C 162 Stereo Preamplifier

- 6 Line Level Inputs including 2 Tape In/Outputs with dubbing facility
- Switchable MM and MC Phono Input
- 2 Line Level Preamp Outputs; one is variable from 0dB to –12dB
- Gold Plated RCA Connectors
- Pure "Class A" Discrete Amplifier Modules
- Independent Headphone Amplifier
- Bass and Treble Control with Tone Defeat Switch
- "Blue Velvet" Alps motorized volume control
- Input switching through hermetically sealed relays
- NAD Link
- 12V Trigger Output
- NAD SR-5 Full System Remote Control

With the arrival of the all new NAD Model C 162 pre-amplifier you can get the best of both worlds: Ultimate performance combined with the convenience of remote control. Its outward simplicity belies the sophistication of the circuitry inside.

Features:
With 6 line inputs (two of which are Tape In/Out) and an MM/MC phono input available it's unlikely you will run out of inputs to connect your sources to. The C 162 is fully remote controlled and comes supplied with the NAD C Series system remote control. As the C 162 has NAD Link, the remote control will also operate many other NAD products such as CD players, tuner etc. The headphone socket will drive virtually any non-electrostatic headphones.

It is fashionable to omit tone controls nowadays: However, provided that the tone controls are properly designed, they can really be a useful tool to make improvements to the overall sound. The C 162 tone controls only work at the frequency extremes leaving the critical mid-band essentially unaltered. The tone control circuits can be completely bypassed by using the tone defeat switch.

For remote on/off switching of ancillary components in a system, such as power amplifiers or active speakers, the C 162 is equipped with a 12V trigger system. When switching the pre-amplifier on, the 12V trigger output is also activated which in turn can

activate a 12V trigger input and switch on the remote devices.

Unique is the Variable Pre-out 2 facility. Many systems can benefit from the use of multiple power amplifiers for "Bi-Amping" (using separate power amplifiers to drive the bass and treble section of a loudspeaker). Many speakers are all ready set up for this with separate inputs for the low and high frequency sections. But not all power amplifiers are identical in gain (amplification factor). With the Variable Pre-out 2 facility differences in loudness between power amplifiers up to 12dB can be dialed out precisely.

The low output impedance on the Pre-outputs allow the C 162 to drive several power amplifiers in parallel and/or the use of long interconnect cables (without the degradation of the performance that can so often become apparent when long cables are used).

Design:
Following NAD's "Music First" design brief, the C 162 utilizes completely new, innovative circuit topology which allows for investment in high specification and close tolerance components. Metal film resistors, polypropylene capacitors, hermetically sealed relays and the Alps "Blue Velvet" motorized volume control are a few examples of this.

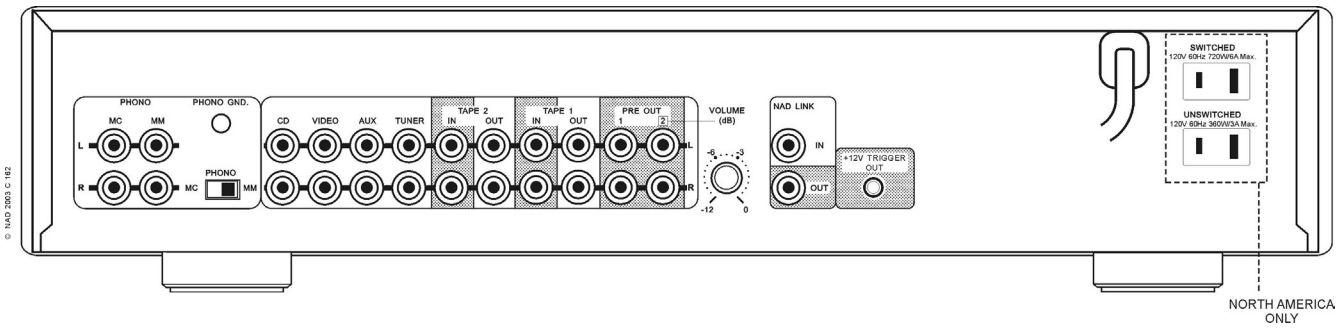
Special attention has been paid to the power supply section of the C 162. The toroidal transformer has 4 separate secondary windings followed by 6 main low-noise regulators. From here no less than 6 super low-noise subsidiary regulators and active filters are used to maximize supply rejection for all sections of the C 162 to more than 100dB.

Often other manufacturers disregard the importance of a phono stage. NAD recognizes the performance potential of a good turntable and has made sure that the C 162 will not be the limiting factor. The MC phono stage is built pretty much like a small "power amp" so that a wide range of MC cartridges can be used while keeping noise very low combined with a high overload margin. Likewise, the

MM phono stage also can cope with a wide range of cartridges and operates entirely in Class A. The built-in infrasonic filter filters out unwanted rumble components from the turntable or record itself but without introducing any significant group delays. To ensure accurate RIAA response the entire circuit uses 1% tolerance metal film resistors and 2% tolerance capacitors.

Essentially the same circuitry used for the phono circuit is also used for both the line input and output stage: A modular FET amp operating in Class A. The line output stage is capable of driving 10V into 600 ohms. This, combined with the high input impedance of the line input amplifier (500k ohms) means that the C 162 can be combined with a vast range of sources and power amplifiers. For the inputs themselves, the NAD engineers have opted for using relays rather then using electronic switching between sources. All input and output sockets are gold plated.

Often it is said that performance and convenience don't go together, but the NAD Model C 162 is the exception to the rule. At this reasonable price, the Model C 162 deserves to partner with the finest of ancillary components.



Phono stage	
Phono R + C; MM	47kΩ + 470pF
Phono R + C; MC	100Ω + 1nF
Input sensitivity ref. 0.5V 1kHz; MM	2.1mV
Input sensitivity ref 200mV; MM	
Input sensitivity ref. 0.5V 1kHz; MC	115uV
Input overload 20Hz/1kHz/20kHz; MM	20mV/230mV/2V
Input overload 20Hz/1kHz/20kHz; MC	1.3mV/12mV/110mV
Signal/noise ratio (A-weighted + cartridge); MM	80dB ref. 5mV
Signal/noise ratio (Unweighted) MM	
Signal/noise ratio (A-weighted + cartridge); MC	81dB ref. 0.5mV
RIAA accuracy; MM (20Hz - 20kHz)	± 0.4dB
RIAA accuracy; MC (50Hz - 20kHz)	± 0.4dB
Line level inputs	
Impedance (R+C)	500kΩ + 320pF
Sensitivity; ref. 0.5V	150mV
Maximum input signal	17V
Signal/noise A-weighted	>100dB ref. 0.5V
Frequency response (-3dB 3Hz - 70kHz)	± 0.2dB
THD	0.01%

Line level outputs	
Output impedance, Pre-amp	75Ω
Tape	Source Z + 1kΩ
Phones	100Ω
Maximum output level; Pre-amp	>15V
Tape	>15V
Phones	190mV into 8Ω
Tone Control	
Treble	±5dB at 10kHz
Bass	±5dB at 50Hz
Remote control	Yes
Physical Specifications	
Dimensions (W x H x D)	17 1/8 x 3 1/8 x 11 1/4" (435 x 80 x 285mm)
Net Weight	10.6 lbs (4.8 kg)
Shipping Weight	13.2 lbs (6 kg)

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