

GooDisplay

GDEM037F52
Dalian Good Display Co., Ltd.

## Picture Production and Bitmap Conversion for GDEM037F52



## 1.Make Picture

This screen supports four colors, black, white, red and yellow 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 make a $416 * 240$ resolution image into a bitmap that only contains four colors: black, white, red, and yellow, and save the images in BMP or jpg format, as shown in Figure 1.

## Conception:

### 1.1. Monochrome: black, white

1.2. Three colors: black, white, red/yellow

1.3. Four colors: black, white, red, and yellow $\square$
1.4. Seven colors: black, white, red, yellow, blue, green, orange
$\square$

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Figure 1, Four color sample images

## 2.Bitmap Conversion

Bitmap conversion can be done using image2LCD software, which can be downloaded from the official website ( https://www.gooddisplay.com) . The interface for setting bitmap conversion parameters is shown in Figure 2:
2.1. Open the image2LCD software and click the "Open" button Open, Import the image that needs to be converted;
2.2. Output data type: Select "C array (*.c)"
$C$ array $(* \cdot c) \quad \geqslant$,
Wertical Scan -

### 2.3. Scanning mode: Select "Vertical Scan"

2.4. Output grayscale: Select "4 Gray" 4 Gray
2.5. Maximum width and height: Select "416" and "240",After selection, you need to click the arrow below to confirm $\square$;
2.6. Select "Scan Right to Left" for these five options
$\Gamma$ Include head data
$\Gamma$ Antitone pixel in byte
$\sqrt{V}$ Scan Right to Left
I Scan Bottom to Top
「 MSB First
2.7. "Reverse Color" not selected Reverse color
2.8. Click on 'Save' Save, Save the converted array to a file with an extension of ".C";
2.9. Finally, replace the corresponding array in the program with the array in the file ". $C$ ".


Figure 2,Four color image settings

