The intentionally radiated frequencies

The intentionally radiated frequency is 600kHz.

All the other frequencies are unintentionally radiated.

A. Antenna

The sensor board has two kinds, transmitter and receiver.

The transmission sensor board has multiple loop coils in horizontal directions.

Each coil is approximately 34.5mm wide. Each coil consists of 8 turns (loops) of copper conductor. Radio frequency energy is radiated from these coils.

The receiver sensor board has two groups of multiple loop coils in X (horizontal) and Y (vertical) directions.

Each coil is approximately 28.8mm wide and as long as the height, for the X-axis, and width, for the Y-axis, of the effective area of the tablet. Each coil consists of one turn (loops) of silver conductor.

B. Original oscillation frequency and intentionally radiated frequency

We make one (600kHz) intentionally radiated frequency from the original oscillation frequency of 600kHz by microcomputer.

C. Operation

The tablet looks for a pointing device, such as a stylus, by feeding electrical current of above-mentioned frequency through the coils in both X axis and Y axis. The current fed through each coil is not more than 300mA .

The tablet is able to detect the position of a pointing device because of the induction caused between the coil of the pointing device and two coils, one from X-axis and the other from Y-axis, of the sensor board.

D. Comment on pointing device

The pointing device operates completely passively and has no battery or active oscillator.

DESCRIPTION

Product:

    LCD Tablet   Model : DTI-520

Manufacturer:

    Name   Foxlink Image Technology Co., Ltd.

    Address   11, Lane 596, Chien Hsing Road Sec.2, Hsinfeng, Hsinchu, Taiwan

Electrical Rating:

    Voltage: AC100～240V

    Power Consumption: 40 watts or less

DTI-520 is an input / output integrated device for a computer, using Wacom's sensor, an erasing Pen and a 15.0 inch TFT color LCD monitor.

The tablet continuously transmits data to and from the Pen.
When transmitting, the tablet sends a signal to the Pen. The Pen stores energy from the signal.

When receiving, the Pen sends a signal that carries coordinate, switch, and pressure data back to the tablet. The tablet sends this data to the computer.

DTI-520 provides a Pen computing.

Pen

LCD monitor

Sensor

Shield