

# HantouchUSA

## Touch Screen Specialists

HT-EBU4-3-CN4 (Serial)  
HT-EBU4-3-CN6 (USB)

### 4-Wire Touch Screen Controllers

#### 1. Features

Hantouch USA has launched touch screen controllers to meet the latest restrictions of the RoHS directive. The HT-EBU4-3 controller boards are halogen-free and have improved ESD. They are available in both USB and Serial interface.

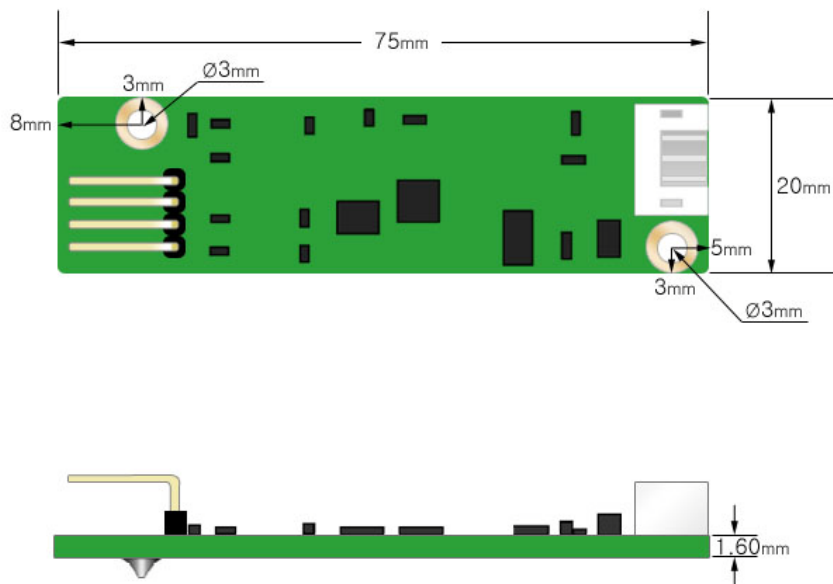
These touch controllers provide optimum performance of your analog resistive 4-wire touch screen. They communicate directly with the PC through either USB or Serial ports in an accurate, user-friendly manner. The touch screen emulates the mouse left and right button functions and supports multiple operating systems.

4 Wire analog resistive touch screens

Utility program support

Supports many operating systems

Support for both USB and Serial interfaces



< Picture1 : Dimension >

## 2. OS Support

OS	Version	Interfaces
<b>Windows</b>	Windows Vista, XP/2000, 9x/ME Windows CE 2.12/3.0/.net/5.0/6.0 Windows Embedded Windows XP Tablet PC edition Windows Vista	RS232/USB
<b>Windows</b>	Windows NT4	RS232
<b>Linux</b>	Mandrake (Mandrake 9.1/9.2/10, Mandriva 2005, Mandriva 2006), Red Hat (7.3/8.0/9.0), Fedora (Core I/II/III/IV/V/VI), Yellow Dog (3.X) , SuSE (9.2/9.3/10/10.1), Ubuntu (5.1/6.06), Debian (3.1, Kernel 2.4.x/2.6.x)	RS232/USB (up to Kernel 2.6.x)
<b>DOS</b>	DOS	RS232
<b>Mac</b>	Mac OS, Mac OS X (IBM, intel CPU)	USB

### 3. Specifications

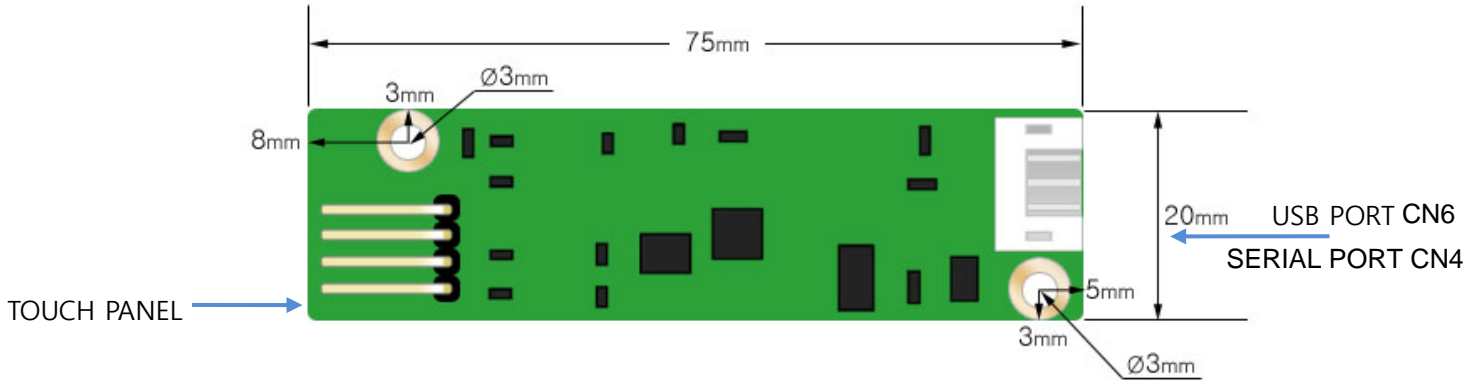
#### USB Controller

<b>HT-EBU4-3-CN6-(X)</b>		-1 for 1mm spacing,    -2.54 for 2.54mm spacing
Circuit Board Dimension	20mm x 75mm (0.79inches x 2.95inches)----(4-Wire)	
Power Requirements	D.C.+5V (80mA typical,50mV peak to peak maximum ripple and noise)	
Operating Temperature	0 to 50 °C	
Storage Temperature	-40 to 80 °C	
Relative Humidity	95% at 60 °C	
Interface	USB: 1.1 Low Speed, 2.0 Full Speed	
Protocol	USB: 1.1 Low Speed, 2.0 Full Speed	
Resolution	2048x2048 resolution	
Report rate	USB: Max. 250 points/sec	
Response time	Max. 20 ms	
Attached Cable	USB: 6' shielded cable with USB-A connector for USB	
Regulatory Approvals	FCC-B, CE, Unaffected by EMI from other nearly CRTs	
	and other display devices	
EMI	Unaffected by environmental EMI	
Panel resistance	4 wire resistive model: 200 ~ 900 ohm	
MTBF	200,000 hrs	

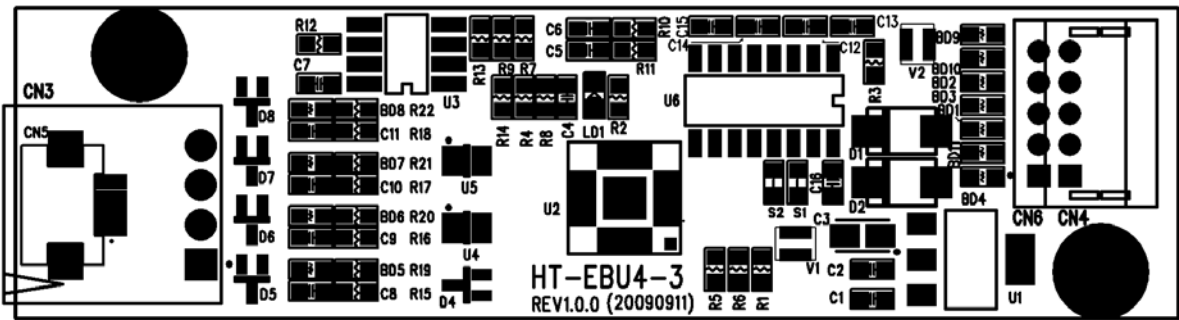
#### Serial Controller

<b>HT-EBU4-3-CN4-(X)</b>		-1 for 1mm spacing,    -2.54 for 2.54mm spacing
Circuit Board Dimension	20mm x 75mm (0.79inches x 2.95inches)----(4-Wire)	
Power Requirements	D.C.+5V (80mA typical,50mV peak to peak maximum ripple and noise)	
Operating Temperature	0 to 50 °C	
Storage Temperature	-40 to 80 °C	
Relative Humidity	95% at 60 °C	
Interface	Bi-directional RS-232 serial communication	
Protocol	No parity,8 data bits,1 stop bit,9600 baud(N,8,1,9600)	
Resolution	2048x2048 resolution	
Report rate	RS232 Model: Max. 160 points/sec	
Response time	Max. 20 ms	
Attached Cable	6' shielded cable with 9-pin D-sub connector	
Regulatory Approvals	FCC-B , CE, Unaffected by EMI from other nearly CRTs	
	and other display devices	
EMI	Unaffected by environmental EMI	
Panel resistance	4 wire resistive model: 200 ~ 900 ohm	
MTBF	200,000 hrs	

## 4. Pin Assignment



< Picture2 : Port Position >



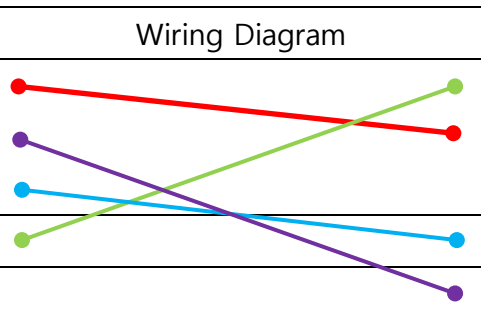
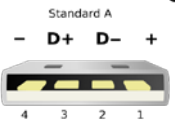
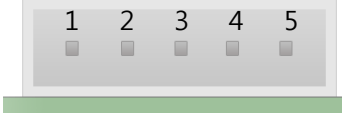
< Picture3 : Parts Layout >

#### 4.1 USB PORT (CN6)

- Connector : YEONHO 20010WR-05 (2mm Pitch, 5pin, Angle)
- Pin Number :

PIN	NAME	Description
1	GND	USB GND
2	+5V	USB 5V
3	GND	USB GND
4	D+	USB D+
5	D-	USB D-

- Cable : USB A-YEONHO(20010HS) CABLE

USB-A	Wiring Diagram	USB-B
1 : +5V		1 : GND
2 : D-		2 : +5V
3 : D+		3 : GND
4 : GND		4 : D+
		5 : D-
		

#### 4.2 RS232 PORT (CN4)

- Connector : YEONHO 20010WR-05 (2mm Pitch, 5pin, Angle)
- Pin Number

PIN	NAME	NAME
1	GND	POWER - GND
2	+5V	POWER - 5.0V
3	GND	POWER - GND
4	TXD	RS232 TXD (OUT)
5	RXD	RS232 RXD (IN)

- Cable : RS232 Cable with PS/2 Power

PS/2	RS232	Wiring Diagram	YEONHO 20010WR-05	
1			1 : POWER - GND	
2			2 : POWER - +5V	
3 : GND			3 : POWER - GND	
4 : +5V			4 : TXD	
5			5 : RXD	
6				
	1			
	2 : RXD			
	3 : TXD			
	4			
	5 : GND			
	6			
	7			
	8			
	9			

#### 4.3 TOUCH PANEL PORT (CN3)

- Connector : Pin Header 2.54Pitch 4PIN, Angle
- Pin Number

PIN	NAME	NAME
1	X+	TOUCH PANEL X+
2	Y+	TOUCH PANEL Y+
3	X-	TOUCH PANEL X-
4	Y-	TOUCH PANEL Y-

