

This voucher is for the turn-key installation of a

HIGH-END MULTI-ROOM MUSIC SYSTEM IN THE MOUNTAIN HOUSE

You will be able to enjoy music throughout the house, with unparalleled ease of use and high-end restitution



Included are:

A music server

A server will be installed in the Rec Room, as part of the multimedia system. It uses a small, yet powerful, Intel NUC computer that is silent and easy to hide. It is self-maintained and comes with remote support.



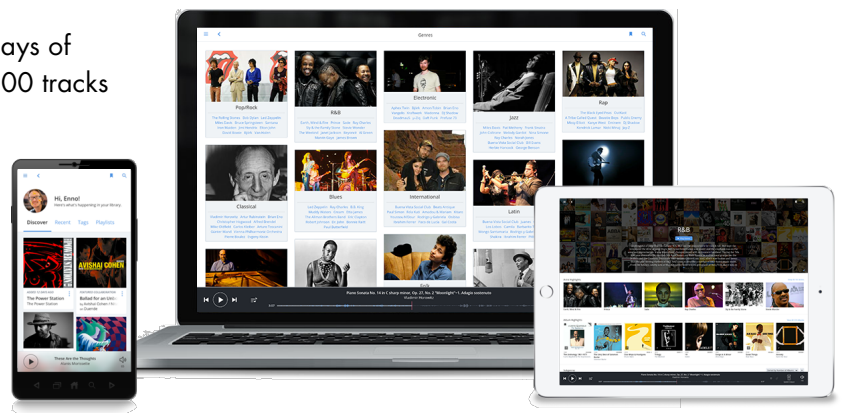
It will be running Roon (with a lifetime service subscription). Roon looks at your music and finds photos, bios, reviews, lyrics, and concert dates, and makes connections between artists, composers, performers, conductors, and producers. What you get is a searchable, surfable magazine about your music. Its beautiful and intuitive interface is available from any computer, tablet or phone in the house.

Roon manages high-resolution multi-room audio, with all rooms capable of playing in perfect sync, or each room playing its own music.

The music library will be seeded with more than 91 days of continuous music (more than 2,100 albums and 30,000 tracks and 600 artists, most in lossless CD quality, many in high-resolution), *including the complete Pink Floyd*.

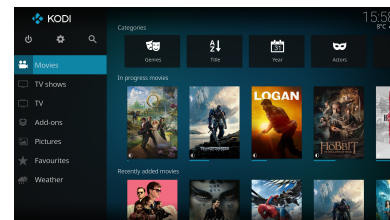
An additional (not included, pending internet bandwidth) Tidal music subscription (lossless and high-resolution) can be added and seamlessly integrated in the user experience.

More information about Roon's capabilities can be found at www.roonlabs.com.





In addition to managing the music, this server will be connected to the TV and act as a Kodi video player and streamer, capable of 4K resolution and HD audio. This feature is currently only a bonus, but is begging to be explored further, as it can also be turned into a multi-room experience, for example. More information about Kodi's capabilities can be found at www.kodi.tv.



Music in the rec room

This setup will be using the existing or future home theatre speakers and A/V receiver. The main component is a Raspberry Pi, a tiny (hidden), very low-power computer. It is self-maintained and comes with remote support. It will be equipped with a high-resolution digital to analog converter (DAC) that will provide music to the receiver. Its internal software will link to the Roon server.



Music in the main and play rooms

These will be complete high-end, but reasonably sized, music playing systems. The base will also be using a Raspberry Pi minicomputer, with the DAC replaced with a 35W high-quality class D amplifier and DAC combo. The very small size of this package makes it extremely easy to hide out of sight. Its internal software will link to the Roon server.



Music reproduction comes through a combination of awards-winning British Wharfedale bookshelf speakers and a small Polk Audio powered subwoofer. The speakers will provide controlled and natural high, mid and low frequencies. The subwoofer will complement the overall soundstage in the lower frequencies and strengthen the capabilities of that small package in large rooms. While the speakers need to be strategically placed, the subwoofer can be located in any discreet location. Finally, sturdy speaker stands provide the needed height and vibrations isolation to make the best of the speakers.



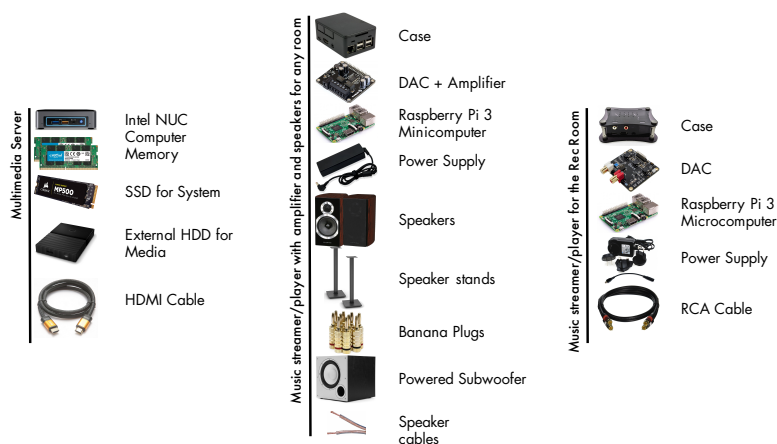
More rooms can be added to the network at a later stage (master bedroom, kitchen, deck, etc.).

Installation, networking, support and the bits and bobs

This will all be engineered, built, installed and integrated by Nico as a turnkey service. All cables, nuts and bolts are part of the package.

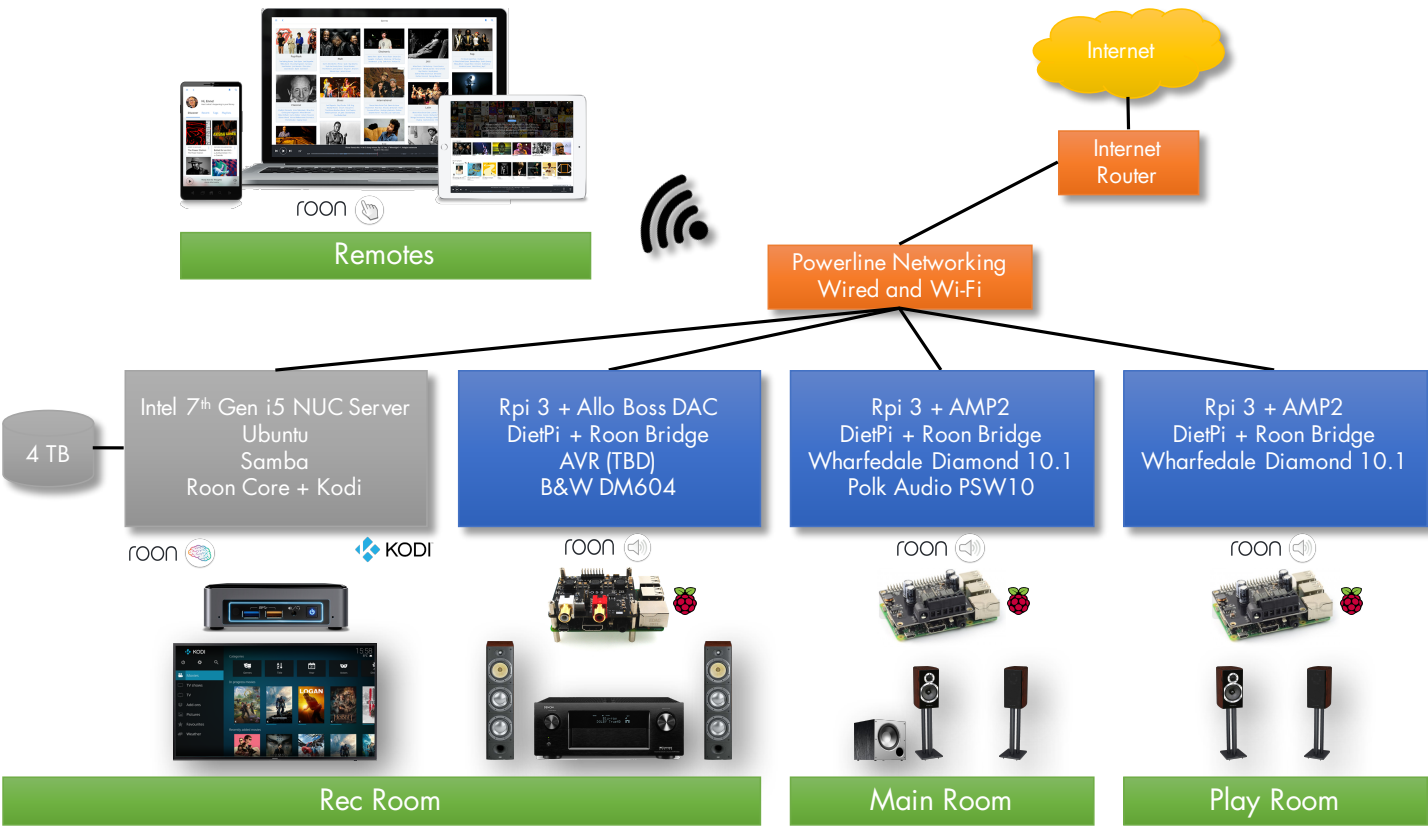
Networking, cabled and Wi-Fi, is expected to be using powerline equipment, removing the need to install Ethernet cabling or rely on airwaves for critical services. The final word on the feasibility of this technical chose is pending a site survey of the electrical installation.

Finally, all elements of the system will be remotely accessible for Nico to support and upgrade them.



You will just have to pour yourself a beer, sit down, select an album and enjoy the music!

System diagram



Kit list

Item	Description	Qty
1	Multimedia server	1
	Central music management and movies/TV series/video streaming	
1.1	Intel NUC mini PC kit NUC7i5BNK (Intel Core i5, Slim version)	1
1.2	Crucial 8GB Kit (4GBx2) DDR4 2133 MT/s (PC4-17000) SR x8 SODIMM 260-Pin Memory - CT2K4G4SFS8213	1
1.3	Corsair Force Series MP500 120GB M.2 NVMe PCIe Gen. 3 x4 SSD System storage	1
1.4	WD 4TB Black My Passport Portable External Hard Drive - USB 3.0 - WDBYFT0040BBK-WESN Media storage - Can be taken back and forth	1
1.5	IBRA Orange HDMI Cable 3ft - UHD HDMI 2.0	1
1.6	Operating system and video software Open source and free, Ubuntu Linux and Kodi Roon lifetime subscription	1
1.7	Music management and distribution software - Tidal music streaming subscption optional	1
1.8	91 days of continuous music , including the complete Pink Floyd - Library seed	1
2	Music streamer/player for the Rec Room	1
	Uses the A/V amplifier and speakers	
2.1	Raspberry Pi 3 Model B Computer	1
2.2	Power supply 5v / 3A	1
2.3	Blank Class 10 8 GB microSD Card	1
2.4	Allo Boss DAC Up to 32 bit / 384 kHz LPCM digital to analog converter	1
2.5	Acrylic Case for Allo Boss and Raspberry Pi - Black	1
2.6	Operating system and software Open source or free - DietPi Linux and Roon Bridge	1
3	Music streamer/player with amplifier and speakers for any room/bedroom	2
3.1	Raspberry Pi 3 Model B Computer	1
3.2	Novelty 20v 3.25a 65w Ac Adapter	1
3.3	Blank Class 10 8 GB microSD Card	1
3.4	HiFiBerry Amp2	1
3.5	HighPi Raspberry Pi Case - Black	1
3.6	Wharfedale - Diamond 10.1 (Black) bookshelf speakers	1
3.7	Pangea Audio LS300 Speaker Stand - Pair (32 Inch)	1
3.8	Operating system and software Open source or free - DietPi Linux and Roon Bridge	1
4	Accessories and cables	1
	Keeps everyting connected and tidy	
4.1	Monoprice 1.5ft Premium 2 RCA Plug/2 RCA Plug M/M 22AWG Cable - Black For the Rec Room, connection of streamer to the A/V amplifier	1
4.2	Monoprice 100ft 12AWG Enhanced Loud Oxygen-Free Copper Speaker Wire Cable For bookshelf speakers and subs , enough for 4 to 8 locations	1
4.3	Monoprice 24k Gold Plated Speaker Banana Plugs, Closed Screw Type (5 Pairs) Cleanly connects speaker cables to speakers	1
4.5	Polk Audio PSW10 10-Inch Powered Subwoofer (Single, Black) Adds ooompf for the low end for bigger rooms	1
5	Powerline Networking with Wi-Fi extension	1
5.1	TP-Link AC1200 Wi-Fi Range Extender AV1200 Powerline Edition with Outlet Pass-Through (TL-WPA8630P KIT) 1 base plug with switch, 1 extension plug with switch, 2 extension plugs with Wi-Fi access points	2
5.2	Mediabridge Cat6 Ethernet Patch Cable (10-Pack - 3 Feet) - Soft Flex Tab - RJ45 - Black	1