# Picture Production and Bitmap Conversion for GDEM102Z90



#### 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 960 \* 640 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

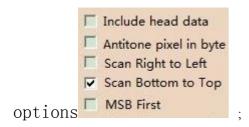


## Figure 1, Image Separation Steps

### 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 Open,
  Import the image that needs to be converted;
- 2. Output data type: Select "C array (\*. c)" Carray(\*.c);
- 3. Scanning mode: Select "Horizon Scan" Horizon Scan"
- 4. Output grayscale: Select "Monochrome"
- 5. Maximum width and height: Select "960" and "640", After selection, you need to click the arrow below to confirm :
- 6. Select "Scan Bottom to Top" for these five



- 7. "Reverse Color" Selection Reverse color
- 8. Click on 'Save' 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".

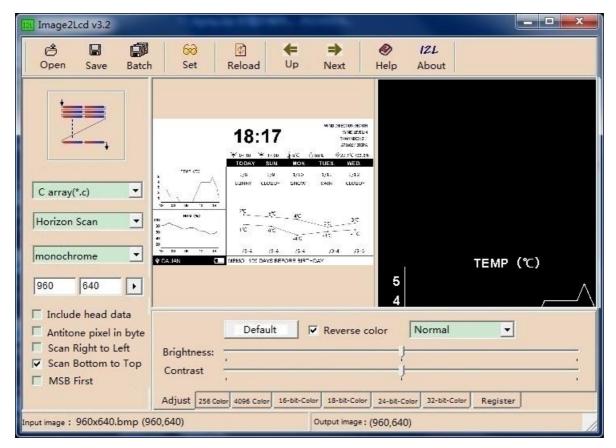


Figure 2, Black and white image settings

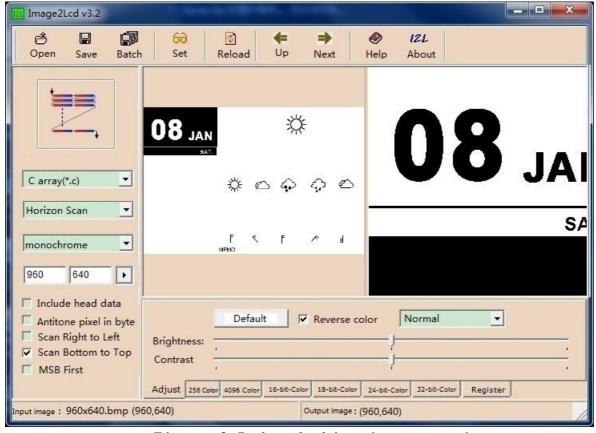


Figure 3, Red and white image settings