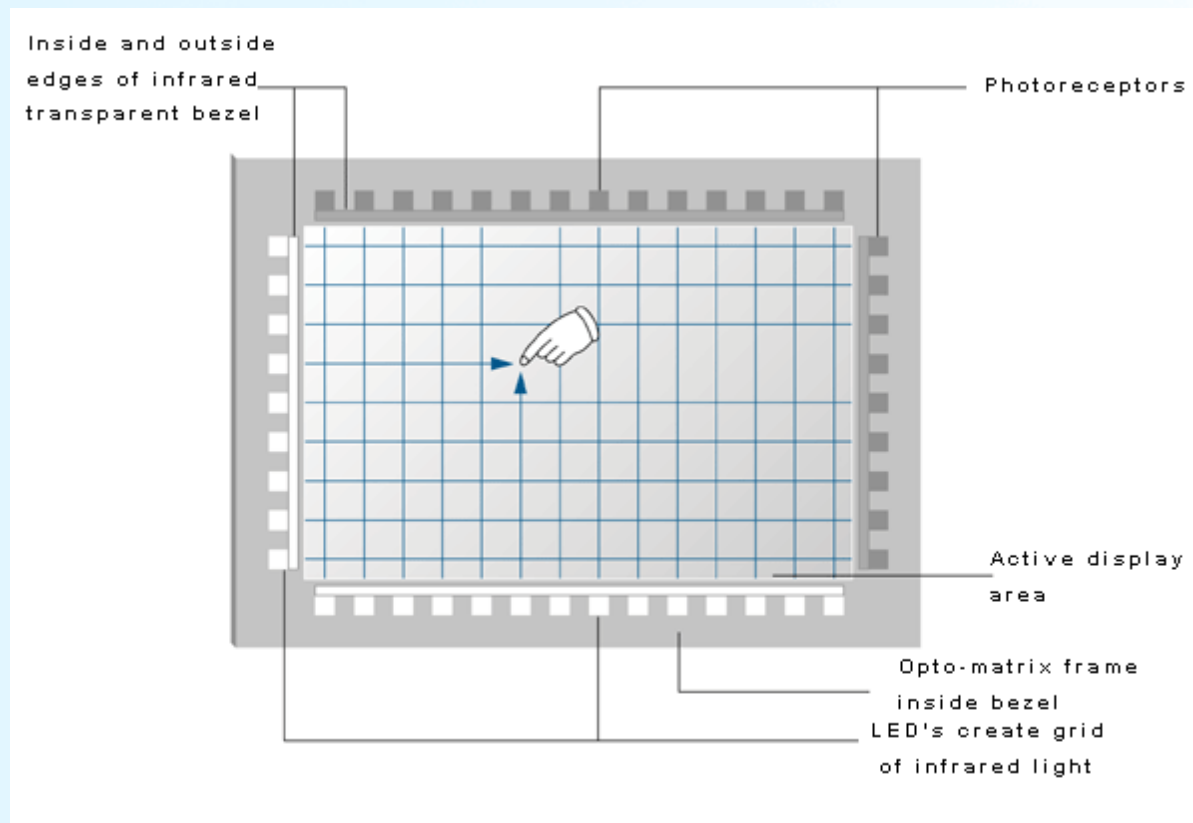


CarrollTouch Technical Explanation



Infrared (IR) technology relies on the interruption of an IR light grid in front of the display screen. The touch frame or opto-matrix frame contains a row of IR-light emitting diode (LEDs) and photo transistors, each mounted on two opposite sides to create a grid of invisible infrared light. The frame assembly is comprised of printed wiring boards on which the opto-electronics are mounted and is concealed behind an IR-transparent bezel. The bezel shields the opto-electronics from the operating environment while allowing the IR beams to pass through.

The IR controller sequentially pulses the LEDs to create a grid of IR light beams. When a stylus, such as a finger, enters the grid, it obstructs the beams. One or more photo transistors detects the absence of light and transmits a signal that identifies the x and y coordinates.



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