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Please note that this document contains the text from the original product brochure, and some technical statements may now be out of date



The NAD 4020A is a rationally-engineered, moderately- priced AM/FM tuner, whose performance in most locations and with most broadcasts is audibly identical to that of many more expensive and elaborate tuners. The 4020's quality of sound is limited only by the quality of the transmitted broadcast.

Recent dramatic advances in FM tuner circuitry, particularly in the development of inexpensive but high-performance "building block" circuit modules, have been incorporated in the 4020A to provide excellent sound at a reasonable price.

Such crucial design parameters as sensitivity, low distortion and wide stereo separation have been given priority over the inclusion of costly superfluous features and esoteric circuitry whose benefits are totally inaudible except in extreme reception conditions. But no compromises whatsoever have been made in those performance areas which relate directly to the 4020's listening quality in normal (and even somewhat difficult) reception locations.

#### **HIGH SENSITIVITY**

The "front end" tuning circuit, for example, employs a Junction FET amplifier, for an optimum combination of sensitivity to weak signals and resistance to cross-- modulation from strong signals. The intermediate frequency (I.F.) amplifier, a high-gain IC, provides excellent limiting (static suppression), very good AM rejection (suppression of multipath interference), and smooth muting of interstation noise. **LOW DISTORTION** While budget-priced tuners commonly contain one or two ceramic I.F. filters, the NAD 4020A employs a total of three. Their sharp selectivity minimises interference from adjacent stations on the increasingly crowded FM dial, and their linear-phase response contributes to minimum distortion of stereo broadcasts. Multiplex stereo decoding is performed by the latest phase-locked loop (PLL) IC. In addition to low noise and wide stereo separation, the PLL decoder yields the lowest distortion in stereo reception - in particular, minimum inter-modulation between high audio frequencies and the 19 kHz stereo pilot tone.

#### **WIDE STEREO SEPARATION**

It is important to maintain wide stereo separation at low and high frequencies as well as the commonly-specified 1 kHz midrange point. In the 4020A, phase shift of the composite signal is minimised in order to preserve full low-frequency separation, and a special NAD phase-compensated crosstalk cancellation circuit increases high-frequency separation and minimises any residual distortion.

Instead of a costly and fragile moving-coil tuning meter the 4020A has a set of three LED indicator lights which form a remarkably simple and accurate meter. Either of two amber LEDs illuminates when the 4020A is mistuned to either side of a station frequency, and a green LED illuminates when the station is optimally tuned for minimum distortion (within 0.025 MHz). The brightness of the green tuning LED indicates the signal strength; when it is dim the station is too weak for optimum reception.

For the music lover seeking uncompromised performance for a modest investment, the NAD 4020A is the logical choice. There are more costly tuners available, some of which have more impressive specifications, but very few sound better in everyday use.

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**FM TUNER SECTION**

Input sensitivity	Mono -30dB THD+N	10.9dBf (1.9 $\mu$ V/75 $\Omega$ )
	Mono 50dB S/N	16dBf (3.5 $\mu$ V/75 $\Omega$ )
	Stereo 50dB S/N	37dBf (40 $\mu$ V/75 $\Omega$ )
Capture ratio (45 - 65dBf)		1.5dB
AM rejection (45 - 65dBf)		60dB
Selectivity		65dB
Image rejection		50dB
I F rejection		75dB
Harmonic distortion	Mono	0.2%
	Stereo	0.3%
Signal/Noise ratio	Mono	75dB
	Stereo	70dB
Frequency response $\pm$ 0.5dB		30Hz - 15kHz
Channel separation at 1kHz		42dB

**AM TUNER SECTION**

Usable sensitivity		250 $\mu$ V
Selectivity		30dB
Image rejection		50dB
I F rejection		40dB
Remote		No
NAD Link		No

**PHYSICAL SPECIFICATIONS**

Dimensions (W x H x D)		420 x 96 x 240mm
Net weight		4.2kg
Shipping weight		5.6kg

Dimensions are of unit's cabinet without attached feet; add up to 18mm for total height.

Dimension depth excludes terminals, sockets, controls and buttons.