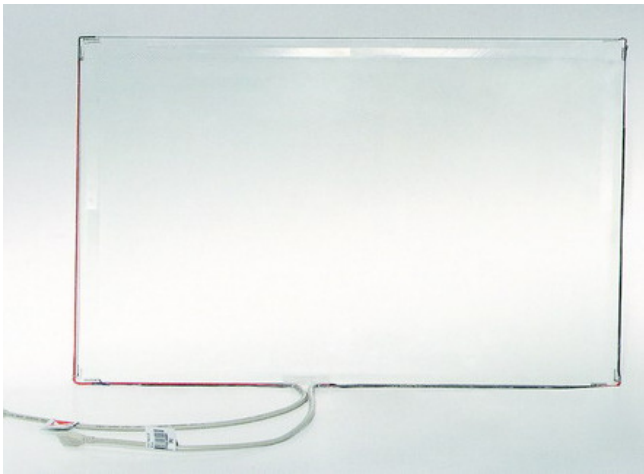# 26"-47" SAW Touch Panel

Specification

Rev2.0

KeeTouch SAW Sensor

KeeTouch Controller

Shenzhen K&JAD Technology Co., Ltd

www.keetouch.com

Dec. 2010

Table of Contents

◆ *Part 1. Technical Specification*

> ➢ **SAW touch screen panel technical specification**

Technology	**Surface Acoustic Wave (SAW)**
Sizes	26"-47"
Resolution	4096 x 4096,Z-axis 256, not related with the sizes of the touch screen panel
Material	Pure glass
Positional Accuracy	Standard deviation of error is less than 0.080 in.(2mm)
Light Transmission	More than 90% per ASTM
Touch Activation Force	30g - 60g
Durability	Scratch-free; More than 50,000,000 touches in one location without failure.
Surface Hardness	Mohs' hardness rating of 7
Multi-Point Touch	Intelligent discrimination by software
Operating Temperature	Touch Panel -20°C to +60°C
Storage Temperature	Touch Panel -40°C to +70°C
Humidity	10%-90% RH at 40°C, non-condensing
Operation Altitude	3800m
Accessories	Connector cables, double-sided glue, dust-proof stripes
Agency Approval	UL, CE, FCC, RoHS, CB

> ➢ **Controller technical specification**

Controller Interface	Dual USB and RS232 interface; KCA-UR02H-R1E
Sizes(PCB)	119.5mm (L) x 73mm (W) x 10mm (H)
Working voltage	12V±2V for KCA-UR02H-R1E
Working Current	80mA for KCA-UR02H-R1E
Maximum Current	100mA for KCA-UR02H-R1E
Response time	≤16ms
Operating temperature	0°C ～ 65°C
Operating humidity	10%-90%RH.
Storage temperature	−25°C ～ 85°C
MTBF	more than 500,000 hours
Agency Approval	UL, CE, FCC, RoHS , CB

◆ *Part 2. Features*

- **Same driver for both USB and RS232**
- **High image clarity**
- **Free of drift**
- **Z-axis pressure recognition**
- **Strong mechanical strength**
- **Short response time**
- **Compact size for easy integration**
- **Customization available on glass sensor size, driver, accessories**

◆ *Part 3. Accessories*

Touch Me, Touch Any

- **Connector Cables**
  - ➢ Standard length: 1.8m (customization available)
  - ➢ Cable type:

Cable Model No.	Features	Work with Controller	Work with SAW Sensor
UD02H	USB, 12V power	KCA-UR02H-R1E	For all SAW touch screen sensor that size is more than 26"
RD02H	RS232, 12VDC power		

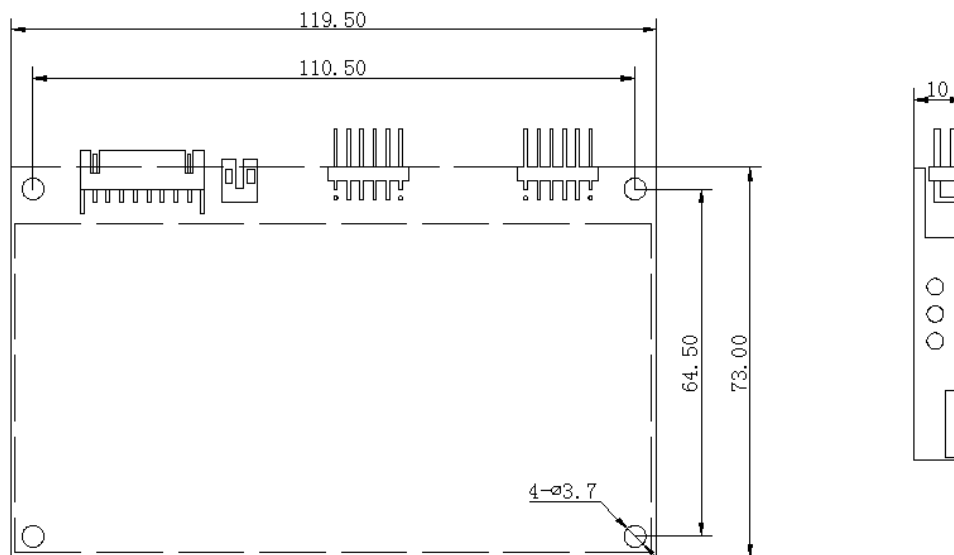- **Double-sided adhesive double tapes**
- **Dust-proof Stripes**

• _Part 4. Drawings and Connection Sketch_

4.1:Drawing of the SAW size from 26" to 47", please kindly read the drawing as attachment.

4.2: Drawing of Controller and cable

    Controller model: KCA-UR02H-R1E

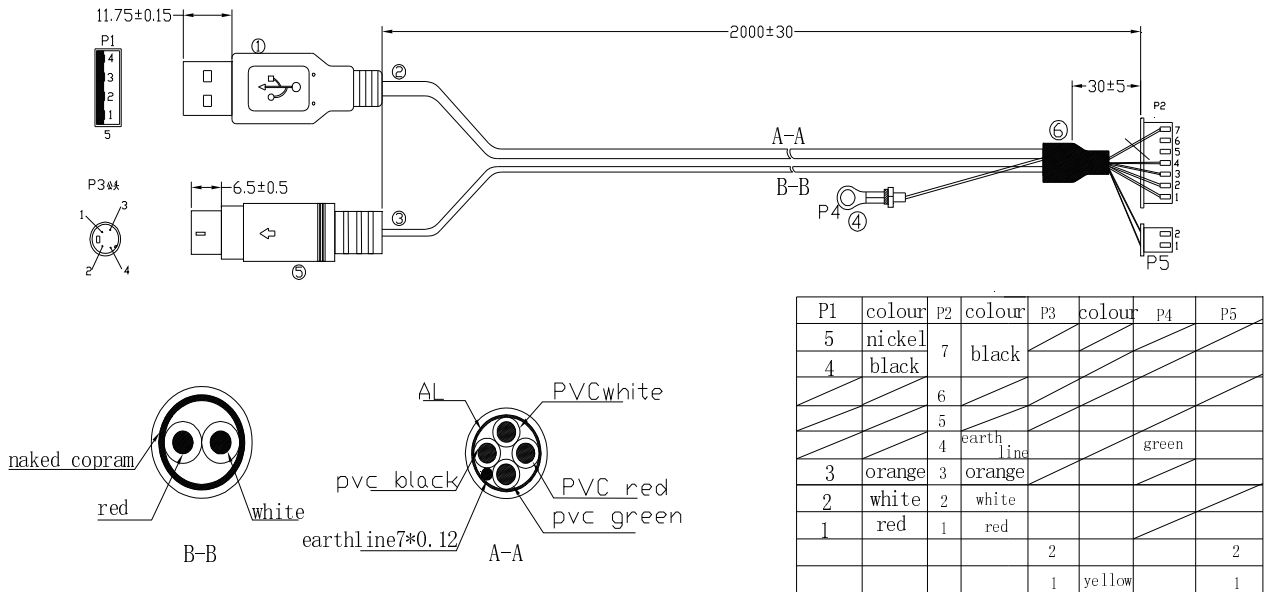 Technical specification: dual interface of USB and RS232; work on 12VDC

  (1) Controller cable model: UD02H

    Technical specification: USB cable for 12VDC controller KCA-UR02H-R1E; 12 VDC can get from the power adaptor we supplied.
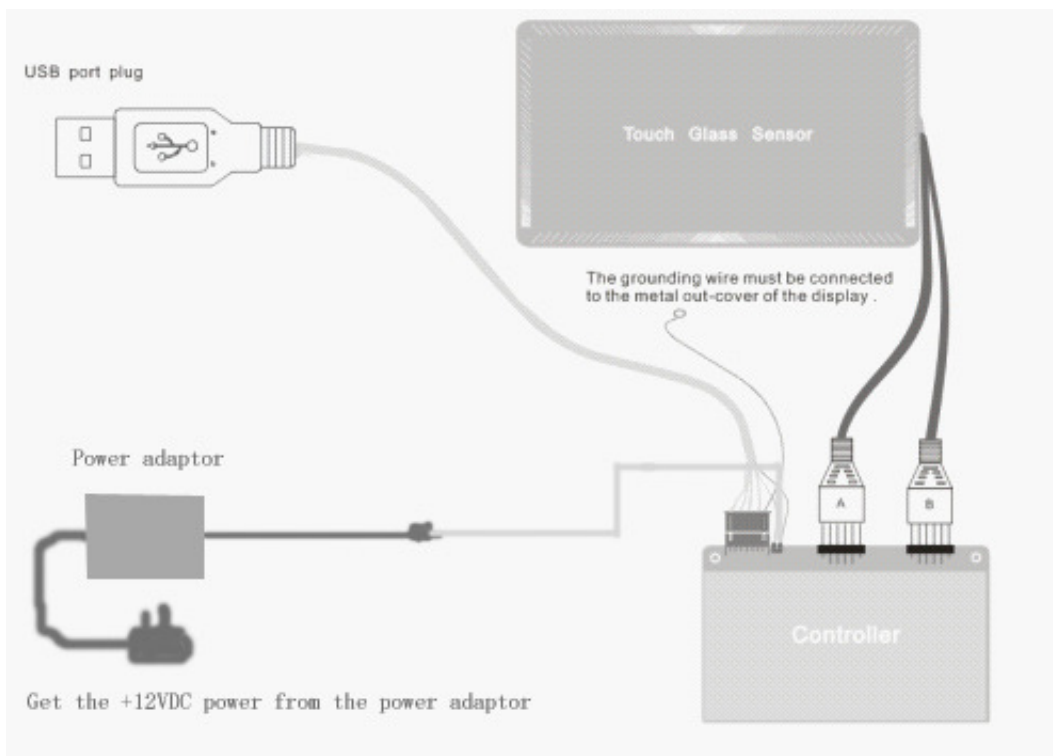

Power Adaptor

Touch Me, Touch Any

P1	colour	P2	colour	P3	colour	P4	P5
5	nickel	7	black				
4	black						
		6					
		5					
		4	earth line				green
3	orange	3	orange				
2	white	2	white				
1	red	1	red				
				2			2
				1	yellow		1

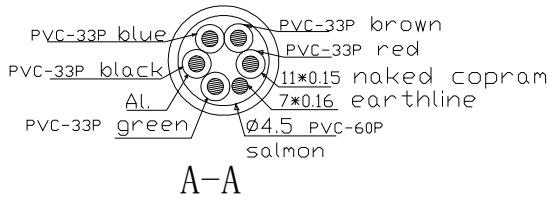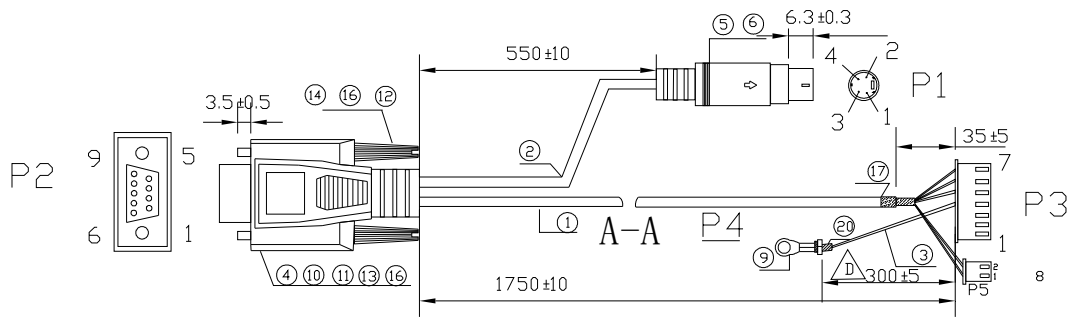**Connection of SAW touch screen sensor, controller model** KCA-UR02**H**-R1E **and cable model UD02H**

(2)**Controller cable model: RD02H**

Technical specification: RS232 cable for 12VDC controller KCA-UR02**H**-R1E; 12 VDC can get from

the power adaptor that we supplied.

interface form:

P1	colour	P2	colour	P3	colour	P4	P5
		5 shell	green	7			
		3	blue	6			
		2	black	5			
				4	green	earthline	
2	brown						2
1	red						1

Connection of SAW touch screen sensor, controller model KCA-UR02H-R1E and cable model RD02H
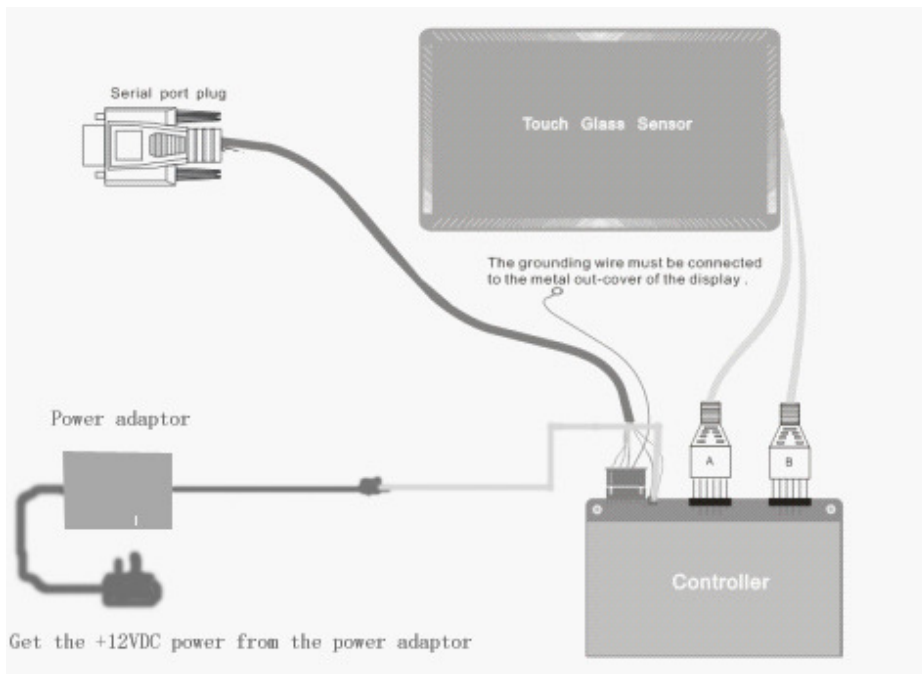
Remarks about the LED indicator lamp on the controller

On the condition of the driver is installed correctly：

Touch Me, Touch Any

- After connecting the controller and the touch sensor, if the controller has been supplied power, the LED indicator lamp would flash continuously for 7 times at the frequency of one time per second.
- After flashed 7 times, the LED indicator lamp will shine for 6 seconds and then turn off. It is a process that the controller inspects the touch sensor.
- Then the LED indicator lamp would flash at the frequency of 2 times per second, and now the controller start working normally
- Normally the LED indicator lamp would flash at the frequency of the touch sensor being touched.
- If the LED indicator lamp would not flash when the touch the sensor, there may be some problems with the connecting cable, which causes controller can't communicate with the computer.
- If the LED indicator lamp keep shining after flashed 7 times, the possible reasons are following: Touch screen unconnected or not connected properly; Touch screen damaged; Controller damaged

On the condition of the driver is not installed correctly or the driver is not installed
- The LED indicator lamp will flash but the cursor would not move when touch the sensor. It need install the correct driver.

◆ *Part 5 Integration Procedure*

Step 1. Connect controller with SAW touch screen.

Remark: Connect "A" port of SAW touch screen with the port of controller which is nearer from power and connect "B" port of SAW touch screen with the other port of controller

Step 2. Connect the controller to the motherboard via either USB port or RS232 port;

Step 3. Connect the controller to either 12VDC power source;

Step 4. Install the appropriate driver in correspondence with operation system, (windows XP, 2000 etc.)

**Remark：The touch system should be integrated according to the above procedure, if not may result working abnormally。**

◆ *Part 6. Available Touch system Driver*

7.1 Available Touch system Driver

- Windows 2000
- Windows XP
- Windows 7
- Vista
- Linux

7.2 Driver installation and Touch System calibration guide:

(1) Preparation: connecting SAW touch screen, controller and application device or computer with correct cable on the integration procedure.

(2) Insert the KeeTouch Driver CD in to application system;

(3) Follow the instruction to complete the driver installation
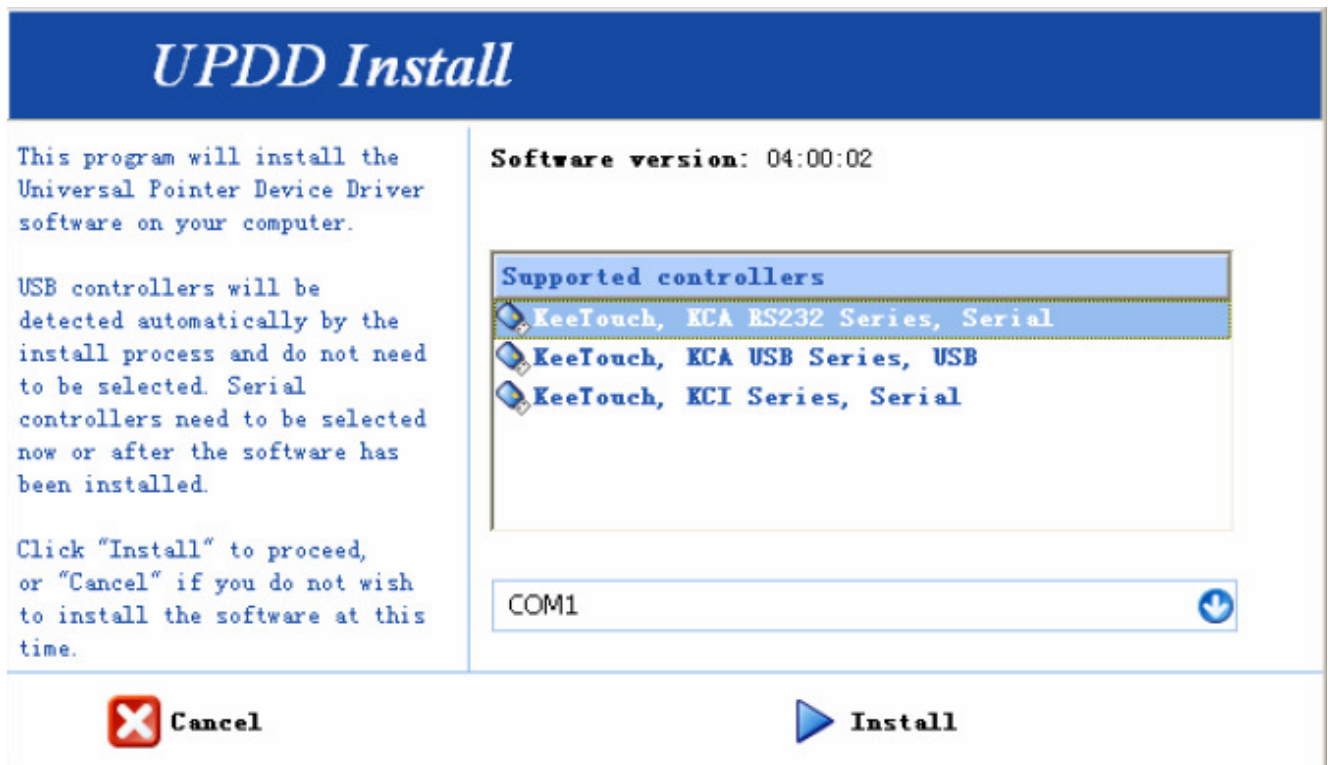
(4) Calibration

Find "calibration" from UPDD in All programs and complete the calibration for your touch system at the first time of touch system integration and every time you changed the touch screen sensor or controller.

Remark：We advice customer use 16 points to calibrate

◆ Part 7. Product Warranty

- **5 years for SAW sensor**
- **3 years for SAW controller**

Part 9. How to contact us

www.Keetouch.com

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