

from 1960 catalog

**HJØRNEHØYTTALER HI-FI.** En god plassering av en High Fidelity høyttaler er å henge den opp i et hjørne.

Tresorten er mahogni, alm eller ahorn. Høyde 100 cm, bredde 53 cm og dybde 24 cm. Vekt 12,5 kg.

Pris m/Type 165 BK Hi-Fi kr. 260,—.

M/Type 165B dobbelt m/filter kr. 305,—.

**HI-FI SYSTEM.** For opphenging på vegg eller plassering i bokhylle. Spesielt egnet for stereo-anlegg.

Alm eller mahogni. Lengde 56 cm, høyde 35 cm og dybde 25 cm. Vekt 8 kg.

Pris m/Type 165 BK Hi-Fi kr. 260,—.

M/Type 165B dobbelt m/filter kr. 305,—.

### **HØYTTALERSYSTEMER.**

Type 165 Hi-Fi ..... Kr. 48,—

» 165 BK Hi-Fi ..... » 73,—

» 165A dobbelt m/filter .. » 97,—

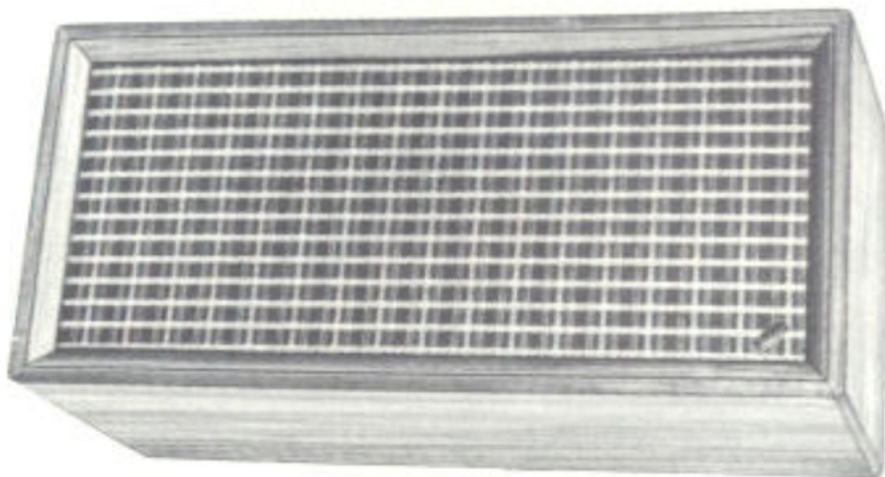
» 165B » » .. » 122,—

**STYRKEKONTROLL** for trinnvis regulering av hver enkelt separathøyttaler.

Kr. 17,—.

**FJERNKONTROLL** for fjernregulering av lydstyrken i apparathøyttaler.

Kr. 24,—.



1961 catalog

## HØYTTALER SEKSJON

Dette er en førsteklasses Hi-Fi høyttaler for mono og stereoanlegg sammen med Huldra 6 Seksjon og Tandberg Båndopptakere. Høyttalersystem: Type 165B dobbelt med filter.

Tresort: teak eller mahogni. Dimensjoner: lengde 56 cm, høyde 26 cm, dybde 25 cm.

**Kr. 275,—**

## HØYTTALERSYSTEMER

Type 165 Hi-Fi	.....	kr. 48,—
— 165 BK Hi-Fi	....	— 73,—
— 165A dobb. m/filter	—	— 97,—
— 165B	— —	— 122,—

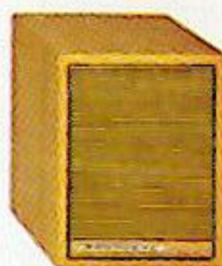
**STYRKEKONTROLL** for trinnvis regulering av hver enkelt separat-høyttaler. **Kr. 17,—**

**FJERNKONTROLL** for fjernregulering av lydstyrken i apparathøyttaler. **Kr. 24,—**

**PLATESKIFTER RC 210.** 4 hastigheter, 3 platestørrelser. Skifter store og små plater. Kan også spille plater enkeltvis. Samme pickup for mono og stereo, vridbar for 78 og 45–33. Lett regulerbart nåltrykk. Mahogni kasett. Lengde 34 cm, dybde 29 cm og høyde 20 cm.

**Kr. 275,—**

(veil. priser)

**External Loudspeaker Model 9.**

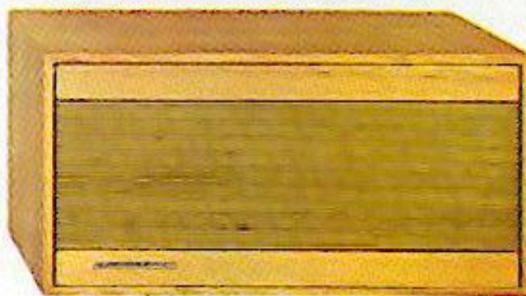
A first class extension loudspeaker for the living room, the kitchen, or other parts of the house. Incorporates loudspeaker chassis HT110 which has a dual cone for wide range reproduction. The speaker has an extremely low cone-resonance, is of moderate size, and has a long concentrated field ensuring minimum distortion at low frequencies.

Dimensions: Length  $14\frac{5}{8}$ " height  $10\frac{3}{8}$ " depth  $9\frac{3}{4}$ ". Teak cabinet. Internal volume: 8.5 litres. Loudspeaker chassis: HT110 with dual cone. Diameter: 6.5". Impedance (at 400 c/s): 5 ohms. Maximum continuous input: 5 watts. Efficiency (radiating from one side only): 1.5%. Bass resonance frequency: 115 c/s. Frequency response: 80—14 000 c/s.

External Loudspeaker Model 9.



Hi-Fi System 112-7.

**Hi-Fi System 113/106-10.**

This loudspeaker has been scientifically designed in order to provide a full bass response from a unit in a very small cabinet and this has been achieved by means of a heavy cone and a fairly low efficiency.

The system combines two loudspeakers with a cross-over network: one loudspeaker taking care of the lower and medium frequencies and the other is a Tweeter for frequencies above 3000 c/s.

Dimensions: Length  $7\frac{1}{8}$ " height  $9\frac{1}{8}$ " depth  $9\frac{1}{8}$ ". Teak cabinet. Internal volume: 6.5 litres. Loudspeakers: HT-113 Woofer 6.5" HT-106 Tweeter 2". Impedance (at 400 c/s): 4 ohms. Maximum continuous input: 8 watts. Efficiency (radiating from one side): 0.5%. Bass resonance frequency: 90 c/s. Frequency response: 60—16 000 c/s.

Hi-Fi System 114/116-8.

**Hi-Fi System 112-7.**

This model is specially designed to accommodate the full output of a 10 watt amplifier and provide maximum power and outstanding frequency response throughout the entire range.

The loudspeaker incorporates a co-axial system with a Woofer unit for the lower and medium frequencies, and a Tweeter mounted in the center of it taking care of frequencies above 3000 c/s. The low bass resonance and long magnetic field ensure excellent bass reproduction.

Dimensions: Length  $20\frac{1}{2}$ " height  $10\frac{1}{4}$ " depth  $9\frac{3}{4}$ ". Teak cabinet. Internal volume: 25 litres. Loudspeaker chassis: HT112 with Tweeter. Woofer  $10" \times 6"$ . Tweeter 2". Impedance (at 400 c/s): 3.2 ohms. Maximum continuous input: 8 watts. Efficiency (radiating from one side): 2.5%. Bass resonance frequency: 85 c/s. Frequency response: 60—16 000 c/s.

**Hi-Fi System 114/116-8.**

Hi-Fi System 114/116-8 is a high efficiency combination designed for perfect reproduction of the entire audible range from 45 c/s to 16 000 c/s, and capable of dealing with input power up to 20 watts. The HT116 Tweeter is co-axially mounted in front of the large Woofer. An efficient filter network crosses over at 3000 c/s. The powerful long magnetic field permits bass amplitude up to 1.5 mm without distortion.

Dimensions: Length  $27\frac{3}{8}$ " height  $13\frac{3}{8}$ " depth 11". Teak cabinet. Internal volume: 50 litres. Loudspeaker chassis: HT114 with Tweeter HT116. Woofer: 10". Tweeter 2.5". Impedance (at 400 c/s): 4 ohms. Maximum continuous input: 15 watts. Efficiency (radiating from one side only): 4%. Bass resonance frequency: 65 c/s. Frequency Response: 45—16 000 c/s.

	Normal living room volume (approx. 80 db)		Strong living room volume (approx. 100 db)	
	Medium Bass (orchestra)	Strong Bass (organ)	Medium Bass (orchestra)	Strong Bass (organ)
Small living room (180 sq.ft.)	113/106-10	112-7	112-7	114/116-8
Large living room (450 sq.ft.)	113/106-10	114/116-8	112-7	114/116-8
Small hall (900 sq.ft.)	112-7	114/116-8	114/116-8	
Large hall (1800 sq.ft.)	112-7	114/116-8	114/116-8	



	Separat- högtalare 9	HiFi-System 113/106-10	HiFi-System 113/106-11	HiFi-System 112-7	HiFi-System 114/116-8
HÖGTALARE	6,5" dubbelkon	Basht. 6,5" Diskht. 2"	Basht. 6,5" Diskht. 2"	Basht. 10" x 6" Diskht. 2"	Basht. 10" Diskht. 2,5"
INVÄNDIG VOLYM	8,5 liter	6,5 liter	6,8 liter	25 liter	50 liter
IMPEDANS	(400 Hz) 5 ohm	(400 Hz) 4 ohm	(400 Hz) 4 ohm	(400 Hz) 3,2 ohm	(400 Hz) 4 ohm
MAX. KONTINUERLIG BELASTNING	5 W	8 W	8 W	8 W	15 W
VERKNINGSGRAD (ENDAST FRONTSTRÄLNING)	1,5 %	0,5 %	0,5 %	2,5 %	4 %
RESONANSFREKVENNS	115 Hz	90 Hz	87 Hz	85 Hz	65 Hz
FREKVENNSOMRÅDE	80-14.000 Hz	60-16.000 Hz	60-16.000 Hz	60-16.000 Hz	45-16.000 Hz
DIMENSIONER	L: 42 H: 21 D: 15	L: 18 H: 23 D: 23	L: 32 H: 21,7 D: 15	L: 52 H: 26 D: 25	L: 70 H: 35 D: 28
VÄGLEDANDE PRIS (INKL. OMS)	140: -	160: -	160: -	240: -	340: -

1966 catalog



HI-FI 10



HI-FI 11



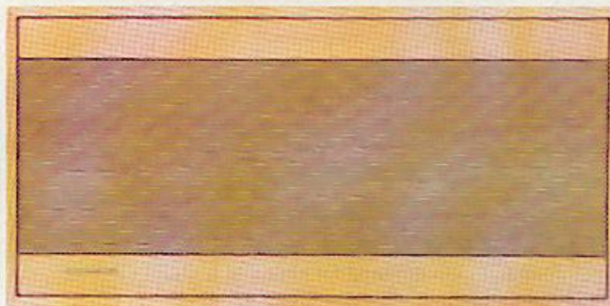
HI-FI 12



HI-FI 7



HI-FI 13



HI-FI 14

	HI-FI System 10	HI-FI System 11	HI-FI System 12	HI-FI System 7	HI-FI System 13	HI-FI System 14
Loudspeakers	Woofer 6 1/2" Tweeter 2"	Woofer 6 1/2" Tweeter 2"	Woofer 6 1/2" Tweeter 2"	Woofer, 10" x 6" Tweeter 2"	Woofer 10" x 6" Tweeter 2"	Woofer 10" Tweeters 2 x 2 1/2"
Internal volume	6,5 litres	6,5 litres	12,5 litres	25 litres	25 litres	50 litres
Impedance (at 400 c/s)	4 ohms	4 ohms	4 ohms	3,2 ohms	3,2 ohms	4 ohms
Max. continuous input	8 W	8 W	8 W	8 W	8 W	15 W
Efficiency (Radiating from one side)	0,5 %	0,5 %	0,5 %	2,5 %	2,5 %	4 %
Frequency response	60-16000 c/s	60-16000 c/s	50-16000 c/s	60-16000 c/s	60-16000 c/s	45-16000 c/s
Dimensions	L: 7-1/8" B: 9-1/8" H: 9-1/8"	L: 12-5/8" B: 6" H: 8 1/2"	L: 17-3/16" B: 7 1/2" H: 8-9/16"	L: 20 1/2" B: 10" H: 10-1/4"	L: 25-9/16" B: 9-13/16" H: 8-1/4"	L: 27 1/2" B: 11" H: 13-3/4"
Type of wood	Siamese Teak	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak

LOUDSPEAKERS	HI-FI SYSTEM 10	HI-FI SYSTEM 11	HI-FI SYSTEM 12	HI-FI SYSTEM 7	HI-FI SYSTEM 13	HI-FI SYSTEM 15
DIAMETER	Woofer 6½" Tweeter 2"	Woofer 6½" Tweeter 2"	Woofer 6½" Tweeter 2"	Woofer 10" × 6" Tweeter 2"	Woofer 10" × 6" Tweeter 2"	Woofer 12" Midrange 5" Tweeter 2.5"
INTERNAL VOLUME	6,5 litres	6,5 litres	12,5 litres	25 litres	25 litres	50 litres
IMPEDANCE (AT 400 C/S)	4 ohms	4 ohms	4 ohms	3,2 ohms	3,2 ohms	4 ohms
MAX. CONTINOUS INPUT	8 W	8 W	8 W	8 W	8 W	30 W
EFFICIENCY (Radiating from one side)	0,5 %	0,5 %	0,5 %	2,5 %	2,5 %	2 %
FREQUENCY RESPONSE	60-16,000 Hz	60-16,000 Hz	50-16,000 Hz	60-16,000 Hz	60-16,000 Hz	35-16,000 Hz
DIMENSIONS	L: 7-1/8" B: 9-1/8" H: 9-1/8"	L: 12-5/8" B: 6" H: 8-1/2"	L: 17-3/16" B: 7-1/2" H: 8-9/16"	L: 20-1/2" B: 10" H: 10-1/4"	L: 25-9/16" B: 9-13/16" H: 8-1/4"	L: 27-1/2" B: 11" H: 13-3/4"
TYPE OF WOOD	Siamese Teak	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak Rosewood	Siamese Teak Rosewood



	Normal living-room volume (approx. 80 dB)		Large living-room volume (approx. 100 dB)	
	Medium Bass (Orchestra)	Deep Bass (Organ)	Medium Bass (Orchestra)	Deep Bass (Organ)
Small living-room (269 sq.ft.)	Hi-Fi 10 Hi-Fi 11	Hi-Fi 7 Hi-Fi 12 Hi-Fi 13	Hi-Fi 7 Hi-Fi 12 Hi-Fi 13	Hi-Fi 15
Large living-room (540 sq.ft.)	Hi-Fi 7 Hi-Fi 12 Hi-Fi 13	Hi-Fi 15	Hi-Fi 7 Hi-Fi 13	Hi-Fi 15
Large hall (2100 sq.ft.)	Hi-Fi 7 Hi-Fi 13	Hi-Fi 15	Hi-Fi 15	

*This catalog might not be accurate dated as content from this english catalog better fit with later Norwegian catalog from around 1970.*

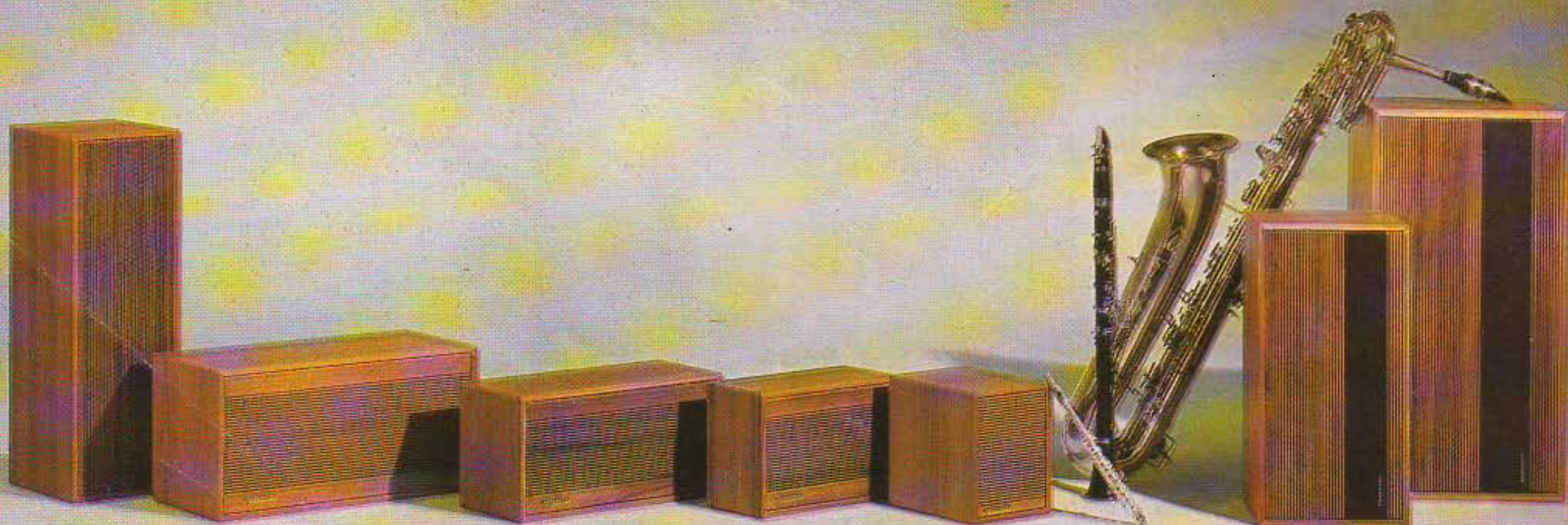


VOLUME	LIVING-ROOM LEVEL		CONCERT-LEVEL	
BASS REPRODUCTION	Medium Bass (Orchestra)	Deep Bass (Organ)	Medium Bass (Orchestra)	Deep Bass (Organ)
LIVING-ROOM (250 sq. ft.)	Hi-Fi 10 Hi-Fi 11 Hi-Fi 12 Hi-Fi 18 Hi-Fi 19	Hi-Fi 12 Hi-Fi 20 Hi-Fi 17	Hi-Fi 12 Hi-Fi 7 Hi-Fi 13 Hi-Fi 19	Hi-Fi 17 Hi-Fi 15
Min. amplifier power	0.5 x D	0.5 x D	2 x D	2 x D
LIVING-ROOM (500 sq. ft.)	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17 Hi-Fi 19	Hi-Fi 17 Hi-Fi 15	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17 Hi-Fi 15	Hi-Fi 15
Min. amplifier power	1 x D	1 x D	4 x D	4 x D
LARGE HALL (2,000 sq. ft.)	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17	Hi-Fi 15	Hi-Fi 7 Hi-Fi 13 Hi-Fi 15	Hi-Fi 15 (4 pcs. coupled in series-parallel.)
Min. amplifier power	4 x D	4 x D	16 x D	

TANDBERG HI-FI LOUDSPEAKERS										
HI-FI SYSTEM	18	10	11	19	12	20	7	13	17	15
Outer dimensions	L: 9 1/4" H: 9 1/4" D: 4 1/4"	L: 7 1/8" H: 9 1/8" D: 9 1/8"	L: 12 3/8" H: 8 1/2" D: 6"	L: 9 1/4" H: 9 1/4" D: 7 1/2"	L: 17 3/16" H: 8 1/16" D: 7 1/2"	L: 18 1/8" H: 8 1/2" D: 7 1/2"	L: 20 1/2" H: 10 1/4" D: 10"	L: 25 9/16" H: 8 1/4" D: 9 13/16"	L: 20 1/2" H: 10 1/4" D: 10"	L: 27 1/2" H: 13 3/4" D: 11"
Internal volume l	3.5	6.5	6.5	7.5	12.5	12.5	25	25	25	50
Frequency response Hz	50 - 18,000	60 - 16,000	60 - 16,000	50 - 18,000	50 - 16,000	45 - 18,000	50 - 16,000	50 - 16,000	35 - 18,000	35 - 18,000
Resonance frequency Hz	85	90	90	85	70	70	85	85	50	50
Operating power <sup>1)</sup> watts	8	4	4	4	4	4	1	1	4	2
Max. supplied continuous power <sup>2)</sup> watts	20	20	20	25	25	25	20	20	35	45
Max. supplied music power <sup>3)</sup> watts	40	40	40	50	50	50	40	40	50	70
Impedance ohm	4	4	4	4	4	4	3.2	3.2	4	4
Number of loudspeakers	Woofer	5"	6.5"	6.5"	6.5"	6.5"	6" x 10"	6" x 10"	8"	12"
	Midrange	-	-	-	-	-	-	-	4" x 7"	5"
	Tweeter	2 1/4"	2"	2"	2 1/4"	2"	2"	2"	2 1/2"	2 1/2"
Type of wood T: Siamese teak R: Rosewood O: Oak	T.R.O.	T.R.	T.R.	T.R.	T.R.	T.R.O.	T.R.O.	T.R.	T.R.	T. R.

<sup>1)</sup> DIN 45,500 Sheet 7,2.2  
<sup>2)</sup> DIN 45,500 - 7,2.6.1  
<sup>3)</sup> DIN 45,500 - 7,2.6.2

Serien av Tandberg Hi-Fi høyttalersystemer  
 – fra venstre 13, 7, 12, 11, 10, 17 og 15.



	HI-FI SYSTEM 10	HI-FI SYSTEM 11	HI-FI SYSTEM 12	HI-FI SYSTEM 7	HI-FI SYSTEM 13	HI-FI SYSTEM 17	HI-FI SYSTEM 15
HØYTTALERE	Bassht. 6,5" Diskht. 2"	Bassht. 6,5" Diskht. 2"	Bassht. 6,5" Diskht. 2"	Bassht. 6" x 10" Diskht. 2"	Bassht. 6" x 10" Diskht. 2"	Bassht. 8" Mellomht. 4" x 7" Diskht. 2 1/2"	Bassht. 12" Mellomht. 5" Diskht. 2 1/2"
INNVENDIG VOLUM	6,5 l	6,5 l	12,5 l	25 l	25 l	25 l	50 l
IMPEDANS VED 400 Hz	4 ohm	4 ohm	4 ohm	3,2 ohm	3,2 ohm	4 ohm	4 ohm
TONEOMRÅDE	60–16 000 Hz	60–16 000 Hz	50–16 000 Hz	60–16 000 Hz	60–16 000 Hz	35–16 000 Hz	35–16 000 Hz
RESONANSFREKVENNS	90 Hz	90 Hz	70 Hz	85 Hz	85 Hz	50 Hz	50 Hz
DRIFTSEFFEKT *)	4 W	4 W	4 W	1 W	1 W	3 W	2 W
MAKSIMAL TILFØRT MUSIKKEFFEKT	20 W	20 W	20 W	20 W	20 W	30 W	45 W
MAKSIMAL TILFØRT GJENNOMSNITTS-EFFEKT	15 W	15 W	15 W	15 W	15 W	20 W	30 W
DIMENSJONER I CM	L: 18 H: 23 D: 23	L: 32 H: 21,7 D: 15	L: 43,6 H: 21,8 D: 19	L: 52 H: 26 D: 25	L: 65 H: 21 D: 25	L: 52 H: 26 D: 25	L: 70 H: 35 D: 28
TRESORT	Teak	Teak og pallsander	Teak og pallsander	Teak og pallsander	Teak og pallsander	Teak og pallsander	Teak og pallsander

LYDSTYRKE	Normalt stuenivå (ca. 80 dB)		Kraftig stuenivå (ca. 100 dB)	
	Middels bass (Orkester)	Mye bass (Orgel)	Middels bass (Orkester)	Mye bass (Orgel)
Stue – 25 m <sup>2</sup>	Hi-Fi 10 Hi-Fi 11 Hi-Fi 12	Hi-Fi 12 Hi-Fi 17	Hi-Fi 12 Hi-Fi 7 Hi-Fi 13	Hi-Fi 17 Hi-Fi 15
Stue – 50 m <sup>2</sup>	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17	Hi-Fi 17 Hi-Fi 15	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17 Hi-Fi 15	Hi-Fi 15
Sal – 200 m <sup>2</sup>	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17	Hi-Fi 15	Hi-Fi 7 Hi-Fi 13 Hi-Fi 17 Hi-Fi 15	Hi-Fi 15





## TANDBERG HI-FI HÖGTALARE

	HI-FI 11	HI-FI 18	HI-FI 19	HI-FI 12	HI-FI 20	HI-FI 7	HI-FI 17	HI-FI 15	TL 2510	TL 5010	
Yttre dimensioner cm	L:32, H:22, D:15	L:23,5, H:23,5, D:11	L:23,5, H:23,5, D:19	L:44, H:22, D:19	L:44, H:22, D:19	L:52, H:26, D:25	L:52, H:26, D:25	L:70, H:35, D:28	L:52,7, H:29,5, D:22	L:65, H:37, D:28	
Invändig volym L	6,5	3,5	7,5	12,5	12,5	25	25	50	25	50	
Frekvensområde Hz	50-16 000	50-25 000	45-25 000	40-16 000	40-25 000	50-16 000	30-25 000	30-20 000	30-25 000	20-25 000	
Frekvensområde Hz (DIN)	60-16 000	50-18 000	50-18 000	50-16 000	45-18 000	60-16 000	35-18 000	35-18 000	40-22 000	35-22 000	
Resonansfrekvens Hz	90	85	85	70	70	85	50	50	60	50	
Känslighet, W*) DIN 45 500	4	8	4	4	4	1	4	2	4	3	
Max. kont. effekt, W, DIN 45 500	20	20	25	25	25	20	35	45	35	45	
Musikeffekt, W, DIN 45 500	40	40	50	50	50	40	50	70	50	70	
Impedans ohm	4	4	4	4	4	3,2	4	4	8-4	8-4	
Högtalarbestyckning	Bas Mellanton Diskant	6,5" - 2"	5" - 2 1/4"	6,5" - 2"	6,5" - 2 1/4"	6,5" - 2 1/4"	6" x 10" - 2"	8" 4" x 7" 2 1/4"	12" 5" 2 1/2"	8" - 1" Dome	12" 5" 1" Dome
Träslag	Teak, palisander	Teak, palisander, ek	Teak, palisander, ek	Teak, palisander, ek	Teak, palisander, ek	Teak, palisander, ek	Teak, palisander, ek	Teak, palisander	Teak, palisander, ek	Teak, palisander	

\*) Nödvändig effekt för att uppnå en bestämd ljudstyrka (96 dB) uppmätt på 1 m. avstånd från högtalaren.

**HI-FI 18**

Ypperlig för den som önskar en bra högtalare med minimala dimensioner. 2-vägs Hi-Fi system. Elegant, neutral metallfront. Diskret i varje interiör. Full Hi-Fi-täckning i vanliga rum. Nyckelhållbeslag ger möjlighet till upphängning på vägg eller i tak.

**HI-FI 19**

Högtalaren som kan placeras överallt - särskilt tänkt för bokhyllan. Tar minimal plats med fullt utnyttjande av hylldjupet. Front liknande HI-FI 18. 2-vägssystem som tillfredsställer stränga återgivningskrav och ger orkesternivå i vanliga rum. Stilfull design.

**HI-FI 11**

Liten och lätt att placera - överallt. Såld i stort antal som en bra Hi-Fi högtalare för användning i små och mellanstora rum. 2-vägssystem som ger tillräcklig rumsnivå med liten förstärkareffekt.

**HI-FI 12**

2-vägssystem av medelstorlek. Hävdar sig gott som Hi-Fi högtalare för många förhållanden. Klar och fyllig återgivning i hela tonområdet. Kan placeras överallt - såväl på kant som liggande.

**HI-FI 7**

Mycket lätt driven högtalare i mellanstorlek. Lyckad också när Tandberg bandspelare används som förstärkaranläggning. 2-vägssystem. På grund av god känslighet passar den ypperligt som extra högtalare för exempelvis Tandberg Portabel Radio TP 41.

**HI-FI 20**

Samma dimensioner som HI-FI 12. Diskantstripa i fronten. Fyllig bas vid moderata ljudnivåer. 2-vägssystem. Tilltalande ljudåtergivning. Trevligt utförande - lätt att placera t.ex. i alla slag av bokhyllor.

**HI-FI 17**

Gedigen HI-FI högtalare. Kombinerar bästa ljudåtergivning med relativt små dimensioner. 3-vägssystem med speciell mellantonhögtalare. Diskantstripa säkrar en jämn utstrålning i högtonområdet. Ger full orkesternivå - också vid djupa bastoner, även i stora rum.

**HI-FI 15**

»Flaggskeppet» i Tandbergs Hi-Fi serie. Samma design som HI-FI 17 och 20 med diskantstripa. 3-vägssystem. Jämn utstrålning och stor renhet i hela tonområdet vid såväl hög som låg effekt. Kraftig nog att ge full orkesternivå och fyllig bas även i stora rum. Byggt för de mest kräsna krav.

**TL 2510**

En nyhet i HI-Fi serien. 2-vägssystem med liten DOME TWEETER. Hela tonområdet blir fylligt återgivet och får stor spridning i rummet.

Ny och elegant design. Tygfronten säkrar klar och distinkt diskantåtergivning även av de högsta tonerna. Lådan, också högtalarens baksida, är fanerad. Ett Tandberg HI-Fi system för den avancerade musikanläggningen.

**TL 5010**

Tandberg HI-Fi system i toppklass - en ny skapelse för den som vill ha det allra bästa. 3-vägssystem med liten DOME TWEETER, som tillfredsställer de strängaste krav på renhet och klangfärg i såväl bas- och mellanton- som i diskanttonområdet. TL 5010 är konstruerad speciellt för att kunna återge stor ljudstyrka i basen och ge fullgod täckning i stora rum. Samma design som TL 2510 med tygfront och helt fanerad låda.



TANDBERG HI-FI HÖGTALARE

	HI-FI 11	HI-FI 18	HI-FI 19	HI-FI 12	HI-FI 20	HI-FI 7	HI-FI 15	TL 1210	TL 1610	TL 2510	TL 5010	
Yttermått i cm	L:32, H:22, D:15	L:23,5, H:23,5, D:11	L:23,5, H:23,5, D:19	L:44, H:22, D:19	L:44, H:22, D:19	L:52, H:26, D:25	L:70, H:35, D:28	L:41,5, H:23,5, D:19	L:52,7, H:29,5, D:16	L:52,7, H:29,5, D:22	L:65, H:37, D:28	
Lådvoly m	6,5 liter	3,5 liter	7,5 liter	12,5 liter	12,5 liter	25 liter	50 liter	12,5 liter	16 liter	25 liter	50 liter	
Frekvensområde	50 – 16 000 Hz	50 – 25 000 Hz	45 – 25 000 Hz	40 – 16 000 Hz	40 – 25 000 Hz	50 – 16 000 Hz	30 – 20 000 Hz	40 – 25 000 Hz	35 – 25 000 Hz	30 – 25 000 Hz	20 – 25 000 Hz	
Frekvensområde, DIN	60 – 16 000 Hz	50 – 18 000 Hz	50 – 18 000 Hz	50 – 16 000 Hz	45 – 18 000 Hz	60 – 16 000 Hz	35 – 18 000 Hz	45 – 20 000 Hz	45 – 22 000 Hz	40 – 22 000 Hz	35 – 22000 Hz	
Resonansfrekvens	90 Hz	85 Hz	85 Hz	70 Hz	70 Hz	85 Hz	50 Hz	70 Hz	70 Hz	60 Hz	50 Hz	
Känslighet*), DIN 45 500	4 W	8 W	4 W	4 W	4 W	1 W	2 W	4 W	4 W	4 W	3 W	
Max. kont. effekt, DIN 45 500	20 W	20 W	25 W	25 W	25 W	20 W	45 W	25 W	30 W	35 W	45 W	
Musikeffekt, DIN 45 500	40 W	40 W	50 W	50 W	50 W	40 W	70 W	40 W	45 W	50 W	70 W	
Impedans	4 ohm	4 ohm	4 ohm	4 ohm	4 ohm	3,2 ohm	4 ohm	8 – 4 ohm	8 – 4 ohm	8 – 4 ohm	8 – 4 ohm	
Högtalare- utrustning	Bas Mellanregister Diskant	6 1/2" – 2"	5" – 2 1/4"	6 1/2" – 2 1/4"	6 1/2" – 2"	6 1/2" – 2 1/4"	6" x 10" – 2"	12" 5" 2 1/2"	6 1/2" – 2 1/4"	7" – 1" Dome	8" – 1" Dome	12" 5" 1" Dome
Träslag**)	T.P.	T.P.E.	T.P.	T.P.E.	T.P.E.	T.P.E.	T.P.	T.P.E.	T.P.	T.P.E.	T.P.E.	

\*) Erforderlig effekt för att uppnå fastställd ljudnivå (96 dB) 1 m från högtalaren.

\*\*\*) T = teak, P = palisander, E = ek.



## TANDBERG HI-FI HØYTTALERE

	HI-FI 7	HI-FI 11	HI-FI 20	TL 1210	TL 1610	TL 2510	TL 5010	FASETT
Ytre dimensjoner, cm	L:52, H:26, D:25	L:32, H:22, D:15	L:44, H:22, D:19	L:41,5, H:23,5, D:19	L:52,7, H:29,5, D:16	L:52,7, H:29,5, D:22	L:65, H:37, D:28	L:28, H:24,2, D:22
Innvendig volum	25 liter	6,5 liter	12,5 liter	12,5 liter	16 liter	25 liter	50 liter	6,5 liter
Frekvensområde	50-16 000 Hz	50-16 000 Hz	40-25 000 Hz	40-25 000 Hz	35-25 000 Hz	30-25 000 Hz	20-25 000 Hz	50-25 000 Hz
Frekvensområde, DIN	60-16 000 Hz	60-16 000 Hz	45-18 000 Hz	45-20 000 Hz	45-22 000 Hz	40-22 000 Hz	35-22 000 Hz	60-20 000 Hz
Resonansfrekvens	85 Hz	90 Hz	70 Hz	70 Hz	70 Hz	60 Hz	50 Hz	85 Hz
Følsomhet*), DIN 45500	1 W	4 W	4 W	4 W	4 W	4 W	3 W	6 W
Maks. varig effekt, DIN 45500	20 W	20 W	25 W	25 W	30 W	35 W	45 W	25 W
Musikkeffekt, DIN 45500	40 W	40 W	50 W	40 W	45 W	50 W	70 W	40 W
Impedans	3,2 ohm	4 ohm	4 ohm	8-4 ohm	8-4 ohm	8-4 ohm	8-4 ohm	8-4 ohm
Høyttaler- bestykning	Bass Mellomtone Diskant	6"x10" - 2"	6 1/2" - 2 1/4"	6 1/2" - 2 1/4"	7" - 1" Dome	8" - 1" Dome	12" 5" 1" Dome	5" - 2 1/4"
Tresort (for FASETT farge) **)	T.P.E.	T.P.	T.P.E.	T.P.E.N.	T.P.E.N.	T.P.E.N.	T.P.E.N.	Grønn, beige, oransje.

\*) Nødvendig effekt for å oppnå en bestemt lydstyrke (96 dB) målt i 1 m avstand fra høyttaleren.

\*\*): T: Teak. P: Palisander. E: Eik. N: Nøtt.



## Tekniske data for Tandberg Hi-Fi høyttalere

	TL 5020	TL 3520	TL 2520	TL 1520	Fasett	TL 2507	TL 1807
Ytre dimensjoner, cm	L: 65 H: 37,5 D: 28	L: 59 H: 35,5 D: 26	L: 53 H: 30 D: 22	L: 42 H: 24,5 D: 22	L: 28 H: 24,5 D: 22	L: 53 H: 29,5 D: 22	L: 45,5 H: 28,5 D: 20,5
Innvendig volum	50 liter	35 liter	25 liter	15 liter	6,5 liter	25 liter	18 liter
Frekvensområde, DIN 45 500	35-20 000 Hz	40-20 000 Hz	45-20 000 Hz	50-20 000 Hz	60-20 000 Hz	60-20 000 Hz	65-20 000 Hz
Resonansfrekvens	50 Hz	53 Hz	60 Hz	70 Hz	85 Hz	85 Hz	90 Hz
Driftseffekt <sup>*)</sup> , DIN 45 500	2 watt	4 watt	3 watt	3 watt	6 watt	2 watt	1,5 watt
Maks. varig effekt, DIN 45 500	60 watt	50 watt	40 watt	30 watt	25 watt	25 watt	25 watt
Musikeffekt, DIN 45 500	100 watt	75 watt	65 watt	45 watt	40 watt	50 watt	50 watt
Impedans	8-4 ohm	8-4 ohm	8-4 ohm	4 ohm	8-4 ohm	4 ohm	4 ohm
Høyttaler- bestykning	Bass 12" Mellomtone 5" Diskant 2x1" Dome	Bass 10" Mellomtone 3 <sup>3</sup> / <sub>8</sub> " Diskant 1" Dome	Bass 8" Mellomtone 3 <sup>3</sup> / <sub>8</sub> " Diskant 2"	Bass 7" Mellomtone 2"	Bass 5" Mellomtone 2 <sup>1</sup> / <sub>4</sub> " Diskant 2 <sup>1</sup> / <sub>2</sub> "	Bass 8" Mellomtone 2 <sup>1</sup> / <sub>2</sub> " Diskant 2 <sup>1</sup> / <sub>2</sub> "	Bass 8" Mellomtone 2 <sup>1</sup> / <sub>2</sub> " Diskant 2 <sup>1</sup> / <sub>2</sub> "
Tresort (for Fasett farge) <sup>**)</sup>	T.P.E.N.	T.P.E.N.	T.P.E.N.	T.P.E.N.	Svart, antikk- hvit, oransje	T.P.E.N.	T.P.E.N.

<sup>\*)</sup> Nødvendig effekt for å oppnå en bestemt lydstyrke (96 dB) målt i 1 m avstand fra høyttaleren.

<sup>\*\*)</sup> T = teak, P = palisander, E = eik, N = nettt

1975-1976 catalog

The TLxx07 series seem to be short lived and only appeared in the 1974/75 catalog

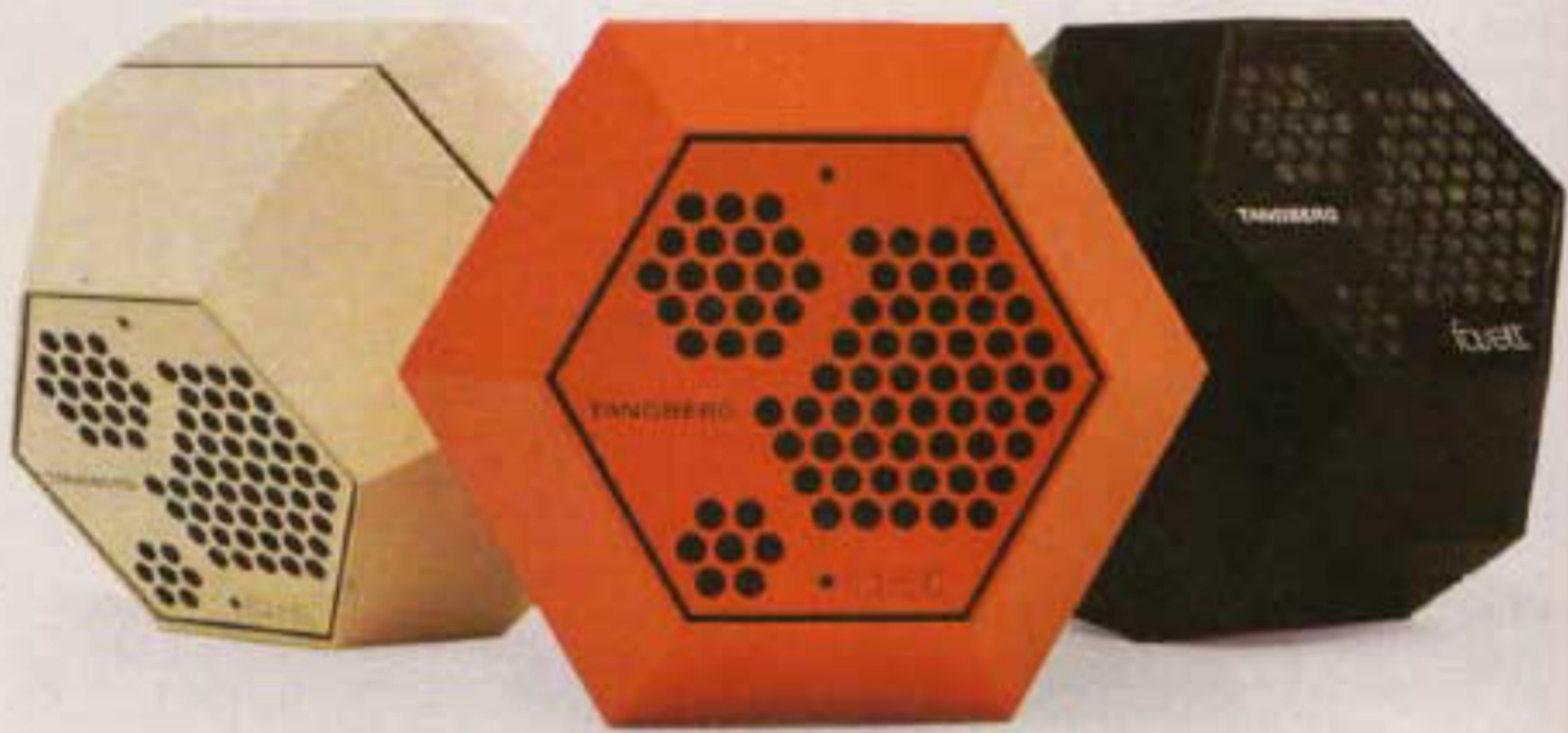


TL 5020

TL 2520

TL 3520

TL 1520



**Tekniske data for Tandberg høyttalere**

	TL 5020	TL 3520	TL 2520	TL 1520	Fasett	TL 2507
Ytre dimensjoner, cm	L: 65 H: 37,5 D: 28	L: 59 H: 35,5 D: 26	L: 53 H: 30 D: 22	L: 42 H: 24,5 D: 22	L: 28 H: 24,5 D: 22	L: 53 H: 29,5 D: 22
Innvendig volum	50 liter	35 liter	25 liter	15 liter	6,5 liter	25 liter
Frekvensområde, DIN 45 500	35 - 20 000 Hz	40 - 20 000 Hz	45 - 20 000 Hz	50 - 20 000 Hz	50 - 20 000 Hz	60 - 20 000 Hz
Resonansfrekvens	50 Hz	53 Hz	60 Hz	70 Hz	85 Hz	85 Hz
Driftseffekt*, DIN 45 500	3 watt	4 watt	4 watt	3 watt	6 watt	2 watt
Maks. varig effekt, DIN 45 500	60 watt	50 watt	40 watt	30 watt	25 watt	25 watt
Musikkeffekt, DIN 45 500	100 watt	75 watt	65 watt	45 watt	40 watt	50 watt
Impedans	8 ohm	8 ohm	8 ohm	4 ohm	4 ohm	4 ohm
Høyttalerbestykning	Bass 12" Mellomtone 5" Diskant 2x 1" Dome	10" 3 <sup>3/8</sup> " 1" Dome	8" 3 <sup>3/8</sup> " 2"	7" 2"	5" 2 <sup>1/4</sup> "	8" 2 <sup>1/2</sup> "
Tresort eller farge**)	T.P.N.H.	T.P.N.H.	T.P.N.H.	T.P.N.H.	Svart, antikk-hvit, oransje	T.P.N.

\*) Nødvendig effekt for å oppnå en bestemt lydstyrke (96 dB) målt i 1 m avstand fra høyttaleren.

\*\*\*) T = teak, P = palisander, N = nøtt, H = hvit.

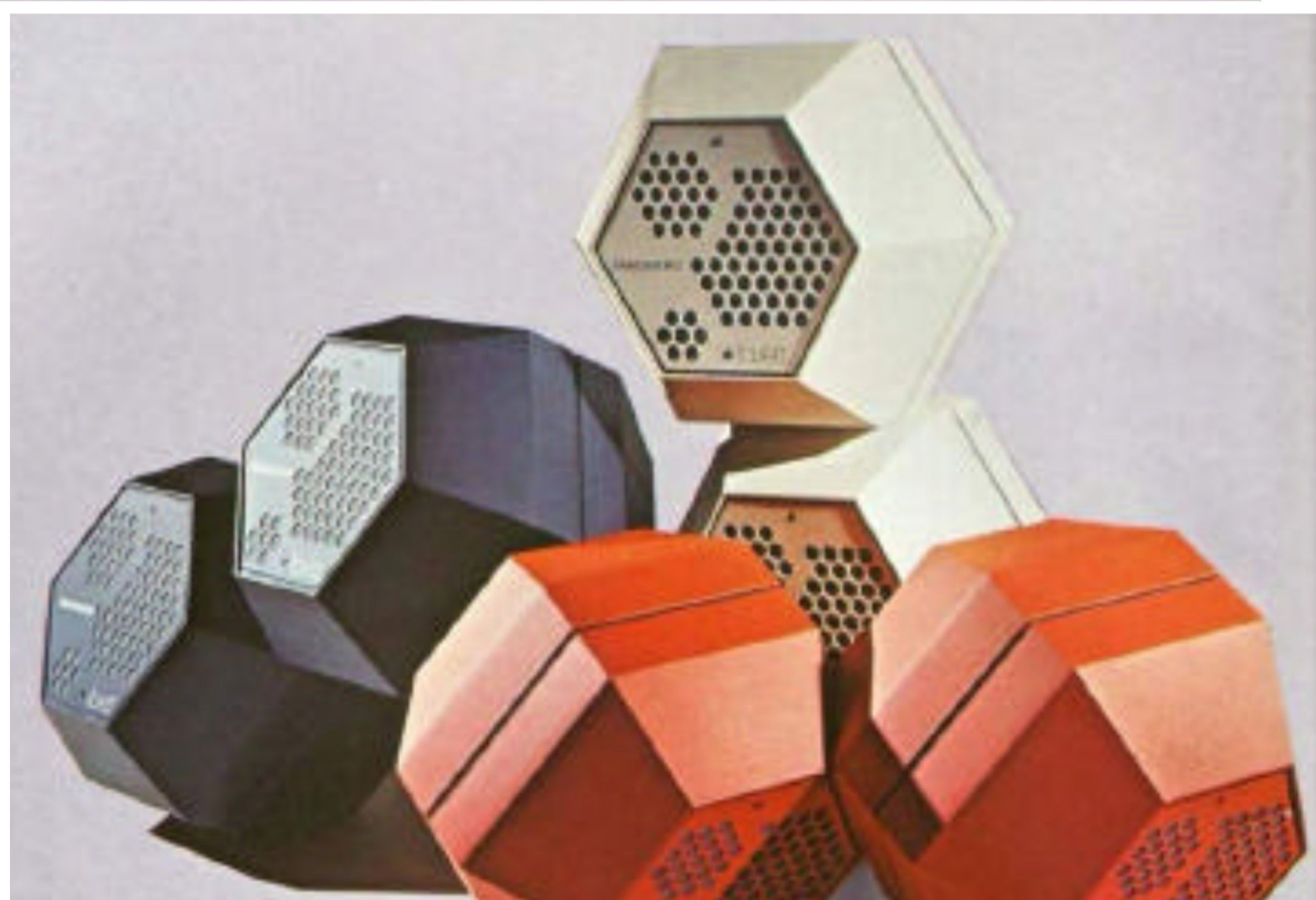


### Tekniske data for Tandberg høyttalere

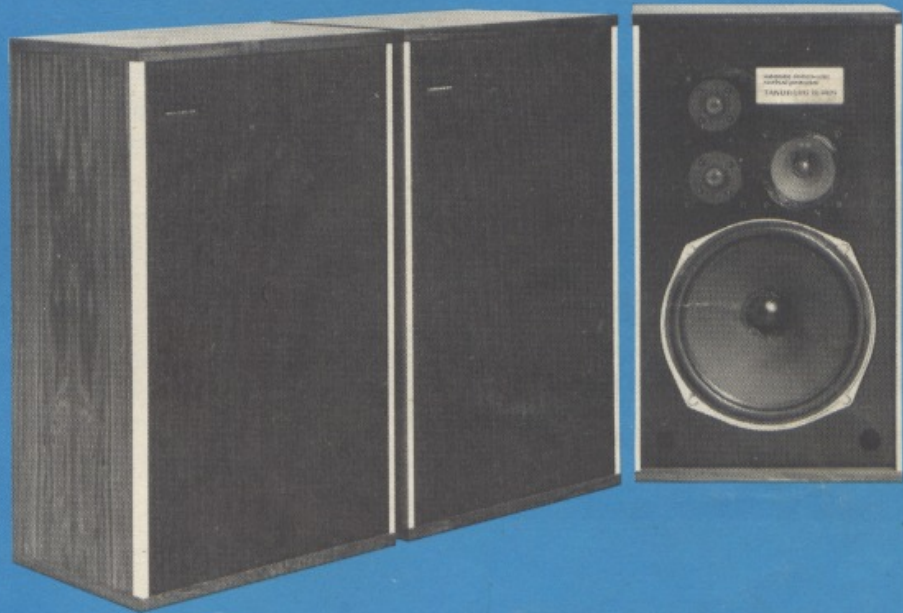
	Studio Monitor	TL 5020	TL 3520	TL 2520	TL 1520	Fasett	TL 1500
Ytre dimensjoner, cm	L: 47,0 H: 75,8 D: 34,2	L: 65 H: 37,5 D: 28	L: 59 H: 35,5 D: 26	L: 63 H: 30 D: 22	L: 42 H: 24,5 D: 22	L: 28 H: 24,5 D: 22	L: 43,1 H: 27,7 D: 20
Innvendig volum	80 liter	50 liter	35 liter	25 liter	15 liter	6,5 liter	15 liter
Frekvensområde, DIN 45 500	25-20 000 Hz	35-20 000 Hz	40-20 000 Hz	45-20 000 Hz	48-20 000 Hz	50-20 000 Hz	50-20 000 Hz
Resonansfrekvens	30 Hz	50 Hz	53 Hz	60 Hz	70 Hz	85 Hz	70 Hz
Driftseffekt <sup>1)</sup> , DIN 45 500	6 watt	3 watt	4 watt	4 watt	3 watt	6 watt	3 watt
Maks. varig effekt, DIN 45 500	100 watt	60 watt	50 watt	40 watt	30 watt	25 watt	25 watt
Musikeffekt, DIN 45 500	160 watt	100 watt	75 watt	65 watt	45 watt	40 watt	40 watt
Impedans	8 ohm	8 ohm	8 ohm	8 ohm	4 ohm	4 ohm	4 ohm
Høyttaler- beskykning	Bass 12" Mellomsone 2" Dome Diskant 2 x 1" Dome	12" 5" 2 x 1" Dome	10" 3 1/2" 1" Dome	8" 3 1/2" 2"	7" 2"	5" 2 1/4"	8" 2 1/2"
Trerart eller farge <sup>2)</sup>	T.P.N. Svart	T.P.N.H.	T.P.N.H.	T.P.N.H.	T.P.N.H.	Svart, antki- hvit, oranje	

<sup>1)</sup> Nødvendig effekt å oppnå en bestemt lydstyrke (96 dB) målt i 1 m avstand fra høyttaleren.

<sup>2)</sup> T = teak, P = palisander, N = natt, H = hvit.



# Specifications and Parts Lists Loudspeaker Systems



**TANDBERG**

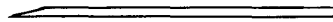
**NOTE**

When ordering spare, we will be grateful if you specify the components you need in this way:

e.g. L1 - HI FI 20 - 0.12 mH - part No. 980148

This will mean faster delivery for you and easier handling for us.

On systems where the front or a part of the front is covered with a perforated strip, this can be removed by means of an iron plate, nearly as broad as the perforated part of the front, 1 mm thick and ground as shown in the figure below.



Iron plate

On systems with a cloth front, access can be gained to the loudspeakers by gently removing the cloth front, which is fastened with steel needles.



## TROUBLE-SHOOTING CHART

### Distortion in the bass range.

#### Possible reasons:

- The woofer rubs because the voice coil is deformed or out of alignment in the magnetic gap.
- Foreign particles in the air gap.
- Partly broken braid wire.
- Cracked or loose paper or rubber surround.
- Assymetrical rest position of the voice coil assembly.
- If the rest position of the cone voice-coil assembly is such as to give a pronounced difference in resistance with movement either in or out of the magnetic gap, a substantial amount of 2nd. harmonic will be heard.
- Loose or leaky dust caps.
- Loose or cracked wooden grille.
- Braid wire touching the cone membrane.
- Loose components on the filter board or other places.
- Leakage around the rim of the loudspeakers or other places in the cabinet.
- Electrical faults on the filter board, shorts or open circuits on  $L_1$  or  $C_1$ .

### Distortion in the mid- and treble ranges.

#### Possible reasons:

- Distortion in the mid-range unit in a three-way system is comparatively rare, but can be caused by rubbing.
- Electrical faults on the filter board.
- Similar faults which occurs in the woofer unit.

### Distorted or missing treble.

#### Possible reasons:

- The tweeter rubs.
- Open circuit in the voice coil or in the lead wires.
- In rare cases it is open circuits in the series capacitor.

Assure yourself that gaskets and sealing strips are undamaged and that they are correctly mounted. Even small leakages can cause annoying noise. Assure yourself that the acoustic damping material does not touch the woofer cone.

## HI FI 7

### Technical specification:

Dimensions	: B:20 3/8" (52 cm), H:10 1/2" (26 cm), D:10" (25 cm)
Internal volume	: 0.88 cu.ft. (25 l)
Weight	: 16 lb (7.2 kg)
Impedance	: 3.2 ohms
Crossover frequency	: 3000 Hz
Resonance frequency	: 85 Hz
Frequency range; DIN 45570	: 60 to 16000 Hz
Sensitivity (DIN 45500)	: 1 Watt
Max. continuous power (DIN 45573)	: 8 Watts

### Complement:

Woofer	: HT 112, 3.2 ohms, 6" x 10",	part No. 205607
Tweeter	: HT 106, 5 ohms, 2",	part No. 211879

### Notes:

Max. continuous power (after 1967): 20 Watts (aluminium voice coil).  
The tweeter with crossover filter is mounted coaxially with the woofer.  
The whole unit has to be replaced when there is a fault.

## HI FI 8 and 14

### Technical specification:

Dimensions	: B:28" (70cm), H:14" (35 cm), D:14" (35 cm)
Internal volume	: 1.77 cu.ft. (50 l)
Weight	:
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 60 Hz
Frequency range (DIN 45570)	: 45 to 16000 Hz
Sensitivity (DIN 45500)	: 0.7 Watt
Max. continuous power (DIN 45573)	: 15 Watts

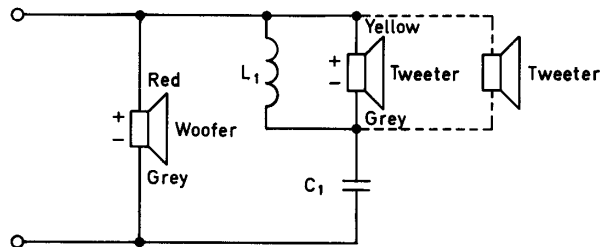
### Complement

Woofer	: HT 114,	4 ohms,	10",	part No. 201893
* Tweeter	: HT 116,	5 ohms,	2 1/2",	part No. 254112

### Crossover filter components:

L1:	0.19 mH	part No. 980147
C1:	8 $\mu$ F,	part No. 276109

### Diagram:



### Notes:

- \* HI FI 14 has two tweeters coupled in parallel, otherwise it is equal to HI FI 8.

## HI FI 10

### Technical specification:

Dimensions	: B:7 1/4" (18 cm), H:9 1/4" (23 cm), D:9 1/4" (23 cm)
Internal volume	: 0.27 cu.ft. (7.6 l)
Weight	:
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 90 Hz
Frequency range (DIN 45570)	: 60 to 16000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 8 Watts

### Complement:

* Woofer	: HT 113		
	or HTC 113,	4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 106,	5 ohms, 2",	part No. 211879

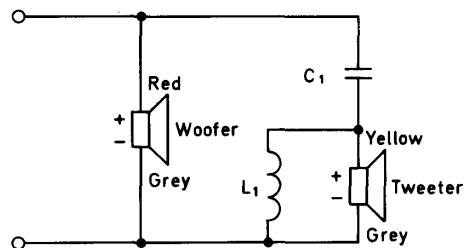
Gasket in front of the tweeter: part No. 224508

### Crossover filter components:

L1: 0.19 mH, part No. 980147

C1: 8  $\mu$ F, part No. 276109

### Diagram:



### Notes:

- \* As a spare part for HT 113 only HTC 113, part No. 264133 can be delivered. The max. continuous power can then be increased to 20 Watts.

The built-in loudspeakers in Huldra 8 have the same specification and complement as HI FI 10.

## HI FI 11

### Technical specification:

Dimensions	: B: 13" (32 cm), H: 8 1/2" (21 cm), D: 6" (15 cm)
Internal volume	: 0.27 cu.ft. (7.6 l)
Weight	: 6.7 lb (3 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 90 Hz
Frequency range (DIN 45570)	: 60 to 16000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 20 Watts

### Complement:

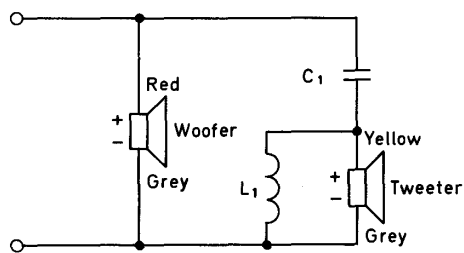
* Woofer	: HTB 113	
	or HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 106 5 ohms, 2",	part No. 211879

Gasket in front of the tweeter: part No. 224508

### Crossover filter components :

Filter board:		part No. 994732
L1:	0.19 mH,	part No. 980147
C1:	8 $\mu$ F,	part No. 276109

### Diagram :



HTC 113 seen  
from behind.

### Notes:

\* As a spare part for HTB 113 only HTC 113, part No. 264133 can be delivered.

## HI FI 12

### Technical specification:

Dimensions	: B: 17 3/4" (44 cm), H: 9" (22 cm), D: 7 3/4" (19 cm)
Internal volume	: 0.45 cu.ft. (12.5 l)
Weight	: 10.9 lb (4.9 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 70 Hz
Frequency range (DIN 45570)	: 50 to 16000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 25 Watts

### Complement:

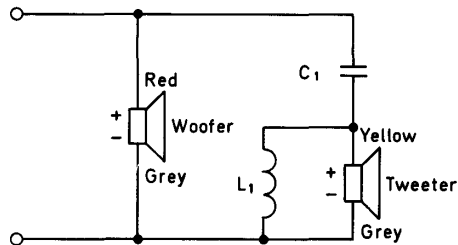
Woofer	: HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 106, 5 ohms, 2",	part No. 211879

Gasket in front of the tweeter: part No. 224508

### Crossover filter components:

Filter board:	part No. 994732
L1: 0.19 mH	part No. 980147
C1: 8 $\mu$ F	part No. 276109

### Diagram:



## HI FI 13

### Technical specification:

Dimensions	: B: 26" (65 cm), H: 8 1/2" (21 cm), D: 10" (25 cm)
Internal volume	: 0.88 cu.ft. (25 l)
Weight	: 19 lb (8.5 kg)
Impedance	: 3.2 ohms
Crossover frequency	: 3000 Hz
Resonance frequency	: 85 Hz
Frequency range (DIN 45570)	: 60 to 16000 Hz
Sensitivity (DIN 45500)	: 1 Watt
Max. continuous power (DIN 45573)	: 8 Watts

### Complement:

Woofers	: HT 112, 3.2 ohms, 6" x 10",	part No. 205607
Tweeter	: HT 106, 5 ohms, 2",	part No. 211879

### Notes:

Max. continuous power after 1967: 20 Watts (aluminium voice coil).  
The tweeter with crossover filter is mounted coaxially with the woofer.

The whole unit has to be replaced when there is a fault.

## HIFI 15

### Technical specification:

Dimensions	: B: 28" (70 cm), H: 14" (35 cm), D: 11 1/4" (28 cm)
Internal volume	: 1.77 cu.ft. (50 l)
Weight	: 39 lb (17.5 kg)
Impedance	: 4 ohms
Crossover frequencies	: 1200 Hz, 4000 Hz
Resonance frequency	: 50 Hz
Frequency range (DIN 45570)	: 35 to 16000 Hz
Sensitivity (DIN 45500)	: 2 Watts
Max. continuous power (DIN 45573)	: 30 Watts

### Complement:

Woofer	:HT 120,	4 ohms,	12",	part No. 251777
Midrange	:HT 121,	4 ohms,	5",	part No. 253458
Tweeter:	:HT116,	4 ohms,	2 1/2",	part No. 254112

Gasket for the tweeter: part No. 253645

### Series 1

### Crossover filter components:

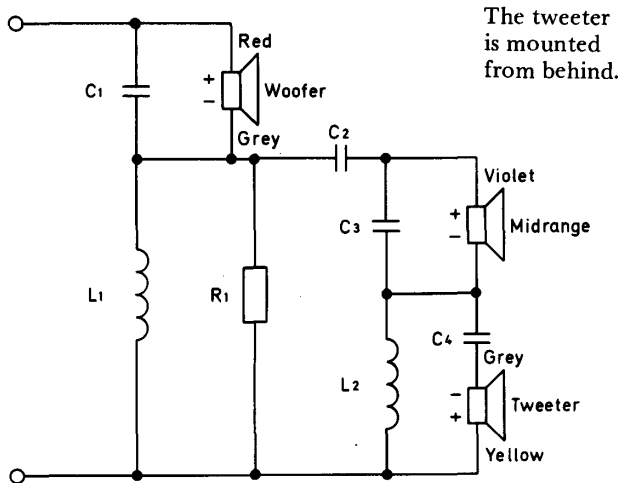
Filter board: part No. 994730

\* L1: 0.5 mH  
 \*\* L2: 0.15 mH

C1: 50  $\mu$ F part No. 282007  
 C2: 12  $\mu$ F part No. 277754  
 C3: 8  $\mu$ F part No. 276109  
 C4: 5  $\mu$ F part No. 275074

R1: 18 ohms, 1W part No. 204279

### Diagram:



### Notes:

\* L1 is replaced by coil 27213, part No. 980213 assembled on the core, part No. 290462.

\*\* L2 can be replaced by coil 27150, part No. 980150. The coil can be mounted on the filter board by means of glue, e.g. Bostik 555.



Series 2

Crossover filter components:

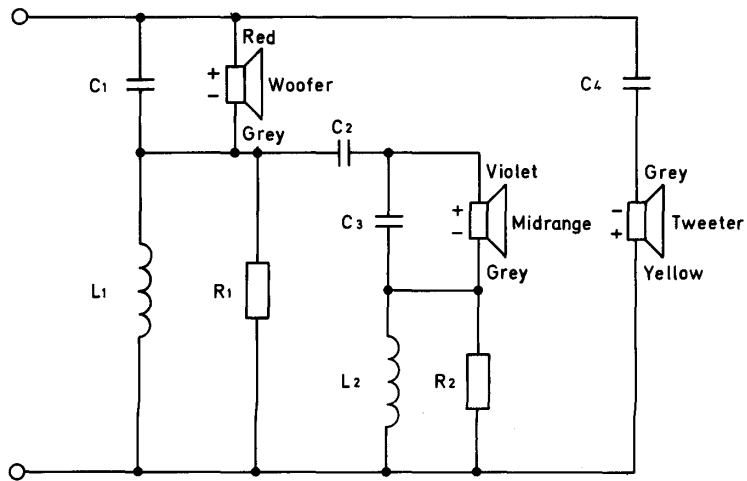
Filter board: part No. 994730

\* L1: 0.5 mH  
\*\* L2: 0.24 mH

C1: 50  $\mu$ F, part No. 282007  
C2: 12  $\mu$ F, part No. 277754  
C3: 8  $\mu$ F, part No. 276109  
C4: 5  $\mu$ F, part No. 275074

R1: 18 ohms, 1 W, part No. 204279  
R2: 18 ohms, 1 W, part No. 204279

Diagram:



Notes:

\* L1 is replaced by coil 27213, part No. 980213 assembled on the core, part No. 290462.

\*\* L2 is replaced by coil 27150, part No. 980150.

Series 3

Crossover filter components:

Filter board:

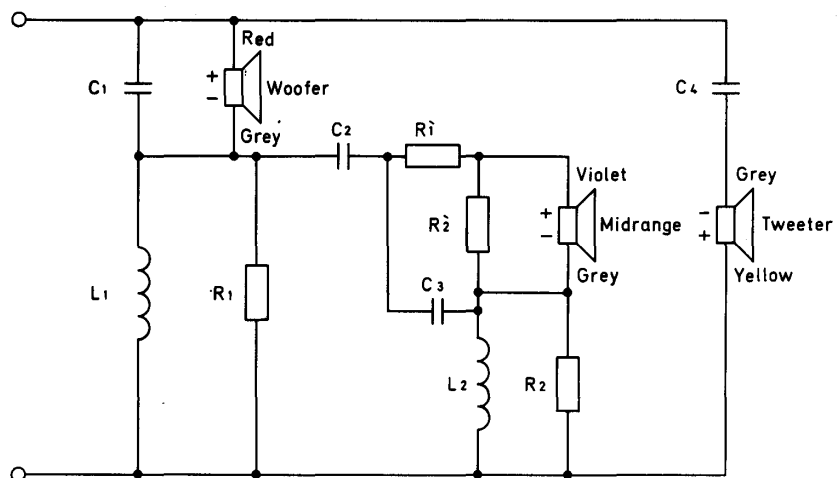
part. No. 994730

\* L1: 0.5 mH  
\*\* L2: 0.24 mH

C1: 50  $\mu$ F, part No. 282007  
C2: 12  $\mu$ F, part No. 277754  
C3: 8  $\mu$ F, part No. 276109  
C4: 5  $\mu$ F, part No. 275074

R1: 18 ohms, 1 W, part No. 204279  
R2: 18 ohms, 1 W, part No. 204279  
R3: 3.9 ohms, 5 W, part No. 228947  
R4: 3.9 ohms, 5 W, part No. 228947

Diagram:



Notes:

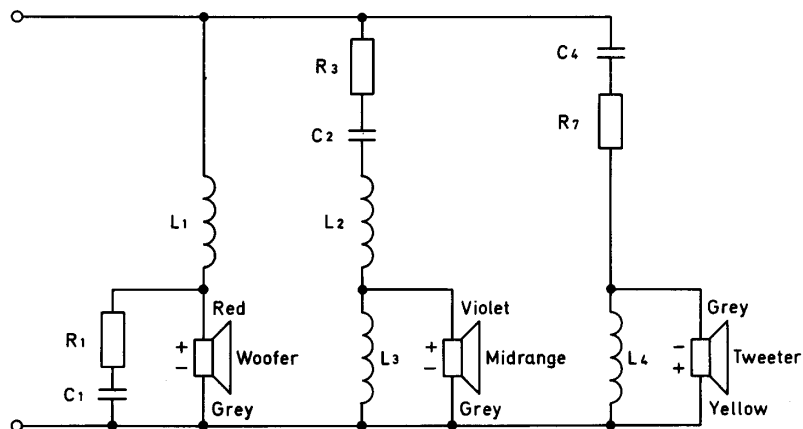
- \* L1 is replaced by coil 27213, part No. 980213 assembled on core, part No. 290462.
- \*\* L2 is replaced by coil 27150, part No. 980150

Series 4

Crossover filter components:

Filter board:			part No. 994730
L1:	3 mH,	coil No. 27167,	part No. 980167, assembled on core, part No. 980167
L2:	0.4 mH	coil No. 27150,	part No. 980150
L3:	0.4 mH,	coil No. 27150,	part No. 980150
L4:	0.4 mH,	coil No. 27150,	part No. 980150
C1:	75 $\mu$ F,		part No. 284858
C2:	50 $\mu$ F,		part No. 282007
C4:	8 $\mu$ F,		part No. 276109
R1:	2.2 ohms,	2 W,	part No. 265433
R3:	2.2 ohms,	2 W,	part No. 265433
R7:	2.2 ohms,	2 W,	part No. 265433

Diagram:



Special woofer: SEAS 30 wK

Notes:

On systems assembled after week 47, 1970, the tweeter is mounted from the front behind the perforated strip.

**Technical specification:**

Dimensions	: B: 21" (52 cm), H: 10 1/2" (26 cm), D: 10" (25 cm)
Internal volume	: 0.88 cu.ft. (25 l)
Weight	: 17.8 lb (8.0 kg)
Impedance	: 4 ohms
Crossover frequencies	: 1000 Hz, 3500 Hz
Resonance frequency	: 50 Hz
Frequency range (DIN 45570)	: 35 to 16000 Hz
Sensitivity (DIN 45500)	: 3 Watts
Max. continuous power (DIN 45573)	: 20 Watts

**Series 1**

**Complement:**

Woofer:	HT 124,	4 ohms,	8",	part No. 263430
Midrange:	HTB 111,	3 ohms,	4" x 7",	part No. 268508
Tweeter:	HT 116,	4 ohms,	2 1/2",	part No. 254112

Gasket for the tweeter: part No. 253645

**Crossover filter components:**

Filter board: part No. 994731

\* L1: 0.5 mH  
 \*\* L2: 0.19 mH  
 \*\* L3: 0.19 mH

C1:	100 uF,	part No. 269779
C2:	12 uF,	part No. 277754
C3:	16 uF,	part No. 268098
C4:	2.5 uF,	part No. 266769

R1:	18 ohms,	1 W,	part No. 204279
R2:	18 ohms,	1 W,	part No. 204279

## Series 2

### Complement:

Woofers: Ht 124, 8 ohms, 8", part No. 263430  
Midrange: HTB 111, 3 ohms, 4" x 7", part No. 268508  
Tweeter: HT 125, 4 ohms, 2 1/4", part No. 267215

Gasket for the tweeter: part No. 271935

### Crossover filter components:

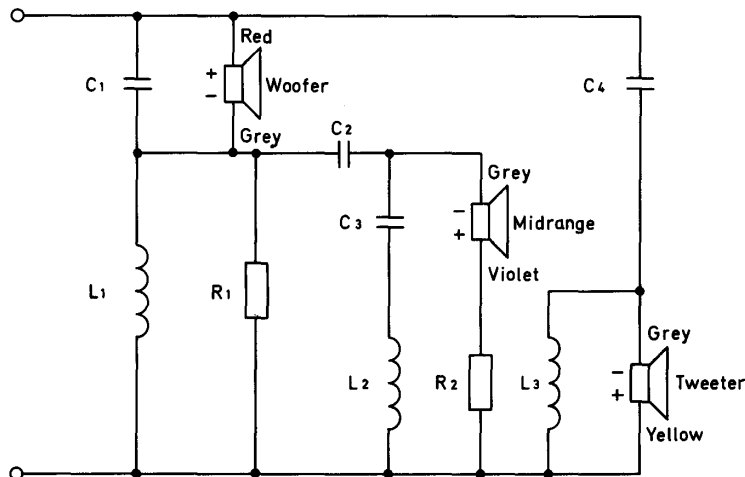
Filter board: part No. 994731

\* L1: 0.5 mH  
\*\* L2: 0.19 mH  
\*\* L3: 0.19 mH

C1: 100 uF, part No. 269779  
C2: 12 uF, part No. 277754  
C3: 16 uF, part No. 268098  
C4: 5 uF, part No. 275074

R1: 18 ohms, 1 W, part No. 204279  
R2: 18 ohms, 1 W, part No. 204279

### Diagram:



HT 124 seen from behind.

### Notes:

\* L1 is replaced by coil 27213, part No. 980213 assembled on core, part No. 290462.

\*\* L2 and L3 is replaced by coil 27150, part No. 980150. The coil can be mounted on the filter board by means of Bostik 555.

Tweeter HT 125 is mounted from the front behind the perforated strip.

## HI FI 18

### Technical specification:

Dimensions	: B: 9 1/2" (23.5 cm), H: 9 1/2" (23.5 cm), H: 4 1/2" (11 cm)
Internal volume	: 0.12 cu.ft. (3.5 l)
Weight	: 6.7 lb (3.0 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 85 Hz
Frequency range (DIN 45570)	: 50 to 1800 Hz
Sensitivity (DIN 45500)	: 8 Watts
Max. continuous power (DIN 45573)	: 20 Watts

### Complement:

Woofers:	HTB 126,	4 ohms,	5",	part No. 265132
Tweeters:	HT 125,	4 ohms,	2 1/4",	part No. 267215

Gasket behind the tweeter: part No. 271935

### Crossover filter components:

Filter board: part No. 994703

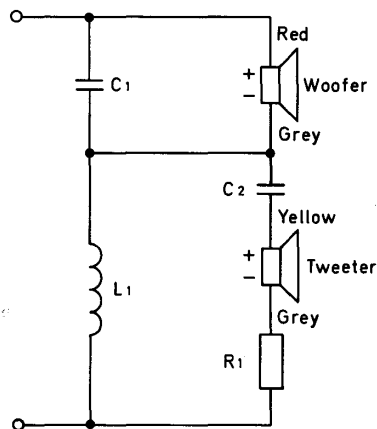
\* L1: 0.24 mH

C1: 12  $\mu$ F, part No. 277754

C2: 5  $\mu$ F, part No. 275074

R1: 2.2 ohms, 2 W, part No. 265433

### Diagram:



### Notes:

\* L1 is replaced by coil 27150, part No. 980150

The filter is either fixed with two screws from inside through the front or is clamped between the rockwool and the front.

## HI FI 19

### Technical specification:

Dimensions	: B: 9 1/2" (23.5 cm), H: 9 1/2" (23.5 cm), D: 7 3/4" (19 cm)
Internal volume	: 0.27 cu.ft. (7.6 l)
Weight	: 7.3 lb (3.3 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 85 Hz
Frequency range (DIN 45570)	: 50 to 18000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 25 Watts

### Complement:

Woofers:	HTC 113,	4 ohms,	6 1/2",	part No. 264133
Tweeters:	HT 125,	4 ohms,	2 1/4",	part No. 267215

Gasket behind the tweeter: part No. 271935

### Crossover filter components:

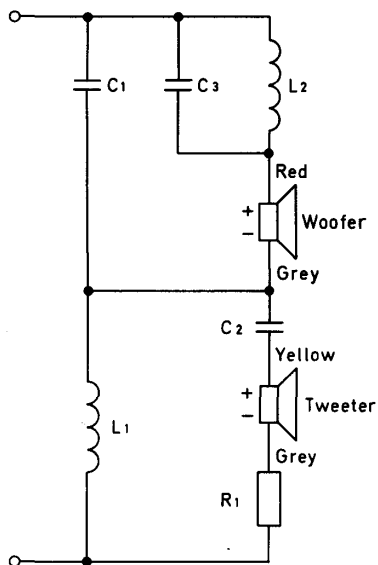
Filter board: part No. 994706

L1: 0.12 mH, part No. 980148  
L2: 0.12 mH, part No. 980148

C1: 12  $\mu$ F, part No. 277754  
C2: 5  $\mu$ F, part No. 275074  
C3: 5  $\mu$ F, part No. 275074

R1: 2.2 ohms 2 W, part No. 265433

### Diagram:



HTC 113  
seen from  
behind.

## HI FI 20

### Technical specification:

Dimensions	: B: 17 3/4" (44 cm), H: 9" (22 cm), D: 7 3/4" (19 cm)
Internal volume	: 0.45 cu.ft. ( 12.5 l)
Weight	: 11.3 lb (5.5 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 70 Hz
Frequency range ( DIN 45570 )	: 45 to 18000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 25 Watts

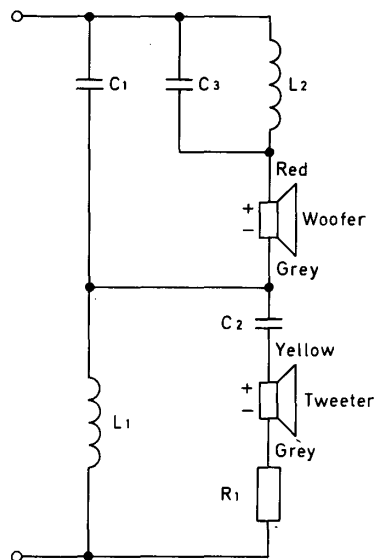
### Complements:

Woofers:	: HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 125, 4 ohms, 2 1/4",	part No. 267215
Gasket for the tweeter:		part No. 271935

### Crossover filter components:

Filter board:		part No. 994704
L1:	0.12 mH,	part No. 980148
L2:	0.15 mH,	part No. 980149
C1:	12 $\mu$ F,	part No. 277754
C2:	8 $\mu$ F,	part No. 276109
C3:	5 $\mu$ F,	part No. 275074
R1:	2.2 ohms, 2 W,	part No. 265433

### Diagram:



HTC 113 seen  
from behind.

### Notes:

To gain access to the tweeter, the perforated strip must be removed. Be careful to avoid damaging to the cabinet.

When the loudspeakers are being replaced with new ones, be careful to get the phasing of the new speakers correct.



## FASETT

### Technical specification:

Dimensions	: B: 11 1/8 (28 cm), H: 9 3/4" (24.2 cm), D: 9" (22 cm)
Internal volume	: 0.23 cu.ft. (6.5 l)
Weight	: 7.6 lb (3.4 kg)
Impedance	: 8 to 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 85 Hz
Frequency range (DIN 45570)	: 60 to 20 000 Hz
Sensitivity (DIN 45500)	: 6 Watts
Max. continuous power (DIN 45573)	: 25 Watts

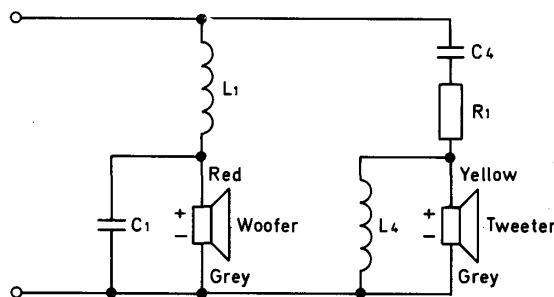
### Complement:

Woofer:	: HTB 126, 4 ohms, 5",	part No. 265132
	HT 125, 4 ohms, 2 1/4",	part No. 267215

### Crossover filter components:

Filter board:	part No. 994721	
* L1:	2 mH,	part No. 980166
L4:	0.4 mH,	part No. 980150
C1:	20 $\mu$ F,	part No. 282358
* C4:	10 $\mu$ F,	part No. 280677
R1:	2.2 ohms, 2 W,	part No. 265433
Rubber gasket:	part No. 253839	

### Diagram:



### Notes:

\* Components marked with an asterisk (\*) are after March 1974 modified to:

L1:	1.1 mH,	part No. 980220
C4:	8 $\mu$ F,	part No. 276109

Early models of the FASETT must be dismantled in the following way:

The plastic cabinet consists of two halves held together with four plastic hooks inside the cabinet. To gain access to the hooks, remove the rubber gasket between the two halves.

The halves can now be dismantled by applying gentle pressure against the hooks through four openings in the cabinet underneath the rubber sealing gasket.

To assemble the two halves, put them together in the original position and press them together with substantial pressure. The hooks will then catch. A new rubber gasket between the two halves must be used.

On later versions the two halves are held together with two long bolts. The nuts are underneath the rear metal plate.

The woofer and the tweeter must be removed from the inner side of the cabinet. If the tweeter has to be changed, loosen the two fastening screws and pull out the unit slowly. Be careful not to remove the sticky substance around the unit. This has been applied for sealing purposes.

If, for any reason, the front on FASETTS equipped with a fine calibre perforated front has to be removed, one of the two fastening screws is situated underneath the TANDBERG name plate. FASETTS with a large calibre perforated front have free access to the fastening screws.

## TL 1210

### Technical specification:

Dimensions	: B: 16 3/4" (41.5 cm), H: 9 1/2" (23.5 cm), D: 7 3/4" (19 cm)
Internal volume	: 0.45 cu.ft. ( 12.5 l)
Weight	: 10.8 lb (4.8 kg)
Impedance	: 4 to 8 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 70 Hz
Frequency range (DIN 45570)	: 45 to 20000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 25 Watts

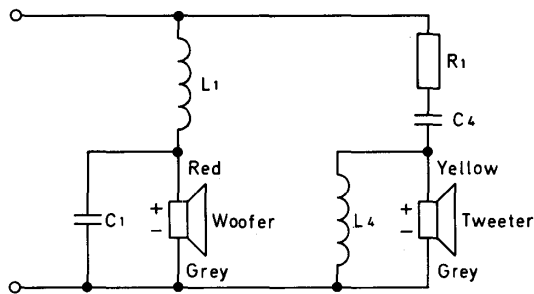
### Complement:

* Woofer	: HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 125, 4 ohms, 2 1/4",	part No. 267215
Gasket behind the tweeter,		part No. 271935

### Crossover filter components:

Filter board:		part No. 994702
L1:	2 mH,	part No. 980166
L4:	0.4 mH,	part No. 980150
C1:	20 $\mu$ F,	part No. 282358
C4:	10 $\mu$ F,	part No. 280677
R1:	2.2 ohms, 2 W,	part No. 265433

### Diagram:



HTC 113 seen  
from behind.

### Notes:

\* Alternative woofer: HTD 113, part No. 307027.

# TL 1520

## Technical specification:

Dimensions	: B. 16 7/8" (42 cm), H: 9 7/8" (24.3 cm), D: 8 3/4" (21.6 cm)
Internal volume	: 0.53 cu.ft. (15 l)
Weight	: 17.1 lb (5.4 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 70 Hz
Frequency range (DIN 45570)	: 50 to 20 000 Hz
Sensitivity (DIN 45500)	: 3 Watts
Max. continuous power (DIN 45573)	: 30 Watts

## Complement:

Woofer	: HT 132, 4 ohms, 7",	part No. 289757
	or HTB 132, 4 ohms,	part No. 315684
Tweeter	: HT 154, 4 ohms,	part No. 319735

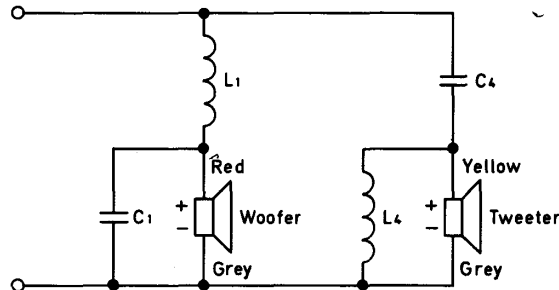
Gasket behind the tweeter: part No. 319377

## Crossover filter components:

Filter board:	part No. 994708
L1:	1.1 mH, part No. 980220
L4:	0.4 mH, part No. 980150
C1:	12 $\mu$ F, part No. 277754
C4:	10 $\mu$ F, part No. 280677

*8  $\mu$ F på nyere modell*

## Diagram:



## TL 1610

### Technical specification:

Dimensions	: B: 21 1/4" (52.7 cm), H: 12" (29.5 cm), D: 6 1/2" (16 cm)
Internal volume	: 0.565 cu.ft. (16 l)
Weight	: 16 lb (7.2 kg)
Impedance	: 4 to 8 ohms
Crossover frequency	: 2000 Hz
Resonance frequency	: 70 Hz
Frequency range (DIN 45570)	: 45 to 22 000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 30 Watts

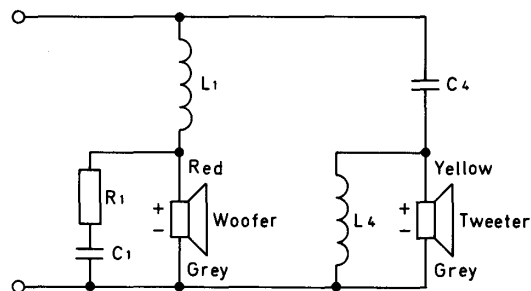
### Complement:

Woofer	: HT 132, 4 ohms, 7",	part No. 289757
	or HT 151, 8 ohms, 7",	part No. 314800
	or HT 149, 8 ohms, 7",	part No. 314706
Tweeter:	: HT 128, 8 ohms, 1",	part No. 282710
Gasket behind the tweeter,		part No. 885100

### Crossover filter components:

Filter board:		part No. 994705
L1:	2 mH,	part No. 980166
L4:	0.4 mH,	part No. 980150
C1:	20 $\mu$ F,	part No. 282358
C4:	10 $\mu$ F,	part No. 280677
R1:	3.9 ohms, 5 W,	part No. 228947

### Diagram:



### Notes:

- \* For stereo-pairs speakers with same HT-No. should be used.

## TL 1807

### Technical specification:

Dimensions	: B: 18 1/4" (45.3 cm), H: 11 3/8" (28.2 cm), D: 8 1/8" (20.2 cm)
Internal volume	: 0.64 cu.ft. ( 18 l )
Weight	: 18.4 lb (5.8 kg)
Impedance	: 4 ohms
Crossover frequency	: 3500 Hz
Resonance frequency	: 100 Hz
Frequency range (DIN 45570)	: 70 to 20 000 Hz
Sensitivity (DIN 45500)	: 1.5 Watts
Max. continuous power (DIN 45573)	: 25 Watts

### Complement:

Woofer	: HT 133, 4 ohms, 8",	part No. 289097
Tweeter	: HT 116, 4 ohms, 2 1/2",	part No. 254112

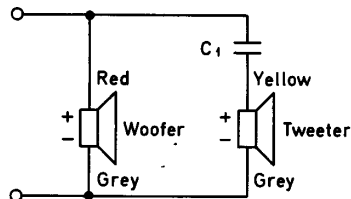
Gasket behind the tweeter, part No. 319298

### Crossover filter components:

C1: 8  $\mu$ F, part No. 276109

Needle, part No. 320479

### Diagram:



## TL 2507

### Technical specification:

Dimensions	: B: 21 1/4" (53 cm), H: 9 1/2" (23.5 cm), D: 9" (22 cm)
Internal volume	: 0.9 cu.ft. ( 25 l)
Weight	: 17.2 lb (7.75 kg)
Impedance	: 4 ohms
Crossover frequency	: 3000 Hz
Resonance frequency	: 90 Hz
Frequency range (DIN 45570)	: 60 to 20 000 Hz
Sensitivity (DIN 45500)	: 1.5 Watts
Max. continuous power (DIN 45573)	: 25 Watts

### Complement:

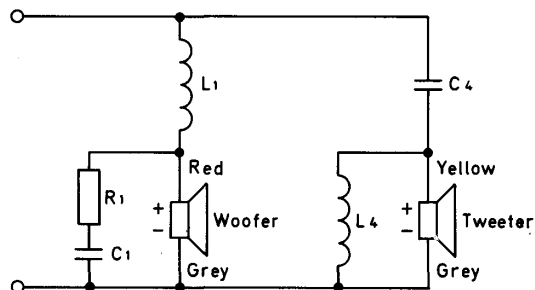
Woofers	: HT 133, 4 ohms, 8",	part No. 289097
Tweeters	: HT 116, 4 ohms, 2 1/2",	part No. 254112
Gasket behind the tweeter,		part No. 253645
or part No. 319298 after week 16, 1974		

### Series 1

### Crossover filter components:

Filter board:		part No. 994720
L1:	0.5 mH,	part No. 980213
L4:	0.4 mH,	part No. 980150
C1:	20 $\mu$ F,	part No. 282358
C4:	10 $\mu$ F,	part No. 280677
R1:	2.2 ohms, 2 W,	part No. 265433
Needle,		part No. 320497

### Diagram:



Series 2

Crossover filter components:

Filter board: part No. 994720

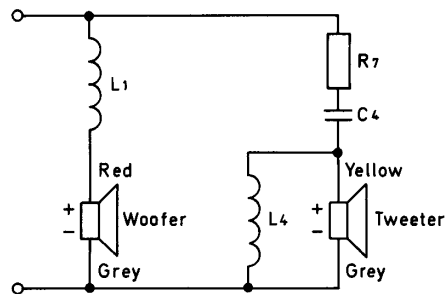
L1: 1.1 mH, part No. 980220

L4: 0.4 mH, part No. 980150

C4: 8  $\mu$ F, part No. 276109

R7: 1 ohm, 2 W, part No. 241900

Diagram:





# TL 2510

## Technical specification:

Dimensions	: B: 21 1/8" (52.7 cm), H: 12" (29.5 cm), D: 9" (22.0 cm)
Internal volume	: 0.9 cu.ft. ( 25 l )
Weight	: 19 lb (8.5 kg)
Impedance	: 4 to 8 ohms
Crossover frequency	: 2000 Hz
Resonance frequency	: 60 Hz
Frequency range (DIN 45570)	: 45 to 22 000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power ( DIN 45573 )	: 35 Watts

## Complement:

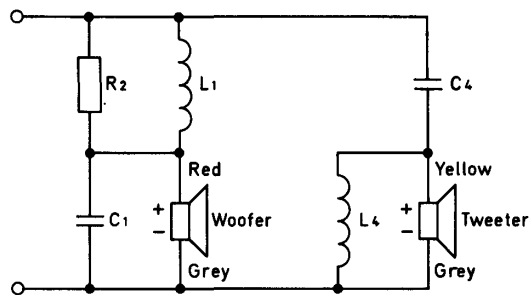
Woofer	: HT 127, 8 ohms, 8",	part No. 284391
Tweeter	: HT 128, 8 ohms, 1",	part No. 282710
Gasket behind the tweeter,		part No. 885100

*104.33 + Mans*  
*88.25 + Mans*

## Crossover filter components:

Filter board:		part No. 994701
L1:	3 mH,	part No. 980167
L4:	0.4 mH,	part No. 980150
C1:	20 $\mu$ F,	part No. 282358
C4:	10 $\mu$ F,	part No. 280677
R2:	33 ohms, 2 W,	part No. 266640

## Diagram:



**TL 2520**

**Technical specification:**

Dimensions	: B: 21" (52.6 cm), H: 12" (29.7 cm), D: 9" (22 cm)
Internal volume	: 0.9 cu.ft. ( 25 l)
Weight	: 20.3 lb (9.15 kg)
Impedance	: 4 ohms
Crossover frequencies	: 700 Hz, 3500 Hz
Resonance frequency	: 60 Hz
Frequency range (DIN 45570)	: 45 to 20 000 Hz
Sensitivity (DIN 45500)	: 3 Watts
Max. continuous power (DIN 45573)	: 40 Watts

**Complement:**

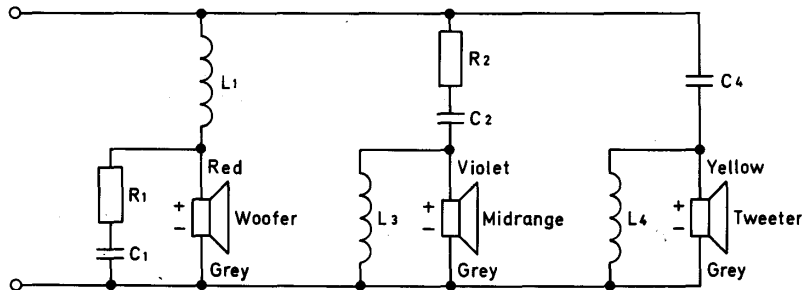
Woofer	: HT 157, 4 ohms, 8"	part No. 318888
Midrange	: HT 156, 8 ohms, 3 3/8"	part No. 315820
Tweeter:	: HT 154, 4 ohms, 2"	part No. 319735
Gaskets for the midrange unit: 85212,		part No. 315748 (2 pcs)
Gasket behind the tweeter:		part No. 319377

*Ny modell  
25-20  
HT-172 852  
Disk.*

**Crossover filter components:**

Filter board:	part No. 994709
L1: 2 mH,	part No. 980166
L3: 1.8 mH,	part No. 980225
L4: 0.4 mH,	part No. 980150
C1: 50 $\mu$ F,	part No. 282007
C2: 20 $\mu$ F,	part No. 282358
C4: 6.8 $\mu$ F,	part No. 313672
R1: 3.9 ohms, 5 W,	part No. 228947
R2: 2.2 ohms, 5 W,	part No. 288170

**Diagram:**



Thor Johnsen

Kjeller 5 oktober 1981

Vedr. TL 3520

Peerless KO 10 DT 8 ohm, kan med fordel brukes i TL 3520. Delefilterets innkopling av diskant høyteren passer.

Har De et delefilter-kort hvor spole L<sub>2</sub>, 0,4 mH ikke er montert, bør denne settes inn. Fjern bro ved L<sub>2</sub>, merket på kortet og plasser spolen mellom R<sub>2</sub> og L<sub>2</sub> + høyter utgang. Kondensator C<sub>4</sub>, 6,8 µf, endres til 4,7 µf polyester.

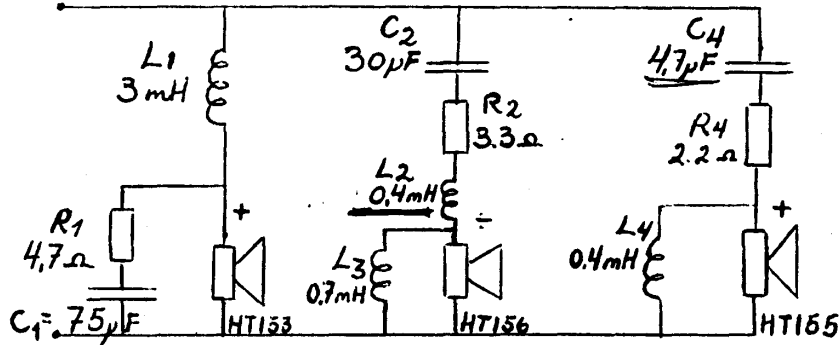
Disse endringene er for en tid siden gjort på TL 3520.

Deler kan bestilles fra vårt delelager på Kjeller.

Skjema m/endringer er vedlagt.

med vennlig hilsen  
Tandberg A/S Servicecenter

### TL 3520



Thor Johnsen

Kjeller 5 oktober 1981

Vedr. TL 3520

Peerless KO 10 DT 8 ohm. kan med fordel brukes i TL 3520. Delefilterets innkopling av diskant høyttaleren passer.

Har De et delefilter-kort hvor spole L, 2,0,4 mH ikke er montert, bør denne settes inn. Fjern bro ved L2, merket på kortet og plasser spolen mellom R2 og L2 + høyttaler utgang. Kondensator C4, 6, 8  $\mu$ f, endres til 4,7  $\mu$ f polyester.

Disse endringene er for en tid siden gjort på TL 3520.

Deler kan bestilles fra vårt delelager på Kjeller.

Skjema m/endringer er vedlagt.

med vennlig hilsen  
Tandberg A/S Servicesenter

  
-----  
T. Brørby  
Servicesjef

  
-----  
H. Øverland  
Avd. Leder

Tandberg A/S  
Servicesenteret  
Fetveien 1 - Postboks 53  
2007 Kjeller

## TL 3520

### Technical specification:

Dimensions	: B: 23 3/4" (59 cm), H: 14 1/8" (35.3 cm), D: 10 1/4" (25.7 cm)
Internal volume	: 1.24 cu.ft. (35 l)
Weight	: 29.4 lb (13.25 kg)
Impedance	: 4 to 8 ohms
Crossover frequencies	: 700 Hz, 3500 Hz
Resonance frequency	: 53 Hz
Frequency range (DIN 45570)	: 40 to 22000 Hz
Sensitivity (DIN 45500)	: 4 Watts
Max. continuous power (DIN 45573)	: 50 Watts

### Complement:

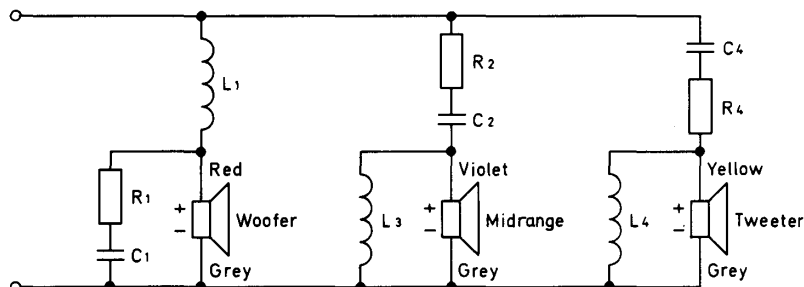
Woofer	: HT 153, 8 ohms, 10",	part No. 313220
Midrange	: HT 156, 8 ohms, 3 3/8",	part No. 315820
Tweeter	: HT 155, 8 ohms, 1" dome,	part No. 319534

Gaskets for the midrange unit:	85212,	part No. 315748 (2 pcs)
Gasket in front of the tweeter,		part No. 319650

### Crossover filter components:

Filter board:		part No. 994710
L1:	3 mH	part No. 980167
L3:	0.7 mH	part No. 980224
L4:	0.4 mH	part No. 980150
C1:	50 $\mu$ F	part No. 282007
C2:	50 $\mu$ F	part No. 282007
C4:	6.8 $\mu$ F	part No. 313672
R1:	4.7 ohms, 9 W	part No. 318019
R2:	2.7 ohms, 9 W	part No. 330740
R3:	2.2 ohms, 5 W	part No. 288170

### Diagram:



## TL 5010

### Technical specification:

Dimensions	: B:26" (65 cm), H: 15" (37 cm), D: 11 1/8" (28 cm)
Internal volume	: 1.8 cu.ft. (50 l)
Weight	: 37.5 lb (17.3 kg)
Impedance	: 4 to 8 ohms
Crossover frequencies	: 700 Hz, 2000 Hz
Resonance frequency	: 50 Hz
Frequency range (DIN 45570)	: 35 to 22 000 Hz
Sensitivity (DIN 45500)	: 3 Watts
Max. continuous power (DIN 45573)	: 45 Watts

### Complement:

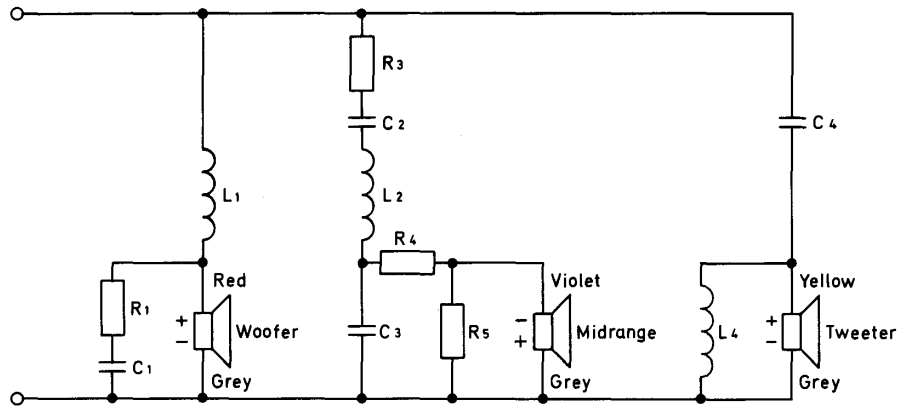
Woofer	: HT 130, 8 ohms, 12",	part No. 281029
Midrange	: HT 129, 8 ohms, 5",	part No. 284743
Tweeter	: HT 128, 8 ohms, 1",	part No. 282710

Gasket behind the tweeter: part No. 885100

### Crossover filter components:

Filter board:		part No. 994700
L1:	3 mH,	part No. 980167
L2:	0.4 mH,	part No. 980150
L4:	0.4 mH,	part No. 980150
* C1:	75 $\mu$ F,	part No. 284858
C2:	50 $\mu$ F,	part No. 282007
C3:	20 $\mu$ F,	part No. 282358
C4:	10 $\mu$ F,	part No. 280677
* R1:	3.9 ohms, 5 W,	part No. 228947
* R3:	8.2 ohms, 5 W,	part No. 280325
R4:	3.9 ohms, 5 W,	part No. 228947
R5:	3.9 ohms, 5 W,	part No. 228947

Diagram:



HT 129 seen  
from behind.

Notes:

\* Components marked with an asterisk (\*) are after 1.11 -72 modified to:

C1: 50  $\mu$ F, part No. 282007

R1: 2.2 ohms, 2 W, part No. 265433

R3: 3.9 ohms, 5 W, part No. 228947

## TL 5020A AND TL 5020

### Technical specification:

Dimensions	: B: 26" (65 cm), H: 14 7/8" (37 cm), D: 11 1/4" (28 cm)
Internal volume	: 1.8 cu.ft. (50 l)
Weight	: 38.5 lb (17.35 kg)
Impedance	: 4 to 8 ohms
Crossover frequencies	: 700 Hz, 3500 Hz
Resonance frequency	: 50 Hz
Frequency range (DIN 45570)	: 35 to 22 000 Hz
Sensitivity (DIN 45500)	: 2 Watts
Max. continuous power (DIN 45573)	: 60 Watts

### Complement:

Woofers	: HT 130, 8 ohms, 12",	part No. 281029
Midrange	: HT 129, 8 ohms, 5",	part No. 284743
Tweeter	: HT 150, 4 ohms, 1",	part No. 314469 ( 2 units )

Gasket behind the tweeter: part No. 313028

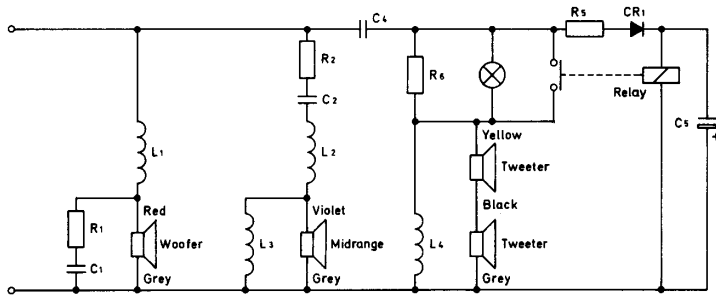
### Series 1

#### Crossover filter components:

Filter board:		part No. 994707
L1:	2 mH,	part No. 980166
L2:	0.4 mH,	part No. 980150
L3:	0.4 mH,	part No. 980150
L4:	0.4 mH,	part No. 980150
C1:	75 $\mu$ F,	part No. 284858
C2:	20 $\mu$ F,	part No. 282358
C3:	6.8 $\mu$ F,	part No. 313672
C5:	250 $\mu$ F,	part No. 241124
R1:	2.2 ohms, 9 W,	part No. 313794
R2:	3.3 ohms, 9 W,	part No. 312113
R5:	56 ohms, 1/4 W,	part No. 325203
R6:	560 ohms, 1/3 W,	part No. 216967
CR1:		part No. 289851
Relay:		part No. 312509
Lamp:		part No. 219343



Diagram:



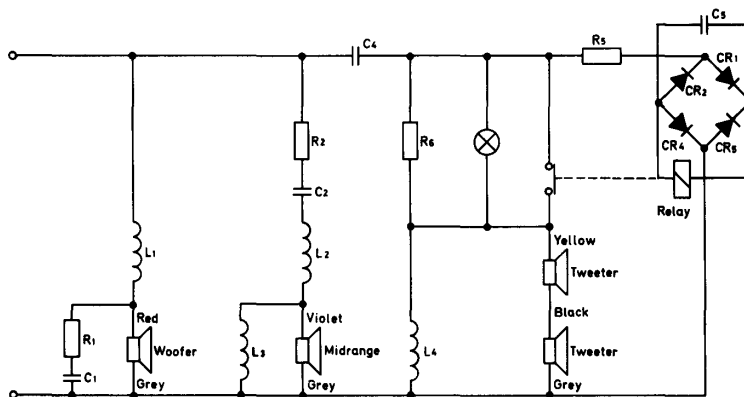
## Series 2

With modified protection circuit for the tweeters.

### Crossover filter components:

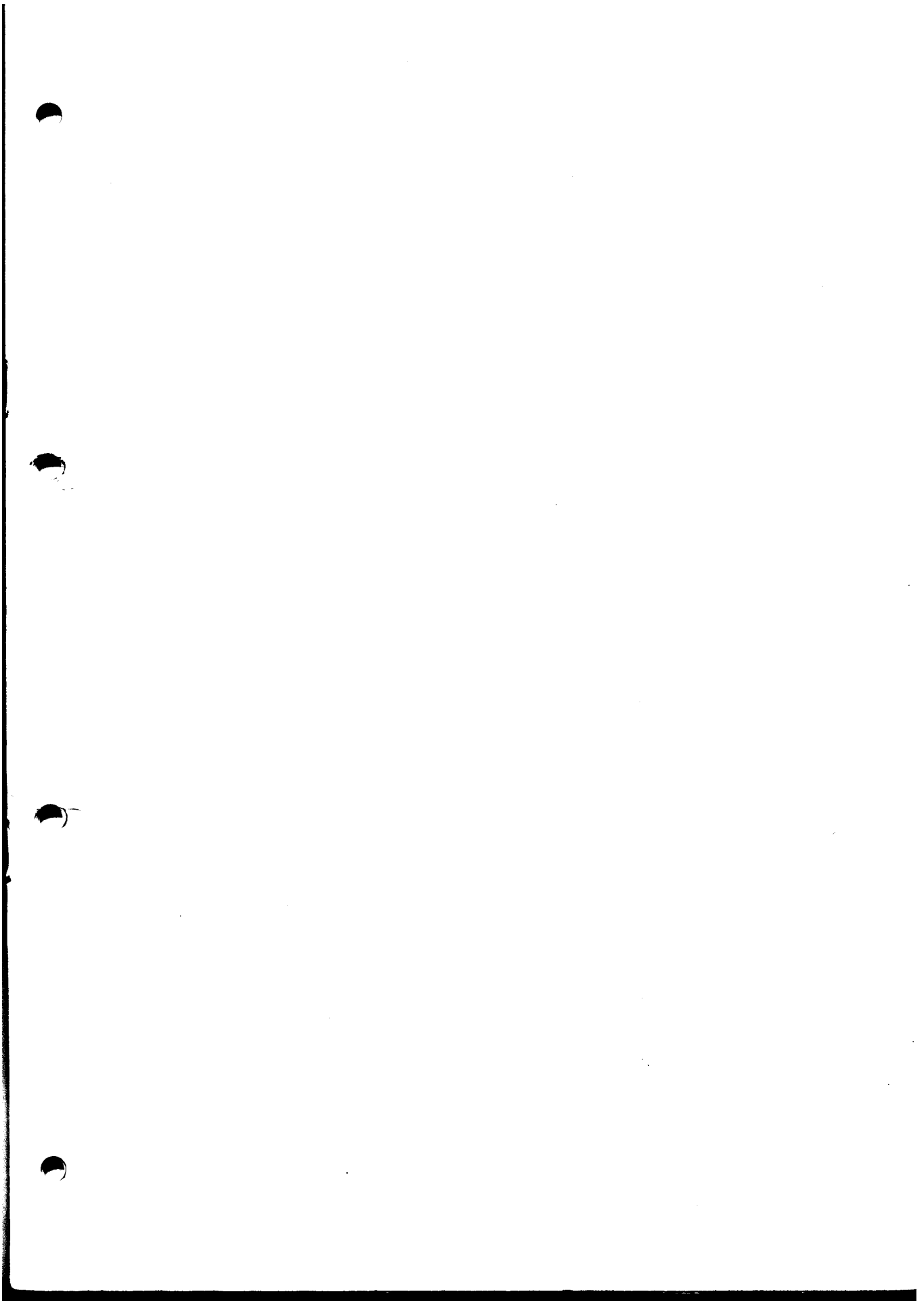
Filter board:		part No. 994707
L1:	2 mH,	part No. 980166
L2:	0.4 mH,	part No. 980150
L3:	0.4 mH,	part No. 980150
L4:	0.4 mH,	part No. 980150
C1:	75 uF,	part No. 284858
C2:	20 uF,	part No. 282358
C3:	6.8 uF,	part No. 313672
C4:	250 uF,	part No. 241124
R1:	2,2 ohms, 9 W,	part No. 313794
R2:	3.3 ohms, 9 W,	part No. 312113
R5:	56 ohms, 1/4 W,	part No. 325203
R6:	560 ohms, 1/3 W,	part No. 216967
CR1:		part No. 289851
CR2:		part No. 289851
CR3:		part No. 289851
CR4:		part No. 289851
CR4:		partNo. 289851
Relay:		part No. 312509
Lamp:		part No. 219343

### Diagram:



### Notes:

The only difference between TL 5020A and TL 5020 is that TL5020 has a different cabinet with aluminium trimmings.



Utvikling

2



**TANBERGS RADIOFABRIKK A/S**  
**Postboks 9, Korsvoll, Oslo 8**  
**Norway**

# TANDBERG

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## STUDIO MONITOR

### Illustrated Parts List

#### INSTRUCTIONS FOR ORDERING REPLACEMENT PARTS

For service and replacement parts contact your nearest Tandberg office or

write to: Tandbergs Radiofabrikk A/S  
Service and Spares Department  
P.O. Box 218  
N 1301 Sandvika, Norway

Telex: 18007 kurer n

When ordering please quote the model and serial numbers together with the ordering number and the full description of each part required. The serial number is found on the rear of the apparatus.

Example: Model Studio Monitor Serial number xxxxxxxx  
348664 Lens, red  
L1 Coil, 4.3 mH

Note! The numbers on the illustration are index numbers and must not be used when ordering. Please refer to the parts list for the ordering number and description.

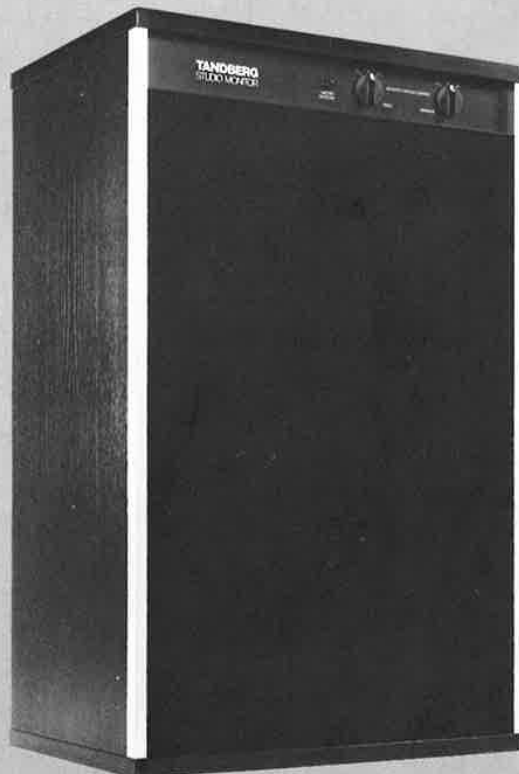
#### INSTRUKS FOR BESTILLING AV DELER

For service og servicedeler kontakt nærmeste Tandberg kontor eller bruk adressen som er vist ovenfor.

Modell og serienummer må alltid oppgis ved bestilling av deler. Bestillingsnr. og beskrivelse finnes i listen. Serienummeret finnes på baksiden av apparatet.

Eksempel: Modell Studio Monitor Serienr. xxxxxxxx  
348664 Lampehette  
L1 Spole, 4,3 mH

Merk! Tallene på tegningen er indeksnumre og må ikke brukes ved bestilling. Bestillingsnr. og beskrivelse finnes i listen.



Mechanical parts

SPECIFY THIS WHEN ORDERING				
Index	Ordering No.	Description (notes)	Beskrivelse (merknader)	Reference
1	347507	Cabinet, teak	Kabinett	
	349188	Cabinet, rosewood	Kabinett	
	345474	Cabinet, walnut	Kabinett	
	347155	Cabinet, black	Kabinett	
2	994742	Baffle, front	Plate	
3	346660	Holder, plastic	Holder	
4	345280	Drawer, cross-over network	Skinne	
5	342882	Screw, 5 x 20 mm csk hd, black	Skrue	
6	348664	Lens, red	Lampehette	
7	340353B	Knob, black, plastic	Knapp	TREBLE, MIDRANGE
8	994738	Board, cross-over network	Kort	
9	244673	Screw, plate, 3/8" No. 8 hex hd	Skrue	
10	234867	Holder	Holder	
11	219343	Bulb, 12 V 18 W	Lampe	DS1, TWEETER OVERLOAD
12	312509	Relay, 6 V	Rele	K1
13	335849	Former, coil (see page 4 for coil L1)	Spoleform (se side 4, spole L1)	
14	346006	Screw, 5 x 50 mm ch hd	Skrue	
15	216994	Nut, 5 mm	Mutter	
16	267244	Switch, rotary	Vender	S1, S2
17	219221	Clamp, cable, nylon, 7 mm	Klammer	
18	349505	Label	Plate	
19	340367	Loudspeaker, 4 ohm	Høytaller	Tweeter
20	340446	Sheet, foam rubber	Plate	
21	332760	Screw, wood, 4 x 16 mm pan hd	Skrue	
22	342400	Loudspeaker, 8 ohm	Høytaller	Midrange
23	344160	Sheet, foam rubber	Plate	
24	357961	Plate	Plate	
25	341201	Screw, 5 x 30 mm csk hd, black	Skrue	
26	344081	Loudspeaker, 8 ohm	Høytaller	Bass
27	352658	Strip, foam rubber, 4 x 12 mm	List	
28	342106	Plate, support, loudspeaker	Skinne	
29	348513	Label	Plate	
30	338082	Screw, plate, 3/8" No. 4 pan hd, black	Skrue	
31	289018	Screw	Skrue	
32	340332	Spacer, threaded 4 mm	Bøssing	
33	272115	Terminal	Kabelsko	
34	334807	Screw, 4 x 8 mm pan hd	Skrue	

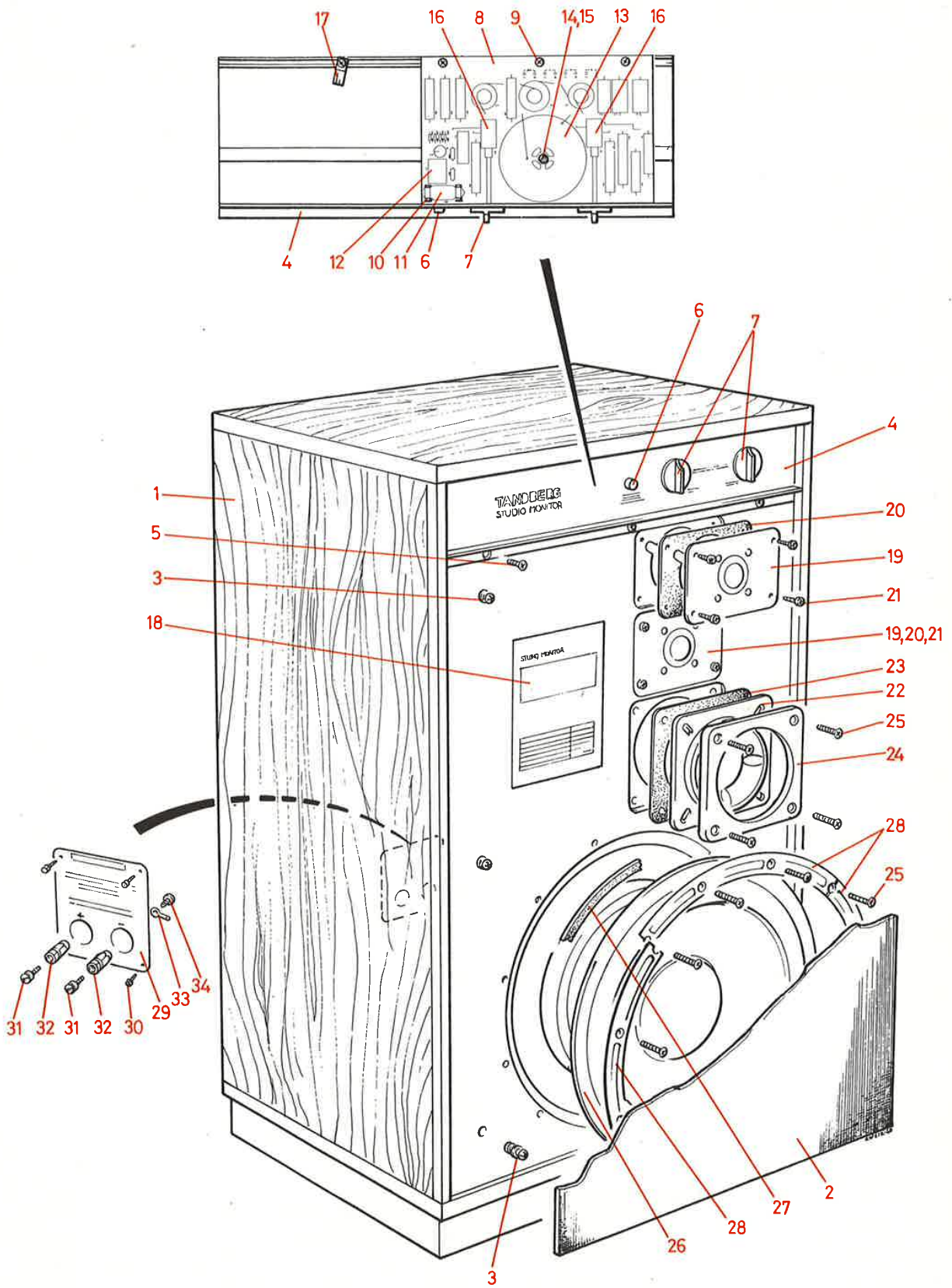


Fig.11 Cabinet assembly

Electrical parts

SPECIFY THIS WHEN ORDERING			
Index	Ordering No.	Description (notes)	Reference
		<b>CAPACITORS</b>	
	337946	50 uF 50 V	C1
	347408	50 uF 50 V	C2
	342199	12 uF 50 V	C3
	285922	4.7 uF 100 V	C4
	241124	220 uF 35-40 V	C5
		<b>DIODES</b>	
	289851	BA 219	D1
	289851	BA 219	D2
	289851	BA 219	D3
	289851	BA 219	D4
		<b>COILS</b>	
	980262	4.3 mH	L1
	980263	0.2 mH	L2
	980264	0.85 mH	L3
	980265	0.4 mH	L4
		<b>RESISTORS</b>	
	343737	4.7 ohm 9 W, wire	R1
	345711	3.3 ohm 9 W, wire	R2
	343880	1.2 ohm 9 W, wire	R3
	340166	1.8 ohm 9 W, wire	R4
	346423	2.2 ohm 9 W, wire	R5
	346423	2.2 ohm 9 W, wire	R6
	343880	1.2 ohm 9 W, wire	R7
	345711	3.3 ohm 9 W, wire	R8
	340166	1.8 ohm 9 W, wire	R9
	295626	390 ohm 1/3 W, film	R10
	294922	560 ohm 1/3 W, film	R11
		<b>KONDENSATORER</b>	
		50 uF 50 V	
		50 uF 50 V	
		12 uF 50 V	
		4,7 uF 100 V	
		220 uF 35/40 V	
		<b>DIODER</b>	
		BA 219	
		BA 219	
		BA 219	
		BA 219	
		<b>SPOLER</b>	
		4,3 mH	
		0,2 mH	
		0,85 mH	
		0,4 mH	
		<b>MOTSTANDER</b>	
		4,7 ohm 9 W, tråd	
		3,3 ohm 9 W, tråd	
		1,2 ohm 9 W, tråd	
		1,8 ohm 9 W, tråd	
		2,2 ohm 9 W, tråd	
		2,2 ohm 9 W, tråd	
		1,2 ohm 9 W, tråd	
		3,3 ohm 9 W, tråd	
		1,8 ohm 9 W, tråd	
		390 ohm 1/3 W, sjikt	
		560 ohm 1/3 W, sjikt	

**TANDBERGS RADIOFABRIKK A/S**  
**N – 1301 Sandvika – Norway**



Partnr.	HT nr.	Fabrikat	Impedans ohm	Størrelse	Anvendelse
217374	HT 104	Peerless E590	3,2	5" x 9"	Eldre sort/hvitt TV, CTV-1
211879	HT 106	Peerless MT20HFC	5,-	2"	Hi Fi 11, Hi Fi 12
213035	HTB 108	Peerless E610	3,2	6" x 10"	Eldre sort/hvitt TV
268508	HTB 111	Rola P47 7586	3,-	4" x 7"	Eldre håndopptakere
205607	HT 112	Peerless Coax 610-20	3,2	6" x 10"	Hi Fi 7, Hi Fi 13
264133	HTC 113	Peerless R65WG-4	4,-	6 1/2"	Hi Fi 11, Hi Fi 12, Hi Fi 1
307026	HTD 113	SEAS 17TV-GWB	4,-	6 1/2"	TL 1210 TL 1210
254112	HT 116	Peerless MT25HFC-4	4,-	2 1/2"	Hi Fi 15, TL 2507, TL 1807
214716	HT 117	Peerless E23OMT	20,-	2" x 4"	TB 11 TK 400.T.
255900	HT 122	Peerless K59OTM	3,2	5" x 9"	TP 41
284326	HTB 123	ITT LP1018/16/8AT	8,-	4" x 7"	TB 14, TB 15
309268	HTC 123	Rola P47/0158	8,-	4" x 7"	TB 14, TB 15
267215	HT 125	Peerless MT225HFC	4,-	2 1/4"	Hi Fi 20, TL 1210 Fasett
265132	HTB 126	Audax HIF 13/J-4	4,-	5"	Fasett
284391	HT 127	Heco PCH200-8	8,-	8"	TL 2510
282710	HT 128	Heco PCH24-8	8,-	1"	TL 1610, TL 2510, TL 5010
Service-					
del	HTB 128	Peerless (Wigo) DT10HFC	8,-	1"	TL 1610, TL 2510, TL 5010
284743	HT 129	Peerless G50MRC-8	8,-	5"	TL 5010, TL 5020
281029	HT 130	Rola T1884-8	8,-	12"	TL 5020
284399	HT 131	Rola P47/9981	15,-	4" x 7"	Nyere sort/hvitt TV, TB 340
315713	HTB 131	ITT LP1018/16/80AT	15,-	4" x 7"	Sort/hvitt TV, TB 3400
289757	HT 132	Peerless K070WF	4,-	7"	TL 1610, TL 1520
315684	HTB 132	ITT LPT175/25/95F	4,-	7"	TL 1520
289097	HT 133	Peerless 0825W	4,-	8"	TL 1807, TL 2507
316604	HTB 133	ITT LP200/25/95F	4,-	8"	TL 1807 (TL 2507)
298988	HT 134	Rola S58/0159	15,-	5" x 8"	CTV 2
317624	HTB 134	Goodman Ref. 5596 Flux 29	15,-	5" x 8"	CTV 2
353399	HTC 134	Audax CIS 13X20D	15,-	5" x 8"	CTV 2-4
320411	HT 135	SEAS 87H	4-8	1 1/2"	TK 20D, TK 35D
324289	HT 136	SEAS 9TV-HF	4,-	3 1/2"	TK 10
320927	HT 137	SEAS 9TV-LG	4,-	3 1/2"	TK 18S, TK 20S
322608	HT 138	SEAS 9TV-LG	8,-	3 1/2"	TK 18S, TK 20S
320575	HT 139	Philips AD4680	4,-	4" x 6"	Menuett 2000
322256	HT 140	SEAS 15/11TVLGD	4,-	4" x 6"	Duett 3001
324993	HT 141	SEAS 17TV-W	4,-	6 1/2"	TK 10
321279	HT 142	SEAS 17TV-GW	4,-	6 1/2"	TK 12
324641	HT 143	SEAS 21TV-GW	4,-	8"	TK 18S, TK 20S
322092	HT 144	SEAS 21TV-EW	4,-	8"	TK 20D
323213	HT 145	SEAS 25TV-EW	4,-	10"	TK 35D
325216	HT 146	SEAS 21TV-EW	15,-	8"	TK 50D
329592	HT 147	SEAS 21TV-GW	8,-	8"	TK 19S
327911	HT 148	SEAS 9TV-LG	15,-	3 1/2"	TK 19S
314706	HT 149	ITT LP175/25/95F	8,-	7"	TL 1610
314469	HT 150	Philips AD0160/T4	4,-	1"	TL 5020
314800	HT 151	Peerless K070WF	8,-	7"	TL 1610
311991	HT 152	Rola G12H	8,-	12"	"Harry"
313220	HT 153	Peerless P100WF	8,-	10"	TL 3520 prosj. 115
319735	HT 154	Philips AS 2090/T4	4,-	2"	TL 1520 prosj. 303
319534	HT 155	Philips AD0160/T8	8,-	1"	TL 3520 prosj. 115
315820	HT 156	Goodman MR/2, Flux 10	8,-	3 3/8"	TL 3520, TL 2520 prosj. 115, 135
318888	HT 157	Peerless P825 WF	4,-	8"	TL 2520 prosj. 135
318967	HT 158	SEAS 18/12 TV LG	15,-	5" x 7"	CTV 2-2
318924	HT 159	Matsushita EAS9KHO55B	4,-	1"	"Harry" prosj. 070
330145	HT 160	ITT LP175/19/105F	8,-	7"	TK 10S Solarvox
331826	HT 161	ITT LPH80/76B	4,-	3 3/8"	TK 10S Solarvox
339785	HT 162	Peerless MT 24 CT	4,-	2"	TL 1520, TK 600
335590	HT 163	SEAS 15/10 TV/L	8,-	4" x 6"	IS 8 Høytt. panel
336919	HT 164	Peerless P825WF	8,-	8"	TL 2520 prosj. 135
359914	HTB 164	Peerless KP825WF-C	8,-	8"	TL 2520, TL 2530, prosj. 1. 135
	HT 165				
337537	HT 166	SEAS 21F-GW	4,-	8"	TK 400, TL 1500
295569	HT 167	Peerless E23OMT-4	4,-	2" x 3"	TDV 2000
341121	HT 168	ITT LPT200/25/95F	4,-	8"	TK 600
342400	HT 169	ITT LPKM 30/50/120T	8,-	2"	Studio Monitor Prosj.760
344081	HT 170	Goodmans Ref.no 91120882502	8,-	12"	"-" -"
340367	HT 171	Peerless K010DT	4,-	1"	"-" -"
345122	HT 172	Peerless MT24CT	8,-	2"	TL 2520 Prosj. 304
348556	HT 173	Rola T 1956	8,-	12"	TL 5020 Prosj. 103
354339	HT 174	Goodmans Ref.no 918004227309	4,-	8"	OEM, 30% TK prosj. 319
353492	HT 175	Oshima Denki LS2009W	4,-	8"	TL 1500, prosj. 320
355481	HT 176	Foster DO50MI2	8,-	2"	TL 4030, prosj. 305
358024	HT 177	Peerless K010DT	8,-	1"	TL 4030, prosj. 305
359705	HT 178	Peerless KD100WF-C	8,-	10"	TL 4030, prosj. 305
358958	HT 179	Primo DH - 17	8,-	1 1/2"	TDV 2000 prosj. 773
358175	HT 180	Hokutone 200FW48L	4,-	8"	TL 1500, prosj. 320
358197	HT 181	Audax HD9X8D25	8,-	1"	TL 2530, prosj. 304
Service del	HTB 180	SEAS 30WK C	4,-	12"	Hi Fi 15
359663	HT 182	HIF 20ES M	4,-	8"	TL 1500