

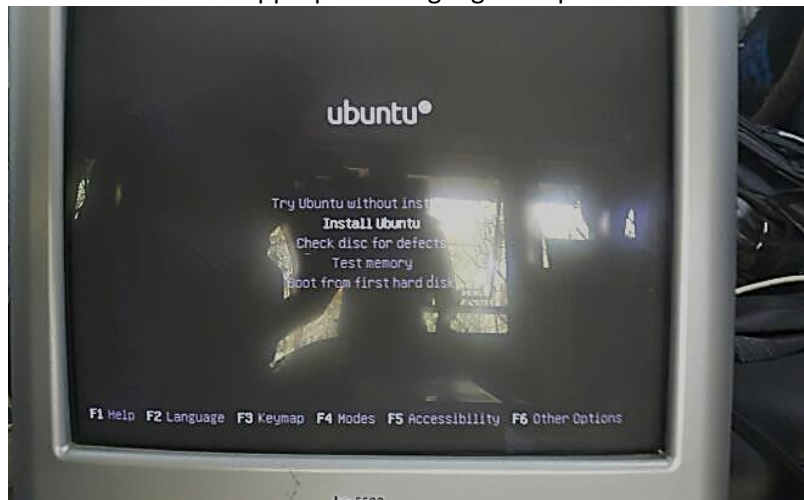
## 1. Linux Installation

- I. Turn on the PC and insert the CD into the CD drive.
- II. The next thing is to choose where the machine will be booted. Select the CD-ROM option.



a.

- III. The next window that appears will be asking you which language it is that you would like to default to the OS. Select an appropriate language and press enter.



- IV. The next window will present to you the installation options of Ubuntu. Select the "Install Ubuntu" option.



- V. Once this is done, a desktop interface will appear with an icon for Ubuntu installation. Click on this and the installation will start. Make sure to answer the question asked appropriately i.e. (time zone, geographical location etc.)  
Once this is done, a dialog will appear asking you to reboot the computer. Before you do this, make sure the CD has been ejected from the computer the click on reboot.
- VI. The computer will reboot with the Ubuntu OS fully installed in your computer.

## 2. Linux distributions

Debian-based	File system
Ubuntu	Ext4
Arch Linux	Ext4
Puppy Linux	Ext4
DebianDog	Ext4
Elive	Ext4

RedHat-based	File system
Fedora	Ext4
Miracle Linux	Ext4
Oracle Linux	Ext4
SME Server	Ext4
Cent OS	Ext4

## 3. Computer ports and descriptions

### Network connection/communication

Ethernet 8P8C(Register Jack-45) – this is an interface used to connect the computer to a network; most commonly, the internet.

Modem RJ-11 – this is used as an interface for a telephone network. RJ-11 may look similar to an RJ-45 port but it is smaller and it 6P-8C.

Firewire 400/800/3200 – This port allows high speed communication and data exchange between a computer and its peripheral devices or another computer.

Centronics SCSI 50-pin – This is used to connect computer parts that use a system called SCSI to communicate with each other.

AAUI – Apple Attachment Unit Interface (AAUI) is a mechanical re-design by Apple of the standard Attachment Unit Interface (AUI) used to connect Ethernet transceivers to computer equipment.

F-Connector RF/CDAX – This is an RF connector used for connecting "over the air" terrestrial television, cable television and universally for satellite television and cable modems, with the computer.

### **Video interface connectors**

S-Video – used to transmit only video signals. This port is black in color and consists of four pins. One pin carries intensity signals whilst the other carries color signals. The third and fourth pin are ground pins for the color and intensity pins.

Component Video – this splits video signals into more than two channels. It can transmit both analogue and digital video signals. It uses three color-coded connectors: Red, Blue and Green.

HDMI (High Definition Media Interface) – connects computer monitors, HDTVs, Blu-Ray players, gaming consoles. It is used to carry both audio and video signals. It has 19 pins.

DVI video – connects the monitor to a computer's video graphic card.

Display Port – this is a digital display interface between the monitor and the computer. Compared to a DVI port, it offers better resolution. It is also a 20-pin connector.

Mini DisplayPort – This is a mini version of the DisplayPort audio-visual digital interface. It has 20 pins.

Mini DVI – similar to mini VGA port. It is a digital video interface.

Mini VGA – transmits DVI.

LFH60 (dual DVID) / DMSS9 (dual DVID)/ Mac Video/MIDI/gameport/AUI/DA-15 – These are video display interfaces.

Composite audio - is an analog video and audio transmission media that carries standard definition audio and video.

### **Peripheral connectors**

USB 1.1/ 2.0/ 3.0. – This port can act as a power charge for portable devices. It is used to transfer data as well as act as an interface between the computer and peripherals.

PS/2 – this is a mouse and keyboard connector. Purple for keyboard and green for mouse.

DE-9 Serial – main port for serial connection between a computer and its peripherals.

Centronics Parallel 36-pin – connects the computer to peripherals with parallel communication.

AT Keyboard – This is a 4-pin connector used for connecting a standard 84 key Keyboard.

DE-15/HD-15 VGA/SVGA – this is an interface between computer and monitor.

Apple Desktop bus – used to connect low speed devices to computers.

**Serial ports**

DE-9F - DE-9 port are used in serial interface with mouse, keyboard, modem, uninterruptible power supplies (UPS).

DB-25 Serial/Com port – this is a ports used in serial connections.

e-SATA – This external serial attachment connector is an interface for large storage devices.

**Audio connectors**

Optical audio– this is an optical audio cable that carries digital audio signals and sends them to an AV receiver.

Surround Sound – This is used to connect headphones or surround sound.

Composite audio - is an analog video and audio transmission media that carries standard definition audio and video.