BIXOLON®

API Reference Guide

Label Printer SDK

iOS

Rev.1.05

SLP-DX420 / DX423

SLP-DX220 / DX223

SLP-TX400 / TX403

SLP-TX420 / TX423

SLP-TX220 / TX223

SLP-DL410 / DL413

SRP-770III

http://www.bixolon.com

■ Table of Contents

1. About This Manual

This SDK Manual contains the description of the library API that is required for the development of iOS application programs.

BIXOLON makes continuous improvements to functions and qualities of products, and specifications and contents of this manual are subject to change without prior notice for this reason.

1-1 Supported iOS Version

- iOS 6.0 and later.

1-2 List of Supported Printer / Interface

Method/Property	Ethernet	Wifi	Bluetooth
SLP-DX420	O	O	X
SLP-DX423	O	O	X
SLP-DX220	O	O	O
SLP-DX223	O	O	O
SLP-TX420	O	O	X
SLP-TX423	O	O	X
SLP-TX220	O	O	X
SLP-TX223	O	O	X
SLP-DL410	O	O	X
SLP-DL413	O	O	X
SLP-TX400	O	O	X
SLP-TX403	O	O	X
SRP-770III	O	O	X

1-3 List of Supported Methods

Method		SLP-DX420/DX423/DX220/DX223/ TX420/TX423/TX220/TX223/DL410/DL413/ TX400/TX403/SRP-770III
General	*open*	O
	close	O
Connection	*connectWithAddress:port:*	O
	isConnected	O
	disconnect	O
	disconnectWithTimeout:	O
Draw Text	*drawTextDeviceFont:* xPosition: yPosition: fontSelection: fontWidth: fontHeight: rightSideCharacterSpacing: fontRotation: reverse: bold: textAlignment:	O
	drawTextVectorFont: xPosition: yPosition: fontSelection: fontWidth: fontHeight: rightSideCharacterSpacing: fontRotation: reverse: bold: italic: textAlignment:	O

Method		SLP-DX420/DX423/DX220/DX223/ TX420/TX423/TX220/TX223/DL410/DL413/ TX400/TX403/SRP-770III
Draw Barcode	*drawBarcode1D:* xPosition: yPosition: barcodeType: widthNarrow: widthWide: height: hri: quietZoneWidth: rotation:	O
	drawBarcodeMaxiCode: xPosition: yPosition: mode:	O
	drawBarcodePDF417: xPosition: yPosition: maximumRowCount: maximumColumnCount: errorCorrectionLevel: dataCompressionMethod: printBarcodeText: barcodeOriginPoint: moduleWidth: barHeight: rotation:	O
	drawBarcodeQRCode: xPosition: yPosition: barcodeSize: model: errorColectionLevel: rotation:	O
	drawBarcodeDataMatrix: xPosition: yPosition: barcodeSize: reverse: rotation:	O
	drawBarcodeAztec: xPosition: yPosition: barcodeSize: extendedChannel: errorCorrectionLevel: menuSymbol: numberOfSymbols: optionalID: rotation:	O

Method		SLP-DX420/DX423/DX220/DX223/ TX420/TX423/TX220/TX223/DL410/DL413/ TX400/TX403/SRP-770III
Draw Barcode	drawBarcodeCode49: xPosition: yPosition: widthNarrow: widthWide: height: hri: startingMode: rotation:	O
	drawBarcodeCodaBlock: xPosition: yPosition: widthNarrow: widthWide: height: securityLevel: numberOfCharactersPerrow: mode: numberOfRowToEncode:	O
	drawBarcodeMicroPDF: xPosition: yPosition: moduleWidth: barcodeHeight: mode: rotation:	O
	drawBarcodeIMB: xPosition: yPosition: printBarcodeText: rotation:	O
	drawBarcodeMSI: xPosition: yPosition: widthNarrow: widthWide: height: checkDigitSelection: printCheckDigitInHRI: hri: rotation:	O
	drawBarcodePlessey: xPosition: yPosition: widthNarrow: widthWide: height: printCheckDigit: hri: rotation:	O

Method		SLP-DX420/DX420/DX220/DX223/ TX420/TX423/TX220/TX223/DL410/DL413/ TX400/TX403/SRP-770III
Draw Barcode	drawBarcodeTLC39: xPosition: yPosition: widthNarrow: widthWide: height: rowHeightOfMicroPDF417: narrowWidthOfMicroPDF417: rotation:	O
	drawBarcodeRSS: xPosition: yPosition: barcodeType: magnification: separatorHeight: barcodeHeight: segmentWidth: rotation:	O
drawBlock	drawBlock: startPosY: endPosX: endPosY: option: thickness:	O
drawCircle	drawCircle: startPosY: sizeSelection: multiplier:	O
drawImage	drawImage: stratPosX: startPosY: width:	O

2. Constants

Constants used in the provided SDK are defined in the “LabelPrinterSDK_Defines.h” file.

2-1 Result Codes

Results Codes are the values returned from various methods, which indicate error conditions of the corresponding method.

```
typedef enum{
    _SDK_RESULT_SUCCESS                     = 0x0000,
    _SDK_RESULT_FAIL                        = 0xF000,
    _SDK_RESULT_FAIL_NOT_SUPPORT_FUNCTION,
    _SDK_RESULT_FAIL_NO_OPEN                ,
    _SDK_RESULT_FAIL_OPEN_ALREADY           ,
    _SDK_RESULT_FAIL_NO_CONNECT             ,
    _SDK_RESULT_FAIL_CONNECT_ALREADY        ,
    _SDK_RESULT_FAIL_WRITE_ERROR            ,
    _SDK_RESULT_FAIL_READ_ERROR             ,
    _SDK_RESULT_FAIL_INVALID_PARAMETER      ,
}__SDK_RESULT_CODES_;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_RESULT_SUCCESS	0X0000	Success
_SDK_RESULT_FAIL	0XF000	Fail
_SDK_RESULT_FAIL_NOT_SUPPORT_FUNCTION	0XF001	Not supported
_SDK_RESULT_FAIL_NO_OPEN	0XF002	SDK is not open
_SDK_RESULT_FAIL_OPEN_ALREADY	0XF003	SDK is already open
_SDK_RESULT_FAIL_NO_CONNECT	0XF004	Printer is not connected
_SDK_RESULT_FAIL_CONNECT_ALREADY	0XF005	Printer is already connected
_SDK_RESULT_FAIL_WRITE_ERROR	0XF006	Failed to send data
_SDK_RESULT_FAIL_READ_ERROR	0XF007	Failed to receive data
_SDK_RESULT_FAIL_INVALID_PARAMETER	0XF008	Invalid parameter

2-2 Alignment

Alignment constants are used to specify the alignment property.

```
typedef enum{
      _SDK_ALIGNMENT_LEFT                          = 0,
      _SDK_ALIGNMENT_RIGHT                         = 1,
      _SDK_ALIGNMENT_CENTER                        = 2,
_SDK_ALIGNMENT_STRING_FROM_RIGHT_2_LEFT      = 2,
}__SDK_ALIGNMENTS;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_ALIGNMENT_LEFT	0	Align to left
_SDK_ALIGNMENT_LEFT	1	Align to right
_SDK_ALIGNMENT_CENTER	2	Align to center
_SDK_ALIGNMENT_STRING_FROM_RIGHT_2_LEFT	2	Print characters from right to left

[Discussion]
_SDK_ALIGNMENT_CENTER value is valid for Vector Font.
If this value is applied to the printing of Device Font, it has the same effect as _SDK_ALIGNMENT_STRING_FROM_RIGHT_2_LEFT, where actual integer values assigned to two constants are same.

2-3 Barcode HRI

Barcode HRI (Human Readable Interpretation) constant is used to specify the position and font of HRI when printing barcodes that support HRI.

```
typedef enum{
    _SDK_BARCODE_HRI_NONE                = 0,
    _SDK_BARCODE_HRI_BELOW_FONTSIZE1     = 1,
    _SDK_BARCODE_HRI_ABOVE_FONTSIZE1     = 2,
    _SDK_BARCODE_HRI_BELOW_FONTSIZE2     = 3,
    _SDK_BARCODE_HRI_ABOVE_FONTSIZE2     = 4,
    _SDK_BARCODE_HRI_BELOW_FONTSIZE3     = 5,
    _SDK_BARCODE_HRI_ABOVE_FONTSIZE3     = 6,
    _SDK_BARCODE_HRI_BELOW_FONTSIZE4     = 7,
    _SDK_BARCODE_HRI_ABOVE_FONTSIZE4     = 8,
}__SDK_BARCODE_HRI;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_BARCODE_HRI_NONE	0	HRI is not used.
_SDK_BARCODE_HRI_BELOW_FONTSIZE1	1	Position of HRI: Below barcode Font Size: 1
_SDK_BARCODE_HRI_ABOVE_FONTSIZE1	2	Position of HRI: Above barcode Font Size: 1
_SDK_BARCODE_HRI_BELOW_FONTSIZE2	3	Position of HRI: Below barcode Font Size: 2
_SDK_BARCODE_HRI_ABOVE_FONTSIZE2	4	Position of HRI: Above barcode Font Size: 2
_SDK_BARCODE_HRI_BELOW_FONTSIZE3	5	Position of HRI: Below barcode Font Size: 3
_SDK_BARCODE_HRI_ABOVE_FONTSIZE3	6	Position of HRI: Above barcode Font Size: 3
_SDK_BARCODE_HRI_BELOW_FONTSIZE4	7	Position of HRI: Below barcode Font Size: 4
_SDK_BARCODE_HRI_ABOVE_FONTSIZE4	8	Position of HRI: Above barcode Font Size: 4

[Discussion]
When a parameter is set to one of these constants, it may be replaced by a valid one and the changed one will be applied accordingly to actual operation.

2-4 MaxiCode Modes

MaxiCode Mode constants are used to set the barcode option when printing Mexi code barcode.

```
typedef enum{
    _SDK_MAXICODE_MODE_0            = 0,
    _SDK_MAXICODE_MODE_2            = 2,
    _SDK_MAXICODE_MODE_3            = 3,
    _SDK_MAXICODE_MODE_4            = 4,
}__SDK_MAXICODE_MODE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_MAXICODE_MODE_0	0	MaxiCode Mode 0
_SDK_MAXICODE_MODE_2	2	MaxiCode Mode 2
_SDK_MAXICODE_MODE_3	3	MaxiCode Mode 3
_SDK_MAXICODE_MODE_4	4	MaxiCode Mode 4

2-5 1D Barcode Types

Barcode Types constants are used to set the barcode option when printing 1D barcode.

```
typedef enum{
    _SDK_BARCODE_TYPE_CODE39                = 0,
    _SDK_BARCODE_TYPE_CODE128               = 1,
    _SDK_BARCODE_TYPE_I2Of5                 = 2,
    _SDK_BARCODE_TYPE_CODABAR               = 3,
    _SDK_BARCODE_TYPE_CODE93                = 4,
    _SDK_BARCODE_TYPE_UPC_A                 = 5,
    _SDK_BARCODE_TYPE_UPC_E                 = 6,
    _SDK_BARCODE_TYPE_EAN13                 = 7,
    _SDK_BARCODE_TYPE_EAN8                  = 8,
    _SDK_BARCODE_TYPE_EAN128                = 9,
    _SDK_BARCODE_TYPE_CODE11                = 10,
    _SDK_BARCODE_TYPE_PLANET                = 11,
    _SDK_BARCODE_TYPE_INDUSTRIAL_2Of5       = 12,
    _SDK_BARCODE_TYPE_STANDARD_2Of5         = 13,
    _SDK_BARCODE_TYPE_LOGMARS               = 14,
    _SDK_BARCODE_TYPE_UPC_EAN_EXTENSIONS    = 15,
    _SDK_BARCODE_TYPE_POSTNET               = 16,
}__SDK_BARCODE_TYPE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_BARCODE_TYPE_CODE39	0	Code39
_SDK_BARCODE_TYPE_CODE128	1	Code128
_SDK_BARCODE_TYPE_I2Of5	2	Interleaved 2of5
_SDK_BARCODE_TYPE_CODABAR	3	Codabar
_SDK_BARCODE_TYPE_CODE93	4	Code93
_SDK_BARCODE_TYPE_UPC_A	5	UPC-A
_SDK_BARCODE_TYPE_UPC_E	6	UPC-E
_SDK_BARCODE_TYPE_EAN13	7	EAN13
_SDK_BARCODE_TYPE_EAN8	8	EAN8
_SDK_BARCODE_TYPE_EAN128	9	UCC/EAN128
_SDK_BARCODE_TYPE_CODE11	10	Code11
_SDK_BARCODE_TYPE_PLANET	11	Planet
_SDK_BARCODE_TYPE_INDUSTRIAL_2Of5	12	Industrial 2of5
_SDK_BARCODE_TYPE_STANDARD_2Of5	13	Standard 2of5
_SDK_BARCODE_TYPE_LOGMARS	14	Logmars
_SDK_BARCODE_TYPE_UPC_EAN_EXTENSIONS	15	UPC/EAN Extensions
_SDK_BARCODE_TYPE_POSTNET	16	Postnet

2-6 Barcode Origin Point

Barcode Origin Point constants are used to set the reference origin position of barcode.

```
typedef enum{
    _SDK_BARCODE_ORIGIN_POINT_CENTER        = 0,
    _SDK_BARCODE_ORIGIN_POINT_UpperLeft     = 1,
}__SDK_BARCODE_ORIGIN_POINT;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_BARCODE_ORIGIN_POINT_CENTER	0	Set the reference point of the barcode to the center.
_SDK_BARCODE_ORIGIN_POINT_UpperLeft	1	Set the reference point of the barcode in the upper left corner.

2-7 Error Correction Level

Error Correction Level constants are used to set the level of error correction for possible corruption of barcode.
More corruption can be corrected with a higher level of correction but the length of the allowed data may be reduced with a higher level of correction.

```
typedef enum{
    _SDK_ERROR_CORRECTION_LEVEL0        = 0,
    _SDK_ERROR_CORRECTION_LEVEL1        = 1,
    _SDK_ERROR_CORRECTION_LEVEL2        = 2,
    _SDK_ERROR_CORRECTION_LEVEL3        = 3,
    _SDK_ERROR_CORRECTION_LEVEL4        = 4,
    _SDK_ERROR_CORRECTION_LEVEL5        = 5,
    _SDK_ERROR_CORRECTION_LEVEL6        = 6,
    _SDK_ERROR_CORRECTION_LEVEL7        = 7,
    _SDK_ERROR_CORRECTION_LEVEL8        = 8,
}__SDK_ERROR_CORRECTION_LEVEL
```

Description of each constant is as follows.

Code	Value	Description
_SDK_ERROR_CORRECTION_LEVEL0	0	Error Correction Level 0
_SDK_ERROR_CORRECTION_LEVEL1	1	Error Correction Level 1
_SDK_ERROR_CORRECTION_LEVEL2	2	Error Correction Level 2
_SDK_ERROR_CORRECTION_LEVEL3	3	Error Correction Level 3
_SDK_ERROR_CORRECTION_LEVEL4	4	Error Correction Level 4
_SDK_ERROR_CORRECTION_LEVEL5	5	Error Correction Level 5
_SDK_ERROR_CORRECTION_LEVEL6	6	Error Correction Level 6
_SDK_ERROR_CORRECTION_LEVEL7	7	Error Correction Level 7
_SDK_ERROR_CORRECTION_LEVEL8	8	Error Correction Level 8

2-8 Data Compression Method

Data Compression Method constants are used to specify the data compression property.

```
typedef enum{
      _SDK_DATA_COMPRESSION_METHOD_TEXT          = 0,
      _SDK_DATA_COMPRESSION_METHOD_NUMERIC     = 1,
      _SDK_DATA_COMPRESSION_METHOD_BINARY       = 2,
}__SDK_DATA_COMPRESSION_METHOD;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_DATA_COMPRESSION_METHOD_TEXT	0	2char / codeword
_SDK_DATA_COMPRESSION_METHOD_NUMERIC	1	2.93 char / codeword
_SDK_DATA_COMPRESSION_METHOD_BINARY	2	1.2bytes / codeword

2-9 QRCode Model

QRCode Model constants are used to set the options in printing QR barcode.

```
typedef enum{
      _SDK_QRCODE_MODEL_1                    = 1,
      _SDK_QRCODE_MODEL_2                    = 2,
}__SDK_QRCODE_MODE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_QRCODE_MODEL_1	1	QR Model 1
_SDK_QRCODE_MODEL_2	2	QR Model 2

2-10 Code 49 Starting Mode

Code 49 Starting Mode constants are used to set the properties of Starting Mode in printing Code 49 barcode.

```
typedef enum{
    _SDK_STARTINGMODE_REGULAR_ALPHANUMERIC          = 0,
    _SDK_STARTINGMODE_MULTIPLE_READ_ALPHANUMERIC    = 1,
    _SDK_STARTINGMODE_REGULAR_NUMERIC               = 2,
    _SDK_STARTINGMODE_GROUP_ALPHANUMERIC            = 3,
    _SDK_STARTINGMODE_REGULAR_ALPHANUMRIC_SHIFT1    = 4,
    _SDK_STARTINGMODE_REGULAR_ALPHANUMRIC_SHIFT2    = 5,
    _SDK_STARTINGMODE_AUTOMATIC                     = 7,
}__SDK_STARTING_MODE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_STARTINGMODE_REGULAR_ALPHANUMERIC	0	Regular Alphanumeric Mode
_SDK_STARTINGMODE_MULTIPLE_READ_ALPHANUMERIC	1	Multiple Read Alphanumeric
_SDK_STARTINGMODE_REGULAR_NUMERIC	2	Regular Numeric Mode
_SDK_STARTINGMODE_GROUP_ALPHANUMERIC	3	Group Alphanumeric Mode
_SDK_STARTINGMODE_REGULAR_ALPHANUMRIC_SHIFT1	4	Regular Alphanumeric Shift 1
_SDK_STARTINGMODE_REGULAR_ALPHANUMRIC_SHIFT2	5	Regular Alphanumeric Shift 2
_SDK_STARTINGMODE_AUTOMATIC	7	Automatic Mode

2-11 Codablock Mode

Codablock Mode constants are used to set the options when printing Codablock barcode.

```
typedef enum{
      _SDK_CODABLACK_MODE_A                    = 'A',
      _SDK_CODABLACK_MODE_E                    = 'E',
      _SDK_CODABLACK_MODE_F                    = 'F',
}__SDK_CODABLACK_MODE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_CODABLACK_MODE_A	‘A’	Code 39 character set is used.
_SDK_CODABLACK_MODE_E	‘E’	Code 128 character set is used.
_SDK_CODABLACK_MODE_F	‘F’	Code 128 character set is used. Function 1 is added automatically.

2-12 Check Digit Option

These constants are used to set the Check Digit property when printing MSI barcode.

```
typedef enum{
      _SDK_CHECKDIGIT_NONE                     = 0,
      _SDK_CHECKDIGIT_1MOD10                   = 1,
      _SDK_CHECKDIGIT_2MOD10                   = 2,
      _SDK_CHECKDIGIT_1MOD11_AND_1MOD_10       = 3,

}_SDK_CHECKDIGIT;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_CHECKDIGIT_NONE	0	No Check Digit
_SDK_CHECKDIGIT_1MOD10	1	Check Digit 1 Mod 10
_SDK_CHECKDIGIT_2MOD10	2	Check Digit 2 Mod 10
_SDK_CHECKDIGIT_1MOD11_AND_1MOD_10	3	Check Digit 1 Mod 10

2-13 RSS Barcode Type

RSS Barcode Type constants are used to set the barcode type when printing RSS barcode.

```
typedef enum{
    _SDK_RSS_BARCODE_TYPE_RSS14                              = 0,
    _SDK_RSS_BARCODE_TYPE_RSS14_TRUNCATED                    = 1,
    _SDK_RSS_BARCODE_TYPE_RSS14_STACKED                      = 2,
    _SDK_RSS_BARCODE_TYPE_RSS14_STACKED_OMNIDIRECTIONAL      = 3,
    _SDK_RSS_BARCODE_TYPE_RSS_LIMITED                        = 4,
    _SDK_RSS_BARCODE_TYPE_RSS_EXPANDED                       = 5,
    _SDK_RSS_BARCODE_TYPE_UPC_A                              = 6,
    _SDK_RSS_BARCODE_TYPE_UPC_E                              = 7,
    _SDK_RSS_BARCODE_TYPE_EAN13                              = 8,
    _SDK_RSS_BARCODE_TYPE_EAN8                               = 9,
    _SDK_RSS_BARCODE_TYPE_UCC_EAN128_CC_A_B                  = 10,
    _SDK_RSS_BARCODE_TYPE_UCC_EAN128_CC_C                    = 11,

}__SDK_RSS_BARCODE_TYPE;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_RSS_BARCODE_TYPE_RSS14	0	RSS14
_SDK_RSS_BARCODE_TYPE_RSS14_TRUNCATED	1	RSS14 truncated
_SDK_RSS_BARCODE_TYPE_RSS14_STACKED	2	RSS14 stacked
_SDK_RSS_BARCODE_TYPE_RSS14_STACKED_OMNIDIRECTIONAL	3	RSS14 Stacked omnidirectional
_SDK_RSS_BARCODE_TYPE_RSS_LIMITED	4	RSS limited
_SDK_RSS_BARCODE_TYPE_RSS_EXPANDED	5	RSS Expanded
_SDK_RSS_BARCODE_TYPE_UPC_A	6	RSS UPC A
_SDK_RSS_BARCODE_TYPE_UPC_E	7	RSS UPC E
_SDK_RSS_BARCODE_TYPE_EAN13	8	EAN13
_SDK_RSS_BARCODE_TYPE_EAN8	9	EAN 8
_SDK_RSS_BARCODE_TYPE_UCC_EAN128_CC_A_B	10	EAN128 CC-A/B
_SDK_RSS_BARCODE_TYPE_UCC_EAN128_CC_C	11	EAN128 CC-C

2-14 Rotation Degrees

Rotation Degrees constants are used to set the rotation property of the printing.

```
typedef enum{
      _SDK_ROTATION_DEGREES_0                = 0,
      _SDK_ROTATION_DEGREES_90               = 1,
      _SDK_ROTATION_DEGREES_180              = 2,
      _SDK_ROTATION_DEGREES_270              = 3,
}__SDK_ROTATION_DEGREES;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_ROTATION_DEGREES_0	0	No rotation
_SDK_ROTATION_DEGREES_90	1	90 degrees of rotation
_SDK_ROTATION_DEGREES_180	2	180 degrees of rotation
_SDK_ROTATION_DEGREES_270	3	270 degrees of rotation.

2-15 Device Fonts

Device Fonts constants are used to set the property of Device Font.

```
typedef enum {
      _SDK_DEVICE_FONT_6PT                    ='0',
      _SDK_DEVICE_FONT_8PT                    ='1',
      _SDK_DEVICE_FONT_10PT                   ='2',
      _SDK_DEVICE_FONT_12PT                   ='3',
      _SDK_DEVICE_FONT_15PT                   ='4',
      _SDK_DEVICE_FONT_20PT                   ='5',
      _SDK_DEVICE_FONT_30PT                   ='6',
      _SDK_DEVICE_FONT_14PT                   ='7',
      _SDK_DEVICE_FONT_18PT                   ='8',
      _SDK_DEVICE_FONT_24PT                   ='9',
      _SDK_DEVICE_FONT_KOREAN1                ='a',
      _SDK_DEVICE_FONT_KOREAN2                ='b',
      _SDK_DEVICE_FONT_KOREAN3                ='c',
      _SDK_DEVICE_FONT_KOREAN4                ='d',
      _SDK_DEVICE_FONT_KOREAN5                ='e',
      _SDK_DEVICE_FONT_KOREAN6                ='f',
      _SDK_DEVICE_FONT_GB2312                 ='m',
      _SDK_DEVICE_FONT_BIG5                   ='n',
      _SDK_DEVICE_FONT_SHIFT_JIS              ='j',
 }_SDK_DEVICE_FONT;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_DEVICE_FONT_6PT	‘0’	9 X 15 (dots)
_SDK_DEVICE_FONT_8PT	‘1’	12 X 20 (dots)
_SDK_DEVICE_FONT_10PT	‘2’	16 X 25 (dots)
_SDK_DEVICE_FONT_12PT	‘3’	19 X 30 (dots)
_SDK_DEVICE_FONT_15PT	‘4’	24 X 38 (dots)
_SDK_DEVICE_FONT_20PT	‘5’	32 X 40 (dots)
_SDK_DEVICE_FONT_30PT	‘6’	48 X 76 (dots)
_SDK_DEVICE_FONT_14PT	‘7’	22 X 34 (dots)
_SDK_DEVICE_FONT_18PT	‘8’	28 X 44 (dots)
_SDK_DEVICE_FONT_24PT	‘9’	37 X 58 (dots)
_SDK_DEVICE_FONT_KOREAN1	‘a’	16 X 16 (dots) (ascii 9 X 15)
_SDK_DEVICE_FONT_KOREAN2	‘b’	24 X 24 (dots) (ascii 12 X 24)
_SDK_DEVICE_FONT_KOREAN3	‘c’	20 X 20 (dots) (ascii 12 X 20)
_SDK_DEVICE_FONT_KOREAN4	‘d’	26 X 26 (dots) (ascii 16 X 30)
_SDK_DEVICE_FONT_KOREAN5	‘e’	20 X 26 (dots) (ascii 16 X 30)
_SDK_DEVICE_FONT_KOREAN6	‘f’	38 X 38 (dots) (ascii 22 X 34)
_SDK_DEVICE_FONT_GB2312	‘m’	24 X 24 (dots) (ascii 12 X 24)
_SDK_DEVICE_FONT_BIG5	‘n’	24 X 24 (dots) (ascii 12 X 24)
_SDK_DEVICE_FONT_SHIFT_JIS	‘j’	24 X 24 (dots) (ascii 12 X 24)

2-16 Vector Fonts

Vector Fonts constants are used to set the property of Vector Fonts.

```
typedef enum {
      _SDK_VECTOR_FONT_ASCII                ='U',
      _SDK_VECTOR_FONT_KS5601               ='K',
      _SDK_VECTOR_FONT_BIG5                 ='B',
      _SDK_VECTOR_FONT_GB2312               ='G',
      _SDK_VECTOR_FONT_SHIFT_JIS            ='J',
      _SDK_VECTOR_FONT_OCR_A                ='a',
      _SDK_VECTOR_FONT_OCR_B                ='b',
}_SDK_VECTOR_FONT;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_VECTOR_FONT_ASCII	‘U’	ASCII (1Byte code)
_SDK_VECTOR_FONT_KS5601	‘K’	KS5601 (2Byte code)
_SDK_VECTOR_FONT_BIG5	‘B’	BIG5 (2Byte code)
_SDK_VECTOR_FONT_GB2312	‘G’	GB2312 (2Byte code)
_SDK_VECTOR_FONT_SHIFT_JIS	‘J’	Shift-JIS (2Byte code)
_SDK_VECTOR_FONT_OCR_A	‘a’	OCR-A (1Byte code)
_SDK_VECTOR_FONT_OCR_B	‘b’	OCR-B (1Byte code)

2-17 Draw Block Options

Draw Block Options constants are used to set the Draw Block Option.

```
typedef enum {
      _SDK_DRAW_BLOCK_OPTION_LINE_OVERWRITING    ='O',
      _SDK_DRAW_BLOCK_OPTION_LINE_EXCLUSIVE_OR ='E',
      _SDK_DRAW_BLOCK_OPTION_LINE_DELETE             ='D',
      _SDK_DRAW_BLOCK_OPTION_SLOPE                   ='S',
      _SDK_DRAW_BLOCK_OPTION_BOX                     ='B',
}_SDK_DRAW_BLOCK_OPTION;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_DRAW_BLOCK_OPTION_LINE_OVERWRITING	‘O’	Line Overwriting
_SDK_DRAW_BLOCK_OPTION_LINE_EXCLUSIVE_OR	‘E’	Line Exclusive OR
_SDK_DRAW_BLOCK_OPTION_LINE_DELETE	‘D’	Line Delete
_SDK_DRAW_BLOCK_OPTION_SLOPE	‘S’	Slope(a oblique line)
_SDK_DRAW_BLOCK_OPTION_BOX	‘B’	Box

2-18 Draw Circle Sizes

Draw Circle Sizes constants are used to set the property related to the size when using the Draw Circle Method.

```
typedef enum {
      _SDK_DRAW_CIRCLE_SIZE_40X40          = 1,      //   5(mm) diameter
      _SDK_DRAW_CIRCLE_SIZE_56X56          = 2,
      _SDK_DRAW_CIRCLE_SIZE_72X72          = 3,
      _SDK_DRAW_CIRCLE_SIZE_88X88          = 4,
      _SDK_DRAW_CIRCLE_SIZE_104X104        = 5,
      _SDK_DRAW_CIRCLE_SIZE_168X168        = 6,
}_SDK_DRAW_CIRCLE_SIZE;
```

Description of each constant is as follows.

Code	Value	Diameter (mm)	Width x Hegith(Dots)
_SDK_DRAW_CIRCLE_SIZE_40X40	1	5	40 × 40
_SDK_DRAW_CIRCLE_SIZE_56X56	2	7	56 × 56
_SDK_DRAW_CIRCLE_SIZE_72X72	3	9	72 × 72
_SDK_DRAW_CIRCLE_SIZE_88X88	4	11	88 × 88
_SDK_DRAW_CIRCLE_SIZE_104X104	5	13	104 × 104
_SDK_DRAW_CIRCLE_SIZE_168X168	6	21	168 × 168

2-19 International Character Set

These constants are used to set the International Character Set.

```
typedef enum {
    _SDK_CONFIG_ICS_USA                 = 0,
    _SDK_CONFIG_ICS_FRANCE              = 1,
    _SDK_CONFIG_ICS_GERMANY             = 2,
    _SDK_CONFIG_ICS_UK                  = 3,
    _SDK_CONFIG_ICS_DENMARK_I           = 4,
    _SDK_CONFIG_ICS_SWEDEN              = 5,
    _SDK_CONFIG_ICS_ITALY               = 6,
    _SDK_CONFIG_ICS_SPAIN_I             = 7,
    _SDK_CONFIG_ICS_NORWAY              = 8,
    _SDK_CONFIG_ICS_DENMARK_II          = 9,
    _SDK_CONFIG_ICS_JAPAN               = 10,
    _SDK_CONFIG_ICS_SPAIN_II            = 11,
    _SDK_CONFIG_ICS_LATIN_AMERICA       = 12,
    _SDK_CONFIG_ICS_KOREA               = 13,
    _SDK_CONFIG_ICS_SLOVENIA_CROATIA    = 14,
    _SDK_CONFIG_ICS_CHINA               = 15,
}_SDK_CONFIG_ICS;
```

Description of each constant is as follows.

Code	Value	Description
_SDK_CONFIG_ICS_USA	*0*	U.S.A
_SDK_CONFIG_ICS_FRANCE	1	France
_SDK_CONFIG_ICS_GERMANY	2	Germany
_SDK_CONFIG_ICS_UK	3	U.K
_SDK_CONFIG_ICS_DENMARK_I	4	Denmark I
_SDK_CONFIG_ICS_SWEDEN	5	Sweden
_SDK_CONFIG_ICS_ITALY	6	Italy
_SDK_CONFIG_ICS_SPAIN_I	7	Spain I
_SDK_CONFIG_ICS_NORWAY	8	Norway
_SDK_CONFIG_ICS_DENMARK_II	9	Denmark II
_SDK_CONFIG_ICS_JAPAN	10	Japan
_SDK_CONFIG_ICS_SPAIN_II	11	Spain II
_SDK_CONFIG_ICS_LATIN_AMERICA	12	Latin America
_SDK_CONFIG_ICS_KOREA	13	Korea
_SDK_CONFIG_ICS_SLOVENIA_CROATIA	14	Slovenia/Croatia
_SDK_CONFIG_ICS_CHINA	15	China

2-20 Code Pages

These constants are used to set the Code Page.

```
typedef enum {
	_SDK_CONFIG_CODEPAGE_CP437			= 0,
	_SDK_CONFIG_CODEPAGE_CP850			= 1,
	_SDK_CONFIG_CODEPAGE_CP852			= 2,
	_SDK_CONFIG_CODEPAGE_CP860			= 3,
	_SDK_CONFIG_CODEPAGE_CP863			= 4,
	_SDK_CONFIG_CODEPAGE_CP865			= 5,
	_SDK_CONFIG_CODEPAGE_CP81252		 = 6,
	_SDK_CONFIG_CODEPAGE_CP865_WCP1252	 = 7,
	_SDK_CONFIG_CODEPAGE_CP857			= 8,
	_SDK_CONFIG_CODEPAGE_CP737			= 9,
	_SDK_CONFIG_CODEPAGE_WPC1250		= 10,
	_SDK_CONFIG_CODEPAGE_WPC1253		= 11,
	_SDK_CONFIG_CODEPAGE_WPC1254		= 12,
	_SDK_CONFIG_CODEPAGE_CP855			= 13,
	_SDK_CONFIG_CODEPAGE_CP862			= 14,
	_SDK_CONFIG_CODEPAGE_CP866			= 15,
	_SDK_CONFIG_CODEPAGE_WCP1251		= 16,
	_SDK_CONFIG_CODEPAGE_WCP1255		= 17,
	_SDK_CONFIG_CODEPAGE_CP928			= 18,
	_SDK_CONFIG_CODEPAGE_CP864			= 19,
	_SDK_CONFIG_CODEPAGE_CP775			= 20,
	_SDK_CONFIG_CODEPAGE_WCP1257		= 21,
	_SDK_CONFIG_CODEPAGE_CP858			= 22,
}_SDK_CONFIG_CODEPAGE;
```

Description of each constant is as follows.

Code	Value		
_SDK_CONFIG_CODEPAGE_CP437	*0*	*CP437*	*U.S.A*
_SDK_CONFIG_CODEPAGE_CP850	1	CP850	Latin1
_SDK_CONFIG_CODEPAGE_CP852	2	CP 852	Latin2
_SDK_CONFIG_CODEPAGE_CP860	3	CP 860	Portuguese
_SDK_CONFIG_CODEPAGE_CP863	4	CP 863	Canadian French
_SDK_CONFIG_CODEPAGE_CP865	5	CP 865	Nordic
_SDK_CONFIG_CODEPAGE_CP1252	6	WCP 1252	Latin I
_SDK_CONFIG_CODEPAGE_CP865_WCP1252	7	CP 865 + WCP 1252	European Combined
_SDK_CONFIG_CODEPAGE_CP857	8	CP 857	Turkish
_SDK_CONFIG_CODEPAGE_CP737	9	CP 737	Greek
_SDK_CONFIG_CODEPAGE_WPC1250	10	WCP 1250	Latin 2
_SDK_CONFIG_CODEPAGE_WPC1253	11	WCP 1253	Greek
_SDK_CONFIG_CODEPAGE_WPC1254	12	WCP 1254	Turkish
_SDK_CONFIG_CODEPAGE_CP855	13	CP 855	Cyrillic
_SDK_CONFIG_CODEPAGE_CP862	14	CP 862	Hebrew
_SDK_CONFIG_CODEPAGE_CP866	15	CP 866	Cyrillic
_SDK_CONFIG_CODEPAGE_WCP1251	16	WCP 1251	Cyrillic
_SDK_CONFIG_CODEPAGE_WCP1255	17	WCP 1255	Hebrew
_SDK_CONFIG_CODEPAGE_CP928	18	CP 928	Greek
_SDK_CONFIG_CODEPAGE_CP864	19	CP 864	Arabic
_SDK_CONFIG_CODEPAGE_CP775	20	CP 775	Baltic
_SDK_CONFIG_CODEPAGE_WCP1257	21	WCP1257	Baltic
_SDK_CONFIG_CODEPAGE_CP858	22	CP858	Latin 1 + Euro

3. LabelPrinterSDK Class Reference

Inherits from	NSObject
Framework	libLabelPrinterSDK.a
Declared	LabelPrinterSDK.h

3-1 Overview

libLabelPrinterSDK Class is the main object that controls the printer operation.

3-2 Methods

3-2-1 open

This method initializes the settings to use the LabelPrinterSDK class.

[Syntax]

-(long) open;

[Return Value]

_SDK_RESULT_SUCCESS will be returned upon successful initialization.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

This method should be called before calling other methods in the LabelPrinterSDK.

[See Also]

2-1 Result Codes

3-2-2 close

This method terminates the use of the LabelPrinterSDK class.

[Syntax]

-(long) close;

[Return Value]

_SDK_RESULT_SUCCESS will be returned upon successful operation.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

All resources inside the LabelPrinterSDK will be released when this method is called.
This method should be called to end the use of the printer.

[See Also]

2-1 Result Codes

3-2-3 connectWithAddress

This method tries to connect to the printer.

[Syntax]

-(long) connectWithAddress:(NSString*)address port:(NSString*) port;

[Parameters]

address

WiFi Printer: Enter the IP Address.
Bluetooth Printer: Enter the Mac Address.

port :

Enter the communication port of the printer.
Communication port of the BIXOLON printers is 9100.
Bluetooth printers are not supported.

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[See Also]

2-1 Result Codes

3-2-4 isConnected

This method checks the status of printer connection.

[Syntax]

-(BOOL) isConnected;

[Return Value]

YES will be returned if printer is connected.

3-2-5 disconnect

This method disconnects the printer.

[Syntax]

-(long) disconnect;

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[See Also]

2-1 Result Codes

3-2-6 disconnectWithTimeout

This method disconnects the printer within the specified Timeout period.

[Syntax]

-(long) disconnectWithTimeout:(NSInteger)timeout;

[Parameters]

timeout

Set the Timeout period. (Unit: Second)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

If data remains in the output buffer,
buffer will be cleared and printer will be disconnected within the Timeout period.
If this parameter is set to -1, this method does not return until all buffers are cleared.

[See Also]

2-1 Result Codes

3-2-7 getDeviceFontList

This method gets information and string values declared in relation to DeviceFont in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getDeviceFontList;

[Return Value]

“nil” will be returned if the operation fails.

[See Also]

2-12 Device Fonts

3-2-8 getVectorFontList

This method gets information and string values declared in relation to VectorFont in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getVectorFontList

[Return Value]

“nil” will be returned if the operation fails.

[See Also]

2-16 Vector Fonts

3-2-9 getDrawBlockOptions

This method gets information and string values declared in relation to Draw Block Options in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getDrawBlockOptions;

[Return Value]

"nil" will be returned if the operation fails.

[See Also]

2-17 Draw Block Options

3-2-10 getDrawCicleSizes

This method gets information and string values declared in relation to Draw Circle Sizes in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getDrawCircleSizes;

[Return Value]

"nil" will be returned if the operation fails.

[See Also]

2-18 Draw Circle Sizes

3-2-11 getBarcodeType1D

This method gets information and string values declared in relation to 1D Barcode Type in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getBarcodeType1D;

[Return Value]

"nil" will be returned if the operation fails.

[See Also]

2-5 1D Barcode Types

3-2-12 getBarcodeHRI

This method gets information and string values declared in relation to Barcode HRI in NSMutableArray data type.

[Syntax]

-(NSMutableArray*) getBarcodeHRI;

[Return Value]

"nil" will be returned if the operation fails.

[See Also]

2-3 1D Barcode HRI

3-2-13 doPrint

This method prints the contents stored in the output buffer of the printer.

[Syntax]

-(long) doPrint:(NSInteger)numberOfCopies;

[Parameters]

numberOfCopies

Number of copies to print.

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[See Also]

2-1 Result Codes

3-2-14 drawTextDeviceFont

This method requests the printing of text string to the image buffer using the Device Fonts.

[Syntax]

```
-(long) drawTextDeviceFont:(NSString*)text
                  xPosition:(NSInteger)xPostion
                  yPosition:(NSInteger)yPostion
              fontSelection:(char)fontSelection
                  fontWidth:(NSInteger)fontWidth
                  fontHeight:(NSInteger)fontHeight
  rightSideCharacterSpacing:(NSInteger)rightSideCharacterSpacing
               fontRotation:(NSInteger)fontRotation
                    reverse:(BOOL)reverse
                       bold:(BOOL)bold
              textAlignment:(NSInteger)textAlignment;
```

[Parameters]

text
Text string to print.

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

fontSelection
Selection of fonts to print (Reference: *2-15 Device Fonts*)

fontWidth
Horizontal magnification of the selected font (1~4).

fontHeight
Vertical magnification of the selected font (1~4).

rightSideCharacterSpacing
Right side margin of the characters (ex: 5, +3, -10…).

fontRotation
Rotation setting of the selected font (Reference: *2-14 Rotation Degrees*)

reverse
Option to use the Reverse Image Font.
Reverse Image Font will be used for printing if this parameter is set to YES.

bold
Option to use the **Bold Font**.
Bold Font will be used for printing if this parameter is set to YES.

textAlignment
Alignment method (Reference: *2-2 Alignment*)

[Return Value]
Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]
- When textAlignment is set to _SDK_ALIGNMENT_CENTER, it has the same effect as the _SDK_ALIGNMENT_STRING_FROM_RIGHT_2_LEFT option.

- Nothing will be printed when this API is called.
  Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]
2-1 Result Codes
2-2 Alignment
2-14 Rotation Degrees
2-15 Device Fonts
3-2-13 doPrint

3-2-15 drawTextVectorFont

This method requests the printing of text string to the image buffer using the Vector Fonts.

[Syntax]

```
-(long) drawTextVectorFont:(NSString*)text
                  xPosition:(NSInteger)xPostion
                  yPosition:(NSInteger)yPostion
              fontSelection:(char)fontSelection
                  fontWidth:(NSInteger)fontWidth
                 fontHeight:(NSInteger)fontHeight
  rightSideCharacterSpacing:(NSInteger)rightSideCharacterSpacing
               fontRotation:(NSInteger)fontRotation
                    reverse:(BOOL)reverse
                       bold:(BOOL)bold
                     italic:(BOOL)italic
textWriteDirectionRightToLeft:(BOOL)textWriteDirectionRightToLeft
                  textAlignment:(NSInteger)textAlignment;
```

[Parameters]

text
Text string to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

fontSelection
Selection of fonts to print (Reference: *2-15 Device Fonts*)

fontWidth
Horizontal magnification of the selected font (1~4).

fontHeight
Vertical magnification of the selected font (1~4).

rightSideCharacterSpacing
Right side margin of the characters (ex: 5, +3, -10…).

fontRotation
Rotation setting of the selected font (Reference: *2-14 Rotation Degrees*)

reverse
Option to use the Reverse Image Font.
Reverse Image Font will be used for printing if this parameter is set to YES.

bold
Option to use the **Bold Font**.
Bold Font will be used for printing if this parameter is set to YES.

italic
Option to use the *Italic Font*.
Italic Font will be used for printing if this parameter is set to YES.

textWriteDirectionRightToLeft
Option to print the character string in the direction from right to left

textAlignment
Alignment method (Reference: *2-2 Alignment*)

[Return Value]
Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]
- When textAlignment is set to _SDK_ALIGNMENT_STRING_FROM_RIGHT_2_LEFT, it has the same effect as the _SDK_ALIGNMENT_CENTER option.

- Nothing will be printed when this API is called.
  Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]
2-1 Result Codes
2-2 Alignment
2-14 Rotation Degrees
2-15 Device Fonts
3-2-13 doPrint

3-2-16 drawBarcode1D

This method requests the printing of 1D barcode to the image buffer.

[Syntax]

```
-(long) drawBarcode1D:(NSString*)data
                xPosition:(NSInteger)xPostion
                yPosition:(NSInteger)yPostion
              barcodeType:(NSInteger)barcodeType
              widthNarrow:(NSInteger)widthNarrow
                widthWide:(NSInteger)widthWide
                   height:(NSInteger)height
                      hri:(NSInteger)hri
           quietZoneWidth:(NSInteger)quietZoneWidth
                 rotation:(NSInteger)rotation;
```

[Parameters]

text
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

barcodeType
Barcode type. (Reference: *2-5 1D Barcode Types*)

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

height
Height of barcode

hri
Print position of barcode data value (Human Readable Interpretation)
(Reference: *2-3 Barcode HRI*)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-5 1D Barcode Types
2-14 Rotation Degrees
2-3 Barcode HRI
3-2-13 doPrint

3-2-17 drawBarcodeMaxiCode

This method requests the printing of MaxiCode barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeMaxiCode:(NSString*)data
                  xPosition:(NSInteger)xPostion
                  yPosition:(NSInteger)yPostion
                       mode:(NSInteger)mode;
```

[Parameters]

text
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

mode
Mode of MaxiCode (Reference: *2-4 MaxiCode Modes*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-4 MaxiCode Modes
3-2-13 doPrint

3-2-18 drawBarcodePDF417

This method requests the printing of PDF417 barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodePDF417:(NSString*)data
                        xPosition:(NSInteger)xPostion
                        yPosition:(NSInteger)yPostion
                maximumRowCount:(NSInteger)maximumRowCount          // 3~90
             maximumColumnCount:(NSInteger)maximumColumnCount       // 1~30
          errorCorrectionLevel:(NSInteger)errorCorrectionLevel
        dataCompressionMethod:(NSInteger)dataCompressionMethod
             printBarcodeText:(BOOL)printBarcodeText
          barcodeOriginPoint:(NSInteger)barcodeOriginPoint
                    moduleWidth:(NSInteger)moduleWidth      // 2~9
                      barHeight:(NSInteger)barHeight        // 4~99
                       rotation:(NSInteger)rotation;
```

[Parameters]

text
: Barcode value to print

xPosition
: X coordinate of the position to print

yPosition
: Y coordinate of the position to print

maximumRowCount
: maximum Row Count (3~90).

errorCorrectionLevel
: Error correction level (Reference: *2-7 Error Correction Level*)

dataCompressionMethod
: Data Compression Method (Reference: *2-8 Data Compression Method*)

printBarcodeText
: HRI printing option.

barcodeOriginPoint
: Position to be used as the reference point of barcode (Reference: *2-6 Barcode Origin Point*)

moduleWidth
: Module Width (2~9)

BarHeight
: Height of barcode (4~99)

rotation
: Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]
Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]
Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]
2-1 Result Codes
2-6 Barcode Origin Point
2-7 Error Correction Level
2-8 Data Compression Method
2-14 Rotation Degrees
3-2-13 doPrint

3-2-19 drawBarcodeQRCode

This method requests the printing of QRCode barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeQRCode:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
               barcodeSize:(NSInteger)barcodeSize      // 1~4
                     model:(NSInteger)model
        errorColectionLevel:(NSInteger)errorColectionLevel
                  rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

barcodeSize
Size of barcode (1~4)

model
Model of QRCode (Reference: *2-9 QRCode Model*)

errorCorrectionLevel
Error Correction Level (Reference: *2-7 Error Correction Level*)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-4 MaxiCode Modes
2-9 QRCode Model
2-14 Rotation Degrees)
3-2-13 doPrint

3-2-20 drawBarcodeDataMatrix

This method requests the printing of Data Matrix barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeDataMatrix:(NSString*)data
                    xPosition:(NSInteger)xPostion
                    yPosition:(NSInteger)yPostion
                  barcodeSize:(NSInteger)barcodeSize      // 1~4
                      reverse:(BOOL)reverse
                     rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

barcodeSize
Size of barcode (1~4)

reverse
Reverse mode

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-14 Rotation Degrees
3-2-13 doPrint

3-2-21 drawBarcodeAztec

This method requests the printing of Aztec barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeAztec:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
               barcodeSize:(NSInteger)barcodeSize       // 1~10
         extendedChannel:(BOOL)extendedChannel
    errorCorrectionLevel:(NSInteger)errorCorrectionLevel
                 menuSymbol:(BOOL)menuSymbol
         numberOfSymbols:(NSInteger)numberOfSymbols
                 optionalID:(NSString*)optionalID
                   rotation:(NSInteger)rotation;
```

[Parameters]

data

Barcode value to print

xPosition

X coordinate of the position to print

yPosition

Y coordinate of the position to print

barcodeSize

Size of barcode (1~10)

extendedChannel

Reverse mode

errorCorrectionLevel

Error Correction Level

Value	Error control and symbol size/type
0	Default error correction level
1 ~ 99	Error correction percentage
101 ~ 104	1 ~ 4 layer compact symbol
201 ~ 232	1 ~ 32 layer full range symbol
300	Simple Aztec “Rune”

menuSymbol

Option to use menu symbol

numberOfSymbols

Number of symbols for structured append: (1 ~ 26)

optionalID

Optional ID field for structured append: ID field string (Maximum 24 character)

rotation

Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]
Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]
Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]
2-1 Result Codes
2-14 Rotation Degrees
3-2-13 doPrint

3-2-22 drawBarcodeCode49

This method requests the printing of Code49 barcode to the image buffer.

[Syntax]

```
-(long)drawBarcodeCode49:(NSString*)data
                xPosition:(NSInteger)xPostion
                yPosition:(NSInteger)yPostion
              widthNarrow:(NSInteger)widthNarrow
                widthWide:(NSInteger)widthWide
                   height:(NSInteger)height
                      hri:(NSInteger)hri
             startingMode:(NSInteger)startingMode
                 rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

hri
Print position of barcode data value (Human Readable Interpretation)
(Reference: *2-3 Barcode HRI*)

height
Height of barcode

startingMode
Starting mode (Reference: *2-10 Code 49 Starting Mode*)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-3 Barcode HRI
2-10 Code 49 Starting Mode
2-14 Rotation Degrees
2-3 Barcode HRI
3-2-13 doPrint

3-2-23 drawBarcodeCodaBlock

This method requests the printing of CodaBlock barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeCodaBlock:(NSString*)data
                    xPosition:(NSInteger)xPostion
                    yPosition:(NSInteger)yPostion
                  widthNarrow:(NSInteger)widthNarrow
                    widthWide:(NSInteger)widthWide
                       height:(NSInteger)height
                  securityLevel:(BOOL)securityLevel
        numberOfCharactersPerrow:(NSInteger)numberOfCharactersPerrow
                         mode:(char)mode
              numberOfRowToEncode:(NSInteger)numberOfRowToEncode;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

height
Height of barcode

securityLevel
securityLevel setting

numberOfCharactersPerrow
Number of characters per row (data columns): 2~62

mode
Barcode printing mode (Reference: *2-11 Codablock Mode*)

numberOfRowToEncode
Number of rows to encode

Mode	Value
_SDK_CODABLACK_MODE_A	1 ~ 18
_SDK_CODABLACK_MODE_E	2 ~ 4
_SDK_CODABLACK_MODE_F	2 ~ 4

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-11 Codablock Mode
3-2-13 doPrint

3-2-24 drawBarcodeMicroPDF

This method requests the printing of Micro PDF417 barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeMicroPDF:(NSString*)data
                  xPosition:(NSInteger)xPostion
                  yPosition:(NSInteger)yPostion
             moduleWidth:(NSInteger)moduleWidth        // 2~8
          barcodeHeight:(NSInteger)barcodeHeight     // 1~99
                       mode:(NSInteger)mode                 // 0~33
                rotation:(NSInteger)rotation;
```

[Parameters]

text
: Barcode value to print

xPosition
: X coordinate of the position to print

yPosition
: Y coordinate of the position to print

moduleWidth
: module Width (2~8)

barcodeHeight
: Height of barcode (1~99)

rotation
: Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-14 Rotation Degrees
3-2-13 doPrint

3-2-25 drawBarcodeIMB

This method requests the printing of drawBarcodeIMB barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeIMB:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
          printBarcodeText:(BOOL)printBarcodeText
                  rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

printBarcodeText
HRI printing option

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-14 Rotation Degrees
3-2-13 doPrint

3-2-26 drawBarcodeMSI

This method requests the printing of drawBarcodeMSI barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeMSI:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
               widthNarrow:(NSInteger)widthNarrow
                 widthWide:(NSInteger)widthWide
                    height:(NSInteger)height
       checkDigitSelection:(NSInteger)checkDigitSelection
     printCheckDigitInHRI:(BOOL)printCheckDigitInHRI
                       hri:(NSInteger)hri
                  rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

height
Height of barcode.

checkDigitSelection
checkDigit option (Reference: *2-12 Check Digit Option*)

printCheckDigitInHRI
Option to include check digit in HRI

hri
Print position of barcode data value (Human Readable Interpretation) (Reference: *2-3 Barcode HRI*)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-3 Barcode HRI
2-12 Check Digit Option
2-14 Rotation Degrees
3-2-13 doPrint

3-2-27 drawBarcodePlessey

This method requests the printing of drawBarcodePlessey barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodePlessey:(NSString*)data
                  xPosition:(NSInteger)xPostion
                  yPosition:(NSInteger)yPostion
                widthNarrow:(NSInteger)widthNarrow
                  widthWide:(NSInteger)widthWide
                     height:(NSInteger)height
           printCheckDigit:(BOOL)printCheckDigit
                        hri:(NSInteger)hri
                   rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

height
Height of barcode.

printCheckDigitInHRI
Option to include check digit in HRI

hri
Print position of barcode data value (Human Readable Interpretation)
(Reference: *2-3 Barcode HRI*)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-3 Barcode HRI
2-14 Rotation Degrees
3-2-13 doPrint

3-2-28 drawBarcodeTLC39

This method requests the printing of drawBarcodeTLC39 barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeTLC39:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
               widthNarrow:(NSInteger)widthNarrow
                 widthWide:(NSInteger)widthWide
                    height:(NSInteger)height
  rowHeightOfMicroPDF417:(NSInteger)rowHeightOfMicroPDF417
narrowWidthOfMicroPDF417:(NSInteger)narrowWidthOfMicroPDF417
                  rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

widthNarrow
Width of narrow bar

widthWide
Width of wide bar

height
Height of barcode.

rowHeightOfMicroPDF417
Row height of microPDF417 barcode

narrowWidthOfMicroPDF417
narrowWideHeight of microPDF417 barcode

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

[See Also]

2-1 Result Codes
2-14 Rotation Degrees
3-2-13 doPrint

3-2-29 drawBarcodeRSS

This method requests the printing of drawBarcodeRSS barcode to the image buffer.

[Syntax]

```
-(long) drawBarcodeRSS:(NSString*)data
                 xPosition:(NSInteger)xPostion
                 yPosition:(NSInteger)yPostion
               barcodeType:(NSInteger)barcodeType
             magnification:(NSInteger)magnification     // 1~10
           separatorHeight:(NSInteger)separatorHeight // 1~2
             barcodeHeight:(NSInteger)barcodeHeight
              segmentWidth:(NSInteger)segmentWidth       // 0~22
                  rotation:(NSInteger)rotation;
```

[Parameters]

data
Barcode value to print

xPosition
X coordinate of the position to print

yPosition
Y coordinate of the position to print

barcodeType
RSS barcode type (Reference: *2-13 RSS Barcode Type*).

magnification
magnification. (1~10)

separatorHeight
Height of separator (1~2)

barcodeHeight
Height of barcode.

segmentWidth
segmentWidth(0~22)

rotation
Rotation setting of barcode (Reference: *2-14 Rotation Degrees*)

[Return Value]

Upon successful operation, _SDK_RESULT_SUCCESS will be returned.
Refer to the *2-1 Result Codes* for more details on other result codes.

[Discussion]

Nothing will be printed when this API is called.
Contents requested by this API will be printed when *3-2-13 doPrint* API is called.

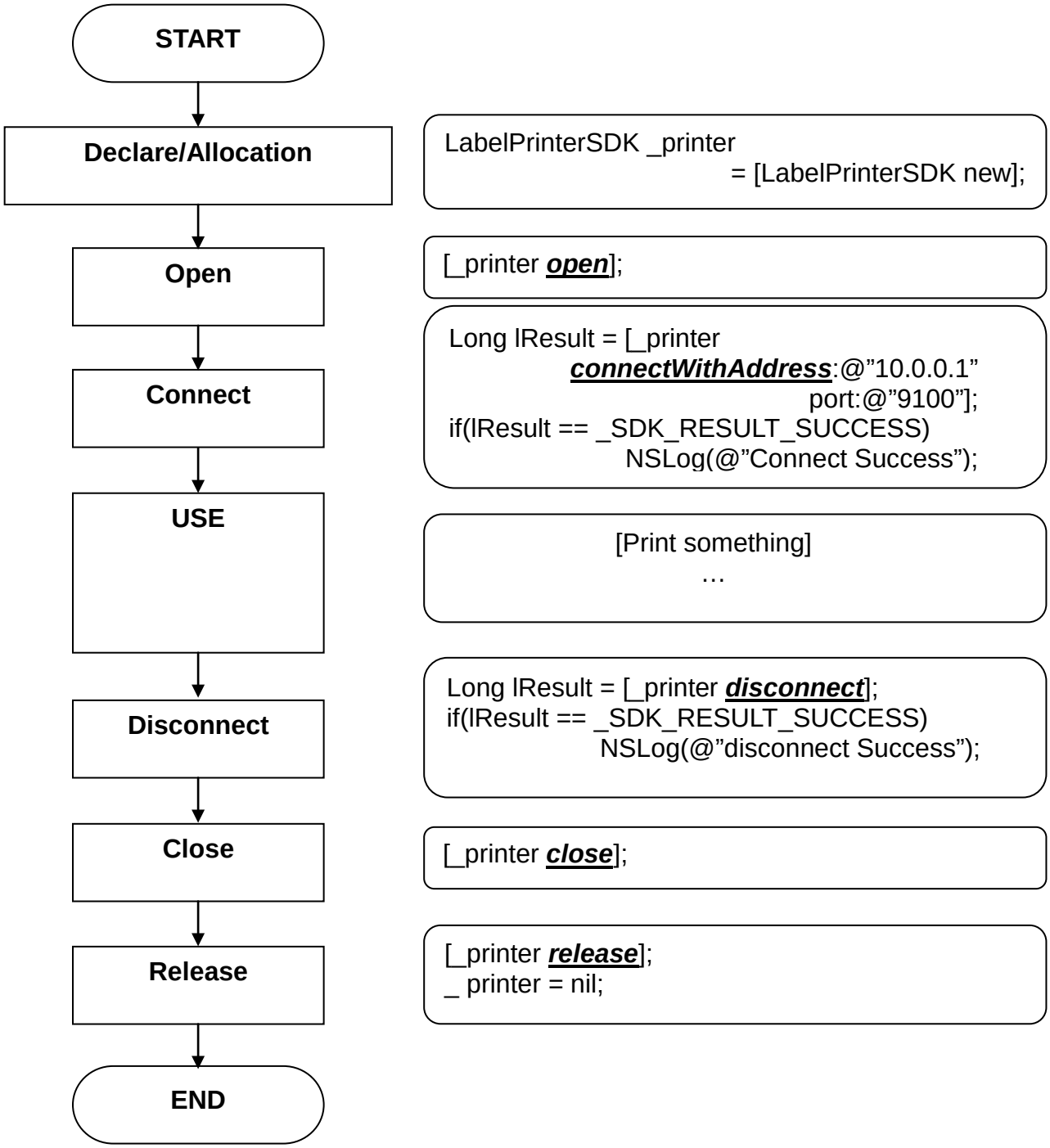
[See Also]

2-1 Result Codes
2-13 RSS Barcode Type
2-14 Rotation Degrees
3-2-13 doPrint

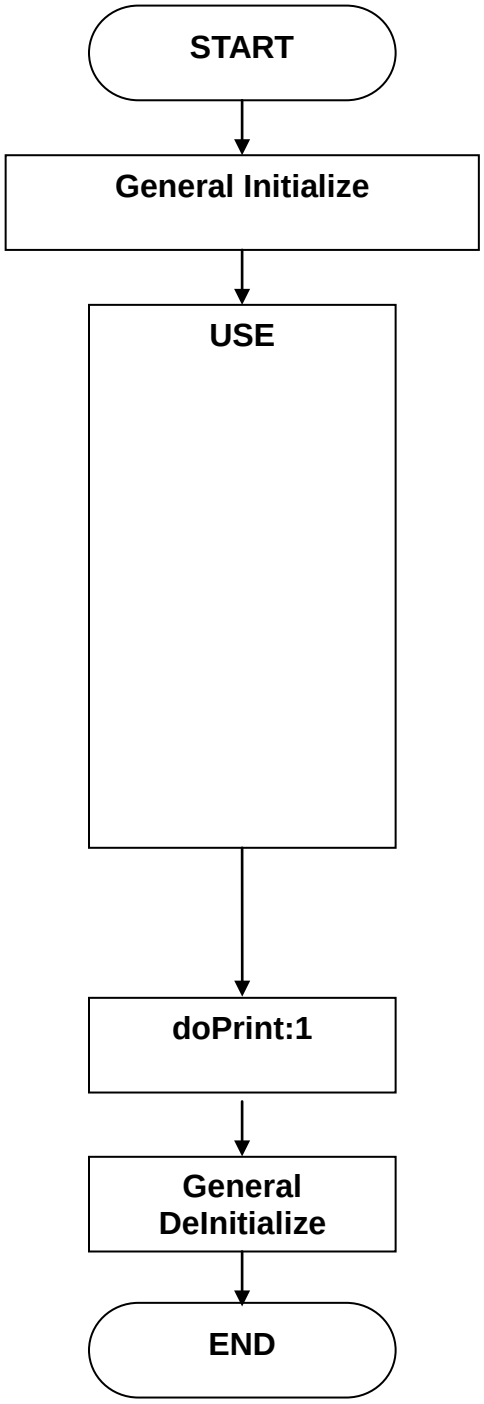
4. Appendix

4-1 Recommended Flow of Operation

4-1-1 General



4-1-2 Printing Contents



General ***Initialize*** … (Declare ~ Connect)
Reference: *4-1-1 General*

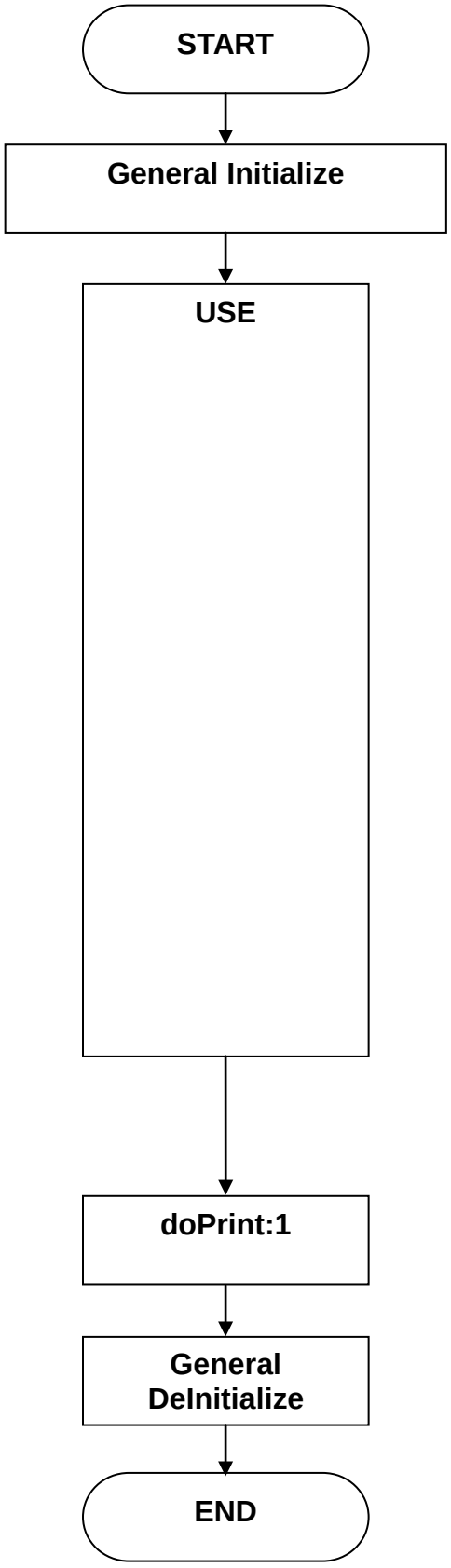
```
// [USE] Functions to print barcode, text,
image, and various shapes can be used.
Long lResult =
[_printer drawImage: _imageSample.image
          stratPosX:100
          startPosY:100
               width:300];

if(lResult = _SDK_RESULT_SUCCESS)
          NSLog(@"drawImage Success");
```

```
Long lResult =    [_printer doPrint:1];
if(lResult = _SDK_RESULT_SUCCESS)
          NSLog(@"drawImage Success");
```

General ***DeInitialize*** … (Declare ~ Connect)
Reference : *4-1-1 General*

4-1-3 Printing Two or More Contents on One Side



General ***Initialize*** … (Declare ~ Connect)
Reference : *4-1-1 General*

```
//   [Contents 1]
Long lResult =
[_printer drawImage: _imageSample.image
          stratPosX:100
          startPosY:100
               width:300];
if(lResult = _SDK_RESULT_SUCCESS)
          NSLog(@"drawImage Success");
//   [Contents 2]
lResult =
[_printer   drawTextDeviceFont:@"0*   12pt,
70, 220" xPosition:70 yPosition:220
fontSelection:_SDK_DEVICE_FONT_12PT
fontWidth:1 fontHeight:1
rightSideCharacterSpacing:0
fontRotation:_SDK_ROTATION_DEGREES
_0 reverse:NO bold:NO
textAlignment:_SDK_ALIGNMENT_LEFT];
if(lResult = _SDK_RESULT_SUCCESS)
            NSLog(@"drawText Success");
```

```
Long lResult =   [_printer doPrint:1];
if(lResult = _SDK_RESULT_SUCCESS)
          NSLog(@"drawImage Success");
```

General ***DeInitialize*** … (Declare ~ Connect)
Reference : *4-1-1 General*

4-2 Sample Codes

4-2-1 Connecting/Disconnecting

```
// Declaration/Allocation and open SDK
LabelPrinterSDK _printer =    [LabelPrinterSDK new];
[_printer open];

// Connect to the printer that is connected with IP Address “10.0.0.1” and Port 9100
long lResult = [_printer    connectWithAddress:@”10.0.0.1” port:@”9100”];
if(lResult == _SDK_RESULT_SUCCESS)
      NSLog(@”Connect Success”);

// After finishing the use of SDK
lResult = [_printer disconnect];    // Disconnect
[_printer release];
```

4-2-2 Printing Contents in the Buffer

```
long    lResult = [_printer doPrint:1];        // Any number bigger than 1 will repeat the same printing for the specified number of times.

if(lResult == _SDK_RESULT_SUCCESS)
      NSLog(@”doPrint Success”);
```

4-2-3 Printing a Rectangular Box to the Image Buffer

```
lResult = [_printer drawBlock:100
startPosY:100
endPosX:300 endPosY:300
option:_SDK_DRAW_BLOCK_OPTION_SLOPE
thickness:1];

NSLog(@” drawBlock Success”);
```

4-2-4 Printing a Circle to the Image Buffer

```
lResult = [_printer drawCircle:200
startPosY:200
sizeSelection:_SDK_DRAW_CIRCLE_SIZE_40X40
multiplier:1];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@”drawTextDeviceFont Success”);
```

4-2-5 Printing a Text String with Device Font to the Image Buffer

```
lResult = [_printer drawTextDeviceFont:@"device Font Test"
xPosition:70    yPosition:220
fontSelection:_SDK_DEVICE_FONT_12PT
fontWidth:1 fontHeight:1
rightSideCharacterSpacing:0
fontRotation:_SDK_ROTATION_DEGREES_0
reverse:NObold:NO textAlignment:_SDK_ALIGNMENT_LEFT];
if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@”drawTextDeviceFont Success”);
```

4-2-6 Printing a Text String with Vector Font to the Image Buffer

```
lResult = [_printer drawTextVectorFont:@"draw Font Test - Vector"
  xPosition:50 yPosition:100
fontSelection:_SDK_VECTOR_FONT_ASCII
fontWidth:10 fontHeight:10
rightSideCharacterSpacing:0
fontRotation:_SDK_ROTATION_DEGREES_0
reverse:NO bold:YES italic:YES
textWriteDirectionRightToLeft:NO textAlignment:_SDK_ALIGNMENT_LEFT];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@”drawTextVectorFont Success”);
```

4-2-7 Printing 1D Barcode to the Image Buffer

```
lResult = [_printer drawBarcode1D:@">A1234567890"
xPosition:50 yPosition:100
barcodeType:_SDK_BARCODE_TYPE_CODE128
widthNarrow:2 widthWide:6 height:100
hri:_SDK_BARCODE_HRI_BELOW_FONTSIZE1
quietZoneWidth:0
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
      NSLog(@”drawBarcode1D Success”);
```

4-2-8 Printing PDF417 Barcode to the Image Buffer

```
lResult =[_printer drawBarcodePDF417:@"PDF417 Test"
xPosition:50 yPosition:300
maximumRowCount:30 maximumColumnCount:5
errorCorrectionLevel:_SDK_ERROR_CORRECTION_LEVEL0
dataCompressionMethod:_SDK_DATA_COMPRESSION_METHOD_TEXT
printBarcodeText:YES
barcodeOriginPoint:_SDK_BARCODE_ORIGIN_POINT_UpperLeft
moduleWidth:3 barHeight:10
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@”drawBarcodePDF417 Success”);
```

4-2-9 Printing QRCode Barcode to the Image Buffer

```
lResult =[_printer drawBarcodeQRCode:@"QR Code Test"
xPosition:450 yPosition:300
barcodeSize:3
model:_SDK_QRCODE_MODEl_2
errorColectionLevel:_SDK_ERROR_CORRECTION_LEVEL1
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@”drawBarcodeQRCode Success”);
```

4-2-10 Printing DataMatrix Barcode to the Image Buffer

```
lResult =[_printer drawBarcodeDataMatrix:@"dataMatrix Test"
xPosition:600 yPosition:300
barcodeSize:3 reverse:NO
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeDataMatrix Success");
```

4-2-11 Printing MaxiCode Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeMaxiCode:@"Maxi Code Test!!!"
xPosition:50 yPosition:400
mode:_SDK_MAXICODE_MODE_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@"drawBarcodeMaxiCode Success");
```

4-2-12 Printing Aztec Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeAztec:@"Aztec Barcode Test"
xPosition:450 yPosition:400
barcodeSize:3
extendedChannel:NO
errorCorrectionLevel:0
menuSymbol:NO numberOfSymbols:1
optionalID:@""
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@"drawBarcodeAztec Success");
```

4-2-13 Printing Code49 Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeCode49:@"Code 49 Test"
xPosition:600 yPosition:400
widthNarrow:1 widthWide:3
height:100
hri:_SDK_BARCODE_HRI_ABOVE_FONTSIZE1
startingMode:_SDK_STARTINGMODE_AUTOMATIC
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeCode49 Success");
```

4-2-14 Printing Codablock Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeIMB:@"01234567890123456789"
xPosition:50 yPosition:1000
printBarcodeText:YES
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeCodaBlock Success");
```

4-2-15 Printing MicroPDF417 Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeMicroPDF:@"MICRO PDF 417 TEST"
xPosition:50 yPosition:900
moduleWidth:4
barcodeHeight:4
mode:8
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@"drawBarcodeMicroPDF Success");
```

4-2-16 Printing IMB Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeIMB:@"01234567890123456789"
xPosition:50 yPosition:1000
printBarcodeText:YES
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeIMB Success");
```

4-2-17 Printing MSI Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeMSI:@"123456"
xPosition:50 yPosition:1100
widthNarrow:2 widthWide:7
height:100
checkDigitSelection:_SDK_CHECKDIGIT_1MOD10
printCheckDigitInHRI:YES
hri:_SDK_BARCODE_HRI_BELOW_FONTSIZE1
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeMSI Success");
```

4-2-18 Printing Plessey Barcode to the Image Buffer

```
lResult = [_printer drawBarcodePlessey:@"12345"
xPosition:100 yPosition:100
widthNarrow:2 widthWide:7
height:100 printCheckDigit:YES
hri:_SDK_BARCODE_HRI_BELOW_FONTSIZE1
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodePlessey Success");
```

4-2-19 Printing TLC39 Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeTLC39:@"123456,ABCD12345678901234"
xPosition:100 yPosition:300
widthNarrow:2 widthWide:7
height:50 rowHeightOfMicroPDF417:3
narrowWidthOfMicroPDF417:2
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeTLC39 Success");
```

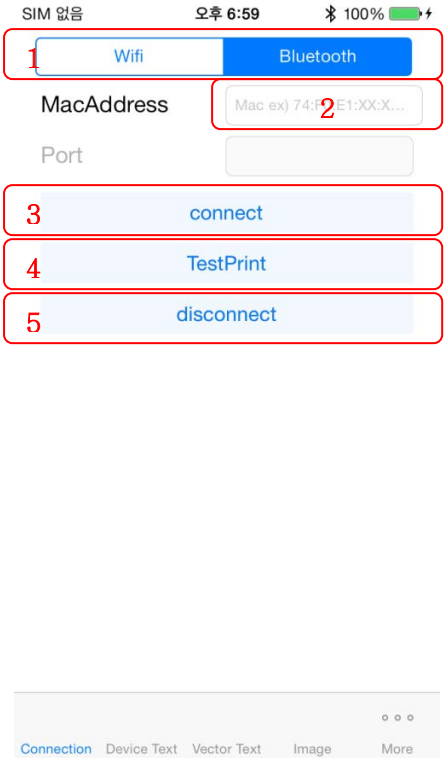
4-2-20 Printing RSS Barcode to the Image Buffer

```
lResult = [_printer drawBarcodeRSS:@"12345678901|this is composite info"
xPosition:100 yPosition:600
barcodeType:_SDK_RSS_BARCODE_TYPE_RSS14
magnification:2
separatorHeight:1 barcodeHeight:20 segmentWidth:10
rotation:_SDK_ROTATION_DEGREES_0];

if(lResult == _SDK_RESULT_SUCCESS)
NSLog(@" drawBarcodeRSS Success");
```

4-3 Sample Application

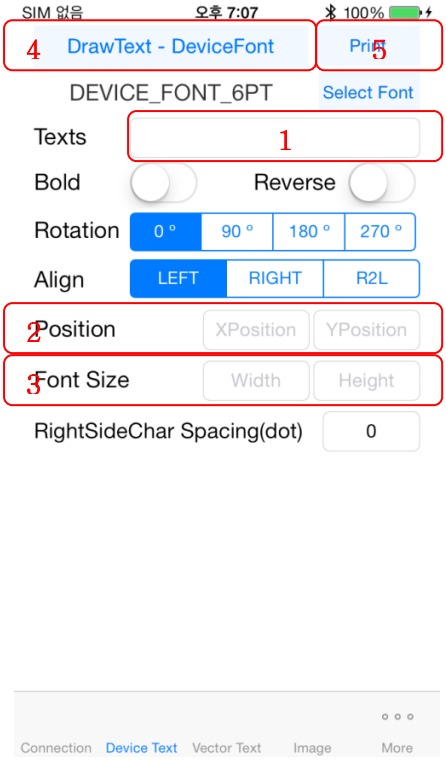
4-3-1 Connect / Disconnect



1. Select to Interface
2. Input the MacAddress for target printer.
3. Connect to target printer.
4. Print to testPage.
5. Disconnect to targetPrinter.

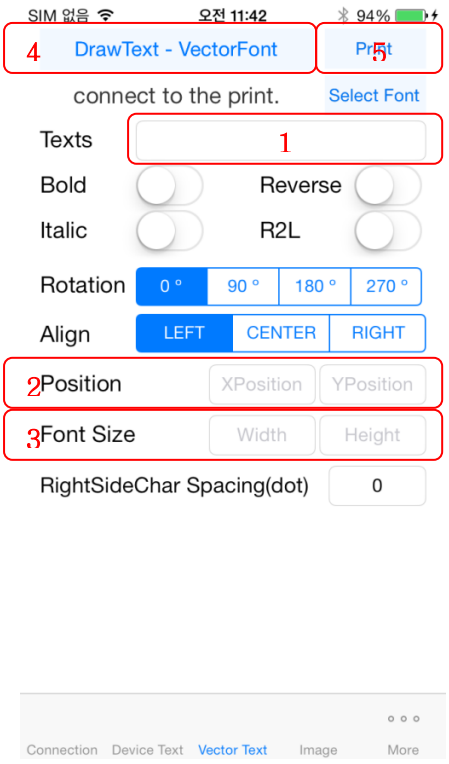
※ Do not disconnect. If you want to use other Features.(print text, print Image, etc.)

4-3-2 Print to Device Font



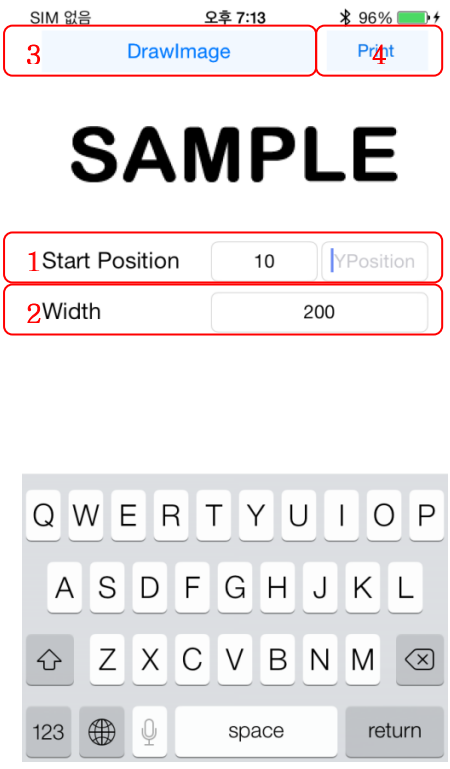
1. Enter text to print.
2. X,Y coordinate of the position to print.
3. Horizontal/Vertical magnification of the selected font (1~4).
4. Requests the printing of text string to the output buffer using the Device Fonts
5. print the contents stored in the output buffer of the printer.

4-3-3 Print Vector Font



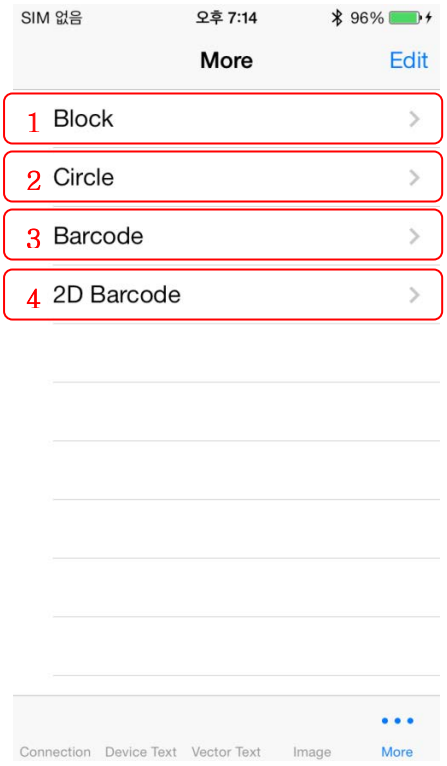
1. Enter text to print.
2. X,Y coordinate of the position to print.(1~4)
3. Horizontal/Vertical magnification of the selected font (1~4).
4. Requests the printing of text string to the output buffer using the Device Fonts
5. prints the contents stored in the output buffer of the printer.

4-3-4 Print Image



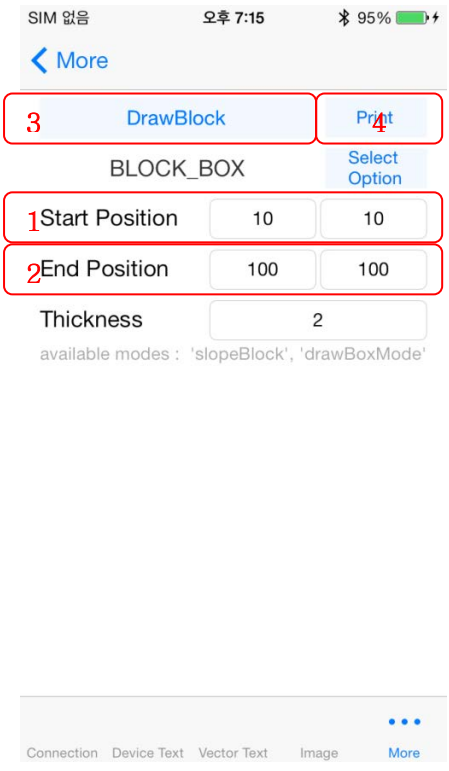
1. X,Y coordinate of the position to print.
2. Enter Width of Image.
3. Store into output buffer.
4. print the contents stored in the output buffer of the printer.

4-3-5 Use to more features.



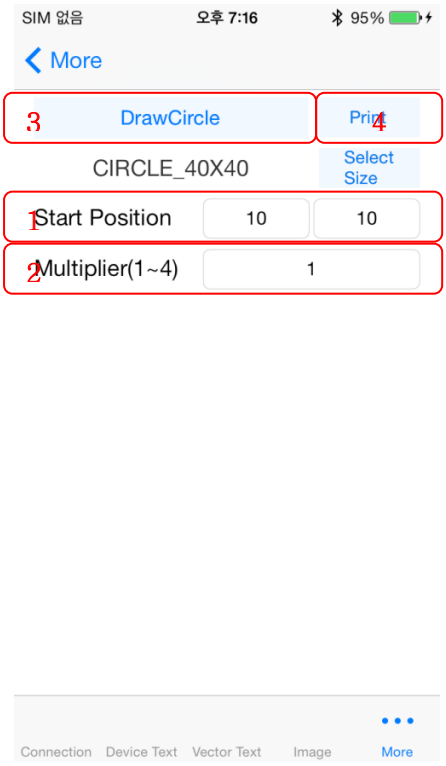
1. Block shapes can be used.
2. Circle shapes can be used.
3. 1D Barcodes can be used..
4. 2D Barcodes can be used.

4-3-6 Print Rectangle.



1. X,Y coordinate of the position to print.(Left, Top)
2. X,Y coordinate of the position to print.(Right, Bottom)
3. Store into output buffer.
4. Print the contents stored in the output buffer of the printer

4-3-7 Print Circle shapes.



1. X,Y coordinate of the position to print.
2. Enter size of circle.(1~4)
3. Store into output buffer
4. Print the contents stored in the output buffer of the printer.