

#### 7-Inch HDMI LCD Display with Capacitive Multi-Touch Touchscreen

#### SKU: U6104

#### Introduction

This UCTRONICS Display is a 7" LCD capacitive touchscreen display which receives the video/ audio signal through the HDMI port, and the touchscreen input through a micro-USB port. It requires three connections: a USB cable connected to a 5V power supply, an HDMI cable and another USB cable (for touchscreen) both connected to the video output device. The 5-finger touch feature requires OS and software support.

It is well integrated with single-board computers such as the Raspberry Pi series and serves as a small screen for your PC or video game consoles. The micro-HDMI to HDMI adapter cable is to use with micro-HDMI devices like the Raspberry Pi 4, and the HDMI-to-HDMI connector is an alternative to a standard HDMI cable.

#### Package Contents

- 1 x UCTRONICS 7" LCD HDMI display with a capacitive multi-touch touchscreen
- 1 x Micro-HDMI to HDMI adapter cable for Raspberry Pi 4 and other micro-HDMI devices
- 1 x HDMI-to-HDMI connector as an HDMI cable alternative for Pi 3B+ and earlier models
- 1 x Micro USB to USB cable for power or USB touch controller
- 1 x Instruction manual

## UCTRONICS Team

- Website: www.uctronics.com
- GitHub Link For Software Package : https://github.com/UCTRONICS/ UCTRONICS\_HDMI\_CTS
- Email: support@uctronics.com

#### Note

1. The native pixels of this display is **1024×600**. It will downscale and squeeze HDMI inputs with larger resolutions to match its own.

2. Avoid EMI (electromagnetic interference) during use. The capacitive touchscreen may misbehave when placed near some power adapters, mouse, or data cables.

3. Feed enough power to this display with a dedicated power cable, otherwise unstable connections may result. Power adapters are preferred over onboard USB ports. We've included one cable, but two are recommended for both power and touch.

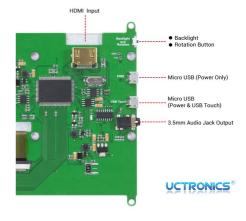
4. Enable **HDMI hotplug** to solve **No Signal**. Computers like RPi may ignore HDMI displays powered after it boots up, so the Pi is up but the display shows No signal. It's also applicable to single-cable touchscreen connection, where the **USB Touch** port receives both power and touch from the host. Set **hdmi\_force\_hotplug=1** in config.txt, and know more details on: <u>https://www.raspberrypi.org/</u> <u>documentation/configuration/config-txt/video.md</u>

5. The touchscreen double-click action is not perfectly supported in Raspbian due to the limited response time and system driver issues. It will work properly on another operating system such as Windows 10.

## **Features and Specs**

- Native Resolution: 1024 x 600
- Supported Input Resolution: Up to 1920 x 1080 and auto downscaling
- Power Consumption: 800mA @ 5V
- Plug-and-Play Touchscreen: Capacitive USB-enabled touch controller
- Multi-touch: 5-finger touch (requires OS and software support)
- Raspberry Pi Friendly: Support all RPi models (Pi Zero requires an extra adapter)
- Touchscreen Monitor: Work as a compact monitor with a USB touchscreen controller
- Backlight Control: On-board mode switch button for turning on/off the LCD backlight
- Power-off rotation memory: On board button for rotating the screen and the rotation is kept after powered back on.
- HDMI Audio Split: Extract audio out of the HDMI signal to the 3.5mm audio jack

#### Connectors Explanation



The connectors on the back of the display

## Use the Display

- Power the display through the PWR port (Micro USB power) until you see the UCTRONICS logo.
- Connect the display to your video output device with an HDMI cable until you see the video feed. Use the micro HDMI to HDMI adapter cable if the connector does not match.
- Connect the USB touch port of the display to the USB port on the video output device to enable touchscreen features.

# Add resolution to Raspberry Pi

The default resolution may be downscaled to fit the native pixels, which makes the onscreen contents unreadable. Follow the steps below to add the 1024 x 768 resolution to the Raspberry Pi for a better mapping with regard to pixels.

wget https://raw.githubusercontent.com/ UCTRONICS/UCTRONICS\_HDMI\_CTS/master/ uc595/hdmi\_1024x768\_cfg.sh sudo chmod +x hdmi\_1024x768\_cfg.sh sudo ./hdmi\_1024x768\_cfg.sh

#### For Raspberry Pi 4

sudo nano /boot/config.txt
Comment out the following 2 lines
#dtoverlay=vc4-fkms-v3d
#max\_framebuffers=2