

ABSTRACT

Nowadays, multi touch screen is used on the screen to gain control and interaction that more natural between sense of touch and sight. Multi touch screen device is an input device, like mouse and keyboard that used to interact with computer. Therefore, it has to be combined with other device to form a complete multi touch input device system. Multi touch screen is a device that has function to detect more than one touch events on the screen by the finger nor other touch device as input.

Basically, this multi touch device is built by three components that work sequentially. Those are touch sensor, touch screen controller, and operating system and application. This study applies the infrared sensor method that utilizing the infrared light nets as sensor system towards the touch events that happening on the screen depending on the interruption to the infrared nets. Modified infrared camera, as a touch screen controller, captures the position of the interruption and relays this information to the computer to be translated as x axis and y axis. Operating system and application converts this interruption as a mouse function, right click nor left click, precisely because the interruption axis that captured on the multi touch screen has been synced with the image on the computer monitor through calibrating process.

The result from designing, testing, and analyzing is that modified infrared camera is capable to capture infrared light and relay it as input to operating system and application while on the touch sensor, infrared light nets is not formed, so that interruption that is meant to be happened, captured as an axis and processed further to be a mouse function is not happening. Things to note so this system can run is that every component work sequentially, meaning that every output from previous subsystem will become the input to the next subsystem and forth untill the last output of overall system.

Keywords: *Infrared, Infrared Sensor Method*