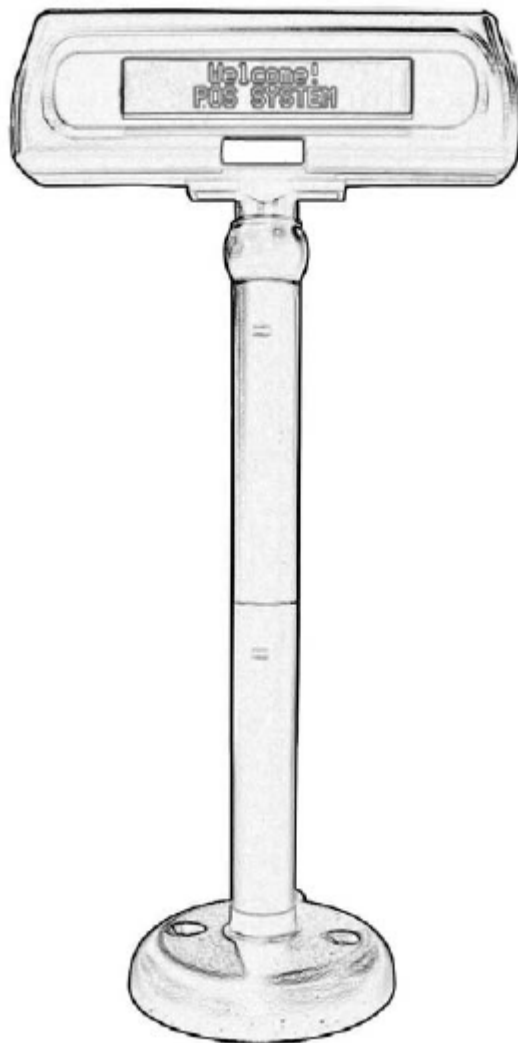


# Customer Pole Display

## SERIES 8035

# Operation Manual

Version 1.1



This equipment has been tested and found to comply with the limits for 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 if not installed and used in accordance with the instructions may cause harmful interference and 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 into 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. This booklet is available from the U.S. government Printing Office, Washington, DC 20402, Stock NO.004-000-00345-4.

**CAUTION:**

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

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.



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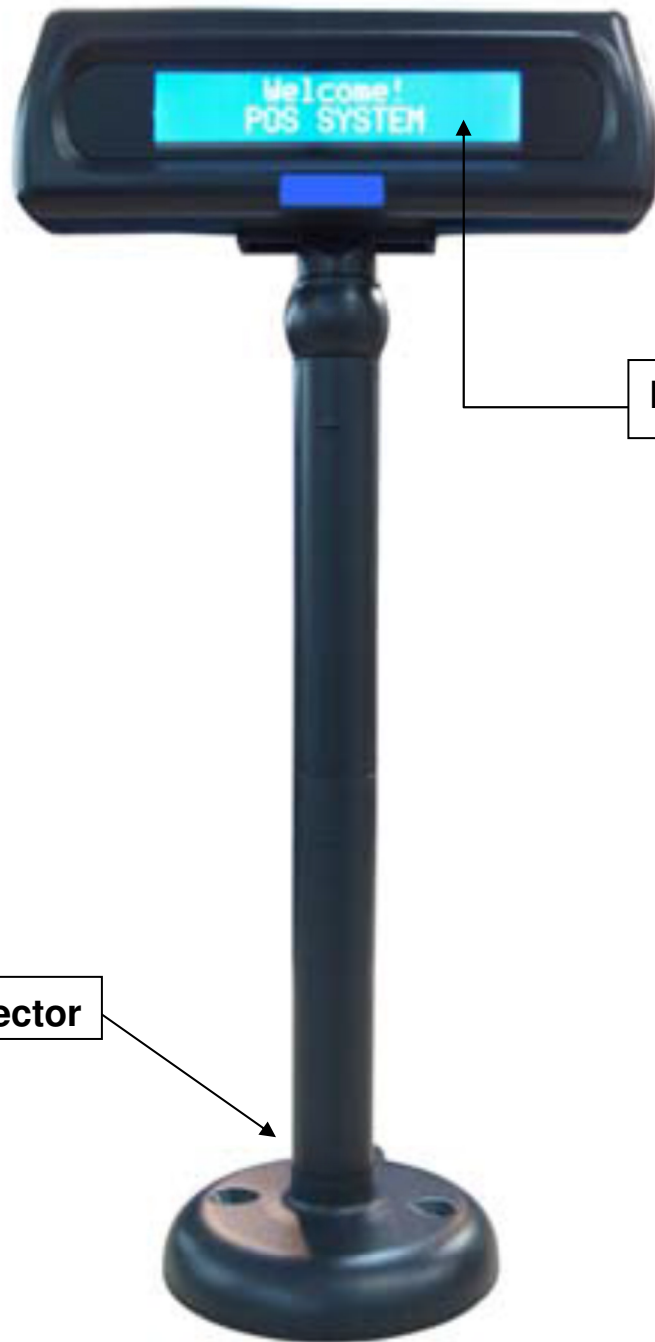
## ***Chapter 1*** Introduction

The 8035 LCD customer display is an excellent tool for transmitting transactions, advertising message, and customer greeting at POS system(point-of-sale system). With adjustable tilt angles and visual swivel, customer could freely set just right angel and pole height according to their demand. The bright alphanumeric LCD display provides wide viewing angles,no matter in close or short distance. 8035 LCD customer display support language (Europe/English). With ESC/POS command codescompatible,8035 can work under any operation system and platform.

### **Features:**

- **Easy to read of blue background & white characters display.**
- **Six adjustable viewing angles and visual swivel design**
- **Language support: (Europe/English)**
- **USB communication**
- **Built-in ESC/POS command codes, compatible to OPOS of ESC/POS**

## **Chapter 2** Appearance



LCD Display

Cable Connector

**JD-8035**

## **Chapter 3** Before You Install

This manual describes functions and usage of the Model 8035 customer pole display. The 8035 is a 2x20 alphanumeric customer pole display designed with multi-languages for retail and other industrial environments. Its outstanding features include high quality liquid crystal display in blue & white color, USB & serial interface are easy to use and powerful programming features. The 8035 can also combine with any serial receipt printer.

### **Step 1: Turn Off Your Computer**

By shutting off your computer, you will prevent any accidental damage to the pole display and computer.

### **Step 2: Review Packing List**

Please ensure that your pole display shipment is complete.

Model 8035 USB includes:

- 1 pcs 8035 pole display
- 1 pcs operation manual
- 1 pcs USB cable
- 1 pcs pole

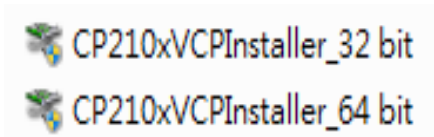
NOTE: The last character of indicates Cable's color.

Ex: W=White; B=Black

## USB Interface

Step 1: Installation USB Driver from CD or download newest:

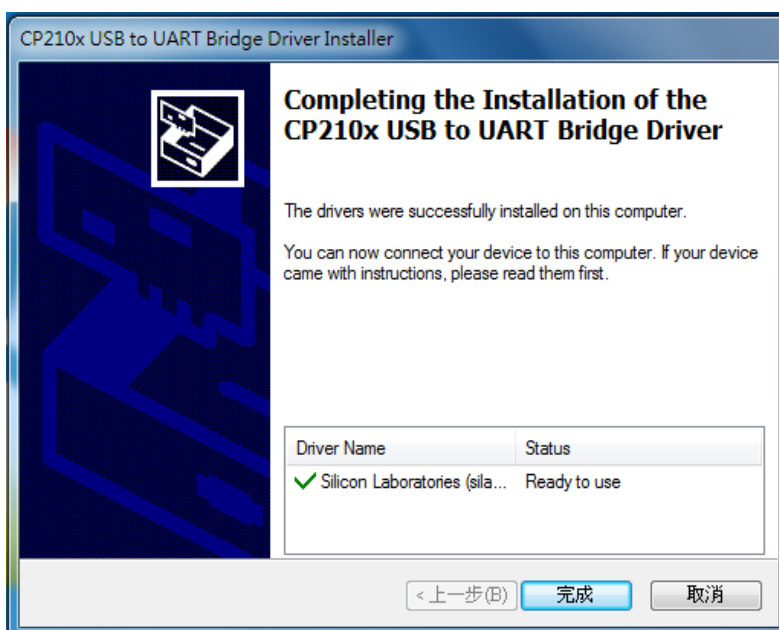
<http://www.silabs.com/products/mcu/pages/usbtouartbridgevcpcdrivers.aspx>



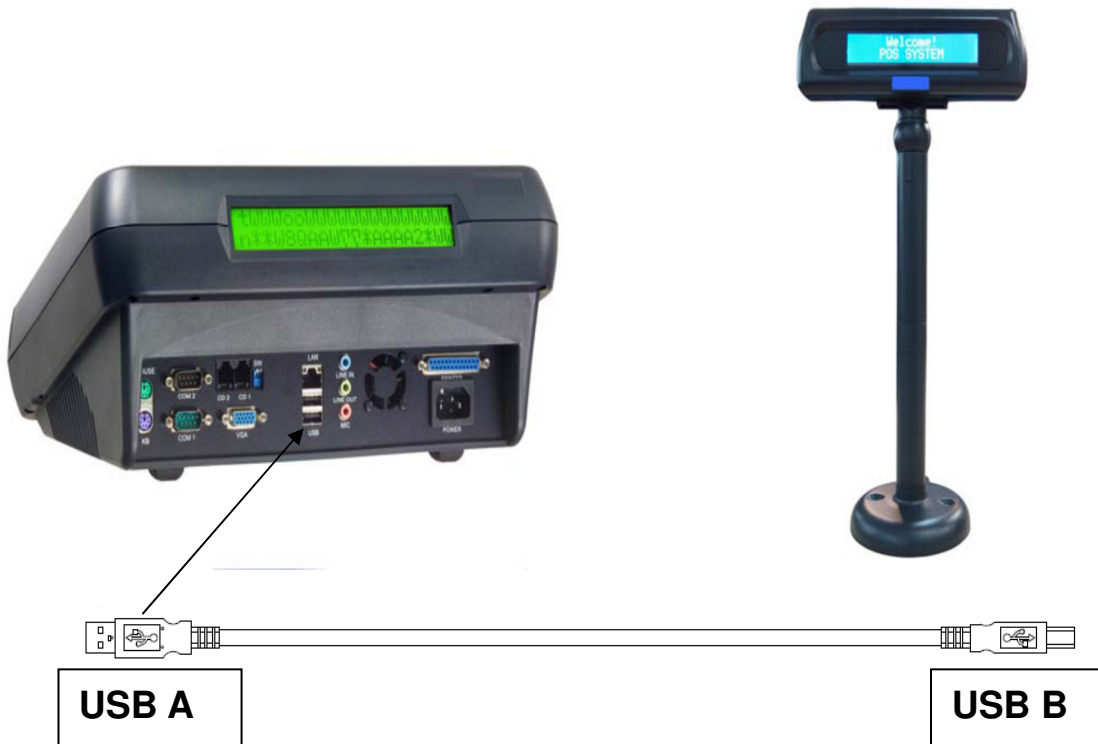
software and installed



After installation complete select “OK”



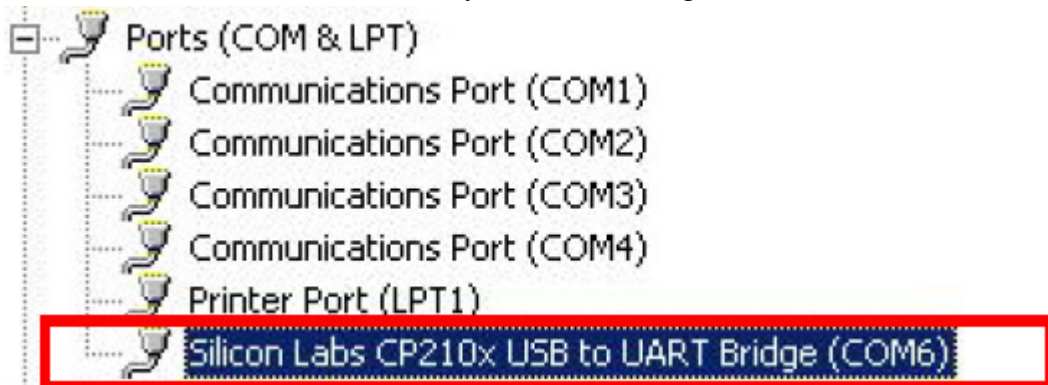
## Step 2: Bulid up your 8035



## 8035 Customer Pole Display USB Installation

### Step 3: Connect to your computer

Connect the USB connector to the port on your computer.  
Then check device installed normally in device manager.



**Notes: COM number may be different on each computer**



## **Chapter 5** Programming Commands

There is a programming mode available for model 8035 with ESC/POS mode. In this Chapter, we will use ESC/POS mode for multi-languages, Please refer to Appendix for details. The basic function of the 8035 display is comparable to the display programming by your software should be as easy. You only need open the COM-port on which the display has been connected from you. Then, you just needs send the character what you want to display on 8035 directly via the COM port. Please following the USB/RS232 parameters to use as below:

### ***9600 Baud, No Parity, 8 Data Bits, 1 Stop bit***

In Basic, you would initialize the interface as follows:

***OPEN "COMx: 9600, N, 8, DS0" FOR OUTPUT AS #1***

(x=number of the COM port you are using for the display)

And you would print something to the display using the PRINT command:

***PRINT#1, "Hello World!"***

In the end, you can close the interface:

***CLOSE #1***

In other programming languages, the commands for serial output shall be different, but they will work in a similar way. For some compilers, you will need an extra toolbox, that offers you usb routines. Please refer to your compilers/interpreters manual for more details.

***Example:***

***OPEN "COMx: 9600, N, 8, 1, DS0" FOR OUTPUT AS #1***

***PRINT #1, "Hello World!"***

***CLOSE #1***

## Programming using DOS routines

You can also generate a display output using the simple DOS routines.

**Example:**

**MODE COMx: 9600, N, 8, 1**

**Copy CON COMx**

**Hello World [ENTER]**

## Control characters and special functions

For special display functions, there are some commands which will be explained in this chapter. Some of the commands consist of one ASCII-CTRL-code, others are command strings, introduced by ESC.

If a command needs additional parameters, please do not forget to use ASCII format for the parameter. That means, if the parameter is 0 (zero), then you have to transmit the ASCII code "0" (=CHR\$(48) in Basic; 48 is the decimal position of the "0" character in the ASCII code table). But please consider that only ONE byte is allowed for each parameter. That is why you cannot transmit two digit numbers. In this case, just add the number you want to transmit as parameter 48 and transmit the corresponding character. For example, if you want to transmit the parameter 11, you have to send CHR\$(11+48)=CHR\$(59)=";". Attention: For some other commands, only BYTE values are allowed as parameter. For those, you directly send the corresponding character code without adding 48 (e.g. CHR\$(11) for 11). For details, please refer to the individual command code descriptions.

**Example: Set the cursor to the last position in the display area**

**WRONG:**

**PRINT #1, CHR\$(27)+"="; :REM command ESC =**

**PRINT #1, 19;1 :REM parameter column 19, line 1**

**CORRECT:**

**PRINT #1, CHR\$(27)+"=";**

**PRINT #1, CHR\$(48+19)+"1" :REM or CHR\$(48+19)+CHR\$(48+1)**

Below is a list of command sequences for user to design an interface to the 8035 customer pole display.

Please note that pole display is default with **9600 bps baud rate, no parity, 8 data bits, 1 stop bit.**

## **Appendix I Specifications**

<b>NO</b>	<b>Item</b>	<b>Descriptions</b>
1	Display method	Liquid crystal display
2	LCD type	STN Blue mode
3	Backlight mode	LED backlight
4	Brightness	600 cd/m2
5	Display color	Blue(back color) and White(character color)
6	Adjustable angle	Swivels 360° and Tilt 45° Angles
7	Viewing angle	0– 45 degrees
8	Number of character	20 columns x 2 lines
9	Character size	5mm(w) x 10mm (H) , 5x7 dot
10	Character font	2 x 20 dot matrix by alpha numeric
11	Language	Europe/ English
12	Interface	USB 2.0 user access 8035 via virtual Comport
13	Software Programming	ESC/POS OPOS (OLE for Retail POS)
14	Power Requirement	5V DC from HOST USB port
15	Total dimensions	214 (W) x 70 (H) x 40 (D) mm
16	Optional Pole Height	140mm or 280mm
17	Approximate Weight	950g
18	Material	ABS Plastic & ABS Plastic with Metal
19	Colors	Dark Gray or White
20	Operating temperature	5 - 45°C
21	Operating Humidity	30% - 85%
22	Storage Temperature	-10 - 55°C
23	Storage Humidity	10% - 85%

# Appendix II

## Character Generator ROM Map

8035(Europe/English) Font Table

Upper 4 bits Lower 4 bits	LLLL	LLLH	LLHL	LLHH	LALL	LALH	LHLL	LHHH	RLLL	RLLH	RLHL	RLHH	RLLL	RLLH	RHLL	RHHH
LLLL (00H)		±		Ø	Ⓔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
LLLH (01H)		≡	!	1	A	Q	ā	ā	ā	ā	ā	ā	ā	ā	ā	ā
LLHL (02H)		ŕ	"	2	B	R	b	r	é	æ	ó	°	ø	ë	ø	œ
LLHH (03H)		¿	#	3	C	S	c	s	â	ô	ú	'	ƒ	ŋ	ε	ψ
LALL (04H)		ƒ	\$	4	D	T	d	t	ä	ö	Ɔ	'	€	Γ	ζ	ω
LALH (05H)		ƒ	%	5	E	U	e	u	ä	ö	Ɔ	'	€	Γ	ζ	ω
LHLL (06H)		ƒ	&	6	F	V	f	v	ä	ö	Ɔ	'	€	Γ	ζ	ω
LHHH (07H)	€	ƒ	'	7	G	W	g	w	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
RLLL (08H)		ƒ	(	8	H	X	h	x	é	ü	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
RLLH (09H)		ƒ	)	9	I	Y	i	y	ë	ö	ı	≤	Γ	Π	λ	€
RLHL (0AH)		ƒ	*	:	J	Z	j	z	è	ü	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
RLHH (0BH)		ƒ	+	;	K	Ɔ	k	Ɔ	ı	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
RLLL (0CH)		ƒ	,	<	L	\	l	ı	ı	ı	ı	ı	ı	ı	ı	ı
RLLH (0DH)		ƒ	-	=	M	I	m	ı	ı	ı	ı	ı	ı	ı	ı	ı
RHLL (0EH)		ƒ	.	>	N	^	n	˘	ı	ı	ı	ı	ı	ı	ı	ı
RHHH (0FH)	€	ƒ	/	?	O	_	o	˘	ı	ı	ı	ı	ı	ı	ı	ı