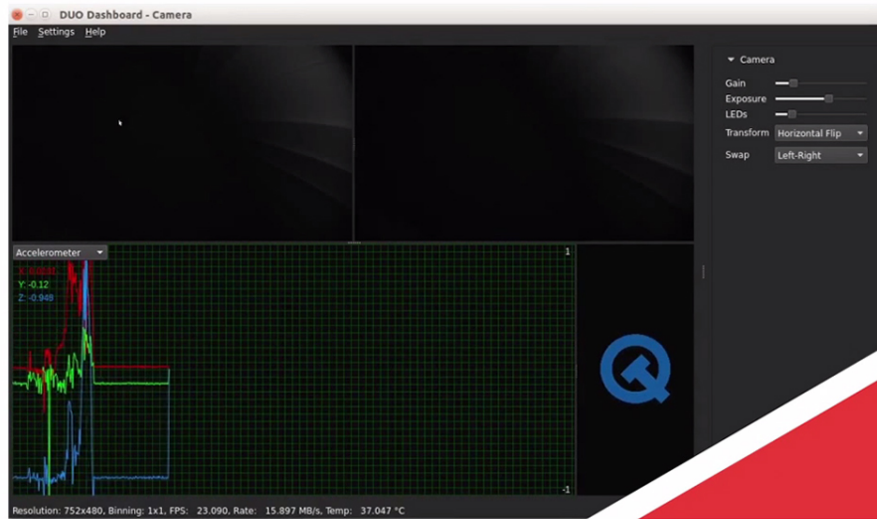


DUO Linux Installation



DUO
INSTALL GUIDE

UBUNTU INSTALLATION GUIDE

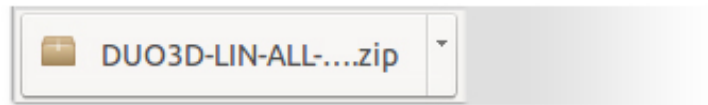
Overview

This guide outlines installing DUO devices on Ubuntu Desktop **we require version** which can be downloaded from here as an `iso` (14.04.2 x64). Before starting verify that your system meets all the system requirements.

Step 1 - Download the Software

Download the latest DUO Software to start using your device. On Linux the DUO requires a driver configuration which is included in the package.

The file will show up on your download bar (The package contains the DUO API/SDK, Dashboard and Utilities)



Step 2 - Install the Software

Before plugging the camera you must install the device driver and required libraries. This will require the terminal and basic knowledge of using commands.

- Open a new Terminal and navigate to the extracted package location
- Verify you are using the supported version of the kernel: **3.16.0-30-generic** using `uname -r`
- For this guide we assume you extracted your package to this path:
~/Documents/DUO3D-LIN-ALL-v1.0.0.148/

2.1 - Install Requirements

Get the required libraries and tools using this command:

```
sudo apt-get install qt5-default libgoogle-glog-dev libblas-dev liblapack-dev libsuitesparse-dev
```

2.2 - Install the Driver

You must install and load the DUO Kernel Module (**duo.ko**) before we must get into the **DUODriver** folder with this commands:

```
cd ~/Documents/DUO3D-LIN-ALL-v1.0.0.148/DUODriver/
```

Once in the proper directory you can use these commands to **install, load or unload** the module:

```
sudo ./InstallDriver
```

```
sudo ./LoadDriver
```

Step 3 - Connect the DUO

Only after you have successfully installed the requirements then connect the DUO to your computer with the supplied USB cable.

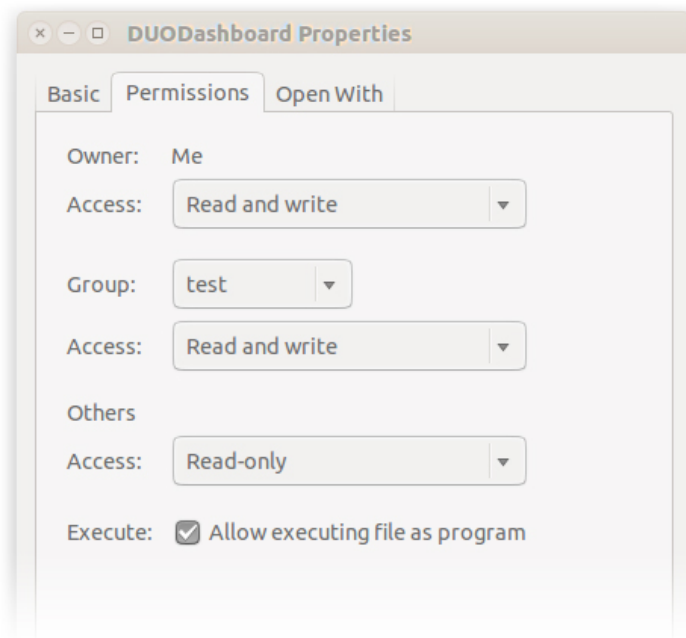
- **To verify that the device is connected** to the system you can view the node `duo0` appears in `/dev` directory on the file system.
-

Step 4 - Start the Dashboard

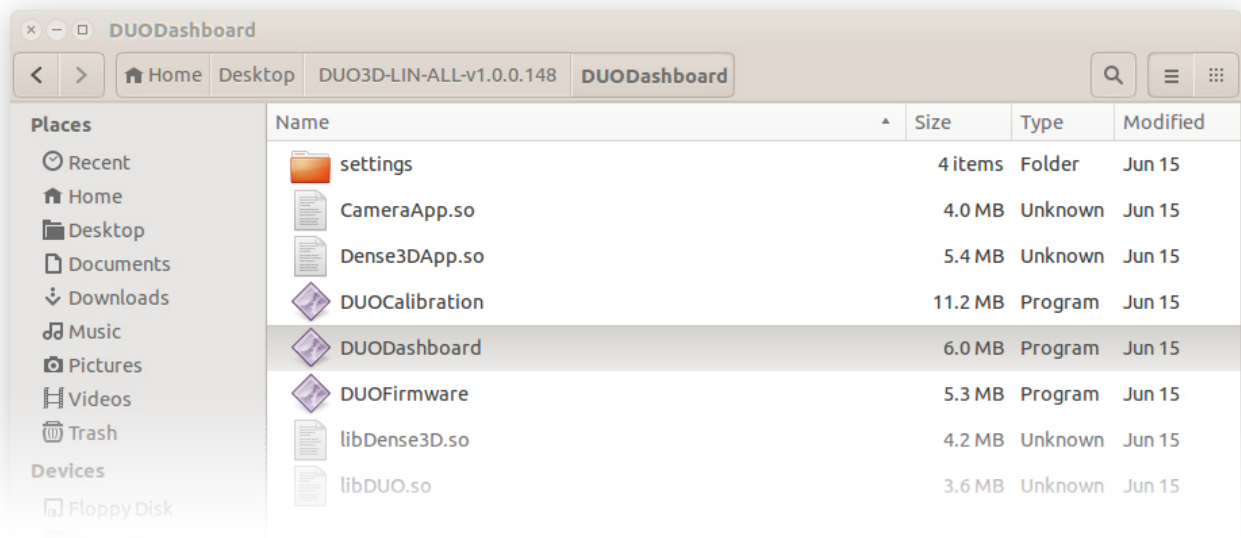
After the installation you will have new applications available on your system. Going to where you extracted the package, here is an example with the user directory at

`~/Documents/DU03D-LIN-ALL-v1.0.0.148/DUODashboard/` . If the application does not run make sure you have a valid **LicenseKey** set in the `DUODashboard.cfg` settings file.

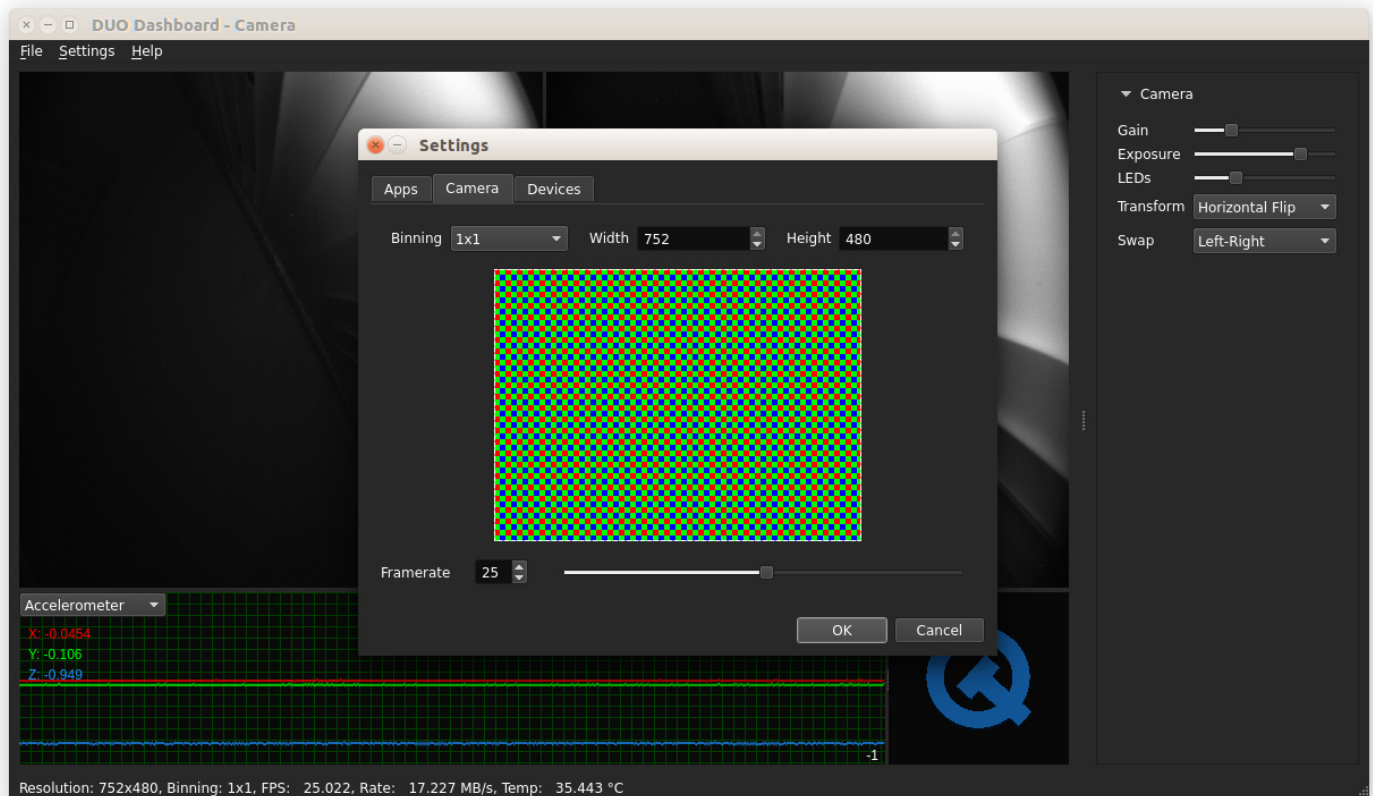
Make sure the permissions on the file to **Allow executing file as program**. This can be done with Terminal with this command
`chmod +x DUODashboard` or **right clicking** on the file.



Running the **DUODashboard** application in the folder (Located where you extracted the package)



After properly installed device and running, the dashboard should look like this:



Using the Applications

Using the Dashboard and Calibration applications will let you test if your DUO device is properly installed, tweak its parameters and view the output. Once your device is operating properly you can start reading the DUO Dashboard article to get started on the following guides.

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- Capturing - Outlines how to get started capturing data from the cameras and motion sensors.
 - Configuring - Review of the DUO Dashboard application settings and configuration parameters.
 - Calibrating - Guide on how to calibrate your device for use with Dense3D API.
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If your devices is not recognized try resolving the issue with some of the tips in the Troubleshooting article.

Related

- DUO ARM Installation
 - DUO Dashboard
 - DUO Calibration
 - DUO Developers
 - DUO Devices
 - DUO Downloads
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