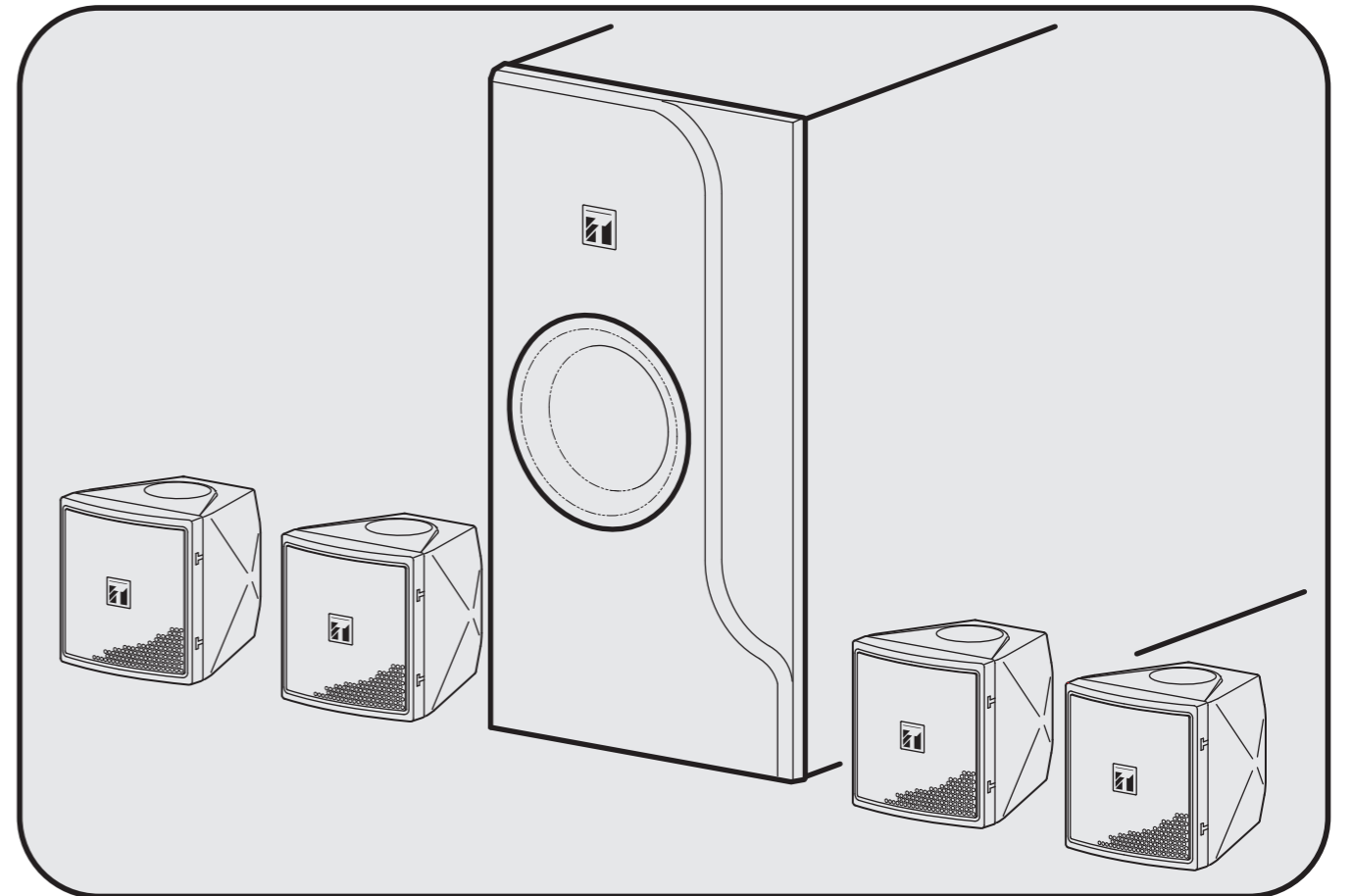




SPEAKER SYSTEM

BS-301B AS
BS-301W AS



Traceability Information for Europe (EMC directive 2004/108/EC)

Manufacturer:
TOA Corporation
7-2-1, Minatojima Nakamachi, Chuo-ku, Kobe, Hyago,
Japan

Authorized representative:
TOA Electronics Europe GmbH
Suederstrasse 282, 20537 Hamburg,
Germany

URL: <http://www.toa.jp/>

Thank you for using our product.

Please follow carefully the instructions stated in the manual to ensure correct installation and to prevent any damage for the long-lasting use of the speaker unit.

1. SAFETY PRECAUTIONS

- Read carefully the manual before installing or using the speaker unit
- Please understand thoroughly the safety instructions and other important notes pertaining to safety stated in the manual.
- Keep the manual for future reference after you have finished reading.



WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.



CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.



WARNING

Installation of speaker unit on bracket

- Install the unit on a location which is secure enough to support the speaker unit and mounting brackets. Failure to do so may cause the speaker unit to fall and inflict injury to people / damage the equipment.
- Do not apply other methods to mount the bracket other than the method stated in the manual. Speaker unit may fall and cause injury to people.
- Use the proper screws in accordance with the composition and structure of the ceiling or wall. Failure to do so may cause the speaker to fall and inflict injury to people.
- Tighten the screws properly. Ensure the bolt is tightened securely after the speaker unit is installed to prevent it from falling and inflicting injury to people.
- Do not install on an unstable location which may cause the speaker unit to fall due to the strong or continuous vibration.
- The speaker is designed for indoor use, do not install outdoors. Failure to do so may cause damage on the speaker unit and or cause it to fall which may inflict injury to people. Speaker is also prone to rain which may cause short-circuit.
- Do not install the speaker in a room without proper ventilation. Bracket will get rusty easily which may cause the speaker to fall and inflict injury to people.
- Do not use anti-corrosion liquid. Anti-corrosion on plastic (resin) or rubber may cause damage on the speaker unit. The speaker unit may fall and inflict injury on people

- Owing to the subwoofer's size weight, be sure that at least two persons are available to install it. Failure to do so could result in personal injury.



CAUTION

During Installation of Speaker Unit

- When unpacking or storage the unit, be sure to handle it with two or more persons. Falling or dropping the unit may cause personal injury.
- Be careful of the sharp edges of the unit which may cause injury.
- To prevent short-circuit, ensure the amplifier is always in the OFF condition when connecting it to the speaker unit.

When Speaker Unit is in use

- Do not place any heavy item on the speaker because it may cause the speaker to fall which may cause injury to people or damage on the equipment. The heavy item may also fall and endanger safety.
- Do not operate the speaker for long duration of time with distorted sound. This indicates false operation and it may introduce heat which subsequently may cause fire.
- Do not sit, stand on or dangle from the speaker unit because it may cause the speaker to fall and inflict injury to people as well as damage the equipment.
- Do regular check of the equipment for early detection of any damage on the speaker unit or corrosion on the mounting bracket. Failure to do so may cause the speaker unit to fall and inflict injury to people.

8. SPECIFICATION

8.1. SPEAKER SYSTEM

Model	BS-301B AS	BS-301W AS
Total input power	240W (2-Way)	
Rated Impedance	6Ω	
Sensitivity / SPL	83dB (Pink noise 330 ~ 3,300 Hz, 1W, 1M) L ch or R ch. only + 2 satellite	
Frequency response	40 ~ 20,000 Hz (L or R ch. Subwoofer + 2 satellite)	
Speaker feature	Subwoofer1pc (Look at point 8.2) Satellite speaker4pc (Look at point 8.3)	
Mounting	Floorstanding / on-wall / on ceiling	
Input Connector	Push-in terminals	
Total Weight	13.9 kg (without bracket)	

8.2. SUBWOOFER

Model	BS-301B AS	BS-301W AS	
Continuous Program Input	120W per Channel		
Impedance	6Ω		
Sensitivity	85dB (1W, 1M) (L or R Channel)		
Frequency Response	40 ~ 190 Hz (-10dB below SPL) (L or R Channel)		
Speaker component	16cm (6") 2-Speaker		
Connection	Push-in terminals (8 connected terminal poles)		
Feature	Speaker cabinet	Particle board with vinyl, black	Particle board with vinyl, white
	Front Cover	ABS Resin (Black)	ABS Resin (White)
	Speaker bracket	Steel plate, black paint	Steel plate, white paint
Dimensions	210 (width) x 390 (height) x 563 (depth) mm		
Weight	11,500g (without bracket)		
Accessories	Rubber foot.....4		
	Speaker Mounting Bracket.....4		
	Taping screws 3 x 14.....4		

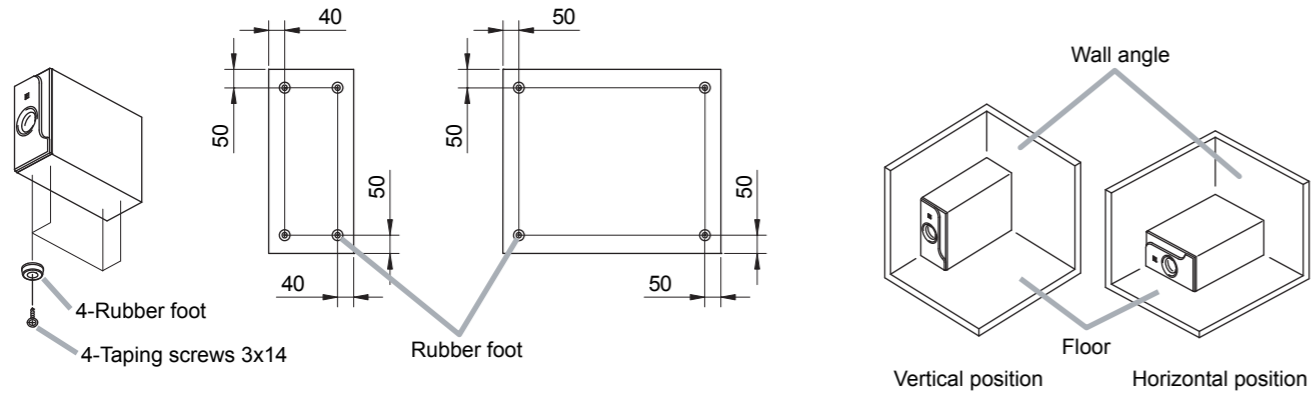
8.3. SATELLITE SPEAKER

Model	BS-301B AS	BS-301W AS	
Continuous Program Input	40W		
Impedance	8Ω		
Sensitivity	85dB (Pink noise 330 ~ 3,300 Hz / 1W, 1M)		
Frequency response	150 ~ 20,000 Hz (-20dB below SPL)		
Speaker component	8cm (3") cone-type		
Connection	Push-in terminals (2 terminal poles)		
Feature	Speaker box	HIPS Resin (Black)	HIPS Resin (White)
	Front Cover		
	Speaker bracket	Steel plate, black paint	Steel plate, white paint
Dimensions	92 (width) x 97.5 (height) x 100 (depth) mm		
Weight	600g (without bracket)		
Accessories	Speaker Bracket.....1		
	Hexagonal bolts M5 x 12 (with ring and spring ring).....2		

※ The specification may change without notice for improvement

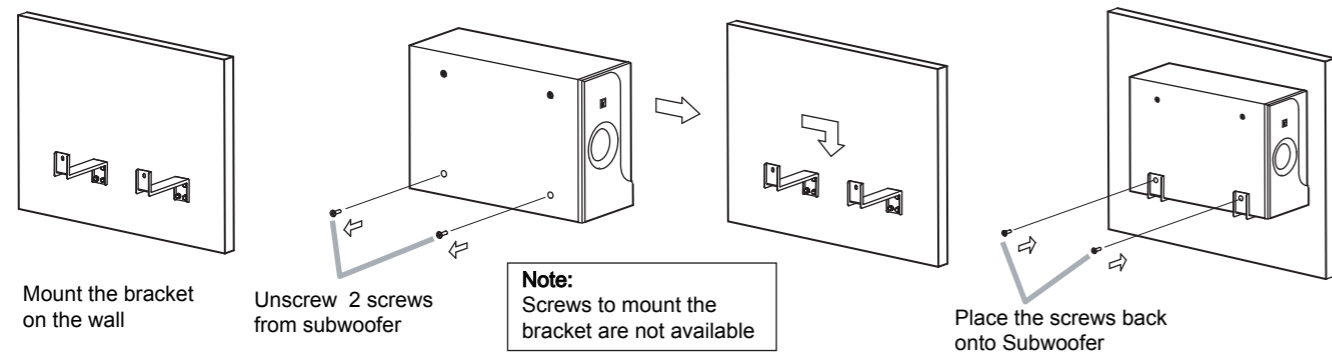
6.2.1. Installation on Floor

Use the rubber foot to install the subwoofer on the floor. Ensure the floor is even and flat so the subwoofer will not move. Install the rubber foot on the side facing the floor.



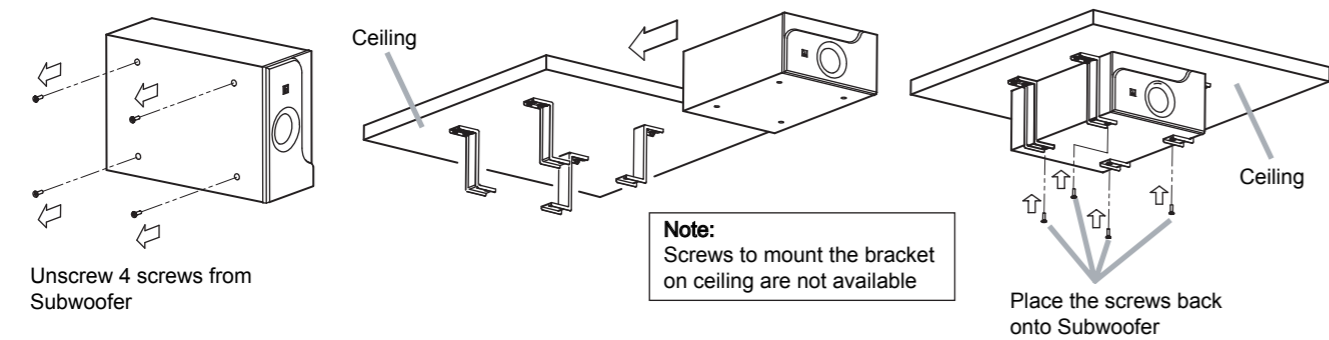
6.2.2. Installation on Wall

For wall installation, unscrew two screws on the subwoofer. Take note of distance between the two screw holes to be mounted on the wall (see image 4.3.2.)

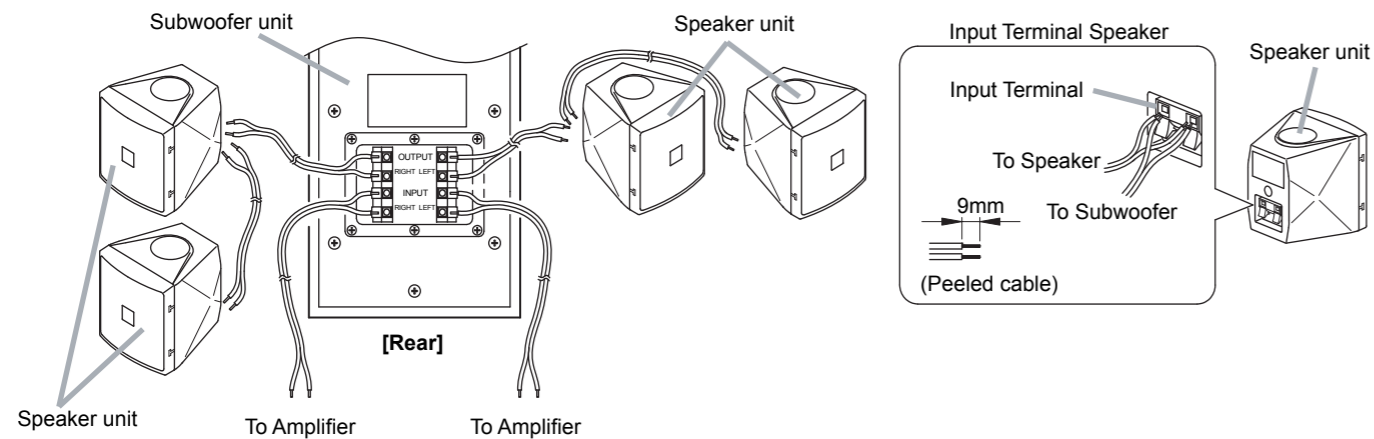


6.2.3. Installation on Ceiling

For ceiling installation, please unscrew all screws (4 pieces) on the subwoofer. Take note of the distance between the two screw holes to be mounted on the ceiling (see image 4.3.2.)



7. THE SPEAKER CABEL CONNECTIONS



2. GENERAL DESCRIPTION

- The speaker system model BS-301 series is a speaker high-power with 2-way system that suitable for indoor use only.
- The wide range of frequency as well as capability of generating high sound pressure level make it an efficient speaker to be used in a spacious room.
- It is consisted of a subwoofer and four pieces satellite speakers.
- The provided brackets allow the speaker to be mounted on various locations and direction radiations.
- The mounting brackets come together with the product as accessories.

3. DESCRIPTION ON OVERLOAD PROTECTION

The speaker unit is equipped with an overload protector. The system shall protect the speaker unit from overload input which exceeds the allowed capacity.

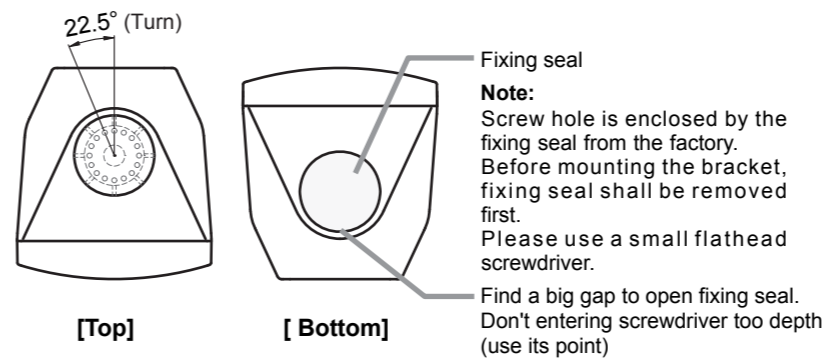
Speaker's volume will turn lower if the input to the speaker exceeds the maximum capacity of the speaker. In such event, please turn down the amplifier volume to the minimum level and wait for 10 seconds. The system shall automatically reset to normal condition. You may then gradually re-adjust the amplifier volume to the level lower then the previous volume.

Important Note!

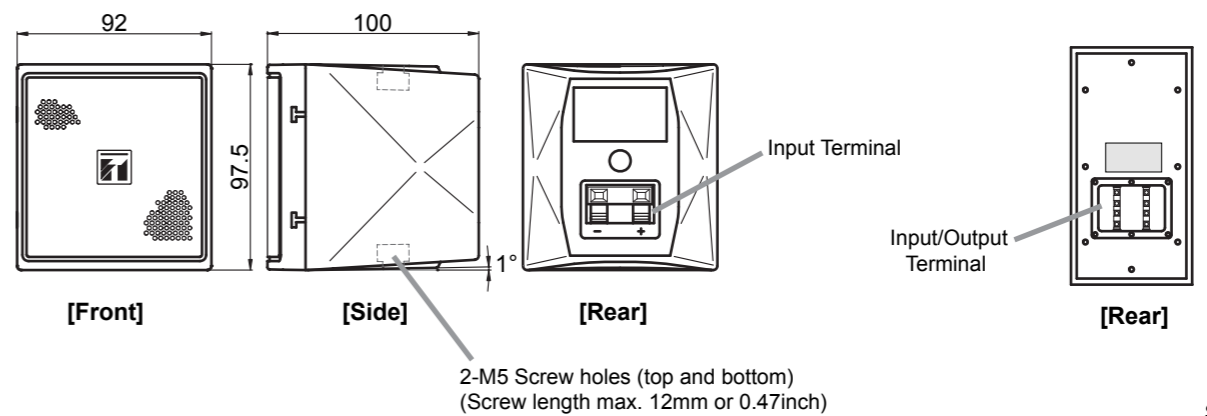
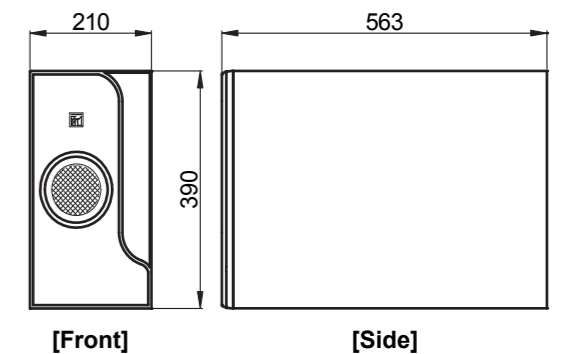
The system does not entirely protect against overload. Prolonged overload input to the speaker unit will cause the system to malfunction. As such, the overload input will flow in and damage the speaker unit. It is important to prevent prolonged overload input exceeding the maximum limit from flowing into the speaker unit.

4. DIMENSIONAL DIAGRAM

4.1. SATELLITE SPEAKER



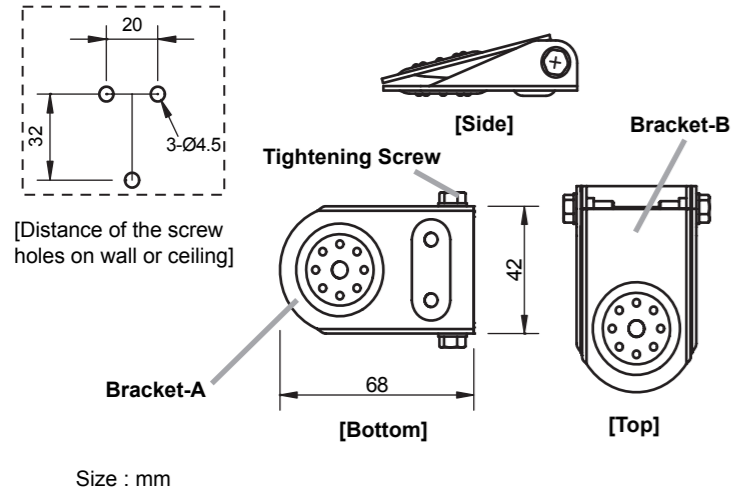
4.2. SUBWOOFER



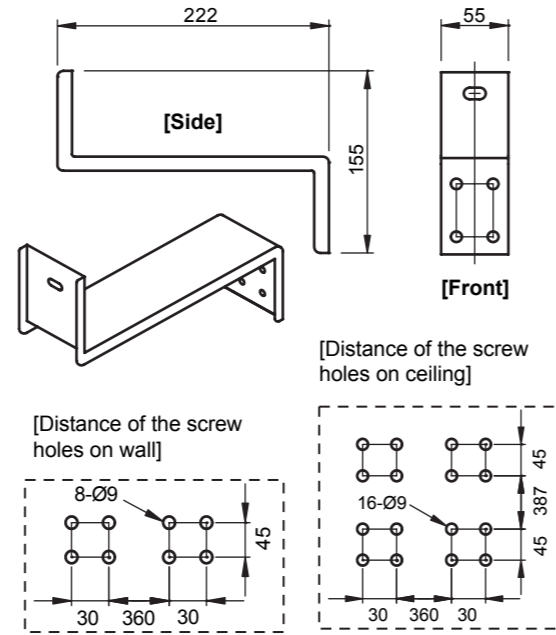
4.3. BRACKET (TO MOUNT SPEAKER)

4.3.1. BRACKET FOR SATELLITE SPEAKER

Loosen the **tightening screw** (right and left) to install the bracket to the speaker unit. Take note of **Bracket-A**; this is the part of the bracket which will be attached to the wall or ceiling when installing the speaker unit.

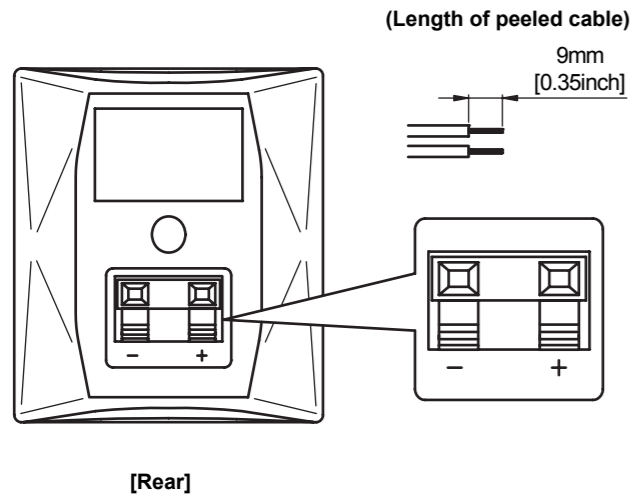


4.3.2. BRACKET FOR SUBWOOFER

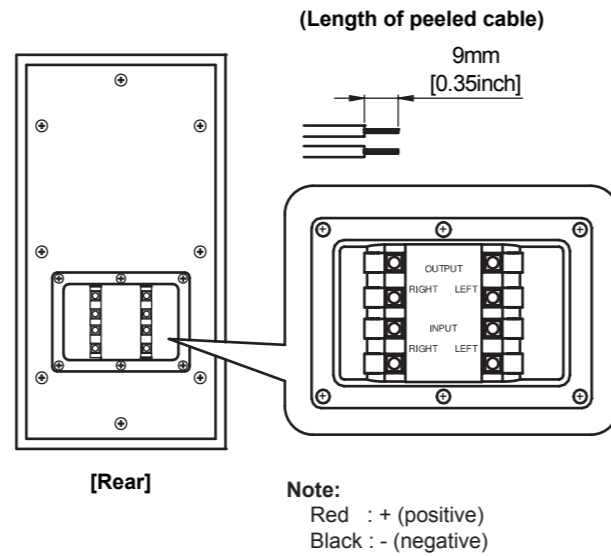


5. SPEAKER CABLE CONNECTIONS

5.1. SATELLITE SPEAKER



5.2. SUBWOOFER



6. INSTALLATION

6.1. SATELLITE SPEAKER

6.1.1. Speaker Unit installation without bracket

Place the speaker unit on an even and flat surface.

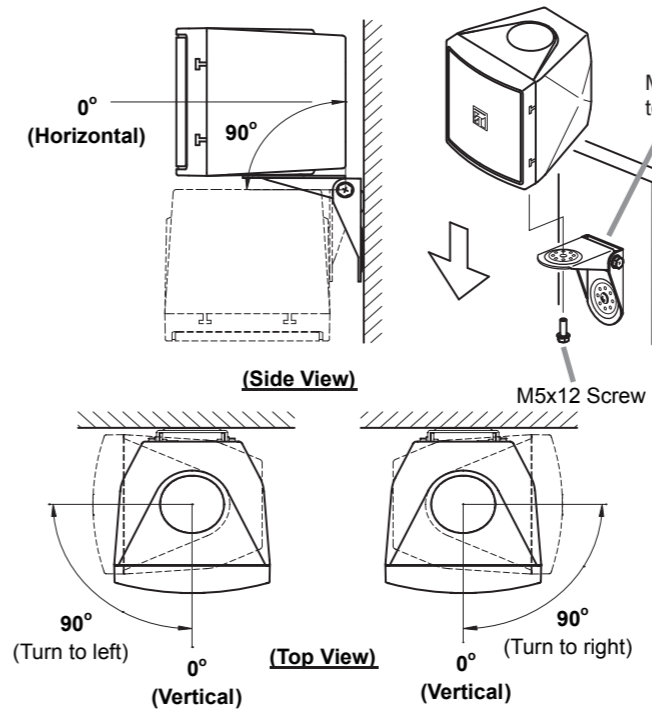
If the speaker unit is placed on glass or slippery surface, you may want to cover the surface with a cloth to prevent the speaker from moving.

6.1.2. Speaker Unit installation with bracket

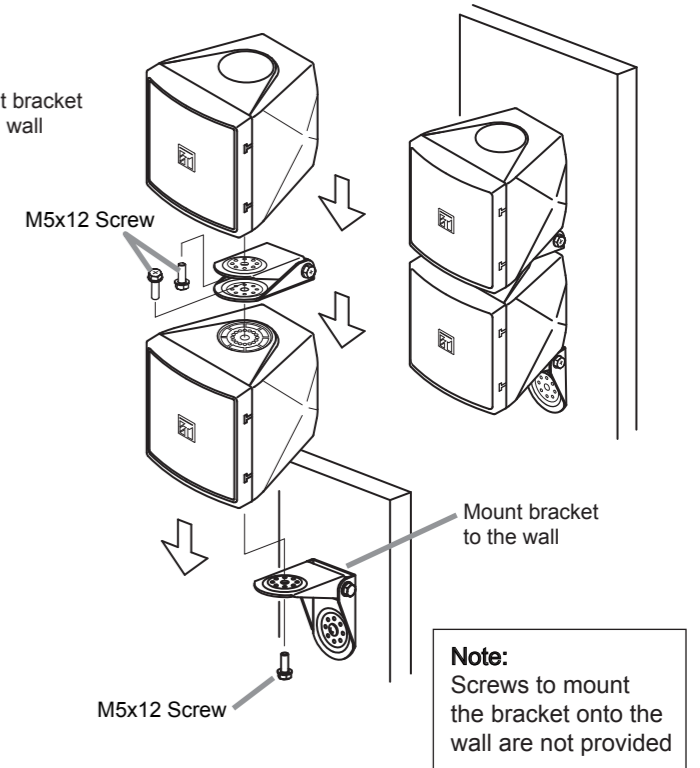
Before installing the bracket to speaker unit, remove / open the fixing seal enclosing the screw holes. Use a small flathead screwdriver. Place the flathead screwdriver into the fixing seal slot (see image 4.1.). For installation of single system, please remove only one fixing seal and for double system, please remove two fixing seals (top and bottom) on one of the speaker units.

6.1.2.1 Installation on Wall

[single-system installation sample]

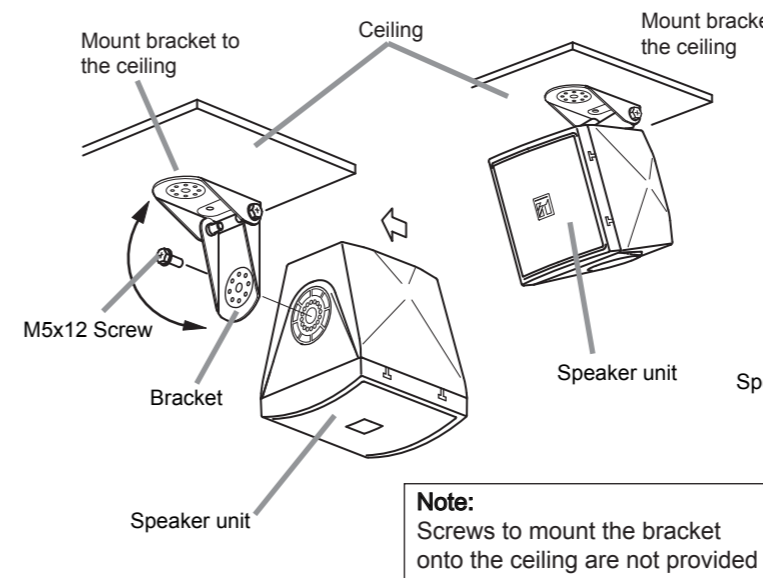


[double-system installation sample]

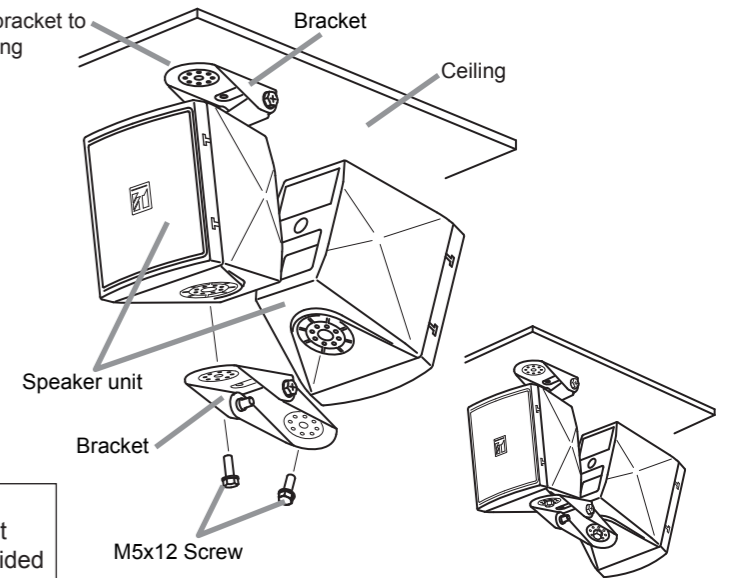


6.1.2.2 Installation on Ceiling

[single-system installation sample]



[double-system installation sample]



6.2. SUBWOOFER

The sound generated by the subwoofer may differ, depending upon the mounting position. The Subwoofer installation samples illustrated here are some of the appropriate positions for room installation. It is recommended to place the subwoofer at the corner of the room for better sound (especially bass).