SLCS

(Samsung Label Command Set)

Target Models - SRP-770/SRP-770II/SRP-780

Programming Manual

Manual Version 1.10 2005-12-26

Contents

CH1. Programming Reference

In this chapter, the basic concept of SLCS and some information necessary for the programmer to use SLCS will be explained. Please read this part before starting programming for efficient and easy use of BIXOLON Label Printers.

1. Image Buffer Configuration

1) Maximum size

A) When using Double Buffering Function

832dots × 1216dots (104mm × 152mm) = 4 inch × 6 inch

B) When using *Single Buffering Function* *(default)*

832dots × 2432dots (104mm × 304mm) = 4 inch × 12 inch

2) Dot size : 0.125mm(W) × 0.125mm(H) (203dpi)

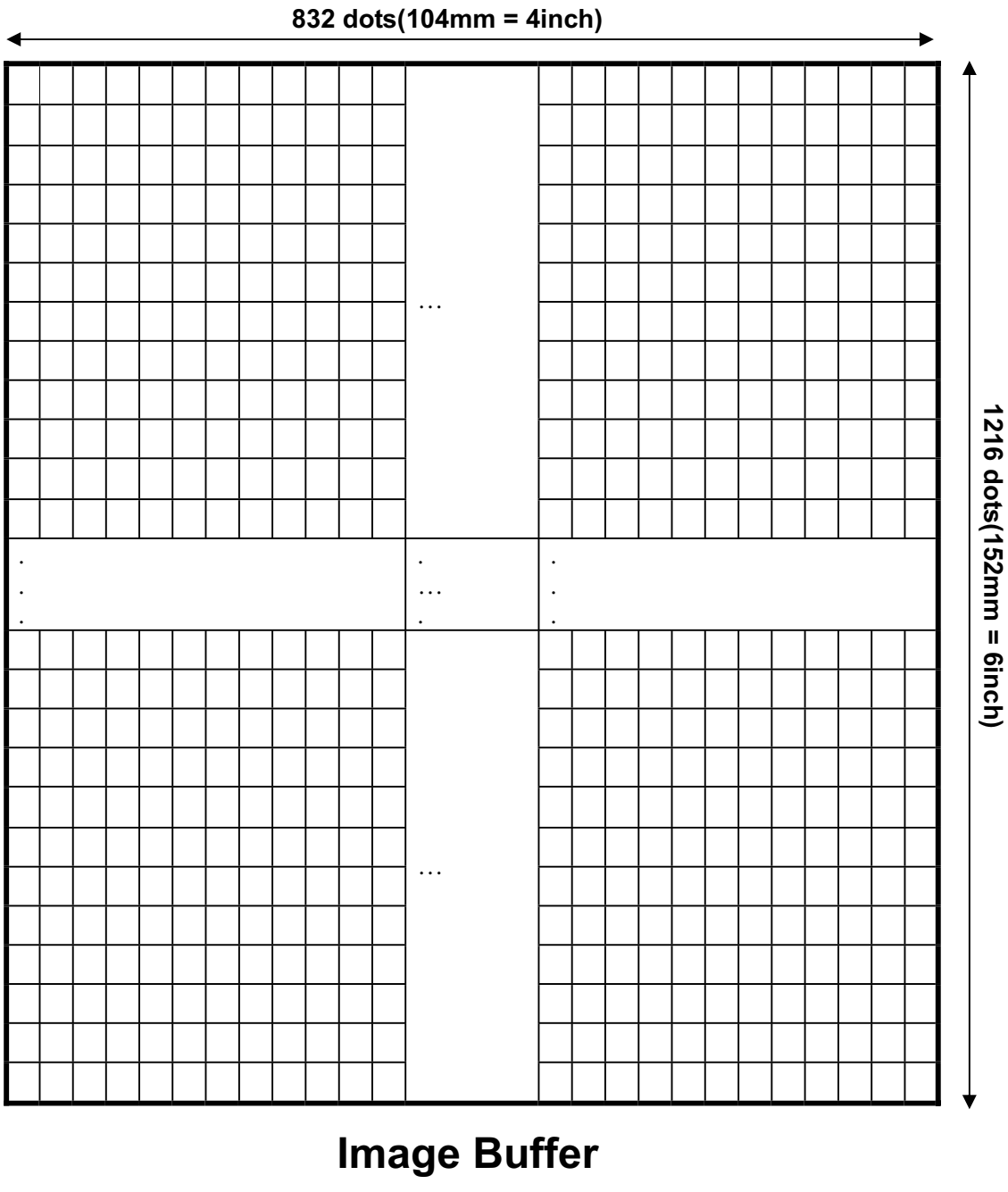


Image Buffer

2. Information for calculating position on image buffer

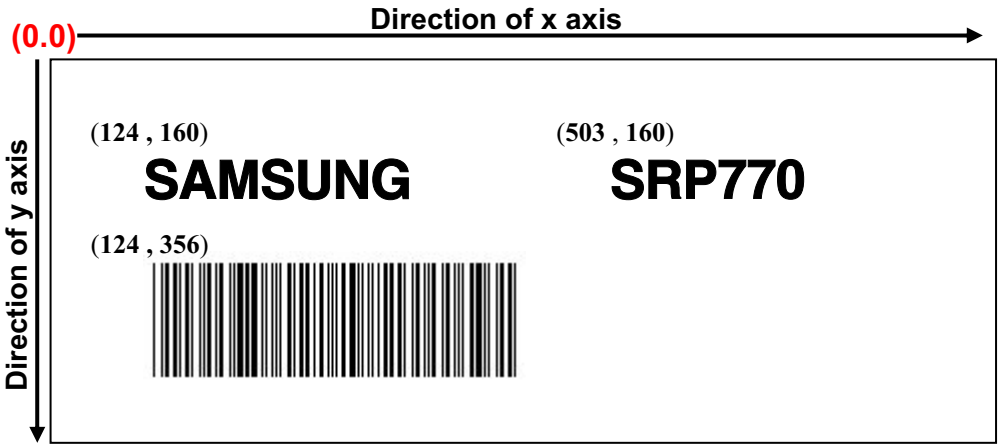
1) Relation between position and number of dots

Inch	mm	dots	Resolution
0.04	1	8	203 dpi
0.40	10.00	80	
1.00	25.40	203	
1.25	31.75	254	
1.50	38.10	305	
1.75	44.45	355	
2.00	50.80	406	
2.25	57.15	457	
2.50	63.50	508	
2.75	69.85	556	
3.00	76.20	610	
4.00	101.6	813	

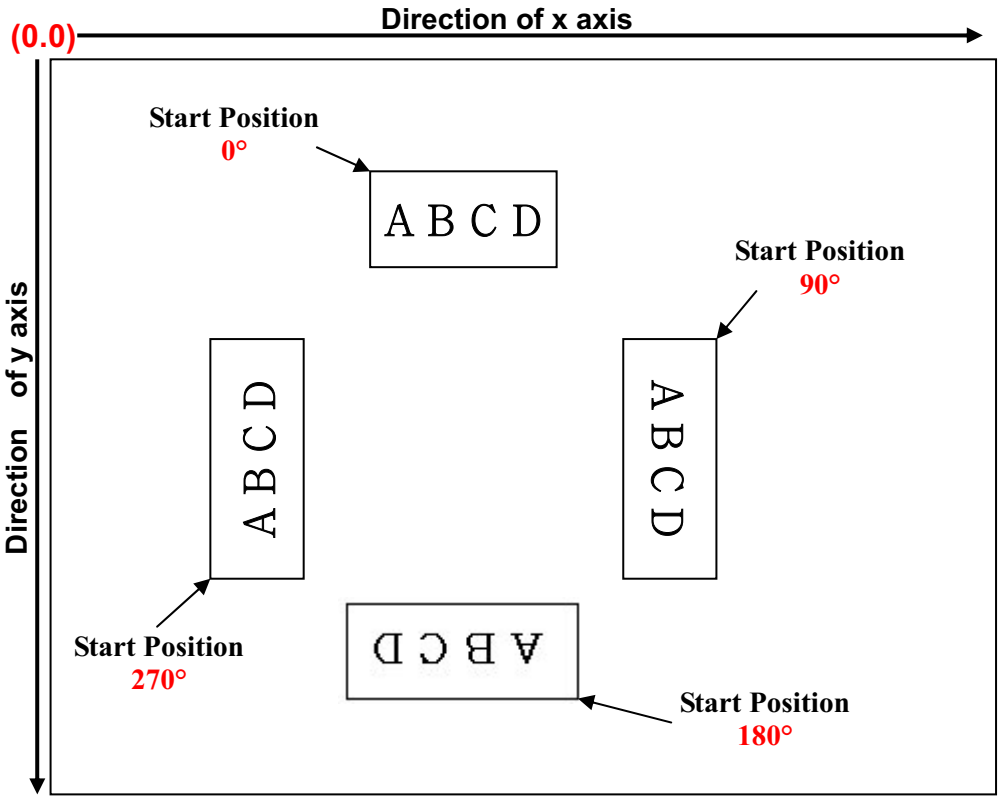
2) Font Information

Font Size (pt)	Width × Height (dots)
6	09 ×15
8	12 × 20
10	16 × 25
12	19 × 30
15	24 × 38
20	32 × 50
30	48 × 76
Korean 1	16 × 16 (ascii:9×15)
Korean 2	24 × 24 (ascii:16×25)
Korean 3	20 × 20 (ascii:12×20)
Korean 4	26 × 26 (ascii:16×30)
Korean 5	20 × 26(ascii:16×30)

3) Example of text and barcode



4) Example of rotation

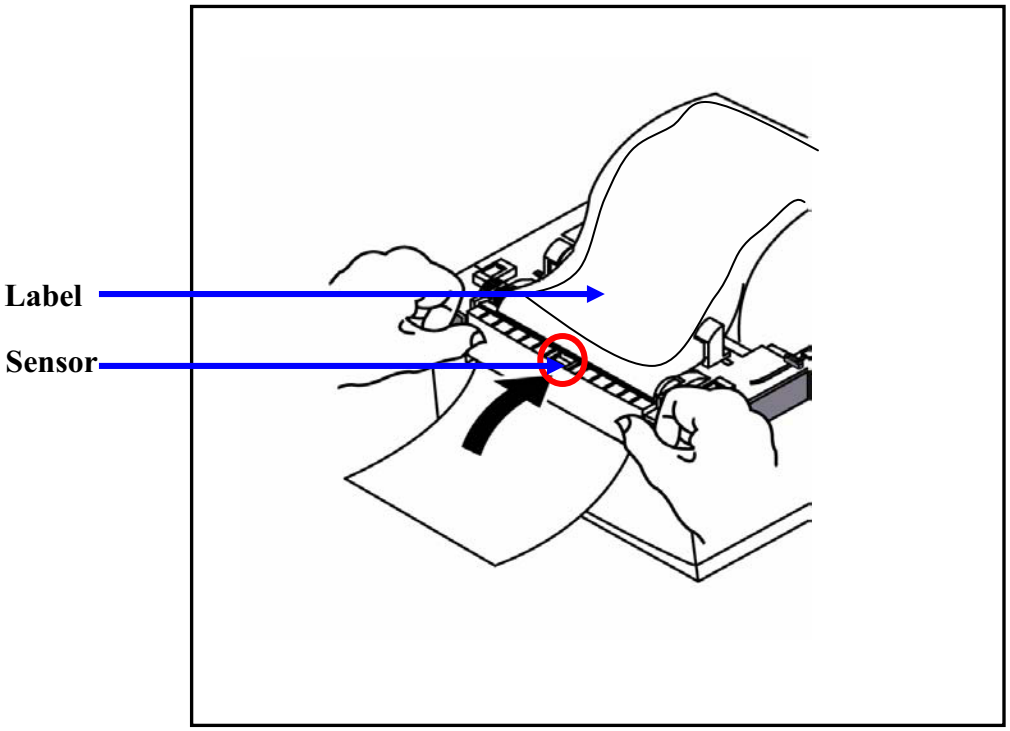


3. Using Peel- Off (Dispenser) function

A peeler(liner dispenser) module is available with BIXOLON label printers and the peel-off function is switched on and off by slide switch which is located in peeler module. The factory setting is switched off. When the peel-off function is enabled, the next label can not be printed out until the peeled off label is removed from the dispenser module.

♣ Caution

When the media is inserted in the dispenser, please be careful that the peel-off sensor is not covered with the label after closing the dispenser. Otherwise the printer will not start printing. In peel off mode, the printer starts printing just when the label is not checked by the sensor. If a label is sensed by the peel off sensor, the printer waits for the label to be removed.



4. LED Displays.

1) When the Green color keeps on,

- Printer is ready to print and is waiting for data reception from host.

2) When the Red color blinks,

A) Cover open error. Printer cover is not closed.

B) Cutter error. Sensor is damaged or jam occurred.

3) When the Orange color blinks,

- Media is not installed in the printer.

4) When the Green color blinks,

A) TPH is over-heated.

B) The printer is starting gap sensor auto-calibration mode.

5) When the Orange color keeps on,

- Auto-sensing failure. The media gap is not detected. That means printer can't sense the installed media or paper jam occurred.

6) When the Red color keeps on,

- Printing job is paused by user. Please push feed button to restart print job.

5. Commands List

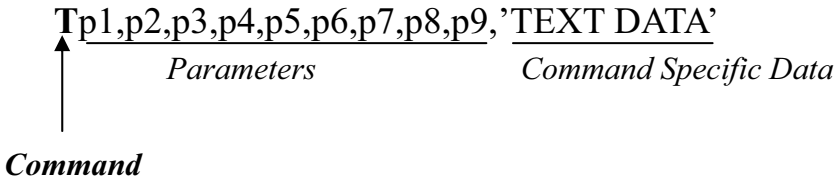
Command	Name	Description	Page
1. Commands for Designing Label			
T	Text	Draw text string on the image buffer	
B1	1d barcode	Draw 1D Barcode on the image buffer	
B2	2d barcode	Draw 2D Barcode on the image buffer	
BD	Block Draw	Draw line or box on the image buffer	
CD	Circle Draw	Draw circle on the image buffer	
CS	Character Set selection	Select international code table	
P	Print	Start printing the content of image buffer	
2. Media & Buffer related Commands			
SM	Set Margin	Set the marginal value of the image buffer	
SL	Set label Length	Set length of label	
SW	Set label Width	Set length of label	
SB	Set Buffer mode	Enable or Disable double buffering function	
CB	Clear Buffer	Clear image buffer	
3. Printer Setting Commands			
SS	Set Speed	Set printing speed	
SD	Set Density	Set printing density from level 0 to 20	
SO	Set Orientation	Set printing direction	
SP	Set serial Port	Set serial port configurations.	
4. Variable related Commands			
SC	Set Counter	Used in Template sequence	
AC	Set Counter	Used in normal mode	
SV	Set Variable	Used in Template sequence	
?	Get variables	Get content of variables and counters.	
PV	Print with Variable	Use this command in Template	

Command	Description	Remarks	Page
5. Template Related Commands			
TS	Template store Start	All contents between these commands are saved in printer memory.	
TE	Template store End		
TR	Template Recall	Load and reuse the stored Template.	
TD	Template Delete	Delete stored Template from printer memory	
TI	Template Information	Print the list of currently stored Templates.	
6. Image Data Related Commands			
IS	Image Store	PCX format image file can be stored.	
IR	Image Recall	Load and reuse the stored image	
ID	Image Delete	Delete stored image	
II	Image Information	Print the list of currently stored images	
LD	Bitmap data draw	Draw bitmap image data on the image buffer	
BMP	BMP format file draw	Draw BMP format file on the image buffer	
7. Downloadable Font Related Commands			
DS	Downloaded font Store	Any size of fonts can be used	
DD	Downloaded font Delete	Delete downloaded font.	
DI	Downloaded font Information	Print the list of currently stored images	
8. The Others			
@	Reset printer	Initialize the printer	
PI	Printer Information	Print current setting of printer	
CUT	Enable/Disable Cutter option	Cutting is executed after Printing is finished if cutting option is enabled by this command.	
^cp	Check Printer Status	Return 2 bytes status values to host.	
^cu	Check Printer Status	Return 1 byte status value to host.	

6. Programming Considerations

1. All commands are case-sensitive and some commands require one or more parameters and ‘Data’.

2. Command Conventions



3. Each command line must be terminated with a ‘CR’(0Dh, 13). The ‘LF’(0Ah,10) is ignored.

4. The commands which draw text, barcode, lines… just draw on the image buffer, they do not print. The printer will start to print when the ‘P’ command shows.

♣ Caution

The ‘P’ command must be terminated by ‘CR’(0x0d). If not, the printer will not start pint till ‘CR’ shows.

CH2. Detail Description

1. Commands for Designing Labels
   - **T, B1, B2, BD, CD, CS, P**

2. Media & Buffer related Commands
   - **MT, SM, SL, SW, CB, SB**

3. Printer Setting Commands
   - **SS, SD, SO, SP**

4. Variables Related Commands
   - **SC, SV, ?, PV**

5. Template Related Commands
   - **TS, TE, TR, TD, TI**

6. Image Related Commands
   - **IS, IR, ID, II, LD, BMP**

7. Download font Related Commands
   - **DS, DD, DI**

8. The Others
   - **@, PI, CUT, ^cp**

1. Commands for Designing a Label.

These commands are used to design a label by providing text, barcode, line, box… and to print content of image buffer on media.

1) T
Draw '**Text String'** on the image buffer.

2) B1
Draw '**1D Barcode**' on the image buffer.

3) B2
Draw '**2D Barcode**' on the image buffer.

4) BD
Draw '**Line, Block, Box & Slope'** on the image buffer.

4) CD
Draw '**Circle'** on the image buffer.

6) CS
Set international character set.

7) P
Start printing the content of image buffer.

T – *Text String*

Description

Draw text string on the image buffer

Syntax

T*p1,p2,p3,p4,p5,p6,p7,p8,p9(,p10),***'DATA'**

Parameters

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : Font selection

Value	Font Size(pt)	Width × Height(dots)
0	6	9 × 15
1	8	12 × 20
2	10	16 × 25
3	12	19 × 30
4	15B	24 × 38
5	20B	32 × 50
6	30B	48 × 76
a	KOREAN 1	16 × 16 (ascii 9×15)
b	KOREAN 2	24 × 24(ascii 16×25)
c	KOREAN 3	20 × 20(ascii 12×20)
d	KOREAN 4	26 × 26(ascii 16×30)
e	KOREAN 5	20 × 26(ascii 16×30)

♣ A to Z are assigned to 'Downloaded font'. Refer to '*DS*' command

♣ B means bold type.

p4 : Horizontal multiplier : 1 ~ 4

p5 : Vertical multiplier : 1 ~ 4

p6 : Right-side text spacing [dot]

Plus(+)/Minus(-) option can be used. Ex) 5, +3, -10…

p7 : Rotation

Value	Rotation
0	No Rotation
1	90 degrees
2	180 degrees
3	270 degrees

p8 : Reverse printing

N : Normal printing R : Reverse printing

p9 : Bold

N : Normal B : Bold

p10 : Text Alignment(Optional)

F : p1 means the position of the first character in text string.**(Left alignment)**

L : p1 means the position of the last character in text string.**(Right alignment)**

♣ **This parameter is for alignment of text lines.**

'DATA' : The various data types can be used in the data field as followings.

1) Fixed text string : ' Text String'

2) Variables declared in template by **SV** command : **Vnn**

3) Counters declared by the **SC** command : **Cn**

♣ **1) , 2) and 3) can be mixed together**

Example

T50,100,3,1,1,0,0,N,N,'Samsug Label Printer'

T50,100,3,1,1,0,0,N,N,'Manufacturer :'*V00*

T50,100,3,1,1,0,0,N,N,*V00*

T50,100,3,1,1,0,0,N,N,'Manufacturer :'*C0*

T50,100,3,1,1,0,0,N,N,*C0*

♣ **If you want to print ' or \ then you must type like \' or \\.**

All available fonts in SRP770.

Resident Fonts	p3	p4	p5	P9	Result Fonts	All Available Fonts(Sorted)	
						No	Fonts
6	0	1	1	N	6	1	6
				B	6B	2	6B
		2	2	N	12	3	8
				B	12B	4	8B
		3	3	N	18	5	10
				B	18B	6	10B
		4	4	N	24	7	12
				B	24B	8	12B
8	1	1	1	N	8	9	15B
				B	8B	10	16
		2	2	N	16	11	16B
				B	16B	12	18
		3	3	N	24	13	18B
				B	24B	14	20
		4	4	N	32	15	20B
				B	32B	16	24
10	2	1	1	N	10	17	24B
				B	10B	18	30
		2	2	N	20	19	30B
				B	20B	20	32
		3	3	N	30	21	32B
				B	30B	22	36
		4	4	N	40	23	36B
				B	40B	24	40
12	3	1	1	N	12	25	40B
				B	12B	26	48
		2	2	N	24	27	48B
				B	24B	28	60B
		3	3	N	36	29	80B
				B	36B	30	90B
		4	4	N	48	31	120B
				B	48B		
15B	4	1	1	B	15B		
		2	2	B	30B		
		3	3	B	45B		
		4	4	B	60B		
20B	5	1	1	B	20B		
		2	2	B	40B		
		3	3	B	60B		
		4	4	B	80B		
30B	6	1	1	B	30B		
		2	2	B	60B		
		3	3	B	90B		
		4	4	B	120B		

Example

CB
SM20,20
T26,20,0,0,0,0,0,N,N,'Font- 6 pt'
T26,49,1,0,0,0,0,N,N,'Font - 8 pt'
T26,81,2,0,0,0,0,N,N,'Font - 10 pt'
T26,117,3,0,0,0,0,N,N,'Font - 12 pt'
T26,156,4,0,0,0,0,N,N,'Font - 15 pt'
T26,200,5,0,0,0,0,N,N,'Font - 20 pt'
T26,252,6,0,0,0,0,N,N,'Font - 30 pt'
P1

Result

Font – 6 pt

Font – 8 pt

Font – 10 pt

Font – 12 pt

Font – 15 pt

Font – 20 pt

Font – 30 pt

B1 – *1 Dimensional bar code*

Description

Draw 1D Barcode on the image buffer

Syntax

B1*p1,p2,p3,p4,p5,p6,p7,p8(,p9),*'**DATA**'

Parameters

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : Barcode selection

p3	Barcode	p3	Barcode
0	Code39	5	UPC-A
1	Code128	6	UPC-E
2	I2of5	7	EAN13
3	Codabar	8	EAN8
4	Code93	9	UCC/EAN128

p4 : Narrow bar width [dot]

p5 : Wide bar width [dot]

p6 : Bar code height [dot]

p7 : Rotation

Value	Rotation
0	No Rotation
1	90 degrees
2	180 degrees
3	270 degrees

p8 : HRI (Human Readable Interpretation)

0 : Not printed

1 : Below the bar code(Font Size : 1)

2 : Above the bar code(Font Size : 1)

3 : Below the bar code(Font Size : 2)

4 : Above the bar code(Font Size : 2)

5 : Below the bar code(Font Size : 3)

6 : Above the bar code(Font Size : 3)

7 : Below the bar code(Font Size : 4)

8 : Above the bar code(Font Size : 4)

(p9) : quiet zone width(optional) : 0 ~ 20

♣ Quiet zone is added to the front and end of the barcode for safe scanning. Because of the quiet zone, the barcode seems to be seen drawn in incorrect position. If p9 is not used, the printer automatically sets parameter to 12.

Quiet zone with = p9 × narrow bar width(p4)

'**DATA'** : The various data types can be used in the data field as followings.

1) Fixed text string : ' Text String'

2) Variable declared in template by **SV** command : **Vnn**

3) Counter declared by the **SC** command : **Cn**

♣ 1) , 2) and 3) can be mixed together

Example

B178,196,0,2,6,100,0,0,'1234567890'

B178,196,0,2,6,100,0,0,*V00*

B178,196,0,2,6,100,0,0,*C0*

Example

CB

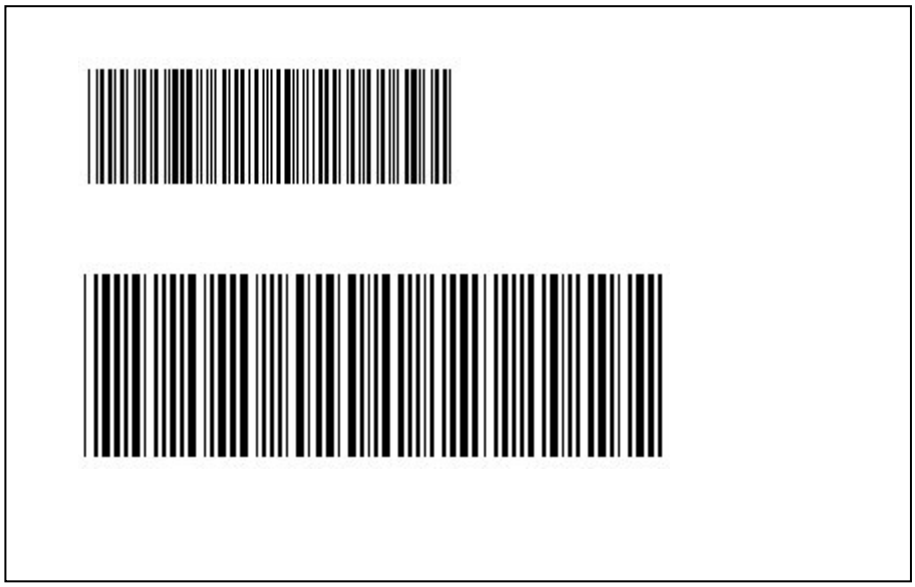
SM20,20

B178,196,0,2,6,100,0,0,’1234567890’ // Caution : The position is not (178,196) but (78,196)

B150,468,0,4,10,200,0,0,’1234567890’

P1

Result



B2 – *2 Dimensional bar code*

Description

Draw 2D Barcode on the image buffer

Syntax

B2*p1,p2,p3……*'**DATA**'

Parameters

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : 2D barcode selection

p3	2D Barcode
M	MaxiCode
P	PDF417
Q	QR Code

♣♣ Following parameters(p4, p5 …. ,Data) are barcodes-specific.

See the following pages for details about 'Maxicode' and 'PDF417'.

Maxicode(When p3 is M)

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : M (means 'Maxicode')

p4 : Mode selection

p4	Rotation
0	Mode0
2	Mode2
3	Mode3
4	Mode4

'DATA' : Data format is dependent on 'Mode'

Mode	Data Format
0	
2 or 3	'cl,co,pc,lpm'
4	'lpm'

cl : Class Code(3 digits)

co : Country Code(3digits)

Mode2 : Numeric Characters

Mode3 : International Characters

pc : Postal Code

lpm : Low priority message(data)

Example

1)Mode 0

B2200,200,M,*0*,'999,840,06810,7317,THIS IS A TEST OF MODE 0 STRUCTURED CARRIER MESSAGE ENCODING. THIS IS AN 84 CHAR MSG'

2)Mode 2

B2200,200,M,*2*,'999,840,06810,7317,THIS IS A TEST OF SAMSUNG LABEL PRINTER SRP770. MODE 2 ENCODING. THIS IS AN 84 CHAR.'

3)Mode3

B2200,200,M,*3*,'999,056,B1050,7317,THIS IS A TEST OF SAMSUNG LABEL PRINTER SRP770. MODE 3 ENCODING. THIS IS AN 84 CHAR.'

4)Mode4

B2200,200,M,*4*,'THIS IS A 93 CHARACTER CODE SET A MESSAGE THAT FILLS A MODE 4, UNAPPENDED, MAXICODE SYMBOL...'

PDF417(When p3 is P)

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : P (means 'PDF417')

p4 : Maximum Row Count : 3 ~ 90

p5 : Maximum Column Count : 1 ~ 30

p6 : Error Correction level

p6	EC Level	EC Codeword
0	0	2
1	1	4
2	2	8
3	3	16
4	4	32
5	5	64
6	6	128
7	7	256
8	8	512

p7 : Data compression method

p7	Data Type	Compression
0	Text	2 Characters per codeword
1	Numeric	2.93 Characters per codeword
2	Binary	1.2 Bytes per codeword

p8 : HRI

0 : Not Printed

1 : Below the barcode

p9 : Barcode origin point

0 : Center of barcode

1 : Upper left corner of barcode(default)

p10 : Module Width : 2 ~ 9

p11 : Bar Height : 4 ~ 99

p12 : Rotation

Value	Rotation
0	No Rotation
1	90 degrees
2	180 degrees
3	270 degrees

'DATA' : ASCII data or Binary data.

Example

B2100,750,P,30,5,0,0,1,1,3,10,0,'Samsung Label Printer SRP770' **// The position is (100,750)**

QR Code(When p3 is Q)

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

p3 : Q (means ‘QR Code’)

p4 : MODEL selection

1 : MODEL1

2 : MODEL2

p5 : ECC Level

p6	Recovery Rate
L	7%
M	15%
Q	25%
H	30%

p6 : Barcode Size : 1~4

p7 : Rotation

Value	Rotation
0	No Rotation
1	90 degrees
2	180 degrees
3	270 degrees

‘DATA’ : ASCII data or Binary data.

Example

B2200,100,Q,2,M,4,0,'ABCDEFGHIJKLMN1234567890' **// The position is (200,100)**

BD – *Block Draw*

Description

Draw Line, Block, Box & Slope on the image buffer

Syntax

BD*p1,p2,p3,p4,p5(,p6)*

Parameters

p1 : Horizontal start position (X) [dot]

p2 : Vertical start position (Y) [dot]

p3 : Horizontal end position (X) [dot]

p4 : Vertical end position (Y) [dot]

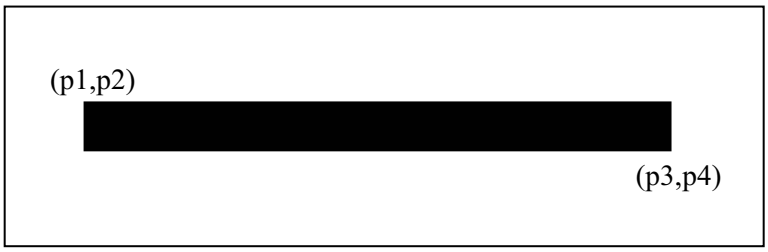
p5 : Options

p5	Type	Additional p6
O	Line Overwriting	Not necessary
E	Line Exclusive OR	Not necessary
D	Line Delete	Not necessary
S	Slope(a oblique line)	Thickness
B	Box	Thickness

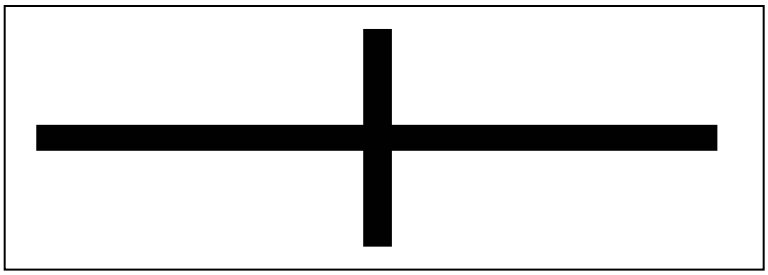
♣ If p5 is S or B, then additional p6 must follow p5.

Example

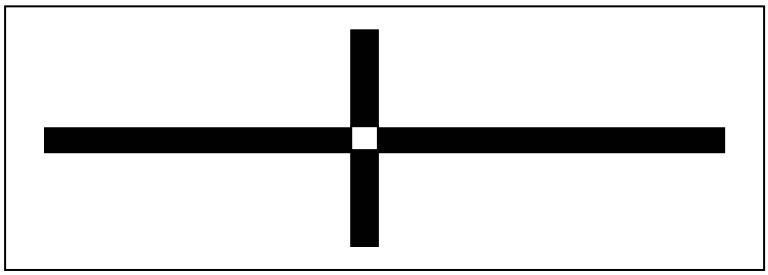
1. Start and end position



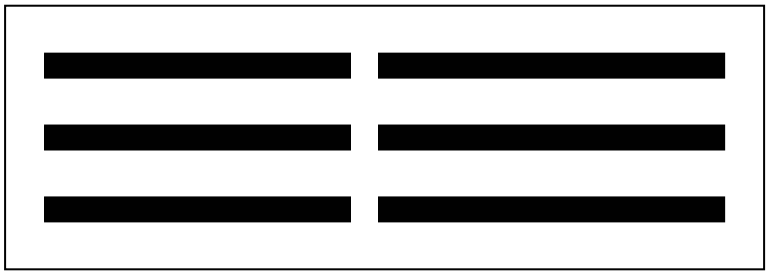
2. Overwriting mode(when p5 is O)



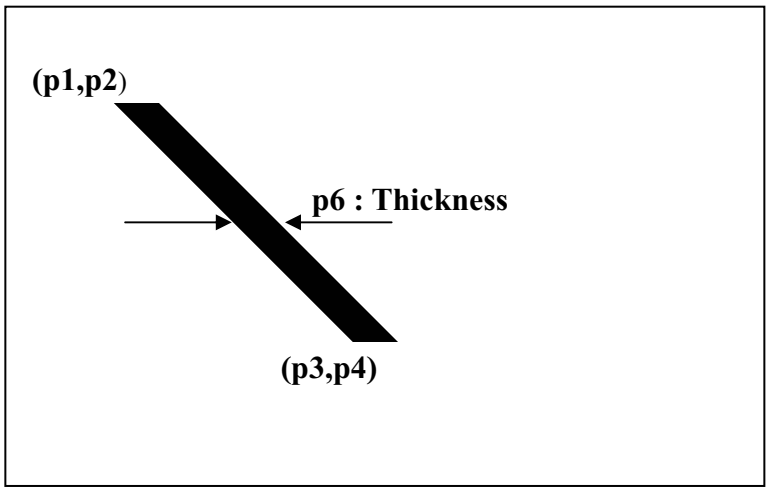
3. Exclusive OR mode(when p5 is E)



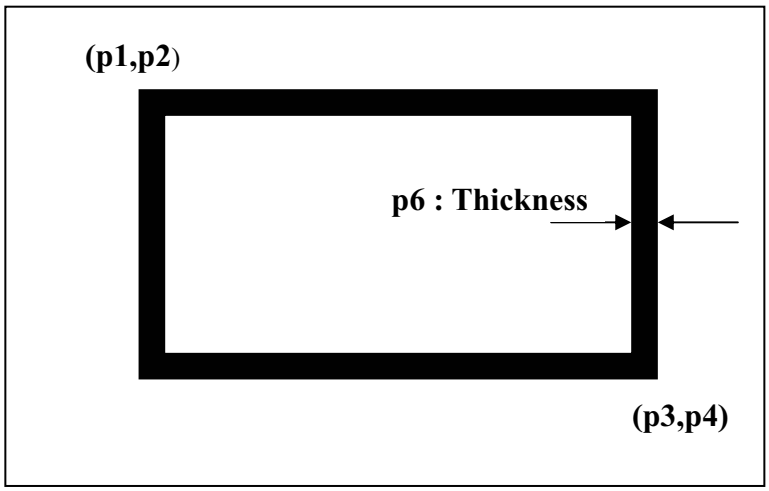
4. Delete block mode(when p5 is D)



5. Slope block mode(when p5 is S)



6. Draw box mode(when p5 is B)



CD – *Circle Draw*

Description

Draw Circle on the image buffer

Syntax

CD*p1,p2,p3,p4*

Parameters

p1 : Horizontal start position (X) [dot]

p2 : Vertical start position (Y) [dot]

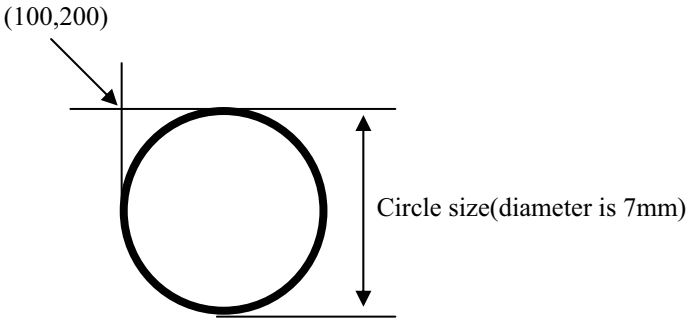
p3 : Circle Size Selection

Value	Diameter (mm)	Width × Height(dots)
1	5	40 × 40
2	7	56 × 56
3	9	72 × 72
4	11	88 × 88
5	13	104 × 104
6	21	168 × 168

p4 : Multiplier : 1 ~ 4

Example

CD100,200,2,1



CS – *Character Set selection*

Description

To select international character set and code table.

Syntax

CSp1,p2

Parameters

p1 : International Character Set

p1	Country
0	*U.S.A*
1	France
2	Germany
3	U.K
4	Denmark I
5	Sweden
6	Italy
7	Spain I
8	Norway
9	Denmark II
10	Japan
11	Spain II
12	Latin America
13	Korea
14	Slovenia/Croatia
15	China

p2 : Code Table

p2	Code Table	Language
0	*PC437*	*U.S.A*
1	PC850	Latin1
2	PC852	Latin2
3	PC860	Portuguese
4	PC863	Canadian French
5	PC865	Nordic
6	PC1252	Latin I
7	PC865 + PC1252	European Combined
8	PC857	Turkish
9	PC737	Greek
10	PC1250	Latin 2
11	PC1253	Greek
12	PC1254	Turkish
13	PC855	Cyrillic
14	PC862	Hebrew
15	PC866	Cyrillic
16	PC1251	Cyrillic
17	PC1255	Hebrew
18	PC928	Greek

♣ Default Setting is U.S.A standard (p1=0 and p2=0).

♣ European Combined Page

Address	Code Page
0x80	Euro Currency
0x81 ~ 0x9f	PC865
0xA0 ~ 0xff	PC1252

Country	International Character Set												
	Hex	23h	24h	40h	5Bh	5Ch	5Dh	5Eh	60h	7Bh	7Ch	7Dh	7E
	Dec	35	36	64	91	92	93	94	96	123	123	125	126
U.S.A		#	$	@	[	₩	]	^	`	{	|	}	~
France		#	$	à	°	ç	§	^	`	é	ù	è	
Germany		#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	
U.K.		£	$	@	[	₩	]	^	`	{	|	}	~
Denmark I		#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
Sweden		#	$	É	Ä	Ö	Å	Ü	É	ä	ö	å	ü
Italy		#	$	@	°	₩	é	^	ù	à	ò	è	ì
Spain		₧	$	@	¡	Ñ	¿	^	`		ñ	}	~
Norway		#		É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Denmark II		#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü

ASCII Code		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
	0 0	Control Characters															
	1 16																
	2 32		!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
	3 48	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0~31 : Control Code	4 64	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
32~127 : Alphanumeric	5 80	P	Q	R	S	T	U	V	W	X	Y	Z	[	]	^	_	`
	6 96	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
	7 112	q	r	s	t	u	v	w	x	y	z	{	|	}	~	⌂	

*** 0 : PC437(U.S.A)**

128(80h) ~ 255(FF)

	HEX	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
HEX	BIN	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	NUL 00	DLE 16	SP 32	0 48	@ 64	P 80	` 96	p 112	Ç 128	É 144	á 160	▓ 176	└ 192	╨ 208	α 224	≡ 240
1	0001	01	XON 17	! 33	1 49	A 65	Q 81	a 97	q 113	ü 129	æ 145	í 161	▒ 177	┴ 193	╤ 209	β 225	± 241
2	0010	02	18	" 34	2 50	B 66	R 82	b 98	r 114	é 130	Æ 146	ó 162	▒ 178	┬ 194	╥ 210	Γ 226	≤ 242
3	0010	03	XOFF 19	% 35	3 51	C 67	S 83	c 99	s 115	â 131	ô 147	ú 163	│ 179	├ 195	╙ 211	π 227	≥ 243
4	0100	EQT 04	20	$ 36	4 52	D 68	T 84	d 100	t 116	ä 132	ö 148	ñ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	ENQ 05	21	% 37	5 53	E 69	U 85	e 101	u 117	à 133	ò 149	Ñ 165	╡ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	06	22	& 38	6 54	F 70	V 86	f 102	v 118	å 134	û 150	ª 166	╢ 182	╞ 198	╓ 214	µ 230	÷ 246
7	0111	07	23	' 39	7 55	G 71	W 87	g 103	w 119	ç 135	ù 151	º 167	╖ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	BS 08	CAN 24	(40	8 56	H 72	X 88	h 104	x 120	ê 136	ÿ 152	¿ 168	╕ 184	╚ 200	╪ 216	Φ 232	° 249
9	1001	HT 09	25	) 41	9 57	I 73	Y 89	i 105	y 121	ë 137	ö 153	⌐ 169	╣ 185	╔ 201	┘ 217	θ 233	• 249
A	1010	LF 10	26	* 42	: 58	J 74	Z 90	j 106	z 122	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Ω 234	• 250
B	1011	11	ESC 27	+ 43	; 59	K 75	[91	k 107	{ 123	ï 139	¢ 155	1/2 171	╗ 187	╦ 203	█ 219	δ 235	√ 251
C	1100	FF 12	FS 28	, 44	< 60	L 76	\ 92	l 108	¦ 124	î 140	£ 156	1/4 172	╝ 188	╠ 204	▄ 220	∞ 236	n 252
D	1101	CR 13	GS 29	- 45	= 61	M 77	] 93	m 109	} 125	ì 141	¥ 157	¡ 173	╜ 189	═ 205	▌ 221	ϕ 237	2 253
E	1110	14	30	. 46	> 62	N 78	‾ 94	n 110	~ 126	Ä 142	Pt 158	« 174	╛ 190	╬ 206	▐ 222	∈ 238	■ 254
F	1111	15	31	/ 47	? 63	O 79	_ 95	o 111	SP 127	Å 143	ƒ 159	» 175	┐ 191	╧ 207	▀ 223	∩ 239	SP 255

*** 1 : PC850(LATIN 1)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▓ 176	└ 192	ð 208	Ó 224	¯ 240
1	0001	ü 129	æ 145	í 161	▒ 177	┴ 193	Ð 209	ß 225	± 241
2	0010	é 130	Æ 146	ó 162	░ 178	┬ 194	É 210	Ô 226	‗ 242
3	0010	â 131	ô 147	ú 163	│ 179	├ 195	Ë 211	Ò 227	3/4 243
4	0100	ä 132	ö 148	ñ 164	┤ 180	─ 196	È 212	õ 228	244
5	0101	à 133	ò 149	Ñ 165	Á 181	┼ 197	i 213	Õ 229	§ 245
6	0110	å 134	û 150	ª 166	Â 182	ã 198	f 214	u 230	÷ 246
7	0111	ç 135	ù 151	º 167	À 183	Ã 199	Î 215	þ 231	¸ 247
8	1000	ê 136	ÿ 152	¿ 168	© 184	╚ 200	Ï 216	p 232	° 249
9	1001	ë 137	ö 153	® 169	╣ 185	╔ 201	┘ 217	Ú 233	¨ 249
A	1010	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Û 234	• 250
B	1011	ï 139	ø 155	1/2 171	╗ 187	╦ 203	█ 219	Ù 235	1 251
C	1100	î 140	£ 156	1/4 172	╝ 188	╠ 204	■ 220	ý 236	3 252
D	1101	ì 141	Ø 157	¡ 173	¢ 189	═ 205	¦ 221	Ý 237	2 253
E	1110	Ä 142	× 158	« 174	¥ 190	╬ 206	Ì 222	¯ 238	▪ 254
F	1111	Å 143	ƒ 159	» 175	┐ 191	¤ 207	■ 223	´ 239	SP 255

*** 2 : PC852(LATIN 2)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▒ 176	└ 192	đ 208	Ó 224	- 240
1	0001	ü 129	Ĺ 145	í 161	▒ 177	┴ 193	Đ 209	ß 225	´ 241
2	0010	é 130	Í 146	ó 162	▒ 178	┬ 194	Ď 210	Ô 226	˛ 242
3	0011	â 131	Ô 147	ú 163	│ 179	├ 195	Ë 211	Ń 227	ˇ 243
4	0100	ů 132	Ö 148	Ą 164	┤ 180	─ 196	ď 212	ń 228	˘ 244
5	0101	ć 133	Ľ 149	ą 165	Á 181	┼ 197	Ň 213	ň 229	§ 245
6	0110	Ç 134	ľ 150	Ž 166	Â 182	Ă 198	Í 214	Š 230	÷ 246
7	0111	Ł 135	Ś 151	ž 167	Ě 183	ă 199	Î 215	š 231	¸ 247
8	1000	ł 136	ś 152	Ę 168	Ş 184	╚ 200	ě 216	Ř 232	° 248
9	1001	ë 137	Ö 153	ę 169	╣ 185	╔ 201	┘ 217	Ú 233	¨ 249
A	1010	Ő 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	ŕ 234	· 250
B	1011	ő 139	Ť 155	Ź 171	╗ 187	╦ 203	■ 219	Ű 235	ű 251
C	1100	î 140	ť 156	Č 172	╝ 188	╠ 204	■ 220	ý 236	Ř 252
D	1101	Ź 141	Ł 157	ş 173	Ż 189	═ 205	J 221	Ý 237	ř 253
E	1110	Ä 142	x 158	« 174	ż 190	╬ 206	Ů 222	ţ 238	■ 254
F	1111	Ć 143	č 159	» 175	┐ 191	¤ 207	■ 223	´ 239	255

*** 3 : PC860(PORTUGUESE)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▓ 176	└ 192	╨ 208	α 224	≡ 240
1	0001	ü 129	À 145	í 161	▒ 177	┴ 193	╤ 209	β 225	± 241
2	0010	é 130	É 146	ó 162	░ 178	┬ 194	╥ 210	Γ 226	≤ 242
3	0010	â 131	ô 147	ú 163	│ 179	├ 195	╙ 211	π 227	≥ 243
4	0100	ä 132	õ 148	ñ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	à 133	ò 149	Ñ 165	╡ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	Á 134	ú 150	ª 166	╢ 182	╞ 198	╓ 214	µ 230	÷ 246
7	0111	ç 135	ù 151	º 167	╖ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	ê 136	Ì 152	¿ 168	╕ 184	╚ 200	╪ 216	Φ 232	° 249
9	1001	Ê 137	õ 153	Ò 169	╣ 185	╔ 201	┘ 217	θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Ω 234	• 250
B	1011	Í 139	¢ 155	1/2 171	╗ 187	╦ 203	▉ 219	δ 235	√ 251
C	1100	Ô 140	£ 156	1/4 172	╝ 188	╠ 204	■ 220	∞ 236	n 252
D	1101	ì 141	Ù 157	¡ 173	╜ 189	═ 205	▌ 221	ϕ 237	2 253
E	1110	Ã 142	Pt 158	« 174	╛ 190	╬ 206	▐ 222	238	▪ 254
F	1111	Â 143	Ó 159	» 175	┐ 191	╧ 207	■ 223	239	SP 255

*** 4 : PC863(CANADIAN FRENCH)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	¦ 160	▓ 176	└ 192	╨ 208	α 224	240
1	0001	ü 129	É 145	´ 161	▒ 177	┴ 193	╤ 209	β 225	± 241
2	0010	é 130	Ê 146	ó 162	▒ 178	┬ 194	╥ 210	Γ 226	≥ 242
3	0010	â 131	ô 147	ú 163	¦ 179	├ 195	╙ 211	π 227	≤ 243
4	0100	Â 132	Ë 148	¨ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	à 133	Ï 149	° 165	┤ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	134	û 150	³ 166	╡ 182	╞ 198	╓ 214	µ 230	÷ 246
7	0111	ç 135	ù 151	¯ 167	╢ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	ê 136	¤ 152	Î 168	╖ 184	╚ 200	╪ 216	Φ 232	° 249
9	1001	ë 137	Ô 153	⌐ 169	╕ 185	╔ 201	┘ 217	θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	╖ 186	╩ 202	┌ 218	Ω 234	• 250
B	1011	Ï 139	¢ 155	1/2 171	╗ 187	╦ 203	▉ 219	δ 235	251
C	1100	î 140	£ 156	1/4 172	╝ 188	╠ 204	■ 220	∞ 236	n 252
D	1101	═ 141	Ù 157	3/4 173	╜ 189	═ 205	▌ 221	ϕ 237	2 253
E	1110	À 142	Û 158	« 174	╛ 190	╬ 206	▐ 222	238	■ 254
F	1111	§ 143	ƒ 159	» 175	┐ 191	╧ 207	■ 223	239	SP 255

*** 5 : PC865(NORDIC)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▓ 176	└ 192	╨ 208	α 224	240
1	0001	ü 129	æ 145	í 161	▒ 177	┴ 193	╤ 209	β 225	± 241
2	0010	é 130	Æ 146	ó 162	⁞ 178	┬ 194	╥ 210	Γ 226	≥ 242
3	0010	â 131	ô 147	ú 163	│ 179	├ 195	╙ 211	π 227	≤ 243
4	0100	ä 132	ö 148	ñ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	à 133	ò 149	Ñ 165	╡ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	å 134	û 150	ª 166	╢ 182	╞ 198	╓ 214	µ 230	÷ 246
7	0111	ç 135	ù 151	º 167	╖ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	ê 136	ÿ 152	¿ 168	╕ 184	╚ 200	╪ 216	Φ 232	° 249
9	1001	ë 137	Ö 153	⌐ 169	╣ 185	╔ 201	┘ 217	θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Ω 234	· 250
B	1011	ï 139	ø 155	1/2 171	╗ 187	╦ 203	▉ 219	δ 235	251
C	1100	î 140	£ 156	1/4 172	╝ 188	╠ 204	■ 220	∞ 236	n 252
D	1101	ì 141	Ø 157	¡ 173	╜ 189	═ 205	▌ 221	ϕ 237	2 253
E	1110	Ä 142	Pt 158	« 174	╛ 190	╬ 206	▐ 222	238	■ 254
F	1111	Å 143	*f* 159	¤ 175	┐ 191	╧ 207	■ 223	239	SP 255

*** 6 : PC1252(WINDOWS LATIN 1)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€ 128	144	160	◊ 176	À 192	Ð 208	à 224	đ 240
1	0001	129	‘ 145	¡ 161	± 177	Á 193	Ñ 209	á 225	ñ 241
2	0010	’ 130	’ 146	¢ 162	2 178	Â 194	Ò 210	â 226	ò 242
3	0011	*f* 131	“ 147	£ 163	3 179	Ã 195	Ó 211	ã 227	ó 243
4	0100	,, 132	” 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	0101	… 133	● 149	¥ 165	µ 181	Å 197	Õ 213	å 229	õ 245
6	0110	† 134	- 150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	ö 246
7	0111	‡ 135	– 151	§ 167	• 183	Ç 199	x 215	ç 231	÷ 247
8	1000	^ 136	~ 152	¨ 168	¸ 184	È 200	Ø 216	è 232	ø 248
9	1001	‰ 137	™ 153	© 169	1 185	É 201	Ù 217	é 233	ù 249
A	1010	Š 138	š 154	ª 170	º 186	Ê 202	Ú 218	ê 234	ú 250
B	1011	‹ 139	› 155	« 171	» 187	Ë 203	Û 219	ë 235	û 251
C	1100	Œ 140	œ 156	¬ 172	¼ 188	Ì 204	Ü 220	ì 236	ü 252
D	1101	141	157	173	½ 189	Í 205	Ý 221	í 237	ý 253
E	1110	Ž 142	ž 158	® 174	¾ 190	Î 206	p 222	î 238	p 254
F	1111	143	Ÿ 159	¯ 175	¿ 191	Ï 207	B 223	ï 239	ÿ 255

*** 7 : PC865 + PC1252(EUROPEAN COMBINED)**

0x80 : Euro Currency, 0x81~0x9f : PC865, 0xA0~0xFF : PC1252

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	160	° 176	À 192	Ð 208	à 224	ð 240
1	0001	ü 129	æ 145	¡ 161	± 177	Á 193	Ñ 209	á 225	ñ 241
2	0010	é 130	Æ 146	¢ 162	² 178	Â 194	Ò 210	â 226	ò 242
3	0011	â 131	ô 147	£ 163	³ 179	Ã 195	Ó 211	ã 227	ó 243
4	0100	ä 132	ö 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	0101	à 133	ò 149	¥ 165	µ 181	Å 197	Õ 213	å 229	õ 245
6	0110	å 134	û 150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	ö 246
7	0111	ç 135	ù 151	§ 167	· 183	Ç 199	× 215	ç 231	÷ 247
8	1000	ê 136	İ 152	¨ 168	¸ 184	È 200	Ø 216	è 232	ø 248
9	1001	ë 137	Ö 153	© 169	¹ 185	É 201	Ù 217	é 233	ù 249
A	1010	è 138	Ü 154	ª 170	º 186	Ê 202	Ú 218	ê 234	ú 250
B	1011	ï 139	ø 155	« 171	» 187	Ë 203	Û 219	ë 235	û 251
C	1100	î 140	£ 156	¬ 172	¼ 188	Ì 204	Ü 220	ì 236	ü 252
D	1101	ı 141	Ø 157	- 173	½ 189	Í 205	Ý 221	í 237	ý 253
E	1110	Ä 142	Pts 158	® 174	¾ 190	Î 206	Þ 222	î 238	þ 254
F	1111	Å 143	*f* 159	¯ 175	¿ 191	Ï 207	ß 223	ï 239	255

*** 8 : PC857(TURKISH)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▒ 176	└ 192	º 208	Ó 224	- 240
1	0001	ü 129	æ 145	í 161	▒ 177	┴ 193	ª 209	ß 225	± 241
2	0010	é 130	Æ 146	ó 162	▓ 178	┬ 194	Ê 210	Ô 226	242
3	0011	â 131	ô 147	ú 163	│ 179	├ 195	Ë 211	Ò 227	¾ 243
4	0100	ä 132	ö 148	ñ 164	┤ 180	─ 196	È 212	õ 228	¶ 244
5	0101	à 133	ò 149	Ñ 165	Á 181	┼ 197	213	Õ 229	§ 245
6	0110	å 134	û 150	Ğ 166	Â 182	ã 198	Í 214	µ 230	÷ 246
7	0111	ç 135	ù 151	ğ 167	À 183	Ã 199	Î 215	231	¸ 247
8	1000	ê 136	İ 152	¿ 168	© 184	╚ 200	Ï 216	× 232	° 248
9	1001	ë 137	Ö 153	® 169	╣ 185	╔ 201	┘ 217	Ú 233	¨ 249
A	1010	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Û 234	· 250
B	1011	ï 139	ø 155	½ 171	╗ 187	╦ 203	▉ 219	Ù 235	¹ 251
C	1100	î 140	£ 156	¼ 172	╝ 188	╠ 204	▄ 220	ì 236	³ 252
D	1101	ı 141	Ø 157	¡ 173	¢ 189	═ 205	¦ 221	ÿ 237	² 253
E	1110	Ä 142	Ş 158	« 174	¥ 190	╬ 206	Ì 222	¯ 238	■ 254
F	1111	Å 143	ş 159	» 175	┐ 191	○ 207	▀ 223	´ 239	255

*** 9 : PC737(GREEK)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Α 128	Ρ 144	ι 160	▒ 176	└ 192	╨ 208	ω 224	Ώ 240
1	0001	Β 129	Σ 145	κ 161	▒ 177	┴ 193	╤ 209	ά 225	± 241
2	0010	Γ 130	Τ 146	λ 162	▒ 178	┬ 194	╥ 210	έ 226	≥ 242
3	0011	Δ 131	Υ 147	μ 163	│ 179	├ 195	╙ 211	ή 227	≤ 243
4	0100	Ε 132	Φ 148	ν 164	┤ 180	─ 196	╘ 212	ϊ 228	Ί 244
5	0101	Ζ 133	Χ 149	ξ 165	╡ 181	┼ 197	╒ 213	ί 229	Ϋ 245
6	0110	Η 134	Ψ 150	ο 166	╢ 182	╞ 198	╓ 214	ό 230	÷ 246
7	0111	Θ 135	Ω 151	π 167	╖ 183	╟ 199	╫ 215	ύ 231	≈ 247
8	1000	Ι 136	α 152	ρ 168	╕ 184	╚ 200	╪ 216	ϋ 232	° 248
9	1001	Κ 137	β 153	σ 169	╣ 185	╔ 201	┘ 217	ώ 233	∙ 249
A	1010	Λ 138	γ 154	ς 170	║ 186	╩ 202	┌ 218	Ά 234	· 250
B	1011	Μ 139	δ 155	τ 171	╗ 187	╦ 203	■ 219	Έ 235	√ 251
C	1100	Ν 140	ε 156	υ 172	╝ 188	╠ 204	▬ 220	Ή 236	n 252
D	1101	Ξ 141	ζ 157	φ 173	╜ 189	═ 205	▌ 221	Ί 237	² 253
E	1110	Ο 142	η 158	χ 174	╛ 190	╬ 206	▐ 222	Ό 238	■ 254
F	1111	Π 143	Θ 159	ψ 175	┐ 191	╧ 207	▀ 223	Ύ 239	NBSP 255

*** 10 : PC1250(WINDOWS LATIN 2)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€ 128	144	NBSP 160	° 176	Ŕ 192	Đ 208	ŕ 224	đ 240
1	0001	129	‘ 145	˘ 161	± 177	Á 193	Ń 209	á 225	ń 241
2	0010	’ 130	’ 146	˘ 162	˛ 178	Â 194	Ň 210	â 226	ň 242
3	0011	ƒ 131	“ 147	£ 163	ł 179	Ă 195	Ó 211	ă 227	ó 243
4	0100	” 132	” 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	0101	⋯ 133	• 149	Ą 165	µ 181	Ĺ 197	Õ 213	Í 229	ő 245
6	0110	† 134	– 150	¦ 166	¶ 182	Ć 198	Ö 214	ć 230	ö 246
7	0111	‡ 135	— 151	§ 167	· 183	Ç 199	× 215	ç 231	÷ 247
8	1000	ˆ 136	˜ 152	¨ 168	¸ 184	Č 200	Ř 216	č 232	ř 248
9	1001	‰ 137	™ 153	© 169	ą 185	É 201	Ů 217	é 233	ů 249
A	1010	Š 138	š 154	Ş 170	ş 186	Ę 202	Ú 218	ę 234	ú 250
B	1011	‹ 139	› 155	« 171	» 187	Ë 203	Ű 219	ë 235	ű 251
C	1100	Ś 140	ś 156	¬ 172	Ľ 188	Ě 204	Ü 220	ě 236	ü 252
D	1101	Ť 141	ť 157	- 173	" 189	Í 205	Ý 221	í 237	ý 253
E	1110	Ž 142	ž 158	® 174	l· 190	Î 206	Ţ 222	î 238	ţ 254
F	1111	Ź 143	ź 159	Ż 175	ż 191	Ď 207	ß 223	ď 239	· 255

*** 11 : PC1253(GREEK)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€ 128	144	NBSP 160	° 176	ΐ 192	Π 208	ΰ 224	π 240
1	0001	129	‘ 145	΅ 161	± 177	Α 193	Ρ 209	α 225	ρ 241
2	0010	’ 130	’ 146	Ά 162	² 178	Β 194	210	β 226	ς 242
3	0011	*ƒ* 131	“ 147	£ 163	³ 179	Γ 195	Σ 211	γ 227	σ 243
4	0100	” 132	” 148	¤ 164	΄ 180	Δ 196	Τ 212	δ 228	τ 244
5	0101	… 133	• 149	¥ 165	µ 181	Ε 197	Υ 213	ε 229	υ 245
6	0110	† 134	– 150	¦ 166	¶ 182	Ζ 198	Φ 214	ζ 230	φ 246
7	0111	‡ 135	— 151	§ 167	· 183	Η 199	Χ 215	η 231	χ 247
8	1000	136	152	¨ 168	Έ 184	Θ 200	Ψ 216	θ 232	ψ 248
9	1001	‰ 137	™ 153	© 169	Ή 185	Ι 201	Ω 217	ι 233	ω 249
A	1010	138	154	170	Ί 186	Κ 202	Ϊ 218	κ 234	ϊ 250
B	1011	‹ 139	› 155	« 171	» 187	Λ 203	Ϋ 219	λ 235	ϋ 251
C	1100	140	156	¬ 172	Ό 188	Μ 204	ά 220	μ 236	ό 252
D	1101	141	157	- 173	½ 189	Ν 205	έ 221	ν 237	ύ 253
E	1110	142	158	® 174	Ύ 190	Ξ 206	ή 222	ξ 238	ώ 254
F	1111	143	159	― 175	Ώ 191	Ο 207	ί 223	ο 239	255

*** 12 : PC1254(TURKISH)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€ 128	144	NBSP 160	° 176	À 192	Ğ 208	à 224	ğ 240
1	0001	129	‘ 145	¡ 161	± 177	Á 193	Ñ 209	á 225	241
2	0010	’ 130	’ 146	¢ 162	² 178	Â 194	Ò 210	â 226	242
3	0011	ƒ 131	“ 147	£ 163	³ 179	Ã 195	Ó 211	ã 227	243
4	0100	” 132	” 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	244
5	0101	… 133	• 149	¥ 165	µ 181	Å 197	Õ 213	å 229	245
6	0110	† 134	– 150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	246
7	0111	‡ 135	— 151	§ 167	· 183	Ç 199	× 215	ç 231	247
8	1000	ˆ 136	˜ 152	¨ 168	¸ 184	È 200	Ø 216	è 232	248
9	1001	‰ 137	™ 153	© 169	¹ 185	É 201	Ù 217	é 233	249
A	1010	Š 138	š 154	ª 170	º 186	Ê 202	Ú 218	ê 234	250
B	1011	‹ 139	› 155	« 171	» 187	Ë 203	Û 219	ë 235	251
C	1100	Œ 140	œ 156	¬ 172	¼ 188	Ì 204	Ü 220	ì 236	252
D	1101	141	157	- 173	½ 189	Í 205	İ 221	í 237	ı 253
E	1110	142	158	® 174	¾ 190	Î 206	Ş 222	î 238	ş 254
F	1111	143	Ÿ 159	¯ 175	¿ 191	Ï 207	ß 223	ï 239	ÿ 255

*** 13 : PC855(CYRILLIC)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	ђ 128	љ 144	а 160	░ 176	└ 192	л 208	Я 224	- 240
1	0001	Ђ 129	Љ 145	А 161	▒ 177	┴ 193	Л 209	р 225	ы 241
2	0010	ѓ 130	њ 146	б 162	▓ 178	┬ 194	м 210	Р 226	Ы 242
3	0011	Ѓ 131	Њ 147	Б 163	│ 179	├ 195	М 211	с 227	з 243
4	0100	ё 132	ћ 148	ц 164	┤ 180	─ 196	н 212	С 228	З 244
5	0101	Ё 133	Ћ 149	Ц 165	х 181	┼ 197	Н 213	т 229	ш 245
6	0110	є 134	ќ 150	д 166	Х 182	к 198	о 214	Т 230	Ш 246
7	0111	Є 135	Ќ 151	Д 167	и 183	К 199	О 215	у 231	э 247
8	1000	ѕ 136	ў 152	е 168	И 184	╚ 200	п 216	У 232	Э 248
9	1001	S 137	Ў 153	Е 169	╣ 185	╔ 201	┘ 217	ж 233	щ 249
A	1010	і 138	џ 154	ф 170	║ 186	╩ 202	┌ 218	Ж 234	Щ 250
B	1011	І 139	Џ 155	Ф 171	╗ 187	╦ 203	█ 219	в 235	ч 251
C	1100	ї 140	ю 156	г 172	╝ 188	╠ 204	▄ 220	В 236	Ч 252
D	1101	Ї 141	Ю 157	Г 173	й 189	═ 205	П 221	ь 237	§ 253
E	1110	j 142	ъ 158	« 174	Й 190	╬ 206	я 222	Ь 238	■ 254
F	1111	J 143	Ъ 159	» 175	┐ 191	¤ 207	▀ 223	№ 239	255

*** 14 : PC862(HEBREW)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	א 128	נ 144	á 160	▒ 176	└ 192	╨ 208	α 224	≡ 240
1	0001	ב 129	ס 145	í 161	▒ 177	┴ 193	╤ 209	ß 225	± 241
2	0010	ג 130	ע 146	ó 162	▒ 178	┬ 194	╥ 210	Γ 226	≥ 242
3	0011	ד 131	ף 147	ú 163	│ 179	├ 195	╙ 211	π 227	≤ 243
4	0100	ה 132	פ 148	ñ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	ו 133	ץ 149	Ñ 165	╡ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	ז 134	צ 150	ª 166	╢ 182	╞ 198	╓ 214	µ 230	÷ 246
7	0111	ח 135	ק 151	º 167	╖ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	ט 136	ר 152	¿ 168	╕ 184	╚ 200	╪ 216	Φ 232	° 248
9	1001	י 137	ש 153	⌐ 169	╣ 185	╔ 201	┘ 217	Θ 233	∙ 249
A	1010	ך 138	ת 154	¬ 170	║ 186	╩ 202	┌ 218	Ω 234	· 250
B	1011	כ 139	¢ 155	½ 171	╗ 187	╦ 203	■ 219	δ 235	√ 251
C	1100	ל 140	£ 156	¾ 172	╝ 188	╠ 204	▬ 220	∞ 236	n 252
D	1101	ם 141	¥ 157	¡ 173	╜ 189	═ 205	▌ 221	φ 237	² 253
E	1110	מ 142	₱ 158	« 174	╛ 190	╬ 206	▐ 222	ε 238	■ 254
F	1111	ן 143	ƒ 159	» 175	┐ 191	╧ 207	▀ 223	∩ 239	NBSP 255

*** 15 : PC866(CYRILLIC)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	А 128	Р 144	а 160	▒ 176	└ 192	╨ 208	р 224	Ё 240
1	0001	Б 129	С 145	б 161	▒ 177	┴ 193	╤ 209	с 225	ё 241
2	0010	В 130	Т 146	в 162	▒ 178	┬ 194	╥ 210	т 226	Є 242
3	0011	Г 131	У 147	г 163	│ 179	├ 195	╙ 211	у 227	є 243
4	0100	Д 132	Ф 148	д 164	┤ 180	─ 196	╘ 212	ф 228	Ї 244
5	0101	Е 133	Х 149	е 165	╡ 181	┼ 197	╒ 213	х 229	ї 245
6	0110	Ж 134	Ц 150	ж 166	╢ 182	╞ 198	╓ 214	ц 230	Ў 246
7	0111	З 135	Ч 151	з 167	╖ 183	╟ 199	╫ 215	ч 231	ў 247
8	1000	И 136	Ш 152	и 168	╕ 184	╚ 200	╪ 216	ш 232	° 248
9	1001	Й 137	Щ 153	й 169	╣ 185	╔ 201	┘ 217	щ 233	· 249
A	1010	К 138	Ъ 154	к 170	║ 186	╩ 202	┌ 218	ъ 234	· 250
B	1011	Л 139	Ы 155	л 171	╗ 187	╦ 203	■ 219	ы 235	√ 251
C	1100	М 140	Ь 156	м 172	╝ 188	╠ 204	▄ 220	ь 236	№ 252
D	1101	Н 141	Э 157	н 173	╜ 189	═ 205	▌ 221	э 237	¤ 253
E	1110	О 142	Ю 158	о 174	╛ 190	╬ 206	▐ 222	ю 238	■ 254
F	1111	П 143	Я 159	п 175	┐ 191	╧ 207	▀ 223	я 239	NBSP 255

*** 16 : PC1251(CYRILLIC)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ђ 128	ђ 144	NBSP 160	° 176	А 192	Р 208	а 224	р 240
1	0001	Ѓ 129	‘ 145	Ў 161	± 177	Б 193	С 209	б 225	с 241
2	0010	’ 130	’ 146	ў 162	І 178	В 194	Т 210	в 226	т 242
3	0011	ѓ 131	“ 147	Ј 163	і 179	Г 195	У 211	г 227	у 243
4	0100	” 132	” 148	¤ 164	ґ 180	Д 196	Ф 212	д 228	ф 244
5	0101	… 133	• 149	Ґ 165	µ 181	Е 197	Х 213	е 229	х 245
6	0110	† 134	– 150	¦ 166	¶ 182	Ж 198	Ц 214	ж 230	ц 246
7	0111	‡ 135	— 151	§ 167	· 183	З 199	Ч 215	з 231	ч 247
8	1000	€ 136	152	Ё 168	ё 184	И 200	Ш 216	и 232	ш 248
9	1001	‰ 137	™ 153	© 169	№ 185	Й 201	Щ 217	й 233	щ 249
A	1010	Љ 138	љ 154	Є 170	є 186	К 202	Ъ 218	к 234	ъ 250
B	1011	‹ 139	› 155	« 171	» 187	Л 203	Ы 219	л 235	ы 251
C	1100	Њ 140	њ 156	¬ 172	ј 188	М 204	Ь 220	м 236	ь 252
D	1101	Ќ 141	ќ 157	- 173	Ѕ 189	Н 205	Э 221	н 237	э 253
E	1110	Ћ 142	ћ 158	® 174	ѕ 190	О 206	Ю 222	о 238	ю 254
F	1111	Џ 143	џ 159	Ї 175	ї 191	П 207	Я 223	п 239	я 255

*** 17 : PC1255(HEBREW)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€ 128	144	NBSP 160	° 176	ְ 192	׀ 208	א 224	נ 240
1	0001	129	‘ 145	¡ 161	± 177	ֱ 193	ׁ 209	ב 225	ס 241
2	0010	’ 130	’ 146	¢ 162	² 178	ֲ 194	ׂ 210	ג 226	ע 242
3	0011	ƒ 131	“ 147	£ 163	³ 179	ֳ 195	׃ 211	ד 227	ף 243
4	0100	” 132	” 148	₪ 164	´ 180	ִ 196	ׄ 212	ה 228	פ 244
5	0101	… 133	• 149	¥ 165	µ 181	ֵ 197	ׅ 213	ו 229	ץ 245
6	0110	† 134	– 150	¦ 166	¶ 182	ֶ 198	׆ 214	ז 230	צ 246
7	0111	‡ 135	— 151	§ 167	· 183	ַ 199	ׇ 215	ח 231	ק 247
8	1000	ˆ 136	˜ 152	¨ 168	¸ 184	ָ 200	״ 216	ט 232	ר 248
9	1001	‰ 137	™ 153	© 169	¹ 185	ֹ 201	217	י 233	ש 249
A	1010	138	154	× 170	÷ 186	202	218	ך 234	ת 250
B	1011	‹ 139	› 155	« 171	» 187	ֻ 203	219	כ 235	251
C	1100	140	156	¬ 172	¼ 188	ּ 204	220	ל 236	252
D	1101	141	157	173	½ 189	ֽ 205	221	ם 237	LTR 253
E	1110	142	158	® 174	¾ 190	־ 206	222	מ 238	RTL 254
F	1111	143	159	¯ 175	¿ 191	ֿ 207	223	ן 239	255

*** 18 : PC928(GREEK)**

128(80h) ~ 255(FF)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	128	144	160	° 176	ΐ 192	Π 208	ϋ 224	π 240
1	0001	129	145	` 161	± 177	Α 193	Ρ 209	α 225	ρ 241
2	0010	130	146	´ 162	² 178	Β 194	210	β 226	ς 242
3	0011	131	147	£ 163	³ 179	Γ 195	Σ 211	γ 227	σ 243
4	0100	132	148	164	' 180	Δ 196	Τ 212	δ 228	τ 244
5	0101	133	149	165	~ 181	Ε 197	Υ 213	ε 229	υ 245
6	0110	134	150	¦ 166	Ά 182	Ζ 198	Φ 214	ζ 230	φ 246
7	0111	135	151	§ 167	· 183	Η 199	Χ 215	η 231	χ 247
8	1000	136	152	¨ 168	Έ 184	Θ 200	Ψ 216	θ 232	ψ 248
9	1001	137	153	© 169	Ή 185	Ι 201	Ω 217	ι 233	ω 249
A	1010	138	154	170	Ί 186	Κ 202	Ϊ 218	κ 234	ϊ 250
B	1011	139	155	« 171	» 187	Λ 203	Ϋ 219	λ 235	ϋ 251
C	1100	140	156	¬ 172	Ό 188	Μ 204	ά 220	μ 236	ό 252
D	1101	141	157	173	½ 189	Ν 205	έ 221	ν 237	ύ 253
E	1110	142	158	174	Ύ 190	Ξ 206	ή 222	ξ 238	ώ 254
F	1111	143	159	― 175	Ώ 191	Ο 207	ί 223	ο 239	255

P – *Print*

Description

Let the printer start printing the content of image buffer

Syntax

P*p1,[p2]*

Parameters

p1 : Number of label sets : 1 ~ 65535

p2 : Number of copies of each label : 1 ~ 65535

♣ The P command cannot be used in a template sequence. If printing command is needed in template sequence, then use the PV command(See the example of next page).

♣ Caution

The 'P' command must be terminated by 'CR'(0x0d). If not, the printer will not start to print till 'CR' shows.

Example

(1) In case of Using P (P is used outside of template sequence)

```
TS'TPL_TST1'                          // Start Template Store
SV00,15,N,'Model Name :'              // Declare variable V00
T50,100,3,1,1,0,0,N,N,'Model Name :'V00   // T command with variable
TE                                    // End Template Store

TR'TPL_TST1"                          // Recall stored template 'TPL_TST1'
?                                     // Get content of variable used in recalled template
SRP770                                // Content of variable V00
P3,2                                  // when using P command, It must not be inside template,
                                      // but be used after recalling the template and entering the
                                      // contents of all variables.
                                      // After P command, printer starts printing.
```

(2) In case of Using PV(PV is used inside of template sequence

```
TS'TPL_TST1'                          // Start Template Store
SV00,15,N,'Model Name :'              // Declare variable V00
SV01,2,N,'# of set :'                 // Declare variable V01
SV02,2,N,'# of copies : '             // Declare variable V02
T50,100,3,1,1,0,0,N,N,'Model Name :'V00   // T command with variable
PVV01,V02                             // PV command can be used inside the template
TE                                    // End Template Store

TR'TPL_TST1"                          // Recall stored template 'TPL_TST1'
?                                     // Get content of variable used in recalled template
SRP770                                // Content of variable V00
3                                     // Content of variable V00
2                                     // Content of variable V00
                                      // As soon as all contents of variables are entered'
                                      // printer will starts printing
```

2. Media & Buffer Related Commands

Set label size and marginal value and ……

1) SM

Set marginal value in label(Image buffer)

2) SL

Set label(Image buffer) length

3) SW

Set label(Image buffer) width

4) SB

Set buffer mode(Enable or disable Double Buffering)

5) CB

Clear Image Buffer

SM – *Set Margin*

Description

Set marginal value of the image buffer.

This command moves the origin point (0,0) to (p1,p2) and make (p1,p2) become the new origin.

Syntax

SM*p1,p2*

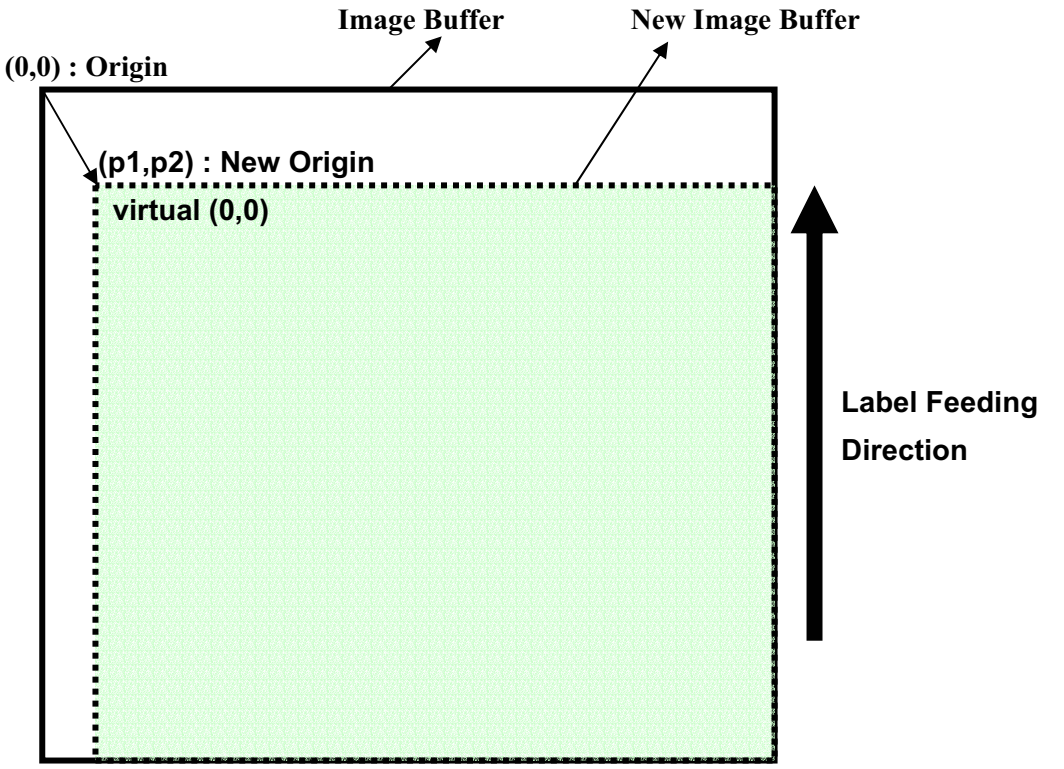
Parameters

p1 : Horizontal margin [dots]

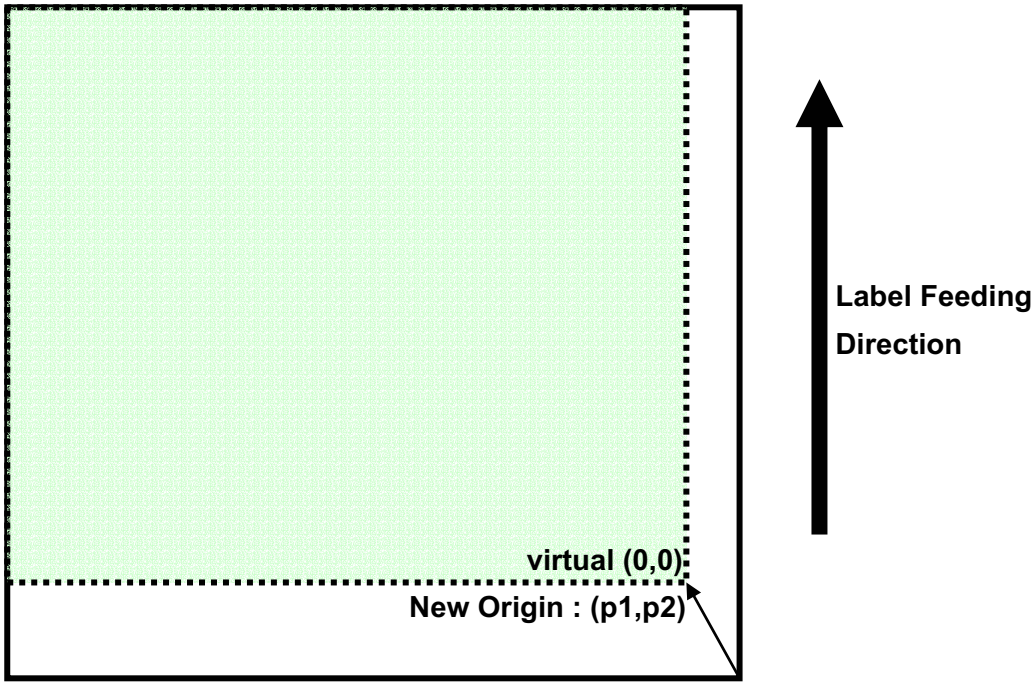
p2 : Vertical margin [dots]

♣ The origin point is upper-left point of the image buffer

** When printing orientation is from top to bottom



** When printing orientation is from bottom to top.



SL – *Set Length*

Description

Set length of label and gap(or Black Mark) and specify media type.

Syntax

SL*p1,p2(,p3)*

Parameters

p1 : Label length [dots] : Maximum 2432 dots(12 inch)

♣ Double buffering feature can be used only when label length(p1) is less than 1216(2432/2, 6inch) dots.

♣ If p1 is over 1216 dots, the double buffering feature will be automatically released.

♣ So if you don't use double buffering feature, you can design maximum 2432 dots(12 inch) size label.

p2 : Gap length or thickness of black line [dots]

p3 : Media Type

p3	Media type
G	*Gap*
C	Continuous
B	Black Mark

♣ If this parameter is not used, automatically set to G(Gap type).

♣ The default value of label length is 6 inch(1216 dots)

♣ This command sets the length of image buffer and the printer will print and form feed as much as the length set by this command.

♣ When using Continuous type media, the label length must be set.

♣ Gap type : The sensor detects and distinguishes the gap from label.

♣ Continuous type : The sensor just detects the end of media.

♣ Black Mark type : The sensor detects black mark on the white label.

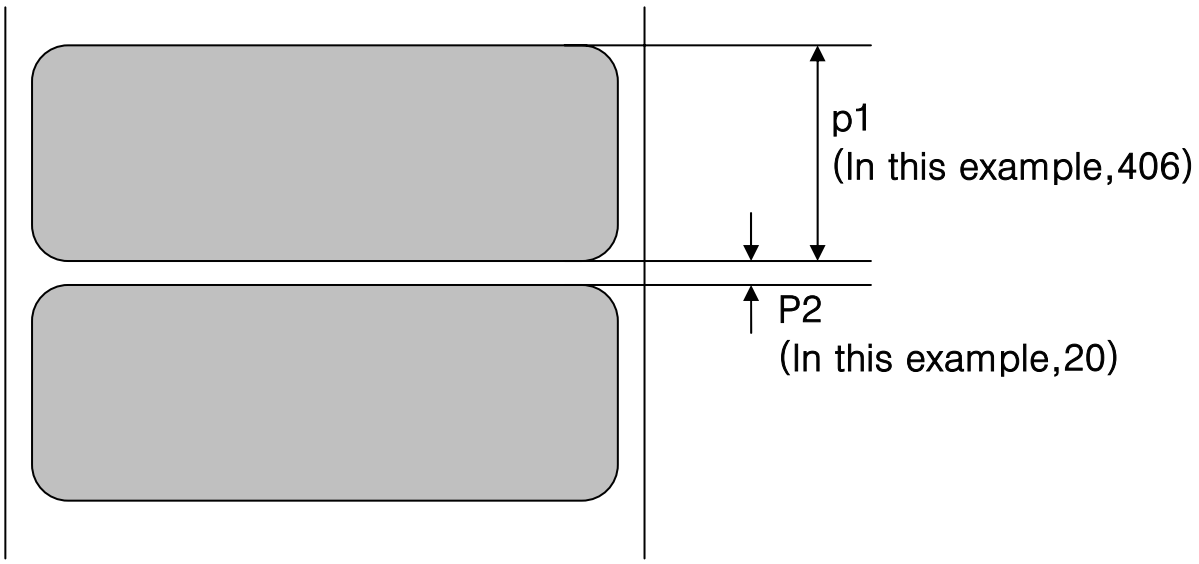
♣ In the Gap Mode, the printer will form feed until meeting the next gap.

♣ In the Continuous Mode, the printer will form feed as much as label length set by SL command.

♣ In the B/M Mode, the printer will form feed until meeting the next B/M.

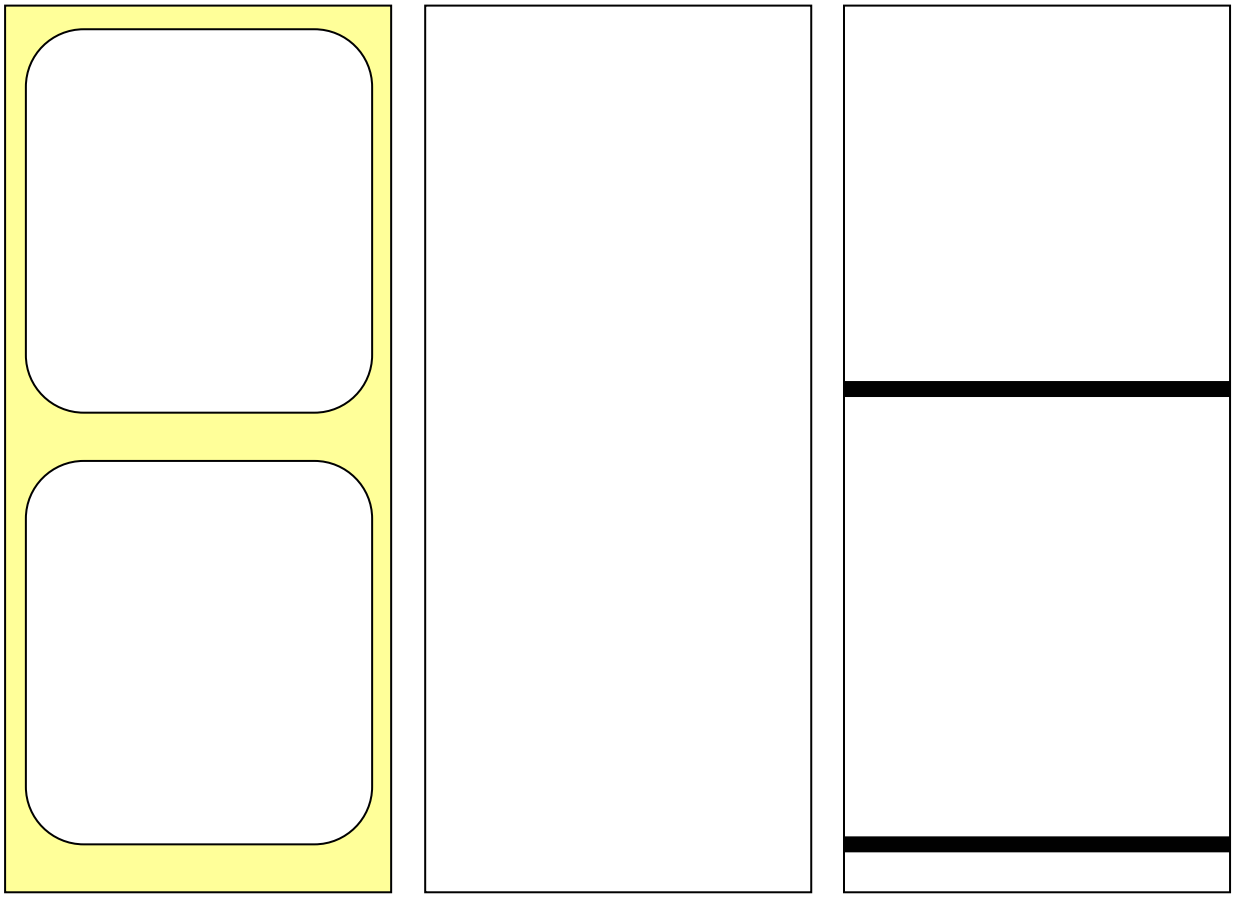
Example 1

SL406,20 // Set label length to 406 dots (2 inch, 50mm) and gap length to 20 dots(2.5mm)

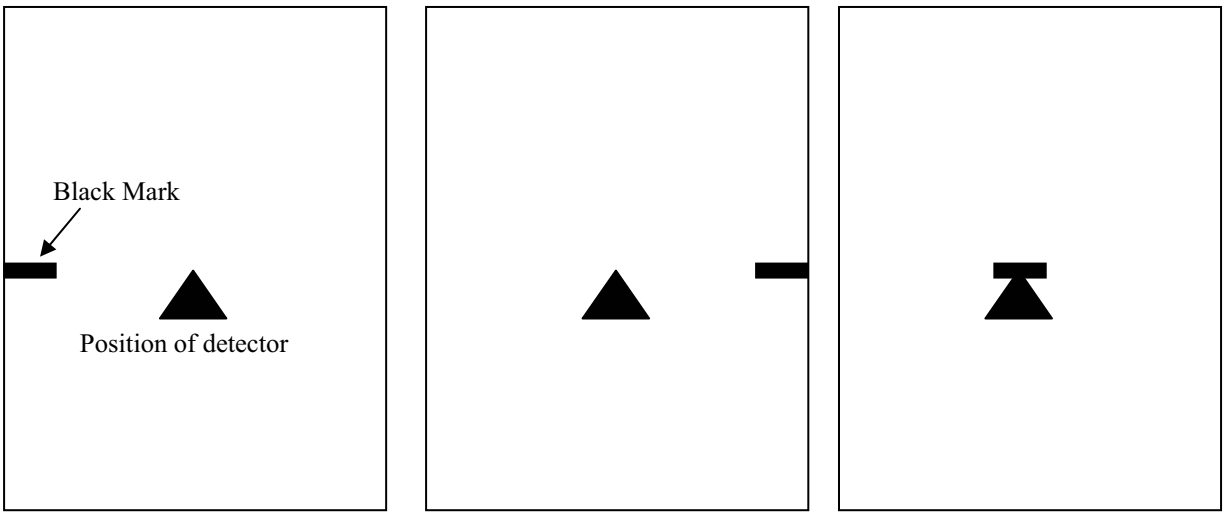


Example 2

1. Gap Type **2. Continuous Type** **3. Black Mark Type**



♣ In case of the B/M type media, the black mark must be located in the center of the media because the detect sensor is in the center position of the printer. So the B/M of next 1 and 2 types cannot be detected.



1. Not Detecting **2. Not Detecting** **3. Detecting**

SW – *Set Width*

Description

Set label width.

Resize the image buffer to match the label size.

Syntax

SW*p1*

Parameters

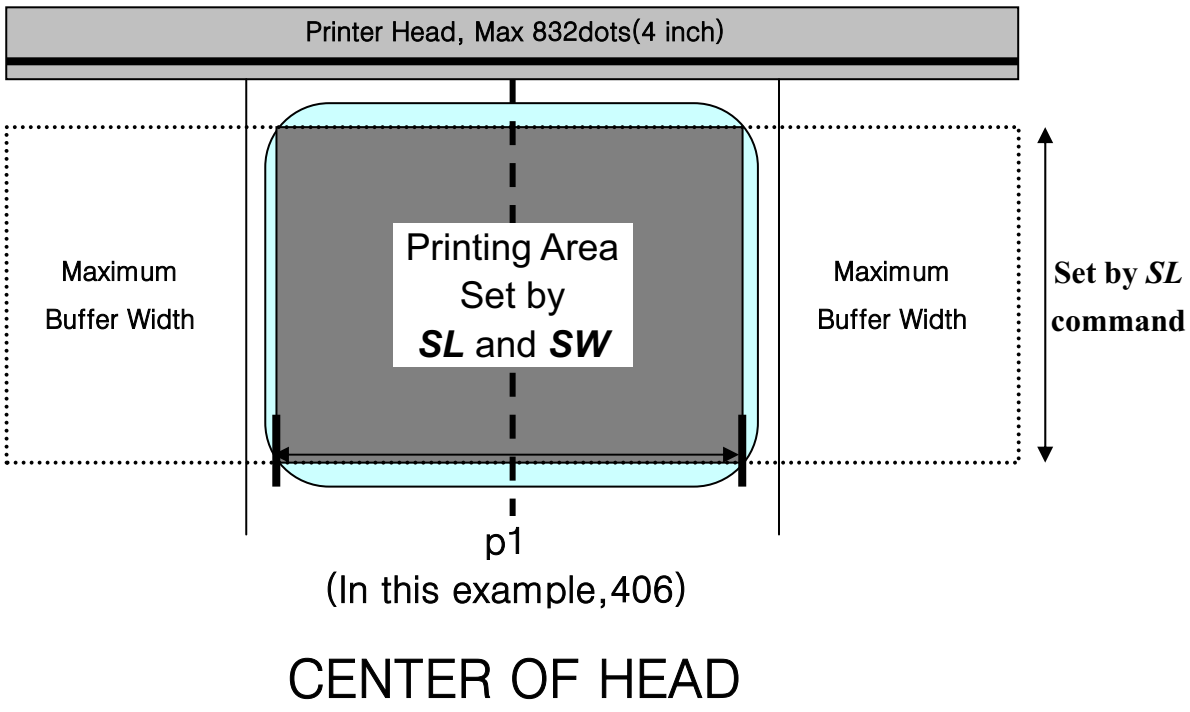
p1 : Label width [dots]

♣ The default value of label width is 4.1 inch(832 dots) and that is the maximum printable width.

♣ SRP770 is the center aligned printer and media is positioned in the center of the head.

Example

SW406 // Set label width to 2 inch(406 dots)



SB – *Set Buffer mode*

Description

Set double buffer mode

Syntax

SB*p1*

Parameters

p1 : Enable **'Double Buffering'** function.

0 : Disable double buffer mode

1 : Enable double buffer mode(Default)

♣ Double buffering feature enables the printer to construct a second image buffer for a new label while printing the first image buffer.

♣ SRP770 provides two image buffers having maximum 4inch * 6inch.
(Max 832 dots width * 1216 dots height)

♣ Double buffering feature is valid only when the label length set by SL command is less than 1216 dots(6inch).

♣ If label length is over 1216 dots, double buffer mode is automatically cancelled.

CB – *Clear Buffer*

Description

Clear image buffer and be ready to make a new label.

Syntax

CB

Example

CB // Clear Image Buffer

3. Printer Setting Commands

To Set variable functions of printer

1) SS
Set printer speed

2) SD
Set printing density

3) SO
Set printing orientation

4) SP
Set serial port

SS – *Set Speed*

Description

Set print speed

Syntax

SS*p1*

Parameters

p1 : Speed set value

Value	Speed	Dip1-2	Dip1-1
0	2.5 ips	Off	Off
1	3.0 ips	Off	On
2	4.0 ips	On	Off
3	5.0 ips	On	On

SD – *Set Density*

Description

Set printing density

Syntax

SD*p1*

Parameters

p1 : Density value : **0 ~ 20** (0 is the lowest density)

SO – *Set Orientation*

Description

Set printing direction

Syntax

SO*p1*

Parameters

p1 : Printing direction

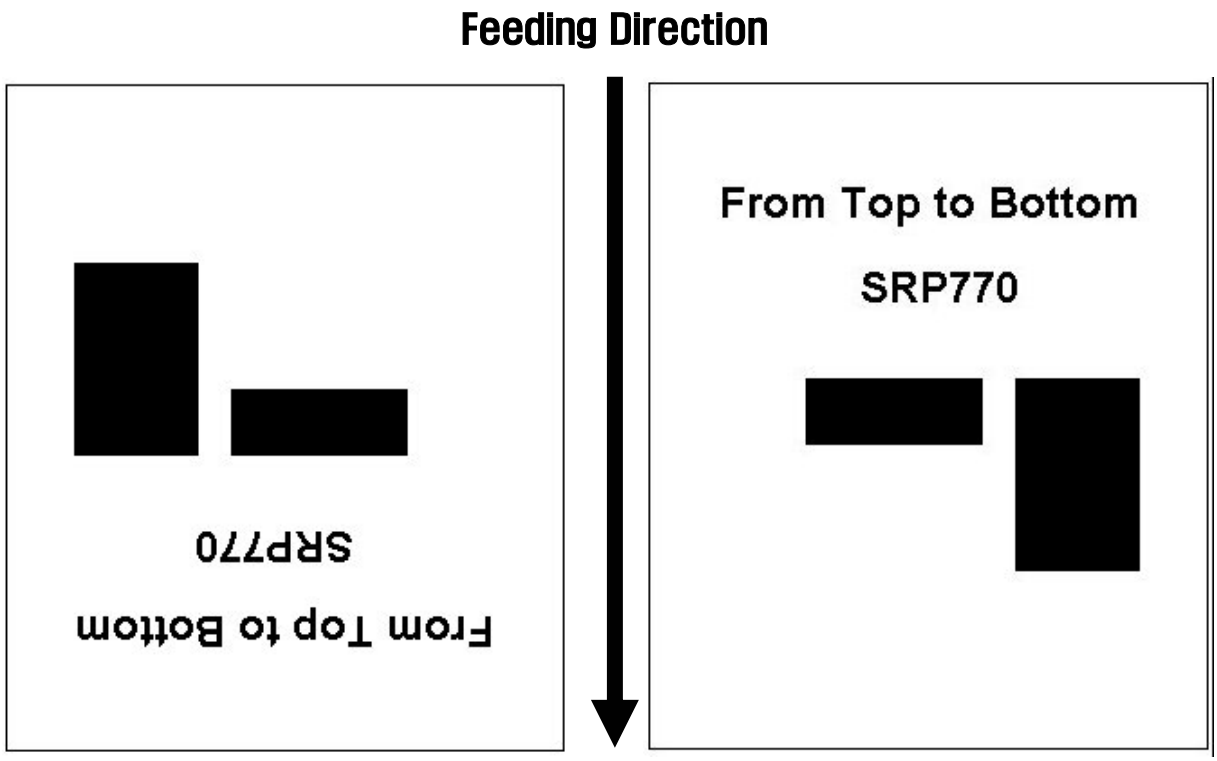
T : Print from top to bottom(default)

B : Print from bottom to top

Example

SOT // Print from top of the image buffer to bottom.

SOB // Print from bottom of the image buffer to top.



1. SOT (Print from Top to Bottom)

2. SOB (Print from Bottom to Top)

SP – *Set Port*

Description

Set serial port.

Syntax

SP*p1,p2,p3,p4*

Parameters

p1 : Baud rate

Value	Baud Rate(bps)	Dip1-2	Dip1-1
0	9,600	Off	Off
1	19,200	Off	On
2	38,400	Not supported by dip switch	
3	57,600	On	Off
4	115,200	On	On

♣You can change setting by both 'SP' command and Dip s/w.

♣When power is turned on, the printer is set by Dip s/w.

♣'SP' command is prior to the DIP s/w settings.

p2 : Parity

Value	Parity
O	Odd parity
E	Even parity
N	***No parity(Default)***

p3 : Number of data bits

Value	Data bits
7	7 bit
8	***8 bits (Default)***

p4 : Number of stop bits

Value	Stop bits
1	***1 bit(Default)***
2	2 bits

4. Variable Related Commands

Variables and counters related commands

1) SC

Counters which is used in template sequence

2) AC(Auto Counter)

Counters which is used in normal commands sequence
(not in template sequence)

3) SV

Set variable

4) ?

Get data for counter and variable

5) PV

Print with variables

SC – *Set Counter*

Description

Define one counter of total 10 counters.

Counters must be used in Template sequence and execute consecutive auto-numbering function.

Syntax

SC*p1,p2,p3,p4*,**'Prompt'**

Parameters

p1 : Identity of Counter : 0 ~ 9

♣ Total 10 counters, from C0 to C9, are provided.

p2 : The size of the field which displays the content of counter : 1 ~ 27

p3 : Justification in field(Field size is p2)

Value	Justification
N	No
R	Right
L	Left
C	Center

p4 : Step Value : ±1 ~ ±9

♣ + or – symbol must precede . Ex) –2 or +3

'Prompt' : This ASCII text field is used to ask a starting counter value to be entered for the counter(p1) and will be transmitted to the host by serial interface.

♣ The data field of T(Text) or B(Barcode) commands is used to print the contents of counter.

♣ SC must be used just in Template sequence. If you want to use counter function in normal mode(not use Template), use the AC(Auto Counter) command described in next page.

Example

SC0,7,N,+3,'Please Enter Serial Number'

AC – *Auto Counter*

Description

Define one counter of total 10 counters.

Counters can be used in normal mode(not in Template) and execute consecutive auto-numbering.

Syntax

AC*p1,p2,p3*,**'Start Value'**

Parameters

p1 : Identity of Counter : 0 ~ 9

♣ Total 10 counters, from C0 to C9, are provided.

p2 : The size of the field which displays the content of counter : 1 ~ 27

p3 : Step Value : ±1 ~ ±9

♣ + or – symbol must precede . Ex) –2 or +3

'Start Value' : Start value of auto-counting. Just digits can be used in this field

---

♣ The Auto-counter defined by AC command can be printed with T and B1 command.

♣ This function is useful to print serial number or serial barcode without using Template.

♣ AC can not be used in Template sequence. If you want to use counter function in Template sequence, use the SC command.

Example

AC0,3,+1,'123' **// Please input the start value of counting between ' marks**

AC1,7,+1,'1234567'

T100,100,3,1,1,0,0,N,N,C0

B1100,400,0,2,7,100,0,1,12,C1

P3,1

SV – *Set Variable*

Description

Define variables for the text or barcode 'data' fields.

Syntax

SV*p1,p2,p3,***'Prompt'**

Parameters

p1 : Identity of Variables : 00 ~ 99

p2 : Maximum number of characters : 1 ~ 99

p3 : Justification in field(Field size is p2)

Value	Justification
N	No
R	Right
L	Left
C	Center

'Prompt' : This ASCII text field is used to ask a value to be entered for the variable(p1) and is transmitted to the host by serial interface.

♣ The data field of T(Text) or B(Barcode) commands is used to print the contents of variable.

♣ Variable is entered to data field like V00 or V01.

Example

SV01,20,N,'Please Enter Product Code :'

? – Get Variables

Description

Use this command to get the content of variables or counters

Syntax

?

Content of variable

♣ Data must be entered in ascending order

Example

TS'Template1'	// Template Store Start
SV00,20,N'Enter Company Name : '	// Declare(Set) variable V00
SV01,15,N'Enter Product Code :'	// Declare(Set) variable V01
T50,30,3,1,1,0,0,N,N,V00	// Use T command to print V00
T50,150,3,1,1,0,0,N,N,'Code : 'V01	// Use T command to print V01
TE	// Template Store End

TR'Template1'	// Recall Template1
?	// Start to get data for variables
SEM	// data for V00
770	// data for V01
P1	**// Start Printing when the P command comes**

Result

SEM
Code : 770

PV – *Print with Variables*

Description

This command is used in template sequence.

The parameters are given by variables.

Syntax

PV*p1,[p2]*

Parameters

p1 : Number of label sets : 1 ~ 65535

p2 : Number of copies of each label : 1 ~ 65535

Example

TS'Template1'	// Template Store Start
SV00,20,N,'Please Input the Name :'	// Declare(Set) variable V00
SV01,5,N,'Input Number of label sets :'	// Declare(Set) variable V01
SV02,5,N,'Input Number of label copies :'	// Declare(Set) variable V02
T50,30,3,1,1,0,0,N,N,V00	// Write V00 to image buffer
PV*V01,V02*	// Print V00, V02 copies, V01 sets
TE	// Template Store End

TR'Template1'	// Recall Template1
?	// Start to get data for variables
This is PV Test	// data for V00
2	// data for V01
1	// data for V02

***** Start Printing as soon as data for all variables(and counters) are entered. *****

5. Template Related Commands.

Template(a certain format of label, sequence of SLCS commands) related commands

1) TS

Indicate start of template sequence store.

2) TE

Indicate end of template sequence store.

3) TR

Recall and reuse stored template.

4) TD

Delete stored template.

5) TI

Print all templates stored in memory.

TS – *Template store Start*

Description

Start template sequence storing.

All the contents following ‘TS’ are stored in memory until meeting ‘TE’ Command.

Syntax

TS’*Template name’*

Parameters

‘Template name’ : This name will be used when ‘Recall’ the stored template.

- ♣ The name is allowed to be up to 10 characters long.
- ♣ The ‘Template name’ is **Case-Sensitive.**

♣ TI command shows the list of currently stored Templates.

TE –*Template store End*

Description

End template sequence storing

Syntax

TE

♣ When storing is finished, the printer sends '!' to the host to prompt end of storing.

Example

TS'Template1' // Start template storing

……

TE // End template storing

TR – *Template Recall*

Description

Recall the stored template from memory to make a label and print that.

Syntax

TR*'Template name'*

Parameters

'Template name' : Indicate the template to be recalled.

- ♣ The name is allowed to be up to 10 characters long.
- ♣ The 'Template name' is **Case-Sensitive.**

Example

TR'Template1' // Recall 'Template1'

♣ If recalled Template does not include any variable or counter, just 'P' command is enough to start printing.

♣ If recalled Template includes variables or counters but not 'PV'(Print with Variables), use '?' command to get data for variables and counters and finally 'P' command is necessary to start printing.

♣ If recalled Template includes PV commands, printing will start as soon as all data for variables and counters are entered.

TD – *Template Delete*

Description

Delete stored template from memory

Syntax

TD*'Template name'*

Parameters

'Template name' : Indicate the template to be deleted.

- ♣ The name is allowed to be up to 10 characters long.
- ♣ The 'Template name' is **Case Sensitive**.
- ♣ By using *****, all templates will be deleted from memory.

Example

TD'Template1'	// Delete 'Template1'
TD*	// Delete all currently stored templates

TI – *Template Information*

Description

Print list of currently stored templates and available memory space

Syntax

TI

Example

TI

Result

```
Templates Information
=========================
1. Template1
2. Template2
Available template memory : 53Kbyte
```

6. Image Related Commands.

These commands provide functions to download and print graphic data.
PCX and BMP format file are supported and bitmap image data can be printed directly.

1) IS
Download PCX format image data to NV(Non Volatile) area of memory.

2) IR
Recall and print downloaded image data.

3) ID
Delete image data in NV memory.

4) II
Print all images stored in memory.

5) LD
Draw the bitmap image data directly on specific position on image buffer.

6) BMP
Draw BMP format image file directly on specific position on image buffer.

IS – *Image Store*

Description

Download PCX format Image file into the Printer Memory

Syntax

IS*p1*,**'Image name'**

***** Use the Image Download utility provided by manufacturer**. ***

Parameters

p1 : The size of image file in unit of byte.

- ♣ DIR command of DOS shows this information.

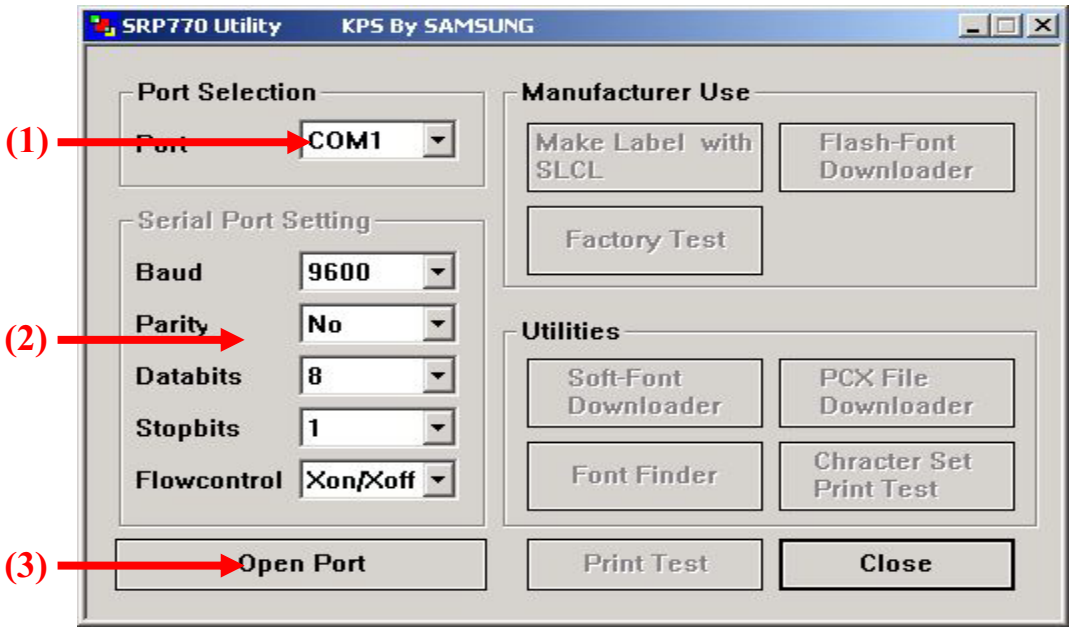
'Image name' : This is the name that will be used when recalling the stored image data.

- ♣ The name is allowed to be up to 10 characters long.
- ♣ The name is case sensitive.

How to download PCX file by using utility program.

Step1. Execute **SRP770Util.exe** provided by manufacturer.

Step2. Open Port

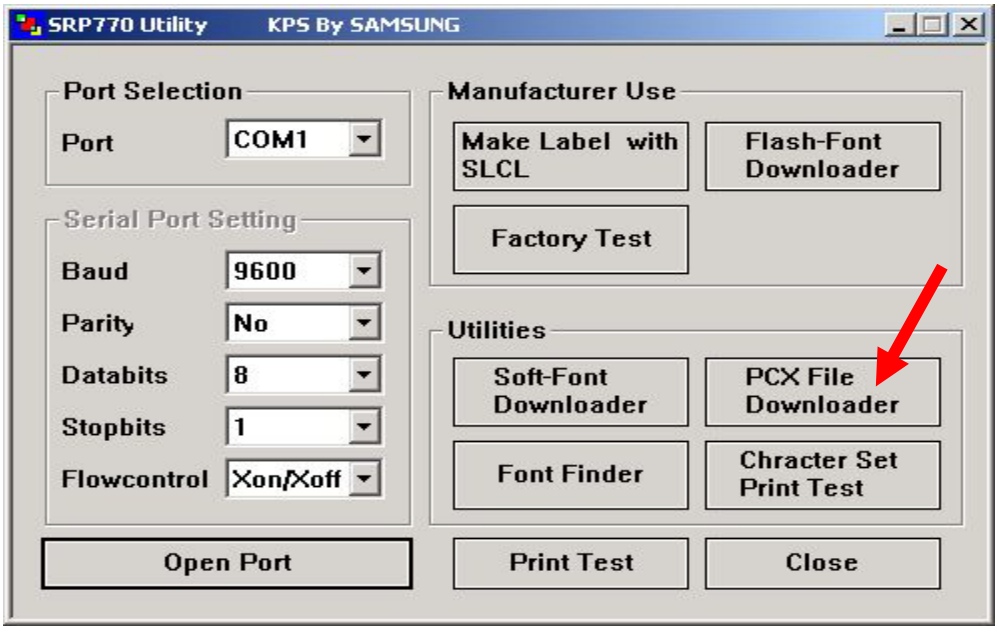


(1) Select Port

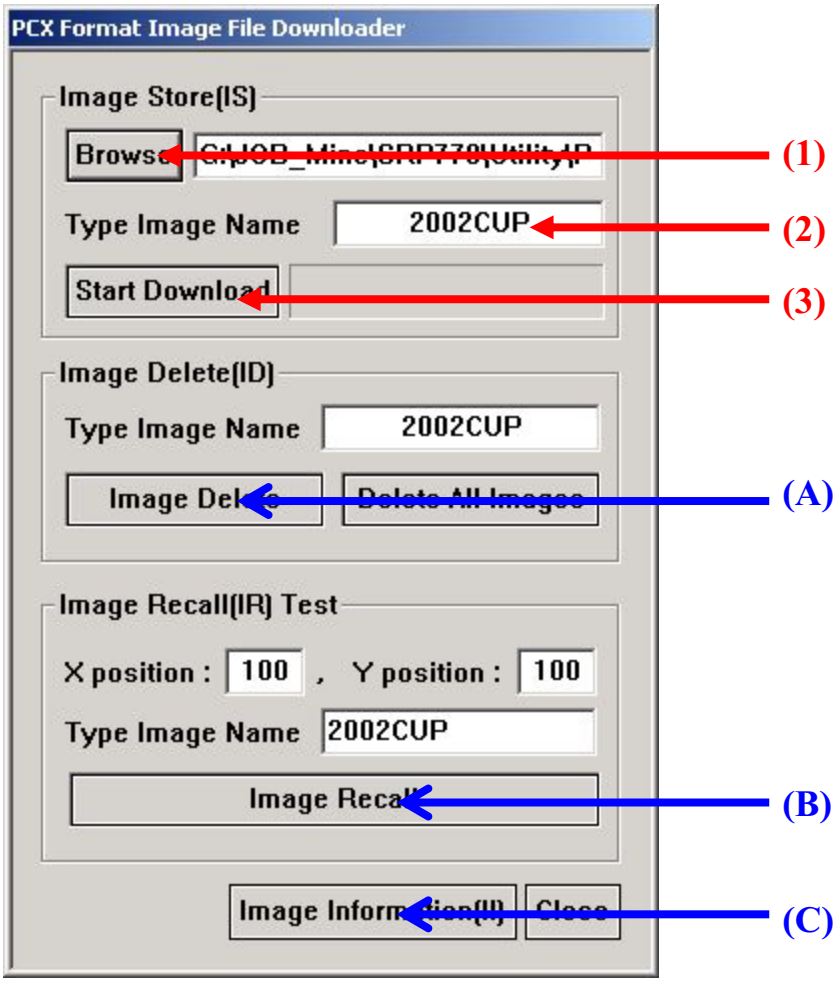
(2) When COM port is selected, adjust Serial port setting to setting of printer.

(3) Click **Open Port** button

Step3. Click **PCX File Downloader** button to start Downloader.



Step4. Download PCX file and store in printer memory.



(1) Click **Browse** button and select PCX file to be downloaded.

(2) Type the image name to be used to recall downloaded image.

The default name is set by the file name and that must be less than 8 characters.

(3) Click **Start Download** button.

♣ You can delete stored images by (A)

♣ You can test IR(image recall) command by (B)

♣ You can see stored images information(II command) by (C)

IR – *Image Recall*

Description

Recall the stored image from memory and draw that on the image buffer.

Syntax

IR*p1,p2*,**'Image name'**

Parameters

p1 : Horizontal position (X) [dot]

p2 : Vertical position (Y) [dot]

'Image name' : Indicate the image data to be recalled.

- **♣ Variable can be used in this field.**
- **♣ The name is allowed to be up to 10 characters long.**
- **♣ This name is Case Sensitive.**

Example

IR30,100,'Image1' // Recall 'Image1'

IR30,100,**V01** // Variable can be used in name field

ID – *Image Delete*

Description

Delete stored image from memory

Syntax

ID*'Image name'*

Parameters

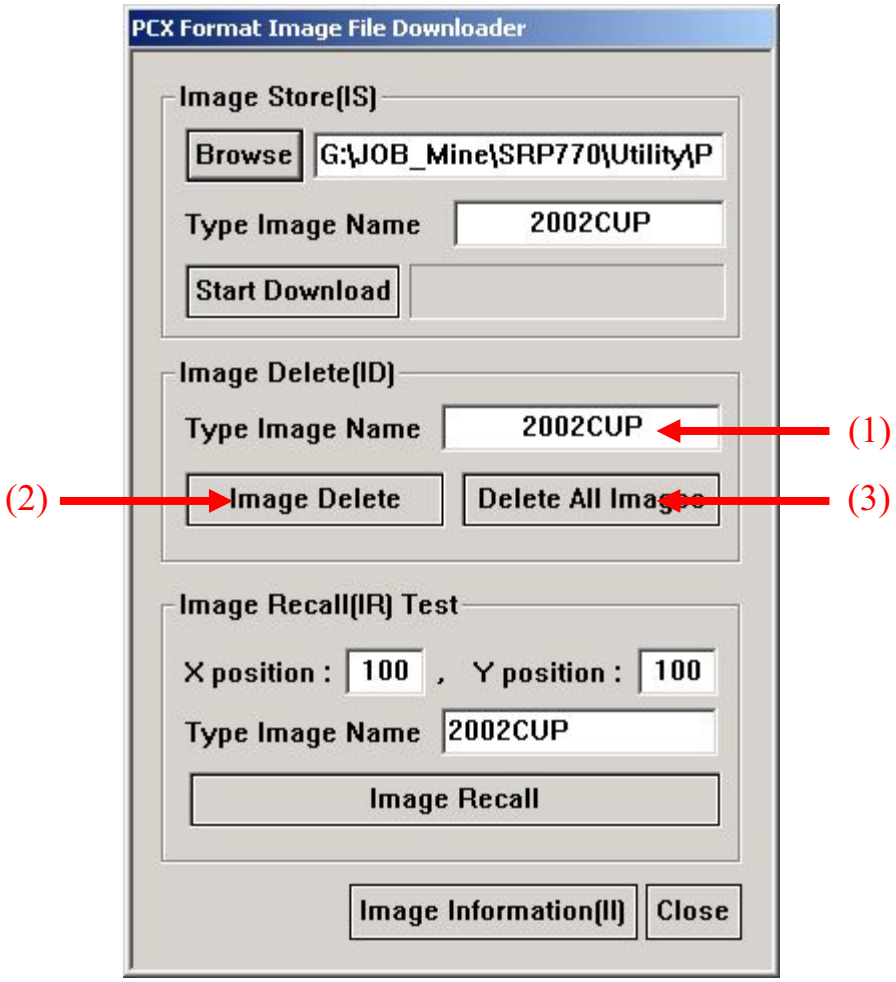
'Image name' : Indicate the Image in memory to be deleted.

- ♣ The name is allowed to be up to 10 characters long.
- ♣ This name is **Case Sensitive**.
- ♣ By using *, all images in memory will be deleted.

Example

ID'Image1'	// Delete 'Image1'
ID*	// Delete all currently stored images

***** You can use the Image Download utility. *****



♣ When you delete the specific image in printer memory

(1) Type the image name to be deleted

(2) Click Image Delete button

♣ When you want to delete all stored images in printer memory

(3) Click Delete All Images button

II – *Image Information*

Description

Print list of currently stored images in memory and available memory space

Syntax

II

Example

II

Result

```
Image Information
=====================
1. Image1
2. Image2
Available Images memory : 5.3Kbyte
```

LD

Draw bitmap image data on specific position of image buffer.

Syntax

LDxL xH yL yH dhL dhH dvL dvH d1~dk

Parameters

xL : Low byte of horizontal start position (X) [dot]
xH : High byte of horizontal start position (X) [dot]
→ Start position in x direction = xH * 256 + xL

yL : Low byte of vertical start position (Y) [dot]
yL : High byte of vertical start position (Y) [dot]
→ Start position in y direction = yH * 256 + yL

dhL : Low byte of the number of bytes in x-direction.
dhH : High byte of the number of bytes in x-direction.
→ Number of data in x direction = dhH * 256 + dhL

dvL : Low byte of the number of lines.
dvH : High byte of the number of lines.
→ Number of data in y direction = dvH * 256 + dvL

d1~dk : bitmap image data.
→ k = (dhH*256 + dhL) * (dvH*256 + dvL)

**** CAUTION ****

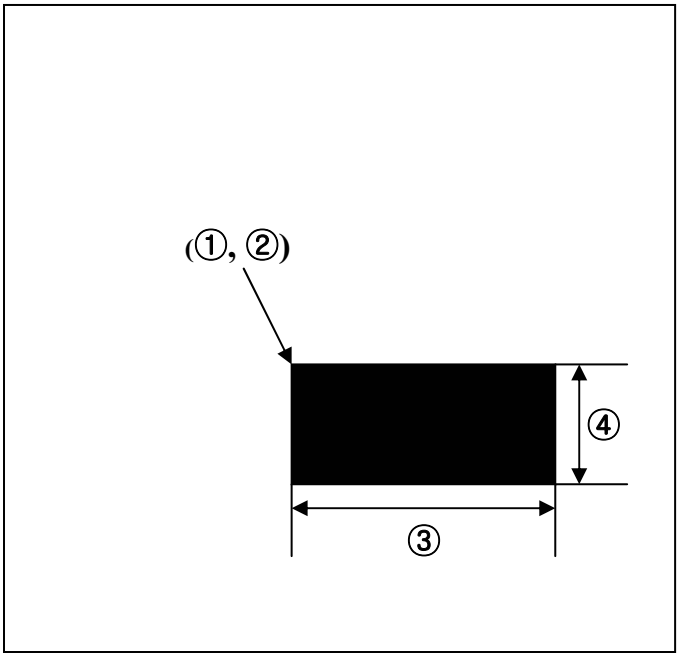
There are no commas(,) and no space between each parameters.

Example

LD 0x11 0x02 0x40 0x02 0x08 0x00 0x20 0x00 0xFF ~ 0xFF

① ② ③ ④ ⑤

① x position : 0x02 * 0x100(256) + 0x11 = 0x211(529)
② y position : 0x02 * 0x100(256) + 0x40 = 0x240(576)
③ horizontal data number : 0x00 * 0x100(256) + 0x08 = 0x08(8)
④ vertical data number : 0x00 * 0x100(256) + 0x20 = 0x20(32)
⑤ bitmap data : total number = 8 * 32 = 256



BMP

Send BMP format file directly to printer. Just white/black BMP file is supported

Syntax

BMPp1,p2↓

Data string of *.bmp

Parameters

p1 : Horizontal position (X) [dot]
p2 : Vertical position (Y) [dot]

---

1. ↓ means 'CR(+LF)'
2. There is comma(,) between p1 and p2.
3. After p2(Before sending BMP data string) 'CR(+LF)' must follow.

Example

In dos mode,
COPY bmp.txt+image2.bmp+P.txt LPT1 /b

Bmp.txt

BMP200,200 ↓

P.txt

P1 ↓

7. Download font Related Commands.

Download fonts into the printer memory. Users can download special size or special design of ASCII font and use this font with T command.

1) DS

Store downloadable fonts to NV(Non Volatile) memory of printer.

2) DD

Delete downloaded fonts from memory

3) DI

Print all downloaded fonts in memory and available memory space.

DS – *Downloadable font Store*

Description

Download soft font in printer memory.

Syntax

DS*p1,p2,p,p4,***'Font Name' Font Data…..**

Parameters

p1 : Font Width

p2 : Font Height

p3 : The number of characters to be downloaded

p4 : Start address of the font map : **0 ~ 255** (not 0x00 ~ 0xFF)

♣ **Please use decimal value not hexadecimal value.**

'Font name' : A ~ Z

→ The soft fonts can be easily downloaded by using the download utility in CD provided by manufacturer.

♣ The ASCII code map (0~255) can be used.

♣ Any size of fonts can be used.

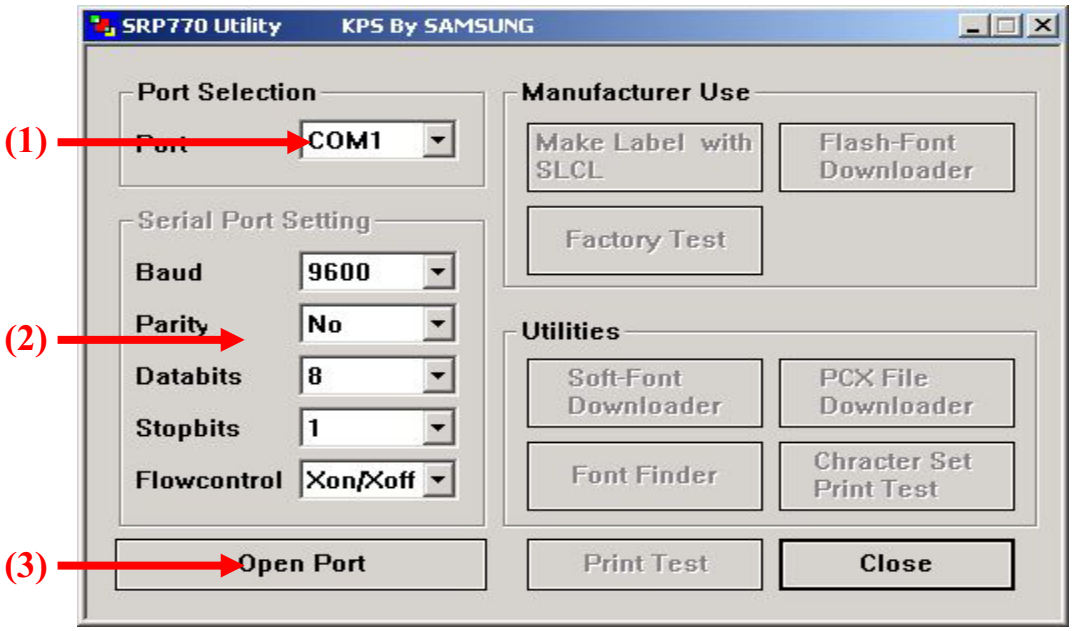
♣ The memory allocated to store soft fonts is total 128 KByte

---

How to download Soft Font by using utility program.

Step1. Execute **SRP770Util.exe** provided by manufacturer.

Step2. Open Port

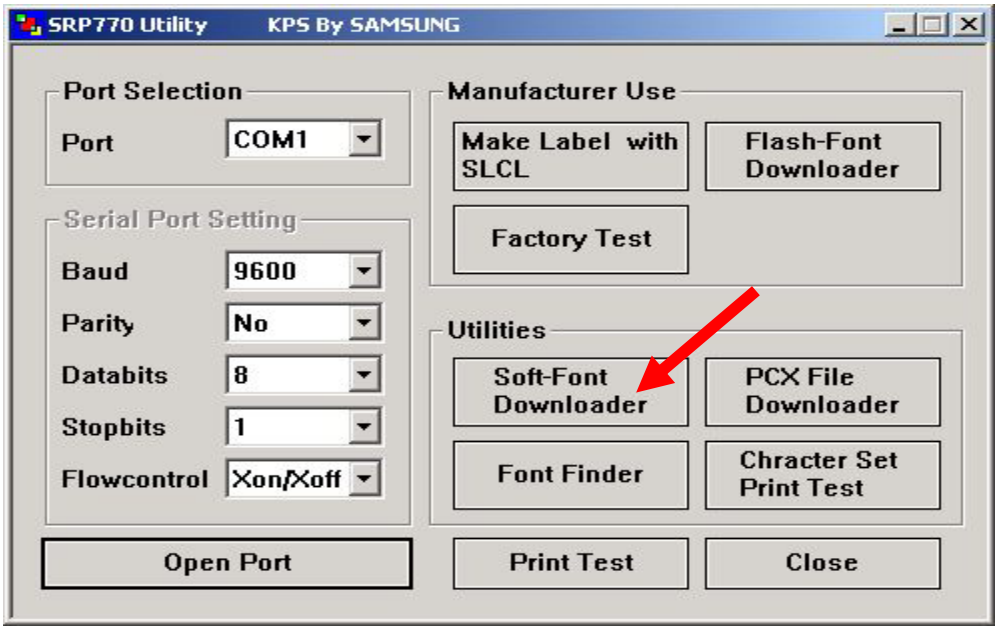


(1) Select Port

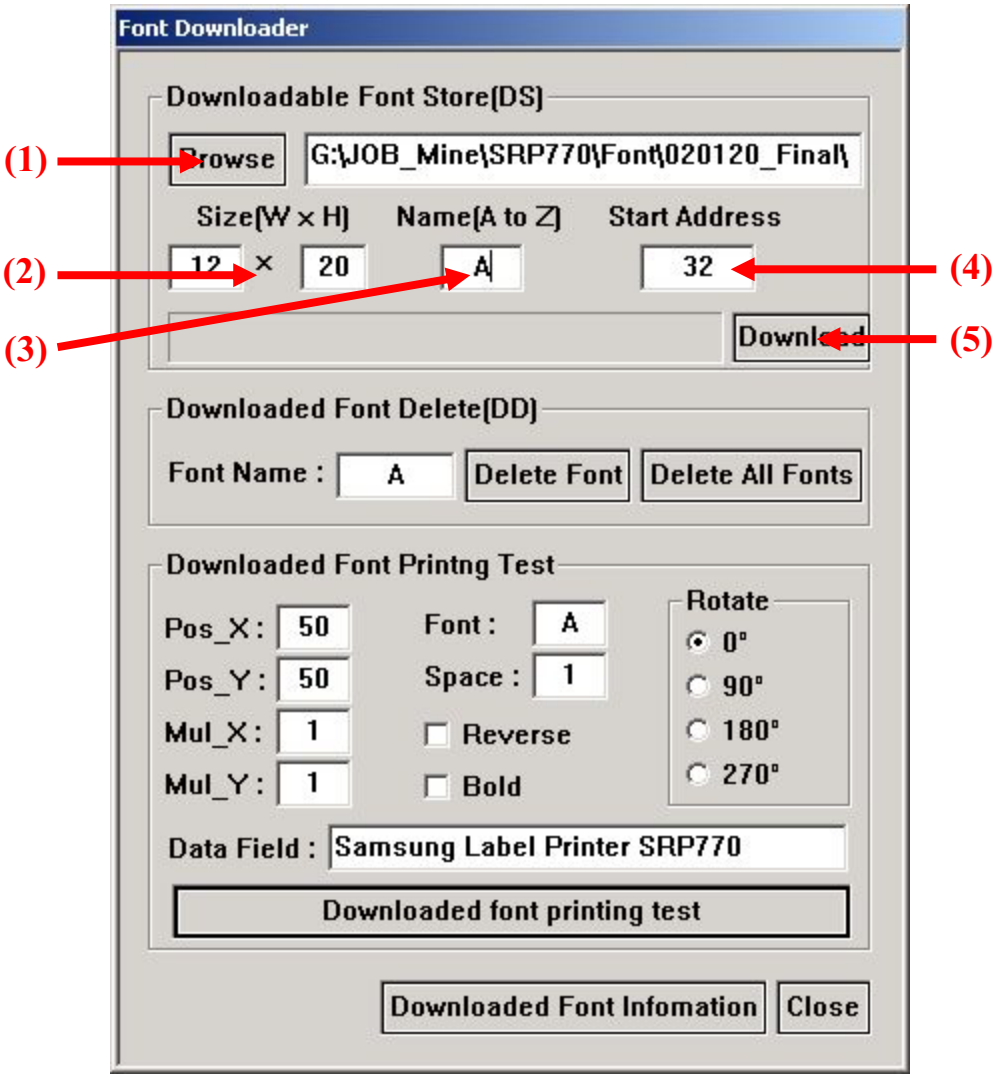
(2) When COM port is selected, adjust Serial port setting to setting of printer.

(3) Click **Open Port** button

Step3. Click **Soft-Font Downloader** button to start Downloader.



Step4. Download PCX file and store in printer memory.



(1) Click **Browse** button and select font file(binary format) to be downloaded.

(2) Type the font size as Width × Height.

(3) Type the font name to be used to select downloaded font in T command.

A to Z can be used as font name(**a to z** are not available).

(4) Type the start address in ASCII code map of font data.

(5) Click **Download** button.

DD – *Downloaded font Delete*

Description

Delete downloaded font from memory

Syntax

DD*'font name'*

Parameters

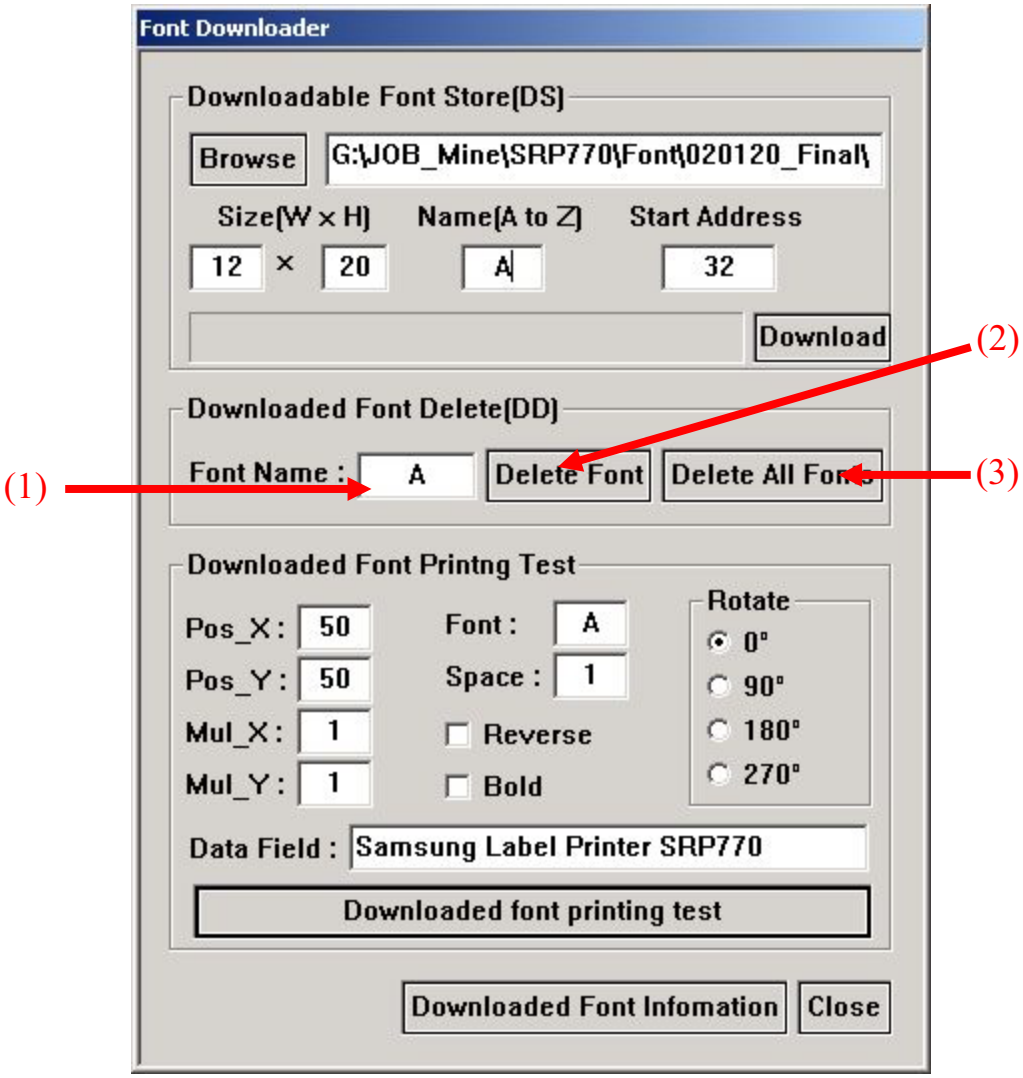
'font name' : Indicate the Image in memory to be deleted.(A~Z)

- ♣ **This name is Case Sensitive.**
- ♣ **By using *, all images in memory will be deleted.**
- ♣ **You can show the downloaded font list by DI command.**

Example

DD'A'	// Delete downloaded font A
DD*	// Delete all downloaded fonts in memory

***** You can delete the downloaded font by using the utility *****



♣ **When you delete the specific font in printer memory**

(1) Type the font name to be deleted.

(2) Click Delete Font button

♣ **When you want to delete all stored font in printer memory**

(3) Click Delete All Fonts button

DI – *Downloaded font Information*

Description

Print list of downloaded font.

Syntax

DI

Example

DI

Result

```
Download Font Information
==============================
Name        w     h      c      Size
==============================
C           16    25     128    6400
G           12    24     224    10752

Free Memory                     179419
==============================
```

♣ **w** : font width, **h** : font height, **c**: total number of characters

8. The Others.

Commands not included in 1 to 7 categories.

1) @
Printer initialization

2) PI
Print information of printer configuration

3) CUT
Enable/Disable Cutting Action

4) ^cp
Check printer status and report 2bytes status data to host.

@ – Initialize printer

Description

Initialize the printer

Syntax

@

PI – *Report Printer Information*

Description

Print current printer setting.

Syntax

PI

CUT – *Auto-cutter Enable/Disable*

Description

Enable or Disable Auto-cut action after printing by 'P' command.

Syntax

CUTp1

Parameters

p1 : Cutting Action Enable/Disable

y : Enable cutter to act after printing is finished.

n : Disable cutter.

♣ This command is not the cutting command itself but cutting enable/disable command.

♣ Cutting is executed immediately after printing is finished by P command if the cutter option is enabled by this CUT command.

♣ The cutter option is initially set by the Dip1-7 when Power is ON and after that the user can control cutter option with this command.

♣ With the cutter enabled, we recommend you set the Dip1-8 as ON state to prevent the printed paper from abruptly spring out the printer.

Example

Cutting is executed after Printing is finished	Cutting is not executed after Printing is finished
T20… B130… BD… … **CUTy** P1	T20… B130… BD… … **CUTn** P1

^cp – *Check Printer Status and Report 2 bytes*

Description

Check printer status and report 2bytes status data to host.

Syntax

^cp

Return Value

1. Format

<1st Byte> <2nd Byte>

2. Table

Return Values		Description	Hex
Byte	**bit**		
1st Byte	7	Paper Empty	0x80
	6	Cover Open	0x40
	5	Cutter jammed	0x20
	4	Thermal Head(TPH) overheat.	0x10
	3	Gap Detection Error(Auto-sensing failure)	0x08
	2	Not assigned	0x04
	1	Not assigned	0x02
	0	Not assigned	0x01
2nd Byte	7	On building label to be printed in image buffer.	0x80
	6	On printing label in image buffer	0x40
	5	Issued label is paused in peeler unit.	0x20
	4	Not assigned	0x10
	3	Not assigned	0x08
	2	Not assigned	0x04
	1	Not assigned	0x02
	0	Not assigned	0x01

3. Examples

When Return Values are		Printer Status is
1st Byte	**2nd Byte**	
0x00	0x00	No Error. The printer is ready to build and print label.
0x80	0x00	No paper is installed in printer.
0x80	0x40	Paper roll out while printing label. When new paper roll is loaded, the printer will re-issue the last label.
0x60	0x40	While printing, cutter is jammed and cover is opened (by user).

^cu – *Check Printer Status and Report 1 byte*

Description

Check printer status and report 1 byte status data to host.

Syntax

^cu

Return Value

1. Format

<1st Byte>

2. Table

Return Values		Description	Hex
Byte	**bit**		
1st Byte	7	Paper Empty	0x80
	6	Cover Open	0x40
	5	Cutter jammed	0x20
	4	Thermal Head(TPH) overheat.	0x10
	3	Gap Detection Error(Auto-sensing failure)	0x08
	2	Not assigned	0x04
	1	Not assigned	0x02
	0	Not assigned	0x01

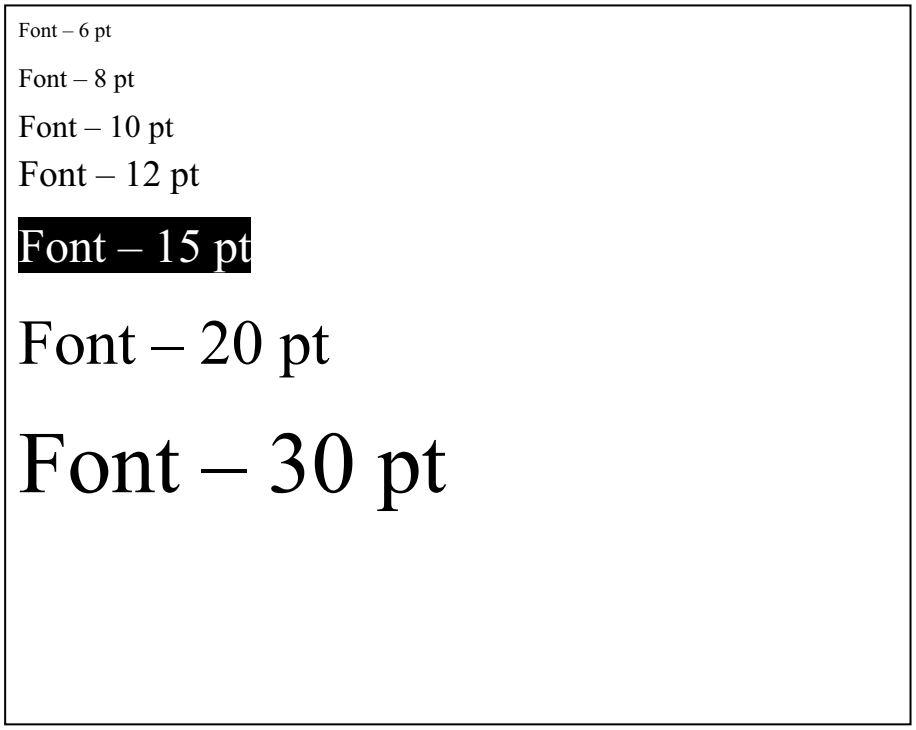
CH3. Programming Example

Example) T_resident

(File location : CD\CommandTest\Commands(SLCS)\Text\T_resident.txt)

```
CB
SS3                                    // Set Speed to 4 ips
SD20                                   // Set Density level to 20
SW800                                  // Set Label Width 800
SOT                                    // Set Printing Orientation from Top to Bottom
T26,20,0,1,1,0,0,N,N,'Font - 6 pt'
T26,49,1,1,1,0,0,N,N,'Font - 8 pt'
T26,81,2,1,1,0,0,N,N,'Font - 10 pt'
T26,117,3,1,1,0,0,N,N,'Font - 12 pt'
T26,156,4,1,1,0,0,R,N,'Font - 15 pt'
T26,200,5,1,1,0,0,N,N,'Font - 20 pt'
T26,252,6,1,1,0,0,N,N,'Font - 30 pt'
P1
```

Result



Example) T_Rotate4

(File location : CD\CommandTest\Commands(SLCS)\Text\T_Rotate4.txt)

CB

SS3

SW832

T300,500,4,1,1,0,0,N,N,'ABCDEFG'

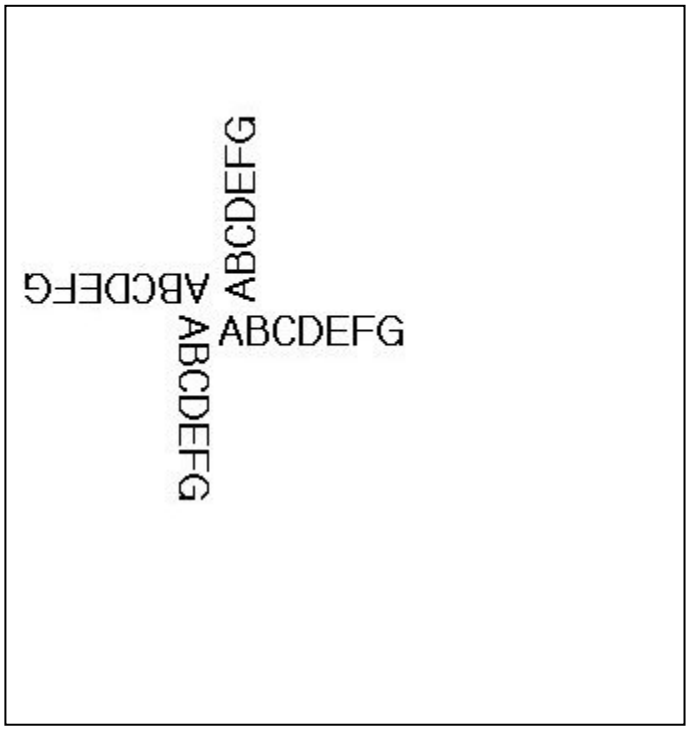
T300,500,4,1,1,0,1,N,N,'ABCDEFG'

T300,500,4,1,1,0,2,N,N,'ABCDEFG'

T300,500,4,1,1,0,3,N,N,'ABCDEFG'

P1

Result



Example) Code39

(File location : CD\CommandTest\Commands(SLCS)\Barcode\Code39.txt)

CB

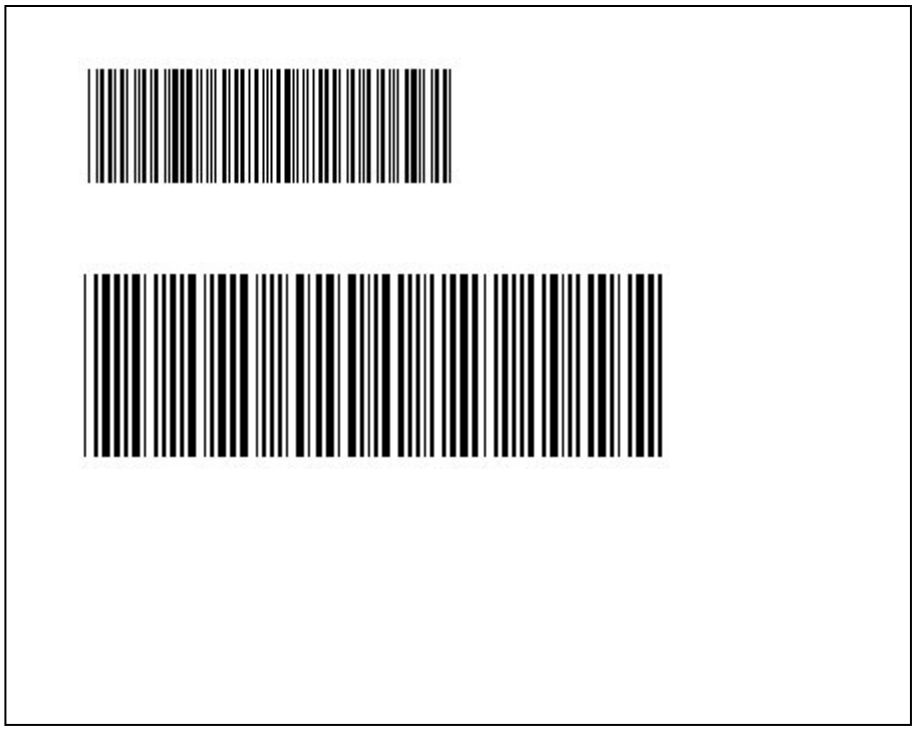
SM10,0

B178,196,0,2,6,100,0,0’1234567890’ **// Caution : The position is not (178,196) but (78,196).**

B150,468,0,4,10,200,0,0’1234567890’

P1

Result

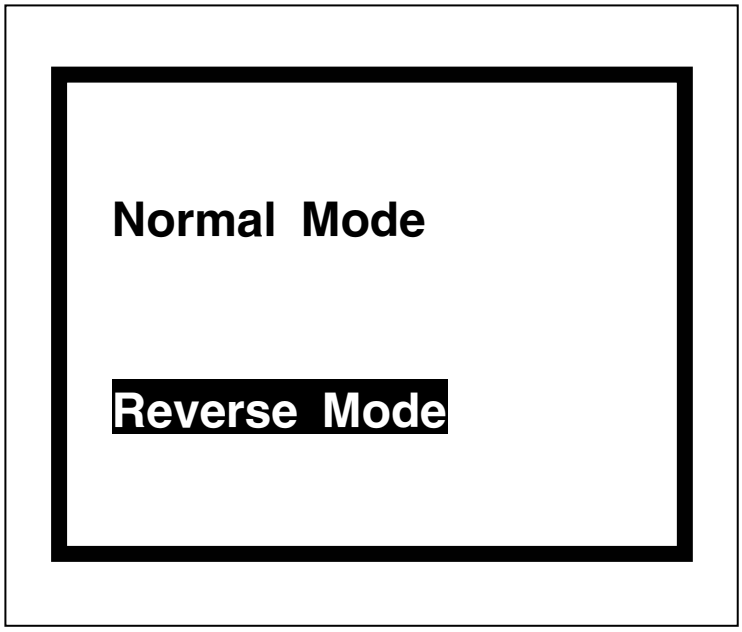


Example) BD1

(File location : CD\CommandTest\Commands(SLCS)\BlockDraw\BD1.txt)

```
SS3                                  // Set Speed to 4 ips
SD20                                 // Set Density level to 20
SW800                                // Set Label Width to 800
CB                                   // Clear Image Buffer

BD50,50,750,500,B,20
T100,150,5,1,1,0,0,N,N,'Normal Mode'
T100,300,5,1,1,0,0,R,N,'Reverse Mode'

SOT
P1
```

Result

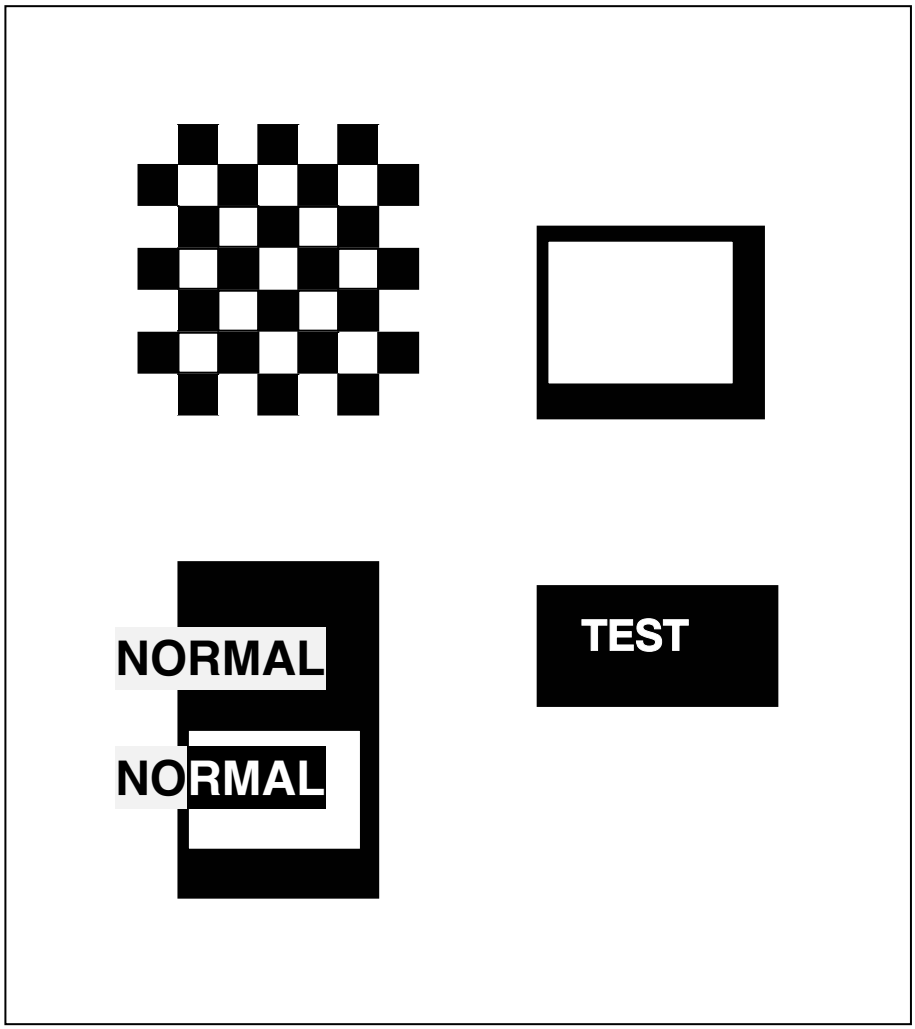


Example) BD3

(File location : CD\CommandTest\Commands(SLCS)\BlockDraw\BD3.txt)

```
SS3                          // Set Printing Speed to 4 ips
SD20                         // Set Printing Density level to 20
SW800                        // Set Label Width to 800
CB                           // Clear Image Buffer

BD50,100,400,150,O           // Draw a block in Overwriting Mode
BD50,200,400,250,O
BD50,300,400,350,O
BD100,50,150,400,E           // Draw a block in Exclusive OR mode
BD200,50,250,400,E
BD300,50,350,400,E
BD500,200,700,400,O
BD510,210,670,370,D          // Draw a block in Delete mode, namely Erase block area
BD100,600,350,1000,O
T50,700,5,1,1,0,0,N,N,'NORMAL'   // Write Text data on image buffer
T50,800,5,1,1,0,0,N,N,'NORMAL'
BD110,780,340,900,E
T500,700,5,1,1,0,0,n,N,'TEST'
BD480,680,700,800,E

SOT                          // Set Printing Orientation from Top to Bottom
P1                           // Start Printing
```

Result

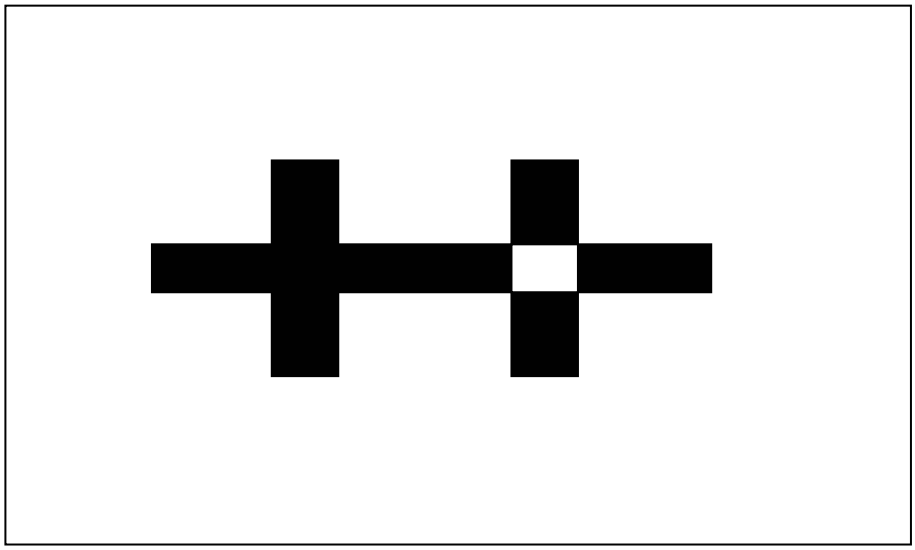


Example) BD4

(File location : CD\CommandTest\Commands(SLCS)\BlockDraw\BD4.txt)

```
CB
SW800
SM10,0

BD100,300,550,330,O          // Overwrite mode
BD200,200,250,430,O          // Overwrite mode
BD400,200,450,430,E          // Exclusive OR mode

P1
```

Result



Example) BD5

(File location : CD\CommandTest\Commands(SLCS)\BlockDraw\BD5.txt)

CB

SW800

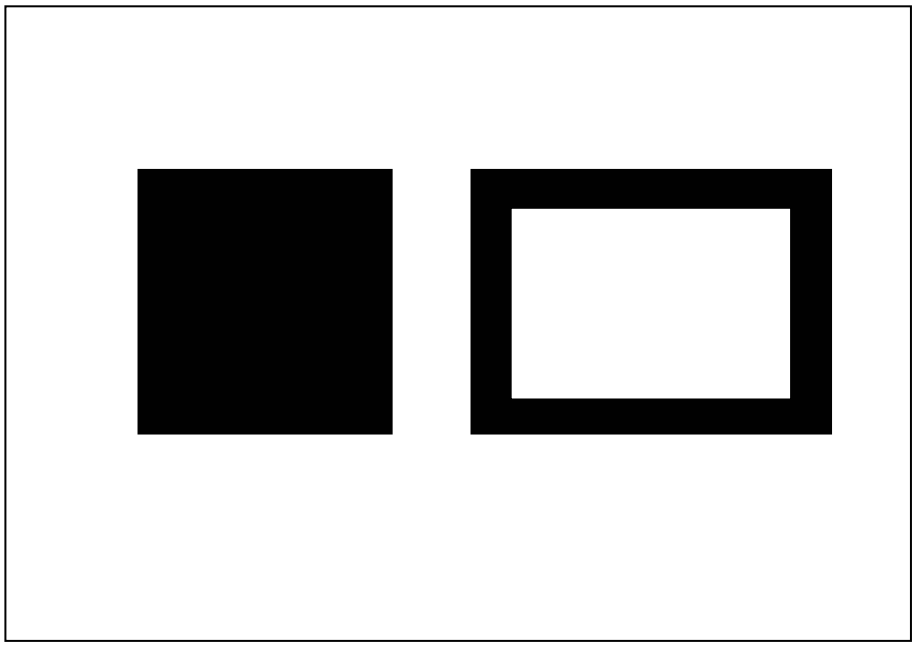
SM10,0

BD100,300,300,500,O

BD400,300,700,500,B,*30* // Box mode, additional parameter follows

P1

Result



Example) Slope

(File location : CD\CommandTest\Commands(SLCS)\BlockDraw\Sope.txt)

CB

SS3

SD20

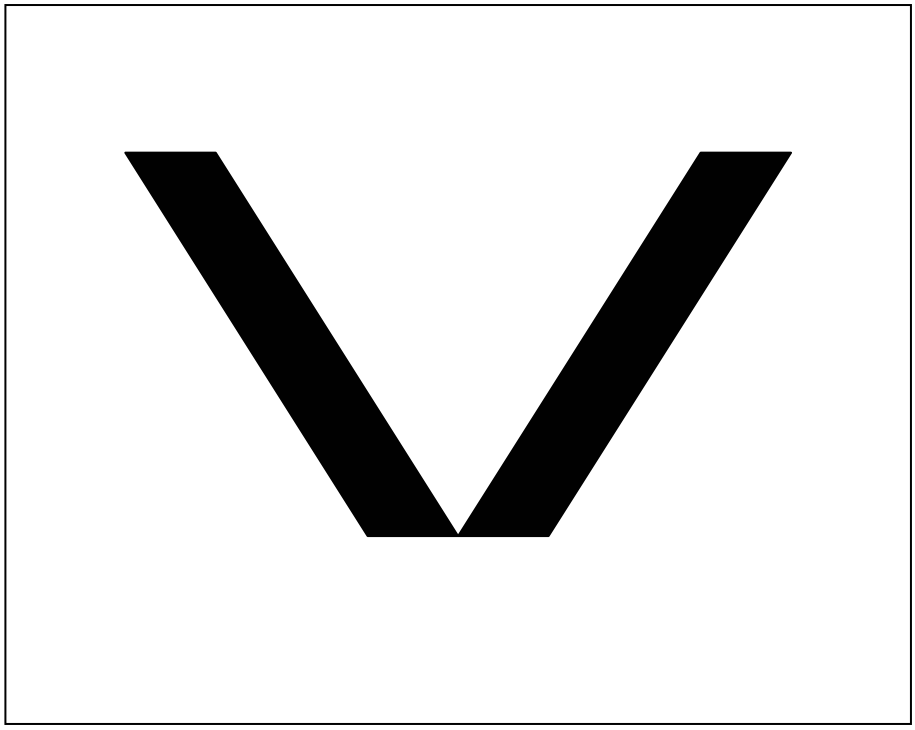
SW8000

BD100,300,300,800,**S,*100*** **// Slope mode, additional parameter follows**

BD600,300,400,800,**S,*100***

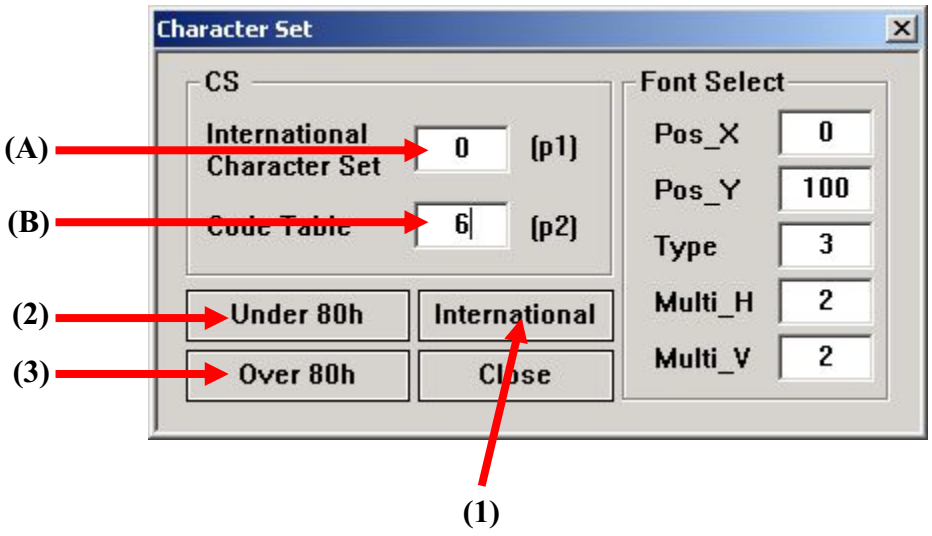
P1

Result



Example) CS(Character Set) Test - Use the Test program.

(File location : CD\Utililties\TestUtility\770TestUtil.exe)



(1) Click this button, then all international characters will be printed.

(2) Click this button, then ASCII characters(under 80h) will be printed.

!! International character set can be selected by changing (A) from 0 to 9.

(3) Click this button, then Code Table(over 80h) will be printed.

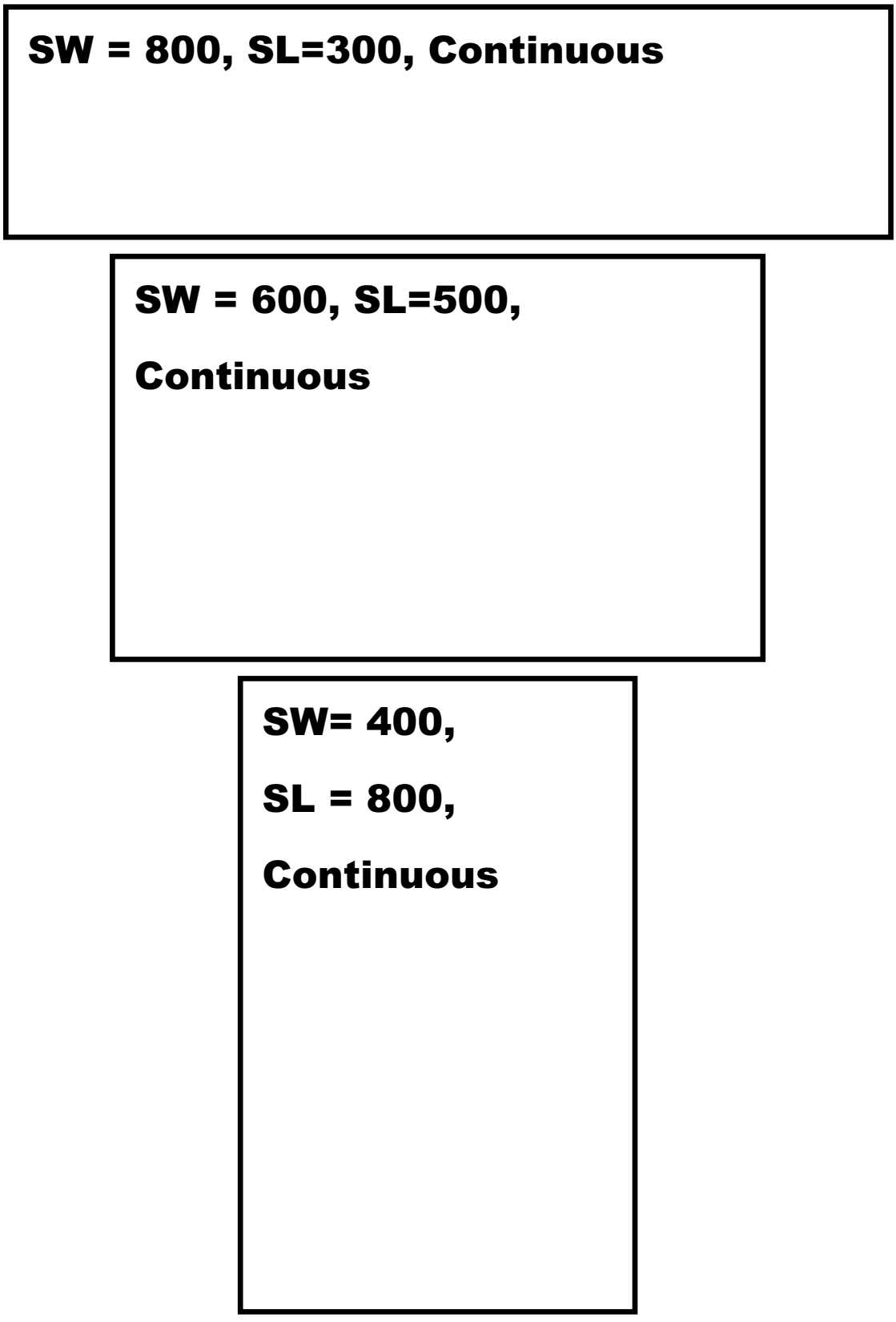
!! Code table can be selected by changing (B) from 0 to 6.

Example) SW&SL

(File location : CD\CommandTest\Commands(SLCS)\Setting\SW&SL.txt)

```
CB
SS3
SD20

SW800                                   // Set Label Width to 800
SL300,10,C                              // Continuous type
BD0,0,800,300,B,10
T30,40,4,1,1,0,0,N,N,'SW=800, SL=300, Continuous'
P1

SW600
SL500,10,C
BD0,0,600,500,B,10
T30,40,4,1,1,0,0,N,N,'SW=600, SL=500'
T30,100,4,1,1,0,0,N,N,'Continuous'
P1

SW400
SL800,10,C
BD0,0,400,800,B,10
T30,40,4,1,1,0,0,N,N,'SW=400'
T30,90,4,1,1,0,0,N,N,'SL=800'
T30,140,4,1,1,0,0,N,N,'Continuous'
P1
```

Result

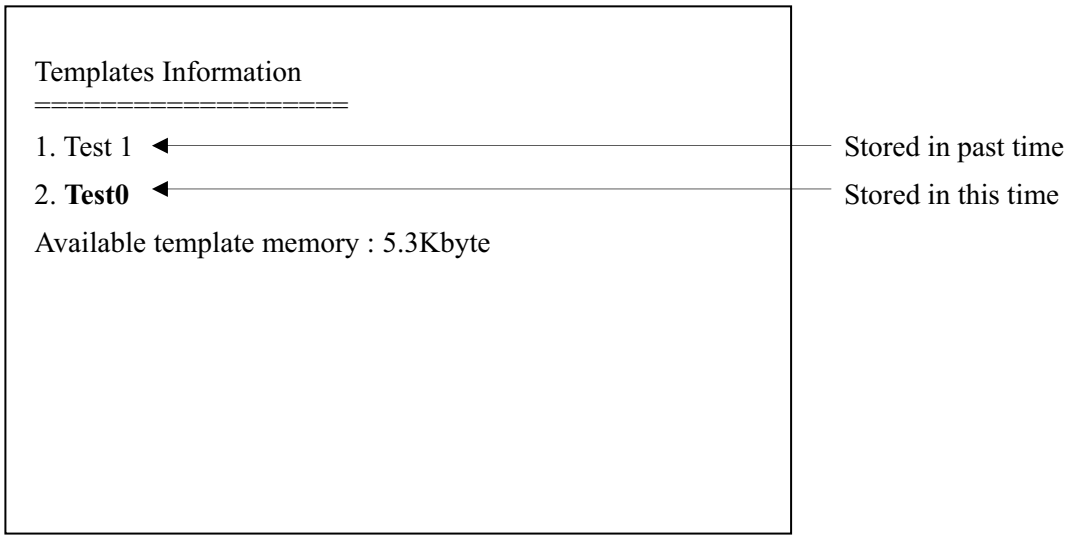

SW = 800, SL=300, Continuous
SW = 600, SL=500,
Continuous
SW= 400,
SL = 800,
Continuous

Example) TEST00_TS

(File location : CD\CommandTest\Commands(SLCS)\Template\Test00\TEST00_TS.txt)

TD'**Test00**'	// Template Delete
TS' **Test00'**	// Start Template Store
SV00,15,**N**,'Manufacturer :'	// Declare variable V00, field size:15, **No justification**
SV01,15,**R**,'Model Name :'	// Declare variable V01, field size:15, **Right justification**
T50,100,3,1,1,0,0,N,N,'Manufacturer :'V00	// Print variable V00 with some text string
T50,150,3,1,1,0,0,N,N,'Model Name :'V01	// Print variable V01 with some text string
T50,300,3,1,1,0,0,N,N,V00	// Print variable V00 only
T50,350,3,1,1,0,0,N,N,V01	// Print variable V01 only
TE	// End Template Store
TI	// Print and show all templates in memory

Result

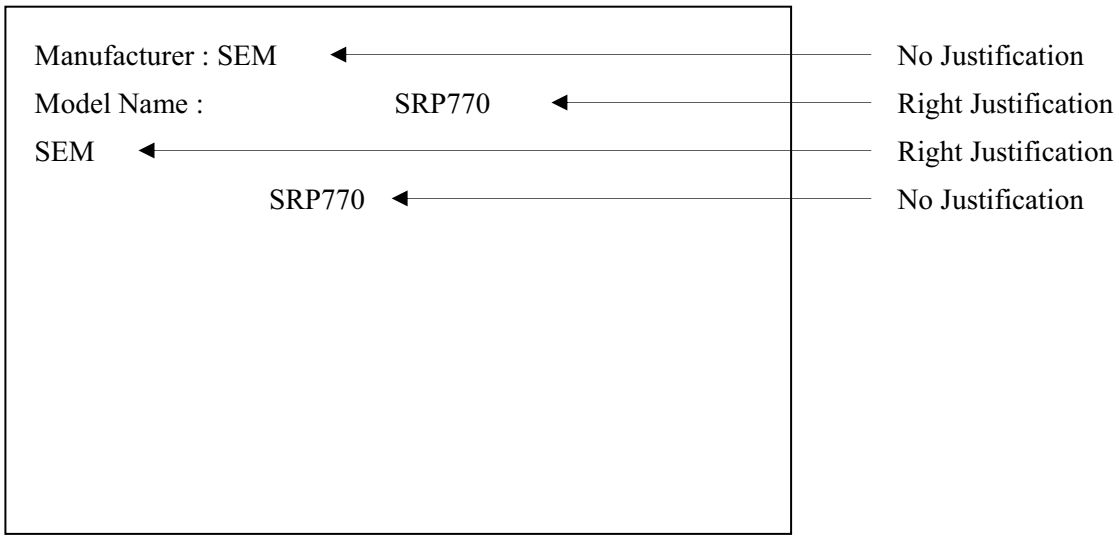


Example) TEST00_TR

(File location : CD\CommandTest\Commands(SLCS)\Template\Test00\TEST00_TR.txt)

TR'**Test00'**	// Recall Stored template 'Test00'
?	// To get contents for variables used in 'Test00'
SEM	// Content for V00
SRP770	// Content for V01
P1	// Print

Result



Example) TEST04_TS

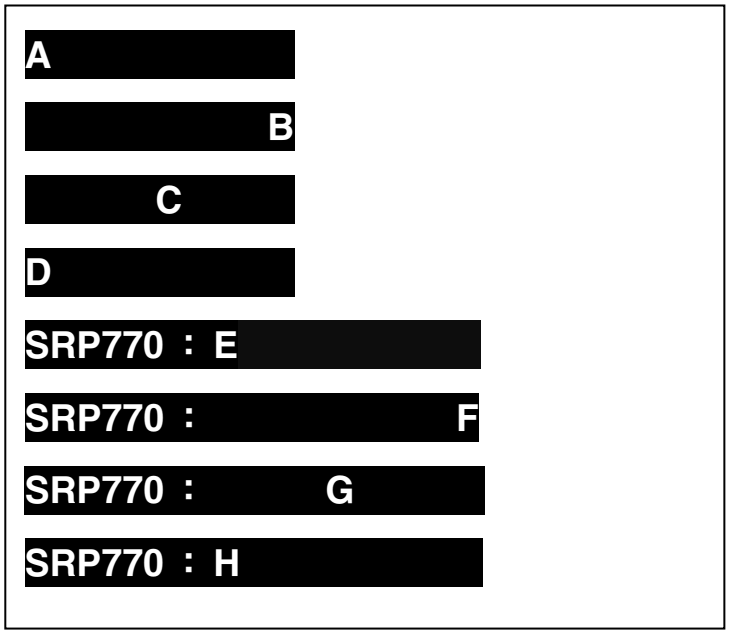
(File location : CD\CommandTest\Commands(SLCS)\Template\Test04\TEST04_TS.txt)

```
TS'Test04'                          // Start Template Store

CB                                  // Clear Image Buffer
SS3                                 // Set Speed to 4 ips
SD20                                // Set Density level 20
SW800                               // Set Label Width to 800
SOT                                 // Set Printing Orientation from Top to Bottom(Default)

SV00,15,L,'prompt'                  // Declare variable V00, field size:15, Left justification
SV01,15,R,'prompt'                  // Declare variable V01, field size:15, Right justification
SV02,15,C,'prompt'                  // Declare variable V02, field size:15, Center justification
SV03,15,N,'prompt'                  // Declare variable V03, field size:15, No justification
SV04,15,L,'prompt'                  // Declare variable V04, field size:15, Left justification
SV05,15,R,'prompt'                  // Declare variable V05, field size:15, Right justification
SV06,15,C,'prompt'                  // Declare variable V06, field size:15, Center justification
SV07,15,N,'prompt'                  // Declare variable V07, field size:15, No justification

T26,50,4,1,1,0,0,R,N,V00            // Print variable only
T26,100,4,1,1,0,0,R,N,V01
T26,150,4,1,1,0,0,R,N,V02
T26,200,4,1,1,0,0,R,N,V03
T26,250,4,1,1,0,0,R,N,'SRP770 :'V04 // Print variable with fixed text data
T26,300,4,1,1,0,0,R,N,'SRP770 :'V05
T26,350,4,1,1,0,0,R,N,'SRP770 :'V06
T26,400,4,1,1,0,0,R,N,'SRP770 :'V07

TE                                  // End Template Store
```

Example) TEST04_TR

(File location : CD\CommandTest\Commands(SLCS)\Template\Test04\TEST04_TR.txt)

TR'Test04'	// Recall Template
?	// Start Get values for variables
A	// data for variable V00
B	// data for variable V00
C	.
D	.
E	.
F	.
G	
H	// data for variable V07
P1	// Start Printing



Example) IR1

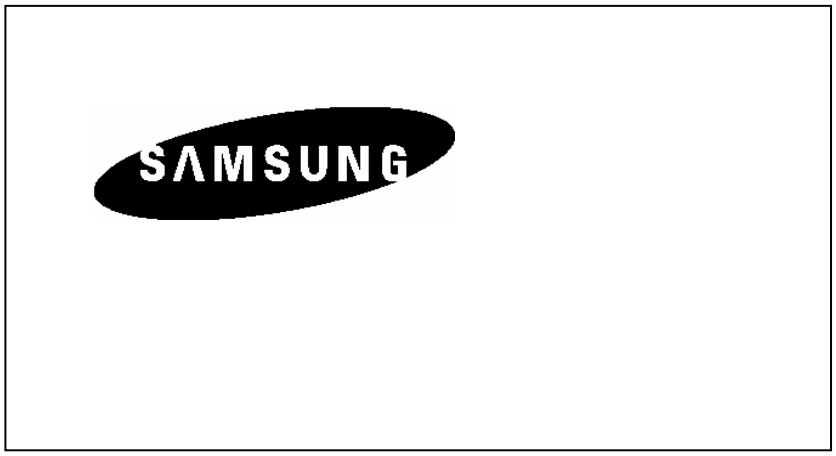
(File location : CD\CommandTest\Commands(SLCS)\PCX\IR1.txt)

IR130,400,'**Samsung**' // Recall stored image data

P1 // Printing

!!! Use the PCXDown utility when you download the pcx image file to printer memory. Refer to IS command.

Result



Example) TEST10_TS

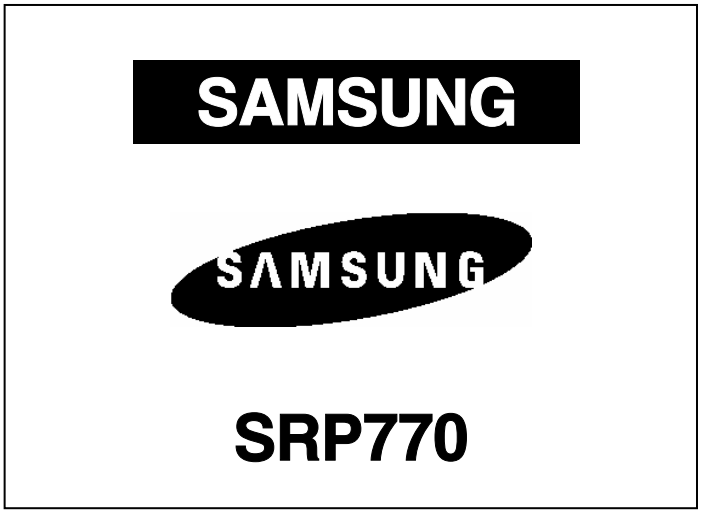
(File location : CD\CommandTest\Commands(SLCS)\Template\Test10\TEST10_TS.txt)

TS'**Test10**'	// Start Template Store
CB	// Clear Image Buffer
SS3	// Set Speed to 5 ips
SD20	// Set Density to 20
SW800	// Set Label Width to 800
SOT	// Set Printing Orientation from Top to bottom
SV00,15,C,'prompt'	// Declare Variable 00
SV01,15,N,'prompt'	// Declare Variable 01
SV02,10,N,'prompt'	// Declare Variable 02
T130,250,5,1,1,0,0,R,N,**V00**	// Print Content of V00
T250,600,5,1,1,0,0,N,N,**V01**	// Print Content of V01
IR130,400,**V02**	// Use V02 as Image Name
TE	// End Template Store

Example) TEST10_TR

(File location : CD\Testfile\Template\Test10\TEST10_TR.txt)

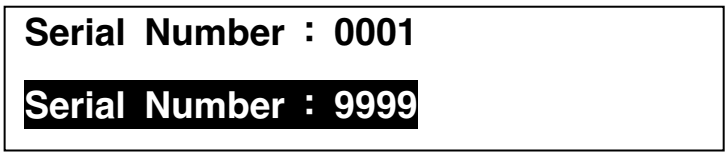
TR'**Test10**'	// Recall Template
?	// Start Get data for variables
SAMSUNG	// data for V00
SRP770	// data for V01
Samsung	// data for V02(Image Name)
P1	// Start Printing

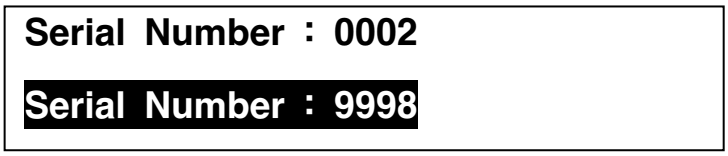


Example) TEST11_TS

(File location CD\CommandTest\Commands(SLCS)\Template\Test11\TEST11_TS.txt)

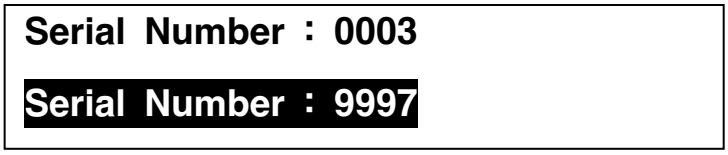
```
TS'Test11'                                  // Start Template Store

CB                                          // Clear Image Buffer
SS2                                         // Set Printing Speed to 4 ips
SD20                                        // Set Density to 20
SW800                                       // Set Label Width to 800
SOT                                         // Set Printing Orientation from Top to Bottom
SC0,4,L,+1,'COUNTER1'                       // Declare Counter 0, Field=4, Step:+1,Left Justi.
SC1,4,N,-1,'COUNTER2'                       // Declare Counter 1, Field=4, Step: -1,No Justi.
T50,50,4,1,1,0,0,N,N,'Serial Number : 'C0   // Print Counter 0
T50,150,4,1,1,0,0,R,N,'Serial Number : 'C1  // Print Counter 1

TE                  // End of Template Store
```

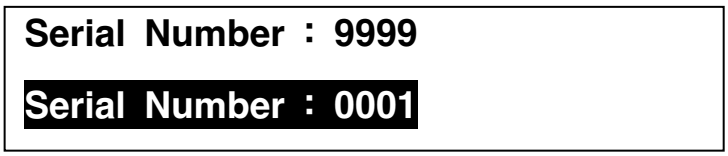


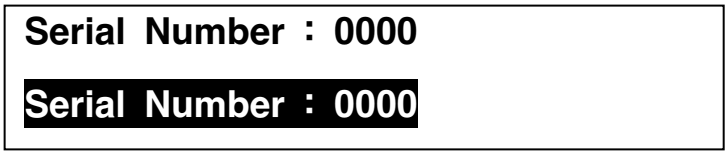


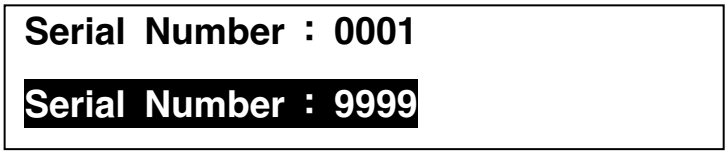
Example) TEST11_TR

```
TR'Test11'          // Recall Template

?           // Start Get values for variables
0001        // data for Counter 0
9999        // data for Counter 1
P3,1

?
9999
0001
P3,1
```









Example) SLCS_UPS

(File location : CD\CommandTest\SampleLabel_by_SLCS\UPSformat.txt)

```
SM20,20
CS0,1
SS3
SD20
SW832
SOT

B210,428,M,2,'002,630,00725,1234,[)>-01  961Z07001156  UPSN  WX9031  013                / 40  N    SAN
JUAN  PR-┘'

T15,5,0,1,1,1,0,N,N,'JESS PANAGIA/MATTY CASTELLANO'
T15,21,0,1,1,1,0,N,N,'(787) 253-2877 '
T15,38,0,1,1,1,0,N,N,'TEST FOR DWT'
T15,55,0,1,1,1,0,N,N,'TEST FOR NO PACKAGE X OF Y'
T15,72,0,1,1,1,0,N,N,'CAROLINA    PR 00979'
T60,160,2,1,1,1,0,N,N,'FOSS DOM TESTCASE'
T60,188,2,1,1,1,0,N,N,'78612345678'
T60,215,2,1,1,1,0,N,N,'UNITED PARCEL SERVICE PR'
T60,243,2,1,1,1,0,N,N,'TEST FOR PLUSFOUR FOR PUERTO RICO'
T60,271,2,1,1,1,0,N,N,'TEST FOR DESCRIPTION'
T60,299,2,1,1,1,0,N,N,'TEST FOR CONSIGNEE BILLING OPTION'
T60,326,4,1,1,1,0,N,N,'SAN JUAN    PR 00725-1234'
T456,9,2,1,1,1,0,N,N,'40 1 '
T507,50,1,1,1,1,0,N,N,'DWT: 15,15,15'
T629,653,3,3,3,1,0,N,B,'2    '
B1265,523,1,3,3,107,0,0,'420007251234'

T258,427,2,2,3,1,0,N,B,'PRI 009 4-00'
T10,664,5,1,1,1,0,N,B,'UPS 2ND DAY AIR'
T10,724,2,1,1,1,0,N,N,'TRACKING #: 1Z WX9 031 02 0700 1156'
BD0,774,812,778,O

T801,1035,1,1,1,1,0,N,N,' '
T10,1031,1,1,1,1,0,N,N,'BILLING: '
T118,1031,1,1,1,1,0,N,N,'CONSIGNEE'
T10,1055,1,1,1,1,0,N,N,'DESC: what ever'
T10,1148,1,1,1,1,0,N,N,'PkgRef2:'
T10,1171,1,1,1,1,0,N,N,'Pkg Ref 5: Label Dom Test 19'
T15,129,2,1,1,1,0,N,N,'SHIP TO: '
BD0,647,810,661,O
BD0,1012,812,1027,O
BD0,423,812,427,O
BD243,423,247,647,O
T382,1193,0,1,1,1,0,N,N,'UOF 12.67.89 Eltron LP2442 12.34 04/2000'
B167,791,1,3,3,208,0,0,'1ZWX90310207001156'
P1
```

Result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