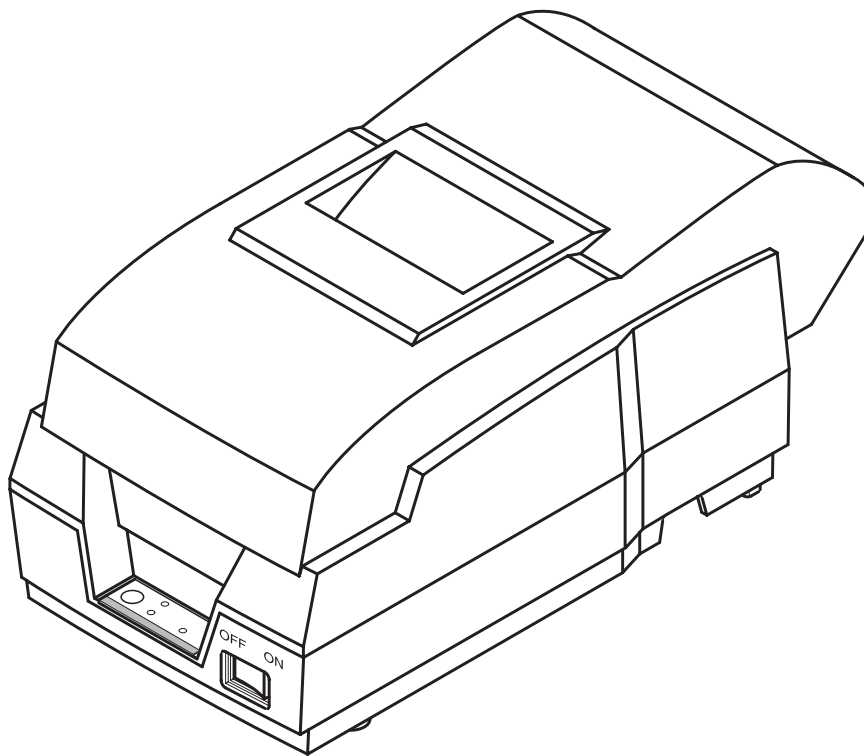


Command Manual

SRP-270

Impact Printer
Rev. 1.01



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1. Notice

This Control Commands Manual contains information on the protocol and functions of all control commands that can be used with this printer (SRP-270).

2. Control Commands List

2-1 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
<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> l n	1D 49 n	Transmit printer ID
<GS> V m	1D 56 m	Select cut mode and cut paper
<GS> V m n	1D 56 m n	
<GS> a n	1D 61 n	Enable/Disable Automatic status back
<GS> r n	1D 72 n	Transmit status

2-2 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
<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

2-3 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"	1B 57 31	Select expanded character mode
<ESC> "W" <1>	1B 57 01	
<ESC> "W" "0"	1B 57 30	Cancel expanded character mode (Default setting)
<ESC> "W" <0>	1B 57 00	
<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
	19	Immediate drive command for peripheral unit 2
<CAN>	18	Cancel print data in buffer
<ESC> "@"	1B 40	Initialize printer
<ESC> "e" "0"	1B 65 30	FEED switch valid
<ESC> "e" <0>	1B 65 00	(Default setting)
<ESC> "e" "1"	1B 65 31	FEED switch invalid
<ESC> "e" <1>	1B 65 01	
<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"	1B 7A 31	Set 1/6 inch line feed
<ESC> "z" <1>	1B 7A 01	
<FF>	0C	Page feed (form feed)
<ESC> d <0>	1B 64 00	Partial cut
<ESC> d <1>	1B 64 01	Partial cut
<ESC> "-" "1"	1B 5F 31	Select overline mode
<ESC> "-" <1>	1B 5F 01	
<ESC> "-" "0"	1B 5F 30	Cancel overline mode
<ESC> "-" <0>	1B 5F 00	
<ESC> "e" "1"	1B 65 31	Set the control panel switch invalid
<ESC> "e" <1>	1B 65 01	
<ESC> "e" "0"	1B 65 30	Set the control panel switch valid
<ESC> "e" <0>	1B 65 00	
<ESC> "f" "1"	1B 66 31	Set the ON LINE switch invalid
<ESC> "f" <1>	1B 66 01	
<ESC> "f" "0"	1B 66 30	Set the ON LINE switch valid
<ESC> "f" <0>	1B 66 00	

3. Control Commands Details

3-1 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.

3-2 Explanation of Terms

LSB Least Significant Bit

3-3 Control Commands Details

HT

[Name] Horizontal tab.
[Format] ASCII HT
 Hex 09
 Decimal 9
[Description] Moves the print position to the next horizontal tab position.

LF

[Name] Print and line feed.
[Format] ASCII LF
 Hex 0A
 Decimal 10
[Description] Prints the data in the print buffer and feeds one line based on the current line spacing.

CR

[Name] Print and carriage return.
[Format] ASCII CR
 Hex 0D
 Decimal 13
[Description] - This command prints the data in the print buffer and does not feed the paper.
 - Sets the print starting position to the beginning of the line.

DLE EOT n

[Name] Real-time status transmission.
 [Format] ASCII DLE EOT n
 Hex 10 04 n
 Decimal 16 4 n
 [Range] $1 \leq n \leq 4$
 [Description] Transmits the selected printer status specified by n in real-time, according to the following parameters :
 n = 1 : Transmit printer status.
 n = 2 : Transmit off-line status.
 n = 3 : Transmit error status.
 n = 4 : Transmit paper roll sensor status.

n = 1 : Printer status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Not used. Fixed to Off.
1	On	02	2	Not used. Fixed to On.
2	Off	00	0	Drawer open/close signal is LOW (connector pin 3).
	On	04	4	Drawer open/close signal is HIGH (connector pin 3).
3	Off	00	0	On-Line
	On	08	8	Off-Line
4	On	10	16	Not used. Fixed to On.
5	Off	00	0	Not waiting for on-line recovery.
	On	20	32	Waiting for on-line recovery.
6	-	-	-	Undefined.
7	Off	00	0	Not used. Fixed to Off.

n = 2 : Off-line status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Not used. Fixed to Off.
1	On	02	2	Not used. Fixed to On.
2	-	-	-	Undefined.
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	Not used. Fixed to On.
5	Off	00	0	No paper-end stop.
	On	20	32	Printing stops due to paper end.
6	Off	00	00	No error.
	On	40	64	Error occurs.
7	Off	00	0	Not used. Fixed to Off.

n = 3 : Error status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Not used. Fixed to Off.
1	On	02	2	Not used. Fixed to On.
2	Off	00	0	No mechanical error.
	On	04	4	Mechanical error occurred.
3	-	-	-	Undefined.
4	On	10	16	Not used. Fixed to On.
6	Off	00	0	No auto-recoverable error.
	On	40	64	Auto-recoverable error has occurred.
7	Off	00	0	Not used. Fixed to Off.

Bit 2 : Mechanical errors include home position, carriage sensor, and slip ejection errors.

Bits 2 & 3 : If these errors occur due to paper jams or the like, it is possible to recover by correcting the cause of the error and executing ELE ENQ n(1 ≤ n ≤ 2). If an error due to a circuit failure (e.g. broken wire) occurs, it is impossible to recover.

Bit 6 : If the print head temperature becomes high, bit 6 is transmitted until the print head temperature drops sufficiently. The printer automatically recovers from this error.

n = 4 : Continuous paper sensor status

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Not used. Fixed to Off.
1	On	02	2	Not used. Fixed to On.
2	Off	00	0	Paper roll end sensor. Paper adequate.
	On	04	4	Paper roll end sensor. Paper end.
3	Off	00	0	Paper roll end sensor. Paper adequate.
	On	08	8	Paper roll end sensor. Paper end.
4	On	10	16	Not used. Fixed to On.
5	Off	00	0	Paper roll end sensor. Paper present.
	On	20	32	Paper roll end sensor. No paper.
6	On	00	0	Paper roll end sensor. Paper present.
	On	40	64	Paper roll end sensor. No paper.
7	Off	00	0	Not used. Fixed to Off.

DLE ENQ n

[Name] Real-time request to printer.

[Format] ASCII DLE ENQ n
 Hex 10 05 n
 Decimal 16 5 n

[Range] 1 ≤ n ≤ 2

[Description] Recovers from an error after clearing the receive and print buffers. This command is available only with a serial interface, and is ignored with a parallel interface.

ESC SP n				
[Name]	Set right-side character spacing.			
[Format]	ASCII	ESC	SP	n
	Hex	1B	20	n
	Decimal	27	32	n
[Range]	0 ≤ n ≤ 255			
[Description]	Sets the character spacing for the right side of the character to n/160 inches.			

ESC ! n				
[Name]	Select print mode(s).			
[Format]	ASCII	ESC	!	n
	Hex	1B	21	n
	Decimal	27	33	n
[Range]	0 ≤ n ≤ 255			
[Description]	Selects print mode(s) using n as follows.			

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Character font(9 × 9) selected.
	On	01	1	Character font(9 × 7) selected.
1,2	-	-	-	Undefined.
3	Off	00	0	Emphasized mode not selected.
	On	08	8	Emphasized mode selected.
4	Off	00	0	Double-height mode not selected.
	On	10	16	Double-height mode selected.
5	Off	00	0	Double-width mode not selected.
	On	20	32	Double-width mode selected.
6	-	-	-	Undefined.
7	Off	00	0	Underline mode not selected.
	On	80	128	Underline mode selected.

* Determine the values of n by adding the value of all the characteristics you want to select.

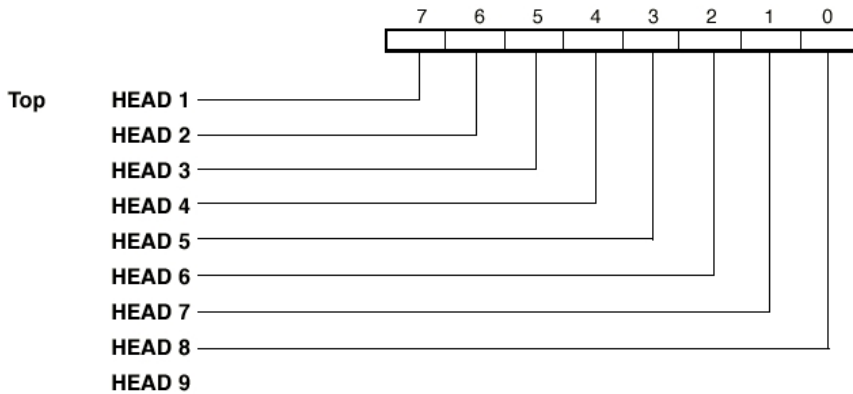
ESC % n				
[Name]	Select / Cancel user-defined character set.			
[Format]	ASCII	ESC	%	n
	Hex	1B	25	n
	Decimal	27	37	n
[Range]	0 ≤ n ≤ 255			
[Description]	<p>Selects or cancels the user-defined character set.</p> <p>When the Least Significant Bit(LSB) is 0, the user-defined character set is canceled and the internal character set is enabled.</p> <p>When the LSB is 1, the user-defined character set is selected.</p>			
[Notes]	The user-defined character and the downloaded bit image cannot be defined simultaneously.			
[Default]	n = 0			

ESC & y c1 c2 [x1 d1...d(y X x1)]... [xk d1... d(yx X xk)]	
[Name]	Define user-defined characters.
[Format]	ASCII ESC & n y c1 c2[x1 d1...d(y X x1)]... [xk d1... d(yx X xk)] Hex 1B 26 n y c1 c2[x1 d1...d(y X x1)]... [xk d1... d(yx X xk)] Decimal 27 38 n y c1 c2[x1 d1...d(y X x1)]... [xk d1... d(yx X xk)]
[Range]	y = 2, 32 ≤ c1 ≤ c2 ≤ 126 0 ≤ x ≤ 12 (9x9 font) 0 ≤ x ≤ 9 (7x9 font) 0 ≤ d1 ... d(y X x) ≤ 255
[Description]	Defines user-defined characters. <ul style="list-style-type: none"> - y specifies the number of bytes in the vertical direction. - c1 specifies the beginning character code for the definition, and c2 specifies the final code. For only one character, use c1 = c2. - The allowable character code range is from decimal code 32 to 126. The maximum number of user-define character is 95. - x specifies the number of dots in the horizontal direction. - d is the dot data for the characters. The dot pattern is on the horizontal direction from the left side. Any remaining dots on right side are blank. - The number of bytes required to download a character definition for one character is “y” X “x”. - In the definition data, a “1” represents a dot that is to be printed, and a “0” represents a dot that is not to be printed. - Independent downloaded character definitions are possible for each font. The font is selected characters are cleared in the following circumstance. <ul style="list-style-type: none"> 1. When “ESC @” is executed 2. When deleted by “ESC ?” 3. When printer is reset or turned off

ESC * m nL nH d1...dk				
[Name]	Select bit-image mode.			
[Format]	ASCII	ESC	*	m nL nH d1...dk
	Hex	1B	2A	m nL nH d1...dk
	Decimal	27	42	m nL nH d1...dk
[Range]	m = 0, 1			
[Description]	0 ≤ nL ≤ 255 0 ≤ nH ≤ 1 0 ≤ d ≤ 255 Selects a bit-image mode using m for the number of dots specified by nL and nH.			

m	No. Vertical Dots	Horizontal Direction		Maximum number of dots
		Dot Density	Adjacent dot	
0	8	Single Density	Permitted	180
1	8	Double Density	Prohibited	360

- The nL and nH indicate the number of dots of the bit image in the horizontal direction. The number of dots is calculated by nL + nH x 256.
- If the bit-image data input exceeds the number of dots to be printed on a line, the excess data is ignored.
- d indicates the bit-image data. Set a corresponding bit to 1 to print a dot or to 0 not to print a dot.
- The relationship between the image data and the dots to be printed is as follows.



ESC - n

[Name] Turn underline mode on / off.
 [Format] ASCII ESC - n
 Hex 1B 2D n
 Decimal 27 45 n
 [Range] n = 0, 1, 48, 49
 [Description] Turns underline mode on or off, based on the following values of n :
 [Default] n = 0

n	Function
0, 48	Turns off underline mode.
0, 49	Turns on underline mode.

ESC 2

[Name] Select default line spacing.
 [Format] ASCII ESC 2
 Hex 1B 32
 Decimal 27 50
 [Description] Sets the line spacing to 1/6-inch line spacing.

ESC 3 n

[Name] Set line spacing
 [Format] ASCII ESC 3 n
 Hex 1B 33 n
 Decimal 27 51 n
 [Range] 0 ≤ n ≤ 255
 [Description] Sets the line spacing to [n X vertical or horizontal motion unit] inches.
 [Default] n = 24

ESC <

[Name] Return home.
 [Format] ASCII ESC <
 Hex 1B 3C
 Decimal 27 60
 [Description] Moves the print head to the standby position.

ESC = n

[Name] Select peripheral device.
 [Format] ASCII ESC = n
 Hex 1B 3D n
 Decimal 27 61 n
 [Range] $0 \leq n \leq 253$
 [Description] Selects device to which host computer sends data, using n as follows :
 [Default] n = 1

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Printer Disabled.
	On	01	1	Printer Enabled.
1,2	-	-	-	Undefined.

ESC ? n

[Name] Cancel user-defined characters.
 [Format] ASCII ESC ? n
 Hex 1B 3F n
 Decimal 27 63 n
 [Range] $32 \leq n \leq 126$
 [Description] Cancels user-defined characters.

ESC @

[Name] Initialize printer.
 [Format] ASCII ESC @
 Hex 1B 40
 Decimal 27 64
 [Range] $32 \leq n \leq 126$
 [Description] Clears the data in the print buffer and resets the printer mode to the mode that was in effect when the power was turned on.

ESC D n1... nk NUL

[Name] Set horizontal tab positions.
 [Format] ASCII ESC D n1... nk NUL
 Hex 1B 44 n1... nk NUL
 Decimal 27 68 n1... nk NUL
 [Range] $1 \leq n \leq 255$
 $0 \leq k \leq 32$

[Description] Sets horizontal tab positions.

* n specifies the column number for setting a horizontal tab position from the beginning of the line.

* k indicates the total number of horizontal tab positions to be set.

ESC E n

[Name]	Turn emphasized mode on / off.			
[Format]	ASCII	ESC	E	n
	Hex	1B	45	n
	Decimal	27	69	n
[Range]	0 ≤ n ≤ 255 (Only the lowest bit of n is enabled)			
[Description]	Turns emphasized mode on or off.			
	* When the LSB of n is 0, emphasized mode is turned off.			
	* When the LSB of n is 1, emphasized mode is turned on.			

ESC G n

[Name]	Turn on / off double-strike mode.			
[Format]	ASCII	ESC	G	n
	Hex	1B	47	n
	Decimal	27	71	n
[Range]	0 ≤ n ≤ 255			
[Description]	Turns double-strike mode on or off.			
	* When the LSB of n is 0, double-strike mode is turned off.			
	* When the LSB of n is 1, double-strike mode is turned on.			

ESC J n

[Name]	Print and feed paper.			
[Format]	ASCII	ESC	G	n
	Hex	1B	4A	n
	Decimal	27	74	n
[Range]	0 ≤ n ≤ 255			
[Description]	Prints the data in the print buffer and feeds the paper n X vertical or horizontal motion unit.			

ESC K n

[Name]	Print and reverse feed.			
[Format]	ASCII	ESC	K	n
	Hex	1B	4B	n
	Decimal	27	75	n
[Range]	0 ≤ n ≤ 255			
[Description]	Prints the data in the print buffer and feeds the paper n X vertical or horizontal motion unit in the reverse direction.			

ESC R n

[Name]	Select an international character set.			
[Format]	ASCII	ESC	R	n
	Hex	1B	52	n
	Decimal	27	82	n
[Range]	0 ≤ n ≤ 10			
[Description]	Selects an international character set in from the following table.			
[Default]	n = 0			

n	Character set	n	Character set
0	U.S.A	5	Sweden
1	France	6	Italy
2	Germany	7	Spain
3	U.K	9	Norway
4	Denmark 1	10	Denmark 2

ESC U n

[Name] Turn on / off unidirectional printing mode.
 [Format] ASCII ESC U n
 Hex 1B 55 n
 Decimal 27 85 n
 [Range] $32 \leq n \leq 255$
 [Description] Turns unidirectional printing mode on or off.
 * When the LSB of n is 0, turns off unidirectional printing mode.
 * When the LSB of n is 1, turns on unidirectional printing mode.

ESC a n

[Name] Select justification.
 [Format] ASCII ESC a n
 Hex 1B 61 n
 Decimal 27 97 n
 [Range] $0 \leq n \leq 2$, $48 \leq n \leq 50$
 [Description] Aligns all the data in one line to the specified position.
 n selects the type of justification as follows.

n	Justification
0, 48	Left justification
1, 49	Centering
2, 50	Right justification

ESC c 3 n

[Name] Select paper sensor(s) to output paper end signals.
 [Format] ASCII ESC c 3 n
 Hex 1B 63 33 n
 Decimal 27 99 51 n
 [Range] $0 \leq n \leq 255$
 [Description] Selects the paper sensor(s) to output paper end signals.
 [Default] This command is available only with a parallel interface and is ignored with serial interface.
 * Each bit of n is used as follows.
 * This command is available only with a parallel interface and is ignored with a serial interface.

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll end sensor disable.
	On	01	1	Paper roll end sensor enable.
1,2	-	-	-	Undefined.

ESC c 5 n

[Name] Enable / Disable panel button.
 [Format] ASCII ESC c 3 n
 Hex 1B 63 35 n
 Decimal 27 99 53 n
 [Range] $0 \leq n \leq 255$
 [Description] Enables or disables the panel button.
 * When the LSB of n is 0, the panel buttons are enabled.
 * When the LSB of n is 1, the panel buttons are disabled.

ESC d n

[Name] Print and feed n lines.
 [Format] ASCII ESC d n
 Hex 1B 64 n
 Decimal 27 100 n
 [Range] $0 \leq n \leq 255$
 [Description] Prints the data in the print buffer and feeds n lines.

ESC e n

[Name] Print and reverse feed n lines.
 [Format] ASCII ESC e n
 Hex 1B 65 n
 Decimal 27 101 n
 [Range] $0 \leq n \leq 2$
 [Description] Prints the data in the print buffer and feeds n lines in the reverse direction.

ESC m

[Name] Executes partial cut.
 [Format] ASCII ESC m
 Hex 1B 6D
 Decimal 27 109
 [Description] Executes partial cut with one point uncut.

ESC p m t1 t2

[Name] Generate pulse.
 [Format] ASCII ESC p m t1 t2
 Hex 1B 70 m t1 t2
 Decimal 27 112 m t1 t2
 [Range] $m = 0, 1, 48, 49$
 $0 \leq t1 \leq 255$
 $0 \leq t2 \leq 255$
 [Description] Outputs the pulse specified by t1 and t2 to connector pin m as follows.

m	Connector pin
0, 48	Drawer kick-out connector pin 2
1, 49	Drawer kick-out connector pin 5

ESC r n

[Name] Select print color.
 [Format] ASCII ESC r n
 Hex 1B 72 n
 Decimal 27 114 n
 [Range] n = 0, 1, 48, 49
 [Description] Selects a print color, using n as follows.

n	Print color
0, 48	Black
1, 49	Red

ESC t n

[Name] Select character code table.
 [Format] ASCII ESC t n
 Hex 1B 74 n
 Decimal 27 116 n
 [Range] $0 \leq n \leq 5, 254 \leq t \leq 255$
 [Description] Selects a page n from the character code table.

n	Page
0	0 (PC437 {USA, standard Europe})
2	2 (PC850 {Multilingual})
3	3 (PC860 {Portuguese})
4	4 (PC863 {Canadian-French})
5	5 (PC865 {Nordic})
19	19 (PC858 {Euro})

ESC u n

[Name] Peripheral status.
 [Format] ASCII ESC u n
 Hex 1B 75 n
 Decimal 27 117 n
 [Range] n = 0
 [Description] Transmits the peripheral status (drawer).
 After receiving this command, the printer transmits only 1 byte without confirming the condition of the DSR signal.
 Transmit data : 01H = drawer open.
 00H = drawer closed.

* This command is available only with a serial interface, and is ignored with a parallel interface.

ESC { n

[Name] Turns on / off upside-down printing mode.
 [Format] ASCII ESC { n
 Hex 1B 7B n
 Decimal 27 123 n
 [Range] $0 \leq n \leq 255$
 [Description] Turns upside-down printing mode on or off.
 * When the LSB of n is 0, upside-down printing mode is turned off.
 * When the LSB of n is 1, upside-down printing mode is turned on.

GS I n

[Name] Transmit printer ID.
 [Format] ASCII GS I n
 Hex 1D 49 n
 Decimal 29 73 n
 [Range] $1 \leq n \leq 3, 49 \leq n \leq 51$
 [Description] Transmits the printer ID specified by n as follows :

n	Printer ID	Specification	ID (hexadecimal)
1, 49	Printer model ID	SRP-270 / SRP-270P	0DH
2, 50	Type ID	See table below.	
3, 51	ROM version ID	ROM version	

n=2, Type ID

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Two-byte character code not supported.
1	Off	00	0	Auto cutter not equipped.
2, 3	-	-	-	Undefined.
4	Off	00	0	Not used. Fixed to Off.
5, 6	-	-	-	Undefined.
7	Off	00	0	Not used. Fixed to Off.

[Notes]

- * When DTR / DSR control is selected, the printer transmits only 1 byte after confirming that the host is ready to receive data (DSR signal is SPACE).
 If the host computer is not ready to receive data (DSR signal is MARK), the printer waits until the host is ready. When XON / XOFF control is selected, the printer transmits only 1 byte without confirming the condition of the DSR signal.
- * The printer ID is transmitted when the data in the receiving buffer is developed.
 Therefore, there maybe a time lag between receiving this command and transmitting the status, depending on the receive buffer status.

GS V m n

[Name] Feed paper for cutting position.
 [Format] ASCII GS V m n
 Hex 1D 56 m n
 Decimal 29 86 m n
 [Range] $65 \leq m \leq 66, 0 \leq n \leq 255$
 [Description] Feed paper for cutting position as follows :

m	Print mode
65	Feeds paper (cutting position + [nX(vertical motion unit)]), and cuts the paper Partially.
66	Feeds paper (cutting position + [nX(vertical motion unit)]), and cuts the paper partially.

GS r n

[Name] Transmit status.
 [Format] ASCII GS V n
 Hex 1D 72 n
 Decimal 29 114 n
 [Range] 1 ≤ n ≤ 2, 49 ≤ n ≤ 50
 [Description] Transmits the status specified by n as follows.

n	Print mode
1, 49	Transmits paper sensor status.
2, 50	Transmits drawer kick-out connector status.

Paper sensor status (n=1, 49)

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll end sensor : paper adequate.
	On	01	1	Paper roll end sensor : paper end.
1	Off	00	0	Paper roll end sensor : paper adequate.
	On	02	2	Paper roll end sensor : paper end.
2	Off	00	0	Paper roll end sensor : paper present.
	On	04	4	Paper roll end sensor : no paper present.
3	Off	00	0	Paper roll end sensor : paper present.
	On	08	8	Paper roll end sensor : no paper present.
4	Off	00	0	Not used. Fixed to Off.
5, 6	-	-	-	Undefined.
7	Off	00	0	Not used. Fixed to Off.

Bits 0 and 1 : The “paper roll end” detector is an option : on units that do not have this detector, the “paper roll end” detector always indicates that paper is present (bits 0 and i=1), whether or not it actually is.

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Drawer kick-out connector pin 3 is LOW.
	On	01	1	Drawer kick-out connector pin 3 is HIGH.
1-3	-	-	-	Undefined.
4	Off	00	0	Not used. Fixed to Off.
5-6	-	-	-	Undefined.
7	Off	00	0	Not used. Fixed to Off.