

**GC3F00001A/GC3F00002A
INTERFACE BOARD USER MANUAL**

LABAU Technology Corp.

■ Specifications

1. General Specifications

Table 1 General Specifications

Item	Specifications	
Application Model	BK3F001A	BK3F002A
Input control method	Serial Input/Output	USB Input/Output
Printing method	Thermal dot line printing	
Character type	CP-437 Katakana CP-850 CP-860 CP-863 CP-865	
Character configuration	Font A Font B	
1-Byte character	9x17 12x24	
2-Byte character	-- 24x24	
Printable dot number	576 dots	
Maximum print speed	150 mm / second	
Operating voltage range: Vp	+24 VDC ± 7%	
Dimensions	69 mm (W) x 50 mm (D)	

2. Connectors

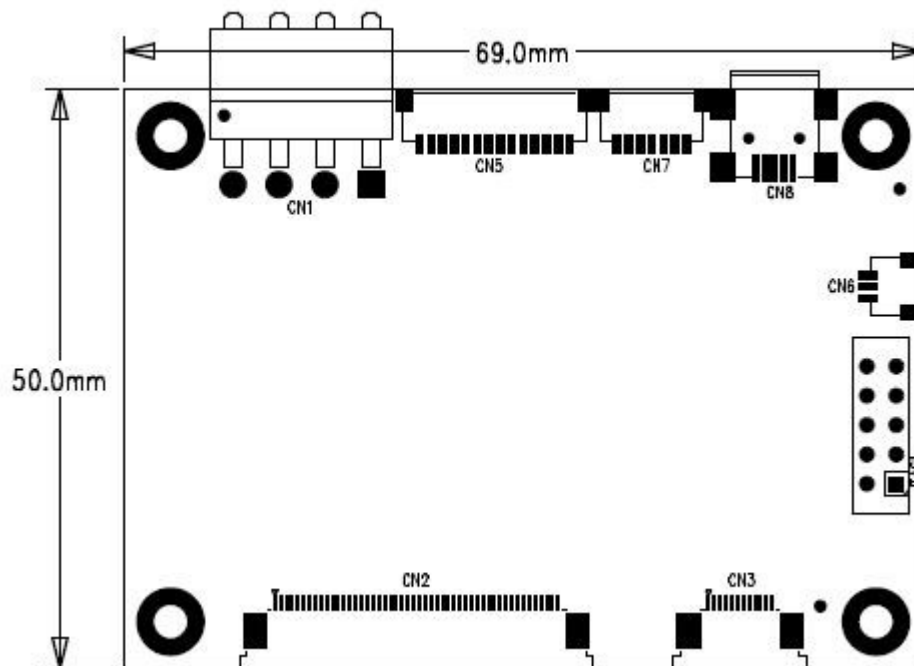


Table 2 CN1 Terminal Assignments

Terminal No.	Signal Name	I/O	Function
1	Vp	I	+24V
2	Vp	I	+24V
3	GND	-	GND
4	GND	-	GND

Table 3 CN2 Terminal Assignments

Terminal No.	Signal Name	I/O	Function
1	HVp	O	Head drive power
2	HVp	O	Head drive power
3	HVp	O	Head drive power
4	HVp	O	Head drive power
5	HVp	O	Head drive power
6	HVp	O	Head drive power
7	DAT	O	Print data output
8	CLK	O	Synchronizing signal for print data transfer
9	GND	-	Head GND
10	GND	-	Head GND
11	GND	-	Head GND
12	GND	-	Head GND
13	GND	-	Head GND

14	GND	-	Head GND
15	NC	-	Unused
16	DST4	O	Head strobe signal 4
17	DST3	O	Head strobe signal 3
18	Vcc	-	Logic power
19	TH GND	-	Thermistor GND
20	TH GND	-	Thermistor GND
21	TH	I	Thermistor signal
22	NC	-	Unused
23	DST2	O	Head strobe signal 2
24	DST1	O	Head strobe signal 1
25	GND	-	Head GND
26	GND	-	Head GND
27	GND	-	Head GND
28	GND	-	Head GND
29	GND	-	Head GND
30	GND	-	Head GND
31	LATCH	-	Print data latch
32	HVp	-	Head drive power
33	HVp	-	Head drive power
34	HVp	-	Head drive power
35	HVp	-	Head drive power
36	HVp	-	Head drive power
37	HVp	-	Head drive power
38	NC	-	Unused
39	PS	I	Signal of the out-of-paper sensor
40	Vps	O	Power supply of the out-of-paper sensor
41	GND	-	GND of the platen position/ out-of-paper sensor
42	HS	I	Signal of the platen position sensor
43	NC	-	Unused
44	FG	-	Frame GND
45	FG	-	Frame GND
46	NC	-	Unused
47	2A	O	Motor drive signal
48	1B	O	Motor drive signal
49	1A	O	Motor drive signal

50	2B	O	Motor drive signal
----	----	---	--------------------

Table 4 CN3 Terminal Assignments

Terminal No.	Signal Name	I/O	Function
1	NC	-	Unused
2	Vcs	O	Power supply of the home position sensor
3	GND	-	GND of the home position sensor
4	CUTS	I	Signal of the home position sensor
5	2B	O	Autocutter motor drive signal
6	2B	O	Autocutter motor drive signal
7	2A	O	Autocutter motor drive signal
8	2A	O	Autocutter motor drive signal
9	1B	O	Autocutter motor drive signal
10	1B	O	Autocutter motor drive signal
11	1A	O	Autocutter motor drive signal
12	1A	O	Autocutter motor drive signal

Table 5 CN5 Terminal Assignments

Terminal No.	Signal Name	I/O	Function
1	FEED	I	Feed signal
2	RESET	I	Reset signal
3	GND	-	GND
4	ST1	O	Status signal
5	ST2	O	Status signal
6	ST3	O	Status signal
7	ST4	O	Status signal
8	GND	O	GND
9	DRS	O	Drawer sensor signal
10	DSW	O	Drawer switch signal
11	Vdu		Drive terminal for the drawer (V _p side)
12	GNDdu		Drive terminal for the drawer(GND side)
13	GND	O	GND
14	NC	O	Unused

Table 6 CN6 Terminal Assignments

Terminal No.	Signal Name	I/O	Function
1	Vns	O	Power supply of the near end sensor

2	NS	I	Signal of the near end sensor
3	GND	-	GND of the near end sensor

Table 7 CN7 Terminal Assignments (For BK3F001A)

Terminal No.	I/O	Signal Name
1	O	TxDI
2	I	RxD
3	O	RTS
4	I	CTS
5	O	DTR
6	I	DSR
7	-	GND

Table 8 CN8 Terminal Assignments (For BK3F002A)

Terminal No.	Signal Name
1	Vbus
2	D-
3	D+
4	NC
5	GND

■ Operation

1. Command

ESC/POS Command List

Command	Hexadecimal	Name
LF	0A	Print and line feed
FF	0C	Print and return to standard mod (in page mode)
NUL NUL NUL	00 00 00	Printing, Beep buzzers
NUL LF	00 0A	Line feed (print after receiving end command)
NUL CR	00 0D	Carriage return (print after receiving end command)
CR+LF	0D 0A	Print, carriage return, and line feed
DLE EOT	10 04	Real-time status transmission
DEL DC4	10 14	Generate pulse at real-time (Drawer kick-out, as 1B 70 command)
ESC FF	1B 0C	Print date in page mode
ESC SP	1B 20	Set right-side character spacing
ESC !	1B 21	Select print mode(s)
ESC \$	1B 24	Set absolute print position
ESC *	1B 2A	Select bit-image mode
ESC -	1B 2D	Turn underline mode on/off
ESC 2	1B 32	Select default line spacing
ESC 3	1B 33	Set line spacing
ESC =	1B 3D	Select peripheral device
ESC @	1B 40	Initialize printer
ESC J	1B 4A	Print and feed paper
ESC L	1B 4C	Select page mode
ESC M	1B 4D	Select character font
ESC R	1B 52	Select an international character set
ESC S	1B 53	Select standard mode
ESC W	1B 5C	Set relative print position
ESC a	1B 61	Select justification
ESC c	1B 63	Select paper sensor(s) to output paper-end signals
ESC d	1B 64	Print and feed n line
ESC i	1B 69	Full cut
ESC l	1B 6D	Partial cut
ESC p	1B 70	Generate pulse
ESC t	1B 74	Select character code table
ESC {	1B 7B	Turn upside-down printing mode on/off
FS !	1C 21	Set Chinese character size
FS &	1C 26	Set Chinese character mode
FS .	1C 2E	Cancel Chinese character
FS g	1C 67	Read/Write user's defined data
FS p	1C 70	Print NV bit image
FS q	1C 71	Define NV bit image
GS !	1D 21	Select character size
GS (A	1D 28	Execute test print
GS *	1D 2A	Define downloaded bit image
GS /	1D 2F	Print downloaded bit image
GS B	1D 42	Turn white/black reverse printing mode on/off
GS H	1D 48	Select printing position of HRI characters
GS I	1D 49	Transmit printer ID
GS L	1D 4C	Set left margin
GS P	1D 50	Set horizontal and vertical motion units
GS V	1D 56	Select cut mode and cut paper
GS a	1D 61	Enable/disable Automatic Status Back(ASB)
GS f	1D 66	Select font for HRI characters

GS h	1D 68	Set bar code height
GS k	1D 6B	Print bar code
GS r	1D 72	Transmit status
GS v	1D 76	Print raster bit image
GS w	1D 77	Set bar code width

2. Setup Utility

3. RS232

The default RS232 status is:

Item	Specification
Synchronization	Asynchronous
Baud rate	115200 bps
Data bit length	8 bits
Stop bit length	1 bit
Parity	None

The serial RS232 connector is CN7.

4. USB Driver Installation

For XP

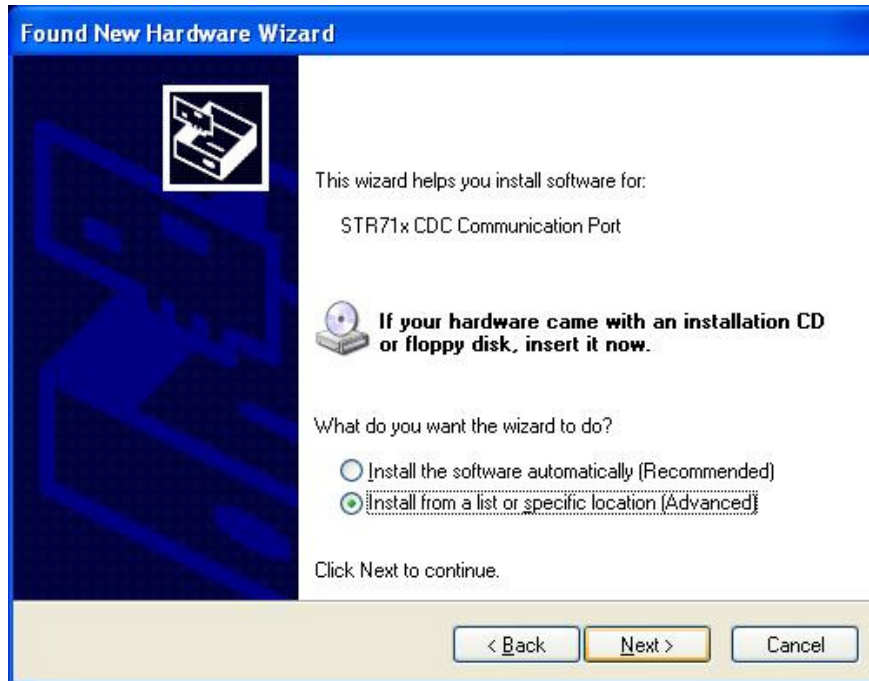
(1).When the printer is connected, the window below will appear.



(2).Please click “YES, this time only” and click “Next”



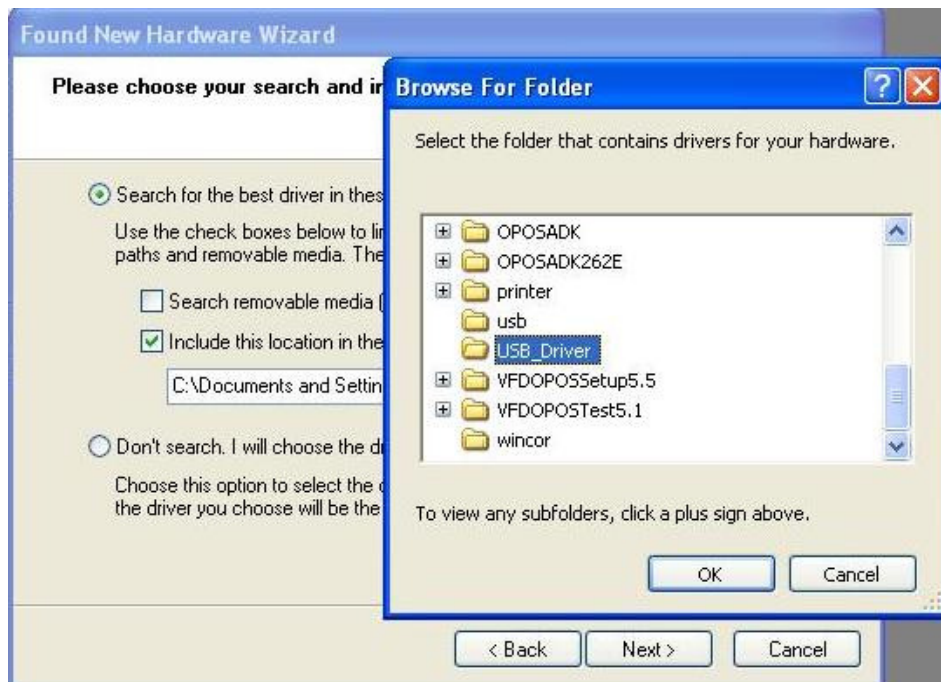
(3).Please click “Install from a list or specific location (Advanced)” and click “Next”



(4).Please click “Include this location in the search” and click “Browse”



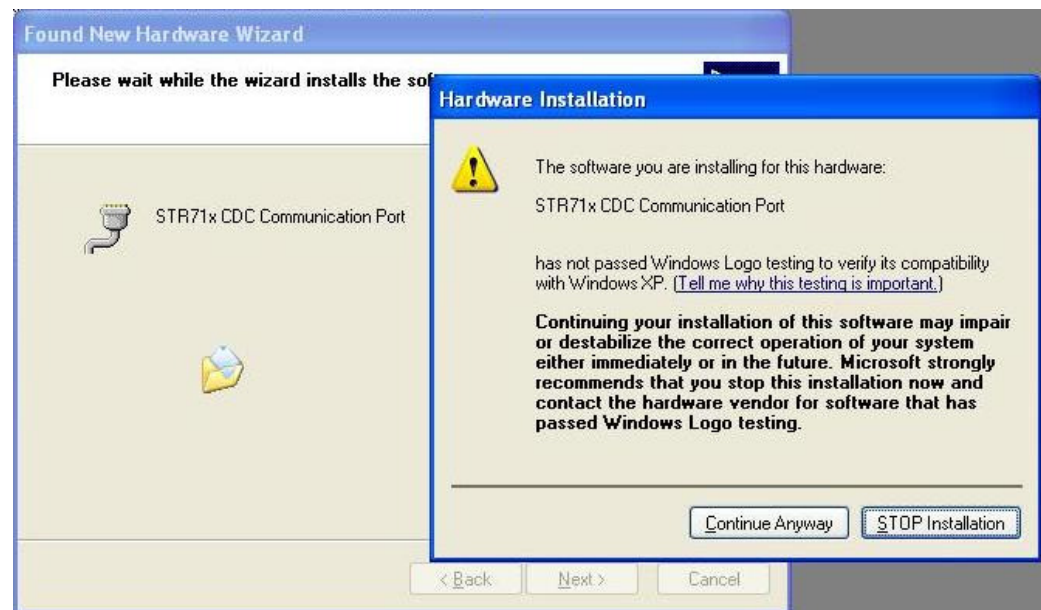
(5).Please click “USB Driver” and click “OK”



(6).Please click “NEXT”



(7).Please click “Continue Anyway”



(8).The installation will begin.



(9).When the window below appears, the installation is done. Please click “Finish”.

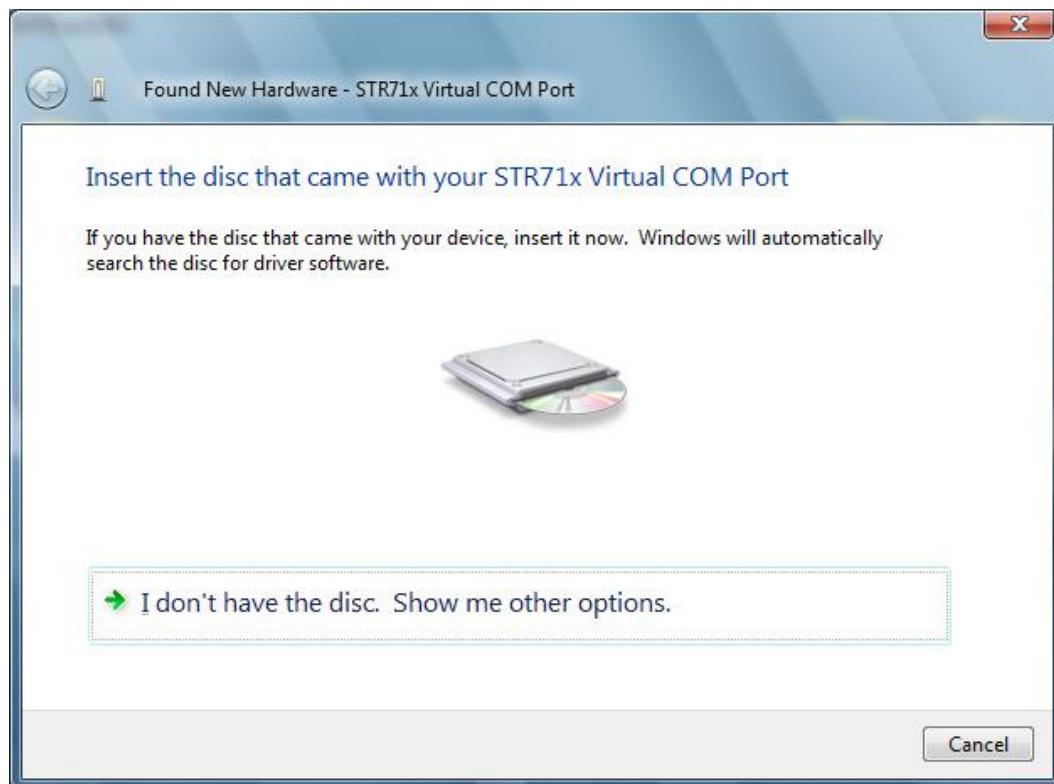


For VISTA&WIN7

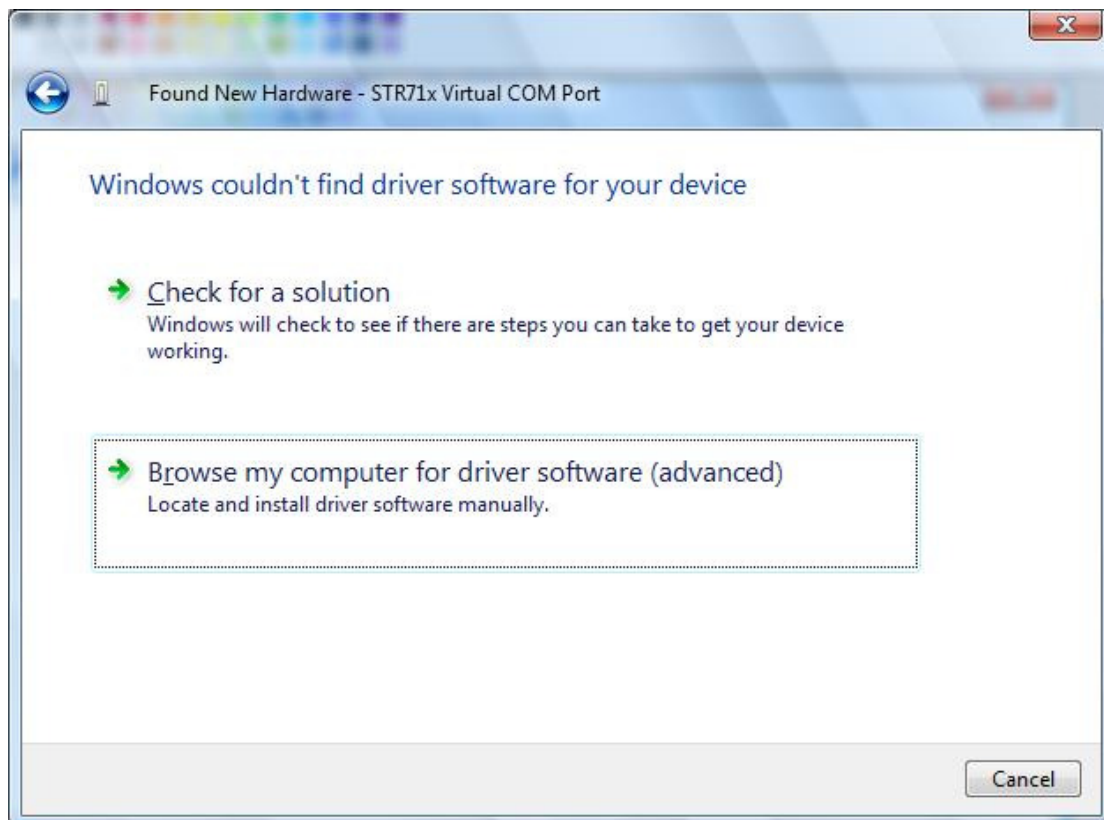
- (1).When the printer is connected, the window below will appear and please click "Locate and install driver software (recommended)"



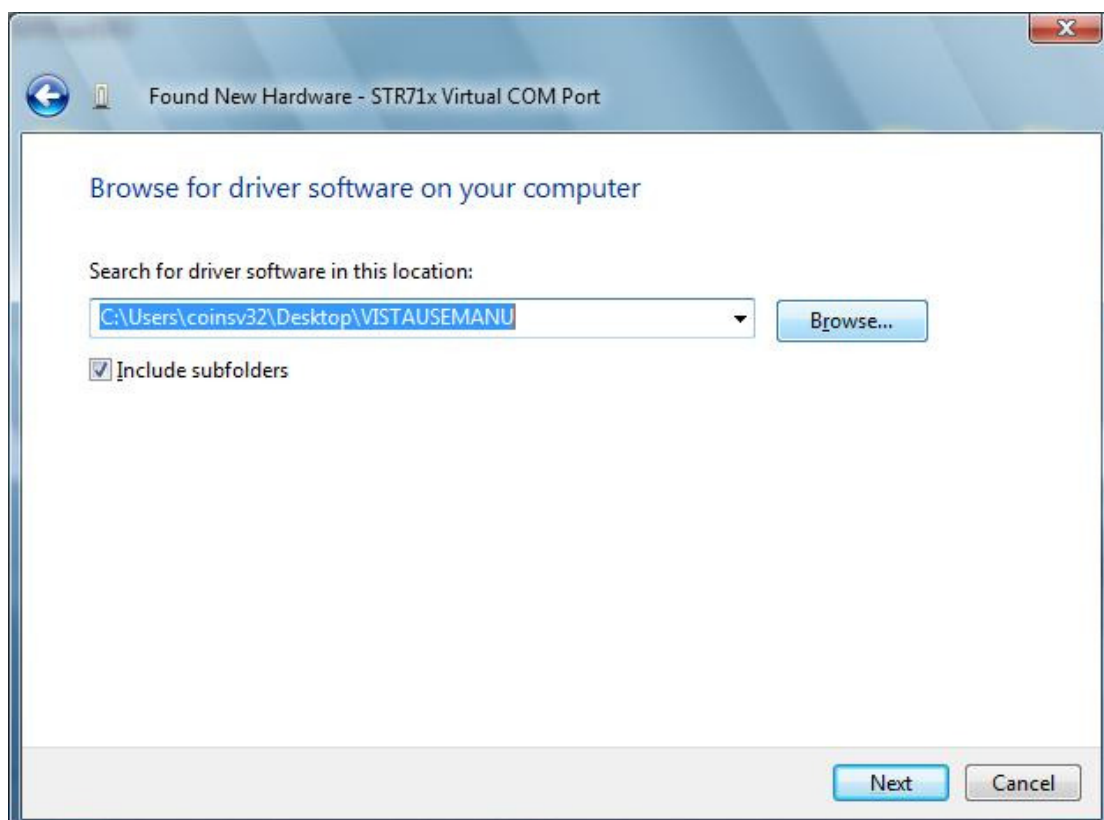
- (2).Please click "I don't have the disc. Show me other options"



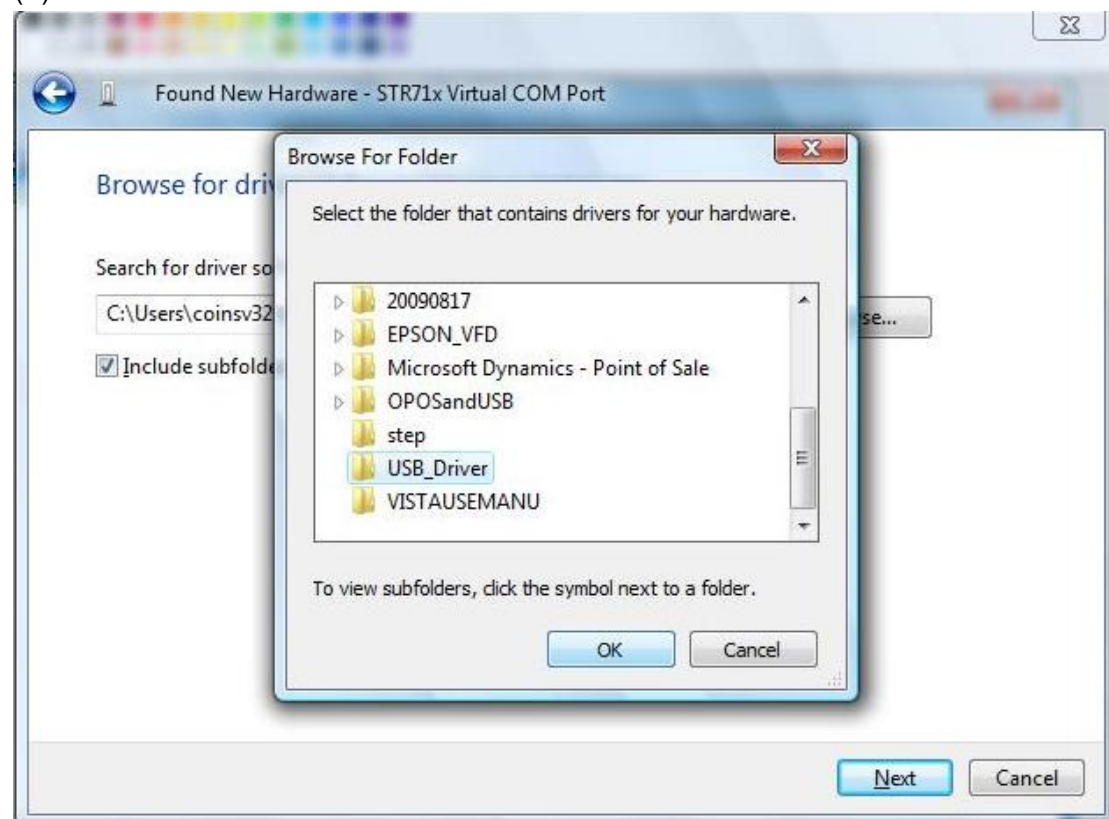
(3).Please click “Browse my computer for driver software (advanced)”



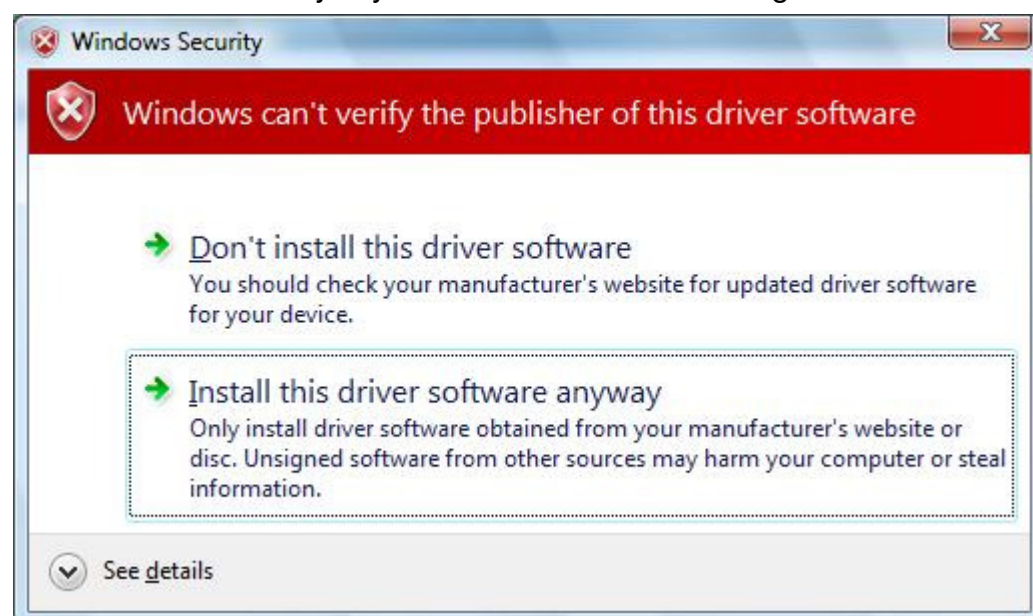
(4).Please click “Browse...”



(5).Please choose “USB Driver” and click “OK”.



(6).Please click “ Next” and a new window will appear. Please click “Install this driver software anyway” and the installation will begin.



(7).When the window below appears, the installation is done.

