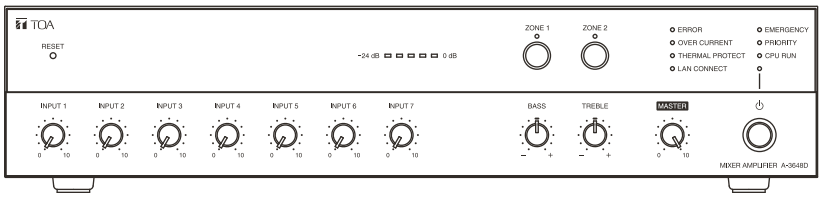
TOA

**OPERATING INSTRUCTIONS**

# MIXER AMPLIFIER

## A-3606D, A-3612D, A-3624D, A-3648D




*The figure represents the A-3648D.*

**About Firmware Upgrade**

The latest firmware is available on the TOA DATA Library (https://www.toa-products.com/international/). Perform a search for the product number "A-3606D, A-3612D, A-3624D, or A-3648D" and download the latest firmware.

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.

## TABLE OF CONTENTS

# 1. 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.

**When Installing the Unit**

- 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.
- Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.
- 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, 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.
- The terminals marked with the symbol ϟ are hazardous live.
  The external wiring to these terminals requires installation by an instructed person.

**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 your nearest TOA dealer.
- 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**

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

**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 optional MB-25B Rack mounting bracket. Prepare them that are appropriate for the equipment rack.

**When the Unit is in Use**

- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.

- 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.

Warning: Operation of this equipment in a residential environment could cause radio interference.

- The socket-outlet shall be installed near the equipment and the plug (disconnecting device) shall be easily accessible.

- The apparatus shall be connected to a mains socket outlet with a protective earthing connection.

## 2. GENERAL DESCRIPTION

TOA's A-3600D Series is a PA amplifier equipped with 4 microphone inputs and 3 auxiliary inputs, and 2-channel zone selector.
In addition to each individual input volume control function, it is equipped with the following functions.

- Priority broadcast function
- Chime function
- Remote confirmation function
- Digital signal processing function

Also, the PFC circuit is provided inside.
The A-3600D Series mixer amplifier is ideal for paging announcement and BGM applications in schools, offices, and super markets.

## 3. FEATURES

- 4 kinds of power amplifier outputs: 60 W (A-3606D), 120 W (A-3612D), 240 W (A-3624D), and 480 W (A-3648D)
- Lightweight owing to the built-in digital power amplifier unit
- Emergency broadcast and priority broadcast activated by way of the control input (contact)
- Voice detection function that allows the priority broadcast to be activated by voice
- Priority setting function
- Remote confirmation function that allows you to confirm the unit's status through the web browser using a PC
- Switchable speaker output
  A-3606D: 8 to 16 Ω or 100 V line
  A-3612D, A-3624D, A-3648D: 4 to 16 Ω or 100 V line
- Zone selection buttons for making broadcasts to 2 zones
- Electronically-balanced 4 microphone inputs (MIC 1 to MIC 4) with input setting switches
- Fine sound adjustment possible by connecting a signal processor like an equalizer between the line output and the power amplifier input
- Bass and treble tone control knobs
- Output level meter
- Master volume control knob to simultaneously adjust all input levels
- Remotely controllable master volume
- Built-in chime unit (1-note chime, 2-note chime, and ascending 4-note chime)
- Equipped with the following signal processing functions:
  FBS (Feedback suppression function), Equalizer (3 points), Gate, Software volume, Limiter, and Ducker

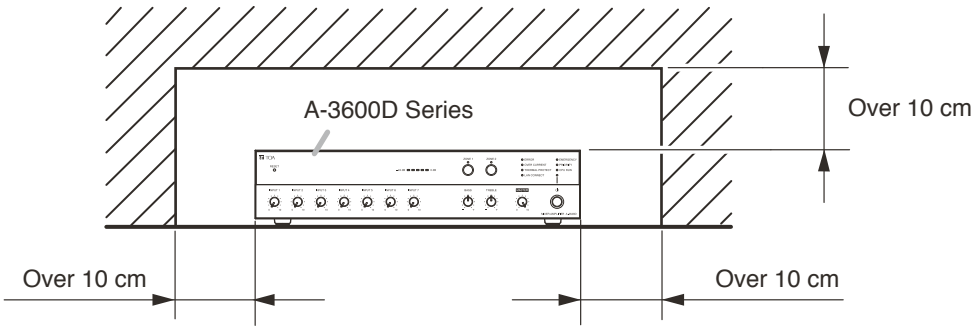
## 4. HANDLING PRECAUTIONS

- In this system, settings and control of the unit are performed on a PC via LAN (Local area network). It is not possible to perform them via the Internet.
- Some operations differ depending on this unit's power ON/OFF state. The table below shows the relationship between the power ON/OFF state and the corresponding operation.

| Power state | LED lighting state | | Normal broadcast | | Priority broadcast/ Emergency broadcast | Web access |
|---|---|---|---|---|---|---|
| | ⏻ | CPU RUN | From Speaker output | From Recording output | | |
| Not energized | Unlit | Unlit | Disabled | Disabled | Disabled | Disabled |
| Energized (Power turned OFF) | Unlit | Lit | Disabled | Disabled | Occasionally possible (Power is temporarily turned ON.) | Enabled |
| Energized (Power turned ON) | Lit | Lit | Enabled | Enabled | Enabled | Enabled |

## 5. INSTALLATION PRECAUTIONS

- The supplied power supply cord is designed for exclusive use with the unit. Never use it with other equipment.
- Install the unit in a well-ventilated environment so that temperature inside the unit will not rise.
- When installing the unit on the desk, keep the unit over 10 cm away from objects that may obstruct air flow as shown below.
- When installing the unit in an equipment rack, mount perforated panels. See "INSTALLING TO AN EQUIPMENT RACK" on p. 21.




## 6. THE DUCKER FUNCTION AND THE PRIORITY BROADCAST FUNCTION

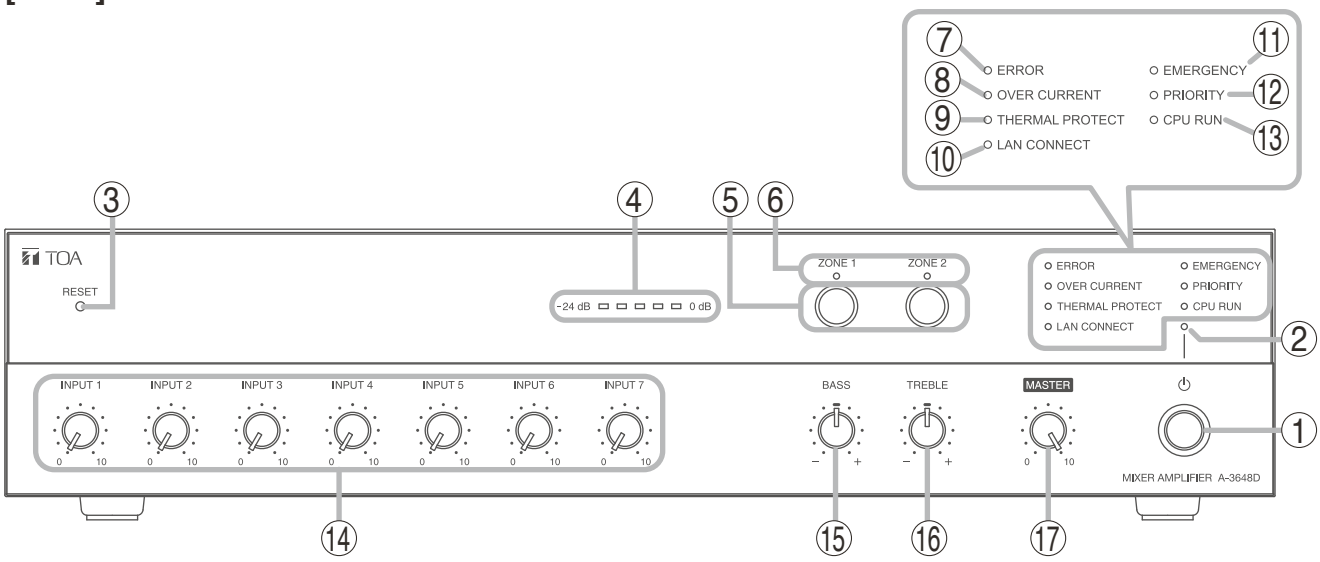
This unit is provided with Ducker function and Priority broadcast function that decrease the output level of other broadcasts while a specific broadcast is being made.

A Ducker function refers to the function to place a priority order between the audio signal groups divided into 2 groups. Use this function to make a simple usage such as to decrease the BGM level when making microphone announcement while the BGM broadcast is in progress.
For the details of the Ducker function, See "DUCKER DEPTH ADJUSTMENT" on p. 19.

A Priority broadcast function is the function to assign one of 6 priority levels to each broadcast content. Use this function to make a complicated usage compared with the Ducker function such as to select the audio signal to mute.
For the details of the Priority broadcast function, See "PRIORITY BROADCAST FUNCTION" on p. 22.

# 7. NOMENCLATURE AND FUNCTIONS

## [Front]




*The figure represents the A-3648D.*

**1. Power switch**

Press this switch to turn on the power. To turn off the power, press this switch again.

**Note**

Operation of the power switch is disabled while the priority broadcast or the emergency broadcast is in progress.

(See "PRIORITY BROADCAST FUNCTION" on p. 22.)

**2. Power indicator (Green)**

Lights when the power is switched on and goes off when it is switched off.

**3. Reset key**

Press this key for 1 second or more to reset the unit.

Use a fine-tipped object to press in this switch.

**Note**

Perform the following steps before pressing the Reset key.

- Turn all volume knobs fully counterclockwise to minimize the volume value.
- Confirm that both the Priority broadcast indicator (12) and the Emergency broadcast indicator (11) are unlit.
- Press the Power switch (1) to turn it OFF.

**4. LED level meter (Green x 3, Orange x 1, Red x 1)**

Displays the output level.

Adjust each volume control knob for an appropriate output sound so that the red indicator does not light.

Operating the unit while the red indicator remains lit causes the sound quality to degrade.

**5. Zone selection buttons**

Select the broadcast zones. Pressing the Zone 1 selection button causes the Zone 1 to be selected, outputting the signals from the zone 1 speaker output terminal (31) on the rear panel.

In the same manner, pressing the Zone 2 selection button causes the Zone 2 to be selected, outputting the signals from the zone 2 speaker output terminal on the rear panel.

**Note**

These buttons are effective only when the output impedance setting switch (32) is set to 100 V line (high impedance).

**6. Zone indicator (Green)**

The indicator of the zone selected by the Zone selection button (5) lights.

**Note**

These indicators work only when the output impedance setting switch (32) is set to 100 V line (high impedance).

**7. Error indicator (Red)**

Lights when the unit's internal abnormality has occurred.

**8. Overcurrent protection indicator (Red)**

Lights while the overcurrent protection circuit is operating if overcurrent flows through the speaker output.

**9. Thermal protection indicator (Red)**

Lights while the internal protection circuit is operating.

**10. Network connection confirmation indicator (Green)**
An indicator to identify the unit using a web browser.
- Flashes for 5 seconds when the identification confirmation is performed using a web browser.
- Flashes 3 times when the unit is started up.
- Lights when in the manual mode.

(See the separate setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).)

**11. Emergency broadcast indicator (Red)**
Lights while the emergency broadcast is in progress. (See "PRIORITY BROADCAST FUNCTION" on p. 22.)

**12. Priority broadcast indicator (Green)**
Lights while the priority broadcast is in progress. (See "PRIORITY BROADCAST FUNCTION" on p. 22.)

**13. CPU running indicator (Green)**
Lights while the CPU is running.

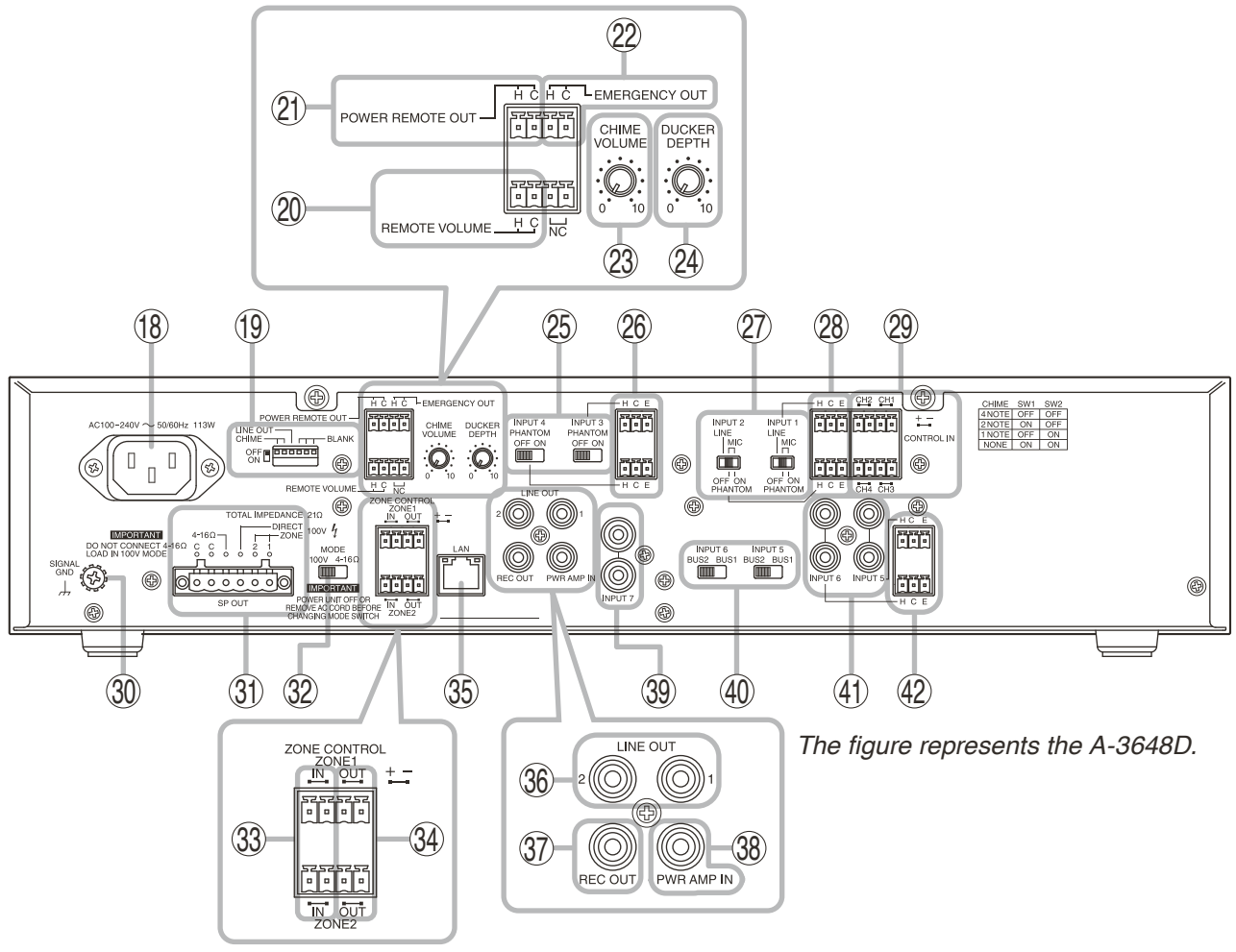
**14. Volume control knobs for Inputs 1 through 7**
Adjust the volume values of the Inputs 1 through 7. Rotate each knob clockwise to increase the volume value and counterclockwise to decrease it. (See "VOLUME ADJUSTMENT" on p. 20.)

**15. Bass control knob**
Rotate the knob clockwise to boost the bass and counterclockwise to cut it.
Setting the knob at the center makes the frequency characteristic flat.

**16. Treble control knob**
Rotate the knob clockwise to boost the treble and counterclockwise to cut it.
Setting the knob at the center makes the frequency characteristic flat.

**17. Master volume control knob**
Adjusts all the volume levels simultaneously. Rotate the knob clockwise to increase the whole volume level and counterclockwise to decrease it. (See "VOLUME ADJUSTMENT" on p. 20.)

## [Rear]




*The figure represents the A-3648D.*

**18. AC inlet**

Connect the supplied power cord to this receptacle.

> **⚠ WARNING**
>
> Be sure to use the supplied power cord. Using any other power cord may cause electric shock.

**19. DIP switch**

- **Switches 1 and 2 (Chime tone setting switch)**
  Set the chime tone to be used.
  (See "Chime Tone Setting" on p. 19.)
- **Switch 3 (Line output interlock switch)**
  Sets an interlock between the zone selection and the line output.
  (See "Line Output Interlock Switch Setting" on p. 19.)
- **Switches 4 through 6**
  Not used.

**20. Remote master volume control terminal**

Short-circuit current: 10 mA or less, open voltage : 35 V DC or less, removable terminal block (3.50 mm, 4 pins)
Sound volume can be adjusted by connecting the 10 kΩ B-taper potentiometer.
(See "Connecting to the Remote Master Volume Control Terminal" on p. 15.)

**21. Power remote control output terminal**

Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less, removable terminal block (3.50 mm, 4 pins)
An output terminal that can be used for remote control of other equipment. Operates in synchronization with the unit's power ON/OFF. When the unit's power is on, it is activated.

**22. Emergency control output terminal**

Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less, removable terminal block (3.50 mm, 4 pins)
An output terminal that can be used for remote control of other equipment.
It is activated during the emergency broadcast made from the unit.

**23. Chime volume control knob**

Adjusts the chime volume.
Rotate the knob clockwise to increase the chime volume and counterclockwise to decrease it.

**24. Ducker depth control knob**

Adjusts the automatically attenuated level of the sound volume on the BUS 2 while the broadcast is being made using the BUS 1.
Rotate the knob clockwise to increase the attenuation on the BUS 2 and counterclockwise to decrease it. (See "DUCKER DEPTH ADJUSTMENT" on p. 19.)

**25. Input setting switches (Inputs 3 and 4)**

Set whether or not to supply phantom power to the microphones connected to Inputs 3 and 4 (26).

**Tip**
Phantom power is a 24 V DC.

**26. Input terminals (Inputs 3 and 4)**

–60 dB*, 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)
Input terminals dedicated for microphones

**27. Input setting switches (Inputs 1 and 2)**

Set the input sensitivity level (LINE or MIC) of the Inputs 1 and 2 (28). When switched to the microphone input, set the phantom power to ON or OFF.

| Switch position | | Input specification at the time of setting |
|---|---|---|
| MIC | PHANTOM ON | –60 dB*, 600 Ω, phantom power ON |
| | PHANTOM OFF | –60 dB*, 600 Ω, phantom power OFF |
| LINE | | –20 dB*, 600 Ω, with no phantom power |

**Tip**
Phantom power is a 24 V DC.

**28. Input terminals (Inputs 1 and 2)**

–20 dB* (LINE)/-60 dB* (MIC), 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)
Input sensitivity can be switched either to the Line input sensitivity or the Microphone input sensitivity.
The input sensitivity can be changed with the Input setting switch (27).

**29. Control input terminals (Control inputs 1 through 4)**

Short-circuit current: 10 mA or less, open voltage: 35 V DC or less, Removable terminal block (3.81 mm, 4 pins)
Input the control signals for controlling the priority broadcast.
While the terminals are closed, the corresponding trigger of the priority broadcast becomes input state.

**30. Functional ground terminal**

Noise may be generated when external equipment is connected to the unit. In this case, connect this terminal to the functional ground terminal of the external equipment, and the noise may be reduced.

**Note**
This ground is not for protective ground.

* 0 dB = 1 V

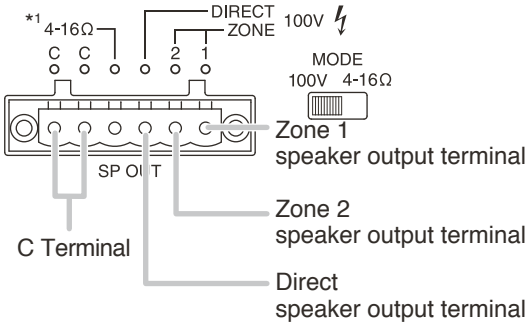
**31. Speaker output terminal**

Removable terminal block (5.00 mm, 6 pins)

Outputs the audio signals of the MAIN output or power amplifier output. (See "BLOCK DIAGRAM" on p. 30.)

When the Zone 1 is selected, audio signals are output from the Zone 1 speaker output terminal. In the same manner, when the Zone 2 is selected, audio signals are output from the Zone 2 speaker output terminal.

When set to High impedance, audio signals are always output from the Direct speaker output terminal regardless of the Zone selection button setting.




The table below shows the specifications of each output.

| | A-3606D | A-3612D | A-3624D | A-3648D |
|---|---|---|---|---|
| Rated output | 60 W | 120 W | 240 W | 480 W |
| Low impedance | 8 to 16 Ω | 4 to 16 Ω | | |
| High impedance (100 V line) | 170 Ω | 83 Ω | 42 Ω | 21 Ω |

**Notes**

- Never use the low impedance and high impedance terminals simultaneously. Doing so may cause damage to the unit or the peripheral equipment.
- Never make connection to low impedance terminal when the Impedance setting switch (32) is set to 100 V.

**Tip**

To change impedance between high and low, use the Impedance setting switch (32).

**32. Impedance setting switch**

Changes the speaker output impedance either to low or high.

100 V: High impedance
4 – 16 Ω*1: Low impedance

**Notes**

- Make sure that the power is switched OFF before changing this switch setting. Change cannot be performed when the power is on.
- The impedance remains as it is even if you change the switch setting when the power is ON. However, the impedance will change when you turn the power ON again after turning the power OFF.

**33. Zone control input terminals**

Short-circuit current: 10 mA or less, open voltage: 35 V DC or less, Removable terminal block (3.81 mm, 4 pins)

Input the control signals for selecting zones. While the terminals are closed, the corresponding zone becomes in selected state, disabling operation of the Zone selection button(5).

**Note**

Zone control is effective only when the output impedance setting switch (32) is set to 100 V line (high impedance).

**34. Zone control output terminals**

Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less, Removable terminal block (3.81 mm, 4 pins),

Output terminals for using the remote control of other equipment. The terminal corresponding to the selected zone is closed.

**Note**

Zone control is effective only when the output impedance setting switch (32) is set to 100 V line (high impedance).

**35. Network terminal**

RJ45 jack

Connect this terminal to the 100BASE-TX network using a STP Category 5 or greater straight through cable. A PC can be connected directly to this terminal without using a hub.

**36. Line output jacks 1 and 2**

0 dB*2, 600 Ω, unbalanced type, RCA pin jack x 2

Can be interlocked with the zone selection state. Signals are output from the Line output jacks 1 and 2 regardless of the zone selection when the Line output selection interlock is set to OFF. With the Line output interlock set to ON, the signals are output from the Line output jack 1 when the Zone 1 is selected, and from the Line output jack 2 when the Zone 2 is selected.

Use the DIP switch (19) to make the interlock setting.

**37. Recording output jack**

0 dB*2, 600 Ω, unbalanced type, RCA pin jack

Outputs the audio signals of the SUB output. (See "BLOCK DIAGRAM" on p. 30.)

Used to record the broadcast contents by connecting the external recording device to this jack.

*1 In case of the A-3606D: 8 – 16 Ω
*2 0 dB = 1 V

**38. Power amplifier input jack**

0 dB*, 600 Ω, unbalanced type, RCA pin jack

Input the output of the signal processor or other devices connected to the line output jack. (See "Connecting the External Equipment between the Line Output and the Power Amplifier" on p. 17.)

Connecting a pin plug to this jack disconnects the power amplifier section from the preamplifier section inside the unit.

**39. Input 7 jacks**

–20 dB*, 10 kΩ, unbalanced type, RCA pin jack x 2

Input jacks dedicated for LINE

**40. BUS setting switches**

Set which to send the audio signals input from the Inputs 5 and 6 to the BUS 1 or 2 using the slide switches.

(See "BLOCK DIAGRAM" on p. 30.)

| Output destination selection switch | Usable input terminal |
|---|---|
| BUS 1 | BUS 1 input terminal (Removable terminal block) |
| BUS 2 | BUS 2 input terminal (RCA pin jack x 2) |

**41. Input terminals dedicated for BUS 2 (Inputs 5 and 6)**

–20 dB*, 10 kΩ, unbalanced type, RCA pin jack x 2

To use these jacks, select "BUS 2" with the BUS setting switches (40).

(See "BLOCK DIAGRAM" on p. 30)

**42. Input terminals dedicated for BUS 1 (Inputs 5 and 6)**

–60 dB*, 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)

To use these terminals, select "BUS 1" with the BUS setting switches (40).

(See "BLOCK DIAGRAM" on p. 30.)

* 0 dB = 1 V

# 8. CONNECTIONS

External cable wiring must be only carried out by qualified and trained personnel.

## 8.1. Speaker Connection

For cable wiring to the removable terminal block, refer to p. 18.

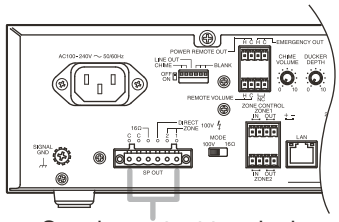
**Notes**

- Never make connection to both 4 – 16 Ω* (low impedance) and 100 V line (high impedance) terminals simultaneously.
- Never make connection to 4 – 16 Ω* terminal when the Impedance setting switch is set to 100 V.

**Tips**

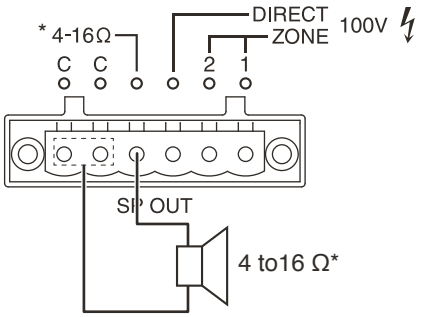
- Either C terminal can be used for connection.
- Recommended speaker cable is IV or HIV cable with thickness described below.
  Solid copper cable: ø0.32 – 2.0 mm
  Stranded copper cable: 0.05 – 3.3 mm (AWG 30 – 12)

A-3606D/3612D/3624D/3648D

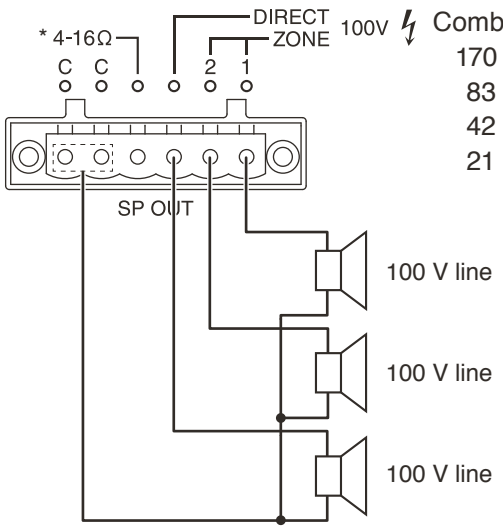


Speaker output terminal

**[Low impedance connection]**




**[High impedance connection]**



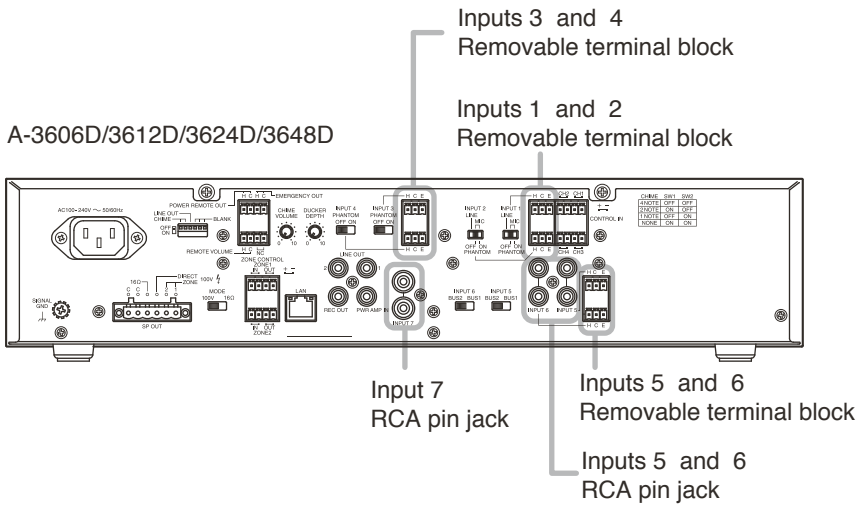

Combined impedance:
170 Ω (A-3606D)
83 Ω (A-3612D)
42 Ω (A-3624D)
21 Ω (A-3648D)

For the audio output at high impedance application setting, refer to "31. Speaker output terminal" on p. 10.

* In case of the A-3606D: 8 – 16 Ω

## 8.2. Input Terminal Connections and Settings

### 8.2.1. Connections

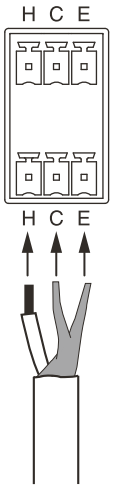



The terminal used for each of the Inputs 5 and 6 differs depending on the Input setting switch (Refer to the next page.).
Connect the cable to the correct terminal according to the input terminal to use.

**[Inputs 1 through 6 (Inputs 5 and 6 connections are for routing to BUS 1)]**

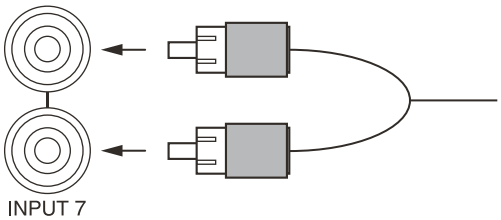
(When connecting a 2-core shielded cable)


(When connecting a single core shielded cable)




For cable wiring to the removable terminal plug, refer to p. 18.

**[Inputs 5 through 7 (Inputs 5 and 6 connections are for routing to BUS 2)]**



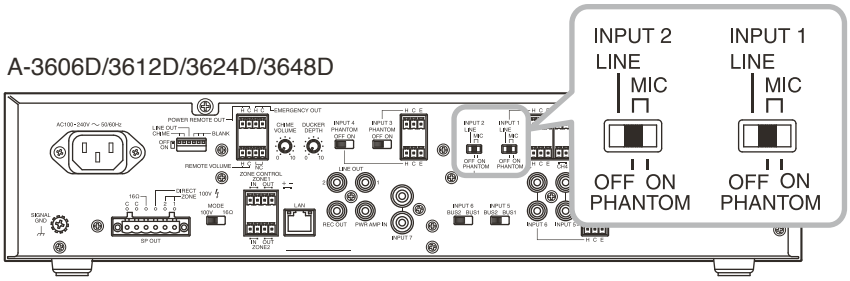
### 8.2.2. Inputs 1 through 6 settings

Each of Inputs 1 through 6 has its own setting switch corresponding to each input. Perform their settings as shown below as needed.

**[Inputs 1 and 2]**

Set the sound source level to connect and whether or not to use the phantom power when the microphone input is selected.

A-3606D/3612D/3624D/3648D

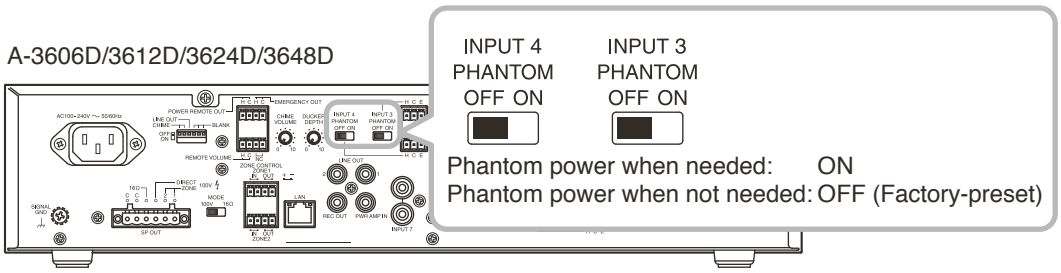



| Input sound source | Switch position | Input specification |
|---|---|---|
| Line level | LINE | –20 dB*, 600 Ω |
| Microphone level, phantom power not required | MIC – PHANTOM OFF (Factory-preset) | –60 dB*, 600 Ω |
| Microphone level, phantom power required | MIC – PHANTOM ON | –60 dB*, 600 Ω |

**[Inputs 3 and 4]**

Set whether or not to use phantom power on the Inputs 3 and 4 (dedicated microphone inputs).

A-3606D/3612D/3624D/3648D

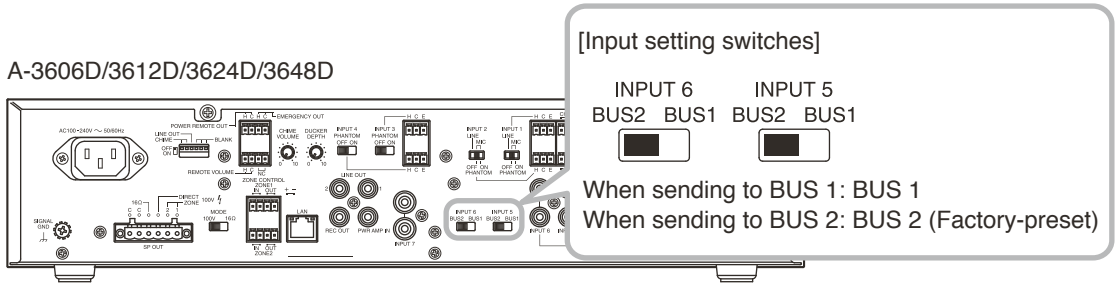



Input specifications: –60 dB*, 600 Ω, electronically balanced

**[Inputs 5 and 6]**

Set which to send the input audio signals to BUS 1 or BUS 2.
Operation when the ducker function works is different between BUS 1 and BUS 2.
(Refer to "DUCKER DEPTH ADJUSTMENT" on p. 19.)

A-3606D/3612D/3624D/3648D



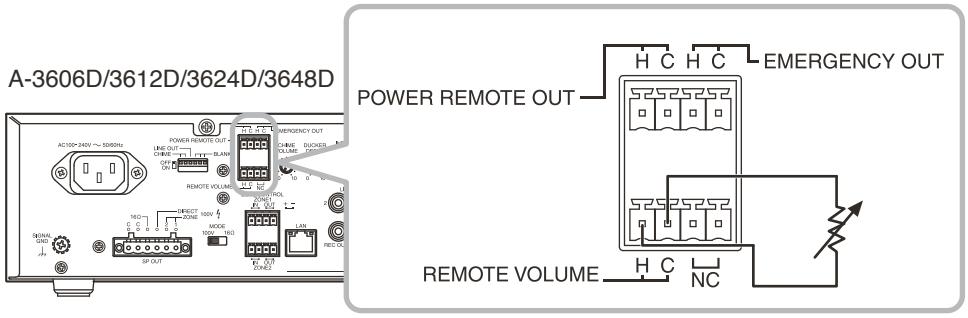

Input specifications: –60 dB*, 600 Ω, electronically balanced, removable terminal block (3.81 mm, 3 pins) (when outputting to BUS 1)
–20 dB*, 10 kΩ, unbalanced, RCA pin jack (when outputting to BUS 2)

* 0 dB = 1 V

## 8.3. Connecting to the Remote Master Volume Control Terminal

You can adjust the volume level by remote control when an external volume control is connected to the unit. To remotely control the volume level, adjust the unit's volume level with the master volume control knob in advance. The level adjusted with the master volume control knob is the maximum volume level that you can remotely control.
For cable wiring to the removable terminal plug, refer to p. 18.

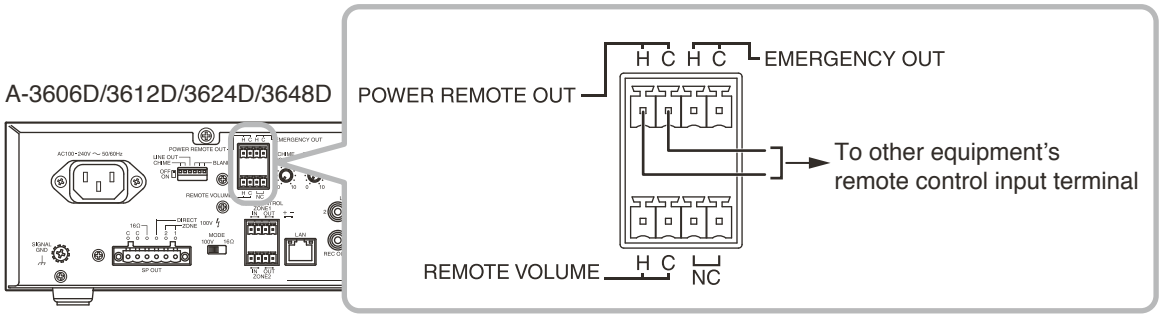
**Note**
Never set the master volume control knob to the minimum position. If set to the minimum, no sound is output even if you maximize the volume level through this terminal.
(Refer to "VOLUME ADJUSTMENT" on p. 20.)




Connectable volume controller: 10 kΩ B-taper potentiometer

## 8.4. Connecting to the Power Remote Control Output Terminal

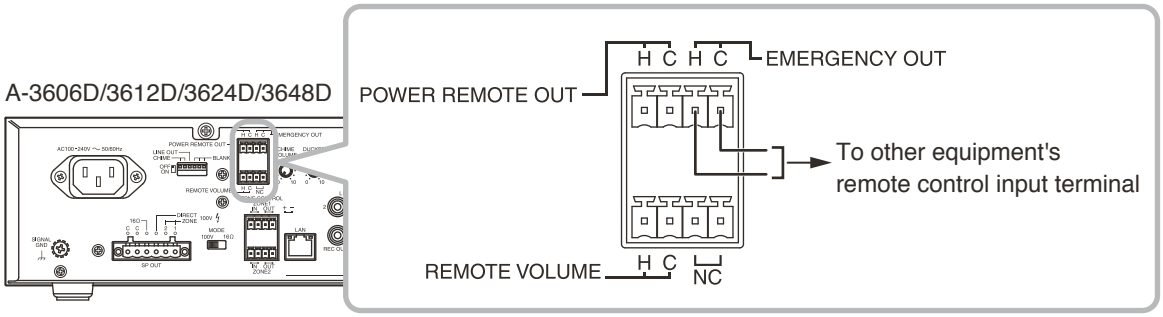
Use this terminal when remotely controlling other equipment. This terminal is activated when the unit is turned ON.
For cable wiring to the removable terminal plug, refer to p. 18.




Output specifications: Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less

## 8.5. Connecting to the Emergency Control Output Terminal

Use this terminal when remotely controlling other equipment. This terminal is activated while the emergency broadcast is in progress from this unit.
For cable wiring to the removable terminal plug, refer to p. 18.



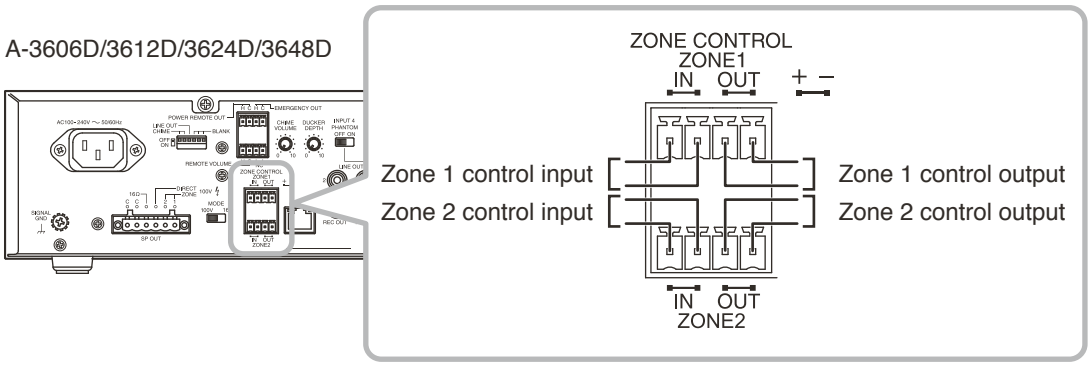

Output specifications: Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less

## 8.6. Connecting to the Zone Control IN/OUT Terminal

Zone can be selected by a control signal (make contact).
These terminals also output a control signal (logic low) when the zone is in selected state. They can be used for remotely controlling other equipment.

**Note**
Zone control is effective only when the output impedance setting switch is set to 100 V line (high impedance).

For cable wiring to the removable terminal plug, refer to p. 18.

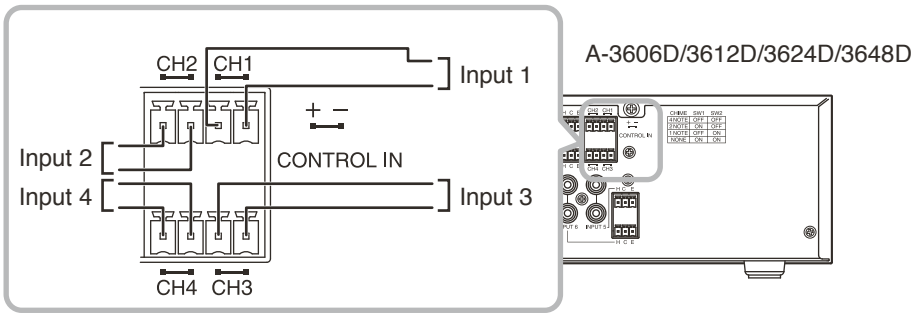



Control input signal specifications: Short-circuit current: 10 mA or less, open voltage: 35 V DC or less
Control output signal specifications: Open collector output, withstand voltage: 30 V DC or less, current: 25 mA or less

## 8.7. Connecting to the Control Input Terminal

Priority broadcast can be controlled by inputting the contact signal to these terminals.
For the priority setting, refer to the separate setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

For cable wiring to the removable terminal plug, refer to p. 18.



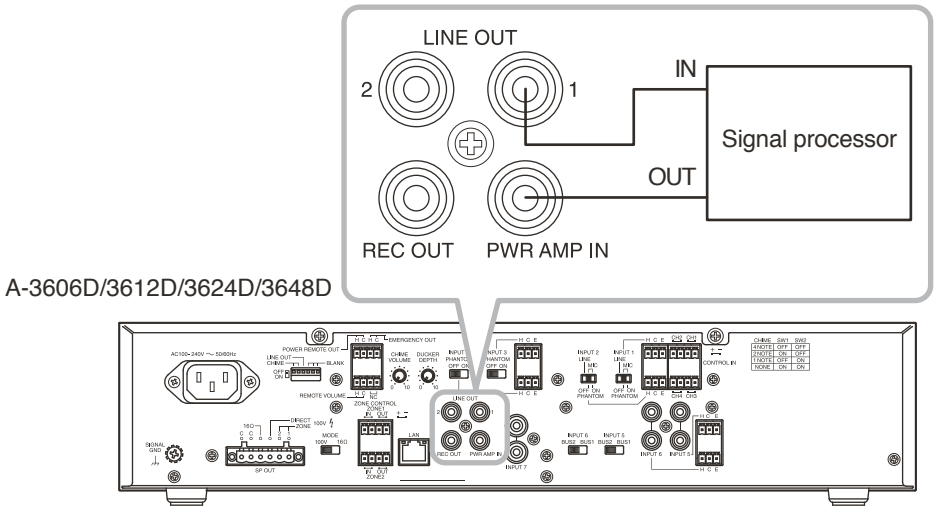

Input signal specifications: Short-circuit current: 10 mA or less, open voltage: 35 V DC or less

## 8.8. Connecting the External Equipment between the Line Output and the Power Amplifier

Appropriate sound can be obtained by connecting a signal processor like an equalizer or limiter between the unit's preamplifier section (Line output jack) and the power amplifier section (Power amplifier input jack).

**Notes**
- When using the signal processor, be sure to turn OFF the unit's line output interlock switch.
- Inserting a pin plug into the unit's power amplifier input jack disconnects the preamplifier section from the power amplifier section inside the unit.

**Tip**
Either Line output 1 or 2 can be used.




Line output specifications: 0 dB*, 600 Ω, unbalanced, RCA pin jack
Power amplifier input specifications: 0 dB*, 600 Ω, unbalanced, RCA pin jack

* 0 dB = 1 V

## 8.9. Removable Terminal Plug Connection

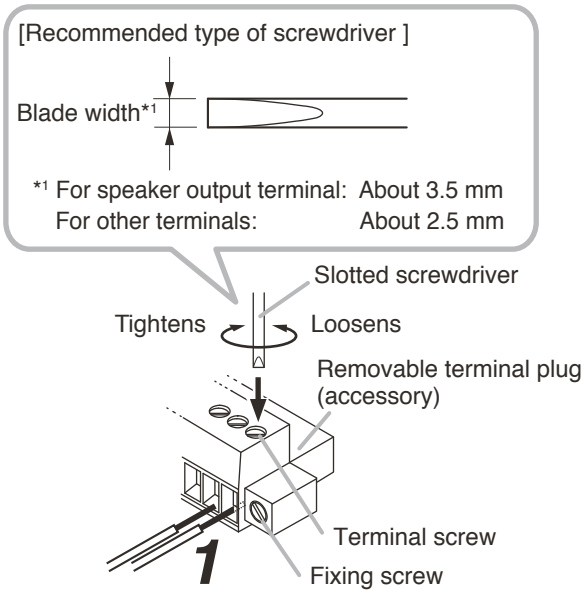
**Step 1.** Wiring the supplied removable terminal plug.

**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.** Only when the fixing screw is inserted, 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.

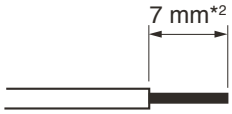
**Tips**

- Applicable cable size

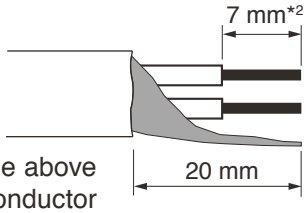
| | For speaker output terminal | For other terminals |
|---|---|---|
| Conductor cross-section area | 0.05 – 3.3 $mm^2$ | 0.08 – 2.0 $mm^2$ |
| AWG | AWG 30 – 12 or equivalent | AWG 28 – 14 or equivalent |

- Cable sheath to trim

Solid cable and stranded cable




Shielded cable




*2 Expose 8 mm 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

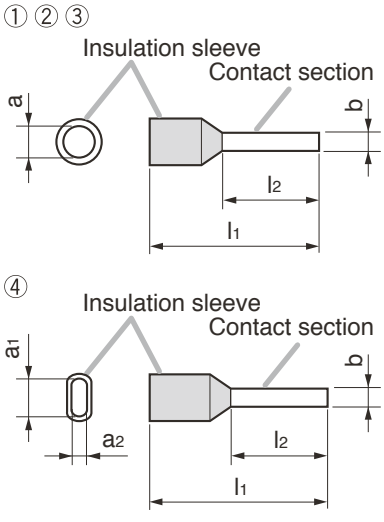
| | Model Number | a | b | $l_1$ | $l_2$ |
|---|---|---|---|---|---|
| ① | AI 0,34-8 TQ | 2 | 0.8 | 12.5 | 8 |
| ② | AI 0,5-8 WH | 2.5 | 1.1 | 14 | 8 |

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

Unit: mm

| | Model Number | a | $a_1$ | $a_2$ | b | $l_1$ | $l_2$ |
|---|---|---|---|---|---|---|---|
| ③ | AI 1,5-8 BK | 3.4 | — | — | 1.8 | 14 | 8 |
| ④ | AI-TWIN 2 x 1,5-8 BK | — | 6.6 | 3.6 | 2.3 | 16 | 8 |

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

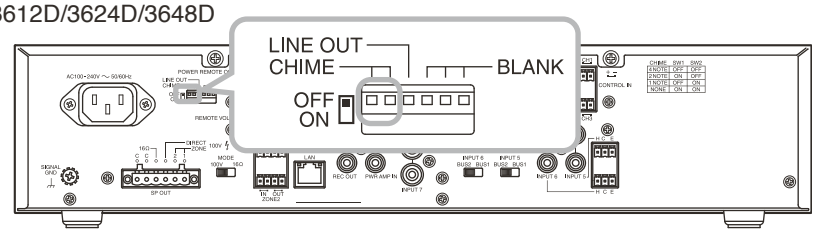


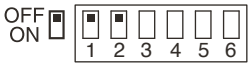
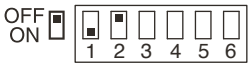
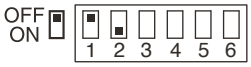
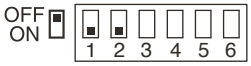
# 9. SETTINGS

## 9.1. Chime Tone Setting

Set the chime tone to use with the DIP switches 1 and 2.

A-3606D/3612D/3624D/3648D



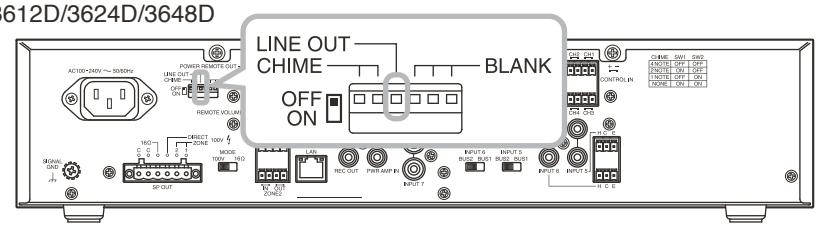

| Chime tone to use | Switch 1 | Switch 2 | Switch's figures |
|---|---|---|---|
| 4-note (Factory-preset) | OFF | OFF |  |
| 2-note | ON | OFF |  |
| 1-note | OFF | ON |  |
| Not used | ON | ON |  |



## 9.2. Line Output Interlock Switch Setting

Set the interlock between zone selection and line output using Switch 3 of the DIP switch.

A-3606D/3612D/3624D/3648D




OFF: Signals are output from the Line output jacks 1 and 2 regardless of zone selection. (Factory-preset)
ON: Signals are output from the Line output jack 1 when the Zone 1 is selected and from the Line output jack 2 when the Zone 2 is selected.

# 10. DUCKER DEPTH ADJUSTMENT

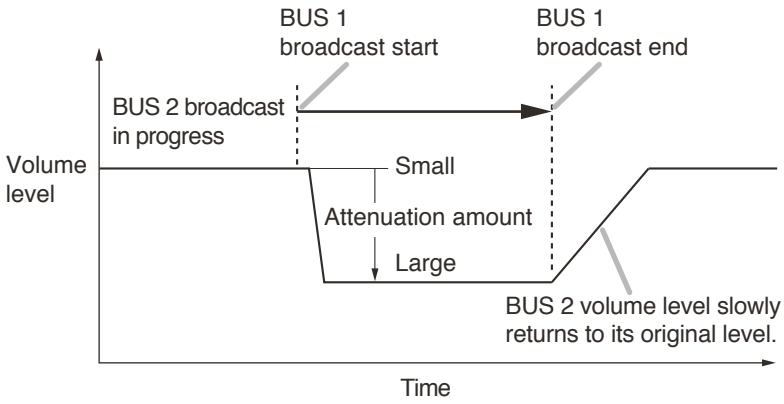
The unit is equipped with Ducker function. When broadcast is made through BUS 1, the volume level of the audio signals input to BUS 2 is automatically attenuated.

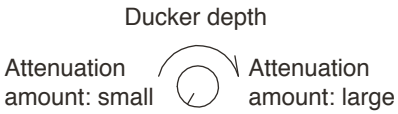
Each input is sent to either BUS 1 or BUS 2 as shown below.

| Input No. | Input destination |
|---|---|
| Inputs 1 through 4 | BUS 1 |
| Inputs 5 and 6 | BUS 1 or BUS 2 selectable |
| Input 7 | BUS 2 |

Attenuation amount can be adjusted with the Ducker depth control knob. Rotate the knob clockwise to increase the attenuation amount and counterclockwise to decrease it.

When signals stop entering BUS 1, the volume level on BUS 2 automatically returns to its original level. (Refer to "BLOCK DIAGRAM" on p. 30.)



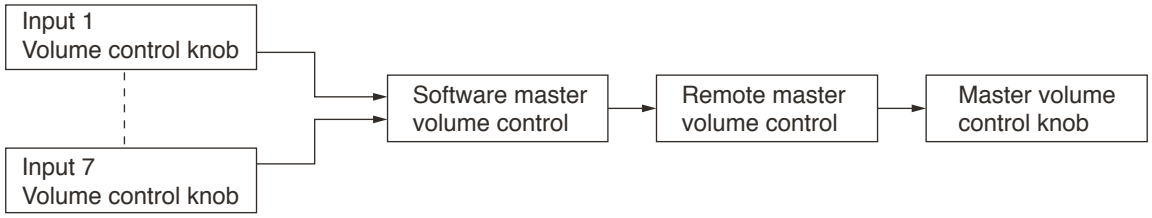




**Note**
When the knob is rotated fully counterclockwise, the volume level of BUS 2 signals such as BGM will not decrease.

## 11. VOLUME ADJUSTMENT

The unit's volume value can be adjusted in 4 steps with the different means as described below.

- Inputs 1 to 7 volume control knobs
- Software master volume control
- Remote master volume control
- Master volume control knob




If any one of the volume controls is set to the minimum, no sound is output even if other volume control is set to the maximum. If you intend to adjust the volume value with the Software master volume control*1 or the Remote master volume control (see p. 15), adjust the volume value using the master volume control knob in advance. The value adjusted with the master volume control knob is the adjustable upper limit.
When set to the Emergency broadcast, the broadcast is made at the maximum level regardless of the set values of the master volume, software master volume, and remote master volume*2. Also, the chime is sounded at the maximum volume, and the characteristics of the EQ, tone control, and bass control are made flat.

The front-mounted emergency broadcast indicator lights during emergency broadcast, making the Emergency control output terminal closed.

*1 Adjust the Software master volume control using the browser. For details, refer to the separate setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).
*2 Volume control knobs for each input remain effective.

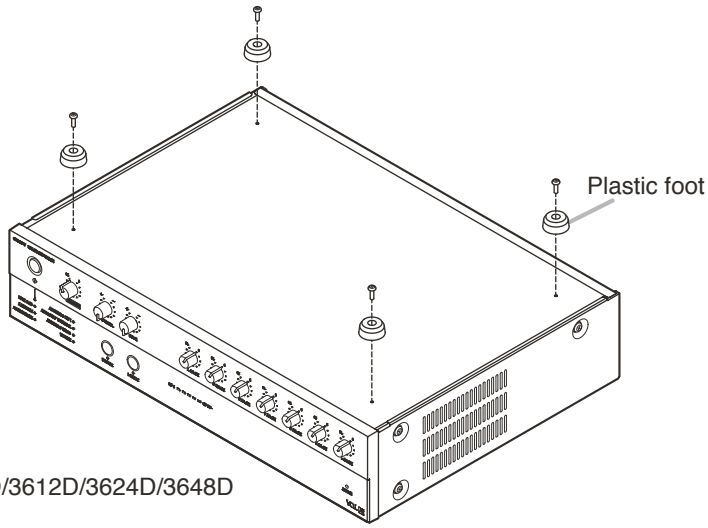
## 12. SPEAKER ZONE SELECTION

Pressing the unit's front-mounted Zone 1 selection switch or inputting the control signal to the Zone 1 control input terminal allows the Zone 1 indicator to light and the broadcast to be output from the speakers connected to the rear-amounted Zone 1 speaker output terminal. Concurrently, the control signal is output from the Zone 1 control output terminal.
Operation in the case of Zone 2 is the same as above.

**Note**
Speaker zone control is effective only when the impedance setting switch (p. 10) is set to 100 V line (high impedance).
When set to High impedance, audio signals are always output from the Direct speaker output terminal regardless of the Zone selection button setting.

## 13. INSTALLING TO AN EQUIPMENT RACK

When installing the unit to an equipment rack, remove the four plastic feet screwed on the unit's base as shown below.

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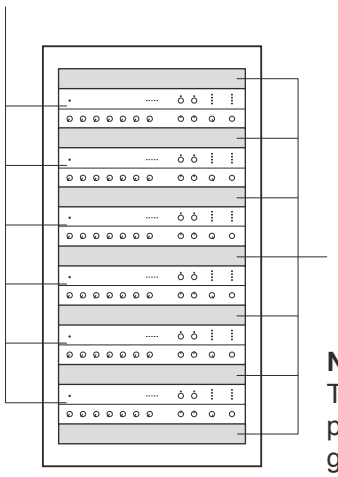
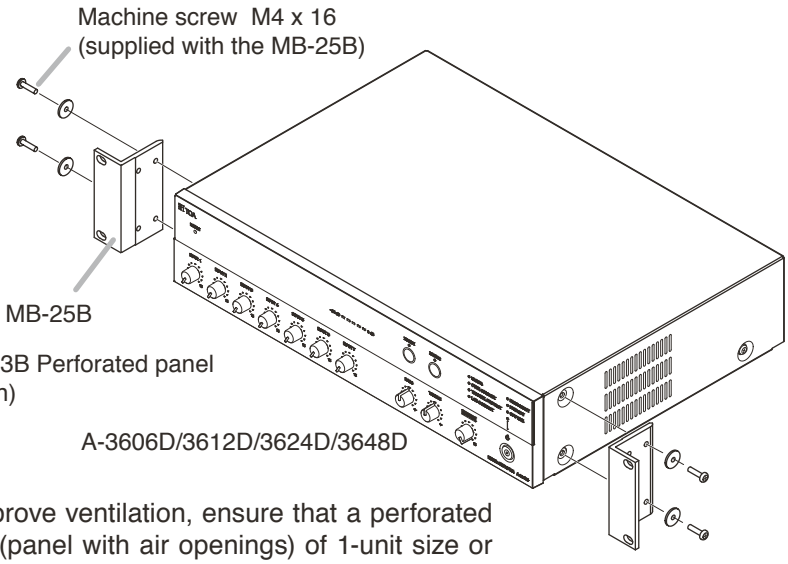
When installing the unit to an equipment rack, use the optional MB-25B Rack mounting bracket.

**⚠ CAUTION** Rack-mounting screws are not supplied with the optional MB-25B Rack mounting bracket. Prepare them that are appropriate for the equipment rack.

A-3606D/3612D/3624D/3648D






**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.

## 14. CONTROL SETTINGS

Output levels are adjustable with individual volume controls. For music play or announcements, adjust the corresponding volume control so that the red indicator doesn't light. Note that the sound quality is downgraded when the red indicator remains lit.

To prevent the accidental change of the settings of input volume and tone (Bass and Treble) controls, remove their knobs after setting them to the desired position and attach the supplied volume control covers instead.

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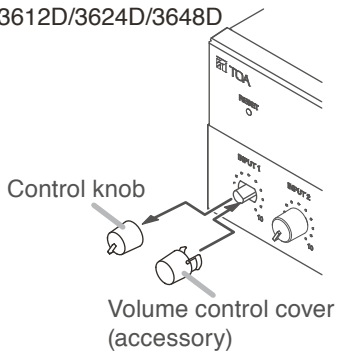


# 15. PRIORITY BROADCAST FUNCTION

Perform the settings related to the priority broadcast using a web browser. For details, refer to the separate setup manual which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

## 15.1. Priority Broadcast

Priority broadcast function refers to a function that mutes the designated audio signal by means of the control signal or audio signal as a trigger when it is input.
One of 6 priority levels can be assigned to the signal that works as a trigger. When multiple triggers are input, the one with higher priority assigned takes precedence.
The Priority broadcast indicator on the front panel is lit while the priority broadcast is in progress.

Two modes are available for the priority broadcast: Standard mode and Manual mode. The unit will start in Standard mode when energized.
The mode can be changed using the web browser. For details, refer to the separate setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

## 15.2. Priority Broadcast Mode

### 15.2.1. Standard mode

When making the priority broadcast in Standard mode, the following 6 signals can be used as triggers to activate the priority broadcast.

- Control inputs 1 through 4 (contact)
- Audio detections 1 and 2 (audio input to Inputs 1 and 2)

The table below shows the difference between the control input and the audio detection.

| | Signal that functions as a trigger | Input that can be muted | Settable broadcast | Power on in power off state | Use of chime |
|---|---|---|---|---|---|
| Control input | Contact inputs (Contacts 1 through 4) | Inputs 1 through 7 | Emergency broadcast Priority broadcast | Enabled | Enabled |
| Audio detection | Audio inputs (Inputs 1 and 2) | Input other than the one set to audio detection | Priority broadcast | Disabled | Disabled |

You can edit the following items related to the priority broadcast on the browser for each trigger. Designated audio signals can be muted in the case of normal broadcast that is not activated by any trigger. For details, refer to the separate

setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

| Item | Setting contents |
|---|---|
| Valid/Invalid | When set to "Valid," priority broadcast will start if the corresponding trigger is input. |
| Priority level | • You can set 6 different levels of priority. However, you cannot assign the same priority level to the multiple triggers. It means only 1 priority level can be assigned to a single trigger.<br>• A trigger with the highest priority level assigned can be set to emergency broadcast.<br>**Note**<br>Emergency broadcast can be assigned only to the control input.<br>• If a higher-priority trigger is input while a priority broadcast is in progress, the higher-priority broadcast takes precedence, overriding the current broadcast.<br>• If a lower-priority trigger is input while a priority broadcast is in progress, the lower-priority trigger is ignored. |
| Chime ON/Chime OFF | Sounds the set chime when the trigger set to "Chime ON" is input.<br>However, no chime sounds when the trigger is ignored.<br>**Note**<br>Chime can be assigned only to the control input. |
| Input to be muted/<br>Input not to be muted | Mutes the input set to "Input to be muted" when the priority broadcast is activated.<br>**Note**<br>It may take a few seconds before the volume level returns to the original level after mute is released. |

**Note**
If the lower priority trigger that is so set to sound a chime is kept applied when the higher priority trigger stops, the chime will not sound even when the broadcast is switched to the lower priority one.

### 15.2.2. Manual mode

The designated audio signal can be muted from the browser in Manual mode.
Use this mode to check the device operation. (See the separate setup manual*.)
The unit's Network connection confirmation indicator lights in the manual mode.

* Can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

## 15.3. Emergency Broadcast

You can set the priority broadcast with the highest priority level to the emergency broadcast.
When set to the Emergency broadcast, the broadcast is made at the maximum level regardless of the set values of the master volume, software master volume, and remote master volume*. Also, the chime is sounded at the maximum volume, and the characteristics of the EQ, tone control, and bass control are made flat.
The front-mounted emergency broadcast indicator lights during emergency broadcast, making the Emergency control output terminal closed.

* Volume control knobs for each input remain effective.

**Note**
Priority broadcast activated by way of the audio detection cannot be set to emergency broadcast.

## 15.4. Normal Broadcast

The broadcast that stays in the state where the unit's power is ON with no trigger input is referred to as the Normal broadcast.

**Note**
Chime at normal broadcast cannot be set to ON.

## 15.5. Relationship between Priority Broadcast by Control Input/Emergency Broadcast and Power On/Off

**[When this unit is in power OFF state]**
- This unit is turned ON when the Priority or Emergency broadcast starts.
- Even if you attempt to turn OFF the power* while the Priority or Emergency broadcast is in progress, this operation is invalid.
- This unit will be turned OFF when the Priority or Emergency broadcast terminates. However, if the higher priority broadcast by audio detection overlaps, the power will be turned OFF after this priority broadcast by audio detection is terminated.

**[When this unit is in power ON state]**
- This unit remains in power ON state regardless whether the Priority or Emergency broadcast starts or terminates.
- Even if you attempt to turn OFF the power* while the Priority or Emergency broadcast is in progress, this operation is invalid.

* Refers to the operation of pressing this unit's front-mounted power switch or clicking the Power ON checkbox to uncheck on the browser screen.

## 15.6. Factory Default Settings

**[Factory default setting list]**

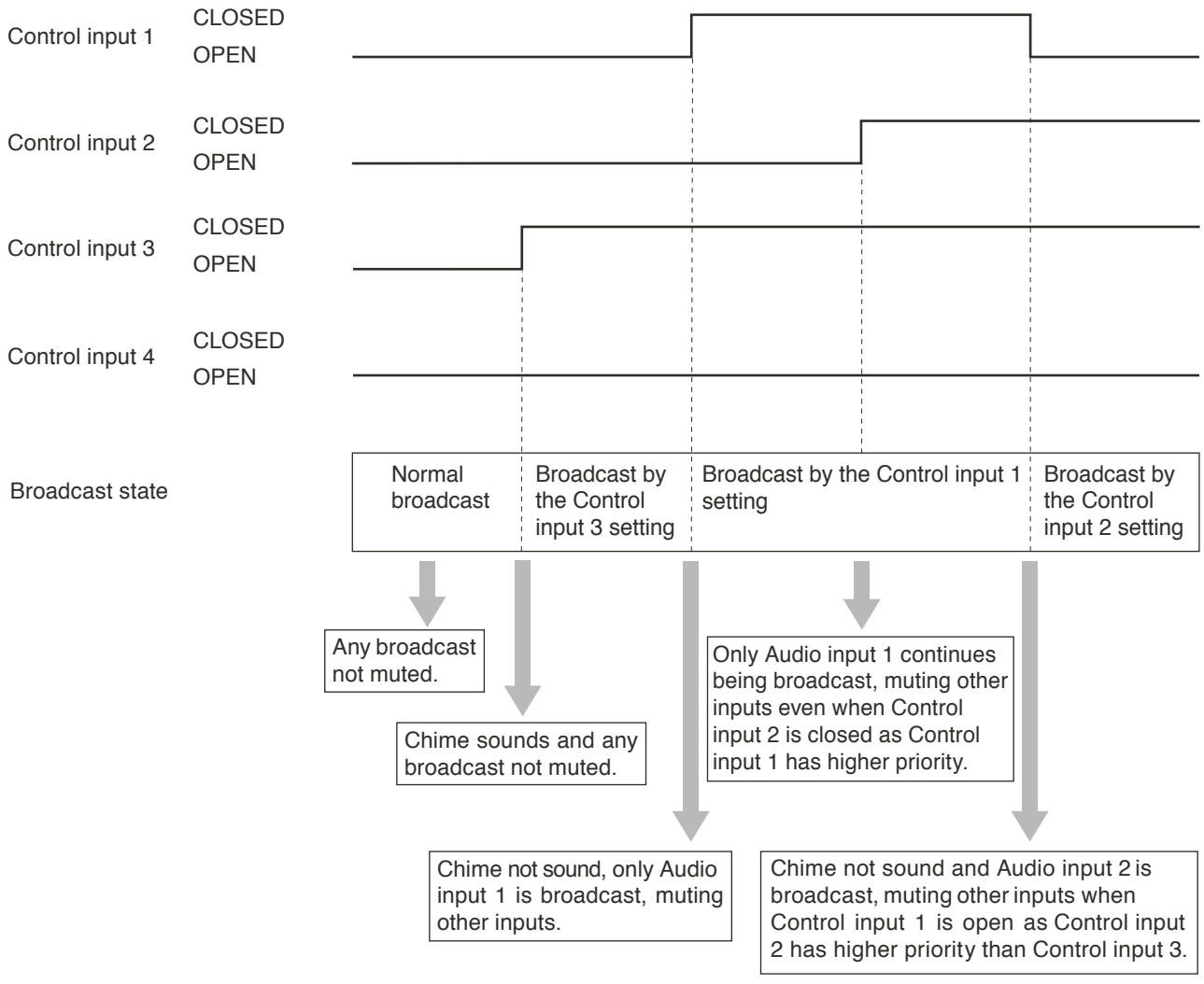
| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 1 | High | Set | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 2 | | – | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Valid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Valid |
| Audio detection (Input 1) | | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | ● | ● | ● | ● | ● | ● | ● | – |

**Notes**

- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- The unit starts up in Standard mode.
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

Shown below are the operations by the factory default.

**[Operation image]**



## 15.7. Setting Examples and Operation Images

### 15.7.1. If the power is ON while being energized

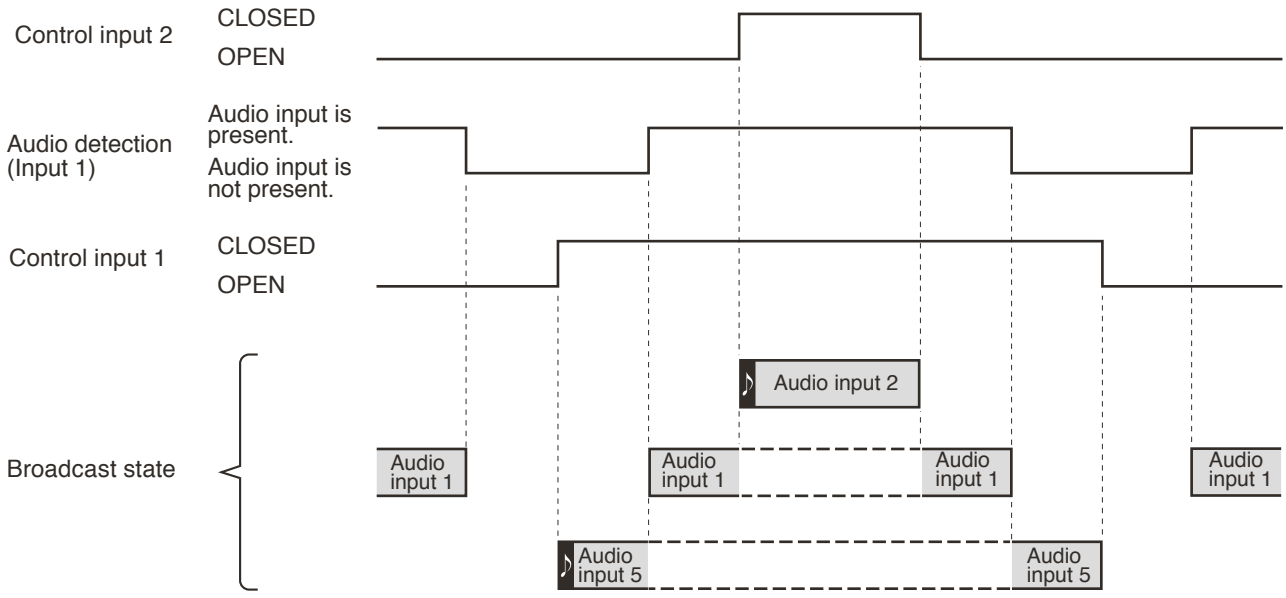
**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 2 | High | Not set | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Audio detection (Input 1) | | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**

- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**




**Notes**

- Symbol " ♪ " represents a startup chime of broadcast.
- Gray box " ▭ " represents the broadcast currently being output.
- Box with a dashed line " ▭ " represents the state that broadcast is activated but not being output because the priority level is low.

### 15.7.2. If the power is OFF while being energized

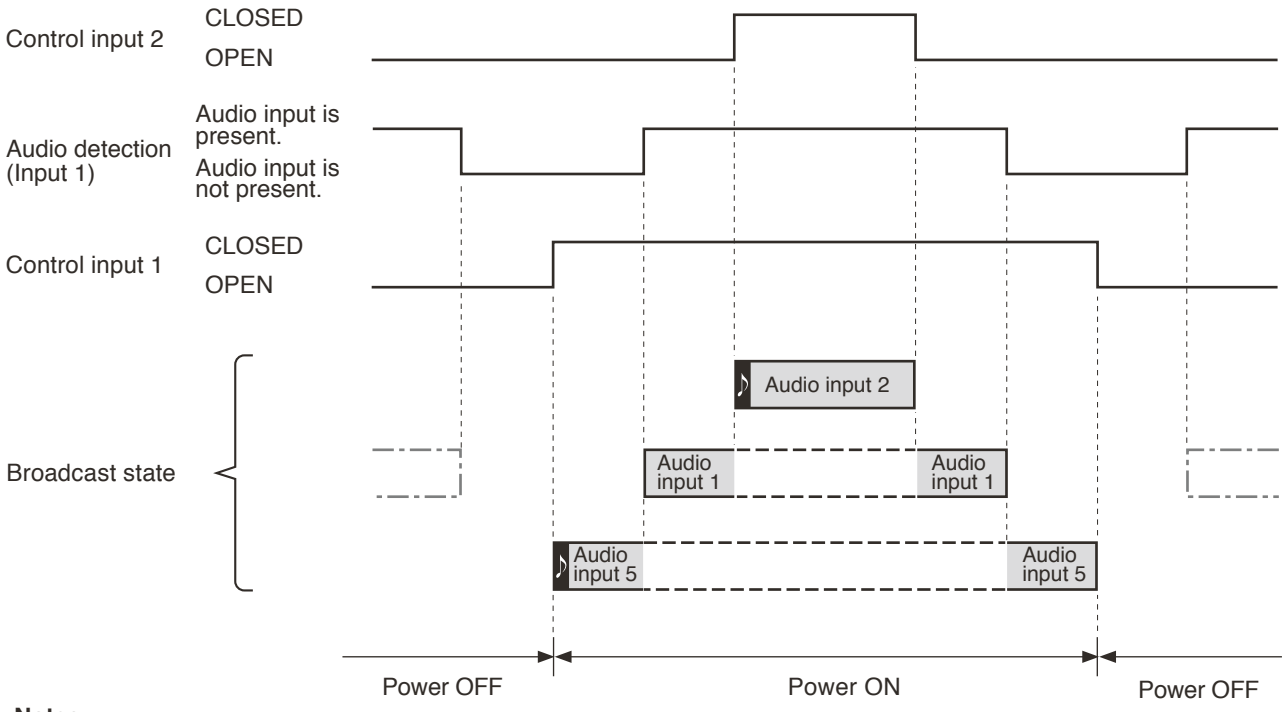
Even when the power is OFF while being energized, it is kept ON as long as the control input is closed.
While the power is ON, the priority-assigned audio signals are output according to the priority levels.
The power is not turned ON even if there is an audio detection input while the power is OFF.

**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 2 | High | Not set | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Audio detection (Input 1) | | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**
- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**




**Notes**
- Symbol " ♪ " represents a startup chime of broadcast.
- Gray box " " represents the broadcast currently being output.
- Box with a dashed line " " represents the state that broadcast is activated but not being output because the priority level is low.
- Box with a dash-dotted line " " represents the state that broadcast is not being output because the power is off though an audio detection trigger has been input.

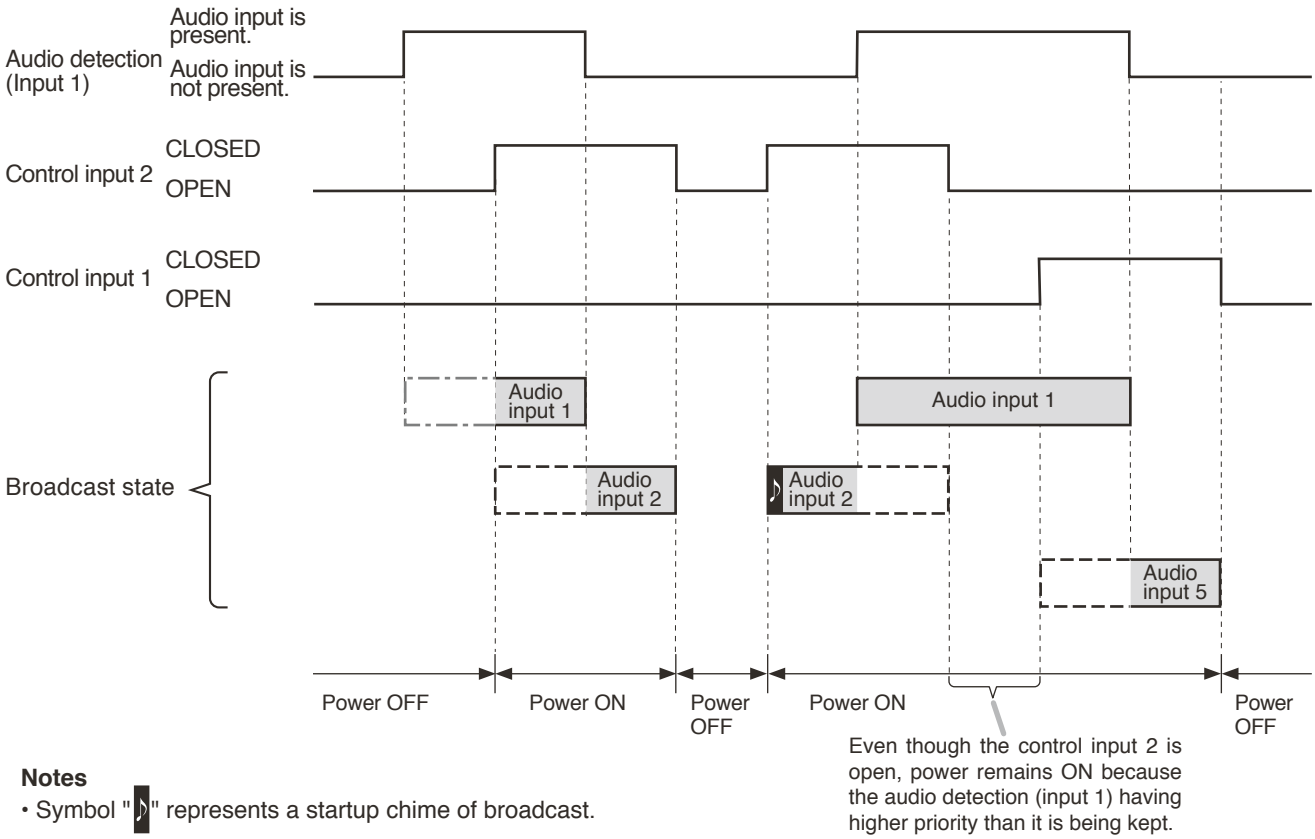
Only in the following case, the power is ON in the period that only the audio detection input is present.
When the control input and the audio detection input with higher priority overlap, the power remains ON until the audio detection input is terminated after all control inputs are opened.

**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Audio detection (Input 1) | High | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 2 | | – | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**
- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**




**Notes**
- Symbol " ♪ " represents a startup chime of broadcast.
- Gray box " ▭ " represents the broadcast currently being output.
- Box with a dashed line " ▭ " represents the state that broadcast is activated but not being output because the priority level is low.
- Box with a dash-dotted line " ▭ " represents the state that broadcast is not being output because the power is off though an audio detection trigger has been input.

# 16. SETTINGS ON THE BROWSER

You can perform the settings and the displays shown below via the network by connecting a PC to the A-3600D Series mixer amplifier from the browser*1.

- Status display*2
- EQ parameter control and display
- Setting content display
- Input priority setting and display
- Network setting
- Account setting
- Firmware update
- Log output

*1 The browsers that have been verified to work are Microsoft Edge, Google Chrome, and Mozilla Firefox.

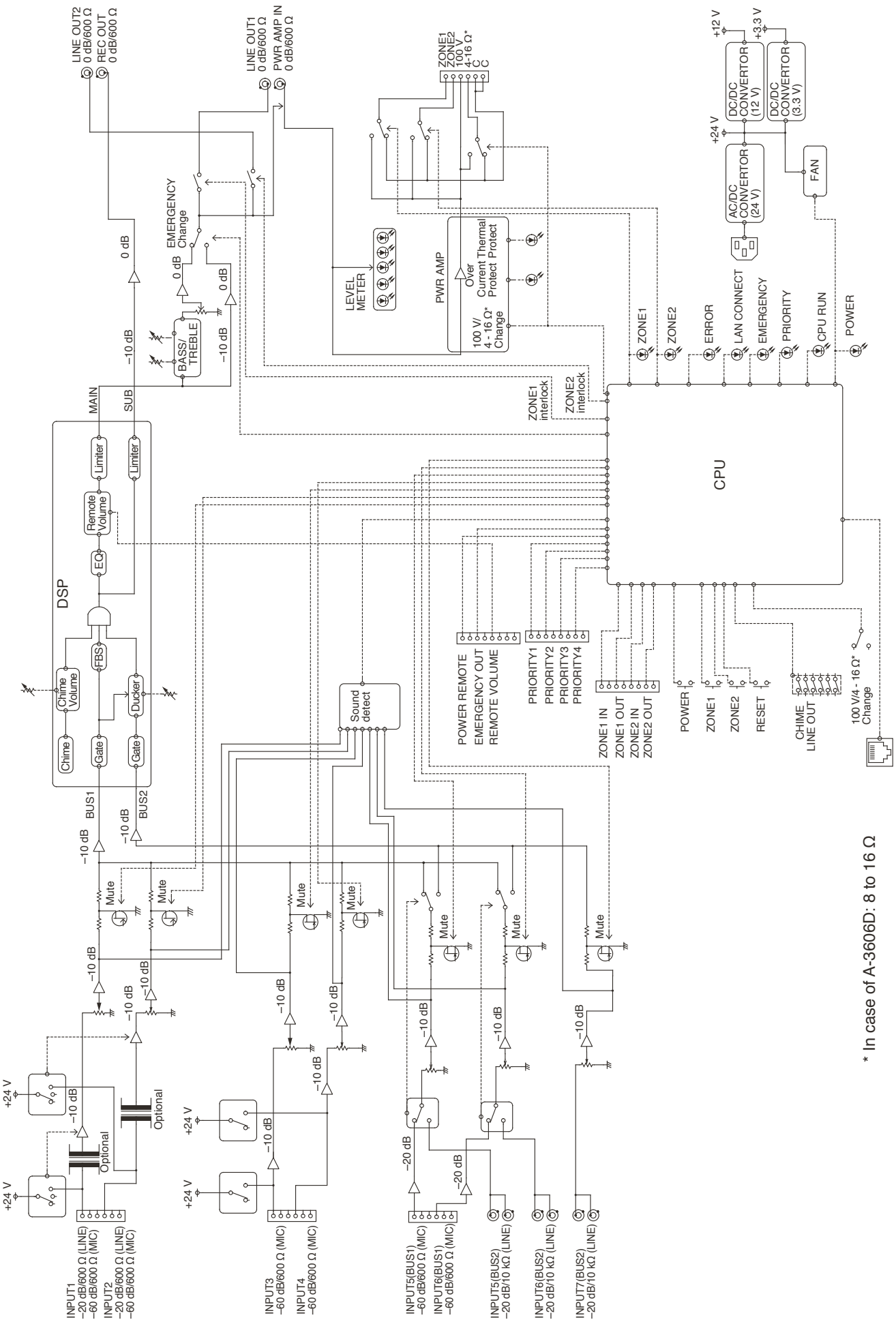
**Notes**

- Microsoft Edge is the registered trademark of Microsoft Corporation in the United States and other countries.
- Google Chrome is the trademark of Google LLC in the United States and other countries.
- Mozilla and Firefox are the trademarks of The Mozilla Foundation in the United States and other countries.

*2 If the volume value is set to the minimum on this screen, no sound is output even if you set the unit's front-mounted volume control knobs to the maximum position. Also, the volume value set on this screen becomes the maximum setting value, disabling the unit's front-mounted volume control knobs to increase the volume value exceeding this value.

For the details of the browser settings, refer to the separate setup manual, which can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

# 17. BLOCK DIAGRAM




* In case of A-3606D: 8 to 16 Ω

# 18. SPECIFICATIONS

| | | A-3606D | A-3612D | A-3624D | A-3648D |
|---|---|---|---|---|---|
| Power Source | | 100 to 240 V AC, 50/60 Hz | | | |
| Rated Output | | 60 W | 120 W | 240 W | 480 W |
| Power/Current Consumption | | 96 W (rated output), 40 W (based on EN62368) | 171 W (rated output), 48 W (based on EN62368) | 314 W (rated output), 70 W (based on EN62368) | 601 W (rated output), 113 W (based on EN62368) |
| | | 200 mA or less (when power switch is OFF) | | | |
| Frequency Response | | 50 Hz to 20 kHz ±3 dB (1/8 rated output) | | | |
| Distortion | | 1% or less at 1 kHz, rated power (20 kHz LPF (AUX-0025)) | | | |
| Tone Control | | Bass: ±10 dB at 100 Hz<br>Treble: ±10 dB at 10 kHz | | | |
| Signal to Noise Ratio | | 88 dB or more (Master volume: min)<br>76 dB or more (Master volume: max)<br>55 dB or more (INPUT 1 to 6)<br>72 dB or more (INPUT 7)<br>(A-weighted) | | | |
| Audio Input | | | | | |
| | INPUT 1, 2 | –60 dB* (MIC)/–20 dB* (LINE) selectable, 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)<br>**Note**<br>MIC inputs are equipped with phantom power (24 V DC, ON/OFF switchable). | | | |
| | INPUT 3, 4 | –60 dB*, 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)<br>**Note**<br>Equipped with phantom power (24 V DC, ON/OFF switchable). | | | |
| | INPUT 5, 6 | MIC (BUS 1)/LINE (BUS 2) selectable<br>MIC: –60 dB*, 600 Ω, electronically-balanced, removable terminal block (3.81 mm, 3 pins)<br>LINE: –20 dB*, 10 kΩ, unbalanced, RCA pin jack x 2 | | | |
| | INPUT 7 | –20 dB*, 10 kΩ, unbalanced, RCA pin jack x 2 | | | |
| | PWR AMP IN | 0 dB*, 600 Ω, unbalanced, RCA pin jack | | | |
| Input Bus | | INPUT 1 to 4: BUS 1<br>INPUT 5, 6: BUS 1/BUS 2 selectable<br>INPUT 7: BUS 2 | | | |
| Audio Output | | | | | |
| | SPEAKER OUT | Low impedance (8 to 16 Ω)/ High impedance (DIRECT, ZONE 1 /ZONE 2: 100 V/ total 170 Ω) (ZONE 1/ZONE 2 is selectable, Max. 60 W per output) | Low impedance (4 to 16 Ω)/ High impedance (DIRECT, ZONE 1 /ZONE 2: 100 V/ total 83 Ω) (ZONE 1/ZONE 2 is selectable, Max. 120 W per output) | Low impedance (4 to 16 Ω)/ High impedance (DIRECT, ZONE 1 /ZONE 2: 100 V/ total 42 Ω) (ZONE 1/ZONE 2 is selectable, Max. 240 W per output) | Low impedance (4 to 16 Ω)/ High impedance (DIRECT, ZONE 1 /ZONE 2: 100 V/ total 21 Ω) (ZONE 1/ZONE 2 is selectable, Max. 480 W per output) |
| | | removable terminal block (5.00 mm, 6 pins) | | | |
| | REC OUT | 0 dB*, 600 Ω, unbalanced, RCA pin jack | | | |
| | LINE OUT 1, 2 | 0 dB*, 600 Ω, unbalanced, RCA pin jack<br>(Interlock with zone selection is possible.) | | | |
| Control Input | | | | | |
| | CONTROL IN | 4 channels, no-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (3.81 mm, 4 pins) | | | |
| | REMOTE VOLUME | Removable terminal block (3.50 mm, 4 pins) | | | |
| | ZONE CONTROL IN | No-voltage make contact input, open voltage: 35 V DC or less, short-circuit current: 10 mA or less, removable terminal block (3.81 mm, 4 pins) | | | |

| | | A-3606D | A-3612D | A-3624D | A-3648D |
|---|---|---|---|---|---|
| Control Output | | | | | |
| | POWER REMOTE OUT | Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (3.50 mm, 4 pins) | | | |
| | EMERGENCY OUT | Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (3.50 mm, 4 pins) | | | |
| | ZONE CONTROL OUT | Open collector output, withstand voltage: 30 V DC or less, control current: 25 mA or less, removable terminal block (3.81 mm, 4 pins) | | | |
| Chime | | 1-note, 2-note, or ascending 4-note chime or None selectable with switch setting | | | |
| Indicators | | LED level meter, Power indicator, Network connection confirmation indicator, Priority broadcast indicator, Emergency broadcast indicator, Thermal protection indicator, Overcurrent protection indicator, CPU running indicator, Error indicator, Zone indicator (1,2) | | | |
| Operating Temperature | | –10 to +40 °C (14 to 104 °F) | | | |
| Operating Humidity | | 85%RH or less (no condensation) | | | |
| Finish | | Panel: ABS resin, black<br>Case: Surface-treated steel plate, black, paint | | | |
| Dimensions | | 420 (w) x 96.1 (h) x 313.1 (d) mm or 16.54" x 3.78" x 12.33" | | | |
| Weight | | 5 kg (11.02 lb) | | | 5.2 kg (11.46 lb) |

* 0 dB = 1 V

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

• **Accessories**

Power cord (2 m (6.56 ft)) ..... 1
Audio input removable terminal plug (3.81 mm, 3 pins) ..... 6
Control I/O removable terminal plug (3.81 mm, 4 pins) ..... 4
Remote control removable terminal plug (3.50 mm, 4 pins) ..... 2
Speaker out removable terminal plug (5.00 mm, 6 pins) ..... 1
Volume control cover ..... 4

• **Optional products**

Rack mounting bracket : MB-25B
Perforated panel: PF-013B

**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

URL: https://www.toa.jp/

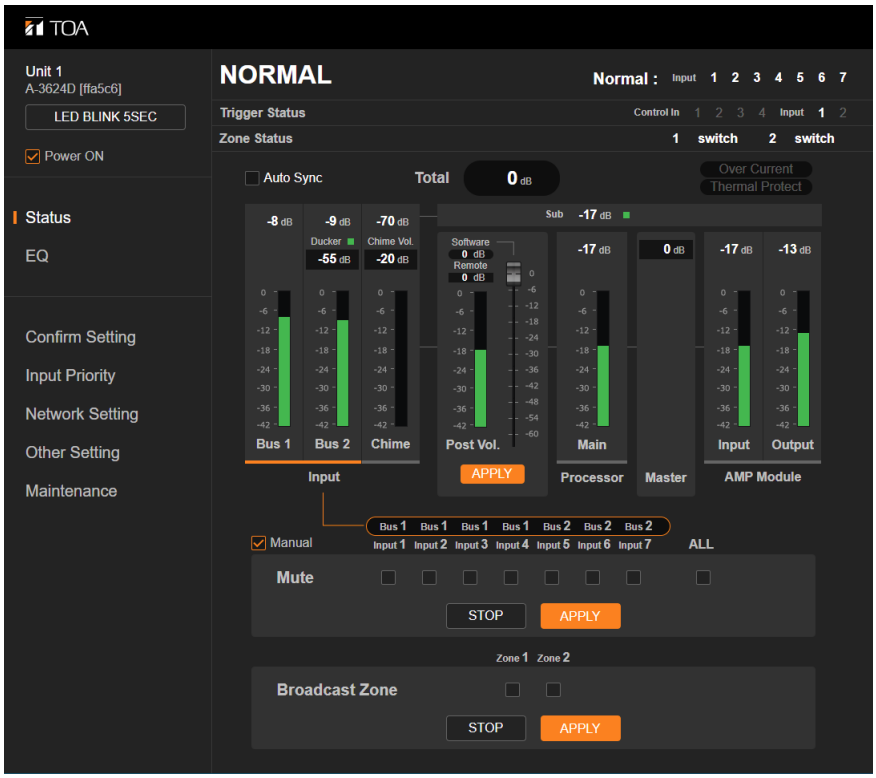
TOA Corporation

133-02-00574-02

SETUP MANUAL

# MIXER AMPLIFIER
# A-3606D, A-3612D, A-3624D, A-3648D

*(Ver. 1.06)*




This manual applies to the A-3600D series amplifier of which firmware version is 1.06.01 or later.
The firmware version can be checked on the browser.

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.

## TABLE OF CONTENTS

# 1. SETTING OUTLINE

You can perform the settings and the displays shown below via the network by connecting a PC to the Mixer Amplifiers A-3606D, A-3612D, A-3624D, A-3648D (herein referred to as this unit) from the browser *1.

- Status display*2 (See p. 10.)
- EQ parameter control and display (See p. 17.)
- Setting content display (See p. 19.)
- Input priority setting and display (See p. 21.)
- Network setting (See p. 25.)
- Account setting (See p. 25.)
- Other setting (See p. 27.)
- Firmware update (See p. 31.)
- Log output (See p. 31.)
- Importing and exporting the configuration file (See p. 32.)

*1 For the browsers that have been verified to work, refer to "SYSTEM REQUIREMENTS" below.

*2 If the volume value is set to the minimum on this screen, no sound is output even if you set the unit's front-mounted volume control knobs to the maximum position. Also, the volume value set on this screen becomes the maximum setting value, disabling the unit's front-mounted volume control knobs to increase the volume value exceeding this value.
For details, refer to "Software Master Volume Setting" on p. 14.

# 2. SYSTEM REQUIREMENTS

The table below shows the software operating conditions for the PC. Use the hardware that can run this software.

| | |
|---|---|
| OS | Windows 10 Pro (64bit)<br>Windows 11 Pro (64bit) |
| Browser | Microsoft Edge, Google Chrome, Mozilla Firefox |

**Notes**
- Microsoft Edge is the registered trademark of Microsoft Corporation in the United States and other countries.
- Google Chrome is the trademark of Google LLC in the United States and other countries.
- Mozilla and Firefox are the trademark of The Mozilla Foundation in the United States and other countries.

**Tip**
In this manual, each procedure is described with the screenshots of Google Chrome.

# 3. HANDLING PRECAUTIONS

- In this system, settings and control of the unit are performed on a PC via LAN (Local area network). It is not possible to perform them via the Internet.
- Some operations differ depending on this unit's power ON/OFF state. The table below shows the relationship between the power ON/OFF state and the corresponding operation.

| Power state | LED lighting state | | Normal broadcast | | Priority broadcast/ Emergency broadcast | Web access |
|---|---|---|---|---|---|---|
| | ⏻ | CPU RUN | From Speaker output | From Recording output | | |
| Not energized | Unlit | Unlit | Disabled | Disabled | Disabled | Disabled |
| Energized (Power turned OFF) | Unlit | Lit | Disabled | Disabled | Occasionally possible (Power is temporarily turned ON.) | Enabled |
| Energized (Power turned ON) | Lit | Lit | Enabled | Enabled | Enabled | Enabled |

- Security Measures When Using the Network
  - Provide the best possible security measures for the network under your own responsibility.
    TOA Corporation takes no responsibility for any damages or loss caused by the network security problems such as illegal access.
  - It is advised to change the default User ID and Password to prevent illegal access to this unit. For their setting method and details, refer to "NETWORK SETTING SCREEN" on p. 25.
  - Keep your password safe.

# 4. THE DUCKER FUNCTION AND THE PRIORITY BROADCAST FUNCTION

This unit is provided with Ducker function and Priority broadcast function that decrease the output level of other broadcasts while a specific broadcast is being made.

A Ducker function refers to the function to place a priority order between the audio signal groups divided into 2 groups. Use this function to make a simple usage such as to decrease the BGM level when making microphone announcement while the BGM broadcast is in progress.
For the details of the Ducker function, refer to the operation manual supplied with this unit.

A Priority broadcast function is the function to assign one of 6 priority levels to each broadcast content. Use this function to make a complicated usage compared with the Ducker function such as to select the audio signal to mute. For the details of the Priority broadcast function, refer to "PRIORITY BROADCAST FUNCTION" on p. 34.

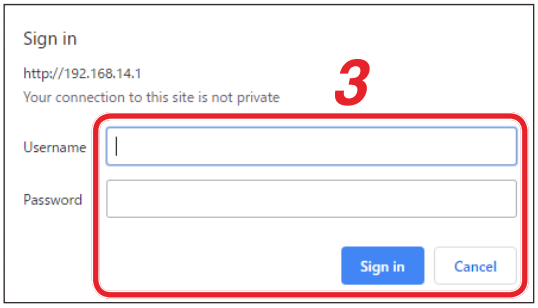
# 5. CONNECTIONS

The procedure in the case when you have set an arbitrary IP address differs from that in the case when an IP address has been automatically acquired, both settings being performed on the Network setting screen (p. 25).

## 5.1. When You Have Set an Arbitrary IP address

**Step 1.** Connect the unit and the PC used for settings to network.

**Step 2.** Run the browser on the PC, then enter unit's IP address in the address field.
Example: 192.168.14.1
A login screen is displayed.




**Tip**
IP address is factory-preset to "192.168.14.1."

**Step 3.** Enter user name and password, then click the "Sign in" button.
A status screen is displayed.


Click the screen name in the menu bar located at the left side of the browser screen to switch to the necessary screen. (See "SWITCHING THE SCREEN" on p. 7.)

**Notes**
- Never connect the unit from multiple PCs simultaneously.
- Never connect the unit from multiple browsers simultaneously.

**Tip**
The default settings of the user name and password are as follows.
User name: admin
Password: guest

## 5.2. When an IP address Has Been Automatically Acquired

**Note**
This procedure cannot be used if your pc's OS is earlier than Windows 10.

**Step 1.** Connect this unit and the PC used for settings to the network.

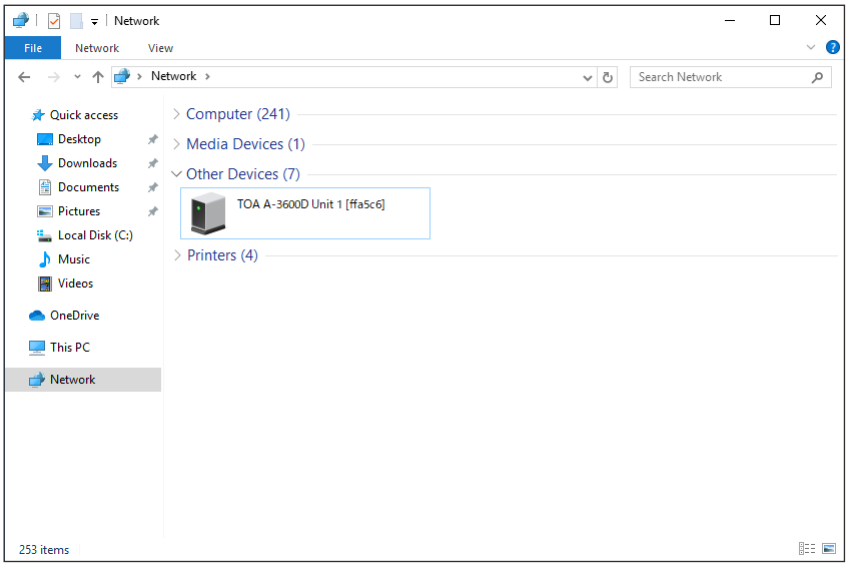
**Step 2.** Open the Explorer screen on the PC.

**Step 3.** Click "Network" in the list located on the left side of the screen to open it.

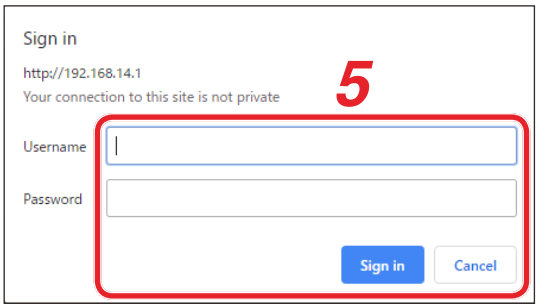
**Step 4.** Click the displayed icon of this unit.

**Tip**
This unit's icon name is as follows.
TOA A-3600D + (Device name entered in the Network setting) + (the last 3 bytes of this unit's MAC address)

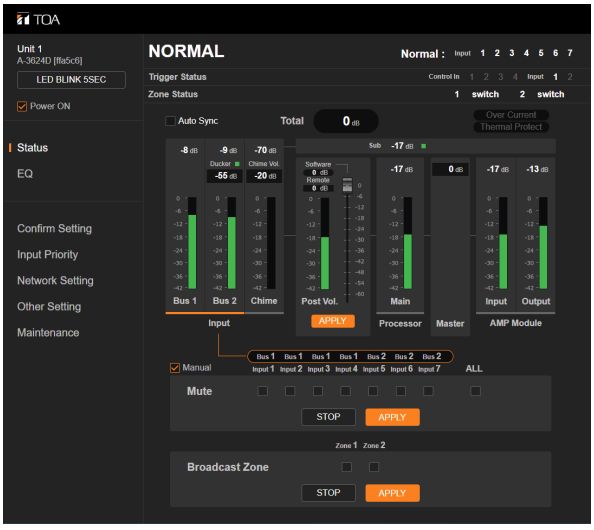
Example: TOA A-3600D Unit 1 [ffa5c6]




A login screen is displayed.




**Step 5.** Enter user name and password, then click the "Sign in" button.
A status screen is displayed.




Click the screen name in the menu bar located at the left side of the browser screen to switch to the necessary screen. (See "SWITCHING THE SCREEN" on the next page.)

**Notes**

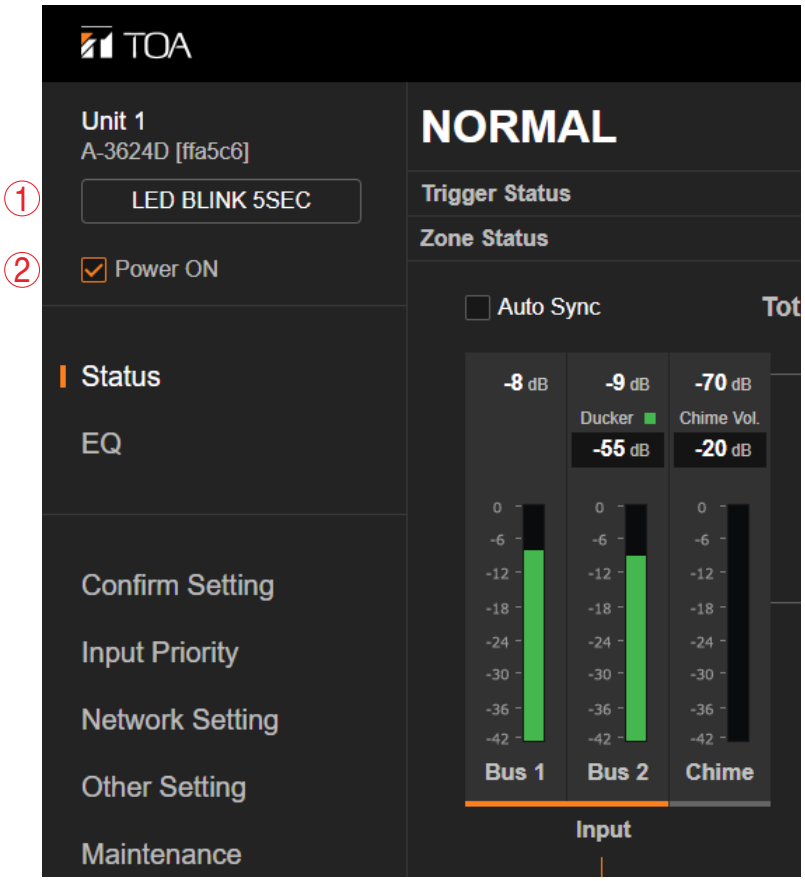
- Never connect the unit from multiple PCs simultaneously.
- Never connect the unit from multiple browsers simultaneously.

**Tip**
The default settings of the user name and password are as follows.
User name: admin
Password: guest

# 6. SWITCHING THE SCREEN

After logging in (p. 4) to this unit, click the screen name in the menu bar at the left side of the browser screen to switch to the corresponding screen. Six screens are provided in total, on each of which you can perform necessary settings and operations.

## 6.1. Common Operation on Each Screen



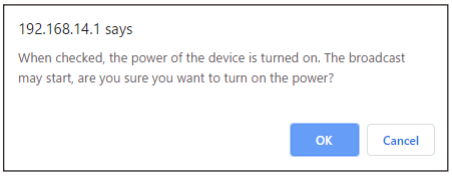

**(1) [LED BLINK 5 SEC] button**
Click this button to identify the amplifier when 2 or more A-3600D Series mixer amplifiers are connected to the network.
Clicking this button causes the LAN CONNECT indicator on the currently logged-in A-3600D Series mixer amplifier to flash for 5 seconds.

**(2) Power ON checkbox**
Turns this unit's power on or off.
Checking or unchecking this checkbox causes the power to turn on or off, respectively.
The Power remote control interlock output terminal is closed while the unit's power is ON, and open while the unit's power is OFF.

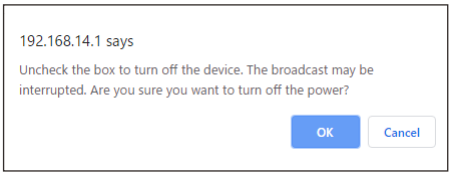
**Note**
You can neither check nor uncheck the checkbox while the priority broadcast or the emergency broadcast is in progress. (See "PRIORITY BROADCAST FUNCTION" on p. 34.)

**Tip**
Either confirmation dialog shown below is displayed when you click the checkbox. Then, click the OK button.

[When checking the checkbox]

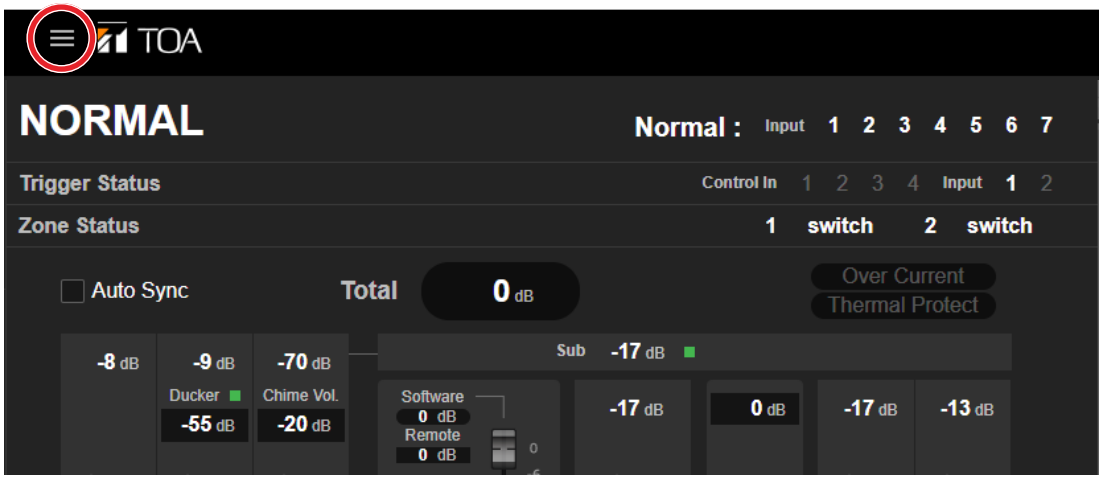



[When unchecking the checkbox]

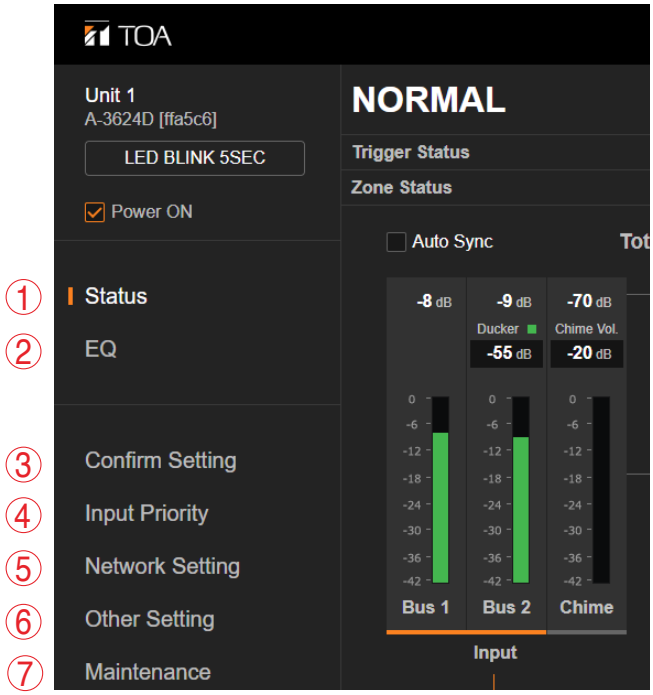



## 6.2. Refreshing the Menu Bar

The menu bar located at the left side of the screen may not be displayed depending on the size of the browser screen.
In this case, click the icon at the upper left corner of the screen to refresh the menu bar.



## 6.3. Contents of Each Screen

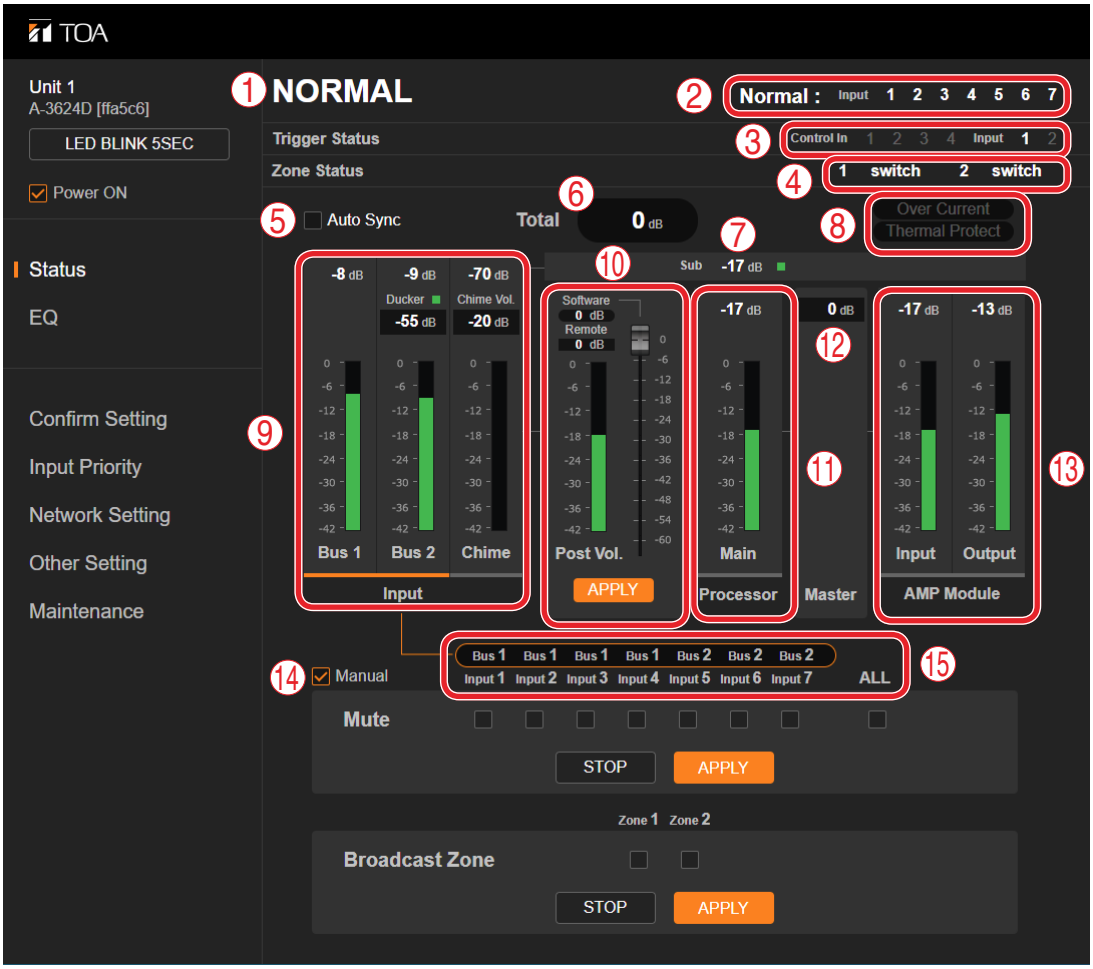



| | Name | Content | Reference page |
|---|---|---|---|
| (1) | Status | Displays the current broadcast status. Also, sets the software master volume value and switches the mode between Standard and Manual. | the next page |
| (2) | EQ | Performs the equalizer's parameter setting. Also, allows you to confirm the operation contents of the Dynamic feedback filters function. | p. 17 |
| (3) | Confirm Setting | Displays the set contents of this unit's switches. | p. 19 |
| (4) | Input Priority | Displays the set contents of the priority broadcast. Also, allows you to set or edit the priority broadcast. | p. 21 |
| (5) | Network Setting | Performs the network setting and the user account setting. | p. 25 |
| (6) | Other setting | Performs the set value retention ON/OFF of the software master volume and the zone control method setting. | p. 27 |
| (7) | Maintenance | Performs the firmware update and exports the log file. | p. 29 |

# 7. STATUS SCREEN

The current broadcast status is displayed on the Status screen.
Also, you can perform the software master volume setting (p. 14) and the operation in manual mode (p. 15).

## 7.1. Display Contents of Each Section




**(1) Status display**

Displays this unit's operation status.
EMERGENCY: Emergency broadcast in progress
PRIORITY: Priority broadcast in progress
NORMAL: Normal broadcast in progress
POWER OFF: Power is turned off.
For details, refer to "PRIORITY BROADCAST FUNCTION" on p. 34.

**(2) Priority trigger display**

Displays the name of the highest priority trigger of the activated triggers and its mute setting contents. The highlighted inputs are set to be broadcast.
When no trigger is input, the normal broadcast (p. 35) setting will be displayed.
For the details of the priority trigger, refer to "PRIORITY BROADCAST FUNCTION" on p. 34 and "INPUT PRIORITY SCREEN" on p. 21.

**(3) Trigger Status**

The activated trigger numbers are highlighted.

**(4) Zone Selection Status**

The zone selection status is highlighted.
Audio signals are output from the selected zone output.

| | |
|---|---|
| When the zone is selected with the front-mounted Zone selection button: | switch |
| When the zone is selected in manual mode (see p. 15): | protocol |
| When the zone is selected with the Zone control input: | control |
| When Emergency broadcast is being made with the Control input 1 through 4: | control [E] |
| When the zone is not selected: | none |

**Note**

Zone selection is disabled during an emergency broadcast, allowing the broadcast to be made to all zones.

**(5) Auto Sync checkbox**

Check this checkbox to display the status in real time. If this checkbox is checked, the display will be automatically updated when this unit's status varies.
When this checkbox is unchecked, the display of this unit's status remains unchanged as it was first shown on the screen even if this unit's status varies.

**Note**

If you change the screen or terminate the browser, the checkbox will be automatically unchecked.

**Tip**

Either confirmation dialog shown below is displayed when you click the checkbox. Then, click the OK button.

[When checking the checkbox]


[When unchecking the checkbox]


**(6) Total volume control indication**

Displays the sum of the set volume values. (See "Software Master Volume Setting" on p. 14.)

**(7) Sub output level indication**

Displays the Sub output level of the processor. (See "BLOCK DIAGRAM" on p. 41.)
The indication at the right side of the numerical value lights green when the sub output level is –42 dB or over, and lights black when it is less than that.

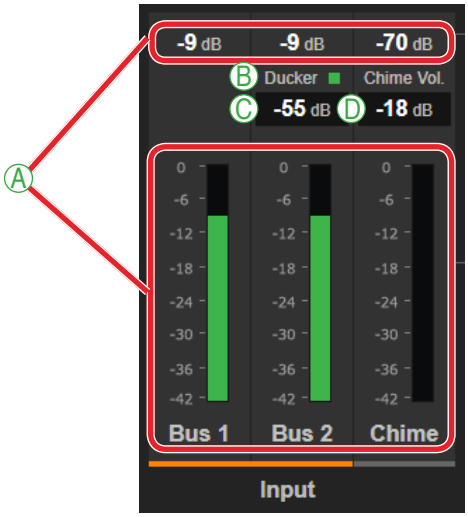
**(8) Error indication**

Appears in red when the following irregularity occurs inside this unit.

| | |
|---|---|
| Over Current: | Indicates that the overcurrent protection circuit is working as an overcurrent flows through the speaker output. |
| Thermal Protect: | Indicates that the thermal protection circuit is working. |

**(9) Input display section**

Displays the operation statuses and the setting contents of BUS 1, BUS 2, and chime.




**A. Operation status display**

Displays the operation statuses of BUS 1, BUS 2, and chime by means of numerical values and green bar graphs.

**B. Ducker processing indication**

Lights green when the Ducker is being processed, and lights black when not being processed.

**C. Ducker depth indication**

Displays the Ducker depth set at this unit.

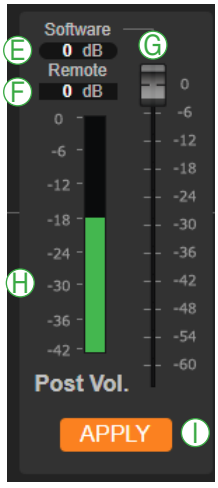
**D. Chime volume indication**

Displays the chime volume value set at this unit.

**(10)Software master volume/Remote master volume**

Used to set the software master volume value and display the set contents. (See "Adjusting the software master volume" on p. 14.)

Also, used to display the remote master volume setting.




**E. Software master volume display**

Displays the set software master volume value.

**F. Remote master volume display**

Displays the set remote master volume value.

**G. Slider**
Used to set the software master volume value.

**Note**
This unit's volume setting will not change if you only operate the slider. Click the APPLY button (I) to apply the setting to this unit. Similarly, take the same procedure during Auto Sync.

**H. Post vol. level meter**
Displays the signal level that has been adjusted by the software master volume, remote master volume, and EQ processing.

**I. APPLY button**
Click this button to apply the set value of the software master volume to this unit.

**(11) Main output level indication**
Displays the main output level of the processor. (See "BLOCK DIAGRAM" on p. 41.)

**(12) Master volume setting value**
Displays the set value of this unit's master volume control knob.

**(13) AMP Module I/O indication**
Displays the input/output levels of this unit's amplifier module. (See "BLOCK DIAGRAM" on p. 41.)

**(14) Manual checkbox**
Used to switch the mode between Standard and Manual. (See"Manual Mode" on p. 15.)

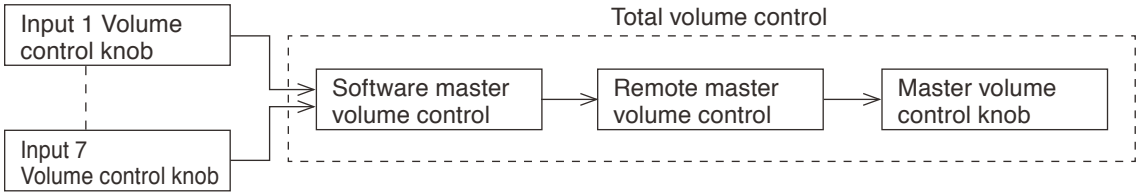
**(15) Destination setting display**
Displays to which each audio input is sent, BUS 1 or BUS 2. The destination is indicated above each audio input name.

## 7.2. Software Master Volume Setting

### 7.2.1. Volume adjustment

This unit's volume value can be adjusted in 4 stages as described below.
The values adjusted with each volume control are summed.

- Inputs 1 to 7 volume control knobs
- Software master volume control
- Remote master volume control
- Master volume control knob

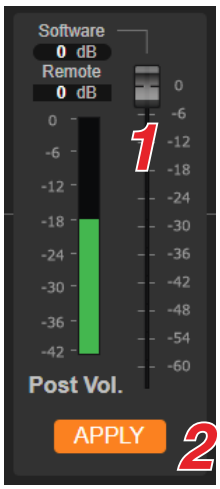



**Note**
If any one of the volume controls is set to the minimum, no sound is output even if other volume control is set to the maximum. If you intend to adjust the volume value with the Software master volume control or the Remote master volume control, adjust the volume value using the master volume control knob in advance. The value adjusted with the master volume control knob is the adjustable upper limit.
When set to the Emergency broadcast, the broadcast is made at the maximum level regardless of the set values of the master volume, software master volume, and remote master volume*1. Also, the chime is sounded at the maximum volume, and the characteristics of the EQ, tone control, and bass control are made flat.

The front-mounted emergency broadcast indicator lights during emergency broadcast, making the Emergency control output terminal closed.

*1 Volume control knobs for each input remain effective.

### 7.2.2. Adjusting the software master volume




**Step 1.** Adjust the volume value with the slider.
The display varies depending on the slider position.

**Step 2.** Click the APPLY button.
The set value is applied to this unit.

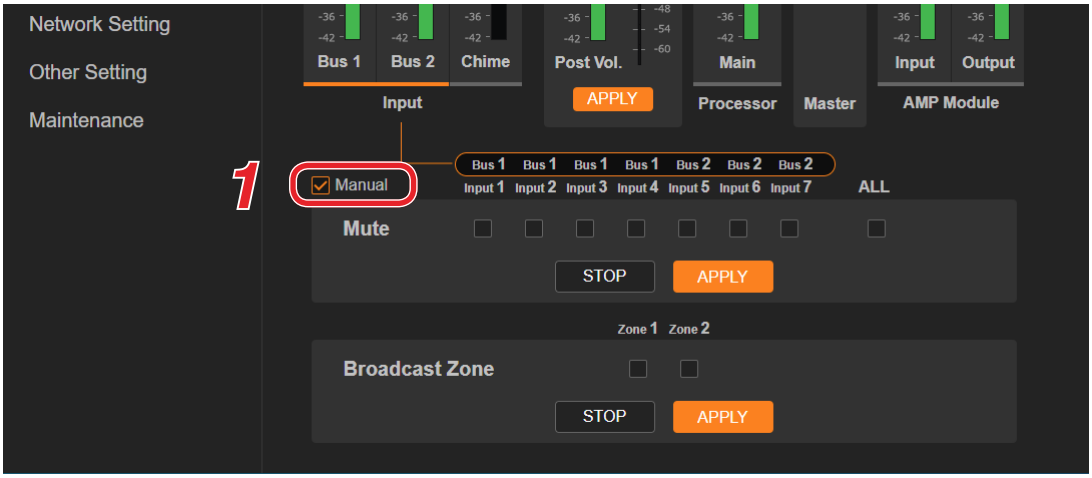
**Note**
The value is not reflected to this unit unless you click the APPLY button. Similarly, take the same procedure during Auto Sync.

## 7.3. Manual Mode

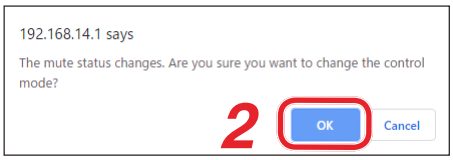
### 7.3.1. What is manual mode?

This unit features a function to manually mute the audio input without using the control input and the voice detection.
The mode in which the priority broadcast is made by using the control input or the voice detection as a trigger is referred to as the Standard mode, while the mode in which it is made muting the audio input from the browser without using the control input and the voice detection as a trigger is referred to as the Manual mode.
Use the Manual mode to confirm the unit operation.
In manual mode, you can also select the broadcast zone by manual. (See "Selecting a zone in manual mode" on p. 16.)

**[Switching the mode between Standard and Manual]**




**Step 1.** Check the checkbox for Manual.
A confirmation dialog is displayed.




**Step 2.** Click the OK button.
The mode switches to the Manual mode, displaying the checkboxes for selecting audio signals to be muted.

**Tip**
Unchecking the checkbox switches the mode to the Standard mode.

**[Muting the audio input in the Manual mode]**


**Step 1.** Check the checkbox for the audio input to be muted.
When muting all audio inputs, check the checkbox for ALL.
Similarly, uncheck the checkbox for ALL when muting no audio inputs.

**Step 2.** Click the APPLY button.
The checked audio input will be muted at this unit.

**Tip**
The normal broadcast continues and the mute is performed according to the normal setting until the APPLY button is clicked.

**Step 3.** To release mute, click the STOP button.
Clicking this button releases muting the checked audio inputs at this unit, resuming the normal broadcast and performing the mute according to the normal setting.

### 7.3.2. Selecting a zone in manual mode


**Step 1.** Check the checkbox of the zone to select.

**Step 2.** Click the APPLY button.
The zone of which checkbox is checked is selected.

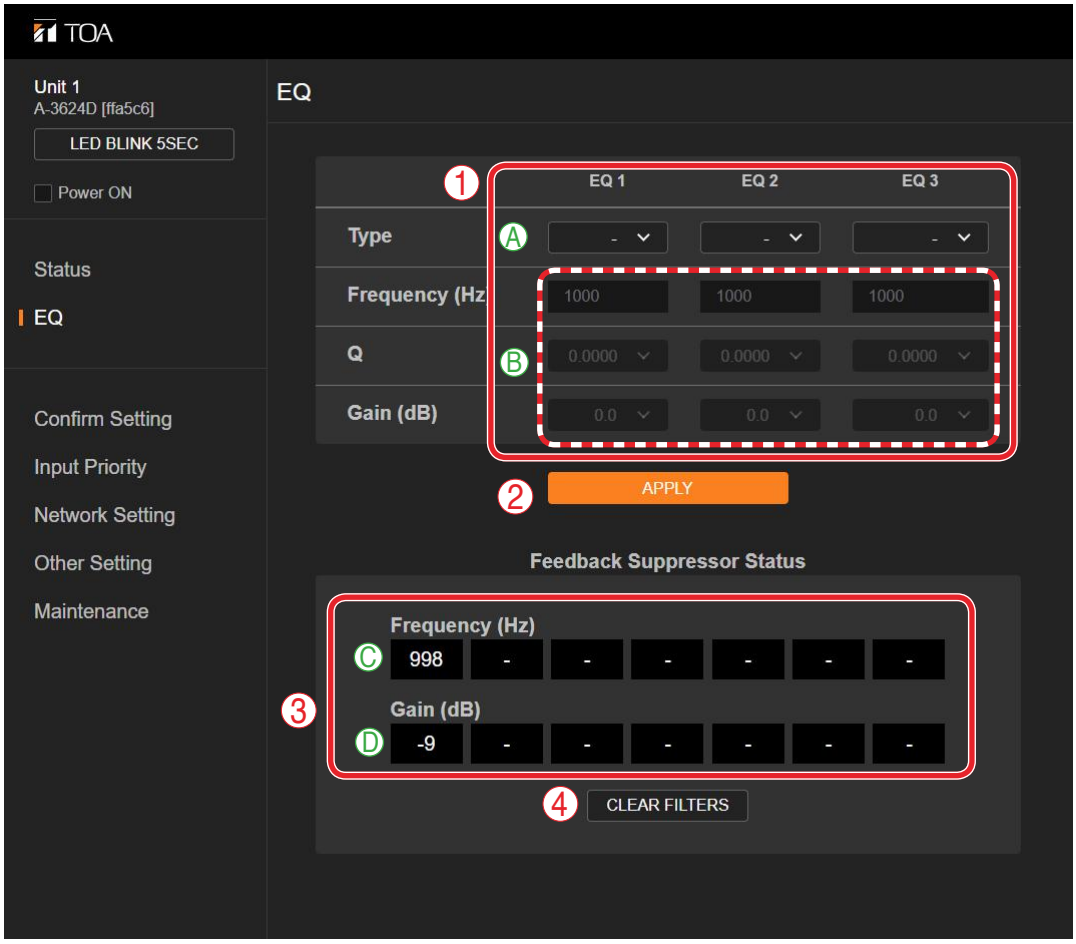
**Tip**
The zone selection will not be cancelled even if you perform the following operations while the zone is selected. Selection operation using the browser takes precedence.
- Pressing the front-mounted corresponding zone selection button.
- Selecting the zone using the rear-mounted corresponding zone control input terminal.

**Step 3.** To cancel the selection, click the STOP button.
Selection is cancelled.

**Tip**
The check mark in the checkbox remains displayed even if selection is cancelled.

# 8. EQ SCREEN

On the EQ screen, you can configure the parameters of the equalizer (3 points), and also confirm the operation contents of the Dynamic feedback filters function.




**(1) PEQ/HPF/LPF setting section**

Set the parameters of the PEQ, HPF, and LPF.

| | Name | Content |
|---|---|---|
| A | PEQ/HPF/LPF selection | Select the setting item from PEQ, HPF, LPF, or - (Not used).<br>Factory default setting: - (Not used) |
| B | Parameter setting | Set the parameters of Frequency, Q, and Gain.<br>The appended table below shows the setting range.<br><br>**Note**<br>When HPF or LPF is selected from the PEQ/HPF/LPF selection, Gain cannot be set. |

**[Setting range]**

| Setting item | Setting content | Setting range |
|---|---|---|
| PEQ | Frequency (Hz) | 20 – 20000 |
| | Q | 0.267 – 69.249 |
| | Gain (dB) | –15.0 to 15.0, 0.1 dB steps |
| HPF | Frequency (Hz) | 20 – 20000 |
| | Q | 0.5 – 2.563 |
| LPF | Frequency (Hz) | 20 – 20000 |
| | Q | 0.5 – 2.563 |

**(2) APPLY button**

Sends the set contents to this unit.

**(3) FBS function (Feedback suppressor function) display section**

This unit employs a built-in FBS function which is continuously operating. Whenever a feedback point is detected, the FBS function decreases the gain at the feedback frequency, eliminating the feedback.
This display section shows the current operation status of the FBS function.

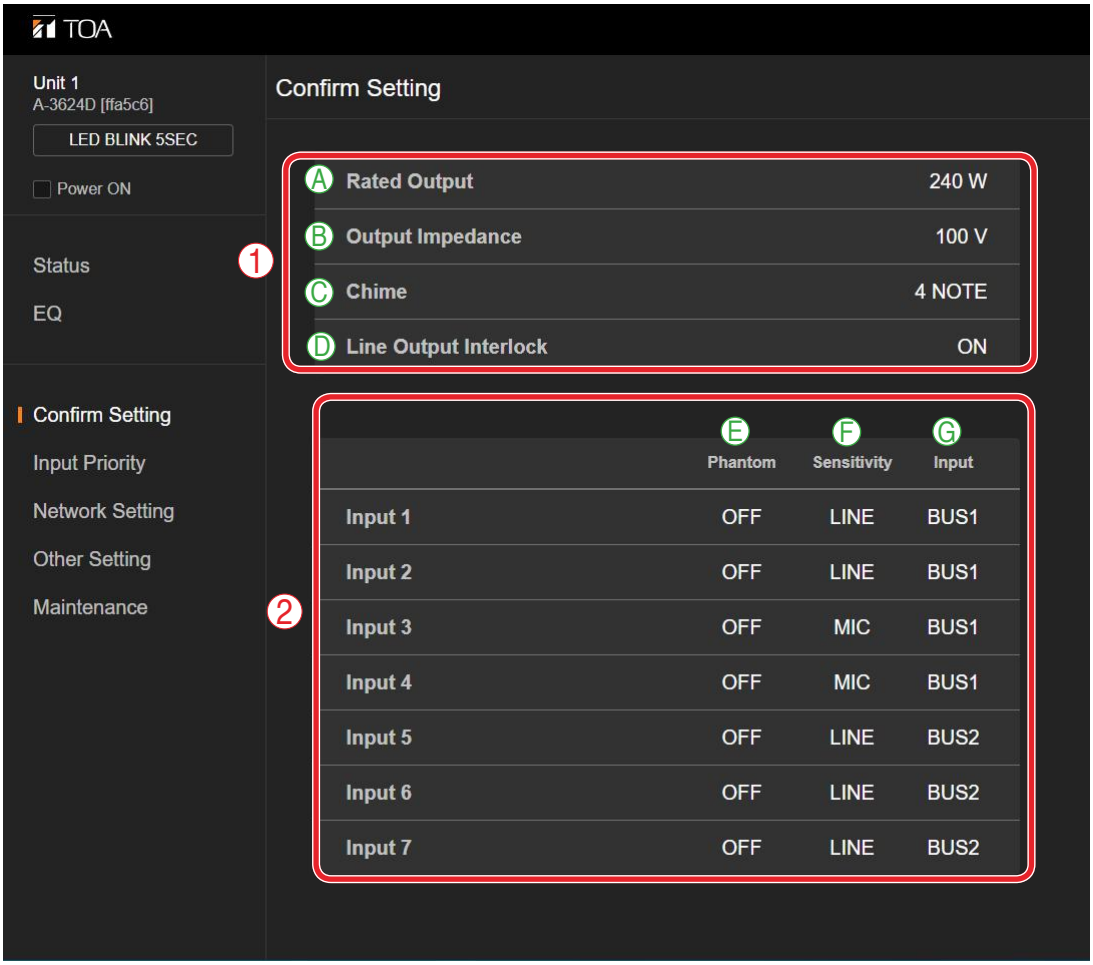
| | Name | Content |
|---|---|---|
| C | Frequency (Hz) | Displays up to 7 feedback frequencies in the boxes from left in order of the feedback occurrence.<br>When the 8th feedback occurs, its frequency will overwrite the feedback frequency that occurred earliest. |
| D | Gain (dB) | Displays the attenuated gain to eliminate the feedback for each detected feedback frequency. |

**(4) CLEAR FILTERS button**

Clears all points at which feedback is suppressed, erasing the contents displayed in the FBS function display section.

# 9. CONFIRM SETTING SCREEN

This unit's setting contents are displayed on the Confirm setting screen.




**(1) Unit setting**

Displays this unit's setting contents.

| | Name | Content |
|---|---|---|
| A | Rated Output | Displays this unit's rated output power. |
| B | Output Impedance | Displays the set output impedance.<br>[Setting range]<br>70 V: High impedance (Factory default setting)<br>8 ohm: Low impedance (In the case of A-3606D)<br>4 ohm: Low impedance (In the case of A-3612D, A-3624D, and A-3648D) |
| C | Chime | Displays the set type of chime tone.<br>[Setting range]<br>4 Note: 4-note chime (Factory default setting)<br>2 Note: 2-note chime<br>1 Note: 1-note chime<br>None: Not used |
| D | Line output interlock | Displays the setting of the line output interlock switch.<br>[Setting range]<br>OFF: Signals are output from the Line output jacks 1 and 2 regardless of zone selection. (Factory default setting)<br>ON: Signals are output from the Line output jack 1 when the Zone 1 is selected and from the Line output jack 2 when the Zone 2 is selected. |

**(2) Input setting**

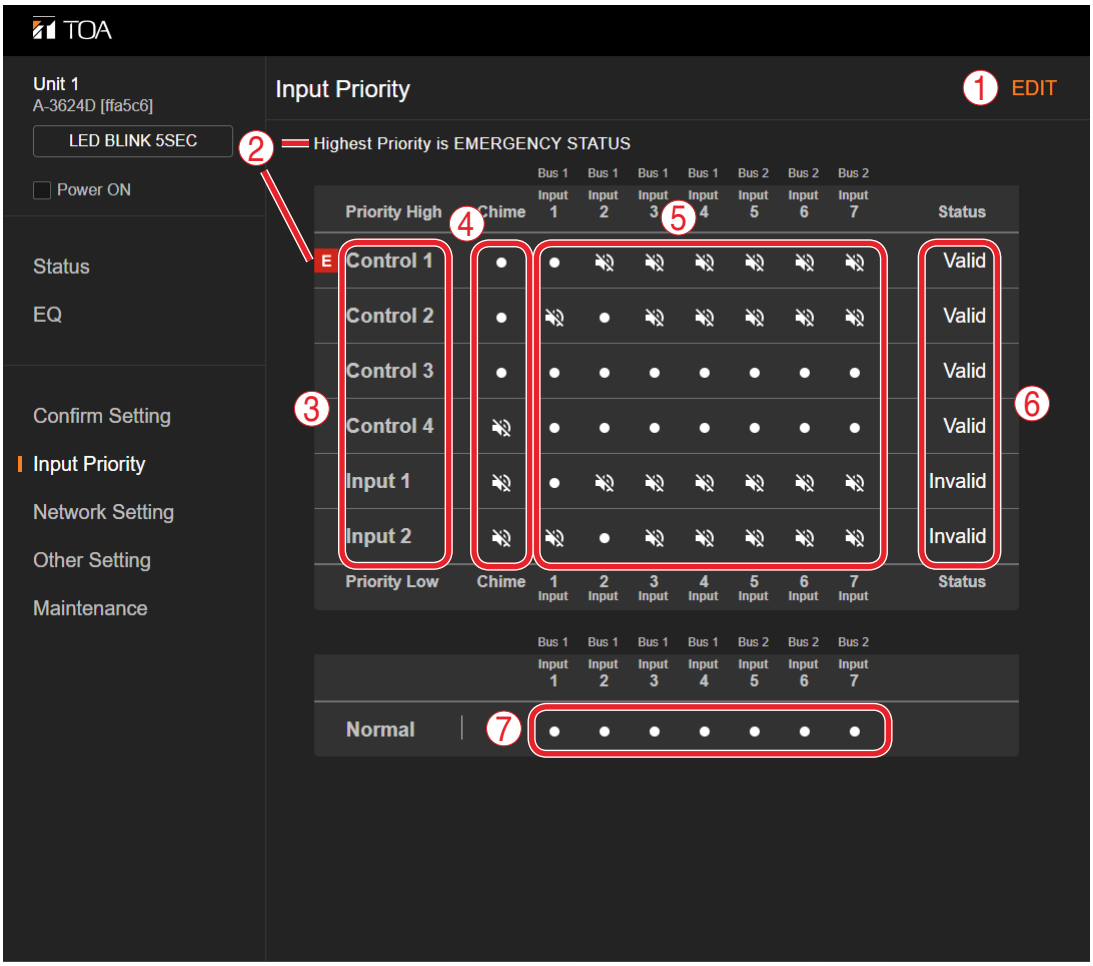
Displays the setting contents of this unit's each input.

| | Name | Content |
|---|---|---|
| E | Phantom | Displays the setting related to the phantom power use.<br>[Setting range]<br>OFF: Not used (Factory default setting)<br>ON: Use<br><br>**Tip**<br>Inputs 5, 6 and 7 are fixed to OFF. |
| F | Sensitivity | Displays the input sensitivity.<br>[Setting range]<br>LINE: –20 dB<br>MIC: –60 dB<br><br>[Factory default setting]<br>INPUTs 1 and 2: MIC<br>INPUTs 3 and 4: MIC (fixed)<br>INPUTs 5 and 6: LINE<br>INPUT 7 LINE (fixed) |
| G | Input | Displays to which each audio input to send, BUS 1 or BUS 2.<br>[Setting range]<br>BUS 1, BUS 2<br><br>[Factory default setting]<br>INPUTs 1 through 4: BUS 1 (fixed)<br>INPUTs 5 and 6: BUS 2<br>INPUT 7: BUS 2 (fixed) |

# 10. INPUT PRIORITY SCREEN

The setting contents of the priority broadcast function are displayed on the Input priority screen. Also, you can edit the setting contents. (See "PRIORITY BROADCAST FUNCTION" on p. 34.)

## 10.1. When Displaying the Setting Contents




**(1) EDIT button**

Click this button when editing the setting contents. (See "Switching to the edit screen" on p. 22.)
Clicking this button places the screen in editable state. (See "When Editing the Setting Contents" on p. 23.)

**(2) EMERGENCY MODE display**

If the highest priority broadcast is set to Emergency broadcast, the "Highest Priority is EMERGENCY STATUS" indication and E are displayed in these positions. (See "When Editing the Setting Contents" on p. 23.)

**(3) Trigger name** (See "PRIORITY BROADCAST FUNCTION" on p. 34.)

Displays 6 names of the control inputs or audio inputs that work as triggers.
Shown below are the displayed names.

- Controls 1 through 4
- Inputs 1 and 2

These names are displayed in descending order of priority levels from top to bottom.

**(4) Chime ON/OFF setting**

Displays ON or OFF setting of the chime sound when the control signal that works as a trigger is input.
When sounding the chime: ●
When not sounding the chime:

**(5) Mute setting**

Displays the setting whether or not to mute each audio input when the control signal or audio signal that works as a trigger is input.

When not muting: ●

When muting: 🔇

**(6) Status display**

Displays Valid or Invalid status of the trigger. The priority broadcast function does not operate by the trigger set to Invalid even if it is entered.

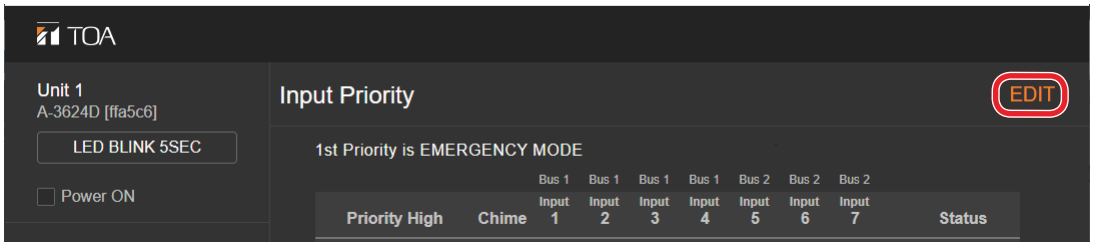
**(7) Normal display**

Displays the mute setting when no trigger is entered (normal broadcast).

When not muting: ●

When muting: 🔇

### 10.1.1. Switching to the edit screen




**Step:** Click the EDIT button.
The screen becomes in editable state.

## 10.2. When Editing the Setting Contents


**(1) Back arrow**

Returns the screen back to the display of the setting contents. (See "When Displaying the Setting Contents" on p. 21.)

**(2) [RESET TO DEFAULT SETTINGS] button**

Returns the set contents to the factory default settings.

**(3) Priority level setting button**

Changes the priority level of the trigger.

Designate the trigger name (5) of which priority level to be changed by clicking on it, then clicking this button allows you to change the priority level.

When making the priority level higher: Click the ▲ icon.

When making the priority level lower: Click the ▼ icon.

**(4) Emergency broadcast setting checkbox**
Check this checkbox when setting the highest priority broadcast to the emergency broadcast.

**(5) Trigger name**

**Note**
Priority broadcast activated by way of the audio detection cannot be set to emergency broadcast.

Displays 6 names of the control inputs or audio inputs that work as triggers. (See "PRIORITY BROADCAST FUNCTION" on p. 34.)
Shown below are the displayed names.
- Controls 1 through 4
- Inputs 1 and 2

These names are displayed in descending order of priority levels from top to bottom.
To change the priority level, use the Priority level setting button (3).

**(6) Chime OFF checkbox**
Check this checkbox to make the chime not sound when the control signal that works as a trigger is input.

**Note**
When the audio detection is set as a trigger, the chime setting is fixed to OFF so that chime sound does not overlap with audio output. Therefore, you cannot change the checked status (Chime OFF) of the checkboxes for the Inputs 1 and 2, of which triggers are audio detection.

**(7) Mute checkbox**
Check this checkbox to mute each audio input when the control signal or audio signal that works as a trigger is input.

**(8) Status setting pull-down menu**
Used to set whether to enable or disable the priority broadcast function when a trigger is entered. The priority broadcast function does not operate by the trigger set to be disabled even if it is entered.
To enable: Valid
To disable: Invalid

**(9) Normal setting checkbox**
Check this checkbox to mute each audio input when no trigger is entered (normal broadcast).

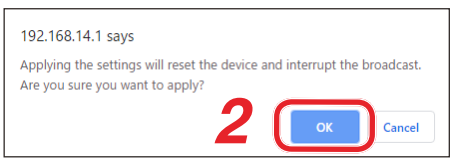
**(10)APPLY button**
Sends the set contents to this unit.
Clicking this button restarts the unit.

### 10.2.1. Sending the edited contents to this unit

After all edits are completed, send the setting contents to this unit.

**Note**
Applying the setting causes this unit to be reset once, interrupting the broadcast during resetting.

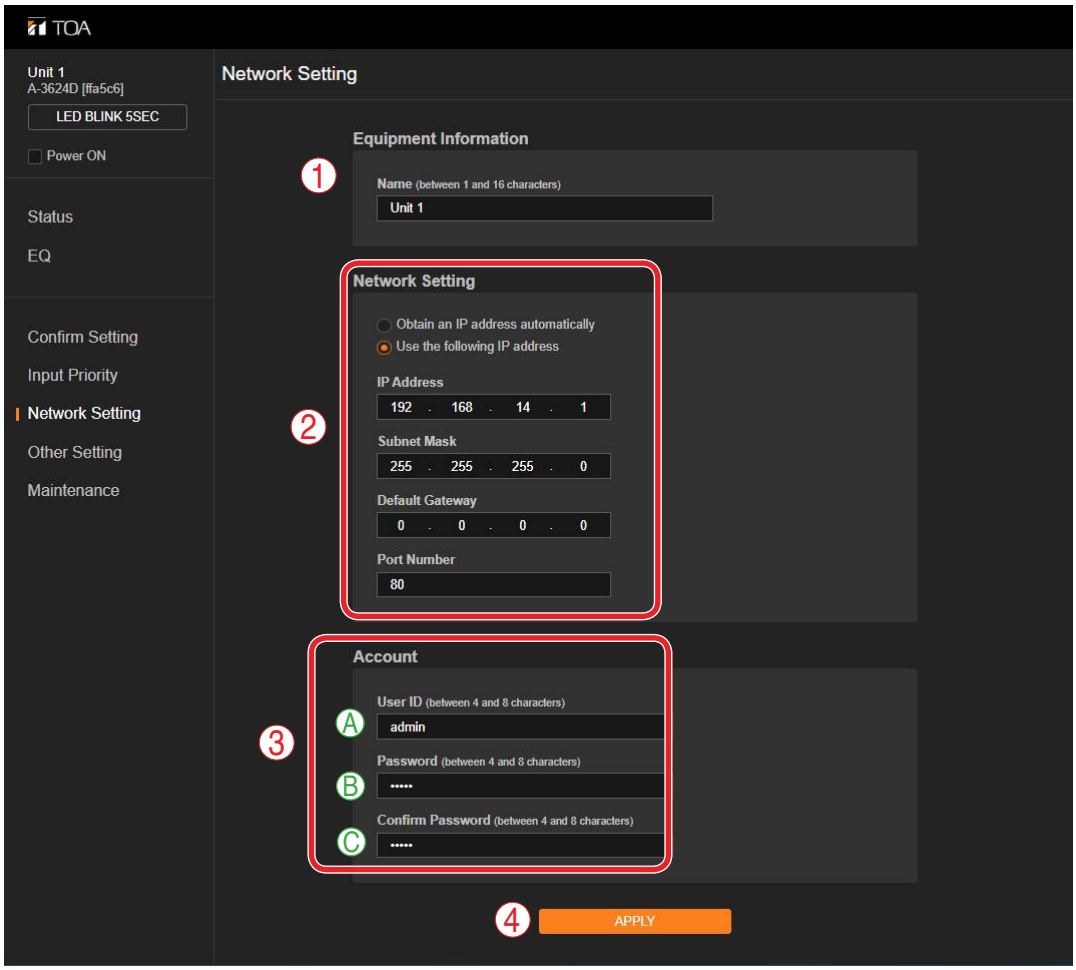
**Step 1.** Click the APPLY button.
A confirmation dialog is displayed.




**Step 2.** Click the OK button.
The edited contents are applied to this unit.

# 11. NETWORK SETTING SCREEN

Perform the network and user account settings on the Network setting screen.




**(1) Equipment Information**

Enter the equipment name between 1 and 16 characters.
Factory default setting: Unit 1

**Notes**

- This name is case-sensitive.
- The following symbols and blank spaces can be used.

  . - _

**(2) Network Setting**

Used to perform the IP address setting.

When acquiring an IP address automatically:
Click the "Obtain an IP address automatically" radio button.

**Note**

This procedure cannot be used if your pc's OS is earlier than Windows 10.

When setting an arbitrary IP address:
Click the "Use the following IP address" radio button, then enter "IP Address," "Subnet Mask," "Default Gateway," and "Port Number."

**Note**

You will not be able to log in this unit if you forget the set contents. Be sure to make a note of the set contents.

**Tip**

- Settable Port Number: 80, 1024 — 65535
- When you do not use "Default Gateway," set "Default Gateway" to "0.0.0.0".

**(3) Account**

Set the user account.

| | Name | Description |
|---|---|---|
| A | User ID | Enter a user name between 4 and 8 characters. |
| B | Password | When changing the password, enter a new password between 4 and 8 characters. |
| C | Confirm Password | Re-enter the new password to confirm when changing the password. Enter the same password as above. |

**Notes**

- You will not be able to log in this unit if you forget the set contents. Be sure to make a note of the set contents.
- User ID and password are case-sensitive.
- The following symbols can be used.

  . - _

**(4) APPLY button**

Sends the set contents to the unit. (See below.)

**Tip**

You can reactivate this unit with only the network setting and user account set to the initial values. The procedure is as follows.

**Step 1.** Unplug the AC cord from the inlet.

**Step 2.** Plug the AC cord into the inlet while pressing down the unit's power switch.
This unit is activated with the setting below.

IP address: 192.168.14.1
User name: admin
Password: guest

**Note**

The unit is activated with other settings remaining unchanged, but you can change them on each setting screen. If you disconnect the AC cord from the inlet without changing the network setting and user account setting, they will return to the original settings.

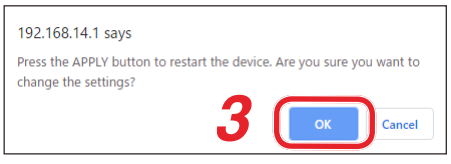
## 11.1. Sending the Edited Contents to This Unit

**Note**

Applying the setting causes this unit to be reset once, interrupting the broadcast during resetting.

**Step 1.** Enter the setting contents into the "Equipment Information," "Network Setting," and "Account" fields as needed.

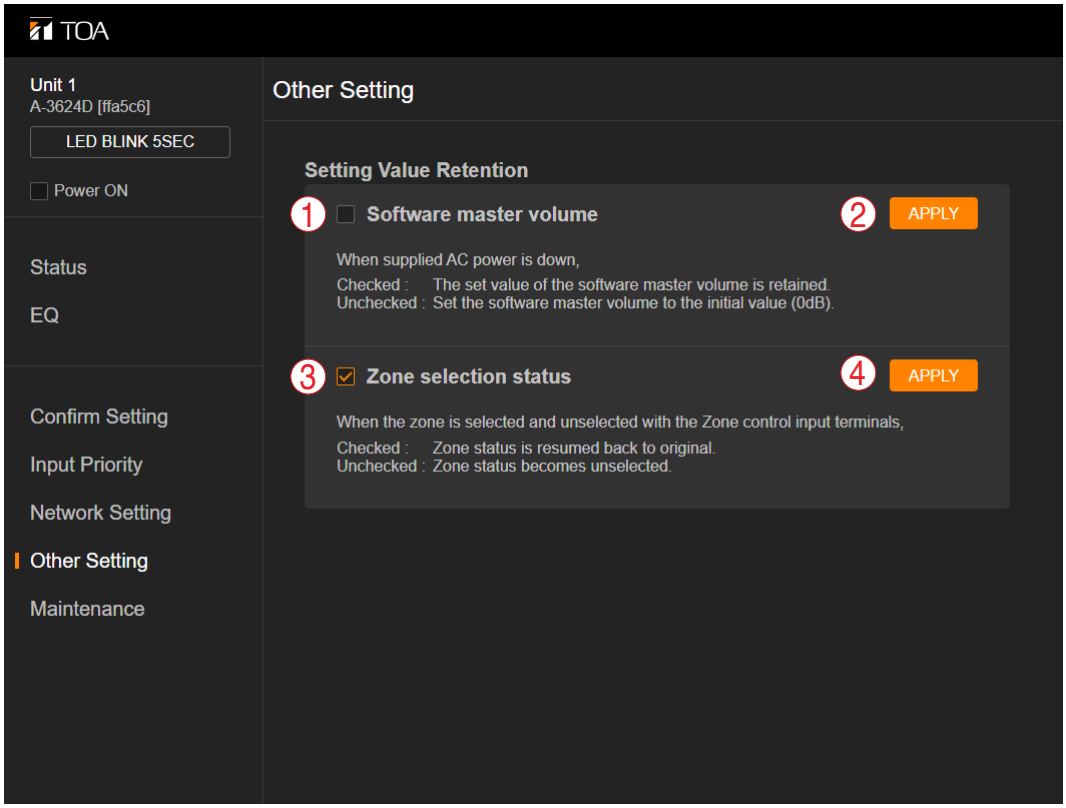
**Step 2.** Click the APPLY button.
A confirmation dialog is displayed.




**Step 3.** Click the OK button.
The set contents are sent to this unit, then, this unit will be restarted according to the new network setting.

# 12. OTHER SETTING SCREEN

Perform the software master volume setting value retention and the zone selection status setting on the Other setting screen.




**(1) Checkbox for retaining the set value of the software master volume**

You can perform the set value retention ON/OFF of the software master volume and the zone control method setting.

**Note**

Be sure to click the APPLY button (2) after you have changed the setting. Otherwise, the setting content is not reflected in the unit.

**Tips**

- While the unit is energized (p. 3), the set value of the software master volume is retained regardless of the checkbox status.
- When you do not retain the setting, click the APPLY button (2) with the checkbox unchecked.
  The set value of the software master volume returns to 0 dB (factory default setting) when power is energized again after power supply to this unit was stopped with the checkbox unchecked.

**(2) APPLY button**

Click this button to apply the checkbox (1) setting for retaining the software master volume in the unit.

**(3) Front-mounted zone selection button operation memory checkbox**

Click the APPLY button (4) with the checkbox checked to maintain the zone in selected state even if the rear-mounted zone control input terminal is opened after being closed while the zone is being selected with the front-mounted zone selection button.
When a checkmark is placed in the box, the zone selection status is kept maintained regardless of the status of the rear-mounted zone control input terminal while the zone is being selected with the front-mounted zone selection button.

**Notes**

- Be sure to click the APPLY button (4) after you have changed the setting. Otherwise, the setting content is not reflected in the unit.
- A checkmark is placed by default. However, it is not placed if the firmware is updated from a version earlier than 1.06.01.

**Tip**

When the operation memory of the front-mounted zone selection button is not needed, uncheck the checkbox.

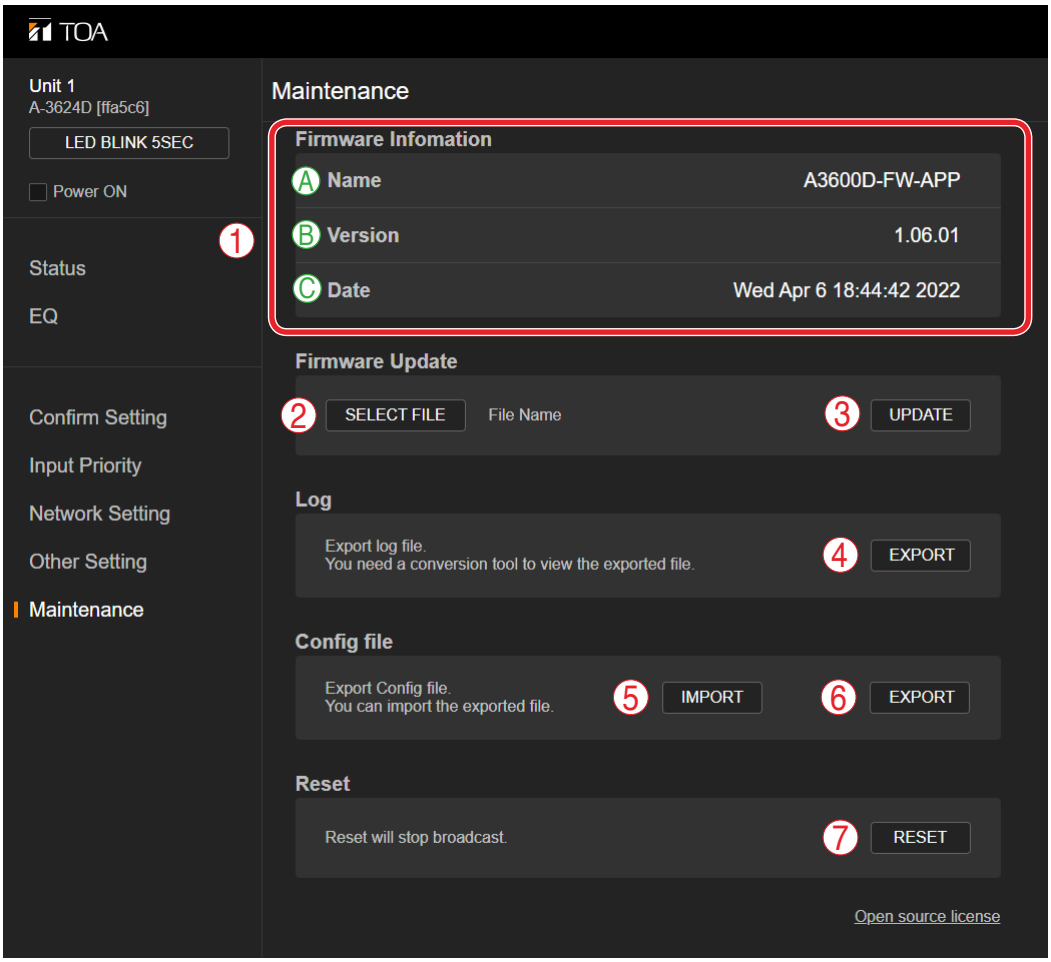
Clicking the APPLY button (4) with checkbox unchecked resets the zone selection status when the rear-mounted zone control input terminal is opened after being closed while the zone is being selected with the front-mounted zone selection button.

**(4) APPLY button**

Click this button to apply the settings of the Front-mounted zone selection button operation memory checkbox (3) to this unit.

# 13. MAINTENANCE SCREEN

Perform firmware update and log output on the Maintenance screen.




### (1) Firmware Information

| | Name | Description |
|---|---|---|
| A | Name | Displays the file name of the firmware. |
| B | Version | Displays the version number of the firmware. |
| C | Date | Displays the date of firmware creation. |

### (2) SELECT FILE button

Click this button to select the file to be updated when updating the firmware.

### (3) UPDATE button

Updates the firmware. (See p. 31.)

**Notes**

- Broadcast from this unit is interrupted during firmware update.
- The unit automatically restarts after update is complete.

### (4) Log EXPORT button

Exports this unit's log file to the PC. (See p. 31.)

### (5) Config file IMPORT button

When changing the setting contents of the unit, click this button to select the desired configuration file.

**Notes**

- Broadcast from the unit will stop while the setting contents are being changed.
- When the change is complete, the unit automatically restarts.

**(6) Config file EXPORT button**
Exports this unit's configuration file to the PC. (See p. 32.)

**(7) RESET button**
Resets this unit.

**Note**
Broadcast from this unit is interrupted during reset.

## 13.1. Updating the Firmware

**Step 1.** Click the SELECT FILE button.
An Explorer screen is displayed.

**Step 2.** Select the firmware file to be updated.
The selected file name is displayed to the right side of the SELECT FILE button.

**Step 3.** Click the UPDATE button.
A confirmation dialog is displayed.


**Step 4.** Click the OK button.
Firmware update starts.
A confirmation dialog is displayed when the firmware update has finished.

**Step 5.** Click the OK button.
The firmware is updated.

## 13.2. Exporting the Log File

**Step 1.** Click the Log EXPORT button.
An Explorer screen is displayed.

**Tip**
The displayed log file name is set to "A-3600log.bin" by default.
Change it as needed.

**Step 2.** Select the destination folder to store the file, then click the Save button.
The unit's log file is exported and saved.

**Notes**
- Up to 3000 logs are stored when the power is energized. If the number of the logs exceeds 3000, the earliest log will be overwritten and deleted in order.
- When the power is not energized or the device is reset, only the most recent 600 logs are stored. The logs earlier than these 600 logs will be deleted.

**Tips**
- The logs inside this unit are not deleted even if they are exported.
- The exported log file is in binary format (extension: .bin).
- A conversion tool is required to see the exported log files. The conversion tool can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

## 13.3. Importing and Exporting the Configuration File

### 13.3.1. Exporting the configuration file

**Step 1.** Click the Config file EXPORT button.
An Explorer screen is displayed.

**Tip**
The displayed configuration file name is set to "A-3600cfg.bin" by default.
Change it as needed.

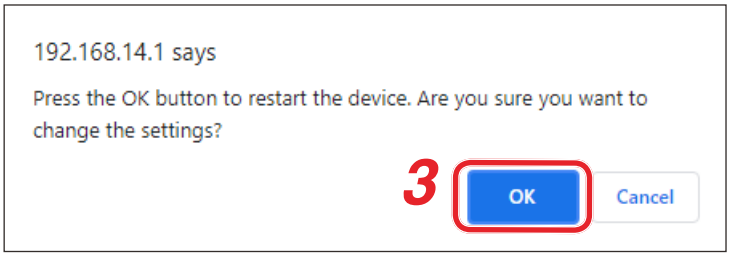
**Step 2.** Select the destination folder to store the file, then click the Save button.
The unit's configuration file is exported and saved.

**Tips**
- The exported configuration file is in binary format (extension: .bin).
- A utility application is required to see the exported configuration files. The utility application can be downloaded from the TOA DATA Library (https://www.toa-products.com/international/).

### 13.3.2. Importing the configuration file

**Step 1.** Click the Config file IMPORT button.
An Explorer screen is displayed.

**Step 2.** Select the configuration file to be imported and click the Open button.
A confirmation dialog is displayed.




**Step 3.** Click the OK button.
Upload of the configuration file starts.
When the upload is complete, a confirmation dialog is displayed.

**Step 4.** Click the OK button.
The device setting contents are reflected.

**Note**
File in text format cannot be uploaded.

**Tip**
You can also select a log file and upload it.
In this case, only the device configuration information recorded in the log file will be uploaded.

# 14. PRIORITY BROADCAST FUNCTION

## 14.1. Priority Broadcast

Priority broadcast function refers to a function that mutes the designated audio signal by means of the control signal or audio signal as a trigger when it is input.
One of 6 priority levels can be assigned to the signal that works as a trigger. When multiple triggers are input, the one with higher priority assigned takes precedence.
The Priority broadcast indicator on the front panel is lit while the priority broadcast is in progress.

Two modes are available for the priority broadcast: Standard mode and Manual mode. The unit will start in Standard mode when energized.
The mode can be changed using the web browser. (See "Switching the mode between Standard and Manual" on p. 15.)

## 14.2. Priority Broadcast Mode

### 14.2.1. Standard mode

When making the priority broadcast in Standard mode, the following 6 signals can be used as triggers to activate the priority broadcast.

- Control inputs 1 through 4 (contact)
- Audio detections 1 and 2 (audio input to Inputs 1 and 2)

The table below shows the difference between the control input and the audio detection

| | Signal that functions as a trigger | Input that can be muted | Settable broadcast | Power on in power off state | Use of chime |
|---|---|---|---|---|---|
| Control input | Contact inputs (Contacts 1 through 4) | Inputs 1 through 7 | Emergency broadcast Priority broadcast | Enabled | Enabled |
| Audio detection | Audio inputs (Inputs 1 and 2) | Input other than the one set to audio detection | Priority broadcast | Disabled | Disabled |

You can edit the following items related to the priority broadcast on the browser for each trigger. Designated audio signals can be muted in the case of normal broadcast that is not activated by any trigger.

| Item | Setting contents |
|---|---|
| Valid/Invalid | When set to "Valid," priority broadcast will start if the corresponding trigger is input. |
| Priority level | • You can set 6 different levels of priority. However, you cannot assign the same priority level to the multiple triggers. It means only 1 priority level can be assigned to a single trigger.<br>• A trigger with the highest priority level assigned can be set to emergency broadcast.<br>**Note**<br>Emergency broadcast can be assigned only to the control input.<br>• If a higher-priority trigger is input while a priority broadcast is in progress, the higher-priority broadcast takes precedence, overriding the current broadcast.<br>• If a lower-priority trigger is input while a priority broadcast is in progress, the lower-priority trigger is ignored. |
| Chime ON/Chime OFF | Sounds the set chime when the trigger set to "Chime ON" is input.<br>However, no chime sounds when the trigger is ignored.<br>**Note**<br>Chime can be assigned only to the control input. |
| Input to be muted/<br>Input not to be muted | Mutes the input set to "Input to be muted" when the priority broadcast is activated.<br>**Note**<br>It may take a few seconds before the volume level returns to the original level after mute is released. |

**Notes**

- If the lower priority trigger that is so set to sound a chime is kept applied when the higher priority trigger stops, the chime will not sound even when the broadcast is switched to the lower priority one.
- Regardless of whether the priority level has been set or not, input signals to the BUS 2 are muted while the chime is sounding.

### 14.2.2. Manual mode

The designated audio signal can be muted from the browser in Manual mode.
Use this mode to check the unit operation. (See "Switching the mode between Standard and Manual" on p. 15.)
The unit's Network connection confirmation indicator lights in the manual mode.

## 14.3. Emergency Broadcast

You can set the priority broadcast with the highest priority level to the emergency broadcast. (See "When Editing the Setting Contents" on p. 23.)
When set to the Emergency broadcast, the broadcast is made at the maximum level regardless of the set values of the master volume, software master volume, and remote master volume*. Also, the chime is sounded at the maximum volume, and the characteristics of the EQ, tone control, and bass control are made flat.

The front-mounted emergency broadcast indicator lights during emergency broadcast, making the Emergency control output terminal closed.
*Volume control knobs for each input remain effective.

**Note**
Priority broadcast activated by way of the audio detection cannot be set to emergency broadcast.

## 14.4. Normal Broadcast

The broadcast that stays in the state where the unit's power is ON with no trigger input is referred to as the Normal broadcast.

**Note**
Chime at normal broadcast cannot be set to ON.

## 14.5. Relationship between Priority Broadcast by Control Input/Emergency Broadcast and Power ON/OFF State

**[When this unit is in power OFF state]**
- This unit is turned ON when the Priority or Emergency broadcast starts.
- Even if you attempt to turn OFF the power* while the Priority or Emergency broadcast is in progress, this operation is invalid.
- This unit will be turned OFF when the Priority or Emergency broadcast terminates. However, if the higher priority broadcast by audio detection overlaps, the power will be turned OFF after this priority broadcast by audio detection is terminated.

**[When this unit is in power ON state]**
- This unit remains in power ON state regardless whether the Priority or Emergency broadcast starts or terminates.
- Even if you attempt to turn OFF the power* while the Priority or Emergency broadcast is in progress, this operation is invalid.

* Refers to the operation of pressing this unit's front-mounted power switch or clicking the Power ON checkbox to uncheck on the browser screen.

## 14.6. Factory Default Settings

**[Factory default setting list]**

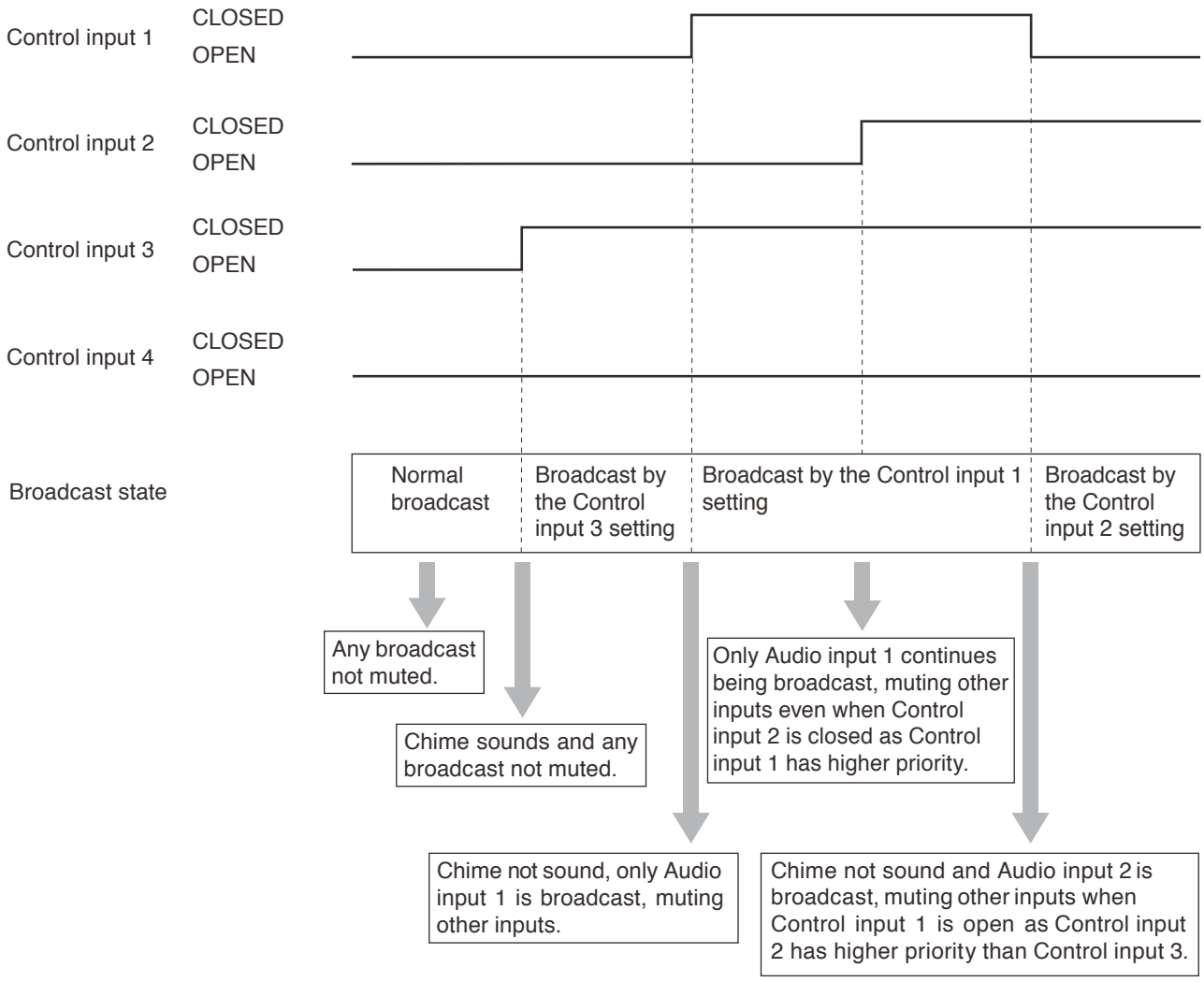
| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 1 | High | Set | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 2 | | – | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Valid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Valid |
| Audio detection (Input 1) | | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | ● | ● | ● | ● | ● | ● | ● | – |

**Notes**

- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- The unit starts up in Standard mode.
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

Shown below are the operations by the factory default.

**[Operation image]**



## 14.7. Setting Examples and Operation Images

### 14.7.1. If the power is ON while being energized

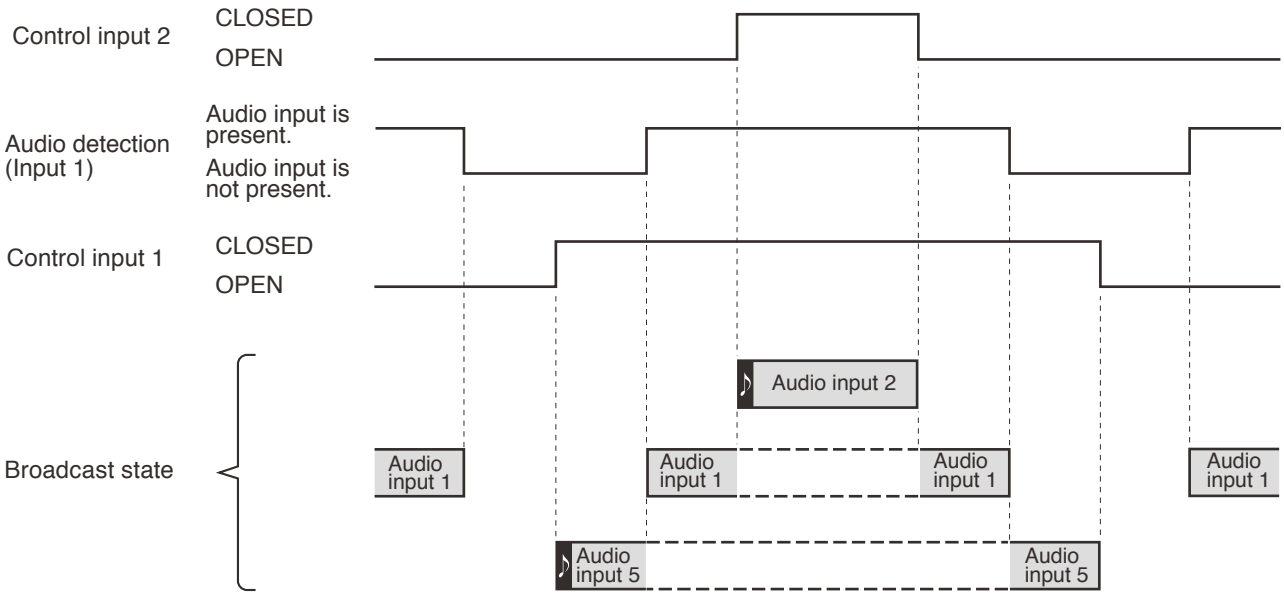
**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 2 | High | Not set | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Audio detection (Input 1) | | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**

- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**




**Notes**

- Symbol " ♪ " represents a startup chime of broadcast.
- Gray box " ▭ " represents the broadcast currently being output.
- Box with a dashed line " ▭ " represents the state that broadcast is activated but not being output because the priority level is low.

### 14.7.2. If the power is OFF while being energized

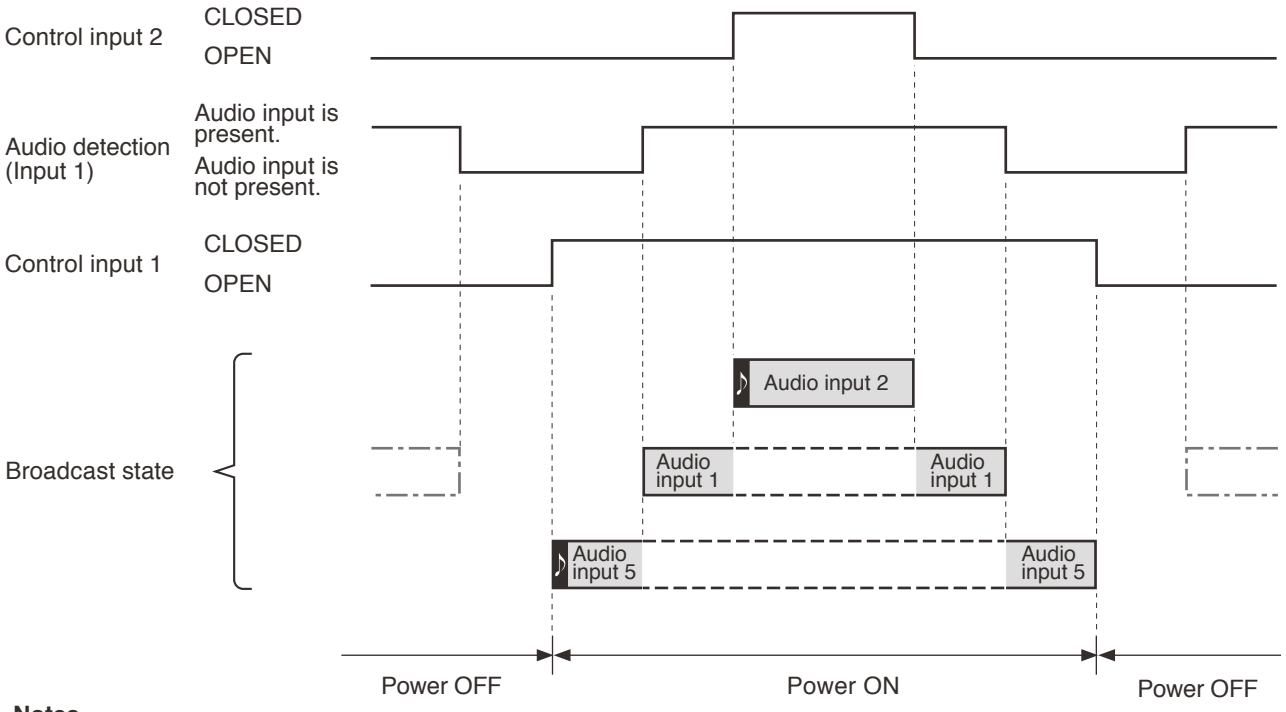
Even when the power is OFF while being energized, it is kept ON as long as the control input is closed.
While the power is ON, the priority-assigned audio signals are output according to the priority levels.
The power is not turned ON even if there is a voice-activated input while the power is OFF.

**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Control input 2 | High | Not set | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Audio detection (Input 1) | | – | 🔇 | • | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**
- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**




**Notes**
- Symbol "♪" represents a startup chime of broadcast.
- Gray box " " represents the broadcast currently being output.
- Box with a dashed line " " represents the state that broadcast is activated but not being output because the priority level is low.
- Box with a dash-dotted line " " represents the state that broadcast is not being output because the power is off though an audio detection trigger has been input.

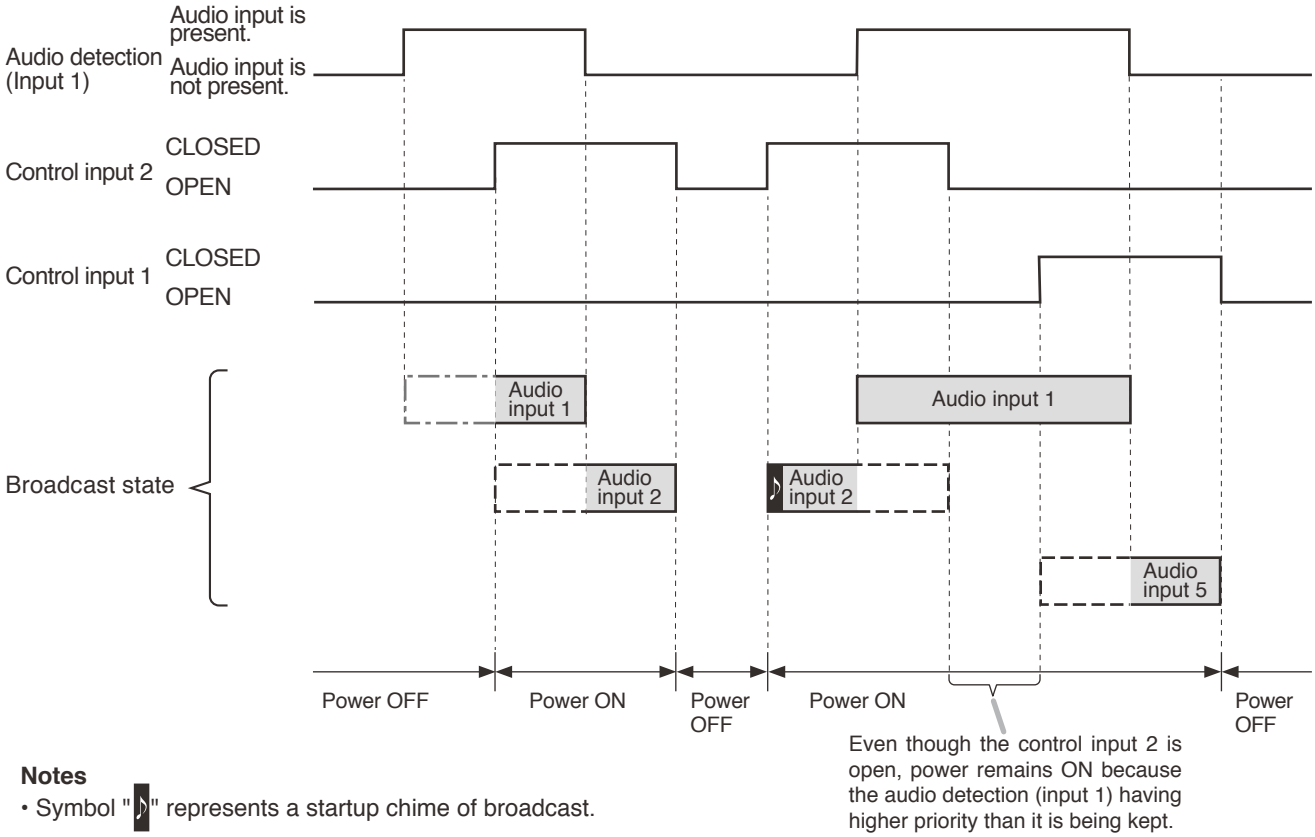
Only in the following case, the power is ON in the period that only the input activated by voice is present.
When the control input and the voice-activated input with higher priority overlap, the power remains ON until the voice-activated input is terminated after all control inputs are opened.

**[Setting list]**

| Trigger | Priority level | Emergency | Chime | Audio inputs | | | | | | | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Audio detection (Input 1) | High | – | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 2 | | – | ● | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Valid |
| Control input 1 | | – | ● | 🔇 | 🔇 | 🔇 | 🔇 | ● | 🔇 | 🔇 | Valid |
| Control input 3 | | – | ● | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Control input 4 | | – | 🔇 | ● | ● | ● | ● | ● | ● | ● | Invalid |
| Audio detection (Input 2) | Low | – | 🔇 | 🔇 | ● | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | Invalid |
| Normal broadcast | – | – | – | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | 🔇 | – |

**Notes**
- Inputs marked " 🔇 " in the Chime field are set to "Chime OFF," while those marked " ● " are set to "Chime ON."
- Inputs marked " 🔇 " in the Audio input field are set to "Muted," while those marked " ● " are set to "Not muted."
- Gray cells indicate the set contents in them cannot be changed.
- Dash marks "–" show that nothing can be set.

**[Operation image]**

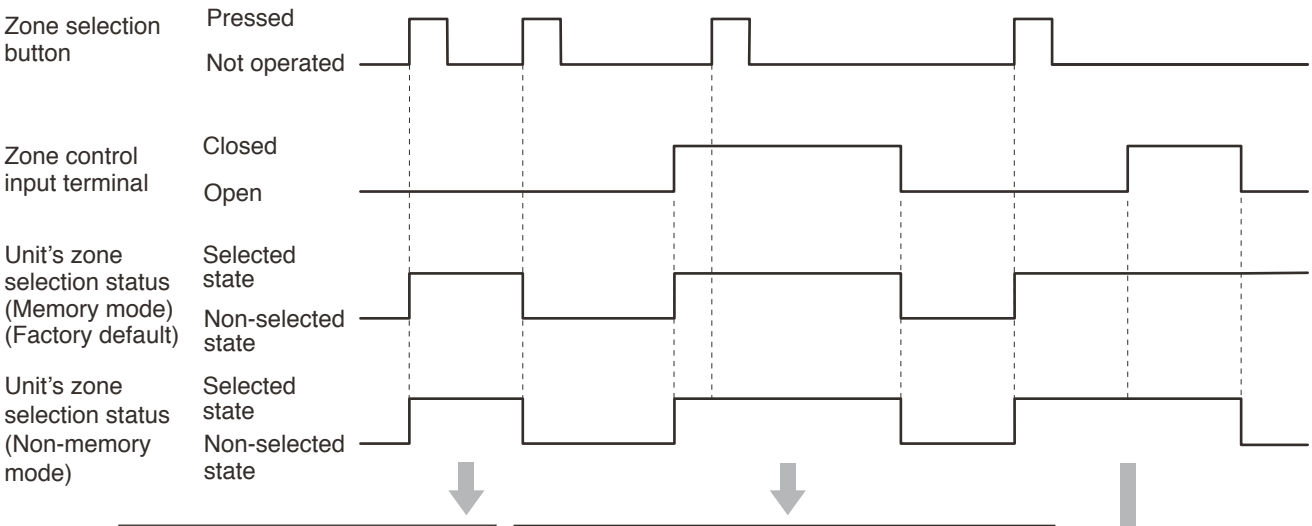



**Notes**
- Symbol " ♪ " represents a startup chime of broadcast.
- Gray box " [ ] " represents the broadcast currently being output.
- Box with a dashed line " [ ] " represents the state that broadcast is activated but not being output because the priority level is low.
- Box with a dash-dotted line " [ ] " represents the state that broadcast is not being output because the power is off though an audio detection trigger has been input.

# 15. OPERATION IMAGE OF SPEAKER ZONE SELECTION

Speaker zone selection operation using the zone selection button and the zone control input terminal differs depending on the settings.

**[Operation chart of the device's zone selection status]**




Pressing the selection button places the target zone in selected state, and pressing it again places the zone in non-selected state.

Closing the control input terminal places the target zone in selected state, while opening it places the zone in non-selected state.
The zone selected state, however, continues even if the selection button is pressed while the control input terminal is closed as the input terminal takes precedence over the button.

When the zone control input terminal is opened after being closed while the zone is placed in selected state by pressing the Zone selection button

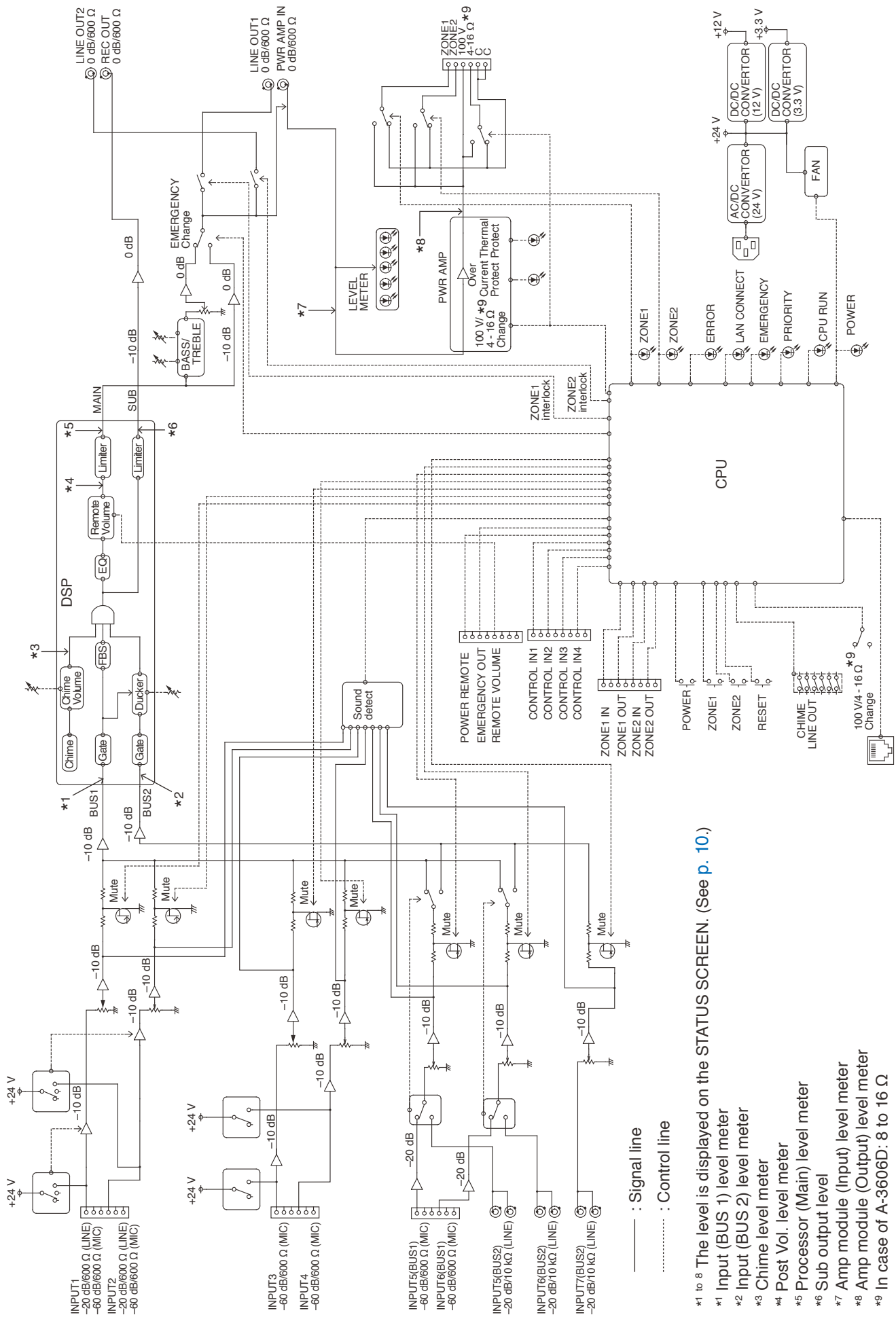
Memory mode: Memorizes the zone selection button operation and maintains the zone in selected state.

Non-memory mode: Does not memorize the zone selection button operation and places the zone in non-selected state.

**Tip**

The selection statuses of the Zones 1 and 2 can be controlled individually.

# 16. BLOCK DIAGRAM




——— : Signal line

- - - - - : Control line

*1 to *8 The level is displayed on the STATUS SCREEN. (See p. 10.)

*1 Input (BUS 1) level meter

*2 Input (BUS 2) level meter

*3 Chime level meter

*4 Post Vol. level meter

*5 Processor (Main) level meter

*6 Sub output level

*7 Amp module (Input) level meter

*8 Amp module (Output) level meter

*9 In case of A-3606D: 8 to 16 Ω

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