

The

Separates

Tandberg

for

3000

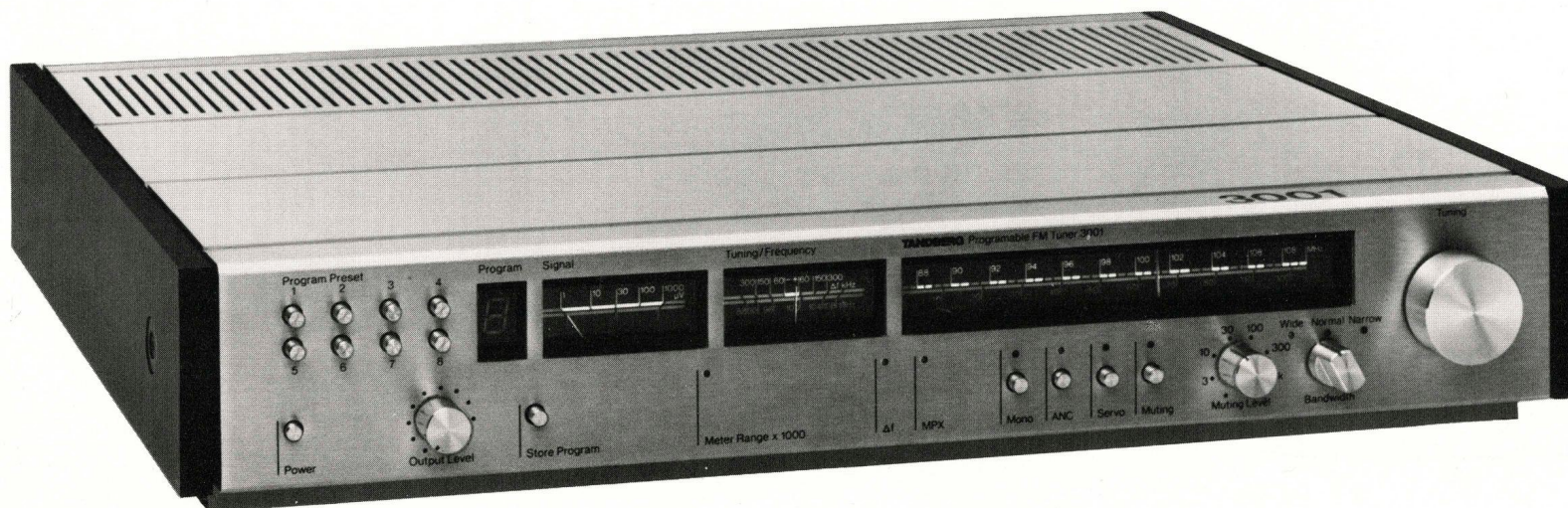
the 80's

Series

The challenge was to produce a series of ultimate performing components which by the very sophistication of their design were beautiful to look at and functional in operation.

Consistency, design integrity, unsurpassed performance and uncompromised engineering: these were the design objectives for Tandberg 3000 Series.

The result, as the following pages illustrate, is a group of products whose performance is on a par with that of the finest in the world, combined with the elegance of design and "common sense" philosophy towards operation that have become the hallmark of Tandberg products.



Creation of the world's finest FM tuner was simply the goal in the design of the TPT-3001.

All solutions representing any form of compromise were abandoned.

A unique design employing eight ganged varactor tuned diodes was employed for the front-end section of this tuner.

Digital frequency display was abandoned as this method inherently compromises signal-to-noise performance.

Dual gate MOS FETS were employed in both RF stages as well as the mixer stage.

The result is signal-to-noise performance figures previously unheard of in an FM tuner. Noise levels are *better than 90 dB* below the signal level in *stereo*.

An electronic memory system is employed to allow the all-electronic tuning section to "store" up to eight pre-selected stations and recall them at the touch of a button.

Computer-type "logic" is employed in the highly sophisticated circuit that controls switching and servo-tuning functions.

A three position IF block is used to overcome the compromises of selectivity and capture ratio performance, as well as insure minimum distortion. Twenty-pole phase linear filters are employed to minimize distortion and improve selectivity. Two ceramic filters are employed in the "narrow" position to yield up to 125 dB selectivity.

In performance, operation, and convenience, the Tandberg TPT-3001 sets new standards for the industry, bringing FM tuner performance on a par with the finest preamplifiers and amplifiers in the world.

An autorange signal meter is employed to maximize dynamic range of the instrument, and a dual function tuning frequency meter indicates center tune and preset frequency.

A unique three-circuit muting function provides totally noise-free tuning during manual operation.

The Tandberg TPT-3001 is as easy to operate as it is to listen to.



Tandberg engineers wanted to employ the latest design technology of "straight wire" configuration without sacrificing adequate controls and functions necessary for operation of a sophisticated system.

Aided by advanced computer analysis, a unique design was created that carefully positioned every component on the circuit board at the ideal location for minimum hum and noise, allowing the sonic integrity to be maintained without sacrificing desired control functions.

The result of this effort is apparent when you look inside this unique preamplifier and discover the total absence of wires—and even more important—when listening to this extraordinary instrument.

Consistent with the "No Compromise" design of all 3000 Series components is the use of two separate phono input preamplifiers. The moving coil input avoids previously employed compromises of transformer or "head amplifier" designs. Instead, a complete preamplifier stage employing 11 discrete semi-conductor devices per channel is employed. This design insures maximum hum and noise rejection combined with high speed performance and near-perfect cartridge interfacing.

A separate and similar design is employed for the moving magnet phono inputs, which provides for adjustment of the capacitance and resistance to insure a correct cartridge interface as well.

Other important features of the Tandberg TCA-3002 include a special Butterworth subsonic filter circuit to reduce low frequency distortions while leaving the audible range untampered, a high current capacity tone control circuit for minimum distortion in the tone circuits, a separate headphone amplifier with independent volume adjustment, plus tape monitor & copy facilities.

The Tandberg TCA-3002 is a truly unique control amplifier providing the harmonious blend of performance & function without compromise.

Designed to satisfy the most discriminating demands of high speed, high powered applications, the TPA-3003 delivers 150 watts per channel into 8 ohms at less than 0.02% THD.

More important than power are the transient signal capabilities resulting from a unique approach in feedback design which optimizes the balance between high speed and stability.

The result is an amplifier delivering stunning clarity and detail, while remaining stable with a wide variety of load conditions.

Of particular importance are the toroidal power transformer and large heat sink surfaces for hum-free and cool operation. A unique top panel allows the use of the entire chassis as a heat sink.

Two LED indicators light up to indicate when the amplifier is approaching the clipping point.

Power fast & clean! The TPA-3003 is designed to satisfy the most discerning listener, offering at the same time the ultimate in reliability.



Incorporating Tandberg's patented ACTILINEAR Recording System and patented DYNEQ Record Equalization, plus a unique new bias circuit, the TCD 3004 represents the culmination of the company's 30 years of research and development in tape recording.

Having completely rethought and redesigned the electronics of the recorder to suit the new generation of recording tapes available now and in the years to come, Tandberg's TCD 3004 brings new performance levels to the cassette format.

Control of every desirable function is simplified through intelligent front panel layout and PROM-brain logic control of microprocessor-operated functions. Obtaining the ultimate in cassette performance becomes an operational pleasure.

The Tandberg TCD 3004 represents the crowning achievement in cassette technology. Available in 1980.



