

# **User's Manual**

## **For ST6001U controller**

**Version 1.0**



**Generaltouch Technology Co.,Ltd.**

<http://www.generaltouch.com>

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## **Agency Approvals**

The touch system including ST6001U controller, touchscreen and connection cable has certified with FCC Part 15 Class B.

The touch system including ST6001U controller, touchscreen and connector cable are compatible with EN55022 and EN55024 standard and certified with CE.

## **Features**

ST6001U is the newest controller supplied by generaltouch.

- 10ms conversion time
- Support size of touchscreens from 6.4' to 22' without jumper setting
- touch sensitivity can be adjusted in 5 levels
- Operation temperature from 0°C to 70°C

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## Physical Characteristics

### Construction

·Multi-layer surface-mount design with internal ground plane for EMI suppression

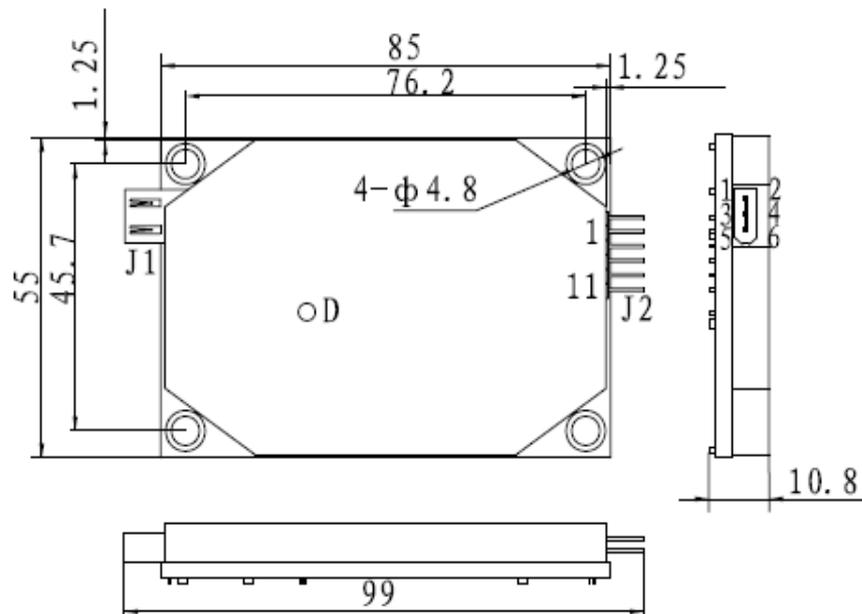
### ·Dimensions

Total Width: 55 mm

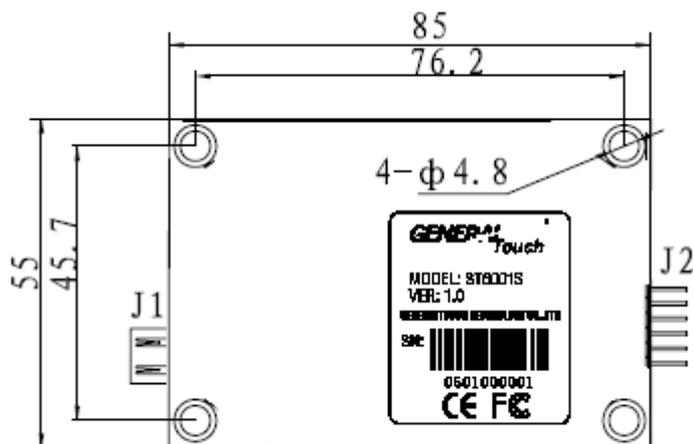
Total Length: 99 mm

Total height: 10.8mm (Including connectors)

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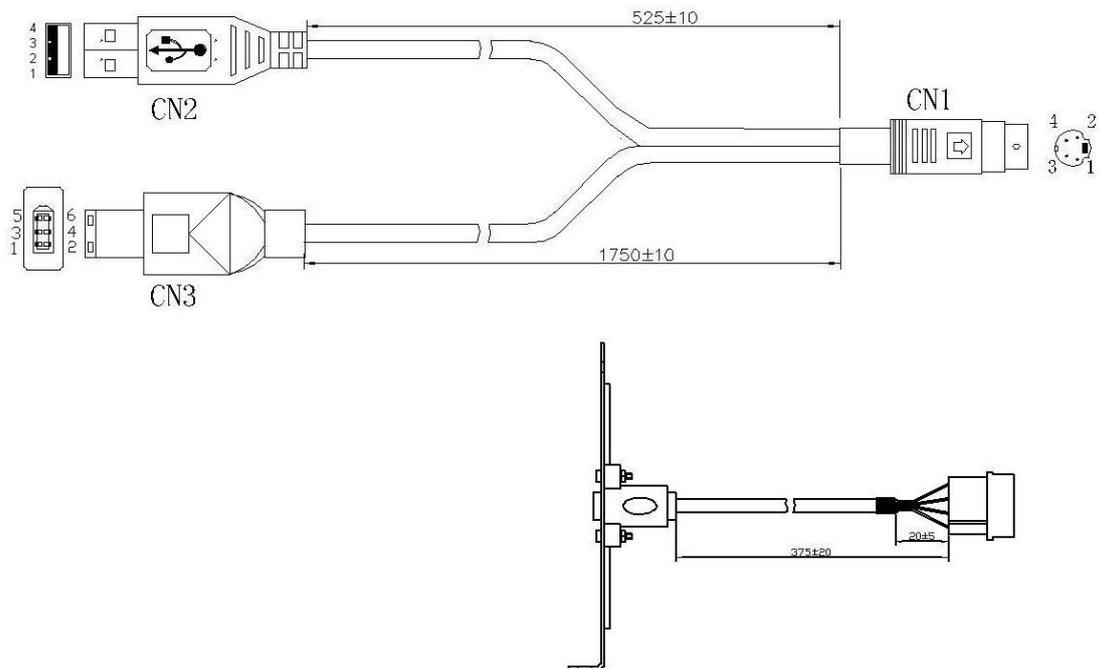
Top and side view



Bottom view

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## Connector and cable



## Pins and definition of controller

Connector of 1394:		Connector of USB:	
Pins	Definition	Pins	Definition
1	D+	3	D+
2	NC		
3	D-	2	D-
4	NC		
5	GND	4	GND
6	+12V		
<p>Note: Controller communicates with PC via pins 1, 3, 5 of IEEE1394. Definitions of the pins refer to those of PC.</p>			

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## Specifications

### Supply Voltage and Current

+12VDC, normal (+9V to +15Vdc)

95mA, typical at +12VDC, Average power dissipation is 1.2W, typical.

Supply must be capable of sourcing 200mA, minimum.

Total noise and ripple requirement must be less than 100mV (p-p) for frequencies below 1 MHz, and less than 50 mV (p-p) for frequencies above 1 MHz.

### Interface

-USB 1.1

### Operation Mode

Support UP/STREAM/DOWN and Z Axis Modes

### Touch Resolution

-4096x4096, size independent, 256 levels of Z axis(pressure)

### Conversion Time

-Approximately 10 ms per coordinate set (including transmitting time)

### Reliability

-MTBF is greater than 300,000 hours per MIL-HDBK-217-F2 using the parts stress calculation method for ground benign environment with an ambient temperature of 25°C

### Flammability

-The printed circuit board substrate is rated with 94V0.

### ESD

-Per EN 61000-4-2: Contact discharge 4kV, air discharge 8KV.

### Environmental Temperature

-Operation: 0°C ~70°C

-Storage: -20°C ~ 85°C

### Humidity

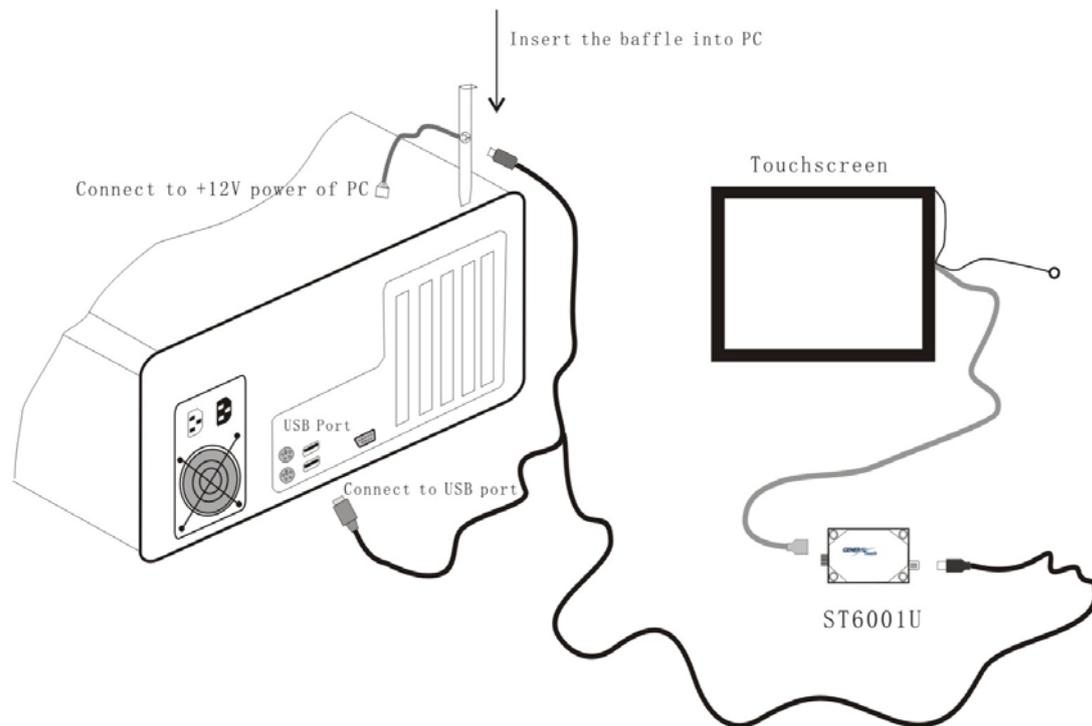
-Operating: 10% to 90%, non-condensing

-Storage: 10% to 90%, non-condensing

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## Connect to the computer



### LED indicator status

The ST6001U has a blue LED to indicate controller status:

The indicator keeps on lighting after turning on the computer, then turns off after finishing self-test.

Indicator temporarily keeps on a lighting period about 3 seconds (1 second on and 2 seconds off) at normal operating status as no touching.

The indicator keeps on lighting as touching.

After the touching, the indicator will be off in 60 seconds then it will be fluttering as normal status.

The indicator will flutter at high speed when it is at abnormal operating status.

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## Touch driver

### Operation platform

Windows98/ME

Windows 2000/XP

You can get these drivers in the driver CD, or download from our website:

[www.generaltouch.com](http://www.generaltouch.com)

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### Windows2000/XP Install/Uninstall Manual

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#### Note:

**you must have administrator access rights on your Windows 2000/XP system to install this software. You must also have administrator access rights to run the touchscreen control panel and calibration applications.**

Shutdown your computer and connect your touchscreen as described in the accompanying documentation.

#### A. If Windows STARTS the New Hardware Wizard

1. Choose Next. Select "Search for the best driver for your device (Recommended)" and Choose Next.
2. When a list of search locations is displayed, place a checkmark on the floppy drive containing this USB driver for Windows disk. Insert the disk into your floppy drive.(If the driver files have been copied to your hard drive or have been distributed on CD, place a checkmark on "Specify a location" and use Browse to select the directory containing the driver files.)
3. Choose Next. Once the GeneralTouch Touchscreen USB Interface driver has been detected choose Next again.
4. Wait while driver files are copied to your computer. Insert your Windows CD if prompted.
5. Choose Finish.

#### B. If Windows DOES NOT START the New Hardware Wizard

1. After Windows loads, click the "Start" button, and then click "Control Panel", "System", "Device Manager".
  2. In the Device Manager, right click on the USB Human Interface Device, and then click on Properties, Driver tab, Update Driver, Next. Select "Search for the best driver for your device (Recommended)" and Choose Next.
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3. When a list of search locations is displayed, place a checkmark on the floppy drive or CD containing this USB driver for Windows disk. Insert the disk into your drive. (If the driver files have been copied to your hard drive, place a checkmark on "Specify a location" and use Browse to select the directory containing the driver files.)
  4. Choose Next. Once the GeneralTouch Touchscreen USB Interface driver has been detected choose Next again.
  5. Wait while driver files are copied to your computer. Insert your Windows CD if prompted.
  6. Choose Finish.
  7. The touchscreen calibration application, GenCalib.exe, must be used manually to align cursor movement with point of touch.

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**Windows 98/ME Install/Uninstall Manual**

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Shutdown your computer and connect your touchscreen as described in the accompanying documentation.

A. Install standard HID mouse driver for our touchscreen

NOTES: If you have installed our USB interface touchscreen before, you can simply skip this installation stage.

1. Windows find our touchscreen, recognize it as a standard HID device, and prompt you to install driver for it.
2. Choose "Next". Select "Search for the best driver for your device (Recommended)" and Choose "Next".
3. Install the standard HID mouse driver for our touchscreen, Wait while driver files are copied to your computer. Insert your Windows CD if prompted. After successful installation, You may notice that a touch will move the Windows cursor even before you begin the second installation stage marked as B.

B. Install our updated touchscreen driver and utilities

1. Click the "Start" button, and then click "Run".
  2. Click the "Browse" button to locate the setup.exe program on the floppy drive containing this software for Windows disk. Insert the disk into your floppy drive. (If the driver files have been copied to your hard drive or have been distributed on CD, use "Browse" to select the directory containing the driver files.) Highlight setup.exe and click "Open", then "OK" to run setup.exe.
  3. Follow the directions on the screen.
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4. If the "Digital Signature Not Found" dialog is displayed by Windows, click "Yes" to continue the installation. This version of touchscreen driver for Windows has not yet been tested by Microsoft.
  5. Restart Windows when prompted. Make sure you remove any floppy disks.

The touchscreen calibration program will automatically run when Windows starts up. Touch each of the three targets as they appear on the screen. Click "Yes" when the cursor lines up correctly with your finger.

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### **Change Touchscreen settings**

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1. Click the "Start" button, point to "Settings", and then click "Control Panel".
2. Double-click the "GeneralTouch Touchscreen" icon, now you can change your touchscreen settings,

For more information about touchscreen settings, you can use context\_sensitive help.

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### **Uninstalling touchscreen driver**

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1. Click the "Start" button, point to "Settings", and then click "Control Panel".
  2. Double-click the "Add/Remove Programs" icon.
  3. Select "GeneralTouch Touchscreen USB interface for 2000/XP" from the list of uninstallable programs on the "Install/Uninstall" tab.
  4. Click the "Add/Remove" button then follow the directions on your screen.
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## FAQ

A. I have used controller 4001U in my system, will I make some modification with my application if I use the ST6001U?

Q. You won't make any change as ST6001U completely compatible with 4001U

A. How far can I use the touchscreen to computer?

Q. The length of the connector cable is unlimited in theory, so the distance from the touchscreen to the PC is decided by the length of the display signal cable. It is recommended to be less than 5 meters from USB port to controller.

A. Why cursor respond two when one touch and what can I do?

Q. It may be caused by incorrect transmit mode, It may need to change the working mode in control panel of touch driver

A. What was wrong while the LED indicator flutter at high speed?

Q. It was normally caused by hardware problem while LED indicator flutter at high speed such as the screen may be broken or connector cable have improperly connection. Fix the problem by:

1. Check the hardware, especially the screen,
2. shut down the power and turn on again
3. test again with another screen if necessary.

## Warranty

GeneralTouch is only under obligation to offer the following Warranty Repair and Services except those authorized formal documents in written form.

Screen      repairable: in 5 years    replaceable: in 90 days

Controller    repairable: in 3 years    replaceable: in 90 days

Above warranty period takes the front four places of the SN labeled on GeneralTouch products as starting date.

Warranty products cover panel, controller and communication cable. Accessories included with the products are not included in the warranty

More warranty details, please access [www.generaltouchus.com/support/customer\\_service](http://www.generaltouchus.com/support/customer_service)

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