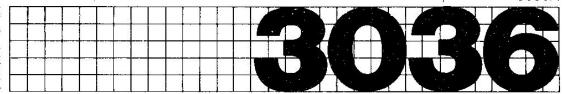
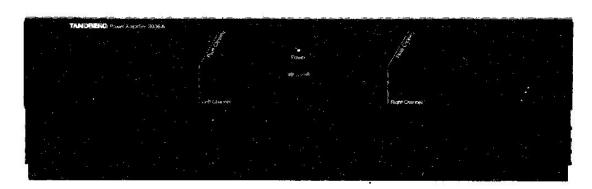
Technical Paper

Power Amplifier TPA 3036A



AMPLIFIER

The TPA 3036A Power Amplifier is a 2×100 W audiophile power amplifier with high current capacity combined with a very rugged design and ability to drive difficult loads. The TPA 3036A includes many features adopted from the Top of the lineTandberg TPA 3016A Power Amplifier and TPA 3026A.



Component selection

All components used in the TPA 3036A are selected for maximum accuracy and best audio performance. Optimum performance is ensured by means of eliminating coupling-capacitors in the signal-path. This special design offers improvements relating to openness, resolution and purity.

All resistors are metal film types for high accuracy, low noise and long term stability,

Active elements are discrete selected types throughout the entire circuitry.

Well dimensioned power circuits

A major feature of this new amplifier is a well dimensioned high current power supply. A massive Dual C transformer reduces voltage modulations usually resulting in unstable perspective and lack of control in the bass area.

The high current design guarantees superior performance even under the most dynamic signal conditions.

High current capability

Years of experience with MOSFET and BI-POLAR technology is incorporated in the design of the

TPA 3036A. This bi-polar design is hardly matched by any other amplifier.

With 20.000 uF capacitors, the 3036A offers a peak current of 30 A.

Zero Feedback

The Zero Feedback design of 3036A greatly increases the signal capacity of the active stages.

Usually feedback is applied to reduce overall distortion and linearity errors.

Our unique design offers all the advantages of zero feedback without any sacrifice in linearity or raised distortion levels.

Feed forward driver design

The feed forward circuitry eliminates the on-resistance in the output transistors.

This results in extremely low output impedance - all through the audio band up to several hundred KHz - assuring full control over all elements in the

speakers, insuring a highly detailed and accurate midrange and high-end performance.

Thermic Servo Loop

DC stability is usually controlled by means of negative feedback, injecting its control signals into the audio path.

The Tandberg Thermic Servo Loop, further refined since its introduction, uniquely controls stability,

by means of temperature, to achieve zero DC with absolutely no interference to the audio signal.

Technical Data

Power Requirements:

110 - 115 V/220 - 230 V/240 V ± 10 %, 50/60 Hz

Tandberg Power Amplifier 3036A

Power Consumption:

50 -- 500 W

Peak Power, 4 ohm:

2 x 240 W

Continuous Average Power Output (4 ohm, 20 - 20.000 Hz):

2 x 120 W

Dimensions:

Width: 17 1/8" (43.5 cm) Depth: 13 3/4" (35.0 cm) Height: 5 1/4" (13.0 cm) Weight: 23.4 lbs (10.6 kg)

Technical Data according to Continuous Average Power Output: IHF-A-202, 1978

 $(8 \text{ ohm } 20 - 20.000 \text{ Hz}, \text{THD} < 0.08 \%) 2 \times 100 \text{ W}$

Frequency Response:

 $20 - 20.000 \, \text{Hz} + 0/- 0.1 \, \text{dB}$

A-weighted Signal-to-Noise Ratio:

(Ref. 1 W/8 ohm)

90 dB

Secondary Disclosures

Output impedance (20 - 20.000 Hz):

< 0.01 ohm

Wideband Damping Factor:

>800

Low Frequency Damping Factor:

> 2500

SMPTE Intermodulation Distortion:

0.08 %

IHF Intermodulation Distortion:

0.08 %

Transient Overload Recovery Time:

Immeasureable

Sensitivity:

(1 W) (100 W) 100 mV 1.0 V

Specifications are subject to change without notice.

YOUR AUTHORIZED TANDBERG REPRESENTATIVE:

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