ABSTRACT

Liquid - Crystal Display System And Power Supply Method

An object is to provide a power supply technique which is optimum when the source voltage range of a signal driver is different from that of a scan driver. A power supply unit supplies a source voltage group of V11, VC1 and V12 of the same polarity having a narrower source voltage range to the signal driver and another source voltage group of V10, VC2 and V15 of the same polarity having a wider source voltage range to the scan driver. The center voltages VC1 and VC2 within these source voltage ranges are equal to each other. The power supply unit has a means for adjusting the source voltages. A control signal and other signals from a control unit are transformed in level by a potential transforming unit. When it is desired to accomplish the display-off function, the outputs of the signal and scan drivers are set to be equal to VC level. Thus, the adjustment of liquid-crystal driving voltages can be accomplished by a simplified adjustment device while maintaining the accurate ratio of voltage division.

Fig.1.