

# Use to C-3.2inch TFT+Touchscreen Shield



Fully assembled 3.2inch display with 320×240 pixels TFT LCD and a resistive touch overlay. 2×13 tall female header is already soldered on the PCB.

Fast 30Mhz SPI is used for the faster frame rate.

You will need an official Ubuntu image to configure it. **You can simply download the Kernel updates and configure your Board for this display shield.**

[Where to buy](#)

## Specification and pin information

## How to activate the 3.2inch LCD shield with your ODROID-C1+

- You need a **HDMI connection** or a **Serial console connection** to follow below instruction.
- Operation confirmed with testing in our [Ubuntu 16.04 LTS \(v2.1\)](#)

# Configuring framebuffer and Touch driver

## 0. Update your Kernel

```
sudo apt update && apt upgrade && apt dist-upgrade
```

## 1. Insert modules

```
sudo modprobe spicc
sudo modprobe fbtft_device name=odroidc_tft32 rotate=270
gpios=reset:116,dc:115 speed=32000000 cs=
```

You will have a new frame buffer /dev/fbX  
Find a framebuffer node.

```
ls /dev/fb*
/dev/fb2
cat /sys/class/graphics/fb2/name
fb_odroidc_tft32
```

## Run Console

### 0. Install package

Install fbset package to manage framebuffer. It might be installed in advance.

```
sudo apt-get install fbset
```

### 1. Run con2fbmap

```
# usage: con2fbmap <console> <framebuffer>
sudo con2fbmap 1 2
```

### 2. Change foreground virtual terminal

The command chvt N makes /dev/ttyN the foreground terminal.

```
sudo chvt 1
```

```
chvt 1 : console
chvt 7 : X11
```

# Run Xwindow

## 0. Create a new config file

```
sudo mv /etc/X11/xorg.conf /etc/X11/xorg.conf.old
sudo vi /etc/X11/xorg.conf
```

## 1. And then, add following lines in "/etc/X11/xorg.conf" file.

```
Section "Device"
    Identifier      "fbdev"
    Driver          "fbdev"
    Option         "fbdev" "/dev/fbX"
EndSection
```

## 2. Run

```
sudo /etc/init.d/lightdm restart
sudo chvt 7
```

# Touch Calibration

- [How to enable & calibrate your touchscreen](#)

# Auto Run

- [Automatically start console mode](#)
- [Automatically start desktop GUI mode](#)

# Applications

- [Using the mplayer on framebuffer](#)
- [Using the Keypads on the TFT LCD](#)

From:  
<http://wiki.odroid.com/> - **ODROID Wiki**

Permanent link:  
[http://wiki.odroid.com/accessory/display/3.2inch\\_tft\\_touchscreen\\_shield/c1/start?rev=1501223855](http://wiki.odroid.com/accessory/display/3.2inch_tft_touchscreen_shield/c1/start?rev=1501223855)

Last update: **2017/07/28 07:37**

