

Poslab

Customer Pole Display PL-200

User's Manual



FEDERAL COMMUNICATIONS COMMISSION

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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

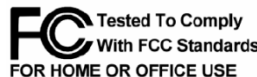
DECLARATION OF CONFORMITY

These devices comply with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) These devices may not cause harmful interference.
- (2) These devices must accept any interference received, including interference that may cause undesired operation.

WEEE (WASTE FROM ELECTRICAL AND ELECTRONIC EQUIPMENT)

The WEEE wheeled bin symbol on the product or on its packaging indicates that the product must not be disposed with other waste. Instead, it should be the user's responsibility to dispose waste equipment by handing it over to an approved location for the recycling of electrical waste and electronic equipment. For more information about where to send your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the place from where you purchased the product.



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Important Safety Instructions

Failure to observe these safety instructions may cause bodily injury, or damage to the product. Read these instructions carefully and keep this user manual in an accessible location for future reference.

- Immediately stop using the product if it emits strange noise, odor, or smoke. Do not try to repair it by yourself. Contact your dealer for assistance.
- Be sure to use a correct AC power source that is between AC 100V~240V.
- Do not plug several products into one multi-outlet.
 - λ This can cause over-heating and fire.
 - λ If the plug is wet or dirty, dry or clean it before using.
 - λ If the plug does not fit perfectly with the outlet, do not plug it in.
 - λ Be sure to use a standardized multi-outlet.
- Do not use aerosol sprayers containing flammable gas inside or around this product.
- Do not allow foreign objects or liquids to enter the product, or serious damage may result.
- Do not place the product on an unstable surface. The product may cause a fire if it is dropped, damaged, or broken.



The product may cause a fire or electric shock when it is used improperly. Observe the above safety measures at all times.



If the product is damaged, immediately turn off the power and disconnect the power cord. Contact your dealer for assistance.

The following instructions will help you to make better use of this product.

- Keep the product away from locations that are subject to high humidity, dust, or temperatures that exceed the specification.
- Clean the product only by using a dry cloth or a cloth soaked with detergent. Never use thinner or other volatile solvents for cleaning.
- Only use approved accessories.
- Do not try to disassemble, repair or remodel it by yourself. Contact your dealer for assistance if needed.
- Do not store accessories where they might be exposed to direct sunlight, high temperatures, humidity, dust, or gas.

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CHAPTER 1

INTRODUCTION

Welcome

Thank you for choosing the PL-200 Customer Pole Display. The PL-200 is a 20 columns x 2 lines customer display with Vacuum Fluorescent Display panel. VFD emits a very bright light with high contrast. Based on VFD display method, the PL-200 gives a better view of message in bright blue-green display fonts.

1.1 Features

1. Vacuum Fluorescent Display
2. Eye-catching bright blue-green display font
3. Unique panel design to vitalize your retail interior.
4. Supports 14 language characters, including those from the USA, France, Germany, UK, Sweden, Denmark I and II, Italy, Spain, Norway, Japan, Slavonic, Russian and Portuguese.
5. Provides 3 command modes: EPSON ESC/POS, CD5220 and DSP-800.
6. The wide-range of power supplies input to prevent misuse.
7. Low power consumption achieves optimal energy use and reliability.
8. Innovative hinge design for quick panel adjustment.
9. User-programmable for all fonts and customer messages.
10. Hardware Interface:
 - Standard
 - RS-232C Interface with baud rates selectable from 9600 to 115200 bps.
11. Mechanical:
 - Provides a wide range of rotation and tilt angles.
 - Selectable pole length for best position installation.

1.2 Specification

Model	PL-200
Display Method	Vacuum fluorescent Display text mode display panel
Number of Characters	40 characters (20 columns x 2 lines)
Display Color	Blue-green
Brightness	700 cd/m2
Font	I. 96 alphanumeric characters II. 14 sets of international characters: USA, France, Germany, UK, Sweden, Denmark I and II, Italy, Spain, Norway, Japan, Slavonic, Russian and Portuguese III. One set of user downloadable characters
Character Size	5x7 Dot Matrix 9.03 mm x 5.25 mm
Command Set	1. EPSON ESC/POS 2. CD5220 3. DSP-800
Interface	■ RS-232C 9600/19200/38400/115200 bps
Power Source	DC +5V~12V
Power Consumption	3 Watts Average (Maximum 15 Watts)
MTBF	25,000 hrs
Certification	CE/FCC Class A
Rotation Angle	Vertically: 0-36 degrees Horizontal: 0-270 degrees
Physical Dimension	
Support (H)	130 mm
Base (W x D x H)	217 x 106 x 20 mm

CHAPTER 2 INTERFACE

2.1 Communication Specification

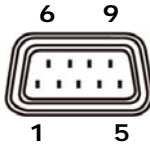
■ RS232C Type

Data transmission	Serial
Synchronization	Asynchronous
Handshaking	None
Signal level	MARK = -3 to -15V (logical "1" OFF) SPACE = +3 to +15V (logical "0" ON)
Baud rate	9600, 19200, 38400, 115200 bps
Parity	None, Even
Bit length (Data word length)	8 bits
Stop bits	1 bit

2.2.1 Serial RS232 connector to PC/HOST

Connector Type: D-sub 9Pin (Female)

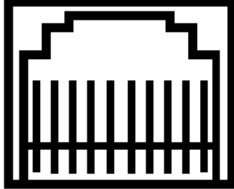
Pin assignment

Pin No.	Signal	I/O	Function	Illustration
2	TXD	Output	Transmit Data	
3	RXD	Input	Receive Data	
4, 7	DTR/RTS	Output	Data Terminal Ready	
5	GND	-	Ground	
6, 8	DSR/CTS	Input	Data Set Ready	

2.2.2 Control Signal to Display Panel

Connector Type: 10Pin Phone Jack

Pin assignment

Pin No.	Signal	I/O	Function	Illustration
1	VIN	Input	+5V	
2	GND	-	Ground	
3	TXD	Output	Transmit Data	
4	DTR		Data Terminal Ready	
5	RXD	Input	Receive Data	
6	DSR		Data Set Ready	
7	USB		VBUS	
8	USB		Data -	
9	USB		Data +	
10	GND	-	Ground	

CHAPTER 3

CONFIGURE YOUR DEVICE

The system parameters of PL-200 can be set by using VFD Utility software tool. You can find the tool in the companion disk. In addition to setting system parameters, you can configure welcome message and user font with the software tool. The system parameters include the following items.

- Language Character Set
- Command Type
- Baud rate
- Parity Check

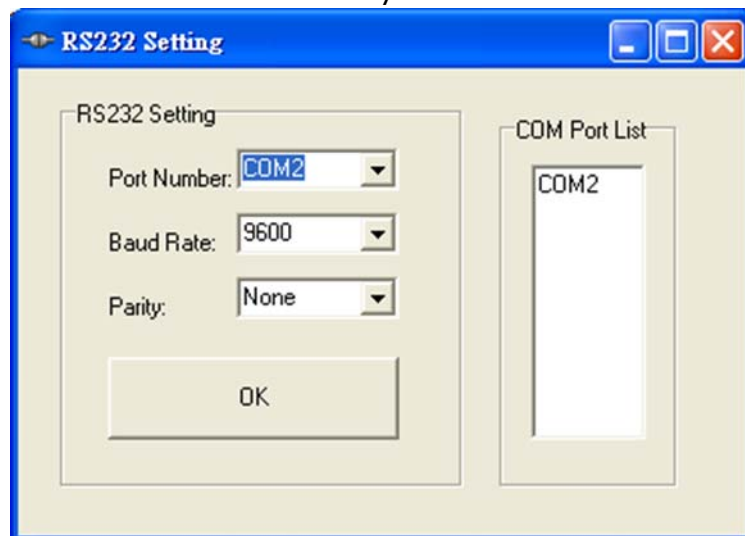
To start the configuration with the software tool, please see the description below for more information.

3.1 Before starting

Before starting the software, please make sure the PL-200 is connected to your PC and it works. If you use USB interface or device driver, please install device driver before starting the software. If the connection is OK, execute the software.

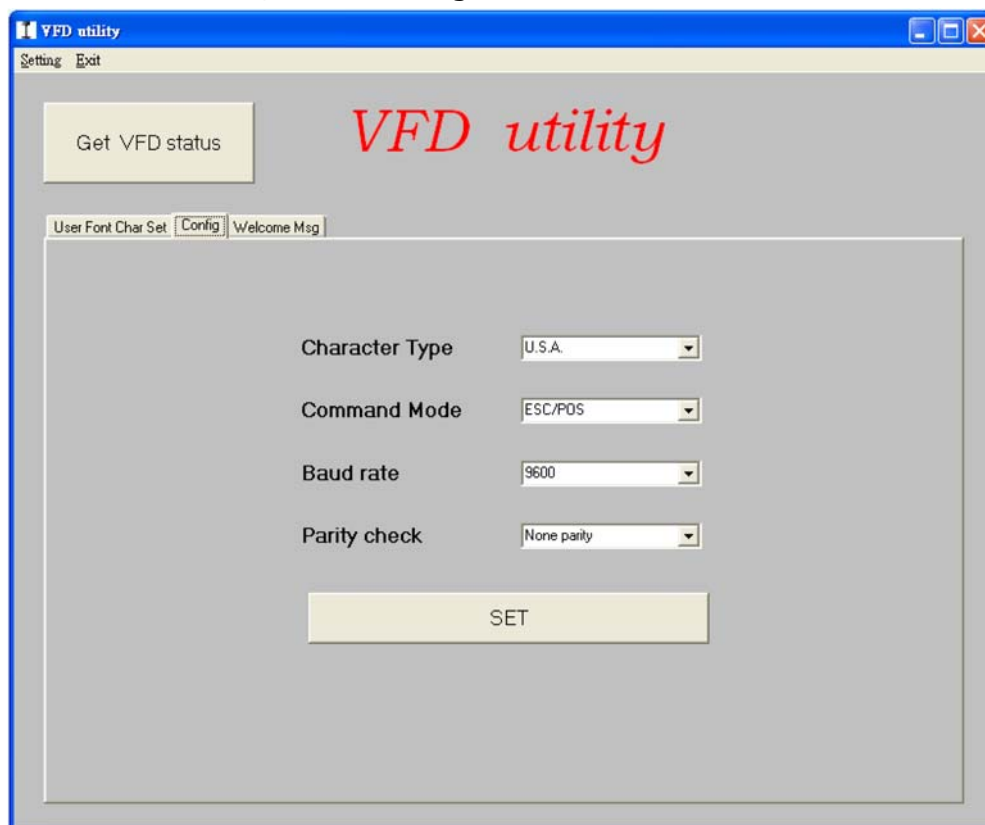
3.1.1 RS-232 Interface

If you select the item COM port, the dialog of RS-232 setting will show up the guide you configure the RS-232 interface. Please make sure the parameters that you type here are the same as the settings of your host PC. If the parameters aren't the same, the communication between host PC and your machine will fail.



3.2 Configure System Parameters

There are three pages on the main dialog. The first one is the Configuration Page. You can select desired character type, command set and baud rate of RS-232 interface. After all items are set to desired condition, press SET button to send all the settings to your device. These settings will be stored on the non-volatile memory. Every time when you start the device, these settings will be retrieved from non-volatile memory.



3.2.1 Command Type

The PL-200 supports up to 3 command sets. They are listed on the following table. Please select one from the pull-down list.

Command Type	Default
EPSON ESC/POS	★
DSP-800	
CD5220	

3.2.2 Language Character Set Selection

The PL-200 supports the following language character set. Please refer to following table for character code page.

Character Set (20h–7Fh)	Code Table (80H-FFH)	Default
U.S.A.	PC-437 (USA, Standard Europe)	
France	PC-858	
Germany		
U.K.		
Denmark I		
Sweden		
Italy		
Spain		
Japan	Katakana	
Norway	PC-858	
Denmark II		
U.S.A.	Slavonic	
U.S.A.	Russia	★
U.S.A.	PC-860 (Portuguese)	
User Font		

3.2.3 Baud Rate Selection

Baud Rate (bps)	Default
9600	★
19200	
38400	
115200	

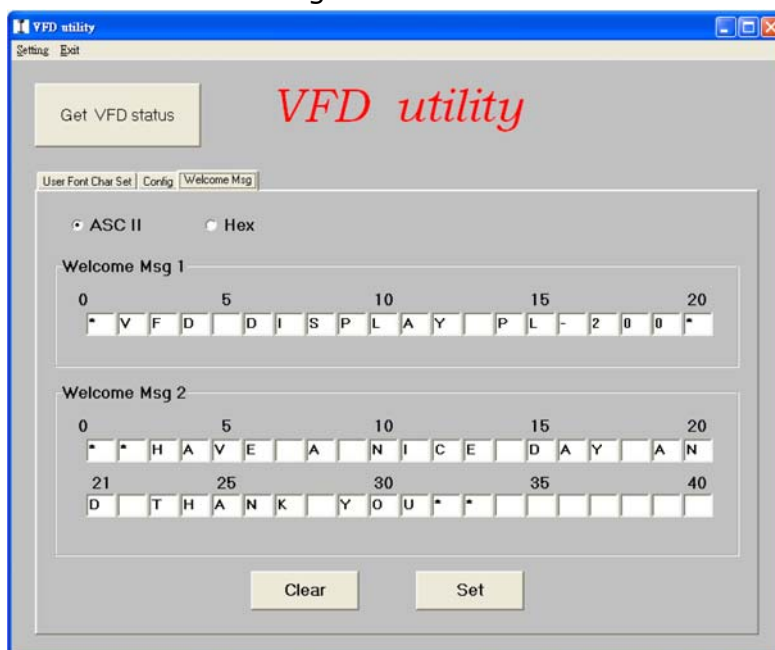
3.2.4 Parity Check Selection

Parity Check	Default
None-parity	★
Even-parity	

3.3 Define Welcome Message

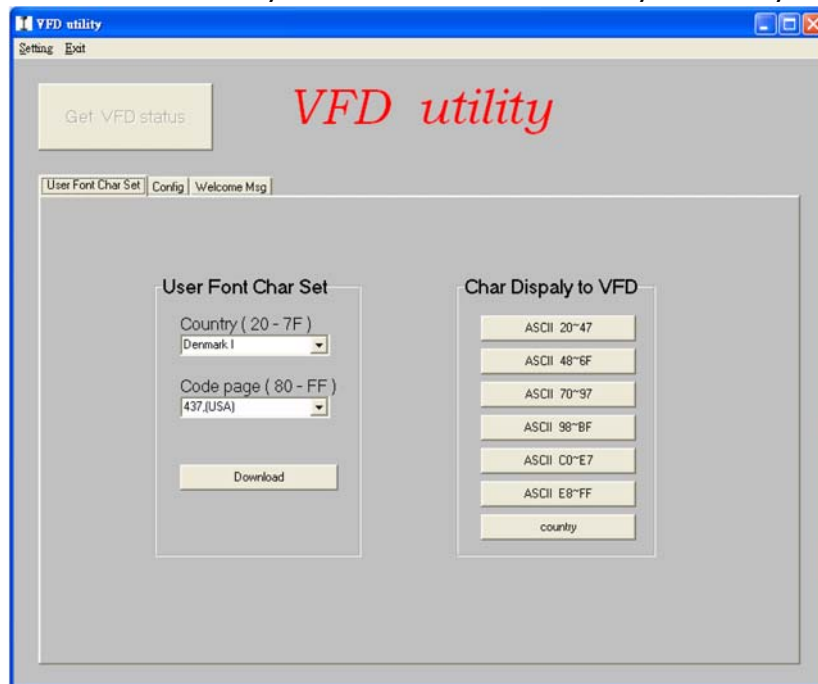
You can define your own message in the display. The Msg1 is displayed steadily on upper line while the Msg2 is displayed on lower line in marquee status.

You can type the character on keyboard in ASCII mode or type others in Hex mode. Press Set button to send the messages to the machine.



3.4 Download Your Own Font

1. Please select user font to be your font base and modify it to fit your requirement.



2. Please select user page
3. Select country name
4. Select code page
5. When fonts have been sent to the CPD. Please check the CPD's Status for knowing whether the download operation complete

CHAPTER 4

SOFTWARE SETTING COMMAND

User can re-set the default configuration by using the following software commands:

4.1 Baud Rate Setting Command

STX 05 B n ETX Change the baud rate

ASCII Format STX 05 B n ETX STX 05 E N ETX

Dec. Format [02][05][66] n [03][02][05][69][78][03] $49 \leq n \leq 51$

Hex. Format [02h][05h][42h] n [03h][02h][05h][45h][4eh][03h]
 $31h \leq n \leq 33h$

Description Change the display communication baud rate. The baud rate setting can be selected from 9600~115200 bps.

N	Baud rate
30h	115200
31h	38400
32h	19200
33h	9600

4.2 Parity Check Setting Command

STX 05 P n ETX Change the parity check

ASCII Format STX 05 P n ETX STX 05 E N ETX

Dec. Format [02][05][80] n [03][02][05][69][78][03] n=48,49

Hex. Format [02h][05h][50h] n [03h][02h][05h][45h][4eh][03h]
n=30h,31h

Description

n	Parity check
30h	None parity
31h	Even parity

4.3 Command Type Setting Command

STX 05 C n ETX Change the command type

ASCII Format STX 05 C n ETX STX 05 E N ETX

Dec. Format [02][05][67] n [03][02][05][69][78][03] n=49,51,55

Hex. Format [02h][05h][43h] n [03h][02h][05h][45h][4eh][03h]
n=31h,33h,37h

Description Change the command type and initialize the display

n	Command type
31h	ESC/POS
33h	DSP-800
37h	CD5220

4.4 International Character Set Setting Command

STX 05 S n ETX	Change the International character set
ASCII Format	STX 05 S n ETX STX 05 E N ETX
Dec. Format	[02][05][83] n [03][02][05][69][78][03] $48 \leq n \leq 63$
Hex. Format	[02h][05h][53h] n [03h][02h][05h][45h][4eh][03h] $30h \leq n \leq 3Fh$
Description	Change the display International character set

n	Character Set (20h–7Fh)	Code Table (80H-FFH)
30h	U.S.A.	PC-437 (USA, Standard Europe)
31h	France	PC-858
32h	Germany	
33h	U.K.	
34h	Denmark I	
35h	Sweden	
36h	Italy	
37h	Spain	
38h	Japan	Katakana
39h	Norway	PC-858
3Ah	Denmark II	
3Bh	U.S.A.	Slavonic
3Ch	U.S.A.	Russia
3Dh	U.S.A.	PC-860 (Portuguese)
3Eh	Reserved	
3Fh	User Font	

CHAPTER 5

COMMAND SET

5.1 ESC/POS Mode Command Set

Command	Code (hex)	Function description
HT	09	Move cursor right.
BS	08	Move cursor left.
US LF	1F 0A	Move cursor up.
LF	0A	Move cursor down.
US CR	1F 0D	Move cursor to right-most position.
CR	0D	Move cursor to left-most position.
HOM	0B	Move cursor to home position.
US B	1F 42	Move cursor to bottom position.
US \$ x y	1F 24 x y $01h \leq x \leq 14h$, $y=01h, 02h$	Move cursor to specified position.
CAN	18	Clear cursor line.
CLR	0C	Clear display screen.
US X n	1F 58 n $01h \leq n \leq 04h$ (=brightest)	Brightness adjustment.
US E n	1F 45 n $00h \leq n \leq FFh$	Blink display screen.
ESC @	1B 40	Initialize display.
ESC # n	1B 23 n $30h \leq n \leq 38h$	Command type select
ESC R n	1B 52 n $00h \leq n \leq 0Ch$	Select international character set. (see Table 5-A)
ESC t n	1B 74 n $n=00h, 01h..07h, 10h, 13h$	Select character code table. (see Table 5-B)
US r n	1F 72 n $n=00h, 01h$	Select/Cancel reverse character. $n=01$ select, $n=00$ cancel
US # n m	1F 23 n m $n=00h, 01h$, $01h < m \leq 14h$	Turn annunciator on/off $n=01$ on, $n=00$ off
US C n	1F 43 n $n=00h, 01h$	Set cursor on/off $n=01$ on, $n=00$ off

US MD1	1F 01	Specify overwrite mode.
US MD2	1F 02	Specify vertical scroll mode.
US MD3	1F 03	Specify horizontal scroll mode.
US @	1F 40	Execute self-test.
US . n	1F 2E n n=a displayable character code	Specify period
US , n	1F 2C n n=a displayable character code	Specify comma
US ; n	1F 3B n n=a displayable character code	Specify semicolon (period + comma)
ESC & s n m [a(p1..pa)]x m-n+1	1B 26 1 n m [a(p1..pa)]x m-n+1 $20h \leq n \leq m \leq FFh$; $1 \leq a \leq 5$ p1..p5=row1...row5	Define download characters.
ESC ? n	1B 3F n $21h \leq n \leq FFh$	Delete download characters.
ESC % n	1B 25 n n=00h, 01h	Select/cancel download character set. n=01 select, n=00 cancel
ESC W n s x1 y1 x2 y2	1B 57 n s x1 y1 x2 y2 $1 \leq n \leq 4$, s=00h,01h $01h \leq x1 \leq x2 \leq 14h$ $01h \leq y1 \leq y2 \leq 02h$	Specify/cancel the window range. s=01 specify, 00 cancel n=select the window x= column position y= row position
ESC = n	1B 3D n n=01h, 02h, 03h	Select peripheral device. n=01h, select printer n=02h, select display n=03h, select printer + display
US :	1F 3A	Set starting/ending position of macro definition.
US ^ n m	1F 5E n m $00h \leq n \leq FFh$ $00h \leq m \leq FFh$	Execute and quit macro. n=word time m=show string time
US T h m	1F 54 h m $00h \leq h \leq 17h$ $00h \leq m \leq 3bh$	Display time

US U	1F 55	Display time continuously
US V n	1F 56 n $00h \leq n \leq 01h$	Status confirmation by DTR signal

n	International Font
00	U.S.A.
01	France
02	Germany
03	U.K.
04	Denmark I
05	Sweden
06	Italy
07	Spain
08	Japan
09	Norway
0A	Denmark II
0B	Slavonic
0C	Russia

Table 5-A Select International font

n	Code Table (80H-FFH)
00	Page 0, (PC437, USA standard Euro)
02	Page 2, (PC850, Multilingual)
03	Page 3, (PC860, Portuguese)
04	Page 4, (PC863, Canadian-French)
05	Page 5, (PC865, Nordic)
06	Page 6, (Slavonic)
07	Page 7, (Russian)
13	Page 8, (PC858, +Euro symbol)
10	Page 9, (WPC1252)

Table 5-B Select code table

5.2 CD5220 Mode Command Set

Command	Code (hex)	Function description
ESC DC1	1B 11	Overwrite mode
US SOH	1F 01	Overwrite mode
ESC DC2	1B 12	Vertical scroll mode
US STX	1F 02	Vertical scroll mode
ESC DC3	1B 13	Horizontal scroll mode
US ETX	1F 03	Horizontal scroll mode
ESC QACR	1B 51 41 [d1, d2...dn] 0D $1 \leq n \leq 20$	Set the string display mode, write string to upper line (see Note 1)
ESC QBCR	1B 51 42 [d1, d2...dn] 0D $1 \leq n \leq 20$	Set the string display mode, write string to bottom line (see Note 1)
ESC QDCR	1B 51 44 [d1, d2...dn]xm 0D $m \leq 40$	Upper line message scroll continuously (see Note 2)
ESC [D	1B 5B 44	Move cursor left
BS	08	Move cursor left
ESC [C	1B 5B 43	Move cursor right

HT	09	Move cursor right
ESC [A	1B 5B 41	Move cursor up
US LF	1F 0A	Move cursor up
ESC [B	1B 5B 42	Move cursor down
LF	0A	Move cursor down
ESC [H	1B 5B 48	Move cursor to home position
HOM	0B	Move cursor to home position
ESC [L	1B 5B 4C	Move cursor to top-left position
CR	0D	Move cursor to top-left position
ESC [R	1B 5B 52	Move cursor to top-right position
US CR	1F 0D	Move cursor to top-right position
ESC [K	1B 5B 4B	Move cursor to bottom position
US B	1F 42	Move cursor to bottom position
ESC # n	1B 23 n n=31h~37h	Command type select
US @	1F 40	Execute self test
US E n	1F 45 n n=00h~FFh	Blink display screen n=00h for no blink
ESC I x y	1B 6C x y $1 \leq x \leq 14h$ y=01h, 02h	Move cursor to specified position x= column position y= row position
US \$ x y	1F 24 x y $01h \leq x \leq 14h$; y=01h, 02h	Move cursor to specified position
ESC @	1B 40	Initialize display
ESC W s x1 x2 y	1B 57 1 x1 x2 y $01h \leq x1 \leq x2 \leq 13h$ y=01h, 02h, s=00h, 01h	Set/Cancel the window range at horizontal scroll mode x= column position y= row position
CLR	0C	Clear display screen and clear string mode
CAN	18	Clear cursor line and clear string mode
ESC * n	1B 2A n $01h \leq n \leq 04h$ (=brightest)	Brightness adjustment
US X n	1F 58 n $01h \leq n \leq 04h$ (=brightest)	Brightness adjustment
ESC & s n m [a(p1..pa)]x (m-n+1)	1B 26 1 n m [a (p1..pa)] x (m-n+1) $20h \leq n \leq m \leq FFh$	Define download characters

	$1 \leq a \leq 5$ $p1...p5 = \text{row}1... \text{row}5$	
ESC ? n	1B 3F	Delete download characters
ESC % n	1B 25 n $n=00h, 01h$	Select/Cancel download character set $n=01$ select, $n=00$ cancel
ESC _ n	1B 5F n $n=00h, 01h$	Set cursor on/off $n=01$ cursor on, $n=00$ cursor off
ESC f n	1B 66 n	Select international font set (see Note 3)
ESC c n	1B 63 n	Select code (see Note 4)
ESC = n	1B 3D n $n=01, 02h, 03h$	Select peripheral device $n=01h$, select printer $n=02h$, select display $n=03h$, select printer + display
ESC s 1	1B 73 01	Store the user defined character into EEPROM.
ESC d 1	1B 64 01	Download the user defined character from EEPROM.

NOTE:

1. While using the command "ESC Q A" or "ESC Q B", other commands cannot be used except for "CLR" or "CAN" to change the operating mode.
2. When using the command "ESC Q D", the upper line message will scroll continuously until a new command is received. It will then clear the upper line and move the cursor to the upper left end position.

3. The parameters of the international font set control command "ESC f n".

Parameter "n"		International Font Set
'A'	41h	U.S.A.
'G'	47h	Germany
'I'	49h	Italy
'J'	4Ah	Japan
'U'	55h	U.K.
'F'	46h	France
'S'	53h	Spain
'N'	4Eh	Norway
'W'	57h	Sweden
'D'	44h	Denmark I
'E'	45h	Denmark II
'L'	4Ch	Slavonic
'R'	52h	Russia

4. The parameters of the code table control command "ESC c n".

Parameter "n"		International Font Set
'A'	41h	Compliance with ASCII code
'L'	4Ch	Compliance with SLOVONIC code
'R'	52h	Compliance with RUSSIA code

5.3 DSP-800 Mode Command Set

Command	Code (hex)	Function Description
EOT SOH I n ETB	04 01 49 n 17 $n=00\sim 0Fh$ or $30\sim 3Fh$	Select International character set (see Table 5-C)
EOT SOH P n ETB	04 01 50 n 17 $31h \leq n \leq 58h$	Move cursor to specified position
EOT SOH C n m ETB	04 01 43 n m 17 $31h \leq n \leq m \leq 58h$	Clear display range from n to m position and move cursor to n position
EOT SOH S n ETB	04 01 53 n 17 $31h \leq n \leq 35h$	Save the current view data to n layer for demo display
EOT SOH D n m ETB	04 01 44 n m 17 $31h \leq n \leq 4Fh$ $31h \leq m \leq 33h$	Display the saved demo message (see Table 5-D)
EOT SOH A n ETB	04 01 41 n 17 $31h \leq n \leq 34h$	Brightness adjustment
EOT SOH F n ETB	04 01 46 n 17 $00h \leq n \leq FFh$	Blink display screen $n=00h$ for no blink
EOT SOH & n [px5] ETB	04 01 26 n p1...p5 17 $20h \leq n \leq FFh$	Define download characters
EOT SOH ? n ETB	04 01 3F n 17 $20h \leq n \leq FFh$	Delete download characters
EOT SOH = n ETB	04 01 3D n 17 $n=31h, 32h, 33h$	Select peripheral device. $n=31h$, select printer $n=32h$, select display $n=33h$, select printer + display
EOT SOH % ETB	04 01 25 17	Initialize display
EOT SOH @ ETB	04 01 40 17	Execute self-test
EOT SOH # n ETB	04 01 23 n 17	Command type select

n	International Font Set
30h	USA
31h	France
32h	Germany
33h	UK
34h	Denmark I
35h	Sweden
36h	Italy
37h	Spain
38h	Japan
39h	Norway
3Ah	Denmark II

Table 5-C International Font Set

n	Layer select
bit 0=1	Layer 1
bit 1=1	Layer 2
bit 2=1	Layer 3
bit 3=1	Layer 4
bit 4=0	Layer 5

m	Show mode
bit 0=1	Show mode 1
bit 1=1	Show mode 2

Table 5-D Layer table for saving data

CHAPTER 6

CHARACTER SET

6.1 Character Code (20h-7Eh)

6.1.1 USA Standard Character Set

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
20h		!	"	#	\$	%	&	'	()	*	+	,	-	.	/
30h	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40h	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
50h	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
60h	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
70h	p	q	r	s	t	u	v	w	x	y	z	{		}	~	

6.1.2 International Character Set

Character Code Number														
Country	Hex	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E	
	Dec	35	36	64	91	92	93	94	96	123	124	125	126	
U.S.A		#	\$	@	[\]	^	`	{		}	~	
France		#	\$	à	°	ç	§	^	`	é	ù	è	¨	
Germany		#	\$	§	Ä	Ö	Ü	^	`	ä	ö	ü	β	
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	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	
Slavonic		#	\$	@	[\]	^	`	{		}	~	
Russia		#	\$	@	[\]	^	`	{		}	~	
Portuguese		#	\$	@	[\]	^	`	{		}	~	

6.2 Character Code Page (80h-FFh)

6.2.1 Page 0 PC437: USA, Standard Europe

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
90H	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥	Pt	f
A0H	á	í	ó	ú	ñ	Ñ	à	á	ê	ë	ì	½	¼	í	«	»
B0H	⌘	⌘	⌘													
C0H	⌘	⌘	⌘													
D0H	⌘	⌘	⌘													
E0H	α	β	Γ	π	Σ	σ	μ	τ	Φ	θ	Ω	δ	∞	ø	ε	∩
F0H	≡	±	≥	≤			÷	≈	°	•	·	√	ⁿ	²	■	SP

6.2.2 Page 1 Katakana for Japanese

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
90H	■	■	■	■	■	■	■	→	←	↑	↓	×	÷	±	≤	≥
A0H	SP	。	「	」	、	・	ヲ	ア	イ	ウ	エ	オ	ヤ	ユ	ヨ	ツ
B0H	—	ア	イ	ウ	エ	オ	カ	キ	ク	ケ	コ	サ	ツ	ス	セ	ソ
C0H	タ	チ	ツ	テ	ト	ナ	ニ	ヌ	ネ	ノ	ハ	ヒ	フ	ヘ	ホ	マ
D0H	ミ	ム	メ	モ	ヤ	ユ	ヨ	ラ	リ	ル	レ	ロ	ワ	ン	”	°
E0H	□	■	■	○	●	◇	◆	◆	▶	◀	▲	▼	《	》	½	¼
F0H	日	月	火	水	木	金	土	年	円	分	人	大	中	小	〒	℃

6.2.3 Page 2 PC850: Multilingual

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
90H	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	f
A0H	á	í	ó	ú	ñ	Ñ	à	á	ê	ë	ì	½	¼	í	«	»
B0H	⌘	⌘	⌘			Á	Â	À	©	⌘	⌘	⌘	⌘	¢	¥	⌘
C0H	⌘	⌘	⌘			ã	Ã	⌘	⌘	⌘	⌘	⌘	⌘	=	⌘	×
D0H	ð	Ð	Ê	Ë	È	Í	Î	Ï	⌘	⌘	■	■		ì	■	■
E0H	Ó	β	Ô	Ò	õ	Õ	μ	þ	þ	Ú	Û	Ù	ý	Ý	—	’
F0H	—	±	=	¾	¶	§	÷	,	°	”	·	¹	³	²	■	SP

6.2.4 Page 3 PC860: Portuguese

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	à	Á	ç	ê	Ê	è	ï	ô	ì	Ä	Å
90H	É	À	È	ô	ö	ò	ú	ù	ì	Ö	Ü	¢	£	ù	Pt	Ó
A0H	á	í	ó	ú	ñ	Ñ	â	ô	ç	Ò	¬	½	¼	ì	«	»
B0H	▒	▒	▒													
C0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
D0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
E0H	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F0H	≡	±	≥	≤			÷	≈	°	•	·	√	n	2	■	

6.2.5 Page 4 PC863: Canadian-French

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	Â	à	¶	ç	ê	ë	è	ï	î	=	À	§
90H	É	È	Ê	ô	Ë	Ï	û	ù	æ	Ô	Ü	¢	£	Ù	Û	f
A0H	í	í	í	ó	ú	¨	-	-	î	¬	¬	½	¼	¾	«	»
B0H	▒	▒	▒													
C0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
D0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
E0H	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F0H	≡	±	≥	≤			÷	≈	°	•	·	√	n	2	■	

6.2.6 Page 5 PC865: Nordic

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	à	å	ç	ê	Ê	è	ï	î	ì	Ä	Å
90H	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	Pt	f
A0H	á	í	ó	ú	ñ	Ñ	â	ô	ç	Ò	¬	½	¼	ì	«	»
B0H	▒	▒	▒													
C0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
D0H	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ	Ⓐ
E0H	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F0H	≡	±	≥	≤			÷	≈	°	•	·	√	n	2	■	

6.2.7 Page 6 Slavonic

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	û	ć	ç	ł	ě	Ń	õ	î	Ž	ä	Ć
90H	é	Ł	í	ô	ö	ł	ŕ	ś	ś	Ö	Ü	ţ	ţ	ł	x	č
A0H	á	í	ó	ú	ą	ą	ż	ż	ę	ę		ż	č	ş	«	»
B0H	▒	▒	▒		┌	á	â	ě	Ş					ž	ž	
C0H					—	†	ă	ă						=		⌘
D0H	đ	đ	đ'	ë	đ'	ř	í	î	ě			■	■	ţ	Ů	■
E0H	Ó	β	Ô	ń	ń	ň	š	š	ř	Ú	ř	Ů	ý	Ý	ţ	'
F0H	-	"	˘	˘	˘	§	÷	˘	°	˘	˘	ú	ř	ř	■	

6.2.8 Page 7 Russia

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	A	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П
90H	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
A0H	a	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
B0H	▒	▒	▒		┌	┐	┐	┐	┐	┐	┐	┐	┐	┐	┐	┐
C0H	Ⓕ	Ⓖ	Ⓙ	└	—	†	└	└	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	=	Ⓖ	Ⓖ
D0H	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	■	■	■	■	■	■
E0H	р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ы	ь	э	ю	я
F0H	Ё	ё	Є	є	Ї	ї	Ÿ	Ÿ	°	°	°	√	"	²	■	

6.2.9 Page 19 PC858: Multilingual + Euro Symbol

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
90H	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	f
A0H	á	í	ó	ú	ñ	Ñ	à	ó	¿	R	¬	½	¼	ı	«	»
B0H	▒	▒	▒		┌	Á	Â	À	с	┌		┌	┌	¢	¥	┐
C0H	Ⓕ	Ⓖ	Ⓙ	└	—	†	ă	Ă	Ⓕ	Ⓖ	Ⓖ	Ⓖ	Ⓖ	└	—	†
D0H	đ	Đ	Ê	Ë	È	€	Í	Î	Ï	Ⓕ	Ⓖ	■	■	ı	İ	■
E0H	Ó	β	Ô	Ò	õ	Õ	μ	þ	þ	Ú	Û	Ù	ý	Ý	—	'
F0H	—	'	—	±	=	¾	¶	÷	=	°	˘	•	¹	³	■	

6.2.10 Page 16 WPC1252: West European Latin

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	€	“	,	f	„	...	†	‡	^	‰	Š	<	Œ		Ž	
90H		`	’	“	”	•	–	—	~	™	š	>	œ		ž	ÿ
A0H		ı	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	-	®	¯
B0H	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
C0H	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
D0H	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
E0H	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
F0H	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ