Hi-Fi Choice RECOMMENDED

Silent night

As a new audio-grade computer network switch hits the market, *Neville Roberts* can't help but rejoice in its glory

T here's no doubt that the best way to connect your streamer, digital music player and music server to your computer network is via Ethernet cable rather than wi-fi network. Only a cable offers the higher speeds that are required to transmit hi-res audio over a modern gigabit (1000Base-T) network. Connecting all of this together requires the use of a network switch, but the

Adding the F1 power switch makes the soundstage wider and less constrained

problem with the standard computer grade switches built into routers is they're designed to allow a reliable flow of information without concerning themselves with the effect that they may have on the timing of the data and the shape of the digital waveforms. For audio applications, these factors have a significant influence on the jitter of the digital audio signal, which the DAC would have to correct. It's therefore preferable to employ a dedicated

network switch that has specifically been designed for audio applications – enter the Silent Angel Bonn N8.

An audio-grade computer network switch with eight 100/1000Base-T gigabit Ethernet ports, it includes a customised Silent Angel Noise Absorber (SANA), two noise isolators for the main power circuit and a further two for the clock generator circuit. The included 'wall-wart' switched-mode power adapter is quoted as being medical grade, which means that it meets 2xMOPP isolation regulations and has a low leakage current of less than 100µA. The network switch is available on its own or with the external F1 linear power supply. The F1 contains two independent 5V 2A USB power supplies, which can connect to equipment via a standard 5.5mm coaxial DC plug or USB-A connection.

The build quality of both the Bonn N8 and F1 power supply is high, with good quality connectors housed in the strong metal cases. The Bonn N8 is supplied with a rather nice 50cm Ugreen Cat 7 patch cable, which employs shielding for individual wire pairs and for the cable as a whole.

Sound quality

I start using the Bonn N8 with its supplied switched-mode power supply to connect my Cambridge Audio Azur 851N streamer to a Thecus fileserver and my Windows PC so I can play music stored on the PC and fileserver. My 24/192 recording of Beethoven's *Piano Concerto No.5* played by the Scottish Chamber Orchestra is full, open and very refined. The piano is complex and sounds incredibly lifelike. When I switch to the F1 power supply, the same piece of music sees the piano move slightly closer to me with the orchestra set further back, but without any loss of clarity or refinement. The soundstage feels wider and less constrained.

After reuniting the Bonn N8 with its supplied switched-mode power supply, Herbie Mann & Sam Most Quintet's *Fascinating Rhythm* enjoys crystal clear flutes, guitar and drums, and impeccable timing. Switching the power supply to the F1, there is perhaps a subtle improvement in the clarity of the flutes, but apart from that the sound quality is excellent as it was previously.

To explore the delivery of detail more closely, I turn to a 16/44 WAV of the Chandos Baroque Players playing Vivaldi's *Concerto in C major*. With the switched-mode power supply, the music flows effortlessly and has superb presence and realism. When I use the F1, I sense more space around the recorder and all the instruments have more clearly defined locations in my room.

Conclusions

This is a great network switch for audio applications and the F1 linear power supply results in improvements that are more apparent with some recordings than with others. Priced at £400 for the N8 switch or £800 with the F1 linear PSU, for the money it's definitely a winner ●

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY
★★★★★

VALUE FOR MONEY
★★★★★

BUILD QUALITY
★★★★★

FEATURES
★★★★★

LIKE: Great build quality; definite improvement to performances

DISLIKE: Nothing at the price

WE SAY: A well-made switch that delivers accurate digital data

OVERALL
★★★★★