

# Service Manual

Honycomb Disc Speaker System

## SB-8

[E],[EG],[EK],[EF],[EH],  
[EB],[Ei],[XA]



### Areas

- \* [E] is available in Scandinavia and Switzerland.
- \* [EG] is available in F.R. Germany.
- \* [EK] is available in United Kingdom.
- \* [EF] is available in France.
- \* [EH] is available in Holland.
- \* [EB] is available in Belgium.
- \* [Ei] is available in Italy.
- \* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.

## Specifications

(Specifications are subject to change without notice for further improvement.)

Type:	3way 3speaker system
Speakers:	Woofer: 32 cm Honeycomb Disc Midrange: 8 cm, Honeycomb Disc Tweeter: 2.8 cm, Honeycomb Disc
Impedance:	8 ohms
Input Power:	150 W, Music 100 W, DIN
Output Sound Pressure	
Level:	94 dB/W (1.0 m)
Crossover Frequency:	1,200 Hz, 3,500 Hz
Frequency Range:	36 Hz ~ 35 kHz (-10 dB)
Dimensions:	40.2(W) × 71.1(H) × 37.1(D) cm
Weight:	27.0 kg

## CARACTERISTIQUES

(Sujet à changement sans preavis.)

Type:	3 voies, 3 haut-parleurs
Haut-parleurs:	graves: 32 cm, disque alvéolé moyennes: 8 cm, disque alvéolé aigus: 2.8 cm, disque alvéolé
Impédance:	8 ohms
Puissance d'entrée:	150 watts, musique 100 watts, DIN
Niveau de pression	
sonore de sortie:	94 dB/W (1.0 m)
Fréquence de	
commutation:	1,200 Hz, 3,500 Hz
Gamme de fréquences:	36 Hz ~ 35 kHz (-10 dB)
Dimensions:	40.2(l) × 71.1(H) × 37.1(P) cm
Poids:	27.0 kg

## TECHNISCHE DATEN

(Spezifikationen Können infolge von Verbesserungen ohne Ankündigung geändert werden.)

Typ:	3-Weg-System mit 3 Lautsprechern
Lautsprecher:	Tieftonlautsprecher: 32 cm, Wabenscheibe Mitteltonlautsprecher: 8 cm, Wabenscheibe Hochtוןlautsprecher: 2.8 cm, Wabenscheibe
Impedanz:	8 Ohm
Belastbarkeit:	150 Watt Musik 100 Watt DIN
Abgegebener	
Schalldruckpegel:	94 dB/W (in 1.0 m Abstand)
Überschneidungs-	
frequenz:	1,200 Hz, 3,500 Hz
Frequenzbereich:	36 Hz ~ 35 kHz (-10 dB)
Abmessungen:	40.2(B) × 71.1(H) × 37.1(T) cm
Gewicht:	27.0 kg

## ESPECIFICACIONES

(Estas especificaciones están sujetas a cualquier cambio sin previo aviso.)

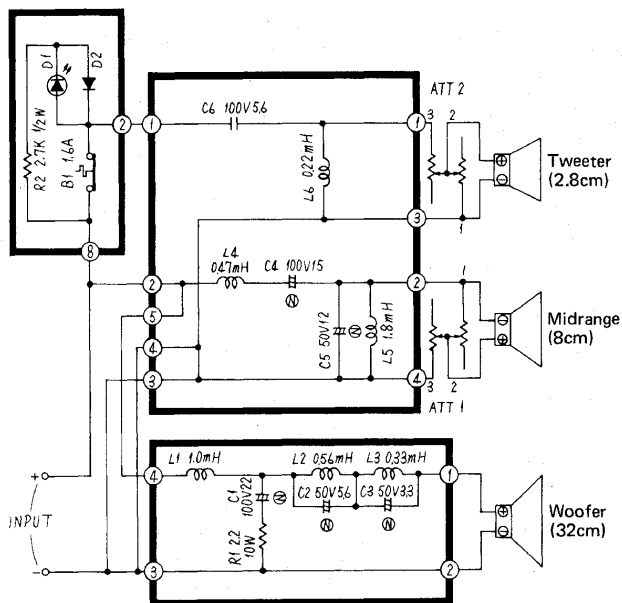
Tipo:	Sistema con 3 altoparlantes
Altoparlantes:	"Woofer": disco en forma de panel de abeja, de 32 cm "Gama media": disco en forma de panel de abeja, de 8 cm "Tweeter": disco en forma de panel de abeja, de 2.8 cm
Impedancia:	8 ohmios
Potencia de entrada:	150 W, música 100 W, DIN
Nivel de presión	
acústica de salida:	94 dB/W (1.0 m)
Frecuencia de cruce:	1,200 Hz, 3,500 Hz
Alcance de frecuencia:	36 Hz ~ 35 kHz (-10 dB)
Dimensiones:	40.2(ancho) × 71.1(alto) × 37.1(prof.) cm
Peso:	27.0 kg

# Technics

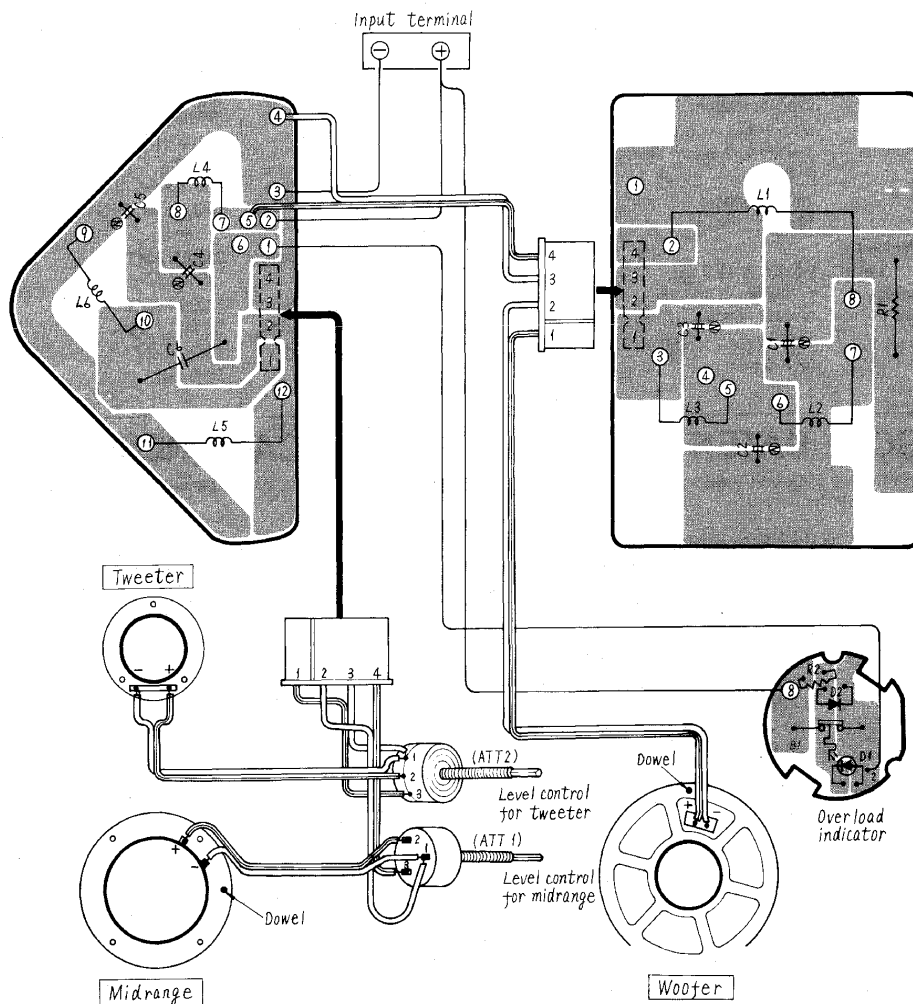
**Matsushita Electric Trading Co., Ltd.**  
P.O. Box 288, Central Osaka Japan

## SCHEMATIC DIAGRAM

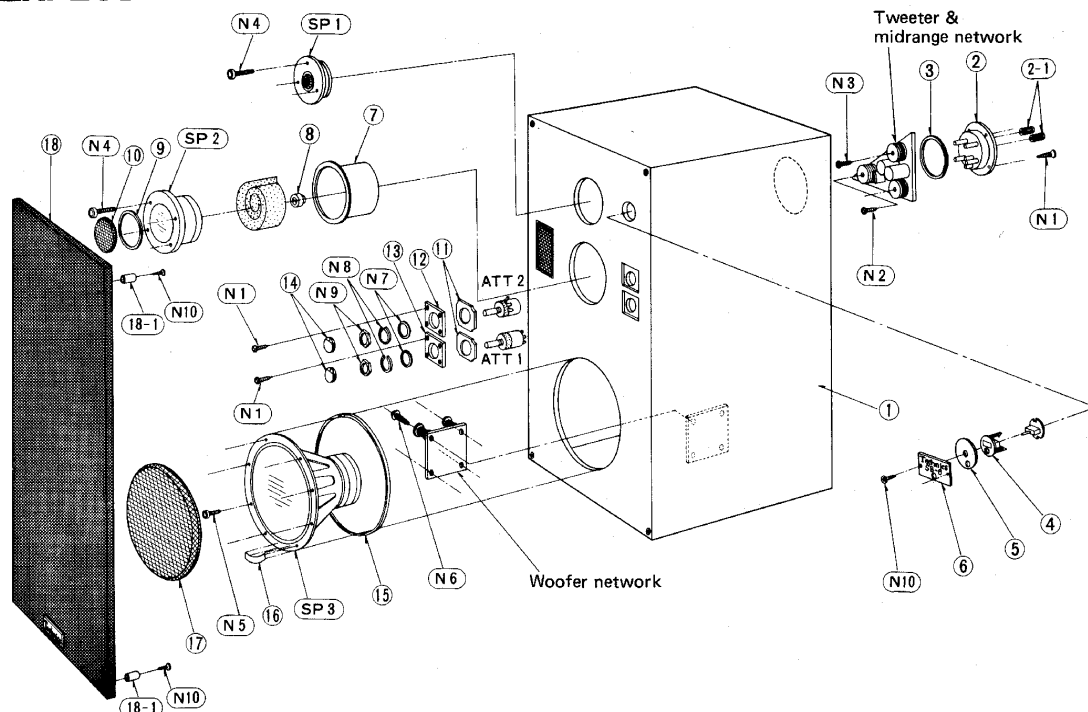
(This schematic diagram may be modified at any time with the development of new technology.)



## CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM



## EXPLODED VIEW



## REPLACEMENT PARTS LIST

**Notes:** 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.

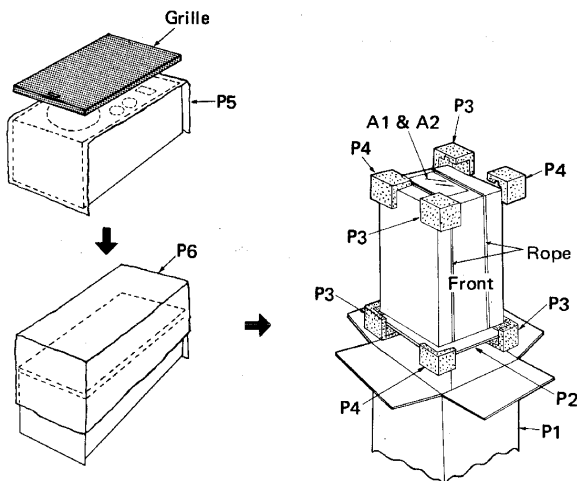
2. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description			
SPEAKERS					
SP1	SASS8T	Tweeter			
SP2	SASS8M	Midrange			
SP3	EAS33PL03S	Woofer			
COILS					
L1	SLCSB102JU	Choke Coil	1.0mH		
L2	SLCSA561J	Choke Coil	0.56mH		
L3	SLCSA331J	Choke Coil	0.33mH		
L4	SLCSA471J	Choke Coil	0.47mH		
L5	SLCSA182J	Choke Coil	1.8mH		
L6	SLCSA221K	Choke Coil	0.22mH		
RESISTORS					
R1	ERF10ZK2R2B	Non-Flammable	10W	2.2Ω	
R2	ERD50FJ272	Carbon	1/2W	2.7kΩ	
CAPACITORS					
C1	ECEA100Y22K	Electrolytic,	100V,	22μF	
C2	ECEA50Y5R6K	Electrolytic,	50V,	5.6μF	
C3	ECEA50Y3R3K	Electrolytic,	50V,	3.3μF	
C4	ECEA100Y15K	Electrolytic,	100V,	15μF	
C5	ECEA50Y12K	Electrolytic,	50V,	12μF	
C6	ECQE1565KZ	Polyester,	100V,	5.6μF	
DIODES					
D1	LN21CP	Light Emitting Diode			
D2	MA162A	Diode			
ATTENUATORS					
ATT1	SRES3	Attenuator, Midrange			
ATT2	SRES2	Attenuator, Tweeter			

Ref. No.	Part No.	Part Name & Description
BREAKER		
B1	SSBS16AB02-1	Breaker, Speaker Protection 1.6A
CABINET PARTS		
1	SKAB8E	Cabinet
2	SJFS4208-4	Terminal
2-1	SNES4001-1	Knob, Speaker Terminal
3	SHR9389	Spacer, Terminal
4	SMES9	Holder, Breaker
5	SHES10	Spacer, Breaker
6	SGBS20	Badge
7	SUVS4	Spacer, Midrange
8	SHG1301	Bushing
9	SGES68	Ornament
10	SGMS17	Tweeter Cover
11	SHRS9047	Spacer, Attenuator
12	SGES64	Spacer, Attenuator
13	SGES64-1	Spacer, Attenuator
14	SBN56	Knob, Attenuator
15	SGES67	Ornament
16	SGKS84	Badge
17	SGMS16	Woofer Cover
18	SYBS70	Grille
18-1	SHG1245-2	Net Catch
SCREWS, NUT and WASHERS		
N1	XMS31+D13FZ	Screw
N2	XTB4+30B	Screw, Terminal
N3	XTB4+35B	Screw, Terminal
N4	SNES9010FJ	Screw, Tweater and Midrange
N5	SNES9009FZ	Screw, Woofer
N6	XMA31+D16	Screw
N7	XWC9E15	Washer, Attenuator
N8	XWV9	Washer, Attenuator
N9	XNS9	Nut, Attenuator
N10	XMS27+13FZ	Screw, Grille

## PACKINGS

Ref. No.	Part No.	Part Name & Description
<b>ACCESSORIES</b>		
A1 [XA] only	SQFS149	Instructions Book
A1 [Other Areas]	SQFS148	Instructions Book
A2	WHCA400	Cord, Speaker
<b>PACKING PARTS</b>		
P1 [EF]	SPGS100-3	Carton, Box
P1 [E], [EG], [EK], [EB], [EH]	SPGS100-4	Carton, Box
P1 [Ei]	SPGS100-5	Carton, Box
P1 [XA]	SPGS100-6	Carbon, Box
P2	SPSS6123	Pad, Bottom
P3	SPS1893	Pad, Corner
P4	SPS1893-1	Pad, Corner
P5	SPHS6031	Sheet
P6	SPPS22	Bag



## HOW TO REPLACE THE SPEAKER PROTECTION CIRCUIT

1. When repairing the speaker protection circuit remove the two screws on the plate as in Fig. 1.
2. Carefully peel off the circular black spacer.
3. Pull out the protection circuit assembly.
4. Spread the two tabs (A and B) of the bracket in the direction of the arrows and remove the printed circuit board as in Fig. 2.
5. Replace the defective parts.

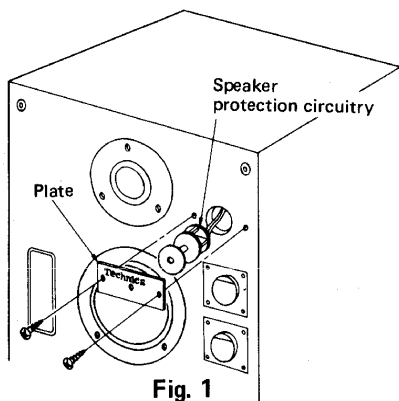


Fig. 1

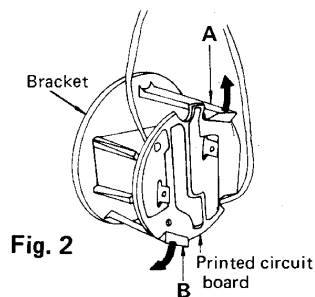


Fig. 2

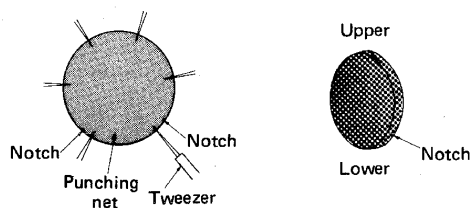


Fig. 3

## WOOFER REMOVAL

1. Remove the woofer cover by prying along the edges until the cover is separated from the woofer. (Fig. 3)
2. Remove the allen screws.

## LEVEL CONTROL REMOVAL

1. Slip a piece of cord behind the knob and gently pull outward. (Fig. 4)
2. Midrange, remove the four screws on the plate.
3. Tweeter, remove the nut of level control (attenuator) after removed the knob. After that remove the level control (attenuator) from fixing hole of woofer.

## NOTES

1. Remove the punching net of the woofer and mid-range speaker by using tweezers or the like as in Fig. 3 with care not to damage the speaker on the net.
2. Install the punching net with the notch down.
3. Insert a rope between the knob and plate by using tweezers or the like as shown in Fig. 4-A. When the rope reaches the back of the knob as in Fig. 4-B, pull it to remove the knob.

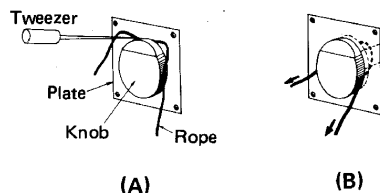


Fig. 4