

PTN3460_Backlight_User_Guide

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1. Install Ubuntu 16.04 (64-bit)

Step 1. Install Ubuntu 16.04.5 (64-bit), and check the version

\$ lsb_release -a

```
aaeon@aaeon-desktop:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:   Ubuntu 16.04.5 LTS
Release:      16.04
Codename:     xenial
```

Step 2. Check the Ubuntu kernel version (4.15.0)

\$ uname -a

```
aaeon@aaeon-desktop:~$ uname -a
Linux aaeon-desktop 4.15.0-29-generic #31~16.04.1-Ubuntu SMP Wed Jul 18 08:54:04 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
```

2. Install PTN3460 Backlight Driver

Step 1. Check the SMBUS port.

```
$ su
# modprobe i2c-i801
# i2cdetect -l
```

```
i2c-3    unknown    DPDDC-A    N/A
i2c-1    unknown    i915 gmbus ddb    N/A
i2c-6    unknown    SMBus I801 adapter at f040    N/A
i2c-4    unknown    DPDDC-B    N/A
i2c-2    unknown    i915 gmbus dpd    N/A
i2c-0    unknown    i915 gmbus dpc    N/A
i2c-5    unknown    DPDDC-C    N/A
```

Get the SMBUS index it is i2c-**6** here.

Step 2. Copy zip file to home folder.

```
$ cp aaeon_ptn3460_bl_V6.0.0.0.zip ~/
```

Step 3. Unzip the zip file.

```
$ unzip ~/aaeon_ptn3460_bl_V6.0.0.0.zip
```

Step 4. Install PTN3460 backlight driver.

```
$ cd ~/aaeon_ptn3460_bl_V6.0.0.0
$ chmod +x ./install.sh
$ sudo ./install.sh 6 (The number 6 is SMBUS index)
```

```
aaeon@aaeon-GENE-B105: ~/aaeon_ptn3460_bl_V6.0.0.0$ sudo ./install.sh 6
-----
Install PTN3460 Backlight Driver.
-----
Check old driver and unload it.
Uninstall ptn3460
Build the module and install.
/home/aaeon/aaeon_ptn3460_bl_V6.0.0.0/driver/ptn3460/ptn3460.c: In function a ptn3460_bl_
obef :
/home/aaeon/aaeon_ptn3460_bl_V6.0.0.0/driver/ptn3460/ptn3460.c:119:2: warning: ISO C90 fo
ids mixed declarations and code [-Wdeclaration-after-statement]
    int ret;
    ^
Update driver.
Load module.
Completed.
$ sudo reboot
```

3. Control the Backlight

Step 1. Check LVDS backlight node.

```
$ cd /sys/class/backlight/  
$ ls | grep -i ptn3460
```

```
aaeon@aaeon-GENE-BT05:~$ cd /sys/class/backlight/  
aaeon@aaeon-GENE-BT05:/sys/class/backlight$ ls | grep -i ptn3460  
ptn3460-backlight
```

Step 2. Control LVDS brightness.

Control LVDS:

(Usage: echo [value (0-255)] > /sys/class/backlight/ptn3460-backlight/brightness)

```
$ su  
# echo 100 > /sys/class/backlight/ptn3460-backlight/brightness
```

```
[aaeon@localhost ~]$ su  
Password:  
[root@localhost aaeon]# echo 100 > /sys/class/backlight/ptn3460-backlight/brightness
```