

# Picture Production and Bitmap Conversion for GDEY029Z94



## 一、 Make Picture

This screen supports three colors, black, white, and red are all standard colors. In practice, you can refer to the color chart of the Windows system's built-in drawing software. When creating images, you need to separate the 296 \* 128 resolution black, white, and red images into two monochrome images: black, white, and red, white (red is replaced by black), and save the images in BMP or jpg format, as shown in Figure 1.

Conception:






1. Monochrome: black, white 
2. Three colors: black, white, red/yellow 
3. Four colors: black, white, red, and yellow 
4. Seven colors: black, white, red, yellow, blue, green, orange 

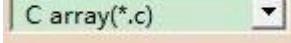


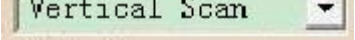
Figure 1, Image Separation Steps

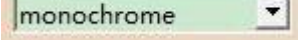
## 二、 Bitmap Conversion


Bitmap conversion can be done using image2LCD software, which can be downloaded from the official website ( <https://www.good-display.com> ). The interface for setting bitmap conversion parameters is shown in Figure 2 and Figure 3. Three color E-paper needs to be converted twice, and the steps for converting black and white and red white image bitmaps are the same:

1. Open the image2LCD software and click the "Open" button  , Import the image that needs to be converted;

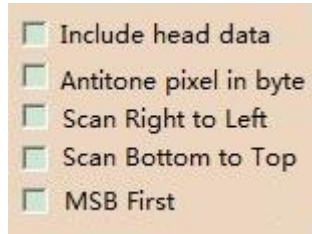
2. Output data type: Select "C array (\*.c)"  ;

3. Scanning mode: Select "Vertical Scan"  ;


4. Output grayscale: Select "Monochrome"  ;

5. Maximum width and height: Select "296" and "128", After selection, you need to click the arrow below to confirm  ;

6. Do not select any of these five options



7. "Reverse Color" Selection  Reverse color ;

8. Click on 'Save'  , Save the converted array to a file with an extension of ". C";

9. Finally, replace the corresponding array in the program with the array in the file ". C".

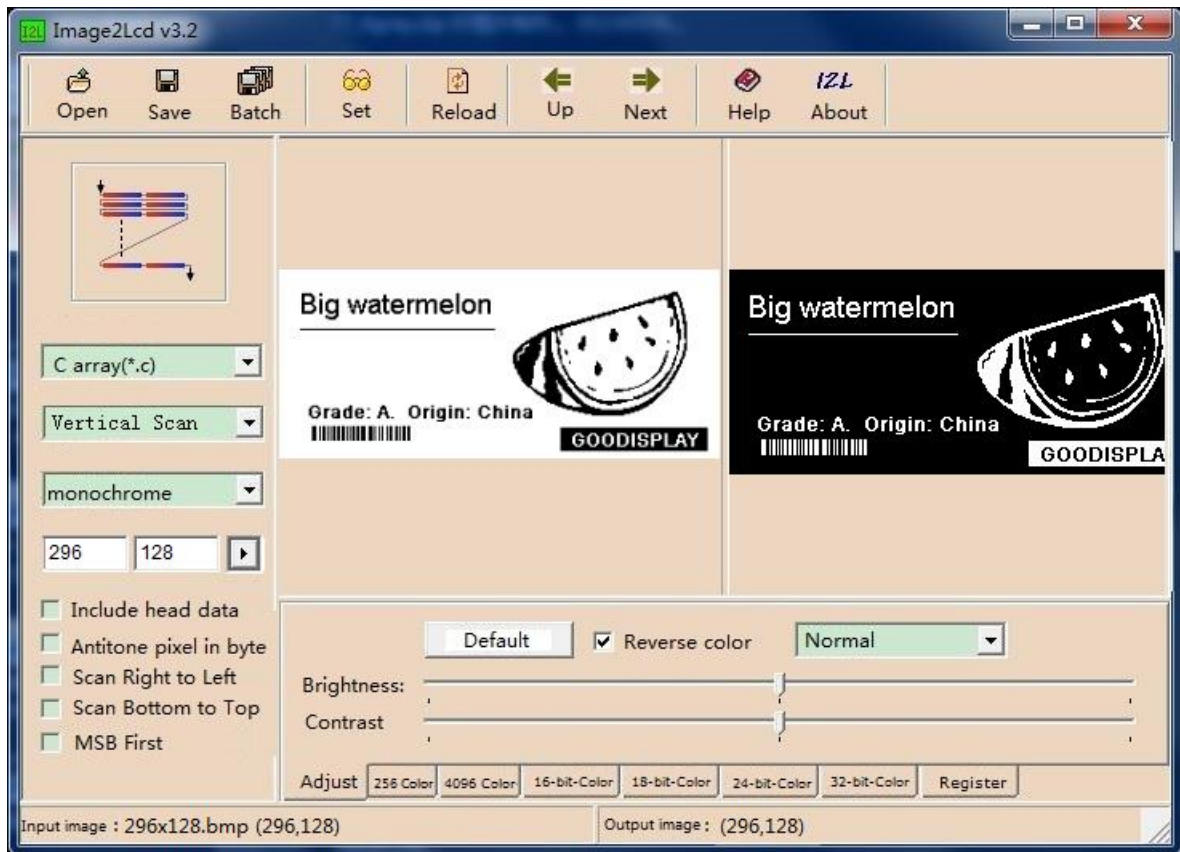


Figure 2, Black and white image settings

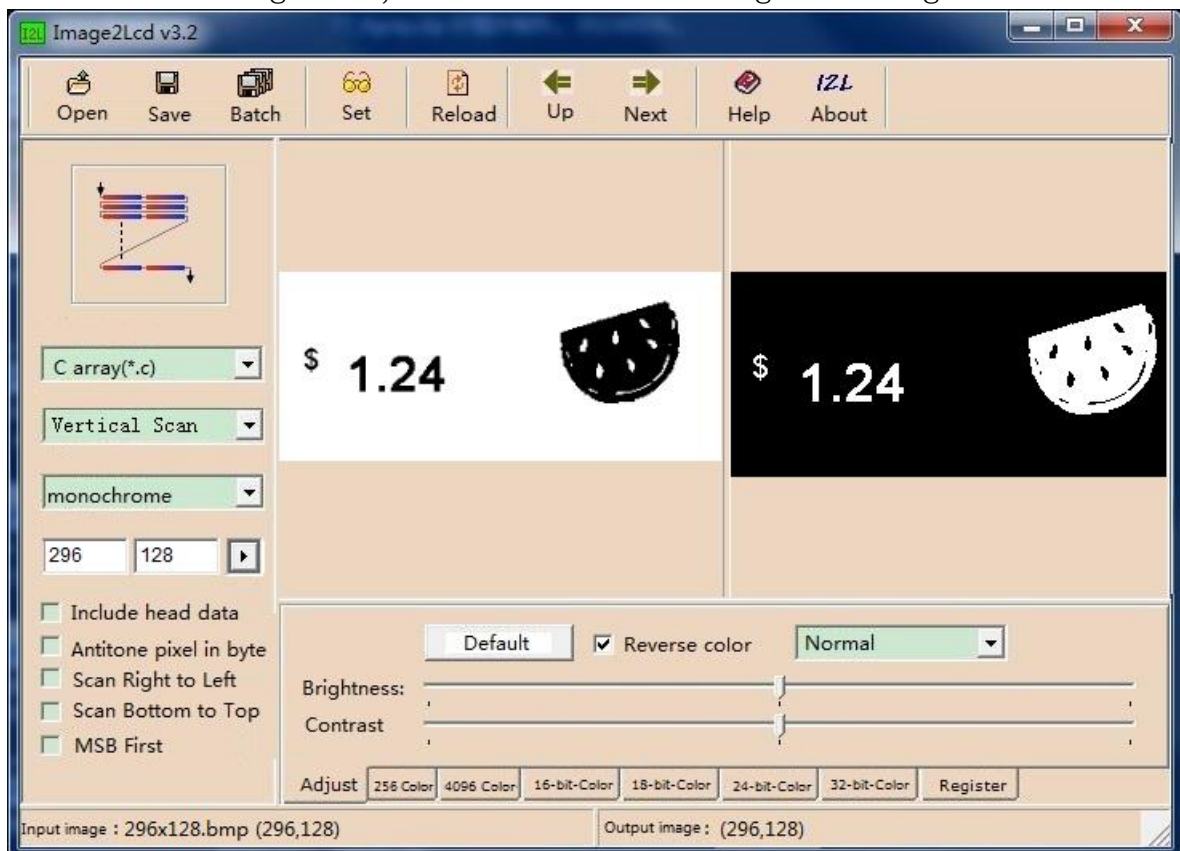


Figure 3, Red and white image settings