

## LED controller

### Specifications



Before you use the LED controller, please read this file first and save it for future

We will struggle and serve for the booming development of LED industry!

BX-5E1

## Statement

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# Brief Introduction

Thanks for ordering LED control card. The design of the control card is according to the international and industrial standard, but if the operations are incorrect, it will probably bring you personal injury and financial harm. As to avoid these and win more from your equipment, please obey the specifications of this file.

## About Software

Cannot do any modification, decompilation, disassembling, decoding or reverse engineering on our software, it's illegal.

## Characteristics

- ◆ Based on strong hardware platform, support large size led display screen with best performance.
- ◆ On-board 100M Ethernet Interface, MAC bindings Mechanism, Ethernet auto-connection.
- ◆ Support PC direct connection/cross-Ethernet connection/cross-internet connection
- ◆ On-board USB interface, support U disk for downloading display file.
- ◆ Flexible and rich display control, high cost performance.
- ◆ 3.5V- 6.5V wide voltage range. -40°C~80°C wide work temperature.
- ◆ Support software update online.
- ◆ Support temperature sensor /temp&humidity sensor/noise sensor.

# Guiding

## **Safety note**

- ◆ Input voltage is 5V, voltage range is from 4.5V-6.5V, please make sure the quality of the power supply of BX-V75L.
- ◆ Please make sure that all the power supply cables are plugged off when you want to connect or plug off any signal or controlling cables.
- ◆ Please make sure that all the power supply cables and signal cables are plugged off when you need to put in or take off the hardware equipment.
- ◆ Please make sure the environment is clean, dry and ventilated when you use this product, also, do not put this product to a high temperature and wet environment.
- ◆ This product is electronic products, please keep away from fire, water source and flammable&combustible products.
- ◆ There's high pressure components in this products, please do not open the box and repair it by yourself.
- ◆ Turn off the power supply immediately when you find smoking, peculiar smell or something unusual. And contact with us soon.

## Function instruction

BX-5E series support all kinds of super large intel screen and cluster display system.

Based on network application, support LAN and internet. A best choice for single screen or cluster display system. Meet all kinds of complex requirements.

### **Control size**

The control area of BX-5E1, for single color  $\leq 256K$ : 2048\*128、1344\*192、1024\*256, with a maximum width of 2048 Pixels, the control size is flexible. With abundant display function

### **Dynamic area**

We provide Java, SDK, c#, VB, C++ series demo for static and dynamic area ; The static area support power off save program , support 32 areas, each static area does not influence each other; It supports 4 dynamic areas (each dynamic capacity is 1M, program will not save while power off, dynamic area can be associated with multiple static program, providing a variety of play modes.

### **Flexible Communication mode**

On-board 2 nos 50PIN serial communication interface, support network communication, GPRS wireless communication, WiFi communication and RF wireless communication, and support USB interface support U disk download file. In order to enable users to pick the most simple way of communication at random, we can also customized two specifications of RS485 for customers: one is standard RS232 interface and the other is USB interface, th

### **Multi area arbitrary collocation**

Support multi content display, use can add Image/text/animation/lunar calendar/digital clock/analogue clock/timer/temperature/temperature & humidity/noisy, ect then rolling display these collocation contents .

### **Cluster management**

Through a stable and efficient network control mode, users can seamlessly connect multiple LED

screens which was distributed in different regions remote centralized management and maintenance, cluster release programs. In addition to send programs with the cluster, but also cluster settings boot, shutdown, correction time , time switch and brightness adjustment ect. Which can reduce the time user operation and management of the LED screen , greatly improve their work efficiency.

## **Timing sending programs**

Supporting send programs regularly, users only need to set the time of the program in the software, and the program will send the program exactly according to the set time

## **Timing power on/off**

The Ledshowtw software has the function of timer switch. After setting the boot and shutdown time, the computer will automatically turn on and turn off on time, so that we can make reasonable use of manpower and material resources, and greatly improve the service life and reliability of the display. When the user is inconvenient to operate on the side of the computer, the timing switch-gear can better realize the unattended function.

## **Test button**

With the increases of use time , the quality of the screen will also change. Therefore, the large LED screen needs regular display quality detection and correction. The product has the function of self testing screen, the Users just need to flow simple operation steps, It can complete the brightness of the screen, , color detection, enabling customers to keep tracking of each LED the life of the screen.

## **Automatic Correcting Time**

The system will automatically correction time according to the real-time time, just like the mobile phone and the computer, so that there is no need to manually calibrate the time and place the places that need not be specially installed to the LED display, it can automatically correction the time, so as to ensure the uniformity of the time of all display terminals at any time.

## **Colorful border and stunt**

The Ledshowtw software has build-in colorful border and super stunt, as guest editor broadcast programs provide rich and colorful eye-catching border and cool exciting stunt change. A variety of

colorful border to meet customer needs and different editing applications, greatly improving the broadcast effect of the program.

## **Sensor**

BX-5E series on-board temperature, humidity, brightness sensor interface, can accurately measure and display the temperature, humidity, brightness value. Provide accurate and accurate data reference for customers in places where temperature, humidity or noise need to be strictly controlled, so as to avoid unnecessary losses caused by improper temperature, humidity or noise control.

## **Multilingual**

The system includes many kinds of font, such as multiple simplified Chinese text and traditional font, the software supports over 20 languages, such as English, Korean, Japanese, Greek, French and so on. The product is suitable for users from all over the world.

## **Secondary development**

Support secondary development of static and dynamic regions. Provide c# and C++ complete development demo for static area and dynamic area , provide perfect and easy to use secondary development interface, users can easily use controller for secondary development, provide complete secondary development technology support services, meet the needs of customers in comprehensive area.



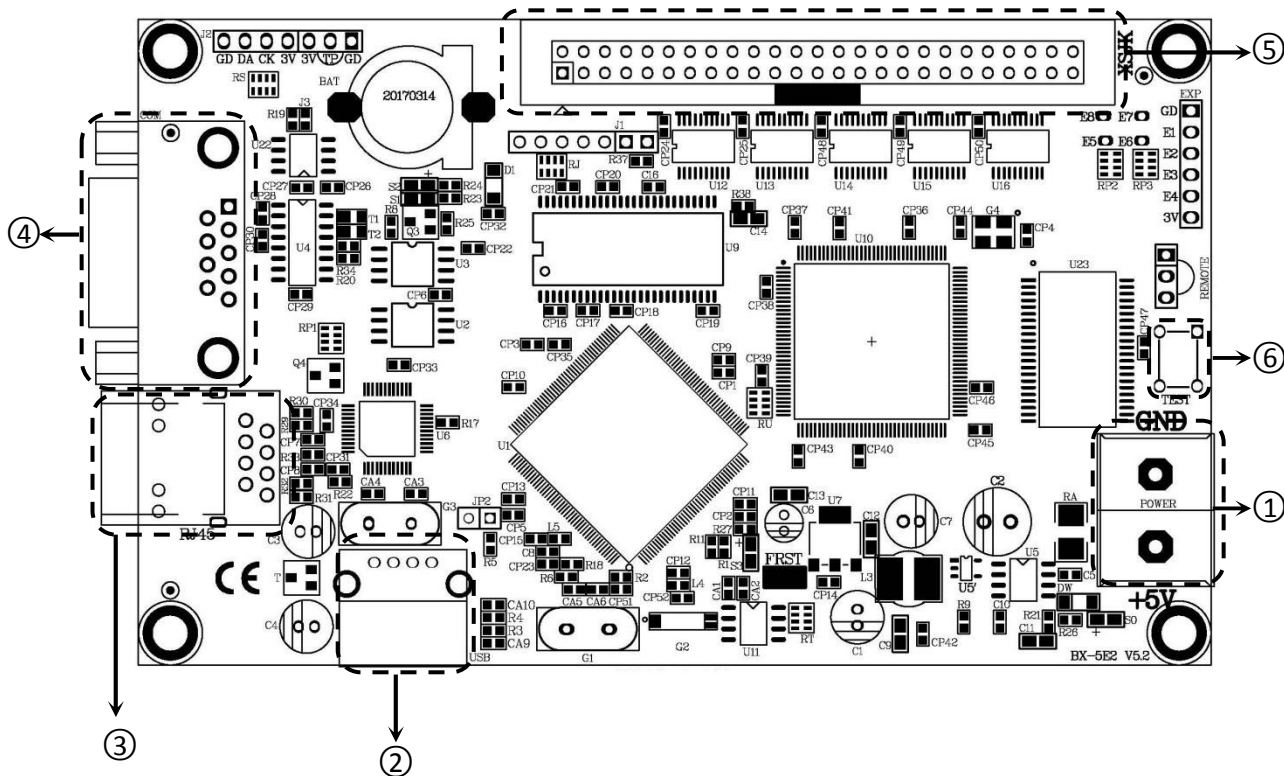
# Technical specifications

Technical specifications	
Control size	Single &Dual color 256K Pixels : 2048*128、1344*192、1024*256
Storage capacity	4MByte
Screen types	All kinds of small single, double colors LED screen
Software function	Screens cluster management/multi-program/multi-areas display/multi-languages
Program type	Normal/global/real-time/shared/self-adapted program
Program quantity	Support 512 programs,32 areas for each program
Area type	Picture and text/single line text/animation/lunar calendar/digital clock/analogue clock/timer/temperature/temperature & humidity
Frame mode	Most advanced colorful / magic graphics frame/Area frame
Communication mode	100M ethernet/RS232/RS485/USB,customized RS485. Two model: one is USB+Ethernet ,the another is USB+Serial
Interface	2 nos of 50 Pin
Sensors supported	Support temperature and temp&humidity sensor
Remote control	Remote control program/lock screen/brightness adjustment/power on/off /screen test
Bright regulation	16 grades brightness, manual and auto-timing adjustment
Power on/off mode	Auto-timing powered on/off /software power on & off/remote power on&off
Voltage	5V (3.5V~6V)
Maximum power	≤2.5W
Temperature	-40℃~80℃
Secondary development	Provide the DLL and corresponding demos
Software	Ledshowtw
User Manuel	Ledshow TW user manual

Specification	
Working voltage	3.5V~6V; Please be sure the good quality of power
Maximum power	≤2.5W
Working temperature	-40℃~80℃



# Interface diagram



Interface details		
1	Power	5V Power interface, DC voltage input, rated voltage 5V, support 3.5V~6V
2	USB port	USB interface ,support USB Disk transmission program
3	100M	Ethernet interface, Fast Ethernet, connected to the computer
4	Serial port	RS232 and RS485 serial interface
5	50 Pin interface	50 PIN interface (XSJK)
6	Test	Test button

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ONBON APP

