int orientation,
        int codeHeight,
        int level,
        int columns,
        int rows,
        int formatId,
        Int aspectRatio,
        const TCHAR* text
);
```

Parameter：

void handle*

[in] The created target printer object.

int xPos

[in] Horizontal starting position (range: 0-32000, unit: dot).

int yPos

[in]Vertical starting position (range: 0-32000, unit: dot).

int orientation

[in] Printing direction.
0 : normal
90: Rotate 90 degrees clockwise
180: Rotate 180 degrees clockwise
270: Rotate 270 degrees clockwise

int codeHeight

[in] code height (range: 1-32000, unit: dot).

int level

[in] Security Level (0、50、80、100、140、200) 。

int column

[in] The number of columns to be encoded.

int rows

[in] The number of lines to be encoded.

int formatId

[in] Format id (0-6).
1 = Field data is number + space (0..9, ")-no \&’ ’
2 = Field data is uppercase alphanumeric + space (A..Z, ’’) – no \&’’
3 = Field data is uppercase alphanumeric + space, period, comma, dotted line and slash(0..9, A..Z, ".-/")
4 = The field data is uppercase alphanumeric + space (0..9, A..Z, ’’) – no \&’ ’
5 = The field data is a complete 128 ASCII 7-bit character set
6 = The field data is a complete 256 ASCII 8-bit character set

int aspectRatio

[in] Aspect ratio.
1 = square
2 = rectangle

const TCHAR text*

[in] code data.

Return Value：

Code	**Value**	**Description**
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.64. ZPL_GetPrinterOdometer

This function is to get the number of printed mileage.

```
int ZPL_GetPrinterOdometer(
        void* handle,
        char* meters
);
```

Parameter:

void handle*

[in] The created target printer object.

char meters*

[in] printed mileage。

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.65. ZPL_SetPrintNetSetting

This function is to set the network port information.

```
int ZPL_SetPrintNetSetting(
        void* handle,
        const char* ipaddress,
        const char* mask,
        const char* gateway
);
```

Parameter:

void handle*

[in] The created target printer object.

const char ipaddress*

[in] ip address. The format is：xxx.xxx.xxx.xxx

const char mask*

[in] subnet mask .The format is：xxx.xxx.xxx.xxx

const char gateway*

[in] default gateway The format is：xxx.xxx.xxx.xxx

Return Value：

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data

ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.66. ZPL_WifiConfig

This function is to set wifi sta information.

```
int ZPL_WifiConfig(
        void* handle,
        int dhcp,
        const char* ipAddress,
        const char* mask,
        const char* gateway,
        const char* ssid,
        const char* password
);
```

Parameter:

void handle*

[in] The created target printer object.

int dhcp

[in] dhcp, Whether to open (0 : close, 1 : open)

const char ipAddress*

[in] ip address. The format is：xxx.xxx.xxx.xxx

const char mask*

[in] subnet mask .The format is：xxx.xxx.xxx.xxx

const char gateway*

[in] default gateway The format is：xxx.xxx.xxx.xxx

const char ssid*

[in] WiFi ssid.

const char password*

[in] WiFi password.

Return Value：

Code	**Value**	**Description**
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.67. ZPL_SetPrinterBluetoothSSID

This function is to set the Bluetooth SSID.

```
int ZPL_SetPrinterBluetoothSSID(
        void* handle,
        const TCHAR*   ssid
);
```

Parameter:

void handle*

[in] The created target printer object.

const TCHAR   ssid*

[in] ssid data (range : 1-32)

Return Value :

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.68. ZPL_SetPrinterBluetoothPIN

This function is to set the Bluetooth pin code.

```
int ZPL_SetPrinterBluetoothPIN(
        void* handle,
        const TCHAR* pin
);
```

Parameter:

void handle*

[in] The created target printer object.

const TCHAR   pin*

[in] pin data (range : 1-32)

Return Value :

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.69. ZPL_SetPrinterSleepTime

This function is to set the sleep time.

```
int ZPL_SetPrinterSleepTime(
        void* handle,
        int time,
);
```

Parameter:

void handle*

[in] The created target printer object.

int time

[in] sleep time(range: 0-10, unit: minute)

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.70. ZPL_SetPrinterShutdownTime

This function is to set the automatic shutdown time.

```
int ZPL_SetPrinterShutdownTime(
        void* handle,
        int time,
);
```

Parameter:

void handle*

[in] The created target printer object.

int time

[in] Automatic shutdown time (range: 0-63, unit: minute)

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.71. ZPL_FirmwareUpgrade

This function is to upgrade the printer firmware.

```
int ZPL_FirmwareUpgrade(
        void* handle,
        const TCHAR* cFileName,
        void (*progressCallback)(float)
```

);

Parameter:

void handle*

[in] The created target printer object.

const TCHAR cFileName*

[in] Firmware file path

*void (*progressCallback)(float)*

update progress callback

describe	Value
update progress	0~1
Update success	ERROR_CM_SUCCESS
Not enough memory	ERROR_CM_INSUFFICIENT_MEMORY
Failed to read file	ERROR_IO_READ_FAILED
Failed to send data	ERROR_IO_WRITE_FAILED

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system

4.72. ZPL_FontDownload

This function is a font download.

```
int ZPL_FontDownload(
        void* handle,
        const TCHAR* cFileName,
        void (*progressCallback)(float)
);
```

Parameter:

void handle*

[in] The created target printer object.

const TCHAR cFileName*

[in] Font file path

*void (*progressCallback)(float)*

update progress callback

describe	Value
update progress	0~1
Update success	0
Not enough memory	-4
Failed to read file	-11
Failed to send data	-9

Return Value:

Code	Value	Description

ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Linux system