## **User Manual**

**P07305 Stand Alone LCD Pole Display** 

Copyright 2005' 11 All Rights Reserved Manual Version 1.1

The information contained in this document is subject to change without notice. We make no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. We shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced or translated to another language without the prior written consent of the manufacturer.

#### TRADEMARK

Intel®, Pentium® and MMX are registered trademarks of Intel® Corporation. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. ELO Touch is the registered trademark of ELO Touch Systems.

# Safety IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions carefully. Save these instructions for future reference.
- 2. Follow all warnings and instructions marked on the product.
- 3. Do not use this product near water.
- 4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 5. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- 6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- 7. Do not allow anything to rest on the power cord.Do not locate this product where persons will walk on the cord.
- 8. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

#### **FCC**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

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

#### **CE Mark**



This device complies with the requirements of the EEC directive 89/336/EEC with regard to "Electromagnetic compatibility" and 72/23/ECC "Low Voltage Directive".

#### LEGISLATION AND WEEE SYMBOL

2002/96/CE Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centres for activation of the treatment, collection, recycling and disposal procedure.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

### **Table of Contents**

1.	Feat	ures	6				
2.	General Specification						
3.	Unpacking and checking the parts						
4.	Inter	face	9				
	4.1.	Specifications	9				
	4.2.	Power Supply Connectors	9				
	4.3.	RS232C Link to PC/HOST Connector	9				
	4.4.	RS232C Link to Display Panel	. 10				
5.	Com	mand List	11				
Ар	pendi	x A: Character Code Tables	. 12				
Аp	pendi	x B: Customer Display Dimension	. 13				

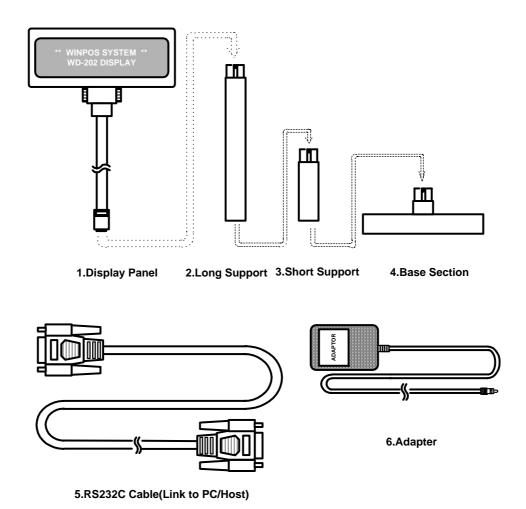
### 1. Features

- Data can be displayed on 30 columns x 4 lines ( or double high is 2 lines ) by 8x16 dot matrix alphanumeric or 15 columns x 4 lines ( or double high is 2 lines ) by Chinese character.
- 2. Blue-white color and no filter are easy to eyes.
- 3. The display panel is adjustable to provide the best view angle.
- 4. Provide 2 poles for best position installation.
- 5. Provide String mode command sets.
- 6. Provides an interface based on RS-232C, and RS232C baud rate fixed 9600 bps. .

## 2. General Specification

NO	ITEM		Descriptions						
1	Display method		Liquid crystal display						
2	LCD t	уре	STN Blue mode						
3	Backl	ight mode	CCFL backlight						
4	Bright	tness	100 cd/m²						
5	Displa	ay color	Blue (back color) and White (character color)						
6	Numb	per of character	30 columns x 4 lines ( or double high is 2 lines ) alphanumeric 15 columns x 4 lines ( or double high is 2 lines ) Chinese character						
7	Chara	acter font	8 x 16 Dot matrix by alphanumeric 16 x 16 dot-matrix by Chinese character						
		Traditional Chinese	96 alphanumeric 13000 Chinese character by Big 5 code						
8	Char	Simplified Chinese	96 alphanumeric 8000 Chinese character by GB code						
	type	Japanese	96 alphanumeric 7000 Japanese character						
		Korean	96 alphanumeric 8000 Korea character						
9	Character size		8.47mm x 4.24mm( 16x8 dot matrix) 8.47mm x 8.47mm( 16x16 dot matrix) 16.94mm x 8.47mm( 32x16 dot matrix)						
10	Powe	r supply	9-33 VDC						
11	Powe	r consumption	3 - 6 W (Standby : 1 W)						
12	MTBF		15000-20000 hours (life time)						
13	Panel	dimensions	224 (W) x 93 (H) x 50(D) mm						
14	Support dimensions		Long support: 22cm Short support: 9cm						
15	Base dimensions		190(w)x55(h)x96(d)mm						
16	Viewi	ng angle	0 – 45 degrees						
17	Rotat	ion angle	Maximum 270 degrees						
18	Weigl		1.25 Kg						
19	Opera	ating temperature	0 − 50°C						
20		ating Humidity	30%-85%						
21	Stora	ge Temperature	-20 - 55°C						
22	Stora	ge Humidity	10%-85%						

## 3. Unpacking and checking the parts



**Notes:** Make sure no parts are missing or damaged.

#### 4. Interface

### 4.1. Specifications

Item	Function						
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	9600 bps						
Parity	None						
Bit length	8 bits						
Stop bits	1 or more						

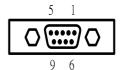
### 4.2. Power Supply Connectors

CN6 / Connector type: DC jack (5.5/2.1)



#### 4.3. RS232C Link to PC/HOST Connector

CN2 / Connector type: D-sub 9 pin female



Pin Assignment

No	Signal	Direction	Function description					
2	RXD	From PC/Host to display	Receive data					
3	TXD	-	-					
4	DSR	-	-					
5	GND	-	Signal ground					
6,8	DTR	From display to PC/Host-	Display ready Signal					

### 4.4. RS232C Link to Display Panel

CN3 / Connector type: Phone-jack 10P/8C



Pin Assignment

No	Signal	Direction	Function description					
1	NC	-	Not connect					
2,3	V+	-	Power input (9 – 33 Vdc)					
4,5	GND	-	Signal ground					
6	DSR	To display panel	PC/Host ready signal					
7	DTR	From display panel	Printer ready signal					
8	RXD	To display panel	Send data to display					
9	TXD	From display panel	No use					
10	NC	-	Not connect					

## 5. Command List

#### **COMMAND**

[Name]	Command name.
[Format]	<>H indicates hexadecimal, <> indicates decimal, []k indicates k times repeat to control code and frequency.
[Range]	Gives the allowable range for set argument and data.
[Description]	Explain command function.
[Complement]	Complement particular.
[Note]	Gives important information on the setting and used of printer command, if necessary.

Command	Code	Name and description
US	<1F>H	Clear display
ESC q A	<1B>H<71>H/<41>	Show string data
	H"d1 – d30" 0D	"d1 – d30" to display line 1.
ESC q B	<1B>H<71>H/<42>	Show string data
	H"d1 – d30" 0D	"d1 – d30" to display line 2.
ESC q C	<1B>H<71>H/<43>	Show string data
	H"d1 – d30" 0D	"d1 – d30" to display line 3.
ESC q D	<1B>H<71>H/<44>	Show string data
	H"d1 – d30" 0D	"d1 – d30" to display line 4.
ESC q E	<1B>H<71>H/<45>	Show double-height string data
	H"d1 – d30" 0D	"d1 – d30" to display line 1 and line 2.
ESC q F	<1B>H<71>H/<46>	Show double-height string data
	H"d1 – d30" 0D	"d1 – d30" to display line 3 and line 4.
SO	<0E>H	Set double-width character mode,
		This code must be inside string data "d1 – d30".
DC4	<14>H	Cancel double-width character mode,
		This code must be inside string data "d1 – d30".

## **Appendix A: Character Code Tables**

	00	10	20	30	40	50	60	70	80	90	A0	В0	C0	D0	E0	F0	
0	NUL	DLE	SP	0	@	Р	`	р									
1			!	1	Α	Q	а	q									
2			ű	2	В	R	b	r									
3			#	3	С	S	С	s									
4	EOT		\$	4	D	Т	d	t									
5	ENQ		%	5	Ш	U	е	u									
6			&	6	F	V	f	٧									
7			4	7	G	W	g	W	1	TWO BYTES CODE SYSTEM							
8			(	8	Н	Χ	h	Х		С	HAR	ACT	ERS	ARE	Α		
9	НТ		)	9	I	Υ	I	у									
Α	LF		*	:	J	Z	j	z									
В		ESC	+	,	K	[	k	{									
С			,	<	L	١	I										
D	CR	GS	ı	=	М	]	m	}									
Е				>	N	۸	n	~									
F		US	/	?	0	_	0	SP									

## **Appendix B: Customer Display Dimension**

