# How to install WU600 with Ubuntu 18.04

1. Login your Ubuntu 18.04, and enter your working directory. For example:

```
root@ubuntu:/home/binn/project#
```

2. Copy the file of driver, whose name is "rtl8821CU_1804.tar.gz", into your working directory. And unzip this file with command of "**tar –xzvf rtl8821CU_1804.tar.gz**". For example:

```
root@ubuntu:/home/binn/project# ls
rtl8821CU_1804.tar.gz
root@ubuntu:/home/binn/project# tar -xzvf rtl8821CU_1804.tar.gz
```

3. Then, you may find a new folder **"rlt8821CU"** created. For example:

```
root@ubuntu:/home/binn/project# ls
rtl8821CU  rtl8821CU_1804.tar.gz
```

4. Then enter the directory of "rtl8821CU" , and "**sudo make**" with root authority.

```
root@ubuntu:/home/binn/project# ls
rtl8821CU  rtl8821CU_1804.tar.gz
root@ubuntu:/home/binn/project# cd rtl8821CU
root@ubuntu:/home/binn/project/rtl8821CU# sudo make
```

5. When complete, you may get the info as following.

```
  LD [M]  /home/binn/project/rtl8821CU/8821cu.o
  Building modules, stage 2.
  MODPOST 1 modules
  CC      /home/binn/project/rtl8821CU/8821cu.mod.o
  LD [M]  /home/binn/project/rtl8821CU/8821cu.ko
make[1]: Leaving directory '/usr/src/linux-headers-5.0.0-37-generic'
root@ubuntu:/home/binn/project/rtl8821CU#
```

6. Then, "**sudo make install**" the driver as following.

```
root@ubuntu:/home/binn/project/rtl8821CU#
root@ubuntu:/home/binn/project/rtl8821CU# sudo make install
mkdir -p /lib/modules/5.0.0-37-generic/kernel/drivers/net/wireless/realtek/rtl8821cu/
install -p -m 644 8821cu.ko  /lib/modules/5.0.0-37-generic/kernel/drivers/net/wireless/realtek/rtl8821cu/
/sbin/depmod -a 5.0.0-37-generic
root@ubuntu:/home/binn/project/rtl8821CU#
```

7. Driver installation done!
8. However, we have to go on to configure the **usb_modeswitch**. Otherwise, WU600 will work as a DISK but not a wi-fi adapter.
9. Edit the file of "/lib/udev/rules.d/40-usb_modeswitch.rules". Add an entry "ATTR{idVendor}=="0bda", ATTR{idProduct}=="1a2b", RUN+="usb_modeswitch '/%k'"" into this file as following screenshot.

```
# Part of usb-modeswitch-data, version 20170806
#
# Works with usb_modeswitch versions >= 2.4.0. Slash before %k parameter
# is for compatibility only. Versions >= 2.5.0 don't need it.
#
ACTION!="add|change", GOTO="modeswitch_rules_end"

# Adds a symlink "gsmmodem[n]" to the lowest ttyUSB port with interrupt
# transfer; checked against a list of known modems, or else no action
KERNEL=="ttyUSB*", ATTRS{bNumConfigurations}=="*", PROGRAM="usb_modeswitch --symlink-name %
p %s{idVendor} %s{idProduct} %E{PRODUCT}", SYMLINK+="%c"

SUBSYSTEM!="usb", ACTION!="add",, GOTO="modeswitch_rules_end"

# Generic entry for most Huawei devices, excluding Android phones
ATTRS{idVendor}=="12d1", ATTRS{manufacturer}!="Android", ATTR{bInterfaceNumber}=="00", ATTR
{bInterfaceClass}=="08", RUN+="usb_modeswitch '/%k'"

# Realtek RTL8821CU
ATTR{idVendor}=="0bda", ATTR{idProduct}=="1a2b", RUN+="usb_modeswitch '/%k'"

# HP LaserJet Professional P1102
ATTR{idVendor}=="03f0", ATTR{idProduct}=="002a", RUN+="usb_modeswitch '/%k'"


# HP LaserJet Professional P1102w
ATTR{idVendor}=="03f0", ATTR{idProduct}=="032a", RUN+="usb_modeswitch '/%k'"

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```

10. Enter the directory “/usr/share/usb_modeswitch/”.

```
root@ubuntu:/home#
root@ubuntu:/home# cd /usr/share/usb_modeswitch/
root@ubuntu:/usr/share/usb_modeswitch# ls
configPack.tar.gz
root@ubuntu:/usr/share/usb_modeswitch#
```

11. Unpack the file “configPack.tar.gz” with command “tar-xzvf configPack.tar.gz”. And then, delete “configPack.tar.gz”.

```
root@ubuntu:/usr/share/usb_modeswitch# rm configPack.tar.gz
```

12. Create a new file of “**0bda:1a2b**”. Yes, the file name is “**0bda:1a2b**”. Input the following item into this file.

```
root@ubuntu: /usr/share/usb_modeswitch
File  Edit  View  Search  Terminal  Help
# Realtek RTL8821CU
TargetVender=0x0bda
TragetProduct=0xc820
StandardEject=1
```

13. Copy “0bda:1a2b” into “/etc/usb_modeswitch.d/”

```
root@ubuntu:/usr/share/usb_modeswitch#
root@ubuntu:/usr/share/usb_modeswitch#
root@ubuntu:/usr/share/usb_modeswitch# cp 0bda:1a2b /etc/usb_modeswitch.d
```

14. Re-pack all the files including “0bda:1a2b” into “configPack.tar.gz”.

```
root@ubuntu:/usr/share/usb_modeswitch#
root@ubuntu:/usr/share/usb_modeswitch#
root@ubuntu:/usr/share/usb_modeswitch#
root@ubuntu:/usr/share/usb_modeswitch# tar -czvf configPack.tar.gz ./*
```

15. Delete all the files except configPack.tar.gz.

```
root@ubuntu:/home#
root@ubuntu:/home# cd /usr/share/usb_modeswitch/
root@ubuntu:/usr/share/usb_modeswitch# ls
configPack.tar.gz
root@ubuntu:/usr/share/usb_modeswitch#
```

16. Reboot your linux.
17. All done!

Total Command Summary:

(1) Driver installation

tar –xzvf rtl8821CU_1804.tar.gz

cd rtl8821CU

sudo make

sudo make install

(2) Configure USB_Switch

tar –xzvf configPack.tar.gz

vim 0bda:1a2b

cp 0bda:1a2b /etc/usb_modeswitch.d/

tar –czvf configPack.tar.gz ./*