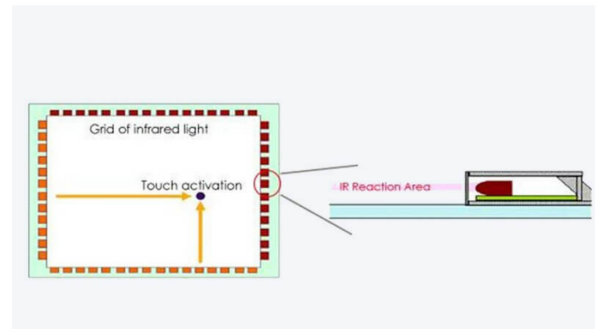**IR touch Frame,TB series 55"**
Overview:

GreenTouch IR (Infrared) **touch screen** is a high-end multi-point **infrared touch screen** technology with perfect combination of tradition and innovation,Our **touch screen** has the features of fast reaction speed, strong anti-environment light ability, good stability and easy integration;With the function of plug and play and without driver, any non-transparent object can change the infrared light and realize the touch operation which is convenient for people to operate and use the digital life and brings the greatest convenience and interactivity to life.

Principle:

IR touch screen is an electronic device that detects and locates a person's touch gestures using a dense infrared matrix in the X and Y directions.The **infrared touch** screen installs a circuit board outer frame in front of the display, and the circuit board arranges the infrared transmitting tube and infrared receiving tube on the four sides of the screen, one by one forming the infrared matrix of cross and cross, as shown in the schematic diagram. When a finger touches the screen, it blocks two infrared rays that pass through it, thus determining where the touch point is on the screen.Any non-transparent object can change the infrared on the contact and realize the **touch screen** operation.
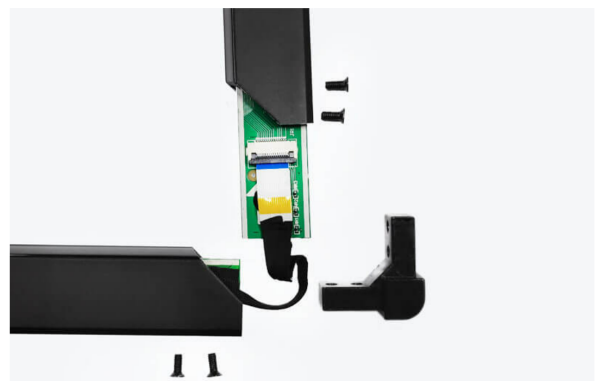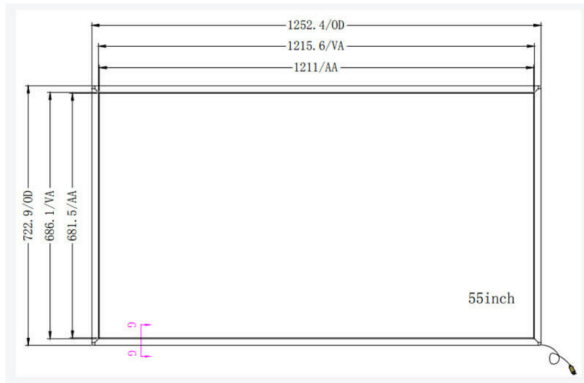

Superior clarity and performance:

Excellent clarity and performance: The infrared touch frame has high quality resolution, light transmission and reliability. The surface of the screen has no surface coating on the plastic film or moving parts, so it does not wear any parts during use. Ensure stable performance without ghosts or drift. Sensitive operation for accurate touch input through opaque objects such as fingers, gloves and passive stylus. High-precision infrared touch frame with an interpolation resolution of 32767 * 32767, supporting plug and play, suitable for a variety of internal and external environments. We have ROHS, CE and FCC international agency certification.

PCB board description：

Ultra-thin, ultra-narrow design, no matter whether it is external or built-in, it can adapt to various needs without affecting the appearance and saving built-in space. Infrared sensing principle, simple finishing, LED die, stable performance, high touch precision and long life. The unique installation method makes the installation of the client a breeze.

Product drawings:

The 55.0-inch infrared touch frame is uniquely ultra-narrow, ultra-thin shape design, infrared sensing principle, display ratio: 16:9 frame thickness 8mm. OD: 1252.4mm*722.9mm, VA: 1215.6mm*686.1mm, AA: 1211mm*681.5mm. According to the size of the infrared frame, the package also changes in size.The surface of the aluminum alloy is sprayed and oxidized, and the whole is delicate, simple, generous and multi-touch. Simple operation, USB connection, plug and play.

Main specification

Touch Screen Size	55"
Touch Activation Force	No pressure required
Luminous Transmission	> 92%(100% with no glass)
Reported Touch Resolution	Without Driver:32768*32768
Touch Response Time(Multi touch)	10-15ms
Touch Response Time(One touch)	7ms
Minimum Recognition	4mm*4mm
Touch Object Size Recognition	Yes
Interface	Socket type USB cable 1.5 meters, socket type 5P

Electronical Specification

Touch Refresh Rate	≥110Hz
Communication	USB2.0 Full Speed
Power Supply Mode	USB*1
Average Current	DC 5.0V±5%
LED Lifetime	60000hours
Fault-tolerant	10% non-consecutive sensors are damaged

Environmental characteristics

Humidity	Up to 90% RH from 0℃ to +40℃，no-condensing
Temperature Range	Working temperature:-10℃~50℃
	Storage temperature:-20℃~60℃
ESD	EN 6100-4-2 2008:3 level.4KV contact discharge and 8KV air discharge
Anti-ligt Interference	Excellent

Software Specification

Firmware Upgrade	USB Upgrade:Windows 8,Windows 7
Support OS(Multi touch)	Windows 10,Windows 8,Windows 7,Andriod
Support OS(One touch)	Windows XP,Mac OS ,LInux