waveshare 7inch HDMI LCD (H)

Waveshare 7-inch HDMI LCD (H) Monitor User Manual

Model: 7inch HDMI LCD (H) | Brand: Waveshare

1. Product Overview

The Waveshare 7-inch HDMI LCD (H) is a versatile capacitive touch screen monitor featuring a 1024x600 IPS display with a toughened glass cover. Designed for broad compatibility, it supports various single-board computers and systems, offering a responsive and clear visual interface.

Key Features:

- **7-inch IPS Display:** Provides a wide viewing angle and vibrant colors.
- **1024x600 Resolution:** Offers clear and crisp visuals.
- **Capacitive Touch:** Supports 5-point touch (driver-free for most supported systems).
- **Toughened Glass Cover:** Enhances durability and protection.
- **Broad Compatibility:** Works with Raspberry Pi (all versions), Jetson Nano, PCs (Windows 10/8.1/8/7), and various game consoles (Xbox360, PS4, Switch).
- **Driver-Free Operation:** Plug-and-play functionality for many supported operating systems.

2. Package Contents

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

- 1x 7-inch HDMI LCD (H) Monitor
- 2x Brackets (for stand)
- 1x HDMI Cable
- 1x USB-A to Type-C Cable
- 1x Mini HDMI to HDMI Adapter
- 2x Long Screws
- 4x Copper Screws
- 4x Short Screws

- 1x Screwdriver
- 1x User Manual

Figure 2.1: Diagram illustrating all components included in the package, such as the 7-inch monitor, brackets, various cables (HDMI, USB-A to Type-C), adapters, screws, screwdriver, and user manual.

3. Specifications

Feature	Specification
Display Screen	7 Inches
Panel Type	IPS
Touch Type	5-point Capacitive Touch
Resolution	1024 x 600
Brightness	420 cd/m²
Viewing Angle	170° (H) / 170° (V)

Feature	Specification
Refresh Rate	60Hz
Interface	HDMI, Type-C, 3.5mm Audio
Input Voltage	5V
Total Power (Max)	2.55W
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Product Weight	0.9 lbs (10.6 ounces)
Screen Dimensions (L×W×D)	165x102x15mm (6.5x4.0x0.6 in)
Display Area (L×W)	154x86mm
Supported Systems	Windows 11/10/8.1/8/7, Raspbian, Ubuntu, Kodi

4. Setup and Installation

4.1 Attaching the Stands

1. Carefully remove the protective film from the included stand brackets.
2. Align the brackets with the screw holes on the back of the monitor.
3. Secure the brackets using the provided long screws and screwdriver. Do not overtighten.

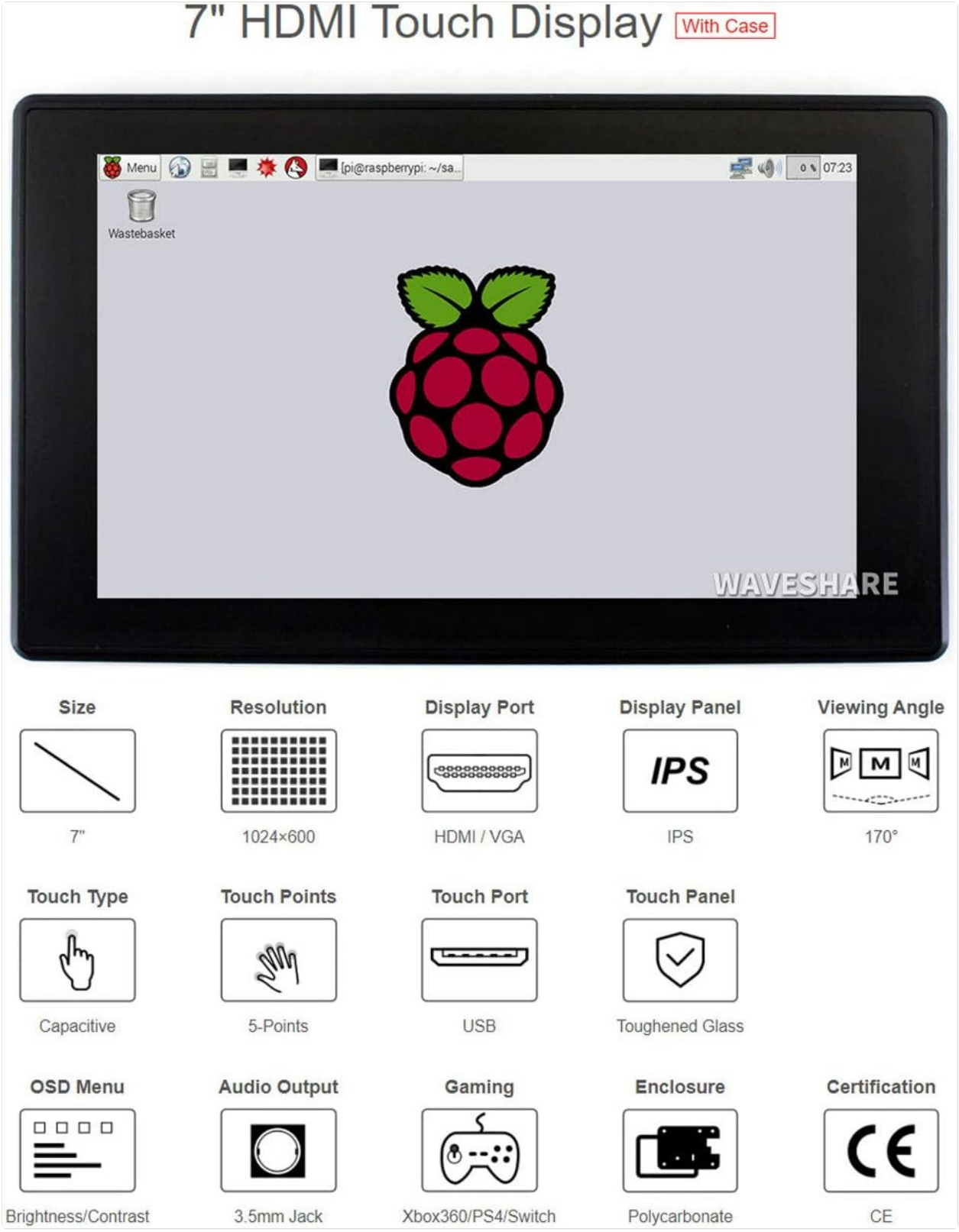


Figure 4.1: The 7-inch monitor with its stand brackets attached, showcasing its compact and stable design.

4.2 Raspberry Pi Connection Setup

To ensure proper functionality with Raspberry Pi, specific configuration changes are required:

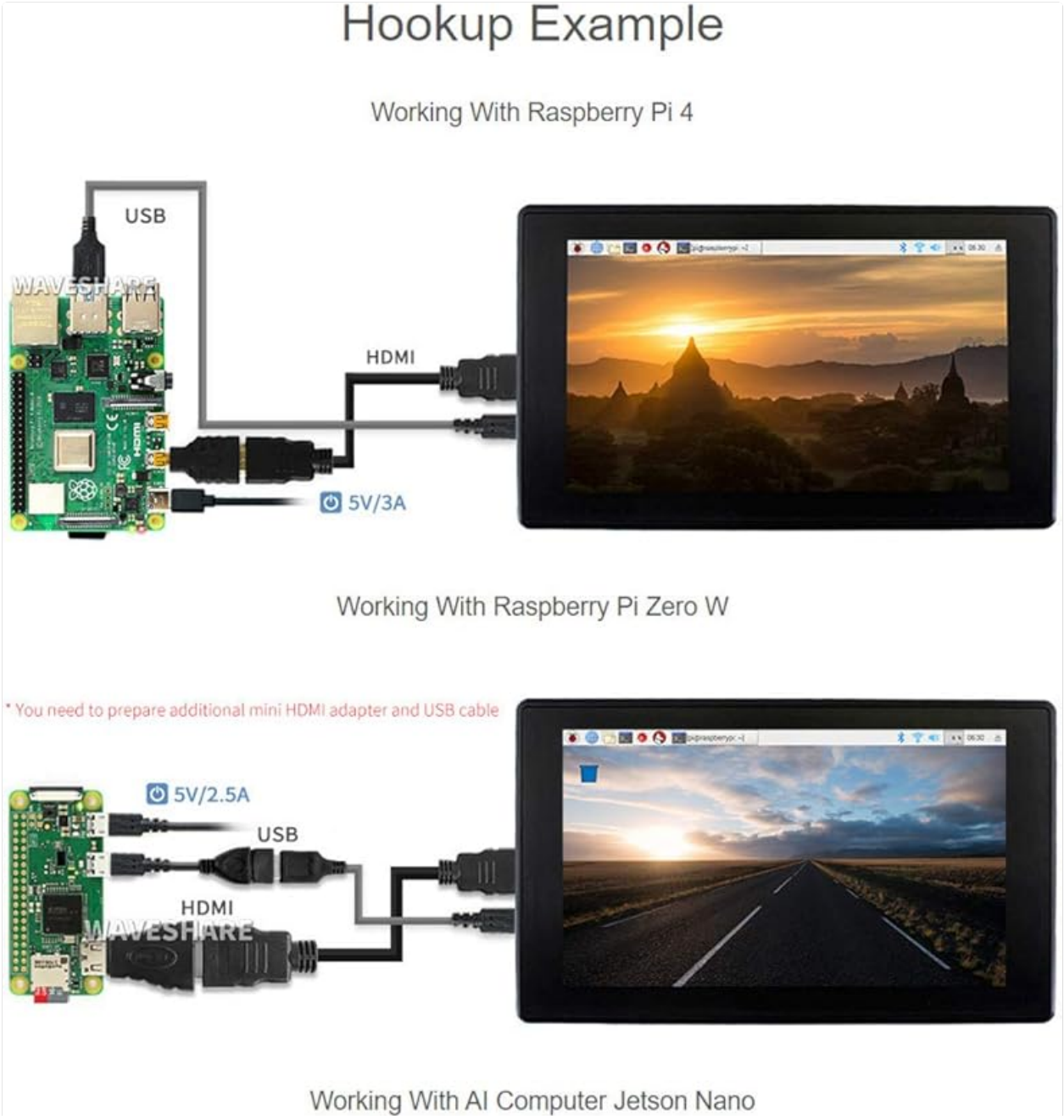
1. Insert your Raspberry Pi's SD card into a computer.
2. Open the config.txt file located in the root directory of the SD card.
3. Add the following lines at the end of the file:

```
max_usb_current=1
hdmi_force_hotplug=1
config_hdmi_boost=7
hdmi_group=2
hdmi_mode=87
hdmi_drive=1
display_rotate=0
hdmi_cvt 1024 600 60 6 0 0 0
```

If you are using the official Raspberry Pi OS (2021-10-30), change:

```
dtoverlay=vc4-kms-v3d
to:
#dtoverlay=vc4-kms-v3d
```

4. Save the changes and safely eject the SD card.
5. Insert the SD card back into your Raspberry Pi.
6. Connect the HDMI and TOUCH interfaces of the monitor to the Raspberry Pi's card.
7. Power up the Raspberry Pi, and the display and touch functionality should work properly.



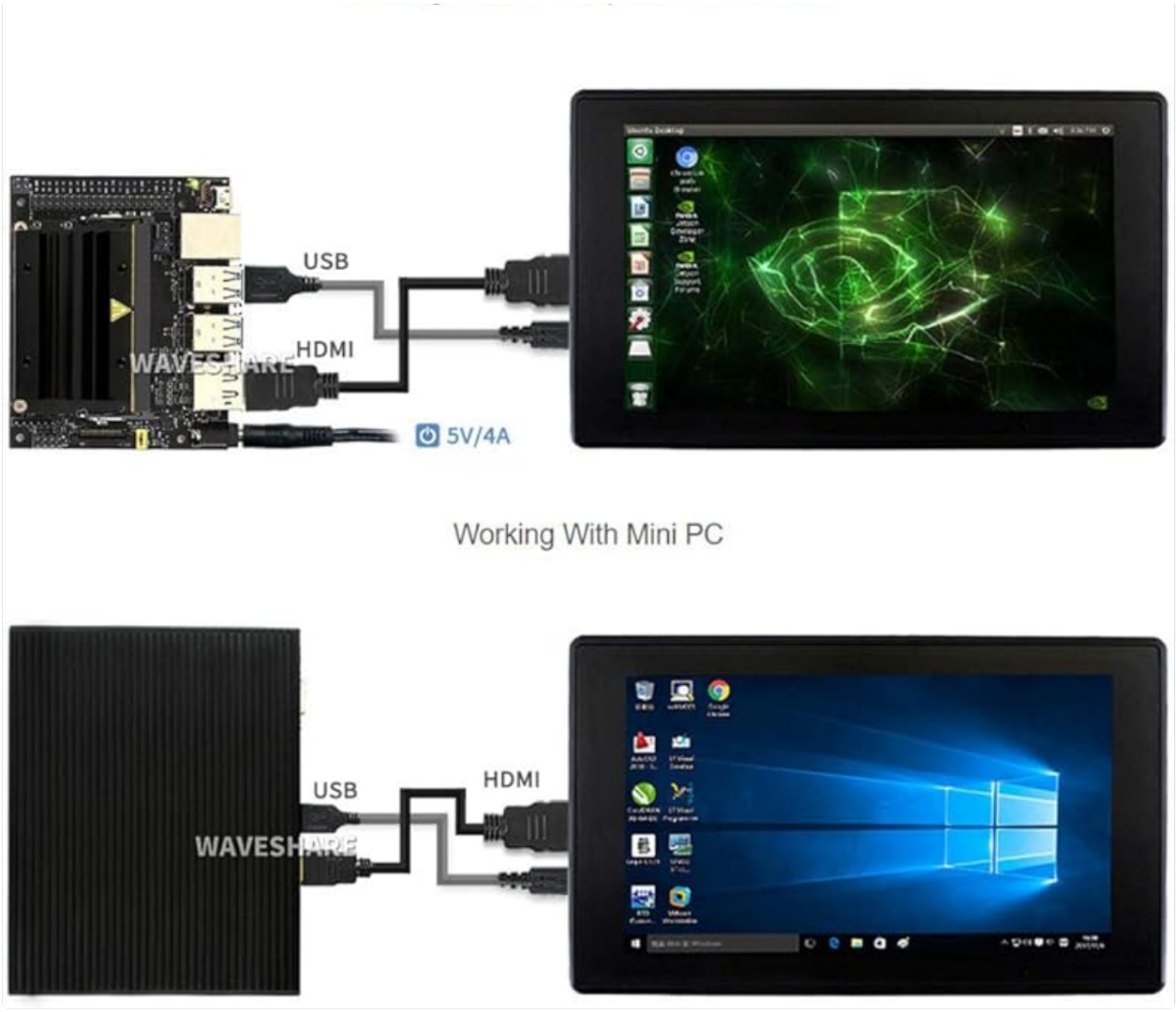


Figure 4.2: Visual guide for connecting the 7-inch monitor to a Raspberry Pi, showing HDMI and USB connections.

4.3 PC Connection Setup

For PC connection, set the resolution according to the instructions in the manual. If using dual monitors, configure the primary and secondary screens, and adjust the resolution for each monitor accordingly.

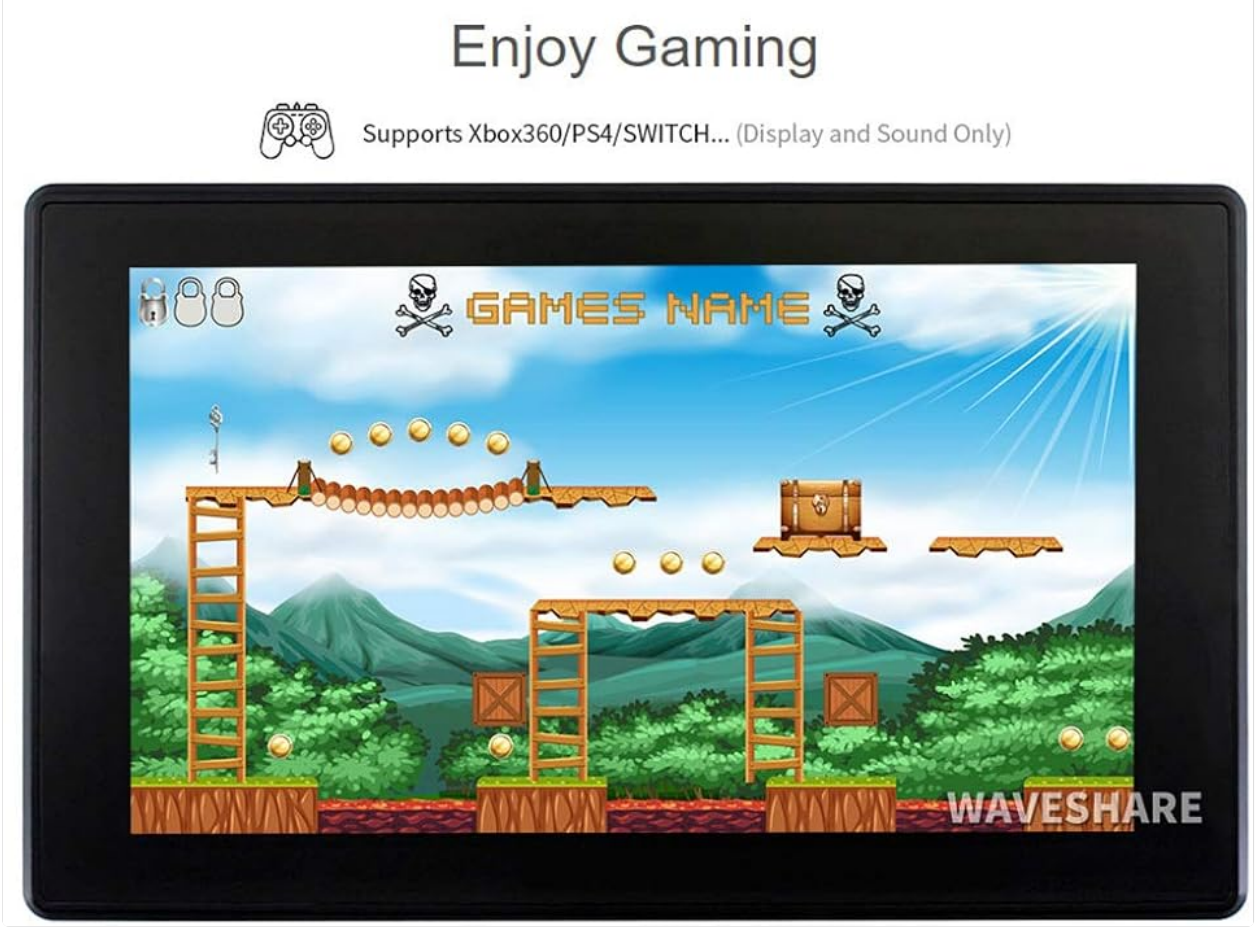


Figure 4.3: The 7-inch monitor connected to a PC, demonstrating its use as an external display.

5. Operating the Monitor

5.1 On-Screen Display (OSD) Menu

The monitor features tactile buttons on the back for navigating the OSD menu. These buttons allow you to adjust various display settings.

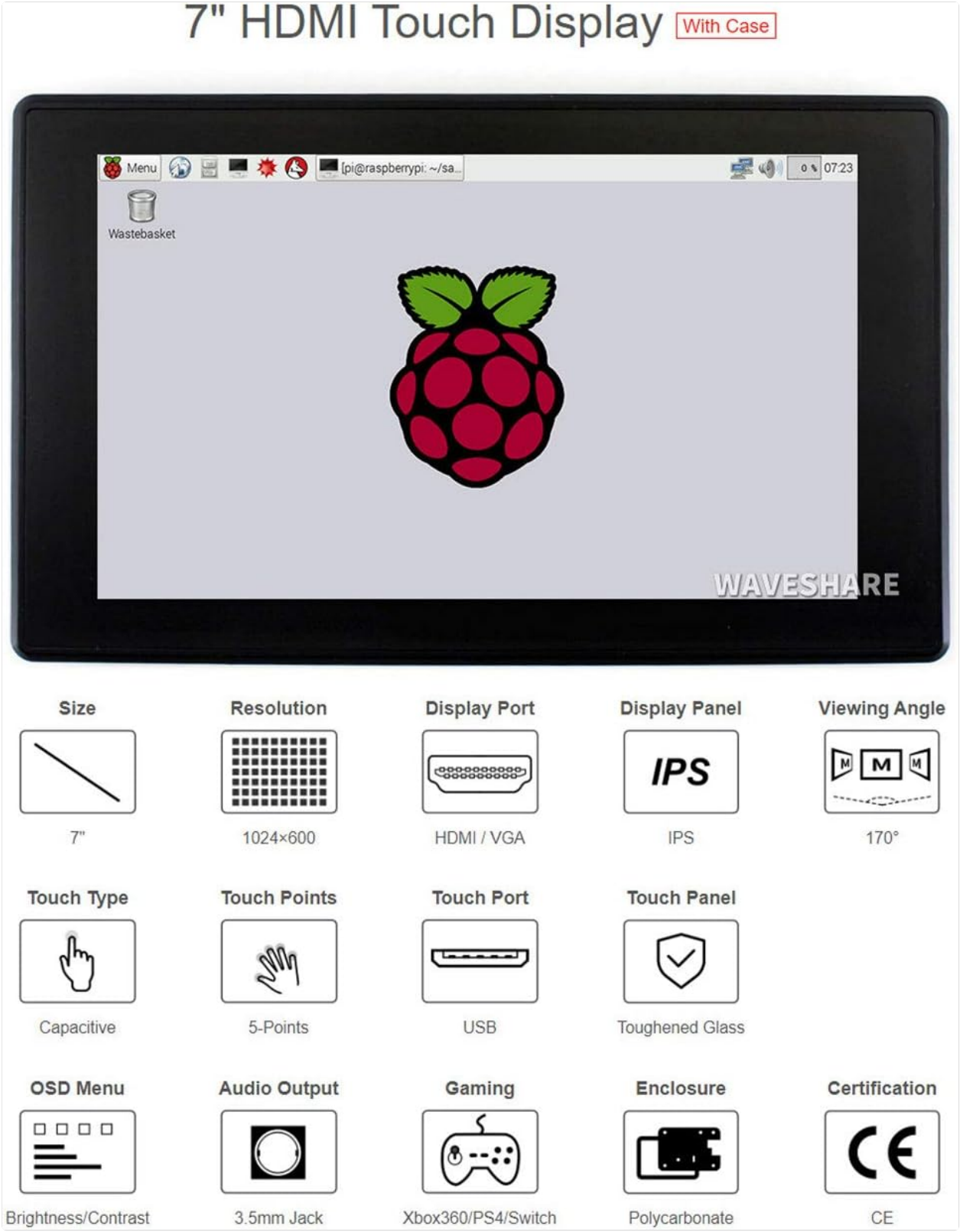


Figure 5.1: Close-up of the monitor's rear panel, highlighting the OSD menu buttons for navigation and control.

- **Menu:** Press to open the main menu, then press again to enter a sub-menu.
- **Left/Up:** Navigate left/up in the menu, or decrease values.

- **Right/Down:** Navigate right/down in the menu, or increase values.
- **Return:** Exit the current menu or return to the previous menu.
- **Power:** Turn the display on/off.

5.2 Touch Control

The capacitive touch screen supports up to 5-points touch, depending on the operating system. This allows for intuitive interaction with compatible devices.

Figure 5.2: A hand interacting with the touch screen, demonstrating the responsive touch control for navigating the interface.

6. Maintenance

To ensure the longevity and optimal performance of your monitor, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the external housing. For the screen, use a soft cloth slightly dampened with water or a non-abrasive screen cleaner. Avoid harsh chemicals.
- **Handling:** Avoid dropping the monitor or subjecting it to strong impacts. Do not place heavy objects on the screen.
- **Environment:** Keep the monitor in a well-ventilated area, away from direct sunlight, heat sources, and

excessive moisture.

7. Troubleshooting

- **Monitor is not powering on:** Ensure the power cable is properly plugged into the Raspberry Pi and the included USB-A to C cable is securely connected between the board and the display.
- **Image is reversed:** The monitor does not support image flip.
- **Touch functionality not working:** Make sure the USB-A to C cable is connected between the Raspberry Pi board and the display, directly from the display to the power socket.
- **No signal on display:** Ensure the HDMI cable is properly connected between the Raspberry Pi board and the display. If using a mini HDMI port, make sure to use the included mini HDMI to HDMI adapter.
- **Operating systems supported:** Windows 11/10/8.1/7, Raspbian, Ubuntu, Kodi.
- **Using with PS3/PS4/Xbox One/Xbox 360:** Yes, please use the HDMI port.
- **Power source shut off, monitor not turning back on:** If the monitor will come back on, or do you have to press the button.
- **No sound:** This monitor has no built-in speakers. For sound output, connect external speakers via the 3.5mm audio jack.

8. Warranty and Support

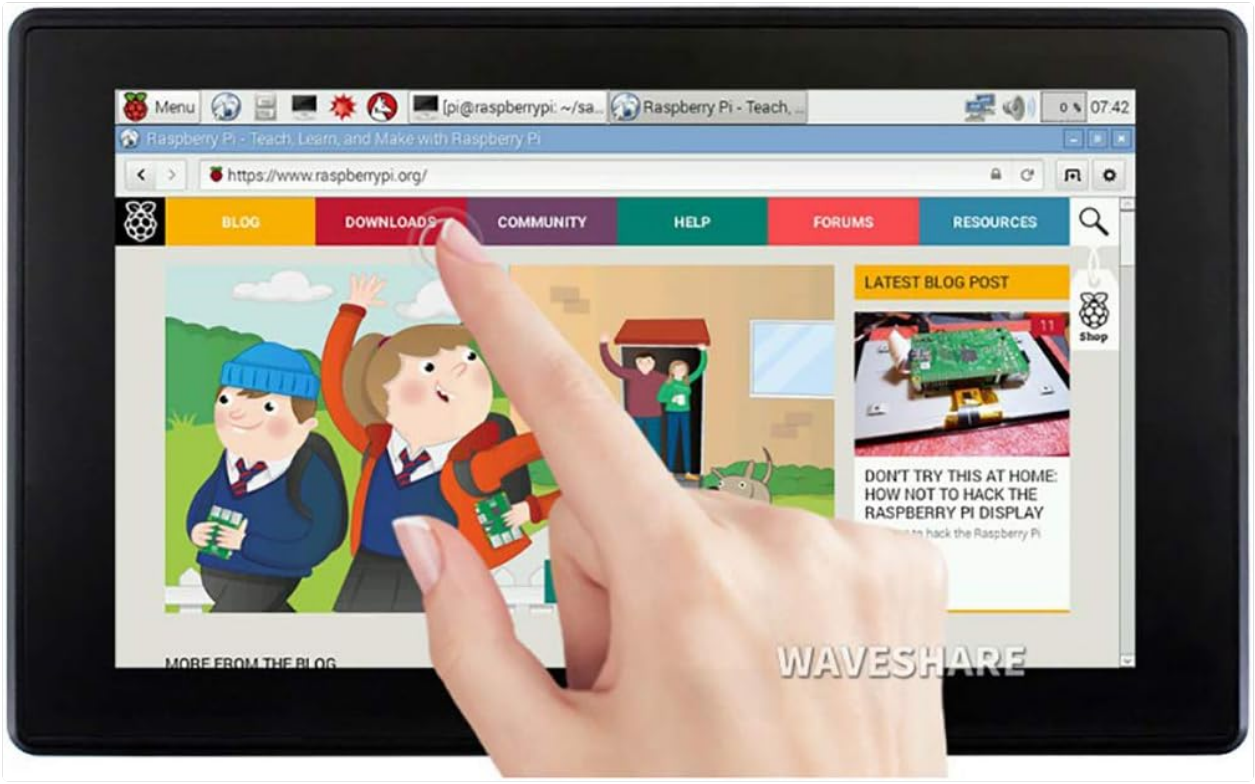
The product comes with a 12-month warranty for quality-related issues. You can return any undamaged product within 12 months for a refund or replacement. Shipping costs and import duties/taxes are not included in the refund/replacement process.

Contact Information:

- **Website:** www.eyoyousa.com
- **Email:** support@eyoyomonitor.com
- **Tel:** 909-317-8588 (9:00AM-5:00PM; Monday-Friday)
- **USA Office Address:** 10700 Jersey Blvd Ste 640, Rancho Cucamonga, CA 91730, USA

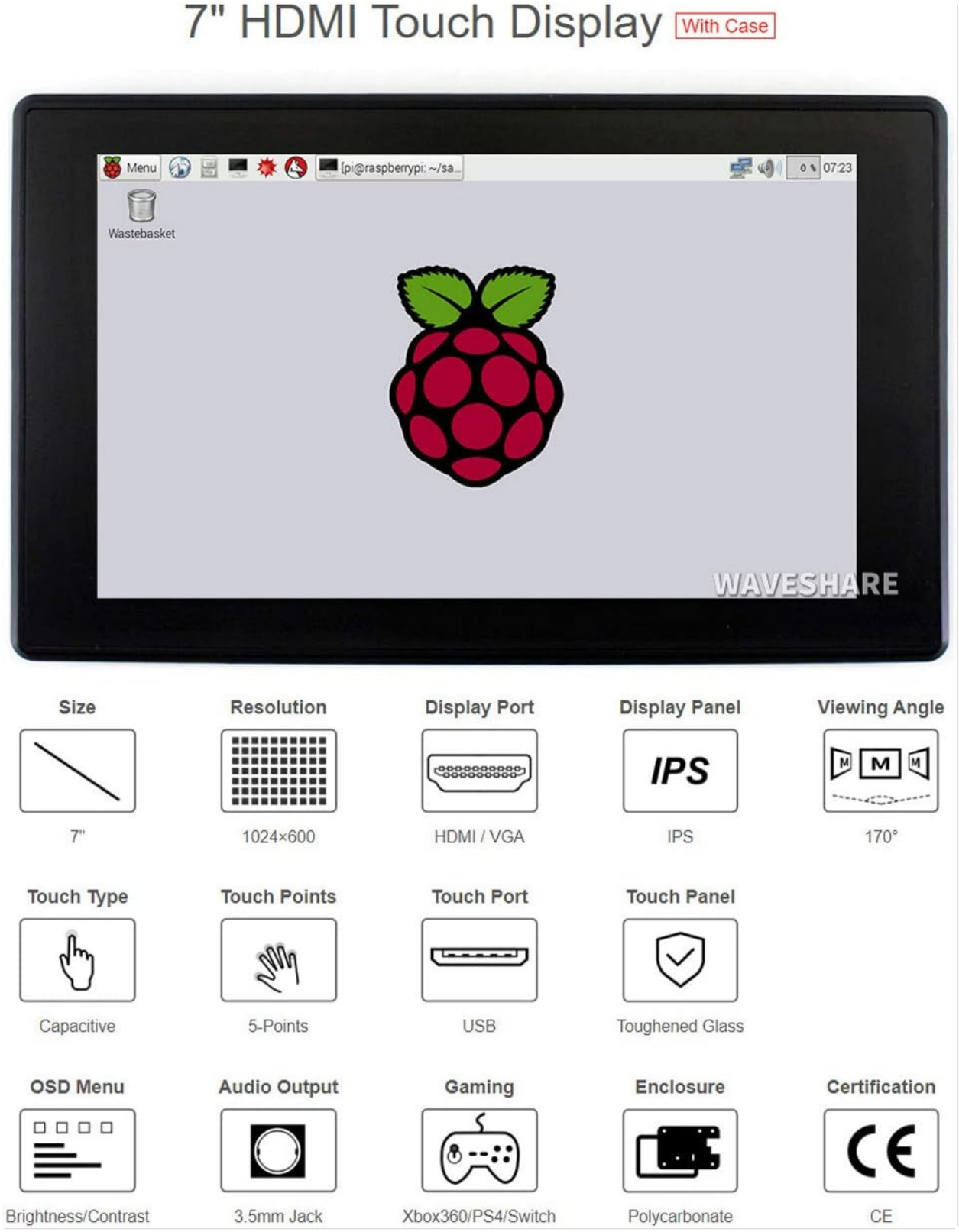
9. Media Gallery

Product Images



Front view of the 7-inch HDMI LCD (H) monitor, showcasing its sleek design and display area.

Side view of the monitor, illustrating the attached stands and its slim profile.



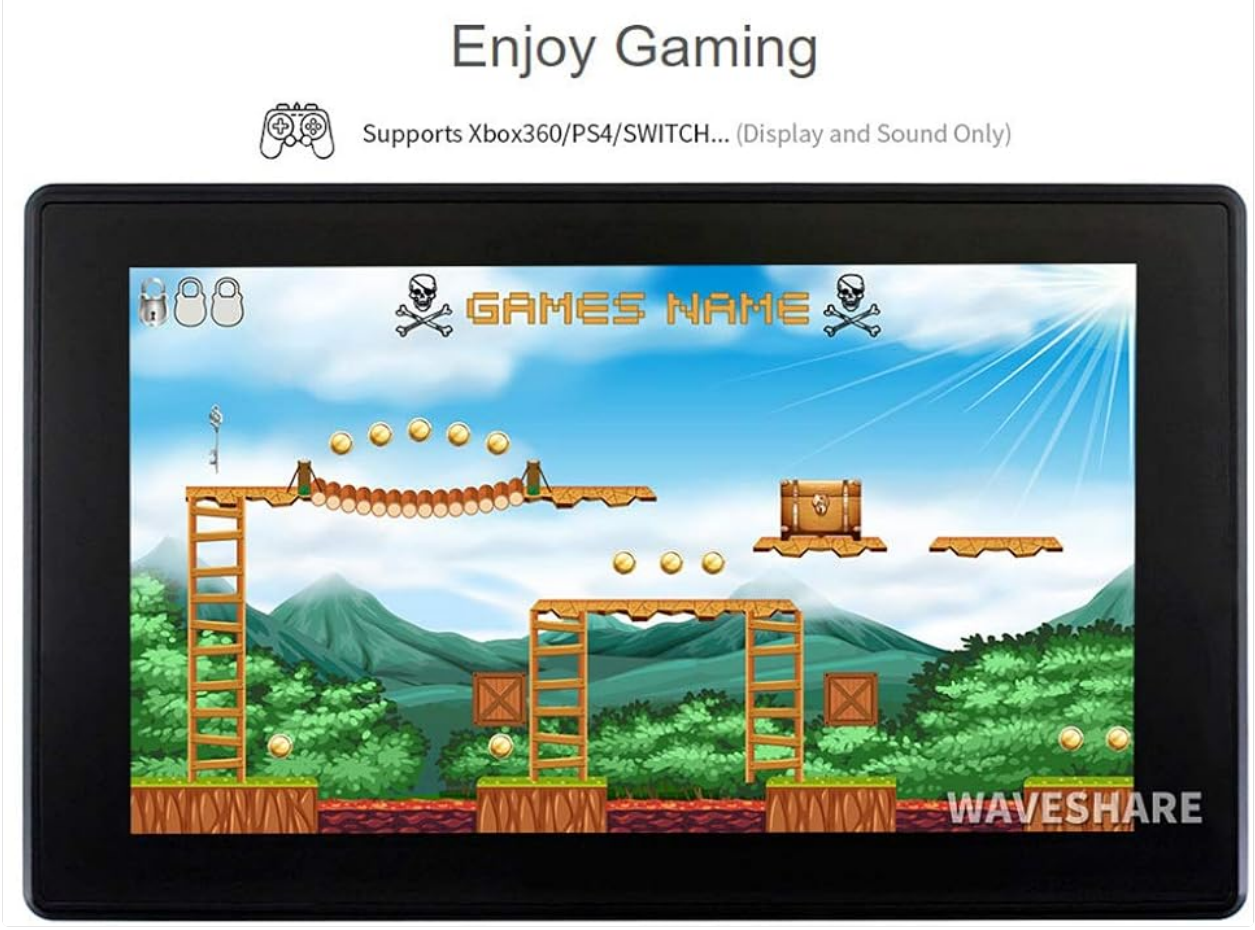
Rear view of the monitor, detailing the various ports (HDMI, Touch, DC) and control buttons (Exit, Direction, Menu, Power).

Working With Raspberry Pi Zero W

Working With AI Computer Jetson Nano

Working With Mini PC

Diagram showing how to connect the 7-inch monitor to a Raspberry Pi 4, including power and HDMI connections.



Illustrations of the monitor connected to a PC and a Jetson Nano, demonstrating its versatility across different platforms.

Detailed diagram showing the physical dimensions of the monitor and the layout of its various ports and buttons.

Official Product Videos

Video: A detailed overview of the 7-inch touchscreen monitor, highlighting its 1024x600 resolution and features.

Video: Installation guide for the ROADOM Touch Screen Monitor, demonstrating how to set it up with a case and connect it.

Video: A comprehensive look at the 7-inch 1024x600 IPS Capacitive Touchscreen, specifically designed for Raspberry Pi.

Video: Step-by-step instructions on how to install the 7-inch screen, including physical assembly and cable connections.

Video: Demonstration of the 7-inch HDMI Touchscreen IPS Capacitive Screen, highlighting its features and compatibility with Raspberry Pi5.

Video: Guide on how to install the Raspberry Pi board with the screen, detailing the assembly process.

Video: An overview of the Hosyond 7-inch IPS DSI Display Touchscreen, showcasing its features and compatibility with Raspberry Pi.