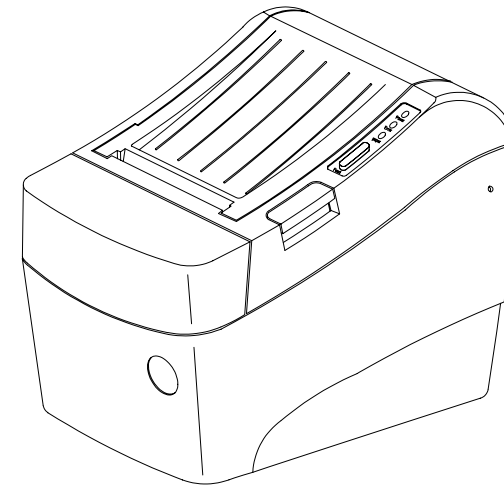


사용 설명서 / 用户手册 / **USER'S MANUAL**
SRP-370

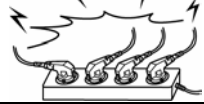
감열식 프린터 / 热敏式打印机 / THERMAL PRINTER

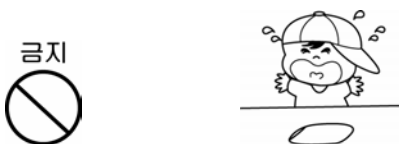
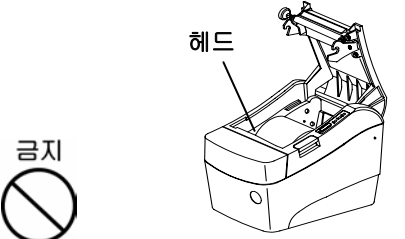


KD04-00046K
Rev. 1.00

안전상의 경고

제품을 올바르게 사용하여 위험이나 물적 손해를 미리 방지하기 위한 내용입니다. 반드시 지켜 사용해 주세요.

경고 표시사항 위반시 심각한 상해나 사망이 발생할 가능성이 있습니다.	
한 콘센트에 여러 제품의 전원플러그를 동시에 꽂아 사용하지 마세요. - 발열 및 발화되어 위험합니다. - 전원플러그에 이물질이나 물기가 묻어 있는 경우에는 잘 닦은 다음 사용하세요. - 전원콘센트의 구멍이 헐거울때는 전원 플러그를 꽂지마세요. - 멀티콘센트는 규격제품을 사용하세요. 금지 	아답터는 공급된 제품만을 사용하세요. 다른 아답터를 사용하면 위험합니다. 반드시 공급품만 
전원플러그를 뺄때는 전원코드를 잡아 당기지 마세요. 코드가 상처를 입어 화재나 고장의 원인이 됩니다. 금지 	비닐팩은 어린이의 손에 닿지 않는 곳에 잘 보관하세요. 어린이가 비닐팩을 머리에 쓰면 위험합니다. 금지 
젖은 손으로 전원플러그를 꽂거나 뽑지 마세요. 감전의 위험이 있습니다. 금지 	제품에서 연기가 나거나 이상한 냄새 또는 소리가 나는 등의 이상 발생시는 바로 전원을 끈 후 아래의 조치를 취해 주세요. - 제품에 이상이 발생시는 바로 프린터 본체의 전원을 끈 다음 반드시 전원 플러그를 콘센트에서 뽑아주세요. - 연기가 나지 않는 것을 확인하고 구입처로 수리를 의뢰해 주세요. 플러그금지  프린터 
전원코드를 무리하게 구부리거나 무거운 물건으로 눌러 파손되지 않도록 하세요. 화재의 원인이 됩니다. 금지 	

주의 표시사항 위반시 경미한 상해나 제품손상이 발생할 가능성이 있습니다.	
방습제는 어린이의 손에 닿지 않는 곳에 잘 보관하세요. • 어린이가 방습제를 먹으면 위험합니다.	안정된 장소에 설치하세요. • 넘어지면 제품이 파손되거나 다칠 수 있습니다.
금지 	금지 
승인된 부품을 사용하고 함부로 분해, 수리, 개조하지 마세요. • 제품이 손상될 수 있으므로 구입처에 문의하세요.	헤드 면을 손으로 만지지 마세요. • 헤드 면을 손으로 만지게 되면, 미열에 의한 화상 및 인쇄 품질 저하를 초래할 수 있습니다.
분해금지 	금지 
프린터의 본체 내부에 물이나 이물질이 들어가지 않도록 주의하세요. • 본체 내부에 물이나 이물질이 들어간 경우에는 먼저 프린터 본체의 스위치를 끄고 전원플러그를 콘센트에서 뺀 다음 구입처로 연락해 주세요.	제품을 고장난 상태에서 사용하지 마세요. 화재, 감전의 원인이 됩니다. • 바로 본체의 전원스위치를 끄고 전원 플러그를 콘센트에서 뺀 다음 구입처로 연락해 주세요.
금지 	플러그금지 

저작권자 (주)삼성전기 2005
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이 사용설명서와 제품은 저작권법에 의해 보호되어 있습니다.
 (주)삼성전기의 사전 서면 동의없이 사용설명서 및 제품의 일부 또는 전체를 복사, 복제, 번역 또는 전자매체나 기계가 읽을 수 있는 형태로 바꿀 수 없습니다. 이 사용설명서와 제품은 인쇄상의 잘못이나 기술적인 잘못이 있을 수 있으며 사전 통보없이 이러한 내용들이 바뀔 수 있습니다.

SRP-370/372, 삼성로고는 삼성전기의 등록상표입니다.

이 기기는 업무용으로 전자파 적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

사용시 주의사항

프린터와 같은 전자 제품은 정전기에 의해 쉽게 훼손될 수 있습니다.

정전기로부터 프린터를 보호하기 위해서는 프린터 후면부에 케이블을 연결하거나 제거하기 전에 반드시 프린터 전원을 끄십시오. 만약 프린터가 정전기로부터 손상을 입었을 경우에는 가까운 구입처에 문의하십시오.

제품소개

SRP-370/372 프린터는 ECR (Electronic Cash Register), POS (Point Of Sales), 컴퓨터 주변기기와 같은 전자 제품과 연결하여 사용하도록 만들어졌습니다.

프린터의 주요 특징

1. 초당 47라인의 고속 인쇄(1/6인치 Feed 기준)
2. 저소음 열전사 방식 인쇄
3. 직렬포트 (RS-232), 병렬포트 (Parallel) 및 USB 지원
(단, 직렬로 인쇄하려면 별도장비 구입 필요)
4. 데이터 버퍼 내장 (인쇄 중에도 인쇄 데이터를 수신함)
5. 주변장치 구동 회로를 통해 금전 등록기와 같은 외부 장치 제어
6. 최대 64배까지 확대 인쇄 가능
7. 바코드 인쇄 기능 (단, 별도의 바코드 명령어를 이용하여 인쇄해야 함)
8. 다양한 인쇄 농도 선택 가능 (선택 스위치를 통한 조정)

프린터를 새로 구입하신 분들은 사용 전에 이 설명서에 있는 내용을 주의 깊게 읽어보시기 바랍니다.

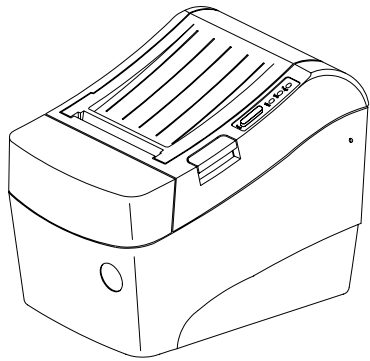
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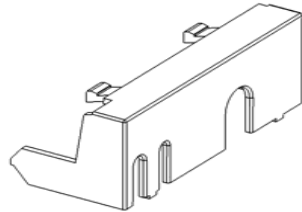
1장. 프린터 설치 및 기본 사용법

1-1. 포장 풀기

아래 내용물을 확인하신 후 빠지거나 잘못 된 것이 있다면 구입하신 곳으로 연락하세요.



SRP-370/372 프린터



케이블 커버



용지



사용설명서



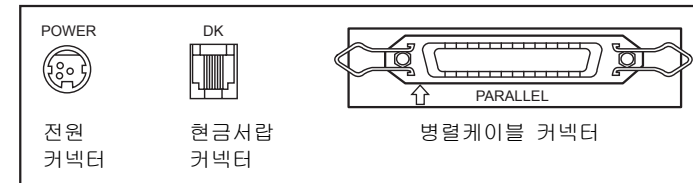
AC 어댑터



전원코드

1-2. 커넥터 확인하기

SRP-370/372 시리즈 프린터는 병렬케이블 (Parallel) 포트를 기본적으로 제공하며 직렬케이블 (Serial, RS-232) 포트는 옵션으로 제공합니다.



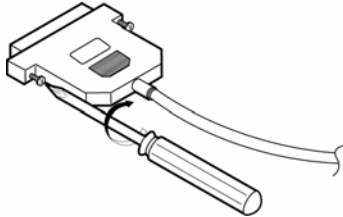
이 프린터를 ECR, POS 또는 컴퓨터와 연결하여 사용하려면 프린터 뒷면의 커넥터에 제공된 케이블을 이용하여 연결하세요.

주의 : 모든 케이블은 프린터와 호스트가 꺼진 상태에서 연결하세요.

1-3. 컴퓨터와 연결하기

제공된 케이블을 이용하여 연결하세요.

1. 병렬케이블을 프린터 뒷면의 PARALLEL 표시부에 연결하세요.
2. 케이블의 나사를 조이세요.



3. 병렬케이블의 다른 한 쪽 끝을 컴퓨터의 프린터 포트에 연결하세요.

1-4. 현금 서랍과 연결하기

현금 서랍 연결 케이블을 프린터 후면의 현금 서랍 커넥터에 연결하세요.

경고

프린터 사양에 맞는 현금 서랍을 사용하십시오.

사양에 맞지 않는 현금 서랍을 사용하였을 경우에는 현금 서랍과 프린터에 이상이 생길 수 있습니다.

주의

현금 서랍 연결 커넥터에 전화선을 사용하지 마십시오.

전화선으로 연결했을 경우 전화선과 프린터에 이상이 생길 수 있습니다.

Korean

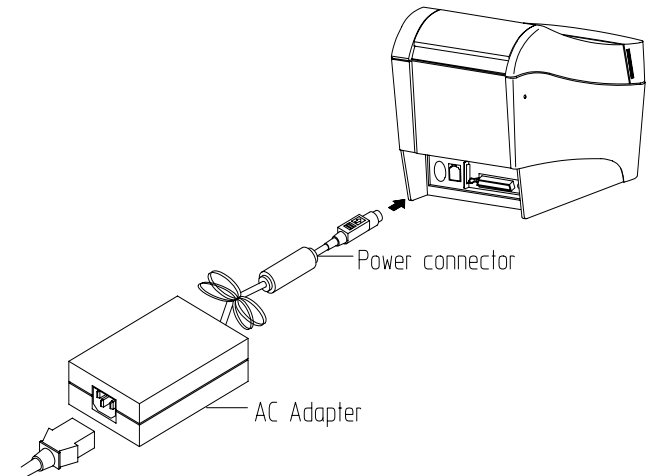
1-5. 전원 연결하기

주의

전원을 연결하거나 제거할 때 반드시 전원공급장치를 콘센트에서 빼고 제거하십시오. 그렇지 않으면 전원공급장치나 프린터에 영향을 미칠 수 있습니다.

전원공급장치와 콘센트의 전압이 맞지 않는다면 판매처에 연락하시고 전원공급장치를 연결을 하지 마십시오. 그렇지 않으면 전원공급장치나 프린터에 영향을 미칠 수 있습니다.

1. 프린터의 전원스위치를 반드시 끄고 전원공급장치의 코드를 콘센트에서 빼십시오.
2. 전원공급장치와 전원 콘센트의 용량을 확인하려면 전원공급장치의 라벨을 확인하십시오.
3. 아래의 그림과 같이 전원공급장치의 연결부위가 평평한 면이 위로 향하게 하여 프린터에 연결하십시오.



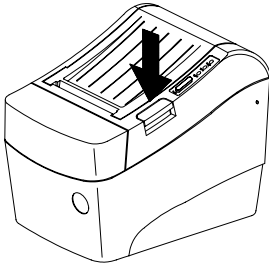
참고 : 전원공급장치를 제거할 때에는 연결부위의 화살표부분을 단단히 잡고 똑바로 뽑아주세요.

Korean

1-6. 용지 넣기와 교환하기

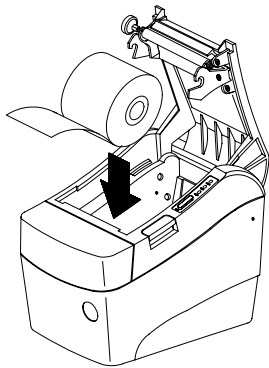
참고 : 규격에 맞는 용지를 사용하십시오. 그렇지 않으면 프린터가 용지 없음을 정확하게 인식하지 못하기 때문에 잘 풀리는 용지를 사용해야 합니다.

1. 데이터 손실이 있을 수 있으니, 프린터가 데이터를 받고 있지 않을 때 용지를 교환하세요.
2. **커버열림** 버튼을 눌러 프린터의 커버를 여세요.

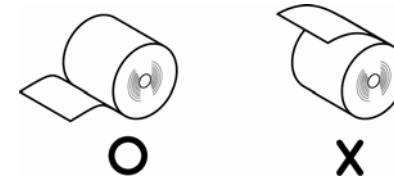


참고 : 프린터가 동작하는 동안에는 프린터 커버를 열지 마세요. 프린터가 손상될 수 있습니다.

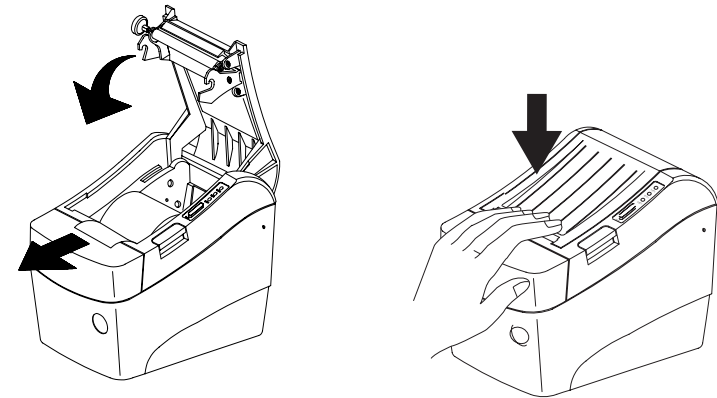
3. 용지를 교환하는 경우라면 다 쓴 용지는 제거하세요.
4. 아래 그림과 같이 용지를 넣으세요.



5. 용지를 넣을 때에는 용지의 방향이 정확한지 확인하세요.

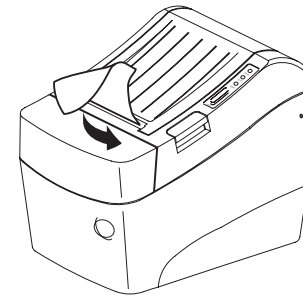


6. 그림과 같이 용지 끝을 약간 앞으로 끌어내린 후 커버를 닫으세요.

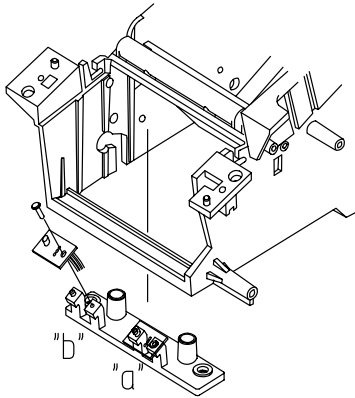


참고 : 커버를 닫을 때 용지가 롤러에 걸릴 수 있도록 커버의 가운데를 확실하게 눌러주십시오.

7. 그림과 같이 용지를 잘라 내세요.



1-7. 용지 감지센서 위치 조절하기



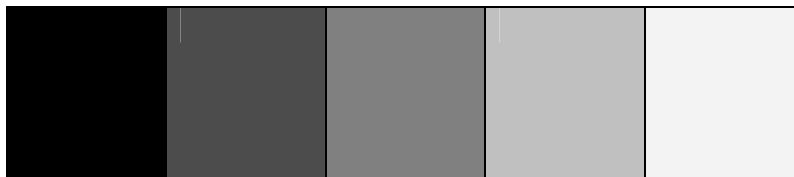
1) 용지 감지센서에는 **용지없음** 인식과 **블랙마크** 인식의 두 가지 기능이 있습니다.

용지없음을 인식하기 위해서는 위의 그림과 같이 센서가 "a"에 위치해야 하는데, 이는 공장에서 출하되는 기본사양입니다. **블랙마크**를 인식하기 위해서는 센서가 "b"에 위치해야 합니다.

2) 블랙마크의 광학농도(O.D)는 적어도 0.6 이상이어야 안정적으로 인식이 됩니다.

용지의 블랙마크 농도가 에러동작의 원인이 될 수도 있으므로 확인하시기 바랍니다.

3) O.D값 표(참조)



1.4

0.9

0.6

0.3

0.2

1-8. 프린터 기능 상용하기

제어판



전원

전원 표시등은 프린터에 전원이 켜져 있을 경우 켜집니다.

오류

오류가 발생하였을 때 켜집니다.

종이

이 표시등이 켜지면 용지가 거의 다 소모되었거나 용지가 없음을 나타냅니다. 새 용지로 교환하거나 용지를 넣으십시오.

이 표시등이 깜빡거리면 SELF TEST 대기 상태이거나 매크로 실행 대기중임을 나타냅니다.

이송버튼

버튼은 ESC c 5 명령어에 의해서 사용 불가능하게 할 수 있습니다.

용지 한 라인을 배출하기 위해서는 이송버튼을 한 번 누르십시오.

이송버튼을 계속 누르고 있으면 용지를 연속적으로 배출 할 수 있습니다.

1-9. 딥 스위치 설정하기

직렬포트 (RS-232C, RS-485)

선택스위치 1 설정

Switch No.	기능	ON	OFF	기본설정
SW1-1	전송 속도	* 아래 테이블 참조		OFF
SW1-2				OFF
SW1-3	흐름제어	Hardware (DTR/DSR)	Software (Xon/Xoff)	OFF
SW1-4	없음	--		OFF
SW1-5	오토 커터 기능	해제	동작	OFF
SW1-6	용지 폭	2 칼라	단색	OFF
SW1-7	없음	--		OFF
SW1-8	없음	--		OFF

* 전송 속도 테이블

SW1-1	SW1-2	전송 속도	비고
OFF	OFF	9600 Baud	
ON	OFF	19200 Baud	
OFF	ON	38400 Baud	
ON	ON	115200 Baud	기본 설정

선택스위치 2 설정

Switch No.	기능	ON	OFF	기본설정
SW2-1	인쇄 농도	* 아래 테이블 참조		OFF
SW2-2				OFF
SW2-3				OFF
SW2-4	Historical 제어	동작	해제	OFF
SW2-5	없음	--		OFF
SW2-6	통신 상태 설정	메모리 스위치	딥 스위치	OFF
SW2-7	없음	--		OFF
SW2-8	용지 폭	2인치 인쇄	3인치 인쇄	OFF

* 인쇄 농도 테이블

SW 2-1	SW 2-2	SW 2-3	인쇄농도	비고
ON	ON	ON	130%	
OFF	ON	ON	120%	
ON	OFF	ON	110%	
OFF	OFF	ON	105%	
OFF	OFF	OFF	100%	기본 설정
ON	OFF	OFF	95%	
OFF	ON	OFF	90%	
ON	ON	OFF	80%	

병렬/USB 포트

선택스위치 2 설정

Switch No.	기능	ON	OFF	기본설정
SW2-1	인쇄 농도	* 아래 테이블 참조		OFF
SW2-2				OFF
SW2-3				OFF
SW2-4	Historical 제어	동작	해제	OFF
SW2-5	없음	--		OFF
SW2-6	통신 상태 설정	메모리 스위치	딥 스위치	OFF
SW2-7	없음	--		OFF
SW2-8	용지 폭	2인치 인쇄	3인치 인쇄	OFF

* 인쇄 농도 테이블

SW 2-1	SW 2-2	SW 2-3	인쇄농도	비고
ON	ON	ON	130%	
OFF	ON	ON	120%	
ON	OFF	ON	110%	
OFF	OFF	ON	105%	
OFF	OFF	OFF	100%	기본 설정
ON	OFF	OFF	95%	
OFF	ON	OFF	90%	
ON	ON	OFF	80%	

※ 오토 커터 (Auto Cutter) 사용 선택

선택스위치 2		
SW 5	ON	오토 커터 사용하지 않음
동작		연속 인쇄 시 오토 커터 동작하지 않음

1-10. 메모리 스위치 설정하기

이 프린터에는 소프트웨어 스위치인 메모리 스위치가 있습니다.

"Memory Switch setting utility"를 이용하여 아래의 표와 같이 메모리 스위치를 ON 또는 OFF로 설정할 수 있습니다. (기본설정: 모두 OFF)

참고 : 메모리 스위치는 두 가지 방법으로 변경할 수 있습니다.

- Memory Switch setting utility
- ESC/POS 명령어 제어

메모리 스위치 설정 값은 NV 메모리에 저장됩니다. 그러므로 프린터에 전원이 공급되지 않아도 유지될 수 있습니다.

MSW1

스위치	기능	ON	OFF
1~4	없음	--	OFF로 고정
5	자동 라인 피딩	동작	해제
6~8	없음	--	OFF로 고정

MSW2

스위치	기능	ON	OFF
1	문자 설정	Font B (9 x 24)	Font A (12 x 24)
2	오토 커터 기능	완전 잘림 (Full Cut)	부분 잘림 (Partial Cut)
3	없음	--	OFF로 고정
4~8	문자표 설정	아래 표 참조	

Korean

MSW2-8	MSW2-7	MSW2-6	MSW2-5	MSW2-4	문자표
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	없음
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	없음
OFF	ON	ON	ON	ON	
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	없음
ON	OFF	ON	OFF	OFF	Page 31 Thai16
ON	OFF	ON	OFF	ON	없음
ON	OFF	ON	ON	OFF	Page 33 1255
ON	OFF	ON	ON	ON	없음
ON	ON	OFF	OFF	OFF	
ON	ON	OFF	OFF	ON	Page 36 855
ON	ON	OFF	ON	OFF	Page 37 857

MSW8

스위치	기능	ON	OFF
1~8	없음	--	OFF로 고정

MSW9

스위치	기능	ON	OFF
1	없음	--	OFF로 고정
2	데이터 길이	7 비트	8 비트
3	패리티 (Parity)	Even	Odd
4	패리티 체크여부	체크함	체크 안 함
5	흐름제어	DTR/DSR	XON/XOFF
6~8	전송속도	아래 표 참조	

MSW9-8	MSW9-7	MSW9-6	전송속도
OFF	OFF	OFF	9600
OFF	OFF	ON	19200
OFF	ON	OFF	38400
OFF	ON	ON	57600
ON	OFF	OFF	115200

Korean

2장. 16진수 인쇄기능

이 기능은 고급 사용자에게 프린터가 주고 받는 데이터를 정확히 확인할 수 있도록 하며, 소프트웨어적인 문제를 발견할 수 있도록 합니다. 프린터의 16진수 인쇄 기능을 사용 할 경우 모든 데이터와 명령어를 16진수 형태로 인쇄하기 때문에 특별한 명령어를 찾는데 도움이 됩니다.

16진수 인쇄기능을 사용하기 위해서는 다음과 같은 단계를 따르십시오.

1. 프린터의 전원을 끈 다음, 프린터 커버를 여세요.
2. *0/송* 버튼을 누른 상태에서 프린터 전원을 켜세요.
3. 프린터 커버를 닫으면 16진수 인쇄 모드가 됩니다.
4. 프린터로 데이터를 보내는 프로그램을 실행하세요.

프린터는 모든 데이터를 2열로 나누어서 인쇄할 것입니다.

첫번째 열은 16진수 코드를 나타내고

두번째 열은 16진수 코드에 해당하는 ASCII 문자를 나타냅니다.

```
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
```

- 해당되는 ASCII 코드가 없을 경우에는 마침표 (.) 로 인쇄됩니다.
- 16진수 인쇄모드상태에서는 **DLE EOT** 과 **DLE ENQ** 명령어를 제외한 모든 명령어가 사용 불가능하게 됩니다.

5. 16진수 인쇄가 다 끝났을 경우에는 프린터의 전원을 끄세요.
6. 프린터의 전원을 다시 켜면 16진수 인쇄모드가 해제됩니다.

3장. 셀프 테스트

셀프 테스트는 프린터에 어떤 이상이 있는지를 체크합니다. 프린터가 제대로 작동하지 않는다면 구입하신 곳으로 연락하시기 바랍니다. 셀프 테스트 절차는 다음과 같습니다.

1. 용지가 제대로 끼워져 있는지 확인하세요.
2. *0/송* 버튼을 누른 상태에서 전원을 켜십시오. 셀프 테스트가 시작됩니다.
3. 프린터는 ROM의 버전과 딥 스위치 설정 상태와 같은 프린터의 현재 상태를 인쇄하게 됩니다.
4. 프린터의 현재 상태를 인쇄하고 난 후, 다음과 같은 문구를 인쇄한 후 멈춥니다.
(종이 표시등은 계속 깜빡입니다).

Self-test printing.
Please press the FEED button

5. 인쇄를 계속 하기 위해서는 *0/송* 버튼을 누르세요.
프린터는 미리 제작된 문자 형식을 인쇄합니다.
6. 셀프 테스트는 자동으로 끝나고 다음과 같은 문구를 인쇄한 후 용지를 절단합니다.

*** COMPLETED ***

프린터는 셀프 테스트가 끝나면 바로 데이터 수신모드 상태가 됩니다.

4장. 코드표

아래의 표는 문자 코드표입니다. hexa 숫자에 대응하는 문자를 찾기 위해서는 표의 상단부에서 오른쪽으로 그 다음에는 왼쪽의 숫자들을 아래쪽으로 문자를 찾습니다.

예) 4A = J

HEX	HEX	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
HEX	BIN	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	NUL	DLE	SP	0	@	P	,	p	Ç	É	á	■	┌	└	α	≡
1	0001		XON	I	1	A	Q	a	q	û	æ	í	■	┐	┘	β	±
2	0010			*	2	B	R	b	r	é	Æ	ó	■	└	┘	Γ	≤
3	0011		XOFF	%	3	C	S	c	s	â	ô	ú	■	┐	┘	π	≥
4	0100		EQT	\$	4	D	T	d	t	â	ô	ñ	■	┐	┘	Σ	f
5	0101		ENQ	%	5	E	U	e	u	à	ò	ñ	■	┐	┘	σ	J
6	0110			&	6	F	V	f	v	â	ú	■	■	┐	┘	μ	+
7	0111			'	7	G	W	g	w	ç	ù	■	■	┐	┘	τ	≈
8	1000	BS	CAN	(	8	H	X	h	x	ê	ÿ	¿	■	┐	┘	Φ	*
9	1001	HT		)	9	I	Y	i	y	ê	ô	■	■	┐	┘	θ	*
A	1010	LF		*		J	Z	j	z	è	ù	■	■	┐	┘	Ω	*
B	1011		ESC	+		K	[	k	{	ï	þ	1/2	■	┐	┘	δ	√
C	1100	FF	FS	<		L	\	l	ı	£	1/4	■	■	┐	┘	∞	n
D	1101	CR	GS	=		M	]	m	}	ı	¥	ı	■	┐	┘	φ	2
E	1110			>		N	^	n	~	À	Pt	«	■	┐	┘	€	*
F	1111			/		O	_	o	SP	À	f	»	■	┐	┘	∩	SP

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	┌	┐	SP	一	タ	ミ	二	×
1	0001	┐	┐	。	ア	チ	ム	ト	円
2	0010	┐	┐	「	イ	ツ	メ	キ	年
3	0011	┐	┐	」	ウ	テ	モ	コ	月
4	0100	┐	┐	、	エ	ト	ヤ	ノ	日
5	0101	┐	┐	・	オ	ナ	ユ	ル	時
6	0110	┐	┐	フ	カ	ニ	ヨ	リ	分
7	0111	┐	┐	ア	キ	ヌ	ラ	シ	秒
8	1000	┐	┐	イ	ク	ネ	リ	ハ	〒
9	1001	┐	┐	ウ	ケ	ノ	ル	心	市
A	1010	┐	┐	エ	コ	ハ	レ	金	区
B	1011	┐	┐	オ	サ	ヒ	ロ	草	町
C	1100	┐	┐	ヤ	シ	フ	ワ	丸	村
D	1101	┐	┐	ユ	ス	ヘ	ン	○	人
E	1110	┐	┐	ヨ	セ	ホ	*	/	■
F	1111	┐	┐	ツ	ソ	マ	°	＼	SP

Page 1 (Katakana)

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

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	■	Ł	Ł	α	≡
		128	144	160	176	192	208	224	240
1	0001	Û	À	ı	■	Ł	Ł	β	±
		129	145	161	177	193	209	225	241
2	0010	é	É	ó	■	Ł	Ł	Γ	≤
		130	146	162	178	194	210	226	242
3	0010	â	ô	ú	ı	Ł	Ł	π	≥
		131	147	163	179	195	211	227	243
4	0100	ä	ö	ñ	ı	—	Ł	Σ	ı
		132	148	164	180	196	212	228	244
5	0101	à	ò	ñ	ı	+	Ł	σ	J
		133	149	165	181	197	213	229	245
6	0110	Á	ú	ª	ı	Ł	Ł	μ	÷
		134	150	166	182	198	214	230	246
7	0111	ç	ù	º	ı	Ł	Ł	τ	≈
		135	151	167	183	199	215	231	247
8	1000	ê	ı	ı	ı	Ł	Ł	Φ	°
		136	152	168	184	200	216	232	249
9	1001	Ê	ö	Ò	ı	Ł	Ł	θ	•
		137	153	169	185	201	217	233	249
A	1010	è	Û	ı	ı	Ł	Ł	Ω	•
		138	154	170	186	202	218	234	250
B	1011	í	¢	1/2	ı	Ł	Ł	δ	√
		139	155	171	187	203	219	235	251
C	1100	Ô	£	1/4	ı	Ł	Ł	∞	n
		140	156	172	188	204	220	236	252
D	1101	ì	Ù	ı	ı	Ł	Ł	φ	2
		141	157	173	189	205	221	237	253
E	1110	Ä	Pt	«	ı	Ł	Ł	ı	■
		142	158	174	190	206	222	238	254
F	1111	Å	Ó	»	ı	Ł	Ł	ı	SP
		143	159	175	191	207	223	239	255

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	Í	■	┐	└	α	
		128	144	160	176	192	208	224	240
1	0001	Ü	Ê	ˆ	■	┐	└	β	±
		129	145	161	177	193	209	225	241
2	0010	é	Ê	ó	■	┐	└	Γ	≥
		130	146	162	178	194	210	226	242
3	0010	â	ô	ú	┐	┐	└	π	≤
		131	147	163	179	195	211	227	243
4	0100	Ä	Ë	ˆ	┐	┐	└	Σ	ƒ
		132	148	164	180	196	212	228	244
5	0101	à	ï	ˆ	┐	┐	└	σ	Ј
		133	149	165	181	197	213	229	245
6	0110		û	³	┐	┐	└	μ	÷
		134	150	166	182	198	214	230	246
7	0111	Ç	ù	—	┐	┐	└	τ	≈
		135	151	167	183	199	215	231	247
8	1000	ê	Ï	î	┐	┐	└	Φ	•
		136	152	168	184	200	216	232	249
9	1001	ë	Ö	ˆ	┐	┐	└	θ	•
		137	153	169	185	201	217	233	249
A	1010	è	Ü	ˆ	┐	┐	└	Ω	•
		138	154	170	186	202	218	234	250
B	1011	ï	ø	1/2	┐	┐	└	δ	
		139	155	171	187	203	219	235	251
C	1100	î	£	1/4	┐	┐	└	∞	n
		140	156	172	188	204	220	236	252
D	1101	=	Ù	3/4	┐	┐	└	φ	²
		141	157	173	189	205	221	237	253
E	1110	À	Û	«	┐	┐	└	■	▪
		142	158	174	190	206	222	238	254
F	1111	\$	f	»	┐	┐	└	SP	
		143	159	175	191	207	223	239	255

Korean

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

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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		129	145	161	177	193	209	225	241
2	0010	’	‚	¢	2	Â	Ò	â	ò
		130	146	162	178	194	210	226	242
3	0011	f	“	£	3	Ã	Ó	ã	ó
		131	147	163	179	195	211	227	243
4	0100	”	”	¤	´	Ä	Ô	ä	ô
		132	148	164	180	196	212	228	244
5	0101	...	•	¥	µ	Å	Õ	å	ø
		133	149	165	181	197	213	229	245
6	0110	†	-	ı	¶	Æ	Ö	æ	ö
		134	150	166	182	198	214	230	246
7	0111	‡	—	§	•	Ç	×	ç	+
		135	151	167	183	199	215	231	247
8	1000	^	~	"	˙	È	Ø	è	ø
		136	152	168	184	200	216	232	248
9	1001	‰	™	©	1	É	Ù	é	ù
		137	153	169	185	201	217	233	249
A	1010	Š	š	Š	š	Ê	Ú	ê	ú
		138	154	170	186	202	218	234	250
B	1011	(	)	((	))	Ë	Û	ë	û
		139	155	171	187	203	219	235	251
C	1100	Œ	œ	ƒ	¼	Ì	Ü	ì	ü
		140	156	172	188	204	220	236	252
D	1101			-	½	Í	Ý	í	ý
		141	157	173	189	205	221	237	253
E	1110	Ž	ž	®	¾	Î	Þ	î	þ
		142	158	174	190	206	222	238	254
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		143	159	175	191	207	223	239	255

Корей

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	А	Р	а		Л	л	р	Ё
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		129	145	161	177	193	209	225	241
2	0010	В	Т	в		Т	т	т	Г
		130	146	162	178	194	210	226	242
3	0011	Г	У	г		Т	л	у	Г
		131	147	163	179	195	211	227	243
4	0100	Д	Ф	д		—	Л	Ф	И
		132	148	164	180	196	212	228	244
5	0101	Е	Х	е		+	Г	Х	И
		133	149	165	181	197	213	229	245
6	0110	Ж	Ц	ж		Г	Г	Ц	У
		134	150	166	182	198	214	230	246
7	0111	З	Ч	з		Г	+	Ч	У
		135	151	167	183	199	215	231	247
8	1000	И	Ш	и		Л	+	Ш	°
		136	152	168	184	200	216	232	248
9	1001	Й	Щ	й		Г	Л	Щ	°
		137	153	169	185	201	217	233	249
A	1010	К	Ъ	к		Г	Г	Ъ	°
		138	154	170	186	202	218	234	250
B	1011	Л	Ы	л		Г	Г	Ы	√
		139	155	171	187	203	219	235	251
C	1100	М	Ь	м		Г	Г	Ь	№
		140	156	172	188	204	220	236	252
D	1101	Н	Э	н		Г	Г	Э	α
		141	157	173	189	205	221	237	253
E	1110	О	Ю	о		Г	Г	Ю	■
		142	158	174	190	206	222	238	254
F	1111	П	Я	п		Г	Г	Я	NBSP
		143	159	175	191	207	223	239	255

Корей

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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		128	144	160	176	192	208	224	240
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		129	145	161	177	193	209	225	241
2	0010	é	Í	ó	␣	Ł	Đ	Ô	ˆ
		130	146	162	178	194	210	226	242
3	0011	â	Ô	ú	␣	Ł	È	Ñ	ˆ
		131	147	163	179	195	211	227	243
4	0100	û	Ö	Ä	␣	-	ä	ñ	ˆ
		132	148	164	180	196	212	228	244
5	0101	č	Ĺ	ą	Ä	+	Ň	ň	š
		133	149	165	181	197	213	229	245
6	0110	Ç	İ	Ž	Ä	Ä	İ	Š	+
		134	150	166	182	198	214	230	246
7	0111	Í	Š	ž	È	ä	İ	š	ˆ
		135	151	167	183	199	215	231	247
8	1000	ı	ś	Ę	Ś	Ł	ě	Ř	°
		136	152	168	184	200	216	232	248
9	1001	ë	Ö	ę	Ł	Ł	Ú	ˆ	ˆ
		137	153	169	185	201	217	233	249
A	1010	Ö	Ü	ˆ	Ł	Ł	ı	ˆ	ˆ
		138	154	170	186	202	218	234	250
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		143	159	175	191	207	223	239	255

Page 18 (PC852 : Latin2)

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	␣	Ł	đ	Ó	-
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		129	145	161	177	193	209	225	241
2	0010	é	Æ	ó	␣	Ł	È	ô	=
		130	146	162	178	194	210	226	242
3	0011	â	ô	ú	␣	Ł	È	ô	3/4
		131	147	163	179	195	211	227	243
4	0100	ä	ö	-	Ł	-	È	ô	ı
		132	148	164	180	196	212	228	244
5	0101	à	ò	ˆ	Ä	+	€	σ	\$
		133	149	165	181	197	213	229	245
6	0110	á	û	ˆ	Ä	ä	ı	μ	÷
		134	150	166	182	198	214	230	246
7	0111	Ç	ù	-	Ä	Ä	ı	ˆ	ˆ
		135	151	167	183	199	215	231	247
8	1000	â	ÿ	İ	␣	Ł	ı	ˆ	ˆ
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		137	153	169	185	201	217	233	249
A	1010	è	Ü	ˆ	Ł	Ł	Ú	ˆ	ˆ
		138	154	170	186	202	218	234	250
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		139	155	171	187	203	219	235	251
C	1100	İ	£	1/4	Ł	Ł	ˆ	ˆ	3
		140	156	172	188	204	220	236	252
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		142	158	174	190	206	222	238	254
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		143	159	175	191	207	223	239	255

Page 19 (PC858 : Euro)

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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E	1110	┘	لا	ر	ص	خ	×	غ	■
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		143	159	175	191	207	223	239	255

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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1	0001	┘	๑	ก	ฅ	ร	แ	๖	๓
		129	145	161	177	193	209	225	241
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		130	146	162	178	194	210	226	242
3	0011	┘	๓	ค	ต	ล	ไ	๘	๕
		131	147	163	179	195	211	227	243
4	0100	┘	๔	ฅ	ถ	ว	ใ	๙	๖
		132	148	164	180	196	212	228	244
5	0101	┘	๕	ง	ท	ฑ	ๆ	๑	๗
		133	149	165	181	197	213	229	245
6	0110	┘	๖	จ	ฐ	ษ	ๆ	๒	๘
		134	150	166	182	198	214	230	246
7	0111	┘	๗	ฉ	น	ส	๑	๓	๙
		135	151	167	183	199	215	231	247
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		136	152	168	184	200	216	232	248
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		137	153	169	185	201	217	233	249
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		138	154	170	186	202	218	234	250
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		139	155	171	187	203	219	235	251
C	1100	←	๑๒	ฅ	พ	๑	๑	๘	๑๕
		140	156	172	188	204	220	236	252
D	1101	↑	๑๓	ฅ	ฟ	ภ	๑	๙	๑๖
		141	157	173	189	205	221	237	253
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		142	158	174	190	206	222	238	254
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		143	159	175	191	207	223	239	255

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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		128	144	160	176	192	208	224	240
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		131	147	163	179	195	211	227	243
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		143	159	175	191	207	223	239	255

Korean

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

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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2	0010	Γ 130	Τ 146	λ 162	 178	⏏ 194	⏏ 210	έ 226	≥ 242
3	0011	Δ 131	Υ 147	μ 163	 179	⏏ 195	⏏ 211	ή 227	≤ 243
4	0100	E 132	Φ 148	ν 164	⏏ 180	⏏ 196	⏏ 212	ϊ 228	Ï 244
5	0101	Z 133	Χ 149	ξ 165	⏏ 181	⏏ 197	⏏ 213	ί 229	ÿ 245
6	0110	H 134	Ψ 150	ο 166	⏏ 182	⏏ 198	⏏ 214	ό 230	÷ 246
7	0111	Θ 135	Ω 151	π 167	⏏ 183	⏏ 199	⏏ 215	ύ 231	≈ 247
8	1000	I 136	α 152	ρ 168	⏏ 184	⏏ 200	⏏ 216	ϋ 232	° 248
9	1001	K 137	β 153	ο 169	⏏ 185	⏏ 201	⏏ 217	ώ 233	· 249
A	1010	Λ 138	γ 154	ς 170	⏏ 186	⏏ 202	⏏ 218	Α 234	· 250
B	1011	M 139	δ 155	τ 171	⏏ 187	⏏ 203	⏏ 219	Ε 235	√ 251
C	1100	N 140	ε 156	υ 172	⏏ 188	⏏ 204	⏏ 220	Η 236	ⁿ 252
D	1101	Ξ 141	ζ 157	φ 173	⏏ 189	⏏ 205	⏏ 221	Ι 237	² 253
E	1110	Ο 142	η 158	χ 174	⏏ 190	⏏ 206	⏏ 222	Ό 238	■ 254
F	1111	Π 143	θ 159	ψ 175	⏏ 191	⏏ 207	⏏ 223	Υ 239	NBSP 255

Korean

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
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1	0001	SP 129	SP 145	SP 161	SP 177	SP 193	SP 209	SP 225	SP 241
2	0010	SP 130	SP 146	SP 162	SP 178	SP 194	SP 210	SP 226	SP 242
3	0011	SP 131	SP 147	SP 163	SP 179	SP 195	SP 211	SP 227	SP 243
4	0100	SP 132	ö 148	SP 164	SP 180	SP 196	SP 212	SP 228	SP 244
5	0101	SP 133	SP 149	SP 165	SP 181	SP 197	SP 213	SP 229	SP 245
6	0110	SP 134	SP 150	SP 166	SP 182	SP 198	SP 214	SP 230	SP 246
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8	1000	SP 136	SP 152	SP 168	SP 184	SP 200	SP 216	SP 232	SP 248
9	1001	SP 137	SP 153	SP 169	SP 185	SP 201	SP 217	SP 233	SP 249
A	1010	SP 138	SP 154	SP 170	SP 186	SP 202	SP 218	SP 234	SP 250
B	1011	SP 139	SP 155	SP 171	SP 187	SP 203	SP 219	SP 235	SP 251
C	1100	SP 140	SP 156	SP 172	SP 188	SP 204	SP 220	SP 236	SP 252
D	1101	SP 141	SP 157	SP 173	SP 189	SP 205	SP 221	SP 237	SP 253
E	1110	SP 142	SP 158	SP 174	SP 190	SP 206	SP 222	SP 238	SP 254
F	1111	SP 143	SP 159	SP 175	SP 191	SP 207	SP 223	SP 239	SP 255

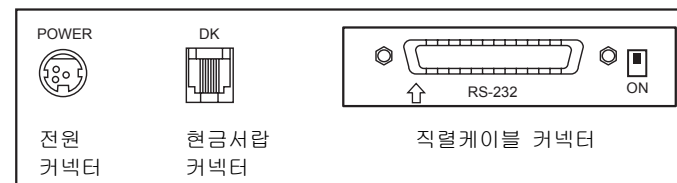
Korean

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France	#	\$	à	°	ç	§	^	`	é	ù	è	¨	
Germany	#	\$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß	
U.K.	£	\$	@	[	\	]	^	`	{		}	~	
Denmark I	#	\$	@	Æ	Ø	Å	^	`	æ	ø	å	~	
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü	
Italy	#	\$	@	°	\	é	^	ù	à	ò	è	ì	
Spain I	Pt	\$	@	í	Ñ	¿	^	`	ñ	}	~		
Japan	#	\$	@	[	¥	]	^	`	{		}	~	
Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü	
Denmark II	#	\$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü	
Spain II	#	\$	á	í	Ñ	¿	é	`	í	ñ	ó	ú	
Latin America	#	\$	á	í	Ñ	¿	é	ü	í	ñ	ó	ú	
Korea	#	\$	@	[	₩	]	^	`	{		}	~	

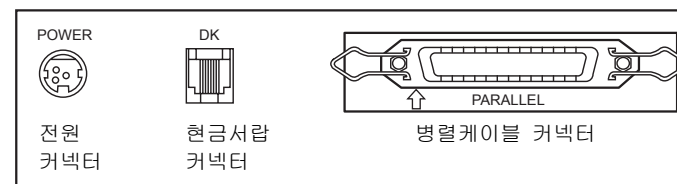
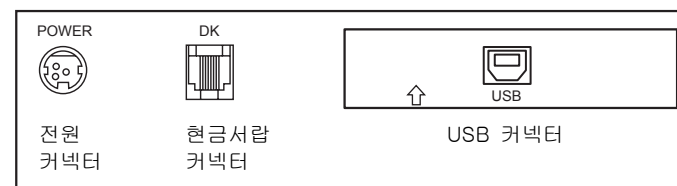
International Character Set

부록

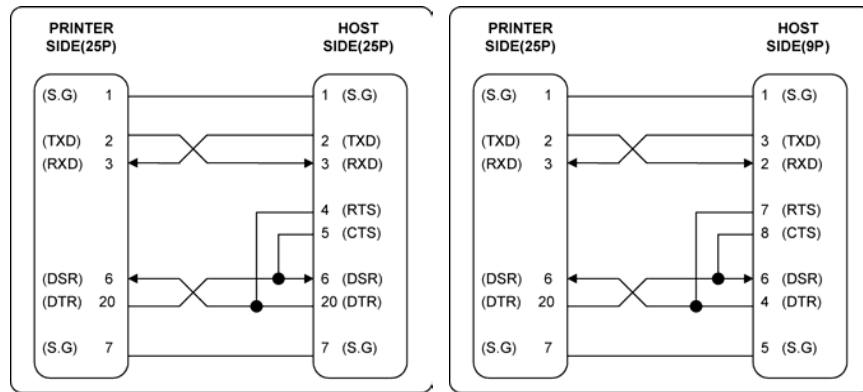
A. 커넥터



※ 시리얼 인터페이스 보드에 있는 덤 스위치를 "ON" 시켜주시면 DTR과 RTS 신호가 서로 연결됩니다.

SRP-370/372 커넥터
(직렬 인터페이스)SRP-370P/372P 커넥터
(병렬 인터페이스)SRP-370U/372U 커넥터
(USB 인터페이스)

RS-232C 케이블 연결



Korean

인터페이스 커넥터

직렬 인터페이스 (RS-232)

핀 번호	신호명	방향	기능
1	FG	-	프레임 접지
2	TxD	출력	데이터 전송
3	RxD	입력	데이터 수신
4	RTS	출력	Ready To Send
5	CTS	입력	Clear to Ready
6	DSR	입력	Data Set Ready
7	SG	-	신호 접지
20	DTR	출력	Data Terminal Ready

병렬 인터페이스 (IEEE-1284)

핀 번호	Source	Compatibility 모드	니블 모드	바이트 모드
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

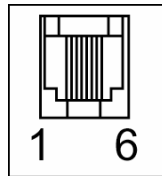
Korean

USB 인터페이스

핀 번호	신호명	배선 (색)	기능
Shell	Shield	Drain Wire	프레임 접지
1	VBUS	적색	호스트 전원
2	D-	백색	데이터 선(D-)
3	D+	녹색	데이터 선(D+)
4	GND	흑색	신호 접지

현금 서랍 커넥터

핀 번호	신호명	설명
1	프레임 접지	-
2	현금 서랍 열기 제어 신호 1	출력
3	현금 서랍 열기/닫기 수신 신호	입력
4	+24V	-
5	현금 서랍 열기 제어 신호 2	출력
6	접지 신호	-



B. 프린터 청소

프린터 내부 용지에 먼지 등이 끼어있을 경우에는 인쇄품질이 저하될 수 있습니다. 이 경우 아래와 같은 방법으로 프린터를 청소하십시오.

- 1) 프린터 커버를 열고 용지가 끼워져 있다면 이를 제거하세요.
- 2) 알코올 용매제를 적신 천으로 프린터의 헤드 부분을 닦아 주세요.
- 3) 물을 적신 천으로 용지감지센서와 페이퍼롤러를 닦아주세요.
- 4) 용지를 삽입한 후 프린터 커버를 닫으세요.

용지감지센서에 의해 감지된 용지 잔량은 용지 중앙부분의 지름에 따라 다르게 나타날 수 있습니다. 용지감지센서를 제대로 설정하기 위해서는 구입하신 곳으로 문의하십시오.

C. 사양

인쇄 방식		열 전사 방식 (감열식) 인쇄	
도트 농도		180 X 180 dpi (7dots/mm)	203 X 203 dpi (8dots/mm)
인쇄 폭		57.5mm, 72.192 ± 0.2mm	
용지 폭		58mm,80mm,82.5 mm	
라인 당 문자 수 (기본값)		180 DPI 42 (Font A) 56 (Font B)	203 DPI 48 (Font A) 64 (Font B)
인쇄 속도	180 DPI	Mono : 47 lines/sec(1/6" Feed) 200mm/sec Color : 23.6 Line/ Sec(1/6inch feed) 100mm/sec	
	203 DPI	Mono : 42 lines/sec(1/6" Feed) 180mm/sec Color : 21 Line/ Sec(1/6inch feed) 90mm/sec	
수신 버퍼 크기		4K Bytes	
참고 : 인쇄속도는 데이터전송속도와 명령어의 조합에 따라 다소 느려질 수 있습니다.			
Supply voltage	입력 전압	100~240 VAC	
	주 파 수	50/60 Hz	
	출력 전압	+24 VDC	
Environmental Conditions	온도	0 ~ 45 ℃ (동작 시) -10 ~ 50 ℃ (보관 시)	
	습도	30 ~ 80 % RH (동작 시) 10 ~ 90 % RH (보관 시) ; 용지는 제외	
수명 *	메커니즘	Monochrome :70,000,000Lines 2Color :35,000,000Lines	
Auto Cutter *		1,200,000 Cut	

* 이 값은 표준온도, 지정된 용지, 인쇄 레벨 2 상태에서 측정된 값입니다.

* 이 값은 온도, 인쇄 레벨에 따라 달라질 수 있습니다.

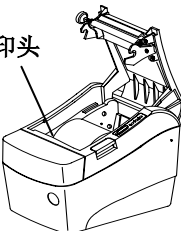
Chinese

安全预防措施

在使用当前设备中，请遵守下列安全规程，以避免任何危险或材料破坏。

 警告 违反上述指令可能会导致严重损害或死亡。	
不要将几个产品插入一个多孔电源插座中。 - 这会导致过热和火灾。 - 如果插头潮湿或者肮脏，请在使用前烘干或者擦拭。 - 如果插头与电源插座不配套，请不要插上电源。 - 一定只使用标准化的多孔电源插座。 禁止  	您只能使用供应的适配器。 使用其它适配器十分危险。 仅使用供应的适配器  !
不要通过拉连接线的方式拔插头。 这可能会损坏连接线，造成火灾或者打印机故障。 禁止  	将塑料袋放在小孩拿不到的地方。 否则，小孩们会将袋子套在头上。 禁止  
不要在手十分潮湿的时候，插或者拔电源插头。 这可能发生触电。 禁止  	如果发现打印机冒出不明原因的烟、气味或者出现噪音，请拔下插头后，再采取应急措施。 - 关闭打印机，拔下设备的插头。 - 在烟消失后，电话联系经销商进行维修。 拔下插头  
不要用力弯曲连接线，或者将其置于重物之下。 连接线损坏后，可能造成火灾。 禁止  	

Chinese

 警告 违反上述指令可能会导致严重损害或死亡。	
将干燥剂放在小孩拿不到的地方。 • 不然，他们会把它们当作食物。	将打印机安装在稳定的平面上。 • 如果打印机跌落，可能会遭到损坏，且造成人员受伤。
禁止  	禁止  
只使用批准的附件，自己不要尝试拆卸、修理或者改装。 • 如果需要这些服务，请电话联系经销商。	不要用手触摸打印机的打印头。 • 这可能会烧伤手或者损坏打印质量。
禁止拆卸  	禁止  
不要将水或者其他物品放进打印机中。 • 如果发生此类事件，请关机并拔下打印机的插头，然后，电话联系经销商。	失去控制时，不要使用打印机。这会导致火灾或者触电。 • 请关机并拔下打印机的插头，然后，电话联系经销商。
禁止  	拔下插头  

警告

静电会轻易地损坏某些半导体设备。在连接或者去掉打印机后面的电缆前，应该“关闭”打印机，保护打印机免受静电的影响。如果打印机受到了静电的损坏，应该“关闭”打印机。

介绍

按照设计，SRP-370/372 卷纸打印机可与各种电子仪器一起使用，如系统 ECR、POS、银行设备、计算机外围设备等等。

打印机的主要特性如下：

1. 高速打印：47（1/6” 进纸）行/秒。
2. 低噪声热敏打印
3. RS-232、并行、USB
4. 数据缓冲器支持设备即使在打印期间也能接收打印数据。
5. 外围设备激励电路单元支持控制外部设备（如收银机抽屉）。
6. 字符最高可放大到原始大小的 64 倍。
7. 可以使用条形码命令打印条形码。
8. 使用 DIP 开关可选择不同的打印密度。

使用新的 SRP-370/372 打印机之前，请务必阅读本手册中的各种操作指导。

SRP-370/372.

注意：插座应该放在打印机附近，随手即可拿到。

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附录 36

A. 连接器 36

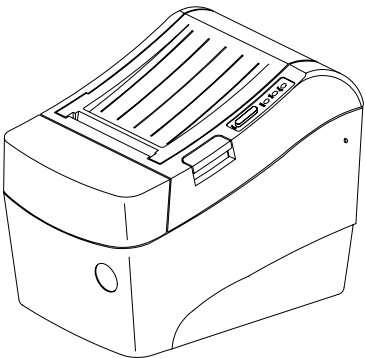
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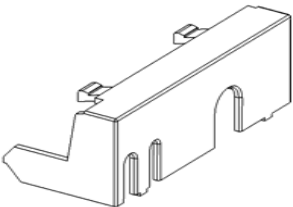
第 1 章. 安装打印机

1-1. 打开包装

打印机箱中应该包括下面插图中显示的各种物品。
如果任何物品出现了毁坏或丢失，请与您的经销商联系。



SRP-370/372



电缆盖



卷纸



操作员手册



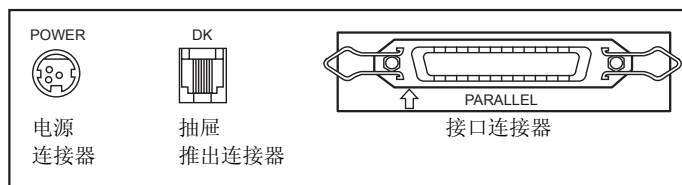
交流整流器



电源线

1-2. 连接电缆

可将三根电缆连接到打印机上。再将所有电缆连接到打印机背后的连接板上，显示如下：

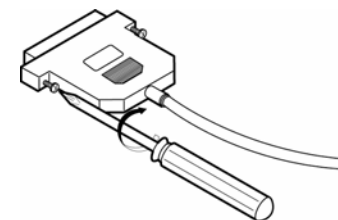


注意： 在连接任何电缆前，确保已关闭了打印机和主机。

1-3. 连接计算机

您必需使用合适的接口电缆。

1. 将电缆连接器安全地插入打印机的接口连接器。
2. 拧紧电缆连接器两端的螺丝。



3. 将电缆的另一端连接到计算机上。

1-4. 连接抽屉

警告：

使用符合打印机技术规范 of 抽屉。使用不合适的抽屉，可能损坏抽屉和打印机。

小心

不要将电话线连接到抽屉推出连接器上，否则，可能损坏打印机和电话线。
将抽屉电缆插入紧挨着电源连接器的打印机背后的抽屉推出连接器上。

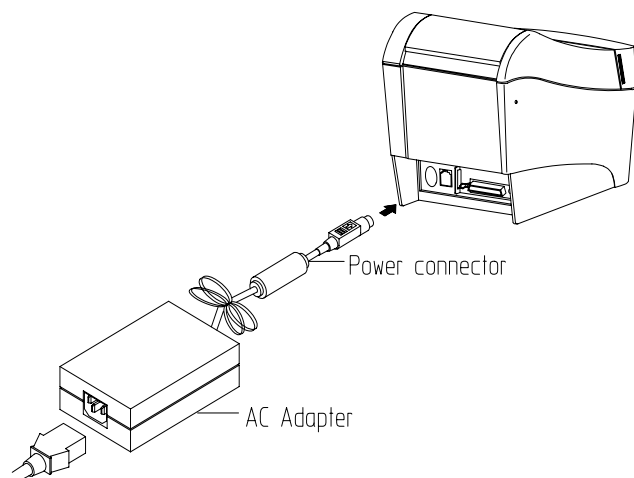
1-5. 连接电源

小心:

在连接或者断开打印机的电源时，确保电源没有插在插座上。否则，可能损坏电源或者打印机。

如果电源的额定电压和您的插座电压不匹配，请联系您的经销商，寻求相关协助。不要插上电源线。否则，可能损坏电源或者打印机。

1. 确保关闭了打印机的电源开关，且电源线已经从插座上拔下。
2. 检查电源上的标记，确保电源所需的电压符合插座的电压。
3. 按照下面图示插上电源。注意，插头的直边应该朝上。



注意:

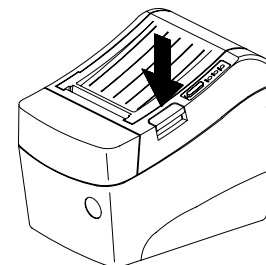
要取下直流电缆连接器之前，请确保电源线已经拔下，然后抓住箭头处的连接器并将其直接拉出

Chinese

1-6. 安装或者更换纸卷

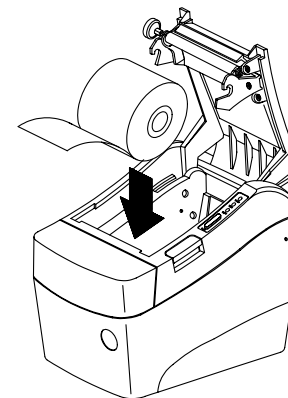
注意: 一定要使用合乎规格的纸卷。不要使用纸张与纸芯胶粘在一起的纸卷，因为打印机无法正常地检测到纸端。

1. 确保打印机此时没有接收数据；否则，可能会丢失数据。
2. 按下开盖按钮，打开纸卷盖。



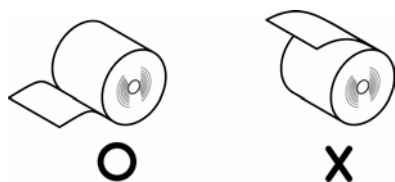
注意: 在打印机工作时，不要打开打印机机盖。这可能会损坏打印机。

3. 如果纸卷已经用完，请取下已经用过的纸卷芯。
4. 按照图示的方法插入纸卷。

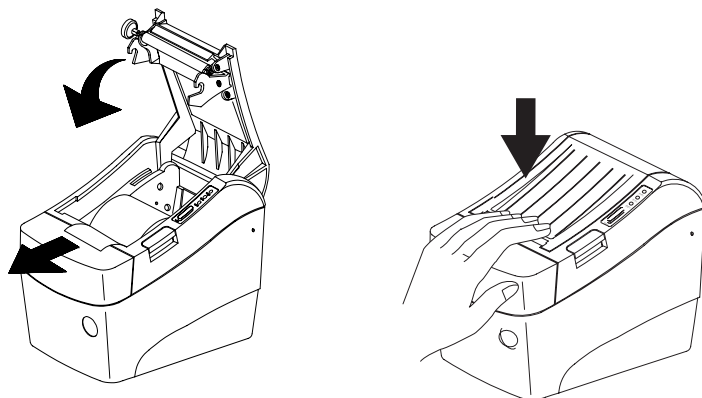


Chinese

5. 一定要注意纸卷出纸的方向要正确。

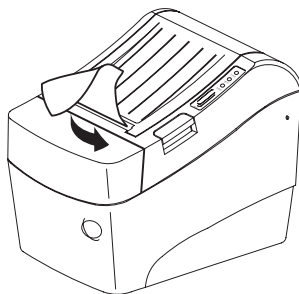


6. 按照图示的方法拉出少量纸张。然后关闭机盖。

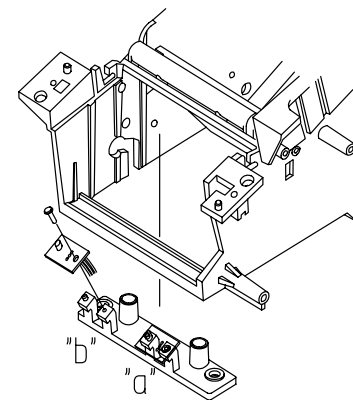


注意：在关闭机盖时，牢牢地按下打印机机盖的中心，以免纸张装载错误。

7. 按照图示的方法撕去纸端。

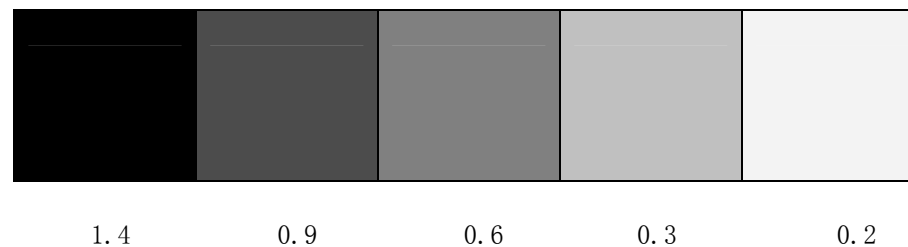


1-7. 调整 and 设置



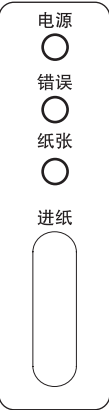
- 1) 本设备拥有两大特性：纸端和污点。如果要检测纸端。必须将其定位在刻画的“a”位置，这是出厂默认设置。如果要检测纸张上打印的污点，就必须将其移到“b”位置。
- 2) 吸光度 (Optical density, O.D) 必须高于 0.6 的密度，以保障标准工作条件的安全。注意，在标准状态下，纸张的污点密度可能较小。

3) O.D 值表 (仅供参考)



1-8. 使用打印机

控制面板



进纸

ESC C 5 命令可以禁用该按钮。
按下 FEED 按钮一次，则进纸一行。还可以按着 FEED 按钮不动，进行不断地进纸。

仪表板照明灯

电源
只要打印机打开，电源（POWER）指示灯就发光。

错误
显示错误。

纸张
这个指示灯表示快到纸卷末端。请安装新的纸卷，以便打印机继续打印。
在该指示灯闪烁时，表示处于打印自检备用状态，
或者使用宏执行命令时的宏执行备用状态。

1-9. 设置 DIP 开关

串行接口（RS-232C、RS-485）技术规范

DIP 开关集 1 功能

开关编号。	功能	开	关	默认
SW1-1	波特率选择	* 参考下表		关
SW1-2				关
SW1-3	- 握手	硬件 (DTR/DSR)	软件 (Xon/Xoff)	关
SW1-4	保存	---		关
SW1-5	切纸器功能	禁用	启用	关
SW1-6	纸张	2 色	单色	关
SW1-7	保存	---		关
SW1-8	保存	---		关

*波特率选择

SW1-1	SW1-2	传输速度	备注
关	关	9600 Baud	
开	关	19200 Baud	
关	开	38400 Baud	
开	开	115200 Baud	默认

DIP 开关集 2 功能

开关编号。	功能	开	关	默认
SW2-1	选择打印密度	* 参考下表		关
SW2-2				关
SW2-3				关
SW2-4	历史控制	启用	禁用	关
SW2-5	保存	---		关
SW2-6	接口条件选择	按内存开关	按 DIP 开关	关
SW2-7	保存	---		关
SW2-8	打印宽度	2” 打印	3” 打印	关

* 打印密度

SW 2-1	SW 2-2	SW 2-3	打印密度	备注
开	开	开	130%	
关	开	开	120%	
开	关	开	110%	
关	关	开	105%	
关	关	关	100%	默认
开	关	关	95%	
关	开	关	90%	
开	开	关	80%	

并行/ USB 接口规格

开关编号。	功能	开	关	默认
SW2-1	选择打印密度	* 参考下表		关
SW2-2				关
SW2-3				关
SW2-4	历史控制	启用	禁用	关
SW2-5	保存	--		关
SW2-6	接口条件选择	按内存开关	按 DIP 开关	关
SW2-7	保存	--		关
SW2-8	打印宽度	2” 打印	3” 打印	关

* 打印密度

SW 2-1	SW 2-2	SW 2-3	打印密度	备注
开	开	开	130%	
关	开	开	120%	
开	关	开	110%	
关	关	开	105%	
开	关	关	100%	默认
关	关	关	95%	
关	开	关	90%	
开	开	关	80%	

※ 自动切纸器启用/禁用选择

DIP 开关集 1		
SW 5	开	禁用自动切纸器
应用程序	忽略自动切纸器错误，继续打印。	

1-10. 设置内存开关

本打印机拥有“内存开关”集，它们是软件开关。内存开关集包括“MSW1”、“MSW2”、“MSW 8”、“MSW9”、“定制值”、“串行通信条件”。

“内存开关设置实用程序”可以将内存开关集更改为开或关，如下表所示（默认：全部关闭）：

注意：

内存开关的更改方法有三种：

- 内存开关设置实用程序
- 通过 ESC/POS 命令进行控制。

内存开关设置存储在 NV 内存中：因此，即使打印机已关闭，设置仍然存在。

MSW1

交换机	功能	开	关
1~4	保存	--	固定为关闭
5	自动换行	启用	禁用
6~8	保存	--	固定为关闭

MSW2

交换机	功能	开	关
1	字体选择	字体 B (9 x 24)	字体 A (12 x 24)
2	自动切纸器功能	全部切割	部分切割
3	保存	--	固定为关闭
4~8	代码页选择	请参见下表	

第 2 章 十六进制转储

本特性支持有经验的用户精确地查看传输到打印机中的数据内容。这在查找软件问题时十分有用。在打开十六进制转储功能时，打印机会以十六进制格式打印全部的命令及其它数据，并打印指南部分帮助您查找专用命令。

若要使用十六进制转储功能，请执行下列步骤：

1. 关闭打印机，然后打开机盖。
2. 打开打印机，同时按住 FEED 按钮。
3. 关闭机盖，然后，让打印机输入十六进制转储方式。
4. 运行任何向打印机发送数据的软件程序。打印机将以两栏格式打印接收的全部代码。第

一栏是十六进制代码，第二栏提供与这些代码相对应的 ASCII 字符。

```
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
```

- （对于没有 ASCII 对应值的每个代码，会打印一个句点（.）。）
- 在十六进制转储期间，禁用除 DLE EOT 和 DLE ENQ 外的所有命令。

5. 打印结束时，关闭打印机。
6. 打开打印机，然后关闭十六进制模式。

MSW2-8	MSW2-7	MSW2-6	MSW2-5	MSW2-4	字符表
关	关	关	关	关	第 437 页
关	关	关	关	开	第 1 页（片假名）
关	关	关	开	关	第 2,850 页
关	关	关	开	开	第 3,860 页
关	关	开	关	关	第 4,863 页
关	关	开	关	开	第 5,865 页
关	关	开	开	关	第 16 页 1252
关	关	开	开	开	第 17,866 页
关	开	关	关	关	第 18,852 页
关	开	关	关	开	第 19,858 页
关	开	关	开	关	保存
关	开	关	开	开	第 22,864 页
关	开	开	关	关	第 23 页 Thai42
关	开	开	关	开	第 24 页 1253
关	开	开	开	关	保存
关	开	开	开	开	
开	关	关	关	关	
开	关	关	关	开	第 28 页 1251
开	关	关	开	关	第 29,737 页
开	关	关	开	开	保存
开	关	开	关	关	第 31 页 Thai16
开	关	开	关	开	保存
开	关	开	开	关	第 33 页 1255
开	关	开	开	开	保存
开	开	关	关	关	
开	开	关	关	开	第 36,855 页
开	开	关	开	关	第 37,857 页

MSW8

交换机	功能	开	关
1~8	保存	--	固定为关闭

MSW9交换机	功能	开	关
1	保存	--	固定为关闭
2	数据长度	7 位	8 位
3	奇偶校验选择	偶	奇
4	奇偶校验	启用	禁用
5	流控制	DTR/DSR	XON/XOFF
6~8	波特率选择	请参见下表	

MSW9-8	MSW9-7	MSW9-6	波特率
关	关	关	9600
关	关	开	19200
关	开	关	38400
关	开	开	57600
开	关	关	115200

第 3 章 自测

打印自检目的是检查打印机是否存在问题。如果打印机运行不正常，请联系您的经销商。打印自检会检查下列内容：

- 1. 确保纸卷的安装正常。
- 2. 打开电源，同时按住 FEED 按钮。开始打印自检。
- 3. 打印自检会打印出当前的打印机状态，包括控制 ROM 的版本和 DIP 开关设置。
- 4. 在打印了当前的打印机状态后，打印自检会打印下列内容并暂停（PAPER LED 指示灯会闪烁）。

打印自检开始打印。
请按下 FEED 按钮

- 5. 按下 FEED 按钮，继续打印。打印机打印模式使用的是内置字符集。
- 6. 打印自检自动结束，并在打印下列内容后切纸。

*** 已完成 ***

打印机一旦完成打印自检，即可接收数据。

第 4 章 代码表

下列页面显示的都是字符代码表。为了找到与十六进制数字相对应的字符，请在该表顶部找到左边的数字，并在该表的左列向下查找右边的数字。例如，4A=J。

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

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	■	┐	SP	一	タ	ミ	二	×
1	0001	■	┐	。	ア	チ	ム	ト	円
2	0010	■	┐	「	イ	ツ	メ	十	年
3	0011	■	┐	」	ウ	テ	モ	コ	月
4	0100	■	■	、	エ	ト	ヤ	▲	日
5	0101	■	■	・	オ	ナ	ユ	▲	時
6	0110	■	■	ヲ	カ	ニ	ヨ	▼	分
7	0111	■	■	ァ	キ	ヌ	ラ	▼	秒
8	1000	■	┐	イ	ク	ネ	リ	♠	〒
9	1001	■	┐	ウ	ケ	ノ	ル	♥	市
A	1010	■	┐	エ	コ	ハ	レ	◆	区
B	1011	■	┐	オ	サ	ヒ	ロ	♣	町
C	1100	■	┐	ヤ	シ	フ	ワ	●	村
D	1101	■	┐	ユ	ス	ヘ	ン	○	人
E	1110	■	┐	ヨ	セ	ホ	°	／	■
F	1111	■	┐	ッ	ソ	マ	°	／	SP

第 1 页（片假名）

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	■	┐	ø	Ó	—
1	0001	ü	æ	í	■	┐	Ð	ß	±
2	0010	é	Æ	ó	■	┐	É	Ô	=
3	0010	â	ô	ú	┐	┐	È	Ò	3/4
4	0100	ä	ö	ñ	┐	—	È	ö	
5	0101	à	ò	ñ	Á	+	í	Ö	§
6	0110	á	û	ª	Â	ä	í	u	÷
7	0111	ç	ù	º	À	Ã	î	þ	·
8	1000	ê	ÿ	¿	©	┐	Ï	þ	°
9	1001	ë	ö	®	¸	┐	¸	Ú	”
A	1010	è	Û	¬		┐	┐	Û	•
B	1011	ï	ø	1/2	┐	┐	■	Ü	¹
C	1100	î	£	1/4	┐	┐	■	Ý	³
D	1101	ì	Ø	┐	¢	=	┐	Ý	²
E	1110	Ä	X	«	¥	┐	┐	—	■
F	1111	Å	f	»	┐	Q	■	’	SP

第 2 页（PC850：多语版）

Chinese

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

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	í	■	┐	α		
		128	144	160	176	192	208	224	240
1	0001	ü	É	´	■	┐	β	±	
		129	145	161	177	193	209	225	241
2	0010	é	Ê	ó	■	┐	Γ	≥	
		130	146	162	178	194	210	226	242
3	0010	â	ô	ú	┐	┐	π	≤	
		131	147	163	179	195	211	227	243
4	0100	Ä	Ë	´	┐	┐	Σ	┐	
		132	148	164	180	196	212	228	244
5	0101	à	ï	´	┐	┐	σ	┐	
		133	149	165	181	197	213	229	245
6	0110		û	³	┐	┐	μ	÷	
		134	150	166	182	198	214	230	246
7	0111	ç	ù	—	┐	┐	τ	≈	
		135	151	167	183	199	215	231	247
8	1000	ê	Ï	î	┐	┐	Φ	°	
		136	152	168	184	200	216	232	249
9	1001	ë	Ô	´	┐	┐	θ	•	
		137	153	169	185	201	217	233	249
A	1010	è	Ü	┐	┐	┐	Ω	•	
		138	154	170	186	202	218	234	250
B	1011	ï	ø	1/2	┐	┐	δ		
		139	155	171	187	203	219	235	251
C	1100	î	£	1/4	┐	┐	∞	n	
		140	156	172	188	204	220	236	252
D	1101	=	Ù	3/4	┐	=	┐	²	
		141	157	173	189	205	221	237	253
E	1110	À	Û	«	┐	┐	┐	■	
		142	158	174	190	206	222	238	254
F	1111	§	f	»	┐	┐	┐	SP	
		143	159	175	191	207	223	239	255

Chinese

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

Chinese

第 5 页 (PC863: 北欧语)

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

Chinese

第 16 页 (WPC1253: 拉丁语 1)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	À	Á	Â	Ã	Ä	Å	Æ	Ç
1	0001	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×
2	0010	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
3	0011	à	á	â	ã	ä	å	æ	ç
4	0100	ð	ñ	ò	ó	ô	õ	ö	×
5	0101	ø	ù	ú	û	ü	ý	þ	ÿ
6	0110	Ž	Š	Š	š	Ź	ž	Ž	ž
7	0111	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
8	1000	И	Ш	И	Ш	И	Ш	И	Ш
9	1001	Й	Щ	Й	Щ	Й	Щ	Й	Щ
A	1010	К	Ъ	К	Ъ	К	Ъ	К	Ъ
B	1011	Л	Ы	Л	Ы	Л	Ы	Л	Ы
C	1100	М	Ь	М	Ь	М	Ь	М	Ь
D	1101	Н	Э	Н	Э	Н	Э	Н	Э
E	1110	О	Ю	О	Ю	О	Ю	О	Ю
F	1111	П	Я	П	Я	П	Я	П	Я

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	á	á	á	á	á
1	0001	ü	í	í	í	í	í	í	í
2	0010	é	í	ó	í	í	í	í	í
3	0011	â	ô	ú	í	í	í	í	í
4	0100	û	ö	À	í	í	í	í	í
5	0101	ć	Ĺ	ą	À	í	í	í	í
6	0110	Ç	İ	Ž	À	À	İ	Š	+
7	0111	Í	Š	ž	Ě	ă	î	š	+
8	1000	İ	ş	Ě	Ş	Ĺ	ě	Ř	°
9	1001	ë	ö	ę	ı	ı	ı	ı	ı
A	1010	ő	ű	ı	ı	ı	ı	ı	ı
B	1011	ö	ť	ž	ı	ı	ı	ı	ı
C	1100	ı	ı	č	ı	ı	ı	ı	ı
D	1101	ž	ł	š	ž	ı	ı	ı	ı
E	1110	ă	x	«	ž	ı	ı	ı	ı
F	1111	ć	č	»	ı	ı	ı	ı	ı

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	■	Ł	ð	ó	—
1	0001	ü	æ	az	■	Ł	ð	β	±
2	0010	é	Æ	ó	■	Ł	É	ô	=
3	0011	â	ô	ú		Ł	É	ô	3/4
4	0100	ä	ö	"	Ł	—	È	Ö	¶
5	0101	à	ò	'	À	+	€	σ	\$
6	0110	á	û	³	À	ä	í	μ	÷
7	0111	ç	ù	—	À	Ä	î	þ	.
8	1000	ê	ÿ	ÿ	©	Ł	ÿ	p	°
9	1001	ë	ö	ƒ	Ł	Ł	Ł	ü	-
A	1010	è	Ü	ˆ		Ł	Ł	ô	°
B	1011	ï	ø	1/2	Ł	Ł	Ł	ü	1
C	1100	î	£	1/4	Ł	Ł	Ł	ý	3
D	1101	ì	ø	3/4	Ł	=	Ł	ÿ	2
E	1110	Ä	x	«	Ł	Ł	Ł	—	■
F	1111	À	f	»	Ł	Ł	Ł	'	SP

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	°	β	NBSP	.	¢	ز	-	—
1	0001	·	∞	—	√	ء	ر	ف	—
2	0010	·	φ	ī	۲	ā	ز	ق	ن
3	0011	√	±	£	۳	أ	س	ك	ه
4	0100	■	1/2	¤	£	ؤ	ش	ل	ث
5	0101	—	1/4	İ	ه	ع	ص	م	ی
6	0110		≈		٦	ئ	ض	ن	ي
7	0111	+	«		۷	ا	ط	ه	غ
8	1000	+	»	ل	۸	ب	ظ	و	ق
9	1001	+	ل	ب	۹	ة	ع	ی	لا
A	1010	+	ل	ت	ف	ت	غ	ی	لا
B	1011	+		ث	؛	ث	ا	ض	ل
C	1100	+		،	س	ج	ق	ع	ك
D	1101	+	لا	ج	ش	ح	÷	غ	ي
E	1110	+	لا	ر	ص	خ	×	غ	■
F	1111	+	ل	خ	؟	د	ع	م	

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	┐	○		ฃ	ຍ	ໂ	'	๙
1	0001	┐	๑	ก	ณ	ร	แ	๙	๙
2	0010	┐	๒	ข	ด	ถ	โ	๙	๙
3	0011	┐	๓	ค	ต	ล	ไ	๙	๙
4	0100	┐	๔	ฅ	ถ	ว	ไ	๙	๙
5	0101	┐	๕	ง	ท	ศ	๙	๙	๙
6	0110	┐	๖	จ	ฐ	ษ	๙	๙	๙
7	0111	┐	๗	ฉ	น	ส	๙	๙	๙
8	1000	┐	๘	ช	ป	ห	๙	๙	๙
9	1001	┐	๙	ช	ป	ฬ	๙	๙	๙
A	1010	┐	๙	ฅ	ฬ	อ	๙	๙	๙
B	1011	┐	๙	ฅ	ฬ	อ	๙	๙	๙
C	1100	┐	๙	ฅ	ฬ	อ	๙	๙	๙
D	1101	┐	๙	ฅ	ฬ	อ	๙	๙	๙
E	1110	┐	๙	ฅ	ฬ	อ	๙	๙	๙
F	1111	┐	๙	ฅ	ฬ	อ	๙	๙	๙

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	€		NBSP	°	†	Π	ϖ	π
1	0001		‘	“	±	A	P	α	ρ
2	0010		’	”	²	B		β	ς
3	0011	f	“	£	³	Γ	Σ	γ	σ
4	0100	”	”	¤	’	Δ	T	δ	τ
5	0101	...	•	¥	μ	E	Y	ε	υ
6	0110	†	—	ı	¶	Z	Φ	ζ	φ
7	0111	‡	—	§	·	H	X	η	χ
8	1000			“	E	Θ	Ψ	Θ	Ψ
9	1001	‰	™	©	H	I	Ω	ι	ω
A	1010				I	K	I	κ	ï
B	1011	‘	’	«	»	Λ	ÿ	λ	ü
C	1100			¬	’	M	ά	μ	ó
D	1101			-	½	N	έ	v	ù
E	1110			®	Y	E	ή	ξ	ώ
F	1111			—	Ω	O	ι	ο	

Chinese

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
1	0001	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
2	0010	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
3	0011	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
4	0100	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
5	0101	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
6	0110	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
7	0111	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
8	1000	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
9	1001	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
A	1010	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
B	1011	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
C	1100	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
D	1101	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
E	1110	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ
F	1111	Ѐ	Ђ	Њ	Ћ	Ќ	Ќ	Ќ	Ќ

Chinese

第 28 页 (WPC1253: 西里尔字母)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
1	0001	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
2	0010	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
3	0011	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
4	0100	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
5	0101	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
6	0110	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
7	0111	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
8	1000	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
9	1001	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
A	1010	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
B	1011	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
C	1100	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
D	1101	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
E	1110	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ
F	1111	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ

Chinese

第 29 页 (PC737: 希腊语)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	SP 128	SP 144	SP 160	SP 176	SP 192	SP 208	SP 224	SP 240
1	0001	SP 129	SP 145	SP 161	SP 177	SP 193	SP 209	SP 225	SP 241
2	0010	SP 130	SP 146	SP 162	SP 178	SP 194	SP 210	SP 226	SP 242
3	0011	SP 131	SP 147	SP 163	SP 179	SP 195	SP 211	SP 227	SP 243
4	0100	SP 132	ö 148	SP 164	SP 180	SP 196	SP 212	SP 228	SP 244
5	0101	SP 133	SP 149	SP 165	SP 181	SP 197	SP 213	SP 229	SP 245
6	0110	SP 134	SP 150	SP 166	SP 182	SP 198	SP 214	SP 230	SP 246
7	0111	SP 135	SP 151	SP 167	SP 183	SP 199	SP 215	SP 231	SP 247
8	1000	SP 136	SP 152	SP 168	SP 184	SP 200	SP 216	SP 232	SP 248
9	1001	SP 137	SP 153	SP 169	SP 185	SP 201	SP 217	SP 233	SP 249
A	1010	SP 138	SP 154	SP 170	SP 186	SP 202	SP 218	SP 234	SP 250
B	1011	SP 139	SP 155	SP 171	SP 187	SP 203	SP 219	SP 235	SP 251
C	1100	SP 140	SP 156	SP 172	SP 188	SP 204	SP 220	SP 236	SP 252
D	1101	SP 141	SP 157	SP 173	SP 189	SP 205	SP 221	SP 237	SP 253
E	1110	SP 142	SP 158	SP 174	SP 190	SP 206	SP 222	SP 238	SP 254
F	1111	SP 143	SP 159	SP 175	SP 191	SP 207	SP 223	SP 239	SP 255

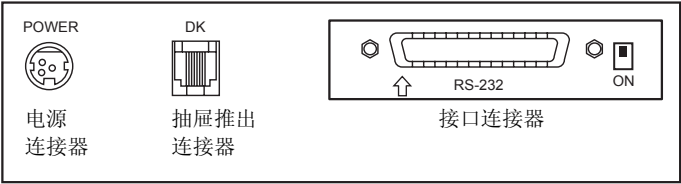
Chinese

Country	ASCII code (Hex)											
	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
U.S.A	#	\$	@	[	\	]	^	·	{		}	~
France	#	\$	à	°	ç	§	^	·	é	ù	è	·
Germany	#	\$	§	Ä	Ö	Ü	^	·	ä	ö	ü	ß
U.K.	£	\$	@	[	\	]	^	·	{		}	~
Denmark I	#	\$	@	Æ	Ø	Å	^	·	æ	ø	å	~
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	\$	@	°	\	é	^	ù	à	ò	è	ì
Spain I	Pt	\$	@	í	Ñ	¿	^	·	ñ	ñ	}	~
Japan	#	\$	@	[	¥	]	^	·	{		}	~
Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Denmark II	#	\$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Spain II	#	\$	á	í	Ñ	¿	é	·	í	ñ	ó	ú
Latin America	#	\$	á	í	Ñ	¿	é	ü	í	ñ	ó	ú
Korea	#	\$	@	[	₩	]	^	·	{		}	~

Chinese

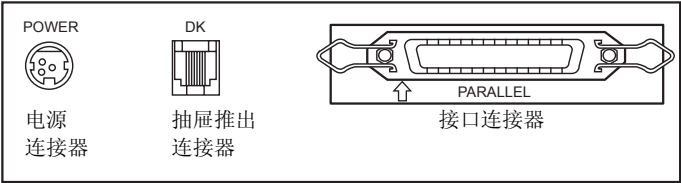
附录

A. 连接器

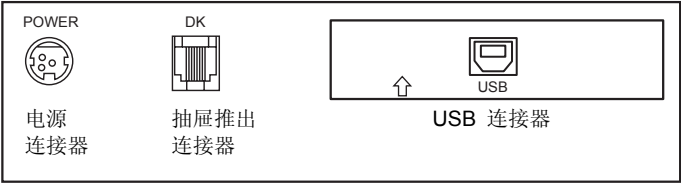


※ 当串行接口板上的 DIP 开关是“ON”时，DTR 和 RTS 会相互连接在一起。

SRP-370/372 连接器
(串行接口)

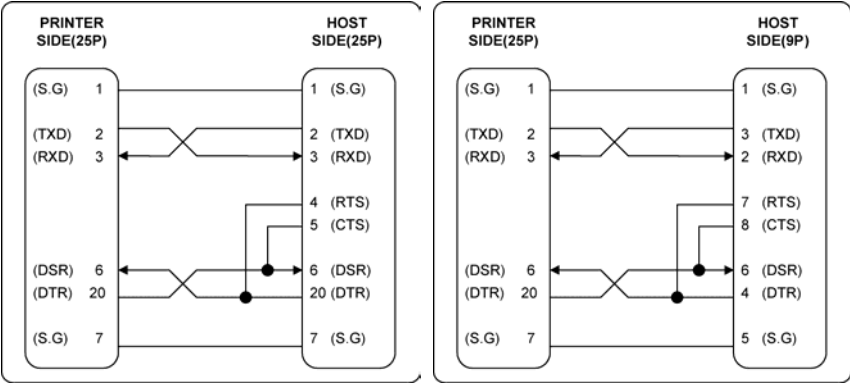


SRP-370P/372P 连接器
(并行接口)



SRP-370U/372U 连接器
(USB 接口)

RS-232C 电缆连接器



接口连接器

串行接口（RS-232）			
插脚编号	信号名	方向	功能
1	FG	—	机座接地
2	TxD	输出	发送数据
3	RxD	输入	接收数据
4	RTS	输出	准备发送
5	CTS	输入	清除发送
6	DSR	输入	数据集就绪
7	SG	—	信号接地
20	DTR	输出	数据终端就绪

并行接口（IEEE-1284）

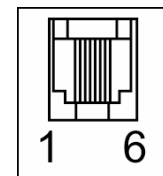
插脚编号	来源	兼容模式	四位模式	字节模式
1	主机	nStrobe	HostClk	HostClk
2	主机/打印机	数据 0 (LSB)	–	数据 0 (LSB)
3	主机/打印机	数据 1	–	数据 1
4	主机/打印机	数据 2	–	数据 2
5	主机/打印机	数据 3	–	数据 3
6	主机/打印机	数据 4	–	数据 4
7	主机/打印机	数据 5	–	数据 5
8	主机/打印机	数据 6	–	数据 6
9	主机/打印机	数据 7 (MSB)	–	数据 7 (MSB)
10	打印机	nAck	PtrClk	PtrClk
11	打印机	忙	PtrBusy /Data3, 7	PtrBusy
12	打印机	Perror	AckDataReq/Data2, 6	AckDataReq
13	打印机	选择	Xflag /Data1, 5	Xflag
14	主机	nAutoFd	HostBusy	HostBusy
15		NC	NC	NC
16		GND	GND	GND
17		FG	FG	FG
18	打印机	Logic-H	Logic-H	Logic-H
19~30		GND	GND	GND
31	主机	nInit	nInit	nInit
32	打印机	nFault	nDataAvail /Data0, 4	nDataAvail
33		GND	ND	ND
34	打印机	DK_Status	ND	ND
35	打印机	+5V	ND	ND
36	主机	nSelectIn	1284-Active	1284-Active

Chinese

抽屉连接器

插脚编号	信号名	方向
1	机座接地	–
2	抽屉推出驱动信号 1	输出
3	抽屉打开/关闭信号	输入
4	+24V	–
5	抽屉推出驱动信号 2	输出
6	信号接地	–

Chinese



B. 注意

打印机内部的不清洁可能会降低打印质量。在这种情况下，请按照如下内容清理打印机。

- 1) 打开打印机机盖，取出其中可能的纸张。
- 2) 使用酒精溶剂棉拭，清理打印头。
- 3) 使用润湿的棉拭清理压纸卷轴滚筒和纸端传感器。
- 4) 插入纸卷，关闭打印机机盖。

纸端传感器检测的纸张余量与纸芯的直径成正比。若要调整该余量，请与当地的经销商联系。

USB 接口

插脚编号	信号名	分配（色）	功能
外壳	屏蔽	漏电引出线	机座接地
1	VBUS	红色	主机电源
2	D	白色	数据线（D-）
3	D	绿色	数据线（D+）
4	GND	黑色	信号接地

C. 技术规范

打印方法		热敏行式打印	
点密度		180 X 180 dpi (7点/毫米)	203 X 203 dpi (8点/毫米)
打印宽度		57.5毫米, 72.192 ± 0.2毫米	
纸张宽度		58毫米, 80毫米, 82.5 毫米	
每行字符数（默认）		180 DPI 42（字体 A） 56（字体 B）	203 DPI 48（字体 A） 64（字体 B）
打印速度	180 DPI	单色：47 行/秒（1/6” 进纸）200毫米/秒 彩色23.6 行/秒（1/6” 进纸）100毫米/秒	
	203 DPI	单色：42 行/秒（1/6” 进纸）180毫米/秒 彩色21 行/秒（1/6” 进纸）100毫米/秒	
接收缓冲器大小		4k 字节	
注意：打印速度可能会降低，具体情况取决于数据传输速度和控制命令的组合情况。			
电源电压	输入电压	100~240 VAC	
	频率	50/60 Hz	
	输出电压	+24 VDC	
环境条件	温度	0 ~ 45 ℃（运行） -10 ~ 50 ℃（存储）	
	湿度	30 ~ 80 % RH（运行） 10 ~ 90 % RH（存储）；纸张除外	
MCBF *	机械装置	单色：70,000,000 行 双色：35,000,000 行	
自动切纸器寿命*		切割 1,200,000 次	

* 这些值是根据第 2 打印级别使用正常温度下建议使用的纸张计算出来的。

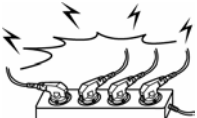
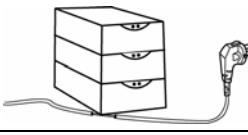
* 这些值的具体数字可能会因为环境温度、打印级别等的变化而变化。

Chinese

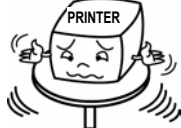
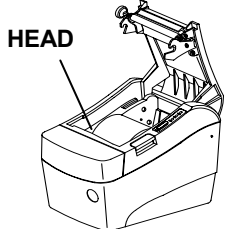
English

Safety Precautions

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

 WARNING Violating following instructions can cause serious injury or death.	
Do not plug several products in one multi-outlet. - This can provoke over-heating and a fire. - If the plug is wet or dirty, dry or wipe it before usage. - If the plug does not fit perfectly with the outlet, do not plug in. - Be sure to use only standardized multi-outlets.	You must use only the supplied adapter. It is dangerous to use other adapters.
PROHIBITED  	PROHIBITED  
Do not pull the cable to unplug. This can damage the cable, which is the origin of a fire or a breakdown of the printer.	Keep the plastic bag out of children's reach. If not, a child may put the bag on his head.
PROHIBITED  	PROHIBITED  
Do not plug in or unplug with your hands wet. You can be electrocuted.	If you observe a strange smoke, odor or noise from the printer, unplug it before taking following measures. - Switch off the printer and unplug the set from the mains. - After the disappearance of the smoke, call your dealer to repair it.
PROHIBITED  	TO UNPLUG  
Do not bend the cable by force or leave it under any heavy object. A damaged cable can cause a fire.	
PROHIBITED  	

English

 WARNING Violating following instructions can cause slight wound or damage the appliance.	
Keep the desiccant out of children's reach. If not, they may eat it.	Install the printer on the stable surface. If the printer falls down, it can be broken and you can hurt yourself.
PROHIBITED  	PROHIBITED  
Use only approved accessories and do not try to disassemble, repair or remodel it for yourself. Call your dealer when you need these services.	Do not touch the HEAD of printer with your hand. This can burn your hand or deteriorate printing quality.
DISASSEMBLING PROHIBITED  	PROHIBITED  
Do not let water or other foreign objects in the printer. If this happened, switch off and unplug the printer before calling your dealer.	Do not use the printer when it is out of order. This can cause a fire or an electrocution. Switch off and unplug the printer before calling your dealer.
PROHIBITED  	TO UNPLUG  

English

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:

1. High speed printing : 47(1/6" Feed) lines per second.
2. Low noise thermal printing.
3. RS-232, Parallel, USB
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.
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.
8. Different print densities can be selected by DIP switches.

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.

※ **All specifications are subjected to change without notice.**

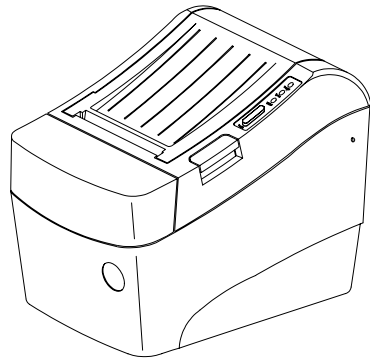
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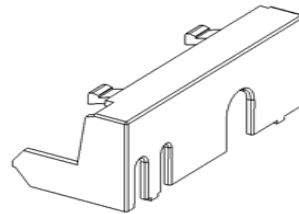
Chapter 1. Setting Up the Printer

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

English



Roll Paper



Operator's manual



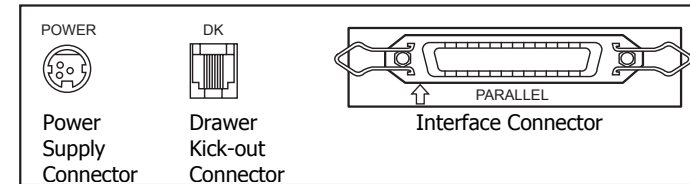
AC Adapter



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:



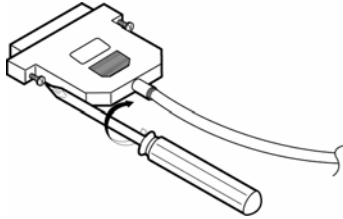
Notes : Before connecting any of the cables, make sure that both the printer and the host are turned off.

English

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.

English

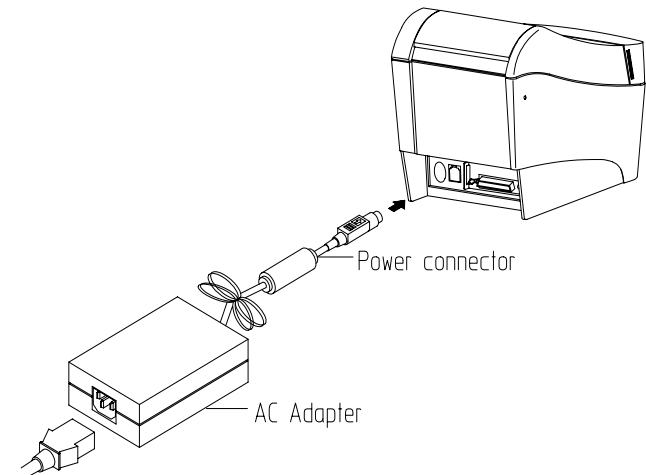
1-5. Connecting the Power Supply

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 up.



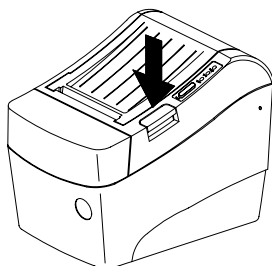
English

Notes : 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.

1-6. Installing or Replacing the Paper Roll

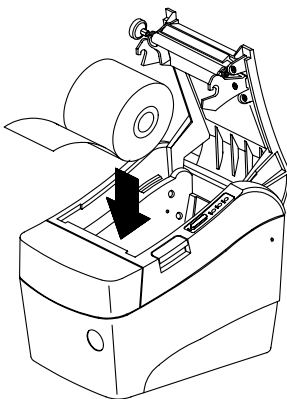
Notes : Be sure to use paper rolls that meet the specifications. Do not use paper rolls that have the paper glued to the core because the printer cannot detect the paper end correctly.

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.

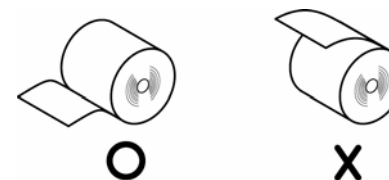


Notes : Do not open the print cover while the printer is operating. This may damage the printer.

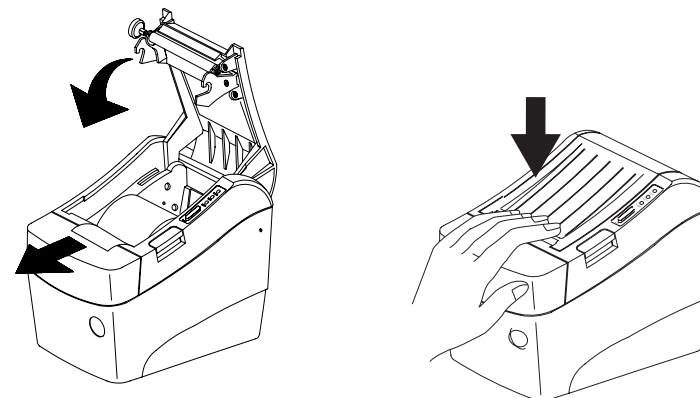
3. Remove the used paper roll core if there is one.
4. Insert the paper roll as shown.



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

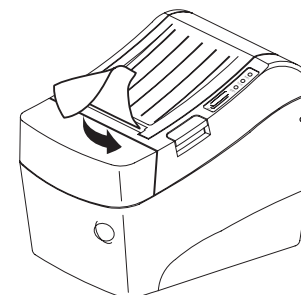


6. Pull out a small amount of paper, as shown. Then close the cover.

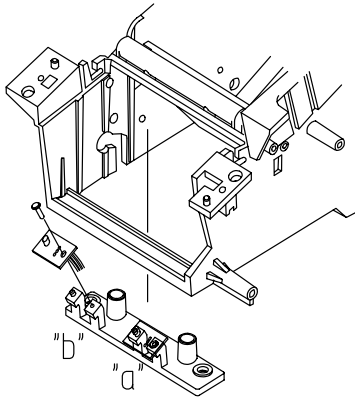


Notes : When closing the cover, press the center of printer cover firmly to prevent paper miss-loading

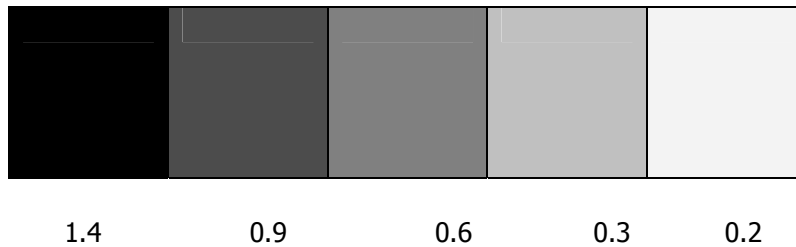
7. Tear off the paper as shown.



1-7. Adjustments and Settings

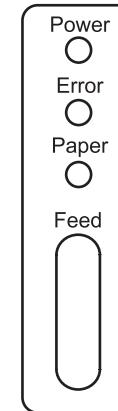


- 1) It has 2 features ; Paper end and Black mark. For detecting Paper End, it must be positioned at "a" Position in drawing and it is a factory default setting. For detecting Black mark printed on the paper, it must be moved to "b" position.
- 2) Optical density (O.D) must be higher than 0.6 in density 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.

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	Baud Rate Selection	* Refer to below Table		OFF
SW1-2				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	Select Print Density	* Refer to below Table		OFF
SW2-2				OFF
SW2-3				OFF
SW2-4	Historical Control	Enable	Disable	OFF
SW2-5	Reserved	--		OFF
SW2-6	Interface Condition Selection	by Memory Switch	by DIP Switch	OFF
SW2-7	Reserved	--		OFF
SW2-8	Printing width	2" Printing	3" Printing	OFF

* Print Density

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%	

Parallel/USB Interface Specification

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

* Print Density

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%	

※ Auto Cutter Enable / Disable selection

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

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	Font Selection	Font B (9 x 24)	Font A (12 x 24)
2	Auto Cutter Function	Full Cutting	Partial Cutting
3	Reserved	--	Fixed to OFF
4~8	Code Page Selection	Refer to following Table	

English

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	Reserved
OFF	ON	ON	ON	ON	
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	
ON	ON	OFF	OFF	ON	
ON	ON	OFF	ON	OFF	Page 36 855
ON	ON	OFF	ON	OFF	Page 37 857

MSW8

Switch	Function	ON	OFF
1~8	Reserved	--	Fixed to OFF

MSW9

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 following Table	

MSW9-8	MSW9-7	MSW9-6	Baud Rate
OFF	OFF	OFF	9600
OFF	OFF	ON	19200
OFF	ON	OFF	38400
OFF	ON	ON	57600
ON	OFF	OFF	115200

English

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.
- 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.

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.
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 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.

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

Page 1 (Katakana)

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

English

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

English

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	Í	■	Ł	⌌	α	
		128	144	160	176	192	208	224	240
1	0001	Ü	Ê	Ĳ	■	⌌	⌌	β	±
		129	145	161	177	193	209	225	241
2	0010	É	Ê	Ó	■	⌌	⌌	Γ	≥
		130	146	162	178	194	210	226	242
3	0010	â	ô	ú	ı	Ł	⌌	π	≤
		131	147	163	179	195	211	227	243
4	0100	Â	Ë	ˆ	ı	—	Ł	Σ	ƒ
		132	148	164	180	196	212	228	244
5	0101	à	ı	ˆ	ı	+	Ł	σ	Ƶ
		133	149	165	181	197	213	229	245
6	0110		û	³	ı	Ł	⌌	μ	÷
		134	150	166	182	198	214	230	246
7	0111	ç	ù	—	ı	Ł	⌌	τ	≈
		135	151	167	183	199	215	231	247
8	1000	ê	ÿ	ı	⌌	⌌	+	Φ	•
		136	152	168	184	200	216	232	249
9	1001	ë	Ö	ı	ı	Ł	⌌	θ	•
		137	153	169	185	201	217	233	249
A	1010	è	Ü	ı	⌌	⌌	⌌	Ω	•
		138	154	170	186	202	218	234	250
B	1011	ï	ø	1/2	ı	⌌	■	δ	
		139	155	171	187	203	219	235	251
C	1100	î	£	1/4	ı	Ł	■	∞	n
		140	156	172	188	204	220	236	252
D	1101	=	Ù	3/4	ı	=	ı	φ	²
		141	157	173	189	205	221	237	253
E	1110	À	Û	«	ı	ı	ı	▪	
		142	158	174	190	206	222	238	254
F	1111	Š	f	»	ı	ı	■	SP	
		143	159	175	191	207	223	239	255

English

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

English

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

Page 16 (WPC1252 : Latin 1)

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

Page 17 (PC866 : Cyrillic #2)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	⌘	Ł	đ	Ó	-
		128	144	160	176	192	208	224	240
1	0001	ü	Ĺ	í	⌘	Ł	Đ	B	ˆ
		129	145	161	177	193	209	225	241
2	0010	é	Í	ó	⌘	Ł	Đ	Ô	˘
		130	146	162	178	194	210	226	242
3	0011	â	Ô	ú		Ł	Ě	Ň	˘
		131	147	163	179	195	211	227	243
4	0100	û	Ö	Ä	┘	-	ä	ň	˘
		132	148	164	180	196	212	228	244
5	0101	č	Ľ	ą	Á	+	Ň	ň	§
		133	149	165	181	197	213	229	245
6	0110	Ç	İ	Ž	Ā	Ā	İ	Š	+
		134	150	166	182	198	214	230	246
7	0111	Ĺ	Š	ž	Ě	ä	İ	š	˘
		135	151	167	183	199	215	231	247
8	1000	ı	ś	Ę	Ş	Ł	ě	Ř	°
		136	152	168	184	200	216	232	248
9	1001	ë	Ö	ę	Ł	Ł	Ú	ˆ	ˆ
		137	153	169	185	201	217	233	249
A	1010	Ö	Ü	˘	Ł	Ł	ı	˘	˘
		138	154	170	186	202	218	234	250
B	1011	ö	Ť	Ž	Ł	Ł	Ů	Ů	ˆ
		139	155	171	187	203	219	235	251
C	1100	İ	İ	Č	Ł	Ł	˘	Ř	ˆ
		140	156	172	188	204	220	236	252
D	1101	Ž	Ł	Ę	Ž	=	J	Ý	ř
		141	157	173	189	205	221	237	253
E	1110	Ä	x	«	ž	Ł	Ů	ı	˘
		142	158	174	190	206	222	238	254
F	1111	Č	č	»	Ł	Ł	˘	˘	˘
		143	159	175	191	207	223	239	255

Page 18 (PC852 : Latin2)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	Ç	É	á	■	Ł	ð	ó	-
		128	144	160	176	192	208	224	240
1	0001	ü	æ	az	■	Ł	ð	β	±
		129	145	161	177	193	209	225	241
2	0010	é	Æ	ó	■	Ł	é	ô	=
		130	146	162	178	194	210	226	242
3	0011	â	ô	ú		Ł	é	ô	3/4
		131	147	163	179	195	211	227	243
4	0100	ä	ö	-	+	-	é	ô	¶
		132	148	164	180	196	212	228	244
5	0101	à	ò	˘	A	+	é	σ	§
		133	149	165	181	197	213	229	245
6	0110	á	û	˘	A	ä	ı	μ	÷
		134	150	166	182	198	214	230	246
7	0111	ç	ù	-	A	Ä	ı	þ	˘
		135	151	167	183	199	215	231	247
8	1000	â	ÿ	İ	©	Ł	ı	þ	˘
		136	152	168	184	200	216	232	248
9	1001	ë	ö	˘	Ł	Ł	Ú	ˆ	ˆ
		137	153	169	185	201	217	233	249
A	1010	è	Ü	˘	Ł	Ł	Ú	ˆ	ˆ
		138	154	170	186	202	218	234	250
B	1011	İ	ø	1/2	Ł	Ł	■	ù	1
		139	155	171	187	203	219	235	251
C	1100	İ	£	1/4	Ł	Ł	■	ý	3
		140	156	172	188	204	220	236	252
D	1101	İ	ø	3/4	Ł	=	ı	Ý	2
		141	157	173	189	205	221	237	253
E	1110	Ä	x	«	Ł	Ł	ı	-	˘
		142	158	174	190	206	222	238	254
F	1111	Ä	f	»	Ł	Ł	˘	˘	SP
		143	159	175	191	207	223	239	255

Page 19 (PC858 : Euro)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	°	β	NBSP	·	¢	ز	-	‘
		128	144	160	176	192	208	224	240
1	0001	·	∞	—	ٲ	ء	ر	ف	’
		129	145	161	177	193	209	225	241
2	0010	·	φ	ī	ٲ	ā	ز	ق	ن
		130	146	162	178	194	210	226	242
3	0011	√	±	£	ٲ	ā	س	ك	ه
		131	147	163	179	195	211	227	243
4	0100	■	½	¤	£	ؤ	ش	ل	+
		132	148	164	180	196	212	228	244
5	0101	—	¼	ī	ه	م	ص	م	ى
		133	149	165	181	197	213	229	245
6	0110		≈		ٲ	ؤ	ض	ن	ي
		134	150	166	182	198	214	230	246
7	0111	+	«		ٲ	ا	ط	ه	غ
		135	151	167	183	199	215	231	247
8	1000	+	»	ل	ٲ	ب	ظ	و	ق،
		136	152	168	184	200	216	232	248
9	1001	+	لا	ب	ٲ	ة	ع	ى	لا
		137	153	169	185	201	217	233	249
A	1010	+	لا	ت	ف	ت	غ	ي	لا
		138	154	170	186	202	218	234	250
B	1011	+		ث	؛	ؤ	ا	ض	ل
		139	155	171	187	203	219	235	251
C	1100	┐		،	س	چ	┐	ع	ك
		140	156	172	188	204	220	236	252
D	1101	┐	لا	ج	ش	ح	÷	م	ي
		141	157	173	189	205	221	237	253
E	1110	┐	لا	س	ص	خ	×	غ	■
		142	158	174	190	206	222	238	254
F	1111	┐	ل	خ	؟	ر	ع	م	
		143	159	175	191	207	223	239	255

Page 22 (PC864 : Arabic)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	┐	○		ฅ	ย	เ	’	ฅ
		128	144	160	176	192	208	224	240
1	0001	┐	๑	ก	ฅ	ร	แ	๖	ฅ
		129	145	161	177	193	209	225	241
2	0010	┐	๒	ข	ค	ถ	โ	๖	ฅ
		130	146	162	178	194	210	226	242
3	0011	┐	๓	ค	ด	ล	ไ	๖	ฅ
		131	147	163	179	195	211	227	243
4	0100		๔	ฅ	ถ	ว	ไ	๖	ฅ
		132	148	164	180	196	212	228	244
5	0101	—	๕	ง	ท	ศ	จ	๖	ฅ
		133	149	165	181	197	213	229	245
6	0110	┐	๖	จ	ต	ช	๖	๖	ฅ
		134	150	166	182	198	214	230	246
7	0111	┐	๗	ฉ	น	ส	๖	๖	ฅ
		135	151	167	183	199	215	231	247
8	1000	┐	๘	ช	บ	ห	๖	๖	ฅ
		136	152	168	184	200	216	232	248
9	1001	┐	๙	ช	ป	พ	๖	๖	ฅ
		137	153	169	185	201	217	233	249
A	1010	┐	๑๐	ฅ	ผ	อ	๖	๖	ฅ
		138	154	170	186	202	218	234	250
B	1011	■	๑๑	ฅ	ฝ	ฮ	๖	๖	ฅ
		139	155	171	187	203	219	235	251
C	1100	←	๑๒	ฅ	พ	๖	๖	๖	ฅ
		140	156	172	188	204	220	236	252
D	1101	↑	๑๓	ฅ	ฟ	ภ	๖	๖	ฅ
		141	157	173	189	205	221	237	253
E	1110	→	๑๔	ฅ	ภ	จ	๖	๖	ฅ
		142	158	174	190	206	222	238	254
F	1111	↓	๑๕	๑	ฅ	๖	๖	๖	ฅ
		143	159	175	191	207	223	239	255

Page 23 (Thai character code 42)

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

Page 24 (WPC1253 : Greek)

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

Page 28 (WPC1251 : Cyrillic)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	A	P	ι	⏏	⏏	⏏	ω	Ω
		128	144	160	176	192	208	224	240
1	0001	B	Σ	κ	⏏	⏏	⏏	ά	±
		129	145	161	177	193	209	225	241
2	0010	Γ	T	λ	⏏	⏏	⏏	έ	≥
		130	146	162	178	194	210	226	242
3	0011	Δ	Υ	μ	⏏	⏏	⏏	ή	≤
		131	147	163	179	195	211	227	243
4	0100	E	Φ	ν	⏏	⏏	⏏	ϊ	Ï
		132	148	164	180	196	212	228	244
5	0101	Z	X	ξ	⏏	⏏	⏏	ί	ÿ
		133	149	165	181	197	213	229	245
6	0110	H	Ψ	ο	⏏	⏏	⏏	ό	÷
		134	150	166	182	198	214	230	246
7	0111	Θ	Ω	π	⏏	⏏	⏏	ù	≈
		135	151	167	183	199	215	231	247
8	1000	I	α	ρ	⏏	⏏	⏏	ü	°
		136	152	168	184	200	216	232	248
9	1001	K	β	σ	⏏	⏏	⏏	ώ	·
		137	153	169	185	201	217	233	249
A	1010	Λ	ϣ	ς	⏏	⏏	⏏	À	·
		138	154	170	186	202	218	234	250
B	1011	M	δ	τ	⏏	⏏	⏏	É	√
		139	155	171	187	203	219	235	251
C	1100	N	ε	υ	⏏	⏏	⏏	Η	ⁿ
		140	156	172	188	204	220	236	252
D	1101	Ξ	ζ	φ	⏏	⏏	⏏	Ι	²
		141	157	173	189	205	221	237	253
E	1110	O	η	χ	⏏	⏏	⏏	Ο	■
		142	158	174	190	206	222	238	254
F	1111	Π	Θ	ψ	⏏	⏏	⏏	Υ	NBSP
		143	159	175	191	207	223	239	255

Page 29 (PC737 : Greek)

	HEX	8	9	A	B	C	D	E	F
HEX	BIN	1000	1001	1010	1011	1100	1101	1110	1111
0	0000	SP	SP	SP	SP	SP	SP	SP	SP
		128	144	160	176	192	208	224	240
1	0001	SP	SP	SP	SP	SP	SP	SP	SP
		129	145	161	177	193	209	225	241
2	0010	SP	SP	SP	SP	SP	SP	SP	SP
		130	146	162	178	194	210	226	242
3	0011	SP	SP	SP	SP	SP	SP	SP	SP
		131	147	163	179	195	211	227	243
4	0100	SP	ö	SP	SP	SP	SP	SP	SP
		132	148	164	180	196	212	228	244
5	0101	SP	SP	SP	SP	SP	SP	SP	SP
		133	149	165	181	197	213	229	245
6	0110	SP	SP	SP	SP	SP	SP	SP	SP
		134	150	166	182	198	214	230	246
7	0111	SP	SP	SP	SP	SP	SP	SP	SP
		135	151	167	183	199	215	231	247
8	1000	SP	SP	SP	SP	SP	SP	SP	SP
		136	152	168	184	200	216	232	248
9	1001	SP	SP	SP	SP	SP	SP	SP	SP
		137	153	169	185	201	217	233	249
A	1010	SP	SP	SP	SP	SP	SP	SP	SP
		138	154	170	186	202	218	234	250
B	1011	SP	SP	SP	SP	SP	SP	SP	SP
		139	155	171	187	203	219	235	251
C	1100	SP	SP	SP	SP	SP	SP	SP	SP
		140	156	172	188	204	220	236	252
D	1101	SP	SP	SP	SP	SP	SP	SP	SP
		141	157	173	189	205	221	237	253
E	1110	SP	SP	SP	SP	SP	SP	SP	SP
		142	158	174	190	206	222	238	254
F	1111	SP	SP	SP	SP	SP	SP	SP	SP
		143	159	175	191	207	223	239	255

Page 255 (Space Page)

Country	ASCII code (Hex)											
	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
U.S.A	#	\$	@	[	\	]	^	.	{		}	~
France	#	\$	à	°	ç	§	^	.	é	ù	è	..
Germany	#	\$	§	Ä	Ö	Ü	^	.	ä	ö	ü	ß
U.K.	£	\$	@	[	\	]	^	.	{		}	~
Denmark I	#	\$	@	Æ	Ø	Å	^	.	æ	ø	å	~
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	\$	@	°	\	é	^	ù	à	ò	è	i
Spain I	Pt	\$	@	i	Ñ	¿	^	.	ñ	}	}	~
Japan	#	\$	@	[	¥	]	^	.	{		}	~
Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Denmark II	#	\$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Spain II	#	\$	á	i	Ñ	¿	é	.	i	ñ	ó	ú
Latin America	#	\$	á	i	Ñ	¿	é	ü	i	ñ	ó	ú
Korea	#	\$	@	[	₩	]	^	.	{		}	~

English

International Character Set

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
DLE DC4	Generate pulse in real-time
	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

English

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
FS p	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	Set graphics data
GS (L	
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 ID
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
GS r	Transmit status
GS v 0	Print raster bit image
GS w	Set bar code width

English

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]	• Moves the print position to the next horizontal tab position.

LF

[Name]	Print and line feed.
[Format]	ASCII LF Hex 0A Decimal 10
[Description]	• In standard mode, prints the data in the print buffer and feeds one line based on the current line spacing. • In page mode, modes the print position in memory to feed one line based on the current line spacing.

FF

[Name]	Print and return to standard mode in page mode.
[Format]	ASCII FF Hex 0C Decimal 12
[Description]	• In page mode, prints the data in the print buffer collectively and returns to standard mode.

English

CR		
[Name]	Print and carriage return.	
[Format]	ASCII	CR
	Hex	0D
	Decimal	13
[Description]	When automatic line feed is enabled, this command functions the same as LF.	
[Notes]	When automatic line feed is disabled, this command is ignored CR.	
	The automatic line feed is ignored with a serial interface model.	
	With a parallel interface model, the automatic line feed is set with memory switch 1-5 when the printer power is turned on or reset.	

CAN		
[Name]	Cancel print data in page mode.	
[Format]	ASCII	CAN
	Hex	18
	Decimal	24
[Description]	▪ In page mode, deletes all the print data in the current printable area.	

DLE EOT n				
[Name]	Transmission real-time status.			
[Format]	ASCII	DLE	EOT	n
	Hex	10	04	n
	Decimal	16	4	n
[Range]	$1 \leq n \leq 4$			
[Description]	Transmits the status specified by n in real-time as follows:			

n	Function
1	Transmit printer status.
2	Transmit off-line status.
3	Transmit error status.
4	Transmit paper roll sensor status.

- This printer transmits the following status in real time.

English

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.
	Off	00	0	No paper-end stop.
5	On	20	32	Printing is being stopped.
	Off	00	0	No error.
6	On	40	64	Error has occurred.
	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.
3	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.

English

n=4 : Continuous paper sensor status

Bit	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.

- [Notes]
- If print data includes a character string with this command, the printer performs this 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.
 - For example : Bit image data might include this command.
 - This command is ignored block data is transmitted.

English

DLE ENQ n

[Name]	Real-time request to printer.			
[Format]	ASCII	DLE	ENQ	n
	Hex	10	05	n
	Decimal	16	5	n
[Range]	0 ≤ n ≤ 2			
[Description]	• Responds to a request from the host computer. - n specifies the requests as follows :			

n	Request
0	Works the same as when the paper FEED button is pressed once during waiting status during the operation of the GS ^ command.
1	Recovers from an error and restarts printing from the line where the error occurred.
2	Recovers from an error after clearing the receive and print buffers.

- [Notes]
- Specify n=1 or 2 after removing the cause of the error.
 - 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.
 - For example : Bit image data might include this command.
 - This command is ignored block data is transmitted.
 - This command is ignored block data is transmitted.

DLE DC4 fn m t (fn=1)

[Name]	Generate pulse in real-time.					
[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 ≤ t ≤ 8					
[Description]	• Outputs the pulse specified by t in real-time to the connector pin specified by m as follows :					

n	Connector pin
0	Drawer kick-out connector pin 2.
1	Drawer kick-out connector pin 5.

- The pulse ON time or OFF time is set to [t x 100 ms].
- Specify n=1 or 2 after removing the cause of the error.
- 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.
 - For example : Bit image data might include this command.
- This command is ignored in the following states :
 - During transmission of block data.
 - During driving of drawer kick-out.
- When an error has occurred.

English

DLE DC4 fn a b (fn=2)

[Name]	Execute power-off sequence.					
[Format]	ASCII	DLE	DC4	fn	a	b
	Hex	10	14	fn	a	b
	Decimal	16	20	fn	a	b
[Range]	fn=2					
	a=1					
	b=8					
[Description]	• Executes the printer power-off sequence. - Stores the values of the maintenance counter. - Transmits the following power-off status (Header + Status + NUL).					

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.
 - For example : Bit image data might include this command.
 - This command is ignored block data is transmitted.

DLE DC4 fn d1...d7 (fn=8)

[Name]	Clear buffer(s).					
[Format]	ASCII	DLE	DC4	fn	d1...d7	
	Hex	10	14	8	d1...d7	
	Decimal	16	20	8	d1...d7	
[Range]	fn=8 d1=1, d2=3, d3=20, d4=1, d5=6, d6=2, d7=8					
[Description]	▪ Clear all data stored in the receive buffer and the print buffer. ▪ Transmits the following three bytes data.					

	Hex	Decimal	Amount of data
Header	37 H	55	1 byte
Flag	25 H	37	1 byte
NUL	00 H	0	1 byte

- [Notes]
- Enters standard mode.
 - The command must be inhibited for use in a system using this printer and the EPSON OPOS.
 - 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.
 - For example : Bit image data might include this command.
 - This command is ignored block data is transmitted.

ESC FF

[Name]	Print data in page mode.		
[Format]	ASCII	ESC	FF
	Hex	1B	0C
	Decimal	27	12
[Description]	▪ In page mode, prints all buffered data in the printing area collectively.		

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			
[Default]	n=0			
[Description]	▪ 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"}.			

ESC ! n

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

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Character font A (12 × 24) selected.
	On	01	1	Character font B (9 × 24) selected.
1,2	Off	00	0	Reserved.
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	Off	00	0	Reserved.
7	Off	00	0	Underline mode not selected.
	On	80	128	Underline mode selected.

ESC \$ nL nH					
[Name]	Set absolute print position.				
[Format]	ASCII	ESC	\$	nL	nH
	Hex	1B	24	nL	nH
	Decimal	27	36	nL	nH
[Range]	$0 \leq (nL + nH \times 256) \leq 65535$ ($0 \leq nH \leq 255, 0 \leq nL \leq 255$)				
[Description]	Sets the next print starting position, and the absolute print position, in reference to the left margin. The distance from the beginning of the line to the left margin is $[(nL + nH \times 256) \times (\text{vertical or horizontal motion units})]$.				

ESC % n				
[Name]	Select/cancel user-defined character set.			
[Format]	ASCII	ESC	%	n
	Hex	1B	25	n
	Decimal	27	37	n
[Range]	$0 \leq n \leq 255$			
[Default]	n=0			
[Description]	- Select or cancels the user-defined character set. - When the LSB of n is 0, the user-defined character set is canceled. - When the LSB of n is 1, the user-defined character set is selected.			

ESC & y c1 c2 [x1 d1...d(y x 1)]...[xk d1...d(y x xk)]							
[Name]	Define user-defined characters.						
[Format]	ASCII	ESC	&	y	c1	c2	[x1 d1...d(y x 1)]...[xk d1...d(y x xk)]
	Hex	1B	26	y	c1	c2	[x1 d1...d(y x 1)]...[xk d1...d(y x xk)]
	Decimal	27	38	y	c1	c2	[x1 d1...d(y x 1)]...[xk d1...d(y x xk)]
[Range]	For SRP-370						
[Default]	y=3						
	$32 \leq c1 \leq c2 \leq 126$						
	$0 \leq x \leq 12$ (when font A (12 x 24) is selected)						
	$0 \leq x \leq 9$ (when font B (9 x 24) is selected)						
	$0 \leq d \leq 255$						
	k=c2-c1+1						
	For SRP-372						
	y=3 (when font A (12 x 24) is selected).						
	y=3 (when font C (8 x 16) selected)						
	$32 \leq c1 \leq c2 \leq 126$						
	$0 \leq x \leq 12$ (when font A (12 x 24) is selected)						
	$0 \leq x \leq 9$ (when font B (9 x 24) is selected)						
	$0 \leq d \leq 255$						
	k=c2-c1+1						
[Description]	- Assigns the user-defined character pattern for the specified character codes. - 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. - x specifies the number of dots in the horizontal direction. - d specifies the definition data.						

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, 32, 33						
	$1 \leq (nL + nH \times 256) \leq 1023$ ($0 \leq nL \leq 255, 0 \leq nH \leq 3$)						
	$0 \leq d \leq 255$						
[Description]	Specifies the bit image in m mode for the number of dots specified by nL and nH.						

- For SRP-370

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	$nL + nH \times 256$
1	8-dot double-density	8	60 dpi	180 dpi	$nL + nH \times 256$
32	24-dot single-density	24	180 dpi	90 dpi	$(nL + nH \times 256) \times 3$
33	24-dot double-density	24	180 dpi	180 dpi	$(nL + nH \times 256) \times 3$

* 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	$nL + nH \times 256$
1	8-dot double-density	8	203/3 dpi	203 dpi	$nL + nH \times 256$
32	24-dot single-density	24	203 dpi	203/2 dpi	$(nL + nH \times 256) \times 3$
33	24-dot double-density	24	203 dpi	203 dpi	$(nL + nH \times 256) \times 3$

ESC - n				
[Name]	Turn underline mode on/off.			
[Format]	ASCII	ESC	-	n
	Hex	1B	2D	n
	Decimal	27	45	n
[Range]	$0 \leq n \leq 2, 48 \leq n \leq 50$			
[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.

ESC 2

[Name]	Select default line spacing.			
[Format]	ASCII	ESC	2	
	Hex	1B	32	
	Decimal	27	50	
[Description]	- For SRP-370 - Sets the current line spacing to approximately 4.23mm {1/6"}. - For SRP-372 - Sets the current line spacing to approximately 3.75mm {30/203"}.			

ESC 3 n

[Name]	Set line spacing			
[Format]	ASCII	ESC	3	n
	Hex	1B	33	n
	Decimal	27	51	n
[Range]	0 ≤ n ≤ 255			
[Default]	- For SRP-370 - Equivalent to approximately 4.23mm {1/6"}. - For SRP-372 - Equivalent to approximately 3.75mm {30/203"}.			
	Sets the current line spacing to [n x vertical motion units] inches.			
[Notes]	- For SRP-370 - The maximum settable line spacing is 1016mm {40"}. - For SRP-372 - The maximum settable line spacing is 900mm {35.5"}.			

ESC = n

[Name]	Select peripheral device.				
[Format]	ASCII	ESC	=	n	
	Hex	1B	3D	n	
	Decimal	27	61	n	
[Range]	0 ≤ n ≤ 3				
[Default]	▪ Serial interface specification :				
	- When turning on the printer : n=1 - When executing ESC @ :				
[Description]	Setting before executing ESC @		n		
			1	2	3
	After ESC @ processing		1	2	1
	▪ Selects device to which host computer sends data, using n as follows :				
	n	Function			
1	Specifies printer only.				
2	Specifies customer display only.				
3	Specifies printer and customer display.				

ESC ? n

[Name]	Cancel user-defined characters.			
[Format]	ASCII	ESC	?	n
	Hex	1B	3F	n
	Decimal	27	63	n
[Range]	32 ≤ n ≤ 126			
[Description]	Cancels user-defined characters, specified with character codes on a selected sheet.			

ESC @

[Name]	Initialize printer.			
[Format]	ASCII	ESC	@	
	Hex	1B	40	
	Decimal	27	64	
[Range]	32 ≤ n ≤ 126			
[Description]	Clears the data in the print buffer and resets the printer mode to the mode that were 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	00
	Decimal	27	68	n1...nk	0
[Range]	1 ≤ n ≤ 255				
	0 ≤ k ≤ 32				
[Default]	n=8, 16, 24, 32, 40,....., 232, 240, 248 (for font A in a standard character size width)				
[Description]	Sets horizontal tab positions.				
	- n specifies the number of digits from the setting position to the left margin or the beginning of the line.				
	- k specifies the number of bytes set for the horizontal tab position.				

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			
[Default]	n=0			
[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 double-strike mode on/off.			
[Format]	ASCII	ESC	G	n
	Hex	1B	47	n
	Decimal	27	71	n
[Range]	$0 \leq n \leq 255$			
[Default]	n=0			
[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	J	n
	Hex	1B	4A	n
	Decimal	27	74	n
[Range]	$0 \leq n \leq 255$			
[Description]	- Prints the data in the print buffer and feeds the paper [n X vertical motion unit]. - For SRP-370 - The maximum paper feed amount is approximately 1016mm{40"} if [n X vertical motion unit] exceeds 1016mm{40"}. - For SRP-372 - The maximum paper feed amount is approximately 900mm {35.5"} if [n X vertical motion unit] exceeds 900mm {35.5"}.			

ESC L

[Name]	Select page mode.		
[Format]	ASCII	ESC	L
	Hex	1B	4C
	Decimal	27	76
[Description]	Switches from standard mode to page mode.		

ESC M n

[Name]	Select character font.			
[Format]	ASCII	ESC	M	n
	Hex	1B	4D	n
	Decimal	27	77	n
[Range]	For SRP-370 : $n = 0, 1, 48, 49$ For SRP-372 : $0 \leq n \leq 2, 48 \leq n \leq 50$			
[Default]	n=0			
[Description]	Selects only-byte character fonts.			

- For SRP-370 model :

n	Function
0, 48	Character font A (12 × 24) selected.
1, 49	Character font B (9 × 24) selected.

- For SRP-372 model :

n	Function
0, 48	Character font A (12 × 24) selected.
1, 49	Character font B (9 × 24) selected.

ESC R n

[Name]	Select an international character set.		
[Format]	ASCII	ESC	R
	Hex	1B	52
	Decimal	27	82
[Range]	$0 \leq n \leq 13$		
[Default]	n=0		
[Description]	Selects international character set in from the following table :		
n	Character set	n	Character set
0	U.S.A	7	Spain I
1	France	9	Norway
2	Germany	10	Denmark II
3	U.K	11	Spain II
4	Denmark I	12	Latin America
5	Sweden	13	Korea
6	Italy		

ESC S

[Name]	Select standard mode.	
[Format]	ASCII	S
	Hex	1B
	Decimal	27
[Description]	Switches from page mode to standard mode. Any data stored in the printer for printing in page mode is cleared.	

ESC T n

[Name]	Select print direction in page mode.		
[Format]	ASCII	ESC	T
	Hex	1B	54
	Decimal	27	84
[Range]	$0 \leq n \leq 3, 48 \leq n \leq 51$		
[Default]	n=0		
[Description]	Selects the print direction and starting position in page mode.		

n	Print Direction	Starting Position
0,48	Left right	Upper left
1,49	Bottom to top	Lower left
1,50	Right left	Lower right
3,51	Top bottom	Upper right

ESC V n

[Name]	Turn 90°clockwise rotation mode on/off.			
[Format]	ASCII	ESC	V	n
	Hex	1B	56	n
	Decimal	27	86	n
[Range]	0 ≤ n ≤ 2, 48 ≤ n ≤ 50			
[Default]	n=0			
[Description]	▪ Turn 90° clockwise rotation mode on/off in standard mode.			
	- When the paper roll is selected :			
	n	Function		
	0, 48	Turn off 90°clockwise rotation mode.		
	1, 49	Turn on 90°clockwise rotation mode.		
	2, 50			

ESC W xL xH yL yH dxL dxH dyL dyH

[Name]	Set relative print position.										
[Format]	ASCII	ESC	W	xL	xH	yL	yH	dxL	dxH	dyL	dyH
	Hex	1B	57	xL	xH	yL	yH	dxL	dxH	dyL	dyH
	Decimal	27	87	xL	xH	yL	yH	dxL	dxH	dyL	dyH
[Range]	0 ≤ (xL + xH x 256) ≤ 65535 (0 ≤ xL ≤ 255, 0 ≤ xH ≤ 255)										
	0 ≤ (yL + yH x 256) ≤ 65535 (0 ≤ yL ≤ 255, 0 ≤ yH ≤ 255)										
	1 ≤ (dxL + dxH x 256) ≤ 65535 (0 ≤ dxL ≤ 255, 0 ≤ dxH ≤ 255)										
	1 ≤ (dyL + dyH x 256) ≤ 65535 (0 ≤ dyL ≤ 255, 0 ≤ dyH ≤ 255)										
[Default]	▪ For SRP-370 :										
	- When a paper width of 80mm{3.15"} is selected :										
	(xL + xH x 256) = 0 (xL=0, xH=0)										
	(yL + yH x 256) = 0 (yL=0, yH=0)										
	(dxL + dxH x 256) = 512 (dxL=0, dxH=2)										
	(dyL + dyH x 256) = 1662 (dyL=126, dyH=6)										
	- When a paper width of 60mm{2.36"} is selected :										
	(xL + xH x 256) = 0 (xL=0, xH=0)										
	(yL + yH x 256) = 0 (yL=0, yH=0)										
	(dxL + dxH x 256) = 360 (dxL=104, dxH=1)										
	(dyL + dyH x 256) = 1662 (dyL=126, dyH=6)										

English

- For SRP-372 :
 - When a paper width of 80mm{3.15"} is selected :
 - (xL + xH x 256) = 0 (xL=0, xH=0)
 - (yL + yH x 256) = 0 (yL=0, yH=0)
 - (dxL + dxH x 256) = 576 (dxL=64, dxH=2)
 - (dyL + dyH x 256) = 1476 (dyL=196, dyH=5)
 - When a paper width of 60mm{2.36"} is selected :
 - (xL + xH x 256) = 0 (xL=0, xH=0)
 - (yL + yH x 256) = 0 (yL=0, yH=0)
 - (dxL + dxH x 256) = 380 (dxL=128, dxH=1)
 - (dyL + dyH x 256) = 1476 (dyL=196, dyH=5)
- [Description] ▪ Set the position and the size of the printing area.
 - Horizontal starting position = [(xL + xH x 256) x (horizontal motion unites)].
 - Vertical starting position = [(yL + yH x 256) x (vertical motion unites)].
 - Horizontal printing area width = [(dxL + dxH x 256) x (horizontal motion unites)].
 - Vertical printing area width = [(dyL + dyH x 256) x (vertical motion unites)].
- The maximum printable area is 117.263mm {1662/360"} maximum.

ESC \ nL nH

[Name]	Set relative print position.			
[Format]	ASCII	ESC	\	nL nH
	Hex	1B	5C	nL nH
	Decimal	27	92	nL nH
[Range]	0 ≤ (nL + nH x 256) ≤ 65535 (0 ≤ nL ≤ 255, 0 ≤ nH ≤ 255)			
[Description]	▪ Set the print starting position based on the current position to [(nL + nH x 256) x horizontal or vertical motion unit]			
	- When (nL + nH x 256) is positive number, the print starting position is specified to the right based on the current position.			
	- When (nL + nH x 256) is negative number, the print starting position is specified to the left based on the current position.			

ESC a n

[Name]	Select justification.			
[Format]	ASCII	ESC	a	n
	Hex	1B	61	n
	Decimal	27	97	n
[Range]	0 ≤ n ≤ 2, 48 ≤ n ≤ 50			
[Default]	n=0			
[Description]	▪ In standard mode, aligns all the data in one line to the position specified by n as follows :			
	n	Justification		
	0, 48	Left justification		
	1, 49	Centering		
	2, 50	Right justification		

English

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 ≤ n ≤ 255				
[Default]	n=0				
[Description]	▪ Selects the paper sensor(s) to output paper end signals when a paper end is detected.				

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll near-end sensor disable.
	On	01	1	Paper roll near-end sensor enable.
1	Off	00	0	Paper roll near-end sensor disable.
	On	02	2	Paper roll near-end sensor enable.
2	Off	00	0	Paper roll end sensor disable.
	On	04	4	Paper roll end sensor enable.
3	Off	00	0	Paper roll end sensor disable.
	On	08	8	Paper roll end sensor enable.
4~7	-	-	-	Reserved.

[Note] ▪ This command is available only with a parallel interface and is ignored with a serial interface.

ESC c 4 n					
[Name]	Select paper sensor(s) to stop printing.				
[Format]	ASCII	ESC	c	4	n
	Hex	1B	63	34	n
	Decimal	27	99	52	n
[Range]	0 ≤ n ≤ 255				
[Default]	n=0				
[Description]	▪ Selects the paper sensor(s) to use to stop printing when a paper end is detected.				

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll end sensor disable.
	On	01	1	Paper roll end sensor enable.
1	Off	00	0	Paper roll end sensor disable.
	On	02	2	Paper roll end sensor enable.
2~7	-	-	-	Reserved.

ESC c 5 n					
[Name]	Enable / Disable panel button.				
[Format]	ASCII	ESC	c	5	n
	Hex	1B	63	35	n
	Decimal	27	99	53	n
[Range]	0 ≤ n ≤ 255				
[Default]	n=0				
[Description]	▪ Enables or disables the panel buttons.				
	- When the LSB of n is 0, the panel buttons are enabled.				
	- When the LSB of n is 1, the panel buttons are disabled.				
[Notes]	▪ When the printer cover is open, the panel buttons are always ignored regardless of the setting with this command.				

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

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 ≤ t1 ≤ 255, 0 ≤ t2 ≤ 255											
[Description]	• Outputs the pulse specified by t1 and t2 to connector pin m as follows :											
	<table><tr><th>m</th><th>Connector pin</th></tr><tr><td>0, 48</td><td>Drawer kick-out connector pin 2</td></tr><tr><td>1, 49</td><td>Drawer kick-out connector pin 5</td></tr></table>						m	Connector pin	0, 48	Drawer kick-out connector pin 2	1, 49	Drawer kick-out connector pin 5
m	Connector pin											
0, 48	Drawer kick-out connector pin 2											
1, 49	Drawer kick-out connector pin 5											
	• t1 specifies the pulse ON time as [t1 x 2ms], and t2 specifies the pulse OFF time as [t2 x 2ms].											
	• If t2 is smaller than t1, OFF time is set as [t1 x 2ms].											

ESC t n

[Name]	Select character code table.			
[Format]	ASCII	ESC	t	n
	Hex	1B	74	n
	Decimal	27	116	n
[Range]	$0 \leq n \leq 5, 16 \leq n \leq 24, 27 \leq n \leq 30, n=255$			
[Default]	For model without Thai character support : n=0			
	For model with Thai character support : n = 20			
[Description]	• Selects a page n from the character code table.			

n	Page
0	PC437 (USA, standard Europe)
1	Katakana
2	PC850 (Multilingual)
3	PC860 (Portuguese)
4	PC863 (Canadian-French)
5	PC865 (Nordic)
7	855 (Cyrillic)
8	857 (Turkish)
16	WPC1252
17	PC866 (Cyrillic #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 character code 16
33	1255 (Hebrew)
255	User-defined page

ESC { n

[Name]	Turns upside-down printing mode on/off.			
[Format]	ASCII	ESC	{	n
	Hex	1B	7B	n
	Decimal	27	123	n
[Range]	$0 \leq n \leq 255$			
[Default]	n=0			
[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.			

FS p n m

[Name]	Print NV bit image.				
[Format]	ASCII	FS	p	n	m
	Hex	1C	70	n	m
	Decimal	28	112	n	m
[Range]	$1 \leq n \leq 255$				
	$0 \leq m \leq 3, 48 \leq m \leq 51$				
[Description]	• Prints an NV bit image n in m mode.				

dpi : dots per 25.4mm {1"}

- For SRP-370 :

m	Mode	Vertical Dot Density (DPI)	Horizontal Dot Density (DPI)
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

- For SRP-372 :

m	Mode	Vertical Dot Density (DPI)	Horizontal Dot Density (DPI)
0, 48	Normal	203 dpi	203 dpi
1, 49	Double-width	203 dpi	203/2 dpi
2, 50	Double-height	203/2 dpi	203 dpi
3, 51	Quadruple	203/2 dpi	203/2 dpi

FS q n [xL xH yL yH d1...dk]1...[xL xH yL yH d1...dk]n

[Name]	Defined NV bit image.				
[Format]	ASCII	FS	q	n	[xL xH yL d1...dk]1... [xL xH yL d1...dk]n
	Hex	1C	71	n	[xL xH yL d1...dk]1... [xL xH yL d1...dk]n
	Decimal	28	113	n	[xL xH yL d1...dk]1... [xL xH yL d1...dk]n
[Range]	$1 \leq n \leq 255$				
	$1 \leq (xL + xH \times 256) \leq 1023 (0 \leq xL \leq 255, 0 \leq xH \leq 3)$				
	$1 \leq (yL + yH \times 256) \leq 288 (0 \leq yL \leq 255, yH=0,1)$				
	$0 \leq d \leq 255$				
	$k = (xL + xH \times 256) \times (yL + yH \times 256) \times 8$				
[Description]	Either one of the total capacity data [0, 64k, 128k, 192k, 256k, 320k, 384k] bytes can be selected by GS (E . The default value is 384 KB.				
	• Defines the specified NV bit image.				
	- n specifies the number of the NV bit image you are defining.				
	- xL, xH specify the number of dots in the horizontal direction for the NV bit image with [(xL + xH × 256) × 8].				
	- yL, yH specify the number of dots in the vertical direction for the NV bit image with [(yL + yH × 256) × 8].				
[Notes]	• 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.				
	• Frequent write command executions by this command may damage to the NV memory. Therefore, it is recommended to write to the NV memory 10 times or less a day.				
	• During processing of this command, the printer is BUSY while writing the data to the NV bit image memory and stops receiving data. Therefore, it is prohibited to transmit data, including real-time commands, during the execution of this command.				

GS ! n

[Name]	Select character size.			
[Format]	ASCII	GS	!	n
	Hex	1D	21	n
	Decimal	29	33	n
[Range]	$0 \leq n \leq 255$ (where $1 \leq \text{Enlargement in vertical direction} \leq 8$, $1 \leq \text{Enlargement in horizontal direction} \leq 8$)			
[Default]	n=0			
[Description]	• Selects character size (enlargement in vertical and horizontal directions).			

Bit	Function	Setting
0	Specifies the number of times enlarged in the vertical direction	Refer to Table 2 [Enlarged in vertical direction]
1		
2		
3		
4	Specifies the number of times enlarged in the horizontal direction	Refer to Table 1 [Enlarged in horizontal direction]
5		
6		
7		

- Table 1 [Enlarged in horizontal direction]

Hex	Decimal	Enlargement
00	0	1 time (standard)
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

- Table 1 [Enlarged in vertical direction]

Hex	Decimal	Enlargement
00	0	1 time (standard)
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]	Set absolute vertical print position in page mode.			
[Format]	ASCII	GS	\$	nL nH
	Hex	1D	24	nL nH
	Decimal	29	36	nL nH
[Range]	$0 \leq (nL + nH \times 256) \leq 65535$ ($0 \leq nL \leq 255$, $0 \leq nH \leq 255$)			
[Description]	• Sets the absolute vertical print starting position to $[(nL + nH \times 256) \times (\text{vertical or horizontal motion units})]$.			

GS (A pL pH n m

[Name]	Execute test print.						
[Format]	ASCII	GS	(	A	pL	pH	n m
	Hex	1D	28	41	pL	pH	n m
	Decimal	29	40	65	pL	pH	n m
[Range]	$(pL + pH \times 256) = 2$ ($pL=2$, $pH=0$) $0 \leq n \leq 2$, $48 \leq n \leq 50$ $1 \leq m \leq 3$, $49 \leq m \leq 51$						
[Description]	• Executes a test print with a specified test pattern on a specified paper type (roll paper). - n specifies the paper type as listed below to be tested :						

m	Paper type
0, 48	Paper roll
1, 49	
2, 50	

- m specifies a test pattern as listed below :

m	Test pattern
1, 49	Hexadecimal dump
2, 50	Self Test Printing

[Notes] • The printer executes a hardware reset after the procedure to place the image into the non-volatile memory. The printer clear the receive and print buffers, and resets all settings (user-defined characters, macros, and the character styles) to the mode that was in effect at power on.

GS (D pL pH m [a1 b1]...[ak bk]

[Name]	Enable/disable real-time command.						
[Format]	ASCII	GS	(	D	pL	pH	m [a1 b1]...[ak bk]
	Hex	1D	28	44	pL	pH	m [a1 b1]...[ak bk]
	Decimal	29	40	68	pL	pH	m [a1 b1]...[ak bk]
[Range]	$3 \leq (pL + pH \times 256) \leq 65535$ $m=20$ $a=1, 2$ $b=0, 1, 48, 49$						
[Default]	b=0, 1, 48, 49						

a	Type(s) of real-time commands	Default
1	DLE DC4 fn m t (fn=1) : Generate pulse in real-time	Enable (b=1)
2	DLE DC4 fn a b (fn=2) : Execute power-off sequence	disable (b=0)

[Description] • Enable or disables the following real-time commands.

a	b	Function
1	0, 48	DLE DC4 fn m t (fn=1) : Not processed (disabled)
	1, 49	DLE DC4 fn m t (fn=1) : Processed (enabled)
2	0, 48	DLE DC4 fn a b (fn=2) : Not processed (disabled)
	1, 49	DLE DC4 fn a b (fn=2) : Processed (enabled)

- pL, pH specifies $(pL + pH \times 256)$ as the number of bytes after pH (m and [a1 b1]...[ak bk]).

- a specifies the type of real-time command.

- b specifies enable or disable.

[Notes] • 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.

GS (E pL pH fn [parameter]

[Name] Customize NV memory area.
 [Description] ▪ Customize the NV user memory area. The table below explains the functions available in this command. Executes commands related to the user setting mode by specifying the 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 b18...b11]... [ak bk8...bk1]	3	Sets value(s) for the memory switch.
4	GS (E pL pH fn a	4	Transmits the settings of the memory switch to the host.
11	GS (E pL pH fn a d1...dk	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.

- pL, pH specifies (pL + pH x 256) as the number of bytes after pH (fn and [parameter]).
- The user setting mode is a special mode to change the values in the NV user memory with this command.
- In Function 2, the printer performs software reset. Therefore, the printer clears the receive and print buffers, and resets all settings (user-defined characters, macros, and the character style) to the mode in effect at power on.

[Notes] ▪ 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.

English

<Function 1> **GS (E pL pH fn d1 d2 (fn=1)**

[Format] ASCII GS (E pL pH fn d1 d2
 Hex 1D 28 45 pL pH fn d1 d2
 Decimal 29 40 69 pL pH fn d1 d2

[Range] (pL + pH x 256) = 3 (pL=3, pH=0)
 fn=1
 d1=73, d2=78

[Description] ▪ Enter the user setting mode and notifies that the mode has changed.

	Hexadecimal	Decimal	Number of Data
Header	37H	55	1 byte
Flag	20H	32	1 byte
NUL	00H	0	1 byte

▪ The following commands are enabled in the user setting mode.
 <Function 2> through <Function 12> of **GS (E, GS I.**

<Function 2> **GS (E pL pH fn d1 d2 d3 (fn=2)**

[Format] ASCII GS (E pL pH fn d1 d2 d3
 Hex 1D 28 45 pL pH fn d1 d2 d3
 Decimal 29 40 69 pL pH fn d1 d2 d3

[Range] (pL + pH x 256) = 4 (pL=4, pH=0)
 fn=2
 d1=79, d2=85, d3=84

[Description] ▪ Ends the user setting mode and performs a software reset. Therefore, the printer clears the receive and print buffers, and resets all settings (user-defined character, downloaded bit images, macros, and the print mode) to the mode that was in effect at power on.
 ▪ This function code (fn=2) is enabled only in the user setting mode.

<Function 3> **GS (E pL pH fn [a1 b18...b11]...[ak bk8...bk1] (fn=3)**

[Format] ASCII GS (E pL pH fn [a1 b18...b11]... [ak bk8...bk1]
 Hex 1D 28 45 pL pH fn [a1 b18...b11]... [ak bk8...bk1]
 Decimal 29 40 69 pL pH fn [a1 b18...b11]... [ak bk8...bk1]

[Range] (pL + pH x 256) = 10, 37
 fn=3
 a=1, 2, 8, 9
 b=48, 49, 50

[Default] ▪ Msw2-1, Msw2-2, and Msw-8-8 are set to On (b=49), and all other switches are set to Off (b=48).

English

- [Description] • Change the memory switch specified by a to the values specified by b.
- When b=48, the applicable bit is turned to Off.
 - When b=49, the applicable bit is turned to On.
 - When b=50, the applicable bit is not changed.
- When a=1, the memory switch 1 is set as follows :

Bit	Setting value	Function
1~4		Reserved
5	48	Automatic line feed : Disabled
	49	Automatic line feed : Enabled
6~8		Reserved

- When a=2, the memory switch 2 is set as follows :

Bit	Setting value	Function
1~2		Reserved.
3	48	Autocutter : Partial Cutting.
	49	Autocutter : Full Cutting.
4~8		Code Page selection.

MSW2-8	MSW2-7	MSW2-6	MSW2-5	MSW2-4	Character Table
48	48	48	48	48	Page 0 437
48	48	48	48	49	Page 1 Katakana
48	48	48	49	48	Page 2 850
48	48	48	49	49	Page 3 860
48	48	49	48	48	Page 4 863
48	48	49	48	49	Page 5 865
48	48	49	49	48	Page 16 1252
48	48	49	49	49	Page 17 866
48	49	48	48	48	Page 18 852
48	49	48	48	49	Page 19 858
48	49	48	49	48	Reserved
48	49	48	49	49	Page 22 864
48	49	49	48	48	Page 23 Thai42
48	49	49	48	49	Page 24 1253
48	49	49	49	48	Reserved
48	49	49	49	49	
49	48	48	48	48	Page 28 1251
49	48	48	49	48	Page 29 737
49	48	48	49	49	Reserved
49	48	49	48	48	Page 31 Thai16
49	48	49	48	49	Reserved
49	48	49	49	48	Page 33 1255
49	48	49	49	49	Reserved
49	49	48	48	48	
49	49	48	48	49	Page 36 855
49	49	48	49	48	Page 37 857

- When a=8, the memory switch 8 is set as follows :

Bit	Setting value	Function
1~8		Reserved.

- 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	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 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> **GS (E pL pH fn a** (fn=4)

[Format] ASCII GS (E pL pH fn a
Hex 1D 28 45 pL pH fn a
Decimal 29 40 69 pL pH fn a

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)
fn=4

a=1, 2, 8

- [Description] • Transmits the setting value(s) of the memory switch specified by a.

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	21H	33	1 byte
Data	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 :

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

<Function 11> **GS (E pL pH fn a d1...dk** (fn=11)

[Format]	ASCII	GS	(	E	pL	pH	fn	a	d1...dk
	Hex	1D	28	45	pL	pH	fn	a	d1...dk
	Decimal	29	40	69	pL	pH	fn	a	d1...dk

[Range] $3 \leq (pL + pH \times 256) \leq 65535$ ($0 \leq pL \leq 255$, $0 \leq pH \leq 255$)

fn=11

$1 \leq a \leq 4$

$48 \leq d \leq 57$

$1 \leq k \leq 6$

[Default] • When a=1 : (d1...dk)="19200"

• When a=2 : d=48

• When a=3 : d=48

• When a=4 : d=56

[Description] • Sets the communication conditions of the serial interface specified by a according to value d.

a	Communication Condition	d
1	Baud rate	k bytes of (d1...dk)
2	Parity	1 byte of (d1)
3	Flow control	1 byte of (d1)
4	Data length	1 byte of (d1)

- Baud rate setting (d1...dk)

Baud rate (bps)	d1	d2	d3	d4	d5	d6
2400	50	52	48	48	--	--
4800	52	56	48	48	--	--
9600	57	54	48	48	--	--
19200	49	57	50	48	48	--
38400	51	56	52	48	48	--
57600	53	55	54	48	48	--
115200	49	49	53	50	48	48

- Parity setting (d1)

d1	Parity
48	No parity
49	Odd parity
50	Even parity

- Flow control setting (d1)

d1	Flow control
48	DTR / DSR
49	XON / XOFF

- Data length setting (d1)

d1	Data length
55	7 bits
56	8 bits

[Notes] • If the value specified with a, d1 is out of range, this command is ignored. (The setting is not changed)

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

<Function 12> **GS (E pL pH fn a** (fn=12)

[Format]	ASCII	GS	(	E	pL	pH	fn	a
	Hex	1D	28	45	pL	pH	fn	a
	Decimal	29	40	69	pL	pH	fn	a

[Range] $(pL + pH \times 256) = 2$ ($pL=2$, $pH=0$)

fn=12

$1 \leq a \leq 4$

[Description] • Transmits the communication conditions of the serial interface specified by a.

a	Communication Condition
1	Baud rate
2	Parity
3	Flow control
4	Data length

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	33H	39	1 byte
Type of the communication condition	31H - 34H	49 - 52	1 byte
Separator	1FH	31	1 byte
Setting value	30H - 39H	48 - 57	1 - 6 bytes
NUL	00H	0	1 byte

• Configuration of the setting value

- When the baud rate (a=1) is specified :

Baud rate (bps)	d1	d2	d3	d4	d5	d6
9600	57	54	48	48	--	--
19200	49	57	50	48	48	--
38400	51	56	52	48	48	--
57600	53	55	54	48	48	--
115200	49	49	53	50	48	48

- When the parity setting (a=2) is specified :

d1	Parity
48	No parity
49	Odd parity
50	Even parity

- When the flow control setting (a=3) is specified :

d1	Flow control
48	DTR / DSR
49	XON / XOFF

- When the data length setting (a=4) is specified :

d1	Data length
55	7 bits
56	8 bits

• If a is out of range, this command ignores the value which is specified with a.

GS (L pL pH m fn [parameter]									
GS 8 L p1 p2 p3 p4 m fn [parameter]									

[Name] Select graphics data.

[Format]	ASCII	GS	(	L	pL	pH	m	fn	[parameter]
Hex	1D	28	4C		pL	pH	m	fn	[parameter]
Decimal	29	40	76		pL	pH	m	fn	[parameter]

ASCII	GS	(	L	p1	p2	p3	p4	m	fn	[parameter]
Hex	1D	28	4C	p1	p2	p3	p4	m	fn	[parameter]
Decimal	29	40	76	p1	p2	p3	p4	m	fn	[parameter]

* In the description below **GS (L** is used for the explanation.

- Note that **GS (L** and **GS 8 L** have the same Function.

- If the [parameter] of each format exceeds 65533 bytes use **GS 8 L**.

[Description] • Processes graphics data according to the function code 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 d1...dk]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 d1...dk	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 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.

<Function 48> GS (L pL pH m fn (fn=0, 48)									
--	--	--	--	--	--	--	--	--	--

[Format]	ASCII	GS	(	L	pL	pH	m	fn	
Hex	1D	28	4C		pL	pH	m	fn	
Decimal	29	40	76		pL	pH	m	fn	

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)

m=48

fn=0, 48

[Description] • Transmits the total capacity of the NV bit-image memory (number of bytes in the memory area).

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	30H	48	1 byte
Data	30H - 39H	48 - 57	1 - 8 bytes
NUL	00H	0	1 byte

• The total capacity data is converted to character codes corresponding to decimal data, then transmitted from the MSB.

• The data length is variable.

• 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.

<Function 50> GS (L pL pH m fn (fn=2, 50)									
--	--	--	--	--	--	--	--	--	--

[Format]	ASCII	GS	(	L	pL	pH	m	fn	
Hex	1D	28	4C		pL	pH	m	fn	
Decimal	29	40	76		pL	pH	m	fn	

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)

m=48

fn=2, 50

[Description] • Prints the buffered graphics which is stored by the process of Function 112.
• Feeds paper by the amount corresponding to the number of dots in the y direction of the buffered graphics.

<Function 51> GS (L pL pH m fn (fn=3, 51)									
--	--	--	--	--	--	--	--	--	--

[Format]	ASCII	GS	(	L	pL	pH	m	fn	
Hex	1D	28	4C		pL	pH	m	fn	
Decimal	29	40	76		pL	pH	m	fn	

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)

m=48

fn=3, 51

[Description] • Transmits the number of bytes of remaining memory (unused area) in the NV user memory.

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	31H	49	1 byte
Data	30H - 39H	48 - 57	1 - 8 bytes
NUL	00H	0	1 byte

• The number of bytes of remaining memory is converted to character codes corresponding to decimal data, then transmitted from the MSB.

• The data length is variable.

<Function 64> **GS (L pL pH m fn d1 d2** (fn=64)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	d1	d2
	Hex	1D	28	4C	pL	pH	m	fn	d1	d2
	Decimal	29	40	76	pL	pH	m	fn	d1	d2

[Range] (pL + pH x 256) = 4 (pL=4, pH=0)
m=48
fn=64
d1=75, d2=67

[Description] • Transmits the defined NV graphics key code list.
- When the key code is present :

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	72H	114	1 byte
Status	40H or 41H	64 or 65	1 byte
Data	30H - 39H	48 - 57	2 - 80 bytes
NUL	00H	0	1 byte

- When the key code is not present :

	Hexadecimal	Decimal	Amount of Data
Header	37H	55	1 byte
Flag	72H	114	1 byte
Status	40H	64	1 byte
NUL	00H	0	1 byte

- If the number of the key code exceed 40, the key code is transmitted dividing up to 40.
 - The status if the continuous transmission data block is present is 41H.
 - The status if the continuous transmission data block is not present is 40H.
- After the [Header-NULL] is transmitted, the printer receives a response from the host; then it performs the process defined by the response. (See the tables below.)
 - When the status (existence of the next data block) is Hexadecimal = 41H / Decimal = 65

Response		Process performed
ASCII	Decimal	
ACK	6	Transmits the next data.
NAK	21	Transmits the previous data again.
CAN	24	Ends the process.

- When the status (for the last data block) is Hexadecimal = 40H / Decimal = 64

Response		Process performed
ASCII	Decimal	
ACK	6	Ends the process.
NAK	21	Transmits the previous data again.
CAN	24	Cancels the process.

<Function 65> **GS (L pL pH m fn d1 d2 d3** (fn=65)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	d1	d2	d3
	Hex	1D	28	4C	pL	pH	m	fn	d1	d2	d3
	Decimal	29	40	76	pL	pH	m	fn	d1	d2	d3

[Range] (pL + pH x 256) = 5 (pL=5, pH=0)
m=48
fn=65
d1=67, d2=76, d3=82

[Description] • Deletes all defined NV graphics data.

<Function 66> **GS (L pL pH m fn kc1 kc2** (fn=66)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	kc1	kc2
	Hex	1D	28	4C	pL	pH	m	fn	kc1	kc2
	Decimal	29	40	76	pL	pH	m	fn	kc1	kc2

[Range] (pL + pH x 256) = 4 (pL=4, pH=0)
m=48
fn=66
32 ≤ kc1 ≤ 126
32 ≤ kc2 ≤ 126

[Description] • Deletes the NV graphics data defined by the key codes kc1 and kc2.

<Function 67> **GS (L pL pH m fn a kc1 kc2 b xL xH yL yH [c d1...dk]1...[c d1...dk]b** (fn=67)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	a	kc1	kc2	b	xL	xH	yL	yH	[c d1...dk]1...[c d1...dk]b
	Hex	1D	28	4C	pL	pH	m	fn	a	kc1	kc2	b	xL	xH	yL	yH	[c d1...dk]1...[c d1...dk]b
	Decimal	29	40	76	pL	pH	m	fn	a	kc1	kc2	b	xL	xH	yL	yH	[c d1...dk]1...[c d1...dk]b

- [Range]
- **GS (L** parameter
3 ≤ (pL + pH x 256) ≤ 65535 (0 ≤ pL ≤ 255, 0 ≤ pH ≤ 255)
 - **GS 8 L** parameter
3 ≤ (p1 + p2 x 256 + p3 x 65535 + p4 x 16777216) ≤ 4294967295
(0 ≤ p1 ≤ 255, 0 ≤ p2 ≤ 255, 0 ≤ p3 ≤ 255, 0 ≤ p4 ≤ 255)
 - Common parameter for **GS 8 L / GS (L**
m=48
fn=67
a=48
32 ≤ kc1 ≤ 126
32 ≤ kc2 ≤ 126
b=1, 2
1 ≤ (xL + xH x 256) ≤ 8192
1 ≤ (yL + yH x 256) ≤ 2304
c=49 (when the monochrome paper is selected)
c=50 (when the two-color paper is selected)
0 ≤ d ≤ 255
k = (int ((xL + xH x 256) + 7) / 8) x (yL + yH x 256)

English

English

- [Description] • 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 384KB.
- Defines the raster graphics data in the NV graphics area.
- b specifies the number of the color of the defined data.
 - xL, xH specifies the defined data in the horizontal direction to (xL + xH x 256) dots.
 - yL, yH specifies the defined data in the vertical direction to (yL + yH x 256) dots.
 - c specifies the color of the defined data.

c	Defined data color
49	Color 1
50	Color 2

- Color 1 means black (high level of energy) in the specified tow-color thermal paper.
- Color 2 means red (low level of energy) in the specified tow-color thermal paper.

- [Notes] • If the color is specified with b and a single color also is specified with c, the printer stops processing the command, and regards the defined data as effective up to the time when the printer stops processing, then disregards the remaining data after it.
- When this command is processed while NV bit image data is defined with **FS q**, the printer deletes all NV bit image data, then defines data with this command.

<Function 69> **GS (L pL pH m fn kc1 kc2 b x y** (fn=69)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	kc1	kc2	x	y
	Hex	1D	28	4C	pL	pH	m	fn	kc1	kc2	x	y
	Decimal	29	40	76	pL	pH	m	fn	kc1	kc2	x	y

- [Range] (pL + pH x 256) = 6 (pL=6, pH=0)
- m=48, fn=69
- 32 ≤ kc1 ≤ 126
- 32 ≤ kc2 ≤ 126
- x=1, 2
- y=1, 2

- [Description] • Prints the NV graphics data defined by the key codes kc1 and kc2. The graphics data is enlarged by x and y in the horizontal and vertical directions.

<Function 112> **GS (L pL pH m fn a bx by c xL xH yL yH d1...dk** (fn=112)

[Format]	ASCII	GS	(	L	pL	pH	m	fn	a	bx	by	c	xL	xH	yL	yH	d1...dk
	Hex	1D	28	4C	pL	pH	m	fn	a	bx	by	c	xL	xH	yL	yH	d1...dk
	Decimal	29	40	76	pL	pH	m	fn	a	bx	by	c	xL	xH	yL	yH	d1...dk

- [Range] • **GS (L** parameter
- 11 ≤ (pL + pH x 256) ≤ 65535 (0 ≤ pL ≤ 255, 0 ≤ pH ≤ 255)
- **GS 8 L** parameter
- 11 ≤ (p1 + p2 x 256 + p3 x 65535 + p4 x 16777216) ≤ 4294967295
(0 ≤ p1 ≤ 255, 0 ≤ p2 ≤ 255, 0 ≤ p3 ≤ 255, 0 ≤ p4 ≤ 255)
- Common parameter for **GS 8 L / GS (L**
- m=48, fn=112, a=48
- bx=1, 2
- by=1, 2
- c=49 (when the monochrome paper is selected)
- c=50 (when the two-color paper is selected)
- When single-color paper is specified :
- 1 ≤ (yL + yH x 256) ≤ 1662 (when by = 1)
- 1 ≤ (yL + yH x 256) ≤ 831 (when by = 2)
- When two-color paper is specified :
- 1 ≤ (yL + yH x 256) ≤ 831 (when by = 1)
- 1 ≤ (yL + yH x 256) ≤ 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 directions to the print buffer.
- xL, xH specifies the raster graphics data in the horizontal direction as (xL + xH x 256) dots.
 - yL, yH specifies the raster graphics data in the vertical direction to (yL + yH x 256) dots.
 - c specifies the color of the defined data.

c	Printing color
49	Color 1
50	Color 2

- Color 1 means black (high level of energy) in the specified tow-color thermal paper.
- Color 2 means red (low level of energy) in the specified tow-color thermal paper.

- [Notes] • In standard mode, each color can be defined only once.

GS (M pL pH fn m

[Name] Customize printer.
[Description] Protects or recovers values or data set or defined in the active area by commands.

fn	Function No.	Descriptions
1, 49	Function 1	Copies the settings stored in the active area to the storage area (save settings).
2, 50	Function 2	Copies the settings stored in the storage area to the storage area (load settings).
3, 51	Function 3	Enables or disables automatic loading of the settings upon initialization.

- Active area : Volatile memory (RAM)
- Storage area : Non-volatile memory (Flash ROM)
- List of commands

Setting value	Command
Status	ESC c 3, GS a
Defined data	GS :
Character	
Kind of character	ESC M, ESC R, ESC t
style	ESC !, ESC -, ESC E, ESC G, ESC V, ESC {, GS !, GS B, GS b, GS (N
etc	ESC SP, ESC 2, ESC 3
Bar code	GS H, GS f, GS h, GS w
2-dimension code	<Function 065> through <Function 070> of GS (k
Print position	ESC D, ESC T, ESC a, GS L, GS W
etc	ESC c 4, ESC c 5, GS (D, GS P

<Function 1> **GS (M pL pH fn m** (fn=1, 49)

[Format] ASCII GS (M pL pH fn m
Hex 1D 28 4D pL pH fn m
Decimal 29 40 77 pL pH fn m

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)
fn=1, 49
m=1, 49

[Description] Copies the setting stored in the active area to the mth storage area.
[Notes] 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 10 times a day.
While processing this command, the printer is BUSY while writing data to the NV user memory and stops receiving data. Therefore it is prohibited to transmit data including the real-time commands during the execution of this command.

<Function 2> **GS (M pL pH fn m** (fn=2, 50)

[Format] ASCII GS (M pL pH fn m
Hex 1D 28 4D pL pH fn m
Decimal 29 40 77 pL pH fn m

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)
fn=2, 50
m=0, 1, 48, 49

[Description] When (m=0,48), initializes all settings in the active area, as described in these specifications.
When (m=1,49), copies the setting stored in the mth storage area to the active area. If no data in the storage area is protected, all settings in the active area are initialized as described in these specifications.

<Function 3> **GS (M pL pH fn m** (fn=3, 51)

[Format] ASCII GS (M pL pH fn m
Hex 1D 28 4D pL pH fn m
Decimal 29 40 77 pL pH fn m

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)
fn=3, 51
m=0, 1, 48, 49

[Description] When m=0,48, does not load data in the storage area to the active area upon initialization.
When m=1,49, loads data in the storage area to the active area upon initialization.

GS (N pL pH fn [parameter]

[Name] Select character style.
[Description] Executes commands for the character style as specified by the function code fn.

fn	Format	Function No.	Description
48	GS (N pL pH fn m	Function 48	Selects character color.

<Function 48> **GS (N pL pH fn m** (fn=48)

[Format] ASCII GS (N pL pH fn m
Hex 1D 28 4E pL pH fn m
Decimal 29 40 78 pL pH fn m

[Range] (pL + pH x 256) = 2 (pL=2, pH=0)
fn=48
m=49 (when the monochrome paper is selected)
m=49,50 (when the two-color paper is selected)
m=49

[Default] m=49
[Description] Prints characters in the color specified by m.

m	Color
49	Color 1
50	Color 2

- Color 1 means black (high level of energy) in the specified two-color thermal paper.
- Color 2 means red (low level of energy) in the specified two-color thermal paper.

GS * x y [d1...d(x x y x 8)]						
[Name]	Define downloaded bit image.					
[Format]	ASCII	GS	*	x	y	[d1...d(x x y x 8)]
	Hex	1D	2A	x	y	[d1...d(x x y x 8)]
	Decimal	29	42	x	y	[d1...d(x x y x 8)]
[Range]	$1 \leq x \leq 255$					
	$1 \leq y \leq 48$ (where $x \times y \leq 1536$)					
	$0 \leq d \leq 255$					
[Description]	- Defines the downloaded bit image using the number of dots specified by x and y. - x specifies the number of dots in the horizontal direction. - y specifies the number of dots in the vertical direction. - When the memory switch 8-7 is On, the user-defined character and the downloaded bit image cannot be defined simultaneously. The downloaded bit image data is cleared with this command.					

GS / m

[Name]

Print downloaded bit image.

[Format]

ASCII

GS

/

m

Hex

1D

2F

m

Decimal

29

47

m

[Range]

0 ≤ m ≤ 3, 48 ≤ m ≤ 51

[Description]

• Prints the defined downloaded bit image in m mode.

- For SRP-370

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

- For SRP-372

m	Mode	Vertical dot density	Horizontal dot density
0, 48	Normal	203 dpi	203 dpi
1, 49	Double-width	203 dpi	203/2 dpi
2, 50	Double-height	203/2 dpi	203 dpi
3, 51	Quadruple	203/2 dpi	203/2 dpi

dpi : dots per 25.4mm {1"}

GS :				
[Name]	Start/end macro definition.			
[Format]	ASCII	GS	:	
	Hex	1D	3A	
	Decimal	29	58	
[Description]	- Starts or ends macro definition. - The contents of the macro can be defined up to 2048 bytes.			

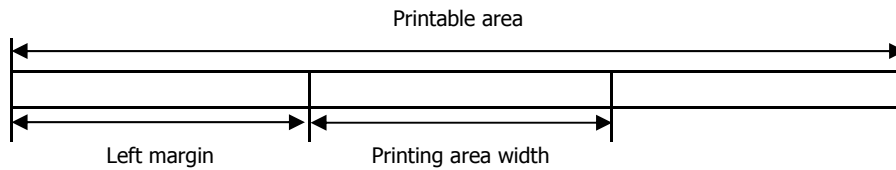
GS B n				
[Name]	Turns white/black reverse printing mode on / off.			
[Format]	ASCII	GS	B	n
	Hex	1D	42	n
	Decimal	29	66	n
[Range]	$0 \leq n \leq 255$			
[Default]	n=0			
[Description]	- Turns white/black reverse printing mode on or off. - When the LSB of n is 0, white/black reverse mode is turned off. - When the LSB of n is 1, white/black reverse mode is turned on.			

GS H n				
[Name]	Selects the printing position of HRI characters.			
[Format]	ASCII	GS	H	n
	Hex	1D	48	n
	Decimal	29	72	n
[Range]	0 ≤ n ≤ 3, 48 ≤ n ≤ 51			
[Default]	n=0			
[Description]	▪ Selects the printing position of HRI characters when 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	Below the bar code.		
	3, 51	Both above and below the bar code.		

GS I n																
[Name]	Transmits printer ID.															
[Format]	ASCII	GS	I	n												
	Hex	1D	49	n												
	Decimal	29	73	n												
[Range]	$1 \leq n \leq 3, 49 \leq n \leq 51, 65 \leq n \leq 69, n=112$															
[Description]	$1 \leq n \leq 3, 49 \leq n \leq 51, 65 \leq n \leq 69$, (when TM-T88II compatible mode is selected.)															
	- Transmits the printer ID specified. - n specifies the types of the printer ID.															
<table><tr><th>n</th><th>Printer ID type</th><th>ID</th></tr><tr><td>1, 49</td><td>Printer model ID</td><td>Hexadecimal : 2EH Decimal : 46</td></tr><tr><td>2, 50</td><td>Type ID</td><td>See table below.</td></tr><tr><td>3, 51</td><td>Firmware version ID</td><td>Depends on firmware version.</td></tr></table>					n	Printer ID type	ID	1, 49	Printer model ID	Hexadecimal : 2EH Decimal : 46	2, 50	Type ID	See table below.	3, 51	Firmware version ID	Depends on firmware version.
n	Printer ID type	ID														
1, 49	Printer model ID	Hexadecimal : 2EH Decimal : 46														
2, 50	Type ID	See table below.														
3, 51	Firmware version ID	Depends on firmware version.														
n specifies the printer information.																
<table><tr><th>n</th><th>Printer ID type</th><th>ID</th></tr><tr><td>65</td><td>Firmware version</td><td>Depends on firmware version</td></tr><tr><td>66</td><td>Manufacturer</td><td>BIXOLON</td></tr><tr><td>67</td><td>Printer name</td><td>SRP-370/372</td></tr></table>					n	Printer ID type	ID	65	Firmware version	Depends on firmware version	66	Manufacturer	BIXOLON	67	Printer name	SRP-370/372
n	Printer ID type	ID														
65	Firmware version	Depends on firmware version														
66	Manufacturer	BIXOLON														
67	Printer name	SRP-370/372														

GS L nL nH

[Name]	Set left margin.				
[Format]	ASCII	GS	L	nL	nH
	Hex	1D	4C	nL	nH
	Decimal	29	76	nL	nH
[Range]	$0 \leq nL \leq 255$				
	$0 \leq nH \leq 255$				
[Default]	$(nL + nH \times 256) = 0$ (nL=0, nH=0)				
[Description]	- Sets the left margin specified by nL and nH. - The left margin is $[(nL + nH \times 256) \times (\text{horizontal motion units})]$.				



GS P x y

[Name]	Set horizontal and vertical motion units.				
[Format]	ASCII	GS	P	x	y
	Hex	1D	50	x	y
	Decimal	29	80	x	y
[Range]	$0 \leq x \leq 255$				
	$0 \leq y \leq 255$				
[Default]	For ANK/Multilingual model : x=180, y=360				
	For Japanese Kanji model : x=203, y=406				
[Description]	- Turns white/black reverse printing mode on or off. - For SRP-370 - When x=0, the default setting of the horizontal motion unit is used. - When $1 \leq x \leq 255$, the horizontal motion unit is set to $25.4/x$ mm $\{(1/x)''\}$. - When y=0, the default setting of the vertical motion unit is used. - When $1 \leq y \leq 255$, the vertical motion unit is set to $25.4/y$ mm $\{(1/y)''\}$. - For SRP-372 - When x=0, the default setting of the horizontal motion unit is used. - When $1 \leq x \leq 255$, the horizontal motion unit is set to $25.4/x$ mm $\{(1/x)''\}$. - When y=0, the default setting of the vertical motion unit is used. - When $1 \leq y \leq 255$, the vertical motion unit is set to $25.4/y$ mm $\{(1/y)''\}$.				

English

GS T n

[Name]	Set print position to the beginning of print line.			
[Format]	ASCII	GS	T	n
	Hex	1D	54	n
	Decimal	29	84	n
[Range]	n=0, 1, 48, 49			
[Description]	- Sets the print position to the beginning of the print line. - n specifies how data in the print buffer is processed when this command is executed.			

n	Function
0, 48	Sets the print position after the data in the print buffer is deleted.
1, 49	Sets the print position after the data in the print buffer is printed.

- 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.
- 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.

① GS V m ② GS V m n

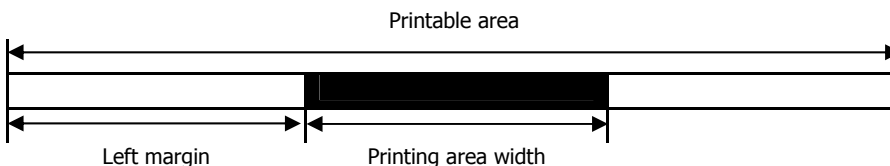
[Name]	Select cut mode and cut paper.					
[Format]	①	ASCII	GS	V	m	
		Hex	1D	56	m	
		Decimal	29	86	m	
	②	ASCII	GS	V	m	n
		Hex	1D	56	m	n
		Decimal	29	86	m	n
[Range]	① m=0, 1, 48, 49 ② m=65, 66, $0 \leq n \leq 255$					
[Description]	Cuts paper in the specified mode.					

m	Function
0, 48 1, 49	Cuts paper (one point left uncut, full cut).
65, 66	Feeds and cuts paper (one point left uncut, full cut).

- n specifies how data in the print buffer is processed when this command is executed.
- Full cut or one point left uncut cannot be changed by software.

English

GS W nL nH					
[Name]	Set printing area width.				
[Format]	ASCII	GS	W	nL	nH
	Hex	1D	57	nL	nH
	Decimal	29	87	nL	nH
[Range]	$0 \leq nL \leq 255$				
	$0 \leq nH \leq 255$				
[Default]	• For SRP-370				
	(nL + nH x 256)=512 (nL=0, nH=2) (for 80mm of the paper width)				
	(nL + nH x 256)=384 (nL=128, nH=1) (for 60mm of the paper width)				
	(nL + nH x 256)=360 (nL=104, nH=1) (for 58mm of the paper width)				
	• For SRP-372				
	(nL + nH x 256)=576 (nL=64, nH=2) (for 80mm of the paper width)				
[Description]	(nL + nH x 256)=436 (nL=180, nH=1) (for 60mm of the paper width)				
	(nL + nH x 256)=420 (nL=164, nH=1) (for 58mm of the paper width)				
	• Sets the printing area width specified with nL and nH.				
	- The printing area width is [(nL + nH x 256) x (horizontal motion units)].				



GS \ nL nH					
[Name]	Set relative vertical print position in page mode.				
[Format]	ASCII	GS	\	nL	nH
	Hex	1D	5C	nL	nH
	Decimal	29	92	nL	nH
[Range]	$0 \leq nL \leq 255$				
	$0 \leq nH \leq 255$				
[Description]	• Sets the relative vertical print starting position from the current position in page mode. The distance from the current position to the starting position is [(nL + nH x 256) x (vertical or horizontal motion units)].				

GS ^ r t m						
[Name]	Execute macro.					
[Format]	ASCII	GS	^	r	t	m
	Hex	1D	5E	r	t	m
	Decimal	29	94	r	t	m
[Range]	$0 \leq r \leq 255$					
	$0 \leq t \leq 255$					
	m=0, 1					
[Description]	• Executes a macro.					
	- r 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.					

m	Function
0	Executes the macro r times at the interval specified by t.
1	After waiting for the time specified by t, the PAPER OUT LED flashes to indicate that the FEED button must be pressed. After the button is pressed, the macro is executed once. This operation is then repeated r times.

GS a n				
[Name]	Enable/Disable Automatic Status Back (ASB).			
[Format]	ASCII	GS	a	n
	Hex	1D	61	n
	Decimal	29	97	n
[Range]	$0 \leq n \leq 255$			
[Default]	n=0 when memory switch 1-3 is Off.			
	n=2 when memory switch 1-3 is On.			
[Description]	• Specifies the status items for ASB (Automatic Status Back).			

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Drawer kick-out connector pin 3 disable.
	On	01	1	Drawer kick-out connector pin 3 enable.
1	Off	00	0	Online/Offline status disabled.
	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.
6	Off	00	0	Panel button status disabled.
	On	40	64	Panel button status enabled.
7	Off	00	0	Reserved.

- The status to be transmitted is the four bytes that follows.
- First byte (printer information)

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.

- When the cover is open while the printing is stopped, the printer becomes offline.
- Second byte (printer information)

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.
	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.
	Off	00	0	No unrecoverable error.
5	On	20	32	Unrecoverable error has occurred.
	Off	00	0	No automatically recoverable error.
6	On	40	64	Automatically recoverable error has occurred.
	Off	00	0	Fixed.

- Third byte (paper sensor information)

Bit	Off/On	Hex	Decimal	Function
0	Off	00	0	Paper roll near-end sensor : paper adequate.
	On	01	1	Paper roll near-end sensor : paper near end.
1	Off	00	0	Paper roll near-end sensor : paper present.
	On	02	2	Paper roll near-end sensor : paper not present.
2	Off	00	0	Paper roll end sensor : paper present.
	On	04	4	Paper roll end sensor : paper near end.
3	Off	00	0	Paper roll end sensor : paper present.
	On	08	8	Paper roll end sensor : paper not present.
4	Off	00	0	Fixed.
5	Off	00	0	Reserved.
6	Off	00	0	Reserved.
7	Off	00	0	Fixed.

- The paper roll end sensor is unstable when the cover is open.

- Fourth byte (paper sensor information)

Bit	Off/On	Hex	Decimal	Function
0	On	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.

[Notes]

- When the memory switch Msw 8-7 is On, the printer transmits the ASB data 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.

[Reference]

APPENDIX J

GS b n				
[Name]	Turns smoothing mode on/off.			
[Format]	ASCII	GS	b	n
	Hex	1D	62	n
	Decimal	29	98	n

[Range] $0 \leq nL \leq 255$

[Default] n=0

- [Description]
- Turns smoothing mode on or off.
 - When the LSB of n is 0, smoothing mode is turned off.
 - When the LSB of n is 1, smoothing mode is turned on.

GS f n				
[Name]	Select font for HRI characters.			
[Format]	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 : $0 \leq n \leq 2, 48 \leq n \leq 50$

[Default] n=0

- [Description]
- Selects a font for the HRI characters used when printing a bar code.
 - n specifies the font of the HRI characters as follows :

n	Font
0, 48	Font A (12 x 24)
1, 49	Font B (9 x 17)

GS h n				
[Name]	Selects bar code height.			
[Format]	ASCII	GS	h	n
	Hex	1D	68	n
	Decimal	29	104	n

[Range] $1 \leq nL \leq 255$

[Default] n=162

- [Description]
- Selects the height of the bar code as n dots.

① GS k m d1...dk NUL

② GS k m n d1...dn

[Name] Print bar code.

[Format]	①	ASCII	GS	k	m	d1...dk	NUL
		Hex	1D	6B	m	d1...dk	NUL
		Decimal	29	107	m	d1...dk	NUL
	②	ASCII	GS	k	m	n	d1...dn
		Hex	1D	6B	m	n	d1...dn
		Decimal	29	107	m	n	d1...dn

[Range] ① $0 \leq m \leq 6$ (k and d depend on the bar code system used)

② $65 \leq m \leq 73$ (n and d depend on the bar code system used)

[Description] • Selects a bar code system and prints the bar code.

For ①

m	Bar Code System	Range of k	Range of d
0	UPC-A	$11 \leq k \leq 12$	$48 \leq d \leq 57$
1	UPC-E	$11 \leq k \leq 12$	$48 \leq d \leq 57$
2	JAN13(EAN)	$12 \leq k \leq 13$	$48 \leq d \leq 57$
3	JAN8(EAN)	$7 \leq k \leq 8$	$48 \leq d \leq 57$
4	CODE39	$1 \leq k$	$48 \leq d \leq 57, 65 \leq d \leq 90, d=32,36,37,43,45,46,47$
5	ITF	$1 \leq k$ (even number)	$48 \leq d \leq 57$
6	CODABAR	$1 \leq k$	$48 \leq d \leq 57, 65 \leq d \leq 68, d=36,43,45,46,47,58$

For ②

m	Bar Code System	Range of k	Range of d
65	UPC-A	$11 \leq n \leq 12$	$48 \leq d \leq 57$
66	UPC-E	$11 \leq n \leq 12$	$48 \leq d \leq 57$
67	JAN13(EAN)	$12 \leq n \leq 13$	$48 \leq d \leq 57$
68	JAN8(EAN)	$7 \leq n \leq 8$	$48 \leq d \leq 57$
69	CODE39	$1 \leq n \leq 255$	$48 \leq d \leq 57, 65 \leq d \leq 90, d=32,36,37,43,45,46,47$
70	ITF	$1 \leq n \leq 255$ (even number)	$48 \leq d \leq 57$
71	CODABAR	$1 \leq n \leq 255$	$48 \leq d \leq 57, 65 \leq d \leq 68, d=36,43,45,46,47,58$
72	CODE93	$1 \leq n \leq 255$	$0 \leq d \leq 127$
73	CODE128	$2 \leq n \leq 255$	$0 \leq d \leq 127$

[Notes] • User must consider the quiet zone of the bar code (left and right spaces of the bar code).

GS r n

[Name] Transmit status.

[Format]	ASCII	GS	r	n
	Hex	1D	72	n
	Decimal	29	114	n

[Range] n=1, 2, 49, 50

[Description] • Transmits the normal status specified by n as follows :

n	Function
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, 1	Off	00	0	Paper roll near-end sensor : paper adequate.
	On	03	3	Paper roll near-end sensor : paper near end.
2, 3	Off	00	0	Paper roll end sensor : paper present.
	On	0C	12	Paper roll end sensor : paper not present.
4	Off	00	0	Fixed.
5	Off	00	0	Reserved.
6	Off	00	0	Reserved.
7	Off	00	0	Fixed.

- Bits 2 and 3 : This command cannot be executed since the printer becomes offline when the paper roll end sensor detects the paper not present. Therefore, the status of bit 2 (1) and bit 3 (1) is not transmitted.

• Drawer kick-out connector status (n=2, 50) :

AAWBit	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	Off	00	0	Reserved.
2	Off	00	0	Reserved.
3	Off	00	0	Reserved.
4	Off	00	0	Fixed.
5	Off	00	0	Reserved.
6	Off	00	0	Reserved.
7	Off	00	0	Fixed.

GS v 0 m xL xH yL yH d1...dk

[Name] Print raster bit image.

[Format]	ASCII	GS	v	0	m	xL	xH	yL	yH	d1...dk
	Hex	1D	76	30	m	xL	xH	yL	yH	d1...dk
	Decimal	29	118	48	m	xL	xH	yL	yH	d1...dk

[Range] $0 \leq m \leq 3, 48 \leq m \leq 51$

$1 \leq (xL + xH \times 256) \leq 128$ ($0 \leq xL \leq 128, xH=0$)

$1 \leq (yL + yH \times 256) \leq 4095$ ($0 \leq yL \leq 255, 0 \leq yH \leq 15$)

$0 \leq d \leq 255$

$k = (xL + xH \times 256) \times (yL + yH \times 256)$

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

<For SRP-370>

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

<For SRP-372>

m	Mode	Vertical dot density	Horizontal dot density
0, 48	Normal	203 dpi	203 dpi
1, 49	Double-width	203 dpi	203/2 dpi
2, 50	Double-height	203/2 dpi	203 dpi
3, 51	Quadruple	203/2 dpi	203/2 dpi

dpi : dots per 25.4mm {1"}

- 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

[Name] Set bar code width.

[Format] ASCII GS w n
Hex 1D 77 n
Decimal 29 119 n

[Range] $2 \leq n \leq 6$
n=3

[Description] • Set the horizontal size of the bar code, using n as follows :
<For SRP-370>

n	Multi-level Bar Code Module Width (mm)	Binary-level Bar Code	
		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

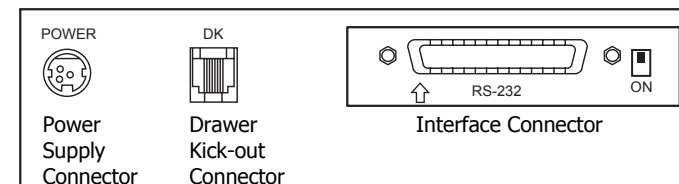
<For SRP-372>

n	Multi-level Bar Code Module Width (mm)	Binary-level Bar Code	
		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
6	0.751	0.751	2.002

- [Notes]
- 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

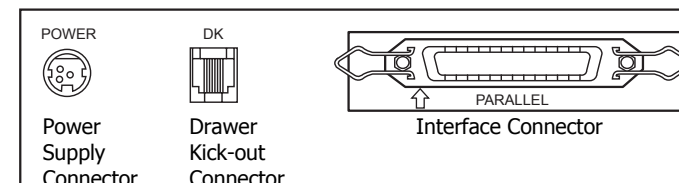
APPENDIX

A. Connectors

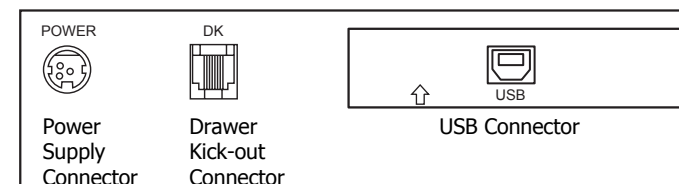


※ When the Dip Switch is "ON" on the Serial Interface Board, DTR and RTS are connected each other.

SRP-370/372 Connector (Serial Interface)

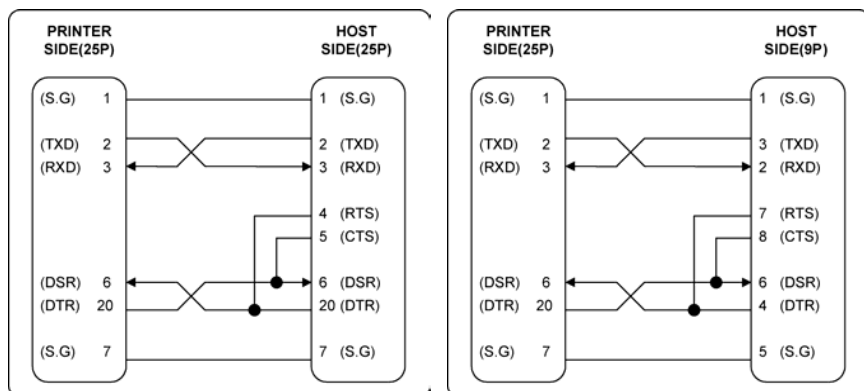


SRP-370P/372P Connector (Parallel Interface)



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

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

English

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

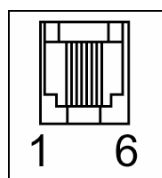
English

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.

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 ± 0.2mm
Paper width		58mm,80mm,82.5 mm
Characters per line (default)		180 DPI 42 (Font A) 203 DPI 48 (Font A) 56 (Font B) 64 (Font B)
Printing speed	180 DPI	Mono : 47 lines/sec(1/6" Feed) 200mm/sec Color : 23.6 Line/ Sec(1/6inch feed) 100mm/sec
	203 DPI	Mono : 42 lines/sec(1/6" Feed) 180mm/sec Color : 21 Line/ Sec(1/6inch feed) 90mm/sec
Receive Buffer Size		4K Bytes
NOTE : Printing speed may be slower, depending on the data transmission speed and the combination of control commands.		
Supply voltage	Input voltage	100~240 VAC
	Frequency	50/60 Hz
	Output voltage	+24 VDC
Environmental Conditions	Temperature	0 ~ 45 ℃ (Operating) -10 ~ 50 ℃ (Storage)
	Humidity	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 recommended paper at normal temperature.

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