

FanyiTek VS40016C31

FanyiTek 4-inch 720x720 IPS MIPI LCD Round Screen and Controller Board User Manual

Model: VS40016C31

1. PRODUCT OVERVIEW

This manual provides instructions for the FanyiTek 4-inch 720x720 IPS MIPI LCD Round Screen and its accompanying Controller Board. This product is designed for various applications, including CPU/GPU computer cases, offering a compact and high-resolution display solution.

Key Features:

- **Display:** 4-inch round IPS screen with a resolution of 720x720 pixels.
- **Brightness:** 300 cd/m² (Typ.) with WLED backlight.
- **Viewing Angle:** Wide viewing angles (85/85/85/85 Typ.) for optimal visibility.
- **Interface:** MIPI (1ch, 8-bit), 31 pins.
- **Controller Board:** Compact board with Micro H/D video input and USB 5V power input.
- **Automatic Brightness:** Supports automatic brightness adjustment via photoresistors input.

Packing List:

- 1 × LCD Board (VS-TURBOR-04)
- 1 × 4-inch VS40016C31 720x720 LCD Screen
- 1 × MIPI Signal Cable





Figure 1: FanyiTek 4-inch round LCD screen and controller board assembly.





Figure 2: Included components in the FanyiTek product package.

2. SETUP INSTRUCTIONS

Follow these steps to correctly assemble and connect your FanyiTek LCD screen and controller board.

2.1 Connecting the LCD Screen to the Controller Board

1. Locate the MIPI signal cable and the 31-pin connector on both the LCD screen and the controller board.
2. Carefully open the locking mechanism on the connector (usually a small black or brown tab that flips up).
3. Insert the MIPI signal cable ribbon into the connector, ensuring it is fully seated and correctly oriented.
4. Close the locking mechanism to secure the cable. Ensure a firm connection to prevent signal issues.

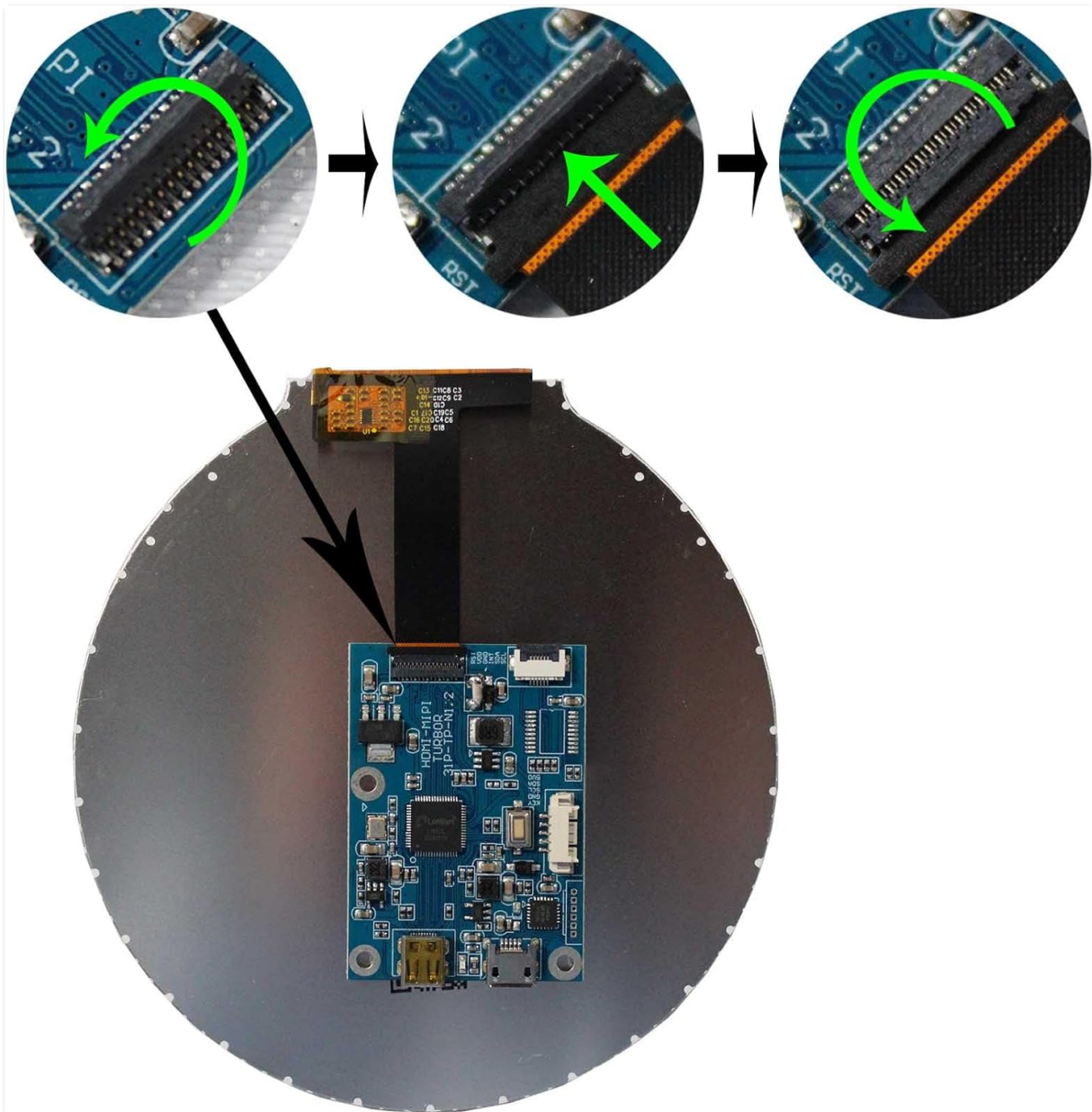


Figure 3: Step-by-step guide for connecting the MIPI cable.

2.2 Power Input

The controller board requires a **USB 5V power supply with more than 1A**. Please prepare this power adapter separately as it is not included in the package.

1. Connect the USB power cable to the designated USB power input port on the controller board.
2. Connect the other end of the USB cable to a suitable 5V, 1A+ power source.

2.3 Video Input

The controller board features a Micro H/D video input port.

1. Connect your video source (e.g., CPU/GPU output) to the Micro H/D port on the controller board using an appropriate cable.

Note: Ensure all connections are secure before powering on the device.

3. OPERATING INSTRUCTIONS

The FanyiTek LCD screen and controller board are designed for plug-and-play operation once correctly

assembled and connected.

1. After completing the setup steps (Section 2), ensure the power supply is connected and the video signal cable is properly inserted.
2. Power on the device. The screen should automatically detect the input signal and display the content.
3. The controller board supports automatic brightness adjustment via photoresistors input. This feature allows the screen brightness to adapt to ambient light conditions.

The board will enter a standby mode if no input signal is detected.

4. MAINTENANCE

Proper care and maintenance will ensure the longevity and optimal performance of your FanyiTek LCD screen and controller board.

- **Environment:** Always use the controller board in an insulated environment to prevent short circuits or damage.
- **Cleaning:** To clean the screen, gently wipe it with a soft, lint-free cloth. Do not use harsh chemicals, abrasive cleaners, or excessive moisture.
- **Handling:** Avoid applying excessive pressure to the screen or the board. Handle the components by their edges to prevent damage to sensitive electronic parts.
- **Storage:** When not in use, store the components in a dry, dust-free environment, away from direct sunlight and extreme temperatures.

5. TROUBLESHOOTING

If you encounter issues with your FanyiTek LCD screen and controller board, refer to the following troubleshooting tips.

Common Issues and Solutions:

- **No Display / Black Screen:**
 - Ensure the 5V, 1A+ USB power supply is correctly connected and providing power.
 - Verify that the MIPI signal cable is securely connected to both the LCD screen and the controller board, and the locking mechanisms are closed.
 - Check the Micro H/D video input cable connection from your source to the controller board.
 - Confirm that your video source is active and outputting a signal.
- **Flickering or Distorted Image:**
 - Inspect the MIPI signal cable for any damage or loose connections.
 - Ensure the power supply is stable and meets the 5V, 1A+ requirement. Insufficient power can cause display instability.
 - Test with a different video source or cable if possible.
- **Screen Not Turning On:**
 - Double-check the power connection. Try a different USB power adapter if available.
 - The board enters standby mode when no signal is detected. Ensure a video signal is being sent to the board.

If these steps do not resolve the issue, please refer to the Support section for further assistance.

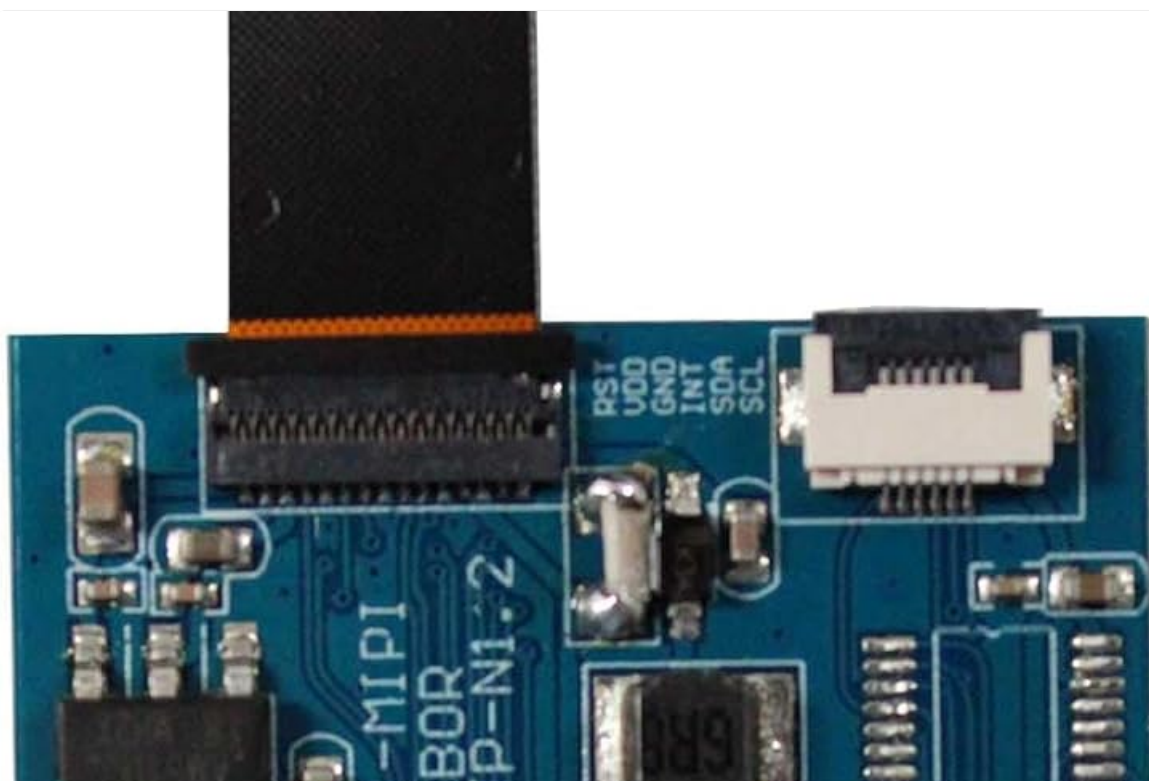
6. SPECIFICATIONS

6.1 FanyiTek VS40016C31 4-inch 720x720 LCD Screen:

Display Mode	TN, Normally White, Transmissive
Resolution	720(RGB)x720
Outline Size	105.6 x 109.87 x 2.13 (WxHxD) mm
Display Area	101.52 x 101.52 (WxH) mm
Brightness	300 cd/m ² (Typ.)
Contrast Ratio	300:1 (Typ.)
Viewing Angle	85/85/85/85 (Typ.) [Left / Right / Up / Down]
Interface	MIPI (1ch, 8-bit), 31 pins
Backlight	WLED
Input Voltage	2.8V (Typ.)

6.2 LCD Controller Board (VS-TURBOR-04):

Input Power Adapter	USB 5V, More than 1A
Video Input	Micro H/D
Board Size	50mm x 35mm x 5mm
Features	Standby Model when no input signal, Photoresistors Input for Automatic brightness adjustment



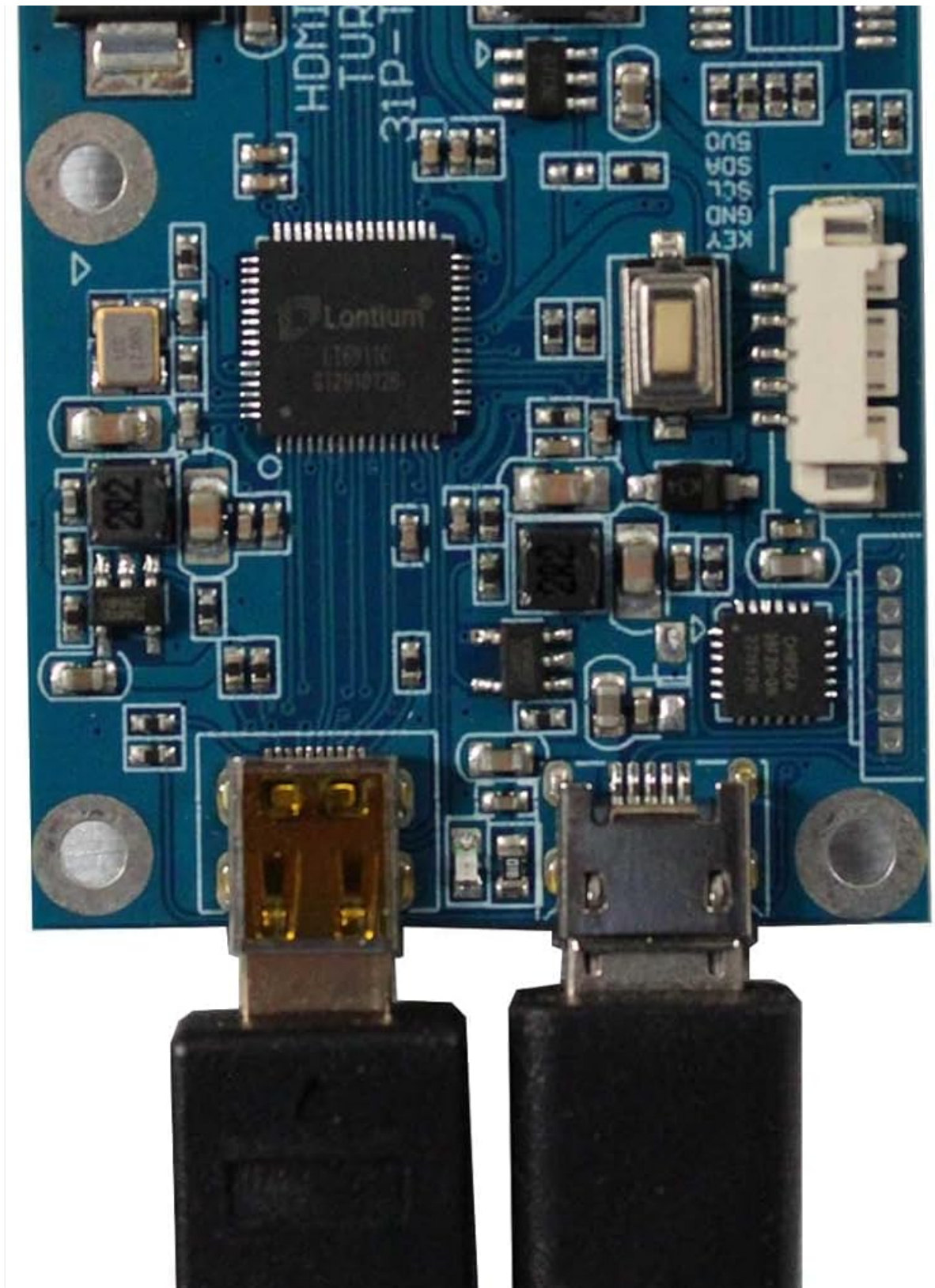


Figure 4: Close-up of the FanyiTek controller board.

6.3 Physical Dimensions:

- **Package Dimensions:** 6.29 x 5.5 x 0.39 inches
- **Item Weight:** 3.04 ounces

7. WARRANTY INFORMATION

Specific warranty details for the FanyiTek 4-inch 720x720 IPS MIPI LCD Round Screen and Controller Board are

typically provided at the point of purchase or included with the product packaging. Please retain your proof of purchase for warranty claims.

For detailed warranty terms and conditions, please refer to the official FanyiTek website or contact their customer support.

8. SUPPORT

If you require further assistance, have questions, or encounter issues not covered in this manual, please contact FanyiTek customer support.

- **Online Store:** Visit the official [FanyiTek Store on Amazon](#) for product information and updates.
- **Manufacturer Contact:** Refer to the product packaging or the FanyiTek official website for direct contact information.