

Waveshare 7inch HDMI LCD (H) (with case)

Waveshare 7-inch Capacitive Touch Screen LCD (H) with Case User Manual

Model: 7inch HDMI LCD (H) (with case)

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Waveshare 7-inch Capacitive Touch Screen LCD (H) with Case. This display is designed for versatility, offering compatibility with various single-board computers and operating systems, including Raspberry Pi, Jetson series, and Windows. Its 1024x600 resolution, IPS panel, and capacitive touch functionality provide a clear and responsive user experience.



Image: The Waveshare 7-inch Capacitive Touch Screen LCD (H) with Case, showcasing its display and touch capabilities.

2. PACKAGE CONTENTS

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

- 1x 7inch HDMI LCD (H) (with case)
- 1x HDMI cable
- 1x HDMI to Micro HDMI Adapter
- 1x USB type A plug to micro B plug cable

Package Content

7inch HDMI LCD (H) (with case) x1



HDMI cable x1



HDMI to Micro HDMI Adapter x1



USB type A plug to micro B plug cable x1



Image: Visual representation of the Waveshare 7-inch LCD package contents, including the display, HDMI cable, HDMI to Micro HDMI adapter, and USB power/touch cable.

3. FEATURES

The Waveshare 7-inch Capacitive Touch Screen LCD (H) offers a range of features designed for optimal performance and user interaction:

- **Display Size:** 7 inches

- **Resolution:** 1024x600 pixels
- **Display Panel:** IPS for wide viewing angles (170°)
- **Touch Type:** Capacitive, supporting up to 5-point touch (OS dependent)
- **Touch Panel:** Toughened glass with up to 6H hardness
- **Display Interface:** HDMI / VGA (via mini HDMI connector)
- **Audio Output:** 3.5mm Jack
- **Enclosure:** Quality Polycarbonate Case
- **Stand:** Two stand angle options (30° or 50°)
- **Certification:** CE certified

7" HDMI Touch Display With Case




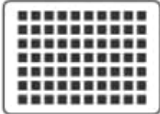







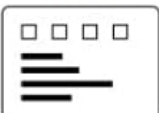




Size  7"	Resolution  1024×600	Display Interface  HDMI / VGA	Display Panel  IPS	Viewing Angle  170°
Touch Type  Capacitive	Touch Points  5-point	Touch Port  USB	Touch Panel  Toughened Glass	
OSD Menu  Brightness/Contrast	Audio Output  3.5mm Jack	Gaming  Xbox360/PS4/Switch	Enclosure  Polycarbonate	Certification  CE

Image: An infographic detailing the key features of the Waveshare 7-inch HDMI LCD, including size, resolution, display interface, panel type, viewing angle, touch type, touch points, touch port, touch panel, OSD menu, audio output, gaming support, enclosure, and certification.

4. DEVICE & SYSTEM SUPPORT

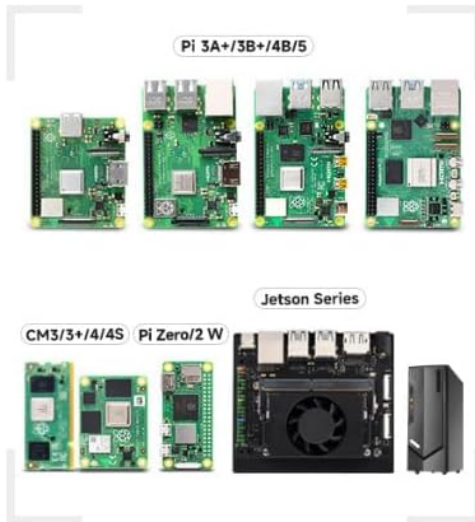
This display offers broad compatibility with various computing platforms:

- **Raspberry Pi:** Supports Raspberry Pi OS, Ubuntu, Kali, RetroPie. Offers 5-point touch (driver-free for most OS). Compatible with Raspberry Pi 5/4B/3B/Zero/Zero W/Zero 2W/Pico/Pico W/Pico WH.
- **Jetson Series:** Supports Ubuntu with single-point touch (driver-free). Compatible with Jetson Nano/TX2/Xavier

NX/Orin series boards.

- **PC:** Supports Windows 11/10/8.1/8/7 with 5-point touch (driver-free).
- **Game Consoles:** Supports Xbox360, PS4, Switch (display and sound only).

Device & System Support



Raspberry Pi

Supports Raspberry Pi OS, 5-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

Supports Ubuntu, single point touch, driver free
Supports Jetson Nano / TX2 / Xavier NX / Orin series boards

PC

Supports Windows 11 / 10 / 8.1 / 8 / 7, 5-point touch, driver free

Display

IPS Panel



Image: Diagram illustrating the compatibility of the Waveshare 7-inch LCD with various devices, including Raspberry Pi models, Jetson series, and PCs, highlighting driver-free touch support.

5. SETUP & CONNECTION

Follow these steps to connect your Waveshare 7-inch LCD to your device:

1. **Power Connection:** Connect the provided USB Type-A to Micro-B cable from a 5V power source (e.g., your host device's USB port or a dedicated 5V power adapter) to the 'DC' port on the display.
2. **Video Connection:** Connect the provided HDMI cable from your host device's HDMI output to the 'HDMI' port on the display. If your device uses a Micro HDMI port (e.g., Raspberry Pi Zero W), use the included HDMI to Micro HDMI adapter.
3. **Touch Connection:** For touch functionality, connect a second USB cable (not included for all setups, refer to package contents) from your host device's USB port to the 'TOUCH' port on the display. This enables the touch input.
4. **Audio Output (Optional):** If you wish to use external speakers or headphones, connect them to the 'HP' (3.5mm)

Audio Jack) port on the display.

Ensure all connections are secure before powering on your devices.

Connection Examples

Working With Raspberry Pi 5

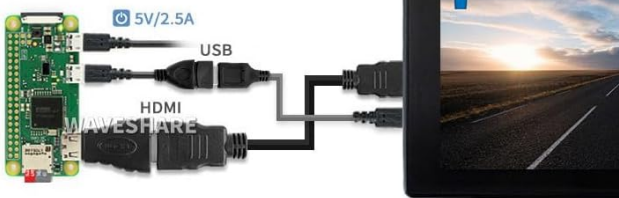


Working With AI Computer Jetson Nano



Working With Raspberry Pi Zero W

* You need to prepare additional mini HDMI adapter and USB cable



Working With Mini PC



Image: Diagrams illustrating various connection examples for the Waveshare 7-inch LCD, including setups with Raspberry Pi 5, Jetson Nano, Raspberry Pi Zero W, and a Mini PC, showing HDMI and USB connections for display and touch.

6. OPERATION

6.1. Touch Control

The display features a capacitive touch panel, supporting up to 5-point multi-touch depending on the operating system. For optimal touch response, ensure the touch USB cable is connected to your host device. Most supported operating systems will automatically recognize the touch input without additional drivers.



Image: A hand interacting with the Waveshare 7-inch LCD, demonstrating its capacitive touch control capabilities.

6.2. On-Screen Display (OSD) Menu

The OSD menu allows you to adjust display settings such as brightness, contrast, and other parameters. The control buttons are located on the side of the display:

- **Power Button:** Turns the display on/off.
- **Menu Button:** Accesses the OSD menu.
- **Direction Buttons (Up/Down/Right/Left):** Navigates through menu options and adjusts values.
- **Exit Button:** Exits the OSD menu.



Image: Detailed view of the Waveshare 7-inch LCD's appearance, including its dimensions, and labeled ports (3.5mm Audio Jack, VGA Display Port, HDMI Display Port, Touch Port, 5V Power Supply) and control buttons (Exit, Down/Right, Up/Left, Menu, Power).

7. MAINTENANCE

To ensure the longevity and optimal performance of your Waveshare 7-inch LCD, follow these maintenance guidelines:

- **Cleaning:** Use a soft, lint-free cloth slightly dampened with water or a screen-safe cleaning solution to clean the display surface. Avoid abrasive materials or harsh chemicals.
- **Handling:** Handle the display by its edges. Avoid applying excessive pressure to the screen.
- **Environment:** Operate and store the display in a clean, dry environment, away from extreme temperatures, direct sunlight, and high humidity.
- **Power Off:** Always power off the display and disconnect it from the power source before cleaning or performing any maintenance.

8. TROUBLESHOOTING

If you encounter issues with your Waveshare 7-inch LCD, refer to the following common troubleshooting steps:

- **No Display:**
 - Ensure the HDMI cable is securely connected to both the display and your host device.

- Verify that the display is receiving adequate power (5V) via the 'DC' port.
- Check if your host device's video output is enabled and configured correctly for an external display.
- Try a different HDMI cable or power source.

- **Touch Not Working:**

- Ensure the USB cable for touch is securely connected from your host device to the 'TOUCH' port on the display.
- Verify that your operating system recognizes the touch input device. For some systems, a reboot may be necessary after connecting.
- Check the Waveshare wiki page for specific driver or configuration instructions for your operating system, if applicable.

- **Flickering/Poor Image Quality:**

- Ensure the display resolution on your host device is set to 1024x600 for optimal clarity.
- Check for any interference from other electronic devices.
- Adjust brightness and contrast settings via the OSD menu.

For more detailed troubleshooting or specific technical support, please refer to the official Waveshare wiki page or contact Waveshare customer service.

Link to Waveshare Amazon store for wiki page: [Waveshare Store](#)

9. SPECIFICATIONS

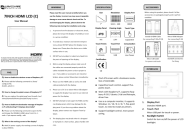
Feature	Specification
Standing screen display size	7 Inches
Screen Resolution	1024x600 (Native), supports up to 1920x1080 input
Brand	Waveshare
Series	Waveshare 7inch Capacitive Touch Screen LCD
Item model number	7inch HDMI LCD (H) (with case)
Operating System Support	Raspberry Pi OS, Ubuntu, Kali, RetroPie, Windows 11, 10, 8.1, 8, 7
Item Weight	7.1 ounces
Product Dimensions	7.87 x 5.51 x 1.97 inches
Color	Black
Voltage	5 Volts
Screen Surface Description	Glossy
Aspect Ratio	1.71:1
Touch Type	Capacitive, up to 5-point touch
Panel Type	IPS

10. WARRANTY AND SUPPORT

Waveshare is committed to providing quality products and customer satisfaction.

- **Return Policy:** This product is eligible for a 30-day refund/replacement policy from the date of purchase.
- **Technical Service:** Waveshare offers 365 days of free repair service and lifetime technical support for this product.
- **User Guide:** A detailed user guide in PDF format is available for download:[Download User Guide \(PDF\)](#)
- **Contact Support:** For further assistance, please visit the official Waveshare website or contact their customer support channels.

Related Documents

	<p>Waveshare 7-inch HDMI LCD (C) User Manual: Setup and Usage Guide</p> <p>This user manual guides users through the setup and operation of the Waveshare 7-inch HDMI LCD (C) display, detailing its specifications, connection methods for Raspberry Pi and PCs, and essential usage tips for optimal performance.</p>

4inch DSI LCD

Introduction

Features

- 4 inch TFT display with screen with a hardware back-light of 400+ nits
- Additional optional back-light, passive or active
- Supported panel resolution for touch panel: 480x800 up to 800
- 3 inch DSI display through Raspberry Pi DSI interface with a screen size of up to 800
- Working with Raspberry Pi, supports Raspberry Pi 0B models
- Supports Pi 400 (Pi 400, 4000) series (not recommended for Raspberry Pi 400)
- Support backlight adjusted by software

Working with Raspberry Pi

Hardware connection

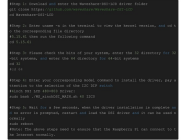
1. Use a 2020+ Pi cable to connect the 4inch DSI LCD to the DSI interface of the Raspberry Pi.
2. The Raspberry Pi is installed on the display board with the back facing down, and the 5V power supply and GND connection are connected through the pins.



Software settings

Method 1: Install Manually

1. Download the image from the Raspberry Pi website.
2. Connect the Pi to your PC via USB and use Etcher or Raspberry Pi Imager to format the TF card.
3. Open the Raspberry Pi Imager software, select the custom image connection in step 2, and click "Next" to write the custom image.
4. After the image has been written, insert the card into the Pi and boot the Pi.
5. Connect the Pi to the Raspberry Pi, start the Raspberry Pi, and log in to the terminal of the Raspberry Pi. You can connect the Raspberry Pi to a 4-inch display using a 2020+ Pi cable.



Note: The above steps need to ensure that the Raspberry Pi is not connected to the Internet network.

1. After the system is installed, the Raspberry Pi will be able to display and touch normally.

Method 2: Program the installed image

1. Select your corresponding Raspberry Pi version image, download and decompress it in the Pi.
2. Connect the Pi to your PC via USB and use Etcher or Raspberry Pi Imager to format the TF card.
3. Open the Raspberry Pi Imager software, select the custom image connection in step 2, and click "Next" to write the custom image.
4. After the image has been written, insert the card into the Pi and boot the Pi.
5. Connect the Pi to the Raspberry Pi, start the Raspberry Pi, and log in to the terminal of the Raspberry Pi. You can connect the Raspberry Pi to a 4-inch display using a 2020+ Pi cable.

1. Connect the Pi to the Raspberry Pi, start the Raspberry Pi, and log in to the terminal of the Raspberry Pi. You can connect the Raspberry Pi to a 4-inch display using a 2020+ Pi cable.

Rotation

Method 1: Graphical Interface Rotation

In the GUI menu, select "Advanced" -> "System Configuration" -> "Configure" -> "Display" -> "Rotation".



Method 2: Rotation Display in Live Version

After the installation is complete, you can use the program in the Start menu -> "Advanced" -> "Rotation" to adjust the rotation.

Touch To Rotate

After the installation is complete, you can use the program in the Start menu -> "Advanced" -> "Rotation" to adjust the rotation.

Backlight Control

Method 1: Graphical Interface Dimming

Using the application provided by WaveShare:

1. Download the application from the WaveShare website.
2. Connect the Pi to your PC via USB and use Etcher or Raspberry Pi Imager to format the TF card.
3. Open the Raspberry Pi Imager software, select the custom image connection in step 2, and click "Next" to write the custom image.
4. After the image has been written, insert the card into the Pi and boot the Pi.
5. Connect the Pi to the Raspberry Pi, start the Raspberry Pi, and log in to the terminal of the Raspberry Pi. You can connect the Raspberry Pi to a 4-inch display using a 2020+ Pi cable.

After the installation is complete, you can use the program in the Start menu -> "Advanced" -> "Rotation" to adjust the rotation.



Method 2: Live Version Dimming Command

To adjust the system command of the live version, after entering the root privilege, execute the following command in the Raspberry Pi terminal:

```
sudo systemctl restart lightdm.service
```

If you are in the range of 0-255, the number is the brightness.

Note

1. Update the system, such as executing the following command:

```
sudo apt-get update
sudo apt-get upgrade
```

After updating the system, some files of the original installed driver may be overwritten, and the first method is recommended to restore normally.

2. Restore the method:

If the first method is used in the Raspberry Pi 400, the user restores the system, such as installing it to a Raspberry Pi 400, the display will not display properly.

Because the Pi and Pi 400 have different driver files, you need to install the driver on the new Raspberry Pi display properly.

Resources

Software

- Raspberry Pi Imager
- Etcher

Pre-installed images

- 4 inch DSI LCD 2020+ Pi 400
- Raspberry Pi 400 DSI LCD 2020+ Pi 400
- Raspberry Pi 400 DSI LCD 2020+ Pi 400

FAQ

Question: Can't connect to the network when using the DSI LCD 2020+ Pi 400 image.

Answer: Please check the network settings in the Raspberry Pi configuration menu.

Question: How to update the Raspberry Pi software?

Answer: Please use the command 'sudo apt-get update' to update the software.

Anti-Static

Since the 4-inch Raspberry Pi 400, WaveShare has been working on anti-static measures and product quality control to ensure the quality of the products.

There are also a few precautions for products in the market. They usually have some warning signs on the product packaging, and some will have a warning sign.

To avoid becoming a victim of product quality, please pay attention to the following factors when purchasing:

1. Check the product packaging for anti-static measures.

Please note that we have found some poor quality of the products in the market. They are usually some of the products that are not properly tested or have some quality issues.



We are sorry for the inconvenience caused by the poor quality of the products. We will continue to improve our product quality and provide better service to our customers.

Support

If you require technical support, please go to the page and open a ticket.

Waveshare 4inch DSI LCD Display for Raspberry Pi: Setup and Guide

Detailed guide for the Waveshare 4inch DSI LCD display, covering features, hardware connection, software installation, screen rotation, backlight control, and troubleshooting for Raspberry Pi.

	<p>Waveshare 7inch HDMI LCD: Raspberry Pi Touchscreen Display Guide</p> <p>Comprehensive user guide for the Waveshare 7inch HDMI LCD, covering setup, driver installation, touch calibration, and usage with Raspberry Pi.</p>
	<p>Waveshare 10.1-inch HDMI LCD (G) User Manual: Setup, Specs, and Connections</p> <p>Explore the Waveshare 10.1-inch HDMI LCD (G) with Case. This user manual covers essential specifications, safety warnings, connection guides for Raspberry Pi, Jetson Nano, and PCs, and answers common questions.</p>

Documents - Waveshare – 7inch HDMI LCD (H) (with case)



[\[pdf\]](#) User Manual

7inch HDMI LCD H User Manual Waveshare This has two versions one is and another with case

FEATURES ○ IPS screen 1024x600 hardware INTRODUCTION Capacitive Touch Screen interface Supports Multi mini PCs Systems display raspberry pi 7in hdmi user manual wiki amperka ru media products waveshare w upload 5 58 80

7inch HDMI LCD H User Manual 7inch HDMI LCD H 7inch HDMI LCD H with case 7inch HDMI LCD CONTENT Introduction

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3 Features.....

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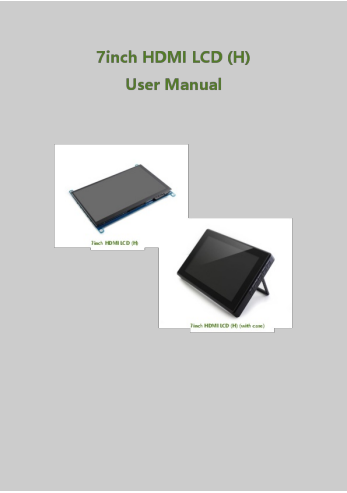


[\[pdf\]](#) User Manual Specifications

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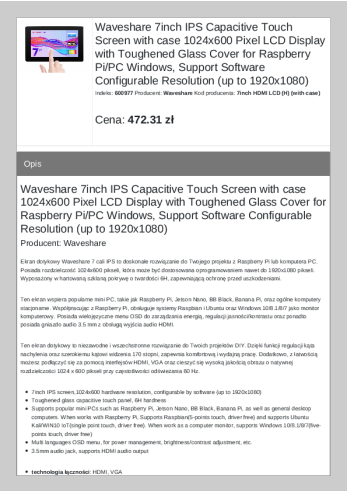


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HDMI LCD CONTENT Introduction

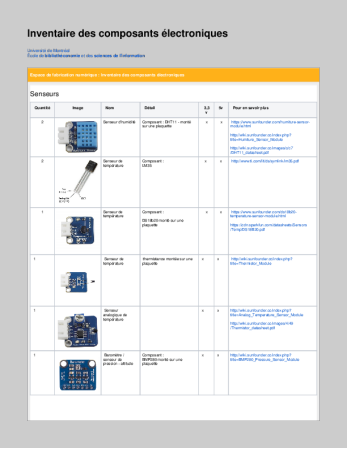
3 Features.....

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Waveshare 7inch IPS Capacitive Touch Screen with case 1024x600 Pixel LCD Display Toughened Glass
Cover for Raspberry Pi PC Windows Support Software Configurable Resolution up to 1920x1080 Sklep
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Waveshare 7inch IPS Capacitive Touch Screen with case 1024x600 Pixel LCD Display
with Toughened Glass Cover for Raspberry Pi/PC Windows, Support Software
Configurable Resolution up to 1920x1080 Indeks: 600977 Producent: Waveshare Kod
producenta: 7inch HDMI LCD H with case Cena: 472.31 zł Opis ...
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[pdf] User Manual Datasheet

Inventaire des composants électroniques Caméra pour Raspberry Pi Avec filtre infrarouge la vision nocturne
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