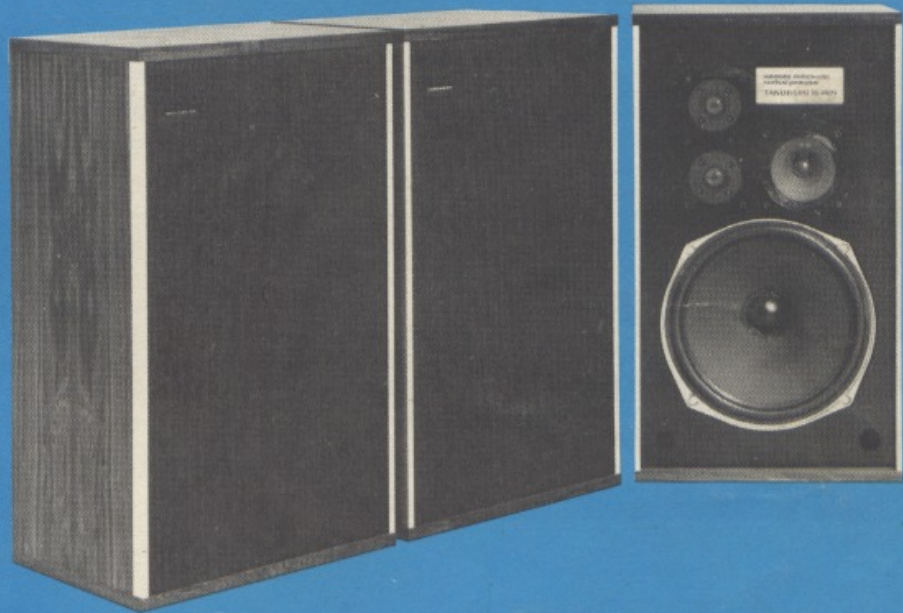


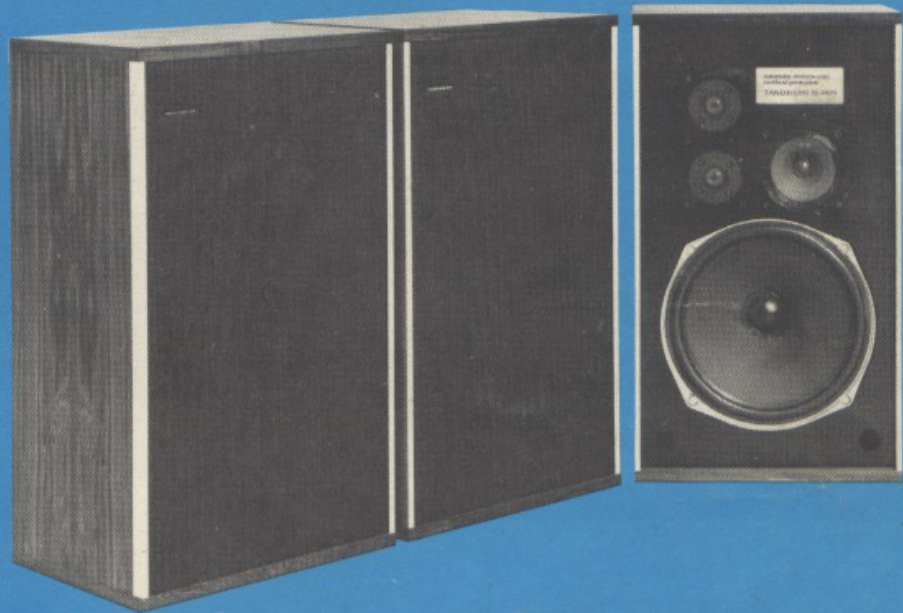
# Specifications and Parts Lists Loudspeaker Systems



**TANDBERG**

# Specifications and Parts Lists

## Loudspeaker Systems



**TANDBERG**

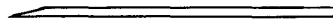
**NOTE**

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.

## TRUBLE-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

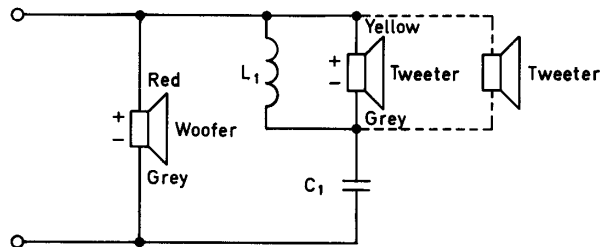
### Complement

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

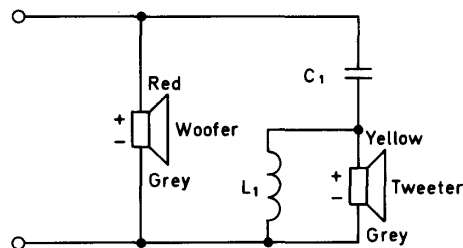
Gasket in front of the tweeter: part No. 224508

### 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:

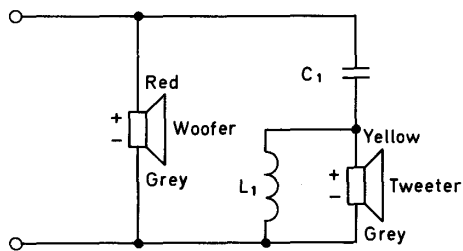
* Woofer	: HTB 113	
	or HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 106 5 ohms, 2",	part No. 211879

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:

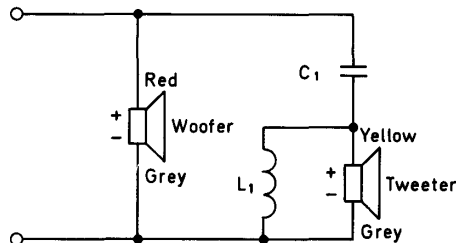
Woofer	: HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 106, 5 ohms, 2",	part No. 211879

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:

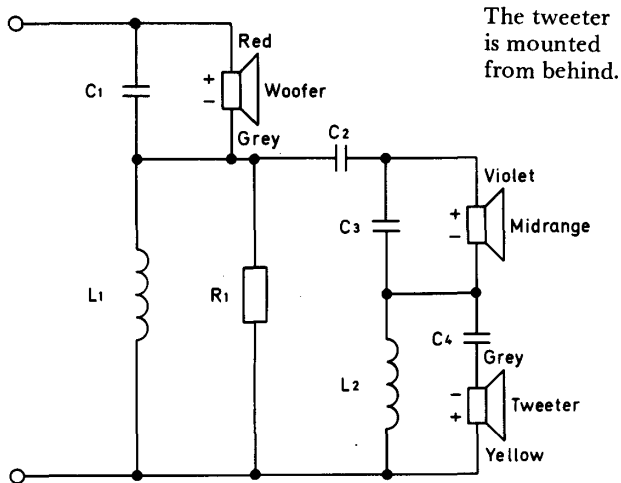
Filter board: part No. 994730

\* 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:

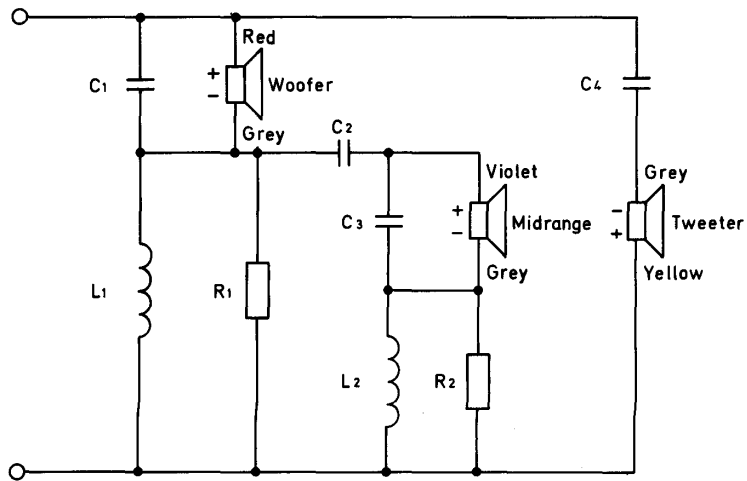
Filter board: part No. 994730

\* 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:

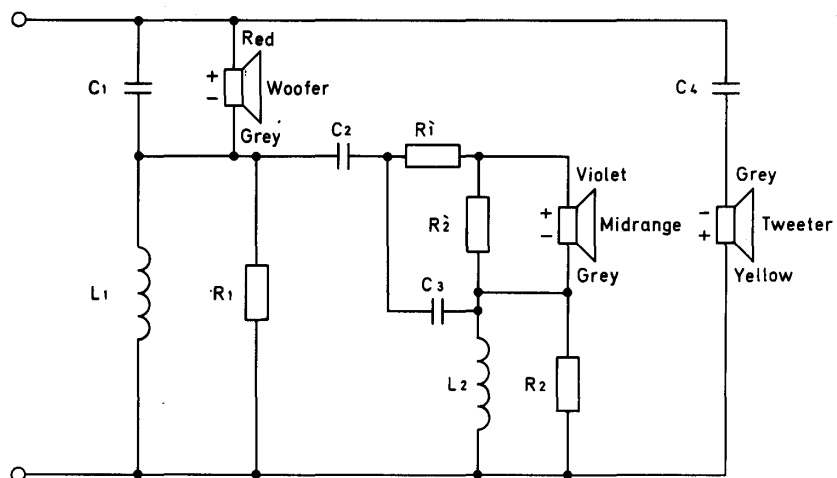
part. No. 994730

\* 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:

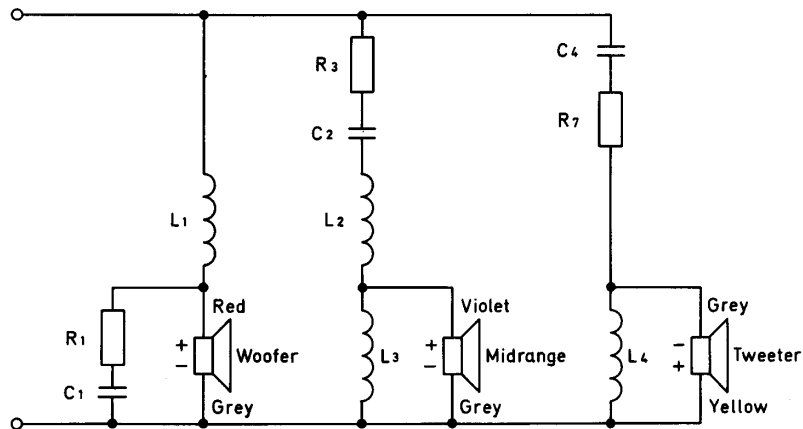
- \* L1 is replaced by coil 27213, part No. 980213 assembled on core, part No. 290462.
- \*\* L2 is replaced by coil 27150, part No. 980150

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





## 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:

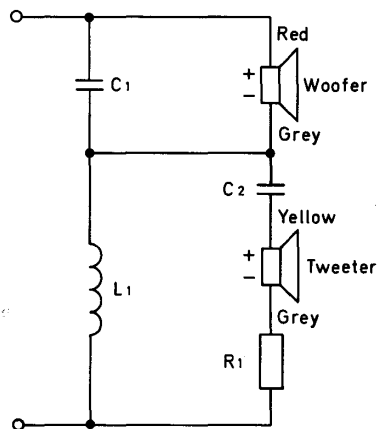
Woofers:	HTB 126,	4 ohms,	5",	part No. 265132
Tweeters:	HT 125,	4 ohms,	2 1/4",	part No. 267215

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:

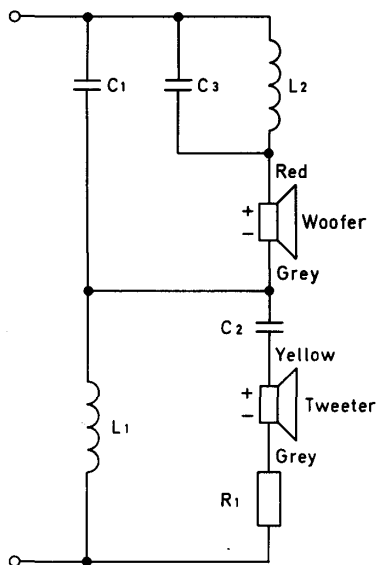
Filter board: part No. 994706

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:

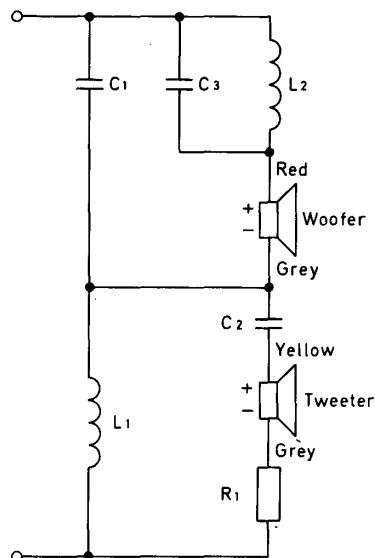
Woofers:	: HTC 113, 4 ohms, 6 1/2",	part No. 264133
Tweeter	: HT 125, 4 ohms, 2 1/4",	part No. 267215

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

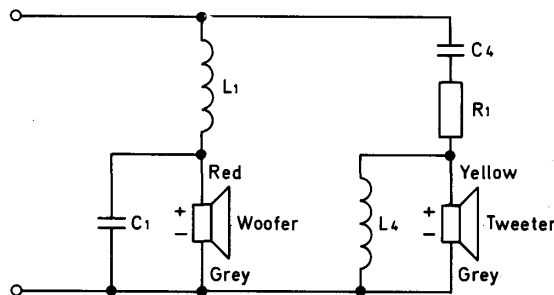
### Complement:

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

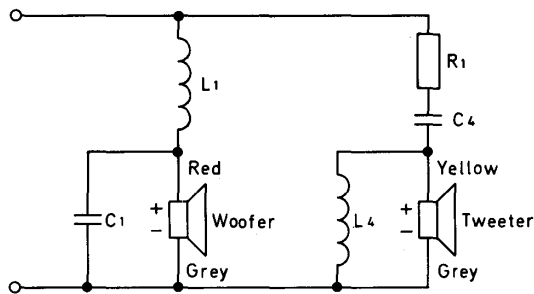
### Complement:

* 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

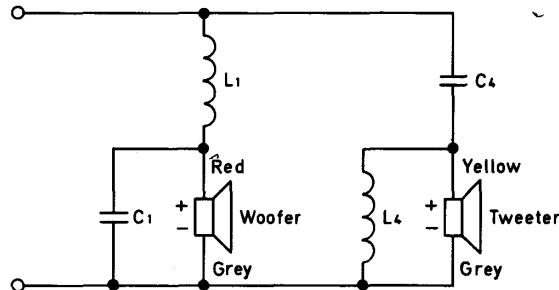
Gasket behind the tweeter: part No. 319377

## 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

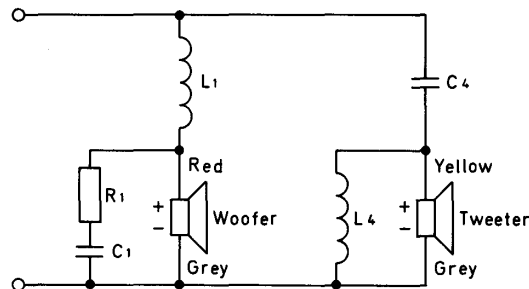
### Complement:

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

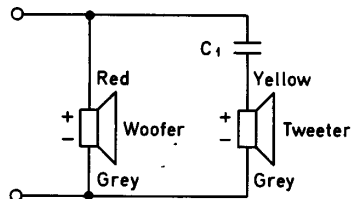
Gasket behind the tweeter, part No. 319298

### 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:

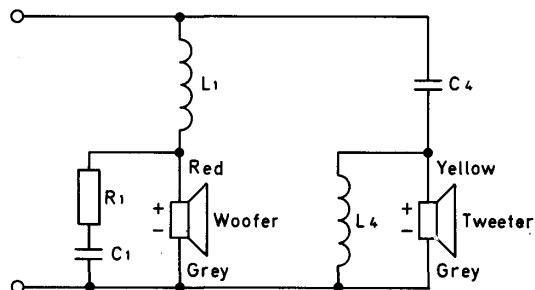
Woofers	: HT 133, 4 ohms, 8",	part No. 289097
Tweeters	: HT 116, 4 ohms, 2 1/2",	part No. 254112
Gasket behind the tweeter,		part No. 253645
or part No. 319298 after week 16, 1974		

### 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:

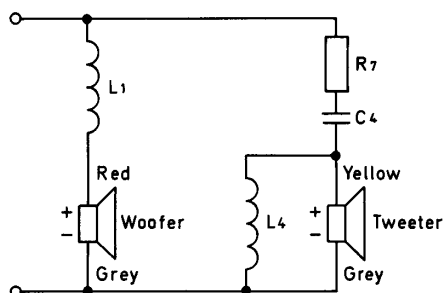


Series 2

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:

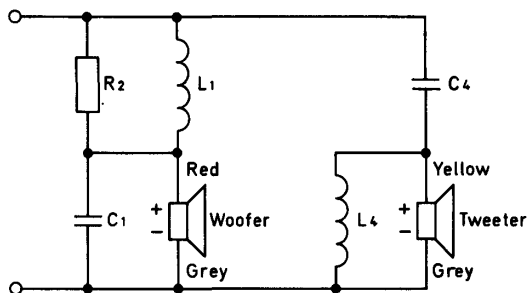
Woofer	: HT 127, 8 ohms, 8",	part No. 284391
Tweeter	: HT 128, 8 ohms, 1",	part No. 282710
Gasket behind the tweeter,		part No. 885100

*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:**

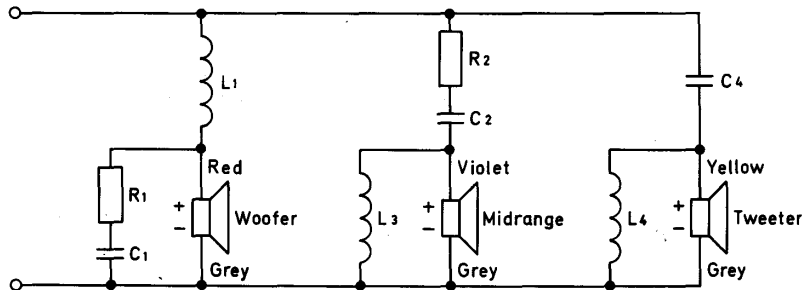
Woofer	: HT 157, 4 ohms, 8"	part No. 318888
Midrange	: HT 156, 8 ohms, 3 3/8"	part No. 315820
Tweeter:	: HT 154, 4 ohms, 2"	part No. 319735
Gaskets for the midrange unit:	85212, <i>HT-162. - 4</i>	part No. 315748 (2 pcs)
Gasket behind the tweeter:		part No. 319377

*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.

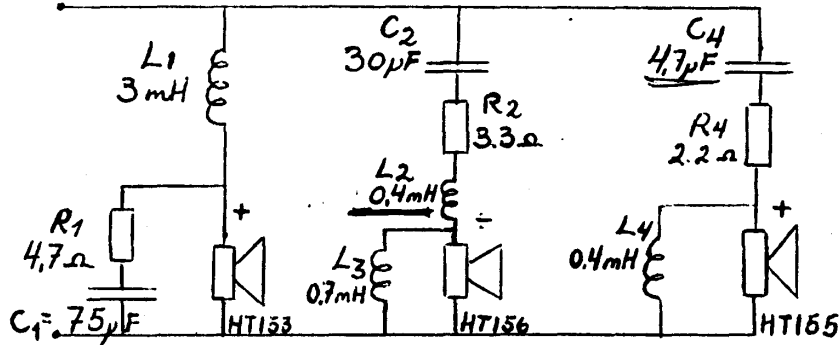
Disse endringene er for en tid siden gjort på TL 3520.

Deler kan bestilles fra vårt delerlager 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-høytaleren passer.

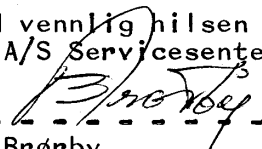
Har De et delefilter-kort hvor spole L, 2,0,4 mH ikke er montert, bør denne settes inn. Fjern bro ved L2, merket på kortet og plasser spolen mellom R2 og L2 + høytaler utgang. Kondensator C4, 6, 8  $\mu$ f, endres til 4,7  $\mu$ f polyester.

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:

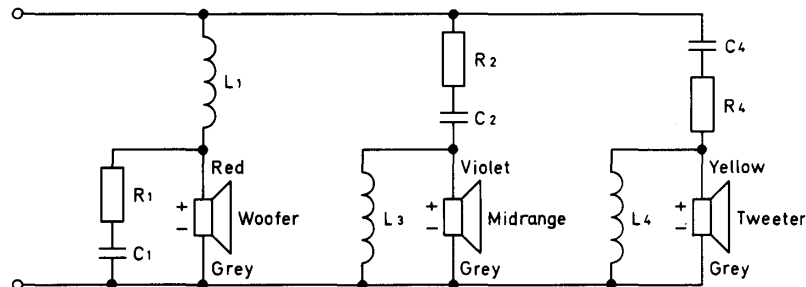
Woofer	: HT 153, 8 ohms, 10",	part No. 313220
Midrange	: HT 156, 8 ohms, 3 3/8",	part No. 315820
Tweeter	: HT 155, 8 ohms, 1" dome,	part No. 319534

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:

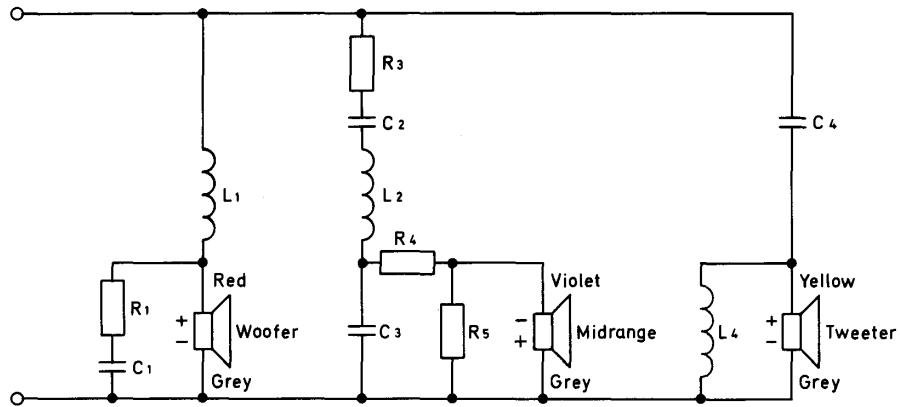
Woofer	: HT 130, 8 ohms, 12",	part No. 281029
Midrange	: HT 129, 8 ohms, 5",	part No. 284743
Tweeter	: HT 128, 8 ohms, 1",	part No. 282710

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 )

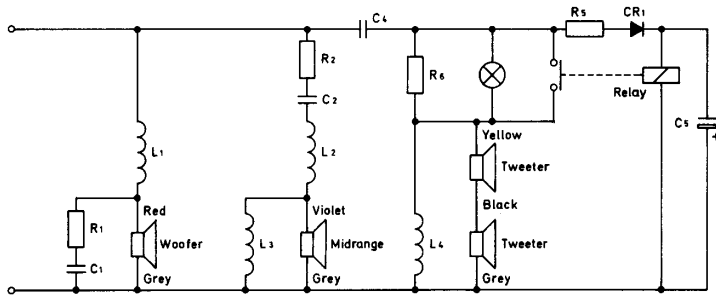
Gasket behind the tweeter: part No. 313028

### 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:



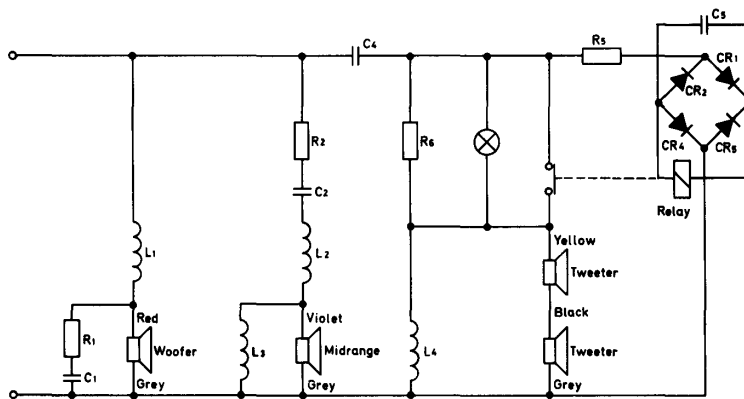
Series 2

With modified protection circuit for the tweeters.

Crossover filter components:

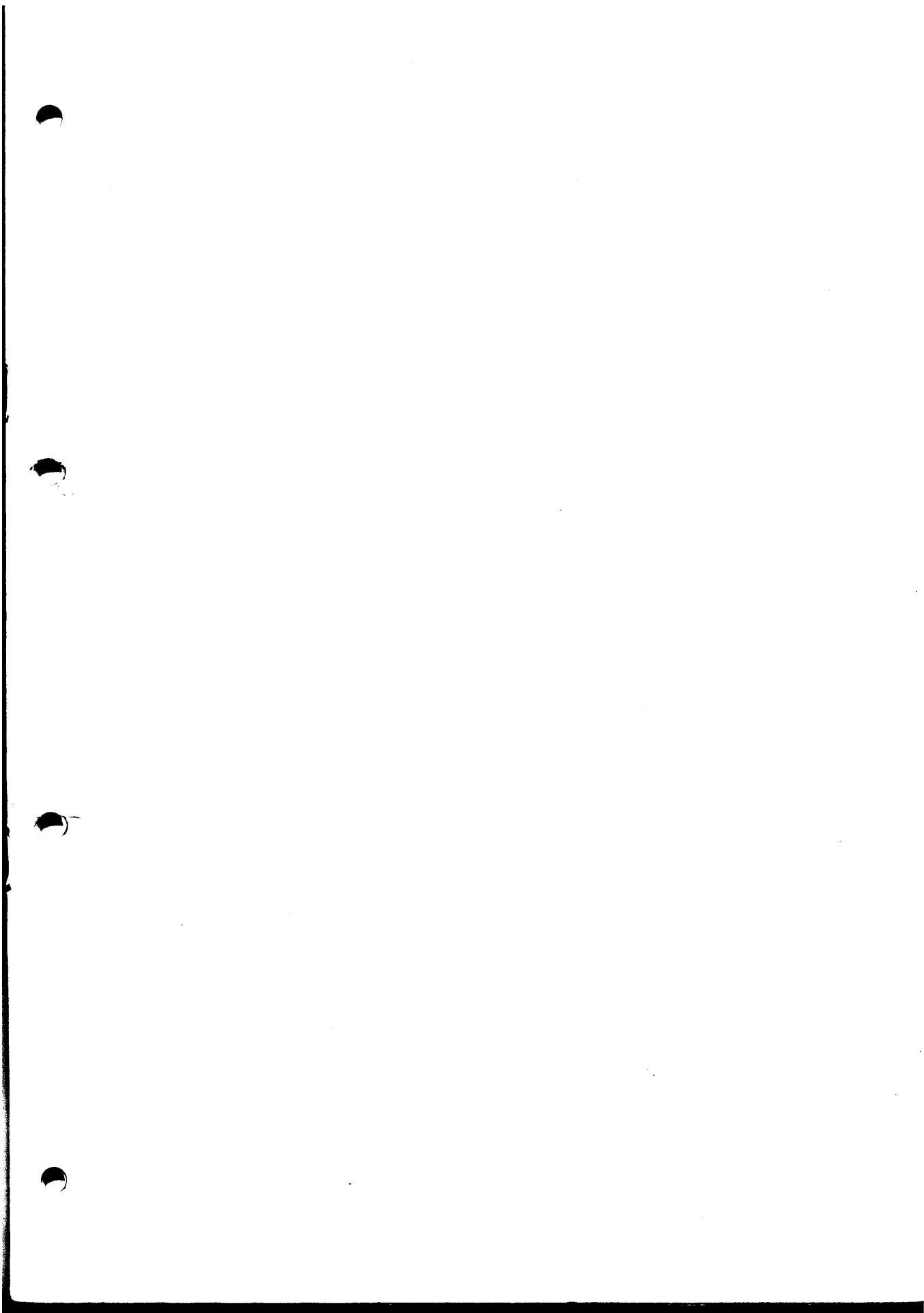
Filter board:		part No. 994707
L1:	2 mH,	part No. 980166
L2:	0.4 mH,	part No. 980150
L3:	0.4 mH,	part No. 980150
L4:	0.4 mH,	part No. 980150
C1:	75 uF,	part No. 284858
C2:	20 uF,	part No. 282358
C3:	6.8 uF,	part No. 313672
C4:	250 uF,	part No. 241124
R1:	2,2 ohms, 9 W,	part No. 313794
R2:	3.3 ohms, 9 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



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