Crystal Clear and Visibly Superior LCD Modules

Dual Power Supply Notes for Character Modules

Character modules with extended temperature liquid crystal fluid and all character modules with 3.3v $V_{\tiny DD}$ require a negative voltage on the $V_{\tiny L}$ (pin 3) pin to adjust the contrast. This contrast voltage should be adjustable, at least on prototype versions of the product. Once the desired contrast voltage is determined it can be a fixed voltage on subsequent production units, if desired.

The basic power supply connections for a dual supply LCD character module are shown below. The power supply connections for a single supply module are also shown for comparison.

It may be necessary to provide a means of automatic temperature compensation for V_L on extended temperature range modules.



