Dongguan Hongdian Technology Co., Ltd

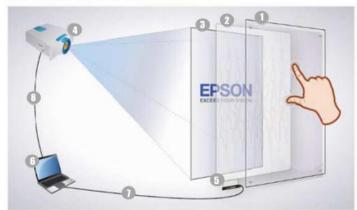# Introduction of Nano Touch Film Projection Technology

Nano Touch Film

Nano touch film is a new-type and transparent touch sensitive film. Once sticking the film on the back of the glass or transparent acrylic plate, you can instantly transform the glass or acrylic plate into a large-size touch screen. Nano touch film is a fully transparent film which is produced by using nano materials, printed circuits, integrated chips, software and other technologies,ultra thin and transparent. It can realize all the actions of the mouse, support multi-touch and handwriting.

Projection Interactive Scheme

Projection interaction scheme

1. glass
2. Nano touch film
3. holographic projection film
4. projector
5. Touch film circuit board
6. computer/laptop
7. USB line
8. VGA/HDMI line

Function Introduction

Induction principle of nano touch film

It is based on the principle of improved projective capacitance. The ITO layer (indium tin oxide, which is often needed in the manufacturing of capacitive touch screens and liquid crystal screens) is replaced by a nano scale wire layer, and the signal changes are accurately calculated by a high-precision measurement algorithm. One of the main features of projective capacitive touch screens is without ITO layer on the nano touch film.

Characteristics of nano touch film

1. Cool appearance of transparent frameless, durable and safety in use;

2. A revolutionary innovation of traditional touch technology and interactive media;

3. Besides the characteristics of protecting the safety of assets, it is waterproof, anti-pollution, anti-explosion, chemical corrosion resistance, high temperature and humidity resistance, low power consumption, no electronic pollution, long span life (MTBF 100,000 hours), and extremely elegant in appearance;

4. Nano touch film makes touch smooth, and the combination of vision and touch perfect. Nano touch film is the leader of the revolutionary change of man-machine interface;

5. Compact structure, lightweight and easy to be installed on glass, acrylic sheets or film;

6. Using unique sensing and computing technology, accurate positioning, it works while touching through the glass, and even wearing gloves;

7. No mechanical or pressure sensing components, last longer;

8. It is not sensitive to external light source, and no affection to work from the change of ambient light.

Four parts are composed to make a complete set of nano touch film

1. Sensing film: PET film encapsulating nanowires;

2. Circuit controlling board and protective sleeve;

3. Cable (USB);

4. Drive disc: Nano touch film drive software installation CD.

Adhesive film: transparent film with strong adhesive ability (Not included in the product standard, must be purchased separately)

Drive disc: Nano touch film drive software installation CD

Application

1. Attaching to the glass window and glass door of the merchant;

2. Displaying the business enterprise propaganda, commodity information to the glass medium,to attract the passing by potential customers for interaction;

3. Making 7x24 hours no closing,recording the interaction information of potential customers,promoting brand image,and also providing advertising.

10 point touch nano touch film

Specific parameters:

Technology Principle: improved projective self - capacitive technology, metal nano wires grid matrix replaces the ITO layer.

Touch Points: 10 points

Touch Deviation: 1-5mm

Scanning Speed: 25ms/frame

Energy Consumption: 0.5W

Custom Support: irregular sizes

Thickness: ≤100um

Transparency: above 95%

Service Voltage: 5V USB

Transmission Distance: ≤15m   (with USB signal amplifier)

Safety Distance: >5mm (distance between liquid crystal screen and film)

Environmental Temperature: from -20 ºC to +70 ºC

Humidity Temperature: 0-95%

Ambient Light: full angle against strong light

Touch Support: Click, drag, zoom in, zoom out, rotate

Calibration: with software

Program Type: Andriod,Windows7,windows8(32/64-bit)

Packing List: touch film*1,Circuit controlling board*1,USB cable*1