灰度科技
HUIDU TECHNOLOGY

User Manual

USER MANUAL

LED poster screen

dedicated control system

HD- B6L

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Update history:

release version	release time	Release Notes
V1.0	2024.6.1 4	First release

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1. Introduction

HD-B6L (B6L for short) is a multimedia control card designed for LED poster screens . It comes standard with HDMI input and output and supports HDMI splicing display. It also supports playing videos, pictures, Gif animations, texts, WPS documents, tables, clocks, timings and other program contents.

B6L comes standard with Wi-Fi and supports wireless control via the mobile phone APP - "LedArt"; supports Internet remote cluster management and Internet remote power control; supports USB interface to update/play programs; supports HDMI signal synchronous playback; supports external connection of various environmental monitoring sensors to realize real-time viewing of environmental monitoring data, and is widely used in mobile poster screens , mirror screens , splicing screens and other display fields.

- Through HDPlayer, Screen Control APP and Xiaohui Cloud, you can easily realize program production, publishing and display screen control. For related operations, please refer to "HDPlayer User Manual", "Screen Control User Manual" and "Xiaohui Cloud User Manual".
- HDSet can be used to configure the display screen and route the screen. For related operations, please refer to the HDSet User Manual.

2. Quick Start

Follow the steps below to quickly use B6L

1. Hardware Setup

- Step 1: Open the package;
- Step 2: Prepare network cables, HD cables, USB flash drives and other accessories;
- Step 3: Build the hardware environment according to the figure below;

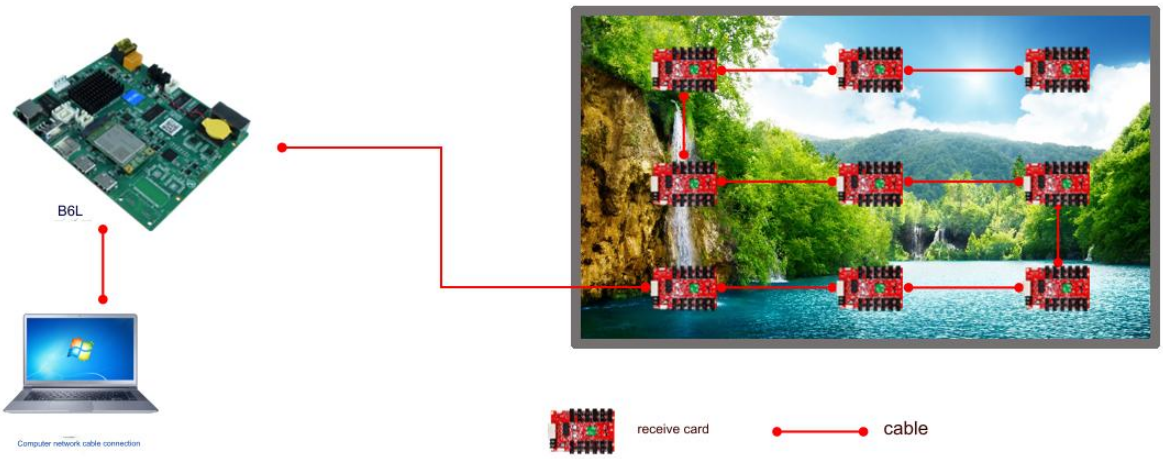

Figure 2-1

- Step 4: Connect the power cord and complete power-on.

2. install software

- Computer software: Visit Huidu Technology's official website www.huidu.cn , download HDPlayer and HDSet, and follow the prompts to install;
- Mobile APP: Search for "Screen Master" APP in the mobile app store, download and install it;

3. Control method

1. Single machine control

- Users can connect to B6L's Wi-Fi hotspot through the mobile phone screen control APP to debug B6L or publish programs.
- Users can directly connect to the B6L input network port via a computer network cable to debug B6L or publish programs.
- Users can update programs on B6L by connecting a USB flash drive to the USB port of B6L .

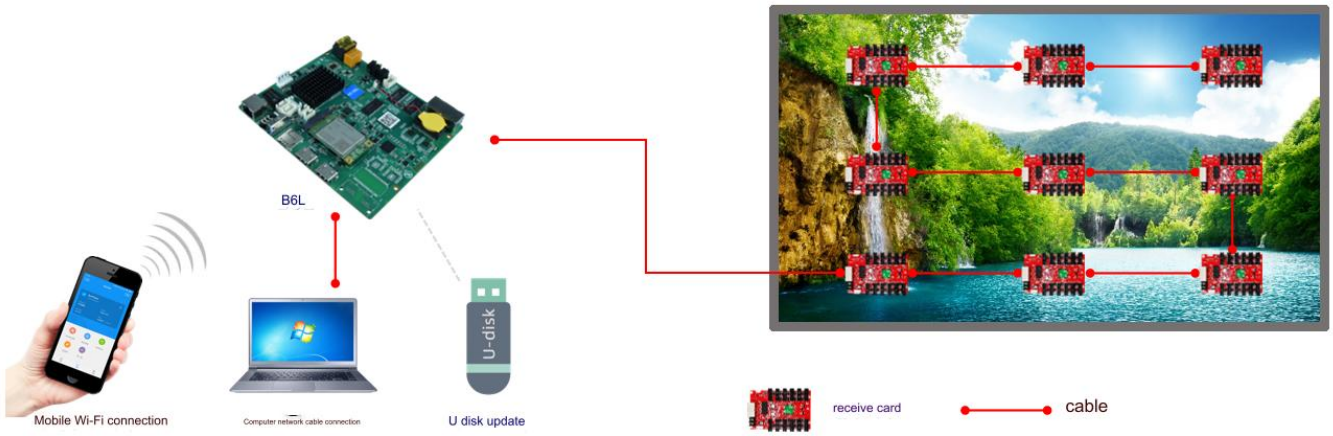

Figure 3-1 Hardware connection diagram

2. Internet remote control

Log in to the Xiaohui Cloud Information Release System via computer or mobile phone to realize cluster control of multiple devices.

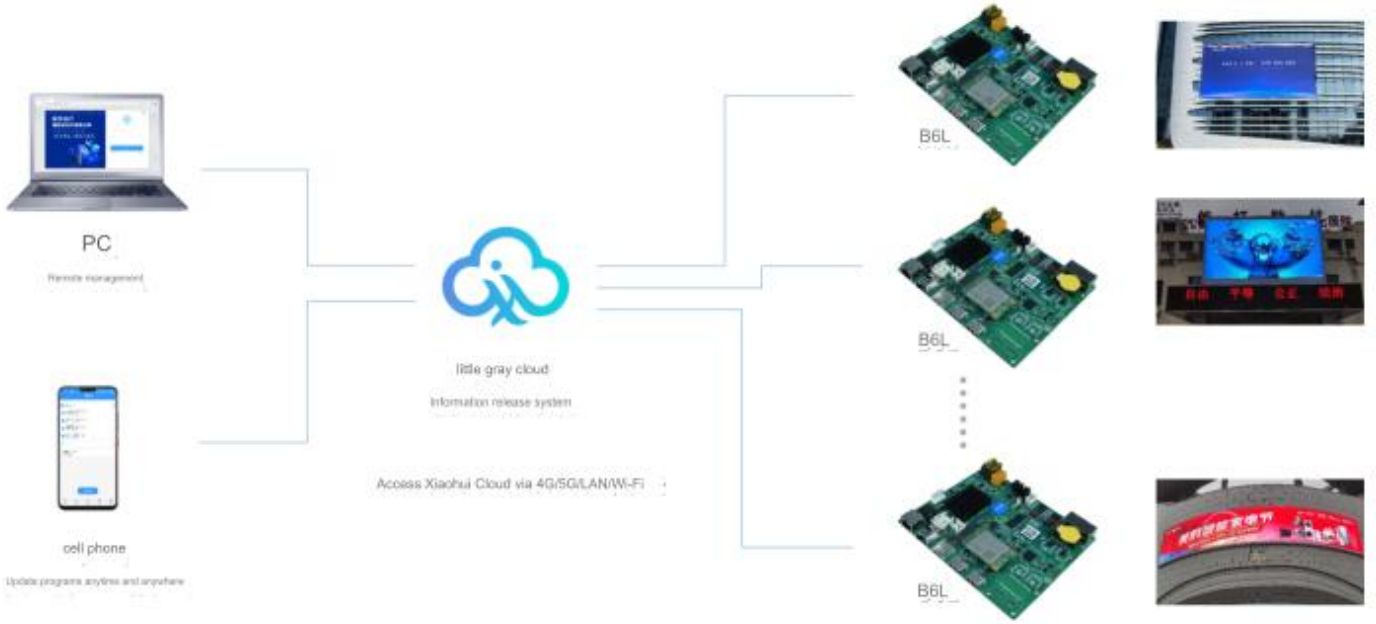

Figure 3-2 Xiaohui Cloud Cluster Management

3. Synchronous control

The HDMI input interface of B6L can be connected to computers, high-definition cameras, multimedia playback boxes, etc. to achieve synchronous playback.

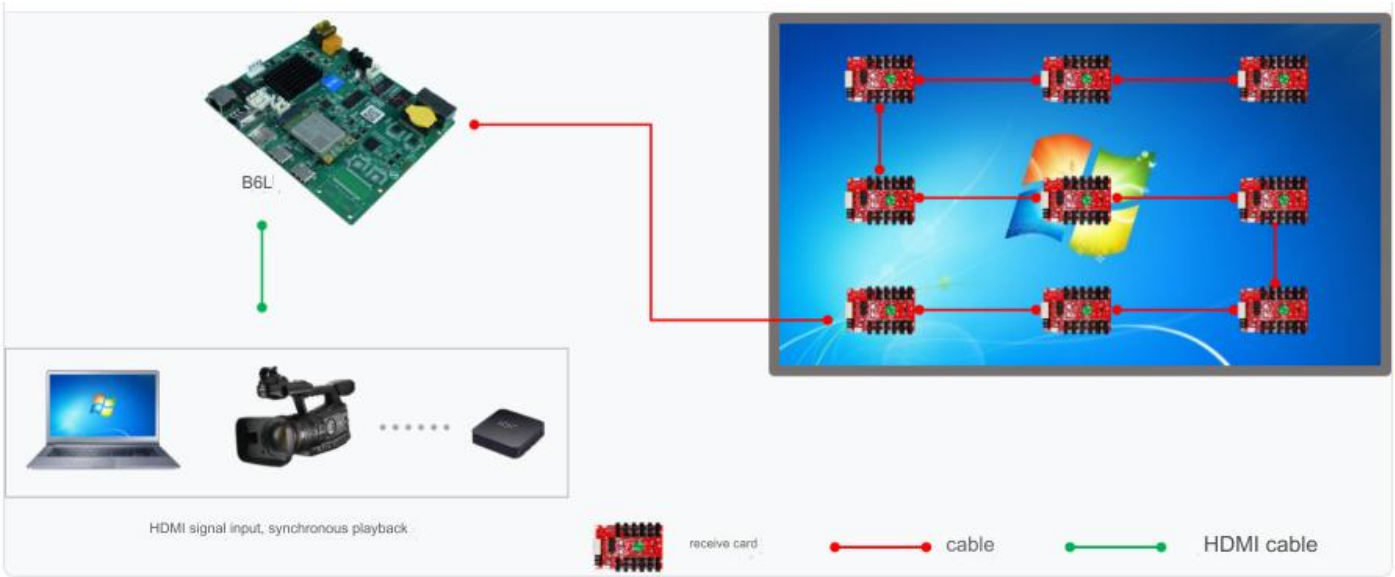

Figure 3-3 Synchronous control

4. Poster screen application

1. Independent playback

Each display screen displays images independently without interfering with each other.

Operation steps: Publish programs to each B6L through a computer/mobile phone using WiFi or a direct network connection.

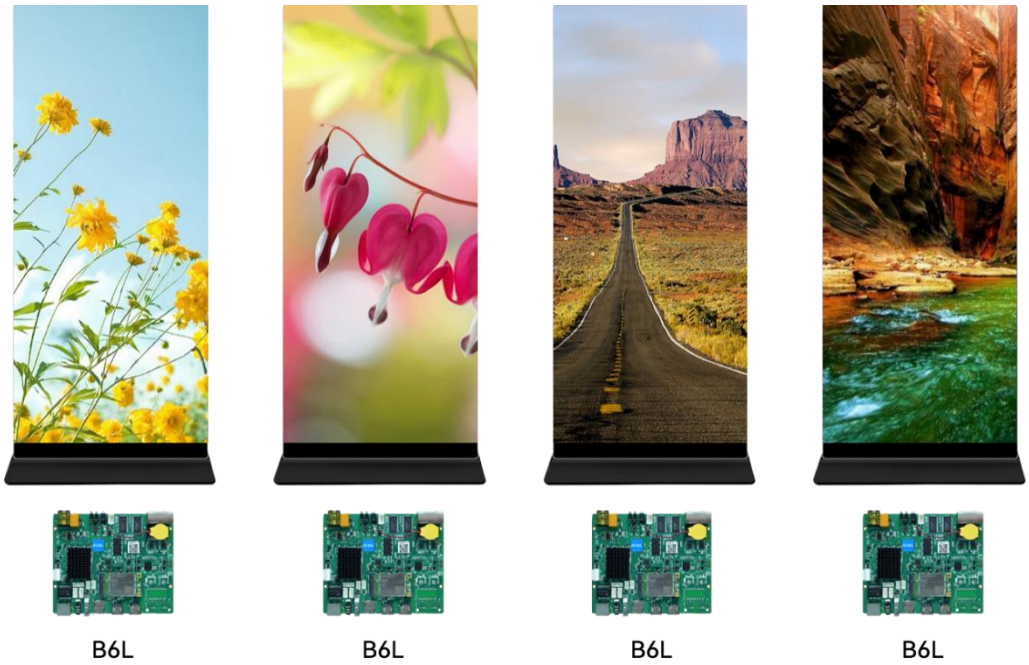

Figure 4-1 Independent playback

2. Multi-screen synchronization

Multiple independent displays synchronously display the same image at the same time.

2.1 LAN multi-screen synchronization

Related configuration: router/switch, network cable
Steps:

- Open HDPlayer, find the device in the lower left corner of the software, and go to Control Menu --> Settings --> Multi-screen Synchronization;
- Select the synchronization method. For LAN, generally select NTP and check the devices that need to

be synchronized.

- Create new display screens, create programs and publish them.

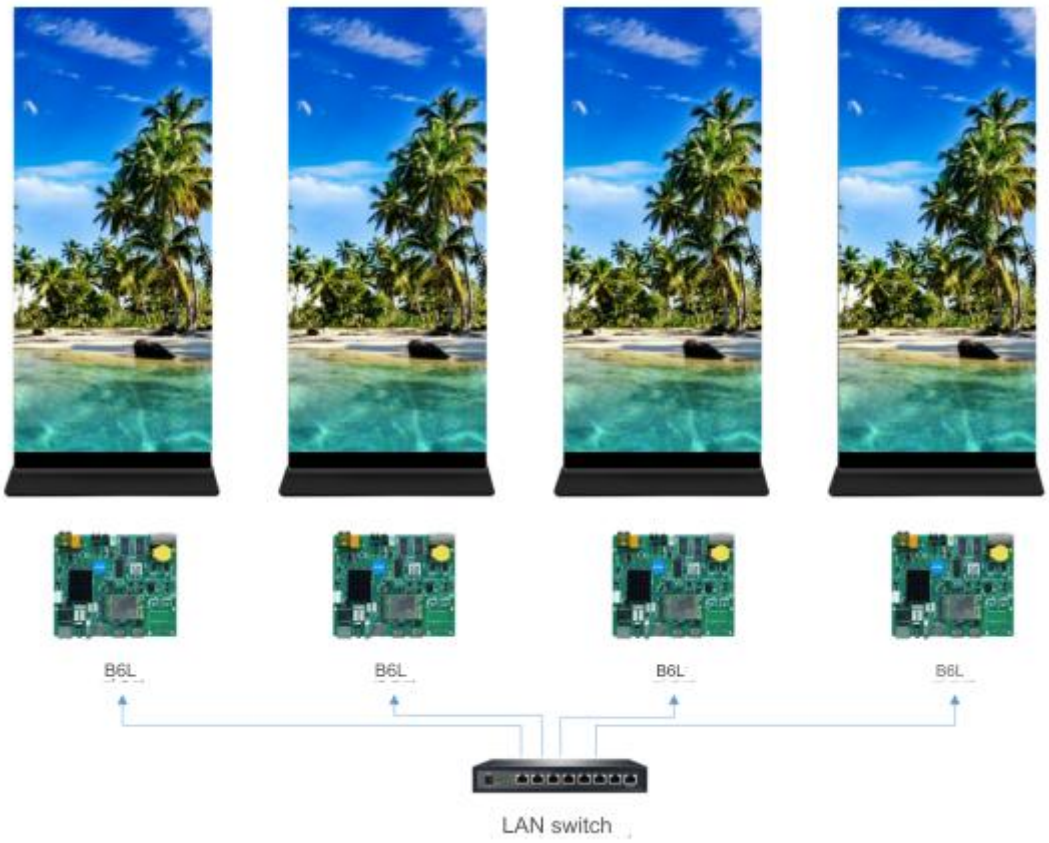

Figure 4-2 LAN multi-screen synchronization

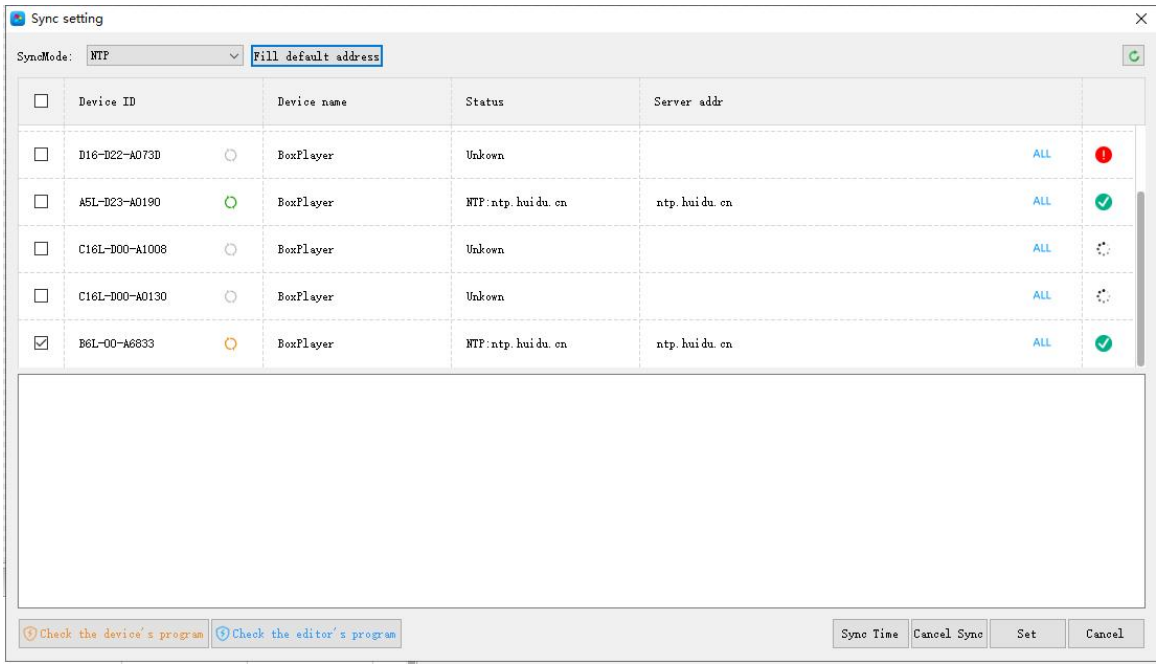

Figure 4-3 Multi-screen synchronization settings interface

2.2 Cloud platform multi-screen synchronization

Related configuration: external network router, network cable, 4G module
Steps:

- The device is bound to the Xiaohui Cloud Information Release System. After discovering the device in the lower left corner of the HDplayer software, enter the Control Menu --> Settings --> Cloud Server Settings, check the device, fill in the cloud platform user name, and click OK;
- Open the Xiaohui Cloud Information Release System, and in the device interface, select Device-->More-->Multi-screen Synchronization;
- Produce and publish programs.

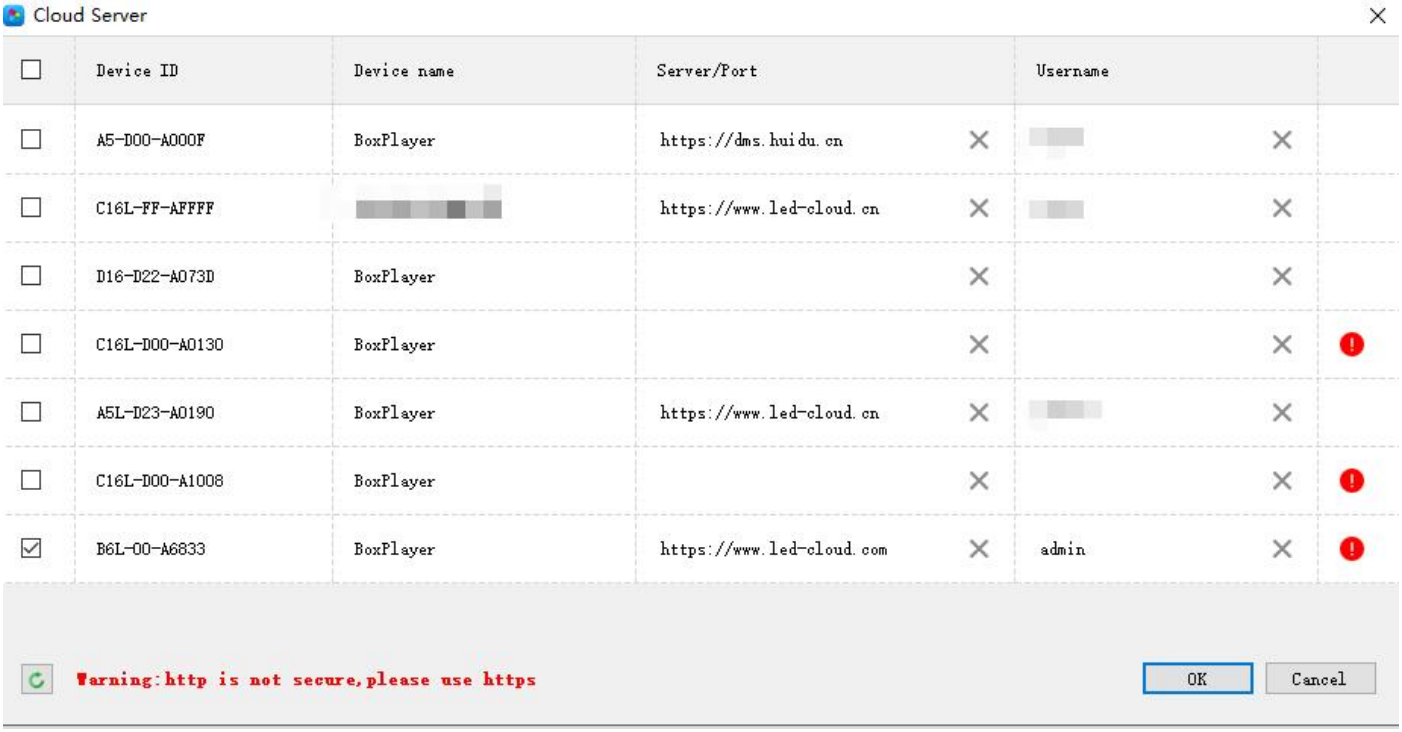

Figure 4-4 Binding to cloud platform

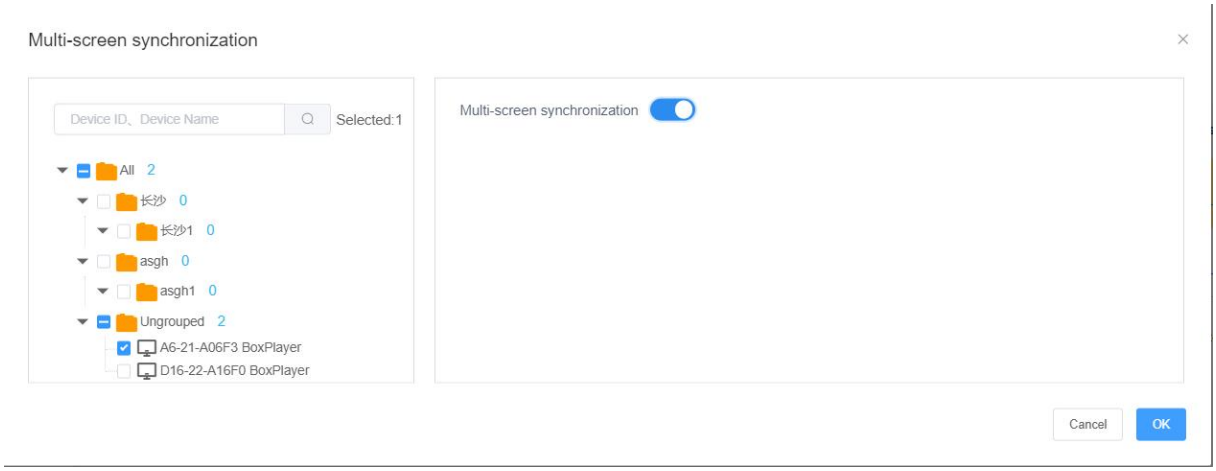

Figure 4-5 Cloud platform multi-screen synchronization

3. Spliced Display

3.1 Cascade synchronization parameters

The cascade state supports the basic parameters and connection relationship of the secondary screen to synchronize the main screen receiving card.
Steps:

- Looking at the screen from the front, the B6L on the far left is the main device;
- Use HDsetV3.1.5.3 and above debugging software to debug the main device using the original process;
- Connect the HDMI OUT of the main device to the HDMI IN of the device on the right, and connect them to the right in sequence. (The one close to the USB port is HDMI IN, and the one far away from the USB port is HDMI OUT), and cascade all the screens with HDMI cables;
- Use the HDPlayer sync parameter function. Enter the control menu --> Control --> Device Information --> More Settings --> Sync Screen Parameters.

3.2 Adaptive stitching

No need to modify the width and height of the main device program, connect the HD cable and it will automatically stretch to display the full picture
Steps:

- Looking at the screen from the front, the B6L on the far left is the main device;
- Use HDplayer software to create programs and send them to the main device;
- Connect the HDMI OUT of the main device to the HDMI IN of the device on the right, and connect them to the right in sequence. (The one close to the USB port is HDMI IN, and the one far away from the USB port is HDMI OUT).

Note: Adaptive stitching is limited by the main device canvas. The stitching width and height cannot exceed the canvas size. The canvas size can be modified to accommodate more stitching quantities.

3.3 Automatic stitching

Steps:

- When looking at the screen from the front, the B6L on the far left is the main device, and the HDMI OUT is connected to the HDMI IN of the device on the right, and the connections are made to the right in sequence. (The one close to the USB port is the HDMI IN, and the one far away from the USB port is the HDMI OUT) ;
- Modify the screen parameters of the main device through HDPlayer. Enter the control menu --> Settings --> Screen parameter settings, and set the screen parameter width to the sum of all screen width resolutions ;
- Produce and publish programs .

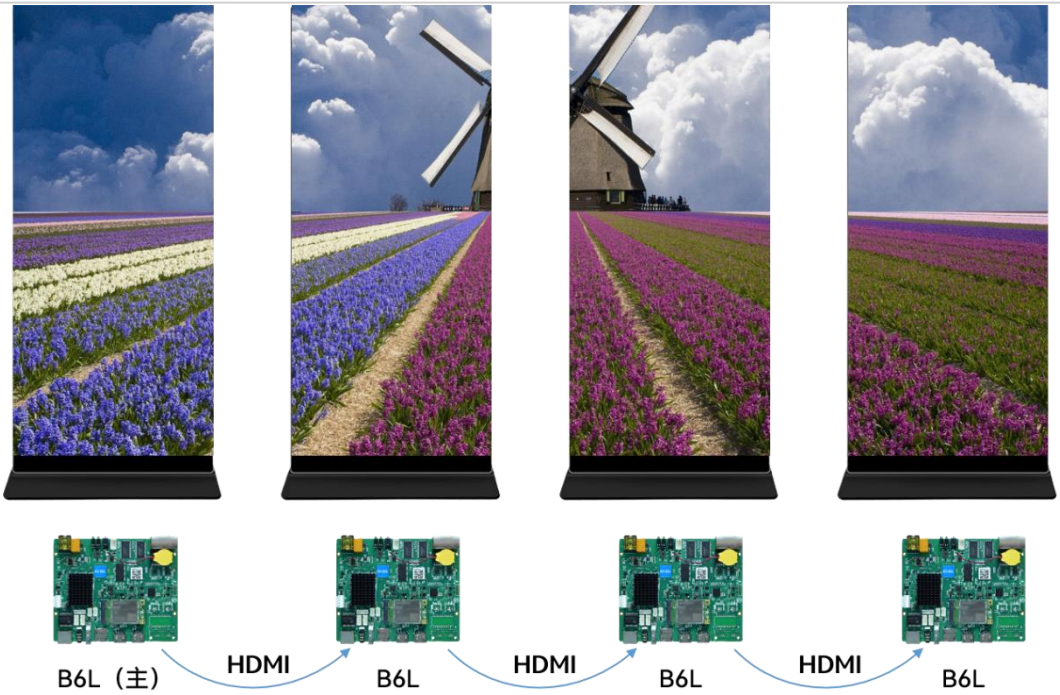

Figure 4-6 Splicing display

3.4 Synchronous Brightness

Cascade synchronous brightness, cascade devices synchronize the brightness of the main device
Steps:

- Looking at the screen from the front, the B6L on the far left is the main device;
- Connect the HDMI OUT of the main device to the HDMI IN of the device on the right, and connect them to the right in sequence. (The one close to the USB port is HDMI IN, and the one far away from the USB port is HDMI OUT);
- Through HDplayer, select Control Menu --> Device Information --> Brightness Settings, which supports 3 brightness modes. Connect a brightness sensor and select the automatic mode to achieve automatic brightness adjustment.

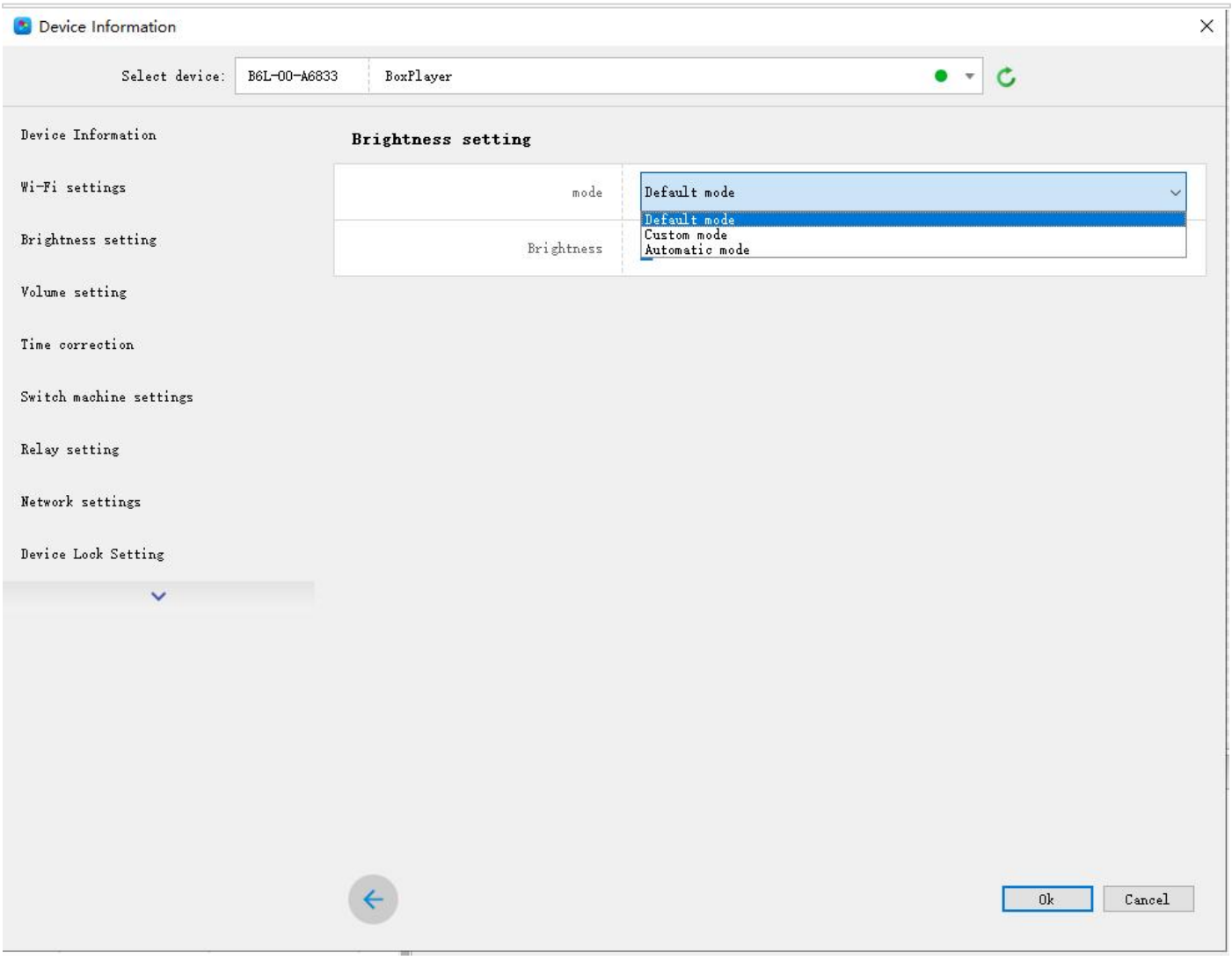

Figure 4-7 Synchronous brightness

5. Relay Settings

B6L has one relay on board, and users can use it with an AC contactor to control the power supply of the LED screen, supporting maximum load: AC 250V~3A or DC 30V~3A .

Open or close the relay

- Steps:
- Open HDPlayer, find the device in the lower left corner of the software, and then go to Control Menu --> Control --> Device Information --> Relay Settings;
- Check "K0" and select the relay state in "Power-on default state".

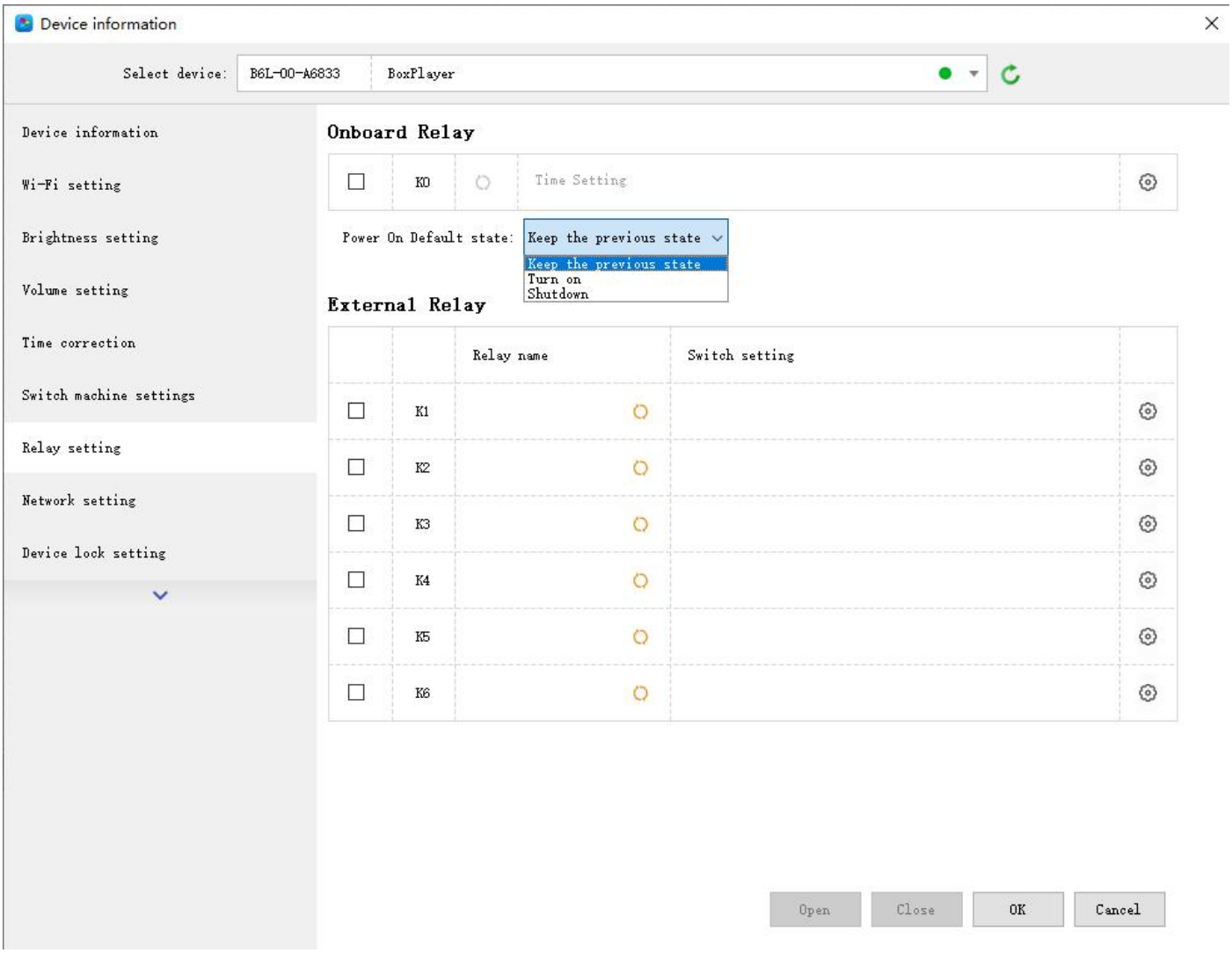

Figure 5-1 Setting the relay status

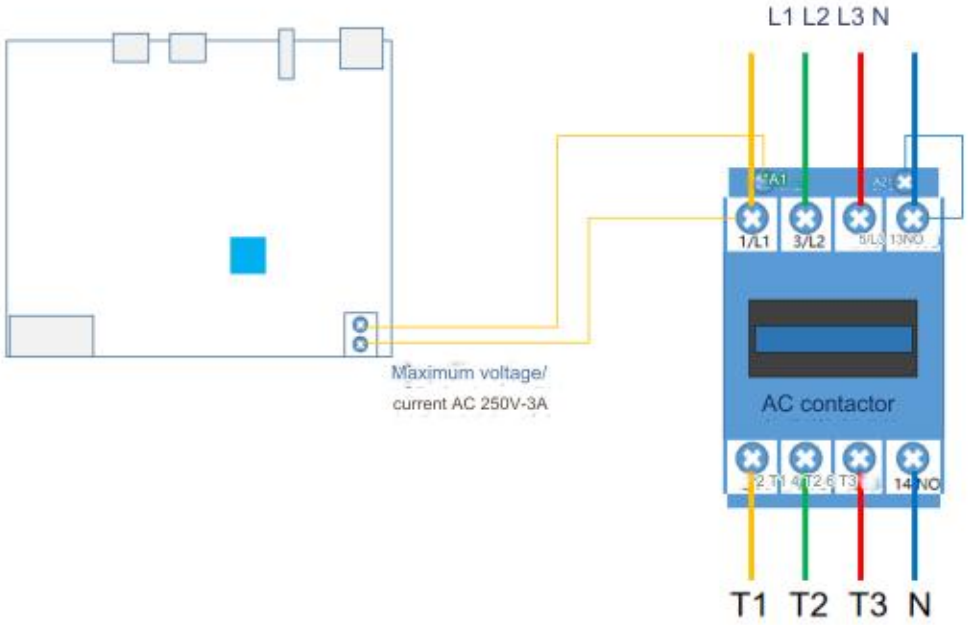

Figure 5-2 Connecting the AC contactor

6. Program Release

Supports computer HDPlayer, mobile phone screen control APP, cloud program editing and sending, please see the corresponding operating instructions for details.

7. Settings Management

1. Device Information

Users can check the working status of the device through HDPlayer software:

- Step 1: Open HDPlayer, select Control Menu --> Device Information;
- Step 2: You can view basic information, program information, etc.

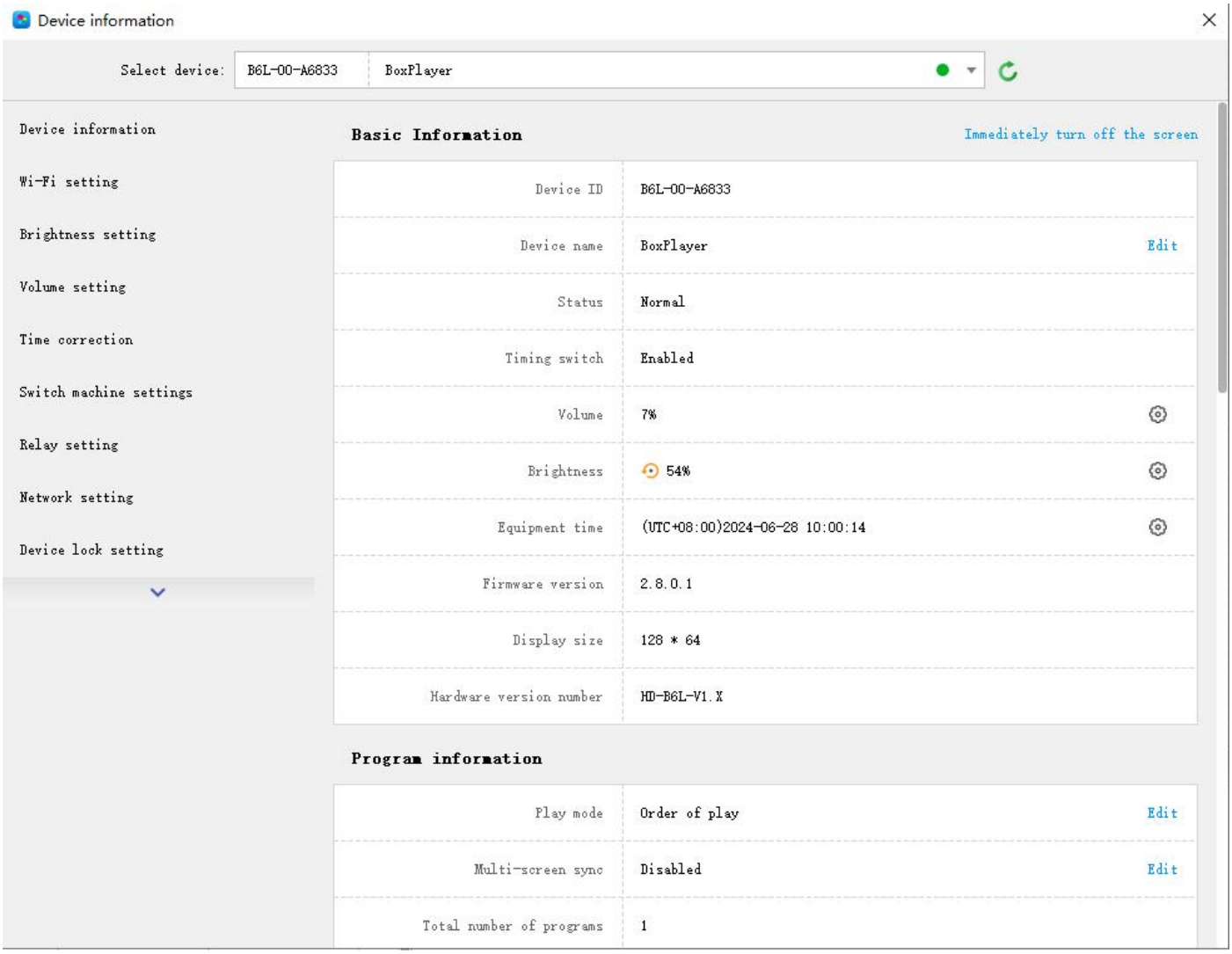

Figure 7-1 Device Information

2. Wi-Fi Settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Wi-Fi Settings;

- Step 2: Enable or disable the Wi-Fi function, select the Wi-Fi mode, set the Wi-Fi password and other functions. After the settings are completed, click OK to take effect.

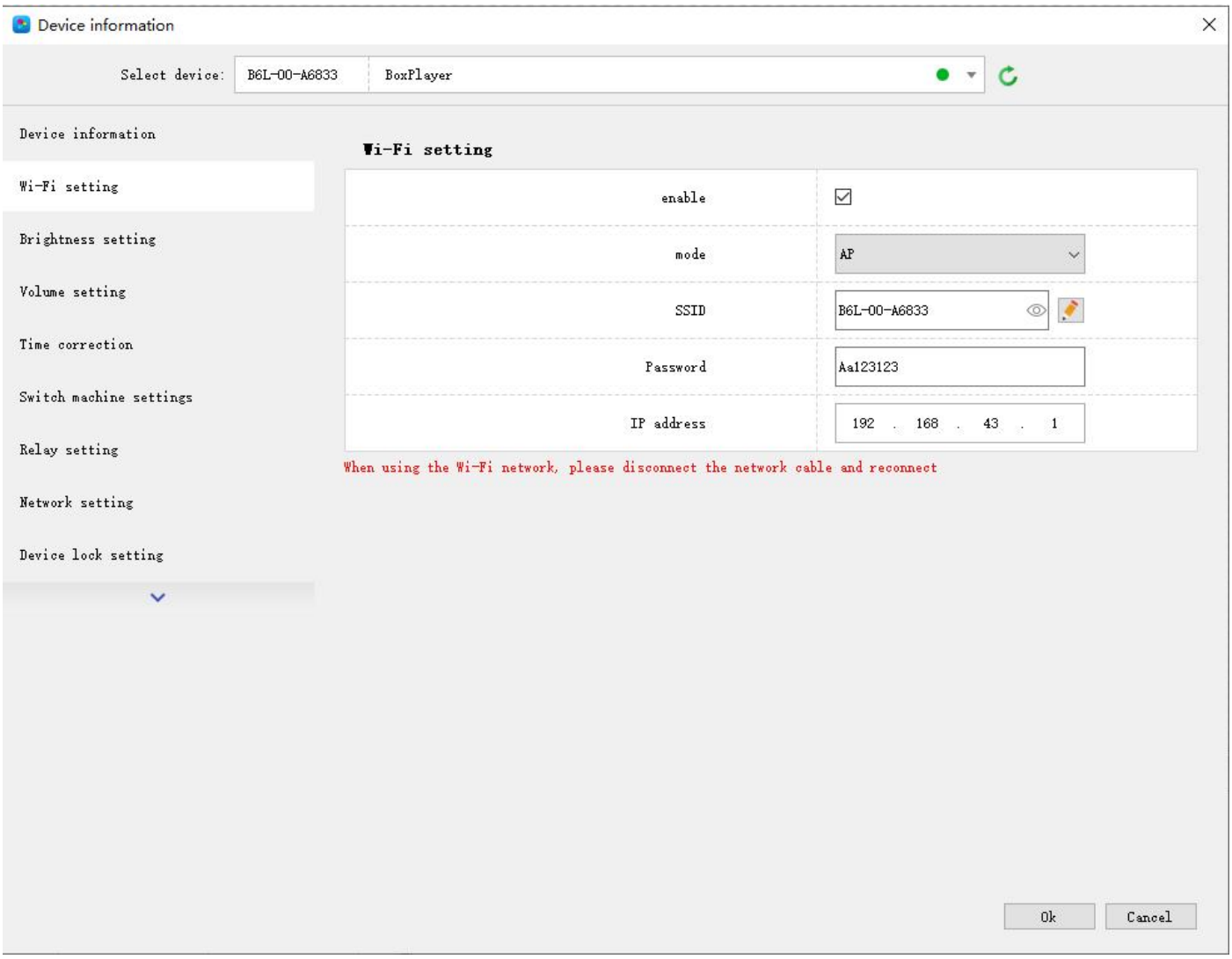

Figure 7-2 Wi-Fi settings

3. Brightness settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Brightness Settings;
- Step 2: Select the "Manual" mode to adjust the brightness of the current device. You can also set the brightness "by time period". After the setting is completed, click OK to take effect.

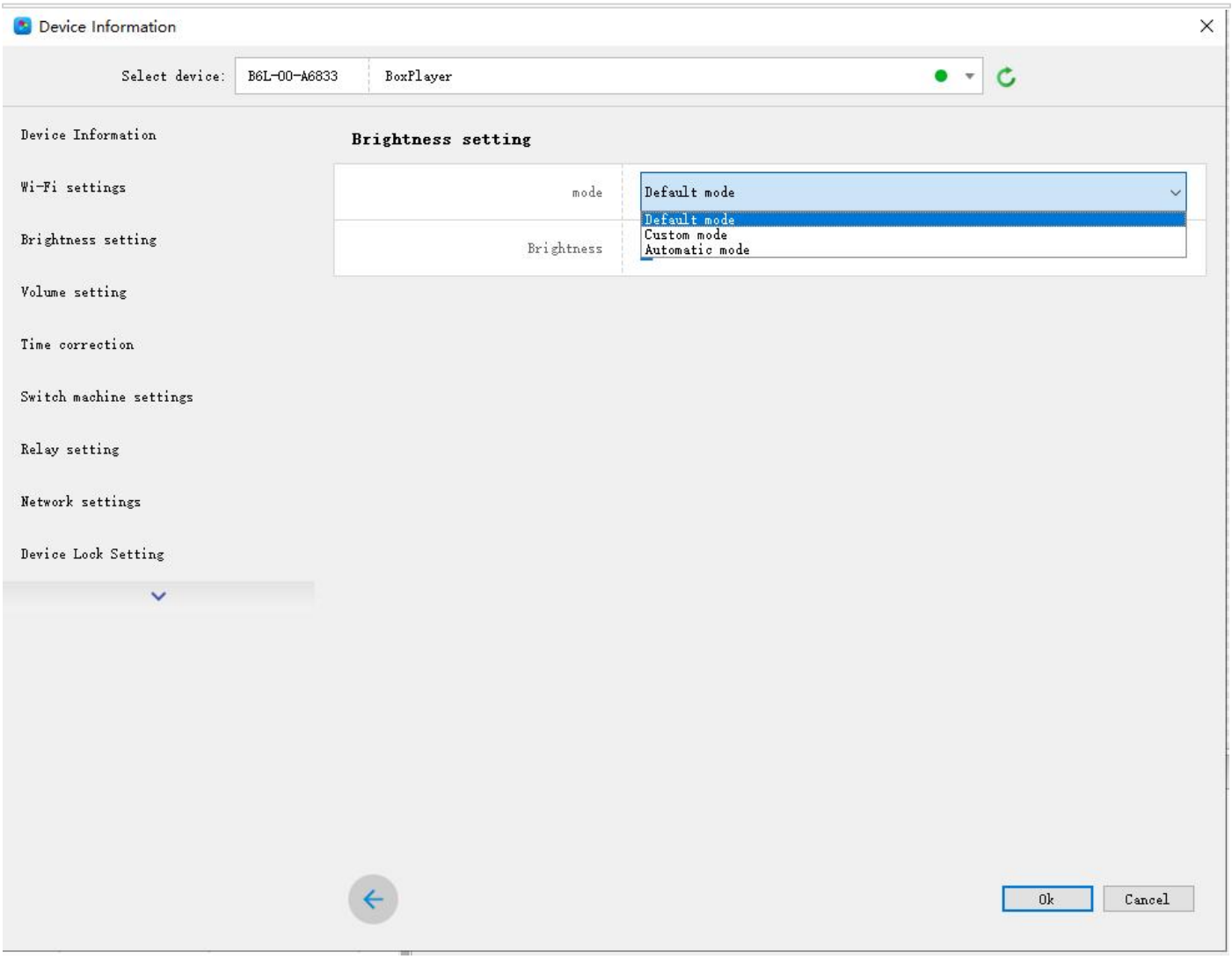

Figure 7-3 Brightness setting

4. Volume Settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Volume Settings;
- Step 2: Select the "Fixed" mode to adjust the device volume, or select "By time period" to adjust the device volume. After the setting is completed, click OK to take effect.

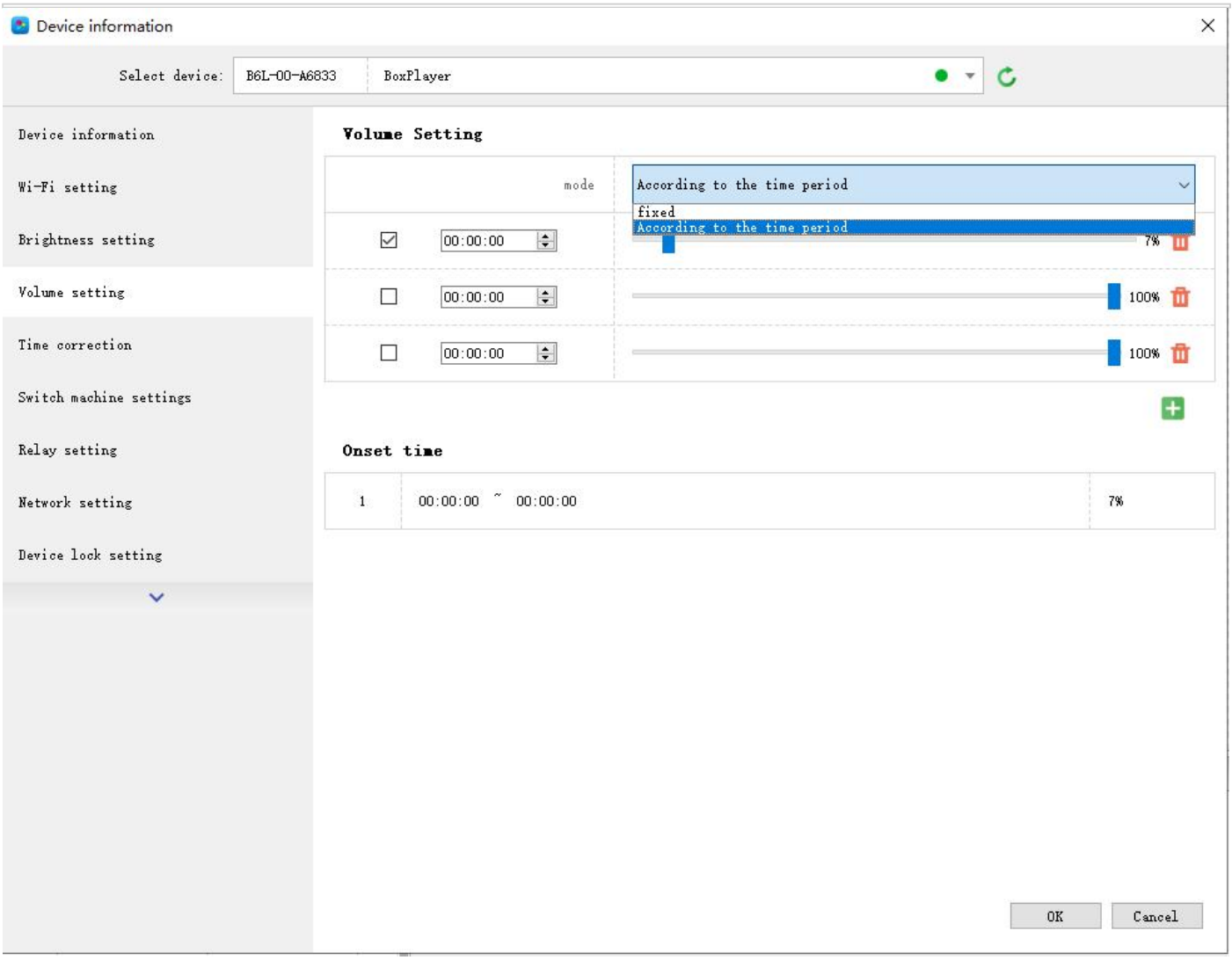

Figure 7-4 Volume setting

5. Time Correction

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Time Correction;
- Step 2: You can select various time correction modes to correct the time. After the settings are completed, click OK to take effect.

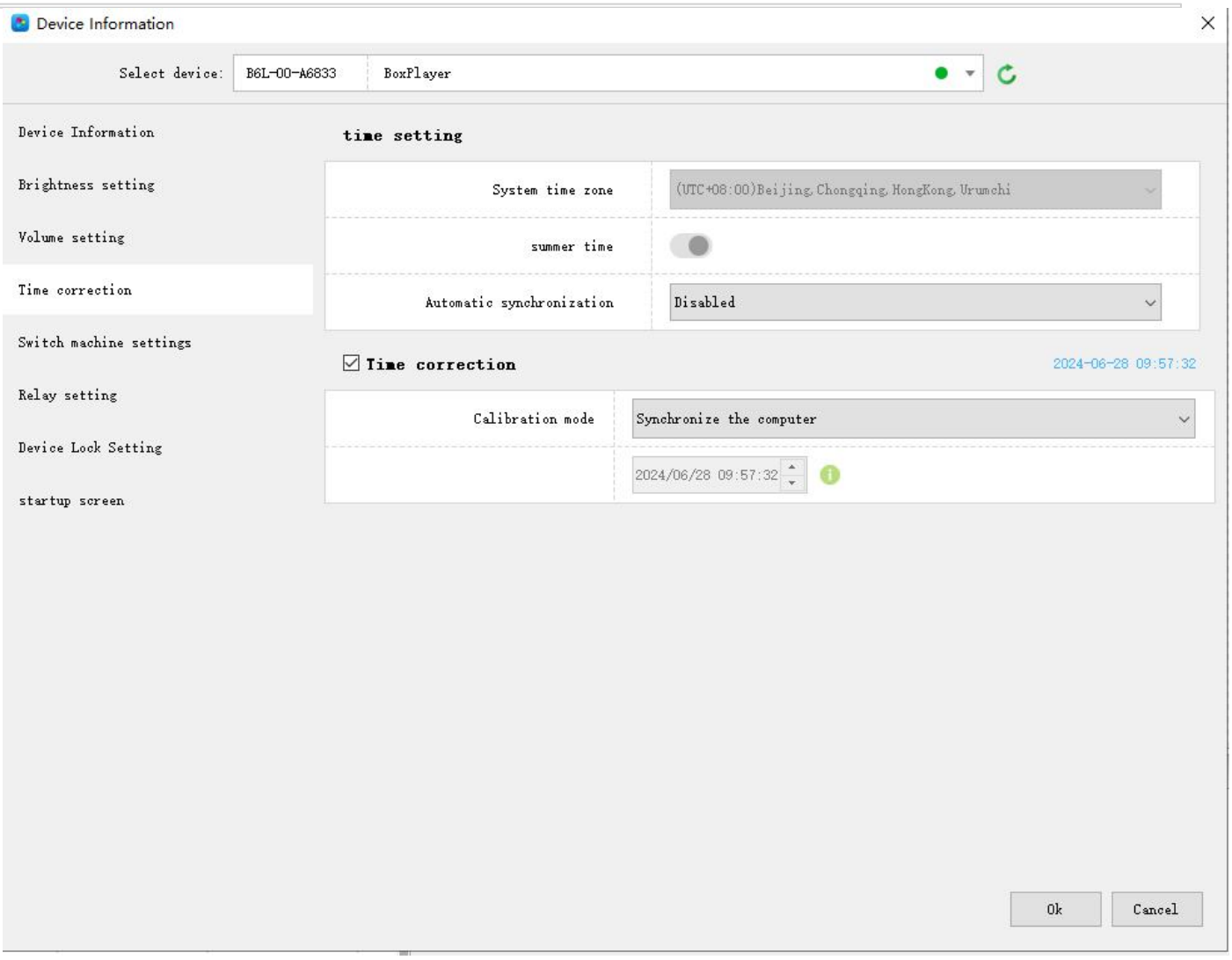

Figure 7-5 Time Correction

6. Switch settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Power On/Off Settings;
- Step 2: Enable the scheduled power on/off function;
- Step 3: Set the scheduled power on and off time, and click OK to take effect.

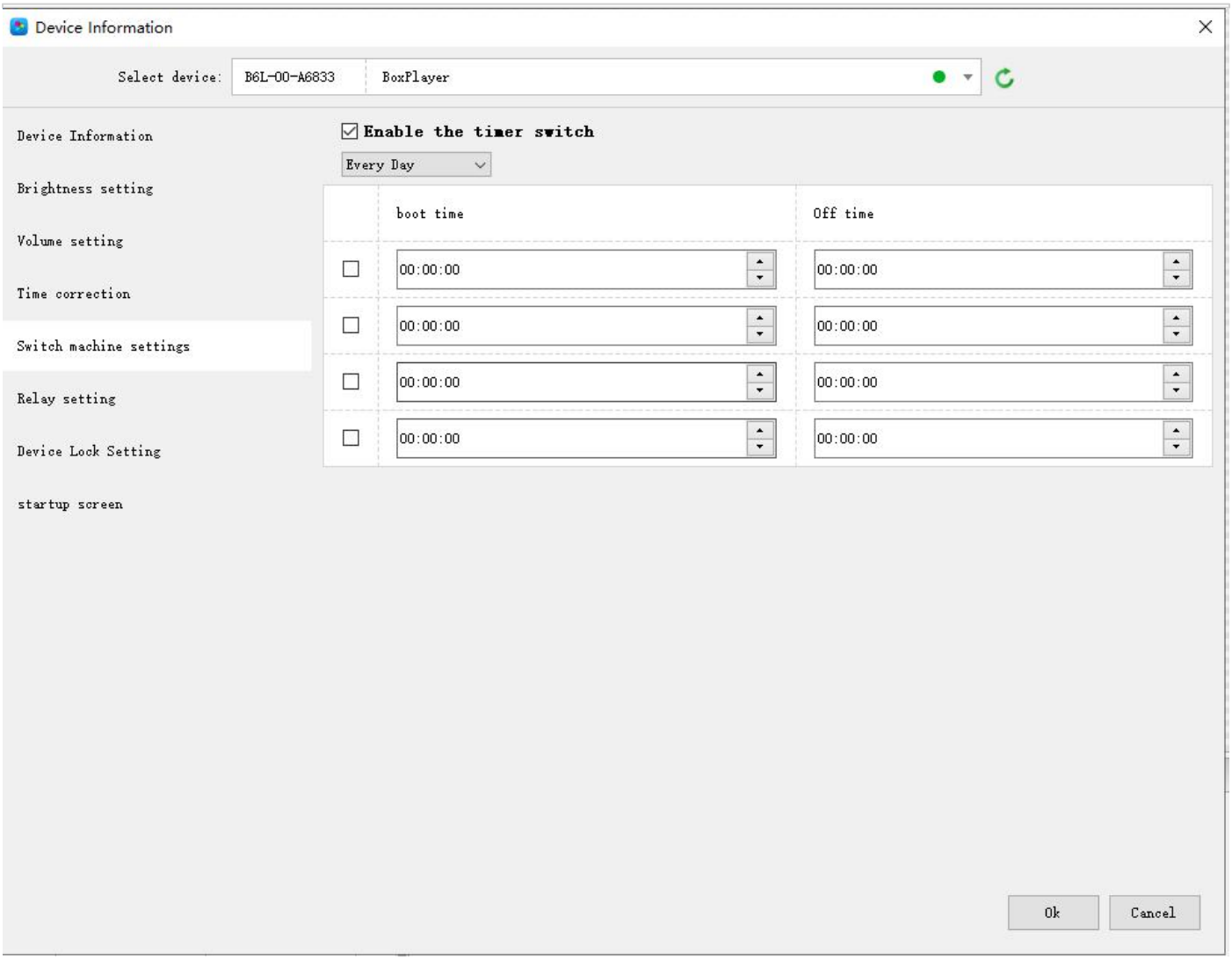

Figure 7-6 Power on/off settings

7. Network Settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Network Settings;
- Step 2: The default is to obtain automatically. Uncheck it to set a fixed IP address for the device. Click OK to take effect.

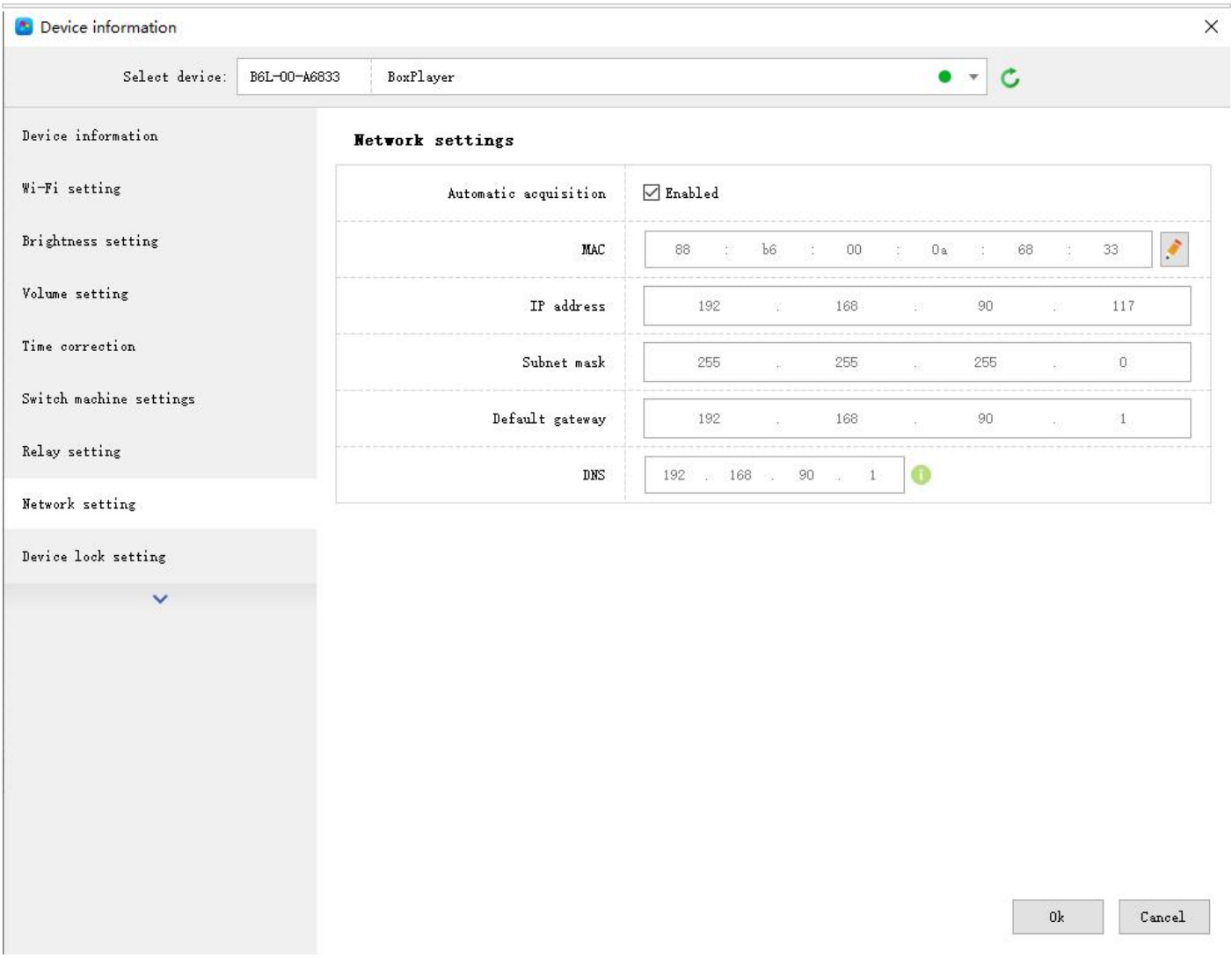

Figure 7-7 Network settings

8. Device lock settings

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Device Lock Settings;
- Step 2: Check Enable;
- Step 3: Set a password and confirm it. Click OK to make it effective.

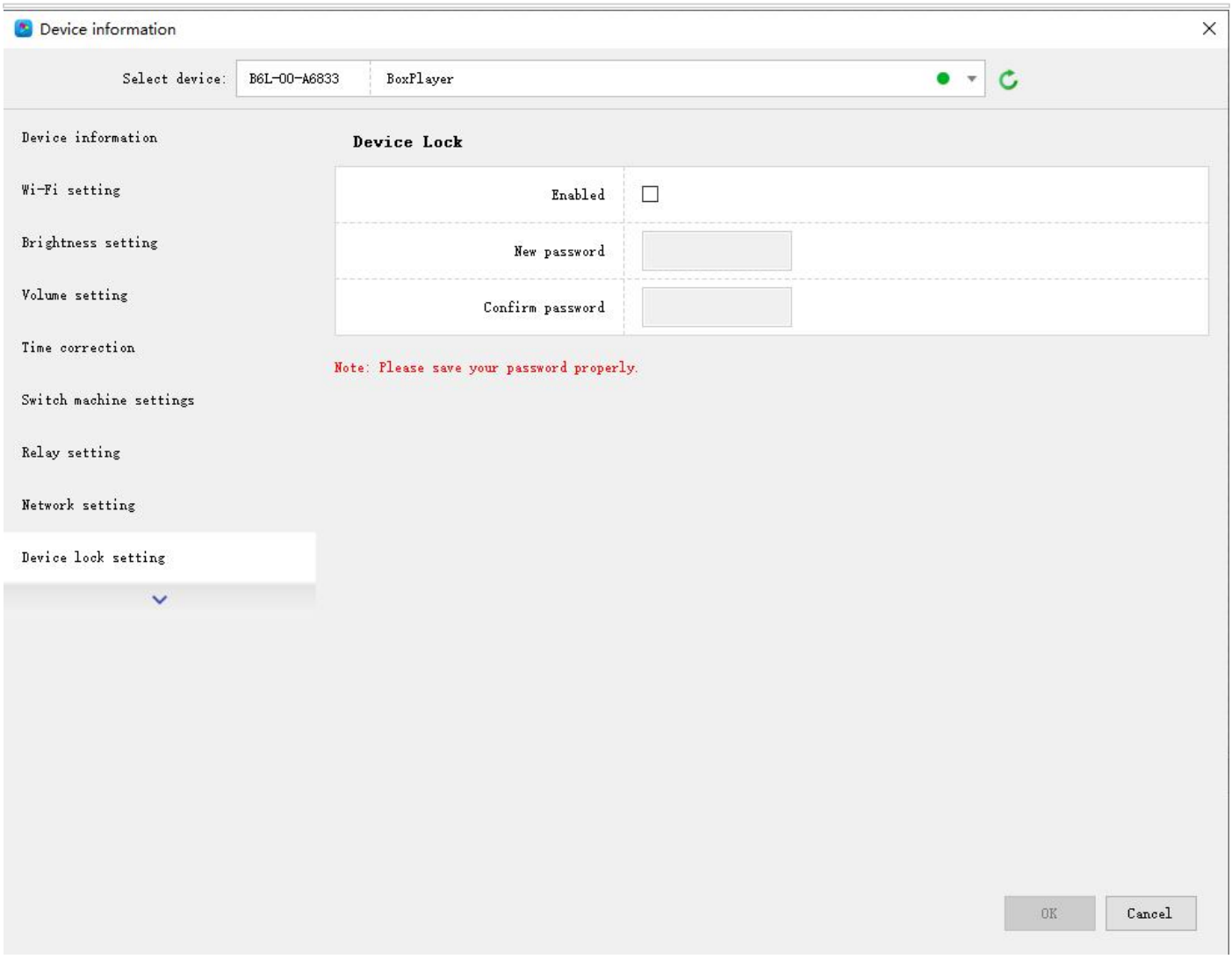

Figure 7-8 Device lock settings

9. startup screen

- Step 1: Open HDPlayer, select Control Menu --> Device Information --> Startup Screen;
- Step 2: Check Enable startup screen;
- Step 3: Select the picture and click OK to take effect.

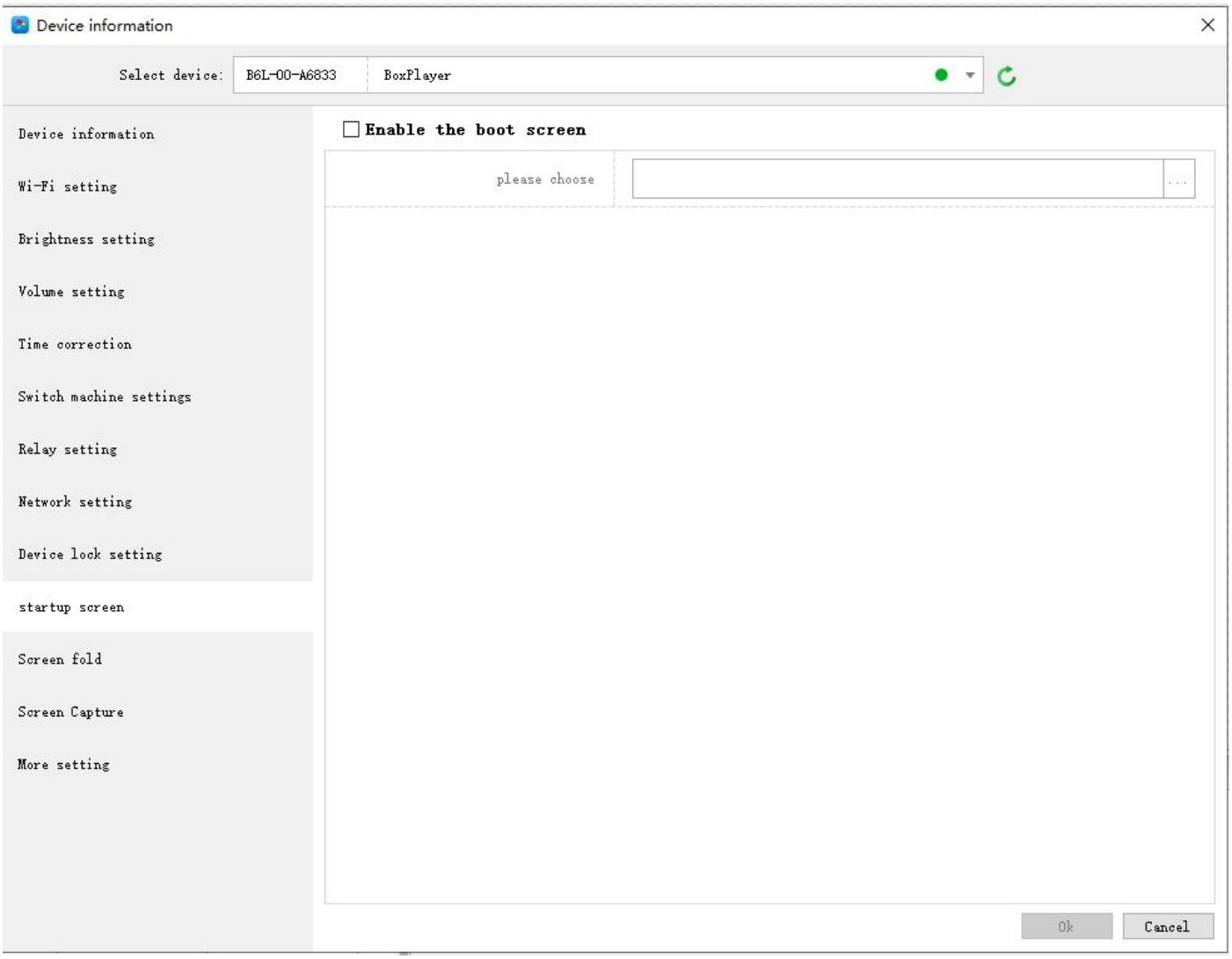

Figure 7-9 Boot screen settings