

## PD-70FA Functional Description

The PD-40 A is a flat panel display device with integrated touchscreen.

The flat panel display section utilizes a standard VGA type analogue RGB input, and converts the signal to digital format for the display panel. At the highest resolution (XGA Mode) and 75 Hz Refresh rate, the clock signals are as follows:

Horizontal scan rate	60 KHz
Vertical scan rate	75 Hz
VCLK	78.75 MHz

These frequencies are supplied to display panel from the Display Controller Circuit, and generated by on-board VCOs and Phased Locked Loops.

The Touch controller uses a low frequency (PCLK 4.0 MHz) microprocessor to scan the resistive element for touch coordinates.

The power regulation uses solid state DC-DC convertors to provide the logic and required circuit voltages, and a backlight inverter operates at about 75 KHz to provide the voltages for the backlight of the display panel.

## PD-70FA Block Diagram

