

Yamaha MusicCast NX-N500

MARTIN COLLOMS TRIES OUT A COMPACT ACTIVE POWERED 'MONITOR'
FROM A STABLE WITH A FINE TRACK RECORD



If somebody mentions Yamaha studio monitors, a couple of venerable 30 year old designs spring to mind: the little two-way *NS10* with its distinctive white driver cone, for a meter bridge location, and the much larger beryllium technology three-way *NS1000m*, ideally located on high stands. The fast timing of the *NS10* could be aggressive, but it clearly showed program faults and was considered highly communicative. With a dry, overdamped bass it did not add false colour or delay to the low frequencies, and was well liked by many for studio monitoring, particularly for checking that mixdown balances sang and timed well. Conversely the *NS1000m* was simply a remarkable loudspeaker: essentially a pure piston over its working range, with fine directivity, it had a massive dynamic range and reproduced electric bass guitar with aplomb.

Yamaha now has separate pro and consumer divisions and in the pro division there is a very compact professional monitor designed to reveal content in recordings, and not to flatter them. Contrasting with the passive *NS10*, the *HS5* is a true active design: a control pack built into the back of the speaker partly functions as a heat-sink but primarily provides the user with the facilities to fine tune the loudspeaker for location and room acoustics, absorption and the like. These include volume (*via* input sensitivity) (level), high frequency output of 0, ± 2 dB, and room boundary matching where the range below 500Hz may be stepped down 0, -2, -4dB (the latter about right for wall mounting, and the zero setting for free space on stands).

Further versions of this loudspeaker include the one actually delivered for review, the much more costly consumer-oriented NX-N500. The full retail price seems to be £600/pair, though it's available for £450/pair. Another fully active design, this also includes full control and signal coupling between the two enclosures, and also offers wireless drive using Yamaha's proprietary MusicCast software and matching App. While this version has analogue inputs and could be used for monitoring, it's obviously more obviously directed to home use, as it incorporates Yamaha control software that facilitates streaming from the internet, with digital audio connectivity to an installed home server network, and may also be driven wirelessly *via* Bluetooth and WiFi.

While devoid of grilles our satin white examples were beautifully finished; black and light walnut are the alternatives. At the time of writing this versatile box of tricks may be driven from a host of sources such as iDevices, phones and pads. It is naturally Airplay compatible, and includes the Yamaha MusicCast software with its associated App. I tried the latter with great success finding many facilities including, volume, bass and treble, internet radio etc. There was also a compact and highly effective remote control. A subtle light on the left hand 'control' loudspeaker also signifies the operating mode: Network, Airplay, Bluetooth, USB, optical, Aux/line, standby (and even an 'error' mode where connection has been unsuccessful).

Considerable internal sophistication includes, for example, the fact that the USB interface supports both 5.6MHz DSD and 32-bit/384kHz PCM audio data. The DAC is the popular ESS Sabre *ES9010K2M*, which has its own master clock. Inputs include stereo analogue *via* a miniature jack, digital optical, Ethernet, and USB. The right channel of the pair needs mains power, and is connected to the main loudspeaker by a local network cable for music data and control, and by a supplied XLR terminated cable for the analogue audio feed. With 10ft of supplied linking cables (specials may be ordered), the maximum spacing is about 8 feet when stand-mounted, which was enough for our auditioning.

On the acoustic side a 13cm (5in) bass/mid unit partners a protected 25mm dome tweeter, the latter as there is no overall grille, this omission a modern fashion. A large reflex port is fitted to the rear panel. Like the studio model, this fully active design has a linear power supply with class A/B amplifiers, 45W for the bass and 25W for the treble, crossing over at 2kHz. The loudspeaker as a whole measures 17x28.5x23.2/23.8cm (WxHxD) (plus a bit extra for cables and connectors). The heavier left channel speaker (which has the main processing workload) weighs 6.2kg; the right 5.7kg.

Sound Quality

Set for free space and mounted on 46cm cast alloy spiked stands, the loudspeakers were tried with a variety of sources and in a variety of operating modes. After a few days, listening began in earnest: even in free space the low frequencies and the lower