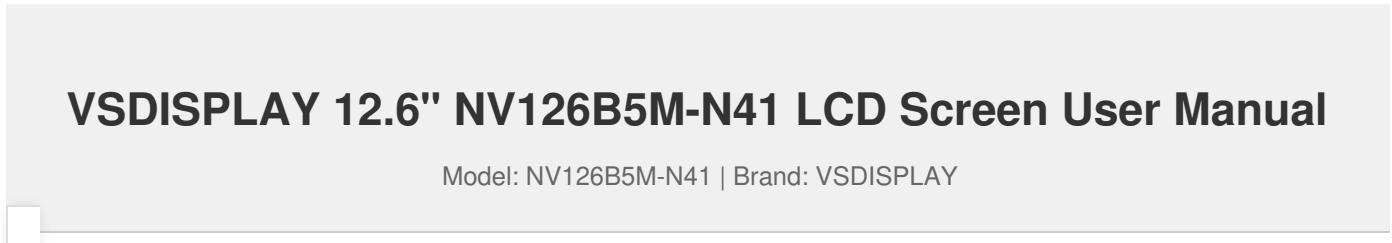


## VSDISPLAY NV126B5M-N41



### 1. INTRODUCTION

This user manual provides comprehensive instructions for the VSDISPLAY 12.6-inch NV126B5M-N41 LCD Screen and its accompanying VS-RTD2556HM-V1 LCD Controller. This kit is designed for various applications, including DIY PC case builds, automotive displays, digital signage, and industrial display solutions. Please read this manual thoroughly before installation and operation to ensure proper use and longevity of the product.

### 2. SAFETY INFORMATION

- Always disconnect power before making any connections or disconnections.
- Ensure the power adapter meets the specified requirements (12Vdc, more than 2A). Using an incorrect power supply can damage the device.
- Handle the LCD screen and controller board with care to avoid physical damage or electrostatic discharge.
- Do not expose the product to moisture, extreme temperatures, or direct sunlight.
- Keep out of reach of children.
- If any smoke, unusual odors, or abnormal sounds occur, immediately disconnect power and contact support.

### 3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1 × VSDISPLAY VS-RTD2556HM-V1 LCD Controller Board
- 1 × 12.6-inch NV126B5M-N41 1920x515 IPS LCD Screen
- 1 × Signal Cable (eDP cable)
- 1 × Keyboard with Cable (for OSD control)

*Note: A power adapter (12Vdc, >2A) and USB/other connectors are NOT included in the packing list and must be purchased separately.*



Figure 3.1: Overview of the VSDISPLAY 12.6-inch LCD Screen Kit components.

## 4. SPECIFICATIONS

Table 4.1: Product Specifications

Feature	Detail
Model Number	NV126B5M-N41
Screen Size	12.6 Inches
Resolution	1920x515 Pixels
Image Brightness	250 cd/m <sup>2</sup> (Typ.)
Contrast Ratio	1200:1 (Typ.)
Screen Surface	Matte
Input Power Requirement	12Vdc, >2A
Standby Power Consumption	<1W
Product Dimensions	0.21 x 12.43 x 3.7 inches

Feature	Detail
Item Weight	11.7 ounces

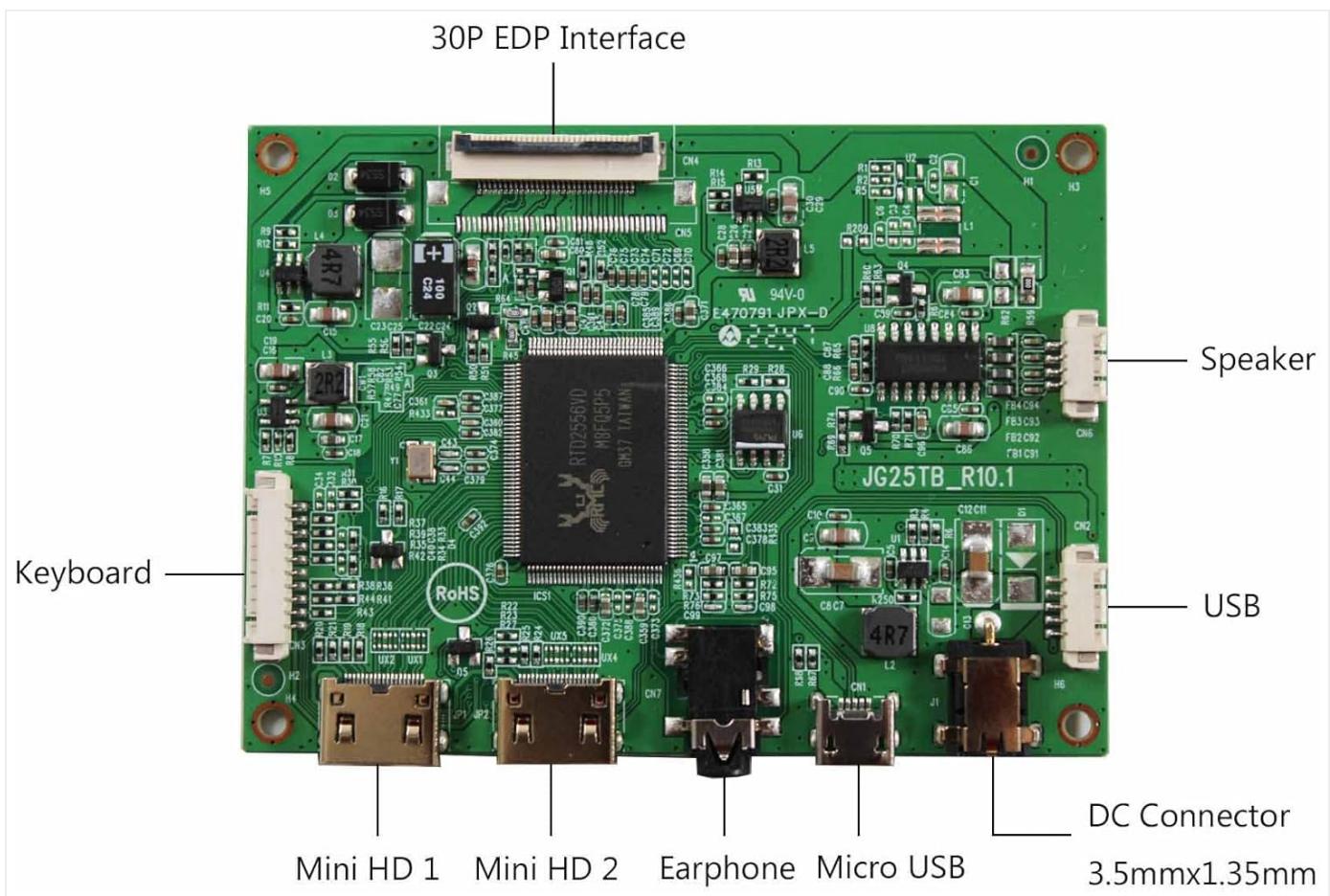


Figure 4.1: VS-RTD2556HM-V1 LCD Controller Board Layout.

## 5. SETUP AND INSTALLATION

Follow these steps to properly connect your VSDISPLAY LCD screen and controller board.

- 1. Prepare Components:** Lay out the LCD screen, controller board, signal cable, and keyboard on a clean, static-free surface.



Figure 5.1: Assembled LCD Screen and Controller.

2. **Connect Signal Cable to LCD Screen:** Carefully open the locking mechanism on the EDP interface connector on the back of the LCD screen. Insert the signal cable (eDP cable) with the blue side facing up, ensuring it is fully seated. Gently close the locking mechanism to secure the cable.



Figure 5.2: Connecting Signal Cable to LCD Screen.

3. **Connect Signal Cable to Controller Board:** Locate the 30P EDP Interface connector on the controller board. Open its locking mechanism, insert the other end of the signal cable, and close the lock. Ensure the cable is inserted correctly to avoid damage.

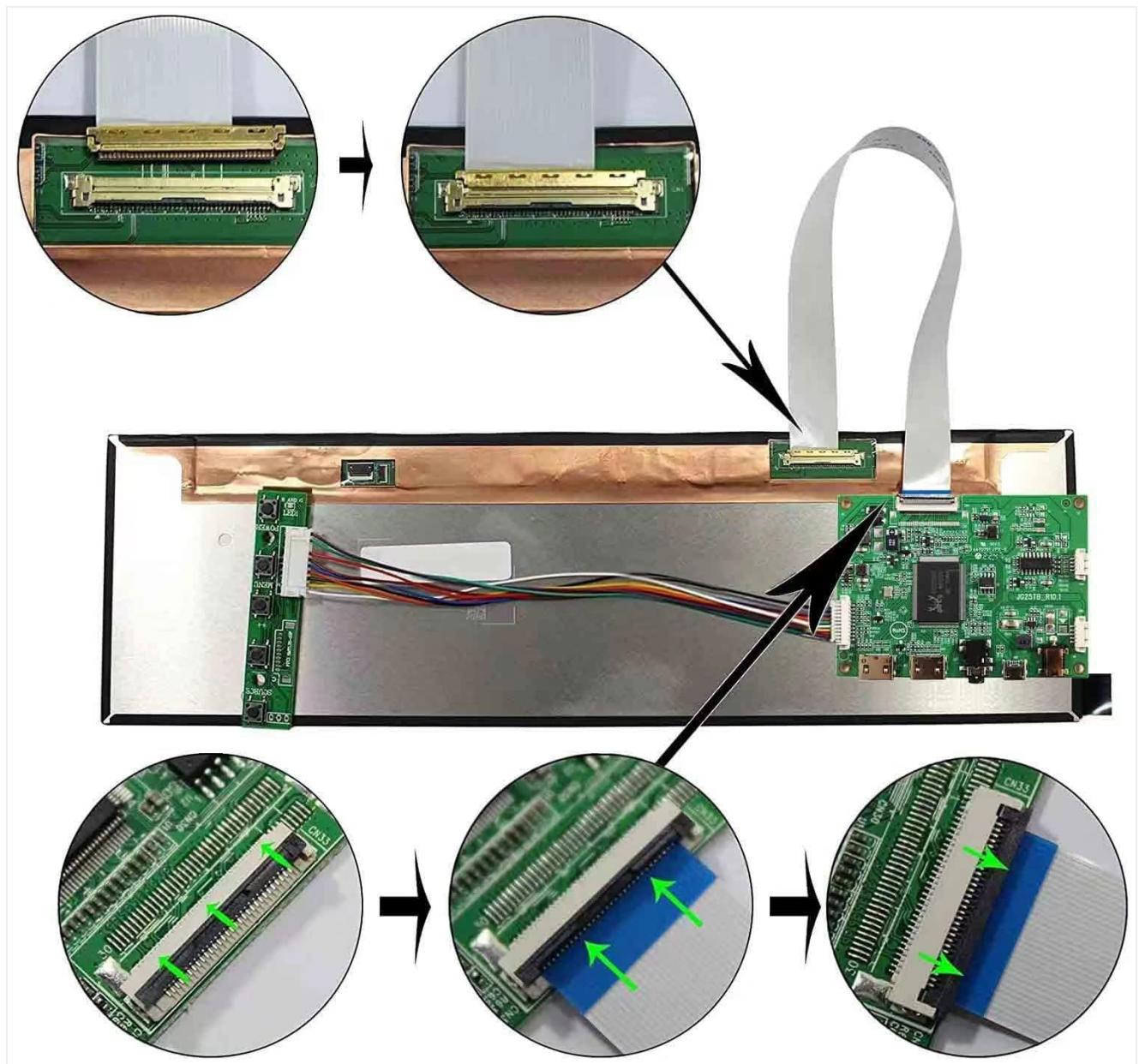


Figure 5.3: Signal Cable Connection Process.

4. **Connect Keyboard:** Plug the keyboard cable into the designated "Keyboard" port on the controller board.

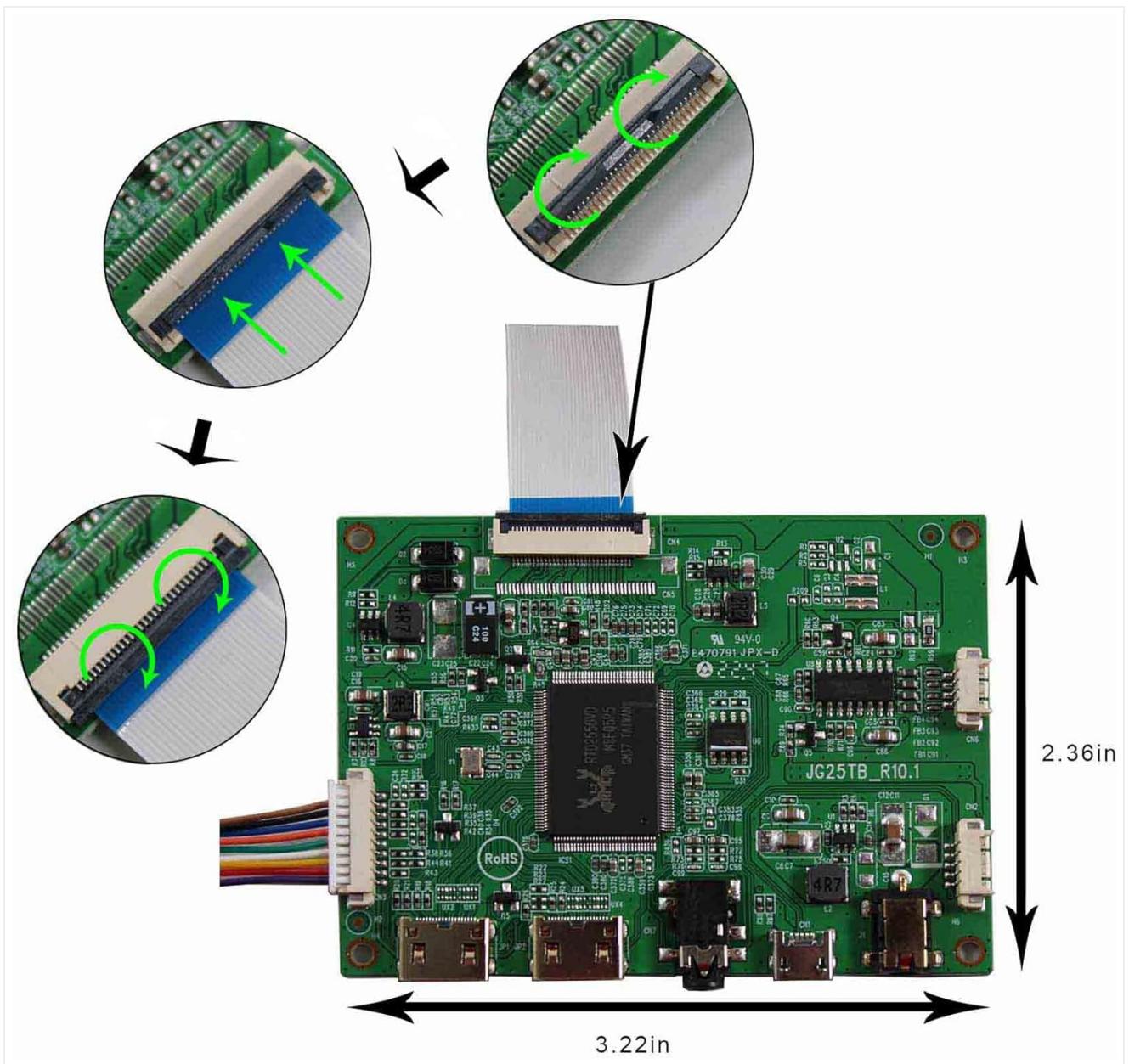


Figure 5.4: Keyboard Connection.

5. **Connect Power Adapter:** Connect a 12Vdc, >2A power adapter (not included) to the DC Connector (3.5mm x 1.35mm) on the controller board.
6. **Connect Input Source:** Use a Mini HD cable (not included) to connect your video source (e.g., computer, media player) to either the Mini HD 1 or Mini HD 2 port on the controller board.

## 6. OPERATING INSTRUCTIONS

Once all connections are secure and power is supplied, the LCD screen should power on and display the input signal.

- **Power On/Off:** The keyboard with cable typically includes buttons for power control. Press the power button to turn the display on or off.
- **OSD Menu Navigation:** Use the buttons on the keyboard to navigate the On-Screen Display (OSD) menu. This menu allows you to adjust settings such as brightness, contrast, input source, and other display parameters.
- **Standby Mode:** The controller board will enter a standby mode (power consumption <1W) when no input signal is detected. The screen will remain blank until a signal is provided.
- **Applications:** This display is versatile and can be used as an extra monitor for CPU/GPU monitoring in PC cases, as a car display, or integrated into various DIY projects and industrial applications.



Integrated into PC Case

**Split screen**

The content can be divided into several at will, and display areas can be divided according to needs

Horizontal and vertical screen intelligent adapting to different installation needs

Split Screen Functionality



Arcade Machine Integration

## 7. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your VSDISPLAY LCD screen.

- Cleaning the Screen:** Use a soft, lint-free cloth slightly dampened with water or a non-abrasive screen cleaner. Do not spray liquid directly onto the screen. Avoid using harsh chemicals or abrasive materials.

- **Cleaning the Controller Board:** Keep the controller board free from dust and debris. Use a soft brush or compressed air to gently clean the components. Ensure power is disconnected before cleaning.
- **Storage:** If storing the product for an extended period, keep it in a cool, dry place, away from direct sunlight and extreme temperatures. Use original packaging if available.

## 8. TROUBLESHOOTING

This section addresses common issues you might encounter.

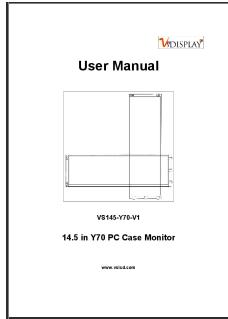
**Table 8.1: Troubleshooting Guide**

Problem	Possible Cause	Solution
No display / Black screen	No power to controller board. Incorrect power adapter. Signal cable not properly connected. No input signal from source. Display in standby mode.	Ensure power adapter is connected and functional. Verify power adapter is 12Vdc, >2A. Check signal cable connections at both the LCD screen and controller board. Ensure locking mechanisms are closed. Verify your input source (e.g., PC) is powered on and outputting a signal. Provide an input signal; the display will exit standby automatically.
Distorted or flickering image	Loose signal cable connection. Faulty signal cable. Incorrect display settings.	Reseat the signal cable firmly. Try a different signal cable if available. Access the OSD menu to adjust resolution or refresh rate to match your source.
Keyboard not responding	Keyboard cable loose or disconnected. Faulty keyboard.	Ensure the keyboard cable is securely plugged into the controller board. If possible, test with another compatible keyboard.

## 9. WARRANTY AND SUPPORT

VSDISPLAY products are designed for reliability and performance. For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or visit the official VSDISPLAY website.

If you encounter issues not covered in this manual or require further assistance, please contact VSDISPLAY customer support through their official channels. You can find more information and contact details on the [VSDISPLAY Amazon Store](#).



### [VSDISPLAY VS145-Y70-V1 14.5-inch PC Case Monitor User Manual](#)

User manual for the VSDISPLAY VS145-Y70-V1, a 14.5-inch monitor designed for the Hyte Y70 PC case. Includes packing lists, installation, operation, specifications, energy label, troubleshooting, and informative notes.