

## TECHNICAL BRIEF

BY: AZD ENGINEERING

### LCD Software Bitmapping

Many customers of AZ Displays, Inc use bit mapped images to generate data for graphic displays. There are several methods to accomplish this. The simplest method is to generate a "bmp" file from an image that has the same attributes used by the graphic display. Eventually this data is fed in directly from the customer's microprocessor or stored/flushed onto other types ICs.



### Bitmapping for Graphic Displays

Below is the following of a graphic image with the attributes of 128x64 pixel resolution. This was generated using the Microsoft paint program supplied most Microsoft PC operating systems. Using the tool bar for "Image" and then "attributes" you can configure the image for the exact format of the graphic display. In order to convert the image into usable data, the image needs to be inverted and a reverse image generated. This will result in the following picture:



Finally this image needs to be saved as a "BMP" file. Using a BIT2HEX program , the data for this image can be read in a hex format . The first 61 words of this document are used for the header of the "BMP" file and needs to be omitted.

