

NSC 222

Product sheet

Where streamlined design meets audiophile quality.

The NSC 222 is a feature-packed streaming pre-amplifier that keeps things simple without compromising on musical quality. Precision engineered and designed in the UK, this new design features a world of music and radio streaming, alongside vinyl and headphone support - plus a full-spec analogue pre-amplifier. Partner with the new NAP 250 power amplifier for the ultimate 'just add speakers' pairing.



Key points

- **Statement volume control architecture** using reed relays. Premium sound quality of fixed resistor volume control, providing precise channel balance. This miniaturised version of the Statement volume control uses super smooth fly-by-wire optical encoder with precision ball raced bearing.
- **Reed relay input switching**
- **Single ended discrete transistor class A** input buffers and filter circuits; using hand soldered polystyrene capacitors.
- **Built in high quality MM phono stage**
- **5.5 inch colour display**
- **Configurable inputs:** Input sensitivity pre-set, naming, AV bypass mode and unused input disabling.
- **Uses Naim's latest NP800 streaming card with LVDS balanced digital signals** for low noise. Stream internet radio stations, music from Spotify Connect, Apple Music, Tidal (and Tidal Connect), Qobuz, AirPlay 2, Chromecast, UPnP servers, USB attached storage and Roon ready.
- **aptX Adaptive Bluetooth**
- **App control continuity** from Mu-so through to Classic range.
- **Multi-room capability** with other Naim streaming products (right up to Classic range and 500 Series).
- **ZigBee RF bi-directional remote control**, line of sight not needed, volume changes reflected on the remote.
- **Dual optical 3.5mm inter-product** communications for synchronised standby and lighting, compatible with the new NAP250 power amplifier.
- **Twin fixed frequency** (44.1kHz and 48kHz based sample rates) master clocks for ultra low jitter. Runs in clock master mode for streaming services.
- **DSP RAM buffer for SP/DIF inputs**, eliminates jitter caused by SP/DIF modulation (4x SP/DIF inputs).
- **Naim's proprietary DSP 705.6kHz/768kHz** integer oversampling filter.
- **PCM1791A DAC** (running in external filter mode) followed by discrete transistor class A op-amps and filters. Custom polystyrene ultralow dielectric absorption Post DAC filter components.
- **PSU upgrade with NPX 300** via two Burndy cables (one digital and one analogue).
- **0.5W standby power**
Using two internal power supplies; one is a high quality audiophile linear type, based on a large toroidal transformer. The other is a highly efficient SMPSU for 0.5W power consumption in standby during standby mode.
- **Galvanic isolation** of control and audio circuits.

Specifications

Type	Preamplifier
Audio inputs	<ul style="list-style-type: none"> • 1 x moving magnet phono • 1 x 8-pin DIN (compatible with 5-pin DIN cables) • 1 x RCA stereo pair • Line level inputs (RCA/DIN): Impedance 47k, 2.2V typical, 7.5Vrms Max • 8 pin DIN has +/-18V for compatible external phono stages such as Solstice NVC-TT. Compatible with 5 pin DIN • MM phono: 47k/470pF, 5mV, 23dB overload (75mV max)
Audio outputs	<ul style="list-style-type: none"> • Analogue • 1 x XLR pair (Stereo XLR balanced impedance 7Vrms max) • 1 x RCA pair (Stereo RCA 7Vrms max) • 1 x 6.35mm headphone jack (Headphone 1.5W into 16)
USB	2 x USB Type A socket (front and rear - 1.6A charge)
Digital inputs (S/PDIF)	<ul style="list-style-type: none"> • 2 x Optical TOSLINK (up to 24bit/96kHz) • 1 x coaxial RCA (up to 24bit/192kHz, DoP 64Fs) • 1 x coaxial BNC (up to 24bit 192kHz, DoP 64Fs)
Audio formats	<ul style="list-style-type: none"> • WAV - up to 32bit/384kHz • FLAC and AIFF - up to 24bit/384Hz • ALAC (Apple Lossless) - up to 24bit/384Hz • MP3 - up to 48kHz, 320kbit (16 bit) • AAC - up to 48kHz, 320kbit (16 bit) • OGG and WMA - up to 48kHz (16 bit) • DSD - 64 and 128Fs • M4A - up to 48kHz, 320kbit (16 bit) • Gapless playback supported on all formats
Analogue gain	<ul style="list-style-type: none"> • Pre-amplifier at max volume 15.5dB (with max Vol and max volume limit at 100%) • Phono stage MM 40dB
Digital level	2.1V at 0dBFS volume at 0dB
Frequency response	<ul style="list-style-type: none"> • MM: -3dB at 10Hz, RIAA +/-0.1dB • Line: 3Hz to 40kHz -3dB • Digital: 3Hz to 27kHz -3dB
Signal to noise ratio	<ul style="list-style-type: none"> • MM 80dB ref 5mV A-wtd volume at 0dB • Line 104dB ref 2.2V A-wtd volume at 0dB • Digital 102dB ref 0dBFS A-wtd volume at 0dB
Distortion	<ul style="list-style-type: none"> • MM: < noise floor • Line: 0.0025% @2.2V input volume at 0dB, 1kHz (Line: 0.015% @2.2V input volume at 0dB, 20kHz) • Digital: 0.0035% @0dBFS volume at 0dB, 1kHz
Cross talk	<ul style="list-style-type: none"> • MM: 90dB at 1kHz, volume at 0dB • Line: 90dB at 1kHz, volume at 0dB (Line: 70dB at 20kHz, volume at 0dB) • Digital: 90dB at 1kHz, volume at 0dB
Control	<ul style="list-style-type: none"> • App control (iOS and Android), bi-directional ZigBee remote and front panel • Optical 3.5mm output for synchronised control of compatible products e.g. NAP 250/350
Network	Ethernet (10/100Mbps), Wi-Fi (802.11 b/g/n/ac)
Typical use consumption	25W
Network standby mode consumption	<2W
Standby mode consumption	<0.5W
Mains Supply	115V or 230V, 50/60Hz
Dimensions (HxWxD)	3 ⁵ / ₈ x17x12 ¹ / ₂ " (9.15x43.2x31.75cm)
Weight	24.25lbs (11kg)

