VSDISPLAY VS-TY2662-V1

VSDISPLAY VGA 2AV LCD Controller Board User Manual

Model: VS-TY2662-V1

1. Introduction

This manual provides comprehensive instructions for the VSDISPLAY VGA 2AV LCD Controller Board, model VS-TY2662-V1. This board is designed to convert various 1280x800 LVDS LCD panels into functional displays with VGA and AV inputs. Please read these instructions carefully before installation and operation to ensure proper functionality and safety.

2. Package Contents

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

- 1 × VGA+2AV LCD Controller Board (VS-TY2662-V1)
- 1 × 1CCFL Inverter Board
- 1 × 30Pin Signal Cable
- 1 × Keyboard With Cable

Figure 2.1: Included components of the VSDISPLAY VGA 2AV LCD Controller Board kit.

3. Specifications

Key technical specifications for the VSDISPLAY VGA 2AV LCD Controller Board:

- **Model:** VS-TY2662-V1
- **Input Power Adapter:** 12V DC, greater than 2A (5.5mm x 2.1mm barrel jack)
- **Video Input:** VGA, AV1, AV2
- **Reversing Function:** Supports automatic switching to AV2 when ACC is connected to 12V.
- **OSD (On-Screen Display) Functions:** Brightness, Contrast, Auto-adjustment, Language selection, etc.
- **Supported OSD Languages:** English, French, German, Spanish, Italian, and more.
- **Board Dimensions:** 91mm x 66mm x 12mm
- **LCD Interface:** LVDS Interface LCD Screen
- **TTL Connector:** 50Pin TTL Connector for 7-inch to 10.1-inch LCD Screens (Note: This product is for LVDS screens,

the TTL connector is a general feature of the board type).

- **Standby Power Consumption:** Less than 1W (when no signal input)

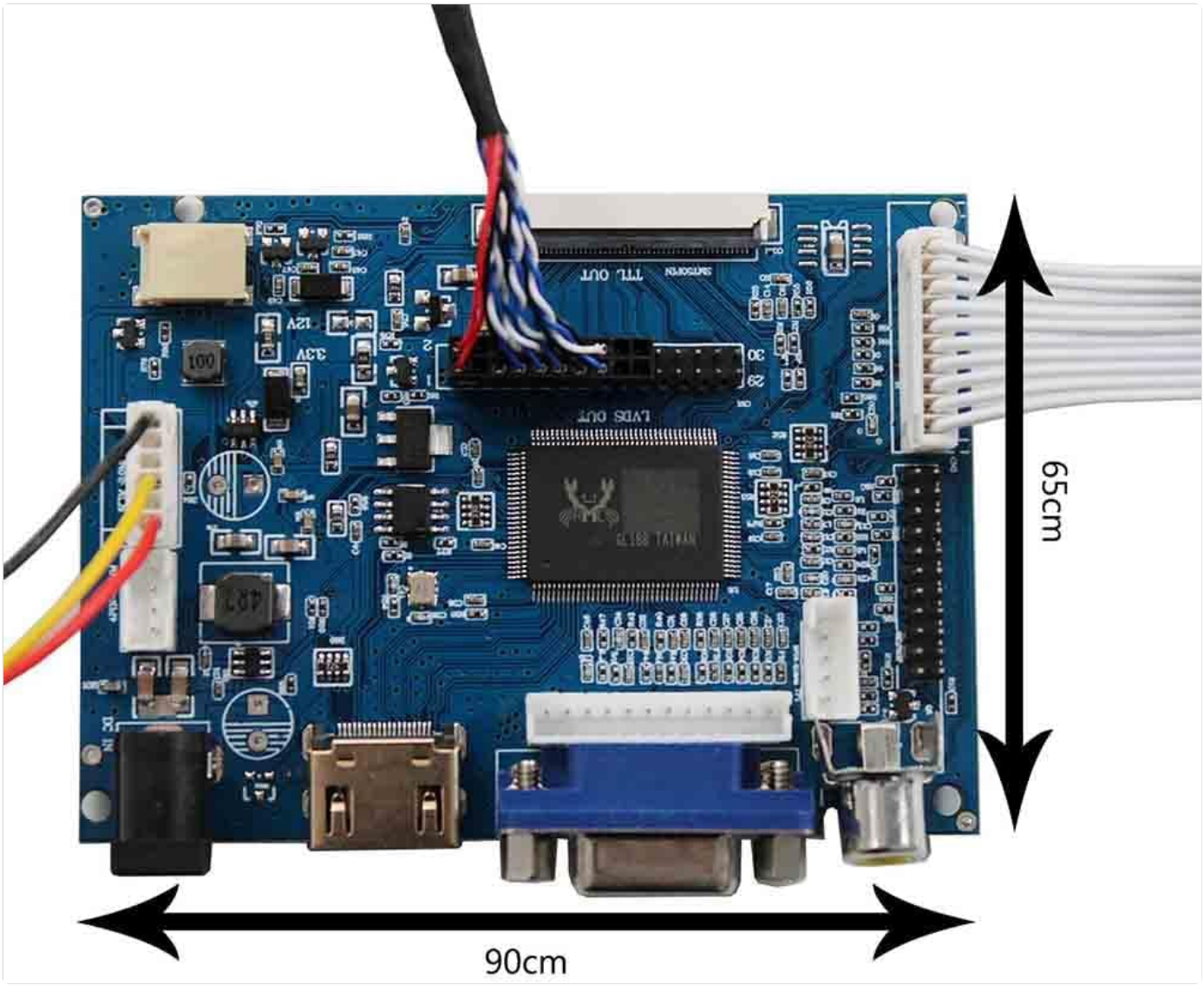

Figure 3.1: VSDISPLAY LCD Controller Board with approximate dimensions (91mm x 66mm).

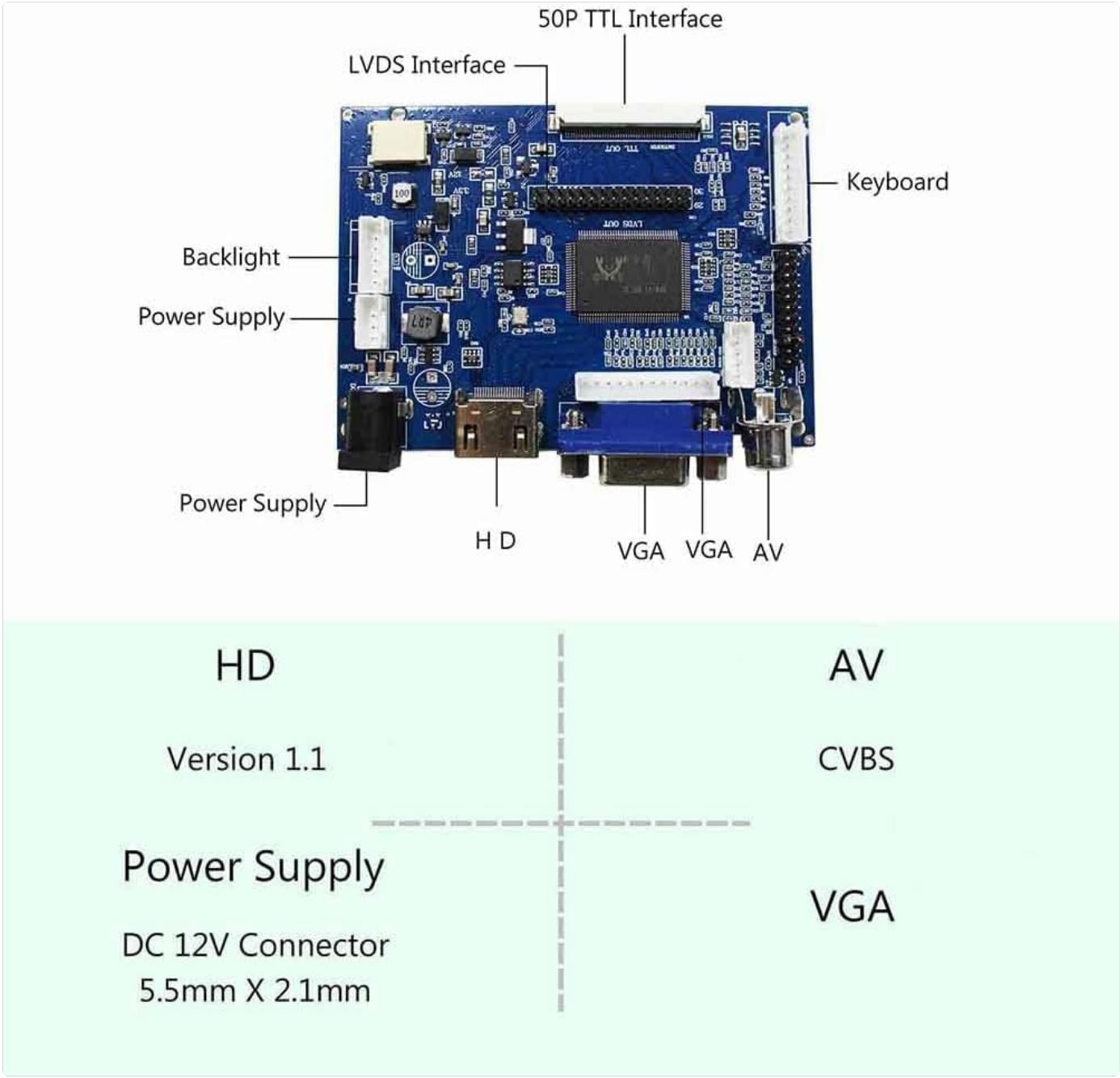

Figure 3.2: Port layout and connections on the controller board.

4. Compatibility

This controller board is compatible with specific 1280x800 resolution LVDS LCD panels. It is crucial to verify your LCD panel's model number and specifications before attempting installation.

4.1. Compatible 14.1-inch 1280x800 1CCFL 30Pin LCD Screens:

- LTN141AT01, LTN141AT02, LTN141AT03, LTN141AT07
- LTN141AT10, LTN141AT13, LTN141AT14
- LP141WX3, LT141WX1
- B141EW01, B141EW02, B141EW03, B141EW04
- M141NWW1, CLAA141WB02, N141I1, QD14TL01

4.2. Compatible 15.4-inch 1280x800 1CCFL 30Pin LCD Screens:

- B154EW01, B154EW02, B154EW03, B154EW04, B154EW06, B154EW08

- LTN154AT01, LTN154AT07, LTN154AT10
- LTN154W1-L01, LTN154X3-L01
- N154I3-L02, LP154W01, LP154WX3, LP154WX4 (e.g., lp154wx4 tl c5, lp154wx4 tl c8, lp154wx4 tl cb)
- LP154W01, N154I2

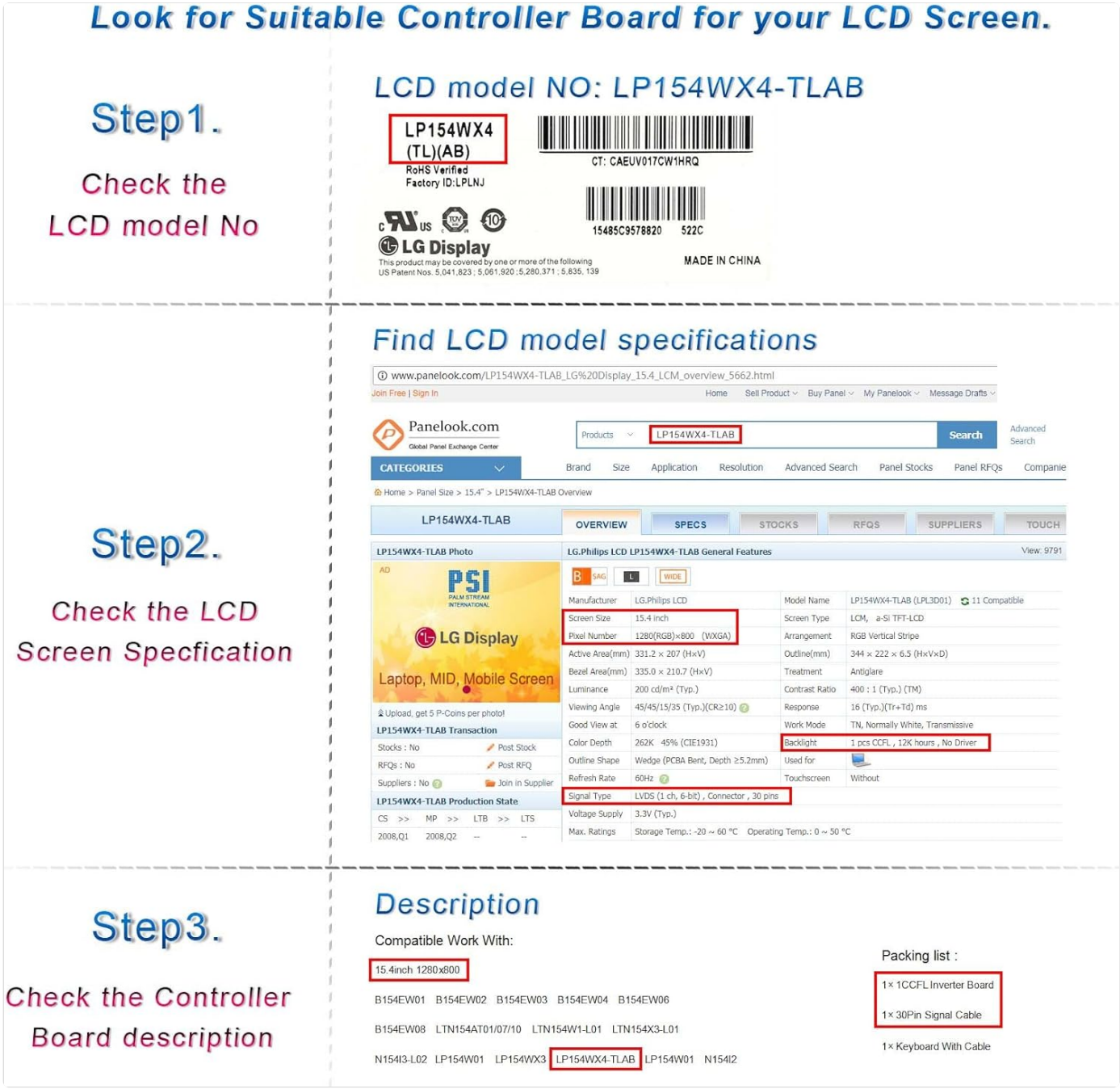

Figure 4.1: Guide to checking LCD screen compatibility with the controller board.

5. Setup and Installation

Follow these steps to correctly connect the LCD controller board to your compatible LCD panel. Exercise caution to avoid damage to components.

1. **Identify LCD Panel:** Ensure your LCD panel is compatible with the controller board (refer to Section 4).
2. **Connect Signal Cable:** Carefully connect the 30-pin signal cable to the LVDS interface on both the LCD panel and the controller board. Ensure correct orientation and secure locking mechanisms if present.
3. **Connect Inverter Board:** Attach the 1CCFL inverter board to the backlight connector on the LCD panel and then connect its power input to the designated port on the controller board.

4. **Connect Keyboard:** Plug the keyboard with its cable into the corresponding port on the controller board.
5. **Power Connection:** Connect a 12V DC power adapter (minimum 2A, 5.5mm x 2.1mm barrel jack) to the controller board. **Do not apply power until all connections are secure.**
6. **Video Source:** Connect your desired video source (VGA or AV) to the appropriate input port on the controller board.

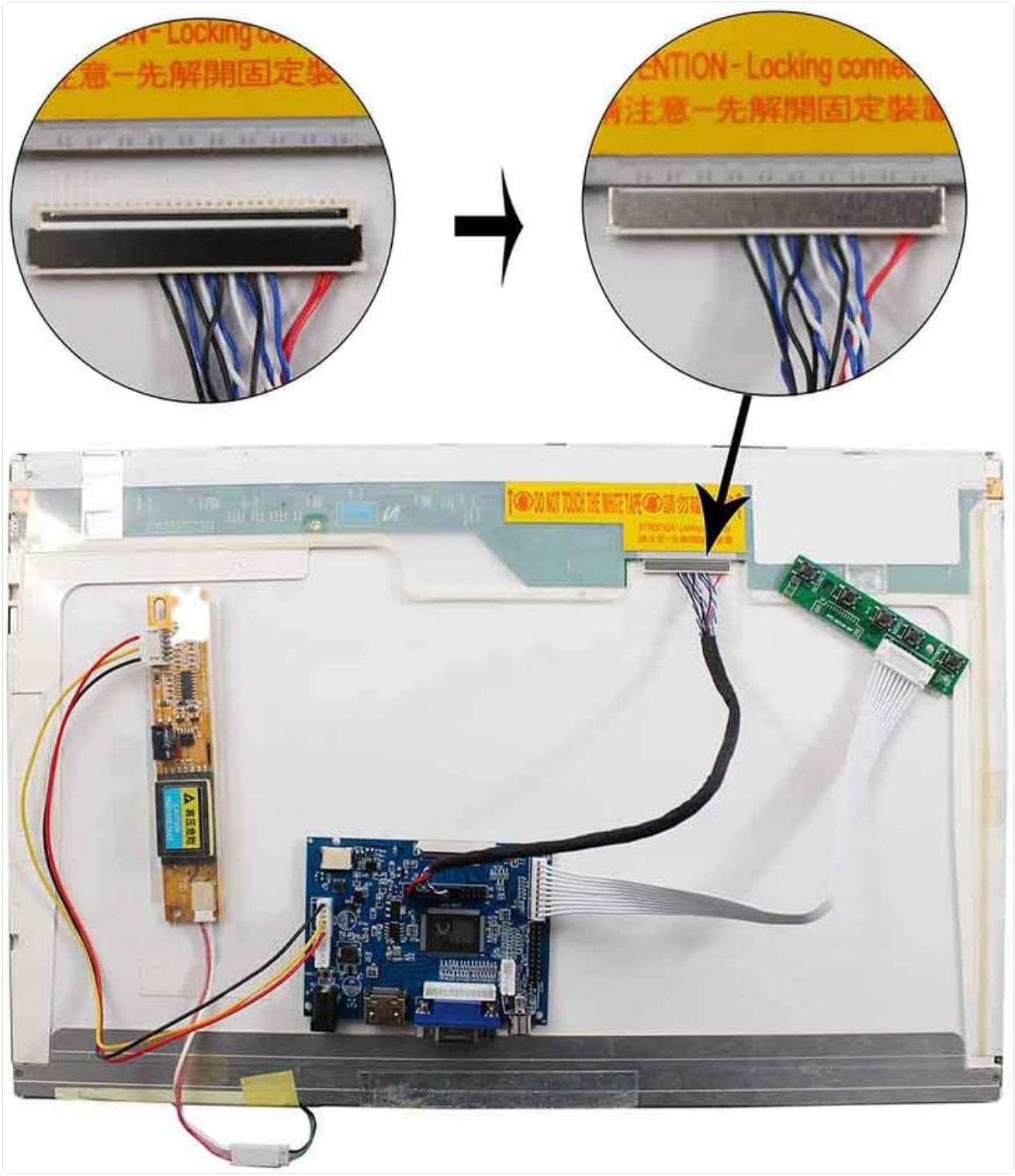

Figure 5.1: Example installation of the controller board with an LCD panel.

6. Operation

Once all connections are made and power is supplied, the display should activate. Use the provided keyboard to navigate the On-Screen Display (OSD) menu for adjustments.

6.1. OSD Menu Navigation:

The keyboard allows access to the OSD menu. Typically, buttons are provided for:

- **Menu:** To open and exit the OSD menu.
- **Up/Down Arrows:** To navigate through menu options.
- **Left/Right Arrows:** To adjust values or select sub-menus.
- **Source/Input:** To switch between VGA, AV1, and AV2 inputs.

6.2. Key OSD Settings:

- **Brightness:** Adjust the overall luminance of the display.
- **Contrast:** Modify the difference between light and dark areas.
- **Auto Adjustment:** Automatically optimizes the display settings for the current input signal (primarily for VGA).
- **Language:** Select the desired language for the OSD menu.
- **Input Source:** Manually select the video input (VGA, AV1, AV2).

6.3. Reversing Function:

If the ACC (Accessory) wire is connected to a 12V source, the board will automatically switch to the AV2 input. This feature is commonly used for automotive applications with a rearview camera.

7. Troubleshooting

If you encounter issues, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No display / Black screen	Incorrect power supply (voltage/current) Loose or incorrect signal cable connection Faulty inverter board (no backlight) Incompatible LCD panel No input signal	Ensure 12V DC, >2A power supply is used. Check all cable connections, especially the 30-pin LVDS cable and inverter cable. Verify the inverter board is functioning. If the screen shows a faint image, the inverter may be faulty. Confirm LCD panel model is listed as compatible. Ensure a video source is connected and active.
Faint image / No backlight	Faulty 1CCFL inverter board Backlight cable disconnected LCD panel backlight failure	Replace the 1CCFL inverter board. Check the connection between the inverter board and the LCD panel's backlight. Test with a known good LCD panel if possible.
Distorted or flickering image	Loose LVDS signal cable Incorrect resolution setting Interference	Reseat the 30-pin LVDS signal cable firmly. Ensure the input resolution matches the LCD panel's native resolution (1280x800). Keep signal cables away from power cables.
OSD menu not appearing	Keyboard cable disconnected or faulty	Check the connection of the keyboard cable to the controller board. Ensure the keyboard itself is not damaged.

8. Maintenance

The VSDISPLAY LCD Controller Board requires minimal maintenance. Keep the board clean and free from dust and moisture. Ensure adequate ventilation to prevent overheating. Avoid exposing the board to extreme temperatures or direct sunlight.

- **Cleaning:** Use a soft, dry cloth to gently wipe the board. Do not use liquid cleaners or solvents.
- **Environment:** Operate the board in a dry, well-ventilated area.
- **Connections:** Periodically check all cable connections to ensure they remain secure.

9. Warranty and Support

For warranty information and technical support, please refer to the VSDISPLAY official website or contact your retailer. Keep your purchase receipt as proof of purchase.
Manufacturer: VSDISPLAY
ASIN: B01MS13A5W
Item Model Number: 8541634721