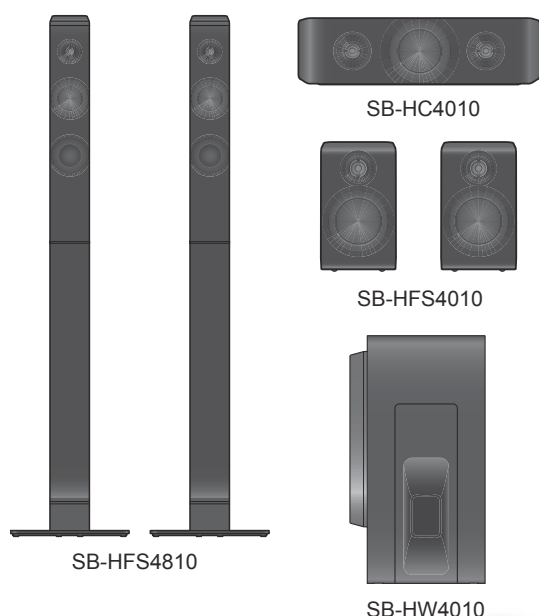


Service Manual

Speaker System



Model No. **SB-HFS4810E**
SB-HC4010E
SB-HFS4010E
SB-HW4010E
SB-HW4010P

Colour : (K)... Black Type

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Service Navigation

1.1 Speaker System information

Below is the Speaker System breakdown:

Speaker System	
Front/Surround Speakers	SB-HFS4810E
Center Speaker	SB-HC4010E
Front/Surround Speakers	SB-HFS4010E
Subwoofer	SB-HW4010E/SB-HW4010P

1.2 Front/Surround Speakers (SB-HFS4810E)

The illustrations for the speakers will be described in this manual.

- Disassembly and Assembly Instructions
- Exploded View
- Replacement Parts List

1.3 Center Speaker (SB-HC4010E)

The illustrations for the speakers will be described in this manual.

- Exploded View
- Replacement Parts List

1.4 Front/Surround Speakers (SB-HFS4010E)

The illustrations for the speakers will be described in this manual.

- Exploded View
- Replacement Parts List

1.5 Subwoofer Speaker (SB-HW4010E/SB-HW4010P)

The illustrations for the speakers will be described in this manual.

- Exploded View
- Replacement Parts List

2 Specifications

Front/Surround Speakers (SB-HFS4810E)

Full range: 6.5 cm (2 1/2") Cone type
Tweeter: Super tweeter Piezo type
RMS Total Power output: 1kHz, 30% total harmonic distortion
167 W per ch (4 Ω)
Dimensions (W x H x D): 270mm x 1181mm x 270mm
(10 5/8" x 46 1/2" x 10 5/8")
Mass [Weight]: Approx. 2.7 kg (5.96 lbs)

Center Speaker (SB-HC4010E)

Full range: 6.5 cm (2 1/2") Cone type
Tweeter: Super tweeter Piezo type
RMS Total Power output: 1kHz, 30% total harmonic distortion
167 W (4 Ω)
Dimensions (W x H x D): 304mm x 87mm x 77mm
(11 31/32" x 3 7/16" x 3 1/32")
Mass [Weight]: Approx. 0.7 kg (1.55 lbs)

Front/Surround Speakers (SB-HFS4010E)

Full range: 6.5 cm (2 1/2") Cone type
Tweeter: Super tweeter Piezo type
RMS Total Power output: 1kHz, 30% total harmonic distortion
167 W per ch (4 Ω)
Dimensions (W x H x D): 83mm x 141mm x 75mm
(3 9/32" x 5 9/16" x 2 15/16")
Mass [Weight]: Approx. 0.5 kg (1.11 lbs)

Subwoofer Speaker (SB-HW4010E/SB-HW4010P)

Woofers: 16 cm (6 1/2") Cone type
RMS Total Power output: 55 Hz, 30% total harmonic distortion
167 W (4 Ω)
Dimensions (W x H x D): 156mm x 290mm x 263mm
(6 5/32" x 11 13/32" x 10 11/32")
Mass [Weight]: Approx. 3.4 kg (7.50 lbs)

Notes:

1. The impedance of all the speakers is 4 Ω .
2. Specifications are subject to change without notice.

3 Disassembly and Assembly Instructions

Caution Note:

- This section describes procedures for checking the operation and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures.
- Special reassembly procedures are described only when required.
- Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.
- During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.
- During replacement of component parts, please refer to the section of "Replacement Parts List" as described in the service manual.
- Select items from the following indexes when disassembly or replacement are required.

Front/Surround Speakers (SB-HFS4810E)

- Disassembly of Upper Box Assembly
- Disassembly of Lower Box Assembly
- Disassembly of Base Assembly

CAUTION NOTE:

Please use original screw and at correct locations.

Below shown is part no. of screw types used:

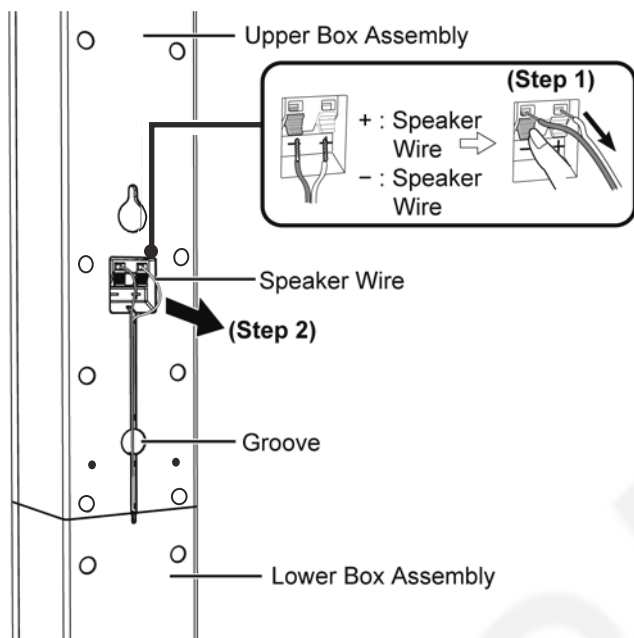
a: XYN5+F14FJK

3.1. Front/Surround Speakers (SB-HFS4810E)

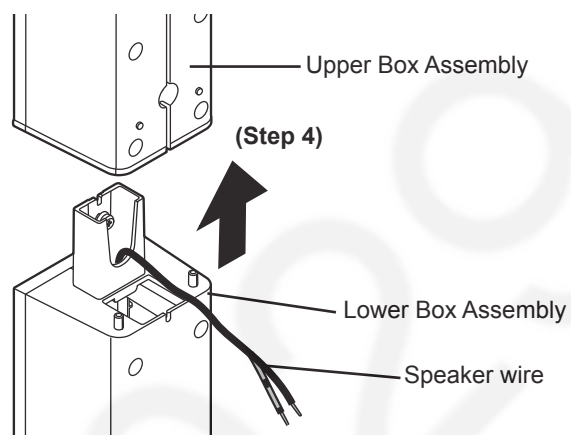
3.1.1 Disassembly of Upper Box Assembly

Step 1: Detach the speaker wire.

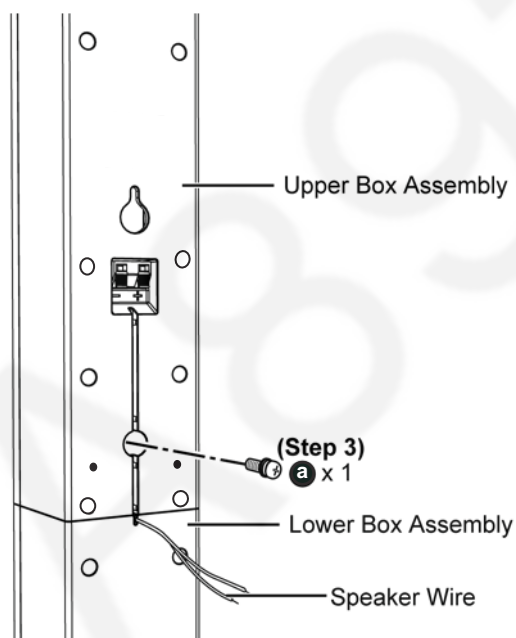
Step 2: Release the Speaker Wire from the groove.



Step 4: Detach the Upper Box Assembly



Step 3: Remove 1 screw from Upper Box Assembly.

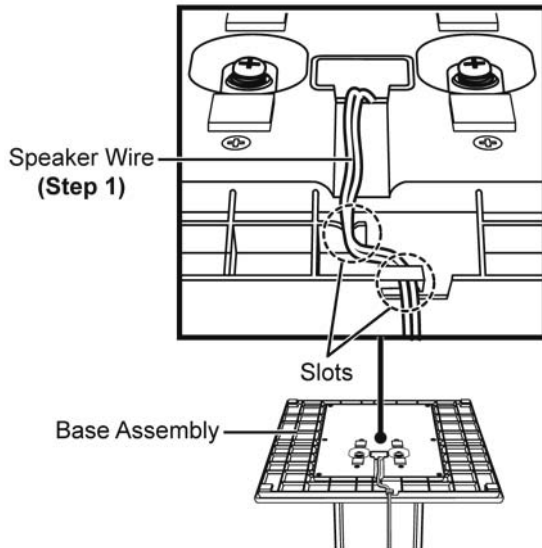


3.1.2 Disassembly of Lower Box Assembly

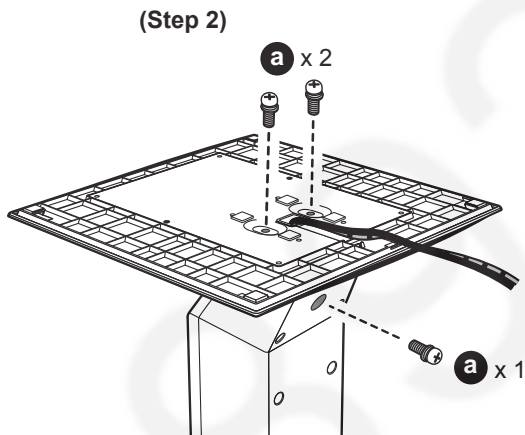
- Refer to "Disassembly of Upper Box Assembly"

Step 1: Release the speaker wire from the slots.

Caution : During assembling, ensure the speaker wire is dressed into the slots of the Base Assembly.

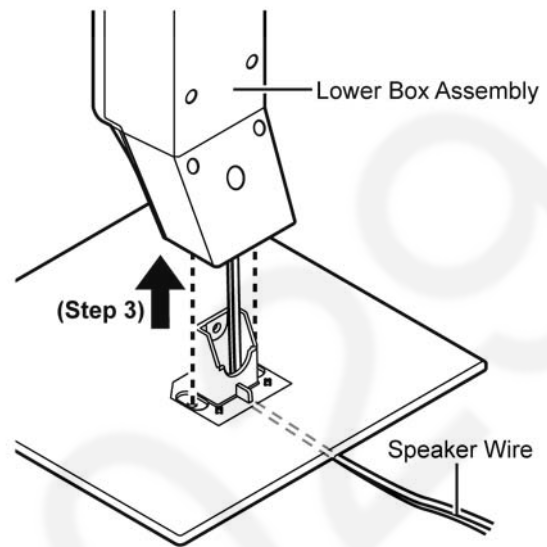


Step 2: Remove 3 screws.



Step 3: Remove the Lower Box Assembly.

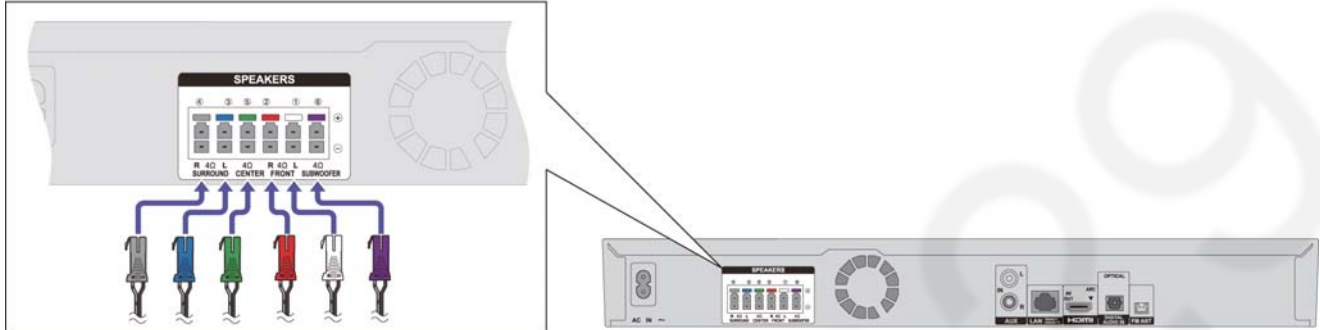
Caution : Speaker Wire is attached with Lower Box Assembly, do not force to pull wire from the Lower Box Assembly.



4 Speaker Connection

- Turn off all equipment before connection and read the appropriate operating instructions.
- Do not connect the AC power supply cord until all other connections are completed.
- The illustration shows the image of the unit SC-BTT466.

Connect the speaker cables to the terminals of the same color.



5 Exploded View and Replacement Parts List

5.1. Replacement Parts List

Important Safety Notice

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- All parts mentioned are supplied by PHK unless indicated likewise.

5.1.1. Front/Surround Speakers (SB-HFS4810E)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	1	SVKA000002	SPEAKER	1	
	2	SVKA000002	SPEAKER	1	
	3	RYP2001-K	STAND (FRONT L)	1	with cable (White)
	3	RYP2001B-K	STAND (SURROUND L)	1	with cable (Blue) (4m)
	3	RYP2001D-K	STAND (SURROUND L)	1	with cable (Blue) (7.5m)
	4	RYP2001A-K	STAND (FRONT R)	1	with cable (Red)
	4	RYP2001C-K	STAND (SURROUND R)	1	with cable (Gray) (4m)
	4	RYP2001E-K	STAND (SURROUND R)	1	with cable (Gray) (7.5m)
	5	RYP2002-K	BASE (L)	1	
	6	RYP2002-K	BASE (R)	1	
	7	XYN5+F14FJK	SCREW	1	
	8	XYN5+F14FJK	SCREW	1	
	9	XYN5+F14FJK	SCREW	1	
	10	XYN5+F14FJK	SCREW	1	
	11	XYN5+F14FJK	SCREW	1	
	12	XYN5+F14FJK	SCREW	1	
	13	XYN5+F14FJK	SCREW	1	
	14	XYN5+F14FJK	SCREW	1	

5.1.2. Front/Surround Speakers (SB-HFS4010E)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	17	RAP0179-K	FRONT SPEAKER (L)	1	Terminal: White
	17	RAP0179-K	SURROUND SPEAKER (L)	1	Terminal: Blue
	18	RAP0179-K	FRONT SPEAKER (R)	1	Terminal: Red
	18	RAP0179-K	SURROUND SPEAKER (R)	1	Terminal: Gray

5.1.3. Center Speaker (SB-HC4010E)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	15	RAP0178-K	CENTER SPEAKER UNIT	1	

5.1.4. Subwoofer (SB-HW4010E/SB-HW4010P)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	16	RAP0180-K	SUBWOOFER UNIT	1	(E)
	16	RAP0180A-K	SUBWOOFER UNIT	1	(P)

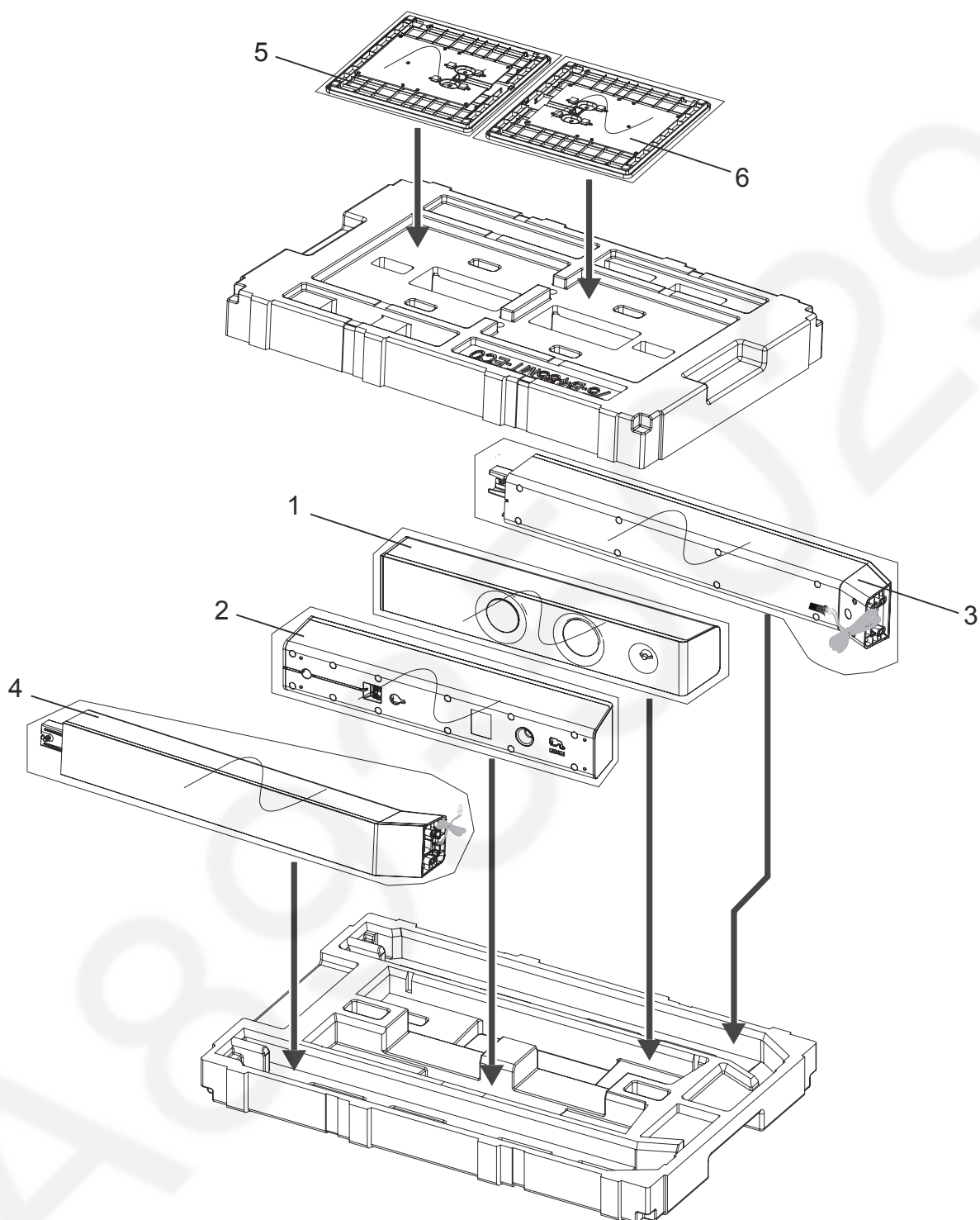
5.1.5. Accessories

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	A1	REE1962	FRONT SPEAKER CABLE (L)	1	(3m) Terminal: White
	A1	REE1971	SURROUND SPEAKER CABLE (L)	1	(8m) Terminal: Blue
	A1	REE1973	SURROUND SPEAKER CABLE (L)	1	(6.5m) Terminal: Blue
	A2	REE1963	FRONT SPEAKER CABLE (R)	1	(3m) Terminal: Red
	A2	REE1972	SURROUND SPEAKER CABLE (R)	1	(8m) Terminal: Gray
	A2	REE1974	SURROUND SPEAKER CABLE (R)	1	(6.5m) Terminal: Gray
	A3	REE1966	CENTER SPEAKER CABLE	1	Terminal: Green

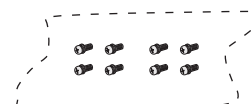
5.1.6. Packing Materials

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P1	SVKU000006	POLYFOAM (TOP)	1	SB-HFS4810
	P2	SVKU000007	BASE BAG	1	
	P3	SVKU000007	BASE BAG	1	
	P4	SVKU000008	SPEAKER BAG	1	
	P5	SVKU000008	SPEAKER BAG	1	
	P6	SVKU000009	STAND BAG	1	
	P7	SVKU000009	STAND BAG	1	
	P8	SVKU000010	POLYFOAM (TOP)	1	SB-HW4010
	P9	SVKU000011	SPEAKER BAG	1	
	P10	SVKU000012	POLYFOAM (TOP)	1	SB-HFS4010
	P11	SVKU000013	SPEAKER BAG	1	
	P12	SVKU000013	SPEAKER BAG	1	
	P13	SVKU000014	POLYFOAM (TOP)	1	SB-HC4010
	P14	SVKU000015	SPEAKER BAG	1	
	P15	SVKU000016	POLYFOAM (BOTTOM)	1	SB-HFS4810
	P16	SVKU000017	POLYFOAM (BOTTOM)	1	SB-HW4010
	P17	SVKU000018	POLYFOAM (BOTTOM)	1	SB-HFS4010
	P18	SVKU000019	POLYFOAM (BOTTOM)	1	SB-HC4010

5.2. Front/Surround Speakers (SB-HFS4810E) Packaging

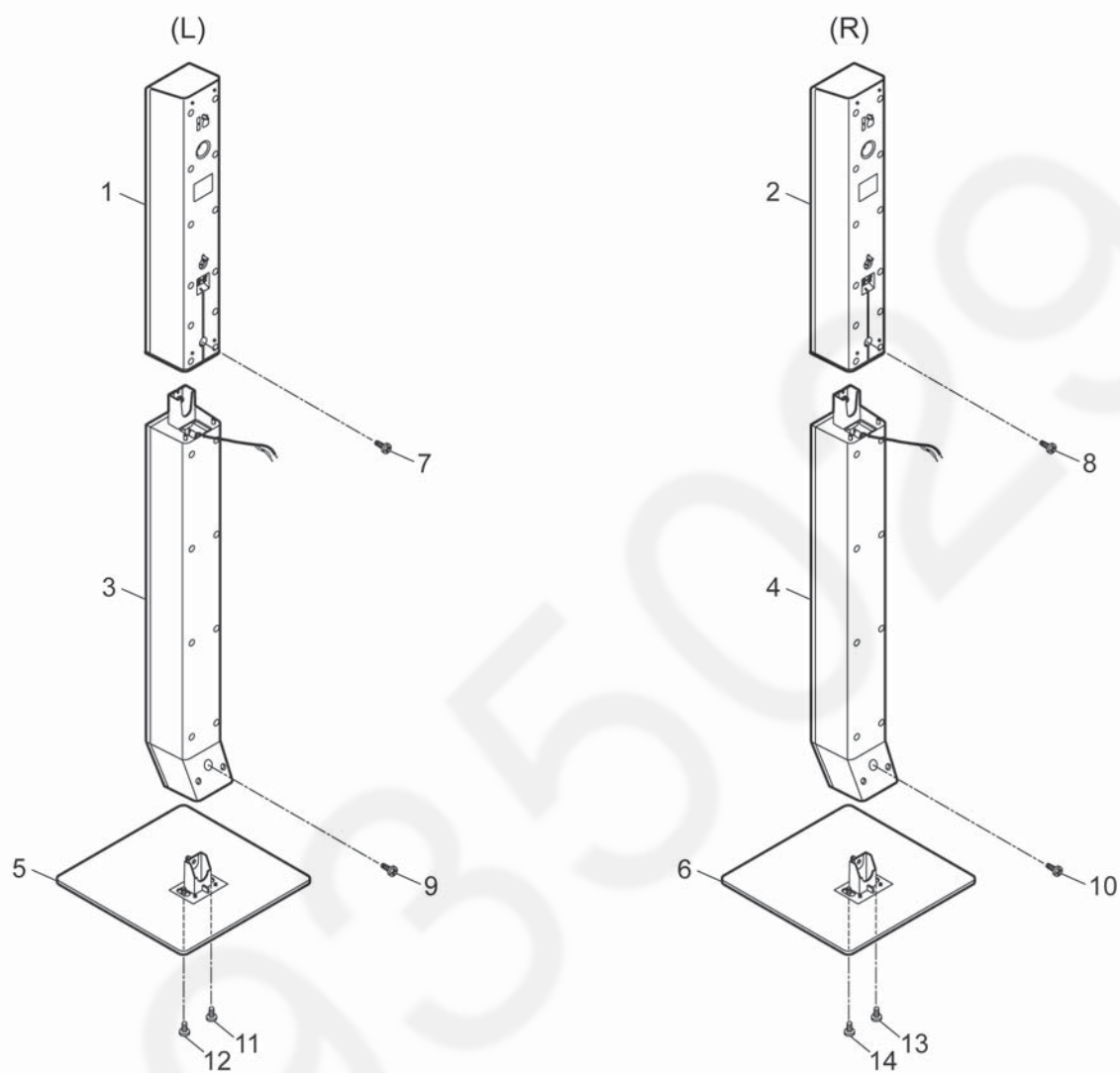


Screws for front speakers

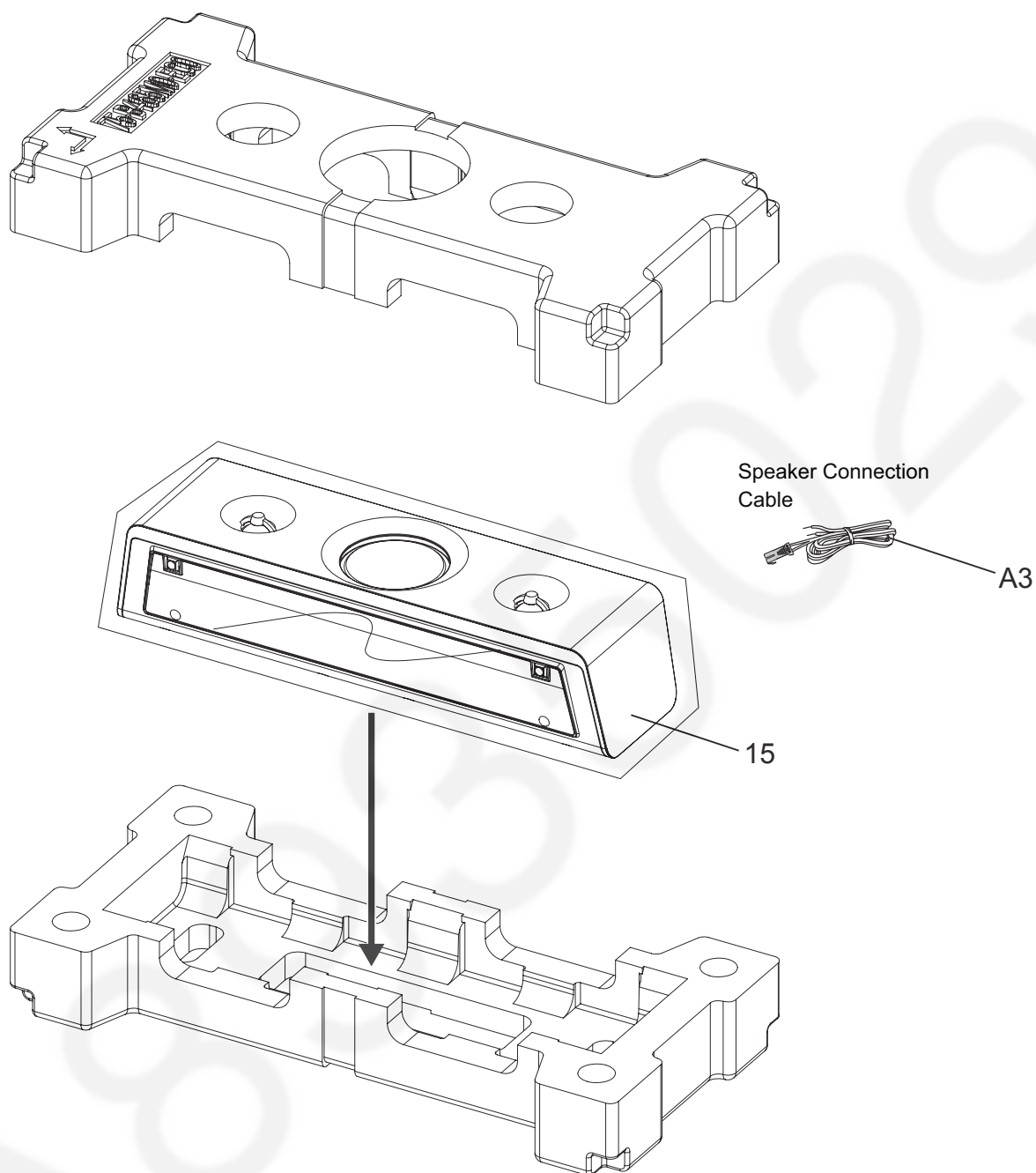


Please see next page for the concrete position that screws are used.

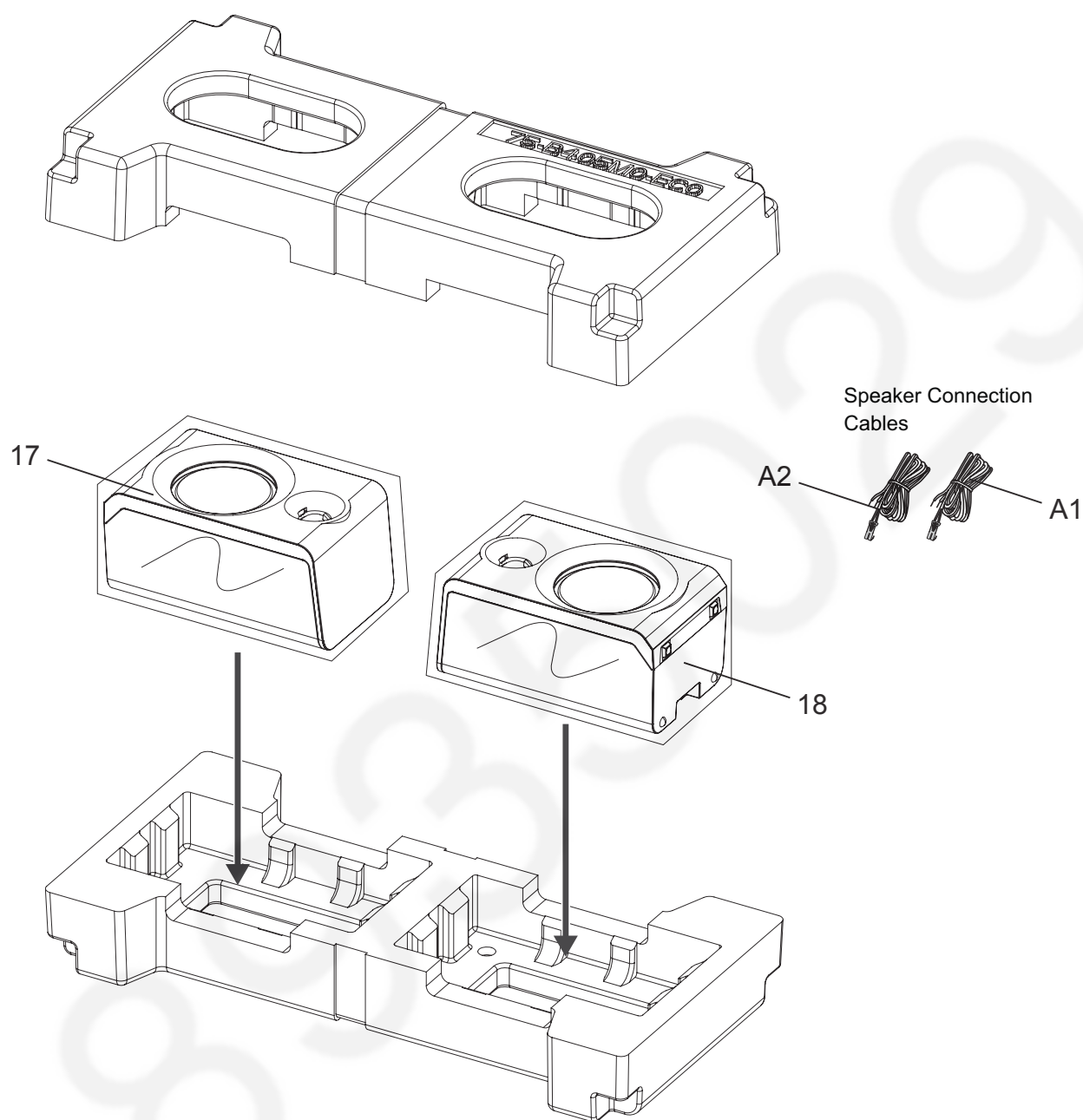
5.2.1 Screws used position



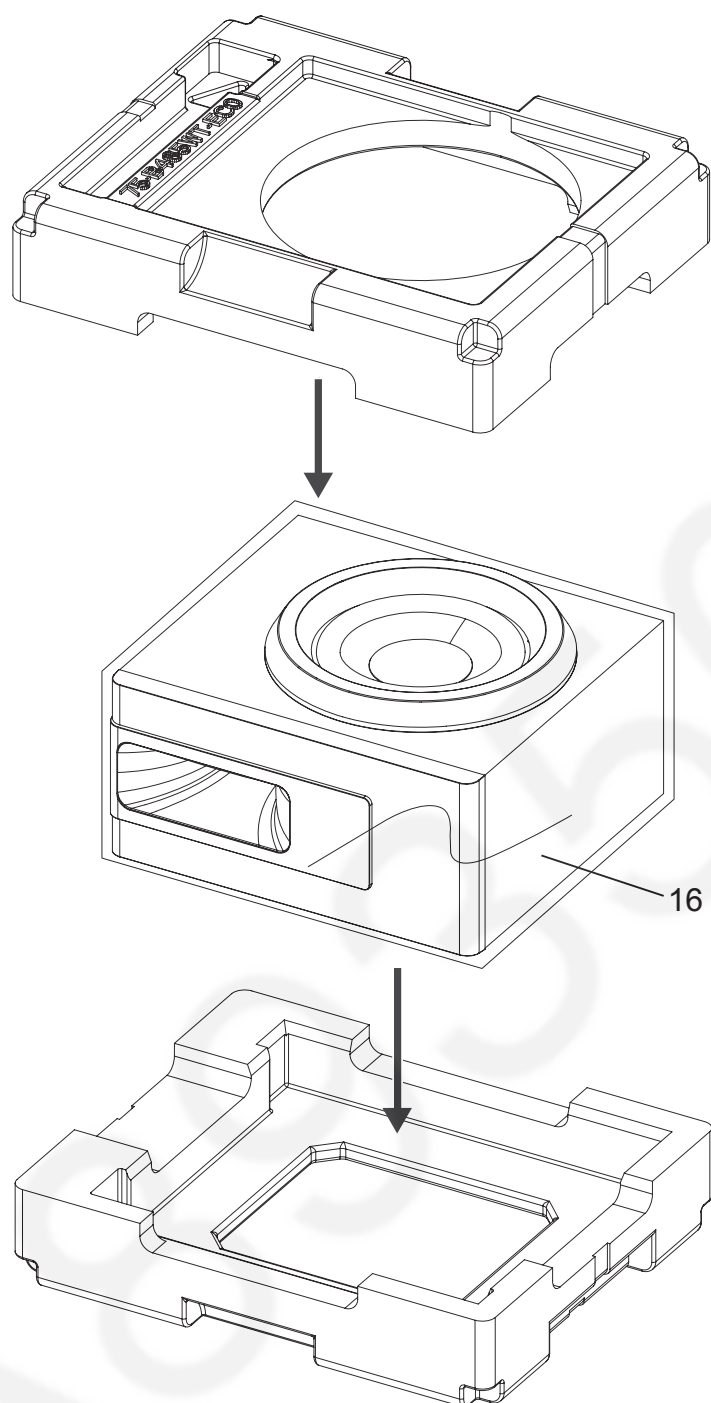
5.3. Center Speaker (SB-HC4010E) Packaging



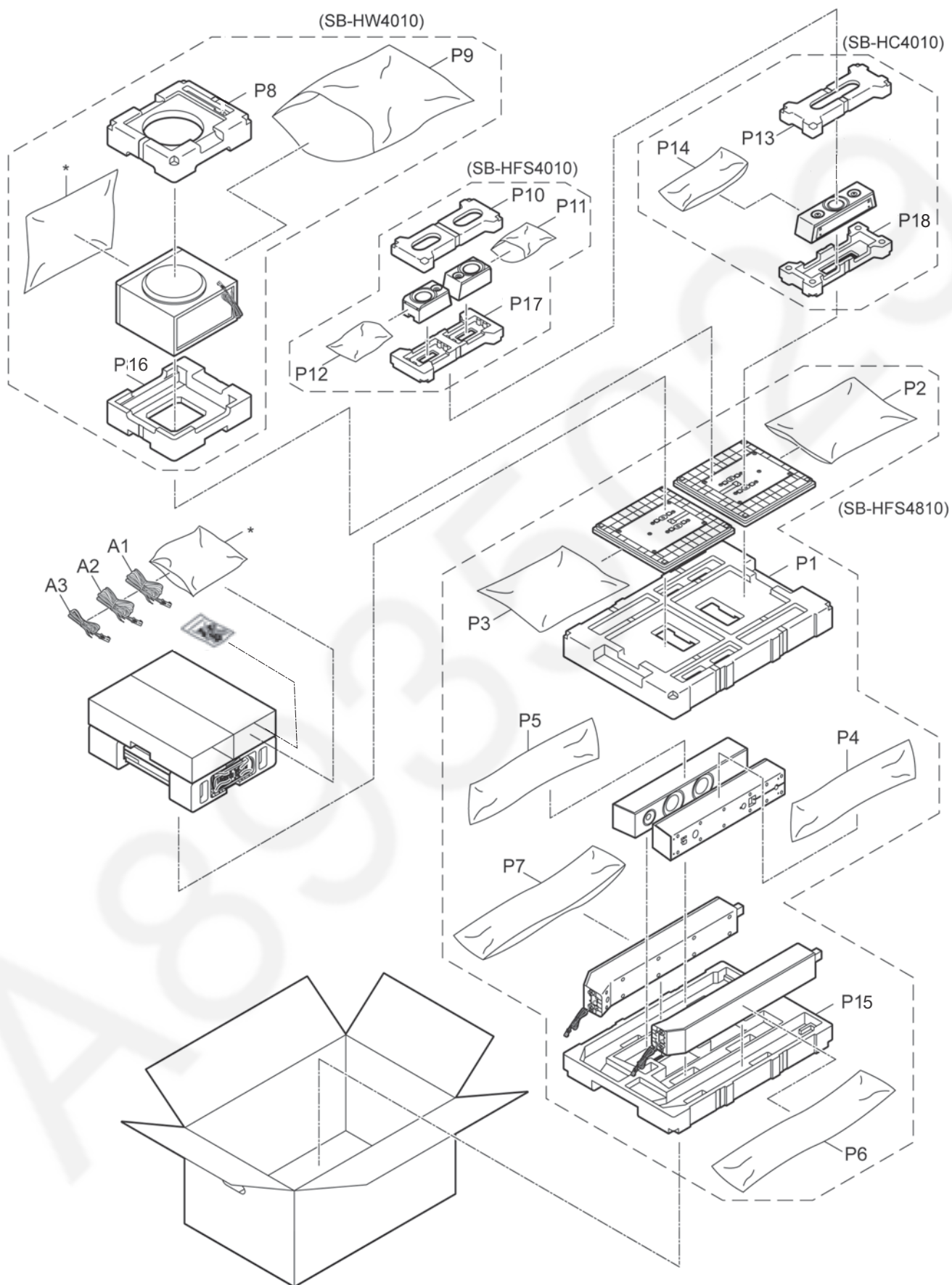
5.4. Front/Surround Speakers (SB-HFS4010E) Packaging



5.5. Subwoofer Speaker (SB-HW4010E/SB-HW4010P) Packaging



5.6. Exploded View of All Speakers Packaging



Note: “*” Part is Not Supplied.