TOPXCDZ H807SB

TOPXCDZ H807SB 4-Port DMX/Artnet to SPI LED Pixel Controller User Manual

1. Introduction

The TOPXCDZ H807SB is a versatile LED pixel controller featuring WIFI and Bluetooth remote control capabilities. This V3 version supports four output ports, capable of controlling up to 4096 pixels. It operates with a DC5-24V input voltage and offers control via Android mobile applications, web pages across various operating systems, and wireless synchronization for multiple controllers. It also supports wireless control from a DMA console.

The H807SB facilitates communication distances of over 60 meters (unobstructed) between controllers or between a controller and a mobile phone. Bluetooth remote control communication is effective over 30 meters (unobstructed). This controller is compatible with a wide range of LED driver chips, including DMX512, HDMX, MY9941, UCS1903, UCS1909, UCS1912, WS2811, WS2812, WS2813, TM1809, TM1812, TM1913, TM1926, P943, P9883, SM16703, SM16709, and SM16712. For optimal performance, the control effect and timing for specific driver chips should be verified through actual testing. The recommended software for programming is "LED Programming Software" V5.03 or newer. Please note that the Bluetooth remote control is an optional accessory and must be purchased separately.

2. Product Overview

The H807SB controller is designed for advanced LED pixel control, offering robust features for various lighting applications.

Key Features:

- **Four Output Ports:** Controls up to 4096 pixels.
- **SD Card Support:** Compatible with FAT32 and FAT16 formats, supporting up to 64 DAT files.
- **Mobile App Control:** Use your phone to switch files, adjust speed and brightness, and configure unicast or full playback settings.
- **WIFI Connectivity:** Supports various WIFI working modes and WEB control. Enables multiple controllers to synchronize wirelessly.
- **DMA Console Integration:** Connects to DMA consoles via WIFI, supports RGBW, allows file

replacement, and speed/brightness adjustments with fast response times.

- **Pixel Tracing and Counting:** Supports online point tracing and offline point counting.
- **DAT File Management:** Receive and save DAT files to the SD card via WIFI.
- **Firmware Upgrades:** Supports firmware updates for enhanced functionality.
- **Bluetooth Remote Control:** Compatible with Bluetooth remote control (sold separately).

Package Contents:

- H807SB 4-Port DMX/Artnet to SPI LED Pixel Controller
- SD Card
- *Note: Remote Control is an optional accessory and may not be included.*

3. Setup

3.1 Component Identification

Figure 1: Top view of the H807SB controller, showing power input, output ports (DAT/D, GND), and control buttons (OK, MENU).

Figure 2: Side view of the H807SB controller, highlighting the SD card slot.

3.2 Power Connection

1. Ensure the power supply is within the DC5-24V range.
2. Connect the positive (+) terminal of your power supply to the "POWER 5-24V" input on the controller.
3. Connect the negative (-) terminal (GND) of your power supply to the "POWER GND" input on the controller.
4. Verify all connections are secure before applying power.

3.3 LED Strip Connection

The H807SB features four output ports for connecting LED pixel strips.

1. Identify the Data (DAT/D) and Ground (GND) wires on your LED pixel strip.
2. Connect the Data wire of your LED strip to the "DAT/D" terminal of an available output port (Port 1, 2, 3, or 4) on the controller.
3. Connect the Ground wire of your LED strip to the "GND" terminal of the same output port.
4. Repeat for additional LED strips, utilizing the remaining ports as needed.
5. Ensure the LED strip's voltage matches the controller's output voltage (which is determined by the input power supply).

3.4 SD Card Insertion

1. Format your SD card to FAT32 or FAT16 file system.
2. Load your desired DAT files (up to 64) onto the formatted SD card.
3. Locate the SD card slot on the side of the H807SB controller (refer to Figure 2).
4. Insert the SD card into the slot until it clicks into place.

3.5 Software Installation and Connectivity

1. Download and install "LED Programming Software" V5.03 or above on your computer.
2. For mobile control, download the corresponding application for Android devices.
3. Power on the H807SB controller.
4. Connect to the controller's WIFI network from your device (phone or computer). The default network name and password should be provided with the product or in the software documentation.
5. Alternatively, if using a Bluetooth remote control (purchased separately), ensure it is paired according to its instructions.

4. Operating Instructions

4.1 Basic Operation via Controller Buttons

The controller features an LED display and buttons for basic navigation and selection.

- **MENU Button:** Press to cycle through different settings or modes.
- **OK Button:** Press to confirm a selection or enter a menu.
- **Up/Down Buttons:** Use to adjust values or navigate through options.

4.2 Mobile App and Web Page Control

Once connected via WIFI, you can control the H807SB using the dedicated mobile app or a web browser.

1. Open the mobile app or navigate to the controller's web interface in your browser.
2. **File Selection:** Browse and select DAT files stored on the SD card for playback.
3. **Adjustments:** Use the interface to modify playback speed, brightness, and color settings.
4. **Playback Modes:** Configure unicast or full playback settings as required for your LED setup.
5. **WIFI Working Mode:** Set the controller's WIFI mode (e.g., AP mode for direct connection, STA mode for connecting to an existing network).

4.3 Advanced Features

- **Wireless Synchronization:** Multiple H807SB controllers can be synchronized wirelessly for large-scale installations. Refer to the software manual for detailed synchronization procedures.
- **DMA Console Control:** Connect the controller to a DMA console via WIFI to manage RGBW settings, replace files, and adjust parameters.
- **Online Point Tracing:** Utilize the software for real-time tracing of pixel points.
- **Offline Point Counting:** Perform offline counting of pixel points for project planning.
- **DAT File Transfer:** Transfer and save DAT files to the controller's SD card wirelessly via WIFI.

4.4 Bluetooth Remote Control (Optional)

If you have purchased the Bluetooth remote control, follow its specific pairing instructions. The remote typically allows for basic functions such as power on/off, mode switching, and brightness adjustment.

5. Maintenance

- **Cleaning:** Keep the controller clean and free from dust. Use a dry, soft cloth for cleaning. Avoid using liquids or abrasive cleaners.
- **Environment:** Operate the controller in a dry, well-ventilated environment. Avoid extreme temperatures and high humidity. This product is designed for indoor use.
- **SD Card Management:** Regularly back up your DAT files from the SD card. Periodically check the SD card for errors and reformat if necessary.
- **Firmware Updates:** Check the manufacturer's website periodically for new firmware versions. Follow the provided instructions carefully for firmware upgrades to ensure optimal performance and access to new features.
- **Cable Connections:** Periodically inspect all power and data cable connections for wear or damage. Ensure they are securely fastened.

6. Troubleshooting

Common Issues and Solutions:

- **Controller does not power on:**
  - Check power supply connections and ensure the input voltage is within DC5-24V.
  - Verify the power adapter is functioning correctly.
- **LED strips are not lighting up or displaying incorrect patterns:**
  - Ensure DAT/D and GND connections to the LED strips are correct and secure.
  - Verify the LED driver chip type selected in the software matches your LED strips.
  - Check if the correct DAT file is loaded and playing.
  - Confirm the number of pixels set in the software matches your physical LED strip length.
  - Ensure the LED strip itself is functional.
- **Cannot connect to controller via WIFI/App:**
  - Ensure the controller is powered on and its WIFI is active.
  - Check your device's WIFI settings and confirm it's connected to the controller's network.
  - Restart both the controller and your device.
  - Verify the mobile app or web interface is up-to-date.
- **SD card not recognized or DAT files not playing:**
  - Ensure the SD card is properly inserted into the slot.
  - Verify the SD card is formatted to FAT32 or FAT16.
  - Check that the DAT files are correctly placed on the SD card and are not corrupted.
  - Try using a different SD card to rule out card issues.
- **Bluetooth remote control not working:**
  - Ensure the remote has fresh batteries.
  - Confirm the remote is properly paired with the controller.
  - Check the communication distance; ensure it's within 30 meters (unobstructed).
- **Difficulty finding software or documentation:**

- Refer to the product listing or manufacturer's official website for the latest software downloads and support resources.
- Search for "LED Programming Software" V5.03 or newer.

7. Specifications

Feature	Detail
Model	H807SB
Input Voltage	DC5-24V
Output Ports	4 ports
Max Control Pixels	4096 pixels
Connectivity	WIFI, Bluetooth
Supported LED Driver Chips	DMX512, HDMX, MY9941, UCS1903, UCS1909, UCS1912, WS2811, WS2812, WS2813, TM1809, TM1812, TM1913, TM1926, P943, P9883, SM16703, SM16709, SM16712, etc.
SD Card Support	FAT32, FAT16 (up to 64 DAT files)
Software	"LED Programming Software" V5.03 and above
WIFI Communication Distance	>60 meters (unobstructed)
Bluetooth Communication Distance	>30 meters (unobstructed)
Material	Plastic
Indoor/Outdoor Usage	Indoor
Included Components	LED Controller, SD Card

8. Warranty and Support

For specific warranty information, please refer to the terms provided at the time of purchase or contact your retailer. If you encounter any issues not covered in this manual or require further assistance, please reach out to TOPXCDZ customer support through their official channels or the platform where the product was purchased.