Custom VA LCD Display with High Readability and Easy Integration for 6 O'clock/12 O'clock View Direction

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: BBI
- Certification: ISO90001 RoHS
- Minimum Order Quantity: 1000
- Price: 0.7-7USD
- Packaging Details: CARTON
- Delivery Time: 3-47WEEKS
- Payment Terms: T/T
- Supply Ability: 100000/MONTH

Product Specification

- View Direction: 6 O'clock/12 O'clock
- Display Technology: LCD
- Polarizer Mode: Transmissive
- Technology: LCD
- Contactor: Pin, Zebra Or FPC
- Display Mode: Positive Or Negative
- Screen Size: Customized
- Lcd Drive Voltage: 2.8-5.0V
- Highlight: **High Readability VA LCD Display**, **Easy Integration 7 Segment Alphanumeric Display Module** , **6 O'clock/12 O'clock View Direction Dot Matrix LCD Screen**

Product Description

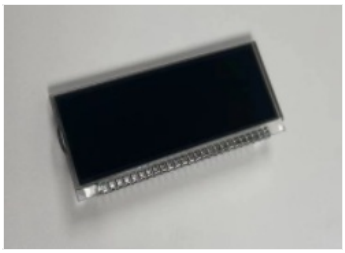
Custom Display Dot Matrix LCD Screen, 7 Segment Alphanumeric Display Module

Product Specifications

Type	VA LCD Display
Backlight Color	White, Blue or Red
Voltage	2.8~5.0V
Connector	Pin, Zebra or FPC
Driving Method	1/4Duty, 1/3 Bias
Polarizer Type	Transmissive

Detailed Technical Parameters

Item	Content	Description
1	LCD Type	TN, HTN, FSTN, VA, DFSTN, STN LCD Display
2	Outline Size	Customized
3	VA Size	Custom
4	Viewing Direction	6 O'clock or 12 O'clock
5	Voltage	2.8V, 3.0V, 3.2V, 3.6V, 4.0V, 4.5V, 5.0V
6	Display Mode	Positive or Negative
7	Backlight	With or without
8	Operation Temp	0°C TO +50°C, -10°C TO +60°C, -20°C TO +70°C
9	Storage Temp	-10°C TO +60°C, -20°C TO +70°C, -30°C TO +80°C, -35°C TO +90°C
10	Contactor	Pin, Zebra or FPC



Core Features

Display Principle and Structure

7-segment display module: Composed of 7 independent liquid crystal segments (labeled a-g), some of which also include the eighth segment as a decimal point. By controlling the combination of the segments' illumination, it can form numbers from 0 to 9 and simple letters such as E, F, and C. The structure is simple and the driving logic is clear.

Customized dot matrix LCD screen: Based on the pixel dot matrix, the dot matrix size and layout can be customized according to requirements. Icons, symbols, and even company logos can be added. Some dot matrix segments can be burned onto glass for permanent display, and they can be visible without power supply.

The overall structure adopts a two-layer structure of indium tin oxide (ITO) glass sandwiching the liquid crystal, divided into transparent type, reflective type, and semi-transparent type. The transparent type requires a backlight, the reflective type relies on external light for display, and the semi-transparent type combines both characteristics.

Performance Advantages

Low Cost and Customization: As a mature display technology, the production and customization costs are low. The size, display content, and backlight color can be designed as needed, suitable for small batch or personalized device requirements.

Low Power Consumption and Long Lifespan: The liquid crystal does not actively emit light; it only requires the power supply of the driving circuit. The power consumption is much lower than OLED and TFT screens. The working temperature covers -20 to 70 , and the service life can reach tens of thousands of hours.

High Readability: The edges of the 7-segment displayed numbers/characters are clear. The icons customized by the dot matrix do not require language for recognition (such as battery, antenna symbols). They can be quickly read in strong light or in daily environments.

Easy Integration: It can be simply controlled through a microcontroller or driver IC. It supports various connection methods such as metal pin feet, FPC, and conductive adhesive strips, suitable for the hardware design of different electronic devices.

Applications

Consumer Electronics and Smart Home

Household Appliances: Microwave ovens, rice cookers, air conditioners, digital panels of electronic alarm clocks, used to display time, temperature, and gears; smart water meters and electricity meters with reading screens.

Small Electronics: Calculators, electronic scales, remote controls with display areas, using 7-segment modules to show numbers, with dot matrix sections displaying units or simple icons.

Industrial and Instrumentation

Industrial Control: Display modules for distribution cabinets, pressure gauges, flow meters, frequency converters, using 7-segment to display values, dot matrix for custom industrial symbols or fault codes.

Test Measurement: Display screens for laboratory measuring instruments and portable detection equipment, relying on high readability to ensure accurate data reading.

Medical Equipment

Portable Medical Instruments: Display of values for blood glucose testers, thermometers, blood pressure monitors, low power to accommodate battery power supply.

Medical Monitoring Equipment: Basic parameter display of simple monitors, dot matrix section for customizable vital sign icons, improving information recognition efficiency.

Vehicle and Public Equipment

Vehicle Display: Digital displays on car dashboards, tire pressure monitors, in-vehicle chargers, using 7-segment to show speed, tire pressure, etc.

Public Facilities: Digital screens for elevator floor displays, parking lot meters, bus stop signs, relying on high reliability and readability.

Dongguan Bibuke Electronic Technology Co., Ltd.

+8613711912723 Jack@smartwinlcd.cn lcdtftscreen.com

Shangyu Commercial Centre Chang'an, Dongguan, Guangdong, China 523881