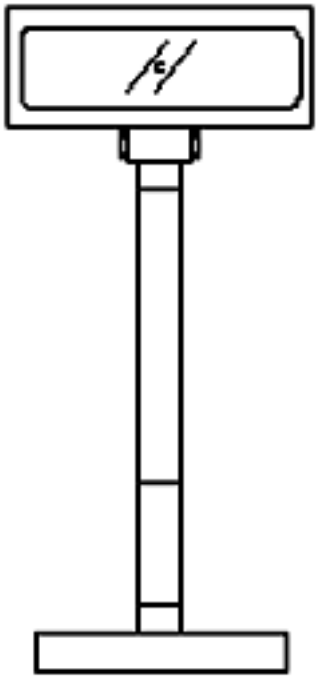
User's Manual

Customer Pole Display

MODEL : WD-202

VERSION : 1.0



INDEX

1. FEATURES

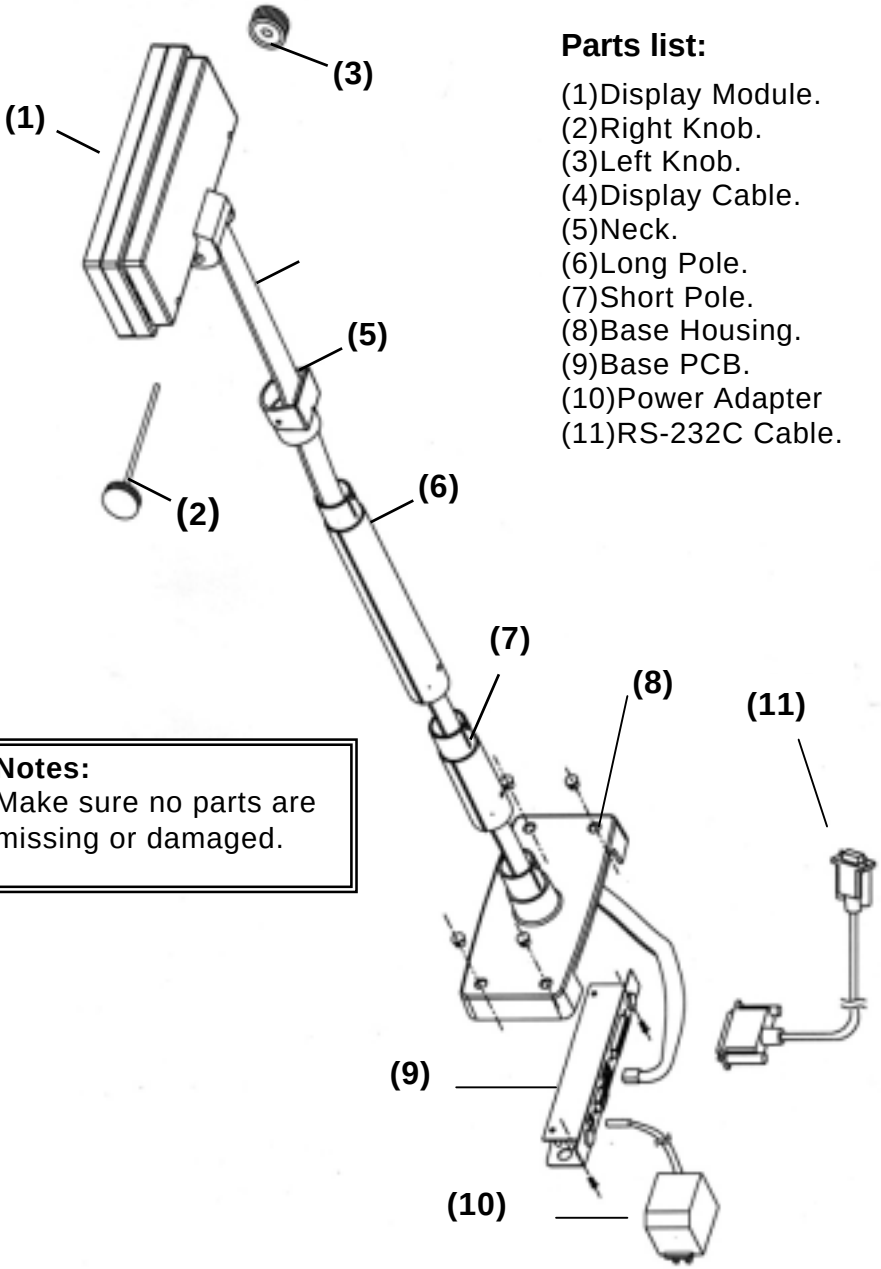
1.) Data can be displayed on 20 columns x 2 lines.
2.) Blue-green color and large character are easy to eyes.
3.) The display panel is adjustable to provide the best view angle.
4.) Provide 2 pole for bast position installation.
5.) The DIP-switches setting emulate commands mode, baud rate and international characters.
6.) CD5220/UTC/EMAX/ADM/EscPOS/DSP-800 emulation command sets.
7.) User-defined characters can be downloaded (for EscPOS /CD5220/DSP-800 command).
8.) Display area can be controlled by window function (for EscPOS command only).
9.) Provides an interface based on RS-232C, and RS232C baud rate from 4800 to 38400 bps.
10.) Provides pass through function, so both printer and display can be connected to the same port (ref. Appendix D).
11.) Multy power connectable and wide range power input (9 – 45 Vdc).

2. GENERAL SPECIFICATIONS

NO	ITEM	Descriptions
1	Display method	Vacuum fluorescent display
2	Numberof character	40 characters (20 columns x 2 lines)
3	Character font	5 x 7 Dot matrix
4	Display color	Blue green
5	Brightness	700 cd/㎡
6	Character type	96 alphanumeric 13 kinds of international character set 1 kind of user define character
7	Character size	9.2 mm x 5. 25 mm
8	Power supply	9 - 45Vdc
9	Power consumption	3 – 6 W
10	MTBF	25000 hours (power on time)
11	Panel dimensions	224 (W) x 93 (H) x 50(D) mm
12	Support dimensions	Long support : 219 mm Short support : 88 mm
13	Base dimensions	190(w)x55(h)x96(d)mm
14	Viewing angle	-5 - 60 degrees
15	Rotation angle	Maximum 270 degrees
16	Weight	1.25 Kg
17	Operating temperature	5 – 45℃
18	Operating Humidity	30%-85%
19	Storage Temperature	-10 - 55℃
20	Storage Humidity	10%-85%

Table 2-1

3. UNPACKING AND CHECKING THE PARTS



Parts list:

(1)Display Module.
(2)Right Knob.
(3)Left Knob.
(4)Display Cable.
(5)Neck.
(6)Long Pole.
(7)Short Pole.
(8)Base Housing.
(9)Base PCB.
(10)Power Adapter
(11)RS-232C Cable.

Notes:
Make sure no parts are missing or damaged.

4. INTERFACE

4.1 Specifications

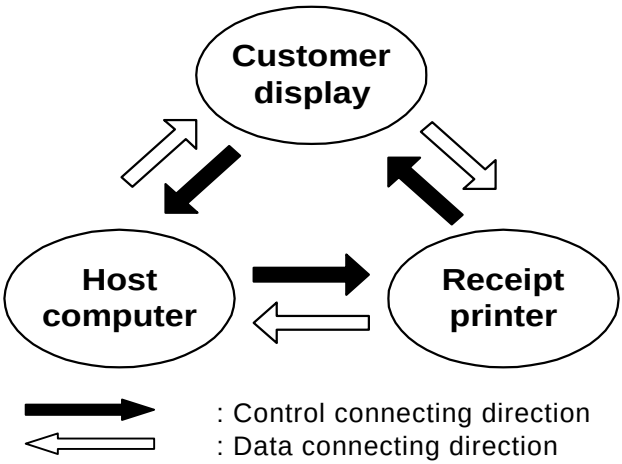
Data transmission:	Serial
Synchronization:	Asynchronous
Handshaking:	DTR / DSR
Signal level:	MARK = -3 to –15 V (logic “1”) SPACE = +3 to +15 V (logic “0”)
Baud rates:	4800,9600,19200 or 38400 bps
Parity and bit lenght	None parity, 8 data bits or Even parity, 7 data bits
Stop bits:	1 or more

Table 4-1

4.2 The communication flow

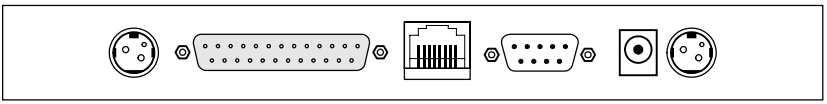
Data flow :	PC/host to display, Display to printer, Printer to PC/host
Handshaking flow :	Display to PC/host, printer to display, PC/host to printer

Table 4-2



Note: There are 200 bytes resident buffer in the display for pass data to printer.If PC/host keep transmitting the data to printer when the display inactive DTR or RTS , data will be lost.

4.4 Interface connector (On the buttom of the base section)



CN1,CN6: 24Vdc power supply pass-through connects
CN2:Power input connector from adapter
CN3: RS-232C connect to PC/Host
CN4: Connect to display pannel
CN5:RS-232C connect to printer

4.5 Power Supply Connectors

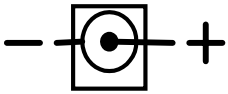
The varibale power input which are avalible on base connectors, but only if one connector can be selected for power input, the description as below:

4.5.1 CN2 / Type: DC jack (5.5/2.1)

Pin assignment

No	Signal
+	Vin
-	GND

Table 4-3

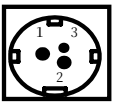


4.5.2 CN1,CN6 / Type: Miniature jacks quick lock 3 pin

Pin assignment

No	Signal
1	Vin
2	GND

Table 4-4

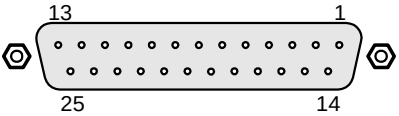


4.5.3 CN5 / Type: DB25/F together with signals of RS-232C,

Pin assignment

No	Signal
25	Vin
7	GND

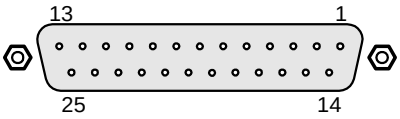
Table 4-5



Note: this connector is same as chapter 4.6

4.6 RS232C link to PC/HOST connector (CN5)

Type : DB25/F



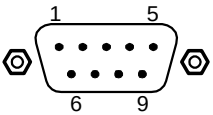
Pin assignment

No	Signal	Direction	Function description
2	TXD	From printer to PC/Host	Printer status data
3	RXD	From PC/Host to display	Receive data
4,20	DTR	From display to PC/Host	Display/printer ready signal
6	DSR	From PC/Host to printer	PC/Host ready signal
7	GND	-	Signal gound
25	Vin	From PC/Host to display	Power input

Table 4-6

4.7 RS232C link to printer connector (CN3)

Type: DB9/M



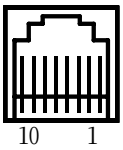
Pin assignment

No	Signal	Direction	Function description
2	RXD	From printer to PC/Host	Printer status data
3	TXD	From display to printer	Printing data
5	GND	-	Signal gound
4,7	DTR	From PC/Host to printer	PC/Host ready signal
6	DSR	From printer to display	Printer ready signal

Table 4-7

4.8 RS232C link to display pannel (CN4)

Type: RJ45/10P/8C

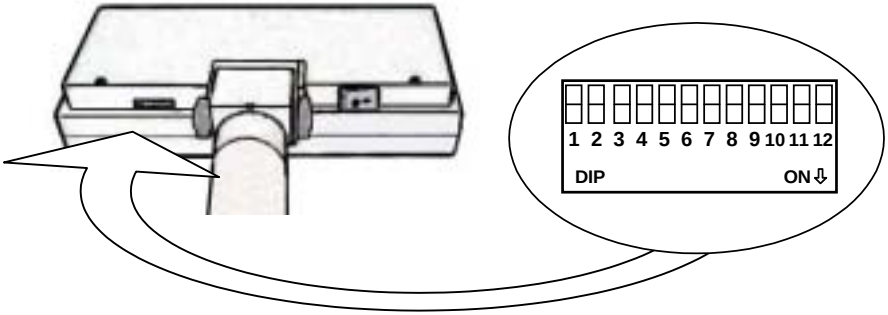


Pin assignment

No	Signal	Direction	Function description
2,3	Vin	-	Power 9 – 35 Vdc
4,5	GND	-	Signal gound
6	DSR	From Printer to Display	Printer ready signal
7	DTR	From Display to PC/Host	Display/Printer ready signal
8	RXD	From PC/Host to Display	Display/Printing data signal
9	TXD	From Display to Printer	Printer status data signal

Table 4-8

5. DIP SWITCH SETTING



5.1 Command type selection

SW1	SW2	SW3	Command type
ON	ON	ON	DSP800
OFF	ON	ON	ESC/pos
ON	OFF	ON	ADM 787
OFF	OFF	ON	ADM 788
ON	ON	OFF	EMAX
OFF	ON	OFF	UTC/P
ON	OFF	OFF	UTC/S
OFF	OFF	OFF	CD5220

Table 5-1

5.2 Baud rate selection

SW8	SW9	Baud rate (bps)
ON	ON	4800
OFF	ON	9600
ON	OFF	19200
OFF	OFF	38400

Table 5-2

5.3 Parity check selection

SW10	Parrity & data bites
ON	None-parity, 8 data bites
OFF	Even-parity, 7 data bites

Table 5-3

5.4 International character set selection

SW4	SW5	SW6	SW7	Character set	Code table (80H-FFH)
ON	ON	ON	ON	U.S.A.	PC-437(USA&Europe)
OFF	ON	ON	ON	FRANCE	PC-850(multilingual)
ON	OFF	ON	ON	GERMANY	PC-850(multilingual)
OFF	OFF	ON	ON	U.K.	PC-850(multilingual)
ON	ON	OFF	ON	DENMARK I	PC-850(multilingual)
OFF	ON	OFF	ON	SWEDEN	PC-850(multilingual)
ON	OFF	OFF	ON	ITALY	PC-850(multilingual)
OFF	OFF	OFF	ON	SPAIN	PC-850(multilingual)
ON	ON	ON	OFF	JAPAN	Katakana
OFF	ON	ON	OFF	NORWAY	PC-850(multilingual)
ON	OFF	ON	OFF	DENMARK II	PC-850(multilingual)
OFF	OFF	ON	OFF	U.S.A	SLAVONIC
ON	ON	OFF	OFF	U.S.A	RUSSIA
OFF	ON	OFF	OFF	U.S.A	PC860 (Portuguese)
ON	OFF	OFF	OFF	U.K.	GREEK
OFF	OFF	OFF	OFF	Not used	

Table 5-4

5.5 Self-test & demo function selection

SW11	Function
ON	Enable
OFF	Disable

Table 5-5

* SW12 reseve

6. COMMAND

6.1 CD5220 Standard Mode Command List

Command	Code (hex)	Function description
ESC DC1	1B 11	Overwrite mode
ESC DC2	1B 12	Vertical scroll mode
ESC DC3	1B 13	Horizontal scroll mode
ESC QA .....CR	1B 51 41 [n]x20 0D	Set thestringdisplay mode,writed string to upper line
ESC QB .....CR	1B 51 42 [n]x20 0D	Set the string display mode, writed string to lower line
ESC QD ....CR	1B 51 44 [n]xm 0D m<40	Upper line message scroll continuously
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
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 left-most position
CR	0D	Move cursor to left-most position
ESC [R	1B 5B 52	Move cursor to right-most position
ESC [K	1B 5B 4B	Move cursor to bottom position

Command	Code (hex)	Function description
ESC l x y	1B 6C x y 1<=x<=20,y=1,2	Move cursor to specified position
ESC @	1B 40	Initialize display
ESC W s x1 x2 y	1B 57 1 x1 x2 y 1<=x1<=x2<=20 y=1,2	Set or cancel the window range at horizontal scroll mode
CLR	0C	Clear display screen , and clear string mode
CAN	18	Clear cursor line, and clear string mode
ESC * n	1B 2A n 1<=n<=4	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) 20<n<=m<=FF	Define download characters. A=1-5 p1..p5 =row1..row5
ESC ?	1B 3F	Deletes download characters.
ESC %	1B 25	Select/cancel download character set.
ESC _ n	1B 5F n n=00,01	Set cursor on/off
ESC f n	1B 66 n	Select international fonts set, refer *2
ESC c n	1B 63 n	Select code, refer *3
ESC = n	1B 3D n n=01,02,03,31,32,33	Select peripheral device, display or printer
ESC s 1	1B 73 01	Store the use define character into eeprom
ESC d 1	1B 64 01	Store the use define character from eeprom

Table 6-1

***2:** The paramiter of international fonts set control by command **"ESC f n"**

Paramiter n	International Font Set
"A"	U.S.A.
"G"	Germany
"I"	Italy
"J"	Japan
"U"	U.K.
"F"	France
"S"	Spain
"N"	Norway
"W"	Sweden
"D"	Denmark I
"E"	Denmark II
"L"	Slavonic
"R"	Russia

Table 6-2

***3**: The paramiter of the code table control by command **"ESC c n"**

Paramiter "n"	International font set
"A"	Compliance with ASCII code
"J"	Compliance with JIS code
"L"	Compliance with SLAVONIC code
"R"	Compliance with RUSSIA code

Table 6-3

6.2 UTC standard mode command list

Command	Code (hex)	Function description
BS	08	Back space
HT	09	Horizontal tab
LF	0A	Line feed
CR	0D	Carriage return
DLE	0F	Display position
DC1	11	Over write display mode
DC2	12	Vertical scroll mode
DC3	13	Cursor on
DC4	14	Cursor off
US	1F	Clear display
ESC d	1B 64	Change to UTC enhanced mode

Table 6-4

6.3 UTC enhanced mode command list

Command	Code (hex)	Function description
ESC u A ..CR	1B 75 41 [data x 40]0D	Upper line display
ESC u B ..CR	1B 75 42 [data x 40]0D	Bottom line display
ESC u D ..CR	1B 75 44 [data x 40]0D	Upper line message scroll continuously
ESC u E ..CR	1B 75 45 hh ':' mm 0D h,m='0'-'9'	Display time
ESC u F ..CR	1B 75 46 [data x 40]0D	Upper line message scroll once pass
ESC u H ..CR	1B 75 48 n m 0D 20h<=n,m	Change attention code
ESC u I ..CR	1B 75 49 [data x 40]0D	Two line display
ESC RS CR	1B 0F 0D	Change to UTC standard mode

Table 6-5

6.4 AEDEX mode command list

Command	Code (hex)	Function description
! # 1 ....CR	21 23 31 [data x 40]0D	Upper line display
! # 2 ....CR	21 23 32 [data x 40]0D	Bottom line display
! # 4 ....CR	21 23 34 [data x 40]0D	Upper line message scroll continuously
! # 5 ....CR	21 23 35 hh ':' mm 0D h,m='0'-'9'	Display time
! # 8 ....CR	21 23 38 n m 0D 20h<=n,m	Change attention code
! # 9 ....CR	21 23 39 [data x 40]0D	Two line display

Table 6-6

6.5 ADM787/788 mode command list

Command	Code (hex)	Function description
CLR	0C	Clear display
CR	0D	Carriage return
SLE1	0E	Clear up line and move cursor to upper line left most end
SLE2	0F	Clear low line and move cursor to lower line left most end
DC0	10 n	Set period to upper line last n position 31H<=n<=37H
DC1	11 n	Set line blanking , N='1' up line, n='2' low line
DC2	12 n	Clear line blanking , N='1' up line, n='2' low line
SF1	1E	Clear field 1 and move cursor to field 1 fast position
SF2	1F	Clear field 2 and move cursor to field 2 fast position

Table 6-7

6.6 DSP-800 mode command list

Command	Code (hex)	Function descriptions
EOT SOH I n ETB	04 01 49 n 17	Select international character set.
EOT SOH P n ETB	04 01 50 n 17 n=31-58	Move cursor to specified position.
EOT SOH C n m ETB	04 01 43 n m 17 31<= n<=m<=58	Clear display range from n position to m position and move cursor to n position.
EOT SOH S n ETB	04 01 53 n 17 n=31-35	Save the current displaying data to n layer for demo display.
EOT SOH D n m ETB	04 01 44 n m 17 n=31-4F m=31-33	Display the saved data
EOT SOH A n ETB	04 01 41 n 17 n=31-34	Brightness adjustment.
EOT SOH F n ETB	04 01 46 n 17 00<=n<=FF	Blink display screen.
EOT SOH & n [px5] ETB	04 01 26 n p1...p5 17, 20<=n	Define download characters
EOT SOH ? n ETB	04 01 3F n 17 20<=n	Delete download characters.
EOT SOH = n ETB	04 01 3D n 17 n='1' ,'2'	Select peripheral device. N='1',printer n='2',display
EOT SOH % ETB	04 01 25 17	Initialize display
EOT SOH @ ETB	04 01 40 17	Execute self-test

Table 6-8

6. 7 EPSON Esc/pos command list

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 x=1-20,y=01,02	Move cursor to specified position.
CLR	0C	Clear display screen.
US X n	1F 58 n 01<=n<=04	Brightness adjustment.
US E n	1F 45 n n=00-ff	Blink display screen.
ESC @	1B 40	Initialize display.
ESC t n	1B 74 n n=00-0f	Select character code table.
ESC R n	1B 52 n n=00-0f	Select international character set.
US r n	1F 72 n n=00,01	Select/cancel reverse character.
US MD1	1F 01	Specify overwrite mode.
US MD2	1F 02	Specify vertical scroll mode.
US MD3	1F 03	Specify horizontal scroll mode.
ESC & s n m [a(p1..pa)]x m-n	1B 26 1 n m [a(p1..pa)]x m-n 20<n<=m<=ff	Define download characters. 20<n<=m<=ff a=1-5 p1..p5 =row1..row5
ESC ?	1B 3F	Delete downloads characters.
ESC %	1B 25	Select/cancel download character set.

Command	Code (hex)	Function description
ESC W n s x1 y1 x2 y2	1B 57 n s x1 y1 x2 y2 n=1,2,3,4 s=0,1	Specify/cancel the window range. 1<=x1<=x2<=20 1<=y1<=y2<=2
ESC = n	1B 3D n n=1,31, select printer n=2,32, selectdisplay	Select peripheral device.
US :	1F 3A	Set starting/ending position of macro definition.
US ^ n m	1F 5E n m 00<=(n, m)<=ff	Execute and quit macro.
US @	1F 40	Execute self-test.
US T h m	1F 54 h m 0<=h<=17 , 0<=m<=3b	Display time
US U	1F 55	Display time continuously

Table 6-9

7. CHARACTER SET

7.1 USA,standard character set (20h – 7Eh)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
20H	SP	!	“	#	$	%	&	‘	(	)	✶	+	,	-	.	/
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	{	|	}	~	SP

Table 7-1

7.2 Internation Character Sets

Hex / Country / Dec	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
	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	$	@	¡	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
Slawie	#	$	@	[	\	]	^	`	{	|	}	~
Russia	#	$	@	[	\	]	^	`	{	|	}	~

Table 7-2

7.3 Page 0 (PC437: USA, Standard Europe) (80H – FFH)

	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	ƒ
A0H	á	í	ó	ú	ñ	Ñ	a	o	¿	⌐	¬	½	¼	¡	«	»
B0H	░	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
C0H	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
D0H	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
E0H	α	ß	Γ	π	Σ	σ	µ	τ	Φ	θ	Ω	δ	∞	ø	Є	∩
F0H	≡	±	≥	≤	⌠	⌡	÷	≈	°	•	·	√	^{n}	^{2}	■	SP

Table 7-3

7.4 Page 1 (Katakana) (80H – FFH)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	α	β	γ	⊿	Є	η	θ	λ	μ	π	ρ	σ	τ	Φ	Ω	∑
90H	£	§	IE	IR	∫	╳̄	□̇	$^{-1}$	^{2}	^{3}	^{x}	½	1/	√	±	■
A0H	SP	。	「	」	、	・										
B0H																
C0H																
D0H															゛	゜
E0H	↑	↓	←	→	□	□	□	□	⇤	⇥	”	“	«	»	∴	∵
F0H	≦	≧	≠		‖	|	⊥	⁙	⁘		~	≡	〒	Ω	⊕	Θ

Table 7-4

7.5 Page 2 (PC850: Mulitlingual) (80H – FFH)

	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	a	o	¿	®	¬	½	¼	¡	«	»
B0H	▒	▒	▓	┃	┤	Á	Â	À	©	╣	╫	╗	╝	¢	¥	┐
C0H	└	┴	┬	├	─	┼	ã	Ã	╚	╔	╩	╦	╠	═	╬	¤
D0H	ð	Ð	É	Ë	È	ı	Í	Î	Ï	┘	┌	▉	▀	¦	Ì	▄
E0H	ó	ß	ô	ò	õ	Õ	µ	þ	Þ	Ú	Û	Ù	ý	Ý	¯	´
F0H	¯	±	‗	¾	¶	§	÷	¸	°	¨	·	¹	³	²	■	SP

Table 7-5

7.6 Page 3 (PC860: Portuguese) (80H – FFH)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ã	à	Á	ç	ê	Ê	è	Í	Ô	ì	Ã	Â
90H	É	À	È	ô	õ	ò	Ú	ù	Ì	Õ	Ü	¢	£	Ù	Pt	Ó
A0H	á	í	ó	ú	ñ	Ñ	a	o	¿	Ò	¬	½	¼	¡	«	»
B0H	▒	▒	▓	┃	┤	╡	╢	╖	╕	╣	╫	╗	╝	╜	╛	┐
C0H	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
D0H	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	▉	▀	▌	▐	▄
E0H	α	β	Γ	π	Σ	σ	µ	τ	Φ	θ	Ω	δ	∞	ø	∈	∩
F0H	≡	±	≥	≤	⌠	⌡	÷	≈	°	•	·	√	ⁿ	²	■	SP

Table 7-6

7.7 Page 4 (PC863: Canadian-French) (80H – FFH)

	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	¤	Ô	Ü	¢	£	Ù	Û	*f*
A0H	¦	´	ó	ú	¨	¸	ª	¯	Î	⌐	¬	½	¼	¾	«	»
B0H	▒	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
C0H	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
D0H	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
E0H	α	β	Γ	π	Σ	σ	µ	τ	Φ	θ	Ω	δ	∞	ø	Є	∩
F0H	≡	±	≥	≤	⌠	⌡	÷	≈	°	•	·	√	ⁿ	²	■	SP

Table 7-7

7.8 Page 5 (PC865: Nordic) (80H – FFH)

	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	Pt	*f*
A0H	á	í	ó	ú	ñ	Ñ	a	o	¿	⌐	¬	½	¼	¡	«	¤
B0H	▒	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
C0H	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
D0H	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
E0H	α	β	Γ	π	Σ	σ	µ	τ	Φ	θ	Ω	δ	∞	ø	Є	∩
F0H	≡	±	≥	≤	⌠	⌡	÷	≈	°	•	·	√	ⁿ	²	■	SP

Table 7-8

7.9 Page 6 (Slavonic) (80H – FFH)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Ç	ü	é	â	ä	ů	ć	ç	ł	ë	ő	ő	î	ź	ä	ć
90H	é	Ľ	í	ô	ö	Ĺ	ĭ	ś	ś	Ö	Ü	Ŧ	ŧ	ł	x	č
A0H	á	í	ó	ú	ą	ą	ž	ž	ę	ę		ź	č	ş	«	»
B0H	▒	▒	▓	│	┤	á	â	ě	ş					ż	ż	
C0H					─	┼	ă	ă						═		¤
D0H	đ	đ	ď	ë	ď	ň	í	î	ě			▉	▄	ţ	ů	▀
E0H	ó	β	ô	ń	ń	ň	š	š	ŕ	ú	ŕ	ũ	ý	ý	ţ	´
F0H	–	˜	¸	ˇ	˘	§	÷	ډ	°	¨	·	ũ	ř	ř	■	SP

Table 7-9

7.10 Page 7 (Russia) (80H – FFH)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	А	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	ш	Ъ	Ы	Ь	Э	Ю	Я
A0H	а	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	∂	Ғ	К	Н	θ	Ұ	Ү	h	∂	ғ	к	н	θ	Ұ	Ү	SP

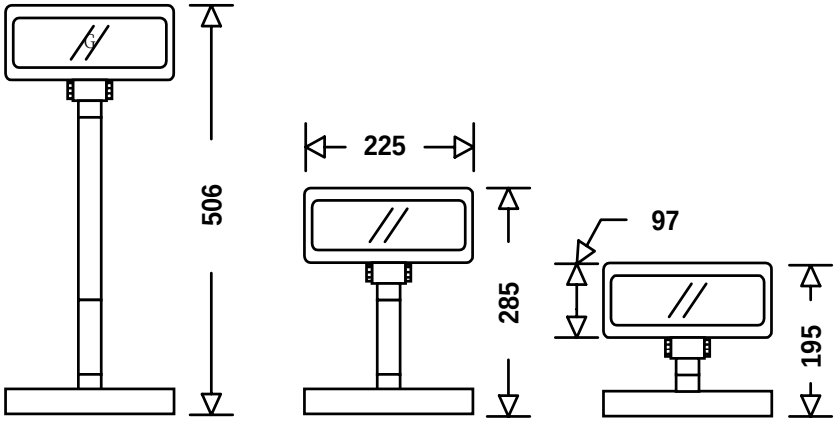
Table 7-10

7.11 Page 8 (Greek) (80H – FFH)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
80H	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π
90H	Ρ	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	α	β	γ	δ	ε	ζ	η	θ
A0H	ι	κ	λ	μ	ν	ξ	ο	π	ρ	σ	s	τ	υ	φ	χ	ψ
B0H																
C0H																
D0H																
E0H	ω															
F0H										£				–		

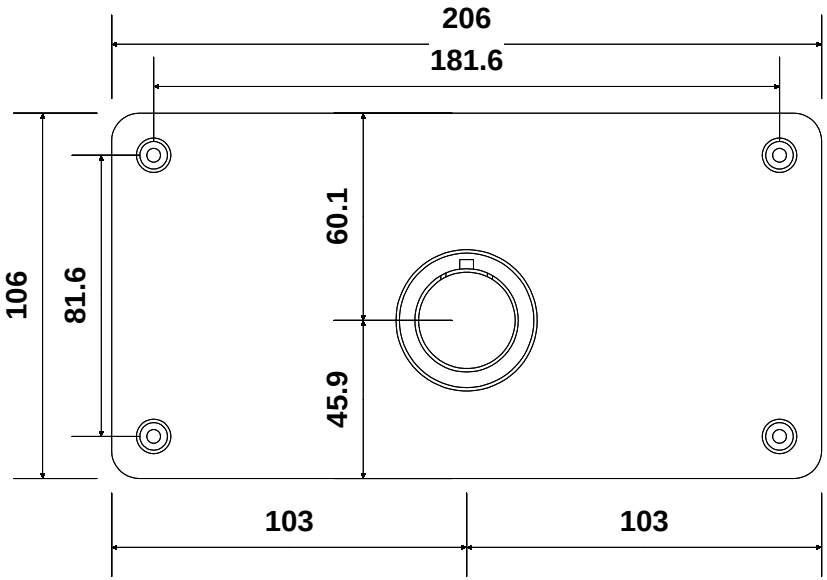
Table 7-11

APPENDIX A: Custemer Display Dimension



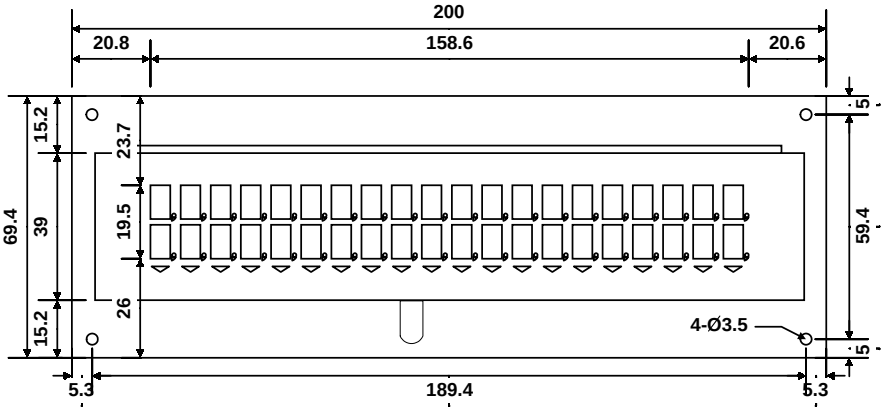
Unit : mm

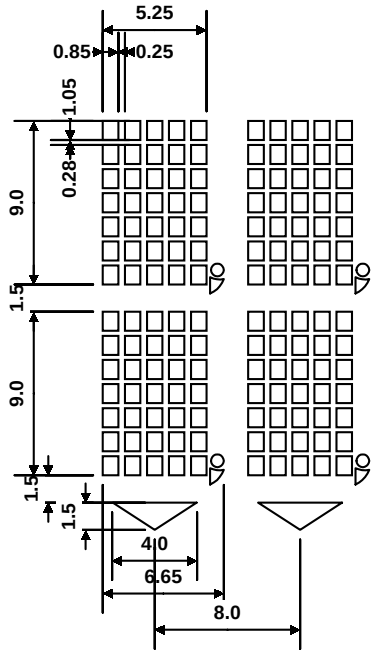
APPENDIX B: Display Base Dimension



Unit : mm

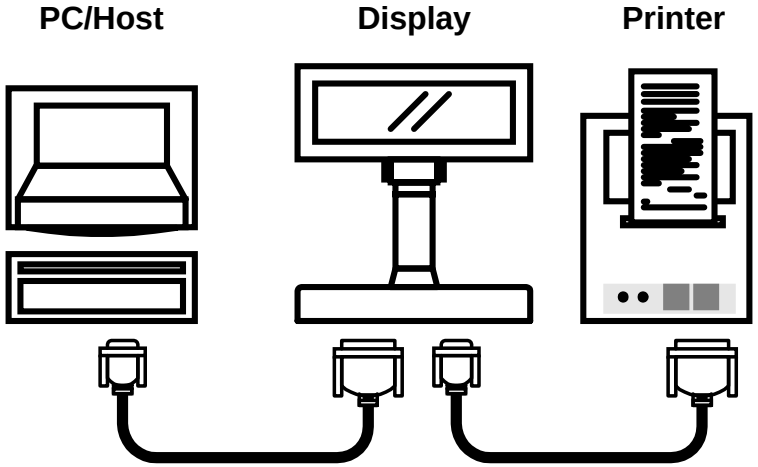
APPENDIX C: WD-202A Display Module Dimension





Unit : mm

APPENDIX D: Pass Through installation Guide

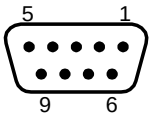


D-1. Pass Through installation Daigram

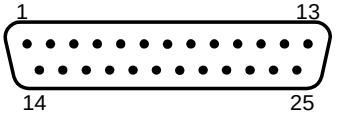
*Only for CD5220/UTC/EMAX/EscPOS/DSP-800 emulation command sets.
*If printer is EPSON TM serail printer then the pass through cable and display cable are same.

D-2.The display cable pin assignment:

DB9/F



DB25/M



Pin assignment .

D-sub 9p		Signale direction	D-sub 25p	
2	RXD	←	2	TXD
3	TXD	→	3	RXD
4	DTR	→	5,6	DSR
6,8	DSR	←	20	DTR
5	GND	---	5	GND
9	Vin	→	16,25	Vin