SRP-270 SERIES

SAMSUNG ELECTRO-MECHANICS

1 STATION PRINTER

Operator's Manual

All specifications are subjected to change without notice

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 according to 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 disconnect cables.   This will help protect the printer against static electricity. If the printer is damaged by the static electricity, you should turn the printer OFF, and refer to your local service provider.

INTRODUCTION

The SRP-270 Roll Printers 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:

1. High speed printing : 4.6 lines per seconds.
2. 2 color dot-matrix printer.
3. RS-232C(SRP-270), RS-485 serial interface (SRP-270S), Parallel interface (SRP-270P),USB interface(SRP-270U).
4. The data buffer allows the unit to receive print data even during printing.
5. Peripheral units drive circuit enables control of external devices such as cash drawer.

Please be sure to read the instruction in this manual carefully before using your new SRP-270 series.

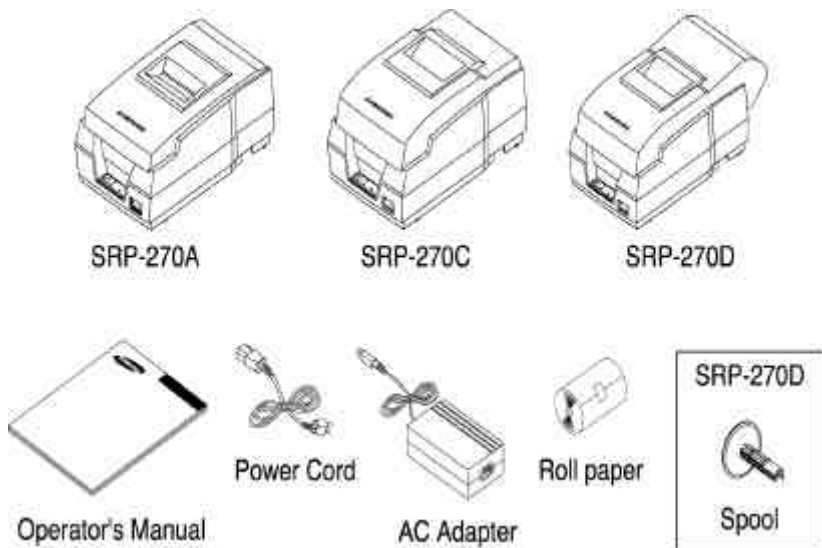> **NOTE : The power-outlet should be near the equipment and it should be easy accessible.**

Table of Contents

Chapter 1. Unpacking

1-1. Checking the Contents of the printer box

After unpacking the unit, check that all the necessary accessories are included in the package.

SRP-270A   SRP-270C   SRP-270D

Operator's Manual   Power Cord   AC Adapter   Roll paper   SRP-270D Spool

1-2. Installing the printer

- Avoid locations in direct sunlight or subject to excessive heat.
- Avoid using or storing the printer in places subject to excessive moisture.
- Do not use or store the printer in a dusty or dirty area. Avoid places subject to intense vibration or shock.
- Choose a stable and flat place for proper use of the printer.
- Make sure that there is enough space around the printer so that it can be used easily.

1-3. Functions

- The power switch is used to turn the printer on and off.
- The FEED button is used to feed roll paper.
- The POWER light (green) is on when the printer is turned on and is off when the printer is turned off.
- The ERROR light (red) is on when the printer is in error state.
- The Paper Out light(red) is on when the printer is in paper end.
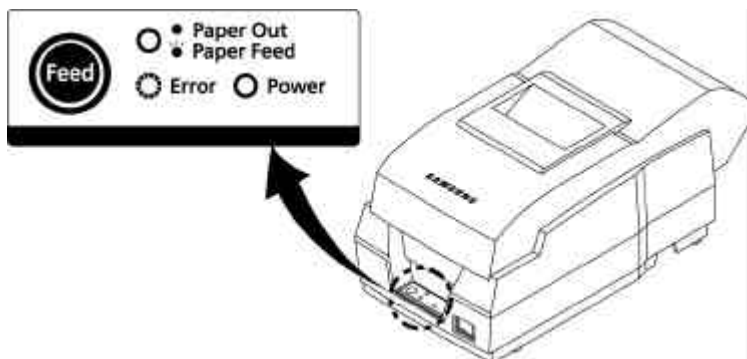
Chapter 2. Connecting the cables

2-1. Connecting the AC adapter to the printer

Power
Connector Cable
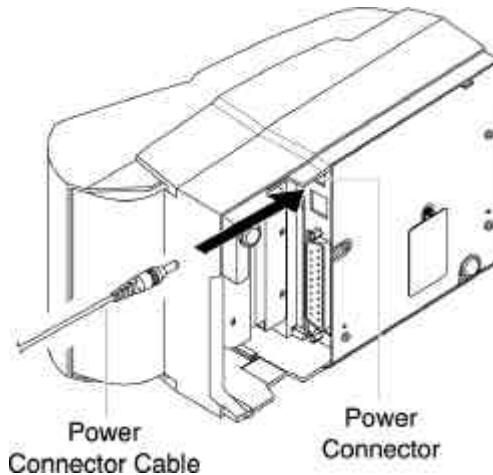
Power
Connector

1). Make sure that the printer is turned off.
2). CHECK the label on the AC adapter to make sure the voltage required by the AC
adapter matches that of your electrical outlet.

3). Plug the DC cord connector into the printer's power connector.

4). Plug the AC adapter power cord into the wall outlet.

2-2. Connecting Interface Cable and Drawer Cable to the printer

Connect the Host Computer(POS/ECR) to the printer using an interface cable that matches the specifications of the printer and the Host computer(POS/ECR). Be sure to use a drawer that matches the printer's specification.

1). Turn off both the printer and the Host computer(POS/ECR).
2). Plug the serial interface cable connector into the printer's interface connector, then tighten the screws on both sides of the connector. In case of the parallel interface, squeeze the wire clips on the printer together until they lock in place on both sides of the connector.
3). Plug the drawer cable into the drawer kick-out connector on the back of the printer next to the interface connector. Do not connect a telephone line to the drawer kick-out connector; otherwise the printer and the telephone line may be damaged.
4). Turn on the Printer and Host computer(POS/ECR).

Serial Interface Cable   Interface Connector

Drawer kick-out Cable   Drawer kick-out Connector
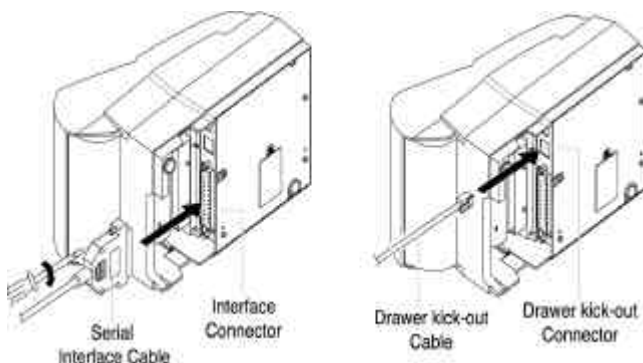
Chapter 3. Installing the roll paper

3-1. Ribbon Cassette Installation

1). Before inserting the ribbon cassette, turn the knob clockwise to prevent twisting the ribbon.

2). Insert the ribbon cassette as shown below and pay particular attention to the placement of the ribbon behind the Print Head.

3). During inserting the ribbon cassette, turn the knob clockwise again to make sure the ribbon moves freely in the cassette.
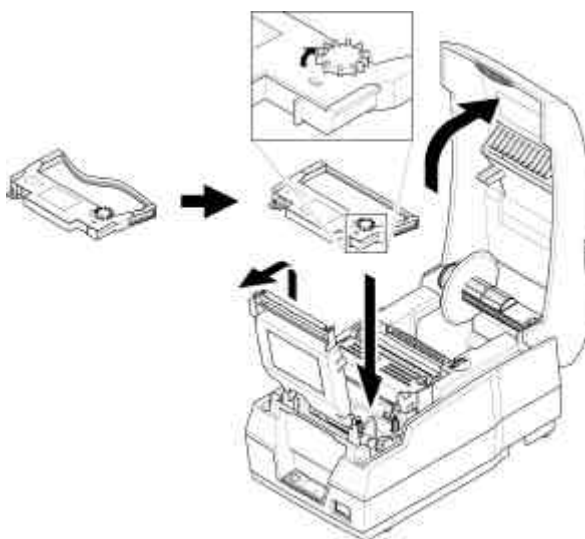
NOTE : Malfunctions and other problems may arise if other than pecified ribbon cassettes are used in the printer.   The Warranty may be voide if other than specified ribbon cassettes are used.   Contact your deale or place of purchase for more information about proper ribbon cassettes.

3-2. Roll Paper Installation

Be sure to use roll paper that matches the printer's specifications.

1). When possible, make sure that the printer has no un-printed data. This data may be lost.
2). Open the printer cover and remove the used paper roll core if there is one.
   " SRP-270 A/C : 1Ply Paper
   # SRP-270 D : 2Ply Paper
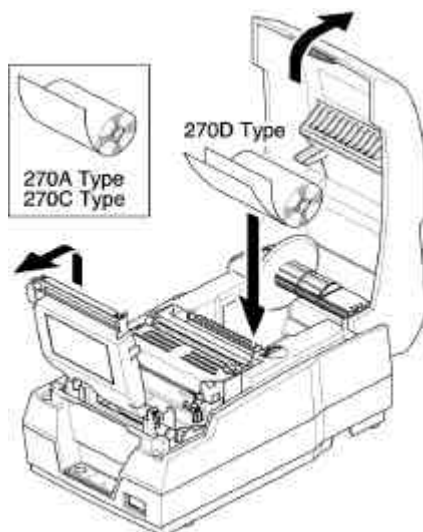
3). To use a new roll paper, unroll the paper and tear off the end of the paper correctly.

Correct   Incorrect   Incorrect
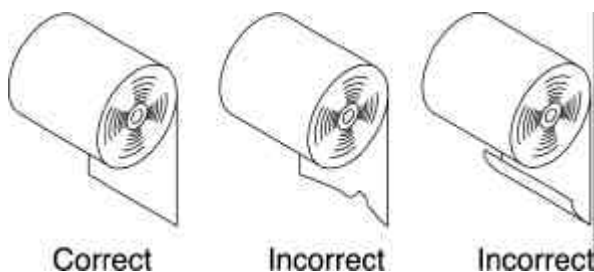
4). Put the roll paper on the paper holder and insert the paper in the printer.
   " SRP-270 A/C : 1Ply Paper
   # SRP-270 D   : 2Ply Paper
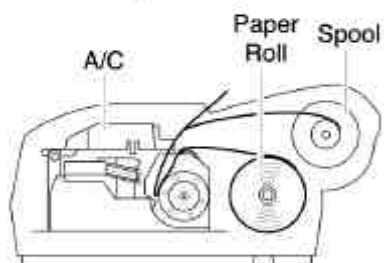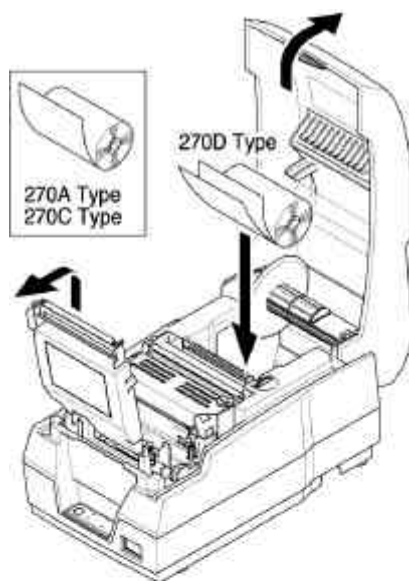
Incorrect
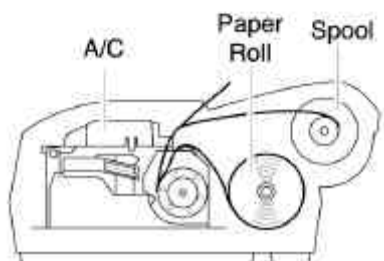
Correct

5) Insert the end of the roll paper straight into the paper inlet. The printer feeds the paper automatically and then the printer will cut the paper automatically(SRP-270C type series and SRP-270D type series).
Refer to the attached label inside the cover.

6). Tear off the paper as shown, if necessary.
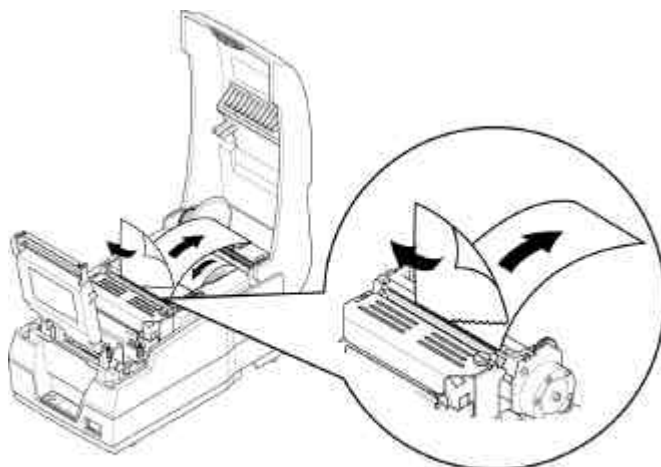
7). Insert the end of the roll paper into the groove on the Roller-Pulley, warp the paper around it two or three times and load the Roller-Pulley onto the groove of the Case.
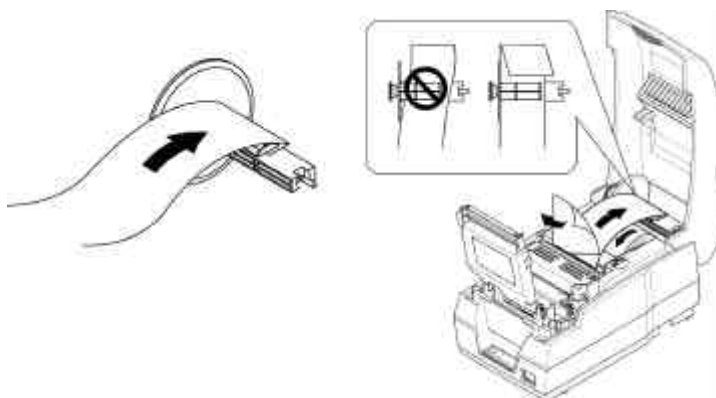
8). Push the auto-cutter cover as shown below and close the printer cover.
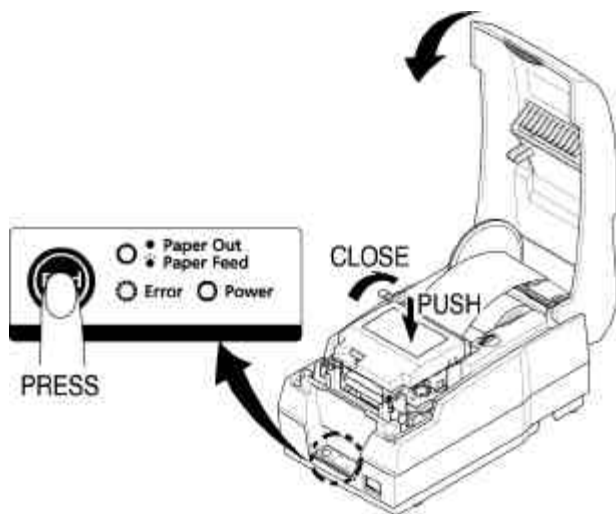
NOTE : Push upper face of the auto cutter cover for completely locking of it.

9). When the ERROR light is on and PAPER OUT light blinks, please press the FEED button. After that, the printer is ready for printing.

Chapter 4. Setting the DIP switches

The DIP switches are located on the bottom of the printer. The DIP switches are used to set the printer to perform various functions. Follow these steps when changing DIP switch settings :

> 1.　Turn the printer power switch off.
>
> 2.　Turn the printer over and remove the dip switch cover.
>
> 3.　Move the DIP switches using tweezers or another narrow-ended tool.
>
> 　　Switches are on when up and off when down in the figure below.
>
> 4.　The new setting takes effect when you turn on the printer.
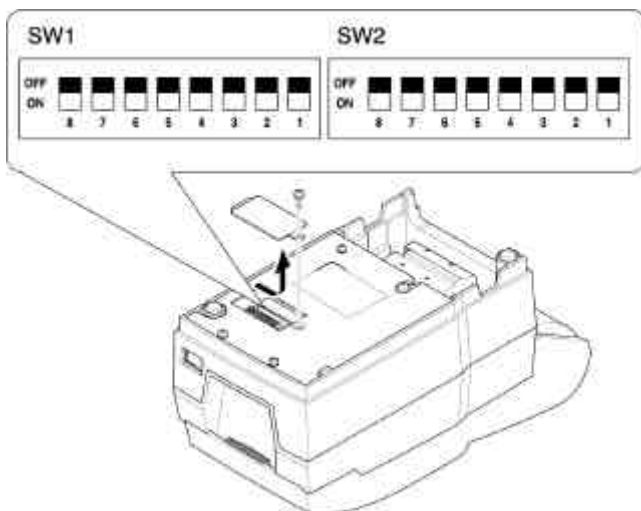
NOTE : Always change DIP switch settings when the printer is turned off. Changes made with the power on have no effect until you turn the printer off and then on again.

Serial Interface (RS-232C/RS-485) Specification

DIP Switch 1 Setting

SW	FUNCTION	ON	OFF	DEFAULT
1	Emulation	Refer to the following table		OFF
2	Selection			OFF
3	Auto-Cutter	Enable	Disable	OFF
4	FONT SPACE	2	3	OFF
5	Function for			-
6	service			-
7	Engineer			OFF
8	RESERVED			OFF

Emulation mode selection

SW – 1	SW – 2	MODE
OFF	OFF	Epson
OFF	ON	Citizen
ON	OFF	Star

Dip Switch 2 Setting

SW	FUNCTION	ON	OFF	DEFAULT
1	Data Receive Error	Print "?"	Ignore	OFF
2	Hexadecimal dump	YES	NO	OFF
3	Hand Shaking	XON/OFF	DTR/DSR	OFF
4	Word length	7 bits	8 bits	OFF
5	Parity check	Enable	Disable	OFF
6	Parity selection	EVEN	ODD	OFF
7	Baud Rate	Refer to the following table		OFF
8	selection			OFF

Baud rate selection

Transmission speed	SW – 7	SW – 8
1200 baud	ON	ON
2400 baud	OFF	ON
4800 baud	ON	OFF
9600 baud	OFF	OFF

NOTE : When the word length is 7 bits, you can not parity check OFF status.

Parallel/USB Interface Specification

DIP Switch 1 Setting

SW	FUNCTION	ON	OFF	DEFAULT
1	Emulation	Refer to the following table		OFF
2	Selection			OFF
3	Auto-Cutter	Enable	Disable	OFF
4	FONT SPACE	2	3	OFF
5	Function for			-
6	service			-
7	Engineer			OFF
8	RESERVED			OFF

Emulation mode selection

SW – 1	SW – 2	MODE
OFF	OFF	Epson
OFF	ON	Citizen
ON	OFF	Star

Dip Switch 2 Setting

SW	FUNCTION	ON	OFF	DEFAULT
1	Reserved	-	-	OFF
2	Hex Dump	YES	NO	OFF
3	Reserved	-	-	OFF
4	Reserved	-	-	OFF
5	Reserved	-	-	OFF
6	Reserved	-	-	OFF
7	Reserved	-	-	OFF
8	Reserved	-	-	OFF

Chapter 5. 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.

2. Set DIP switch 2-2 On.

3. Turn on the printer, 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 correspond to the codes.

```
1B 21 00 1B 26 02 40 40          . ! . . & . @ @
02 0D 1B 44 0A 14 1E 28          . . . D . . . . (
00 01 0A 41 0D 42 0A 43          . . . A . B . C
```

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

- During the hex dump, all commands except **DLE EOT** and **DLE ENQ** are disabled.

- Insufficient print data to fill the last line can be printed by pressing the feed button.

5. When the printing finishes, turn off the printer, and then change DIP switch 2-2 OFF.

6. Turn on the printer and then the hexadecimal mode is off.

Chapter 6. The self test

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

1. Make sure paper roll has been installed properly.
2. Turn on the power while holding down the FEED button. The self-test begins.
3. The self-test prints the current printer status, which provides the control ROM version and the DIP switch setting.
4. 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

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

** Character Test Completed **

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

Chapter 7. 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.

HEX	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
BIN	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
0 0000	NUL [00]	DLE [16]	SP [32]	0 [48]	@ [64]	P [80]	` [96]	p [112]	Ç [128]	É [144]	á [160]	░ [176]	└ [192]	┴ [208]	α [224]	≡ [240]
1 0001	XON [01]	XON [17]	! [33]	1 [49]	A [65]	Q [81]	a [97]	q [113]	ü [129]	æ [145]	í [161]	▒ [177]	┴ [193]	┬ [209]	ß [225]	± [241]
2 0010	[02]	[18]	" [34]	2 [50]	B [66]	R [82]	b [98]	r [114]	é [130]	Æ [146]	ó [162]	▓ [178]	┬ [194]	┬ [210]	Γ [226]	≥ [242]
3 0011	XOFF [03]	XOFF [19]	# [35]	3 [51]	C [67]	S [83]	c [99]	s [115]	â [131]	ô [147]	ú [163]	│ [179]	├ [195]	└ [211]	π [227]	≤ [243]
4 0100	EOT [04]	[20]	$ [36]	4 [52]	D [68]	T [84]	d [100]	t [116]	ä [132]	ö [148]	ñ [164]	┤ [180]	─ [196]	└ [212]	Σ [228]	⌠ [244]
5 0101	ENQ [05]	[21]	% [37]	5 [53]	E [69]	U [85]	e [101]	u [117]	à [133]	ò [149]	Ñ [165]	╡ [181]	┼ [197]	┌ [213]	σ [229]	⌡ [245]
6 0110	[06]	[22]	& [38]	6 [54]	F [70]	V [86]	f [102]	v [118]	å [134]	û [150]	ª [166]	╢ [182]	╞ [198]	┌ [214]	µ [230]	÷ [246]
7 0111	[07]	[23]	' [39]	7 [55]	G [71]	W [87]	g [103]	w [119]	ç [135]	ù [151]	º [167]	╖ [183]	╟ [199]	┼ [215]	τ [231]	≈ [247]
8 1000	BS [08]	CAN [24]	([40]	8 [56]	H [72]	X [88]	h [104]	x [120]	ê [136]	ÿ [152]	¿ [168]	╕ [184]	╚ [200]	┼ [216]	Φ [232]	° [248]
9 1001	HT [09]	[25]	) [41]	9 [57]	I [73]	Y [89]	i [105]	y [121]	ë [137]	Ö [153]	⌐ [169]	╣ [185]	╔ [201]	┘ [217]	Θ [233]	∙ [249]
A 1010	LF [10]	[26]	* [42]	: [58]	J [74]	Z [90]	j [106]	z [122]	è [138]	Ü [154]	¬ [170]	║ [186]	╩ [202]	┌ [218]	Ω [234]	· [250]
B 1011	[11]	ESC [27]	+ [43]	; [59]	K [75]	[[91]	k [107]	{ [123]	ï [139]	¢ [155]	½ [171]	╗ [187]	╦ [203]	█ [219]	δ [235]	√ [251]
C 1100	FF [12]	FS [28]	, [44]	< [60]	L [76]	\ [92]	l [108]		[124]	î [140]	£ [156]	¼ [172]	╝ [188]	╠ [204]	▄ [220]	∞ [236]	ⁿ [252]
D 1101	CR [13]	GS [29]	- [45]	= [61]	M [77]	] [93]	m [109]	} [125]	ì [141]	¥ [157]	¡ [173]	╜ [189]	═ [205]	▌ [221]	φ [237]	² [253]
E 1110	[14]	[30]	. [46]	> [62]	N [78]	^ [94]	n [110]	~ [126]	Ä [142]	₧ [158]	« [174]	╛ [190]	╬ [206]	▐ [222]	ε [238]	■ [254]
F 1111	[15]	[31]	/ [47]	? [63]	O [79]	_ [95]	o [111]	SP [127]	Å [143]	ƒ [159]	» [175]	┐ [191]	╧ [207]	▀ [223]	∩ [239]	SP [255]

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

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

Page 2 (PC 850 : Multilingual)

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HEX		8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▓ 176	└ 192	⊥ 208	α 224	240
1	0001	ü 129	À 145	í 161	▒ 177	⊥ 193	┬ 209	β 225	± 241
2	0010	é 130	È 146	ó 162	▓ 178	┬ 194	┬ 210	Γ 226	≥ 242
3	0011	â 131	ô 147	ú 163	│ 179	├ 195	└ 211	π 227	≤ 243
4	0100	ã 132	õ 148	ñ 164	┤ 180	─ 196	└ 212	Σ 228	⌠ 244
5	0101	à 133	ò 149	Ñ 165	┤ 181	┼ 197	┌ 213	σ 229	⌡ 245
6	0110	Á 134	Ú 150	ª 166	┤ 182	├ 198	┌ 214	µ 230	÷ 246
7	0111	ç 135	ù 151	º 167	┐ 183	├ 199	┼ 215	τ 231	≈ 247
8	1000	ê 136	Ì 152	¿ 168	┐ 184	└ 200	┼ 216	Φ 232	° 248
9	1001	Ê 137	Õ 153	Ò 169	┤ 185	┌ 201	┘ 217	θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	│ 186	┴ 202	┌ 218	Ω 234	· 250
B	1011	Í 139	¢ 155	½ 171	┐ 187	┬ 203	█ 219	δ 235	251
C	1100	Ô 140	£ 156	¼ 172	┘ 188	├ 204	▄ 220	∞ 236	ⁿ 252
D	1101	ì 141	Ù 157	¡ 173	┘ 189	─ 205	▌ 221	ø 237	² 253
E	1110	Ã 142	Pt 158	« 174	┘ 190	┼ 206	▐ 222	238	■ 254
F	1111	Â 143	Ó 159	» 175	┐ 191	┴ 207	▀ 223	239	SP 255

Page 3 (PC 860 : Portuguese)

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HEX		8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	¦ 160	▓ 176	└ 192	╨ 208	α 224	240
1	0001	ü 129	È 145	´ 161	▓ 177	┴ 193	╤ 209	β 225	± 241
2	0010	é 130	Ê 146	ó 162	▓ 178	┬ 194	╥ 210	Γ 226	≥ 242
3	0011	â 131	ô 147	ú 163	│ 179	├ 195	╙ 211	π 227	≤ 243
4	0100	Â 132	Ë 148	¨ 164	┤ 180	─ 196	╘ 212	Σ 228	⌠ 244
5	0101	à 133	Ï 149	¸ 165	╡ 181	┼ 197	╒ 213	σ 229	⌡ 245
6	0110	¶ 134	û 150	³ 166	╢ 182	╞ 198	╓ 214	μ 230	÷ 246
7	0111	¶ 135	ù 151	─ 167	╖ 183	╟ 199	╫ 215	τ 231	≈ 247
8	1000	ê 136	¤ 152	Î 168	╕ 184	╚ 200	╪ 216	Φ 232	° 248
9	1001	ë 137	Ô 153	⌐ 169	╣ 185	╔ 201	┘ 217	Θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	║ 186	╩ 202	┌ 218	Ω 234	· 250
B	1011	ï 139	¢ 155	‡ 171	╗ 187	╦ 203	█ 219	δ 235	251
C	1100	î 140	£ 156	¼ 172	╝ 188	╠ 204	▄ 220	∞ 236	ñ 252
D	1101	‑ 141	Ù 157	¾ 173	╜ 189	═ 205	█ 221	ø 237	² 253
E	1110	À 142	Û 158	« 174	╛ 190	╬ 206	█ 222	∈ 238	■ 254
F	1111	§ 143	ƒ 159	» 175	┐ 191	╧ 207	▀ 223	239	SP 255

Page 4 (PC 863 : Canadian - French)

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	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç 128	É 144	á 160	▓ 176	└ 192	┴ 208	α 224	240
1	0001	ü 129	æ 145	í 161	▒ 177	┴ 193	┬ 209	β 225	± 241
2	0010	é 130	Æ 146	ó 162	▓ 178	┬ 194	┬ 210	Γ 226	≥ 242
3	0011	â 131	ô 147	ú 163	│ 179	├ 195	└ 211	π 227	≤ 243
4	0100	ä 132	ö 148	ñ 164	┤ 180	─ 196	└ 212	Σ 228	⌠ 244
5	0101	à 133	ò 149	Ñ 165	╡ 181	┼ 197	┌ 213	σ 229	⌡ 245
6	0110	å 134	û 150	ª 166	╢ 182	├ 198	┌ 214	μ 230	÷ 246
7	0111	ç 135	ù 151	º 167	┐ 183	├ 199	┼ 215	τ 231	≈ 247
8	1000	ê 136	ÿ 152	¿ 168	┐ 184	└ 200	┼ 216	Φ 232	° 248
9	1001	ë 137	Ö 153	⌐ 169	╣ 185	┌ 201	┘ 217	Θ 233	• 249
A	1010	è 138	Ü 154	¬ 170	║ 186	┴ 202	┌ 218	Ω 234	· 250
B	1011	ï 139	ø 155	½ 171	┐ 187	┬ 203	█ 219	δ 235	251
C	1100	î 140	£ 156	¼ 172	┘ 188	├ 204	▄ 220	∞ 236	ⁿ 252
D	1101	ì 141	Ø 157	¡ 173	┘ 189	─ 205	█ 221	ø 237	² 253
E	1110	Ä 142	₧ 158	« 174	┘ 190	┼ 206	▌ 222	∈ 238	■ 254
F	1111	Å 143	ƒ 159	¤ 175	┐ 191	┴ 207	▀ 223	239	SP 255

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

Country	ASCII code (hexadecimal)											
Hex	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
Dec	35	36	64	91	92	93	94	96	123	124	125	126
U.S.A.	#	$	@	[	\	]	^	`	{	¦	}	~
France	#	$	à	°	ç	§	^	`	é	û	è	¨
Germany	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
U.K.	£	$	@	[	\	]	^	`	[	¦	]	~
Denmark I	#	$	@	Æ	Ø	Å	^	`	œ	ø	å	¨
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	$	@	°	\	é	^	ù	à	ò	è	ì
Spain	Pt	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
Norway	#	¤	É	Æ	Ø	Å	Ü	é	œ	ø	å	ù
Denmark II	#	$	É	Æ	Ø	Å	Ü	é	œ	ø	å	ü

International Character

Chapter 8. Control Commands List

EPSON mode

Control code	Hexadecimal code	Function
<HT>	09	Horizontal tab
<LF>	0A	Print and line feed
<CR>	0D	Print and carriage return
<DLE> <EOT> n	10 04 n	Real-time status transmission
<DLE> <ENQ> n	10 05 n	Real-time request to printer
<ESC> <SP> n	1B 20 n	Set right-side character spacing
<ESC> ! n	1B 21 n	Select print modes
<ESC> % n	1B 25 n	Select/Cancel user-defined character set
<ESC> & y c1 c2 ..	1B 26 y c1 c2	Define user-defined characters
<ESC> * m nL nH ..	1B 2A m nL nH	Select bit-image mode
<ESC> - n	1B 2D n	Turn underline mode on/off
<ESC> 2	1B 32	Select default line spacing
<ESC> 3 n	1B 33 n	Set line spacing
<ESC> <	1B 3C	Return home
<ESC> = n	1B 3D n	Set peripheral device
<ESC> ? n	1B 3F n	Cancel user-defined characters
<ESC> @	1B 40	Initialize printer
<ESC> D n1 ~ nK	1B 44 … 00	Set horizontal tab position
<ESC> E n	1B 45 n	Turn emphasized mode on/off
<ESC> G n	1B 47 n	Turn double-strike mode on/off
<ESC> J n	1B 4A n	Print and feed paper
<ESC> K n	1B 4B n	Print and Reverse feed
<ESC> R n	1B 52 n	Select an international character set
<ESC> U n	1B 55 n	Turn unidirectional printing mode
<ESC> a n	1B 61 n	Select justification

Control code	Hexadecimal code	Function
<ESC> c 3 n	1B 63 33 n	Select paper sensor to output paper end signals
<ESC> c 4 n	1B 63 34 n	Select paper sensor to stop printing
<ESC> c 5 n	1B 63 35 n	Enable/Disable panel button
<ESC> d n	1B 64 n	Print and feed n lines
<ESC> p m t1 t2	1B 70 m t1 t2	Generate pulse
<ESC> t n	1B 74 n	Select character code table
<ESC> r n	1B 72 n	Select print color
<ESC> m	1B 6D	Execute partial cut
<ESC> { n	1B 7B n	Turn on/off upside-down printing mode
<ESC> e n	1B 65 n	Print and reverse feed n lines
<GS> I n	1D 49 n	Transmit printer ID
<GS> V m <GS> V m n	1D 56 m 1D 56 m n	Select cut mode and cut paper
<GS> a n	1D 61 n	Enable/Disable Automatic status back
<GS> r n	1D 72 n	Transmit status

CITIZEN mode

Control code	Hexadecimal code	Function
<FF> "n"	0C + n	"n" -lines paper feed command
<LF>	0A	Paper feed command
<SO>	0E	Enlarged character command
<SI>	0F	Normal character command
<DC1>	11	Initial set command
<DC2>	12	Inverted character command
<DC3>	13	Red color print command
<CAN>	18	Clear command
<ESC> "P" <0>	1B, 50, 00	Paper partial cut command
<ESC> "P" <1>	1B, 50, 01	Paper partial cut command
<ESC> "-" "n"	1B, 2D, n	Underline command

| Control code	Hexadecimal code	Function
<ESC> "1"	1B, 31	1/9 inch paper feed preset command
<ESC> "2"	1B, 32	2/9 inch paper feed preset command
<ESC> "C" "n"	1B, 43, n	Page length set command
<ESC> "f" "1"	1B, 66, 01	Form feed command
<SUB>	1A	Second drawer drive command
<FS>	1C	First drawer quick drive command
<ESC><BEL> n1 n2	1B, 07, n1, n2	Drive pulse setting command for the first drawer
<BEL>	07	First drawer drive command

STAR mode

| Control code	Hexadecimal code	Function
<ESC> "C" n	1B 43 n	Set page length at n lines
<ESC> "R" n	1B 52 n	Select international character set.
<ESC> "M"	1B 4D	Select 9×7(Half dots) character size
<SO>	0E	Select expanded character mode
<SI>	0F	Select upside-down
<DC2>	12	Cancel upside-down character
<DC4>	14	Cancel expanded character mode(Default setting)
<ESC> "W" "1" <ESC> "W" <1>	1B 57 31 1B 57 01	Select expanded character mode
<ESC> "W" "0" <ESC> "W" <0>	1B 57 30 1B 57 00	Cancel expanded character mode (Default setting)
<ESC> "4"	1B 34	Red color print selection
<ESC> "5"	1B 35	Red color print deselection
<ESC> "E"	1B 45	Emphasized print mode selection
<ESC> "F"	1B 46	Emphasized print mode deselection(Default setting)
<ESC> "a" n	1B 61 n	Feed paper n lines

| Control code	Hexadecimal code	Function
<ESC><BEL>n1 n2	1B 07 n1 n2	Adjust drive pulse width for peripheral unit(Default setting)
<BEL>	07	Deferred drive command "A" for peripheral unit 1
<FS>	1C	Immediate drive command "B" for peripheral unit 1
<SUB>	1A	Immediate drive command for peripheral unit 2
<EM>	19	Immediate drive command for peripheral unit 2
<CAN>	18	Cancel print data in buffer
<ESC> "@"	1B 40	Initialize printer
<ESC> "e" "0" <ESC> "e" <0>	1B 65 30 1B 65 00	FEED switch valid (Default setting)
<ESC> "e" "1" <ESC> "e" <1>	1B 65 31 1B 65 01	FEED switch invalid
<ESC> U n	1B 55 n	Set or Cancel uni-direction mode
<ESC> - n	1B 2D n	Set or Cancel underline mode
<ESC> "z" "1" <ESC> "z" <1>	1B 7A 31 1B 7A 01	Set 1/6 inch line feed
<FF>	0C	Page feed (form feed)
<ESC> d <0>	1B 64 00	Partial cut
<ESC> d <1>	1B 64 01	Partial cut
<ESC> "-" "1" <ESC> "-" <1>	1B 5F 31 1B 5F 01	Select overline mode
<ESC> "-" "0" <ESC> "-" <0>	1B 5F 30 1B 5F 00	Cancel overline mode
<ESC> "e" "1" <ESC> "e" <1>	1B 65 31 1B 65 01	Set the control panel switch invalid
<ESC> "e" "0" <ESC> "e" <0>	1B 65 30 1B 65 00	Set the control panel switch valid
<ESC> "f" "1" <ESC> "f" <1>	1B 66 31 1B 66 01	Set the ON LINE switch invalid
<ESC> "f" "0" <ESC> "f" <0>	1B 66 30 1B 66 00	Set the ON LINE switch valid

Appendix A
Connectors
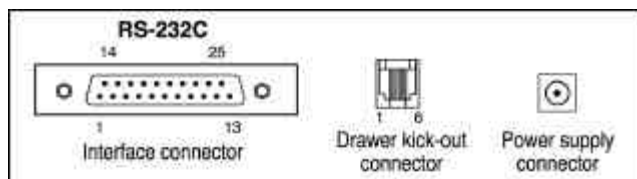
SRP-270 Connector
(Serial Interface: RS-232C)
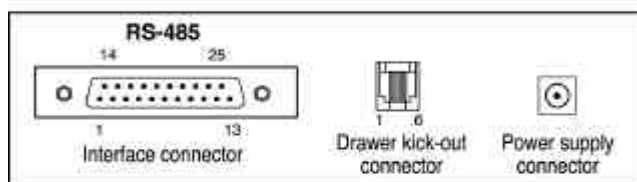
SRP-270 Connector
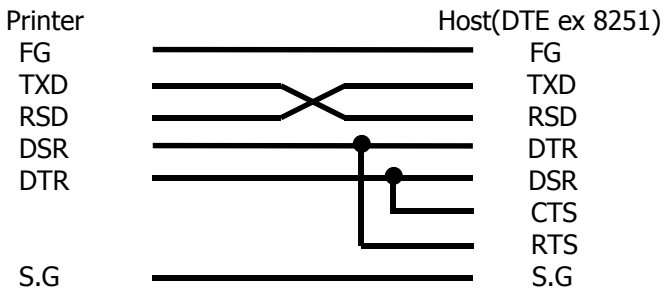(Serial Interface: RS-485)
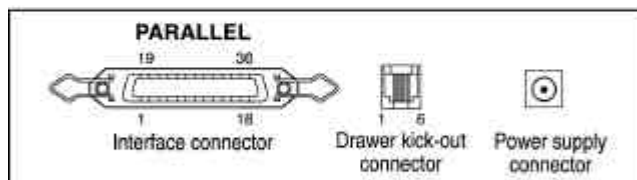
SRP-270 Connector
(Parallel Interface)
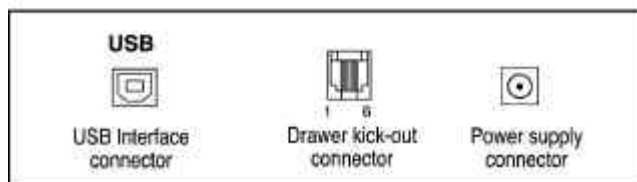
SRP-270U Connector
(USB Interface)

Interface Connector

Serial Interface (RS-232C)

Pin No.	Signal name	Direction	Function
1	FG	-	Frame Ground
2	TXD	Output	Transmit Data
3	RXD	Input	Receive Data
6	DSR	Input	Data Set Ready
7	SG	-	Signal Ground
20	DTR	Output	Data Terminal Ready

Serial Communication Interface (Example)


```
Printer                                    Host(DTE ex 8251)
 FG    ─────────────────────────────        FG
TXD    ───────────────╲  ╱─────────        TXD
RSD    ───────────────╱  ╲─────────        RSD
DSR    ─────────────────●───────────        DTR
DTR    ───────────────────●─────────        DSR
                                            CTS
                                            RTS
S.G    ─────────────────────────────        S.G
```

Serial Interface (RS-485)

Pin No.	Signal Name	Direction	Function
1	FGND	-	Frame Ground
2	SD2	Output	Send Data
3	SD1	Output	
4	RD2	Input	Receive Data
5	RD1	Input	
7	SGND	-	Signal Ground
8 9	DR2 DR1	Output	Same as DTR(RS-232)
10 11	CS2 CS1	Input	Same as DSR(RS-232)

Parallel Interface (IEEE-1284)

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	-

Appendix B
Specification

| Printer	Printing method	Serial impact dot matrix
	Number of head pin	9 wires
	Printing direction	Bi-directional
	Lines per second	Approx. 4.6 LPS
	Characters per line	40 (9*7), 33(9*9)
Ribbon	Ribbon type	Cartridge type (ERC-38 Black/Red)
	Color	Black & Red
	Ribbon life	Approx. Black: 1.5 Million characters Red: 0.75 Million characters
Paper	Paper type	Roll paper
	Paper width	W76mm ± 0.5mm (2.99" ± 0.22")
	Roll diameter	Max. φ80mm (3.14")
	Thickness	0.06mm ~ 0.085mm (0.002" ~ 0.003")
Adapter	Overall dimensions	120mm * 63mm * 33mm (4.71" * 2.47" * 1.29")
	Weight	215gr (0.5 lbs)
	Types	AD-270 Free Voltage (50Hz ~ 60Hz)
Auto Cutter	Cutter type	Gillotine type
	Cutting width	Max. 85 mm
	Cutting thickness	Max. 0.1mm
ETC	Data buffer	4k bytes

	Overall dimension	SRP-270A/AS/AP/AU:
		  160(W)*249(D)*130(H)mm(6.3"*9.8"*5.12")
		SRP-270C/CS/CP/CU :
		  160(W)*249(D)*149(H)mm(6.3"*9.8"*5.87")
		SRP-270D/DS/DP/DU:
		  160(W)*294(D)*160(H)mm(6.3"*11.57"*6.3")

	Weight	Weight (printer only) **/** Weight (with box & accessories): SRP-270A TYPE: 2.2 Kg (4.9 lbs) **/** 3.2 Kg (7.1 lbs) SRP-270C TYPE: 2.5 Kg (5.5 lbs) **/** 3.5 Kg (7.7 lbs) SRP-270D TYPE: 2.6 Kg (5.7 lbs) **/** 3.6 Kg (7.9 lbs)
	Rating	DC 24 V, 1.0 A
	Power consumption	Standby: 8 W, Operation: 24 W
	EMI	FCC class A, CE
	Safety standards	UL/CSA, TUV
	Reliability	Printer MCBF: 7,500,000 lines (Except print head life) Print head life: 300,000,000 Dots
	Operation temperature	0 ~ 40 (32 ~ 104)
	Operation humidity	30% ~ 80%
	Storage temperature	-5 ~ 50 (23 ~ 122)
	Storage humidity	10% ~ 95%

Appendix C
Removing Jammed Paper

1) Open the printer cover
2) Raise the auto cutter unit by lifting the knob lock.
3) Remove the ribbon cassette.
4) Loosen the manual screw.
5) Remove the head cover.
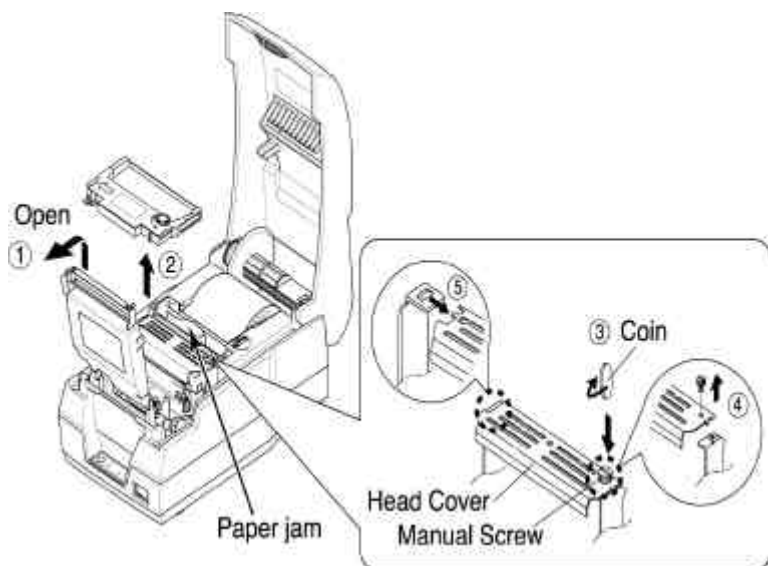
CAUTION: **The printer head becomes very hot during printing.**
Allow it to be cool before you reach into the printer.

6) Move the print head carriage to the reverse direction of paper jam.　By pushing on the side of the print head as shown in the illustration.
7) Remove the jammed paper by rotating the paper-feed knob.

Paper jam

Paper Feed Knob
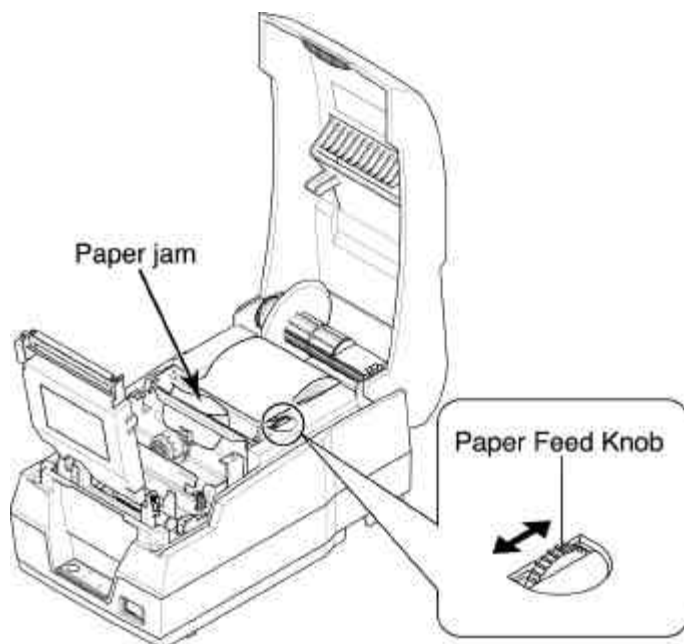
8) Replace the head cover and secure it with screw.
9) Replace the ribbon cassette and roll paper, then close the printer cover.

NOTE: If you are troubled with reloading the paper, the cutter blade may not be in its normal position. Insert a screw driver into the hole at the bottom side of auto cutter unit as shown followed picture, and turn the gear inside the cutter unit to move the cutter blade to its normal position.