

Novastar TB30

Novastar Taurus TB30 LED Display Controller User Manual

Model: TB30

1. INTRODUCTION

This manual provides detailed instructions for the proper installation, operation, and maintenance of the Novastar Taurus TB30 LED Display Controller. The TB30 is a powerful multimedia player designed for LED display applications, offering robust processing capabilities and versatile control options. Please read this manual thoroughly before using the device to ensure optimal performance and safety.

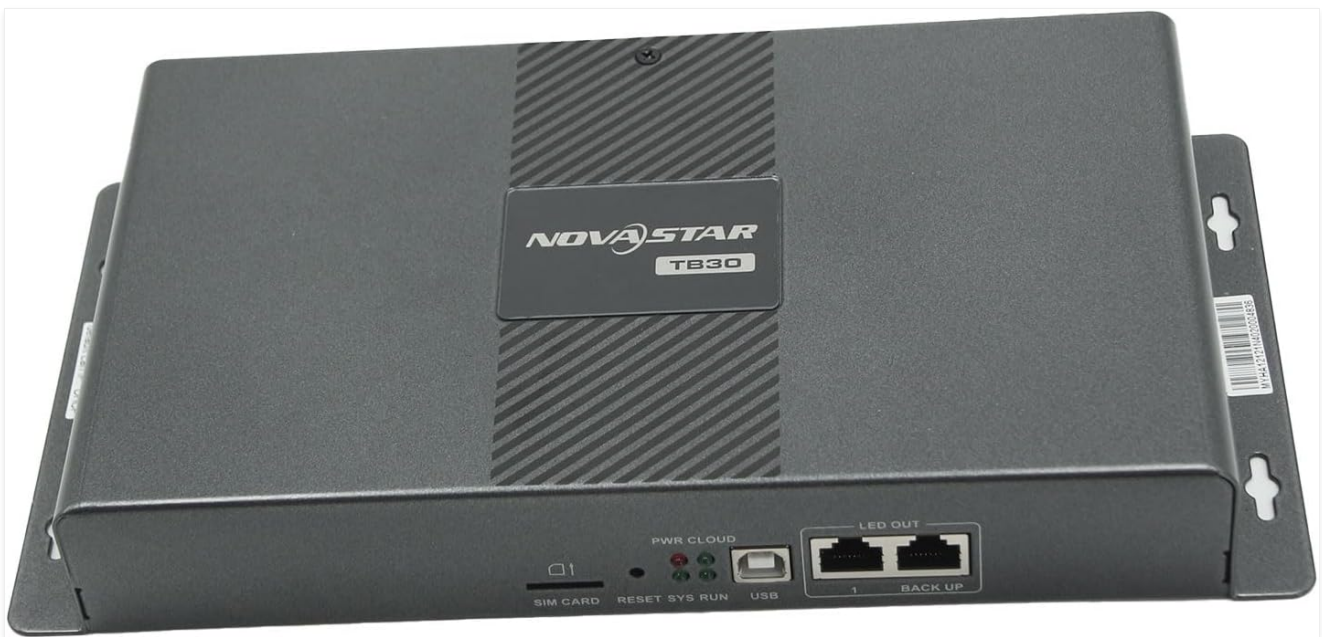


Figure 1.1: Front view of the Novastar Taurus TB30 LED Display Controller. This image shows the compact design and the Novastar branding on the top panel.

2. PRODUCT FEATURES

The Novastar Taurus TB30 is engineered with advanced features to deliver high-quality LED display management:

- **Powerful Processing Capacity:** Equipped with a quad-core ARM A55 processor clocked at 1.8 GHz, supporting H.264/H.265 4K@60Hz video decoding. It includes 1 GB of onboard RAM and 16 GB of internal storage.
- **Flawless Playback:** Capable of 1x 4K video playback or 2x 1080p video playback, ensuring smooth content delivery.

- **Versatile Control Plans:** Enables content publishing and screen control from various devices, including computers, mobile phones, and tablets. Users can manage screens remotely from any location at any time.
- **Wi-Fi Connectivity:** Supports switching between Wi-Fi AP (Access Point) and Wi-Fi STA (Station) modes. In Wi-Fi STA mode, the device connects to an existing Wi-Fi hotspot.
- **Synchronous Playback:** Achieves synchronized playback across multiple screens using NTP (Network Time Protocol) time synchronization. GPS time synchronization is also supported with an optional 4G module.
- **4G Module Support:** The TB30 is compatible with 4G modules (sold separately) for enhanced connectivity and GPS time synchronization capabilities.
- **High Pixel Loading Capacity:** Supports a maximum loading capacity of 650,000 pixels, with a maximum width of 4096 pixels and a maximum height of 4096 pixels.

3. PACKAGE CONTENTS

Please verify that all items listed below are present in your package. If any items are missing or damaged, contact your vendor immediately.

- Novastar Taurus TB30 LED Display Controller Unit
- Power Cable
- Wi-Fi Antenna
- Quick Start Guide / Documentation (may vary by region)



Figure 3.1: The Novastar Taurus TB30 unit alongside its power cable and Wi-Fi antenna. These are the primary components included in the product package.

4. SETUP INSTRUCTIONS

Follow these steps to set up your Novastar Taurus TB30 controller:

1. **Connect Wi-Fi Antenna:** Screw the provided Wi-Fi antenna into the designated Wi-Fi connector on the back panel of the TB30.
2. **Power Connection:** Connect the power cable to the AC power input on the TB30 and then plug it into a suitable power outlet. Ensure the power switch is in the OFF position before connecting.
3. **Network Connection (Optional):** For wired network connectivity, connect an Ethernet cable from your network router or switch to the Ethernet port on the TB30.
4. **LED Display Connection:** Connect the LED display to the "LED OUT" port(s) on the TB30 using appropriate network cables.
5. **Audio Output (Optional):** If audio is required, connect speakers or an audio system to the "AUDIO OUT" port.
6. **Power On:** Flip the power switch on the back panel to the ON position. The device will begin its startup sequence.



Figure 4.1: Rear view of the Novastar Taurus TB30, highlighting the various input/output ports including power, Ethernet, Wi-Fi antenna connector, USB, and audio out.

5. OPERATING INSTRUCTIONS

The Novastar Taurus TB30 can be controlled and managed through various methods.

5.1. Software Installation

To fully utilize the features of the TB30, you will need to install the relevant Novastar control software on your computer, mobile phone, or tablet. This software allows for content creation, scheduling, and device management.

For detailed software configuration and instructions, please refer to the official Novastar documentation available at: [Novastar TB30 Documentation](#).

5.2. Content Publishing and Control

- **Local Control:** Connect your computer to the same local network as the TB30 (via Wi-Fi STA mode or Ethernet) and use the Novastar software to publish content directly.
- **Remote Control:** For remote management, ensure the TB30 has internet access (via Wi-Fi or 4G module). Use the Novastar cloud platform or mobile application to publish content, schedule playback, and monitor the display status from anywhere.
- **USB Playback:** Content can also be loaded onto a USB drive and inserted into the USB port on the TB30 for direct playback.

5.3. Wi-Fi Modes

- **Wi-Fi AP Mode:** The TB30 acts as an access point, allowing direct connection from a computer or mobile device for configuration and control.
- **Wi-Fi STA Mode:** The TB30 connects to an existing Wi-Fi network, integrating into your local network infrastructure.

6. SPECIFICATIONS

Feature	Detail
Model Name	TB30
Processor	Quad-core ARM A55 @ 1.8 GHz

Feature	Detail
RAM	1 GB
Internal Storage	16 GB
Video Decoding	H.264/H.265 4K@60Hz
Video Playback	1x 4K or 2x 1080p
Pixel Loading Capacity	650,000 pixels (Max. 4096 width, 4096 height)
Connectivity Technology	Ethernet, Wi-Fi, Optional 4G
Connector Type	Ethernet, USB, Audio Out, SIM Card Slot
Supported Audio Format	MP3, AAC, WAV
Audio Output Mode	Stereo
Special Features	Multi-Format Playback, High Definition, 3D Streaming (with compatible content)
Item Weight	Approximately 3.25 pounds (1.47 kg)
Package Dimensions	Approximately 15 x 11 x 3 inches (38.1 x 27.9 x 7.6 cm)

7. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your TB30 controller.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid cleaners or aerosols directly on the unit. Ensure the device is powered off before cleaning.
- **Ventilation:** Ensure that the ventilation openings are not blocked. Proper airflow is crucial to prevent overheating.
- **Firmware Updates:** Periodically check the Novastar official website or software for available firmware updates. Keeping the firmware updated can improve performance, add new features, and fix bugs.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges to prevent damage.

8. TROUBLESHOOTING

If you encounter issues with your Novastar Taurus TB30, refer to the following common problems and solutions:

Problem	Possible Cause / Solution
Device does not power on	<ul style="list-style-type: none">◦ Check if the power cable is securely connected to both the device and the power outlet.◦ Ensure the power switch on the back panel is in the ON position.◦ Verify the power outlet is functional.

Problem	Possible Cause / Solution
No display on LED screen	<ul style="list-style-type: none"> ◦ Check the connection between the TB30's "LED OUT" port and the LED display. ◦ Ensure the LED display is powered on and configured correctly. ◦ Verify that content is published and scheduled for playback on the TB30. ◦ Confirm the resolution and refresh rate settings are compatible with the LED display.
Cannot connect to Wi-Fi	<ul style="list-style-type: none"> ◦ Ensure the Wi-Fi antenna is properly installed. ◦ If in STA mode, verify the Wi-Fi network name (SSID) and password are correct. ◦ If in AP mode, ensure your device is connecting to the TB30's broadcasted Wi-Fi network. ◦ Check for signal interference or distance from the Wi-Fi router.
Content not updating remotely	<ul style="list-style-type: none"> ◦ Ensure the TB30 has a stable internet connection. ◦ Verify that the remote control software or cloud platform is correctly configured and logged in. ◦ Check for any firewall settings that might be blocking communication.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact your authorized Novastar dealer or the point of purchase. Keep your purchase receipt as proof of purchase.

Manufacturer: Novastar

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10. IMPORTANT SAFETY INFORMATION

- Do not expose the device to rain, moisture, or extreme temperatures.
- Do not open the casing of the device. Servicing should only be performed by qualified personnel.
- Ensure proper ventilation to prevent overheating.
- Use only the power adapter supplied with the device or a compatible replacement.
- Keep the device away from strong magnetic fields.
- Dispose of electronic waste responsibly according to local regulations.