

Ubuntu - LUbuntu - Linux Setup

Update, screensaver, git, Python, Pillow, TK, numpy PIP, SSH:

note : <https://itsfoss.com/apt-vs-apt-get-difference/>

Better to use apt install in Ubuntu / LUbuntu 17.10 64-bit

Lubuntu:

```
sudo apt-get remove xfce4-power-manager
sudo apt install gnome-power-manager
gsettings set org.gnome.settings-daemon.plugins.power button-power
shutdown
```

```
sudo apt-get update
sudo apt-get install xscreensaver
sudo apt-get install git
sudo apt-get install openssh-server
sudo apt-get install python3-pip
sudo apt-get install python3-pil.imagetk
```

```
pip3 install numpy
pip3 install noise
```

```
git clone -b py3.6 https://github.com/LukeMurphy/RPI.git
mkdir ~/.config/autostart
nano ~/.config/autostart/startup0.desktop
```

AUTOSTART

create folder & file
~/.config/autostart/startup0.desktop

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscripto
Comment=startupscript_to_start_xscreensaver
Icon=gnome-info
Exec=xscreensaver
Terminal=false
Type=Application
Categories=

X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=1
```

~/.config/autostart/startup1.desktop

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscript
Comment=startupscript
Icon=gnome-info
Exec=python3 /home/daemon21/Documents/RPI/player.py -mname d21 -path
/home/daemon21/Documents/RPI -cfg prod/p4-6x16-chimney-2.cfg
Terminal=false
Type=Application
Categories=
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=2
```

TEST --
python3 player.py -mname d11 -path ~/Documents/RPI -cfg p4-8x10/repeater.cfg&

Upgrade Pillow - current is 7.0.0

```
python3 -m pip install --upgrade pip
python3 -m pip install --upgrade Pillow
```

```
sudo apt-get install libjpeg8 libjpeg8-dev libfreetype6 libfreetype6-dev
zlib1g-dev
sudo apt-get install python-dev
sudo apt-get install python-imaging
sudo apt-get install python-imaging-tk
sudo apt-get install python3.5-tk
sudo apt install python-pip
sudo pip install numpy
pip install Pillow
```

```
$ sudo nano /etc/lightdm/lightdm.conf
Add the following lines replacing myusername with your user:
[Seat:*]
pam-service=lightdm
pam-autologin-service=lightdm-autologin
autologin-user=myusername
```

```
autologin-user-timeout=0
```

To check use:

```
$ /usr/sbin/lightdm --show-config
```

from: <https://askubuntu.com/questions/741022/how-to-make-lubuntu-login-automatically>

Make nano default editor:

```
export EDITOR=nano
```

Change Power button behavior:

```
gsettings set org.gnome.settings-daemon.plugins.power button-power shutdown
```

Remove logo:

```
sudo nano /boot/cmdline.txt  
add : logo.nologo
```

<https://github.com/python-pillow/Pillow/issues/322>

Get Repo:

```
git clone -b postshow https://github.com/LukeMurphy/RPI.git
```

4 - **.bashrc**

```
alias ll='ls -la --color=auto'  
alias ls='ls -l'  
alias la='ls -A'  
alias l='ls -CF'  
alias spy='sudo python'  
#alias pscpu = 'ps auxf | sort -nr -k 3 | head -10'  
alias srun="~/RPI/cntrlscripts/run.sh"  
alias kilp="ps -ef | pgrep python | xargs sudo kill -9;"
```

```
alias kilp="ps -ef | pgrep player | xargs sudo kill -9;"
alias k="ps aux | grep sequence | awk '{print \$2}' | xargs sudo kill"
#note kill -9 is stronger
```

AUTOSTART

```
create folder & file
~/config/autostart/startupscript.desktop
```

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscripto
Comment=startupscript_to_start_xscreensaver
Icon=gnome-info
Exec=xscreensaver
Terminal=false
Type=Application
Categories=
```

```
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=1
```

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscript
Comment=startupscript
Icon=gnome-info
Exec=python3 /home/daemon21/Documents/RPI/player.py -mname d21 -path
/home/daemon21/Documents/RPI -cfg prod/p4-6x16-chimney-2.cfg&RPI -cfg prod/p4-
6x16-chimney-2.cfg
Terminal=false
Type=Application
Categories=
```

```
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=2
```

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscript
Comment=startupscript
```

```
Icon=gnome-info
Exec=bash -c '/home/daemon8/RPI/cntrlscripts/remotemngr/remotecontrol_daemon8.sh
startup'
Type=Application
Categories=
```

```
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=2
```

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscript
Comment=startupscript
Icon=gnome-info
Exec=python /home/pi/Documents/RPI/player.py dem5 /home/pi/Documents/RPI/
/home/pi/Documents/RPI/configs/p4-8x10/repaint.cfg
#Exec=/home/pi/Documents/RPI/cntrlscripts/run3.sh
Terminal=false
Type=Application
Categories=
```

```
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=2
```

```
[Desktop Entry]
Encoding=UTF-8
Name=startupscript
Comment=startupscript
Icon=gnome-info
Exec=python /home/daemon3/Documents/RPI/player.py dem3
/home/daemon3/Documents/RPI/
/home/daemon3/Documents/RPI/configs/lrgsq/feeling.cfg
Terminal=false
Type=Application
Categories=
```

```
X-GNOME-Autostart-enabled=true
X-GNOME-Autostart-Delay=2
```

```
[Desktop Entry]
Name=Terminal
Comment=Use the command line
Keywords=shell;prompt;command;commandline;cmd;
```

```
TryExec=gnome-terminal
Exec=gnome-terminal
Icon=utilities-terminal
Type=Application
X-GNOME-DocPath=gnome-terminal/index.html
X-GNOME-Bugzilla-Bugzilla=GNOME
X-GNOME-Bugzilla-Product=gnome-terminal
X-GNOME-Bugzilla-Component=BugBuddyBugs
X-GNOME-Bugzilla-Version=3.18.3
Categories=GNOME;GTK;System;TerminalEmulator;
StartupNotify=true
X-GNOME-SingleWindow=false
OnlyShowIn=GNOME;Unity;
Actions=New
X-Ubuntu-Gettext-Domain=gnome-terminal
```

```
[Desktop Action New]
Name=New Terminal
Exec=gnome-terminal
OnlyShowIn=Unity
```

#!/bin/sh

```
FILE="testlog.log"
exec 3<> "testlog.log"
echo "TEST" >&3
exec 3>&-
```

SSH File System — mount remote

must install FUSE etc

<https://amaral.northwestern.edu/resources/guides/mounting-remote-folder-os-x-over-ssh#InstallingSSHFSforMac>

```
sshfs pi@192.168.0.10:/home/pi/rpi-rgb-led-matrix-master
/Users/lamshell/Documents/RPI
sshfs pi@192.168.1.126:/home/pi/RPI /Users/lamshell/Documents/RPI15
sshfs daemon3@192.168.1.155:/home/ /Users/lamshell/Documents/dev/MountPoints/dem3
admin
sshfs daemon7@192.168.1.155:/home/
/Users/lamshell/Documents/dev/MountPoints/daemon7 admin000
```

ssh [pi@raspberrypi.local](https://pi.raspberrypi.local)

Copy From Remote

```
scp -r pi@192.168.1.172:/home/pi/RPI_BAK_ORIG/.
```

```
scp -r daemon40@daemon40.local:/home/daemon40/Documents/RPI/.
```

Run remote GUI display

```
ssh lurk@192.168.1.143 "DISPLAY=:0 nohup firefox"
```

```
pipi / admin000
```

```
$ export DISPLAY=:0
```

PROBLEMS ON MSI / Celeron Machines -

Change GRUB_CMDLINE_LINUX_DEFAULT="quiet splash acpic=off"

Then

```
sudo update-grub
```

Also did

CMDLINE_LINUX = "noaipic"

Other options : <https://github.com/torvalds/linux/blob/master/Documentation/admin-guide/kernel-parameters.txt>

```
DISPLAY=:0 python ~/Documents/RPI/player.py rpi ~/Documents/RPI/  
~/Documents/RPI/configs/p4-6x5/fluddd.cfg&
```

LINSN CARD SETUPS:

NOTE: when running two displays, the receiver needs to be configured so that the Y OFFSET matches where the second gui window shows up -- this has to be done on the "simple" receiver setup tab
