Bluesound Vault 2i
networked drive/ripper/streamer

Music from the Vault

Bluesound's latest '2i' generation of the Vault aims for super-reliable hard-drive-based playback, along with all the streaming and multiroom benefits of BluOS.

BluOS is a fully mature streaming and multiroom platform, and Bluesound is its lead brand, with an ecosystem covering every corner from wireless speakers to a soundbar/subwoofer combo to streaming amplifiers. As a platform BluOS has a reputation for quality above most rivals, having supported high-res audio from the start, as well as gaining from impressive access to high-quality amplification, since Bluesound's sister company is the legendary hi-fi company NAD, whose HybridDigital amplification is used in Bluesound products, as in its own hi-fi amplifiers. Indeed NAD offers BluOS abilities within some of its own products, as does speaker company DALI.

Store and play

One of our favourites from the Bluesound range has always been the Bluesound Vault, because it offers something its main rivals don't — hard-drive storage for your music. You can rip music from CDs, or copy it into the drive over the network, then you can play it directly into your sound system of choice, or over the network to other BluOS players and speakers around the home. There are big advantages in hard-drive playback, notably removing the vagaries of network playback, and potentially having the full data path under a single clock. Yet as is evident by the lack of rivals, it is not easy or cheap to achieve with the traditional reliability of consumer audio. Who trusts a hard drive? Getting this right is something that both explains the Vault's pricing, and delivers its value — music-specific drive-based players can run to tens of thousands of dollars, and Bluesound's is one of the cheapest.

Equipment

The original Vault Mk1 design was perhaps a bit 'out there', with a vertical CD slot and the angled geometric design which made the original Bluesound products stand out from the crowd. But we much prefer the stylish newer look, the CD drive sensibly horizontal at the midpoint separation of this nicely curved rectangular box, control buttons and a grille on top through which the innards are just visibly twinkling below. The CD drive is one way to load music into the hard drive, but with the Vault connected to your network, you can also simply copy files directly into its hard drive. After a reindexing of its contents, they're ready to play.

Outputs
The Vault 2i offers RCA analogue outputs and also both optical and coaxial digital outputs, plus a subwoofer feed. There's a headphone socket on the front, plus Bluetooth out for wireless headphones.

Other connections
There is a single input on a combined optical/analogue minijack socket, two USB-A slots, trigger & IR control inputs, and the essential Ethernet network connection.

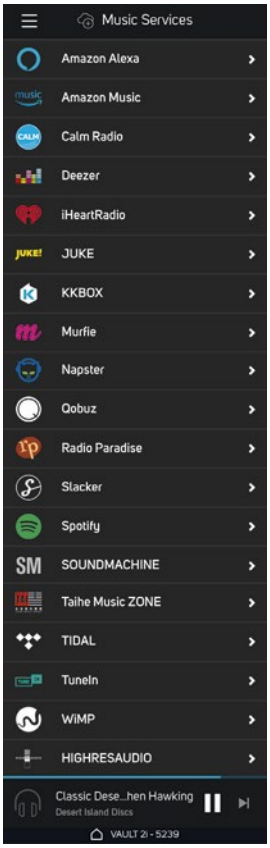
SUMMARY

Bluesound Vault 2i
Price: $1999

+ CD ripping & 2TB music storage
+ Great app control
+ Very high-res friendly
+ Alexa voice control

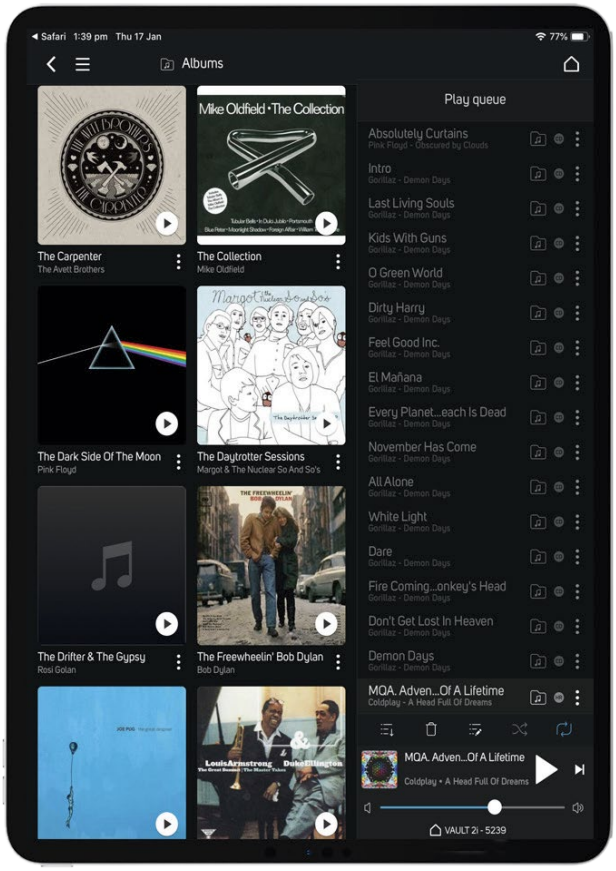
– No Wi-Fi, must have Ethernet
– Library indexing time on set-up
– Alexa control not seamless

But the Vault is not only a CD-ripping hard-drive music player. Using the BluOS app you can also use the Vault as a streaming preamplifier, with two USB slots, a combo analogue/optical minijack input, plus all the ways of BluOS. There is both Bluetooth for streaming from your phone or computer, and also Bluetooth out, so it can stream music to your wireless headphones. Through the Wi-Fi and Ethernet networking options the Vault can directly access a long list of music services, both paid (including Spotify, Deezer and Tidal) and free (TuneIn, iHeartRadio). Those paying for the higher-level Tidal Hi-Fi subscription will be able to enjoy MQA playback (effectively high-res audio streaming), as all Bluesound DACs can unfold MQA.



◂ A full scroll of the music services (though not all are available to Australia).

▸ Browsing album artwork on the iPad Pro, creating an ongoing playlist.



Voice control

The networking also includes Apple's latest AirPlay 2, which brings not only Apple-friendly multiroom playback but one of several options for voice control, using Siri through an iOS device or HomePod to control music from an Apple Music subscription: 'Hey Siri, play Crowded House in the living room' or 'Hey Siri, turn it up.'

And while the Vault was in residence, Bluesound also announced that Alexa has acquired a set of BluOS skills. So we grabbed our Dot (below), downloaded the skill set, went through quite the curfuffle of account linkages, and could then say things like "Alexa, tell BluVoice to turn it down". This it would do in the default room, though we soon found that 'Vault' sounds quite like 'default', so we renamed the Vault to Living Room ('Lounge' was not one of the suggested room names), made it the default player ("Alexa, ask BluVoice to set the default player to the living room"), then could say "Alexa, ask BluVoice to"… pause music, play, turn it up and down, and a good few other things.

Was it 100% reliable? No it wasn't. Ask it to play an artist and it searches not for an artist but for a playlist of the artist's name, which you almost certainly won't have. It's also biased towards the more popular artists, so that "Alexa tell BluVoice to play The Strypes" resulted a playlist of The Strokes from Amazon Music, which emerged inexplicably from the Alexa Dot itself, rather than the Vault.

It's early days, and new skills will be added. But the syntax gets pretty daunting when you have to say 'Alexa tell BluVoice to play Crowded House from Tidal in the Living Room'. We have to declare Alexa voice control to be located very much in the experimental stage for the moment. Use the app, we say.

The BluOS app

And you should use the app because it's excellent. It is most spaciously browsed on a tablet, of course, but it's most convenient on a phone, and remains easy to use on the smaller screen, though there's inevitably a bit more backing up through menus, or hopping around between sections, especially when organising playback through multiple zones. But it all worked, and we set up several players using only our iPhone. Simple it was, and successful each time (once a Pulse Flex speaker announced that set-up had failed, but it actually hadn't.)

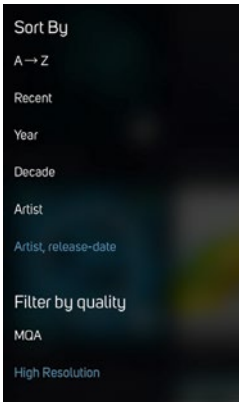
One bonus of networked set-up in this way is that you don't need to be in the room, so if you're setting up a group of BluOS devices throughout the home, you just find them one at a time in your Wi-Fi settings and set them up, perhaps, as we did, while listening to music flowing in the main room from your first initialisation.

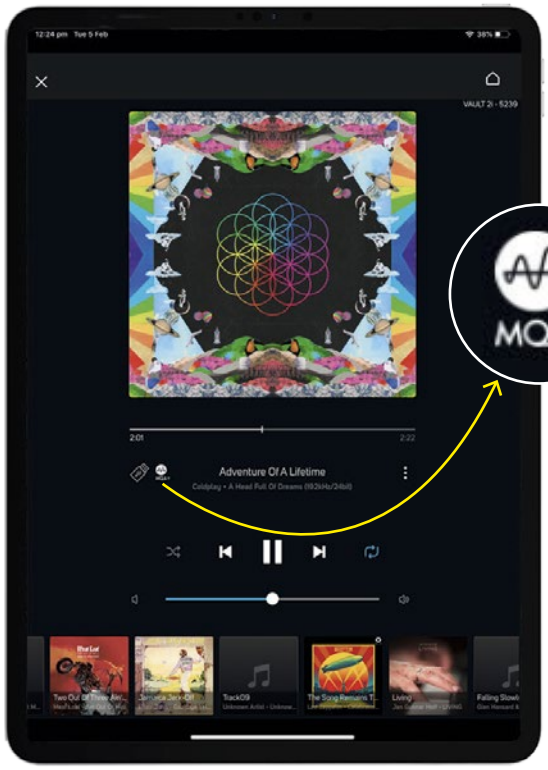
You get early firmware update prompts, which are sensibly applied. We got one a few weeks later as well, again warning us it might take 30 minutes, but rather pleasingly taking only about five.

Browsing has all the usual options, by artist (no pictures), albums (artwork shown), songs, genres, playlists, composers and, often useful for external drives and network shares, by folder. If you used the very first-gen of Bluesound app and found it frustrating that album titles were delayed until all the artwork had loaded, you'll be pleased to know that's long fixed, and navigation was zippy from both our shiny new iPad Pro and our rather older iPhone 5.

We also love Bluesound's ability to filter album and song lists by quality (see below), so it shows only music of minimum CD quality, or high-res, or MQA (a compression method that claims to fold high-res audio into much smaller and so streamable files). Bluesound is fully MQA-compatible and the app highlights MQA playback with either a green or blue dot over the MQA logo, blue being better, as it indicates a file "signed off" by its creators. Blue files were thin on the ground in the early days, but are now increasingly available via Tidal. Our few standalone MQA files all played perfectly (see overleaf).

You can also (simultaneously) filter albums to appear in artist order, and in release order, which proved our favourite way of general browsing.





Time to index

The zippiness of navigation is partly down to the way that BluOS makes an index of your music collection before you start browsing. The indexing system has both merits and disadvantages. By maintaining an index for all your music, BluOS doesn't have to constantly check every piece on information on the network — it's there for you without delay. This works admirably for those with stable and permanent file collections, though when you first ask BluOS to index a network share with 70,000 songs on it, prepare for a long wait; the claim is 1000 songs a minute, we were getting rather less, about 10,000 an hour. But this is (hopefully) a one-time process.

On the other hand, indexing will go wrong quickly if a network share becomes unavailable, or if you rearrange your folder systems. It also requires reindexing when you add new music, which can be quick enough but a frustrating pause given it's often the new music you to want to play.

And a permanent index is not well suited to USB storage, which the Vault supports via its two rear USB slots. BluOS tackles this as sensibly as possible, creating an instant but temporary index when you insert a USB stick or drive, and wiping that index again when the device is removed — the songs are never added to your master Library, though they can go into mixed playlists and queues.

However, as noted, indexing takes time, so when we inserted one stick and one drive, both loaded to the gills with high-res audio and all our filetype tests, we were confused that all the folders on the USB were visible but empty. Only 10 minutes later did we note them filling up with files that we could play, with the artists and albums also browseable within the USB input selection (we gather it will index around 500 songs a minute, half the speed it will index a network share).

So for USB this is hardly instant plug'n'play, nor are the USB files visible to other Bluesound players in the same way as the hard drive, although you could 'group play' to them with the Vault in control. Also worth nothing is that the Vault only provides USB power up to 0.5A.

This is why Bluesound recommends network shares and hard-drive storage over USB. But nevertheless if you want to keep a USB drive permanently in the back, it works well, just separately from your main library. We couldn't find a way to copy from USB to the Vault's drive, which is a pity because we found doing so from a networked computer was too slow to be practical. (But our network is full of switches and may have been having a bad day.)

Listening

The first thing to note when listening is that we never once heard the hard drive in operation. Compare that to the Mac Mini wheezing away in our Music Room and it's quite the achievement. The music is all that you'll hear when playing from the Vault.

We listened initially via its analogue outputs, in order to judge the quality of its own internal DAC, which proved enjoyable enough, only marginally outclassed in smoothness and resolution by the DAC in our Classé amplifier when fed the Vault's optical output. If you have a good external DAC, set your volume trims to match, flick between the two and choose your preference.

This decided, the Vault's performance is more about the access and reliability delivered by the hard drive storage and the endless BluOS streaming options. Browse your music, selecting songs and choosing 'Add Next' or 'Add Last', building a queue of goodies and then controlling them from the convenience of your phone. Click 'information' to get online information, press 'technical info' to get the detailed file statistics. We drifted into internet radio and podcasts using iHeartRadio and Radio Paradise (the latter Alexa-selectable), and best of all sat back and played through our folders of high-res FLAC albums.

And fine as the BluOS app is, we confess stealing away to the Roon app and playing music to the Roon-ready Vault that way. And when once the Vault inexplicably disappeared as a Roon endpoint, we instead Rooned music to an upstairs Bluesound Pulse Flex speaker, grouped that with the Vault, and turned the Pulse's volume down to zero. Success! See how versatile these multiroom set-ups can be, as well as quirky.

File types

We were able to check the Vault/Bluesound's ability to play different file types from our USBs, and support is good for high-res FLAC, WAV to 24-bit 192kHz and Apple Lossless to at least 24-bit 96kHz. It unfolds MQA as described (see inset image, left). It even scored a rare success at playing a 5.1-channel FLAC file of *Wish You Were Here*, though rendering only two channels so that it was silent for a minute until Gilmour's overdubbed acoustic guitar arrived. It seemed to play a 24/352.8k FLAC — the timebar progressed but no music emerged.

Our folder of DSD files was simply empty. It turns out that DSD support is, shall we say, nominal, requiring you to load the BluOS app for Mac or PC onto a computer, turn on a DSD playback option, then point the app to your DSD files which will then be converted into PCM for playback — which clearly isn't DSD playback at all. Far easier to convert the files yourself, anyway. But after reading our interview with Brian Zolner this issue, you may not much care about DSD anyway.

Conclusion

We'll have more in the next issue on other members of the Bluesound 2i family, and their multiroom operation in particular. But in our time with the Vault 2i, this stylish unit performed its core functionality of playback from hard-drive perfectly, under the control of the excellent BluOS app, and to a certain extent under Alexa voice control too. In addition you get the whole BluOS streaming and multiroom platform, which is well developed and mature (except the Alexa bit), and the further bonuses of Bluetooth in with aptX HD, of Bluetooth out to wireless headphones, and of AirPlay 2. And once you've become accustomed to the indexing ways of the app, it all becomes a thorough pleasure to use, especially when filtering by quality, making a queue of faves, settling back and enjoying the music. ⊣ *Jez Ford*

SPECS

Bluesound Vault 2i $1999

Internal drive storage: 2TB

Inputs: CD ripper, optical/analogue minijack, 2 x USB-A, Bluetooth with aptX HD, Ethernet

Outputs: RCA analogue out, optical/coaxial digital out, subwoofer out, headphone out, Bluetooth out

Dimensions (whd): 220 x 90 x 192 mm

Weight: 1.84 kg

Contact: Convoy International

Telephone: 02 9774 9900

Web: bluesound.com.au