

# Installation of Quantis drivers and libraries

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## 1 Device drivers

**Note:** In the following instructions Quantis-v11.01.12 should be replaced by the appropriate directory depending on the software package you are using.

### 1.1 PCI and PCI-express version

1. Install module-assistant package  
`apt-get install module-assistant`
2. Prepare your system for module compilation  
`m-a prepare`
3. Unpack the Quantis software package and go to  
Quantis-v11.01.12/Drivers/Unix/QuantisPci.
4. Compile the module  
`make`
5. Install the module  
`make install`  
and check if the module was installed properly  
`find /lib/modules/ -name quantis_pci.ko`
6. Make sure that the drive will be loaded during the next boot  
`echo "quantis_pci" >> /etc/modules`
7. Follow instructions in Section 1.3.

### 1.2 USB version

1. Install libusb and libusb-dev packages  
`apt-get install libusb-1.0-0 libusb-1.0-0-dev`
2. Check your device with `lsusb`  
`lsusb -d 0aba:0102 -v` or `lsusb -v | grep Quantis`
3. Follow instructions in Section 1.3.

### 1.3 Device permissions

1. Make sure that the plugdev group exists  
`cat /etc/group | grep plugdev`
2. Add user to the plugdev group  
`usermod -G plugdev -a LOGIN,`  
where LOGIN is the login name of the user
3. Copy file  
`Quantis-v11.01.12/Drivers/Unix/idq-quantis.rules`, to `/etc/udev/rules.d/` directory and reload the UDEV rules  
`udevadm control --reload-rules`

## 2 Libraries

1. Unpack distribution files from `Quantis-v11.01.12/Packages/Linux` to a selected directory, e.g `/usr/local/IDQ/Quantis`  
`mkdir /usr/local/IDQ`  
`tar xjvf QuantisRNG-2.5.0-Linux-amd64.tar.bz2`  
`mv QuantisRNG-2.5.0-Linux-amd64 /usr/local/IDQ/Quantis`  
After this step the EasyQuantis applicaiton shoul be in `/usr/local/IDQ/Quantis/bin/EasyQuantis`
2. Copy `Quantis.h` and `DllMain.h` from `Quantis-v11.01.12/Libs-Apps/Quantis` to `/usr/local/IQD/Quantis/include`
3. Add `/usr/local/IDQ/Quantis/lib` (or `/usr/local/IDQ/Quantis/lib64`) to `/etc/ld.so.config` or some file which in included by this file e.g `/etc/ld.so.conf.d/quantis.conf`
4. Update the loader cache  
`ldconfig`