





DietPi

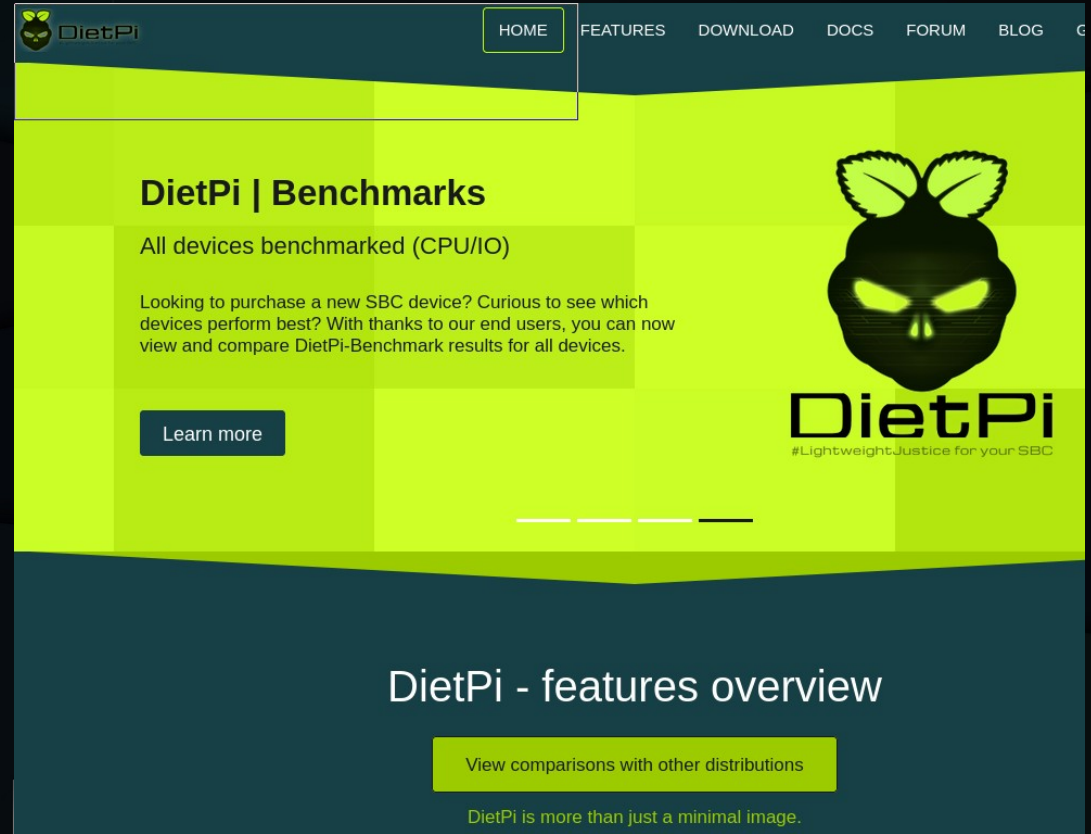
Lightweight Distro

By Ramon

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Download

- Go to Dietpi.com
- And select Downloads



The screenshot shows the DietPi website homepage. The navigation menu at the top includes 'HOME', 'FEATURES', 'DOWNLOAD', 'DOCS', 'FORUM', and 'BLOG'. The main content area features a 'DietPi | Benchmarks' section with the text 'All devices benchmarked (CPU/IO)' and a paragraph: 'Looking to purchase a new SBC device? Curious to see which devices perform best? With thanks to our end users, you can now view and compare DietPi-Benchmark results for all devices.' A 'Learn more' button is located below this text. To the right is a large image of the DietPi logo, a stylized raspberry with glowing eyes, and the text 'DietPi #LightweightJustice for your SBC'. Below the main content is a 'DietPi - features overview' section with a 'View comparisons with other distributions' button and the text 'DietPi is more than just a minimal image.'





Download

- Select the Single Board Computer (SBC) you are utilizing.

View DietPi-Benchmark scores for all devices

username: **root** password: **dietpi**

[All] Raspberry Pi Odroid PINE64 Radxa Allo ASUS NanoPi Orange Pi

 <p>Raspberry Pi 1/Zero (1) BCM2708 1 Core ARMv6</p>	 <p>Raspberry Pi 2 PCB v1.1 BCM2709 4 Cores ARMv7</p>	 <p>Raspberry Pi 2/3/4 BCM2710/2711 4 Cores ARMv8</p>	 <p>Raspberry Pi 5 (testing) BCM2712 4 Cores ARMv8</p>
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Download

Select the
type of
download.


Raspberry Pi 2/3/4

CPU: BCM2710/2711 900-1800 MHz | 4 Cores | ARMv8
RAM: 1 GiB LPDDR2 - 8 GiB LPDDR4

Download Image:  [Download \(SHA256\) \(Signature\)](#)

How to install / Details:  [View](#)

Amiberry image:  [Download \(SHA256\) \(Signature\)](#)
This image installs and boots into [Amiberry](#) automatically on first boot.

Allo GUI image:  [Download \(SHA256\) \(Signature\)](#)
This image has our [Allo web GUI](#) and audiophile software pre-installed.

Bullseye images:
We provide images based on the older Debian Bullseye release as well, as not all software in our catalogue is compatible with Debian Bookworm yet. All info about this can be found [here](#).

These images are compatible with all Raspberry Pi 3 and 4 models, as well as Raspberry Pi 2 PCB v1.2 and Zero 2.

The Raspberry Pi 2 comes in two versions, which is printed onto the PCB. PCB v1.1 has an ARMv7 chip, hence needs to use the ARMv7 image, PCB v1.2 can use this ARMv8 image, which we then generally recommend.

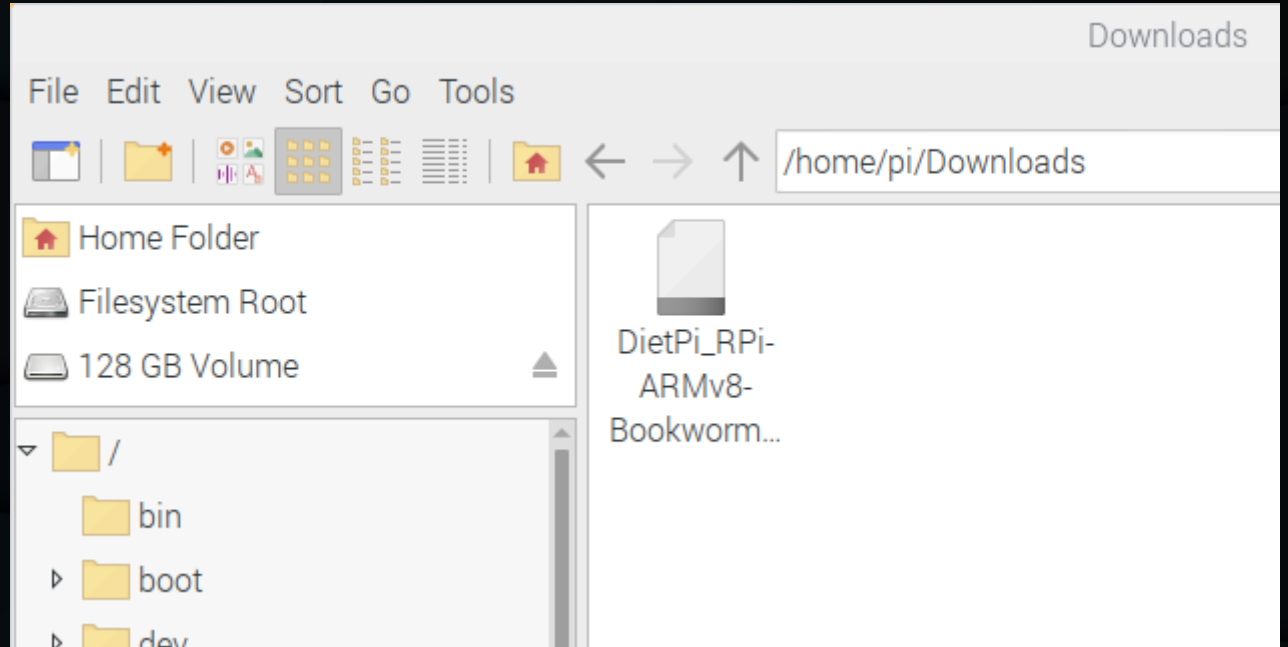


Installation

Verify your download is completed.

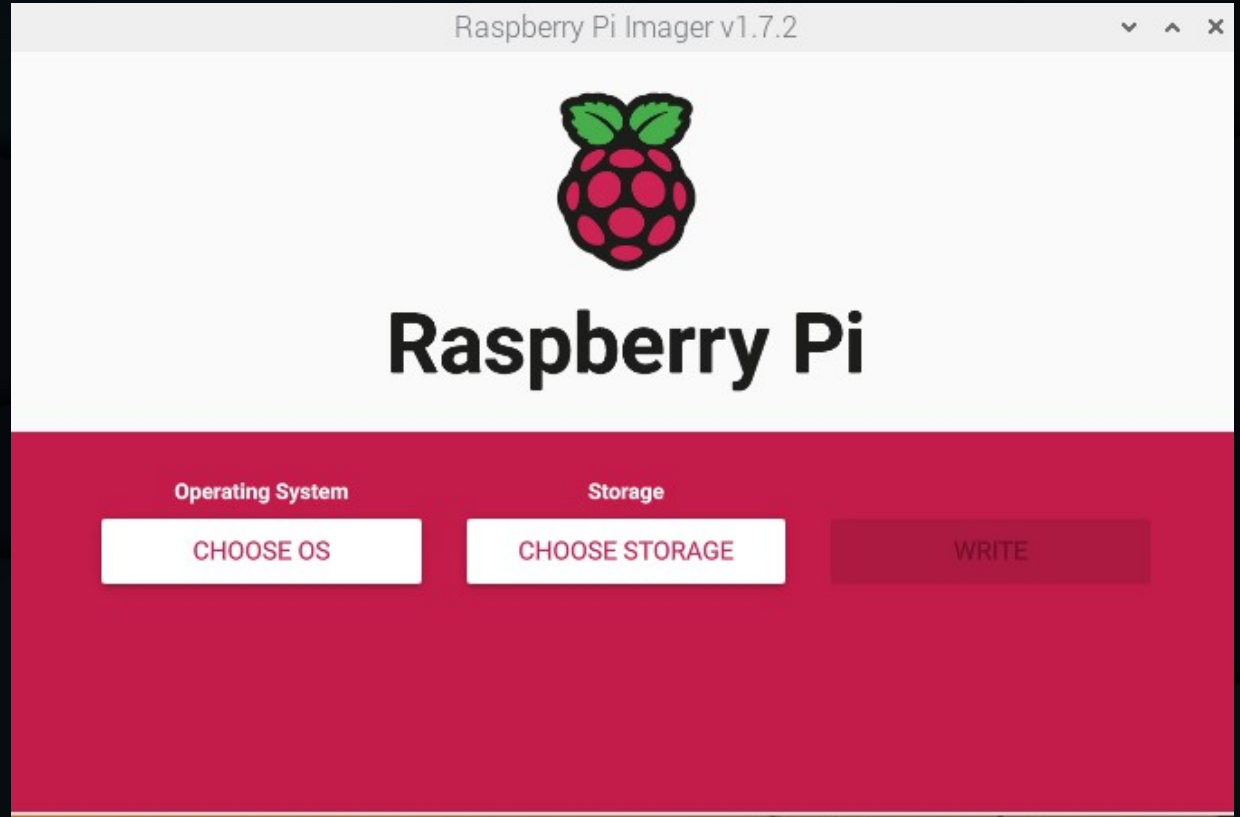
If you download the first option the file will be compress with .xz

In terminal use
`unxz filename`
To uncompress



Installation

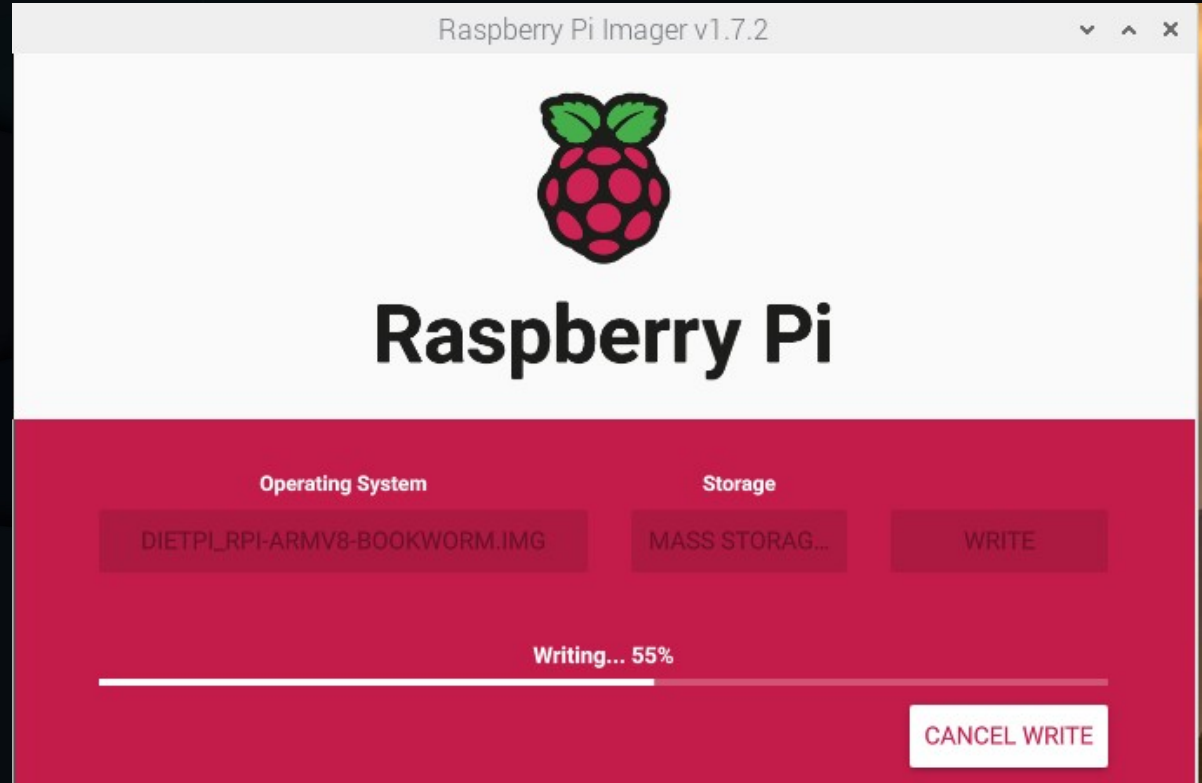
Use the raspberry pi imager to burn the image into a new micro SD card



Installation

Make sure you select the correct drive because imager will not prevent you from overriding the current SD card with the running operating system.

Just like the DD command.

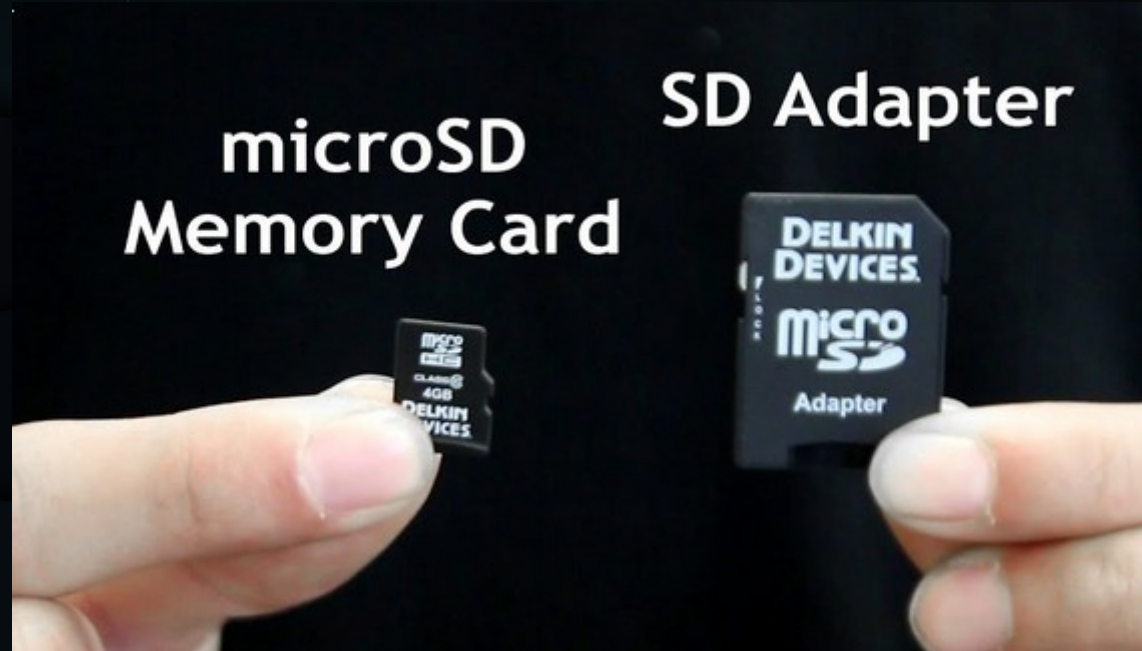


Installation

Once the image is finished burning into the SD card.

Remove the SD card and insert the MicroSD into the SBC you had selected.

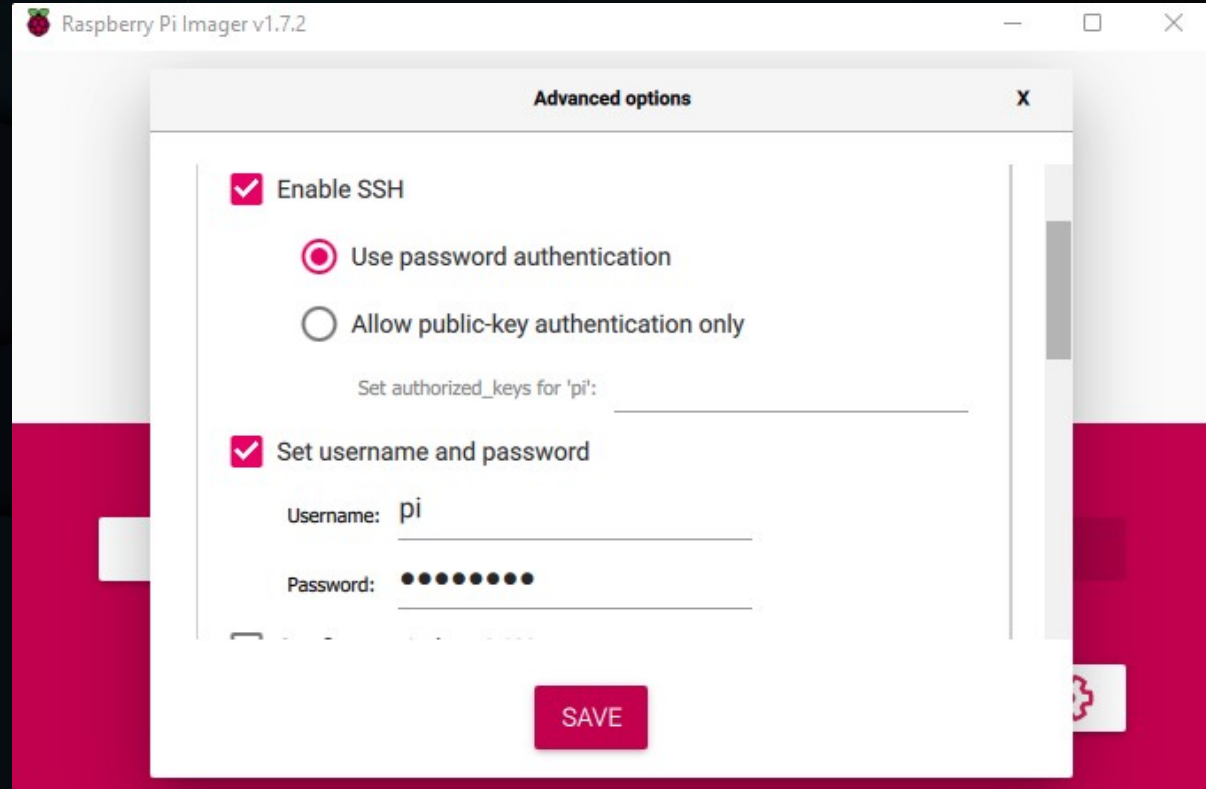
Note: Dietpi can also be loaded into a regular harddrive for a 386 computer rig. To make a quick server.



Boot UP and Update

Dietpi will ask for internet access to perform an “apt update” and “apt upgrade” automatically.

If you did not opt to activate SSH in the imager SD card options. You will have to plug the SBC to a monitor to see the scripting taking place. And activate features thru pi-config.



Boot UP and Update

Once you have found the IP address of your SBC you can SSH as root into the Dietpi

```
ssh root@192.168.0.0 localhost
```

You can also just plug in a monitor and keyboard and proceed with the installation prompts

```
The programs included with the Debian GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.
```

```
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.
```

```
DietPi v9.4.2 : 1 APT updates available
```

```
- Device model : RPi 4 Model B (aarch64)  
- CPU temp : 35 °C / 95 °F : Cool runnings  
- LAN IP : 192.168.0.58 (eth0)  
- MOTD : DietPi v9.4 has been released. Check out all changes:  
        https://dietpi.com/docs/releases/v9_4/
```

```
DietPi Team      : https://github.com/MichaIng/DietPi#the-dietpi-project-team  
Patreon Legends : Chris Gelatt, ADSB.im  
Website         : https://dietpi.com/ | https://twitter.com/DietPi_  
Contribute      : https://dietpi.com/contribute.html  
Web Hosting by  : https://myvirtualserver.com
```

```
apt upgrade      : Run now to apply 1 available APT package upgrades
```

```
dietpi-launcher : All the DietPi programs in one place  
dietpi-config  : Feature rich configuration tool for your device  
dietpi-software : Select optimised software for installation  
htop           : Resource monitor  
cpu            : Shows CPU information and stats
```

```
root@DietPi:~# dietpi-software list |grep " =2" □
```

Boot UP and Update

You will be asked to participate in the data collection.

I opted not to!!!

Also you will be asked to change all the passwords for root and Dietpi default user.

```
RPi 4 Model B (aarch64) | IP: 192.168.0.58
```

DietPi-Survey

DietPi-Survey would like to collect anonymous usage statistics.

This allows us to focus development based on popularity.

- NO private data will be collected and NO ONE can identify you based on it.
- The data is sent via secured SFTP connection, stored unreadable to the public upload user.
- If you agree, your uploaded data will be updated after each DietPi-Update and DietPi-Software install.
- Current survey statistics can be reviewed at: <https://dietpi.com/survey/>

Would you like to join DietPi-Survey?

Show : Show me the upload file content

1 : Opt IN and upload data

0 : Opt OUT and purge uploaded data

<Ok>

<Cancel>

Boot UP and Update

Once done with all the basic installation you will come to this screen.

It can be called in terminal as:
dietpi-software

```
RPi 4 Model B (aarch64) | IP: 192.168.0.58
```

```
DietPi-Software
```

```
Help!           : Links to online guides, docs and information
DietPi-Config   : Feature-rich configuration tool for your device
                  ●— Select Software —●
Search Software  : Find software to install via search box
Browse Software  : Select software from the full list
SSH Server       : [Dropbear]
Log System       : [DietPi-RAMlog #1]
User Data Location : [SD/eMMC | /mnt/dietpi_userdata]
                  ●— Install or Remove Software —●
Uninstall        : Select installed software for removal
Install          : Go >> Start installation for selected software
```

```
<Ok>                <Exit>
```

Features

There is an extensive list of software that can be automatically installed and halfway configured by the Dietpi OS (scripts)

Here is a small part of the list.

Desktops:

- LXDE - Highly optimized lightweight desktop without the "bloatware".
- MATE - Popular Gnome 2 desktop.
- XFCE - Lightweight desktop.
- GnuStep - Alternative/unique desktop.
- Chromium - Optional: Web browser

Remote Desktop Access:

- Tightvnc Server - Desktop for remote connection.
- VNC4 Server - Desktop for remote connection.
- NoMachine - Feature rich remote desktop connection.
- XRDP - Remote desktop server for Windows Remote Desktop Client.
- RealVNC Server - Desktop for remote connection.

Media Systems:

- Kodi - Media Centre / Player
- YMPD - Lightweight web Interface audio player for MPD
- myMPD - Lightweight web Interface audio player for MPD
- OJMPD - Feature-rich web Interface audio player for MPD
- CAVA - Optional: Console-based audio visualizer for MPD
- Mopidy - Web Interface Music /Radio Player
- AirSonic - Feature rich media streaming server with web interface.
- SubSonic - Feature rich media streaming server with web interface.
- SqueezeBox - Also known as Logitech Media Server.
- SqueezeLite - Audio player for SqueezeBox.
- Shairport Sync - AirPlay audio player with multiroom sync
- ReadyMedia - (MiniDLNA) Media streaming server (DLNA, UPnP)
- Ampache - Web interface media streaming server.
- Emby - Web interface media streaming server.
- Plex Media Server - Web interface media streaming server.
- Tautulli - Monitoring and tracking tool for Plex Media Server.
- Murrmur - Mumble VoIP Server
- Roon Bridge - Turns your device into a Roon capable audio player
- Roon Server - Turns your device into a Roon capable audio player and Roon core
- Roon Extension Manager - Manage extensions from within Roon
- NAA Daemon - SignaList Network Audio Adaptor (NAA).
- IceCast - Shoutcast Streaming Server, including DarkIce.
- jRiver - Media Center
- Koel - Web interface streaming server.
- Gmrender - DLNA audio render.
- Ubooquity - Free home server for your comics and ebooks library.

BitTorrent / Download Tools:

- Transmission - Lightweight BitTorrent server with web interface
- Deluge - Alternative BitTorrent server with web interface
- qBitTorrent - Lightweight and fast (c++) BitTorrent server with web interface
- rTorrent - BitTorrent server with ruTorrent web interface
- Aria2 - Download manager with web interface
- SABnzbd - NZB download manager with web interface.
- SICKRAGE - Automatically download TV shows
- Sonarr - Automatically download TV shows
- Radarr - Automatically download Movies

Emulation & Gaming:

- OpenTyrian - Gaming
- Cuberite - Fast Minecraft server with web interface
- MineOS - Multiple Minecraft servers with web interface
- Nukkit - Server for Minecraft Pocket Edition
- AmiBerry - Amiga emulation system, further developed optimized builds of uae4arm-rpi
- DXx-Rebirth - Descent 1 & 2 OpenGL port
- Steam - Steam client

Camera / Surveillance:

- RPi Cam Control - RPi Camera / Web Interface Surveillance
- MotionEye - Camera / Web Interface Surveillance

Cloud / Backups:

- ownCloud - Your own personal cloud based backup/data storage system
- Nextcloud - Your own personal cloud based backup/data storage system
- Pydio - Feature-rich backup and sync server with web interface.
- UrBackup Server - Full backups for systems on your network
- Gogs - GitHub style server, with web interface.
- Gitea - GitHub style server, with web interface.
- Syncthing - Backup and sync server with web interface.
- Tonido - Lightweight backup and sync server with web interface, and, cloud access.
- Minio - S3 compatible distributed object server

Social / Search:

- FreshRSS - A self-hosted RSS feed aggregator
- Forums - phpbb3
- Wordpress - Website Blog and Publishing platform.
- Image Gallery - Host and browse your images from a web interface.
- BaiKal - Lightweight CalDAV + CardDAV server.
- OpenBazaar - Decentralized peer to peer market server using BitCoin.
- YaCy - Decentralized open source search engine.

WiFi HotSpot

- WiFi HotSpot - Turn your device into a wireless hotspot/access point.
- Tor HotSpot - Optional: Routes all WiFi HotSpot traffic through the Tor network.

Home Automation:

- Home Assistant - Open-source home automation platform running on Python 3.
- EmonPi - Lightweight Energy usage stats with EmonPi PCB.
- Grasshopper - Web App to control Bticino MyHome

Hardware Projects:

- Google AIY - Voice kit "Ok, Google!".
- PiJuice - PiSupply UPS/battery power system.
- RPi.GPIO - GPIO Interface library for RPi (python).
- WiringPi - GPIO Interface library (c).
- WebIOPi - Web interface to control RPi GPIO.
- Node-Red - Visual tool for wiring together hardware devices, APIs and online services.
- Mosquitto - Message broker that implements MQTT protocol versions 3.1 and 3.1.1.

Now we GO Live

Use the command

```
dietpi-software list | grep "=2"
```

To see a list of the reinstalled software in your SBC.

```
root@DietPi:~# dietpi-software list |grep "=2"
ID 73 | =2 | Fail2Ban: prevents brute-force attacks with ip ban | | https://dietpi.com/docs/s
ID 82 | =2 | LLMP: Lighttpd + MariaDB + PHP | +Lighttpd +MariaDB +PHP | https://dietpi.com/do
ID 84 | =2 | Lighttpd: Extremely lightweight webserver | | https://dietpi.com/docs/software/w
ID 88 | =2 | MariaDB: Persistent cached file-per-table database server | | https://dietpi.com
ID 89 | =2 | PHP: Hypertext Preprocessor for dynamic web content | | https://dietpi.com/docs/
ID 91 | =2 | Redis: Volatile in-memory non-SQL database server | | https://dietpi.com/docs/so
ID 92 | =2 | Certbot: Obtain and renew Let's Encrypt SSL certs for HTTPS | | https://dietpi.c
ID 103 | =2 | DietPi-RAMlog: Makes /var/log a RAM disk, preserves file structure on reboot |
ID 104 | =2 | Dropbear: Lightweight SSH server | | https://dietpi.com/docs/software/ssh/#drop
ID 114 | =2 | Nextcloud: File sync, sharing and collaboration platform | +MariaDB +PHP +Redis
root@DietPi:~#
```

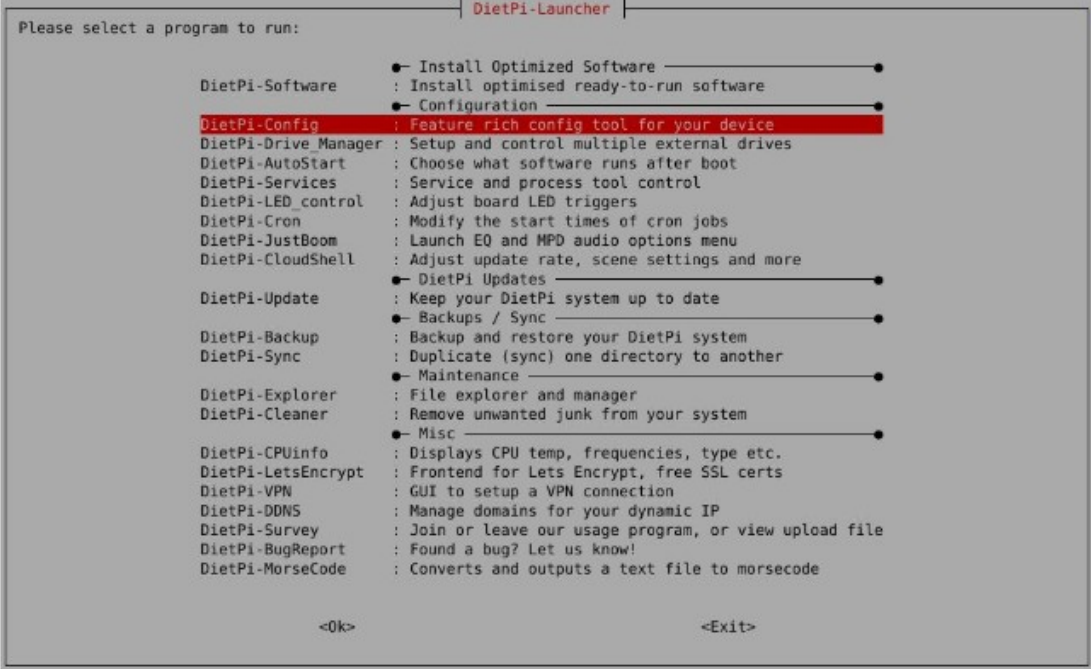
Now we GO Live

We can use the dietpi-launcher to run a specific OS tools.

DietPi-Launcher

It provides an easy access to all DietPi OS tools and can be accessed by running next command:

```
dietpi-launcher
```



```
Please select a program to run:

DietPi-Software      : Install Optimized Software
                    : Install optimised ready-to-run software
                    : Configuration
DietPi-Config       : Feature rich config tool for your device
DietPi-Drive Manager : Setup and control multiple external drives
DietPi-AutoStart    : Choose what software runs after boot
DietPi-Services     : Service and process tool control
DietPi-LED control  : Adjust board LED triggers
DietPi-Cron         : Modify the start times of cron jobs
DietPi-JustBoom     : Launch EQ and MPD audio options menu
DietPi-CloudShell   : Adjust update rate, scene settings and more

DietPi-Update       : DietPi Updates
                    : Keep your DietPi system up to date
                    : Backups / Sync
DietPi-Backup       : Backup and restore your DietPi system
DietPi-Sync         : Duplicate (sync) one directory to another

DietPi-Explorer     : Maintenance
                    : File explorer and manager
DietPi-Cleaner      : Remove unwanted junk from your system

DietPi-CPUinfo      : Misc
                    : Displays CPU temp, frequencies, type etc.
DietPi-LetsEncrypt  : Frontend for Lets Encrypt, free SSL certs
DietPi-VPN          : GUI to setup a VPN connection
DietPi-DDNS         : Manage domains for your dynamic IP
DietPi-Survey       : Join or leave our usage program, or view upload file
DietPi-BugReport    : Found a bug? Let us know!
DietPi-MorseCode    : Converts and outputs a text file to morsecode

<Ok>                <Exit>
```


That is it Folks

This was based on a simple FSCJ presentation of “How to install nextcloud in a Raspberry Pi to act as a home cloud server.

In hind site I could have made it a Plex server.

