



BX-Y2E Specification

Version : V1.3 Release date : 2023.3.15

Catalog

Brief Introduction	1
About Software	1
Guiding	2
Safety note	2
Feature	3
Function instruction	4
Control area	4
Support high refresh	4
HD video display	4
Synchronous&asynchronous integration	5
Multiple management platform	5
Large storage capacity	6
Support database	6
Support APP	6
Program release method is flexible	6
Online update firmware	7
Support various sensors	7
Relay function	7
Timing on/off screen	7
Secondary development	7
Technical parameter	8
Dimensional illustration	9
Interface diagram	10
Left panel diagram	10
right panel diagram	11

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.

Guiding

Safety note

- ◆ Input voltage is 12V, , please make sure the quality of the power supply of player.
- ◆ 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 take off the power supply of LED video processor before you do any hardware operations, and ESD by touching the ground.
- ◆ 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.

Feature

- ◆ Total pixel \leq 640K points: 1024 * 640, width \leq 9600, height \leq 1920, 2 gigabit network ports output.
- ◆ Support mixed playback of external video sources and local signals.
- ◆ Support for two 1080P video areas or one 1080P@60Hz External video source.
- ◆ High performance CPU, hardware decoding, HD video smooth playback .
- ◆ On board 100M Ethernet port, WIFI module, also supports external USB WIFI module interface.
- ◆ Built in WIFI can be used either as a hot spot (AP) or as a terminal. Support BX-4Gu4 .
- ◆ Onboard EMMC large capacity (8G) flash memory, can store 16 hours of high-definition video, ultra high-definition video 8 hours.
- ◆ Indefinite expanding memory.on-board SD card and dual USB interface, USB interface supports large capacity mobile hard disk (1000G).
- ◆ Support USB disk plug and play, and also upload into the memory to play, very suitable for networking inconvenience place program released.
- ◆ Support cluster control, especially suitable for large-scale urban outdoor advertising screen large-scale deployment, management
- ◆ Easy to upgrade the software , you can use pc software or cloud platform to remote upgrade it , no need to the pot

Function instruction

Control area

BX-Y2E has two gigabit output network ports, with a total pixel size of $\leq 640K$ pixels, 1024×640 , width ≤ 9600 , height ≤ 1920 , flexible control area, rich display functions, and high performance. Suitable for smart city government screens, with an extra long load of 9600 pixels.

Support high refresh

BX Y series of controller support high refresh (here refers to the receiving card for LED screen refresh, users scan) or mobile phone camera shooting LED large screen picture from time to time, no distortion, no scanning line, the true nature and excellent results. In the ordinary low refresh display screen, camera, you can see the stripes, stripes is actually a scan line, generally horizontal black stripes line, it is caused by the screen refresh rate is low, is the camera to capture the present.

HD video display

The controller supports two 1080P video areas or one 1080P@60Hz External video source, controller using high-performance CPU, hardware decoding, can smoothly play high-definition video.

The controller provides 1 channel of HDMI input, and external video can be played as a video area to achieve a picture-in-picture effect. External video sources can also be played in full screen to achieve synchronization.

Synchronous&asynchronous integration

The controller supports two modes of operation: synchronous mode and asynchronous mode. In asynchronous mode, users can edit and release programs by themselves. In synchronous mode, the controller can receive external input video source equipment, and synchronize the output and sound of the equipment such as TV set, set-top box, DVD and so on. Mode switching can be done by the mode button on the front panel of the controller. When the button is pressed, the controller sequentially enters the synchronous HDMI mode, asynchronous mode. Multiple communication mode/support network topology.

Multiple management platform

The controller supports multiple management platforms, including PC software LedshowYQ and cloud platform iLEDCloud. The PC software LedshowYQ supports mainstream operating systems such as Windows XP, win7, and win10. The software provides comprehensive and rich controller configuration, program scheduling, and program sending functions.

The cloud platform iLEDCloud is a multimedia information publishing platform provided by onbon technology. Its core server is hosted by Alibaba Cloud, providing excellent reliability and stability. Users only need a browser to use the platform, and can remotely edit programs, preview programs, and play them at fixed times and locations. Users can log in and use the cloud platform through mobile phones, pads, and PCs.

If the user is in a LAN application environment, they can choose the PC software LedshowYQ provided by us for control and management. If the user's usage environment needs to span the public network, they can access the iLEDCloud cloud platform and manage it through a web browser.

Large storage capacity

The controller provides high-capacity built-in flash memory, also supports external capacity expansion. Controller built-in 8G flash memory, you can store 16 hours of high-definition video. It provides SD card slot, allowing users to insert large capacity SD card, to expand capacity. When users use large capacity SD card expansion capacity, please switch the working medium to the SD card. The controller also supports high-capacity mobile hard drives on the USB interface, which can support up to 1T (1000G) of removable hard disk when the mobile hard drive is powered by a separate adapter. When users use large-capacity mobile hard disk expansion capacity, the need to switch the working medium to USB mode.

Support database

It supports the database area, supports multi-page display, supports MySQL, sqlserver and other format database.

Support APP

It can be controlled with APP led media, managed easily. APP support search screen, support multi-language, support dynamic preview, video transcoding function. Support gesture zoom in and out of partition function.

Program release method is flexible

Users can use the PC software LedshowYQ edit, preview, release program. If there is no access to internet, you can also use the U disk for the program to import or plug and play. Program import, please insert the U disk into the PC, click the "USB" icon, select "import memory play", click "Save", the program can be deposited into the U disk. Then the user can insert the U disk into the remote screen controller, the controller will automatically copy the

program to memory, to play. And "plug and play", it is inserted into the remote U disk controller, the controller will automatically cut the media for U disk to play.

Online update firmware

BX-Y series support remote upgrade firmware, users can use PC software LedshowYQ, iLEDCloud platform to upgrade the latest firmware, to enhance controller functionality, performance, solve bugs. The controller has built-in logging function, it can record various important events, and support remote consult, analyze and solve the fault. Support remote control BX-Y08 supports remote control , very easy to switch programs by the remote .and also the screen brightness, volume, turn on and off screen , testing etc. user experience comparable to TV remote control, especially suitable for indoor led screen management.

Support various sensors

Onboard temperature, humidity, and brightness sensor interface , which can accurately measure and display brightness, temperature, and humidity values. Provide accurate data reference for customers in places where strict control of temperature, humidity, or brightness is required.

Relay function

BX-Y series added relay function , Match with VMF multi-function card, the controller supports remote start, shutdown control , effectively reduce the screen power consumption, saving energy.

Timing on/off screen

The software has a timed on-off function. After setting the startup and shutdown time, the computer will automatically start and shut down on time, achieving a reasonable use of human and material resources, greatly improving the service life and reliability of the display screen. When it is inconvenient for users to operate on the computer frequently, timing on/off can better achieve unattended functions.

Secondary development

Provide SDK file that support major systems such as WINDOWS/LINUX/ANDROID/iOS,

including various dynamic libraries, communication protocols, and test routines;

Support mainstream programming languages such as JAVA/C/C+/C #/Delphi, and support secondary development by users on various platforms to maximize the development and expansion of customized functions for users.

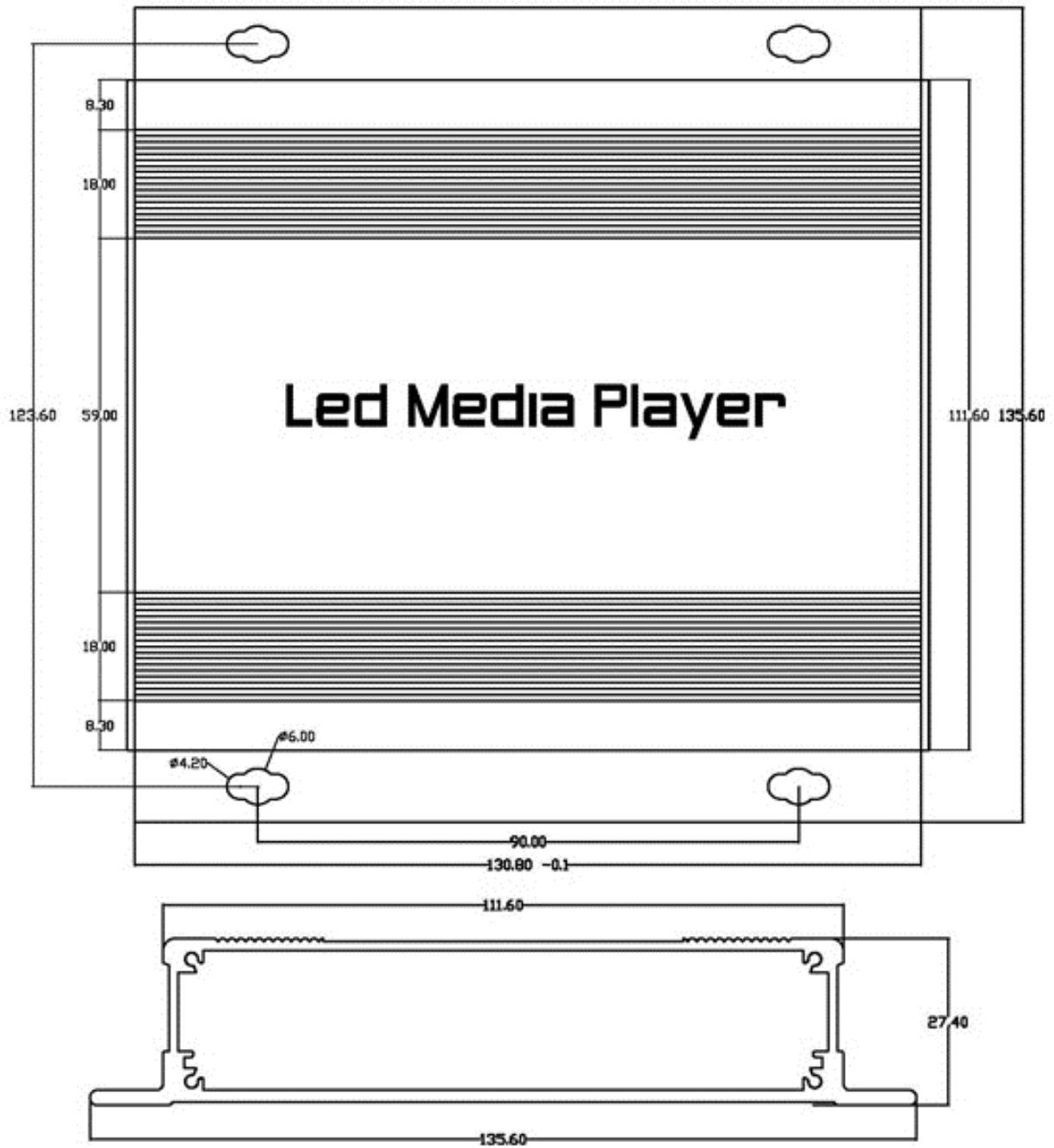
Technical parameter

Screen index	
Parameter	Specification
Minimum size	1024×640
Maximum size	9600
Maximum width	1920

Product specification	
Input power supply	12V
Power Dissipation	≤6W (Optional 4Gu4 , ≤10W)
Temperature	-40°C ~ 80°C

Dimensional illustration

单位: mm



Interface diagram

Left panel diagram



Button specification	
USB	USB interface, which can be connected to a USB disk, and USB-RS485 adapter to connect various Modbus environmental sensors
WIFI	Connect WIFI antenna
4G	4G antenna (需选配 4Gu4)
SD	SD slot
LAN	Ethernet interface, connect with computers
TEST	Test button
▶	Program switch button
NET	Network indicator
SYS	System indicator

right panel diagram



Key illustration	
LED1	Gigabit network port output 1, connected to the receiving card
LED2	Gigabit network port output 2, connected to the receiving card
AUDIO	Audio out
HDMI	HDMI1.4
LIGHT	Brightness sensor interface
12V	12V power supply interface, standard DW12W-12V power adapter

Shanghai ONBON Technology Co.,Ltd (Headquarters)

Address: 7 Floor, Tower 88, 1199#, North Qinzhou Road, Xuhui District, Shanghai City, China

Tel:0086 15921814956

Website: www.onbonbx.com

ONBON (Jiangsu) Optoelectronic Industrial Co.,LTD

Factory Address: 1299#, Fuchun Jiang Road, Kunshan City, Jiangsu Province, China

Sales Contacts

Tel: 0086-15921814956 0086-15800379719

Email: onbon@onbonbx.com

Second Development Tel: 0512-66589212

Email: dev@onbonbx.com

iLEDCloud

Website: <http://www.iledcloud.com/>