

## How to install R502 readers on Linux and Raspberry

(Example for Ubuntu/Debian systems).

1. Open a root terminal window; you need to have administrator rights.

Get and install the libusb library with the apt-get command:

```
apt-get install libusb-dev libusb++-0.1-4c2
```

Check the installation: You shall find the library libusb.so under the directory /usr/lib/

2. Download and install the libccid package:

```
apt-get install libccid
```

3. Download and install the pcsc-lite package:

```
apt-get install pcscd
```

4. Check that the pcscd service is running:

In the terminal console, run the command `ps -A`.

You should find a "pcscd" process running in the list displayed

Run pcscd in terminal

5. Download and install libpcsclite1:

```
apt-get install libpcsclite1
```

6. Download and install libpcsclite-dev:

```
apt-get install libpcsclite-dev
```

7. Check whether the R502 reader is detected:

```
your_system_name:/tmp# lsusb
```

```
Bus 001 Device 002: ID 096e:0608
```

8. Use root to run "install script":

```
$ wget http://download.ftsafe.com/files/reader/product/R502/install.sh
```

```
$ sh install.sh or $ bash install.sh
```

9. After run "install script", then insert reader and start "pcscd" service.

Run "pcsctest" command to do test

Like below:

```
pcscd -adf //run pcscd service, for parameter, you can using "man pcscd" to  
get more helps  
pcsctest
```

10. To develop application based on FEITIAN R502, check below:

To develop your own application, just follow PCSC Lite APIs

[http://pcsclite.alioth.debian.org/api/group\\_API.html](http://pcsclite.alioth.debian.org/api/group_API.html)

For the test demo application, you can found in source code, which named "pcscstest"

[https://alioth.debian.org/frs/?group\\_id=30105](https://alioth.debian.org/frs/?group_id=30105)