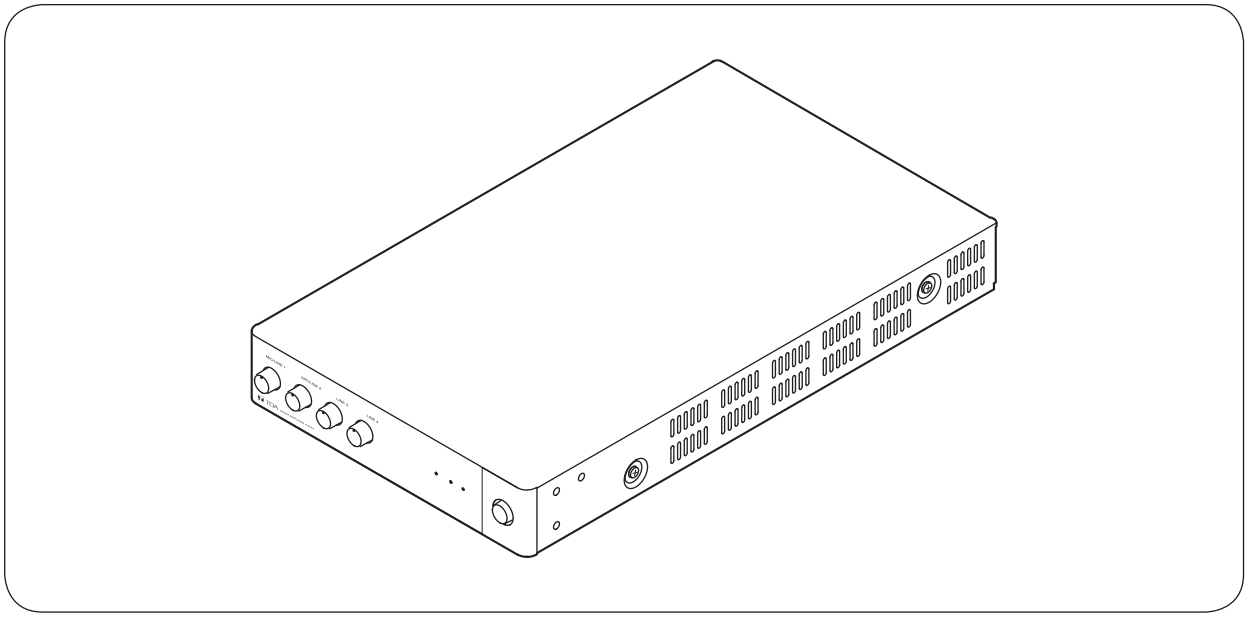
TOA

INSTRUCTION MANUAL

MIXER AMPLIFIERS

A-5006
A-5012



Thank you for purchasing TOA's Mixer Amplifier.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

TOA Corporation

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1. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

INSTRUCTIONS ESSENTIELLES POUR LA SÉCURITÉ

- Lire ces instructions.
- Conserver ces instructions pour référence ultérieure.
- Respecter tous les avertissements.
- Suivre toutes les instructions.
- Ne pas utiliser cet appareil à proximité d'eau.
- Nettoyer uniquement à l'aide d'un chiffon sec.
- Ne pas obstruer les orifices de ventilation. Installer conformément aux instructions du fabricant.
- Ne pas installer à proximité de sources de chaleur telles que des radiateurs, des registres thermiques, des chaudières ou d'autres appareils (notamment des amplificateurs) produisant de la chaleur.
- Ne pas contourner la fonction de sécurité de la fiche polarisée ou de mise à la terre. Une fiche polarisée est équipée de deux broches, dont l'une est plus large que l'autre. Une fiche de mise à la terre est équipée de deux broches et d'une troisième pour la mise à la terre. Cette dernière, la plus large, est prévue à des fins de sécurité. Si la fiche fournie ne peut être insérée dans la prise électrique souhaitée, consulter un électricien pour faire remplacer cette dernière.
- Protéger le cordon d'alimentation pour éviter qu'il ne soit piétiné ou pincé, notamment au niveau des fiches, des prises de courant ou de son point de sortie de l'appareil.
- Utiliser uniquement les accessoires spécifiés par le fabricant.
- Utiliser uniquement avec le chariot, support, trépied, la patte de montage ou la table spécifiés par le fabricant ou vendus avec l'appareil. En cas d'utilisation d'un chariot, manipuler la combinaison chariot/appareil pour éviter les blessures dues à un renversement.



- Débrancher cet appareil pendant les orages ainsi que lorsqu'il reste inutilisé pendant une période prolongée.
- La maintenance de l'appareil doit être confiée à un technicien après-vente qualifié. Une maintenance s'avère nécessaire si l'appareil est endommagé (au niveau du cordon d'alimentation ou de la fiche), a été mouillé par un liquide, un objet est tombé à l'intérieur, s'il a été exposé à la pluie ou l'humidité, s'il ne fonctionne pas normalement ou s'il est tombé.

2. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.

⚠ **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

When Installing the Unit

- The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- Since the unit is designed for indoor use, do not install it outdoors. If installed outdoors, the aging of parts causes the unit to fall off, resulting in personal injury. Also, when it gets wet with rain, there is a danger of electric shock.

When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - If you detect smoke or a strange smell coming from the unit.
  - If water or any metallic object gets into the unit
  - If the unit falls, or the unit case breaks
  - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to qualified service personnel.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not touch a power supply plug during thunder and lightning, as this may result in electric shock.

⚠ CAUTION

When Installing the Unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.

- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.

- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.

- Do not block the ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire. Also, periodically clean the ventilation slots of dust.

- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

- To avoid electric shocks, be sure to switch off the unit's power when connecting speakers.

- Be sure to follow the instructions below when rack-mounting the unit. Failure to do so may cause a fire or personal injury.
  - Install the equipment rack on a stable, hard floor. Fix it with anchor bolts or take other arrangements to prevent it from falling down.
  - When connecting the unit's power cord to an AC outlet, use the AC outlet with current capacity allowable to the unit.
  - Rack-mounting screws are not supplied with the unit. Prepare them that are appropriate for the equipment rack.

When the Unit is in Use

- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.

- Do not operate the unit for an extended period of time with the sound distorting. Doing so may cause the connected speakers to heat, resulting in a fire.

- Contact your TOA dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.

- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.

- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

CONSEILS DE SÉCURITÉ

- Avant l'installation ou l'utilisation, lire attentivement l'ensemble des instructions de cette section pour un fonctionnement correct et sûr.
- Veiller à respecter les précautions recommandées dans cette section, laquelle contient des mises en garde et/ou précautions importantes en matière de sécurité.
- Après lecture, conserver ce manuel à portée de main pour consultation ultérieure.

Symboles de sécurité et conventions

Les symboles et messages de sécurité décrits ci-dessous sont utilisés dans cette notice pour prévenir tout dommage corporel ou matériel pouvant résulter d'une mauvaise utilisation. Lire attentivement cette notice pour comprendre parfaitement les symboles et messages de sécurité afin de prévenir tout risque éventuel.

⚠ **AVERTISSEMENT**	Indique une situation risquant d'entraîner des blessures graves, voire la mort, en cas de mauvaise manipulation.
⚠ **ATTENTION**	Indique une situation risquant d'entraîner des blessures moyennement graves ou mineures, et/ou des dommages matériels.

⚠ AVERTISSEMENT

Lors de l'installation de l'appareil

- L'appareil doit être branché à une prise secteur dotée d'une connexion à la terre.

- Ne pas exposer l'appareil à la pluie et le protéger de tout contact avec de l'eau ou d'autres liquides afin d'éviter un incendie ou une électrocution.

- Utilisez l'appareil uniquement avec la tension spécifiée sur le chargeur. L'utilisation d'une tension supérieure à celle spécifiée peut être à l'origine d'un incendie ou d'une électrocution.

- Ne pas couper, entortiller, modifier ou endommager le cordon d'alimentation. En outre, éviter d'utiliser le cordon d'alimentation à proximité d'un radiateur et ne jamais placer d'objets lourds (y compris l'appareil lui-même) sur le cordon d'alimentation, car ceci présente un risque d'incendie ou d'électrocution.

- Évitez d'installer ou de monter l'unité dans des endroits instables, comme sur une table bancale ou une surface inclinée. Cela peut entraîner la chute de l'appareil et causer des blessures et / ou des dommages matériels.

- Cet appareil est conçu pour une installation en intérieur. Il ne doit pas être installé à l'extérieur. S'il est installé à l'extérieur, les pièces risquent de rouiller et de céder. La chute de l'appareil peut alors engendre des blessures. La pluie présente en outre un danger d'électrocution.

- En cas de survenue des irrégularités suivantes pendant l'utilisation, couper immédiatement l'alimentation, débrancher la fiche du cordon d'alimentation de l'adaptateur secteur de la prise secteur et contacter le représentant TOA le plus proche. Ne pas essayer pas d'utiliser l'appareil dans ces conditions sous peine de provoquer un incendie ou une électrocution.
  - Détection de fumée ou d'une odeur inhabituelle émanant de l'appareil.
  - Pénétration d'eau ou d'un objet métallique dans l'appareil
  - Chute ou endommagement de l'appareil
  - Dégradation du cordon d'alimentation (âme du câble dénudée, déconnexion etc.).
  - Dysfonctionnement (absence de tonalité).

- Pour empêcher un incendie ou une électrocution, ne jamais ouvrir ni ne retirer le boîtier de l'appareil, en raison de la présence de pièces à haute tension. La maintenance de l'appareil doit être confiée à un technicien après-vente qualifié.

- Ne pas placer de tasses, bols ou autres récipients remplis de liquides ou d'objets métalliques au-dessus de l'appareil. S'ils se répandent par accident sur l'appareil, ils peuvent provoquer un incendie ou une électrocution.

- Ne pas insérer ni laisser tomber d'objets métalliques ou de matériaux inflammables dans les évents de ventilation du capot de l'appareil sous peine de provoquer un incendie ou une électrocution.

- Ne pas toucher la fiche du cordon d'alimentation pendant un orage. Risque d'électrocution.

⚠ ATTENTION

Lors de l'installation de l'appareil

- Ne jamais brancher, ni débrancher la fiche du cordon d'alimentation avec les mains mouillées. Risque d'électrocution.

- Pour débrancher le cordon d'alimentation, veiller à le tenir par sa fiche ; ne jamais tirer directement le cordon. Utiliser l'appareil avec un cordon d'alimentation endommagé peut présenter un risque d'incendie ou d'électrocution.

- Lors du déplacement de l'appareil, veiller à retirer la fiche du cordon d'alimentation de l'adaptateur secteur de la prise murale. Si le chargeur est déplacé avec le cordon d'alimentation branché dans la prise, ce dernier risque d'être endommagé, ce qui présente un risque d'incendie ou d'électrocution. Pour retirer le cordon d'alimentation, le tirer par la prise.

- Ne pas obstruer les fentes de ventilation sur le capot de l'appareil.
  Cela peut provoquer une accumulation de chaleur à l'intérieur de l'appareil et causer un incendie.
  Nettoyer régulièrement les encoches de ventilation.

- Éviter d'installer l'appareil dans un endroit humide ou poussiéreux, en plein soleil, à proximité d'un radiateur, ou dans un endroit dégageant de la fumée noire ou de la vapeur sous peine de provoquer un incendie ou une électrocution.

- Pour éviter les chocs électriques, veiller à débrancher l'appareil avant de connecter les haut-parleurs.

- Veiller à suivre les instructions ci-dessous lors du montage en bâti. Risque d'incendie ou de blessure corporelle.
  · Installer le bâti sur un sol stable.
  Le fixer à l'aide de boulons d'ancrage ou d'un autre dispositif pour l'empêcher de tomber.
  · Pour brancher le cordon d'alimentation à une prise CA, vérifier l'intensité maximale de l'appareil.
  · Les vis de montage en bâti ne sont pas livrées avec l'appareil. Préparez-en des appropriés pour le montage en bâti.

Pendant l'utilisation de l'appareil

- Assurez-vous que la commande de volume est réglée sur la position minimum avant la mise sous tension. Un grand bruit produit à un volume élevé lorsque l'alimentation est activée peut nuire à l'audition.

- Ne pas utiliser l'appareil pendant une période prolongée si le son est distordu.
  Les haut-parleurs branchés risquent de surchauffer et de provoquer un incendie.

- Pour nettoyer l'appareil, contacter votre revendeur TOA. L'accumulation de poussière pendant une période prolongée peut entraîner un incendie ou une dégradation de l'appareil.

- L'accumulation de poussière sur la fiche du cordon d'alimentation ou dans la prise secteur présente un risque d'incendie. Les nettoyer régulièrement.
  Par ailleurs, insérer complètement la fiche dans la prise murale.

- Par mesure de sécurité, lors du nettoyage ou lorsque l'appareil n'est pas utilisé pendant 10 jours ou plus, couper l'alimentation, et débrancher la fiche du cordon d'alimentation de l'adaptateur secteur de la prise secteur. Autrement, cela présente un risque d'incendie ou d'électrocution.

3. GENERAL DESCRIPTION

The A-5006/5012 is a compact desktop integrated Mixer Amplifier with a 4-input/1-output configuration. The 4 inputs include an assortment of line and microphone inputs. The unit is equipped with a terminal that allows remote control of overall sound volume. Signal processing, including equalization and compression, can be performed using the supplied A-5000 PC Software.*
The unit can also be easily mounted in an EIA-standard equipment rack with the additional purchase of optional rack mounting hardware. Horizontal connectivity permits two mixer amplifiers to be simultaneously mounted in a one-unit size rack space.

* Recorded on the supplied CD.

4. FEATURES

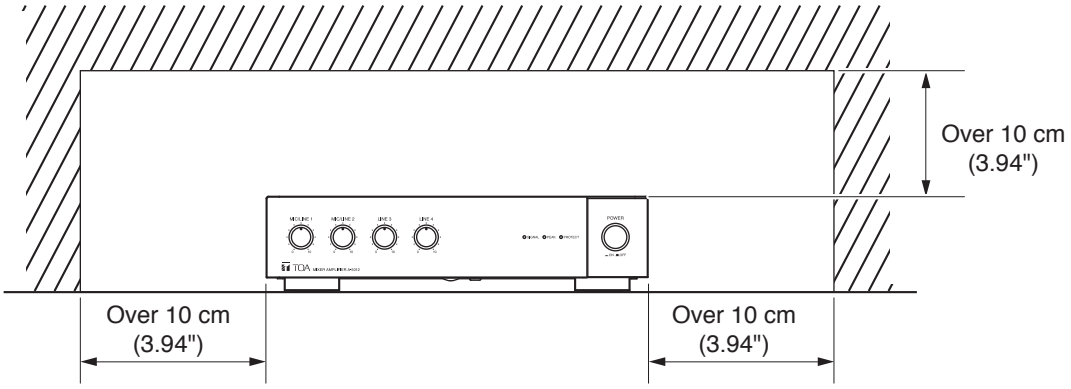
- The input sensitivity of Inputs 1 and 2, and impedance of the speaker outputs are set by way of a DIP switch located on the unit's rear panel.
- The input sensitivity of Inputs 1 and 2 can be independently set to either MIC or LINE signal level. Inputs 3 and 4 are fixed at LINE level.
- Speaker outputs can be set for either low or high impedance connections.
- A manual muting function and a remote master volume control function allow remote adjustment of the sound volume.
- The unit is equipped with the LAN port, making it possible to perform the unit's settings using the A-5000 PC Software. Functions that can be set include an input equalizer, output equalizer, compressor and remote master volume.

5. HANDLING PRECAUTIONS

- The supplied power cord is designed to be used exclusively with the unit. Do not connect it to any other equipment.
- Install the unit in locations where the temperature is between 0 and 40 °C (32 and 104°F) and the moisture is between 35 and 80% (no dew condensation must be formed).
- The unit is a precision audio component. To prevent failure, avoid locations where the unit may be exposed to strong shocks or vibrations.
- To clean, be sure to first switch off the unit's power, then wipe with a dry cloth. Never use benzene, thinner, alcohol, or chemically-treated cleaning cloth because such volatile liquids could deform or discolor the unit.

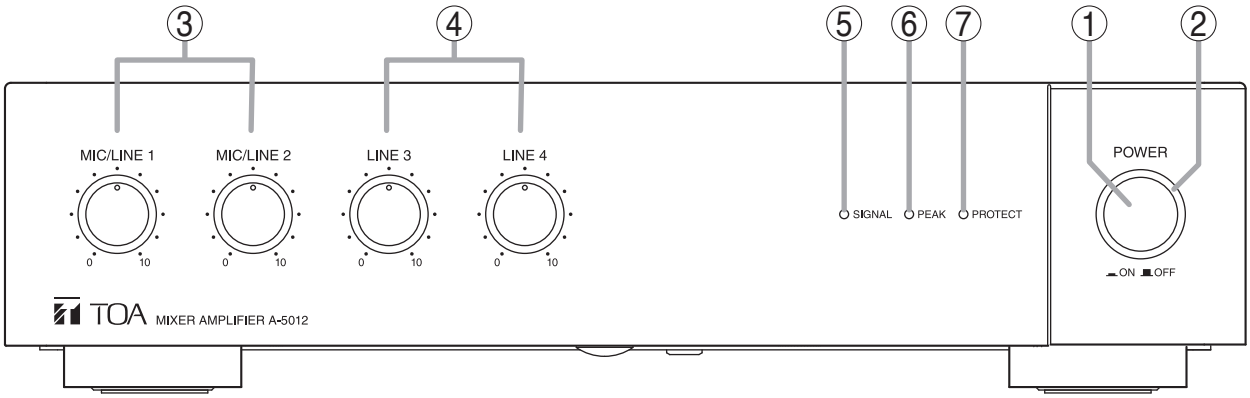
6. INSTALLATION PRECAUTIONS

- Be sure to install and connect the unit before the connection to the AC mains outlet. Remove the unit's power supply cord from the AC mains outlet when uninstalling or disconnecting the unit.
- The socket-outlet shall be installed near the unit and the plug shall be easily accessible.
- Ensure that the unit is located at least 10 cm (3.94") away from ceiling and wall surfaces, as shown in the figure below, to allow adequate cooling and thus prevent extreme increases in temperature inside the unit. Also, do not place any other devices within that range.



7. NOMENCLATURE AND FUNCTIONS

[Front]



The figure shows the A-5012.

1. Power switch
Turns unit power ON and OFF with each press of the switch.

Note
When re-using contents set with the A-5000 PC Setting software, be sure to save the contents to the preset memory before turning the power OFF. The set contents will be lost if the power is switched off before Save procedure is completed.
For details, please read the software instruction manual on the supplied CD.

2. Power indicator (Green)
Lights green when power is switched ON, and extinguishes when power is switched OFF.

3. MIC/LINE input volume controls (1, 2)
Adjusts the sound volume of MIC/LINE Input 1 or 2.

4. LINE input volume controls (3, 4)
Adjusts the sound volume of LINE Input 3 or 4.

5. Signal indicator (Green)
Lights when the sound volume of any signal input exceeds the specified level (–20 dB from the rated output level).

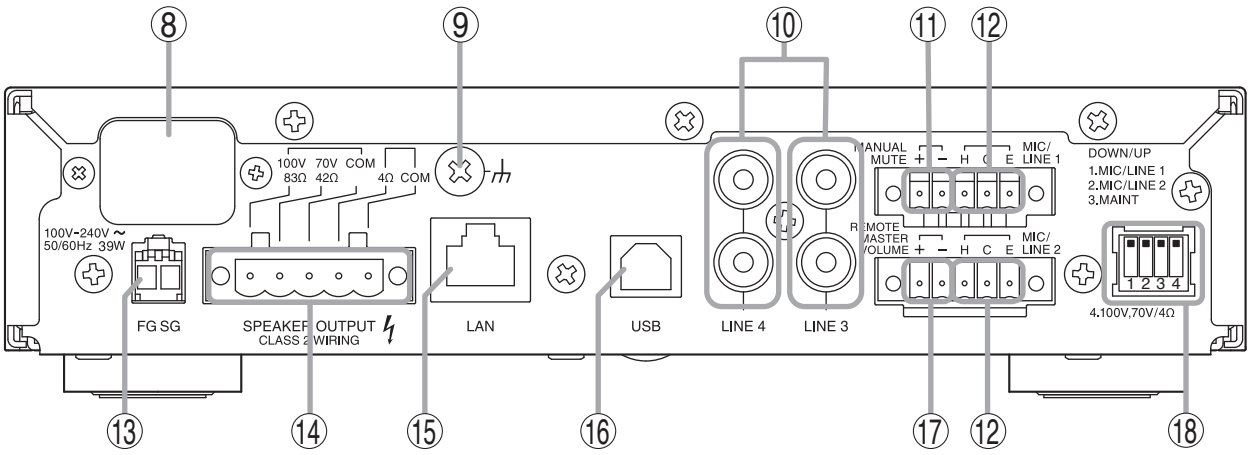
6. Peak indicator (Red)
Lights when the sound volume of any signal input reaches a high level (–3 dB from the rated output level).

Note
Adjust the sound volume to prevent this indicator from continually lighting. If it remains lit, sound output could be distorted.

7. Failure indicator (Red)
Lights when the unit's protection circuitry is in operation (when a failure is detected) or when the fan fails.

Note
When this indicator lights, both the Signal Indicator (5) and Peak Indicator (6) will extinguish.

[Rear]



The figure shows the A-5012.

8. AC Power input terminal
Use the supplied power cord to connect the unit to an AC power source.

9. Functional ground terminal
Connect this terminal to the functional ground of external equipment if much noise is encountered when the unit is connected to the external equipment. The noise may be reduced.

Note: This ground is not for protective ground.

10. Line input jacks (3, 4)
RCA jack x 2
–20 dB, 10 kΩ, unbalanced
(See p. 14, "Inputs 3 and 4 connections.")

11. Manual muting terminals
Removable terminal block (5 pins).
Short circuit current: 3 mA or less
Release voltage: 24 V DC or less.
The muting function is enabled by connection of a no-voltage contact (such as a switch).
(See p. 16, "Manual muting terminal connections.")

Note
A push-button switch or similar device must first be connected to the unit and settings performed using the A-5000 PC Software.

12. MIC/LINE input terminals (1, 2)
MIC: –60 dB
LINE: –20 dB
Removable terminal block (5 pins).
2.2 kΩ, electronically balanced input.
Input sensitivity can be selected from LINE and MIC input levels.
(See p. 14, "Inputs 1 and 2 connections.")

Note
Input sensitivity is selected at the DIP switch (18).

13. Ground lifting terminal
If the unit is connected to other equipment and a resulting ground loop causes hum noise, remove the plug connected to this terminal to reduce the noise.

14. Speaker output terminals
Removable terminal block (5 pins).
(See p. 15, "Speaker Output Signal Connections.")
The following table shows each output's specifications:

		A-5006	A-5012
Rated output		60 W	120 W
Low-impedance		4 Ω	4 Ω
High-impedance	100 V line	170 Ω	83 Ω
	70 V line	83 Ω	42 Ω

Note
Avoid simultaneously using both the high- and low-impedance terminals. Also, do not use the high-impedance 100 V line terminal simultaneously with the 70 V line terminal, as this could result in unit failure.

Tip
Use the DIP switch (18) to switch between high- and low-impedance output.

15. LAN port
Ethernet RJ-45 port.
Use a Category 5 (or higher) straight LAN cable to connect this port to a 100BASE-TX-compatible network.
(See p. 16, "Connection to PCs.")

16. USB port
Not used.

17. Remote master volume adjustment terminals

Removable terminal block (5 pins).
Release voltage: 24 V DC or less.
The unit's master volume control can be remotely operated by connecting an external resistor to these terminals.
(See p. 16, "Remote master volume adjustment terminal connection.")

Note

Use a 10 kΩ variable resistor (B curve) for the external resistor.
If the resistor's resistance value is small, the unit's sound level will be reduced, and if the resistance value is large, the sound level will be increased.

18. DIP switch

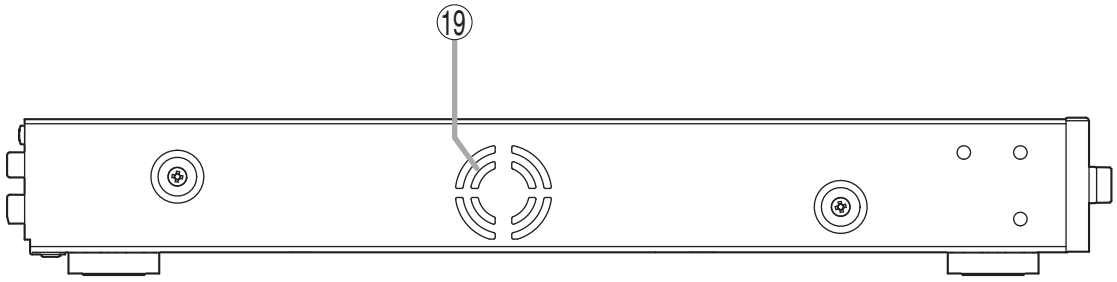
Used to select the input sensitivities of Inputs 1 and 2 and the output impedance of the speaker terminals.

- **Switch 1**
  Selects Input 1 sensitivity.
  UP: LINE
  DOWN: MIC
- **Switch 2**
  Selects Input 2 sensitivity.
  UP: LINE
  DOWN: MIC
- **Switch 3**
  Not used. Leave this switch in its default position (UP).
- **Switch 4**
  Switches the speaker output between low and high impedance.
  UP: Low-impedance
  DOWN: High-impedance

Note

All switches of the DIP switch are factory-preset to the UP position.

[Left Side]



19. Fan

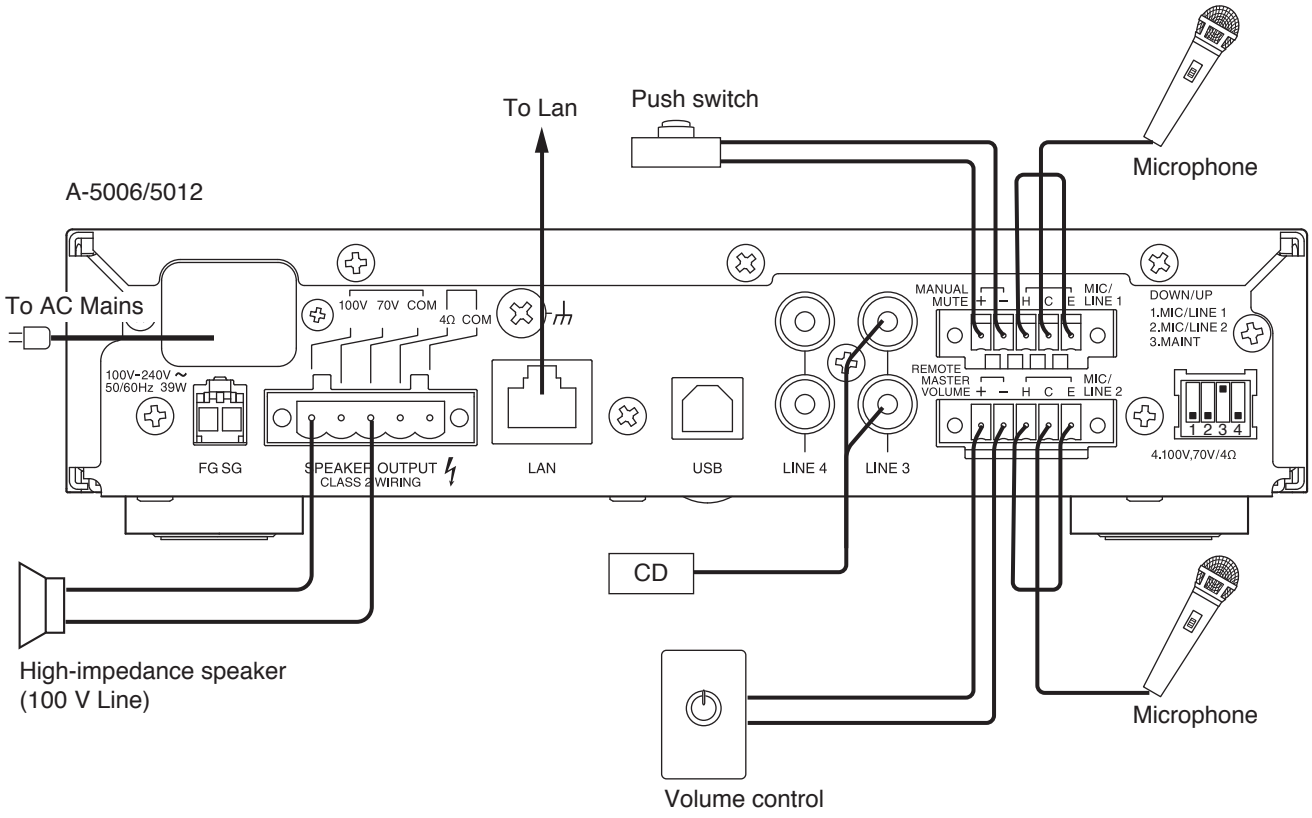
Exhaust fan.

Note

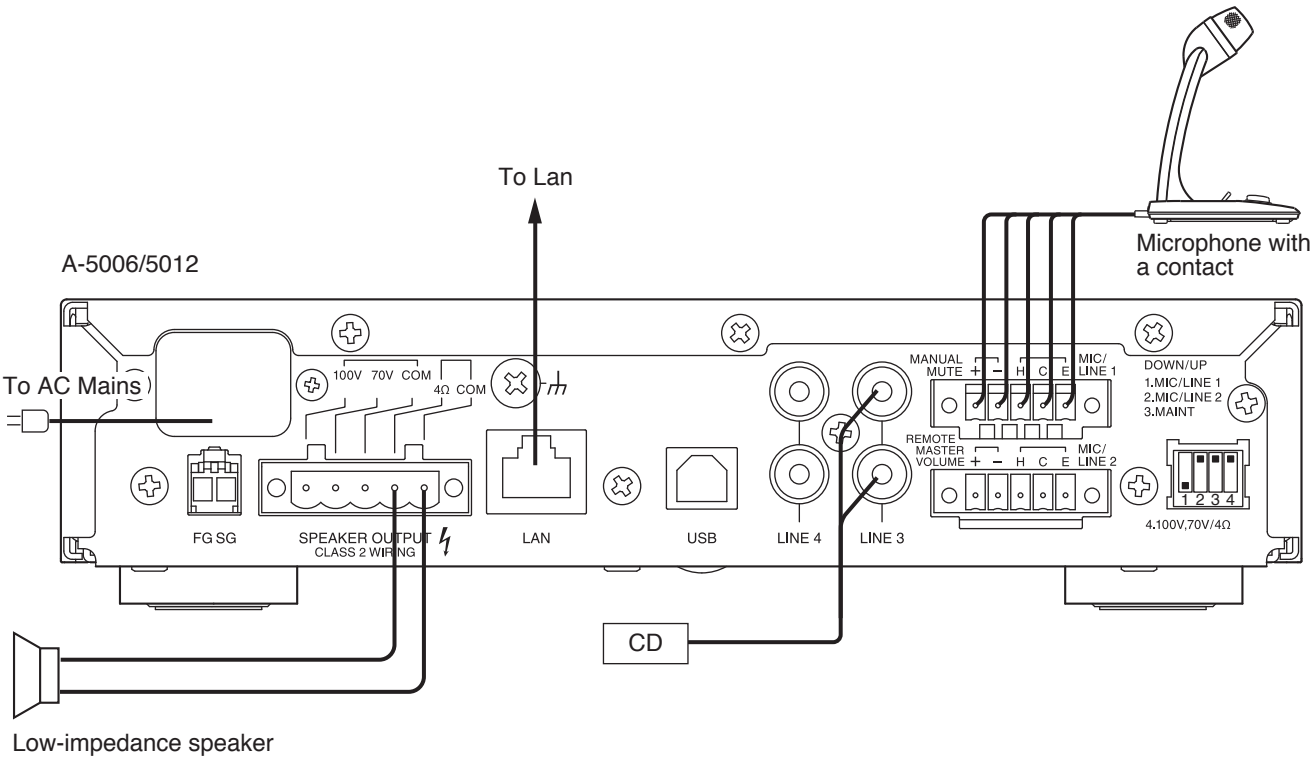
Avoid blocking the fan, as this could result in unit failure.

8. CONNECTION EXAMPLES

[Example 1]



[Example 2]



9. CONNECTION

9.1. Removable Terminal Plug Connection

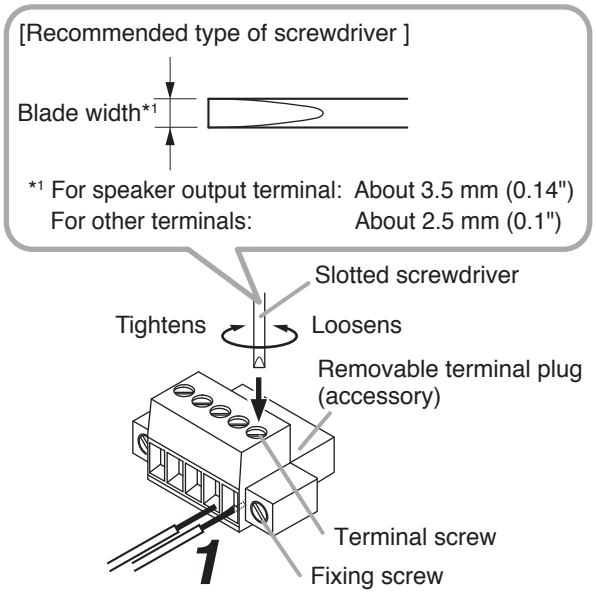
Step 1. Wiring the supplied removable terminal plug.

1-1. Loosen the terminal screws to insert the wire.

1-2. Tighten the terminal screws.
Ensure that the wire does not break free when pulled. If the wire does pull free, repeat the connection procedure from the start.

Step 2. Insert the wired terminal plug into the corresponding terminal block in the unit's rear panel.

Step 3. Tighten the fixing screw.



Notes

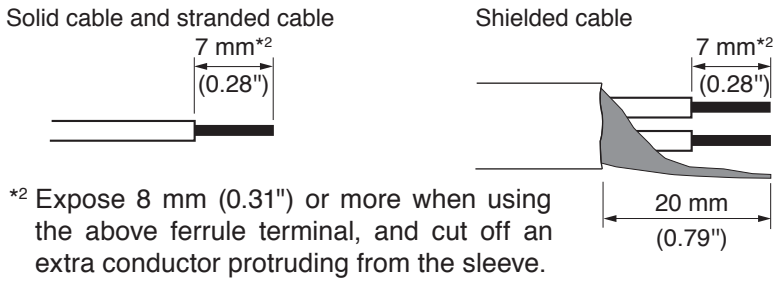
- Do not reverse **Steps 1** and **2** above. Poor contact may result if force is applied to the unit's internal circuit board pins while the terminal screws are being tightened.
- When detaching the terminal plug, pull it straight out. Pulling it out at an angle may cause the terminal plug or terminal block to break.

Tips

- Applicable cable size

	For speaker output terminal	For other terminals
Conductor cross-section area	0.2 – 2.5 mm^2	0.14 – 1.5 mm^2
AWG	AWG 24 – 12 or equivalent	AWG 28 – 16 or equivalent

- Cable sheath to trim



*2 Expose 8 mm (0.31") or more when using the above ferrule terminal, and cut off an extra conductor protruding from the sleeve.

Note

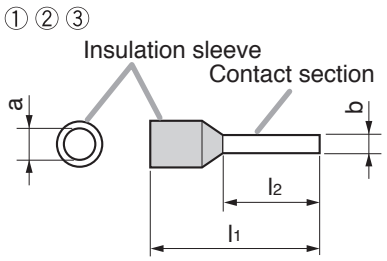
Avoid soldering stranded or shielded cable, as contact resistance may increase when the cable is tightened and the solder is crushed, possibly resulting in an excessive rise in joint temperatures.

- When connecting 2 cables or a shielded cable to a single terminal, use a ferrule terminal with an insulation sleeve to crimp the cables because such cable conductors could become loose.

(1) Recommended ferrule terminals for signal cables (made by Phoenix Contact)

Unit: mm (in)

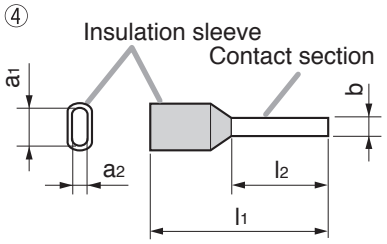
	Model Number	a	b	l_1	l_2
①	AI 0,34-8 TQ	2 (0.08)	0.8 (0.03)	12.5 (0.49)	8 (0.31)
②	AI 0,5-8 WH	2.5 (0.1)	1.1 (0.04)	14 (0.55)	8 (0.31)



(2) Recommended ferrule terminals for speaker cables (made by Phoenix Contact)

Unit: mm (in)

	Model Number	a	a_1	a_2	b	l_1	l_2
③	AI 1,5-8 BK	3.4 (0.31)	—	—	1.8 (0.07)	14 (0.55)	8 (0.31)
④	AI-TWIN 2 x 1,5-8 BK	—	6.6 (0.26)	3.6 (0.14)	2.3 (0.09)	16 (0.63)	8 (0.31)

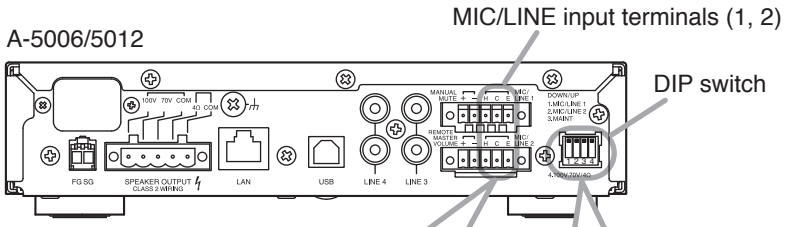


Crimping tool: CRIMPFOX 10S (made by Phoenix Contact)

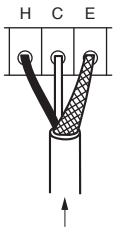
9.2. How to Connect Input Signals

9.2.1. Inputs 1 and 2 connections

Use the supplied Small type removable terminal plug (5 pins) for connection. Inputs 1 and 2 can be set to MIC or LINE input.
When setting, use Switch 1 of the DIP switch for the Input 1 connection and Switch 2 for the Input 2 connection.

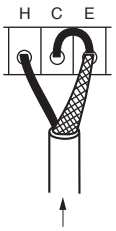


[Using a 2-core shielded wire]



From microphone or external playing equipment

[Using a single-core shielded wire]



Short terminals C and E.

From microphone or external playing equipment

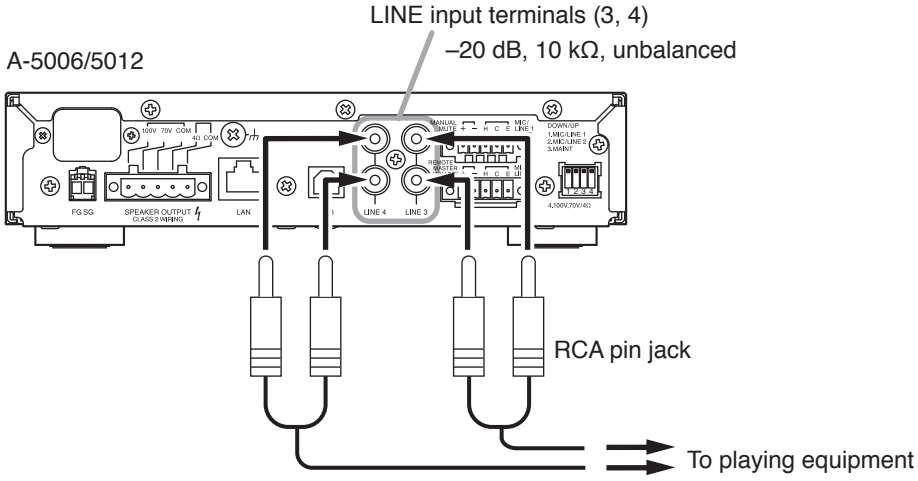
[DIP switch settings]

	MIC Input	LINE Input
Input 1	 1 : DOWN	 1 : UP
Input 2	 2 : DOWN	 2 : UP

Switches 1 and 2 are both factory-preset to the UP position.

9.2.2. Inputs 3 and 4 connections

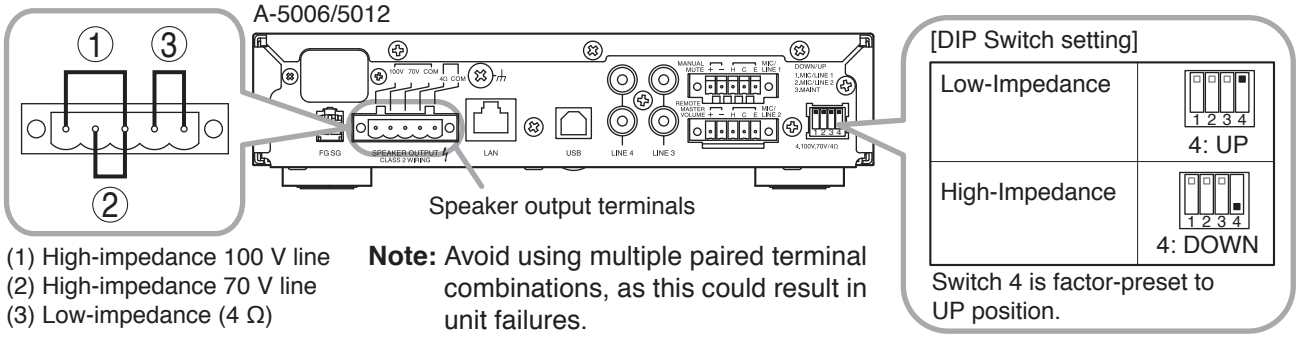
Inputs 3 and 4 are intended exclusively for LINE input.
When connecting a monaural sound source, connect the L line.



Note: L and R line signals are mixed inside the unit.

9.3. Speaker Output Signal Connections

The unit can be connected to high- or low-impedance speakers. Class 2 wiring may be used.
Using the supplied Large type removable terminal plug (5 pins), connect the speaker line to any pair of terminals from among the following three combinations.
Also, perform the impedance setting using Switch 4 of the DIP switch.

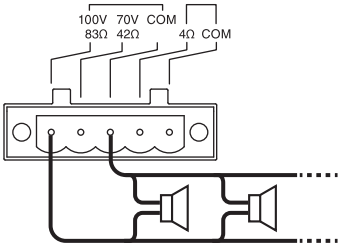


(1) High-impedance 100 V line
(2) High-impedance 70 V line
(3) Low-impedance (4 Ω)

Note: Avoid using multiple paired terminal combinations, as this could result in unit failures.

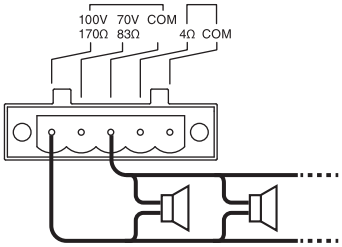
9.3.1. High-impedance 100 V line speaker connections

[For A-5012]



Total wattage: 120 W or less
Total impedance: 83 Ω or more

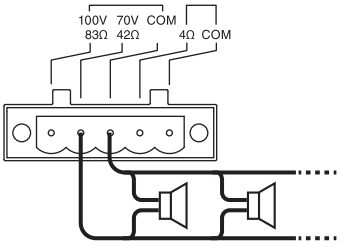
[For A-5006]



Total wattage: 60 W or less
Total impedance: 170 Ω or more

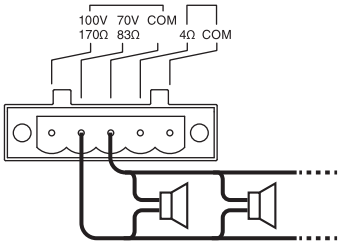
9.3.2. High-impedance 70 V line speaker connections

[For A-5012]



Total wattage: 120 W or less
Total impedance: 42 Ω or more

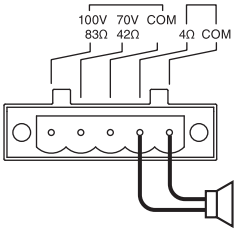
[For A-5006]



Total wattage: 60 W or less
Total impedance: 83 Ω or more

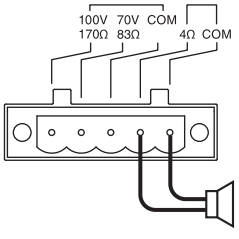
9.3.3. Low-impedance speaker connections

[For A-5012]



Impedance: 4 to 16 Ω
Rated input of speaker: 120 W or more

[For A-5006]



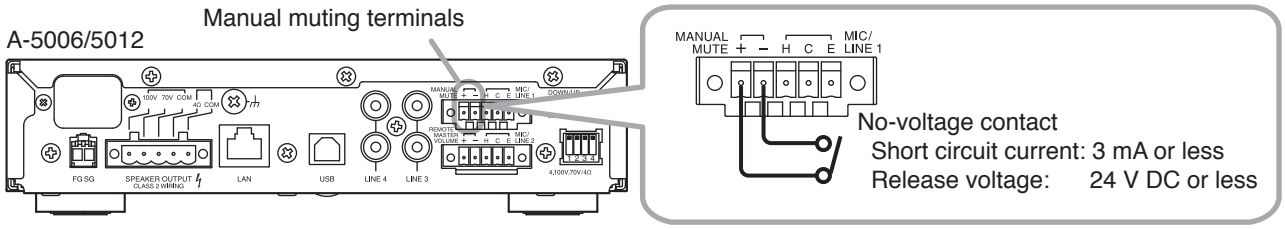
Impedance: 4 to 16 Ω
Rated input of speaker: 60 W or more

9.4. Remote Control Equipment Connections

Use the supplied Small type removable terminal plug (5 pins) for connection.

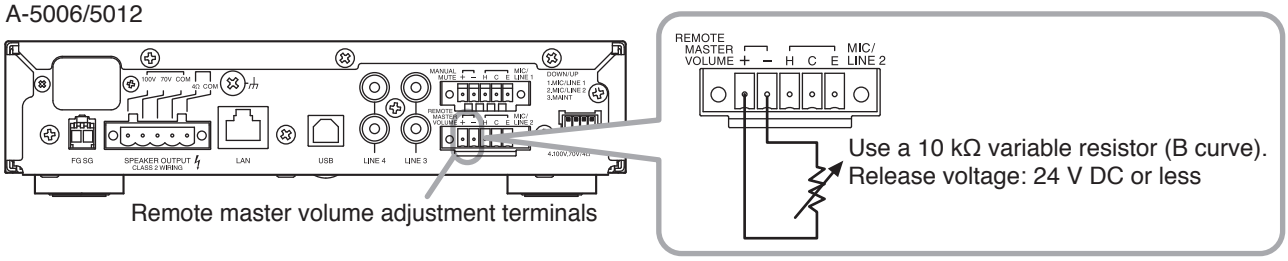
9.4.1. Manual muting terminal connections

If a no-voltage contact is connected, closing the contact allows the pre-determined input channel volume to be reduced by a preset level of attenuation.
If a microphone with a contact is connected as shown in Connection Example 2 (p. 12), the audio of other channels will be muted for as long as the microphone's talk switch is pressed.
Use the A-5000 PC Software to enable or disable this function, select the input channel, and set the attenuation.
For details, please read the software instruction manual on the supplied CD.



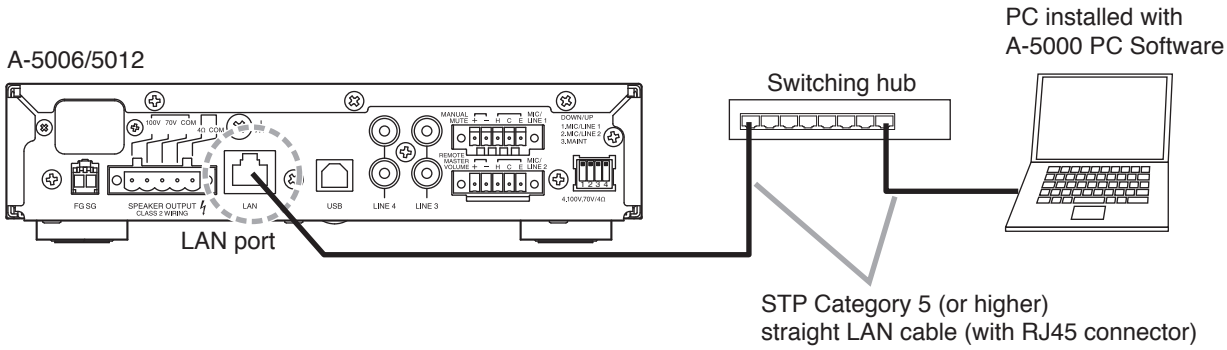
9.4.2. Remote master volume adjustment terminal connection

The unit's master volume can be remotely adjusted by an externally-connected resistor.
If the resistor's resistance value is small, the unit's sound level will be reduced, and if the resistance value is large, the sound level will be increased.



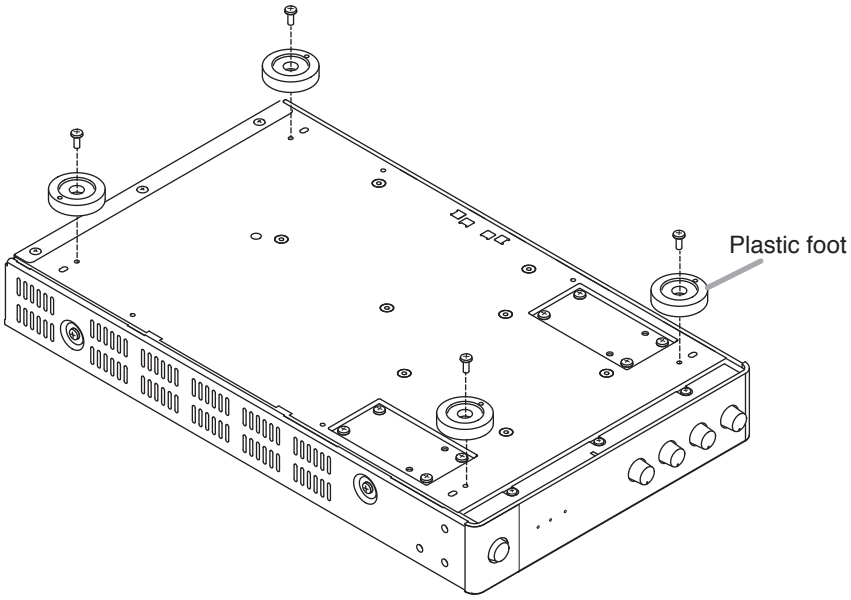
9.5. Connection to PCs

Connect a PC via a switching hub.
For details, please read the software instruction manual on the supplied CD.



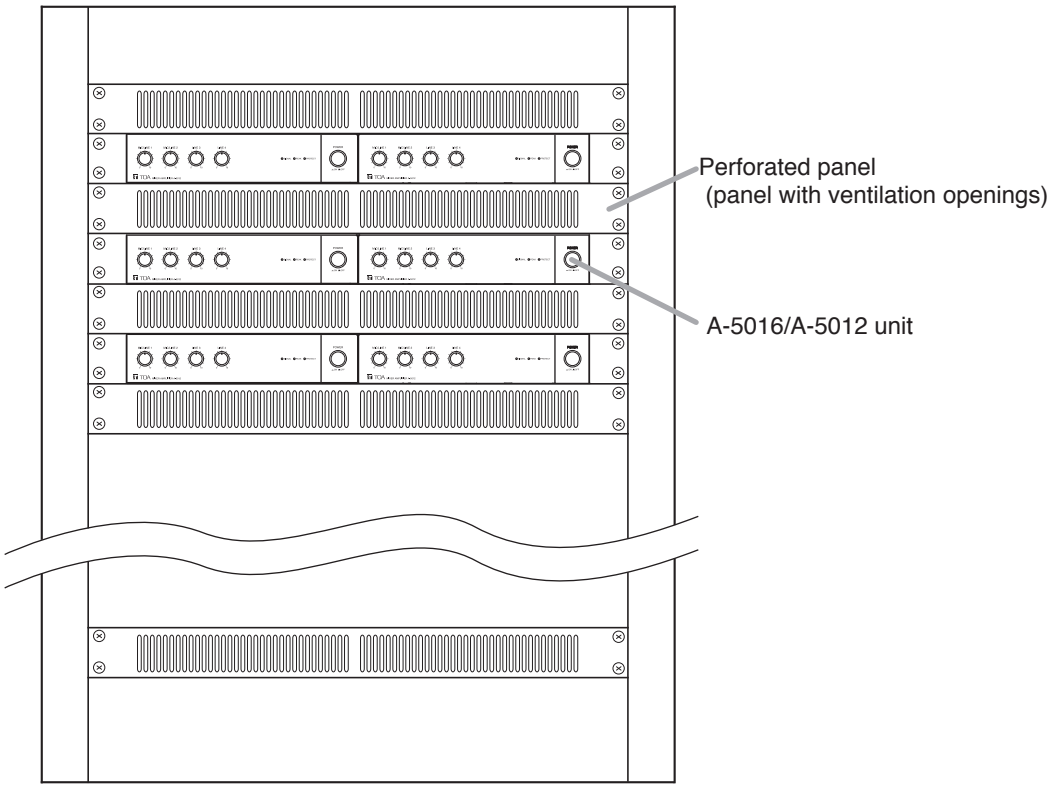
10. RACK-MOUNTING THE MIXER AMPLIFIER

To mount the unit in an equipment rack, use the optional YA-706 guide rail and either the MB-15B-BK (for 1 unit) or MB-15B-J (for 2 units) bracket set. Before mounting, remove the four plastic feet attached to the bottom surface of the unit.



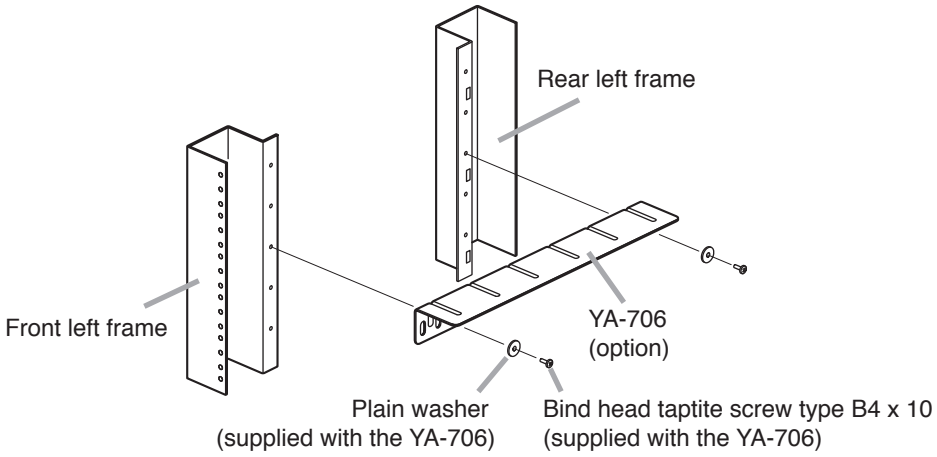
Note

To improve ventilation, ensure that a perforated panel (panel with air openings) of 1-unit size or greater is mounted over and under each unit, as well as on the top and at the bottom of the rack.

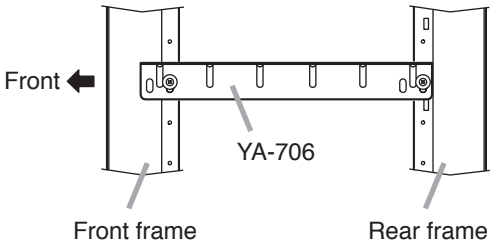


Step 1. Fix the optional guide rail YA-706 loosely to the rack frame.

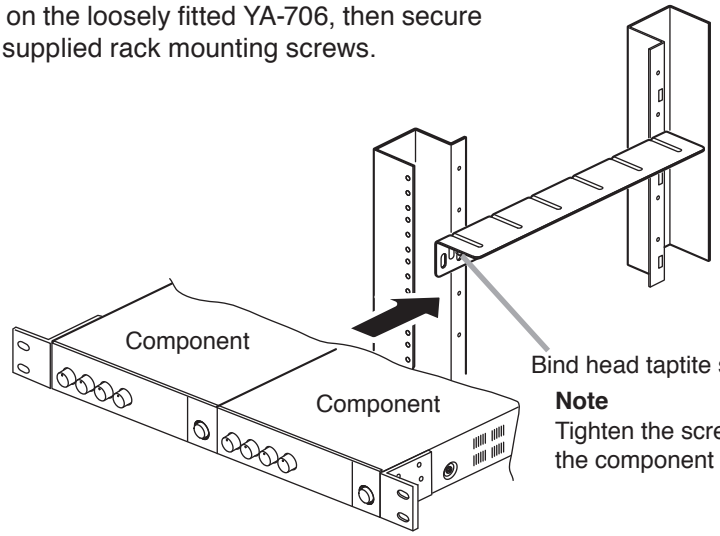
Note
The figures below show the way to install the YA-706 to the left side of the rack. Follow the same procedure for installation to the right side.



Note
To install the YA-706, use its second front hole and rearmost hole as shown at right.



Step 2. Place the component on the loosely fitted YA-706, then secure it to the rack with the supplied rack mounting screws.

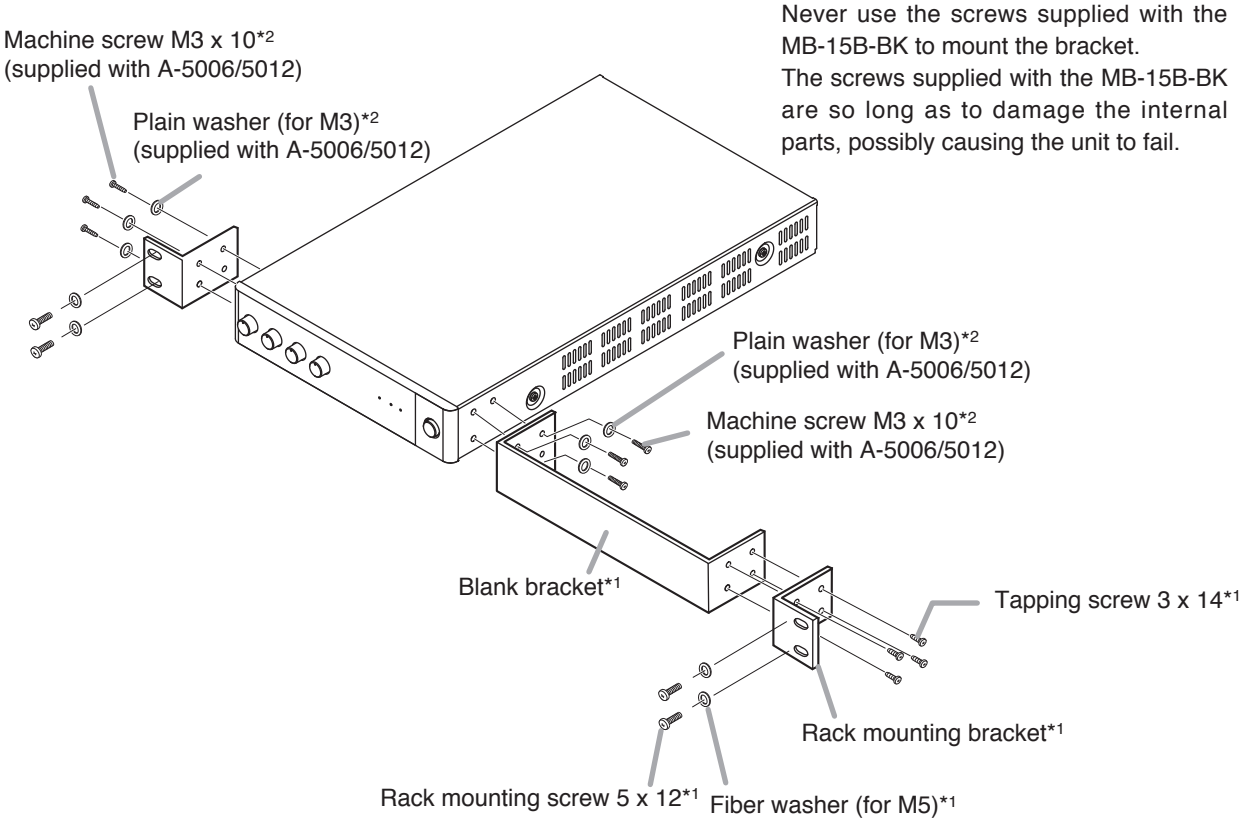


Note
Tighten the screws after securing the component to the rack.

2-1. When mounting a single unit
Use the optional MB-15B-BK hardware set.

*1 Component parts of MB-15B-BK

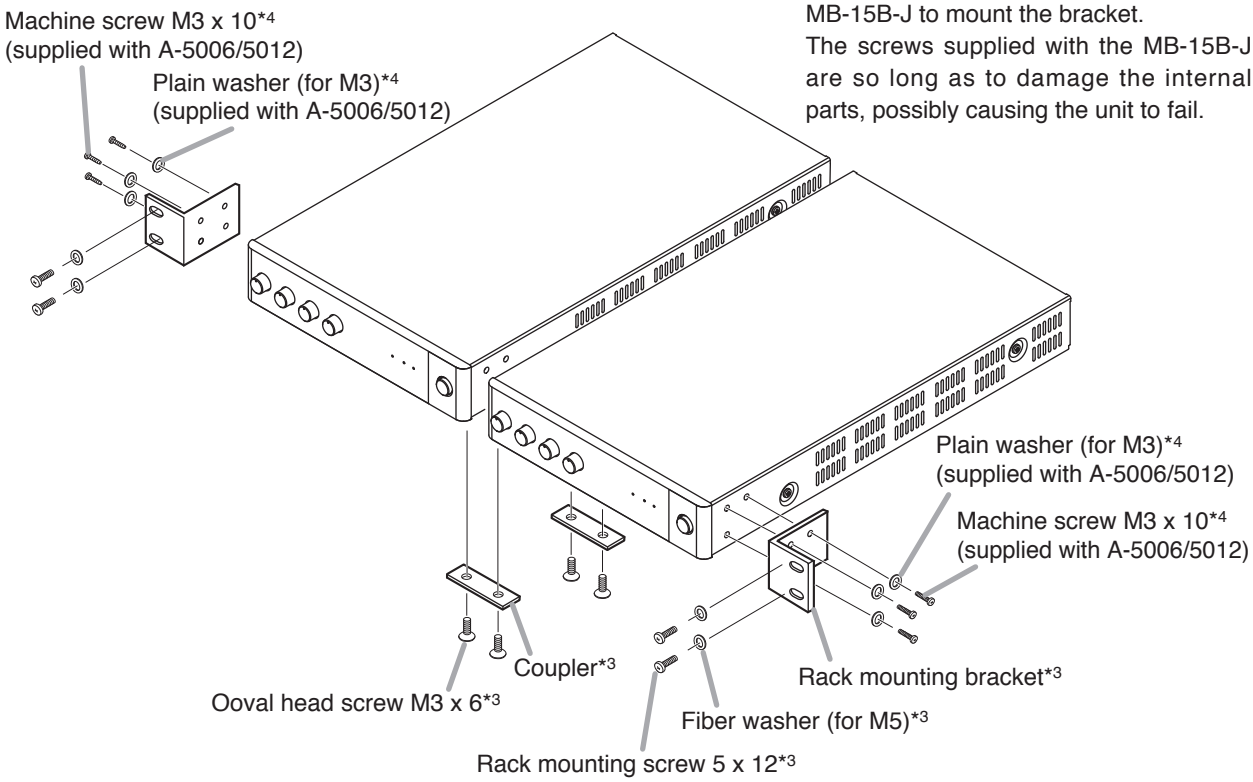
*2 **Note**
Never use the screws supplied with the MB-15B-BK to mount the bracket.
The screws supplied with the MB-15B-BK are so long as to damage the internal parts, possibly causing the unit to fail.



2-2. When mounting 2 units
Use the optional MB-15B-J hardware set

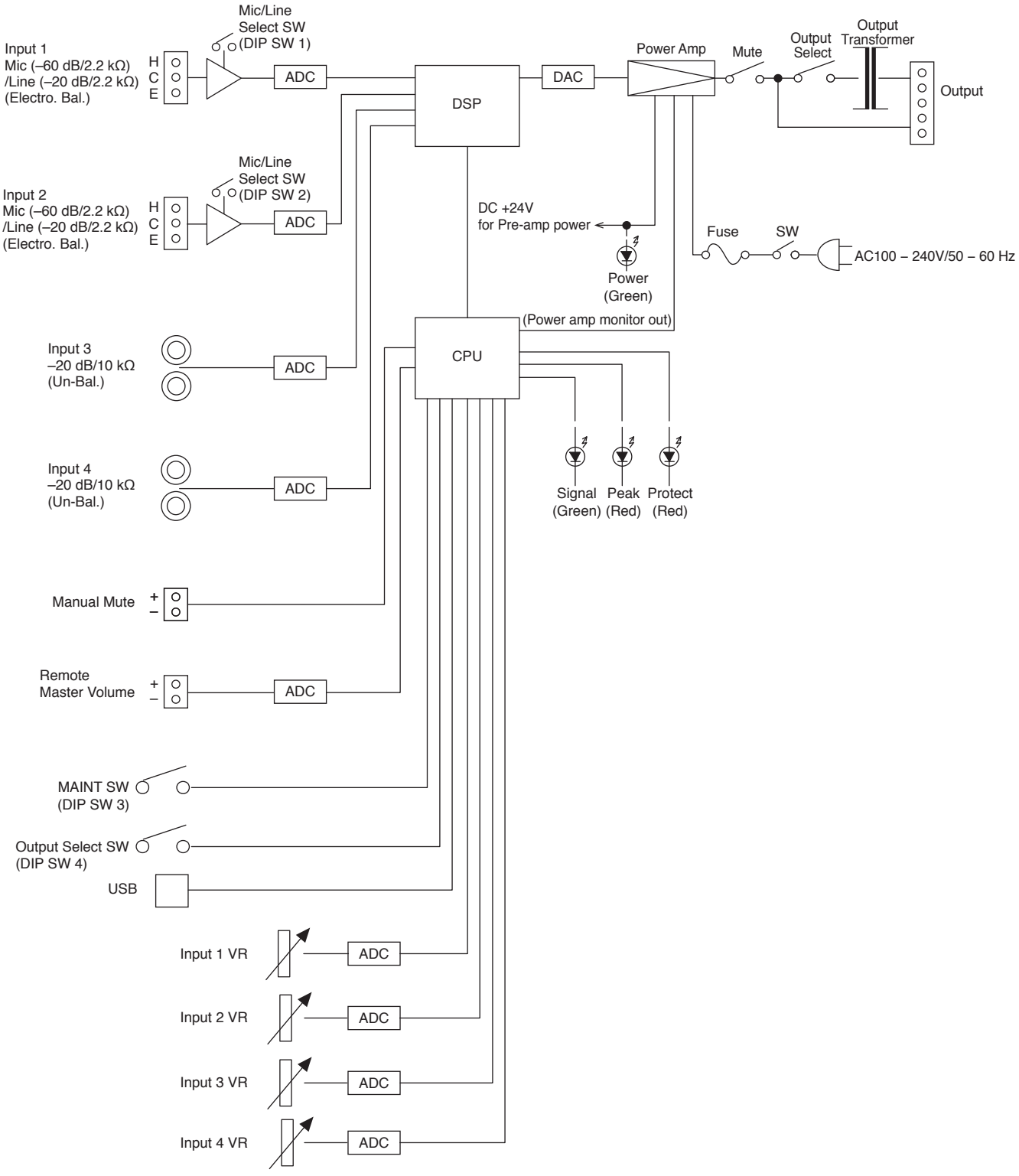
*3 Component parts of MB-15B-J

*4 **Note**
Never use the screws supplied with the MB-15B-J to mount the bracket.
The screws supplied with the MB-15B-J are so long as to damage the internal parts, possibly causing the unit to fail.



Step 3. Lift up the YA-706 until they hold the component, then secure them.

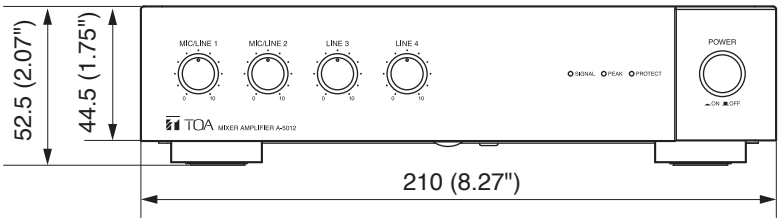
11. BLOCK DIAGRAM



12. DIMENSIONAL DIAGRAM

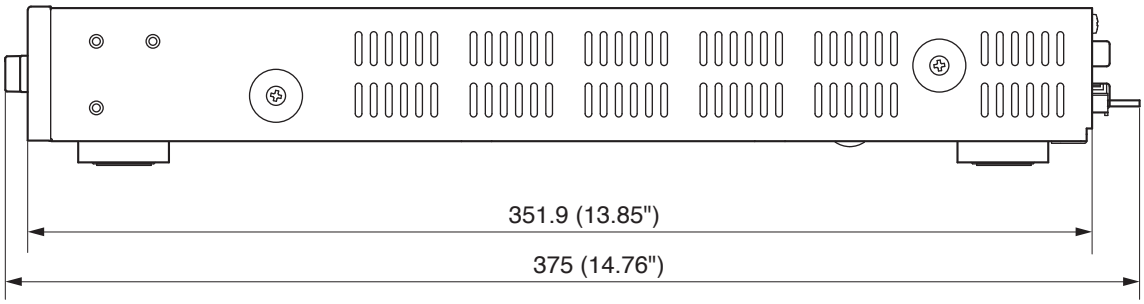
[FRONT]

Unit : mm



The figure shows the A-5012.
The dimensions of A-5006 are same as A-5012.

[SIDE]



13. SPECIFICATIONS

Model No.		A-5006	A-5012
Power Source		100 – 240 V AC, 50/60 Hz	
Rated Output		60 W	120 W
Power Consumption		106 W (rated output), 20 W (based on cULus standards)	207 W (rated output), 39 W (based on cULus standards)
Current Consumption		Max. 2 A	Max. 3 A
Frequency Response		50 Hz – 20 kHz (1/8 rated output)	
Distortion		1% or less (1 kHz, rated output)	
Input	INPUT 1, 2	MIC: –60 dB*/LINE: –20 dB* (MIC/LINE selectable) 2.2 kΩ, electronically-balanced, removable terminal block (5 pins)	
	INPUT 3, 4	LINE: –20 dB*, 10 kΩ, unbalanced, RCA pin jack	
Output	SPEAKER	4 Ω, 70 V (83 Ω), 100 V (170 Ω), removable terminal block (5 pins)	4 Ω, 70 V (42 Ω), 100 V (83 Ω), removable terminal block (5 pins)
Signal to Noise Ratio		MIC 1, 2: 50 dB or more, LINE 1 – 4: 70 dB or more (A-weighted)	
Function		Parametric equalizer: 5 points settable on each input and output 20 Hz – 20 kHz ±15 dB Q: 0.267 – 69.249 Compressor: ON/OFF settable on Inputs 1 and 2 (OFF by default) Threshold, Ratio, Attack time, Release time, and Gain are settable independently on each input.	
Control		Mute control, Remote master volume control, Power ON/OFF switch, Ground lift	
LED Indicator		Power indicator, Signal indicator, Peak indicator, Protect indicator	
Network I/F		100BASE-TX	
Operating Temperature		0 to 40 °C (32 to 104 °F)	
Operating Humidity		35 to 80 %RH (no condensation)	
Finish		Panel: PS resin, black Case: Surface-treated steel plate, black, paint	
Dimensions		210 (w) x 52.5 (h) x 375 (d) mm (8.27" x 2.07" x 14.76")	
Weight		3.6 kg (7.94 lb)	3.9 kg (8.6 lb)

* 0 dB = 1 V

Note: The design and specifications are subject to change without notice for improvement.

• **Accessories**

CD (setting software) 1
Large type removable terminal plug (5 pins) 1
Small type removable terminal plug (5 pins) 2
Machine screw M3 x 10..... 6
Plain washer (for M3) 6
Power supply cord (2 m or 6.56 ft) 1

• **Optional products**

Half width blank panel: MB-15B-BK (for rack mounting 1 unit)
Rack joint bracket: MB-15B-J (for rack mounting 2 units)
Rack runner: YA-706

FCC REQUIREMENTS

Note
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Modifications
Any modifications made to this device that are not approved by TOA Corporation may void the authority granted to the user by the FCC to operate this equipment.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Traceability Information for Europe

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

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

TOA Corporation

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

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