

# TANDBERG

## TR 2040

### Technical data

It is Tandberg's policy to improve products as new techniques and components become available.

Tandbergs Radiofabrikk A/S therefore reserves the right to change specifications at any time.



## AUDIO SECTION

**\*POWER OUTPUT:** Average continuous sinewave power is 40 watts minimum RMS per channel, both channels driven into 8 ohms load, from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion from 1/4 watt to 40 watts as specified herein.

Power output DIN 45500: 2 x 72 watts

Power output: continuous, both channels driven into 4 ohms load at 1 kHz, 0.15% distortion. 2 x 65 watts

Power output: continuous, both channels driven into 8 ohms load at 1 kHz, 0.09% distortion. 2 x 50 watts

Load impedance: 4–16 ohms

**\*TOTAL HARMONIC DISTORTION:** Maximum 0.09% at any power from 1/4 watt up to rated power in 8 ohms load.

Intermodulation, IHF and DIN 45500: Less than 0.09%

Damping factor at 20–20,000 Hz: 50 at 8 ohms

Frequency response: 8–50,000 Hz

Overall linear input at –1.6 dB

Bass control range: ±15 dB at 50 Hz

Bass loudness: +9 dB 50 Hz

Treble control range: ±15 dB at 10,000 Hz

Treble loudness: +3 dB at 10,000 Hz

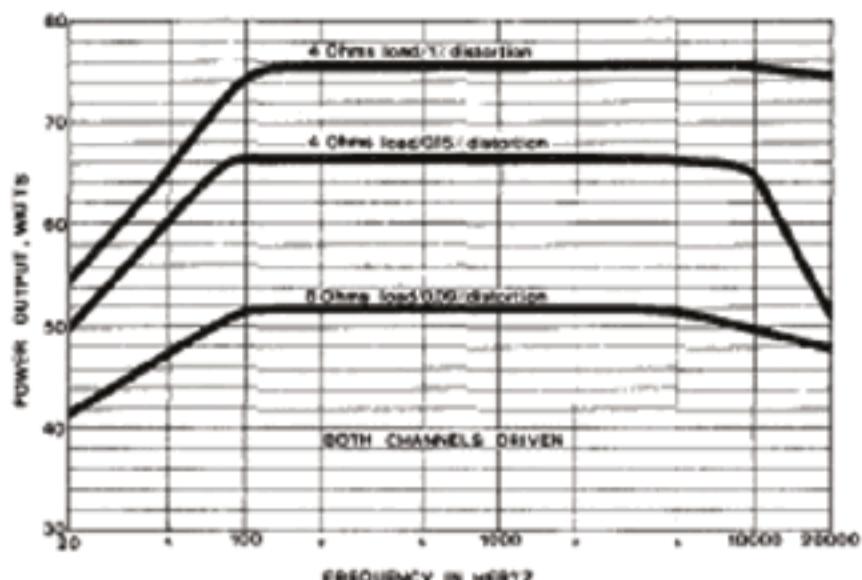
LOW filter: –3 dB at 70 Hz  
(-12 dB/octave)

HIGH filter: –3 dB at 8,000 Hz  
(-12 dB/octave)

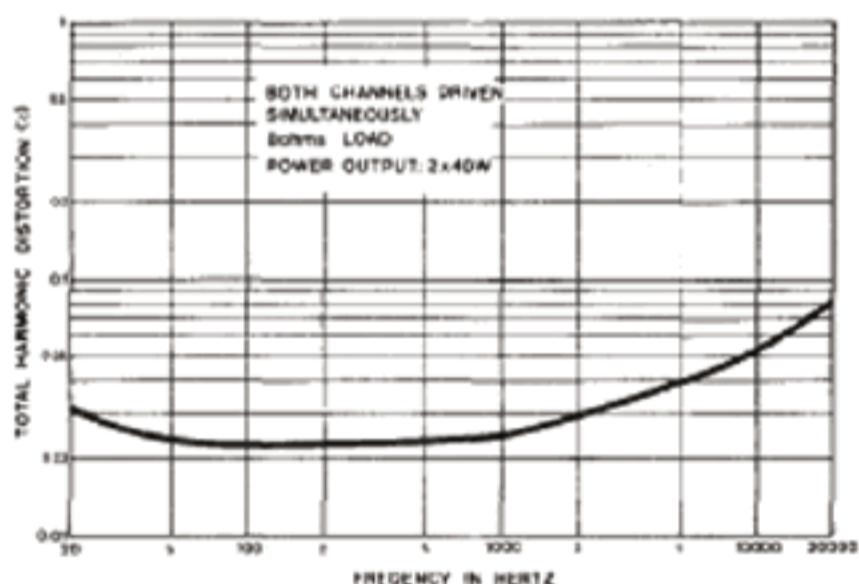
Channel separation:  
at 1 kHz Tape: 60 dB  
Phono: 60 dB

Signal/hum and noise ratio, IHF:  
reference, max. output, into 8 ohms  
load, shorted input, no filter network  
used.

Signal/hum and noise ratio, IHF:  
reference, max. output, into 8 ohms  
load, shorted input, A-network used.  
Tape 1: 94 dB  
(input signal 190 mV)  
Tape 2: 94 dB  
(input signal 190 mV)  
Phono: 75 dB  
(input signal 2.8 mV)  
Phono: 86 dB  
(input signal 10 mV)  
Volume at minimum: 95 dB



POWER OUTPUT VERSUS FREQUENCY



DISTORTION VERSUS FREQUENCY

Signal/hum and noise ratio, DIN 45500: Tape 1: 61 dB  
reference 50 mW, 8 ohms  
(input signal 190 mV)

Tape 2: 61 dB  
(input signal 190 mV)  
Phono: 60 dB  
(input signal 2.8 mV)  
Phono: 62 dB  
(input signal 10 mV)

Sensitivity:  
at maximum power output,  
in 8 ohms load

Tape 1: 190 mV  
(input imp. 15–27 k ohms)  
Tape 2: 190 mV  
(input imp. 15–27 k ohms)  
Phono: 2.8 mV  
(input imp. 47 k ohms)

Maximum input signals:  
0.15% distortion at 1 kHz

Tape 1: 35 V  
Tape 2: 35 V  
Phono: 90 mV

Output of TAPE socket:  
unloaded

250 mV  
(output imp. 33 k ohms)

US Models:

800 mV  
(output imp. 4 k ohms)

Output from PHONES:  
unloaded

Max. 20 V  
(output imp. 160 ohms)

\*Measured according to FTC rules.

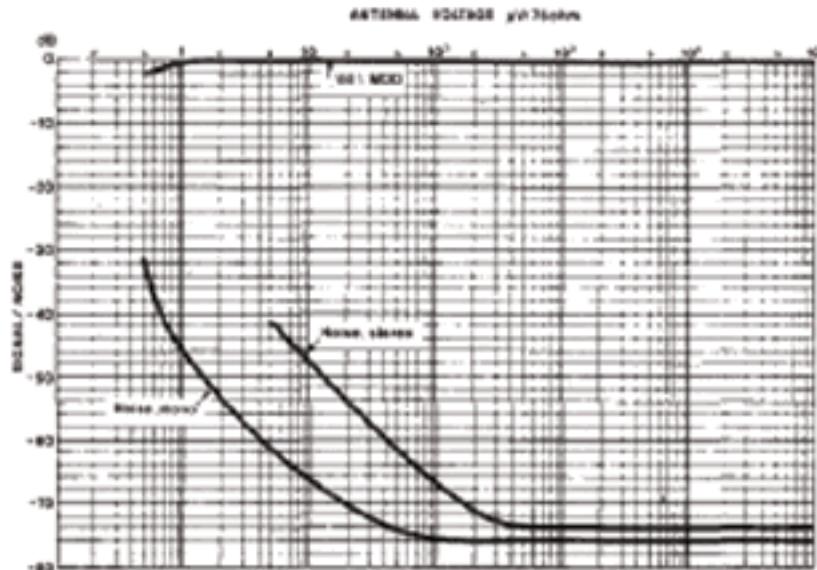
## FM SECTION

Specifications according to IHF-T-200, 1975  
(IEEE std. 185, 1975)

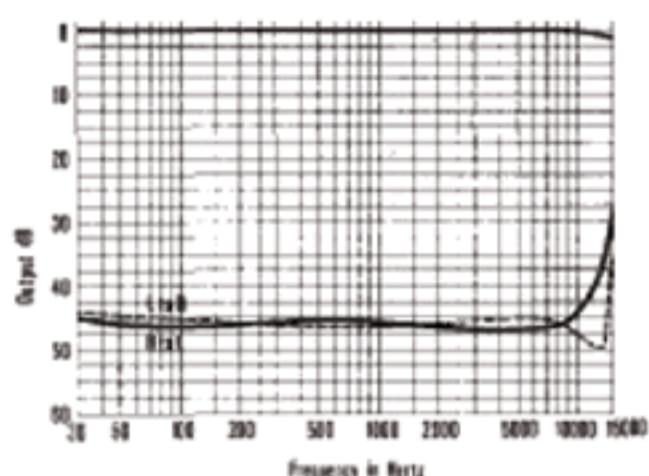
Tuning range:	87.5–108 MHz
Usable sensitivity:	MONO: 1.9 $\mu$ V/300 ohms (10.8 dBf)
50 dB quieting sensitivity:	MONO: 3.5 $\mu$ V/300 ohms (16.2 dBf) STEREO: 40 $\mu$ V/300 ohms (37.3 dBf)
Signal-to-noise ratio at 65 dBf (1 mV/300 ohms):	MONO: 76 dB STEREO: 74 dB
Muting threshold: Muting hysteresis, 6 dB	MONO: 6 $\mu$ V/300 ohms (20.8 dBf)
Stereo threshold: Stereo hysteresis, 8 dB	15 $\mu$ V/300 ohms (28.8 dBf)
Frequency response :- 30 Hz–15 kHz	MONO: +1, -2 dB STEREO: +1, -2 dB
Distortion at 50 dB quieting:	MONO: 0.6% STEREO: 0.9%
Distortion at 65 dBf: (1 mV/300 ohms)	MONO: 0.4% STEREO: 0.5%
Capture ratio:	1.5 dB
Selectively measured.	
Adjacent channel selectivity:	10 dB at $\pm$ 200 kHz
DYNAMIC	
Alternate channel selectivity:	80 dB at $\pm$ 400 kHz
DYNAMIC	
Spurious response ratio:	Greater than 100 dB
Image response ratio:	Greater than 100 dB
IF response ratio (balanced):	Greater than 100 dB
AM suppression ratio:	Greater than 65 dB
Stereo separation: at 100 Hz–10 kHz (selectively measured).	Greater than 40 dB
Subcarrier product ratio:	52 dB
19 kHz suppression:	55 dB
38 kHz suppression:	55 dB

Specifications according to DIN 45301 and  
DIN 45500

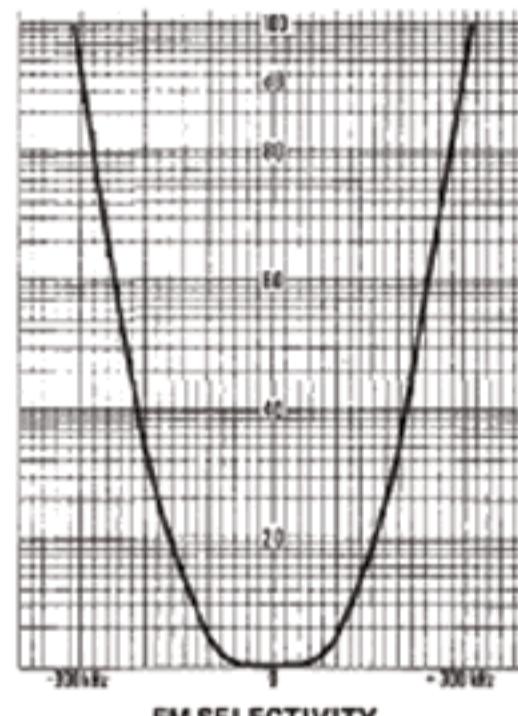
Sensitivity mono, DIN 45301: at 26 dB signal/noise, RMS, dev. $\pm$ 22.5 kHz.	1.6 $\mu$ V/300 ohms
Sensitivity stereo, DIN 45500: at 46 dB signal/noise, RMS, dev. $\pm$ 40 kHz.	40 $\mu$ V/300 ohms
Signal/noise, Weighted, DIN 45500: quasi-peak, dev. $\pm$ 40 kHz	MONO: 64 dB STEREO: 62 dB
Signal/noise, Unweighted, DIN 45500: RMS, dev. $\pm$ 40 kHz.	MONO: 65 dB STEREO: 65 dB
Selectivity: carrier down	80 dB at $\pm$ 300 kHz
Total harmonic distortion: dev. $\pm$ 40 kHz.	MONO: 0.2% STEREO: 0.3%



FM SENSITIVITY CURVES  
FOR MONO AND STEREO



FREQUENCY RESPONSE AND SEPARATION  
VERSUS FREQUENCY



FM SELECTIVITY

## GENERAL

AC Power Requirement:	120/220/240 V, 50/60 Hz
AC Power consumption:	270 W (full power) 45 W (no signal)
Dimensions:	Width: 20 1/8" (51 cm) Height: 5 5/8" (14.5 cm) Depth: 12 5/8" + knobs 13/16" (32 cm + 2.1 cm)
Weight:	21 lbs (9.6 kg)