

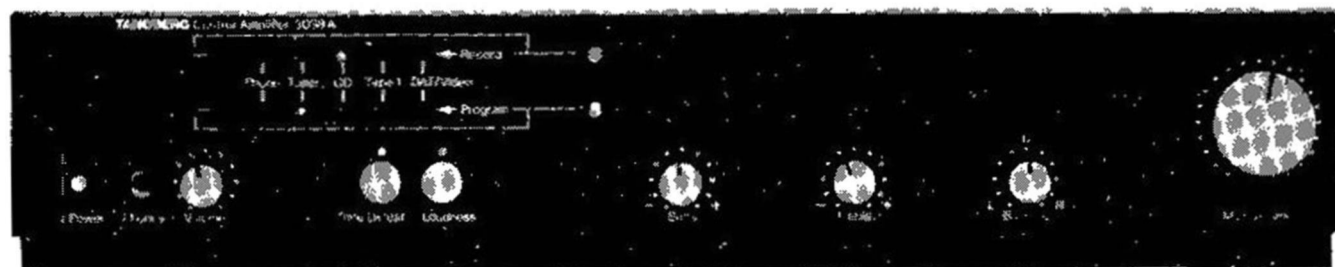
3038

AMPLIFIER

The new Tandberg TCA 3038A Pre-amplifier is a full remote controlled unit, sharing many design-

features with the "state of the art" TCA 3018A Pre-amp.

This new pre-amplifier is a true audiophile product, incorporating a large number of inputs, including MM and MC phono sections.



Component selection

All audio stages are comprised exclusively of high quality capacitors and metal film resistors, selected for optimum audio performance. These selected capacitors eliminate dielectric losses and dyna-

mic capacitance changes found in conventional components, with their subtle sonic blurring of details, loss of perspective and focus, and harsh metallic sound.

All metal film resistors used, provide high accuracy and long term stability.

The audio section employs only discrete selected active elements.

High level inputs

All high level inputs on the TCA 3038A offer an overload rating in excess of 6 volt.

No matter how dynamic the source is, it will not overload the input.

RIAA

The design philosophy is based on a passive/active Phono EQ. Both phono sections, MC/MM, are split into passive H.F. and active L.F. sections.

This eliminates the need for negative feedback in the high end with its resultant sonic degradation.

The design incorporates separate input-stages for the MC/MM sections with automatic switching.

Zero Negative Feedback

The Tandberg TCA 3038A Pre-amplifier is a true zero negative feedback line-amplifier.

The result of this is remarkable sound reproduction. Purity, transients, openness, resolution and imaging, only surpassed by the more expensive Tandberg TCA 3018A,

are distinct improvements over the widely employed negative feedback design of other industry manufacturers.

The linearity of the amplifiers is maintained at all levels and with all loads. No negative feedback also means no need for

stability compensation, no stability problems, no internal circuit overload nor conditional stability.

How this affects sound reproduction is remarkable. The best proof is to compare the performance of the TCA 3038A with any other product in this price category.

Full remote operation

All functions are micro-processor controlled, and can be remote operated by the RC 3000 transmitter (optional).

Program select, record select, tone/tone-defeat and loudness are all monitored by means of LED's.

The volume control is operated by a servo-motor to avoid degradation of sound, normally apparent in voltage controlled amplifiers (VCA's).

Technical Data

Tandberg Control Amplifier TCA 3038A

Power Requirements:**Power consumption:**

110 – 115 V/220 – 230 V/240 V $\pm 10\%$, 50/60 Hz
35 W max.

Dimensions:

Width 17 1/8" (43.5 cm)
Depth 13 3/4" (35.0 cm)
Height 3 1/4" (8.3 cm)
Weight 10.7 lbs (4.85 kg)

Technical Data according to IHF-A-202, 1978

Frequency range:

Phono MM, Phono MC:

20 – 20.000 Hz

 ± 0.5 dB

Tape 1, Tape 2, Tuner, CD:

20 – 20.000 Hz

 $\pm 0/-0.5$ dB**Maximum Voltage Output:**

Preamp output:

5.5 V at THD = 0.05%

Preamp output:

5.5 V at clipping level

Tape 1, Tape 2:

5.5 V

Headphone output:

10 V unloaded

Total Harmonic Distortion (20 Hz – 20.000 Hz):

Phono MM, Phono MC:

< 0.08 %

Tape 1, Tape 2, DAT, Video, Tuner, CD:

< 0.04 %

Input Sensitivity – Ref. 0.5 V output voltage:

Phono MM

1.5 mV

Phono MC:

60 μ V

Tape 1, Tape 2, DAT, Video, Tuner, CD:

60 mV

A-weighted Signal-to-Noise ratio:

Phono MM:

75 dB

Phono MC:

70 dB

Tape 1, Tape 2, DAT, Video, Tuner, CD:

85 dB

Maximum Input Voltage (1 kHz):

Phono MM:

70 mV

Phono MC:

5 mV

Tape 1, Tape 2, DAT, Video, Tuner, CD:

6 V

Input impedance:

Phono MM:

47 kohm

Phono MC:

150 ohm

Tape 1, Tape 2, DAT, Video, Tuner, CD:

min. 10 kohm

Secondary Disclosures

Output impedance:

Preamp:

200 ohm + 22 μ F in series

Headphones:

150 ohm

Headphones (min. load):

150 ohm

Tone control response:

Bass:

 ± 9 dB at 100 Hz

Treble:

 ± 9 dB at 10.000 Hz

Loudness:

Max. 7 dB at 50 Hz

Crosstalk (100 Hz – 10 kHz):

Phono MM, Phono MC:

To any of the other sources > 75 dB

Tape 1, Tape 2, DAT, Video, Tuner, CD:

To any of the other sources > 75 dB

Separation (100 Hz – 10 kHz):

Phono MM, Phono MC:

> 50 dB

Tape 1, Tape 2, DAT, Video, Tuner, CD:

> 50 dB

Transient intermodulation:

All inputs:

Immeasurable

Other Technical Data

Frequency range:

Tape 1, Tape 2, Tuner, CD:

1.6 – 250.000 Hz $\pm 0/-3$ dB**Phase shift (20 Hz – 20.000 Hz):**

Tape 1, Tape 2, DAT, Video, Tuner, CD:

 $\pm 5^\circ/-5^\circ$

– Specifications are subject to change without notice.

YOUR AUTHORIZED TANDBERG REPRESENTATIVE:

HEADQUARTER:

Tandberg Audio
Products A.s
Østensjøvn. 44
N-0667 Oslo 6
Norway

Telephone
(472) 65 09 05