

[TSPL Linux SDK]

[Printer TSPL Command Development Manual v2.0.4]

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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]	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	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.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] 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.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] The created target printer objec

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_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.TSPL_BarCode

The method is to print a one-dimensional barcode.

```
int TSPL_BarCode(
    void* hPrinter,
    int x,
    int y,
    BarcodeType type,
    const char* content,
```

```

int height,
TextAlign showText = TextAlign::HIDE,
Rotation rotation = Rotation::ROTATION_0,
int narrow = 2,
int wide = 2
);

```

Parameter:

void hPrinter*

[in] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

BarcodeType type

[in] barcode type.

Barcode type	Value
Code 128	CODE_128
Code 128M	CODE_128M
EAN 128	EAN_128
Interleaved 2 of 5	CODE_25
Interleaved 2 of 5 with check digits	CODE_25C
Code 39	CODE_39
Code 39C	CODE_39C
Code 93	CODE_93
EAN 13	EAN_13
EAN 13 with 2 digits add-on	EAN_13_2
EAN 13 with 5 digits add-on	EAN_13_5
EAN 8	EAN_8
EAN 8 with 2 digits add-on	EAN_8_2
EAN 8 with 5 digits add-on	EAN_8_5
Codabar	CODA
Postnet	POST
UPC-A	UPCA
UPC-A with 2 digits add-on	UPCA_2
UPC-A with 5 digits add-on	UPCA_5
UPC- E	UPCE
UPC- E with 2 digits add-on	UPCE_2
UPC- E with 5 digits add-on	UPCE_5
China post code	CPOST
MSI code	MSI
MSI with check digit	MSIC
PLESSEY code	PLESSEY
ITF 14 code	ITF_14
EAN 14 code	EAN_14
Code 11	EAN_14
TELEPEN	TELEPEN
TELEPENN	TELEPENN
PLANET	PLANE
CODE_49	CODE_49
DPI	DPI

DPL	DPL
-----	-----

const char content*

[in] barcode data.

int height

[in] height, unit:dot.

TextAlign showText

[in] text display type

Text display type	Value
do not display text	HIDE
text is displayed on the left	LEFT
text centered	CENTER
text is displayed on the right	RIGHT

Rotation rotation

[in] barcode rotation direction

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

int narrow

[in] Narrow Bar Width, unit:dot.

int wide

[in] Wide Bar Width, 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

4.10. 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] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] Image width, unit:byte.

int height

[in] Bitmap 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_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. TSPL_Image

This method is for printing the specified image (Only supports monochrome bmp format), 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  
);
```

Parameter:

void hPrinter*

[in] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int mode

[in] Mode for printing Image.

mode	Value
OVERWRITE	0

OR	1
XOR	2

*const char** imgPath

[in] The correct 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

4.12. 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] The created target printer object.

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_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. 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] 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

4.14. 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] The created target printer object.

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_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. TSPL_QrCode

This method is used to print a QR code.

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

Parameter:

void hPrinter*

[in] The created target printer object.

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 rotate

[in] QR code rotation angle.

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

int model

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

int mask

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

const char data*

[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

4.16. 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] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

const char fontName*

[in] Font name.

Font name	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] text content.

int rotation

[in] Rotation angle.

Rotation 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.

Alignment	Value
Default (Left)	0
Left	1
Center	2
Right	3

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. TSPL_Print

This method is to perform printing operations.

int TSPL_Print(

```

        void* hPrinter,
        int num,
        int copies
    );

```

Parameter:

void hPrinter*

[in] The created target printer object.

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_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. 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] 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

4.19. 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] The created target printer object.

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_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. TSPL_SetRibbon

The method is used to set the ribbon working mode.

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

Parameter:

void hPrinter*

[in] The created target printer object.

int mode

[in] Ribbon mode; 0=turn off the ribbon function; 1=start the ribbon function; 2=inner winding ribbon; 3=outer winding ribbon.

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. 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] The created target printer object.

int distance

[in] Extra feed length, 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

4.22. TSPL_Direction

This method is used to set the printer printing direction.

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

Parameter:

void hPrinter*

[in] The created target printer object.

Direction direction

[in] Define the print orientation of the printer(DIRECTION_FORWARD:Forward printing,DIRECTION_REVERSE: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_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. 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] The created target printer object.

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_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. 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] 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
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4.25. TSPL_Learn

This method is used to learn labels for the printer.

```
int TSPL_Learn(
    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	-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. 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] The created target printer object.

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_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. 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]The created target printer object.

*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_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

4.28. 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] The created target printer object.

const char codepage*

[in]code page.

7-bit code page		8-bit code page		Linux code page		ISO code page	
US A	USA	437	United States	1250	Central Europe	8859- 1	Latin 1
BRI	British	737	Greek	1251	Cyrillic	8859-2	Latin 2
GE R	German	850	Multilingual	1252	Latin I	8859-3	Latin 3
FRE	French	851	Greek1	1253	Greek	8859-4	Batltic
DA N	Danish	852	Slavic	1254	Turkish	8859-5	Cyrillic
ITA	Italian	855	Cyrillic	1255	Hebrew	8859-6	Arabic
SPA	Spansh	857	Turkish	1256	Arabic	8859-7	Greek
SW E	Sweidsh	860	Portuguese	1257	Batltic	8859-8	Hebrew
SWI	Swiss	861	Icelandic	1258	Vietnam	8859-9	Turkish
		862	Hebrew	932	Japanese shift-JIS	8859- 10	Latin 6
		863	Canadian/Fren ch	936	simplified	8859- 15	Latin 9
		864	Arabic	949	Korean		
		865	Nordic	950	Traditional Chinese BIG5		
		866	Russian	UTF-8	UTF 8		
		869	Greek2				

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. 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 rotate,
    const char* option,
    const char* data
);

```

Parameter:

*void * hPrinter*

[in] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] QR code width, unit:dot.

int height

[in] QR code height, unit:dot.

int rotate

[in] Rotation angle.

Rotation 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).

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,z	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] 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

4.30. 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,  
    Rotation rotation = ROTATION_0,  
    int x_multiplication = 1,  
    int y_multiplication = 1,  
    int alignment = 0  
);
```

Parameter:

void hPrinter*

[in] The created target printer object.

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.

Font name	value
normal	"0"
8x12	"1"
12x20	"2"
16x24	"3"
24x32	"4"
32x48	"5"
14x19	"6"

21x27	"7"
14x25	"8"
简体中文	"TSS24.BF2"

const char content*

[in] Data in block. The maximum data length is 4092 bytes.

Rotation rotation

[in] The rotation angle of text.

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

int x_multiplication

[in] Horizontal multiplication, up to 10x, Available factors: 1~10.

int y_multiplication

[in] Vertical multiplication, up to 10x, Available factors: 1~10.

int alginment

[in] Text alignment.

Alignment	Value
Default (Left)	0
Left	1
Center	2
Right	3

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. 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] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.
int y
[in] Vertical starting position,unit:dot.
int width
[in] width, unit:dot.
int heigh
[in] height, 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

4.32. 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] The created target printer object.
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_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. 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] The created target printer object.

int x

[in] Horizontal starting position, unit:dot.

int y

[in] Vertical starting position,unit:dot.

int width

[in] The expected width of barcode area (in dots)

int height

[in] The expected height of barcode area (in dots)

const char content*

[in] Content of DataMatrix 2D bar code.

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_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. TSPL_SetCutter

This method is used to set the cutter working mode.

```

int TSPL_SetCutter(
    void* hPrinter,
    int pieces
);

```

Parameter:

void hPrinter*

[in] The created target printer object.

int copies

[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_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