NSC 222

Product sheet

NSC 222 is a feature-packed streaming preamplifier 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 preamplifier. Partner with NAP 250 power amplifier for the ultimate 'just add speakers' pairing.

1.5W discrete transistor, class A/AB headphone amplifier. Runs class A/class AB for higher power peaks. Headphone connection via 1/4 inch socket



Tactile buttons on front panel for quick access to standby, play/pause, inputs and favourites

Wi-Fi (802.11 b/g/n/ac) diversity antennas built into heatsink (patent GB2524815B) and wired Ethernet connector



Balanced impedance class A output amplifier for long and regular length cable runs via XLR

> Second set of outputs via RCA for bi-amping or subwoofer connection

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.
- Multiroom 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 NAP 250 power amplifier.
- Twin fixed frequency (44.1kHz and 48kHz based sample rates) master clocks for ultra low jitter.
- 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 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

Туре	Preamplifier
Analogue inputs	1 x moving magnet phono 1 x 8-pin DIN (47k Ω , 2.2V typical, 7.5Vrms max) 1 x RCA (47k Ω , 2.2V typical, 7.5Vrms max) pair 8-pin DIN compatible with 5-pin DIN 8 pin DIN has +/-18V (for compatible external phono stages e.g NVC TT) MM phono: 47k Ω /470pF, 5mV, 23dB overload (75mV max)
Analogue outputs	1 x XLR pair (balanced 7Vrms max) 1 x RCA pair (7Vrms max) 1 x 6.35mm headphone jack (1.5W into 16Ω)
USB	2 x USB Type A socket (front and rear - 1.6A charge)
Digital inputs (S/PDIF)	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	WAV - up to 32bit/384kHz FLAC and AIFF - up to 24bit/384Hz ALAC (Apple Lossless) - up to 24bit/384Hz MP3 - up to 48kHz, 320kbit (16bit) AAC - up to 48kHz, 320kbit (16bit) OGG and WMA - up to 48kHz (16bit) DSD - 64 and 128Fs M4A - up to 48kHz, 320kbit (16bit) Gapless playback supported on all formats
Analogue gain	Preamplifier at max volume: 15.5dB Phono stage MM: 40dB
Digital level	2.1V at OdBFS volume at OdB
Frequency response	MM: -3dB at 10Hz, RIAA +/-0.1dB Line: 3Hz to 40kHz -3dB Digital: 3Hz to 27kHz -3dB
Signal to noise ratio	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	MM: < noise floor Line: 0.0025% @2.2V input volume at OdB, 1kHz (Line: 0.015% @2.2V input volume at OdB, 20kHz) Digital: 0.0035% @0dBFS volume at OdB, 1kHz
Cross talk	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	App control (iOS and Android), bi-directional ZigBee remote and front panel. Control of NSC 222 via Zigbee 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)	35/8x17x121/2" (9.15x43.2x31.75cm)
Weight	24.25lbs (11kg)

