

TSPL Windows SDK Manual

2.1.5

1. UpdateRecords

Version	Text content	Editor
2.1.0	Add wide character type to image path	dan
2.1.3	Text supports no alignment parameters	dan
2.1.5	Join the Nuget repository	dan

2. Information of the Manual

This SDK manual provides the dll file information for Windows application development. We are constantly striving to improve and upgrade the functionality and quality of all our products. Afterwards, the product specifications and user manual may be changed. Please contact our customer service to confirm the latest version.

3. Operation System

Windows 10 or above

4. Remark

When error code Return Value is greater than 0, it is the internal error of Windows system, please refer to related help file.

The printer resolution is 200 dpi,1 mm=8 dot;The printer resolution is 300 dpi,1 mm=12 dot.

5. NuGet Package Manager

If you use Visual Studio tools, you can use Nuget.

NuGet URL:<http://47.245.124.98:8081/repository/nuget-hosted/>

User and password: You can obtain your account and password for free by consulting customer service.

6. Method

6.1. PrinterCreator

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

```
int PrinterCreator(void** handle, const char* model);
```

Parameter:

*void** handle*

[in,out] The created target printer object.

const TCHAR model*

[in] Specify the model of target printer.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument

6.2. 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_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
ERROR_CM_INSUFFICIENT_MEMORY	-4	Failed, out of memory

6.3. 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* handle,const TCHAR* setting);  
int PortOpen(void* handle, const char* setting);
```

Parameter:

void handle*

[in] Printer object handle

setting

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

Configuration List:

Category	Configuration	Description	Example
USB	USB,Model/PortNum	USB,printer model USB,The port number If you connect multiple printers of different models of our company at the same time, it is recommended to use "USB, model" to connect	USB,4B-2054A USB,USB031
NET	NET, IP address(IPV4)[,port]	Specify 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	COMn,rate	Specify the number and baud rate of connected serial port	COM10,19200
LPT	LPTn	Specify the number of connected parallel port.	LPT3

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle

ERROR_CM_INSUFFICIENT_MEMORY	-4	Failed, out of memory
ERROR_IO_OPEN_FAILED	-8	Failed to open port
ERROR_IO_USB_DEVICE_NOT_FOUND	-17	Unable to find USB device

6.4. ClosePort

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

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

Parameter:

void handle*

[in] Printer object handle

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle

6.5. WriteData

This function is to send data to the printer.

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

Parameter:

void handle*

[in] Printer object handle

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_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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
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6.6. ReadData

This function is to read the printer data.

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

Parameter:

void handle*

[in] Printer object handle

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	Success, read data length
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
ERROR_CM_INSUFFICIENT_MEMORY	-4	Failed, out of memory
ERROR_IO_OPEN_FAILED	-8	Failed to open port

6.7. TSPL_SelfTest

This method is to print a self-test page for the printer, which contains basic configuration information for the printer.

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

Parameter:

void hPrinter*

[in] Printer object handle

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle

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 system

6.8. TSPL_Bar

The function is to draw a bar.

```
int TSPL_Bar(void* hPrinter, int x, int y,int width, int height);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] width, unit:dot.

int height

[in] height, unit:dot.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.9. TSPL_BarCode

The method is to print a one-dimensional barcode.

```
int TSPL_BarCode(void* hPrinter,int x,int y,int type,const char* content,int height,int showText
= 0,int rotation = 0,int narrow = 2,int wide = 2);
```

Parameter:*void* hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int type

[in] barcode type.

Type	Value
Code 128	0
Code 128M	1
EAN 128	2
Interleaved 2 of 5	3
Interleaved 2 of 5 with check digits	4
Code 39	5
Code 39C	6
Code 93	7
EAN 13	8
EAN 13 with 2 digits add-on	9
EAN 13 with 5 digits add-on	10
EAN 8	11
EAN 8 with 2 digits add-on	12
EAN 8 with 5 digits add-on	13
Codabar	14
Postnet	15
UPC-A	16
UPC-A with 2 digits add-on	17
UPC-A with 5 digits add-on	18
UPC- E	19
UPC- E with 2 digits add-on	20
UPC- E with 5 digits add-on	21
China post code	22
MSI code	23
MSI with check digit	24
PLESSEY code	25
ITF 14 code	26
EAN 14 code	27
Code 11	28
TELEPEN	29
TELEPENN	30
PLANET	31
CODE_49	32
DPI	33

DPL	34
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const char content*

[in] barcode data.

int height

[in] height, unit:dot.

int showText

[in] text display type.

Type	Value
do not display text	0
text is displayed on the left	1
text centered	2
text is displayed on the right	3

int rotation

[in] Rotation direction

Direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

int narrow

[in] Narrow Bar Width, unit:dot.

int rotation

[in] Wide Bar Width, unit:dot.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.10. TSPL_BitMap

This method is used to draw the binarized bitmap.

```
int TSPL_BitMap(void* hPrinter,int x,int y,int width,int height,int mode,unsigned char* data);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] width, unit:dot.

int height

[in] height, unit:dot.

int mode

[in] Mode for printing bitmap.

Mode	Value
OVERWRITE	0
OR	1
XOR	2

unsigned char data*

[in] Binarized bitmap data

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.11. TSPL_Image

This method is for printing the specified image (supports bmp, jpg, gif, etc), this function is suitable for printing LOGO.

Convert the image of the specified path to bitmap data and send it to the printer and print.

```
int TSPL_Image(void* hPrinter, int x, int y, int mode, const char* imgPath);
```

```
int TSPL_ImageW(void* hPrinter, int x, int y, int mode, const wchar_t* imgPathW);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int mode

[in] Mode for printing bitmap.

Mode	Value
OVERWRITE	0
OR	1
XOR	2

const char imgPath*

const wchar_t imgPathW*

[in] The correct path to the image.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.12. TSPL_Setup

This method is to set for the printer's basic parameters.

int TSPL_Setup(*void* hPrinter*, *int* printSpeed, *int* printDensity, *int* labelWidth, *int* labelHeight, *int* labelType, *int* gapHeight, *int* offset);

Parameter:

void hPrinter*

[in] Printer object handle

int printSpeed

[in] printing speed.

int printDensity

[in] print density (range: 0- 15).

int labelWidth

[in] Label width, unit:mm.

int labelHeight

[in] Label length, unit:mm.

int labelType

[in] label paper type (0: black mark/continuous paper 1: seam label/continuous paper).

int gapHeight

[in] The space between two labels, if it is set to 0, it means that it is continuous paper,unit:mm.

int offset

[in] offset position,unit:mm.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.13. TSPL_ClearBuffer

This function is to clear the printer memory cache. Clear the printer cache before executing print data.

`int TSPL_ClearBuffer(void* hPrinter);`

Parameter:

void hPrinter*

[in] Printer object handle

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.14. TSPL_Box

The method is used to draw box.

```
int TSPL_Box(void* hPrinter, int x, int y, int x_end, int y_end, int thickness = 1, int radius = 0);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int x_end

[in] Horizontal end position, unit:dot.

int y_end

[in] Vertical end position, unit:dot.

int thickness

[in] Line thickness., unit:dot.

int radius

[in] Specifies whether to have rounded corners, unit:dot.,default is 0.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.15. TSPL_QrCode

This method is used to print a QR code.

int TSPL_QrCode(void* hPrinter, int x, int y, int width, int eccLevel, int mode, int rotation, int model, int mask, const char* data);

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] QR code print width (range: 1- 10).

int eccLevel

[in] Error correction level.

Error correction level.	Value
7%	0
15%	1
25%	2
30%	3

int mode

[in] Automatic / manual coding (A : automatic, 1 : manual).

int rotation

[in] Rotation direction

Direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

int model

[in] QR code version (0 : Basic, 1 : Enhanced).

int mask

[in] mask(range: 0-8).

const char data*

[in] DataContent

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle

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 system

6.16. TSPL_Text

This method is to print text for the printer.

```
int TSPL_Text(void* hPrinter, int x, int y, const char* fontName, const char* content, int rotation
= 0, int x_multiplication = 1, int y_multiplication = 1, int alignment = 0);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

const char fontName*

[in] Font name.

Description	Value
normal	"0"
8x12	"1"
12x20	"2"
16x24	"3"
24x32	"4"
32x48	"5"
14x19	"6"
21x27	"7"
14x25	"8"
Simplified Chinese	"TSS24.BF2"

const char content*

[in] DataContent

int rotation

[in] Rotation direction

Direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2

Rotate 270 degrees	3
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int x_multiplication

[in] Horizontal magnification ratio, effective parameters: 1~10.

int y_multiplication

[in] Vertical magnification ratio, effective parameters: 1~10.

int alignment

[in] the alignment of the text.

Description	Value
Do not use this parameter	-1
Default (Left)	0
Align Left	1
Align Center	2
Align Right	3

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.17. TSPL_Print

This method is to perform printing operations.

`int TSPL_Print(void* hPrinter, int num, int copies);`

Parameter:

void hPrinter*

[in] Printer object handle

int num

[in] The number of labels.

int copies

[in] Print the number of copies of each label.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.18. TSPL_FormFeed

The method is to push the paper to the starting position of the next label.

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

Parameter:

void hPrinter*

[in] Printer object handle

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.19. TSPL_SetTear

This function is to enable/disable the tear-off function for setting the printer.

```
int TSPL_SetTear(void* hPrinter, int mode);
```

Parameter:

void hPrinter*

[in] Printer object handle

int mode

[in] Enable/disable the tear-off function (0 : OFF, 1 : ON).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.20. TSPL_SetRibbon

The method is used to set the ribbon working mode.

```
int TSPL_SetRibbon(void* hPrinter, int mode);
```

Parameter:

void hPrinter*

[in] Printer object handle

int mode

[in] Ribbon mode; 0 = turn off the ribbon state; 1 = turn on the ribbon state.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.21. TSPL_GetRibbonState

This function is to obtain the current printer ribbon status

```
int TSPL_GetRibbonState(void* hPrinter, int* mode);
```

Parameter:

void hPrinter*

[in] Printer object handle

int mode*

[in,out] Ribbon mode; 0 = turn off the ribbon state; 1 = turn on the ribbon state.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.22. TSPL_Offset

This method is used to define the extra feed length of each label of the printer.

`int TSPL_Offset(void* hPrinter, int distance);`

Parameter:

void hPrinter*

[in] Printer object handle

int distance

[in] Extra feed length, unit:dot.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.23. TSPL_Direction

This method is used to set the printer printing direction.

```
int TSPL_Direction(void* hPrinter, int direction, int mirror);
```

Parameter:

void hPrinter*

[in] Printer object handle

int direction

[in] Define the print orientation of the printer(0:Forward printing,1:reverse print).

int mirror

[in] Define the mirror of the printed content, 0:normal; 1:mirror

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.24. TSPL_Feed

This method is used to feed a specified length of paper to the printer.

```
int TSPL_Feed(void* hPrinter, int n);
```

Parameter:

void hPrinter*

[in] Printer object handle

int n

[in] Feed length Valid parameter: $\pm 1 \sim 9999$, When the number is negative, the paper will be ejected backward, unit:dot.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success

ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.25. TSPL_Home

This method is used to feed the paper to the starting position for the printer.

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

Parameter:

void hPrinter*

[in] Printer object handle

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.26. TSPL_Learn

This method is used to learn labels for the printer.

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

Parameter:

void hPrinter*

[in] Printer object handle

Return Value:

Code	Value	Description
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ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.27. TSPL_GetSN

This method is used to obtain the serial number of the printer SN.

```
int TSPL_GetSN(void* hPrinter, char* snBuffer, int bufSize);
```

Parameter:

void hPrinter*

[in] Printer object handle

char snBuffer*

[in,out] The buffer address used to get the serial number.

int bufSize

[in] Buffer size.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.28. TSPL_GetPrinterStatus

This method is used to get the current state of the printer.

```
int TSPL_GetPrinterStatus(void* hPrinter, unsigned int* printerStatus);
```

Parameter:

void hPrinter*

[in] Printer object handle

unsigned int printerStatus*

[in,out] Current status of the printer.

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

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.29. TSPL_SetCodePage

This method is used to set the code page for the printer.

`int TSPL_SetCodePage(void* hPrinter, const char* codepage);`

Parameter:

void hPrinter*

[in] Printer object handle

const char codepage*

[in] Code page.

Code	Name	Code	Name	Code	Name	Code	Name
USA	USA	437	United States	1250	Central Europe	8859-1	Latin 1
BRI	British	737	Greek	1251	Cyrillic	8859-2	8859-2
GER	German	850	Multilingual	1252	Latin I	8859-3	Latin 3

FRE	French	851	Greek 1	1253	Greek	8859-4	Baltic
DAN	Danish	852	Slavic	1254	Turkish	8859-5	Cyrillic
ITA	Italian	855	Cyrillic	1255	Hebrew	8859-6	Arabic
SPA	Spanish	857	Turkish	1256	Arabic	8859-7	Greek
SWE	Swedish	860	Portuguese	1257	Baltic	8859-8	Hebrew
SWI	Swiss	861	Icelandic	1258	Vietnam	8859-9	Turkish
		862	Hebrew	932	Japanese Shift-JIS	8859-10	Latin 6
		863	Canadian/French	936	Simplified Chinese GBK	8859-15	Latin 9
		864	Arabic	949	Korean		
		865	Nordic	950	Traditional Chinese Big5		
		866	Russian	UTF-8	UTF 8		
		869	Greek 2				

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.30. TSPL_PDF417

This method is used to print PDF417 QR code.

```
int TSPL_PDF417(void* hPrinter, int x, int y, int width, int height, int rotation, const char* option, const char* data);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] width, unit:dot.

int height

[in] height, unit:dot.

int rotation

[in] Rotation direction

Direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

const char option*

[in] Options (Example: E3,W2,H8).

Value	Description
P	Data compression method: 0 : automatic 1 : binary mode
E	Error check level (0~8)
M	Bar code center print mode 0: This mode will print in the upper left corner alignment area 1: will print in the middle area
Ux,y,c	Code readable x: the x coordinate specified by the readable character y: the y coordinate specified by the readable character c: maximum number of readable characters per line
W	Module width (2~9: dot)
H	Height of small bar code (4~99: dot)
R	Maximum number of rows
C	Maximum number of columns
T	Whether to cut off 0: No 1: Yes
Lm	Indicates the length (1~2048)

const char data*

[in] DataContent

Return Value:

Code	Value	Description
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ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.31. TSPL_Block

This method is used to prints paragraph on label.

```
int TSPL_Block(void* hPrinter, int x, int y, int width, int height,const char* fontName,const char* content,int rotation = 0,int x_multiplication = 1,int y_multiplication = 1,int alignment = 0);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] The width of block for the paragraph in dots.

int height

[in] The height of block for the paragraph in dots.

const char fontName*

[in] Font name.

Description	Value
normal	"0"
8x12	"1"
12x20	"2"
16x24	"3"
24x32	"4"
32x48	"5"
14x19	"6"
21x27	"7"
14x25	"8"
Simplified Chinese	"TSS24.BF2"

const char content*

[in] DataContent

int rotation

[in] Rotation direction

Direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

int x_multiplication

[in] Horizontal magnification ratio, effective parameters: 1~10.

int y_multiplication

[in] Vertical magnification ratio, effective parameters: 1~10.

int alignment

[in] the alignment of the text.

the alignment of the text.	Value
Default (Left)	0
Align Left	1
Align Center	2
Align Right	3

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.32. TSPL_Reverse

This method is used to reverses a region in image buffer.

`int TSPL_Reverse(void* hPrinter,int x,int y,int width,int height);`

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] width, unit:dot.

int height

[in] height, unit:dot.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.33. TSPL_GapDetect

This method is used to detect paper size and gap size.

`int TSPL_GapDetect(void* hPrinter, int x = 0, int y = 0);`

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Paper length (in dots).

int y

[in] Gap length (in dots).

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system
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6.34. TSPL_Dmatrix

This method is used to print Data Matrix 2D barcodes.

```
int TSPL_Dmatrix(void* hPrinter, int x, int y, int width, int height, const char* content, int
blockSize = 0, int row = 10, int col = 10);
```

Parameter:

void hPrinter*

[in] Printer object handle

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] width, unit:dot.

int height

[in] height, unit:dot.

const char content*

[in] DataContent

int blockSize

[in] optional,Module size (in dots).

int row

[in] optional,Symbol size of row: 10 to 144.

int col

[in] optional,Symbol size of col: 10 to 144.

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system

6.35. TSPL_SetCutter

This method is used to set the cutter working mode.

```
int TSPL_SetCutter(void* hPrinter, int mode);
```

Parameter:

void hPrinter*

[in] Printer object handle

int mode

[in] Set number of printing labels per cut.0=Turn off the cutter function,-1=

Cut paper after printing job, 1-65535=Number of labels for cut paper

Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	Success
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INVALID_HANDLE	-2	Invalid Handle
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 system