# **UCTRONICS**

# 3.5" LCD HDMI Display

# Model: B0106

# VARIATIONS

- B010601: Display
- B010604: Display with case

# **INTRODUCTION**

UCTRONICS B0106 is a 3.5" display with HDMI interface and Raspbian touchscreen support. It's designed for Raspberry Pi but also serves as a general-purpose compact HDMI display and an alternative to those large ones.

## SPECIFICATION

Model number:

B010601, B010604(with case)

Display

3.5" (diagonal)

Native resolution

480×320 pixels

Video Transmission Interface

HDMI

**HDMI** input support

480×320 ~ 1920×1080 (scaled)

**Power Input** 

Micro USB or GPIO

Dimensions

2.20"x3.37" (55.98mm x 85.60mm)

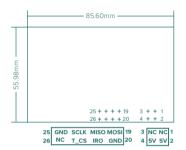
#### Audio

3.5mm audio jack (HDMI audio split)

# **Touch Screen Support**

Raspbian (via SPI interface)

# **HARDWARE INSTALLATION**



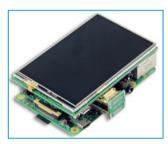


Figure 1

Figure 2

The Figure 1 shows the display module pin out and dimension. Connect the 3.5-inch HDMI LCD to the Raspberry Pi board like the Figure 2 shows. (B010604 please follow the separate assembly instruction.)

**Step1** Align the pin 1 of the edge connector between the LCD display and Raspberry pi board

 $\textbf{Step2} \ \mathsf{Connect} \ \mathsf{the} \ \mathsf{HDMI} \ \mathsf{interface} \ \mathsf{with} \ \mathsf{the} \ \mathsf{HDMI} \ \mathsf{adapter} \ \mathsf{board}.$ 

Step3 Power on the Raspberry Pi board

#### Note:

- 1.Please unplug the HDMI connector before unplugging the screen from the GPIO port.
- 2. You can push the on-board button near the micro USB port to adjust and turn on/off the backlight.

## ■ DOWNLOAD AND INSTALL DRIVER

The driver includes the settings of the Raspbian OS resolution and touch screen support. If you have B010602, The LCD driver has been already installed in the Micro SD card shipped with the bundle kit that includes a Micro SD card.

Otherwise users have to install the driver manually with the following steps for a clean system. Make sure the SD card you choose to install the driver has no quality problem. When downloading and installing the driver, please do not turn off the power.

The online version of this tutorial where you can copy and paste the code is available at:

https://www.uctronics.com/download/Amazon/B0106.pdf

#### Step1 Update your Raspberry Pi system

sudo apt-get update

## Step2 Download the driver package

git clone https://github.com/UCTRONICS/UCTRONICS LCD35 HDMI RPI.git

#### Step3 Come in the UCTRONICS LCD35 HDMI\_RPI

cd UCTRONICS LCD35 HDMI RPI/Raspbian/

# Step4 Get run permissions

sudo chmod +x \*.sh

## Step5 Install the UCTRONICS LCD35 HDMI driver

sudo ./install\_uc\_touch\_180.sh

Wait for  $2^{\sim}3$  minutes, and the system will be installed and restarted automatically.

If you want to roll back to the pre-installation system, you can use the below command

sudo ./restore.sh

If you don't want to run those commands to install the LCD driver, we also provide ready-to-use system image file "UCTRONICS\_LCD35\_HD-Ml.imq". For display with UC-558 in the back (newer revisions).

http://uctronics.oss-us-west-1.aliyuncs.com/LCD35/image/UCTRONICS\_LCD35\_HDMI\_UC558.img

# INSTALL CALIBRATION SOFTWARE

#### Step1 Install calibration software

cd UCTRONICS\_LCD35\_HDMI\_RPI/Raspbian/sudo ./calibrateToolInstall.sh

### Step2 Calibration screen

sudo ./calibration\_uc\_touch\_180.sh /dev/input/event1

Note: /dev/input/event1 is the sample screen node, you need to find the input node of your own screen and execute the command.

#### Step3 Calibrate and reboot

Tap the five calibration points on the screen in sequence with the stylus. The screen will reboot automatically after calibration is complete.



# **CONTACT US**

If you need any further support, feel free to contact us.

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