



## USER'S MANUAL SRP-370/372

## THERMAL RECEIPT PRINTER



All specifications are subjected to change without notice <a href="http://www.samsungminiprinters.com">http://www.samsungminiprinters.com</a>

## **Safety Precautions**

In using the present appliance, please keep the following safety regulations in order to prevent any hazard or material damage.





Warning - U.S. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### Notice - Canada

This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

### Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

## INTRODUCTION

The SRP-370/372 Roll Printer are designed for use with electronic instruments such as system ECR, POS, banking equipment, computer peripheral equipment, etc.

The main features of the printer are as follows:

- High speed printing : 47(1/6" Feed) lines per second.
- 2. Low noise thermal printing.
- RS-232, Parallel, USB 3.
- NS-232, Parallel, USB The data buffer allows the unit to receive print data even during printing. Peripheral units drive circuit enables control of external devices such as 4 5. cash drawer.
- 6. Characters can be scaled up to 64 times compared to it's original size.
- 7.
- Bar code printing is possible by using a bar code command. Different print densities can be selected by DIP switches. 8.

Please be sure to read the instruction in this manual carefully before using your new SRP-370/372.

NOTE : The socket-outlet shall be near the equipment and it shall be easy accessible.

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# Chapter 1. Setting Up the Printer

## 1-1. Unpacking

Your printer box should include these items. If any items are damaged or missing, please contact your dealer for assistance.





SRP-370/372

Cover Cable







Roll Paper Operator's manual

nual AC Adapter

Power Code

### 1-2. Connecting the Cables

You can connect up the three cables to the printer. They all connect to the connector panel on the back of the printer, which is shown below:



 $\underline{Notes:}$  Before connecting any of the cables, make sure that both the printer and the host are turned off.

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### 1-3. Connecting the computer

You need an appropriate interface cable.

1. Plug the cable connector securely into the printer's interface connector. 2. Tighten the screws on both sides of the cable connector.



3. Attach the other end of the cable to the computer.

## 1-4. Connecting the Drawer

#### WARNING:

Use a drawer that matches the printer specification. Using an improper drawer may damage the drawer as well as the printer.

#### CAUTION:

Do not connect a telephone line to the drawer kick-out connector; otherwise the printer and the telephone line may be damaged.

Plug the drawer cable into the drawer kick-out connector on the back of the printer next to the power supply connector.

### 1-5. Connecting the Power Supply

### CAUTIONS:

When connecting or disconnecting the power supply from the printer, make sure that the power supply is not plugged into an electrical outlet. Otherwise you may damage the power supply or the printer.

If the power supply's rated voltage and your outlet's voltage do not match, contact your dealer for assistance. Do not plug in the power cord. Otherwise, you may damage the power supply or the printer.

1. Make sure that the printer's power switch is turned off, and the power supply's power

cord is unplugged from the electrical outlet.

2. Check the label on the power supply to make sure that the voltage required by the power supply matches that of your electrical outlet.

3. Plug in the power supply's cable as shown below. Notice that the flat side of the plug faces down.



Power Cable

<u>Notes</u>: To remove the DC cable connector, make sure that the power supply's power cord is unplugged; then grasp the connector at the arrow and pull it straight out.

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### 1-6. Installing or Replacing the Paper Roll

<u>Notes</u>: Be sure to use paper rolls that meet the specifications. Do not use paper rolls that have the paper glued to the core because the printer cannot detect the paper end correctly.

1. Make sure that the printer is not receiving data; otherwise, data may be lost.

2. Open the paper roll cover by pressing the cover-open button.



<u>Notes</u>: Do not open the print cover while the printer is operating. This may damage the printer.

3. Remove the used paper roll core if there is one.

4. Insert the paper roll as shown.



5. Be sure to note the correct direction that the paper comes off the roll.



6. Pull out a small amount of paper, as shown. Then close the cover.



<u>Notes</u>: When closing the cover, press the center of printer cover firmly to prevent paper miss-loading

7. Tear off the paper as shown.





## 1-7. Adjustments and Settings



1)It has 2 features ; Paper end and Black mark. For detecting Paper End, it must be positioned at "a" Position in drawing and it is a factory default setting. For detecting Black mark printed on the paper, it must be moved to "b" position.

 Optical density (O.D) must be higher than 0.6 in density to secure a standard working condition.

Make sure if the density of paper black mark is lesser it might be a cause of normality. 3) Table of O.D value (Reference)





## 1-8. Using the Printer

### **Control Panel**



#### Button

The button can be disabled by the ESC c 5 command.

Press the FEED button once to advance paper one line. You can also hold down the FEED button to feed paper continuously.

### Panel lights

POWER The POWER light is on whenever the printer is on.

ERROR

This indicates an error.

PAPER OUT This light indicates the near end of the paper roll. Install a new paper roll and the printer Will continue printing.

When the light blinks, it indicates the self-test printing standby state or macro execution Standby state when the macro execution command is used.

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## 1-9. Setting the DIP Switches

### Serial Interface(RS-232C, RS-485) Specification

### **DIP Switch Set 1 Functions**

Switch No.	Function	ON	OFF	Default
SW1-1	Paud Data Calentian	Defer to be	alaus Tabla	OFF
SW1-2	Baud Rate Selection	Refer to be	elow Table	OFF
SW1-3	Handshaking	Hardware (DTR/DSR)	Software (Xon/Xoff)	OFF
SW1-4	Reserved			OFF
SW1-5	Cutter Function	Disable	Enable	OFF
SW1-6	Paper	2 Color	Mono	OFF
SW1-7	Reserved			OFF
SW1-8	Reserved	-	-	ON

#### **Baud rate selection**

SW1-1	SW1-2	Trans- Speed	Remark
OFF	OFF	9600 Baud	
ON	OFF	19200 Baud	
OFF	ON	38400 Baud	
ON	ON	115200 Baud	Default

### **Dip Switch Set 2 Functions**

Switch No.	Function	ON	OFF	Default
SW2-1				OFF
SW2-2	Select Print Density	Refer to b	Refer to below Table	
SW2-3				OFF
SW2-4	Historical Control	Enable	Disable	OFF
SW2-5	Reserved	-	-	OFF
614/2 C	Interface Condition	by Memory	by DIP	055
SW2-6	Selection	Switch	Switch	OFF
SW2-7	Reserved			OFF
SW2-8	Printing width	2" Printing	3" Printing	OFF

SW 2-1	SW 2-2	SW 2-3	Print Density	Remark
ON	ON	ON	130%	
OFF	ON	ON	120%	
ON	OFF	ON	110%	
OFF	OFF	ON	105%	
OFF	OFF	OFF	100%	Default
ON	OFF	OFF	95%	
OFF	ON	OFF	90%	
ON	ON	OFF	80%	

Print Density

### Parallel/USB Interface Specification

Switch No.	Function	ON	OFF	Default
SW2-1				OFF
SW2-2	Select Print Density	Refer to b	elow Table	OFF
SW2-3				OFF
SW2-4	Historical Control	Enable	Disable	OFF
SW2-5	Reserved		-	OFF
SW2-6	Interface Condition	by Memory	by DIP	OFF
C11/2 7	Selection	Switch	Switch	055
SW2-7	Reserved			OFF
SW2-8	Printing width	2" Printing	3" Printing	OFF

SW 2-1	SW 2-2	SW 2-3	Print Density	Remark
ON	ON	ON	130%	
OFF	ON	ON	120%	
ON	OFF	ON	110%	
OFF	OFF	ON	105%	
ON	OFF	OFF	100%	Default
OFF	OFF	OFF	95%	
OFF	ON	OFF	90%	
ON	ON	OFF	80%	
		Print De	nsity	

	Di	p Switch Set 1			
SW 5	SW 5 ON Auto Cutter Disabled				
Application	Application Ignores Auto Cutter error for continuous printing.				

\* Auto Cutter Enable / Disable selection

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## 1-10. Setting the Memory Switches

This printer has "Memory Switch" set which is software switches. Memory Switch set has "MSW1", "MSW2", "MSW8", "MSW9" "Customize value", "Serial communication condition". "Memory Switch setting utility" can change the Memory Switch set to ON or OFF as shown in the table below (default : all OFF) :

Notes : The Memory Switch is available to be changed by three methods : - Memory Switch setting utility. - Control from ESC/POS command.

Settings of the Memory Switch are stored in the NV memory : therefore, even if the printer is turned off, the settings are maintained.

MSW1

Switch	Function	ON	OFF
1~4	Reserved		Fixed to OFF
5	Auto Line Feed	Enable	Disable
6~8	Reserved	-	Fixed to OFF

MSW2

Switch	Function	ON	OFF
1~2	Reserved		Fixed to OFF
3	Auto Cutter Function	Full Cutting	Partial Cutting
4~8	Code Page Selection	Refer to foll	owing Table

MSW2-8	MSW2-7	MSW2-6	MSW2-5	MSW2-4	Character Table
OFF	OFF	OFF	OFF	OFF	Page 0 437
OFF	OFF	OFF	OFF	ON	Page 1 Katakana
OFF	OFF	OFF	ON	OFF	Page 2 850
OFF	OFF	OFF	ON	ON	Page 3 860
OFF	OFF	ON	OFF	OFF	Page 4 863
OFF	OFF	ON	OFF	ON	Page 5 865
OFF	OFF	ON	ON	OFF	Page 16 1252
OFF	OFF	ON	ON	ON	Page 17 866
OFF	ON	OFF	OFF	OFF	Page 18 852
OFF	ON	OFF	OFF	ON	Page 19 858
OFF	ON	OFF	ON	OFF	Reserved
OFF	ON	OFF	ON	ON	Page 22 864
OFF	ON	ON	OFF	OFF	Page 23 Thai42
OFF	ON	ON	OFF	ON	Page 24 1253
OFF	ON	ON	ON	OFF	
OFF	ON	ON	ON	ON	Reserved
ON	OFF	OFF	OFF	OFF	
ON	OFF	OFF	OFF	ON	Page 28 1251
ON	OFF	OFF	ON	OFF	Page 29 737
ON	OFF	OFF	ON	ON	Reserved
ON	OFF	ON	OFF	OFF	Page 31 Thai16
ON	OFF	ON	OFF	ON	Reserved
ON	OFF	ON	ON	OFF	Page 33 1255
ON	OFF	ON	ON	ON	Reserved
ON	ON	OFF	OFF	OFF	Reserved
ON	ON	OFF	OFF	ON	Page 36 855
ON	ON	OFF	ON	OFF	Page 37 857
MSW8					
Switch		Function		ON	OFF
1~8		Reserved			Fixed to OFF

Switch	Function	ON	OFF
1	Reserved		Fixed to OFF
2	Data Length	7 Bits	8 Bits
3	Parity Selection	Even	Odd
4	Parity Check	Enable	Disable
5	Flow Control	DTR/DSR	XON/XOFF
6~8	Baud Rate Selection	Refer to fol	lowing Table
MSW9-8	MSW9-7	MSW9-6	Baud Rate
OFF	OFF	OFF	9600
OFF	OFF	ON	19200

ON

ON OFF

16

OFF

ON OFF 38400

57600

115200

## Chapter 2. Hexadecimal Dumping

This feature allows experienced users to see exactly what data is coming to the printer. This can be useful in finding software problems. When you turn on the hexadecimal dump function, the printer prints all commands and data in hexadecimal format along with a guide section to help you find specific commands.

To use the hexadecimal dump function, follow these steps:

- 1. After you make sure that the printer is off, open the cover.
- 2. Turn on the printer, while holding down the FEED button.
- 3. Close the cover, then the printer enters the hexadecimal dump mode.
- 4. Run any software program that sends data to the printer. The printer will print all the codes it receives in a two-column format. The first column contains the hexadecimal codes and the second column gives the ASCII characters that corresponds to the codes.

0000: 1B 21	00 1B - 26 02 40 40 ¦	. ! & . @ @
0008: 40 40	02 0D - 1B 44 0A 14	@ @ D
0010: 1E 28	28 28 - 00 01 0A 41 ¦	. ( ( ( A

• A period (.) is printed for each code that has no ASCII equivalent.

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- During the hex dump, all commands except DLE EOT and DLE ENQ are disabled.
- 5. When the printing finishes, turn off the printer.
- 6. Turn on the printer and then the hexadecimal mode is off.

OFF

OFF

ON

## Chapter 3. The self test

The self-test checks whether the printer has any problems. If the printer does not function properly, contact your dealer. The self-test checks the following;

- 1. Make sure paper roll has been installed properly.
- 2. Turn on the power while holding down the FEED button. The self-test begins.
- The self-test prints the current printer status, which provides the control ROM version and the DIP switch setting.
- After printing the current printer status, self-test printing will print the following, and pause (The PAPER LED light blinks).

#### Self-test printing. Please press the FEED button

- Press the FEED button to continue printing. The printer prints a pattern using the built-in character set.
- 6. The self-test automatically ends and cuts the paper after printing the following.

#### \*\*\* COMPLETED \*\*\*

The printer is ready to receive data as soon as it completes the self-test.

## Chapter 4. Code Table

The following pages show the character code tables. To find the character corresponding to a hexadecimal number, count across the top of the table for the left digit and count down the left column of the table for the right digit. For example, 4A = J.



Page 0 ( PC437 : USA, Standard Europe) ( International Character Set : USA )

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	HEX	8	9	A	В	С	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	_	1	SP	-	タ		=	$\times$
0	0000	128	144	160	176	192	208	224	240
	0004	_	Т	0	P	チ	4	F	円
1	0001	129	145	161	177	193	209	225	241
	0040		-	Г	イ	ツ	×	+	年
2	0010	130	146	162	178	194	210	226	242
			F		ウ	テ	モ	1	月
3	0011	131	147	163	179	195	211	227	243
	0400		-		エ	ŀ	ヤ		日
4	0100	132	148	164	180	196	212	228	244
	0101		-	•	オ	ナ	ユ		時
5	0101	133	149	165	181	197	213	229	245
0	0440			7	カ	-	Э		分
6	0110	134	150	166	182	198	214	230	246
-				P	キ	ヌ	ラ	•	秒
7	0111	135	151	167	183	199	215	231	247
•	1000	I	Г	1	2	ネ	IJ	<b></b>	Ŧ
8	1000	136	152	168	184	200	216	232	248
•	4004		7	ウ	ケ	1	ル	•	市
9	1001	137	153	169	185	201	217	233	249
	1010		L	I	2	ハ	V	•	X
A	1010	138	154	170	186	202	218	234	250
_	1011	l í	<u>ا</u>	才	サ	F	D	*	町
В	1011	139	155	171	187	203	219	235	251
			6	ヤ	シ	7	ワ	•	村
С	1100	140	156	172	188	204	220	236	252
_		<b>I</b>	5	ユ	ス	~	ン	0	人
D	1101	141	157	173	189	205	221	237	253
-			7	Э	セ	ホ	*	/	
E	1110	142	158	174	190	206	222	238	254
_		+	~	"	7	7	0		SP
F	1111	143	159	175	191	207	223	239	255

	HEX		8		9		Α		В		С		D		E		F
HEX	BIN	10	000		001		010		011		100	1	101		110	1	111
0	0000	Ç	128	É	144	á	160		176	L	192	ð	208	Ó	224	-	240
1	0001	ü	129	æ	145	ſ	161	an a	177	1	193	Ð	209	ß	225	±	241
2	0010	é	130	Æ	146	ó	162	111	178	т	194	É	210	Ô	226	=	242
3	0010	â	131	ô	147	ú	163	1	179	F	195	Ē	210	ò	227	3/4	243
4	0100	ä		ö		ñ		+		-		È		õ			
5	0101	à	132	ò	148	Ñ	164	Á	180	+	196	i	212	Õ	228	§	244
6	0110	å	133	û	149	a	165	Â	181	ã	197	f	213	u	229	÷	245
		ç	134	ù	150	<u>0</u>	166	À	182	Ã	198	î	214	þ	230	,	246
7	0111	ê	135	ÿ	151	i	167	Ô	183		199	ĭ	215	p	231	•	247
8	1000		136		152	1	168		184	-	200	1	216	1	232		249
9	1001	ë	137	Ö	153	®	169	4	185	ſ	201	-	217	Ú	233		249
A	1010	è	138	Ü	154	7	170	1	186	<u> </u>	202	<b>_</b>	218	Û	234	•	250
в	1011	ï	139	ø	155	1/2	171	77	187	٦r	203		219	Ù	235	1	251
с	1100	î	140	£	156	1/4	172	1	188	F	204	-	220	ý	236	3	252
D	1101	1	141	ø	150	I	172	¢	189	=	204	1	221	Ý	237	2	253
Е	1110	Ä		x		«		¥		ł		1		-		•	
F		Å	142	f	158	»	174	7	190	p	206	-	222		238	SP	254
F	1111		143		159		175	1	191	1	207		223	1	239		255

Page 2 ( PC850 : Multilingual )

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Page 1 ( Katakana )

	HEX	8		9		Α		в		С		D		E		F
HEX	BIN	1000		001		010		011	1	100	1	101	1	110		111
0	0000	Ç	É		á		1		L.		1		α		=	
		128		144		160		176		192		208		224		240
1	0001	ü	À		í		-		1		<b></b>		β		±	
		129		145		161		177		193		209		225		241
2	0010	é	É		Ó				Τ.		T		Г		5	
_		130		146		162		178		194		210		226		242
3	0010	â	ô		ú				F		L.		π		≥	
-		131		147		163		179		195		211		227		243
4	0100	ä	õ		ñ		+		-		L		Σ		1	
		132		148		164		180		196		212		228		244
5	0101	à	ò		Ñ		+		+		F		σ		1	_
Ů		133		149		165		181		197		213		229		245
6	0110	Á	ú		<u>a</u>		4		ļ F		11		μ		÷	
-		134		150		166		182		198		214		230		246
7	0111	ç	ù		<u>0</u>		1		ŀ		#		τ		*	
	••••	135		151		167		183		199		215		231		247
8	1000	ê	1		3		1		L		+		Φ		•	
Ů		136	-	152		168		184		200		216		232		249
9	1001	Ê	õ		Ò		4		Ī		<u> </u>		θ		•	
-		137	-	153		169		185		201		217		233		249
A	1010	è	Ü		-		1		브				Ω		•	
		138		154		170		186		202	_	218		234		250
в	1011	í	¢		1/2		F		11				δ		√	
-		139		155		171		187		203		219		235		251
c	1100	Ô	£		1/4		1		ŀ		•		∞		n	
Ů	1100	140		156		172		188		204		220		236		252
D	1101	1	Ù		i		Ш		=				¢		2	
		141		157		173		189		205		221		237		253
E	1110	Ã	Pt		*		4		+						•	
-		142		158		174		190		206		222		238		254
F	1111	Â	Ó		»		٦		4		•				SP	
		143		159		175		191		207		223		239		255

	HEX	8	3		9		Α		В		С		D		E		F
HEX	BIN	10	00		001	1	010		011	1	100	1	101	1	110	1	111
0	0000	ç	128	É	144	1	160	-	176	L	192	ш	208	α	224		240
1	0001	ü		É		•		-		1		-		β		±	
			129		145		161		177		193		209		225		241
2	0010	é	130	Ê	146	ó	162	ш	178	Т	194	Π	210	Г	226	≥	242
•		â		ô		ú				-		L		π		5	
3	0010		131	Ũ	147		163		179		195	1	211	1	227	1	243
4	0100	Â		Ë		•		+		-		F		Σ		1	
4	0100	L [	132		148	1	164	1	180		196	1	212		228	1	244
5	0101	à		ï		•		+		+		F		σ		1	
Ŭ	0101		133		149		165		181		197		213		229		245
6	0110		101	û	150	3	100	4	400	F	100	1	014	μ		÷	0.40
		-	134		150	_	166	1	182		198		214		230	-	246
7	0111	Ş.	135	ù	151		167	1	183	ŀ	199	+	215	τ	231	~	247
		ê	133	¤	131	î	107		100	L	199	+	215	Φ	201	•	24/
8	1000		136	Å	152	Ľ.	168	1"	184		200	1	216	Ψ	232		249
-		ë		Ô		-		4		F				θ			
9	1001		137	Ŭ	153		169		185		201		217	Ĩ	233	1	249
	1010	è		Ü		7		11		JL		Г		Ω		•	
Α	1010		138		154	1	170	1	186	-	202	1	218		234	1	250
в	1011	Ĩ.		¢		1/2		F		٦٢				δ			
	1011		139		155		171		187		203		219		235		251
с	1100	Î,		£		1/4		1		¦⊧		•		∞		n	
-			140		156		172		188		204	-	220		236		252
D	1101	= ,		Ù	457	3/4	170	Ш	400	=	005	I.	004	¢	007	2	050
			141	~	157		173		189	ᆉ	205		221		237		253
Е	1110	<b>A</b>	142	Û	158	×	174	4	190	זר	206	I.	222		238	1	254
-		§		f		»		7		1		-				SP	
F	1111		143	'	159		175	1	191	1	207	1	223	1	239	1	255

Page 3 ( PC860 : Portuguese )

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Page 4 ( PC 863 : Canadian - French )

	HEX		8		9		А		В		С		D		Е		F
HEX	BIN	1	000		001	1	010	1	011	1	100	1	101	1	110	1	111
0	0000	Ç		É		á		巖		L		.11.,		α			
Ŭ	0000		128		144		160		176		192		208		224		240
1	0001	ü		æ		í		55		1				β		±	
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Page 16 (WPC1252 : Latin 1)

Page 5 ( PC 865 : Nordic )

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### Page 17 ( PC866 : Cyrillic #2 )

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Page 18 ( PC852 : Latin2 )

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Page 22 ( PC864 : Arabic )

Page 19 ( PC858 : Euro )

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### Page 23 ( Thai character code 42 )

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Р	1011		139	1	155	1	171	1	187		203		219		235	1	251
						~		Ö		Μ		å		μ		ò	
с	1100		140		156		172		188		204		220		236	-	252
						-		1/2		Ν		ė		v		ΰ	
D	1101		141		157		173	1	189	1	205	Ĩ	221	1	237	5	253
				-		®		'Y		Ξ	200	ή		ξ		ώ	
E	1110		142		158	0	174	1	190	2	206	1	222	5	238	ω	254
			142		150		174	n	190	0	200	1	222		230		204
F	1111					-	475	Ω		0		i		0			
			143		159		175		191		207		223		239		255

### Page 24 (WPC1253 : Greek )

	HEX		8		9		Α		В		С		D		E		F	
HEX	BIN	1	000	1	001	1	010	1	011	1	100	1	101	1	110	1	111	
0	0000	Th		ħ		NBS	SP	0		Α		Р		а		р		
Ŭ	0000		128		144		160		176		192		208		224		240	
1	0001	Γ́		"		У		±		Б		С		б		С		
·	0001		129		145		161		177		193		209		225		241	
2	0010	,		,		ÿ		Ι		В		Т		в		т		
2	0010		130		146		162		178		194		210		226		242	
3	0011	ŕ		"		J		i		Г		У		Г		у		
3	0011		131	1	147	1	163	1	179		195		211		227		243	
	0100	"		"		¤		Ľ		Д		Φ		д		ф		
4	0100		132		148	1	164	1	180	1	196	1	212	1	228		244	
	0404			•		Г		μ		Ε		Χ		е		X		
5	0101		133		149	1	165	1	181	1	197	1	213	1	229	1	245	
		+		-		1		¶		Ж		Ц		ж		ц		
6	0110		134		150	1.	166	1.	182	1	198	1	214	1	230		246	
-		‡		—		§		•		3		Ч		з		ч		
7	0111		135		151	Ĩ	167	1	183	1	199	1	215	1	231	1	247	
		€				Ë		ë		И		Ш		и		ш		
8	1000		136		152	1	168	1	184	1	200	1	216	1	232	1	248	
		‰		TM		©		No		Й		Ш		й		ш		
9	1001		137		153	1	169	1	185	1	201		217	1	233		249	
		Љ		јь		E		E		К		Ъ		к	1	ъ		
A	1010		138		154	1	170		186		202		218		234		250	
-		۲		>		«		»		Л		Ы		л		ы		
в	1011		139		155		171		187		203		219		235		251	
		њ		њ		-		j		Μ		Ь		м		ь		
С	1100		140		156	1	172	ľ	188	1	204	1	220	1	236	1	252	
_		Ŕ		Ŕ		-		S		Η		Э		н		Э		
D	1101		141		157	1	173	1	189	1	205	1	221	1	237	1	253	
		Tì		ħ		R		s	1	0	1	Ю		0		ю		
E	1110		142		158		174		190		206	-	222		238	10	254	
		Ų		ц		Ï		ï		П		Я		п		я		
F	1111	1	143	*	159	-	175	1	191		207	1	223		239	1	255	

### Page 28 (WPC1251 : Cyrillic)

0	2
J	4

	HEX		8		9		A		в		С		D		E		F
HEX	BIN	10	000	1	001	1	010		011	1	100		101	1	110	1	111
0	0000	А		Ρ		ι				L		┸		ω		Ω	
	0000		128		144		160		176		192	1	208	1	224	1	240
	0004	В		Σ		к				1		-		ά		±	
1	0001		129		145		161		177		193		209		225		241
		Г		Т		λ				т		Т		έ		$\geq$	
2	0010		130		146		162		178		194		210		226		242
_	0044	Δ		Υ		μ		Τ		F		L		ή		$\leq$	
3	0011		131		147		163		179		195	1	211		227	1	243
		Е		Φ		v		-		—		F		ï		Ĩ	
4	0100		132		148		164		180	1	196	1	212	1	228	1	244
		Ζ		Χ		ξ		=		+		F		i		Ÿ	
5	0101		133		149		165		181		197	1	213		229		245
		Η		Ψ		0		-		F		Г		ò		÷	
6	0110		134		150		166		182		198	1	214		230	1	246
_		Θ		Ω		π		п		⊩		+		ΰ		~	
7	0111		135		151		167		183		199	1	215		231	1	247
		Ι		α		ρ		٦		L		+		ΰ		0	
8	1000		136		152	1	168	· .	184		200	1.	216		232		248
		Κ		β		σ		-		Г				ώ		•	
9	1001		137	1	153		169		185	ľ.,	201		217		233		249
		Λ		X		ς				╧		Г		Ά		•	
A	1010		138	Ű	154	1	170		186		202	1.	218		234		250
_		Μ		δ		τ		-		┯				Έ			
В	1011		139		155		171		187		203	-	219		235		251
		Ν		3		υ		┛		⊫		_		Ή		n	
с	1100		140		156		172		188	Ľ.,	204		220		236		252
		Ξ		ζ		φ		┛		_				Ί		2	
D	1101		141	1	157	1	173		189		205		221		237		253
		0		η		х		_		╬				0			
E	1110		142	-0	158	1	174		190	1	206	1 -	222		238		254
		П		θ		ψ		٦		⊥				'Y		NBS	
F	1111		143		159	т	175	1	191		207		223	1	239		255
																	-54

### Page 29 ( PC737 : Greek )

	HEX		8		9		A		В		Ċ		D		E		F
HEX	BIN		000		)01		010		011		100		101	_	110	_	111
0	0000	SP															
0	0000		128		144		160		176		192		208		224		240
	0001	SP															
1	0001		129		145		161		177		193		209		225		241
		SP		SP		SP		SP		SP		SP		SP		SP	
2	0010		130		146		162		178		194		210		226		242
	0011	SP															
3	0011		131		147		163		179		195		211		227		243
		SP		ö		SP											
4	0100		132		148		164		180		196		212		228		244
-		SP		SP		SP		SP		SP		SP		SP		SP	
5	0101		133		149		165		181	1	197		213		229		245
	0110	SP															
6	0110		134		150		166	1	182		198		214		230		246
-	0111	SP															
7	0111		135		151		167		183		199		215		231		247
	1000	SP		ŚP		SP		SP									
8	1000		136		152		168		184		200		216		232		248
0	1001	SP															
9	1001		137		153		169		185		201		217		233		249
	1010	SP															
A	1010		138		154		170		186		202		218		234		250
B	1011	SP															
В	1011		139		155		171		187		203		219		235	_	251
l c	1100	SP															
Ľ	1100		140		156		172		188		204		220		236		252
D	1101	SP		SP		SP	-	SP									
Ľ			141	·	157		173		189		205		221		237		253
E	1110	SP		SP		SP	_	SP									
Ľ.	1110		142	_	158		174		190		206		222		238		254
F	11111	SP															
Ľ	1		143		159		175		191		207		223		239		255

	1.Ra	160 k	-	11.7	AS	CII co	de (H	ex)	official		iner T	
Country	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	76
U.S.A	#	\$	@	[	1	]	^		{	1	}	~
France	#	\$	à	0	ç	ş	^		é	ù	è	1.4
Germany	#	\$	§	Ä	Ö	Ü	٨		ä	ö	ü	ß
U.K.	£	\$	@	[	1	]	^	•	{	1	}	~
Denmark I	#	\$	@	Æ	Ø	Å	٨	•	æ	ø	å	~
Sweden	#		É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	\$	@	0	1	é	^	ù	à	ò	è	i
Spain I	Pt	\$	@	1	Ñ	ż	^			ñ	}	~
Japan	#	\$	@	[	¥	]	٨		{	plapin	}	~
Norway	#		É	Æ	Ø	Å	Ü	é	æ	ø	á	ü
Denmark II	#	\$	É	Æ	Ø	Å	Ü	é	æ	ø	á	ü
Spain II	#	\$	á	i	Ñ	i	é	•	í	ñ	ó	ú
Latin America	#	\$	á	1	Ñ	ż	é	ü	i	ñ	ó	ú
Korea	#	\$	@	[	₩	1	^	•	1		}	~

**International Character Set** 

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Page 255 ( Space Page )

# Chapter 5. Control Commands List

Command	Name
HT	Horizontal tab
LF	Print and line feed
FF	Print and return to standard mode (in page mode)
CR	Print and carriage return
CAN	Cancel print data in page mode
DLE EOT	Real-time status transmission
DLE ENQ	Real-time request to printer
	Generate pulse in real-time
DLE DC4	Execute power-off sequence
	Clear buffer(s)
ESC FF	Print data in page mode
ESC SP	Set right-side character spacing
ESC !	Select print mode(s)
ESC \$	Set absolute print position
ESC %	Select/cancel user-defined character set
ESC &	Define user-defined characters
ESC *	Select bit-image mode
ESC -	Turn underline mode on/off
ESC 2	Select default line spacing
ESC 3	Set line spacing
ESC =	Select peripheral device
ESC ?	Cancel user-defined characters
ESC @	Initialize printer
ESC D	Set horizontal tab positions
ESC E	Turn emphasized mode on/off
ESC G	Turn double-strike mode on/off
ESC J	Print and feed paper
ESC L	Select page mode
ESC M	Select character font
ESC R	Select an international character set
ESC S	Select standard mode
ESC T	Select print direction in page mode
ESC V	Turn 90° clockwise rotation mode on/off
ESC W	Set printing area in page mode
ESC \	Set relative print position
ESC a	Select justification
ESC c 3	Select paper sensor(s) to output paper-end signals
ESC c 4	Select paper sensor(s) to stop printing
ESC c 5	Enable/disable panel buttons

Command	Name
ESC d	Print and feed n lines
ESC p	General pulse
ESC t	Select character code table
ESC {	Turn upside-down printing mode on/off
FSp	print NV bit image
FS q	Define NV bit image
GS !	Select character size
GS \$	Set absolute vertical print position in page mode
GS ( A	Execute test print
GS ( D	Enable/disable real-time command
GS ( E	User setup commands
GS 8 L	Cat amounting data
GS ( L	Set graphics data
GS ( M	Customize printer control value(s)
GS ( N	Select character style(s)
GS *	Define downloaded bit image
GS /	Print downloaded bit image
GS :	Start/end macro definition
GS B	Turn white/black reverse printing mode on/off
GS H	Select printing position of HRI characters
GS I	Transmit printer IE
GS L	Set left margin
GS P	Set horizontal and vertical motion units
GS T	Set print position to the beginning of print line
GS V	Select cut mode and cut paper
GS W	Set printing area width
GS \	Set relative vertical print position in page mode
GS ^	Execute macro
GS a	Enable/disable Automatic Status Back (ASB)
GS b	Turn smoothing mode on/off
GS f	Select font for HIR characters
GS h	Set bar code height
GS k	Print bar code
GSr	Transmit status
GS v 0	Print raster bit image
GS w	Set bar code width

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## Command Notation

[Name]	The name of the command.
[Format]	The code sequence. ASCII Indicates the ASCII equivalents.
	Hex indicates the hexadecimal equivalents.
	Decimal indicates the decimal equivalents.
	[] k indicates the contents of the [] should be repeated k times.
[Range]	Gives the allowable ranges for the arguments.
[Description]	Describes the function of the command.

# Explanation of Terms LSB Least Significant Bit

HT		
[Name]	Horizontal tab.	
[Format]	ASCII	HT
	Hex	09
	Decimal	9
[Description]	<ul> <li>Moves the print</li> </ul>	position to the next horizontal tab position.
LF		
[Name]	Print and line fee	d.
[Format]	ASCII	LF
	Hex	0A
	Decimal	10
[Description]	<ul> <li>In standard mod</li> </ul>	de, prints the data in the print buffer and feeds one line
	based on the curr	rent line spacing.
	<ul> <li>In page mode, i</li> </ul>	modes the print position in memory to feed one line based
	on the current lin	e spacing.
FF		
[Name]	Print and return t	o standard mode in page mode.
[Format]	ASCII	FF
	Hex	0C
	Decimal	12
[Description]	<ul> <li>In page mode, j</li> </ul>	prints the data in the print buffer collectively and returns
	to standard mode	· · · · · · · · · · · · · · · · · · ·

Print and car	riage return.					
ASCII	CR					
Hex	0D					
Decimal	13					
<ul> <li>When autor</li> </ul>	natic line fee	d is enabled,	this command function	s the same a		
LF.						
memory swit	ch 1-5 when	the printer p	ower is turned on or re	set.		
Cancel print (	data in page	mode.				
ASCII	CAN					
Hex	18					
Decimal	24					
] • In page mo	de, deletes a	all the print da	ta in the current printa	ble area.		
	real-time sta	atus.				
ASCII	DLE	EOT	n			
Hex	10	04	n			
Decimal	16	4	n			
1 ≤ n ≤ 4						
] • Transmits t	he status spe	cified by n in	real-time as follows:			
] • Transmits to	he status spe	ecified by n in	real-time as follows:			
I] • Transmits the second sec	he status spe	ecified by n in	real-time as follows:			
unction	· ·	ecified by n in	real-time as follows:			
-	atus.	ecified by n in	real-time as follows:			
1	ASCII Hex Decimal • When autor <b>LF</b> . • When autor • The automa • With a para memory swite Cancel print of ASCII Hex Decimal • In page mo • Transmission ASCII Hex Decimal	Hex 0D Decimal 13 • When automatic line fee <b>LF</b> • When automatic line feed • With a parallel interface memory switch 1-5 when Cancel print data in page ASCII CAN Hex 18 Decimal 24 • In page mode, deletes a Transmission real-time sta ASCII DLE Hex 10 Decimal 16	ASCII CR Hex 0D Decimal 13 • When automatic line feed is enabled, <b>LF</b> . • When automatic line feed is disabled, • The automatic line feed is disabled, • The automatic line feed is ignored wit • With a parallel interface model, the at memory switch 1-5 when the printer por Cancel print data in page mode. ASCII CAN Hex 18 Decimal 24 • In page mode, deletes all the print da Transmission real-time status. ASCII DLE EOT Hex 10 04 Decimal 16 4	ASCII CR Hex 0D Decimal 13 • When automatic line feed is enabled, this command function <b>LF</b> . • When automatic line feed is disabled, this command is ignor • The automatic line feed is ignored with a serial interface model • With a parallel interface model, the automatic line feed is see memory switch 1-5 when the printer power is turned on or re- Cancel print data in page mode. ASCII CAN Hex 18 Decimal 24 • In page mode, deletes all the print data in the current printa Transmission real-time status. ASCII DLE EOT n Hex 10 04 n Decimal 16 4 n		

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A Transmit paper roll sensor status.
 This printer transmits the following status in real time.

### n=1 : Printer status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Fixed.
1	On	02	2	Fixed.
2	Off	00	0	Drawer kick-out connector pin 3 is LOW.
	On	04	4	Drawer kick-out connector pin 3 is HIGH.
3	Off	00	0	On-Line.
	On	08	8	Off-Line.
4	On	10	16	Fixed.
5	Off	00	0	Not in on-line waiting status.
	On	20	32	During on lines waiting status.
6	Off	00	0	Paper FEED button is turned Off.
	On	40	64	Paper FEED button is turned On.
7	Off	00	0	Fixed.

n=2 : Off-line status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Fixed.
1	On	02	2	Fixed.
2	Off	00	0	Cover is closed.
	On	04	4	Cover is open.
3	Off	00	0	Paper is not being fed by using the paper FEED button.
	On	08	8	Paper is being fed by the paper FEED button.
4	On	10	16	Fixed.
5	Off	00	0	No paper-end stop.
	On	20	32	Printing is being stopped.
6	Off	00	0	No error.
	On	40	64	Error has occurred.
7	Off	00	0	Fixed.

				n=3 : Error status
Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Fixed.
1	On	02	2	Fixed.
2	Off	00	0	No mechanical error.
	On	04	4	Mechanical error has occurred.
З	Off	00	0	No auto-cutter error.
	On	08	8	Auto-cutter error occurred.
4	On	10	16	Fixed.
5	Off	00	0	No unrecoverable error.
	On	20	32	Unrecoverable error has occurred.
6	Off	00	0	No automatically recoverable error.
	On	40	64	Automatically recoverable error has occurred.
7	Off	00	0	Fixed.

		1		n=4 : Continuous paper sensor sta
	Off/On	Hex	Decimal	Function
0	Off	00	0	Fixed.
1	On	02	2	Fixed.
2	Off	00	0	Paper roll near-end sensor : paper adequate.
	On	04	4	Paper roll near-end sensor : paper near end.
3	Off	00	0	Paper roll near-end sensor : paper adequate.
	On	08	8	Paper roll near-end sensor : paper near end.
4	On	10	16	Fixed.
5	Off	00	0	Paper roll near-end sensor : paper present.
	On	20	32	Paper roll near-end sensor : paper not present.
6	Off	00	0	Paper roll near-end sensor : paper present.
	On	40	64	Paper roll near-end sensor : paper not present.
7	Off	00	0	Fixed.
				ignored block data is transmitted.
	NQ n	B 1.1		
[Name		ASCI	me request t	
[Form	alj	Hex		DLE ENQ n 10 05 n
		Decin		16 5 n
[Rang	ല	$0 \le n$		10 5 11
	ription]			quest from the host computer.
[] 000				equests as follows :
n		uest		
0				n the paper FEED button is pressed once during waitin tion of the <b>GS</b> ^ command.
1	Reco	vers fror	n an error ar	nd restarts printing from the line where the error occurred
2	Reco	overs fro	m an error a	after clearing the receive and print buffers.
[Note:	s]			after removing the cause of the error.

n=4 : Continuous paper sensor status Function

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DLE DC4	<b>fn m t</b> (fn=1)							
[Name]	Generate puls	se in real-tin	ne.					
[Format]	ASCII	DLE	DC4	fn	m	t		
	Hex	10	14	1	m	t		
	Decimal	16	20	1	m	t		
[Range]	fn=1							
0 ≤ m ≤ 8								
$1 \le t \le 8$								
[Description] • Outputs the pulse specified by t in real-time to the connector pin spe								
	by m as follow	ws:						
n	n Connector pin							
	Drawer kick-out co	nnector nin	2					
-	Drawer kick-out co							
1		mector pin	5.					
	<ul> <li>This comma - During tr</li> </ul>	ed this comple : Bit ima and is ignore ransmission or riving of dra	ge data migh d in the follor of block data wer kick-out.	t include this wing states :	command.			
DLE DC4	<b>fn a b</b> (fn=2)							
[Name]	Execute powe							
[Format]	ASCII	DLE	DC4	fn	а	b		
	Hex	10	14	fn	а	b		
	Decimal	16	20	fn	а	b		
[Range]	fn=2							
	a=1							
	b=8							
[Descriptio	- Stores the	e values of t	wer-off seque he maintenar ng power-off	nce counter.	or + Status			

Power off status	Hex	Decimal	Amount of data
Header	3B H	59	1 byte
Status	30 H	48	1 byte
NUL	00 H	0	1 byte

[Notes]

Executes the printer power off.
If this command is encountered, the printer will not continue to process anything. To recover the printer to print again, it is necessary to turn the power on again or execute a hardware reset.
If print data includes a character string with this command, the printer performs the command. User must consider this.
For example : Bit image data accidentally might include a data string with this command.
Do not embed this command within another command.

Do not embed this command within another command.
For example : Bit image data might include this command.
This command is ignored block data is transmitted.

DLE DC4 fn ( [Name]	Clear buffer						
[Format]	ASCII	DLE	DC4	fn	d1d7		
[i oimat]	Hex			8	d1d7		
	Decimal	16	14 20	8	d1d7		
[Range]	fn=8	10	20	0	u1u/	1	
[Description]	<ul> <li>Clear all d</li> </ul>	8, d3=20, d4=1 ata stored in th the following t	e receive b	uffer and the	e print buffer		
		Hex	1	Decimal	Αποι	int of data	
Header		37 H		55		1 byte	
Flag		25 H		37		1 byte	
NUL		00 H		0		1 byte	
[Notes]	The comm the EPSON     If print da performs th     - For exar with this con     Do not em     - For exar	ta includes a ch e command. Us nple : Bit imag	naracter stri ser must co e data accio and within e data migh	ng with this nsider this. lentally migl another com it include thi	command, th nt include a d nmand. is command.	ne printer	
ESC FF							
ESC FF [Name]		page mode.					
	Print data ir ASCII Hex	i page mode. ESC 1B	FF 0C				

Decimal 27 12 [Description] • In page mode, prints all buffered data in the printing area collectively.

SP n							
ne]	Set righ	t-side chara	cter spacin	g.			
nat]	ASCII	ES	SC	SP	n		
	Hex	1	В	20	n		
	Decim		7	32	n		
ge]	$0 \le n \le$	255					
ault]	n=0						
cription]						character to	
	- For	Japanese Ka	anji model,	31.875	imm {255/203"	}.	
In							
	Select p	rint mode(s	).				
nat]	ASCII			!	n		
9	Hex	1	В	21	n		
	Decim	al 2	7 33 n				
			/	55			
ge]	0 ≤ n ≤		,	55			
ault]	0 ≤ n ≤ n=0	255					
	0 ≤ n ≤ n=0						
ault]	0 ≤ n ≤ n=0	255					
ault] cription]	0 ≤ n ≤ n=0	255					
ault]	0 ≤ n ≤ n=0 • Selects	s print mode	e(s) using n	as fol	ows.		
oult] cription]	0 ≤ n ≤ n=0 • Selects	s print mode	e(s) using n Character	as fol	ows. Function	cted.	
ault] cription] Off/On Off	0 ≤ n ≤ n=0 • Selects Hex 00	s print mode Decimal	e(s) using n Character	as fol	ows. Function (12 × 24) select	cted.	
off/On Off Off	0 ≤ n ≤ n=0 • Selects 00 01	255 s print mode Decimal 0 1	e(s) using n Character Character Reserved	as fol font A font E	ows. Function (12 × 24) select	cted. ed.	
off/On Off Off Off Off	0 ≤ n ≤ n=0 • Selects 00 01 00	255 s print mode <b>Decimal</b> 0 1 0	e(s) using n Character Character Reserved Emphasiz	r as fol	Function           (12 × 24) select           (9 x 24) select	cted. ed.	
Off/On Off Off Off Off Off	0 ≤ n ≤ n=0 • Selects 00 01 00 00	255 s print mode 0 1 0 0	e(s) using n Character Character Reserved Emphasiz Emphasiz	font A font A font E ed moded model	Function (12 × 24) select (9 × 24) select de not selected.	cted. ed.	
Off/On Off Off Off Off Off Off Off On	0 ≤ n ≤ n=0 • Selects 00 01 00 00 00 08	255 s print mode 0 1 0 0 8	e(s) using n Character Character Reserved Emphasiz Double-ho	r font A r font E ed mod ed mod eight m	Function (12 × 24) select (9 × 24) selected.	cted. ed.	
off/On Off/On Off On Off Off On Off On	0 ≤ n ≤ n=0 • Select: 00 01 00 00 00 08 00	255 s print mode 0 1 0 0 8 0	e(s) using n Character Character Reserved Emphasiz Double-hu Double-hu	r font A r font A r font E ed mod ed mod eight m eight m	Function (12 × 24) select (9 × 24) select (9 × 24) selected. te not selected. to de not selected.	cted. ed.	
Off/On Off/On Off On Off Off On Off On Off On	0 ≤ n ≤ n=0 • Select: 00 01 00 00 00 00 00 00 10	255 s print mode 0 1 0 0 8 0 16	e(s) using n Character Character Reserved Emphasiz Emphasiz Double-hr Double-hr Double-hr	r font A r font A r font E ed more eight m eight m	Function (12 × 24) select (9 × 24) selected. de not selected. lode not selected. ode selected.	cted. ed.	
off/On Off/On Off Off Off Off Off Off On Off On Off	0 ≤ n ≤ n=0 • Select: 00 01 00 00 00 00 00 00 10 00	255 s print mode 0 1 0 0 8 0 16 0	e(s) using n Character Character Reserved Emphasiz Emphasiz Double-hr Double-hr Double-hr	r font A font A font E ed mou eight n eight m idth m	Function (12 × 24) select (9 × 24) selected. ie selected. iode not selected oode selected.	cted. ed.	
Off/On Off Off Off Off Off Off Off On Off On Off On	$0 \le n \le n = 0$ n=0 $\cdot$ Select:	255 s print mode 0 1 0 0 8 0 1 6 0 32	c(s) using r Character Character Reserved Emphasiz Double-h Double-h Double-w Double-w Reserved	r font A font E ed mod eight m eight m idth m	Function (12 × 24) select (9 × 24) selected. de not selected. lode not selected. ode selected.	cted. ed.	
	ge] sult] cription]	$\begin{array}{c} \text{ASCII} \\ \text{Hex} \\ \text{Decim} \\ \text{ge]}  0 \leq n \leq \\ \text{n=0} \\ \text{uult]}  n=0 \\ \text{oription]}  \cdot \text{Sets ti} \\ \text{In } \\ \text{rhor } \\ \{rhor } \\ \{rhor } \\ \text{rhor } \\ \text{rhor } \\ \text{rhor } \\ \{rhor } \\ \text{rhor } \\ \text{rhor } \\ \{rhor } \\ \text{rhor } \\ \{rhor } \\$	at] ASCII ES Hex 1 Decimal 2 ge] 0 ≤ n ≤ 255 n=0 · Sets the character [n ×horizontal or ve · The maximum rig - For ANK/Multilir - For Japanese Ka In le] Select print mode(s hat] ASCII ES Hex 1	anat] ASCII ESC Hex 1B Decimal 27 ge] 0 ≤ n ≤ 255 nult] n=0 • Sets the character spacing for [n ×horizontal or vertical moti • The maximum right-side cha - For ANK/Multilingual mode - For Japanese Kanji model, <b>! n</b> lee] Select print mode(s). nat] ASCII ESC Hex 1B	at]       ASCII       ESC       SP         Hex       1B       20         Decimal       27       32         ge]       0 $\leq n \leq 255$ 32         nult]       n=0       • Sets the character spacing for the rint in xhorizontal or vertical motion units         • The maximum right-side character services       • For ANK/Multillingual model, 35.95         • For Japanese Kanji model, 31.875         In         lej       Select print mode(s).         nat]       ASCII       ESC         Hex       1B       21	at]       ASCII       ESC       SP       n         Hex       1B       20       n         Decimal       27       32       n         ge]       0 $\leq n \leq 255$ n       n         n=0       • Sets the character spacing for the right side of the [n ×horizontal or vertical motion units].       • The maximum right-side character spacing is :       • For ANK/Multilingual model, 35.955mm {255/180 //>3555mm {255/180 //>3555/180 //>3555/180 //>255/203"         In             le]       Select print mode(s).       n          hex       1B       21       n	at]       ASCII       ESC       SP       n         Hex       1B       20       n         ge]       0 $\leq n \leq 255$ n         nult]       n=0       • Sets the character spacing for the right side of the character to [n ×horizontal or vertical motion units].         • The maximum right-side character spacing is :       • For ANK/Multilingual model, 35.955mm {255/180"}.         • For Japanese Kanji model, 31.875mm {255/203"}.         In         le]       Select print mode(s).         nat]       ASCII       ESC         Hex       1B       21

ESC \$ nL nH										
[Name]	Set absolute	print posit	ion.							
[Format]	ASCII	ESC		\$		nL		nH		
	Hex	1B		24	1	nL	-	nH		
	Decimal	27		36	5	nL		nH		
[Range]	0 ≤ (nL + nH	x 256) ≤	6553	5 (0	≤ nH	≤ 255.	0 ≤ nl	L ≤ 255	)	
[Description]	<ul> <li>Sets the nex</li> </ul>									in
[beschpelon]	reference to t	he left ma	argin.	The	dista	nce fron	n the b	eginnin	g of the li	ne to tł
	left margin is	L(UF + UE	1 X Z 3	) X (0	(veru	cal of h	orizoni	lai mouo	n units)].	
ESC % n										
[Name]	Select/cancel		ned ch			et.				
[Format]	ASCII	ESC		%		n				
	Hex	1B		25		n				
	Decimal	27		37	7	n				
[Range]	0 ≤ n ≤ 255									
[Default]	n=0									
[Description]	<ul> <li>Select or ca</li> </ul>	ncels the i	user-c	define	ed chi	aracter :	set.			
	- When the	LSB of n	is 0, t	the u	ser-d	efined c	haract	er set is	canceled	
	- When the	LSB of n	is 1, t	the u	ser-d	efined c	haract	er set is	selected.	
			,							
	2 [x1 d1d(y	x 1)][	xk d1	Ld(	(y x >	(k)]				
[Name]	Define user-d	efined cha	aracte	ers.						
[Format]	ASCII I	SC &	У	c1	c2				xk d1d(	
	Hex	1B 26	У	c1	c2	[x1 d1	ld(y	x 1)][	xk d1d(	(y x xk)
	Decimal	27 38	У	c1	c2	[x1 d1	ld(y	x 1)][	xk d1d(	(y x xk)
[Range]	For SRP-370									
[Default]	y=3									
	32 ≤ c1 ≤	c2 ≤ 126								
	$0 \le x \le 12$	(when for	nt A (	12 x	24) is	s selecte	ed)			
	$0 \le x \le 9$									
	$0 \le d \le 25$				,	,				
	k=c2-c1+1									
	For SRP-372									
	y=3 (when	font A (1	2 x 24	1) is (	select	ed.				
	y=3 (when									
	$32 \le c1 \le c$		A 10)	3010	.cicu)					
	$0 \le x \le 12$		nt A (	12 v	24) ie	colocto	d)			
	$0 \le x \le 12$ $0 \le x \le 9$									
	$0 \le x \le 9$ $0 \le d \le 25$		L D (9	x 24	1) 15 5	elected)				
Description 7	k=c2-c1+1									
[Description]	<ul> <li>Assigns the</li> </ul>									r codes
	- y specifi									
	<ul> <li>c1 specifies</li> </ul>									nal code.
	<ul> <li>x specifie</li> </ul>					he horiz	contal o	direction	۱.	
	<ul> <li>d specifie</li> </ul>	es the defi	nition	data	э.					

ESC * m nl	L nH d1dk						
[Name]	Select bit im	age mode.					
[Format]	ASCII	ESC	*	m	nL	nH	d1dk
	Hex	1B	2A	m	nL	nH	d1dk
	Decimal	27	42	m	nL	nH	d1dk
[Range]	m=0, 1, 32,	33					
	1 ≤ (nL + nl 0 ≤ d ≤ 255		1023 (0 ≤	≤ nL ≤ 255	5, 0 ≤ nH :	≤ 3)	

[Description]	<ul> <li>Specif</li> </ul>	fies the bit image in	m mode for the	number of dots	specified by nL and nH.
				* dpi :	dots per 25.4mm {1"}
- For SRP-3	70			-	

m	Mode	Number of dots in vertical direction	Vertical dot density	Horizontal dot density	Number of bytes (k)
0	8-dot single-density	8	60 dpi	90 dpi	nL + nH x 256
1	8-dot double-density	8	60 dpi	180 dpi	nL + nH x 256
32	24-dot single-density	24	180 dpi	90 dpi	(nL + nH x 256) x 3
33	24-dot double-density	24	180 dpi	180 dpi	(nL + nH x 256) x 3
				* dpi :	dots per 25.4mm {1"}

-	For SRP-372				
m	Mode	Number of dots in vertical direction	Vertical dot density	Horizontal dot density	Number of bytes (k)
0	8-dot single-density	8	203/3 dpi	203/2 dpi	nL + nH x 256
1	8-dot double-density	8	203/3 dpi	203 dpi	nL + nH x 256
32	24-dot single-density	24	203 dpi	203/2 dpi	(nL + nH x 256) x 3
33	24-dot double-density	24	203 dpi	203 dpi	(nL + nH x 256) x 3

ESC - n					
[Name]	Turn underlin	e mode on/o	off.		
[Format]	ASCII	ESC	-	n	
	Hex	1B	2D	n	
	Decimal	27	45	n	
[Range]	0 ≤ n ≤ 2, 48	8 ≤ n ≤ 50			
[Default]	n=0				

[Description] • Turn underline mode on or off, based on the following values of n :

n	Function
0,48	Turns off underline mode.
1,49	Turns on underline mode, set at 1-dot width.
2,50	Turns on underline mode, set at 2-dot width.

[Name]	Select defau	It line spacing				
[Format]	ASCII	ESC	2			
	Hex	1B	32			
	Decimal	27	50			
[Description]	<ul> <li>For SRP-37</li> </ul>	0				
	- Sets the	current line	spacing to a	oproximately	4.23mm {1/	6″}.
	<ul> <li>For SRP-37</li> </ul>					- ).
	- Sets the	current line	spacing to a	pproximately	3.75mm {30	/203"}.
ESC 3 n						
[Name]	Set line space					
[Format]	ASCII	ESC	3	n		
	Hex	1B	33	n		
	Decimal	27	51	n		
[Range]	0 ≤ n ≤ 255					
[Default]	<ul> <li>For SRP-37</li> </ul>					
		ent to approxi	mately 4.23	mm {1/6"}.		
	<ul> <li>For SRP-37</li> </ul>					
		nt to approxir				
		irrent line spa	icing to [n x	vertical moti	on units] incr	ies.
	<ul> <li>For SRP-37</li> </ul>	0.	5 2		-	les.
	<ul> <li>For SRP-37</li> <li>The max</li> </ul>	'0 ximum settab	5 2		-	ies.
	<ul> <li>For SRP-37</li> <li>The max</li> <li>For SRP-37</li> </ul>	'0 ximum settab '2	le line spacir	ng is 1016mr	n {40″}.	les.
	<ul> <li>For SRP-37</li> <li>The max</li> <li>For SRP-37</li> </ul>	'0 ximum settab	le line spacir	ng is 1016mr	n {40″}.	les.
[Notes]	<ul> <li>For SRP-37</li> <li>The max</li> <li>For SRP-37</li> </ul>	'0 ximum settab '2	le line spacir	ng is 1016mr	n {40″}.	les.
[Notes] ESC = n	<ul> <li>For SRP-37</li> <li>The mathematical control of the mathematical control of t</li></ul>	20 ximum settab 22 imum settabl	le line spacir	ng is 1016mr	n {40″}.	les.
[Notes] ESC = n [Name]	<ul> <li>For SRP-37</li> <li>The max</li> <li>For SRP-37</li> </ul>	20 ximum settab 22 imum settabl	le line spacir	ng is 1016mr	n {40″}.	les.
[Notes] ESC = n [Name]	For SRP-37     The max     For SRP-37     The max     Select periph	no ximum settab '2 imum settabl neral device.	le line spacir e line spacin	ng is 1016mr g is 900mm	n {40″}.	
[Notes] ESC = n [Name]	For SRP-37     The max     For SRP-37     The max     The max     Select periph     ASCII	r0 ximum settabl rimum settabl neral device. ESC	e line spacin	ng is 1016mr g is 900mm n	n {40″}.	
[Notes] <b>ESC = n</b> [Name] [Format]	For SRP-37     The max     For SRP-37     The max     Select periph     ASCII     Hex	no ximum settabl imum settabl neral device. ESC 1B	le line spacir e line spacin = 3D	ng is 1016mr g is 900mm n n	n {40″}.	
[Notes] ESC = n [Name] [Format] [Range]	• For SRP-37 - The max • For SRP-37 - The max • The max Select periph ASCII Hex Decimal $0 \le n \le 3$	no ximum settabl imum settabl neral device. ESC 1B	le line spacir e line spacin = 3D 61	ng is 1016mr g is 900mm n n	n {40″}.	
[Notes] ESC = n [Name] [Format] [Range]	• For SRP-37 - The ma: • For SRP-37 - The max • For SRP-37 - The max Select peripf ASCII Hex Decimal $0 \le n \le 3$ • Serial inter	no ximum settabl imum settabl neral device. ESC 1B 27	le line spacin e line spacin = 3D 61 tion :	ng is 1016mr g is 900mm n n n	n {40″}.	
[Notes] ESC = n [Name] [Format] [Range]	• For SRP-37 - The ma: • For SRP-37 - The max Select peripf ASCII Hex Decimal $0 \le n \le 3$ • Serial inter • When tu	no kimum settabl imum settabl neral device. ESC 1B 27 face specifica	le line spacin e line spacin = 3D 61 tion : printer : n=1	ng is 1016mr g is 900mm n n n	n {40″}.	
[Notes] ESC = n [Name] [Format] [Range]	• For SRP-37 - The ma: • For SRP-37 - The max • For SRP-37 - The max Select periph ASCII Hex Decimal $0 \le n \le 3$ • Serial inter • When tw • When ex	no kimum settabl '2 imum settabl heral device. ESC 1B 27 face specifica rning on the p recuting <b>ESC</b>	le line spacin e line spacin = 3D 61 tion : printer : n=1 @ :	ng is 1016mr g is 900mm n n n	n {40″}.	
[Notes] ESC = n [Name] [Format] [Range]	• For SRP-37 - The ma: • For SRP-37 - The max • For SRP-37 - The max Select periph ASCII Hex Decimal $0 \le n \le 3$ • Serial inter • When tw • When ex	ro kimum settabl imum settabl heral device. ESC 1B 27 face specifica rrning on the p	le line spacin e line spacin = 3D 61 tion : printer : n=1 @ :	ng is 1016mr g is 900mm n n n	- (35.5″}.	
[Notes] ESC = n [Name] [Format] [Range] [Default]	• For SRP-37 - The max • For SRP-37 - The max Select periph ASCII Hex Decimal 0 $\leq$ n $\leq$ 3 • Serial inter - When tu - When tw Setting be	no kimum settabl '2 imum settabl heral device. ESC 1B 27 face specifica rning on the p recuting <b>ESC</b>	e line spacin e line spacin = 3D 61 tion : printer : n=1 @ : g ESC @ -	ng is 1016mr g is 900mm n n	n {40"}. {35.5"}.	
[Notes] ESC = n [Name] [Format] [Range] [Default]	For SRP-37         The max         For SRP-37         The max         Select peripf         ASCII         Hex         Decimal         0 ≤ n ≤ 3         Serial inter         When tu         When tu         When tx         Setting be         After	ro kimum settabl '2 imum settabl heral device. ESC 1B 27 face specifica rrning on the p secuting <b>ESC</b> fore executin	le line spacir e line spacin = 3D 61 tion : printer : n=1 @ : g ESC @ ssing	ng is 1016mr g is 900mm n n	n {40"}. {35.5"}. <u>2</u>	3
[Notes] ESC = n [Name] [Format] [Range] [Default]	• For SRP-37 - The ma: • For SRP-37 - The max For SRP-37 - The max Select peripf ASCII Hex Decimal $0 \le n \le 3$ • Serial inter - When ex Setting be After • Selects dev	o kimum settabl imum settabl neral device. ESC 1B 27 face specifica rrning on the p recuting <b>ESC</b> fore executin <b>ESC</b> @ proce	le line spacir e line spacin = 3D 61 tion : printer : n=1 @ : g ESC @ ssing	ng is 1016mr g is 900mm n n	n {40"}. {35.5"}. <u>2</u>	3
[Notes] ESC = n [Name] [Format] [Range] [Default]	• For SRP-37 - The ma: • For SRP-37 - The max • For SRP-37 - The max Select periph ASCII Hex Decimal $0 \le n \le 3$ • Serial inter • When tw Setting be After • Selects dev <b>n Fu</b>	ro kimum settabl '2 imum settabl heral device. ESC 1B 27 face specifica rrning on the p recuting ESC fore executin ESC @ proce rice to which i nction	e line spacin e line spacin e line spacin 3D 61 tion : printer : n=1 @ : g ESC @ ssing host compute	ng is 1016mr g is 900mm n n	n {40"}. {35.5"}. <u>2</u>	3
[Description] [Notes] ESC = n [Name] [Format] [Perault] [Default] [Description]	• For SRP-37 • The max • For SRP-37 • The max Select peripf ASCII Hex Decimal $0 \le n \le 3$ • Serial inter • When tu • When tu • When tu • When tu • Setting be <u>After</u> • Selects deu <u>n Fu</u> <u>1 Sp</u>	no kimum settabl 2 imum settabl heral device. ESC 1B 27 face specifica 27 face specifica face specifica fore executin ESC @ proce vice to which l	le line spacir e line spacin = 3D 61 tion : printer : n=1 @ : g ESC @ ssing host comput	ng is 1016mr g is 900mm n n n	n {40"}. {35.5"}. <u>2</u>	3

ESC ? n						-
[Name]	Cancel user-de	fined chara	cters.			
[Format]	ASCII	ESC	?	n		
	Hex	1B	3F	n		
	Decimal	27	63	n		
[Range]	32 ≤ n ≤ 126					
[Description]	<ul> <li>Cancels user-</li> </ul>	defined cha	aracters, sp	ecified with cha	aracter codes or	۱a
	selected sheet.					
ESC @						
[Name]	Initialize printe					
[Format]	ASCII	ESC	0			
	Hex	1B	40			
	Decimal	27	64			
[Range]	32 ≤ n ≤ 126					
[Description]					printer mode to	the
	mode that wer	e in effect v	when the p	ower was turne	ed on.	
ESC D n1 r						
Name]	Set horizontal t					
[Format]	ASCII	ESC	D	n1nk	NUL	
	Hex	1B	44	n1nk	00	
	Decimal	27	68	n1nk	0	
[Range]	1 ≤ n ≤ 255					
	0 ≤ k ≤ 32					
[Default]	n=8, 16, 24, 3					
	(for font A in			ize width)		
[Description]	<ul> <li>Sets horizonta</li> </ul>					
				rom the setting	position to the	lef
	margin or the l					
	<ul> <li>k specifies</li> </ul>	the number	r of bytes s	et for the horiz	ontal tab positio	on.
SC E n						
Name]	Turn emphasiz	ed mode or	o / off			
Format]	ASCII	ESC	E	n		
Format		1B	-			
	Hex		45	n		
Dengel	Decimal	27	69	n		
[Range]	$0 \le n \le 255$					
[Default]	n=0		~			
[Description]	<ul> <li>Turns empha</li> </ul>					
				zed mode is tu		
	- When the l	SB of n is :	1, emphasiz	zed mode is tu	rned on.	
	- When the I	SB of n is	1, emphasia	zed mode is tu	rned on.	

[Name]	Turn double-s	trike mode	on/off		
[Format]	ASCII	ESC	G	n	
[i oimac]	Hex	1B	47	n	
	Decimal	27	71	n	
[Range]	$0 \le n \le 255$	27	/1		
[Default]	n=0				
[Description]		e-strike mo	de on or off		
[Description]					e is turned off.
					e is turned on.
ESC J n					
[Name]	Print and feed	paper.			
[Format]	ASCII	ESC	J	n	
	Hex	1B	4A	n	
	Decimal	27	74	n	
[Range]	0 ≤ n ≤ 255				
[Description]	<ul> <li>Prints the data</li> </ul>	a in the prin	t buffer and f	eeds the pa	aper [n X vertical motion unit].
	<ul> <li>For SRP-370</li> </ul>				
			r feed amou	nt is appro	oximately 1016mm{40"} if [
	- The maxi	mum pape			
		mum pape ion unit] ex			
	- The maxi X vertical mot • For SRP-372	mum pape ion unit] ex	ceeds 1016	mm{40"}.	
	- The maxi X vertical mot • For SRP-372	mum pape ion unit] ex num paper	ceeds 1016	mm{40"}. nt is appro	oximately 900mm {35.5"} if
	- The maxi X vertical mot • For SRP-372 - The maxir	mum pape ion unit] ex num paper	ceeds 1016	mm{40"}. nt is appro	oximately 900mm {35.5"} if
	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n	mum pape ion unit] ex num paper notion unit	ceeds 1016	mm{40"}. nt is appro	oximately 900mm {35.5"} if
[Name]	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n Select page m	mum pape ion unit] ex num paper notion unit	cceeds 1016 feed amour exceeds 90	mm{40"}. nt is appro	oximately 900mm {35.5"} if
[Name]	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n Select page m ASCII	mum pape ion unit] ex num paper notion unit iode. ESC	kceeds 1016 feed amour exceeds 90 L	mm{40"}. nt is appro	oximately 900mm {35.5"} if
[Name]	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex	mum pape ion unit] ex num paper notion unit uode. ESC 1B	kceeds 1016 feed amour exceeds 90 L 4C	mm{40"}. nt is appro	oximately 900mm {35.5"} if
[Name] [Format]	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal	mum pape ion unit] ex num paper notion unit uode. ESC 1B 27	kceeds 1016 feed amour exceeds 90 L 4C 76	mm{40"}. nt is appro 10mm {35	.ximately 900mm {35.5"} if .5"}.
[Name] [Format]	- The maxi X vertical mot • For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex	mum pape ion unit] ex num paper notion unit uode. ESC 1B 27	kceeds 1016 feed amour exceeds 90 L 4C 76	mm{40"}. nt is appro 10mm {35	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b>	- The maxi X vertical mot For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal • Switches fro	mum pape ion unit] ex num paper notion unit dode. ESC 1B 27 m standarc	kceeds 1016 feed amour exceeds 90 L 4C 76	mm{40"}. nt is appro 10mm {35	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name]	The maxi X vertical mot For SRP-372     The maxir [n X vertical n  Select page m ASCII Hex Decimal Switches fro Select charact	mum pape ion unit] ex- num paper notion unit note. ESC 1B 27 m standard er font.	kceeds 1016 feed amour exceeds 90 L 4C 76 d mode to pa	mm{40 <sup>ii</sup> }. nt is appro 00mm {35	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name]	- The maxi X vertical mot For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal - Switches fro Select charact ASCII	mum pape ion unit] ex num paper notion unit iode. ESC 1B 27 m standard er font. ESC	kceeds 1016 feed amour exceeds 90 L 4C 76 d mode to pa	mm{40 <sup>ii</sup> }. ht is appro 10mm {35 age mode. n	.ximately 900mm {35.5"} if .5"}.
ESC L [Name] [Format] [Description] ESC M n [Name] [Format]	- The maxi X vertical mot For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal - Switches fro Select charact ASCII Hex	mum pape ion unit] ex num paper notion unit ode. ESC 1B 27 m standard er font. ESC 1B	kceeds 1016 feed amour exceeds 90 L 4C 76 d mode to pa M 4D	mm{40 <sup>ii</sup> }. nt is appro 00mm {35	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name] [Format]	The maxi X vertical mot For SRP-372     The maxir [n X vertical n  Select page m ASCII Hex Decimal Select charact ASCII Hex Decimal	mum pape ion unit] ex- num paper notion unit ode. ESC 1B 27 m standard er font. ESC 1B 27 27	kceeds 1016 feed amour l exceeds 90 L 4C 76 d mode to pa M 4D 77	mm{40 <sup>ii</sup> }. ht is appro 10mm {35 age mode. n	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name] [Format]	- The maxi X vertical mot For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal - Switches fro Select charact ASCII Hex Decimal For SRP-370 :	mum pape ion unit] ex- num paper hotion unit; tode. ESC 1B 27 m standard er font. ESC 1B 27 n = 0, 1, -	xceeds 1016 feed amour l exceeds 90 L 4C 76 d mode to pa M 4D 77 78, 49	mm{40 <sup>ii</sup> }. nt is appro 00mm {35 age mode.  n n	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name] [Format]	The maxi X vertical mot For SRP-372     The maxir [n X vertical n  Select page m ASCII Hex Decimal Select charact ASCII Hex Decimal	mum pape ion unit] ex- num paper hotion unit; tode. ESC 1B 27 m standard er font. ESC 1B 27 n = 0, 1, -	xceeds 1016 feed amour l exceeds 90 L 4C 76 d mode to pa M 4D 77 78, 49	mm{40 <sup>ii</sup> }. nt is appro 00mm {35 age mode.  n n	.ximately 900mm {35.5"} if .5"}.
[Name] [Format] [Description] <b>ESC M n</b> [Name]	- The maxi X vertical mot For SRP-372 - The maxir [n X vertical n Select page m ASCII Hex Decimal - Switches fro Select charact ASCII Hex Decimal For SRP-370 :	mum pape ion unit] ex- num paper hotion unit; tode. ESC 1B 27 m standard er font. ESC 1B 27 n = 0, 1, -	xceeds 1016 feed amour l exceeds 90 L 4C 76 d mode to pa M 4D 77 78, 49	mm{40 <sup>ii</sup> }. nt is appro 00mm {35 age mode.  n n	.ximately 900mm {35.5"} if .5"}.

- For SRP-3	370 model :				
	tion				
	acter font A (1				
1, 49 Char	acter font B (9	× 24) select	ted.		
- For SPD-7	72 model :				
	tion				
	acter font A (1	2 × 24) sele	cted.		
	acter font B (9				
ESC R n					
[Name]	Select an in	ternational cl	haracter set		
[Format]	ASCII	ESC	R	n	
	Hex	1B	52	n	
	Decimal	27	82	n	
[Range]	0 ≤ n ≤ 13				
[Default] [Description]	n=0	ornational ch	aractor cot	in from the	following table :
[Description]	n	Charact		n	Character set
	0	U.S.		7	Spain I
	1	Fran		9	Norway
	2	Germa		10	Denmark II
	3	U.K	-	11	Spain II
	4	Denma	ark I	12	Latin America
	5	Swed	len	13	Korea
	6	Ital	у		
	·				
ESC S					
[Name]	Select stand				
[Format]	ASCII	ESC	S		
	Hex	1B	53		
[Description]	Decimal	27	83 ado to ctano	lard mode	Any data stored in the
[Description]		rinting in page			Any uala slored in the
	printer for p	initiang in pa	ye moue is i	cicaleu.	
ESC T n					
[Name]		direction in p			
[Format]	ASCII	ESC	Т	n	
	Hex	1B	54	n	
[D]	Decimal	27	84	n	
[Range]		48 ≤ n ≤ 51			
[Default] [Description]	n=0 • Selects the	a nrint directi	on and star	tina nositio	n in page mode.
[Description]	- JCIECUS UN		on and star	ung positio	n in page mode.

n	Print	Direc	tion				Startin	ng Pos	ition	
0,48	Le	eft righ	t				Up	per lef	t	
1,49		om to					Lo	wer lef	t	
1,50	Ri	ght lef	t				Lov	ver righ	nt	
3,51	Тор	botto	m				Upj	per righ	nt	
·										
ESC V n										
[Name]	Turn 90°clc	ckwise	e rotati	on mode	on/off.					
[Format]	ASCII	E	SC	V		n				
	Hex		1B	56		n				
	Decimal		27	86		n				
[Range]	0 ≤ n ≤ 2,	48 ≤ n	≤ 50							
[Default]	n=o									
[Description]	<ul> <li>Turn 90°</li> </ul>					ff in st	andard	mode.		
				is selecte	1:					
	n		ction							
	0, 48	Turn	off 90	°clockwis	e rotati	on mo	de.			
	1, 49	Turn	on 90	°clockwis	- rotati	on mo	de			
	2, 50	Turri	011 50	ciocititis	Totad		uc.			
	H yL yH dxL									
[Name]	Set relative	print p								
		500							dyL	
[Format]	ASCII	ESC	W	xL xH			dxL			dyH
	ASCII Hex	1B	57	xL xH	ýL	ýН	dxL	dxH	dyL	dýH
[Format]	ASCII Hex Decimal	1B 27	57 87	xL xH xL xH	ýL yL	ýН уН	dxL dxL	dxH dxH	dyL dyL	
	ASCII Hex Decimal $0 \le (xL + x)$	1B 27 H x 25	57 87 6) ≤ 6	xL xH xL xH 55535 (0 :	ýL yL ≲xL ≤	ўн ун 255, С	dxL dxL ≤ xH	dxH dxH ≤ 255)	dyL dyL	dýH
[Format]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$	1B 27 H x 25 H x 25	57 87 6) ≤ 6 6) ≤ 6	xL x⊢ xL x⊢ 55535 (0 ± 55535 (0 ±	ýL yL ≤ xL ≤ ≤ yL ≤	ўН уН 255, 0 255, 0	dxL dxL dxL = xH dxL = xH	dxH dxH ≤ 255) ≤ 255)	dýL dyL	dýH
[Format]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$ $1 \le (dxL + y)$	1B 27 H x 25 H x 25 dxH x	57 87 6) ≤ 6 6) ≤ 6 256) :	xL x⊢ xL x⊢ 55535 (0 : 55535 (0 : ≤ 65535 (	ýL yL ≤ xL ≤ ≤ yL ≤ 2 ≤ dxl	ýH yH 255, 0 255, 0 ∟ ≤ 25	dxL dxL 0 ≤ xH 0 ≤ yH 05, 0 ≤	dxH dxH ≤ 255) ≤ 255) dxH ≤	dýL dyL 255)	dýH
[Format] [Range]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$ $1 \le (dxL + 1) \le (dyL + 1)$	1B 27 H x 25 H x 25 dxH x dyH x	57 87 6) ≤ 6 6) ≤ 6 256) :	xL x⊢ xL x⊢ 55535 (0 : 55535 (0 : ≤ 65535 (	ýL yL ≤ xL ≤ ≤ yL ≤ 2 ≤ dxl	ýH yH 255, 0 255, 0 ∟ ≤ 25	dxL dxL 0 ≤ xH 0 ≤ yH 05, 0 ≤	dxH dxH ≤ 255) ≤ 255) dxH ≤	dýL dyL 255)	dýH
[Format]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$ $1 \le (dxL + 1) \le (dyL + 1)$ • For SRP-3	1B 27 xH x 25 rH x 25 dxH x 25 dxH x dyH x 70 :	57 87 66) ≤ 6 66) ≤ 6 256) : 256) :	xL xH xL xH 55535 (0 : 55535 (0 : ≤ 65535 ( ≤ 65535 (	ýL yL ≤ ≤ xL ≤ ≤ yL ≤ ) ≤ dxl ) ≤ dyl	ýH yH 255, 0 255, 0 L ≤ 25 L ≤ 25	dxL dxL 0 ≤ xH 0 ≤ yH 5, 0 ≤ 5, 0 ≤	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$ $1 \le (dxL + x)$ $1 \le (dyL + x)$ For SRP-3 - When a	1B 27 H x 25 H x 25 dxH x 25 dxH x dyH x 70 : paper	$57 \\ 87 \\ 60 \le 6 \\ 256 \le 256 $	xL xH xL xH 55535 (0 : 55535 (0 : ≤ 65535 ( ≤ 65535 ( of 80mm	ýL yL ≤ xL ≤ ≤ yL ≤ 0 ≤ dxl 0 ≤ dyl (3.15")	ýH 9H 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel	dxL dxL 0 ≤ xH 0 ≤ yH 5, 0 ≤ 5, 0 ≤	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dyH
[Format] [Range]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + x)$ $1 \le (dxL + x)$ $1 \le (dyL + x)$ $1 \le (dyL + x)$ - For SRP-3 - When a (xL + x)	1B 27 H x 25 H x 25 dxH x dyH x 70 : paper xH x 2	57 87 $66) \le 6$ 256) = width 256) =	xL xH xL xH 55535 (0 = 55535 (0 = 55535 (0 = 65535 (0 = 65535 (0 = 65535 (0 = 65535 (0 = 65535 (0 = 66535 (0 = 0 = 0, 0 = 0)))))	ýL yL ≤ xL ≤ ≤ yL ≤ 0 ≤ dxl 0 ≤ dyl (3.15"] xH=0)	ýH yH 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel	dxL dxL 0 ≤ xH 0 ≤ yH 5, 0 ≤ 5, 0 ≤	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dyH
[Format] [Range]	ASCII Hex Decimal $0 \le (xL + x)$ $0 \le (yL + y)$ $1 \le (dxL + 1) \le (dxL + 1) \le (dyL + 1) \le $	1B 27 H x 25 H x 25 dxH x dyH x 70 : paper xH x 2 yH x 2	57 87 $66) \le 6$ 256) := width 256) = 256) =	xL xH xL xH 55535 (0 : 55535 (0 : 55535 (0 : 65535 ( ≤ 65535 ( ≤ 65535 ( of 80mm 0 (xL=0, 0 (yL=0,	ýL yL ≤ xL ≤ ≤ yL ≤ 0 ≤ dxl 0 ≤ dyl (3.15"] xH=0) yH=0)	yH 9H 255, 0 255, 0 ∟ ≤ 25 ∟ ≤ 25 ↓ ssel	$dxLdxL) \le xH) \le yH5, 0 \le 5, 0 \le$ ected :	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	$\begin{array}{l} \mbox{ASCII} \\ \mbox{Hex} \\ \mbox{Decimal} \\ 0 \leq (xL + x) \\ 0 \leq (yL + y) \\ 1 \leq (dxL + 1 \\ \leq (dyL + 1 \\ \cdot \mbox{For SRP-3} \\ \cdot \mbox{When a} \\ (xL + (yL + (yL + (dxL + 1))) \\ \end{array}$	1B 27 H x 25 H x 25 dxH x dyH x 70 : paper xH x 2 yH x 2 + dxH	57 87 $66) \le 6$ 256) = width 256) = 256) = 256) = x = 256	xL xH xL xH 55535 (0 : 55535 (0 : 55535 (0 : ≤ 65535 ( ≤ 65535 ( 0 (xL=0, 0 (xL=0, 0 (yL=0, = 512 (d	ýL yL ≤ xL ≤ ≤ yL ≤ 0 ≤ dxl 0 ≤ dyl (3.15"] (3.15"] (xH=0) yH=0) xL=0, (	ýH 9H 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel dxH=2	$dxL  dxL  0 \le xH  0 \le yH  15, 0 \le 15, 0 \le 100 $ ected :	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	$\begin{array}{l} \text{ASCII} \\ \text{Hex} \\ \text{Decimal} \\ 0 \leq (xL + x) \\ 0 \leq (yL + y) \\ 1 \leq (dxL + y) \\ 1 \leq (dxL + z) \\ \text{For SRP-3} \\ - \text{When a} \\ (xL + z) \\ (dxL + z) \\ (dxL + z) \\ (dyL + z$	1B 27 H x 25 dxH x 25 dxH x dyH x 70 : paper xH x 2 yH x 2 + dxH + dyH	57 87 $66) \le 6$ 256) = 256) = 256) = 256) = x = 256) x = 256)	xL xH xL xH 55535 (0 : 55535 (0 : 55535 (0 : ≤ 65535 ( ≤ 65535 ( 0 (xL=0, 0 (xL=0, 0 (yL=0, 0 (yL=0, 1 = 512 (d) = 1662 (	yL yL ≤ xL ≤ ≤ yL ≤ 2 ≤ dxl 0 ≤ dyl 3 (3.15"] (3.15"] (3.15"] xH=0) yH=0) xL=0, 0 dyL=12	ýH 9H 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel dxH=2 26, dyl	dxL dxL $0 \le xH$ $0 \le yH$ $5, 0 \le 5, 0 \le 5, 0 \le 100$ ected : 1000000000000000000000000000000000000	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	$\begin{array}{l} \text{ASCII}\\ \text{Hex}\\ \text{Decimal}\\ 0 \leq (xL + x)\\ 0 \leq (yL + y)\\ 1 \leq (dxL + \\ 1 \leq (dyL + \\ \cdot \text{For SRP-3} \\ \cdot \text{When a}\\ (xL + \\ (yL + \\ (dxL - \\ (dyL - \\ \cdot \text{When a}) \end{array}$	1B 27 H x 25 dxH x 25 dxH x dyH x 70 : paper xH x 2 yH x 2 + dxH + dyH	57 87 $66) \le 6$ $256) \le 6$ 256) = 256) = x 256) x 256) x 256)	xL xH xL xH 55535 (0 $\pm$ 55535 (0 $\pm$ 65535	yL yL $z xL \le z$ $z yL \le z$ $z yL \le z$ z dxl z dx dx dx dx dxl z dx	ýH 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel dxH=2 26, dyl } is sel	dxL dxL $0 \le xH$ $0 \le yH$ $5, 0 \le 5, 0 \le 5, 0 \le 100$ ected : 1000000000000000000000000000000000000	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	$\begin{array}{l} \text{ASCII} \\ \text{Hex} \\ \text{Decimal} \\ 0 \leq (xL + x) \\ 0 \leq (yL + y) \\ 1 \leq (dyL + y) \\ 1 \leq (dyL + y) \\ \text{For SRP-3} \\ \text{- When a} \\ (xL + y) \\ (dyL - y) \\ \text{- When a} \\ (xL + y) \\ (x$	1B 27 H x 25 dxH x dyH x 70 : paper xH x 2 yH x 2 + dxH + dyH paper xH x 2	57 87 $60 \le 6$ $256 \le 6$ $256 \ge 2$ $256 \ge 2$ $x = 256 \ge 2$	$\begin{array}{cccc} xL & xH \\ xL & xH \\ 55535 (0 : : : : : : : : : : : : : : : : : : $	yL yL $yL \le$ $yL \le$ $yL \le$ (3.15") (3.15"	ýH 255, 0 255, 0 L ≤ 25 L ≤ 25 } is sel dxH=2 26, dyl } is sel	dxL dxL $0 \le xH$ $0 \le yH$ $5, 0 \le 5, 0 \le 5, 0 \le 100$ ected : 1000000000000000000000000000000000000	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH
[Format] [Range]	$\begin{array}{l} \text{ASCII} \\ \text{Hex} \\ \text{Decimal} \\ 0 \leq (xL + x) \\ 1 \leq (dxL + x) \\ 1 \leq (dxL + x) \\ \text{For SRP-3} \\ - \text{ When a} \\ (xL + x) \\ (dyL - x) \\ (dyL - x) \\ - \text{ When a} \\ (xL + x) \\ (yL + x) $	1B 27 H x 25 dxH x dyH x 70 : paper xH x 2 yH x 2 + dxH + dyH paper xH x 2 yH x	57 87 $66) \le 6$ 256) = 256) = 256) = 256) = x = 256) x = 256) x = 256) x = 256) =	xL xH xL xH 55535 (0 $\pm$ 55535 (0 $\pm$ 65535	yL yL $yL \le$ $yL \le$ $yL \le$ (3.15") (3.15"	ýH 9H 255, 0 255, 0 ≤ 25 ≤ 25 ≤ 25 is sel is sel dxH=2 26, dyl is sel	$dxL  dxL  0 \le xH  0 \le yH  15, 0 \le 15, 0 \le 15, 0 \le 10, 0 $	dxH dxH ≤ 255) ≤ 255) dxH ≤ dyH ≤	dýL dyL 255)	dýH

[Description]	(xL + xl (yL + yl (dxL + (dyL + - When a p (xL + xl (yL + yl (dxL + + (dyL + - Kertical st - Horizontal - Vertical st - Vertical pri - The maximu	aper width o H x 256) = 0 H x 256) = 0 dyH x 256) = dyH x 256) = dyH x 256) = 0 H x 256) = 0 dxH x 256) = 0 dxH x 256) = 0 dyH x 256) = dyH x 256)	(xL=0, xH= (yL=0, yH= :576 (dxL= :1476 (dyL) $f 60mm{2.3} (xL=0, xH=$ (yL=0, yH= :1476 (dyL) :1476 (dyL) :size of the pon = [(xL + x)on = [(yL + x)th = [(dxL + a)th = [(dyL + a)]	=0) 64, dxH=2) =196, dyH=5 6"} is selecte =0) =0) 128, dxH=1) =196, dyH=5 printing area. H x 256) x (ho yH x 256) x (ho dyH x 256) x (ho dyH x 256) x (ho	) d :	unites)]. tes)]. nites)].
ESC \ nL nl						
[Name]	Set relative p	rint position.				
[Format]	ASCII	ESC	\ \	nL	nH	
	Hex	1B	5C	nL	nH	
	Decimal	27	92	nL	nH	
[Range]	0 ≤ (nL + nH	x 256) ≤ 65	535 (0 ≤ nL	. 255, 0 ≤ nH	≤ 255)	
[Description]	<ul> <li>Set the print</li> </ul>	t starting pos	ition based	on the curren	nt position to [(r	וL+nH
	× 256) × hor	izontal or ver	tical motion	unit]		
	- When (nL	+ nH × 256	) is positive	number, the	print starting po	osition is
	specified to the	ne right base	d on the cu	rent position.		
	- When (nL	. + nH × 256	) is negative	e number, the	e print starting p	osition is
	specified to the	ne left based	on the curr	ent position.		
	•			•		
ESC a n						
[Name]	Select justific	ation.				
[Format]	ASCII	ESC	а	n		
	Hex	1B	61	n		
	Decimal	27	97	n		
[Range]	0 ≤ n ≤2, 48	≤ n ≤50				
[Default]	n=0					
[Description]	<ul> <li>In standard model</li> </ul>	de, aligns all the	e data in one li	ne to the positior	n specified by n as f	ollows :
	n	Justificatio				
	0, 48	Left justifica	tion			
	1, 49	Centering				
	2, 50	Right justific	ation			
	2,00					

[Name]	Foloct	nanor conc	or(s) to outp	ut paper	and cignals		
[Format]	ASCI		ESC	C C	3	n	
Formatj	Hex		1B	63	33	n	
	Decin		1D 27	99	55 51		
Dengel	0 ≤ n :		27	99	51	n	
Range]		≤ 255					
Default]	n=0						
Descriptio	is dete		er sensor(s) t	o output	paper end s	signals when a pape	er er
	is deter	cieu.					
Bit	Off/On	Hex	Decimal	Functi	on		
0	Off	00	0		-	l sensor disable.	
Ū	On	01	1			sensor enable.	
1	Off	00	0			sensor disable.	
1	On	00	2			sensor enable.	
2	Off	02	0		oll end sens		
Z	On	00	4		oll end sens		
3			-				
3	Off	00	0		oll end sens	sor disable.	
4~7	On -	- -	8 -	Reserv			
[Note]	- • This o with a	-	- s available or	Reserv	ed.	sor enable. erface and is ignore	ed
[Note] ESC c 4 n	- • This o with a	- command is serial inter	s available or face.	Reservently with a	ed. a parallel int		ed
[Note] ESC c 4 n [Name]	- • This of with a Select	- command is serial interf paper sens	s available or face. or(s) to stop	Reservently with a printing.	ed. a parallel int	erface and is ignore	ed
[Note] ESC c 4 n [Name]	- • This of with a Select ASCII	- command is serial interf paper sens	s available or face. or(s) to stop ESC	Reservently with a printing.	ed. a parallel inte	erface and is ignore	ed
[Note] ESC c 4 n [Name]	- • This of with a Select ASCII Hex	- command is serial inter paper sens	s available or face. or(s) to stop ESC 1B	Reservent nly with a printing. c 63	ed. a parallel intr 4 34	erface and is ignore	ed
[Note] ESC c 4 n [Name] [Format]	- • This of with a Select ASCII Hex Decin	- command is serial interi paper sens [ 1	s available or face. or(s) to stop ESC	Reservently with a printing.	ed. a parallel inte	erface and is ignore	ed
[Note] ESC c 4 n [Name] [Format] [Range]	- • This of with a Select ASCII Hex Decin 0 ≤ n :	- command is serial interi paper sens [ 1	s available or face. or(s) to stop ESC 1B	Reservent nly with a printing. c 63	ed. a parallel intr 4 34	erface and is ignore	ed
[Note] ESC c 4 n [Name] [Format] [Range] [Default]	- • This o with a Select ASCII Hex Decin 0 ≤ n : n=0	- command is serial interf paper sens [	s available or face. or(s) to stop ESC 1B 27	Reservent nly with a printing. c 63 99	ed. a parallel into 4 34 52	n n n n	
[Note] ESC c 4 n [Name] [Format] [Range] [Default]	- • This o with a Select ( ASCI) Hex Decin 0 ≤ n s n=0 • Select	- command is serial interf paper sens [ nal ≤ 255 ts the pape	s available or face. or(s) to stop ESC 1B 27	Reservent nly with a printing. c 63 99	ed. a parallel into 4 34 52	erface and is ignore	
[Note] ESC c 4 n [Name] [Format] [Range] [Default]	- • This o with a Select ASCII Hex Decin 0 ≤ n : n=0	- command is serial interf paper sens [ nal ≤ 255 ts the pape	s available or face. or(s) to stop ESC 1B 27	Reservent nly with a printing. c 63 99	ed. a parallel into 4 34 52	n n n n	
[Note] ESC c 4 n [Name] Format] [Range] [Default]	- • This o with a Select ( ASCI) Hex Decin 0 ≤ n s n=0 • Select	- command is serial interf paper sens [ nal ≤ 255 ts the pape	s available or face. or(s) to stop ESC 1B 27	Reservent nly with a printing. c 63 99	ed. a parallel intr 4 34 52 stop printing	n n n n	
[Note] <b>ESC c 4 n</b> [Name] [Format] [Format] [Range] [Default] [Descriptic	- • This of with a Select t ASCII Hex Decin 0 ≤ n s n=0 • Select detecte	- command is serial interf paper sens [ mal ≤ 255 ts the pape ed.	s available or face. or(s) to stop ESC 1B 27 er sensor(s) t	Reserving Ny with a printing. c 63 99 o use to Functi	ed. a parallel intr 4 34 52 stop printing	n n n n g when a paper end	
[Note] ESC c 4 n [Name] [Format] [Pange] [Default] [Descriptic Bit		- command is serial interf paper sens t nal ≤ 255 ts the pape ad. Hex	s available or face. or(s) to stop ESC 1B 27 er sensor(s) t	Reserv nly with a printing. c 63 99 o use to Functi Paper r	ed. a parallel int 4 34 52 stop printing on roll end sens	n n n g when a paper enc	
[Note] ESC c 4 n [Name] [Format] [Pange] [Default] [Descriptic Bit	- • This c with a Select   ASCII Hex Decin 0 ≤ n : n=0 n] • Select detecte Off/On Off	- command is serial interf paper sens [ 1 mal ≤ 255 ts the pape cd. Hex 00	s available or face. or(s) to stop ESC 1B 27 er sensor(s) to <b>Decimal</b> 0	Reserv Aly with a printing. c 63 99 o use to Functi Paper n Paper n	ed. a parallel intr 4 34 52 stop printing on oil end sens oil end sens	n n n g when a paper enc sor disable. sor enable.	
[Note] ESC c 4 n [Name] [Format] [Range] [Default] [Descriptic Bit 0	- • This c with a Select ASCII Hex Decin 0 ≤ n : n=0 off / On Off On	- command is serial interf paper sens [ nal ≤ 255 ts the pape ed. Hex 00 01	s available or face. or(s) to stop ESC 1B 27 er sensor(s) t <b>Decimal</b> 0 1	Reservent printing. c 63 99 o use to Functi Paper n Paper n Paper n	ed. a parallel int 4 34 52 stop printing on roll end sens	n n n g when a paper enc cor disable. cor disable. cor disable.	

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ESC c 5 n						
[Name]	Enable / Disa	ble panel bu	tton.			
[Format]	ASCII	ESC	с	5	n	
	Hex	1B	63	35	n	
	Decimal	27	99	53	n	
[Range]	0 ≤ n ≤ 255					
[Default]	n=0					
[Description]	<ul> <li>Enables or of</li> </ul>	lisables the	panel button	s.		
			0, the panel			
			1, the panel			
[Notes]	<ul> <li>When the p</li> </ul>				s are always	ignored
	regardless of	the setting v	with this com	mand.		
ESC d n						
[Name]	Print and feed	d n lines.				
[Format]	ASCII	ESC	d	n		
	Hex	1B	64	n		
	Decimal	27	100	n		
[Range]	0 ≤ n ≤ 255					
[Description]	<ul> <li>Prints the d</li> </ul>	ata in the pr	int buffer and	d feeds n line	es.	
ESC p m t1 t						
[Name]	Generate puls					
[Format]	ASCII	ESC	р	m	t1	t2
	Hex	1B	70	m	t1	t2
	Decimal	27	112	m	t1	t2
[Range]	m = 0, 1, 48,					
	$0 \le t1 \le 255$					<i>.</i>
[Description]	<ul> <li>Outputs the</li> </ul>			d t2 to conne	ector pin m as	s follows :
	m	Connector				
	0, 48		-out connect			
	1, 49		k-out connect			
	<ul> <li>t1 specifies</li> </ul>		N time as [t1	x 2ms], and	t2 specifies	the pulse
	OFF time as [					
	<ul> <li>If t2 is small</li> </ul>	ier than t1,	UFF time is s	et as [t1 x 2i	msj.	

[Name]	Select cha	racter code table	2.						
[Format]	ASCII	ESC	t	n					
	Hex	1B	74	n					
	Decimal	27	116	n					
[Range]	0 ≤ n ≤ 5	, 16 ≤ n ≤ 24, 2	7 ≤ n ≤ 30,	n=255					
[Default]	For model	without Thai ch	aracter supp	ort : n=0					
		with Thai chara							
[Description]	<ul> <li>Selects a</li> </ul>	page n from the	e character	code table.					
	n	Page							
	0	PC437 (USA,	standard Eu	rope)					
	1	Katakana							
	2	PC850 (Multilingual)							
	3	PC860 (Portuguese)							
	4	PC863 (Canadian-French)							
	5	PC865 (Nordi	c)						
	7	855 (Cyrillic)							
	8	857 (Turkish)							
	16	WPC1252							
	17	PC866 (Cyrilli	c #2)						
	18	PC852 (Latin	2)						
	19	PC858 (Euro)							
	22	864 (Arabic)							
	23	Thai character code 42							
	24	1253 (Greek)							
	28	1251 (Cyrillic)	)						
	29	737 (Greek)							
	31	Thai characte	r code 16						
	33	1255 (Hebrev	v)						
	255	User-defined	page						
	·								
ESC { n									
[Name]		ide-down printin	g mode on/o	off.					
[Format]	ASCII	ESC	{	n					
	Hex	1B	7B	n					

	rame applace dominiprinting mode on one						
[Format]	ASCII	ESC	{	n			
	Hex	1B	7B	n			
	Decimal	27	123	n			
[Range]	0 ≤ n ≤ 255						
[Default]	n=0						
[Description]		.SB of n is	0, upside-do	wn printing mo	de is turned off. de is turned on.		

[Name]	Print NV b	it image.						
[Format]		FS	FS p		m			
	Hex	1C	70	n	m			
	Decimal	28	112	n	m			
[Range]	$1 \le n \le 2$	55						
	0 ≤ m ≤ 3	$3,48 \le m \le 51$						
Descript		NV bit image						
					dpi : dots per 25.4mn	n {1"		
- For S	RP-370:							
m	Mode	Vertical Do	t Density (DF	РI) Н	orizontal Dot Density (	(DPI)		
0, 48	Normal	1	80 dpi		180 dpi			
1, 49	Double-width	1	80 dpi		90 dpi			
2, 50	Double-height	ç	0 dpi		180 dpi			
3, 51	Quadruple		0 dpi		90 dpi			
	RP-372 :							
m	Mode	Vertical Do	t Density (DF	PI) H	orizontal Dot Density (	DPI		
0, 48	Normal		03 dpi	,	203 dpi			
1, 49	Double-width		03 dpi		203/2 dpi			
2, 50	Double-height		3/2 dpi		203 dpi			
3, 51	Quadruple		3/2 dpi		203/2 dpi			
-/			-, F		p			
FS a n [	xL xH yL yH d1.	dk]1[xL)	H vL vH d1	dk]n				
[Name]		V bit image.						
[Format]			n [xL xH	vL d1d	k]1[xL xH yLd1dk	ln		
	Hex	1C 71			k]1[xL xH vL d1dk			
	Decimal	28 113	n ÎxL xH	vL d1d	k]1 [xL xH yLd1dk	เป็ก		
[Range]	1 ≤ n ≤ 2!	55	-	,	,	-		
	1 ≤ (xL +	xH ×256) ≤ 10	023 (0 ≤ xL ≤	≤ 255, 0 :	≤ xH ≤ 3)			
	1 ≤ (yL +	$1 \le (yL + yH \times 256) \le 288 (0 \le yL \le 255, yH=0,1)$						
	$0 \le d \le 2$	$0 \le d \le 255$						
		$k = (xL + xH \times 256) \times (yL + yH \times 256) \times 8$						
					8k, 192k, 256k, 320k,	384k		
				default v	alue is 384 KB.			
[Descript		the specified N						
					you are defining.			
					rizontal direction for the	e NV		
		bit image with $[(xL + xH \times 256) \times 8]$ .						
		- yL, yH specify the number of dots in the vertical direction for the NV bit						
		image with $[(yL + yH \times 256) \times 8]$ .						
		<ul> <li>If this command is processed when the NV graphics is defined with GS ( L or GS 8 L, delete all NV graphics data, then define the bit image data with this command.</li> </ul>						
[NI-4]								
[Notes] • Frequent write command executions by this command may damage to Therefore, it is recommended to write to the NV memory 10 times or le						ory.		
		<ul> <li>During processing of this command, the printer is BUSY while writing the</li> </ul>						
	data to the	e NV bit image	memory and	stops rea	ceiving data. Therefore, commands, during the	, it is		

[Name]	Select cl	naracter size.						
[Format]	ASCII	GS	!	n				
	Hex	1D	21	n				
	Decima	al 29	33	n				
[Range]	0 ≤ n ≤ 255							
	(where	1 ≤ Enlargemer	nt in vertical direct	ion ≤ 8, 1 ≤ Enlargement in				
	horizont	al direction $\leq 8$	)					
[Default]	n=0							
[Description]	<ul> <li>Selects</li> </ul>		(enlargement in v	vertical and horizontal directions)				
	Bit	Function		Setting				
	0	Specifies the	number of times					
	1	enlarged in th		Refer to Table 2				
	2	direction		[Enlarged in vertical direction]				
	3	direction						
	4	Enocifies the	number of times	Refer to Table 1				
	5			[Enlarged in horizontal				
	6	enlarged in the horizontal direction		direction]				
	7							
	- Ta	ble 1 [Enlarged	in horizontal direct	tion]				
	Hex	Decimal	Enlargement					
	00	0	1 time (standard	i)				
	10	16	2 times					
	20	32	3 times					
	30	48	4 times					
	40	64	5 times					
	50	80	6 times					
	60	96	7 times					
	70	112	8 times					
	- Ta		in vertical direction	n]				
	Hex	Decimal	Enlargement					
	00	0	1 time (standard	1)				
	01	1	2 times					
	02	2	3 times					
	03	3	4 times					
	04	4	5 times					
	05	5	6 times					
	06	6	7 times					
	07	7	8 times					
GS \$ nL nH								
[Name]			int position in page					
[Format]	ASCII	GS	\$	nL nH				
	Hex	1D	24	nL nH				
[Dange]	Decima		36	nL nH				
[Range]	U ≦ (NL	+ 11H X 250) ≤	2 L I I 2 U) 25 CC0	255, 0 ≤ nH ≤ 255)				
[Description]				position to $[(nL + nH \times 256) \times$				

[Name]	Execute test p	rint.								
[Format]	ASCII	GS	(	Α	pL	pН	n	m		
	Hex	1D	28	41	pL	pH	n	m		
	Decimal	29	40	65	pL	pH	n	m		
[Range]	(pL + pH x 25	6) = 2 (r	L=2, pH	1=0)		r.				
	$0 \le n \le 2,48$	$\leq n \leq 50$	)							
	1 ≤ m ≤ 3, 49	≤ m ≤ 5	51							
[Description]	<ul> <li>Executes a term</li> </ul>	est print	with a s	pecified	test patte	rn on a spe	cified p	aper		
	type (roll pape	r).								
	<ul> <li>n specifies</li> </ul>	the pape	er type a	as listed	below to	be tested :				
	m Pape	r type								
	0, 48									
	1, 49 Pape	r roll								
	2, 50									
	<ul> <li>m specifies</li> </ul>	s a test p	attern a	s listed	below :					
	m Test	pattern								
	1, 49 Hexa	decimal	dump							
	2, 50 Self	Test Prin	ting							
NI-47	<ul> <li>The printer execution</li> </ul>	ites a hardw	are reset a	after the p	rocedure to pl	ace the image	into the n	on-volati		
[Notes]	memory. The printe	er clear the	receive and	d print but	ters, and rese	ts all settings (	(user-defin	ed		
	characters, macros,	and the ch	aracter sty	les) to the	mode that w	as in effect at	power on.			
	m [a1 b1][a									
[Name]	Enable/disable									
[Format]		SS (	D	pL pl			][ak b			
		D 28 29 40		pL pl			][ak b			
[Range]	$3 \le (pL + pH)$			pL pl	H m	[at bi	][ak b	кј		
[Range]	3 ≤ (pL + pH ) m=20	x 250) >	00000							
	a=1, 2									
[Default]	b=0, 1, 48, 49									
[Deldale]	a		) of rea	l-time	comman	de	Def	ault		
	-				ate pulse in		Enable			
					e power-off		disable			
[Description]							alsabit	. (0=0		
	Enable or disables the following real-time commands.     a b Function									
	1 0, 48 <b>DLE DC4 fn m t</b> (fn=1) : Not processed (disabled)									
		DIFI								
	1 1, 49							1)		
	1 1, 49 2 0, 48	DLE I	DC4 fn	a b (fn=	=2) : Not p	processed (	disabled	d)		
	1 2 1,49 2,48 1,49	DLE I	DC4 fn DC4 fn	a b (fn= a b (fn=	=2) : Not p =2) : Proce	processed ( essed (enal	disabled bled)			
	1 1, 49 2 0, 48 2 1, 49 - pL, pH spe	DLE I DLE I	DC4 fn DC4 fn	a b (fn= a b (fn=	=2) : Not p =2) : Proce	processed ( essed (enal	disabled bled)			
	1 1, 49 2 0, 48 1, 49 - pL, pH spe and [a1 b1][	DLE I DLE I cifies (pl ak bk]).	DC4 fn DC4 fn + pH x	<b>a b</b> (fn= <b>a b</b> (fn= 256) a:	=2) : Not p =2) : Proce s the num	processed ( essed (enal	disabled bled)			
	1 1, 49 2 0, 48 1, 49 - pL, pH spe and [a1 b1][ - a specifies	DLE I DLE I cifies (pl ak bk]). the type	DC4 fn DC4 fn + pH x	<b>a b</b> (fn= <b>a b</b> (fn= 256) a time co	=2) : Not p =2) : Proce s the num	processed ( essed (enal	disabled bled)			
[Notes]	1 1, 49 2 0, 48 1, 49 - pL, pH spe and [a1 b1][	DLE I DLE I cifies (pl ak bk]). the type enable o	DC4 fn DC4 fn + pH x of real- or disable	<b>a b</b> (fn= <b>a b</b> (fn= 256) a: time con e.	=2) : Not p =2) : Proce s the num mmand.	processed ( essed (enal ber of byte	disabled bled) s after p			

If bit image data accidentally includes a character string with this command, it is
recommended to use this command in advance to disable the real-time command.

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[Deso		ommano	rea. The table below explains the d. Executes commands related to the e function code fn.
fn	Format	No.	Function
1	GS ( E pL pH fn d1 d2	1	Changes into the user setting mode.
2	GS ( E pL pH fn d1 d2 d3	2	Ends the user setting mode session. (Performs a soft reset.)
3	GS ( E pL pH fn [a1 b18b11] [ak bk8bk1]	3	Sets value(s) for the memory switch.
4	GS ( E pL pH fn a	4	Transmits the settings of the memor switch to the host.
11	GS ( E pL pH fn a d1dk	11	Sets the communication conditions for the serial interface.
12	GS ( E pL pH fn a	12	Transmits the communication conditions for the serial interface.
	[parameter]). • The user setting mode is a user memory with this comm • In Function 2, the printer p	special and. erforms	s the number of bytes after pH (fn and mode to change the values in the NV software reset. Therefore, the printer and resets all settings (user-defined

characters, macros, and the character style) to the mode in effect at power [Notes]

on.
Frequent write commands by this command, may damage the NV memory. Therefore, it is recommended to write to NV memory no more than 10 times a day.
While processing this command, the printer is BUSY while writing data to the user NV memory and stops receiving data. Therefore it is prohibited to transmit data including the real-time commands during the execution of this command.

	GS ( E pL pl						6		-12
[Format]	ASCII Hex	GS 1D	(	E	pL		fn	d1	d2
			28	45	pL		fn	d1	d2
[Danga]	Decimal	29	40	69 20-03	pL	pН	fn	d1	d2
[Range]	(pL + pH x fn=1	2007 = 3	(pL=3,	μ <b>π=</b> 0)	)				
	d1=73, d2=	70							
[Description]	Enter the		na mode	and no	tifies t	hat the r	node ha	change	А
[Description]	- Enter the		decimal			imal		nber of I	
	Header		7H			5	itui	1 byte	Jaca
	Flag		OH			32		1 byte	
	NUL		OH			0		1 byte	
	The follow	-		enabl		-	ottina m		
	<function< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>ouc.</td><td></td></function<>							ouc.	
		27 unou	gii si uni						
<function 2=""></function>	GS ( E pL pl	H fn d1 d	2 d3 (f	n=2)					
[Format]	ASCII	GS	(	ΕĹ	pL	pH 1	fn d1	. d2	d3
	Hex	1D	28	45	pL	pH 1	'n d1	d2	d3
	Decimal	29	40	69	pL	pH 1	'n d1	d2	d3
[Range]	الما المار	256) = 4	(nl = 4	nH=0	, i				
	$(pL + p\Pi x)$			$p_{1}=0$					
[	(pL + pH x fn=2	230) = 4	(PL= 1,	pri=0,	,				
		,	. ,	pri=0,	,				
	fn=2 d1=79, d2= • Ends the u	=85, d3=8 user settin	4 g mode a	and pe	rforms				ore, the
	fn=2 d1=79, d2= • Ends the u printer clear	85, d3=8 ser settin s the rece	4 g mode a	and pe	rforms uffers,	and rese	ts all set	tings	,
	fn=2 d1=79, d2= • Ends the u printer clear (user-define	85, d3=8 user settin s the rece ed charact	4 g mode a eive and er, down	and pe print b loaded	rforms uffers,   bit ima	and rese ages, ma	ts all set	tings	,
	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th	85, d3=8 user settin the rece d charact be mode the	4 g mode a eive and er, down nat was i	and pe print b loaded n effec	rforms uffers,   bit ima t at po	and rese ages, ma wer on.	ets all set acros, an	tings d the pri	nt
	fn=2 d1=79, d2= • Ends the u printer clear (user-define	85, d3=8 user settin the rece d charact be mode the	4 g mode a eive and er, down nat was i	and pe print b loaded n effec	rforms uffers,   bit ima t at po	and rese ages, ma wer on.	ets all set acros, an	tings d the pri	nt
[Description]	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi	85, d3=8 user settin rs the rece ed charact ie mode the ion code (	4 g mode a eive and er, down hat was i fn=2) is	and pe print b loaded n effec enable	rforms uffers, l bit ima t at po d only	and rese ages, ma wer on. in the us	ets all set acros, an er settin	tings d the pri	nt
[Description]	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi	=85, d3=8 user settin rs the rece ed charact ie mode th ion code ( <b>H fn [a1</b> ]	4 g mode a eive and er, down hat was i fn=2) is	and pe print b loaded n effec enable <b>1][a</b>	rforms uffers, l bit ima t at po d only <b>ak bk8</b>	and rese ages, ma wer on. in the us <b>bk1]</b>	ets all set acros, an ser settin (fn=3)	ttings d the pri g mode.	nt
[Description]	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi GS ( E pL pl ASCII	=85, d3=8 user settin rs the rece ed charact ie mode th ion code ( H fn [a1 I GS (	4 g mode a eive and er, down hat was i fn=2) is b18b1	and pe print b loaded n effec enable <b>1][a</b> pL	rforms uffers, l bit ima t at po d only <b>ak bk8</b> pH f	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1]	ets all set acros, an ser settin (fn=3) b18b11]	tings d the pri g mode. [ak bk8	nt 3bk1]
[Description]	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi GS ( E pL pl ASCII Hex	85, d3=8 user settin rs the rece ed charact ie mode th ion code ( H fn [a1 ] GS ( 1D 2	4 g mode a eive and er, down hat was i fn=2) is <b>b18b1</b> E 8 45	and pe print b loaded n effec enable <b>1][a</b> pL pL	rforms uffers, l bit ima t at po d only <b>ak bk8</b> pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1] n [a1]	ets all set acros, an ser settin (fn=3) b18b11] b18b11]	tings d the pri g mode. [ak bk8 [ak bk8	nt 3bk1] 3bk1]
[Description] <function 3=""> [Format]</function>	fn=2 d1=79, d2= • Ends the u printer clean (user-define mode) to th • This functi GS ( E pL pl ASCII Hex Decimal	85, d3=8 user settin rs the rece ed charact ie mode th ion code ( H fn [a1 ] GS ( 1D 2 29 4	4 g mode a eive and er, down hat was i fn=2) is <b>b18b1</b> ( E 8 45 0 69	and pe print b loaded n effec enable <b>1][a</b> pL pL	rforms uffers, I bit ima t at po d only <b>ak bk8</b> pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1] n [a1]	ets all set acros, an ser settin (fn=3) b18b11] b18b11]	tings d the pri g mode. [ak bk8	nt 3bk1] 3bk1]
[Description]	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi GS (E pL pl ASCII Hex Decimal (pL + pH x	85, d3=8 user settin rs the rece ed charact ie mode th ion code ( H fn [a1 ] GS ( 1D 2 29 4	4 g mode a eive and er, down hat was i fn=2) is <b>b18b1</b> ( E 8 45 0 69	and pe print b loaded n effec enable <b>1][a</b> pL pL	rforms uffers, l bit ima t at po d only <b>ak bk8</b> pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1] n [a1]	ets all set acros, an ser settin (fn=3) b18b11] b18b11]	tings d the pri g mode. [ak bk8 [ak bk8	nt 3bk1] 3bk1]
[Description] <function 3=""> [Format]</function>	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi <b>GS ( E pL pl</b> ASCII Hex Decimal (pL + pH x fn=3	85, d3=8 user settin rs the rece d charactive e mode the ion code ( H fn [a1 I GS ( 1D 2 29 4 256) = 10	4 g mode a eive and er, down hat was i fn=2) is <b>b18b1</b> ( E 8 45 0 69	and pe print b loaded n effec enable <b>1][a</b> pL pL	rforms uffers, l bit ima t at po d only <b>ak bk8</b> pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1] n [a1]	ets all set acros, an ser settin (fn=3) b18b11] b18b11]	tings d the pri g mode. [ak bk8 [ak bk8	nt 3bk1] 3bk1]
[Description] <function 3=""> [Format]</function>	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi <b>GS (E pL pi</b> ASCII Hex Decimal (pL + pH x fn=3 a=1, 2, 8, 9	85, d3=8 iser settin rs the rece ed charact e mode the ion code ( H fn [a1 ] GS ( 1D 2 29 4 256) = 10	4 g mode a eive and er, down hat was i fn=2) is <b>b18b1</b> ( E 8 45 0 69	and pe print b loaded n effec enable <b>1][a</b> pL pL	rforms uffers, l bit ima t at po d only <b>ak bk8</b> pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1] n [a1]	ets all set acros, an ser settin (fn=3) b18b11] b18b11]	tings d the pri g mode. [ak bk8 [ak bk8	nt 3bk1] 3bk1]
[Description] <function 3=""> [Format]</function>	fn=2 d1=79, d2= • Ends the u printer clear (user-define mode) to th • This functi <b>GS ( E pL pl</b> ASCII Hex Decimal (pL + pH x fn=3	85, d3=8 user settin rs the received character and char	4 g mode a er, down nat was i fn=2) is b18b1 ( E 8 45 0 69 0, 37	and pe print b loaded n effec enable <b>1][a</b> pL pL pL	rforms uffers, I bit ima t at po d only a <b>k bk8</b> pH fi pH fi pH fi	and rese ages, ma wer on. in the us <b>bk1]</b> n [a1 n [a1 n [a1]	ets all set acros, an eer settin (fn=3) b18b11 b18b11 b18b11]	tings d the pri g mode. [ak bk8 [ak bk8 [ak bk8	nt 3bk1] 3bk1] 3bk1]

[Description]	Change			hab ana		a tha ualua	a an acified by	. h	
[Description]					t is turned f		s specified by	/ D.	
					t is turned f				
					t is not cha				
					1 is set as f				
	Bit	Setting							
		value							
	1~4		Reser	ved					
	5	48			e feed : Dis				
		49	Auton	natic lin	e feed : Ena	abled			
	6~8		Reser						
					2 is set as f	ollows :			
	Bit	Setting	value	Funct					
	1~2			Reser					
	3	48			utter : Parti				
	1.0	49			utter : Full	Cutting.			
	4~8	Code Pag	le selec	tion.					
	MSW2-	8 MSW2	-7 M	SW2-6	MSW2-5	MSW2-4	Character	Table	
	48	48		48	48	48	Page 0 4		
	48	48		48	48	49	Page 1 Kata	akana	
	48	48		48	49	48	Page 2 8		
	48	48		48	49	49	Page 3 8		
	48	48	49		48	48	Page 4 8		
	48	48		49	48	49	Page 5 8		
	48 48	48		49 49	49 49	48 49	Page 16 1 Page 17 8		
	48	48		49	49	49	Page 17 8 Page 18 8		
	48	49		48	48	49	Page 10 8		
	48	49		48	49	48	Reserve		
	48	49		48	49	49	Page 22 8		
	48	49		49	48	48	Page 23 Th		
	48	49		49	48	49	Page 24 1	253	
	48	49		49	49	48			
	48	49		49	49	49	Reserve	:d	
	49	48		48	48	48	D 20 1	254	
	49	48		48	48	49	Page 28 1		
	49 49	48		48 48	49 49	48 49	Page 29 7 Reserve		
	49	48		40	49	49	Page 31 Th		
	49	48		49	48	49	Reserve		
	49	48		49	49	48	Page 33 1		
	49	48		49	49	49			
	49	49		48	48	48	Reserve	.u	
	49	49		48	48	49	Page 36 8		
	49	49		48	49	48	Page 37 8	357	

		switch 8 is set as follows :
	A 111 1	<b>-</b>

Bit	Setting value	Function					
1~8		Reserved.					
<ul> <li>When</li> </ul>	When a=9, the memory switch 9 is set as follows :						
Bit	Setting value	Function					
2	48	Data Length : 8 Bits					
	49	Data Length : 7 Bits					
3	3 48 Parity : odd						
	49	Parity : even					
4	48	Parity Check : Disable					
	49	Parity Check : Enable					
5	48	Flow Control : DTR/DSR					
	49	Flow Control : XON/XOFF					
6~8	Baud Rate Select	aud Rate Selection.					

MSW9-8	MSW9-7	MSW9-6	Baud Rate
48	48	48	9600
48	48	49	19200
48	49	48	38400
48	49	49	57600
49	48	48	115200

<function 4=""></function>	GS (EpLpH	lfna (	fn=4)					
[Format]	ASCII	GS	(	Е	рL	pН	fn	а
	Hex	1D	28	45	pL	pH	fn	а
	Decimal	29	40	69	pL	pH	fn	а
[Range]	(pL + pH x 2	256) = 2	(pL=2,	pH=0)				
	fn=4							
	a=1, 2, 8							
[Description]	<ul> <li>Transmits</li> </ul>	the settir	ng value(s	s) of the	e memo	ry switc	h specif	ied by a.
		Hexad	lecimal		Decima	l 🗌	Amo	ount of Data
	Header	3	7H		55			1 byte
	Flag	2	1H		33			1 byte
	Data	2011			40	0		0

Header Flag Data 21H 30H or 31H 48 or 49 8 bytes 
 NUL
 00H
 0
 1 byte

 • Data for the setting is transmitted as 8 bytes or a data string in the order from bit 8 to bit 1, as follows :
 0
 1 byte

 • Off : Hexadecimal = 30H / Decimal = 48
 - On : Hexadecimal = 31H / Decimal = 49
 - 48

[Format]	ASCII	GS	(	E	pL	pН	fn	а	d1dk	
	Hex	1D	28	45	pL	pH	fn	а	d1dk	
	Decimal	29	40	69	pL	pH	fn	а	d1dk	
[Range]	3 ≤ (pL +	pH x 256)	≤ 6553	35 (0 ≤	$pL \le 2$	255, 0 :	≤ pH 2	55)		
	fn=11									
	$1 \le a \le 4$									
	$48 \le d \le 5$	7								
	$1 \le k \le 6$									
[Default]	<ul> <li>When a=</li> </ul>		k)="19	200"						
	<ul> <li>When a=</li> <li>When a=</li> </ul>									
	<ul> <li>When a=</li> </ul>									
[Description]	<ul> <li>Sets the d</li> </ul>		ation co	ondition	s of the	o corial	interfa	ce snecif	ied hv a	
[Description]	according t			Jilaition.	5 01 01	c scriai	mena	ce specii	icu by a	
	a	Commun		Conditi	ion			d		
	1		Baud ra		UN1		k hvte	s of (d1	dk)	
	2	-	Parity					/te of (d)		
	3	Fl	ow con					/te of (d)		
	4		ata len					1 byte of (d1)		
	- Baud ra	ate setting	(d1	ik)					,	
	Baud ra	ite d	1	d2	d3	3	d4	d5	d6	
	(bps)									
	2400		50	52	48	3	48			
	4800	-	52	56	48	3	48			
	9600		57	54	48	3	48			
	19200	) 4	19	57	50	)	48	48		
	38400	) 5	51	56	52	2	48	48		
	57600		53	55	54	1	48	48		
	11520	0 4	19	49	53	3	50	48	48	
	- Parity s	etting (d1	)							
	d1					Parity	,			
	48					No pari				
	49				C	)dd par	ity			
	50				E	ven pa	rity			
	1	ontrol setti	ng (d1	)						
	d1					ow con				
	48					DTR / D				
	49				X	ON / XO	DFF			
		ngth settir	ıg (d1)		-					
	d1				Da	ata len				
	55 56					7 bits 8 bits				

• This function code fn=11 is enabled only in the user setting mode.

63

Format]	ASCII	GS	(	Е	pL	pН	fn	а					
	Hex	1D	28	45	pL	pH	fn	a					
	Decimal	29	40	69	pL	pH	fn	а					
Range]	(pL + pH x 25	6) = 2	2 (pL=2,	pH=0)									
	fn=12												
	1 ≤ a ≤ 4												
Description]	<ul> <li>Transmits the</li> </ul>	comm						specified	by a.				
	а			Comm			ndition						
	1					l rate							
	2	Parity											
	3					control							
	4 Data length												
				He	xadeci	imal	Decimal	Amou	int of Data				
	Header				37H		55	1	byte				
	Flag				33H		39		byte				
	Type of the com	municati	on condition	3	1H - 3	4H	49 - 52		byte				
	Separator	manneau			1FH		31		1 byte				
	Setting value	3		3	0H - 3	9H	48 - 57	1 -	6 bytes				
	NUL				00H		0	1	byte				
	Configuration     - When the				ocifiod								
	Baud rate (		d1	d2		d3	d4	d5	d6				
	9600	<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	57	54		48	48						
	19200		49	57		50	48	48					
	38400		51	56		52	48	48					
	57600		53	55		52 54	48	48					
	115200		49	49		53	50	48	48				
		narity					30	U	0				
	d1	panty	setting (	a-z) i	a=2) is specified : Parity								
	48												
	49				No parity Odd parity								
	50					ven pa	,						
	- When the	flow c	ontrol ca	ttina (:									
	d1	1000 0		ung (		ow coi							
	48					DTR / D							
	49					ON / X							
	- When the	data k	enath set	tina (a									
	d1	aada n	0.1901.000			ata ler							
	55					7 bit	-						
	56					8 bit	-						
	<ul> <li>If a is out of r</li> </ul>	1											

0	
r	<u>۸</u>

GS (LpLpH	GS ( L pL pH m fn [parameter]												
GS 8 L p1 p2	p3 p4 m fn	[pai	ramete	r]									
[Name]	Select graph	nics da	ta.										
[Format]	ASCII	GS	(	L	pL	pН	l r	n	fn	[parameter]			
	Hex	1D			pL	pH	pH m		fn	[parameter]			
	Decimal	29	40	76	pL	рH	l r	n	fn	[parameter]			
	ASCII	GS	(	p1	p2	р3	p4	m	fn	[parameter]			
	Hex	1D	28 4	C p1	p2	р3	p4	m	fn	[parameter]			
	Decimal	29	40 7	6 p1	p2	р3	p4	m	fn	[parameter]			
	* In the des	criptic	n belov	GS ( L	is use	d for	the ex	kplan	ation.				
	<ul> <li>Note that</li> </ul>	t GS	(L and	GS 8 L	have t	the sar	me Fu	inctio	on.				
	- If the [p	arame	eter] of	each for	mat e	kceeds	6553	33 by	tes us	se GS 8 L.			
[Description]	<ul> <li>Processes</li> </ul>	graph	ics data	accordi	ng to t	he fur	nction	code	e fn.				

fn	Format	Function No.	Function
0, 48	GS ( L pL pH m fn	Function 48	Transmits the NV graphics memory capacity.
2, 50	GS ( L pL pH m fn	Function 50	Prints the graphics data in the print buffer.
3, 51	GS ( L pL pH m fn	Function 51	Transmits the remaining capacity of the NV graphics memory.
64	GS ( L pL pH m fn d1 d2	Function 64	Transmits the defined NV graphics key code list.
65	GS ( L pL pH m fn d1 d2 d3	Function 65	Deletes all NV graphics data.
66	GS ( L pL pH m fn kc1 kc2	Function 66	Deletes the specified NV graphics data.
67	GS ( L pL pH m fn a kc1 kc2 b xL xH yL yH [c d1dk]1[c d1 dk]b	Function 67	Defines the raster graphics data in the non-volatile memory.
69	GS ( L pL pH m fn kc1 kc2 x y	Function 69	Prints the specified NV graphics data.
112	GS ( L pL pH m fn a bx by c xL xH yL yH d1dk	Function 112	Stores the raster graphics data in the print buffer memory.

pL, pH specifies (pL + pH x 256) as the number of bytes after pH(m, fn, and [parameter]).
Frequent write command executions by this command may damage the NV memory. Therefore, it is recommended to write to the NV memory no more than 10times a day.
While recording the particular p

• While processing this command, the printer is BUSY while writing data to the NV graphics memory and stops receiving data. Therefore it is prohibited to transmit data including the real-time commands during the execution of this command.

	- GS ( L pL p ASCII	GS		υ) L	pL	рH	fn	m					
[Format]	Hex	1D	( 28	4C	pL	рH	fn	m					
	Decimal	29	40	76	pL	pH	fn	m					
[Range]	(pL + pH x 2				PE	pri							
[.tange]	m=48		- (PE E/P										
	fn=0, 48												
[Description]	<ul> <li>Transmits</li> </ul>	the total	capacity of	of the N	V bit-image	mem	ory (numbe	r of					
	bytes in the	memory	/ area).		_								
			Hexadec	imal	Decimal		Amount o	f Data					
	Heade	r	37H		55		1 byt	e					
	Flag		30H		48		1 byt	e					
	Data		30H - 3	9H	48 - 57		1 - 8 by	/tes					
	NUL		00H		0		1 byt	e					
	<ul> <li>The total c</li> </ul>	apacity	data is cor	nverted t	to character	code	s correspon	ding to					
	decimal data			l from th	ne MSB.								
	<ul> <li>The data left</li> </ul>												
		<ul> <li>The total capacity of the UV user memory is selectable as any one of [0, 64K, 128K, 192K, 256K, 320K, 384K] bytes with GS (E. The default value is 384 KB.</li> </ul>											
	128K, 192K, 2	256K, 320	)K, 384K] b	ytes with	<b>GS ( E</b> . The	defau	It value is 38	4 KB.					
<function 50:<="" td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></function>				-									
[Format]	ASCII	GS	(	L	pL	pH	m	fn					
	Hex	1D	28	4C	pL	pH	m	fn fn					
[Danga]	Decimal	29	40	76	pL	pН	m	fn					
[Range]	(pL + pH x 256) = 2 (pL=2, pH=0) m=48												
[Description]	fn=2, 50	uffered	aranhics w	nich is st	ored by the	nroce	ss of Functio	n 112					
[Description]	fn=2, 50 • Prints the b												
[Description]	fn=2, 50 • Prints the b • Feeds pape	er by the	e amount o	correspo									
[Description]	fn=2, 50 • Prints the b	er by the	e amount o	correspo									
[Description]	fn=2, 50 • Prints the b • Feeds pape direction of	er by the	e amount o	correspo nics.									
	fn=2, 50 • Prints the b • Feeds pape direction of	er by the	e amount o ered graph	correspo nics.									
<function 51:<="" td=""><td>fn=2, 50 • Prints the b • Feeds pape direction of t • GS ( L pL p</td><td>er by the the buffe <b>H m fn</b></td><td>e amount o ered graph (fn=3, 5</td><td>correspo lics. 1)</td><td>nding to the</td><td>e num</td><td>ber of dots</td><td>in the y</td></function>	fn=2, 50 • Prints the b • Feeds pape direction of t • GS ( L pL p	er by the the buffe <b>H m fn</b>	e amount o ered graph (fn=3, 5	correspo lics. 1)	nding to the	e num	ber of dots	in the y					
<function 51:<="" td=""><td>fn=2, 50 • Prints the b • Feeds pape direction of f • <b>GS ( L pL p</b> ASCII</td><td>er by the the buffe <u>H m fn</u> GS</td><td>e amount o ered graph (fn=3, 5 (</td><td>correspo nics. 1) L</td><td>nding to the</td><td>pH</td><td>nber of dots</td><td>in the y</td></function>	fn=2, 50 • Prints the b • Feeds pape direction of f • <b>GS ( L pL p</b> ASCII	er by the the buffe <u>H m fn</u> GS	e amount o ered graph (fn=3, 5 (	correspo nics. 1) L	nding to the	pH	nber of dots	in the y					
<function 51:<="" td=""><td>fn=2, 50 • Prints the b • Feeds papedirection of f • GS (LpLp ASCII Hex Decimal (pL + pH x 2</td><td>er by the the buffe H m fn GS 1D 29</td><td>e amount o ered graph (fn=3, 5 ( 28 40</td><td>correspo nics. 1) L 4C 76</td><td>pL pL</td><td>pH pH</td><td>m m m</td><td>in the y fn fn</td></function>	fn=2, 50 • Prints the b • Feeds papedirection of f • GS (LpLp ASCII Hex Decimal (pL + pH x 2	er by the the buffe H m fn GS 1D 29	e amount o ered graph (fn=3, 5 ( 28 40	correspo nics. 1) L 4C 76	pL pL	pH pH	m m m	in the y fn fn					
<function 51:<br="">[Format]</function>	fn=2, 50 • Prints the b • Feeds papedirection of the <b>GS (LpLp</b> ASCII Hex Decimal (pL + pH x 2 m=48	er by the the buffe H m fn GS 1D 29	e amount o ered graph (fn=3, 5 ( 28 40	correspo nics. 1) L 4C 76	pL pL	pH pH	m m m	in the y fn fn					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds papy direction of f • GS ( L pL p ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51	er by the the buffe GS 1D 29 256) = 2	e amount ( ered graph ( <u>fn=3, 5</u> ( 28 40 2 (pL=2, p	ics. 1) L 4C 76 H=0)	pL pL pL pL	pH pH pH pH	mber of dots	in the y fn fn fn					
<function 51:<br="">[Format]</function>	fn=2, 50 • Prints the b • Feeds papy direction of f • <b>SG (L pL p</b> ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51 • Transmits	er by the the buffe GS 1D 29 256) = 2 the num	e amount ( ered graph ( <u>fn=3, 5</u> ( 28 40 2 (pL=2, p	ics. 1) L 4C 76 H=0)	pL pL pL pL	pH pH pH pH	mber of dots	in the y fn fn fn					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds papy direction of f • GS ( L pL p ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51	er by the the buffe GS 1D 29 256) = 2 the num	e amount d ered graph ( <u>fn=3, 5</u> ( 28 40 2 (pL=2, p ber of byt	correspo iics. 1) L 4C 76 H=0) es of rer	pL pL pL pL pL naining mer	pH pH pH pH	m m m m (unused are	in the y fn fn fn fn a) in th					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds pape direction of 1 • <b>GS (L pL p</b> ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51 • Transmits NV user mer	er by the the buffe GS 1D 29 256) = 2 the num nory.	e amount of ered graph ( <u>fn=3, 5</u> ( 28 40 2 (pL=2, p ber of byte Hexadec	correspo iics. 1) L 4C 76 H=0) es of rer imal	pL pL pL pL pL pL DEcimal	pH pH pH pH	m m m (unused are Amount o	in the y fn fn fn fn fn fn fn					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds pape direction of it • GS (L pL p ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51 • Transmits NV user mer Heade	er by the the buffe GS 1D 29 256) = 2 the num nory.	e amount d ered graph (fn=3, 5 ( 28 40 2 (pL=2, p) ber of byte Hexadec 37H	correspo iics. 1) 4C 76 H=0) es of rer imal	pL pL pL pL pL DE maining mer Decimal 55	pH pH pH pH	m m m (unused are <u>Amount o</u> 1 byt	in the y fn fn fn ea) in th <b>f Data</b> e					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds pape direction of 1 • <b>GS ( L p L p</b> ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51 • Transmits ' NV user mer Heade Flag	er by the the buffe GS 1D 29 256) = 2 the num nory.	e amount d ered graph (fn=3, 5 ( 28 40 2 (pL=2, p bber of byt Hexadec 37H 31H	correspo nics. 1) L 4C 76 H=0) es of rer imal	pL pL pL pL pL <b>Decimal</b> 55 49	pH pH pH pH	m m m (unused are <u>Amount o</u> <u>1 byt</u>	in the y fn fn fn fn fn f f <b>Data</b> e e					
<function 51:<br="">[Format] [Range]</function>	fn=2, 50 • Prints the b • Feeds pape direction of it • GS (L pL p ASCII Hex Decimal (pL + pH x 2 m=48 fn=3, 51 • Transmits NV user mer Heade	er by the the buffe GS 1D 29 256) = 2 the num nory.	e amount d ered graph (fn=3, 5 ( 28 40 2 (pL=2, p) ber of byte Hexadec 37H	correspo nics. 1) L 4C 76 H=0) es of rer imal	pL pL pL pL pL DE maining mer Decimal 55	pH pH pH pH	m m m (unused are <u>Amount o</u> 1 byt	in the y fn fn fn fn fn fn fn th f <b>Data</b> e e v/tes					

The data length is variable.

<function 64:<="" th=""><th>&gt; GS (LpLpH</th><th>l m fn</th><th>d1 d2</th><th>(fn=</th><th>64)</th><th></th><th></th><th></th><th></th><th></th></function>	> GS (LpLpH	l m fn	d1 d2	(fn=	64)						
[Format]	ASCII	GS	(	Ĺ	pL	pН	m	fn	d1	d2	
	Hex	1D	28	4C	pL	pН	m	fn	d1	d2	
	Decimal	29	40	76	pL	pН	m	fn	d1	d2	
[Range]	(pL + pH x 2	56) = 4	1 (pL=∙	4, pH=0	))						
	m=48										
	fn=64	_									
	d1=75, d2=6										
[Description]	<ul> <li>Transmits the</li> </ul>					code lis	t.				
	- When the	кеу со						Amount of Data			
				Hexade			cimal	Am			
	Head			37		-	55		1 byte		
	Fla			72		-	.14	+	1 byte		
	Stat			40H or			or 65	-	1 byte		
	Dat NU			30H -		48	- 57	2	- 80 b		
				00		0		1 byte	3		
	- When the k	ey coue		Hexade		Do	cimal	۸m	ount of	Data	
	Head	lor		37			55	AIII	1 byte		
	Flag			72			.14		1 byte		
	Stat			40			64		1 byte		
		NUL			Н		0		1 byte		
		ev code			v code is		ed divi				
	<ul> <li>If the number of the key code exceed 40, the key code is transmitted dividing up to 40.</li> <li>The status if the continuous transmission data block is present is 41H.</li> </ul>										
	- The status if the continuous transmission data block is present is 40H.										
	<ul> <li>After the [Heat</li> </ul>	<ul> <li>After the [Header-NULL] is transmitted, the printer receives a response from the I</li> </ul>								e host;	
	then it performs	the pro	cess de	efined by the response. (See the tables below.)							
	- When the			ence of	the nex	data	block) i	s Hex	adecim	al =	
	41H / Decima										
	Resp	1				Proces	s perfo	rmed			
	ASCII		imal	_			•				
	ACK		6		mits the						
	NAK		21				ous data	ı agair	า.		
	CAN		24		the pro						
	- When the		(for th	ne last d	ata blo	ск) is ŀ	lexadec	imal =	= 40H /		
	Decimal = 64			1							
	ASCII		imal	1		Proces	s perfo	rmed			
	ACK		.imai 6	Ends the process.							
	NAK		21				ous data	anair	1.		
	CAN		24		els the p			agan	0		
				cunce	as une p	100033					

	5> <b>GS ( L pL pH m fn d1 d2 d3</b> (fn=65) ASCII GS ( L pL pH m fn d1 d2 d3	[Description] • The total capacity of the UV user memory is selectable as any 64K, 128K, 192K, 256K, 320K, 384K] bytes with GS (E. The discussion)
[Format]	ASCII GS ( L pL pH m fn d1 d2 d3 Hex 1D 28 4C pL pH m fn d1 d2 d3	is 384KB.
	Decimal 29 40 76 pL pH m fn d1 d2 d3	<ul> <li>Defines the raster graphics data in the NV graphics area.</li> </ul>
[Range]	$(pL + pH \times 256) = 5 (pL=5, pH=0)$	- b specifies the number of the color of the defined data.
[runge]	m=48	- xL, xH specifies the defined data in the horizontal direction
	fn=65	x 256) dots.
	d1=67, d2=76, d3=82	- xL, xH specifies the defined data in the vertical direction to
[Description]		256) dots.
		- c specifies the color of the defined data.
	6> GS ( L pL pH m fn kc1 kc2 (fn=66)	c Defined data co
[Format]	ASCII GS ( L pL pH m fn kc1 kc2	49 Color 1
	Hex 1D 28 4C pL pH m fn kc1 kc2	50 Color 2
	Decimal 29 40 76 pL pH m fn kc1 kc2	<ul> <li>Color 1 means black (high level of energy) in the specified</li> </ul>
[Range]	$(pL + pH \times 256) = 4 (pL=4, pH=0)$	thermal paper.
	m=48	- Color 2 means red (low level of energy) in the specified tov
	fn=66 32 ≤ kc1 ≤ 126	thermal paper. [Notes] If the color is specified with h and a single color also is specified.
	$32 \le kc1 \le 120$ $32 \le kc2 \le 126$	i the color is specified with b and a single color also is specifi
[Description]		the printer stops processing the command, and regards the de effective up to the time when the printer stops processing, the
[Description]	• Deletes the NV graphics data defined by the key codes kc1 and kc2.	the remaining data after it.
< Eunction 67	7> GS ( L pL pH m fn a kc1 kc2 b xL xH yL yH [c d1dk]1[c d1dk]b (fn=67)	When this command is processed while NV bit image data is a
[Format]	ASCII GS ( L pL pH m fn a kc1 kc2 b xL xH yL yH [c d1dk]b (m=b)	<b>FS q</b> , the printer deletes all NV bit image data, then defines da
[i oi i i ac]	Hex 1D 28 4C pL pH m fn a kc1 kc2 b xL xH yL yH [c d1dk]1[c d1dk]b	command.
	Decimal 29 40 76 pL pH m fn a kc1 kc2 b kL xH yL yH [c d1dk]1[c d1dk]b	commund.
[Range]	• GS ( L parameter	<function 69=""> GS ( L pL pH m fn kc1 kc2 b x y (fn=69)</function>
[	$3 \le (pL + pH \times 256) \le 65535 (0 \le pL \le 255, 0 \le pH \le 255)$	[Format] ASCII GS ( L pL pH m fn kc1 k
	- GS 8 L parameter	Hex 1D 28 4C pL pH m fn kc1 k
	$3 \le (p1 + p2 \times 256 + p3 \times 65535 + p4 \times 16777216) \le 4294967295$	Decimal 29 40 76 pL pH m fn kc1 k
	$(0 \le p1 \le 255, 0 \le p2 \le 255, 0 \le p3 \le 255, 0 \le p4 \le 255)$	[Range] $(pL + pH \times 256) = 6 (pL=6, pH=0)$
	Common parameter for GS 8 L / GS ( L	m=48, fn=69
	m=48	$32 \le \text{kc1} \le 126$
	fn=67	$32 \le \text{kc} 2 \le 126$
	a=48	x=1, 2
	$32 \le kc1 \le 126$	y=1, 2
	$32 \le kc2 \le 126$	[Description] • Prints the NV graphics data defined by the key codes kc1 and
		graphics data is enlarged by x and y in the horizontal and verti
	b=1, 2	
	b=1, 2 1 ≤ (xL + xH x 256) ≤ 8192	directions.
	b=1, 2 1 ≤ (xL + xH x 256) ≤ 8192 1 ≤ (yL + yH x 256) ≤ 2304	
	b=1, 2 $1 \le (xL + xH \times 256) \le 8192$ $1 \le (yL + yH \times 256) \le 2304$ c=49 (when the monochrome paper is selected)	
	b=1, 2 $1 \le (xL + xH \times 256) \le 8192$ $1 \le (yL + yH \times 256) \le 2304$ c=49 (when the monochrome paper is selected) c=50 (when the two-color paper is selected)	
	b=1, 2 $1 \le (xL + xH \times 256) \le 8192$ $1 \le (yL + yH \times 256) \le 2304$ c=49 (when the monochrome paper is selected)	

Format]	2> GS ( L pL pH ASCII GS		L					xH yL yH d1d				
	Hex 1D		4C					xH yL yH d1d				
	Decimal 29	40	76					xH yL yH d1d				
[Range]	• GS ( L param			pe p.		a 5/(	o, e	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
[	$11 \le (pL + pH \times 256) \le 65535 (0 \le pL \le 255, 0 \le pH \le 255)$											
	• <b>GS 8 L</b> parameter											
	$11 \le (p1 + p2 \times 256 + p3 \times 65535 + p4 \times 16777216) \le 4294967295$											
	(0 ≤ p1 ≤ )											
	<ul> <li>Common para</li> </ul>						,	,				
	m=48, fn=1			- / -	•							
	bx=1, 2											
	by=1, 2											
	c=49 (wher	the mo	nochi	ome pa	oer is	select	ed)					
	c=50 (wher	the tw	o-colo	r paper	is sele	cted)						
	- When single-color paper is specified :											
	$1 \le (yL + yH \times 256) \le 1662$ (when by = 1)											
	$1 \le (yL + yH \times 256) \le 831$ (when by = 2)											
	- When two-color paper is specified :											
	$1 \le (yL + yH \times 256) \le 831$ (when by = 1)											
	$1 \le (yL + yH \times 256) \le 415$ (when by = 2)											
	0 ≤ d ≤ 255											
	k = ( int ( ( xL + xH x 256 ) + 7 ) / 8 ) x ( yL + yH x 256 )											
[Description]	- Stores the raster graphics data, enlarged by bx and by in the horizontal											
	and vertical dire											
				er graphi	cs dat	a in th	ne horiz	zontal direction				
	as (xL + xH x 256) dots.											
	<ul> <li>xL, xH specifies the raster graphics data in the vertical direction to</li> </ul>											
	(yL + yH x 256) dots.											
	<ul> <li>c specifies t</li> </ul>	he colo	r of th	e define	d data	a.						
		с						ing color				
		49						olor 1				
		50						olor 2				
	- Color 1 mea	ans blac	k (hig	h level c	f ene	·gy) in	the sp	ecified tow-colo				
	thermal pa											
	- Color 2 means red (low level of energy) in the specified tow-color											
	thermal pa	per.										
[Notes]	<ul> <li>In standard m</li> </ul>											

[Name]	Customi	ze printer.								
[Description]	<ul> <li>Protects</li> </ul>	or recovers va	alues or d	ata set or def	fined in th	e active ar	rea by con	nmands.		
	fn	Function	No.	Descripti	ons					
	1, 49	Function 3	1	Copies the settings stored in the active to the storage area (save settings).						
	2, 50	Function 2	2	Copies the settings stored in the stora to the storage area (load settings).						
	3, 51	51 Function 3		Enables of settings u				ading of the		
	- Activ	e area : Vo	latile m							
	- Stor	age area : H	-lon-vola	atile memo	ory (Flas	h ROM)				
	<ul> <li>List of</li> </ul>	commands			, ,	,				
	Setti	ng value	Comn	nand						
	Status		ESC o	: 3, GS a						
	Define	d data	GS :							
	Character									
	Kind (	of character		ч, esc r,						
	S	tyle	ESC !, ESC -, ESC E, ESC G, ESC V, ESC {, GS !,							
			GS B, GS b, GS ( N ESC SP, ESC 2, ESC 3							
	_	tc								
	Bar code 2-dimension code		GS H, GS f, GS h, GS w <function 065=""> through <function 070=""> of GS ( k</function></function>							
	Print p	osition	ESC D, ESC T, ESC a, GS L, GS W ESC c 4, ESC c 5, GS ( D, GS P							
	etc									
<function 1=""></function>	GS ( M p	L pH fn m	(fn=1	., 49)						
[Format]	ASCII	GS	(	М	pL	pН	fn	m		
	Hex	1D	28	4D	pL	pН	fn	m		
	Decima		40	77	pL	pН	fn	m		
[Range]		1 x 256) =	2 (pL=2	2, pH=0)						
	fn=1, 49									
[Description]	m=1, 49									
[Notes]		the setting						age area. damage th		
Linoteol								/ memory n		
		an 10 times		3 ICCUIIIII	Linueu li	s write u		i memory n		
				nmand, the	e printe	is BUSY	' while v	vriting data		
								prohibited		
								xecution of		
		mand.	5							
	uns com	mana.								

Format1	ASCII	GS	5 (	M	pL	p	Н	fn	m		
[ officie]	Hex	10		4D	pL	pl		fn	m		
	Decima			77	pL	pl		fn	m		
Range]			= 2 (pL=2,		P	P					
[Runge]		fn=2, 50									
	m=0, 1,										
Description]			initializes	all setting	ns in the	activ	/e area	. as d	escribe	d in	
	these spe							,			
			, copies th	e settina	stored i	in th	e mth	stora	ae area	to the	
			data in the								
			itialized as								
						•					
<function 3=""></function>	GS ( M pl	L pH fn i	<b>m</b> (fn=3,	51)							
Format]	ASCII	GS	5 (	М	pL	pl	Н	fn	m		
	Hex	10	28	4D	pL	pl	н	fn	m		
	Decima			77	pL	pl	Н	fn	m		
Range]			= 2 (pL=2,	pH=0)							
5 1	fn=3, 51										
	m=0, 1,										
Description]				ad data	in the st	orag	je area	to th	ne activ	e area	
	<ul> <li>When m=0,48, does not load data in the storage area to the active area upon initialization.</li> </ul>										
	<ul> <li>When m=1,49, loads data in the storage area to the active area upon</li> </ul>										
	<ul> <li>When n</li> </ul>	n=1,49,		in the st	orage ar	rea ti	o the a	ctive	area u	pon	
		n=1,49,		in the st	orage ar	rea ti	o the a	ctive	area u	pon	
	<ul> <li>When n initialization</li> </ul>	n=1,49, ion.	loads data	in the st	orage ar	rea t	o the a	active	area u	pon	
	• When n initializati	n=1,49, ion. <b>ameter</b> ]	loads data	in the st	orage ar	rea t	o the a	active	area u	pon	
Name]	When n initializati     fn [par Select ch	n=1,49, ion. ameter]	loads data								
Name]	When n initialization     Initialization     Select ch     Execute	n=1,49, ion. ameter]	loads data								
Name]	When n initialization     fn [para Select ch • Execute code fn.	n=1,49, ion. ameter] aracter s es comma	loads data	e charac	ter style	as s	pecifie	d by	the fun		
Name]	• When n initializati fn [par Select ch • Execute code fn. fn	n=1,49, ion. ameter] aracter s es comm Format	loads data L tyle. ands for th	e charac	ter style	as s	pecifie <b>Descr</b> i	d by	the fun	ction	
Name]	When n initialization     fn [para Select ch • Execute code fn.	n=1,49, ion. ameter] aracter s es comm Format	loads data	e charac	ter style	as s	pecifie <b>Descr</b> i	d by	the fun	ction	
Name] Description]	When n initialization initinitialization initialization initialization initialization initi	n=1,49, ion. ameter] aracter s es comma Format GS ( N p	loads data tyle. ands for th DL pH fn m	e charac Func	ter style	as s	pecifie <b>Descr</b> i	d by	the fun	ction	
Name] Description] <function 48=""></function>	• When n initializati fn [para Select ch • Execute code fn. fn 48	n=1,49, ion. a <b>meter</b> aracter s es comma <u>Format</u> GS ( N p DL pH fn	loads data tyle. ands for th DL pH fn m <b>m</b> (fn=4	e charac Func Func 8)	ter style tion No.	as s	pecifie <b>Descr</b> i Select	d by iption s cha	the fun racter o	ction	
Name] Description] <function 48=""></function>	• When n initializati fn [par Select ch • Execute code fn. fn 48 • GS ( N p ASCII	n=1,49, ion. aracter s es comma <u>Format</u> <u>GS ( N p</u> <u>GS</u>	loads data Ltyle. ands for th DL pH fn m (fn=4	e charac Func Func 8) N	ter style tion No. tion 48	as s	pecifie Descri Select	d by iption	the fun racter of m	ction	
Name] Description] <function 48=""></function>	• When n initializati fn [par Select ch • Execute code fn. fn 48 • GS ( N p ASCII Hex	n=1,49, ion. ameter aracter s es comma <u>Format</u> <u>GS ( N p</u> <u>GS 1D</u>	loads data Ltyle. ands for th DL pH fn m (fn=4 ( 28	e charac Func Func 8) N 4E	ter style tion No. tion 48 pL pL	as s pH pH	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format]</function>	• When n initializati fn [par Select ch • Execute code fn. fn 48 • GS ( N p Hex Decima	n=1,49, ion. ameter aracter s es comma <u>Format</u> <u>GS ( N p</u> <u>DL pH fn</u> <u>GS</u> 1D 1 29	loads data tyle. ands for th <u>DL pH fn m</u> ( 28 40	e charac Func Func 8) N 4E 78	ter style tion No. tion 48	as s	pecifie Descri Select	d by iption s cha	the fun racter of m	ction	
Name] Description] <function 48:<br="">Format]</function>	When n initializati Select ch Execute code fn. <u>fn</u> 48 <b>GS ( N p</b> ASCII Hex Decima (pL + pH	n=1,49, ion. ameter aracter s es comma <u>Format</u> <u>GS ( N p</u> <u>DL pH fn</u> <u>GS</u> 1D 1 29	loads data Ltyle. ands for th DL pH fn m (fn=4 ( 28	e charac Func Func 8) N 4E 78	ter style tion No. tion 48 pL pL	as s pH pH	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format]</function>	When n initializati fn [par. Select ch Execute code fn. fn 48 GS ( N p ASCII Hex Decimal (pL + pH fn=48     )	n=1,49, ion. arracter s arracter s es comma <u>Format</u> GS ( N p GS ( N p DL pH fn GS 1D 29 1 x 256) =	loads data tyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2,	e charac Func Func 8) N 4E 78 pH=0)	ter style tion No. tion 48 pL pL pL	as s pH pH pH	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format]</function>	When n initializati fn [par Select ch Execute code fn. fn 48 GS ( N p ASCII Hex Decima (pL + pH fn=48 m=49 (w	n=1,49, ion. ameter] aracter ses commat GS ( N p oL pH fn GS 1D I 29 I x 256) : vhen the	loads data Lyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2, monochroi	e charac Func Func 8) N 4E 78 pH=0) me pape	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH pH	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] < <u>Function 482</u> Format] Range]	When n initialization     Men n initialization     Select ch     Execute     code fn. <u>fn     48     SG ( N p     ASCII     Hex     Decima     (pL + pH     fn=48     m=49,50 </u>	n=1,49, ion. ameter] aracter ses commat GS ( N p oL pH fn GS 1D I 29 I x 256) : vhen the	loads data tyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2,	e charac Func Func 8) N 4E 78 pH=0) me pape	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH pH	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format] [Range] [Default]</function>	When n initializati     fn [par.     Select ch     • Execute     code fn.     fn 48     GS (N p     ASCII     Hex     Decima     (pL + pH     fn=48     m=49 (w     m=49,50     m=49	n=1,49, ion. ameter j aracter s es comma Format GS ( N j DL pH fn GS 1D 1 29 1 x 256) : when the 0 (when the	loads data tyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2, monochron he two-col	e charac Func 8) N 4E 78 pH=0) me pape or paper	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH pH ted)	pecifie Descri Select fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format] [Range] [Default]</function>	When n initializati     fn [par.     Select ch     • Execute     code fn.     fn 48     GS (N p     ASCII     Hex     Decima     (pL + pH     fn=48     m=49 (w     m=49,50     m=49	n=1,49, ion. ameter] aracters as commat Format GS ( N I DL pH fn GS 1D 1 29 1 x 256) : when the 0 (when t haracters	loads data Lyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2, monochroi	e charac Func 8) N 4E 78 pH=0) me pape or paper	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH ted)	pecifie Descri Select fn fn fn	d by iption s cha	the fun racter of m m	ction	
Name] Description] <function 48:<br="">Format] [Range] [Default]</function>	When n initializati     fn [par.     Select ch     • Execute     code fn.     fn 48     GS (N p     ASCII     Hex     Decima     (pL + pH     fn=48     m=49 (w     m=49,50     m=49	n=1,49, ion. ameter j aracter s es commat GS ( N j bl pH fn GS 1D 1 29 1 x 256) when the 0 (when t tharacters m	loads data tyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2, monochron he two-col	e charac Func 8) N 4E 78 pH=0) me pape or paper	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH ted) 1. <b>Co</b>	pecifie Descri Select fn fn fn	d by iption s cha	the fun racter of m m	ction	
SS ( N pL pH Name] [Description] <function 482<br="">[Format] [Range] [Default] [Default] [Description]</function>	When n initializati     fn [par.     Select ch     • Execute     code fn.     fn 48     GS (N p     ASCII     Hex     Decima     (pL + pH     fn=48     m=49 (w     m=49,50     m=49	n=1,49, ion. ameter] aracters as commat Format GS ( N I DL pH fn GS 1D 1 29 1 x 256) : when the 0 (when t haracters	loads data tyle. ands for th <u>m (fn=4</u> ( 28 40 = 2 (pL=2, monochron he two-col	e charac Func 8) N 4E 78 pH=0) me pape or paper	ter style tion No. tion 48 pL pL pL r is select	as s pH pH pH ted)	pecifie Descri Select fn fn fn fn fn fn	d by iption s cha	the fun racter of m m	ction	

 Color 2 means red (low level of energy) in the specified two-color thermal paper.

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[Name]	d(x x y Define d	lownloaded bit im	lage.						
[Format]	ASCII	GS	*	х	v	[d1d(x x y x 8)]			
	Hex	1D	2A	х	ý	$[d1d(x \times y \times 8)]$			
	Decima	al 29	42	х	ý	$[d1d(x \times y \times 8)]$			
[Range]	1 ≤ x ≤	255			,				
	1 ≤ y ≤	48 (where x x y	≤ 1536)						
	0 ≤ d ≤	255							
[Description]	<ul> <li>Defines</li> </ul>	s the downloaded	l bit ima	ge usi	ng the n	umber of dots specified by			
	and y.								
		ecifies the numbe							
		ecifies the numbe							
						defined character and the			
						aneously. The downloaded			
	bit imag	e data is cleared	with this	com	mand.				
GS / m									
[Name]	Print do	wnloaded bit ima	ae.						
[Format]	ASCII		GS		1	m			
[]	Hex		1D		2F	m			
	Decima	al	29		47	m			
[Pange]	$0 \le m \le 3, 48 \le m \le 51$								
[Range]									
[Description]	<ul> <li>Prints t</li> </ul>	the defined down	loaded b	it ima	ige in m	mode.			
	<ul> <li>Prints t</li> </ul>					mode.			
	<ul> <li>Prints t</li> <li>For \$</li> <li>m</li> </ul>	the defined down SRP-370 Mode		al dot	density	Horizontal dot density			
	<ul> <li>Prints t</li> <li>For \$</li> </ul>	the defined down SRP-370 <b>Mode</b> Normal	Vertic	<b>al dot</b> 180 d	<b>density</b> pi	Horizontal dot density 180 dpi			
	<ul> <li>Prints t</li> <li>For S</li> <li>m</li> </ul>	the defined down SRP-370 Mode	Vertic	al dot	<b>density</b> pi	Horizontal dot density			
	<ul> <li>Prints t</li> <li>For \$</li> <li>m</li> <li>0, 48</li> </ul>	the defined down SRP-370 Normal Double-width Double-height	Vertic	<b>al dot</b> 180 d	<b>density</b> pi pi	Horizontal dot density 180 dpi			
	<ul> <li>Prints t</li> <li>For 5</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> </ul>	the defined down SRP-370 <b>Mode</b> Normal Double-width Double-height Quadruple	Vertic	<b>al dot</b> 180 d 180 d	<b>density</b> pi pi pi	Horizontal dot density 180 dpi 90 dpi			
	<ul> <li>Prints t</li> <li>For 5</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> </ul>	the defined down SRP-370 Normal Double-width Double-height	Vertic	<b>al dot</b> 180 d 180 d 90 d 90 d	density pi pi pi pi pi	Horizontal dot density 180 dpi 90 dpi 180 dpi 90 dpi			
	<ul> <li>Prints t</li> <li>For 5</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> </ul>	the defined down SRP-370 <b>Mode</b> Normal Double-width Double-height Quadruple	Vertic	<b>al dot</b> 180 d 180 d 90 d 90 d	<b>density</b> pi pi pi	Horizontal dot density 180 dpi 90 dpi 180 dpi 90 dpi Horizontal dot density			
	Prints t     For S     m     0, 48     1, 49     2, 50     3, 51     For S     m     0, 48	the defined down RP-370 <b>Mode</b> Normal Double-width Double-height Quadruple SRP-372 <b>Mode</b> Normal	Vertic	al dot 180 d 180 d 90 d 90 d 90 d al dot 203 d	density pi pi pi oi oi density pi	Horizontal dot density 180 dpi 90 dpi 180 dpi 90 dpi Horizontal dot density 203 dpi			
	<ul> <li>Prints t</li> <li>For S</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> <li>For S</li> <li>m</li> </ul>	the defined down SRP-370 Mode Normal Double-width Double-height Quadruple SRP-372 Mode	Vertic	<b>al dot</b> 180 d 180 d 90 d 90 d	density pi pi pi oi oi density pi	Horizontal dot density 180 dpi 90 dpi 180 dpi 90 dpi Horizontal dot density			
	Prints t     For S     m     0, 48     1, 49     2, 50     3, 51     For S     m     0, 48	the defined down RP-370 <b>Mode</b> Normal Double-width Double-height Quadruple SRP-372 <b>Mode</b> Normal	Vertic	al dot 180 d 180 d 90 d 90 d 90 d al dot 203 d	density pi pi bi density pi pi	Horizontal dot density 180 dpi 90 dpi 180 dpi 90 dpi Horizontal dot density 203 dpi			
	Prints t     - For s     m     0, 48     1, 49     2, 50     3, 51     - For s     m     0, 48     1, 49	the defined down SRP-370 Mode Normal Double-width Double-height Quadruple SRP-372 Mode Normal Double-width	Vertic Vertic	al dot 180 d 90 d 90 d 90 d al dot 203 d 203 d	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			
	<ul> <li>Prints t</li> <li>For S</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> <li>For S</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> </ul>	the defined down SRP-370 Mode Normal Double-width Double-height SRP-372 Mode Normal Double-width Double-height	Vertic Vertic	al dot 180 d 90 d 90 d 90 d 90 d 203 d 203 d 03/2	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi			
[Description]	<ul> <li>Prints t</li> <li>For S</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> <li>3, 51</li> <li>For S</li> <li>m</li> <li>0, 48</li> <li>1, 49</li> <li>2, 50</li> </ul>	the defined down SRP-370 Mode Normal Double-width Double-height SRP-372 Mode Normal Double-width Double-height	Vertic Vertic	al dot 180 d 90 d 90 d 90 d 90 d 203 d 203 d 03/2	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			
[Description]	Prints t     For S     M     0,48     1,49     2,50     3,51     - For S     M     0,48     1,49     2,50     3,51     3,51	the defined down SRP-370 Mode Normal Double-width Double-height SRP-372 Mode Normal Double-width Double-height Quadruple	Vertic	al dot 180 d 90 d 90 d 90 d 90 d 203 d 203 d 03/2	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			
[Description] GS: [Name]	Prints t     For S     M     0,48     1,49     2,50     3,51     - For S     M     0,48     1,49     2,50     3,51     3,51	the defined down SRP-370 Mode Normal Double-width Double-height SRP-372 Mode Normal Double-width Double-height	Vertic	al dot 180 d 90 d 90 d 90 d 203 d 203 d 03/2 03/2	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			
[Description] GS: [Name]	Prints t     For S     m     0,48     1,49     2,50     3,51     - For S     m     0,48     1,49     2,50     3,51     Start/en	the defined down SRP-370 Mode Normal Double-width Double-height SRP-372 Mode Normal Double-width Double-height Quadruple	Vertic	al dot 180 d 90 d 90 d 90 d 203 d 203 d 03/2 03/2	density pi pi oi oi density pi pi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			
[Description]	Prints t     For S     m     0,48     1,49     2,50     3,51     For S     m     0,48     1,49     2,50     3,51     Start/en     ASCII	the defined down SRP-370 Mode Normal Double-neight Quadruple SRP-372 Mode Normal Double-width Double-width Double-neight Quadruple	Vertic	al dot 180 d 90 d 90 d 203 d 203 d 03/2 03/2	density pi pi bi density pi pi dpi dpi	Horizontal dot density           180 dpi           90 dpi           180 dpi           90 dpi           Horizontal dot density           203 dpi           203/2 dpi           203 dpi           203/2 dpi           203/2 dpi			

- The contents of the macro can be defined up to 2048 bytes.

	Turne	hito/black rev	area printi	na mode	on / off				
[Name]	ASCII	hite/black reve							
[Format]	ASCII Hex		G 1	-	В 42	n			
	Decima		2	-	42 66	n n			
[Range]	$0 \le n \le$		2	2	00				
[Default]	0 ≤ 11 ≤ n=0	255							
[Description]		white/black re	vorco nrir	tina moc		ff			
[Description]						node is turned off.			
						node is turned on.			
			15 1, 111	cc/ black	everse n				
GS H n									
[Name]	Selects t	he printing po	sition of I	-IRI chara	cters.				
[Format]	ASCII	GS	н	n					
	Hex	1D	48	n					
	Decima		72	n					
[Range]	0 ≤ n ≤	3, 48 ≤ n ≤ 5	1						
[Default]	n=0								
[Description]						hen printing a bar code.			
	- n selects the execution of printing and the printing position as follows :								
	n Printing position								
	0, 48 Not printed.								
		1, 49 Above the bar code.							
	2, 50								
	3, 51	Both above a	and below	the bar	code.				
GS I n									
[Name]		s printer ID.							
	ASCII	GS	I	n					
[Name]	ASCII Hex	GS 1D	49	n					
[Name] [Format]	ASCII Hex Decima	GS 1D al 29	49 73	n n	110				
[Name]	ASCII Hex Decima 1 ≤ n ≤	GS 1D al 29 3, 49 ≤ n ≤ 5	49 73 51, 65 ≤ r	n n i≤ 69, n		TOOII competible			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$	GS 1D al 29 3, 49 ≤ n ≤ 5 3, 49 ≤ n ≤ 5	49 73 51, 65 ≤ r	n n i≤ 69, n		T88II compatible mode it			
[Name] [Format]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected	GS 1D 3, 49 ≤ n ≤ 5 3, 49 ≤ n ≤ 5 3, 49 ≤ n ≤ 5	49 73 51, 65 ≤ r 51, 65 ≤ r	n n i ≤ 69, n i ≤ 69, (v		T88II compatible mode is			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm	GS 1D 29 3, 49 $\le$ n $\le$ 5 3, 49 $\le$ n $\le$ 5 .) hits the printer	49 73 i1, 65 ≤ r i1, 65 ≤ r ID speci	n n i ≤ 69, n i ≤ 69, (v fied.	vhen TM-	T88II compatible mode is			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm - n spi	GS 1D 1D 29 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 .) hits the printer ecifies the typ	$49 \\ 73 \\ 1, 65 \le r \\ 1, 65 \le r \\ 1, 65 \le r \\ 1D species of the \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 1$	n n $\leq 69, n$ $\leq 69, (v)$ fied. <u>printer II</u>	vhen TM-	T88II compatible mode is			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected. • Transm - n spo <b>n</b>	GS 1D 1D 29 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 ) hits the printer ecifies the typ <b>Printer ID ty</b>	$49 \\ 73 \\ 51, 65 \le r \\ 51, 65 \le r \\ 10 \text{ speci} \\ r \text{ ID speci} \\ r \text{ so of the} \\ r \text{pe} $	n n $\leq 69, n$ $\leq 69, (v)$ fied. printer II <b>ID</b>	vhen TM- ).				
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm - n spo <b>n</b> 1, 49	$GS$ $1D$ $29$ $3, 49 \le n \le 5$ $3, 49 \le n \le 5$ ) intro the printer ecifies the typp <b>Printer ID ty</b> Printer mode	$49 \\ 73 \\ 51, 65 \le r \\ 51, 65 \le r \\ 10 \text{ speci} \\ r \text{ ID speci} \\ r \text{ so of the} \\ r \text{pe} $	n n $\leq 69$ , n $\leq 69$ , (v fied. printer II <b>ID</b> Hexad	vhen TM- 0. ecimal : 3	2EH Decimal : 46			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm • n spo <b>n</b> 1, 49 2, 50	$GS$ $1D$ $29$ $3, 49 \le n \le 5$ $9$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$	$49 \\ 73 \\ 51, 65 \le r \\ 10, 65 \le r \\ 10 \text{ special of the } \\ 10  sp$	n n $\leq 69, n \leq 69, (v)$ fied. printer II Hexad See ta	vhen TM- ). ecimal : 3 ble belov	2EH Decimal : 46			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm • n spo <b>n</b> 1, 49 2, 50 3, 51	$\begin{array}{c} \text{GS} \\ 1D \\ 29 \\ 3, 49 \leq n \leq 5 \\ 3, 49 \leq n \leq 5 \\ \end{array}$ its the printer interective the type Printer mode Printer mode Type ID Firmware ve	$49 \\ 73 \\ 51, 65 \le r \\ r \text{ ID speciries of the } \\ res of the \\ res$	n n $\leq 69, n \leq 69, (v)$ fied. printer II Hexad See ta Depen	vhen TM- ). ecimal : 3 ble belov	2EH Decimal : 46			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ $1 \le n \le$ selected • Transm • n spo <b>n</b> 1, 49 2, 50 3, 51	GS 1D 129 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 ) its the printer crifies the typ <b>Printer</b> ID ty <b>Printer</b> mode Type ID Firmware ve crifies the print	49 73 i1, $65 \le r$ i1, $65 \le r$ i ID species of the es of the el ID rsion ID nter inforr	n n $\leq 69, n$ $i \leq 69, (v)$ fied. printer II <b>ID</b> Hexad See ta Depennation.	vhen TM- ). ecimal : 3 ble belov	2EH Decimal : 46			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ selected • Transm • n spu <b>n</b> 1, 49 2, 50 3, 51 • n spu <b>n</b>	GS 1D 129 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 ) its the printer cifies the typ Printer ID ty Printer mode Type ID Firmware ve ecifies the print Printer ID ty	49 73 i1, $65 \le r$ i1, $75 \le r$ i1, $10$ i1, $10$ it, 1	n n n $\leq 69, n$ : $\leq 69, (v$ fied. printer II Hexad See ta Depen- nation. ID	vhen TM- D. ecimal : ble belov ds on firr	2EH Decimal : 46 7. nware version.			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ selected. • Transm - n spo <b>n</b> 1, 49 2, 50 3, 51 - n spo	GS 1D 129 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 ) its the printer crifies the typ <b>Printer</b> ID ty <b>Printer</b> mode Type ID Firmware ve crifies the print	49 73 i1, $65 \le r$ i1, $75 \le r$ i1, $10$ i1, $10$ it, 1	n n n $\leq 69, n$ : $\leq 69, (v$ fied. printer II Hexad See ta Depen- nation. ID	vhen TM- D. ecimal : ble belov ds on firr	2EH Decimal : 46			
[Name] [Format] [Range]	ASCII Hex Decima $1 \le n \le$ selected • Transm • n spu <b>n</b> 1, 49 2, 50 3, 51 • n spu <b>n</b>	GS 1D 129 3, 49 $\leq$ n $\leq$ 5 3, 49 $\leq$ n $\leq$ 5 ) its the printer cifies the typ Printer ID ty Printer mode Type ID Firmware ve ecifies the print Printer ID ty	49 73 $(1, 65 \le r)$ $(1, 65 \le r)$	n n n $\leq 69, n$ : $\leq 69, (v$ fied. printer II Hexad See ta Depen- nation. ID	vhen TM- <u>ecimal : :</u> <u>ble below</u> ds on firm	2EH Decimal : 46 7. nware version.			

GS L nL nH [Name]	Set left mare	nin.			
[Format]	ASCII	GS	L	nL	nH
	Hex	1D	4C	nL	nH
	Decimal	29	76	nL	nH
[Range]	0 ≤ nL ≤ 25	5			
	$0 \le nH \le 25$	55			
[Default]	(nL + nH x 2	256)=0 (r	nL=0, nH=	0)	
[Description]	<ul> <li>Sets the le</li> </ul>	ft margin	specified I	by nL and	nH.
	- The left	margin is	[(nL + nH	x 256) x	(horizontal motion units)].
			Printable	area	
			THILCODIC	area	
F			THICADIC	area	
<b> </b>					
l					
<u> </u>	nargin	•	Printing ar		
H					

GSPxy						
[Name]	Set horizonta	and ve	rtical motic	on units.		
[Format]	ASCII	GS	Р	х	у	
	Hex	1D	50	х	y	
	Decimal	29	80	х	y	
[Range]	0 ≤ x ≤ 255					
	0 ≤ y ≤ 255					
[Default]	For ANK/Mult					
	For Japanese	e Kanji m	odel : x=2	03, y=406		
[Description]	<ul> <li>Turns white</li> </ul>		everse prin	ting mode	on or off.	
	- For SRP-	370				
	When >	<=0, the	default set	ting of the	e horizontal motion unit is	used.
					n unit is set to 25.4/x mm {(	
					e vertical motion unit is us	
			5, the vertic	cal motion ι	nit is set to 25.4/y mm {(1/	y)"}.
	- For SRP-					
					e horizontal motion unit is	
					n unit is set to 25.4/x mm {(	
					e vertical motion unit is us	
	When 1	$\leq y \leq 25$	5, the vertic	cal motion ι	nit is set to 25.4/y mm {(1/	<sub>/</sub> )"}.

[Name]	Set print	t position to	the begir	nning of p	orint line.					
[Format]	ASCII	GS	Ť	 r	ו					
	Hex	1D	54	r	า					
	Decima	al 29	84	r	า					
[Range]	n=0, 1,	48, 49								
[Description]	<ul> <li>Sets the print position to the beginning of the print line.</li> </ul>									
	- n specifies how data in the print buffer is processed when this									
	comman	d is execute	d.							
	n	Function								
	0, 48	Sets the pr deleted.	int positi	on after t	he data in th	e print buffer	is			
	1, 49	Sets the pr printed.	int positi	on after t	he data in th	e print buffer	is			
	- Whe	n printing is	specified	l (n=1,49	), the printer	prints the da	ata in the			
	<ul> <li>When printing is specified (n=1,49), the printer prints the data in the print buffer and executes a line feed, based on the line feed amount to be set.</li> </ul>									
		- When deleting is specified (n=0,48), the printer executes the cancel								
	process for the print data in the print buffer, and keeps other data or setting values except for the print data.									
	setting v	/alues excep	t for the	print data	э.					
	setting v	alues excep	t for the	print data	а.					
	setting v	alues excep	t for the	print data	3.					
② GS V m n	5	•			э.					
② GS V m n [Name]	Select cu	ut mode and	cut pape	er.						
GS V m n     [Name]	Select cu	ut mode and ASCII	cut pape GS	er. V	m					
GS V m n     [Name]	Select cu	ut mode and ASCII Hex	cut pape GS 1D	er. V 56	m m					
② GS V m n [Name]	Select cu	ut mode and ASCII	cut pape GS	er. V	m					
② GS V m n [Name]	Select cu ① /	ut mode and ASCII Hex Decimal	cut pape GS 1D	er. V 56 86	m m m					
② GS V m n [Name]	Select cu	ut mode and ASCII Hex Decimal ASCII	cut pape GS 1D	er. V 56 86 GS	m m m V	 	n			
<b>© GS V m n</b> [Name] [Format]	Select cu ① /	ut mode and ASCII Hex Decimal ASCII Hex	cut pape GS 1D	er. V 56 86 GS 1D	m m m V 56	m	n			
② <b>GS V m n</b> [Name] [Format]	Select cu ①   /	ut mode and ASCII Hex Decimal ASCII Hex Decimal	cut pape GS 1D	er. V 56 86 GS	m m m V					
GS V m n [Name] [Format] [Range]	Select cu ① / / ② ① m=0,	ut mode and ASCII Hex Decimal ASCII Hex Decimal , 1, 48, 49	cut pape GS 1D 29	er. V 56 86 GS 1D	m m m V 56	m	n			
<b>OBS V m n</b> [Name] [Format]	Select cu 1 // 2 1 m=0, 2 m=65	ut mode and ASCII Hex Decimal ASCII Hex Decimal , 1, 48, 49 5, 66, 0 ≤ n	cut pape GS 1D 29 ≤ 255	er. V 56 86 GS 1D 29	m m m V 56	m	n			
① GS V m ② GS V m n [Name] [Format] [Range] [Description]	Select cu (1) // // // // // // // // // // // // //	tt mode and ASCII Hex Decimal ASCII Hex Decimal , 1, 48, 49 5, 66, 0 ≤ n aper in the s	cut pape GS 1D 29 ≤ 255	er. V 56 86 GS 1D 29	m m m V 56	m	n			
GS V m n [Name] [Format] [Range]	Select cc (1) // // (2) m=0, (2) m=65 • Cuts pa m 0, 48	ut mode and ASCII Hex Decimal ASCII Hex Decimal , 1, 48, 49 5, 66, 0 ≤ n aper in the s Function	cut pape GS 1D 29 ≤ 255 pecified I	er. V 56 86 GS 1D 29 mode.	m m m V 56	m m	n			
GS V m n [Name] [Format] [Range]	Select cc 1 // / 2 1 m=0, 2 m=65 • Cuts pi 0, 48 1, 49	ut mode and ASCII Hex Decimal ASCII Hex Decimal 1, 48, 49 Cucimal $5, 66, 0 \le n$ aper in the s Function Cuts pap	cut pape GS 1D 29 ≤ 255 pecified	er. V 56 86 GS 1D 29 mode.	m m V 56 86 uncut, full cut	m m ).	n			
<b>OBS V m n</b> [Name] [Format]	Select cc () m=0, (2) m=65 • Cuts pa m 0, 48 1, 49 65, 66	ut mode and ASCII Hex Decimal ASCII Hex Decimal 1, 48, 49 5, 66, 0 $\leq$ n per in the s <b>Function</b> Cuts pap Feeds an	cut pape GS 1D 29 ≤ 255 pecified i er (one p d cuts pa	er. V 56 86 GS 1D 29 mode. oint left ( per (one	m m V 56 86	m m .). cut, full cut).	n			

command is executed. • Full cut or one point left uncut cannot be changed by software.

GS W nL nH	<u> </u>	. 101					
[Name]	Set printing ar						
[Format]	ASCII	GS	W	nL	nH		
	Hex	1D	57	nL	nH		
	Decimal	29	87	nL	nH		
[Range]	0 ≤ nL ≤ 255						
	0 ≤ nH ≤ 255						
[Default]	<ul> <li>For SRP-370</li> </ul>						
	(nL + nH x )	256)=512	(nL=0, n	IH=2)	(for 80mr	n of the pa	per width
	(nL + nH x )	256)=384	(nL=128	, nH=1)	(for 60m	n of the pa	per width
	(nL + nH x )	256)=360	(nL=104	, nH=1)	(for 58m	n of the pa	per width
	<ul> <li>For SRP-372</li> </ul>						
	(nL + nH x )	256)=576	(nL=64,	nH=2)	(for 80mr	n of the pa	per width
	(nL + nH x )					n of the pa	
	(nL + nH x )					n of the pa	
[Description]	<ul> <li>Sets the prin</li> </ul>						
	- The printing						ts)].
				,			/3
		1	Printable a	area			
ı							
•		1					
1		◀			→		
1	<b></b>	4			-		
Left r	► nargin	<b>∢</b> Pri	nting area	a width	-		
Left r	nargin	<b>⊲</b> Pri	nting area	a width	→		
Left r GS ∖ nL nH	-	<b>∢</b> Pri	nting area	a width	->		
	-		-		node.		
GS ∖ nL nH	-		-		node.		
GS ∖ nL nH [Name]	Set relative ve	rtical prin	-	in page n			
GS ∖ nL nH [Name]	Set relative ve ASCII Hex	rtical prin GS	t position	in page n nL nL	nH nH		
<b>GS \ nL nH</b> [Name] [Format]	Set relative ve ASCII Hex Decimal	rtical prin GS 1D	t position	in page n nL	nH		
GS ∖ nL nH [Name]	Set relative ve ASCII Hex Decimal 0 ≤ nL ≤ 255	rtical prin GS 1D	t position	in page n nL nL	nH nH		
GS ∖ nL nH [Name] [Format] [Range]	Set relative ve ASCII Hex Decimal 0 ≤ nL ≤ 255 0 ≤ nH ≤ 255	rtical prin GS 1D 29	t position \ 5C 92	in page n nL nL nL	nH nH nH	the current	position i
<b>GS \ nL nH</b> [Name] [Format]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ • Sets the rela	rtical prin GS 1D 29 tive vertic	t position 5C 92 al print st	in page n nL nL nL arting pos	nH nH nH		
GS ∖ nL nH [Name] [Format] [Range]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ Sets the relat page mode. The set of the set	rtical prin GS 1D 29 tive vertic	t position 5C 92 al print st	in page n nL nL nL arting pos	nH nH nH sition from to	the starting	
GS ∖ nL nH [Name] [Format] [Range]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ • Sets the rela	rtical prin GS 1D 29 tive vertic	t position 5C 92 al print st	in page n nL nL nL arting pos	nH nH nH sition from to	the starting	
GS \ nL nH [Name] [Format] [Range] [Description]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ Sets the relat page mode. The set of the set	rtical prin GS 1D 29 tive vertic	t position 5C 92 al print st	in page n nL nL nL arting pos	nH nH nH sition from to	the starting	
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ • Sets the rela page mode. TI [(nL + nH x 2!	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver	t position 5C 92 al print st	in page n nL nL nL arting pos	nH nH nH sition from to	the starting	
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name]	Set relative ve ASCII Hex Decimal $0 \le nt \le 255$ $0 \le nH \le 255$ • Sets the relation page mode. TI (nL + nH x 2) Execute macroc	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver	t position 5C 92 al print st ree from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH sition from t position to notion units	the starting )].	g position
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ • Sets the rela page mode. TI [(nL + nH x 22) Execute macro ASCII	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver GS	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL sarting pos e current rrizontal n	nH nH nH sition from to position to notion units	the starting )]. t	m
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ • Sets the rela page mode. TI [(nL + nH x 2! Execute macro ASCII Hex	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver 56) x (ver 0. GS 1D	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH position from f position to notion units r r	the starting )]. t t	m m
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name] [Format]	Set relative ve ASCII Hex Decimal $0 \le nt \le 255$ $0 \le nH \le 255$ • Sets the relat page mode. TI (nL + nH x 2) Execute macroc ASCII Hex Decimal	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver GS	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH sition from to position to notion units	the starting )]. t	m
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ • Sets the rela page mode. TI [(nL + nH x 22) Execute macro ASCII Hex Decimal $0 \le r \le 255$	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver 56) x (ver 0. GS 1D	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH position from f position to notion units r r	the starting )]. t t	m m
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name] [Format]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ $0 \le nH \le 255$ Sets the relat page mode. The [(nL + nH x 2)] Execute macroc ASCII Hex Decimal $0 \le r \le 255$	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver 56) x (ver 0. GS 1D	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH position from f position to notion units r r	the starting )]. t t	m m
GS \ nL nH [Name] [Format] [Range] [Description] GS ^ r t m [Name] [Format]	Set relative ve ASCII Hex Decimal $0 \le nL \le 255$ • Sets the rela page mode. TI [(nL + nH x 22) Execute macro ASCII Hex Decimal $0 \le r \le 255$	rtical prin GS 1D 29 tive vertic he distanc 56) x (ver	t position 5C 92 al print st re from th tical or ho	in page n nL nL nL arting pos e current rrizontal n	nH nH nH position from f position to notion units r r	the starting )]. t t	m m

t specifies the number of times to execute the macro.
 t specifies the waiting time for executing the macro.
 m specifies macro executing mode from the table below.

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m	Fune	ction				
0	Exec	cutes th	ne macro r	times	at the inter	val specified by t.
1	that	the FE	ED button	must l	pressed.	; the PAPER OUT LED flashes to indicate After the button is pressed, the macro is epeated r times.
GS a n						
[Name]		Enabl	e/Disable	Autom	atic Status	Back (ASB).
[Format]		ASC		GS	а	
		Hex		1D	61	n
			imal	29	97	'n
[Range]			≤ 255			
[Default]					itch 1-3 is	
Descript	ion]				itch 1-3 is i	Un. B (Automatic Status Back).
Descript		Bit	Off/On	Hex	Decimal	Function
			Off	00	0	Drawer kick-out connector pin 3 disable.
		0	On	01	1	Drawer kick-out connector pin 3 enable.
			Off	00	0	Online/Offline status disabled.
	_	1			-	
			On	02	2	Online/Offline status enabled.
		2	Off	00	0	Error status disabled.
			On	04	4	Error status enabled.
		3	Off	00	0	Paper roll sensor status disabled.
		_	On	08	8	Paper roll sensor status enabled.
		4	Off	00	0	Reserved.
		5	Off	00	0	Reserved.
		c	Off	00	0	Panel button status disabled.
		6	On	40	64	Panel button status enabled.
		7	Off	00	0	Reserved.
		<ul> <li>The</li> </ul>	status to	be tran	smitted is t	he four bytes that follows.
		- I	irst byte (	printer	informatio	n)
		Bit	Off/On	Hex	Decimal	Function
		0	Off	00	0	Fixed.
		1	Off	00	0	Fixed.
		2	Off	00	0	Drawer kick-out connector pin 3 is LOW.
		-	On	04	4	Drawer kick-out connector pin 3 is HIGH.
		3	Off	00	0	Online.
		+	On	08	8	Offline.
		4	Off	10	16	Fixed.
		5	Off	00	0	Cover is closed.
		-	On	20	32	Cover is opened.
		6	Off	00	0	Paper is not being fed by using the paper FEED button.
		+	On	40	64	Paper is being fed by using the paper FEED button.
		7	Off	00	0	Fixed.

			ter informa	
Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Not on online waiting status.
	On	01	1	During online waiting status.
1	Off	00	0	Panel button OFF.
-	On	02	2	Panel button ON.
2	Off	00	0	No mechanical error.
2	On	04	4	Mechanical error has occurred.
3	Off	00	0	No Auto Cutter error.
	On	08	8	Auto Cutter error occurred.
4	Off	00	0	Fixed.
5	Off	00	0	No unrecoverable error.
5	On	20	32	Unrecoverable error has occurred.
6	Off	00	0	No automatically recoverable error.
0	On	40	64	Automatically recoverable error has occurre
7	Off	00	0	Fixed.
- TI		paper s	sensor infor	
Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll near-end sensor : paper adequate.
0	On	01	1	Paper roll near-end sensor : paper near en
1	Off	00	0	Paper roll near-end sensor : paper prese
T	On	02	2	Paper roll near-end sensor : paper not presen
2	Off	00	0	Paper roll end sensor : paper presen
2	On	04	4	Paper roll end sensor : paper near e
3	Off	00	0	Paper roll end sensor : paper preser
з	On	08	8	Paper roll end sensor : paper not presen
4	Off	00	0	Fixed.
5	Off	00	0	Reserved.
6	Off	00	0	Reserved.
7	Off	00	0	Fixed.
	paper roll		nsor is uns	table when the cover is open.
			sensor info	
Bit	Off/On	Hex	Decimal	Function
0	Ön	01	1	Reserved.
1	On	02	2	Reserved.
2	On	04	4	Reserved.
3	On	08	8	Reserved.
4	Off	00	0	Fixed.
5	Off	00	0	Reserved.
6	Off	00	0	Reserved.
7	Off	00	0	Fixed.

aata to the host whether the host can receive or not. • When the memory switch Msw 8-7 is On, the printer transmits the ASB data with the panel button status always being ignored. APPENDIX J [Reference]

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[Notes]

lame]	Turns smoothir	na mode	on/off					
ormat]	ASCII	ig mode	GS	b		n		
ormacj	Hex		1D	62		n		
	Decimal		29	98		n		
Range]	$0 \le nL \le 255$		25	50				
Default]	n=0							
Description]	Turns smooth	ina mod	le on or off					
(cocinption)	- When the L				turned	off.		
	- When the L							
				5				
Sfn								
lame]	Select font for	HRI char	racters.					
ormat]	ASCII		GS	f		n		
	Hex		1D	66		n		
	Decimal		29	102		n		
Range]	For ANK/Multilingual model : n=0, 1, 48, 49							
	For Japanese Kanji model : $0 \le n \le 2$ , $48 \le n \le 50$							
				,				
Default]	n=0	2		,				
Default] Description]	n=0 • Selects a font	for the	HRI charad	ters used wh			r code	
	n=0 • Selects a font - n specifies	for the	HRI charad	ters used wh			r code	
	n=0 • Selects a font - n specifies n Font	for the the font	HRI charac of the HRI	ters used wh			r code	
	n=0 • Selects a font - n specifies <b>n Font</b> 0, 48 Font	for the the font	HRI charac of the HRI 24)	ters used wh			r code	
	n=0 • Selects a font - n specifies <b>n Font</b> 0, 48 Font	for the the font	HRI charac of the HRI 24)	ters used wh			r code.	
Description]	n=0 • Selects a font - n specifies <b>n Font</b> 0, 48 Font	for the the font	HRI charac of the HRI 24)	ters used wh			r code	
Description]	n=0 • Selects a font - n specifies n Font 0, 48 Font 1, 49 Font	for the the font A (12 x 2 B (9 x 17	HRI charac of the HRI 24) 7)	ters used wh			r code	
Description] Shn lame]	n=0 • Selects a font - n specifies n Font 0, 48 Font 1, 49 Font Selects bar cod	for the the font A (12 x 2 B (9 x 12 le height	HRI charac of the HRI 24) 7)	ters used wh characters a			r code	
Description]	n=0 • Selects a font - n specifies n Font 0, 48 Font 1, 49 Font Selects bar cod ASCII	for the the font A (12 x $2$ B (9 x 1 $2$ e height GS	HRI charac of the HRI 24) 7) :. h	ters used wh			ır code.	
Description] Shn lame]	n=0 • Selects a font - n specifies n Font 0, 48 Font 1, 49 Font Selects bar cod ASCII Hex	for the the font $A (12 \times 2)$ $B (9 \times 1)$ $B (9 \times 1)$ $B (9 \times 1)$ $B (12 \times 2)$ $B (12 \times 2)$	HRI charac of the HRI 24) 7) :. h 68	n n			r code	
Description] <b>S h n</b> lame] iormat]	n=0 • Selects a font - n specifies <b>n</b> Font 0, 48 Font 1, 49 Font Selects bar cod ASCII Hex Decimal	for the the font A (12 x $2$ B (9 x 1 $2$ e height GS	HRI charac of the HRI 24) 7) :. h	n			r code	
Description] Shn Jame] Format] Range]	$\begin{array}{l} n=0\\ \bullet \mbox{ Selects a font}\\ \bullet \ n \mbox{ specifies}\\ \hline n \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	for the the font $A (12 \times 2)$ $B (9 \times 1)$ $B (9 \times 1)$ $B (9 \times 1)$ $B (12 \times 2)$ $B (12 \times 2)$	HRI charac of the HRI 24) 7) :. h 68	n n			r code	
Description] <b>S h n</b> lame] iormat]	n=0 • Selects a font - n specifies <b>n</b> Font 0, 48 Font 1, 49 Font Selects bar cod ASCII Hex Decimal	A (12 x 2 B (9 x 17 B (9 x 17 C 10 C 10 C 10 C 10 C 10 C 10 C 10 C 10	HRI charac of the HRI 24) 7) h 68 104	n n n			r code	

② GS k m n [Name]		<b>n</b> bar code.				
[Format]	(1)	ASCII GS	k	m	d1dk	NUL
[FUIIIdt]	U	Hex 1D		m	d1dk	NUL
		Decimal 29		m	d1dk	NUL
	2	ASCII GS		m	n	d1dn
		Hex 10		m	n	d1dn
[D]	•••	Decimal 29		m	n	d1dn
[Range]		$\leq$ m $\leq$ 6 (k and d de 5 $\leq$ m $\leq$ 73 (n and d				
[Description]		ects a bar code syste			stern useu)	
[Description]	- 36	For ①		bai coue.		
	m	Bar Code System	Range of k	Range of	d	
	0	UPC-A	$11 \le k \le 12$	48 ≤ d ≤	57	
	1	UPC-E	$11 \le k \le 12$	48 ≤ d ≤		
	2	JAN13(EAN)	$12 \le k \le 13$	48 ≤ d ≤	-	
	3	JAN8(EAN)	7 ≤ k ≤ 8	48 ≤ d ≤		
	4	CODE39	1 ≤ k		57, 65 ≤ c 37,43,45,4	
			1 ≤ k (even			0,47
	5	ITF	number)	48 ≤ d ≤	57	
	6	CODABAR	1 ≤ k		57, 65 ≤ c	
	0		128	d=36,43,	45,46,47,5	8
		For ②		-		
	m	Bar Code System	Range of k	Range of		
	65	UPC-A	11 ≤ n ≤ 12	48 ≤ d ≤	57	
	66	UPC-E	11 ≤ n ≤ 12	48 ≤ d ≤	57	
	67	JAN13(EAN)	12 ≤ n ≤ 13	48 ≤ d ≤	57	
	68	JAN8(EAN)	7 ≤ n ≤ 8	48 ≤ d ≤	57	
	69	CODE39	1 ≤ n ≤ 255		57, 65 ≤ c ,37,43,45,4	
	70	ITF	$1 \le n \le 255$ (even number)	48 ≤ d ≤	57	
	71	CODABAR	1 ≤ n ≤ 255		57, 65 ≤ c ,45,46,47,5	
	1	000503	1 ≤ n ≤ 255	0 ≤ d ≤	107	
	72	CODE93	1 5 11 5 255	0 2 0 2	12/	

of the bar code).

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Name]	Transmit	status.				
Format]	ASCII		GS	r		n
	Hex		1D	72		n
	Decima		29	114		n
Range]	n=1, 2, 4					
Description]	<ul> <li>Transm</li> </ul>	its the ne	ormal	status spe	cified	by n as follows :
	n	Function				
	1, 49	Transmi	ts pap	er sensor	statu	s.
	2, 50	Transmi	ts dra	wer kick-o	ut co	nnector status.
	<ul> <li>Paper s</li> </ul>	ensor sta	atus (r	1=1, 49) :		
	Bit (	Off/On	Hex	Decimal	Fu	nction
	0, 1	Off	00	0	Pap	per roll near-end sensor : paper adequate
	0, 1	On	03	3	Pap	per roll near-end sensor : paper near end
	2.2	Off	00	0	Pa	per roll end sensor : paper present
	2, 3	On	0C	12	Par	per roll end sensor : paper not present.
	4	Off	00	0		ed.
	5	Off	00	0	Re	served.
	6	Off	00	0		served.
				-		
	7	Off	00	0	Fix	ed.
		Off 2 and 3 :				ed.
	- Bits 2	2 and 3 :	This c	command of	anno	ot be executed since the printer
	- Bits 2 becomes	2 and 3 : offline w	This c /hen t	command on he paper r	anno oll en	ot be executed since the printer ad sensor detects the paper not
	- Bits 2 becomes present.	2 and 3 : offline w Therefor	This c /hen tl e, the	command on he paper r	anno oll en oit 2 (	t be executed since the printer ad sensor detects the paper not (1) and bit 3 (1) is not transmitted
	- Bits 2 becomes present.	2 and 3 : offline w Therefor kick-out	This c hen the e, the conne	command on the paper r status of l	canno oll en oit 2 ( s (n=	t be executed since the printer ad sensor detects the paper not (1) and bit 3 (1) is not transmitted
	- Bits 2 becomes present. • Drawer AAWBit	2 and 3 : offline w Therefor kick-out	This c hen the conne n H	command one paper r status of l ector statu	canno oll en oit 2 ( s (n=	t be executed since the printer id sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function
	- Bits 2 becomes present. • Drawer	2 and 3 : offline w Therefore kick-out t Off/0	This c hen the conne n H (	command on the paper r status of l ector status ex Decin 00 0	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW
	- Bits 2 becomes present. • Drawer AAWBit	2 and 3 : offline w Therefork kick-out t Off/O	This c hen the conne n H (	command on the paper r status of l ector status ex Decin 00 0	canno oll en oit 2 ( s (n=	t be executed since the printer id sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> t 0 1	2 and 3 : offline w Therefore kick-out t Off/O Off Off	This c hen the conne on H ( (	command (       he paper r       status of l       ector status       ex     Decin       00     0       01     1       00     0	canno oll en oit 2 ( s (n=	to be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> 0 1 2	2 and 3 : offline w Therefore kick-out t Off/O Off Off Off	This c /hen tl e, the conne n H ( ( ( ( ( (	Annu Command (           the paper r           status of l           extor status           extor status           00         0           01         1           00         0           00         0	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBit</b> 0 1 2 3	2 and 3 : offline w Therefore kick-out t Off/O Off Off Off Off	This c /hen tl e, the conne 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Annu Command (           the paper r           status of l           extor status           extor status           00         0           01         1           00         0           00         0           00         0           00         0           00         0	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : <b>Function</b> Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> 0 1 2 3 4	2 and 3 : offline w Therefore kick-out t Off/O Off Off Off Off Off	This c vhen the conner n H C C C C C C C C C C C C C	oormand (           he paper r           status of l           ext Decin           00         0           01         1           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0	canno oll en oit 2 ( s (n=	bt be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Fixed.
	- Bits 2 becomes present. - Drawer AAWBit 0 1 2 3 4 5	2 and 3 : offline w Therefore kick-out t Off/O Off Off Off Off Off Off	This c vhen the conne on H C C C C C C C C C C C C C C C C C C C	oormand (           he paper r           status of l           ext Decin           00         0           01         1           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0	canno oll en oit 2 ( s (n=	bt be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Fixed. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> 0 1 2 3 4 5 6	2 and 3 : offline w Therefor kick-out t Off/O Off Off Off Off Off Off Off	This c vhen the conne co	Annotation         Annotation           and paper r         status of l           status of l         status of l           actor status         annotation           annotation         annotation	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Fixed. Reserved. Reserved. Reserved. Reserved. Reserved.
	- Bits 2 becomes present. - Drawer AAWBit 0 1 2 3 4 5	2 and 3 : offline w Therefore kick-out t Off/O Off Off Off Off Off Off	This c vhen the conne co	oormand (           he paper r           status of l           ext Decin           00         0           01         1           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0           00         0	canno oll en oit 2 ( s (n=	bt be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Fixed. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> 0 1 2 3 4 5 6 6 7	2 and 3 : offline w Therefore kick-out <b>b Off/O</b> Off Off Off Off Off Off Off	This c vhen the conne co	Annotation         Annotation           and paper r         status of l           status of l         status of l           actor status         annotation           annotation         annotation	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Fixed. Reserved. Reserved. Reserved. Reserved. Reserved.
	- Bits 2 becomes present. • Drawer <b>AAWBi</b> 0 1 2 3 4 5 6 7 7 <b>×H yL yH</b>	2 and 3 : offline w Therefore kick-out kick-out kick-out to off/O Off Off Off Off Off Off Off Off Off	This c /hen tl e, the conne 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Annotation         Annotation           and paper r         status of l           status of l         status of l           actor status         annotation           annotation         annotation	canno oll en oit 2 ( s (n=	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted. 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Fixed. Reserved. Reserved. Reserved. Reserved. Reserved.
Name]	- Bits 2 becomes present. - Drawer AAWBi 0 1 2 3 4 5 6 7 7 <b>xH yL yH</b>	2 and 3 : offline w Therefor kick-out to off/O Off Off Off Off Off Off Off Off Off	This c /hen tl e, the conne 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Command 6         Paper r           he paper r         status of l           ector status         ector status           100         0           11         1           100         0           101         1           100         0           100         0           100         0           100         0           100         0           100         0           100         0           100         0           100         0	cannco bil en pit 2 ( s (n= <b>nal</b>	bt be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted. 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Fixed. Reserved. Reserved. Fixed. Fixed. Fixed.
Name]	Bits 2     becomes     present.     Drawer     AAWBi     0     1     2     3     4     5     6     7     Print ras     ASCII	2 and 3 : offline w Therefore kick-out kick-out kick-out cont off Off Off Off Off Off Off Off	This c /hen tl e, the conne 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Normand         Command         Command <t< td=""><td>m</td><td>t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted. 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Reserved. Reserved. Fixed. Reserved. Fixed.</td></t<>	m	t be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted. 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Reserved. Reserved. Fixed. Reserved. Fixed.
<b>35 v 0 m xL</b> Name] Format]	- Bits 2 becomes present. - Drawer AAWBi 0 1 2 3 4 5 6 7 7 <b>xH yL yH</b>	2 and 3 : offline w Therefor kick-out k Off/O Off Off Off Off Off Off Off Off Of	This c vhen tl e, the conner n H ( ( ( ( ( ( ( ( ( ( ( ( (	Command 6         Paper r           he paper r         status of l           ector status         ector status           100         0           11         1           100         0           101         1           100         0           100         0           100         0           100         0           100         0           100         0           100         0           100         0           100         0	cannco bil en pit 2 ( s (n= <b>nal</b>	bt be executed since the printer d sensor detects the paper not (1) and bit 3 (1) is not transmitted. 2, 50) : Function Drawer kick-out connector pin 3 is LOW Drawer kick-out connector pin 3 is HIGH. Reserved. Reserved. Reserved. Reserved. Fixed. Reserved. Fixed. Reserved. Fixed.

 $\begin{array}{l} 1 \leq (yL + yH + z256) \leq 120 & (0 \leq yL \leq 125, x = 0) \\ 1 \leq (yL + yH + z256) \leq 4095 & (0 \leq yL \leq 255, 0 \leq yH \leq 15) \\ 0 \leq d \leq 255 \\ k = (xL + xH + z256) \times (yL + yH + z256) \end{array}$ 

#### [Description] • Prints a raster bit image in m mode. - m specifies the bit image mode.

m	Mode	Vertical dot density	Horizontal dot density
0, 48	Normal	180 dpi	180 dpi
1, 49	Double-width	180 dpi	90 dpi
2, 50	Double-height	90 dpi	180 dpi
3, 51	Quadruple	90 dpi	90 dpi
<f< td=""><td>or SRP-372&gt;</td><td></td><td></td></f<>	or SRP-372>		
m	Mode	Vertical dot density	Horizontal dot density
<b>m</b> 0, 48	Mode Normal	203 dpi	Horizontal dot density 203 dpi
0, 48	Normal	203 dpi	203 dpi
0, 48 1, 49	Normal Double-width	203 dpi 203 dpi	203 dpi 203/2 dpi

xL, xH specifies (xL + xH x 256) byte(s) in the horizontal direction for the bit image.
 yL, yH specifies (yL + yH x 256) dot(s) in the vertical direction for the bit image.
 d specifies the definition data of the bit image data.

GS w n

0.5 W II					
[Name]	Set bar code	width.			
[Format]	ASCII	GS	w	n	
	Hex	1D	77	n	
	Decimal	29	119	n	
[Range]	2 ≤ n ≤ 6				
	n=3				
[Description]	<ul> <li>Set the hori</li> </ul>	zontal siz	e of the	bar code,	using n as follows :
	<for si<="" td=""><td>RP-370&gt;</td><td></td><td></td><td></td></for>	RP-370>			
	Maria	Invest Days O	a dia		Discours I accel Days Carda

-	Multi-level Bar Code	Binary-level Bar Code						
n	Module Width (mm)	Thin element width (mm)	Thick element width (mm)					
2	0.282	0.282	0.706					
3	0.423	0.423	1.129					
4	0.564	0.564	1.411					
5	0.706	0.706	1.834					
6	0.847	0.847	2.258					
	<for srp-372=""></for>							
-	Multi-level Bar Code	Binary-level Bar Code						
n	Module Width (mm)	Thin element width (mm)	Thick element width (mm)					
2	0.250	0.250	0.626					
3	0.375	0.375	1.001					
4	0.500	0.500	1.251					
5	0.626	0.626	1.627					

[Notes]

 6
 0.751
 0.751

 • Multi-level bar codes are as follows :
 .

 · UPC-A, UPC-E, JAN13, HAN8, CODE93, CODE128

 • Binary-level bar codes are as follows :

 - CODE39, ITF, CODABAR

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## APPENDIX

### **A.** Connectors



When the Dip Switch is "ON" on the Serial Interface Board, DTR and RTS are connected each other.

### SRP-370/372 Connector ( Serial Interface )

POWER	DK	PARALLEL
Power Supply	Drawer Kick-out	Interface Connector
Connector	Connector	

#### SRP-370P/372P Connector (Parallel Interface)

POWER	DK	· · · · · · · · · · · · · · · · · · ·
FOWER		
(200)		
	Гариндей	tr ⊔sb
Power	Drawer	USB Connector
Supply	Kick-out	
Connector	Connector	

### SRP-370U/372U Connector (USB Interface)

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### RS-232C Cable Connection



### Interface Connector

Serial Interface (RS-232)						
Pin No.	Signal name	Direction	Function			
1	FG	-	Frame Ground			
2	TxD	Output	Transmit Data			
3	RxD	Input	Receive Data			
4	RTS	Output	Ready To Send			
5	CTS	Input	Clear To Send			
6	DSR	Input	Data Set Ready			
7	SG	-	Signal Ground			
20	DTR	Output	Data Terminal Ready			

Pin No.	Source	Compatibility Mode	Nibble Mode	Byte Mode
1	Host	nStrobe	HostClk	HostClk
2	Host / Printer	Data 0 (LSB)	-	Data 0 (LSB)
3	Host / Printer	Data 1	-	Data 1
4	Host / Printer	Data 2	-	Data 2
5	Host / Printer	Data 3	-	Data 3
6	Host / Printer	Data 4	-	Data 4
7	Host / Printer	Data 5	-	Data 5
8	Host / Printer	Data 6	-	Data 6
9	Host / Printer	Data 7 (MSB)	-	Data 7 (MSB)
10	Printer	nAck	PtrClk	PtrClk
11	Printer	Busy	PtrBusy /Data3,7	PtrBusy
12	Printer	Perror	AckDataReq/Data2,6	AckDataReq
13	Printer	Select	Xflag /Data1,5	Xflag
14	Host	nAutoFd	HostBusy	HostBusy
15		NC	NC	NC
16		GND	GND	GND
17		FG	FG	FG
18	Printer	Logic-H	Logic-H	Logic-H
19~30		GND	GND	GND
31	Host	nInit	nInit	nInit
32	Printer	nFault	nDataAvail /Data0,4	nDataAvail
33		GND	ND	ND
34	Printer	DK_Status	ND	ND
35	Printer	+5V	ND	ND
36	Host	nSelectIn	1284-Active	1284-Active

### USB Interface

Pin No.	Signal Name	Assignment (Color)	Function
Shell	Shield	Drain Wire	Frame Ground
1	VBUS	Red	Host Power
2	D-	White	Data Line(D-)
3	D+	Green	Data Line(D+)
4	GND	Black	Signal Ground

### Drawer Connector

Pin No.	Signal name	Direction
1	Frame ground	-
2	Drawer kick- out drive signal 1	Output
3	Drawer open/close signal	Input
4	+24V	-
5	Drawer kick- out drive signal 2	Output
6	Signal ground	-



### **B. Notes**

Paper dust inside the printer may lower the print quality. In this case clean the printer as follows.

- 1) Open the printer cover and remove the paper if exists.
- 2) Clean the print head with a cotton swab moistened with alcohol solvent.
- 3) Clean the platen roller and paper end sensor with cotton swab moistened with water.
- 4) Insert a paper roll and close the printer cover.

The remained amount of paper detected by paper near end sensor varies with the diameter of the paper core. To adjust the remained amount, contact your dealer.

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## C. Specification

Printing method			Thermal line printing			
Dot density				180 X 180 dpi (7dots/mm) 203 X 203 dpi (8dots/mm)		
Printing width			57.	5mm, 72.192 $\pm$ 0.2	mm	
Paper width			58n	nm,80mm,82.5 mm		
Characters per line (default)			1	80 DPI 42 (Font A)	203 DPI 48 (Font A)	
				56 (Font B)	64 (Font B)	
Printing speed		180 DPI	Mor	no: 47 lines/sec(1/6'	Feed) 200mm/sec	
			Colo	or: 23.6 Line/ Sec(1/	6inch feed) 100mm/sec	
		203 DPI	Mor	no: 42 lines/sec(1/6'	Feed) 180mm/sec	
			Color : 21 Line/ Sec(1/6inch feed) 90mm/sec			
Receive Buffer Siz	е		4K Bytes			
NOTE : Printing speed combination of control			eper	nding on the data tra	nsmission speed and the	
Supply voltage	Inp	ut voltage	100~240 VAC			
	Fre	equency		50/60 Hz		
	Out	Dutput voltage		+24 VDC		
Environmental	Ter	nperature		0 ~ 45 °C (Operating)		
Conditions			-10 ~ 50 °C (Storage)			
	Hu	nidity	30 ~ 80 % RH (Operating)			
			10 ~ 90 % RH (Storage)			
			; Except for paper			
MCBF *	Mechanism			Monochrome :70,000,000Lines 2Color :35,000,000Lines		
Auto cutter life *				1,200,000 Cut		

\* These values are calculated under printing level 2 with

\* These values may vary with environment temperature.
\* These values may vary with environment temperature, printing level, etc.

