

# Nucleus & Nucleus+

## User Guide and Manual

### *Introduction*

---

#### *What is Nucleus?*

At the heart of every Roon system is a [Roon Core](#). This is the brain behind the entire Roon experience – it manages your music collection, streams to your audio devices, and stores the Roon database. Nucleus was developed by the Roon team to provide a silent, high-performance, power-efficient appliance to host the Roon Core. Every aspect of the hardware, operating system, and software is optimized to make Nucleus the very best way to run Roon-by the same team who made Roon.

#### *Roon account*

Nucleus requires a Roon account with a valid subscription, which you can purchase at <https://roonlabs.com/>

If you're trying Roon for the first time, getting started is a snap. Just connect and power up Nucleus, install the Roon or Roon Remote app on your devices, sign up for a Roon account, and you're all set. If you already use Roon on another device, there's one extra (optional) step: Nucleus will take the place of your existing Roon Core, so you can migrate your Roon database from the computer you're using now to your Nucleus, or you can start from scratch.

#### *Controlling Nucleus*

Nucleus has no display or interactive components. To experience Roon, you will use the Roon app on a Mac or Windows PC, or the Roon Remote app for iPad, iPhone, or Android devices. **Note: Only Mac, Windows, and tablets provide access to all of Roon's features.** Due to their smaller screens, the Roon Remote app on phones has a limited feature set.

## *Playing audio*

There are three ways to use Nucleus to play audio, and you can use any or all of these at the same time. The first is connecting an integrated audio component, DAC, or headphone amp via one of the two USB ports. The second is to use the HDMI port to connect to an audio/video receiver (AVR) or another device which supports multi-channel audio over HDMI. The third (and most flexible) is to stream to your audio device(s) over your network; Nucleus supports many different types of networked audio devices, including Airplay, Sonos, 100s of Roon Ready products, and devices with legacy streaming protocols from Devialet, Meridian, Squeezebox, and KEF.

## *Storing your music files*

Nucleus can manage your music files three different ways, and you're free to mix and match these as well. The first is to connect an external hard disk drive (HDD) or solid state drive (SSD) via USB. The second is to install an optional internal HDD or SSD. The third is to store your files on a network attached storage (NAS) device, which Nucleus will access over your network.

---

## *What's in the box?*

- 1 Nucleus or Nucleus+
- 4 screws for mounting an optional internal HDD or SSD
- Quick Start Guide
- 1 Power supply (to be connected to Nucleus)
- 1 Power cord (to be connected to the power supply)
- 1 female to male straight-line adapter for the power supply (only if power supply has right angle)

---

## *Back panel layout*



### 1. Power button and Power LED

- Press power button once to turn on the unit or to initiate a clean shutdown.
- A dim white LED will be lit when the unit is powered on.
- Hold the power button for 4 seconds to hard power off.

### 2. Power connector

- Connect the power supply here.

### 3. HDMI port

- This port can be used as a multichannel audio output.
- This port can be used for diagnostics by the Roon support team.

### 4. Ethernet port

- Connect your Nucleus to your network via an ethernet cable
- Note: the lights here should be on and blink even when the unit is not turned on.

### 5. USB 3.0 ports (2)

- Can be used for connecting:
  - USB storage drive
  - USB audio device
  - USB network adapter

### 6. Thunderbolt port

- Currently not active. May become active in a future firmware update.
-

## Setup

### 1. Connect and power up Nucleus

The first step is making power and network connections and starting Nucleus. [Learn more...](#)

### 2. Update Nucleus firmware

Before using Roon with Nucleus for the first time, it's important to make sure your firmware is up to date. **Note: Not updating Nucleus firmware could lead to data loss or a failed migration.** [Learn more...](#)

### 3. Prepare your storage and audio devices

Nucleus will discover devices connected via USB, HDMI, and ethernet at any time, but it's simplest to have these devices connected and powered on before you get started. [Learn more...](#)

### 4. Start using Nucleus

Now that your equipment is connected, it's time to install the Roon app (for Mac and Windows PC) and/or the Roon Remote app for iPad, iPhone, and Android devices, and connect to Nucleus. From here, you can migrate an older Roon installation to Nucleus as well. [Learn more...](#)

## Maintenance

Nucleus comes with an administrative interface that can be loaded using any web browser. [Learn more...](#)

*Updated Tue Jul 03 2018*