



Your Total LCD Solutions Provider

## Dear Valued Customer,

Orient Display strives to introduce new technologies into the market. It is our pleasure today to introduce **Bi-stable LCDs** to our valued customers.

### What is Bi-Stable LCD?

Bi-stable can retain an image without power. The crystals may exist in one of two stable orientations and power is only required to change the image. Bi-stable LCD can change colors, and keep that color even when power is cut off.

### Bi-stable LCD Advantages



- No flicking: eyes not get tired easily
- Low power: no power is needed to maintain the images
- A green display: no polarizer, color filter and backlight are needed.
- High contrast and wide viewing angle: The monochromatic bi-stable LCD's contrast ratio is as high as 30:1, viewing angle about 80° in all directions.

### Available Bi-stable LCD Color Combination

- Green on Black
- Amber on Black
- Yellow on Black
- Red on Black
- White on Blue
- White On Red



### Precautions of Using Bi-stable LCDs

- Bi-stable Liquid Crystal materials require protection from UV light. A UV blocking material with a minimum 98% cut off at 380nm and lower spectral components is required.
- The finished product design should incorporate a transparent cover such as acrylic, polycarbonate etc to protect the viewing area of the display. Place the protective cover as close to the display module as possible. The protective cover should be sufficient thickness to resist bending.

### Technical Details

- Bi-stable can be used for making segment, character and graphic displays.
- Operating temperature: 0 - 50°C, Storage Temperature: -20 - 70°C
- Vdd: 3V, Vlcd: 5-33V depending on multiplex. LCD controllers have voltage booster available
- Bi-stable LCD can be made into mono, multi or full colors.
- Viewing Angles: Up/Down: -80°/+80°, Left/Right: -80°/+80°

Orient Display has samples available for evaluation and we also accept custom made inquiries.

Please feel free to contact us anytime.

Sincerely,

**Orient Display**

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### Contact Details

#### **US Office**

14925 SE Allen Road  
Suite 203 B  
Bellevue, WA 98006

Tel: (425) 698-1938

Fax: (425) 698-1852

[info@orientdisplay.com](mailto:info@orientdisplay.com)

#### **Canada Office**

145 Royal Crest Court  
Unit 42  
Markham, ON L3R 9Z4

Tel: (905) 477-1166

Fax: (905) 477-1782

[service@orientdisplay.com](mailto:service@orientdisplay.com)

### Links

#### **Company Website**

[www.orientdisplay.com](http://www.orientdisplay.com)

#### **Online Store**

[www.orientlcd.com](http://www.orientlcd.com)