Waveshare 9.7inch 768x1024 LCD

Waveshare 9.7-inch Capacitive Touch Display User Manual
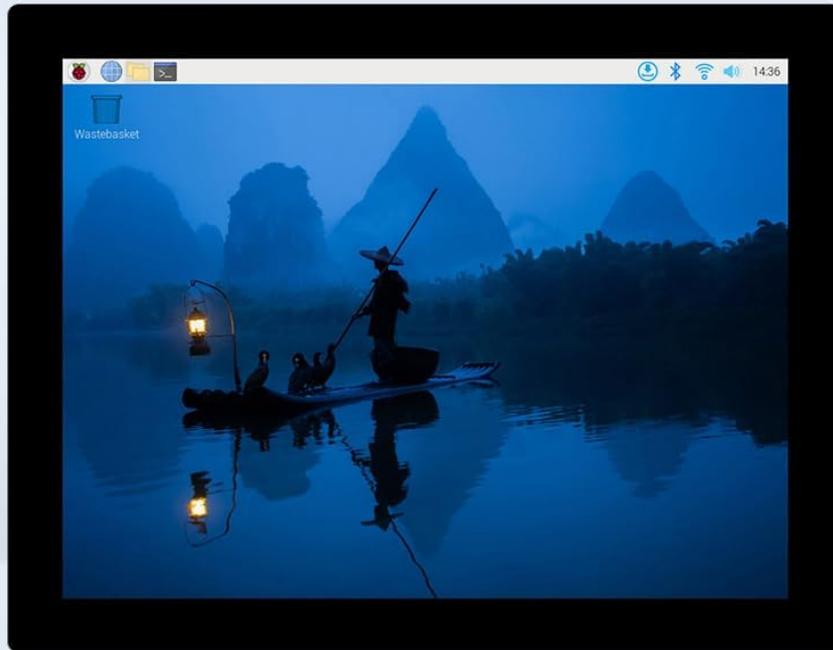
Model: 9.7inch 768x1024 LCD

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Waveshare 9.7-inch Capacitive Touch Display. This display features a 768x1024 resolution IPS panel, 10-point capacitive touch, and wide compatibility with various devices including Raspberry Pi and Windows PCs.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact Waveshare support.

Figure 2.1: Package Contents Overview

1. 9.7inch 768x1024 LCD x1

2. HDMI flat cable ~1m x1

3. USB-A to Type-C cable ~1m x1

4. USB to Type-C adapter (C) x1

5. USB to Type-C adapter (B) x1

6. HDMI adapter x1

7. HDMI to Micro HDMI adapter x1
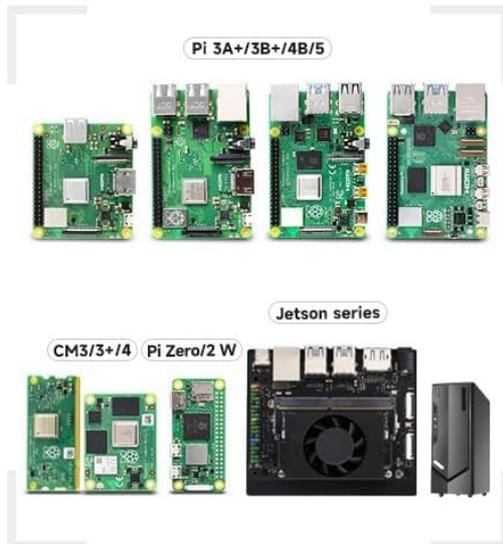
8. Screws pack x1

3. SPECIFICATIONS

Feature	Description
Screen Size	9.7 Inches

Feature	Description
Resolution	768 x 1024 Pixels (Portrait by default)
Display Panel Type	IPS
Viewing Angle	178° Wide Viewing Angle
Touch Type	Capacitive, up to 10-point touch (OS dependent)
Panel Hardness	Up to 6H toughened glass
Connectivity	HDMI, USB Type-C (for touch and power)
Audio Output	3.5mm Jack, 4PIN Header
Backlight	Adjustable via software
Dimensions (LxWxH)	0.5 x 10.47 x 6.97 inches (approx. 12.8 x 266.15 x 177.18 mm)
Weight	1.63 pounds

4. DEVICE & SYSTEM COMPATIBILITY

The Waveshare 9.7-inch Capacitive Touch Display offers broad compatibility with various computing platforms and operating systems.

Device & System Support

Pi 3A+/3B+/4B/5

Raspberry Pi

Supports Raspberry Pi OS, 10-point touch, driver free
Supports Ubuntu / Kali / WIN10 IoT, single point touch, driver free
Supports Retropie, driver free

Supports all versions of Raspberry Pi

Jetson series

CM3/3+/4 Pi Zero/2 W

Jetson Nano

Supports Ubuntu, single point touch, driver free

PC

Supports Windows 11 / 10 / 8.1 / 8 / 7, 10-point touch, driver free

IPS Display Panel

Excellent Display Performance With 178° Wide Viewing Angle
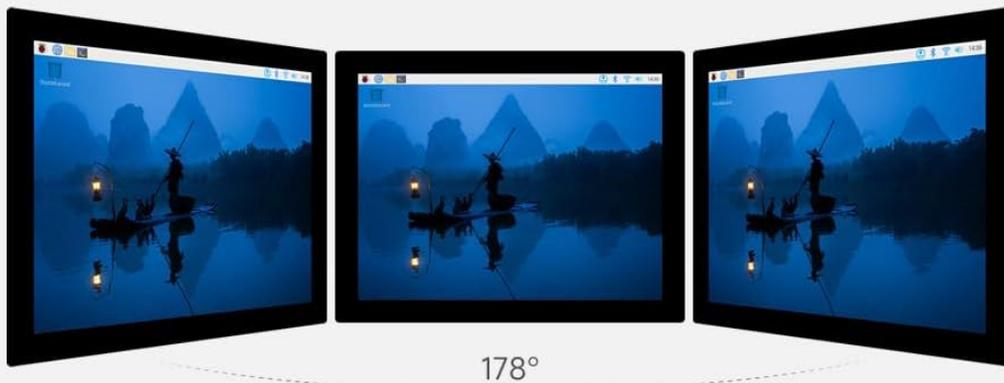
178°

Figure 4.1: Device and System Support Overview

- **Raspberry Pi:** Supports all versions of Raspberry Pi.

  - Supports Raspberry Pi OS: 10-point touch, driver-free.
  - Supports Ubuntu / Kali / WIN10 IoT: Single point touch, driver-free.
  - Supports Retropie: Driver-free.

- **Jetson Series:** Supports Ubuntu, single point touch, driver-free.
- **PC:** Supports Windows 11 / 10 / 8.1 / 8 / 7, 10-point touch, driver-free.

5. SETUP AND CONNECTION

Follow these steps to connect your display to your chosen device. Ensure all connections are secure before powering on.

Figure 5.1: Connection Examples

1. **Power Connection:** Connect the display to a 5V power source using the provided USB-A to Type-C cable. The display requires adequate power for stable operation.

2. **Video Connection:**

   - For devices with standard HDMI output (e.g., Raspberry Pi 5, 4B, PC): Use the provided HDMI flat cable and HDMI adapter.
   - For devices with Micro HDMI output (e.g., Raspberry Pi Zero 2 W): Use the provided HDMI flat cable and HDMI to Micro HDMI adapter.

3. **Touch Connection:** Connect the USB-A to Type-C cable from your host device (Raspberry Pi, PC, Jetson) to the display's Type-C touch port. This enables the touch functionality.

4. **Orientation:** The display is portrait by default (768x1024 HxV). To change to landscape orientation, you will need to adjust the software configuration on your host device. Refer to your device's operating system documentation for display rotation settings.

6. OPERATING INSTRUCTIONS

6.1 Capacitive Touch Functionality

The display features a capacitive touch panel, supporting up to 10-point touch depending on the operating system. The toughened glass panel provides durability with up to 6H hardness.

Figure 6.1: Capacitive 10-Point Touch

6.2 Backlight Adjustment

The display's backlight can be adjusted via software. This allows you to optimize brightness for various lighting conditions and reduce eye strain.
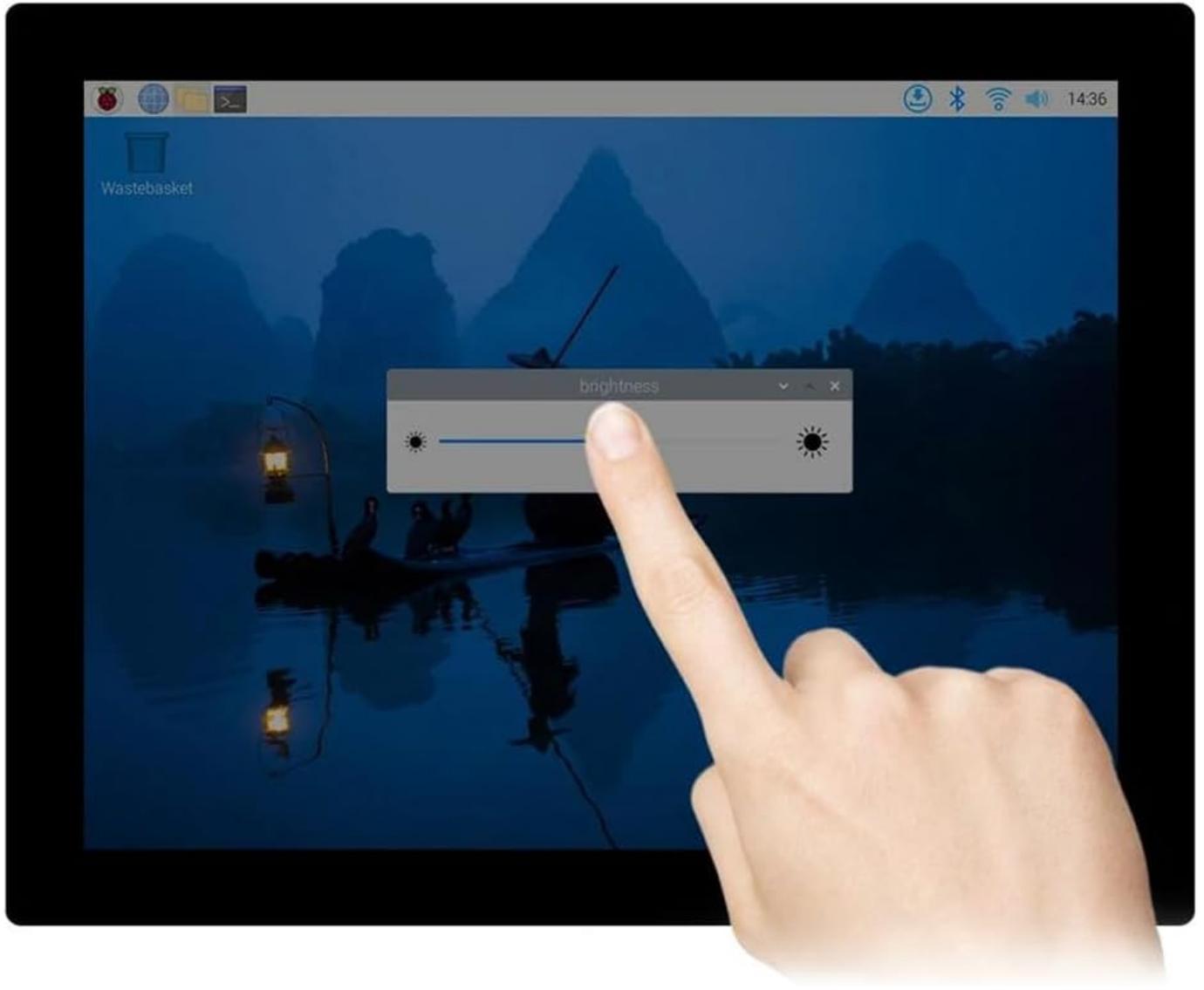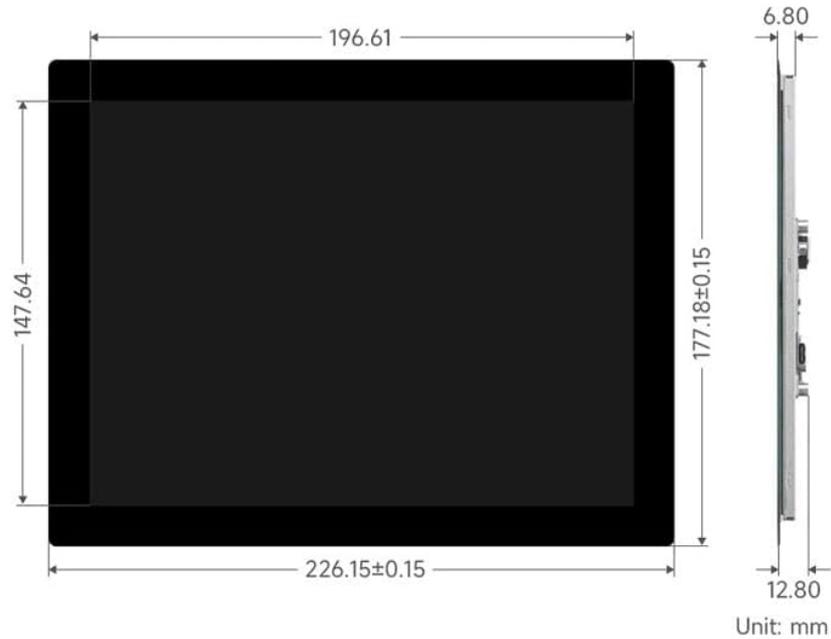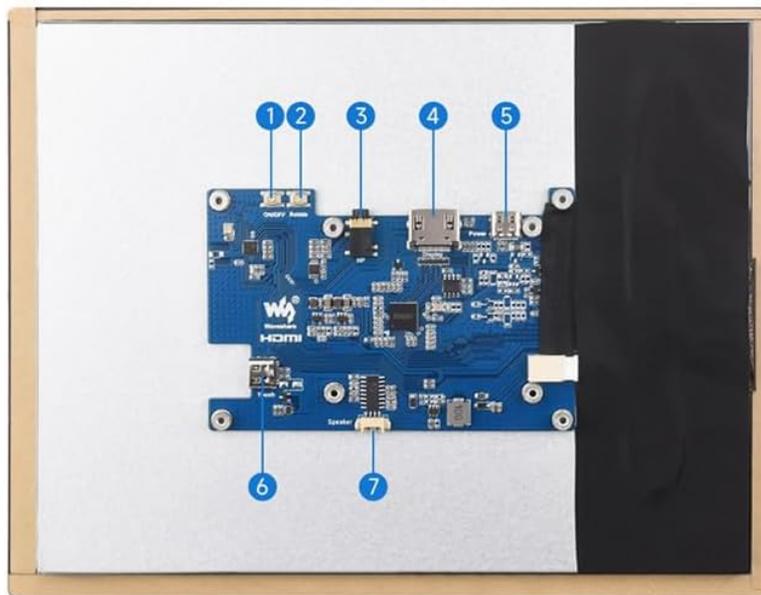
Figure 6.2: Backlight Adjustment via Software

6.3 Interface Introduction

Familiarize yourself with the various ports and buttons on the display for proper operation.

Dimensions

196.61

6.80

147.64

177.18±0.15

226.15±0.15

12.80

Unit: mm

Interface Introduction

1. Power ON/OFF & Brightness Adjustment
2. Touch Rotation Button
3. Audio Jack
4. HDMI Port
5. Power Supply
6. Touch Port
7. Speaker Header

Figure 6.3: Display Interface Overview

1. Power ON/OFF & Brightness Adjustment
2. Touch Rotation Button
3. Audio Jack
4. HDMI Port
5. Power Supply (Type-C)
6. Touch Port (Type-C)
7. Speaker Header

7. MAINTENANCE

- Keep the display clean by wiping it with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- Do not expose the display to extreme temperatures or humidity.
- Handle with care to prevent physical damage to the screen or internal components.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display output	Loose HDMI connection, insufficient power, incorrect input source.	Check HDMI cable, ensure 5V power supply is connected, verify host device's display settings.
Touch not responding	Loose USB connection, driver issue (for some OS), incorrect touch port.	Ensure USB-C touch cable is securely connected to the correct port. For Windows, ensure drivers are installed (though often driver-free). Restart the host device.
Display is in portrait mode, needs landscape	Default orientation.	Adjust display rotation settings in your operating system (e.g., Raspberry Pi OS, Windows display settings).
Backlight too dim/bright	Backlight setting needs adjustment.	Use the software backlight adjustment feature or the physical brightness adjustment button if available.

9. OFFICIAL PRODUCT VIDEO

Watch the official product video for a visual overview of the Waveshare 9.7-inch Capacitive Touch Display's features and capabilities.

Your browser does not support the video tag.

Video 9.1: Waveshare 9.7inch 768x1024 LCD Product Overview. This video demonstrates the display's features, including its size, resolution, IPS panel, capacitive touch, and compatibility with various devices like Raspberry Pi and PCs.

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Waveshare website or contact their customer service directly. Keep your purchase receipt for warranty claims.

- **Manufacturer:** Waveshare
- **Return Policy:** 30-day refund/replacement (as per Amazon's policy at time of data retrieval).
- **Protection Plans:** Optional 3-Year or 4-Year Protection Plans may be available for purchase.